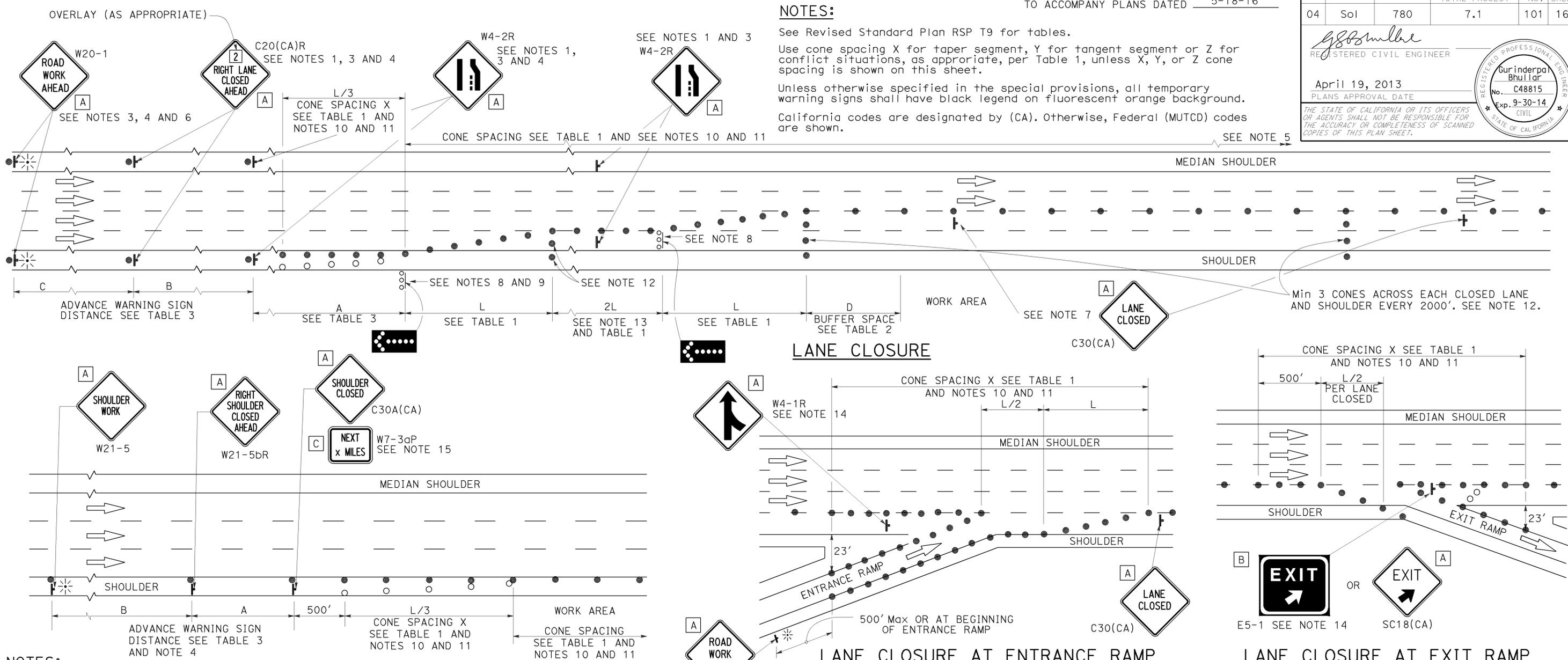


DIST	COUNTY	ROUTE	POST MILES TOTAL PROJECT	SHEET No.	TOTAL SHEETS
04	SoI	780	7.1	101	160

REGISTERED CIVIL ENGINEER
 April 19, 2013
 PLANS APPROVAL DATE

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

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



- 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.

- SHOULDER CLOSURE**
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)L and W4-2L signs shall be used.
 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.

- LANE CLOSURE AT ENTRANCE RAMP**
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 the shoulder 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

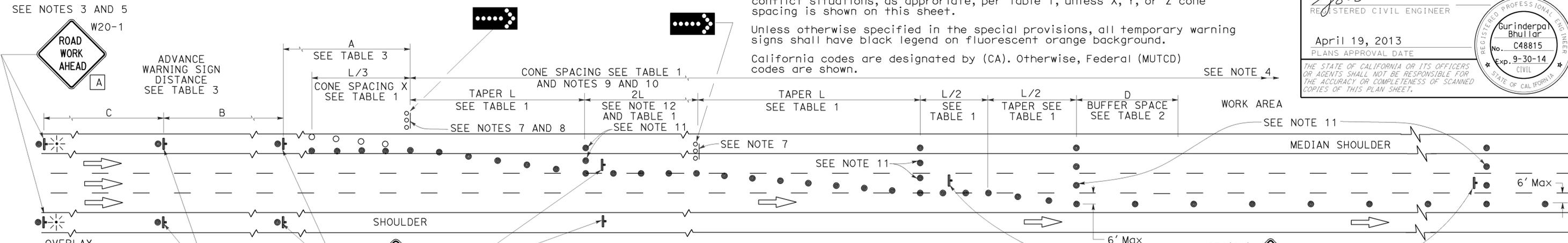
Dist	COUNTY	ROUTE	POST MILES TOTAL PROJECT	SHEET No.	TOTAL SHEETS
04	SoI	780	7.1	102	160

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

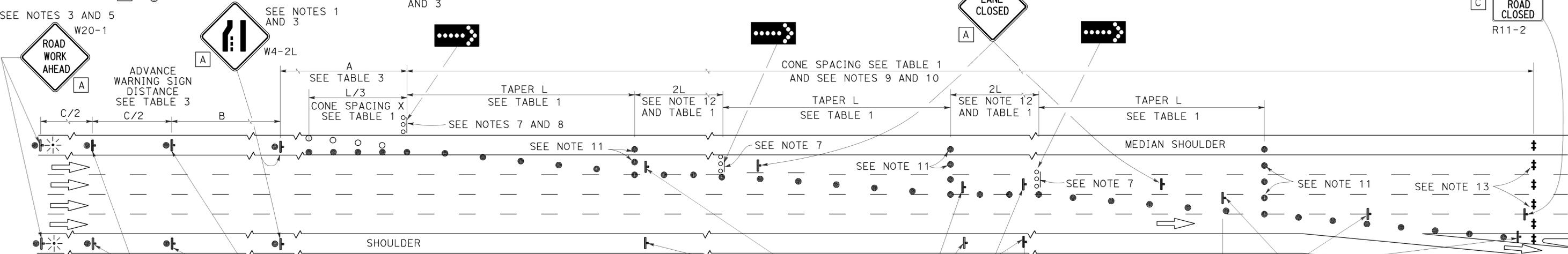
April 19, 2013
 PLANS APPROVAL DATE

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

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 appropriate, 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 WITH PARTIAL SHOULDER USE



COMPLETE CLOSURE

NOTES:

- Lane closures on the right side using partial median shoulder as a traffic lane shall conform to the details as shown except that C20(CA)R and W4-2R signs shall be used.
- At least one person shall be assigned to provide full time maintenance of traffic control devices for lane closures.
- 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.
- 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.
- 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.
- Place a C30(CA) sign every 2000' throughout length of lane closure.
- One flashing arrow sign for each lane closed. The flashing arrow signs shall be Type I.
- 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 the top of crest vertical curve or on a horizontal curve.
- All cones used for lane closures during the hours of darkness shall be fitted with retroreflective bands (or sleeves) as specified in the specifications.
- Portable delineators, placed at one-half the spacing indicated for traffic cones, may be used instead of cones for daytime closures only.
- 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 With Partial Shoulder Use" 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.
- 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.
- A minimum of Two Type II or III barricades shall be placed across each closed lane and shoulder at the location shown and every 2000' within the complete closure area. Within the complete closure area, the transverse alignment of the barricades on the closed shoulder may be shifted from the transverse alignment to provide access to the work.
- When specified in the special provisions, a W20-2 "DETOUR AHEAD" sign is to be used in place of the W20-3 "FREEWAY CLOSED AHEAD" sign.

SIGN PANEL SIZE (Min)

- A 48" x 48"
- B 48" x 18"
- C 48" x 30"

LEGEND

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

STATE OF CALIFORNIA
 DEPARTMENT OF TRANSPORTATION
**TRAFFIC CONTROL SYSTEM
 FOR LANE CLOSURES ON
 FREEWAYS AND EXPRESSWAYS**
 NO SCALE

RSP T10A DATED APRIL 19, 2013 SUPERSEDES STANDARD PLAN T10A DATED MAY 20, 2011 - PAGE 238 OF THE STANDARD PLANS BOOK DATED 2010.

REVISED STANDARD PLAN RSP T10A

2010 REVISED STANDARD PLAN RSP T10A

Dist	COUNTY	ROUTE	POST MILES TOTAL PROJECT	SHEET No.	TOTAL SHEETS
04	Soi	780	7.1	103	160

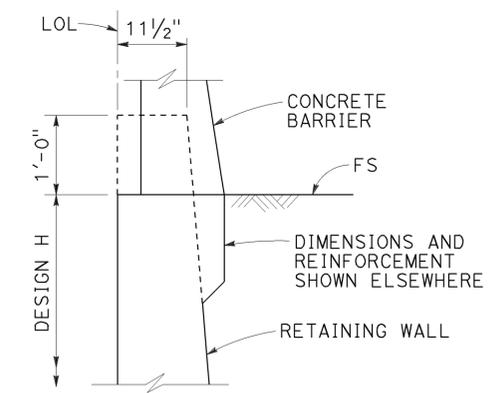


 REGISTERED CIVIL ENGINEER
 Gary Wang
 No. C58298
 Exp. 6-30-12
 CIVIL
 STATE OF CALIFORNIA

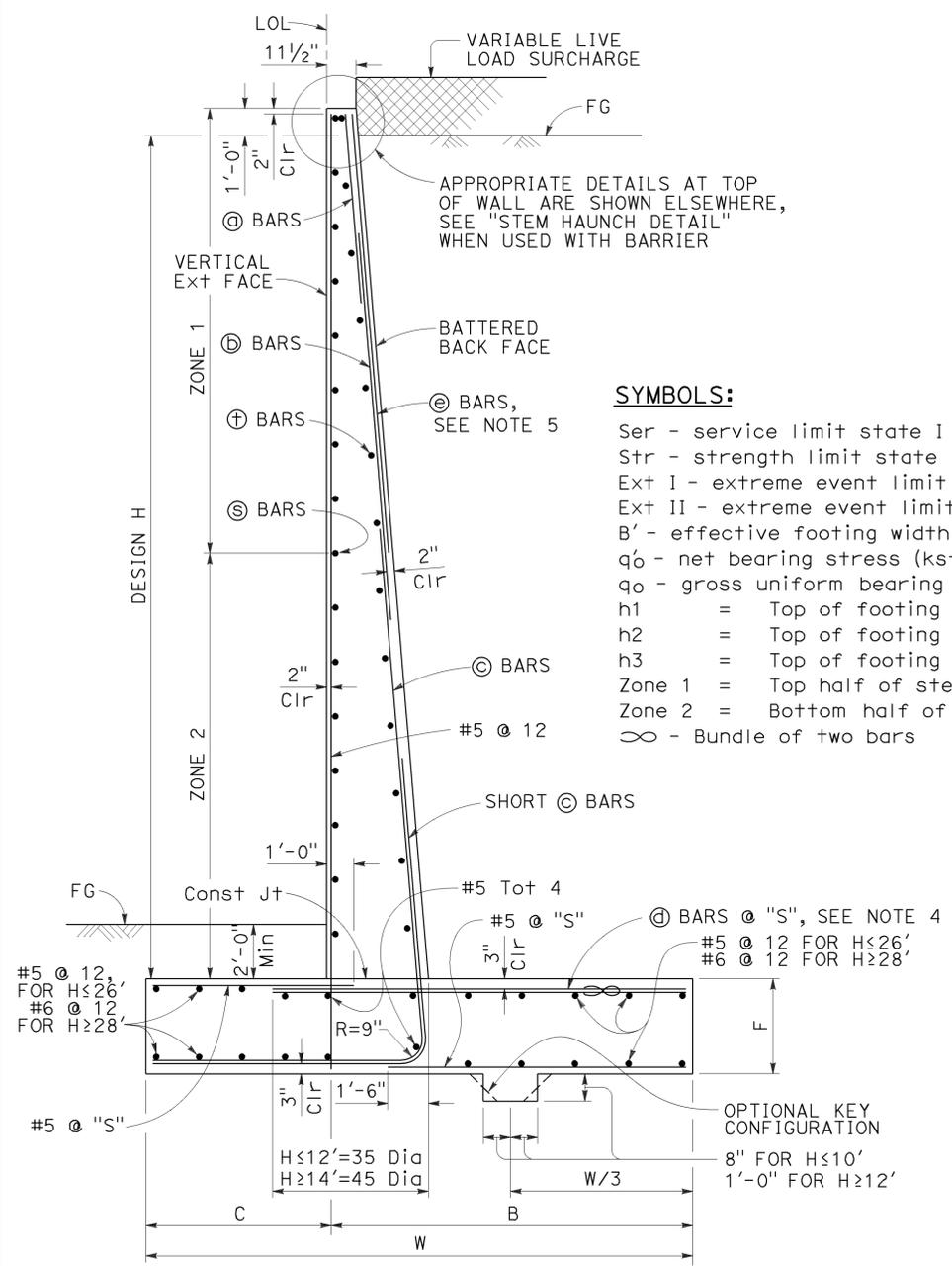
April 20, 2012
 PLANS APPROVAL DATE
THE STATE OF CALIFORNIA OR ITS OFFICERS OR AGENTS SHALL NOT BE RESPONSIBLE FOR THE ACCURACY OR COMPLETENESS OF SCANNED COPIES OF THIS PLAN SHEET.

DESIGN CONDITIONS:

Design H may be exceeded by 6" before going to the next size. Special footing design is required where foundation material is incapable of supporting bearing stress listed in the table.



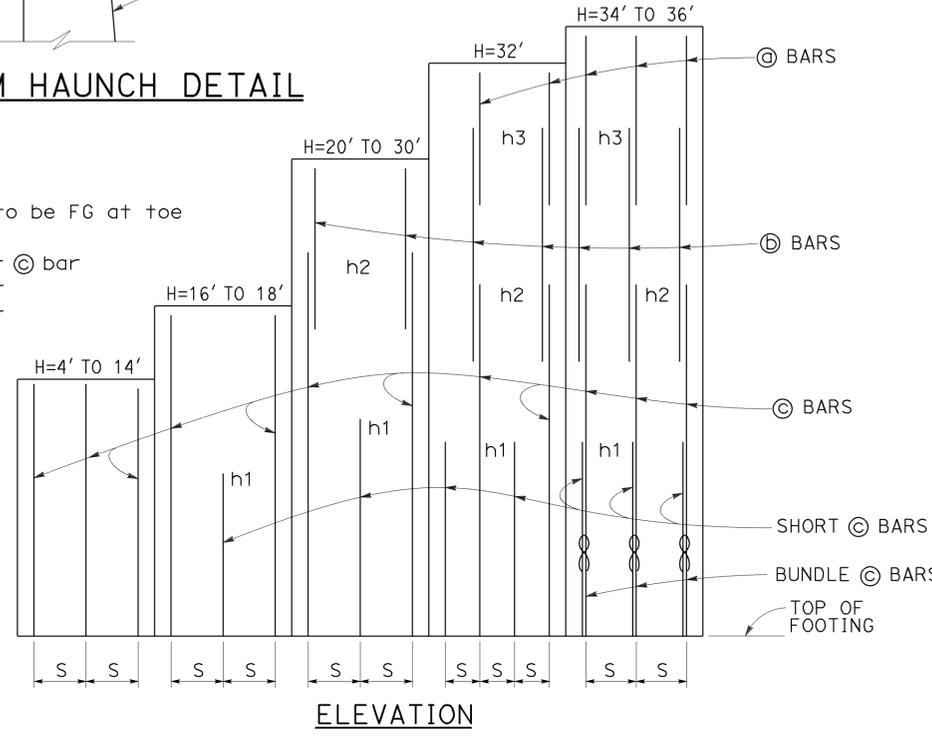
STEM HAUNCH DETAIL



TYPICAL SECTION

NOTES:

- For details not shown and drainage notes see 
- For wall stem joint details see  and 
- At \textcircled{C} bars:
 $H \leq 6'$, no splices are allowed within 1'-8" above the top of footing.
 $H > 6'$, no splices are allowed within $H/4$ above the top of footing.
- Bundle \textcircled{A} bars for $H = 34'$ & $36'$.
- Provide #6 @ 10" x 15'-0" \textcircled{C} bars over a distance of 8'-0" measured from all expansion joints, begin wall and end wall locations. For $H \leq 14'$, hook \textcircled{C} bar into footing and reduce bar length as needed to maintain Min Clr cover.



ELEVATION

TABLE OF REINFORCING STEEL, DIMENSIONS AND DATA

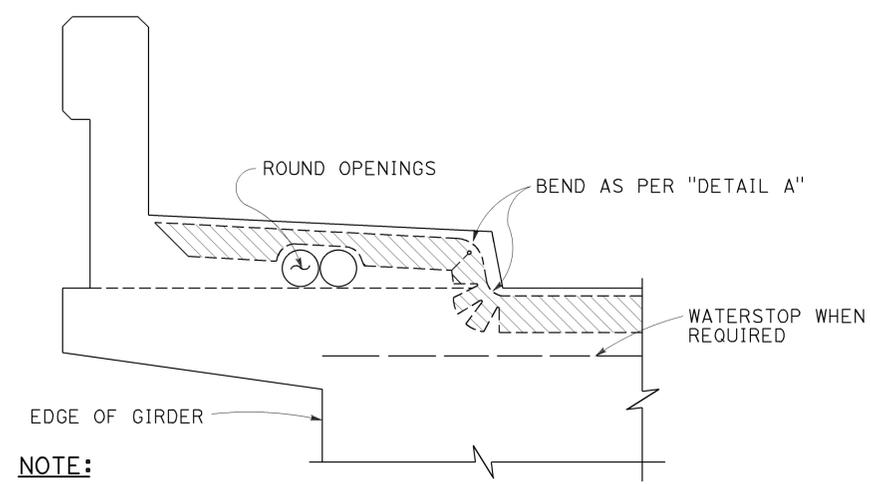
DESIGN H	4'	6'	8'	10'	12'	14'	16'	18'	20'	22'	24'	26'	28'	30'	32'	34'	36'
W	6'-10"	7'-0"	7'-3"	7'-7"	8'-4"	9'-7"	10'-9"	12'-0"	13'-3"	14'-6"	15'-9"	17'-1"	18'-5"	19'-10"	21'-2"	22'-7"	24'-0"
C	2'-2"	2'-3"	2'-3"	2'-4"	2'-6"	3'-0"	3'-6"	4'-0"	4'-6"	5'-0"	5'-5"	6'-0"	6'-6"	7'-2"	7'-8"	8'-2"	9'-0"
B	4'-8"	4'-9"	5'-0"	5'-3"	5'-10"	6'-7"	7'-3"	8'-0"	8'-9"	9'-6"	10'-4"	11'-1"	11'-11"	12'-8"	13'-6"	14'-5"	15'-0"
F	1'-4"	1'-4"	1'-4"	1'-4"	1'-6"	1'-8"	1'-8"	1'-9"	1'-9"	1'-11"	2'-2"	2'-5"	2'-10"	3'-3"	3'-6"	4'-0"	4'-3"
BATTER	1/2: 12	1/2: 12	1/2: 12	1/2: 12	1/2: 12	1/2: 12	1/2: 12	1/2: 12	1/2: 12	1/2: 12	5/8: 12	5/8: 12	3/4: 12	7/8: 12	1: 12	1: 12	1: 12
SPACING "S"	9"	9"	9"	9"	9"	7"	6"	5"	6"	6"	6"	6"	6"	6"	6"	10"	8"
\textcircled{A} BARS	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-
\textcircled{B} BARS	-	-	-	-	-	-	-	-	#7	#7	#7	#7	#7	#7	#7	#7	#7
\textcircled{C} BARS	#6	#6	#6	#6	#6	#6	#7	#7	#8	#9	#9	#10	#10	#10	#11	#11	#11
\textcircled{D} BARS	#5	#5	#6	#6	#6	#6	#9	#8	#8	#9	#9	#10	#10	#10	#11	#11	#11
h1	-	-	-	-	-	-	5'-9"	5'-10"	8'-0"	9'-0"	10'-1"	11'-0"	12'-1"	13'-0"	13'-0"	12'-7"	11'-6"
h2	-	-	-	-	-	-	-	-	10'-5"	13'-0"	14'-7"	17'-6"	19'-0"	20'-5"	19'-0"	18'-0"	20'-2"
h3	-	-	-	-	-	-	-	-	-	-	-	-	-	-	21'-2"	21'-10"	24'-0"
ZONE 1 \textcircled{C} BARS	#5 @ 18	#5 @ 18	#5 @ 18	#5 @ 18	#5 @ 18	#5 @ 18	#5 @ 18	#5 @ 18	#5 @ 18	#5 @ 18	#5 @ 12	#5 @ 12	#5 @ 12	#5 @ 12	#5 @ 12	#5 @ 12	#5 @ 12
ZONE 2 \textcircled{C} BARS	#5 @ 18	#5 @ 18	#5 @ 18	#5 @ 18	#5 @ 18	#5 @ 18	#5 @ 12	#5 @ 12	#5 @ 12	#5 @ 12	#5 @ 12	#5 @ 12	#6 @ 12	#6 @ 12	#6 @ 12	#7 @ 12	#7 @ 12
ZONE 1 \textcircled{D} BARS	#4 @ 18	#4 @ 18	#4 @ 18	#4 @ 18	#4 @ 18	#4 @ 18	#4 @ 18	#4 @ 18	#4 @ 18	#4 @ 18	#4 @ 12	#4 @ 12	#4 @ 12	#4 @ 12	#4 @ 12	#4 @ 12	#4 @ 12
ZONE 2 \textcircled{D} BARS	#4 @ 18	#4 @ 18	#4 @ 18	#4 @ 18	#4 @ 18	#4 @ 18	#4 @ 18	#4 @ 18	#4 @ 18	#4 @ 18	#4 @ 12	#4 @ 12	#4 @ 12	#4 @ 12	#5 @ 12	#5 @ 12	#5 @ 12
Ser: B', q ₀	6.8, 0.7	6.5, 1.0	6.2, 1.3	6.0, 1.6	6.3, 2.0	7.5, 2.1	8.6, 2.2	9.8, 2.3	11.0, 2.4	12.1, 2.5	13.2, 2.8	14.4, 2.9	15.5, 3.1	16.8, 3.3	18.0, 3.5	19.2, 3.7	20.6, 3.7
Str: B', q ₀	6.6, 1.6	5.0, 1.8	3.6, 2.3	3.0, 3.3	3.2, 4.0	4.3, 3.8	5.3, 3.7	6.4, 3.7	7.4, 3.8	8.2, 4.1	9.0, 4.4	9.9, 4.6	10.7, 4.9	11.7, 5.2	12.6, 5.4	13.6, 5.8	14.6, 5.9
Ext I: B', q ₀	5.2, 1.1	4.7, 1.5	3.9, 2.2	3.1, 3.4	2.8, 4.8	3.2, 5.3	3.6, 5.7	4.1, 6.1	4.6, 6.4	5.0, 6.9	5.3, 7.6	5.8, 8.1	6.1, 8.9	6.7, 9.4	7.1, 10.0	7.5, 10.7	8.2, 10.9
Ext II: B', q ₀	2.6, 2.2	2.7, 2.6	2.8, 3.1	2.9, 3.6	3.7, 3.6	5.2, 3.3	6.7, 3.1	8.3, 3.0	9.8, 3.0	11.2, 3.1	12.5, 3.2	13.9, 3.4	15.2, 3.6	16.7, 3.8	18.0, 4.0	19.3, 4.2	20.8, 4.3

STATE OF CALIFORNIA
 DEPARTMENT OF TRANSPORTATION
RETAINING WALL TYPE 1 (CASE 1)
 NO SCALE

RSP B3-1A DATED APRIL 20, 2012 SUPPLEMENTS THE
 STANDARD PLANS BOOK DATED 2010.

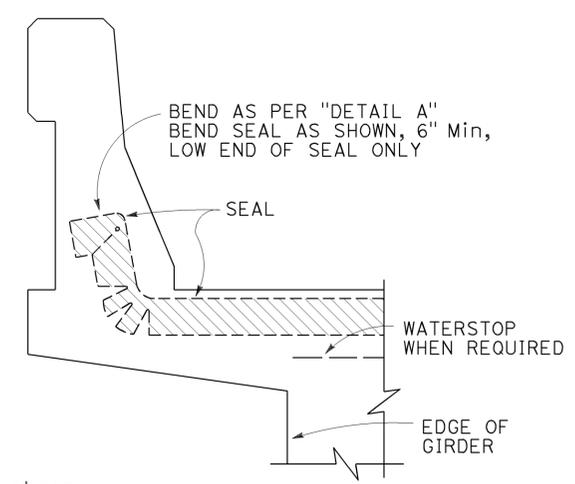
REVISED STANDARD PLAN RSP B3-1A

2010 REVISED STANDARD PLAN RSP B3-1A

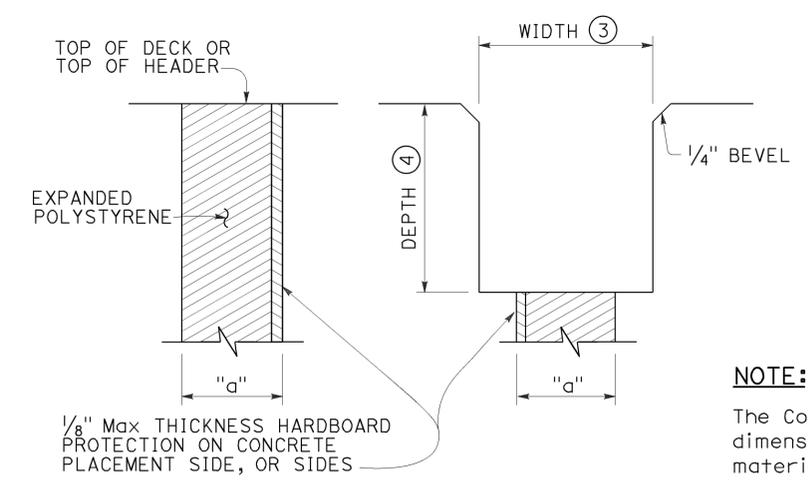


NOTE:
 Type "B" seal shown. Type "A" seals to conform to the general path of seal shown, cuts for bending not required. Bend type "A" seals 3" up into curb or barrier rail on only the low end of the seal.

CONCRETE BARRIER AND SIDEWALK



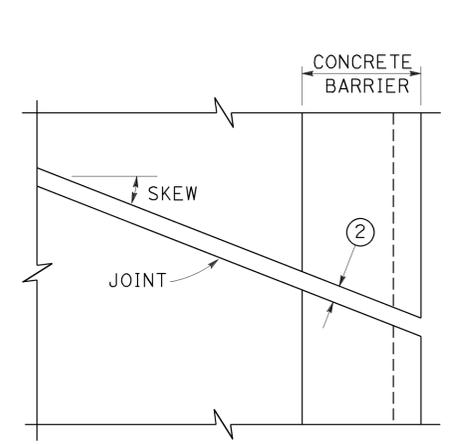
CONCRETE BARRIER



FORMING DETAIL SAWCUT DETAIL

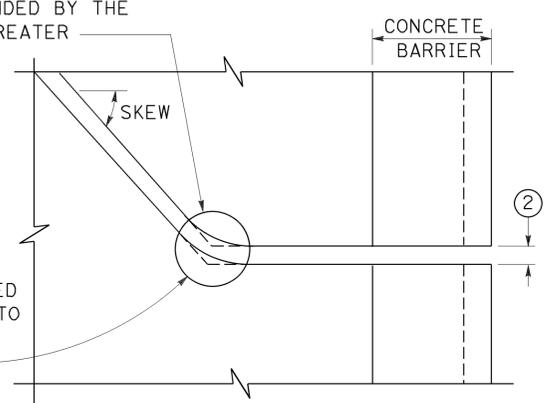
NOTE:
 The Contractor shall verify all controlling field dimensions before ordering or fabricating any material.

JOINT SEALS DETAILS



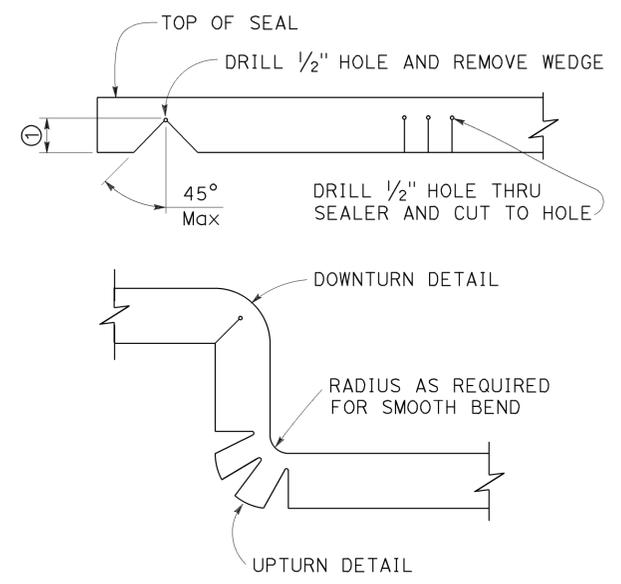
PLAN OF JOINT (SKEW ≤ 20°)

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



PLAN OF JOINT (SKEW > 20°)

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

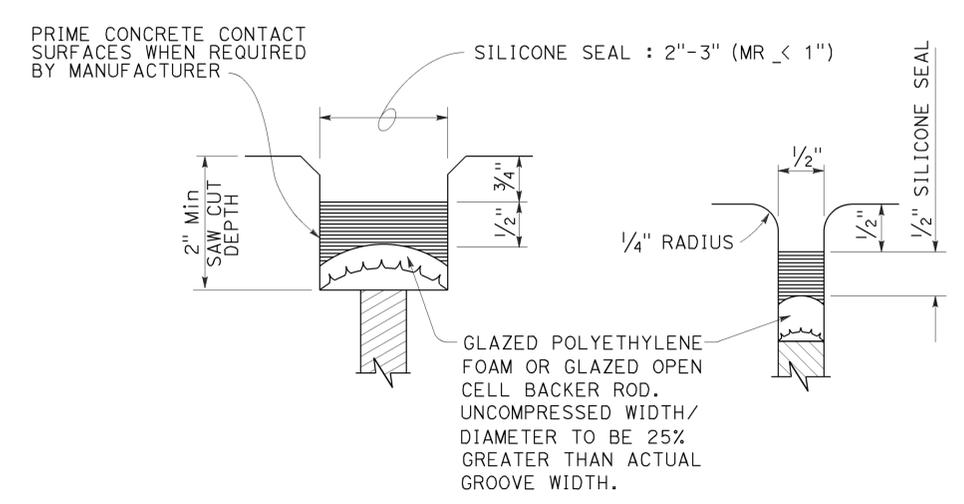


DETAIL A

- NOTES:**
- Make smooth cuts from the bottom of seal to 1/2" 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.
 - Opening in barrier to match width of sawn deck joint.
 - Sawcut groove widths shall be as ordered by the Engineer.
 - 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.
 - MR (movement rating) as shown on other plan sheets.
 - Other depths must be approved by the Engineer.
 - 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	1 1/2"	1 1/4"	3/4"
	CIP/PS	1 1/4"	1"	1/2"
1 1/2"	ALL EXCEPT CIP/PS	1 1/4"	1"	1/2"
	CIP/PS	1"	3/4"	1/2"
1"	ALL EXCEPT CIP/PS	1"	3/4"	1/2"
	CIP/PS	3/4"	1/2"	1/2"
1/2"	ALL EXCEPT CIP/PS	3/4"	3/4"	1/2"
	CIP/PS	1/2"	1/2"	1/2"

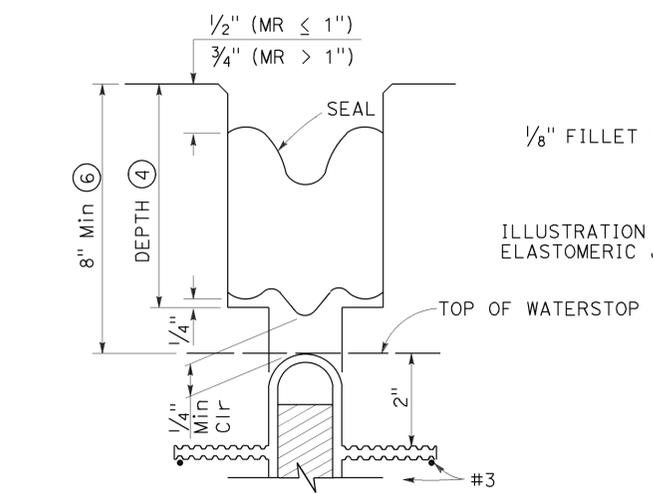


TYPE A SEAL

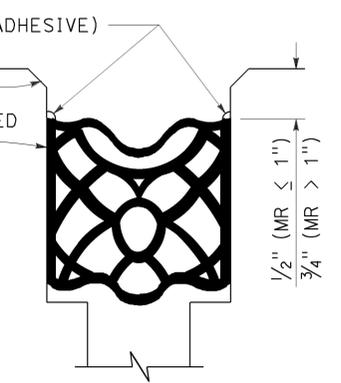
Movement rating : Silicone = 1" Max

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.

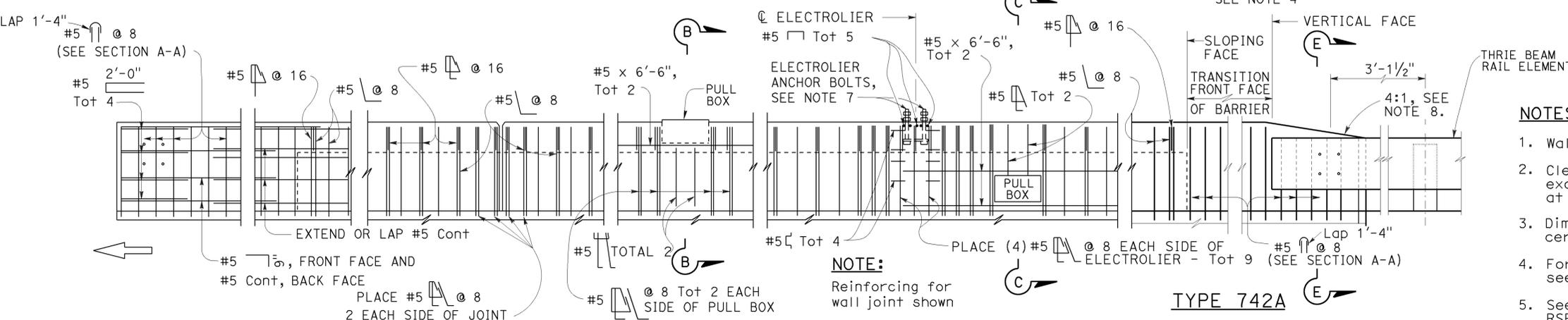
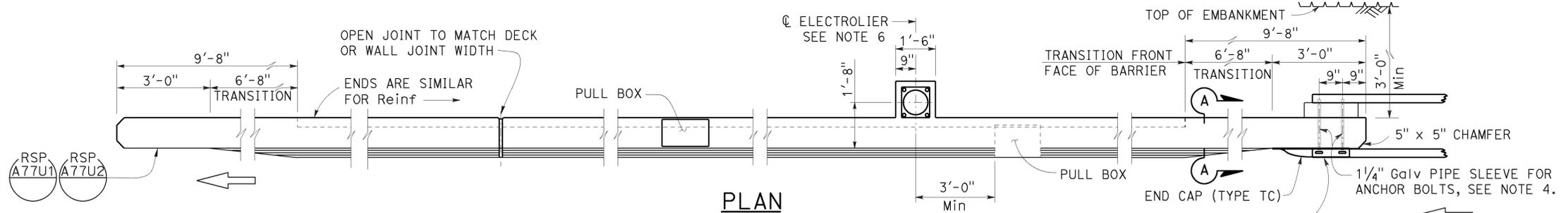
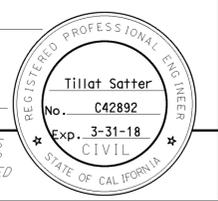
Dist	COUNTY	ROUTE	POST MILES TOTAL PROJECT	SHEET No.	TOTAL SHEETS
04	Soi	780	7.1	105	160

REGISTERED CIVIL ENGINEER

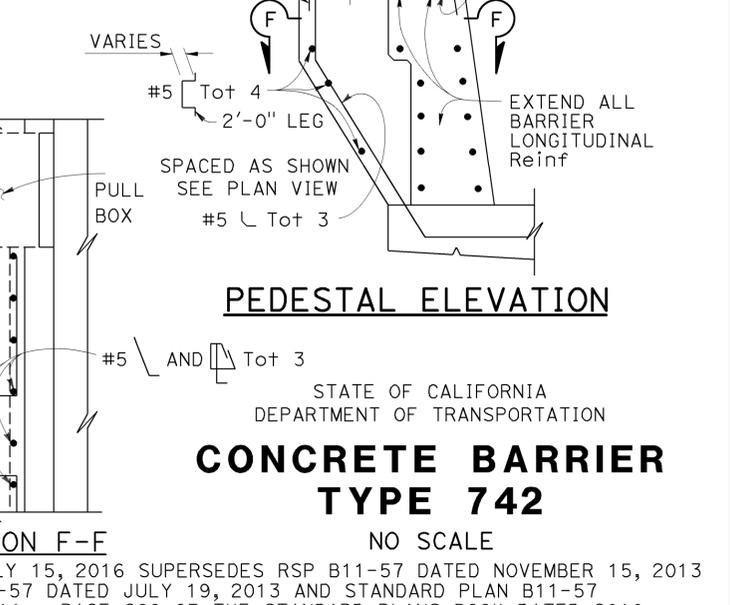
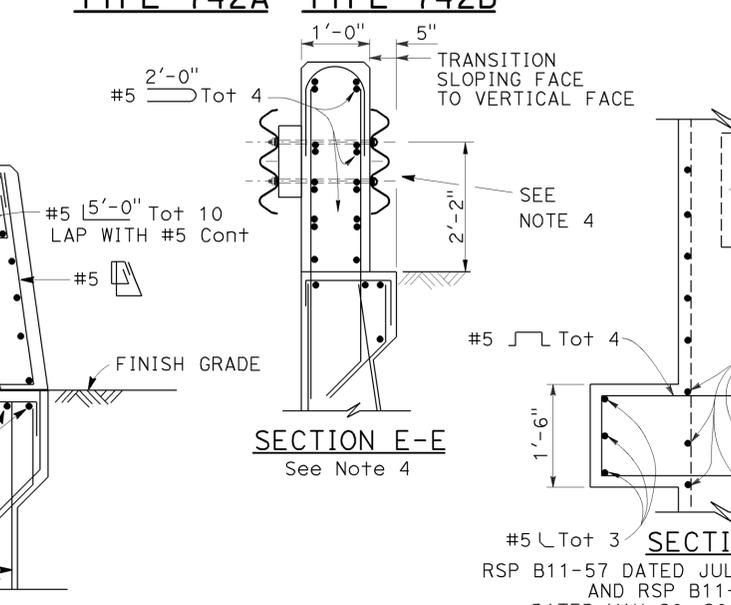
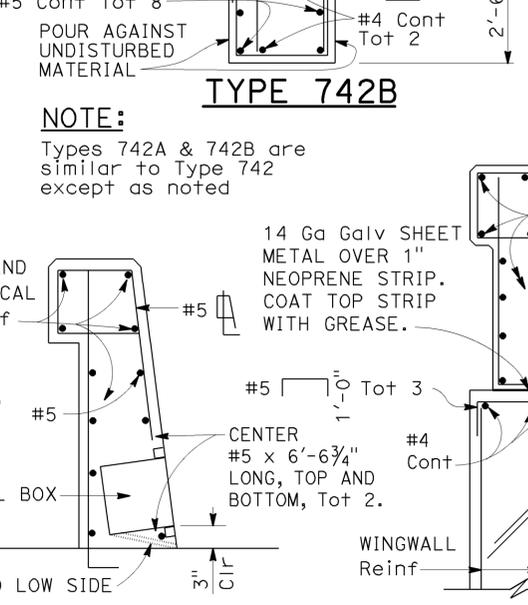
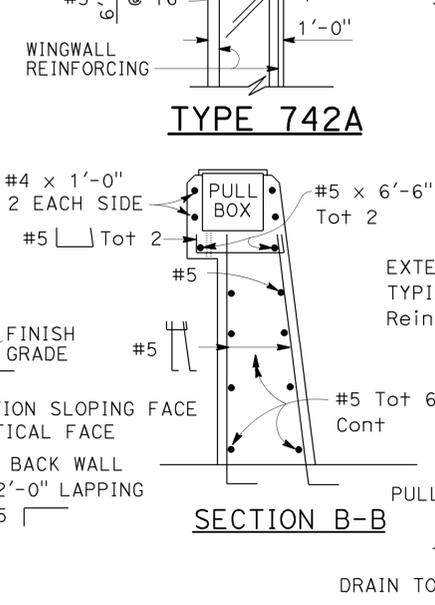
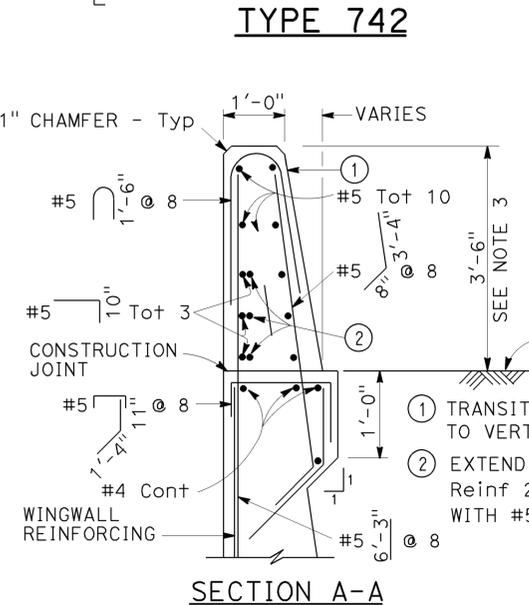
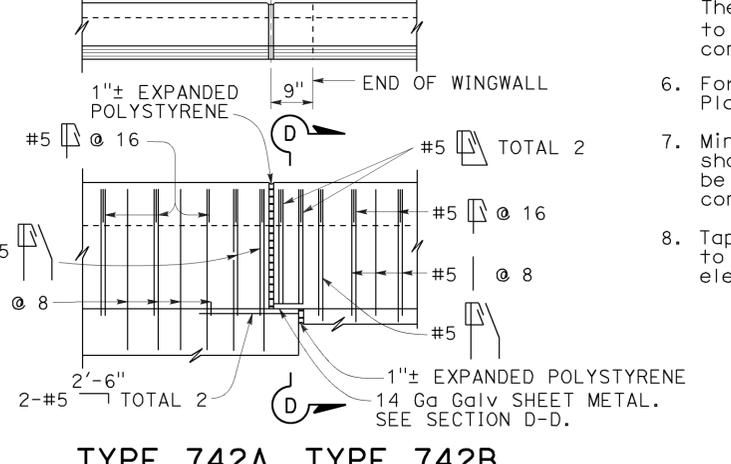
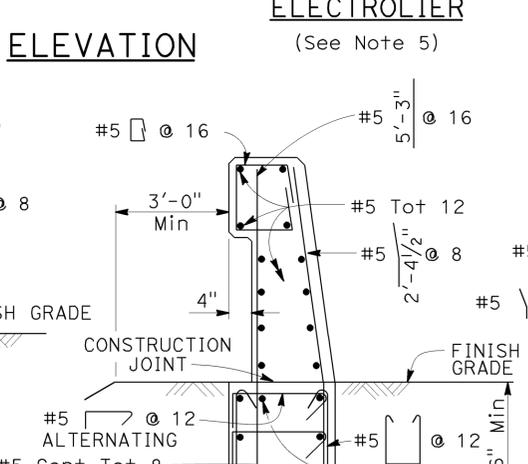
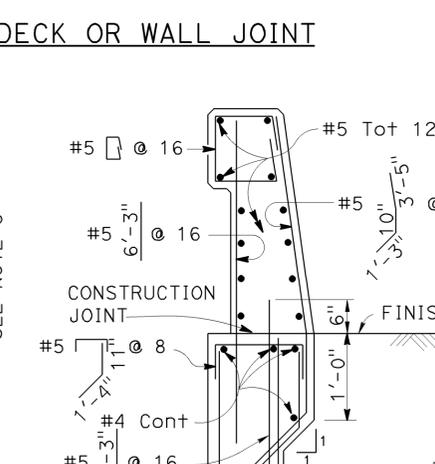
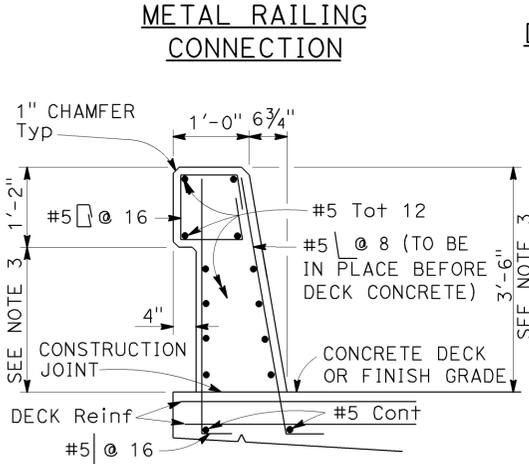
July 15, 2016
PLANS APPROVAL DATE

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.

TO ACCOMPANY PLANS DATED 5-18-16



- NOTES:**
- Walls are to be backfilled before barrier is placed.
 - Clearance to reinforcing steel in barrier to be 1", except as noted. Longitudinal reinforcement to stop at all expansion joints.
 - Dimensions may vary with roadway cross slope and with certain thickness of surfacing. See Project Plans.
 - For typical metal railing connection details not shown, see Revised Standard Plans RSP A77U1 and RSP A77U2.
 - See Revised Standard Plans RSP ES-9A, RSP ES-9B, RSP ES-9C, RSP ES-9D and RSP ES-9E for electrical details. The maximum number of conduits in the barrier is limited to two 2" conduits along with one 3" conduit. When a 3" conduit is used, it is restricted to the base of the barrier.
 - For electrolier mounting details, See Revised Standard Plans RSP ES-6A and RSP ES-6B.
 - Minimum concrete edge distance, to the reinforcing shown, shall be maintained. Edge distance may be adjusted to accommodate increase in concrete cover for architectural treatment.
 - Taper the top of the end of the bridge railing at 4:1 to match the top elevation of the thrie beam rail element.



Details shown for barrier anchorage to Type 742A. Anchorage for barrier Types 742 and 742A are similar to their respective details.

SECTION B-B
SECTION C-C
See Notes

SECTION D-D
SECTION E-E
See Note 4

SECTION F-F
See Note 4

STATE OF CALIFORNIA
DEPARTMENT OF TRANSPORTATION
**CONCRETE BARRIER
TYPE 742**
NO SCALE
RSP B11-57 DATED JULY 15, 2016 SUPERSEDES RSP B11-57 DATED NOVEMBER 15, 2013
AND RSP B11-57 DATED JULY 19, 2013 AND STANDARD PLAN B11-57
DATED MAY 20, 2011 - PAGE 299 OF THE STANDARD PLANS BOOK DATED 2010.

REVISED STANDARD PLAN RSP B11-57

2010 REVISED STANDARD PLAN RSP B11-57

LEGEND:

AB	ABANDON. IF APPLIED TO CONDUIT, REMOVE CONDUCTORS
BC	INSTALL PULL BOX IN EXISTING CONDUIT RUN
BP	PEDESTRIAN BARRICADE, TYPE AS INDICATED ON PLAN
CB	INSTALL CONDUIT INTO EXISTING PULL BOX
CC	CONNECT NEW AND EXISTING CONDUIT. REMOVE EXISTING CONDUCTORS AND INSTALL CONDUCTORS AS INDICATED
CF	CONDUIT TO REMAIN FOR FUTURE USE. REMOVE CONDUCTORS. INSTALL PULL TAPE
DH	DETECTOR HANDHOLE
FA	FOUNDATION TO BE ABANDONED
IS	INSTALL SIGN ON SIGNAL MAST ARM
NS	NO SLIP BASE ON STANDARD
PEC	PHOTOELECTRIC CONTROL
PEU	PHOTOELECTRIC UNIT
RC	EQUIPMENT OR MATERIAL TO BE REMOVED AND BECOME THE PROPERTY OF THE CONTRACTOR
RE	REMOVE ELECTROLIER, FUSES AND BALLAST. TAPE ENDS OF CONDUCTORS
RL	RELOCATE EQUIPMENT
RR	REMOVE AND REUSE EQUIPMENT
RS	REMOVE AND SALVAGE EQUIPMENT
SC	SPLICE NEW TO EXISTING CONDUCTORS
SD	SERVICE DISCONNECT
TSP	TELEPHONE SERVICE POINT

ABBREVIATIONS

AC+	UNDERGROUNDED CONDUCTOR	MAT	MAST ARM MOUNTING TOP ATTACHMENT
APS	ACCESSIBLE PEDESTRIAN SIGNAL	MAS	MAST ARM MOUNTING SIDE ATTACHMENT
Batt	BATTERY	MBPS	MANUAL BYPASS SWITCH
BBS	BATTERY BACKUP SYSTEM	M/M	MULTIPLE TO MULTIPLE TRANSFORMER
BC	BOLT CIRCLE	Mtg	MOUNTING
BIK	BLACK	MV	MERCURY VAPOR LIGHTING FIXTURE
BP	BYPASS	MVDS	MICROWAVE VEHICLE DETECTION SYSTEM
BPB	BICYCLE PUSH BUTTON	N	NEUTRAL (GROUNDED CONDUCTOR)
C	CONDUIT	NB	NEUTRAL BUS
CB	CIRCUIT BREAKER	NC	NORMALLY CLOSE
CCTV	CLOSED CIRCUIT TELEVISION	NO	NORMALLY OPEN
Ckt	CIRCUIT	P	CIRCUIT BREAKER'S POLE
CMS	CHANGEABLE MESSAGE SIGN	PB	PULL BOX
Ctid	CALTRANS IDENTIFICATION	PBA	PUSH BUTTON ASSEMBLY
Comm	COMMUNICATION	PEC	PHOTOELECTRIC CONTROL
Cntl	CONTROL	Ped	PEDESTRIAN
DF	DEPARTMENT-FURNISHED	PEU	PHOTOELECTRIC UNIT
DLC	LOOP DETECTOR LEAD-IN CABLE	PT	CONDUIT WITH PULL TAPE
EMS	EXTINGUISHABLE MESSAGE SIGN	PTR	POWER TRANSFER RELAY
EVUC	EMERGENCY VEHICLE UNIT CABLE	RE	RELOCATED EQUIPMENT
EVUD	EMERGENCY VEHICLE UNIT DETECTOR	RM	RAMP METERING
FB	FLASHING BEACON	RWIS	ROADSIDE WEATHER INFORMATION SYSTEM
FBCA	FLASHING BEACON CONTROL ASSEMBLY	SB	SLIP BASE
FBS	FLASHING BEACON WITH SLIP BASE	SIC	SIGNAL INTERCONNECT CABLE
FO	FIBER OPTIC	Sig	SIGNAL
G	EQUIPMENT GROUNDING CONDUCTOR	SMA	SIGNAL MAST ARM
GB	GROUND BUS	SNS	STREET NAME SIGN
GFCI	GROUND FAULT CIRCUIT INTERRUPTER	SP	SERVICE POINT
Grn	GREEN	TB	TERMINAL BOARD
HAR	HIGHWAY ADVISORY RADIO	TDC	TELEPHONE DEMARCATION CABINET
Hex	HEXAGONAL	Temp	TEMPERATURE
HPS	HIGH PRESSURE SODIUM	TMS	TRAFFIC MONITORING STATION
IISNS	INTERNALLY ILLUMINATED STREET NAME SIGN	TOS	TRAFFIC OPERATIONS SYSTEM
ISL	INDUCTION SIGN LIGHTING	UPS	UNINTERRUPTABLE POWER SUPPLY
LED	LIGHT EMITTING DIODE	UPSC	UNINTERRUPTABLE POWER SUPPLY CONTROLLER
LMA	LUMINAIRE MAST ARM	Veh	VEHICLE
LPS	LOW PRESSURE SODIUM	VIVDS	VIDEO IMAGE VEHICLE DETECTION SYSTEM
Ltg	LIGHTING	Wht	WHITE
Lum	LUMINAIRE	WIM	WEIGH-IN-MOTION
M	METERED	Xfmr	TRANSFORMER

Dist	COUNTY	ROUTE	POST MILES TOTAL PROJECT	SHEET No.	TOTAL SHEETS
04	SoI	780	7.1	106	160

Theresa Gabriel
REGISTERED ELECTRICAL ENGINEER

October 30, 2015
PLANS APPROVAL DATE

Theresa
Aziz Gabriel
No. E15129
Exp. 6-30-16
ELECTRICAL
STATE OF CALIFORNIA

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

TO ACCOMPANY PLANS DATED 5-18-16

SOFFIT AND WALL-MOUNTED LUMINAIRES

- PENDANT SOFFIT LUMINAIRE, 70 W HPS UNLESS OTHERWISE SPECIFIED
- FLUSH-MOUNTED SOFFIT LUMINAIRE, 70 W HPS UNLESS OTHERWISE SPECIFIED
- WALL-MOUNTED LUMINAIRE, 70 W HPS UNLESS OTHERWISE SPECIFIED
- EXISTING SOFFIT OR WALL-MOUNTED LUMINAIRE TO REMAIN UNMODIFIED
- EXISTING SOFFIT OR WALL-MOUNTED LUMINAIRE TO BE MODIFIED AS SPECIFIED

NOTE:
Arrow indicates "street side" of luminaire.

COMMONLY USED SYMBOLS FOR UNITED STATES CUSTOMARY UNITS OF MEASUREMENT:

SYMBOL	DEFINITIONS
Ω	OHMS
min	MINUTE
s	SECOND
bps	BITS PER SECOND
Bps	BYTES PER SECOND
A	AMPERE
V	VOLT
V(dc)	VOLT (DIRECT CURRENT)
V(ac)	VOLT (ALTERNATING CURRENT)
FC	FOOT - CANDLE
W	WATTS
VA	VOLT-AMPERE
M	MEGA
k	KILO
m	MILLI
μ	MICRO
P	PICO
Hz	HERTZ

MISCELLANEOUS ELECTROLIERS

NEW	EXISTING	
		LUMINAIRE ON WOOD POLE
		NON-STANDARD ELECTROLIER (SEE PROJECT LEGEND)
		CITY ELECTROLIER
		ELECTROLIER FOUNDATION (FUTURE INSTALLATION)

- NOTES:**
- LED luminaires shall be 235 W when installed on Type 21, 21D, 30, 31 and 32 Standards, unless otherwise specified. LED luminaires shall be 165 W when installed on other type standards or poles, unless otherwise specified.
 - Luminaires shall be the cutoff type, ANSI Type III medium cutoff lighting distribution, unless otherwise specified.

STANDARD ELECTROLIER

NEW	EXISTING	STANDARD TYPE
		15
		15D
		15 STRUCTURE
		15D STRUCTURE
		21
		21D
		21 STRUCTURE
		21D STRUCTURE
		30
		31
		32

STATE OF CALIFORNIA
DEPARTMENT OF TRANSPORTATION

ELECTRICAL SYSTEMS (LEGEND AND ABBREVIATIONS)

NO SCALE

RSP ES-1A DATED OCTOBER 30, 2015 SUPERSEDES RSP ES-1A DATED JULY 19, 2013 AND STANDARD PLAN ES-1A DATED MAY 20, 2011 - PAGE 425 OF THE STANDARD PLANS BOOK DATED 2010.

REVISED STANDARD PLAN RSP ES-1A

2010 REVISED STANDARD PLAN RSP ES-1A

Dist	COUNTY	ROUTE	POST MILES TOTAL PROJECT	SHEET No.	TOTAL SHEETS
04	SoI	780	7.1	107	160

Theresa Gabriel
 REGISTERED ELECTRICAL ENGINEER
 October 30, 2015
 PLANS APPROVAL DATE

Theresa
Aziz Gabriel
No. E15129
Exp. 6-30-16
ELECTRICAL
STATE OF CALIFORNIA

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TO ACCOMPANY PLANS DATED 5-18-16

CONDUIT

SIGNAL EQUIPMENT

NEW	EXISTING	
---	---	LIGHTING CONDUIT, UNLESS OTHERWISE INDICATED OR NOTED
---	---	TRAFFIC SIGNAL CONDUIT
---C---	---c---	COMMUNICATION CONDUIT
---T---	---t---	TELEPHONE CONDUIT
---F---	---f---	FIRE ALARM CONDUIT
---FO---	---fo---	FIBER OPTIC CONDUIT
---	---	CONDUIT TERMINATION
		CONDUIT RISER ATTACHED TO THE STRUCTURE OR SERVICE POLE

NEW	EXISTING	
		PEDESTRIAN SIGNAL HEAD
		PUSH BUTTON ASSEMBLY POST
		PEDESTRIAN BARRICADE
		VEHICLE SIGNAL HEAD (WITH BACKPLATE AND 3-SECTIONS: RED, YELLOW AND GREEN)
		VEHICLE SIGNAL HEAD WITH ANGLE VISOR
		MODIFICATIONS OF BASIC SYMBOL: "L" INDICATES ALL NON-ARROW SECTIONS LOUVERED "LG" INDICATES LOUVERED GREEN SECTION ONLY "PV" INDICATES ALL 12" SECTIONS PROGRAMMED VISIBILITY "8" INDICATES ALL 8" SECTIONS (ONLY WHEN SPECIFIED)

SIGNAL EQUIPMENT Cont

NEW	EXISTING	
		GUARD POST
		TYPE 1 STANDARD WITH RAMP METERING SIGN
		OPTICAL DETECTOR FOR THE EMERGENCY VEHICLE DETECTION

SERVICE EQUIPMENT

NEW	EXISTING	
---OH---	---oh---	OVERHEAD LINES
		WOOD POLE, "U" INDICATES UTILITY OWNED
		POLE GUY WITH ANCHOR
		UTILITY TRANSFORMER - GROUND MOUNTED
		SERVICE EQUIPMENT ENCLOSURE TYPE. DOOR INDICATES FRONT OF ENCLOSURE
		TELEPHONE DEMARCATION CABINET

POLE-MOUNTED SERVICE DESIGNATION

	TYPE H SERVICE, 28'-10"	TYPE OF INSTALLATION AND POLE HEIGHT ABOVE GRADE
--	-------------------------	--

FLASHING BEACON

NEW	EXISTING	
		FLASHING BEACON (ONE VEHICLE SIGNAL HEAD WITH BACKPLATE AND VISOR) "R" INDICATES RED INDICATION, "Y" INDICATES YELLOW INDICATION
		FLASHING BEACON WITH TYPE 15-FBS STANDARD AND A SIGN.
		FLASHING BEACON WITH TYPES 9, 9A OR 9B SIGN UNLESS OTHERWISE SPECIFIED OR INDICATED

		VEHICLE SIGNAL HEAD CONSISTING OF RED, YELLOW AND GREEN LEFT ARROW SECTIONS
		VEHICLE SIGNAL HEAD CONSISTING OF RED AND YELLOW SECTIONS WITH AN UP GREEN ARROW SECTION
		VEHICLE SIGNAL HEAD (5 SECTION) CONSISTING OF RED, YELLOW AND GREEN SECTIONS WITH YELLOW AND GREEN RIGHT ARROW SECTIONS
		TYPE 15TS STANDARD WITH VEHICLE SIGNAL HEAD AND LUMINAIRE
		TYPE 21TS STANDARD WITH VEHICLE SIGNAL HEAD AND LUMINAIRE
		STANDARD WITH LUMINAIRE AND SIGNAL MAST ARMS AND ATTACHED VEHICLE SIGNAL HEADS
		TYPE 1 STANDARD WITH ATTACHED VEHICLE SIGNAL HEADS
		STANDARD WITH A SIGNAL MAST ARM, ATTACHED VEHICLE SIGNAL HEADS AND INTERNALLY ILLUMINATED STREET NAME SIGN
		CONTROLLER ASSEMBLY. DOOR INDICATES FRONT OF CABINET

NOTES:

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

ILLUMINATED OVERHEAD SIGN

NEW	EXISTING	
		SINGLE POST, SINGLE ILLUMINATED SIGN, BALANCED BUTTERFLY
		SINGLE POST, DOUBLE ILLUMINATED SIGN, BALANCED BUTTERFLY
		SINGLE POST, SINGLE ILLUMINATED SIGN, FULL CANTILEVER
		DOUBLE POST, SINGLE ILLUMINATED SIGN
		SINGLE ILLUMINATED SIGN MOUNTED ON STRUCTURE
		DOUBLE POST, SINGLE ILLUMINATED SIGN WITH ELECTROLIER

STATE OF CALIFORNIA
 DEPARTMENT OF TRANSPORTATION
**ELECTRICAL SYSTEMS
 (LEGEND AND ABBREVIATIONS)**

NO SCALE

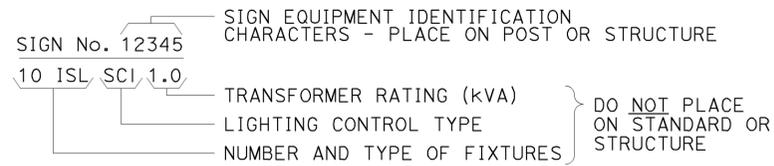
RSP ES-1B DATED OCTOBER 30, 2015 SUPERSEDES RSP ES-1B DATED JULY 19, 2013 AND STANDARD PLAN ES-1B DATED MAY 20, 2011 - PAGE 426 OF THE STANDARD PLANS BOOK DATED 2010.

REVISED STANDARD PLAN RSP ES-1B

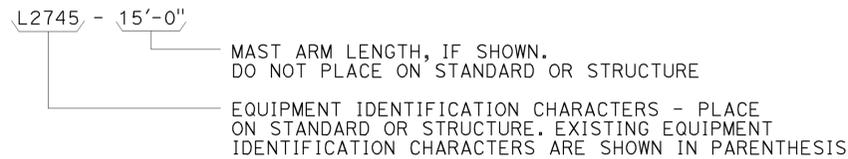
2010 REVISED STANDARD PLAN RSP ES-1B

EQUIPMENT IDENTIFICATION

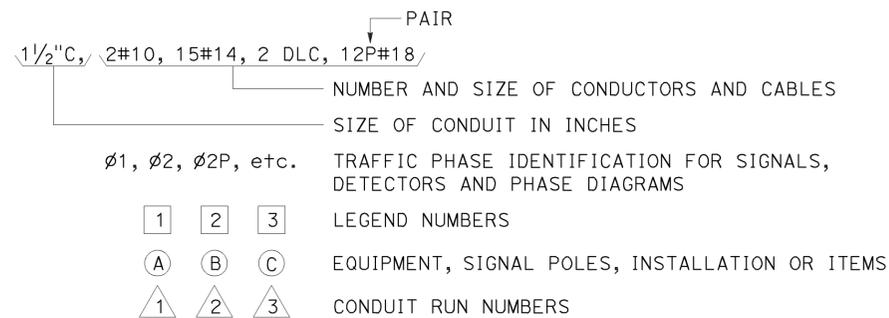
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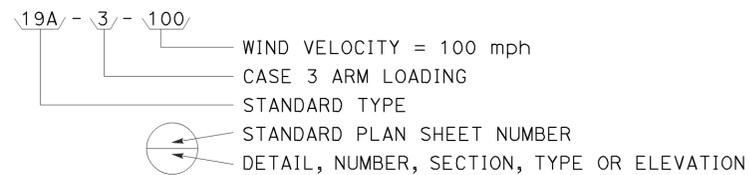
ELECTROLIER OR EQUIPMENT IDENTIFICATION:



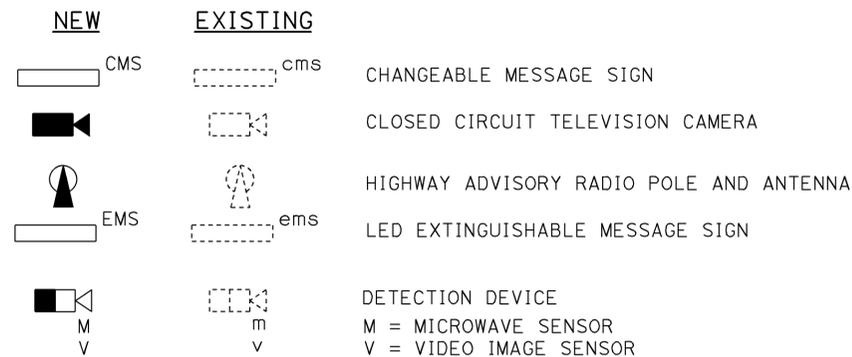
CONDUIT AND CONDUCTOR IDENTIFICATION:



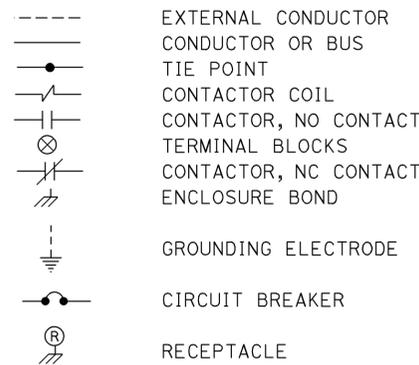
SIGNAL AND LIGHTING STANDARD (TYPICAL DESIGNATION):



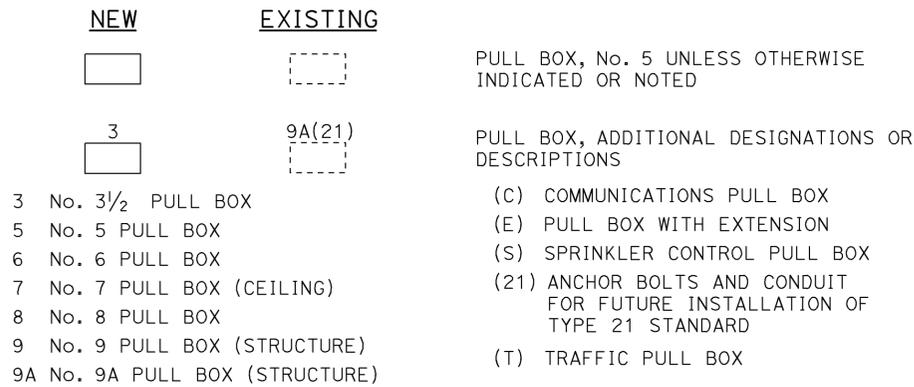
MISCELLANEOUS EQUIPMENT



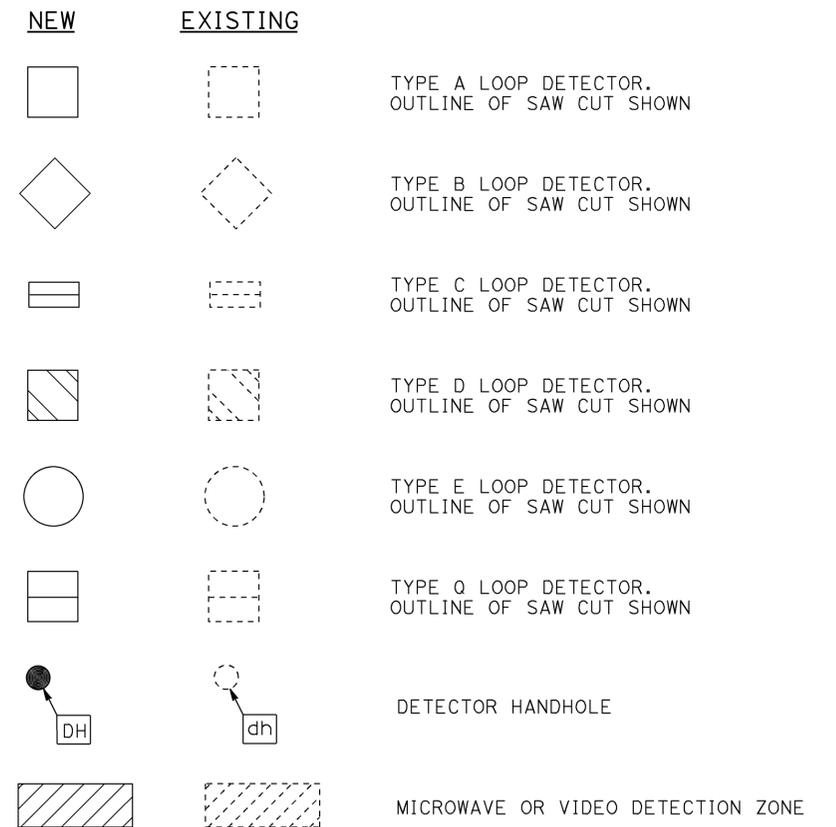
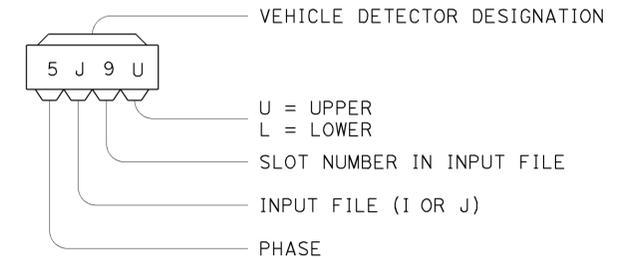
WIRING DIAGRAM LEGEND



PULL BOXES



VEHICLE DETECTORS



STATE OF CALIFORNIA
 DEPARTMENT OF TRANSPORTATION

ELECTRICAL SYSTEMS (LEGEND AND ABBREVIATIONS)

NO SCALE

RSP ES-1C DATED APRIL 15, 2016 SUPERSEDES RSP ES-1C
 DATED OCTOBER 30, 2015 AND RSP ES-1C DATED JULY 19, 2013 AND
 STANDARD PLAN ES-1C DATED MAY 20, 2011 - PAGE 427 OF THE STANDARD PLANS BOOK DATED 2010.

REVISED STANDARD PLAN RSP ES-1C

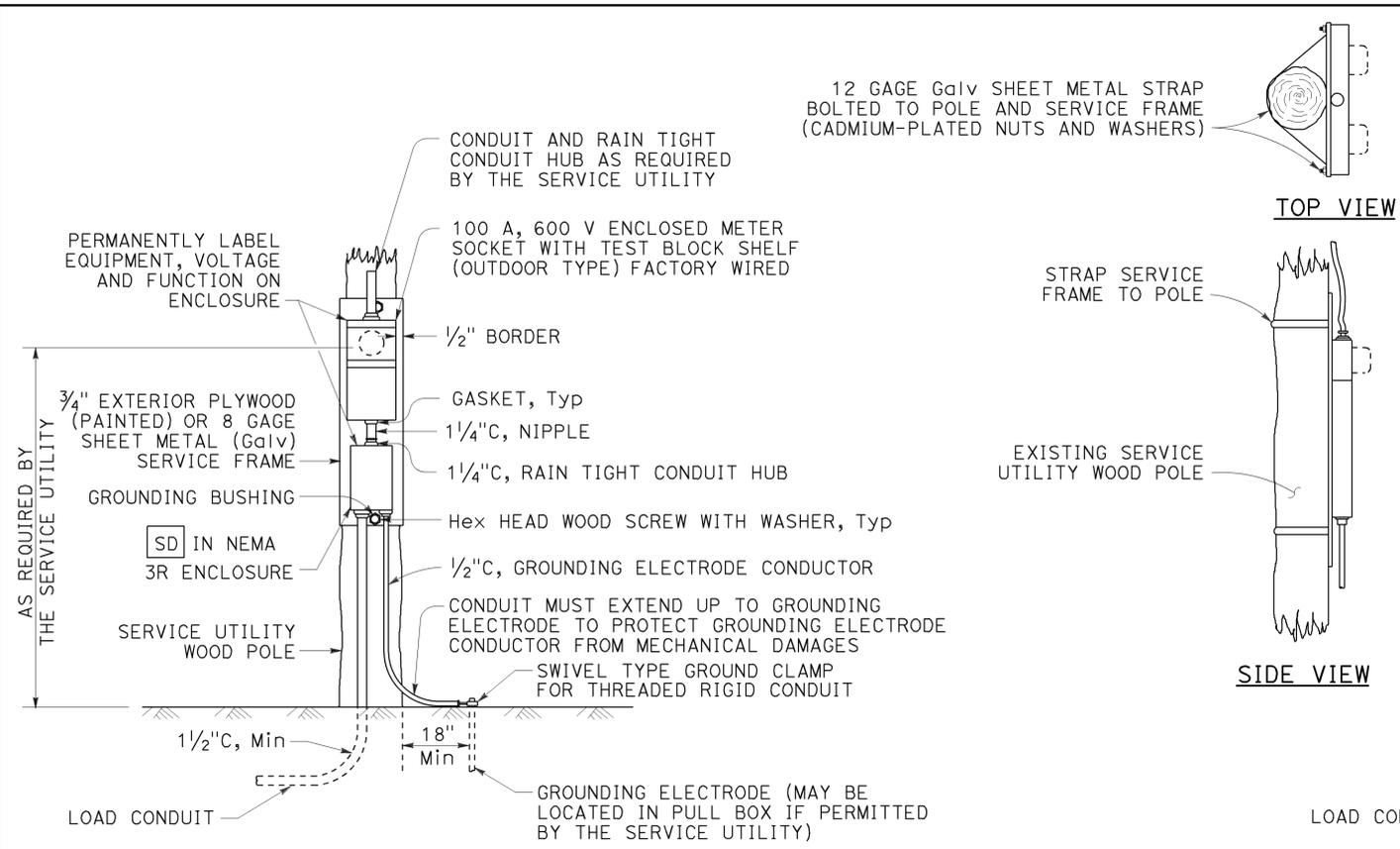
2010 REVISED STANDARD PLAN RSP ES-1C

Dist	COUNTY	ROUTE	POST MILES TOTAL PROJECT	SHEET No.	TOTAL SHEETS
04	SoI	780	7.1	109	160

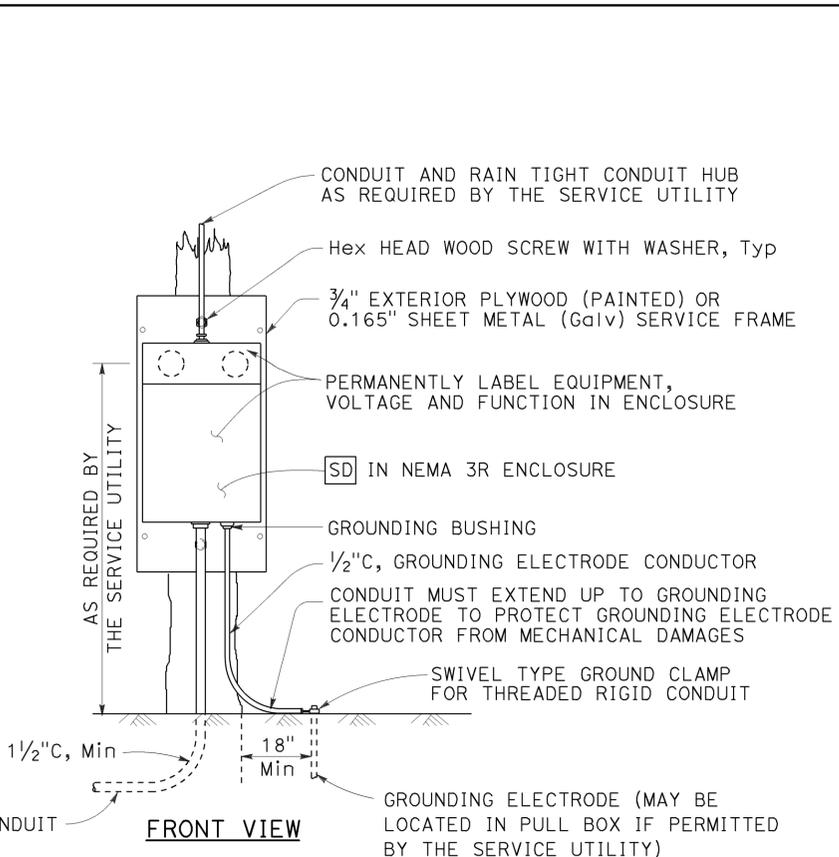
Theresa Gabriel
 REGISTERED ELECTRICAL ENGINEER
 October 30, 2015
 PLANS APPROVAL DATE
THE STATE OF CALIFORNIA OR ITS OFFICERS OR AGENTS SHALL NOT BE RESPONSIBLE FOR THE ACCURACY OR COMPLETENESS OF SCANNED COPIES OF THIS PLAN SHEET.



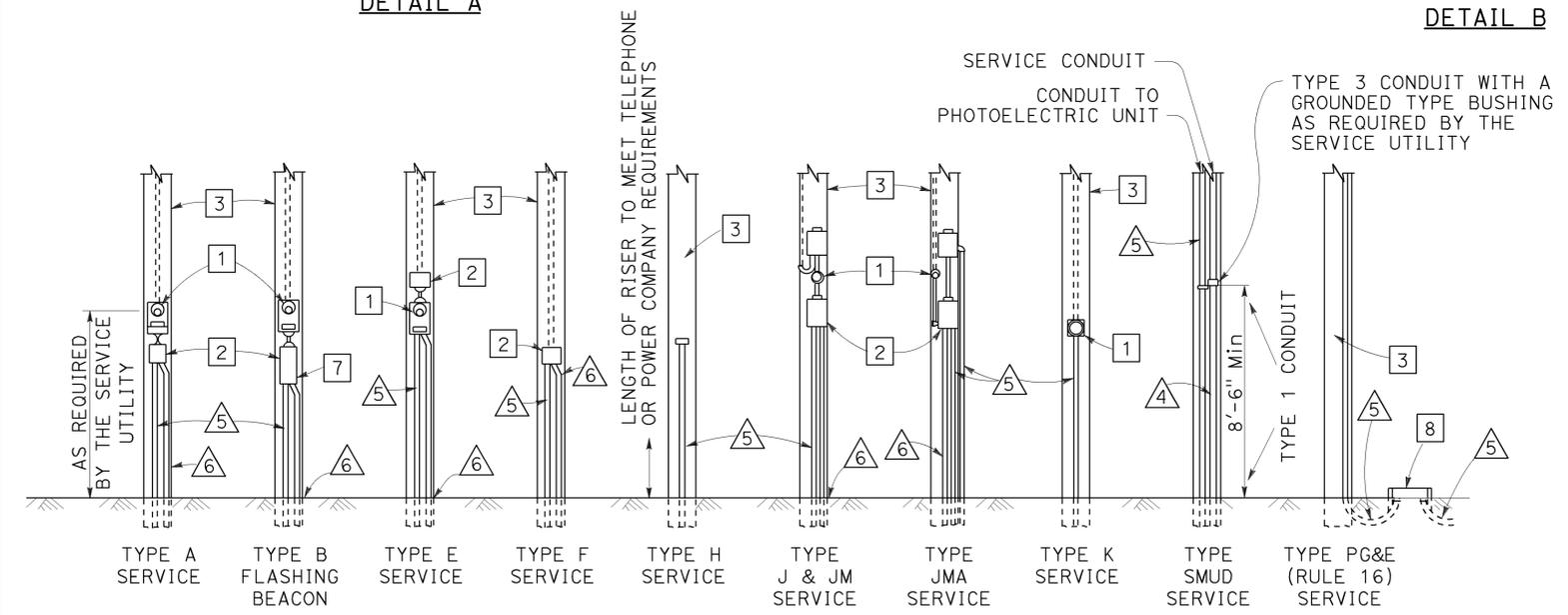
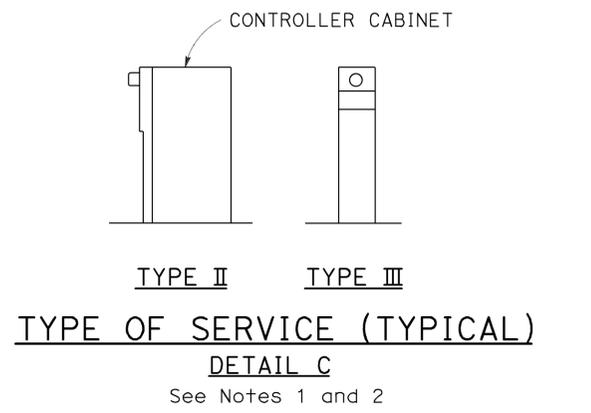
TO ACCOMPANY PLANS DATED 5-18-16



TYPE SCE-1
DETAIL A

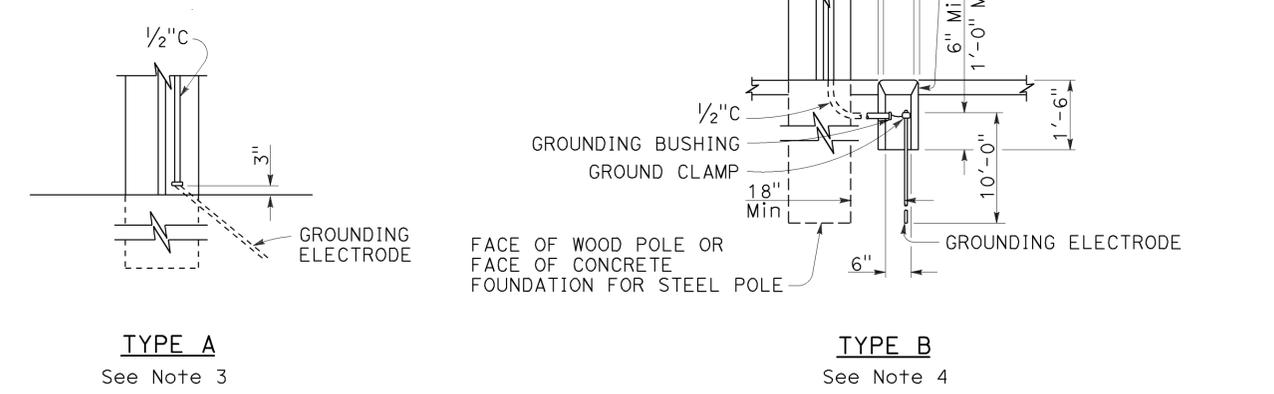


TYPE SCE-2
DETAIL B



- LEGEND:**
- 1 METER SOCKET.
 - 2 SERVICE ENCLOSURE WITH A MINIMUM 60 A RATED MAIN CIRCUIT BREAKER, UNLESS OTHERWISE SHOWN.
 - 3 A. UTILITY OWNED POLE. THE SERVICE UTILITY WILL FURNISH AND INSTALL REQUIRED SERVICE RISER, PEU WITH CONDUCTORS AND OTHER EQUIPMENT AS NEEDED.
B. STATE OWNED POLE. THE CONTRACTOR SHALL FURNISH AND INSTALL REQUIRED SERVICE RISER AND EQUIPMENT.
 - 4 2" C, SERVICE CONDUIT MUST HAVE A GROUNDED TYPE BUSHING INSTALLED AT UPPER END OF THE METALLIC POLE RISER CONDUIT. A GROUNDING CONDUCTOR MUST BE ATTACHED TO THE BUSHING, CARRIED THROUGH THE CONDUIT RUN AND ATTACHED TO THE SERVICE EQUIPMENT ENCLOSURE'S GROUNDING ELECTRODE.
 - 5 CONDUIT, LENGTH AND SIZE AS REQUIRED.
 - 6 1/2" C, 1#6. SEE DETAIL E.
 - 7 FLASHING BEACON CONTROL ASSEMBLY.
 - 8 SERVICE PULL BOX, No. 5 UNLESS OTHERWISE NOTED, FURNISHED AND INSTALLED BY THE CONTRACTOR. SERVICE UTILITY SHALL DETERMINE THE EXACT LOCATION.

POLE MOUNTED SERVICE INSTALLATIONS
DETAIL D



SERVICE GROUNDING
DETAIL E

- NOTES:**
- Type II service equipment enclosure mounted on the side of a controller cabinet.
 - Type III complete free-standing service equipment enclosure.
 - Ground clamp and required fittings must be accessible. Conduit must extend to protect grounding electrode conductor from mechanical damage.
 - Use where service utility requires 18" clearance between grounding electrode and the pole or service equipment enclosure. Installation shown is for sidewalk or paved areas. In unpaved areas, omit special service pull box and locate ground clamp above ground or locate ground clamp in nearest pull box.

STATE OF CALIFORNIA
DEPARTMENT OF TRANSPORTATION
ELECTRICAL SYSTEMS
(SERVICE EQUIPMENT)
NO SCALE

RSP ES-2A DATED OCTOBER 30, 2015 SUPERSEDES STANDARD PLAN ES-2A DATED MAY 20, 2011 - PAGE 428 OF THE STANDARD PLANS BOOK DATED 2010.

2010 REVISED STANDARD PLAN RSP ES-2A

Dist	COUNTY	ROUTE	POST MILES TOTAL PROJECT	SHEET No.	TOTAL SHEETS
04	SoI	780	7.1	110	160

Theresa Gabriel
REGISTERED ELECTRICAL ENGINEER

October 30, 2015
PLANS APPROVAL DATE



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TO ACCOMPANY PLANS DATED 5-18-16

NOTES:

1. The plan shows the approximate location of devices within the enclosure. Components may be rearranged, however, the "working" clearances within the service equipment enclosure shall be maintained.
2. In unpaved areas a raised portland cement concrete pad 2'-0" x 4" x width of foundation shall be constructed in front of new service equipment enclosure installation. Pad shall be set to elevation of foundation.
3. Plug-in circuit breakers may be mounted in the vertical or horizontal position. Cable-in/cable-out circuit breakers shall be mounted in the vertical position.
4. Type III-AF and Type III-BF service equipment enclosures shall have the meter viewing windows located on the front side of the service equipment enclosures.
5. Type III-AR and Type III-BR service equipment enclosure shall be similarly constructed as Type III-AF and Type III-BF respectively, except the meter viewing windows shall be located on the back side of the service equipment enclosures.

STATE OF CALIFORNIA
DEPARTMENT OF TRANSPORTATION

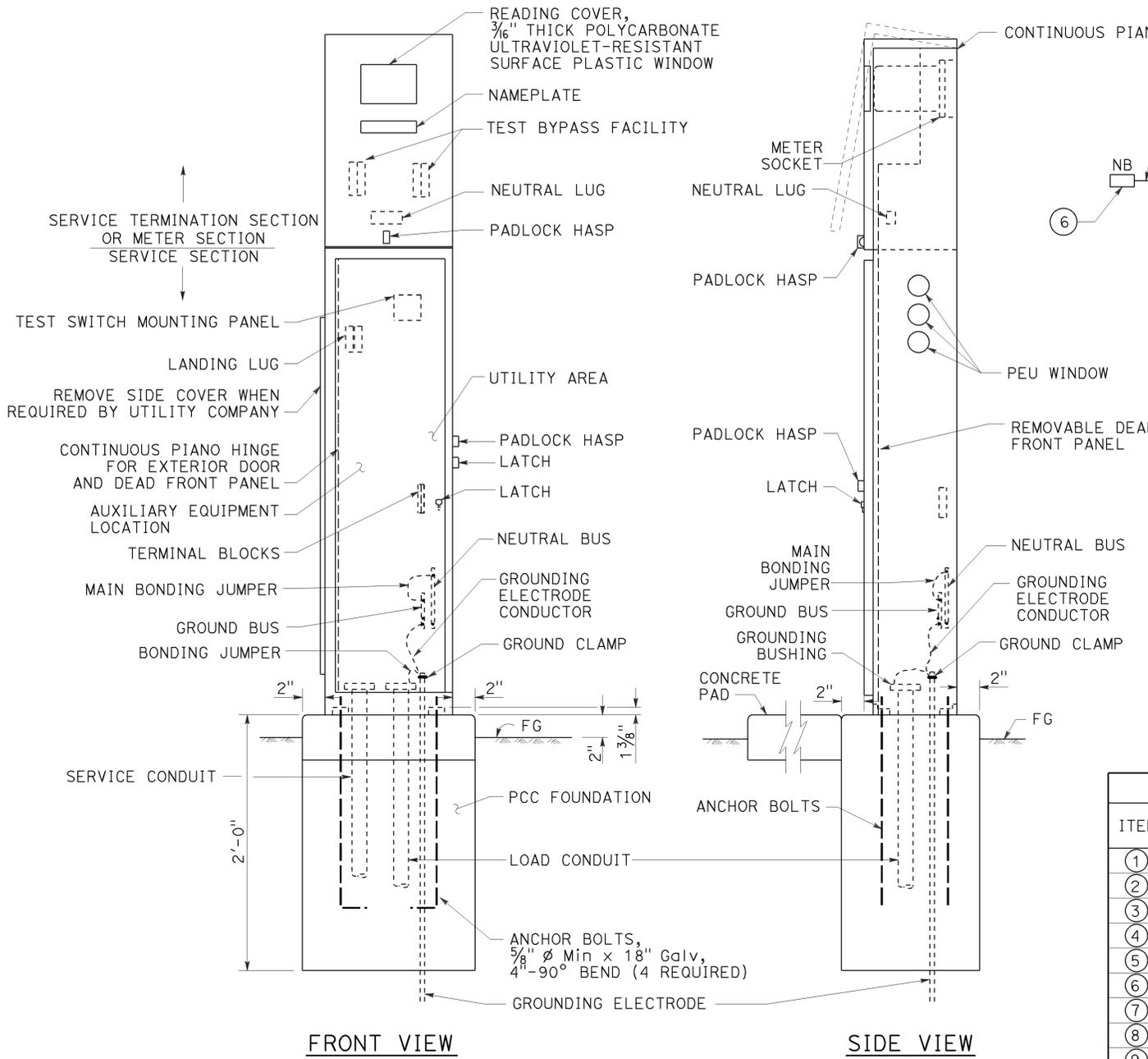
**ELECTRICAL SYSTEMS
(SERVICE EQUIPMENT ENCLOSURE
NOTES TYPE III SERIES)**

NO SCALE

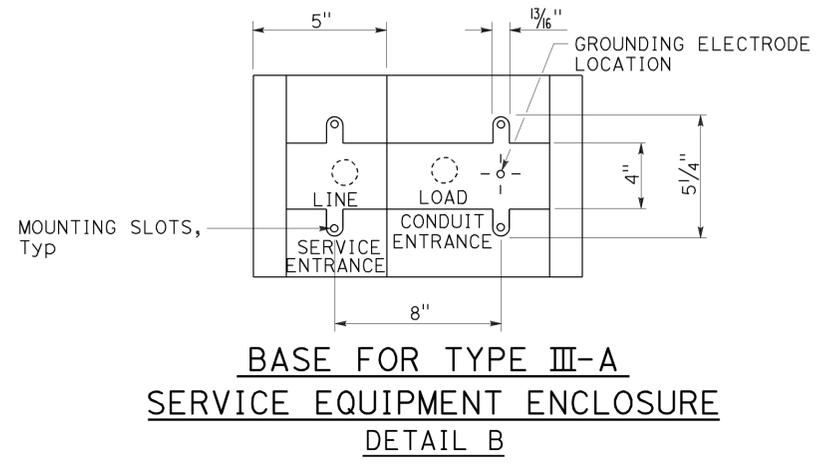
RSP ES-2C DATED OCTOBER 30, 2015 SUPERSEDES STANDARD PLAN ES-2C DATED MAY 20, 2011 - PAGE 430 OF THE STANDARD PLANS BOOK DATED 2010.

REVISED STANDARD PLAN RSP ES-2C

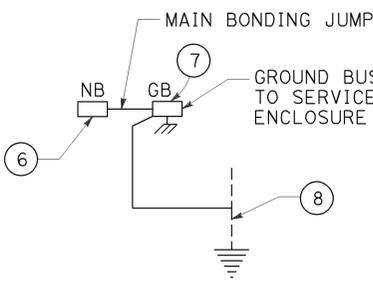
2010 REVISED STANDARD PLAN RSP ES-2C



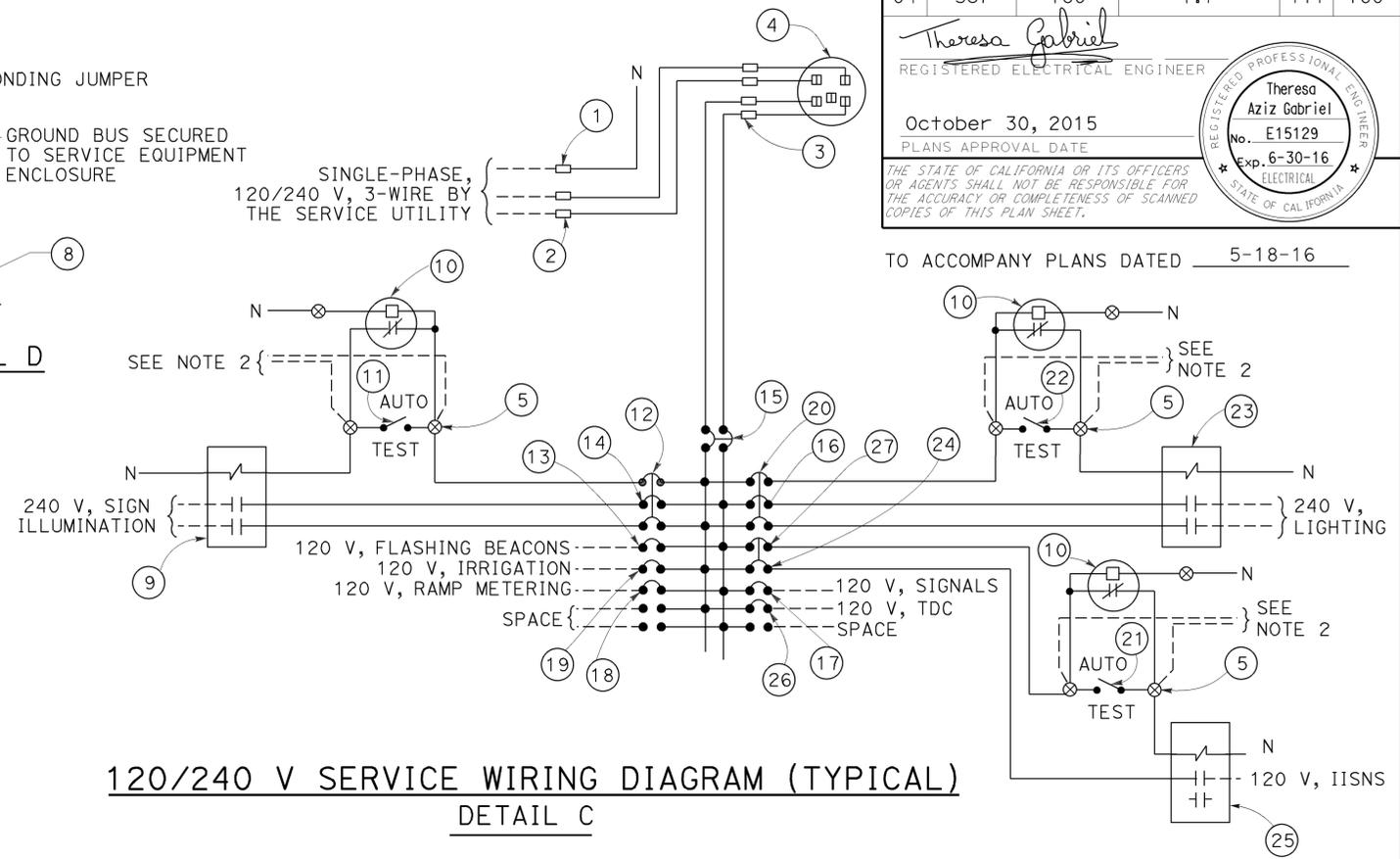
TYPE III-AF SERVICE EQUIPMENT ENCLOSURE (TYPICAL)
DETAIL A



DETAIL D



120/240 V SERVICE WIRING DIAGRAM (TYPICAL)
DETAIL C



TYPE III-A SERVICE EQUIPMENT ENCLOSURE LEGEND (120/240 V)					
ITEM	COMPONENT	NAMEPLATE DESCRIPTION	ITEM	COMPONENT	NAMEPLATE DESCRIPTION
①	NEUTRAL LUG		⑭	30 A, 240 V, 2P, CB	SIGN ILLUMINATION
②	LANDING LUG		⑮	100 A, 240 V, 2P, CB	MAIN BREAKER
③	TEST BYPASS FACILITY		⑯	30 A, 240 V, 2P, CB	LIGHTING
④	METER SOCKET AND SUPPORT		⑰	50 A, 120 V, 1P, CB	SIGNALS
⑤	TERMINAL BLOCKS		⑱	30 A, 120 V, 1P, CB	RAMP METERING
⑥	NEUTRAL BUS		⑲	20 A, 120 V, 1P, CB	IRRIGATION
⑦	GROUND BUS		⑳	15 A, 120 V, 1P, CB	LIGHTING CONTROL
⑧	GROUNDING ELECTRODE		㉑	15 A, 1P, TEST SWITCH	IISNS TEST SWITCH
⑨	30 A, 2P, NO CONTACTOR	SIGN ILLUMINATION	㉒	15 A, 1P, TEST SWITCH	LIGHTING TEST SWITCH
⑩	PHOTOELECTRIC UNIT (NOTE 4)	PEU	㉓	60 A, 2P, NO CONTACTOR	LIGHTING
⑪	15 A, 1P, TEST SWITCH	SIGN ILLUMINATION TEST SWITCH	㉔	15 A, 120 V, 1P, CB	IISNS
⑫	15 A, 120 V, 1P, CB	SIGN ILLUMINATION CONTROL	㉕	30 A, 2P, NO CONTACTOR	IISNS
⑬	15 A, 120 V, 1P, CB	FLASHING BEACON	㉖	20 A, 120 V, 1P, CB	TELEPHONE DEMARCATION CABINET
			㉗	15 A, 120 V, 1P, CB	IISNS CONTROL

NOTES:

1. Unless otherwise indicated on the plans, service equipment items shall be provided for each service equipment enclosure as shown.
2. Connect to remote test switch mounted on lighting standards, sign post or structure when required.
3. Items ① and ⑥ shall be isolated from the service equipment enclosure.
4. Type I photoelectric control shall be used unless otherwise indicated on the plans.
5. Item ⑫, ⑳ and ㉗ shall be ganged operated CB.

STATE OF CALIFORNIA
DEPARTMENT OF TRANSPORTATION

**ELECTRICAL SYSTEMS
(SERVICE EQUIPMENT ENCLOSURE
AND TYPICAL WIRING DIAGRAM,
TYPE III-A SERIES)**

NO SCALE

RSP ES-2D DATED OCTOBER 30, 2015 SUPERSEDES STANDARD PLAN ES-2D DATED MAY 20, 2011 - PAGE 431 OF THE STANDARD PLANS BOOK DATED 2010.

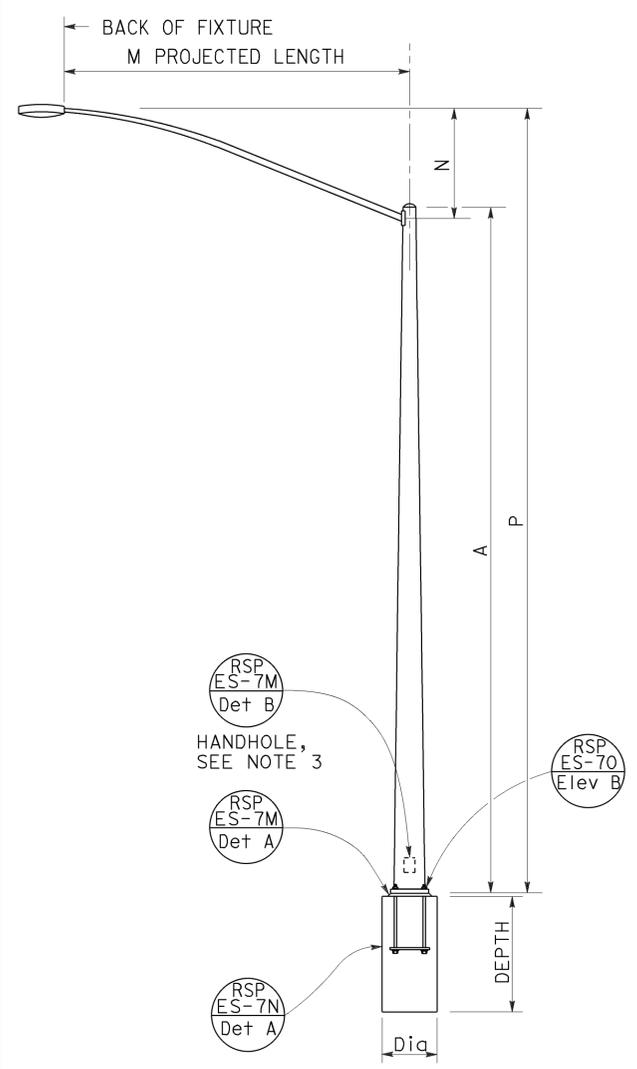
2010 REVISED STANDARD PLAN RSP ES-2D

Dist	COUNTY	ROUTE	POST MILES TOTAL PROJECT	SHEET No.	TOTAL SHEETS
04	Soi	780	7.1	112	160

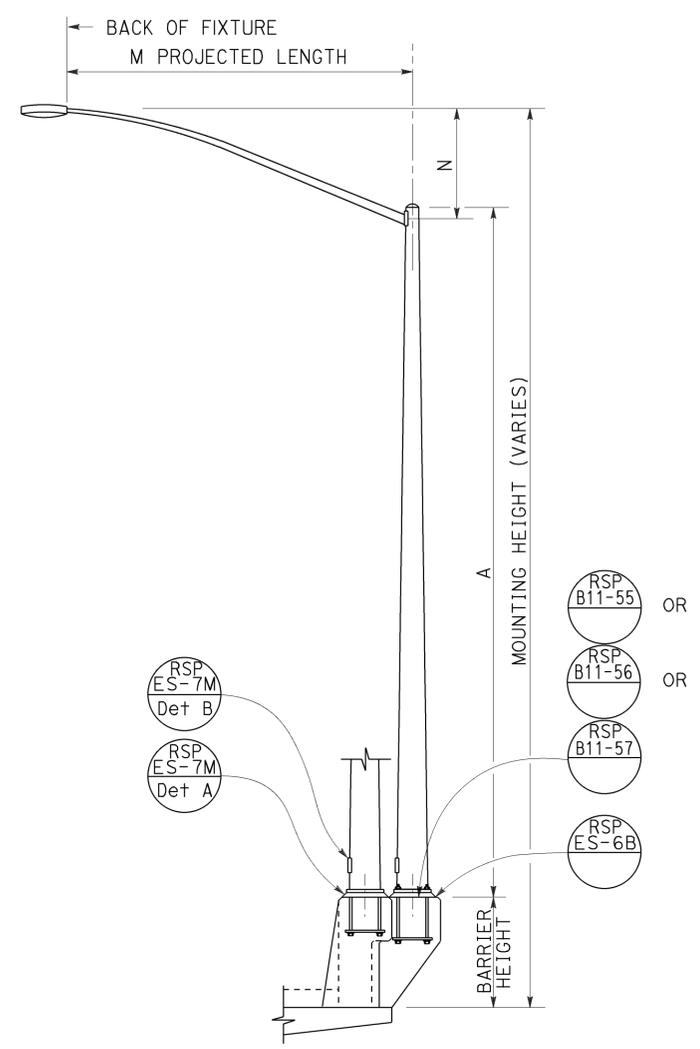
Stanley P. Johnson
 REGISTERED CIVIL ENGINEER
 July 15, 2016
 PLANS APPROVAL DATE
 THE STATE OF CALIFORNIA OR ITS OFFICERS OR AGENTS SHALL NOT BE RESPONSIBLE FOR THE ACCURACY OR COMPLETENESS OF SCANNED COPIES OF THIS PLAN SHEET.

REGISTERED PROFESSIONAL ENGINEER
 Stanley P. Johnson
 No. C57793
 Exp. 3-31-18
 CIVIL
 STATE OF CALIFORNIA

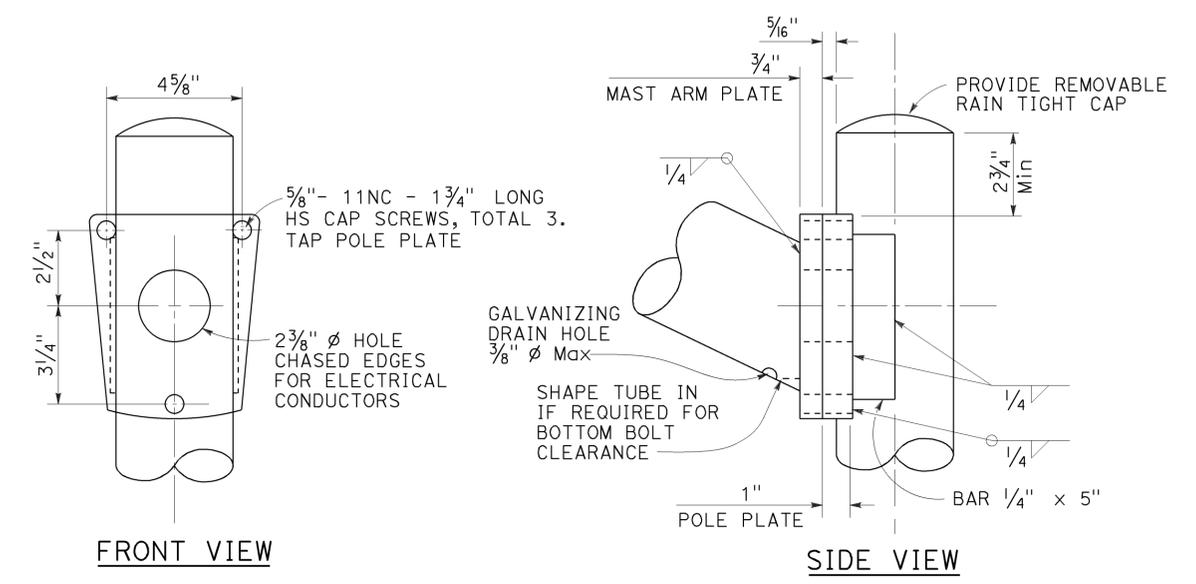
TO ACCOMPANY PLANS DATED 5-18-16



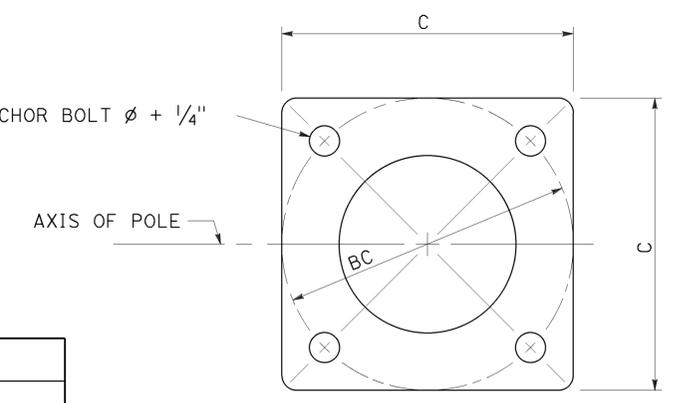
**TYPE 15 AND TYPE 21
ELEVATION A**



**TYPE 15 AND TYPE 21 BARRIER RAIL MOUNTED
ELEVATION B**



**LUMINAIRE MAST ARM CONNECTION
DETAIL R**



**BASE PLATE
DETAIL A**

POLE TYPE	POLE DATA			BASE PLATE DATA			CIDH PILE FOUNDATION		
	A HEIGHT	Min OD BASE	WALL THICKNESS TOP	C	BC = BOLT CIRCLE	THICKNESS	ANCHOR BOLT SIZE	Dia	DEPTH
15	30'-0"	8"	0.1196"	1'-0"	1'-0"	1 1/2"	1" ϕ x 36" *	2'-6"	6'-0"
21	35'-0"	8 5/8"	0.1793"	1'-0"	1'-0"	2"	1 1/4" ϕ x 36" *	2'-6"	7'-0"

* FOR BARRIER RAIL BOLTS, SEE REVISED STANDARD PLAN RSP ES-6B.

M PROJECTED LENGTH	N RISE	Min OD AT POLE	NOMINAL THICKNESS	P	
				TYPE 15	TYPE 21
6'-0"	2'-0" \pm	3 1/4"	0.1196"	31'-6" \pm	36'-6" \pm
8'-0"	2'-6" \pm	3 1/2"		32'-0" \pm	37'-0" \pm
10'-0"	3'-3" \pm	3 3/8"		32'-9" \pm	37'-9" \pm
12'-0"	4'-3" \pm	3 7/8"		33'-9" \pm	38'-9" \pm
15'-0"	4'-9" \pm	4 1/4"		34'-3" \pm	39'-3" \pm

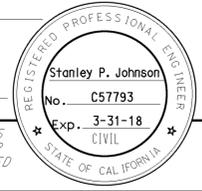
NOTES:

- Indicates mast arm length to be used unless otherwise noted on the plans.
- For Type 15-SB, use Type 15 standard with Type 30 slip base plate details, see Revised Standard Plan RSP ES-6F.
- Handhole shall be located on the downstream side of traffic.
- For additional notes and details, see Revised Standard Plans RSP ES-7M and RSP ES-7N.

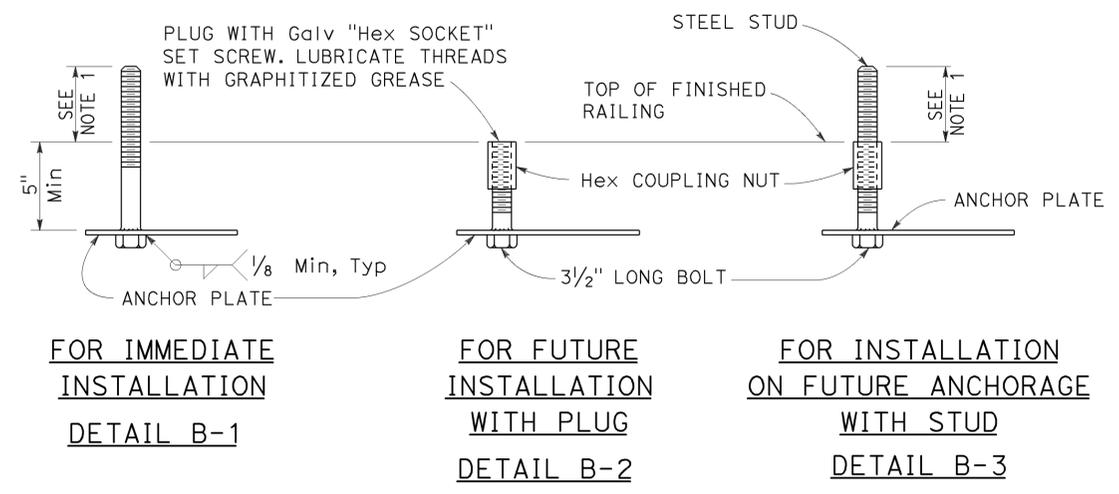
STATE OF CALIFORNIA
 DEPARTMENT OF TRANSPORTATION
**ELECTRICAL SYSTEMS
 (LIGHTING STANDARD,
 TYPES 15 AND 21)**
 NO SCALE

RSP ES-6A DATED JULY 15, 2016 SUPERSEDES RSP ES-6A
 DATED OCTOBER 30, 2015 AND STANDARD PLAN ES-6A DATED MAY 20, 2011 -
 PAGE 452 OF THE STANDARD PLANS BOOK DATED 2010.

2010 REVISED STANDARD PLAN RSP ES-6A



TO ACCOMPANY PLANS DATED 5-18-16



ELECTROLIER ANCHORAGES
DETAIL B

NOTES:

1. Anchor bolt or stud length shall be such that thread extends 1/2" maximum above nut on level base plate after grouting. See Detail N.
2. Electrolier anchor bolts shall be held in position for pouring by means of anchor plates and suitable templates. Deviation from the true position, vertical and height shall not exceed 1/16".
3. See railing sheets for reinforcement and structural details at electroliers and pull boxes.

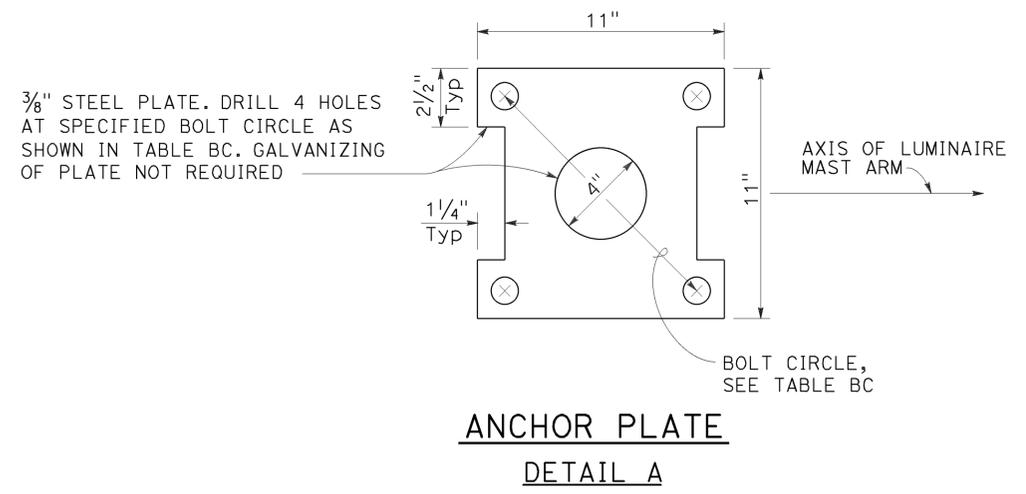
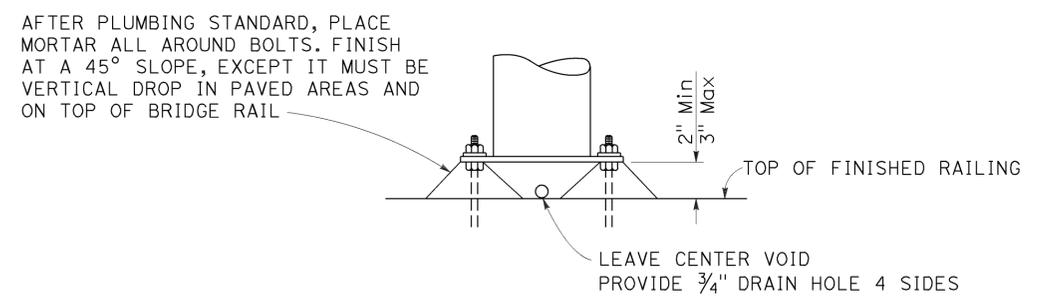


TABLE BC				
TYPE	BC = BOLT CIRCLE	ANCHOR BOLT DIAMETER	COUPLING NUT BASIC LENGTH	SET SCREW LENGTH DETAIL B-2
15	1'-0"	1"	3"	1 1/2"
21		1 1/4"	3 3/4"	1 7/8"



GROUTING AT ELECTROLIER
DETAIL N

STATE OF CALIFORNIA
 DEPARTMENT OF TRANSPORTATION
ELECTRICAL SYSTEMS
(ELECTROLIER ANCHORAGE AND
GROUTING FOR
TYPE 15 AND TYPE 21
BARRIER RAIL MOUNTED)

NO SCALE

RSP ES-6B DATED JULY 15, 2016 SUPERSEDES STANDARD PLAN ES-6B DATED MAY 20, 2011 - PAGE 453 OF THE STANDARD PLANS BOOK DATED 2010.

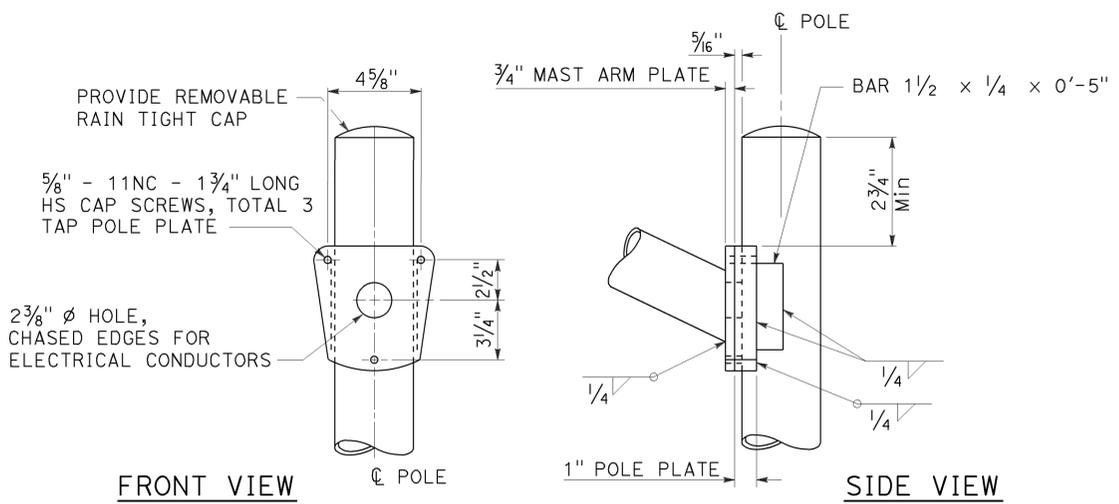
2010 REVISED STANDARD PLAN RSP ES-6B

Dist	COUNTY	ROUTE	POST MILES TOTAL PROJECT	SHEET No.	TOTAL SHEETS
04	SoI	780	7.1	114	160

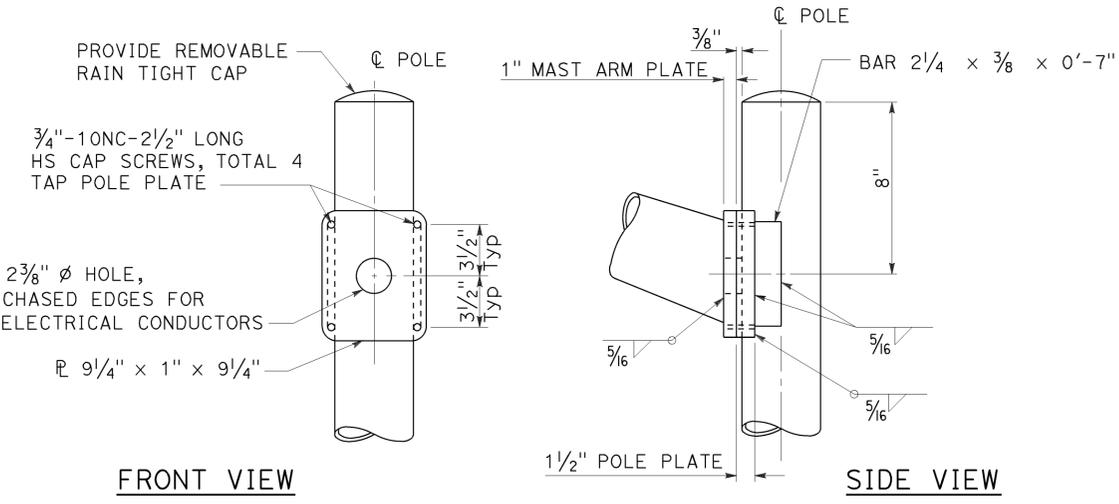
Stanley P. Johnson
 REGISTERED CIVIL ENGINEER
 July 15, 2016
 PLANS APPROVAL DATE
 THE STATE OF CALIFORNIA OR ITS OFFICERS OR AGENTS SHALL NOT BE RESPONSIBLE FOR THE ACCURACY OR COMPLETENESS OF SCANNED COPIES OF THIS PLAN SHEET.

LUMINAIRE MAST ARM DATA			
PROJECTED LENGTH	THICKNESS	MINIMUM OD AT POLE	MOUNTING HEIGHT
* 6'-0"	0.1196"	3 1/4"	36'-9"±
* 8'-0"		3 1/2"	37'-3"±
* 10'-0"		3 7/8"	38'-0"±
* 12'-0"			39'-0"±
* 15'-0"		4 1/4"	39'-6"±
** 20'-0"	0.1793"	5"	37'-0"±

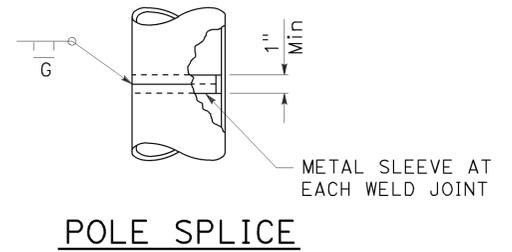
* TYPE 30
 ** TYPE 31



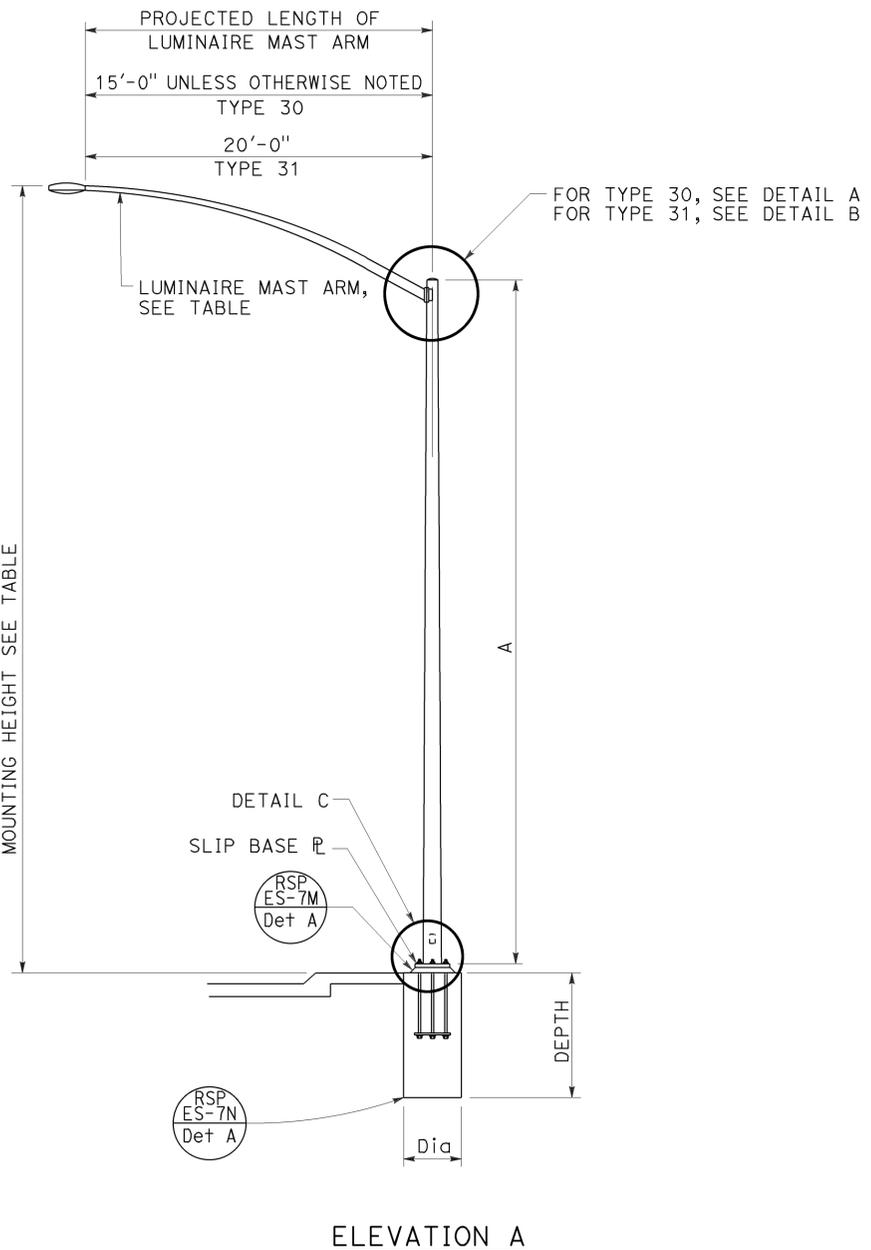
**TYPE 30
DETAIL A**



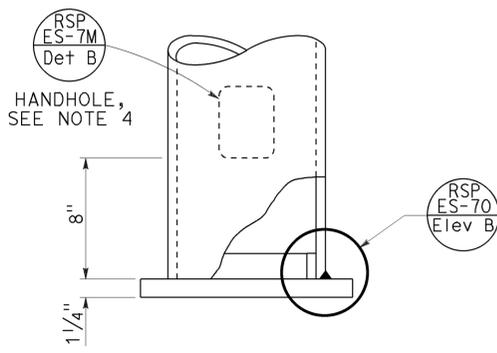
**TYPE 31
DETAIL B**



POLE SPLICE



ELEVATION A



DETAIL C

NOTES:

1. For slip base plate details, see Revised Standard Plan RSP ES-6F.
2. For Type 30 fixed base use Type 15 base plate and foundation shown on Revised Standard Plan RSP ES-6A. Use 1 1/4" Dia x 3'-6" anchor bolts.
3. For Type 31 fixed base use Type 32 base plate, anchor bolts and foundation on Revised Standard Plan RSP ES-6G.
4. Handhole shall be located on the downstream side of traffic.
5. For additional notes and details, see Revised Standard Plans RSP ES-7M and RSP ES-7N.

TO ACCOMPANY PLANS DATED 5-18-16

POLE TYPE	POLE DATA			CIDH PILE FOUNDATION	
	A HEIGHT	Min OD BASE	Min OD TOP	Min THICKNESS	Di a DEPTH
30	35'-0"	8 3/4"	3 1/8"	0.1196"	2'-6" 7'-0"
31		10 3/4"	5 1/8"	0.1793"	3'-0" 8'-0"

STATE OF CALIFORNIA
 DEPARTMENT OF TRANSPORTATION
**ELECTRICAL SYSTEMS
 (LIGHTING STANDARD,
 TYPES 30 AND 31)**

NO SCALE

RSP ES-6E DATED JULY 15, 2016 SUPERSEDES RSP ES-6E
 DATED OCTOBER 30, 2015 AND STANDARD PLAN ES-6E DATED MAY 20, 2011 -
 PAGE 456 OF THE STANDARD PLANS BOOK DATED 2010.

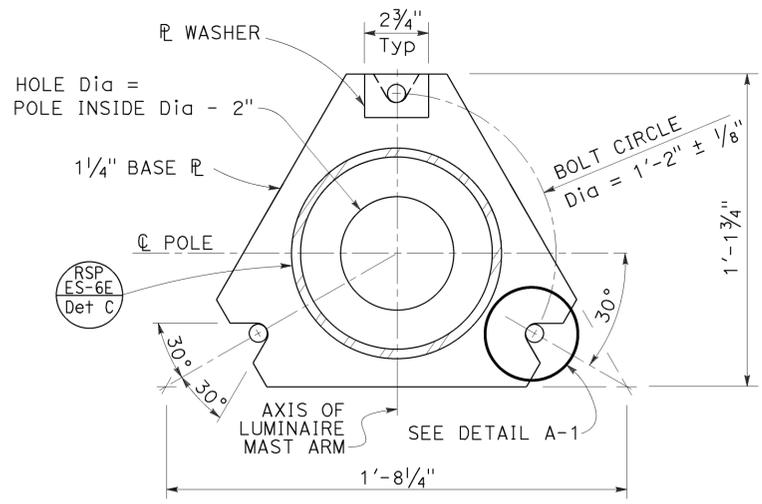
2010 REVISED STANDARD PLAN RSP ES-6E

Dist	COUNTY	ROUTE	POST MILES TOTAL PROJECT	SHEET No.	TOTAL SHEETS
04	SoI	780	7.1	115	160

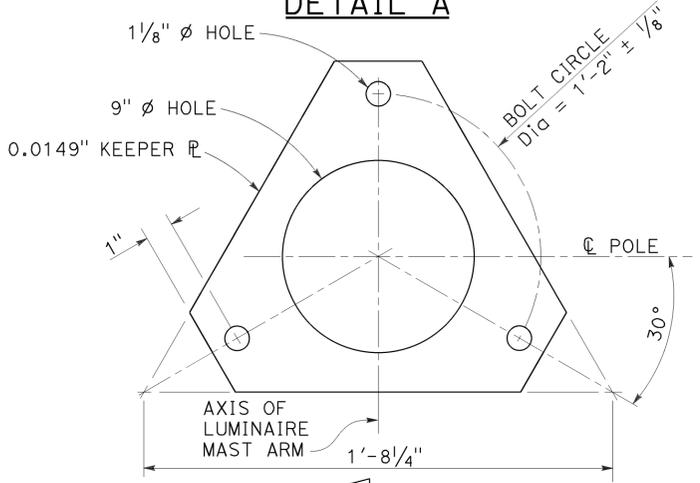
Stanley P. Johnson
 REGISTERED CIVIL ENGINEER
 October 30, 2015
 PLANS APPROVAL DATE
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Stanley P. Johnson	REGISTERED PROFESSIONAL ENGINEER
No. C57793	CIVIL
Exp. 3-31-16	STATE OF CALIFORNIA

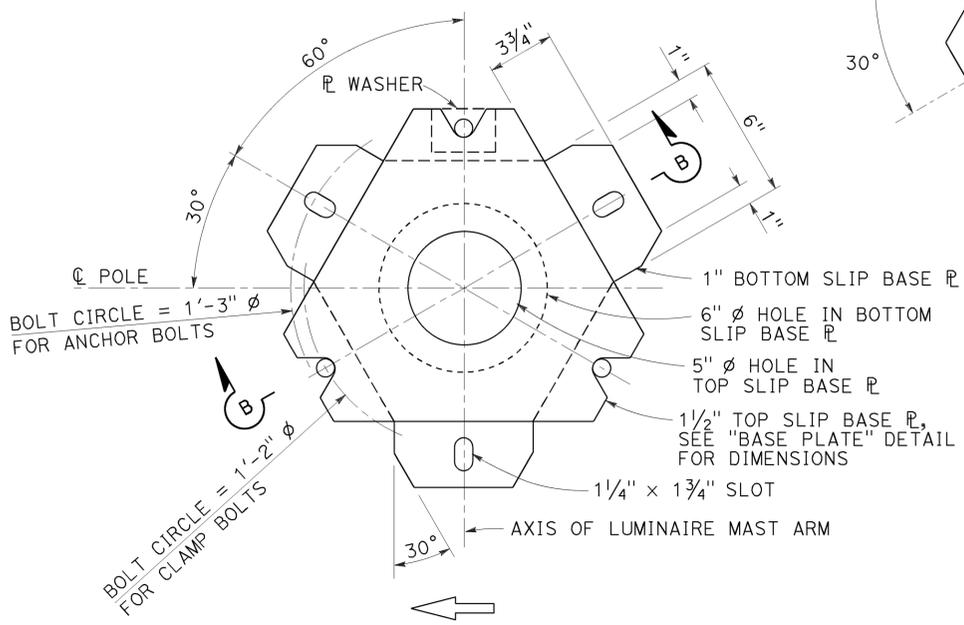
2010 REVISED STANDARD PLAN RSP ES-6F



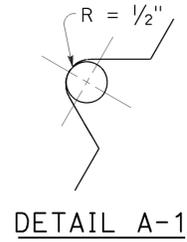
**BASE PLATE
DETAIL A**



**KEEPER PLATE
DETAIL B**

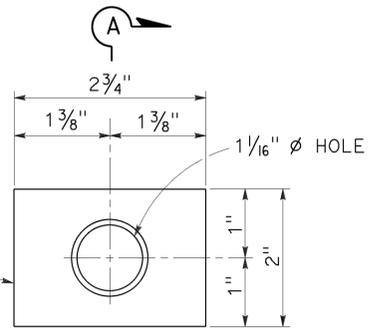


**BOTTOM PLATE
DETAIL C**

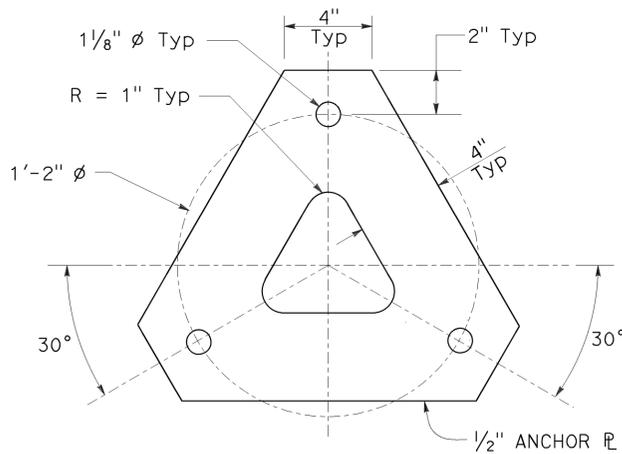


DETAIL A-1

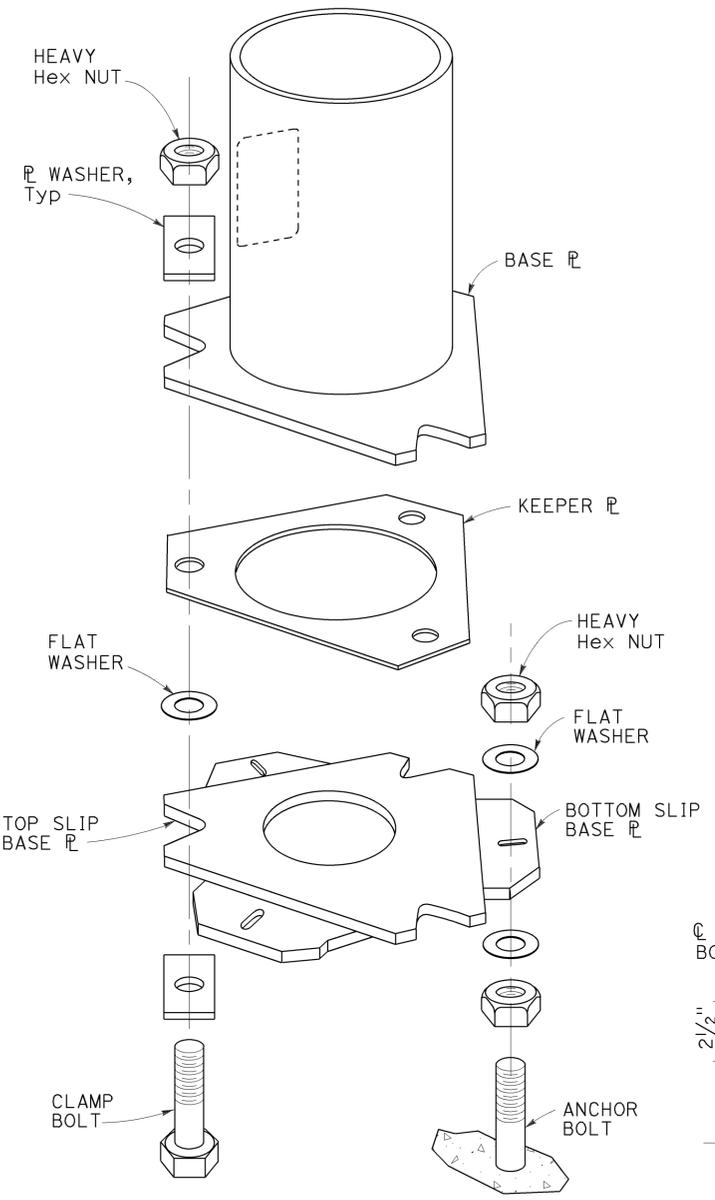
SECTION A-A



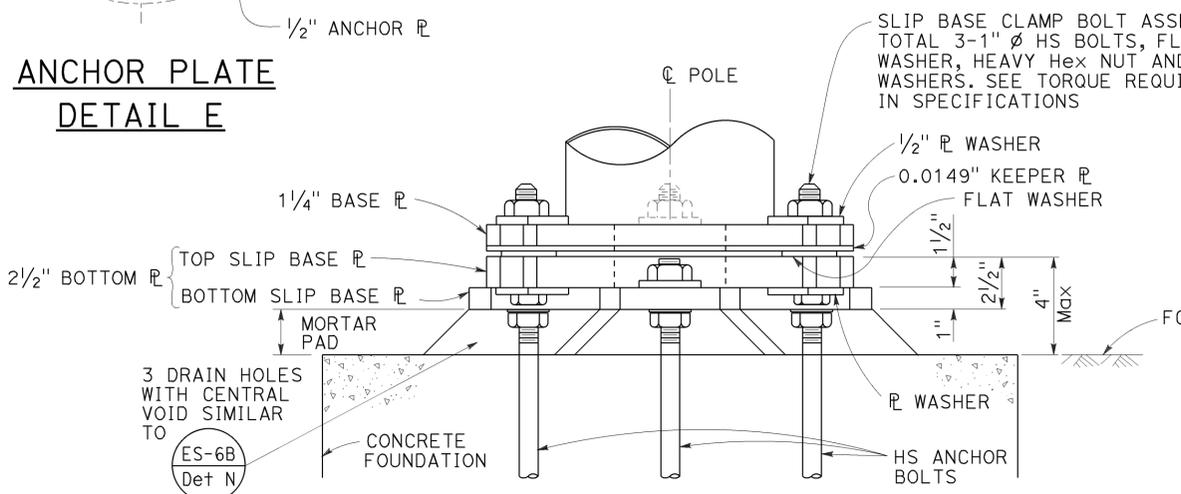
**PLATE WASHER
DETAIL D**



**ANCHOR PLATE
DETAIL E**



**SLIP BASE DETAIL
DETAIL F**

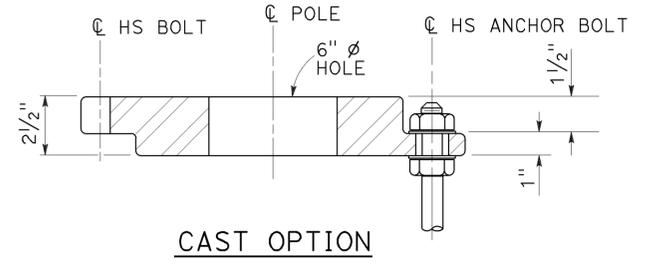


**SLIP BASE
ELEVATION A**

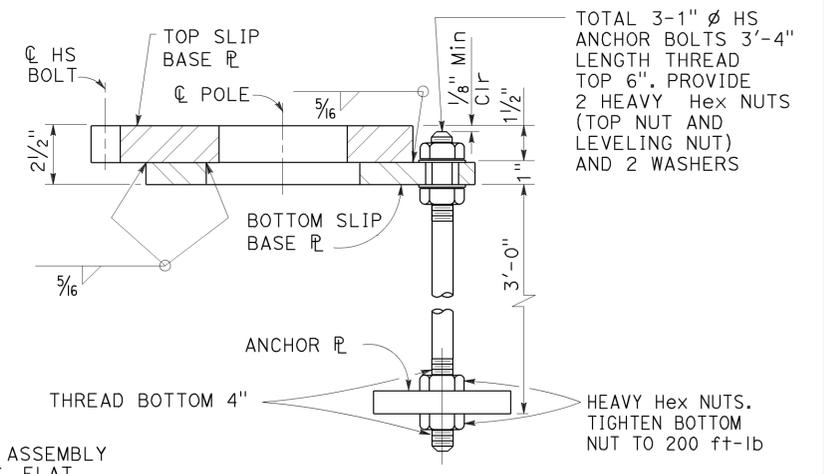
NOTES:

TO ACCOMPANY PLANS DATED 5-18-16

1. 1" ϕ HS anchor bolts. For clamp bolts, see specifications.
2. Conduit shall not protrude more than 2" above top of foundation.
3. Handhole shall be located on the downstream side of traffic.
4. For Type 30 fixed base and for Type 31 fixed base, see Notes 3 and 4 on Revised Standard Plan RSP ES-6E.



CAST OPTION



WELDED OPTION

SECTION B-B

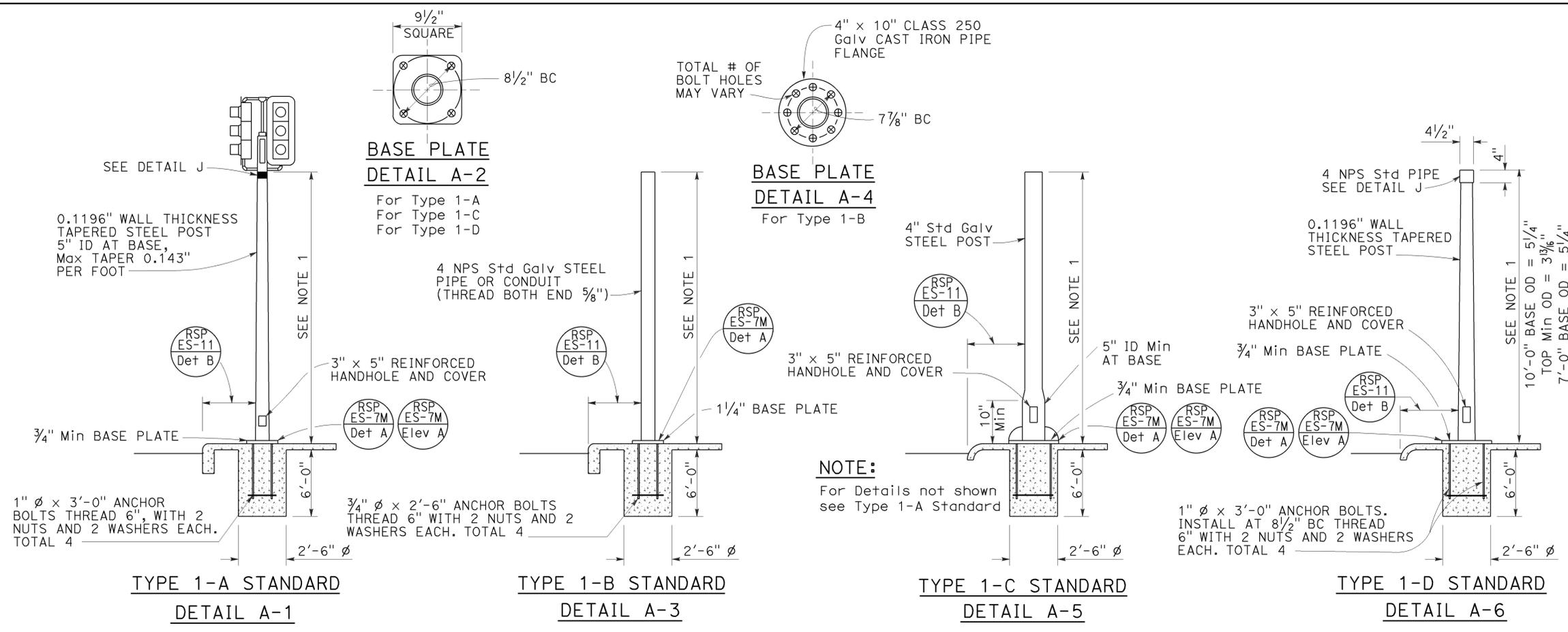
**ELECTRICAL SYSTEMS
(LIGHTING STANDARD,
SLIP BASE PLATE)**

NO SCALE

RSP ES-6F DATED OCTOBER 30, 2015 SUPERSEDES STANDARD PLAN ES-6F DATED MAY 20, 2011 - PAGE 457 OF THE STANDARD PLANS BOOK DATED 2010.

REVISED STANDARD PLAN RSP ES-6F

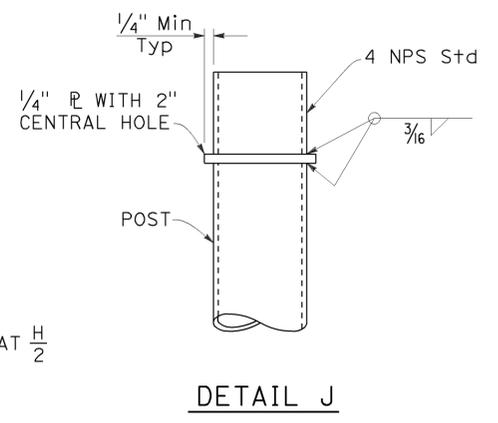
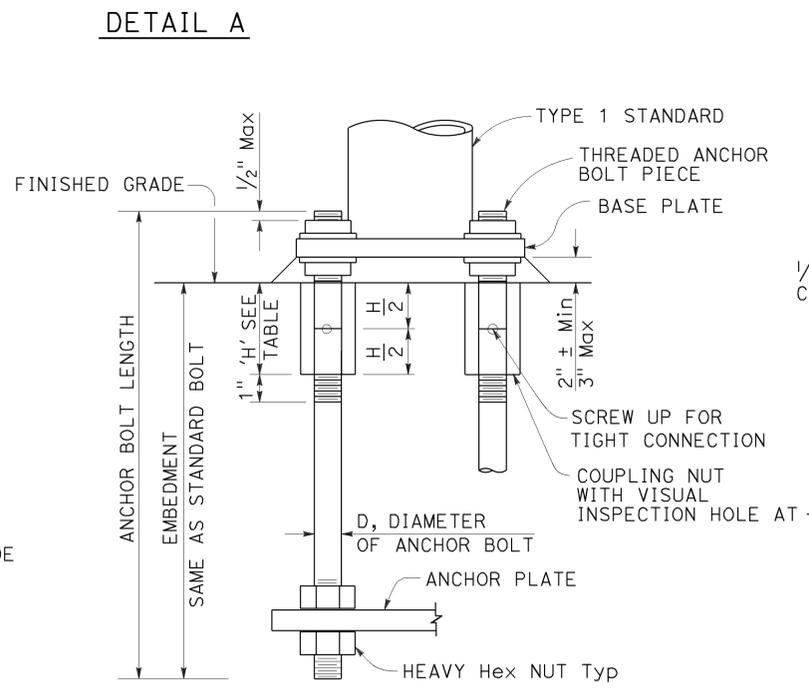
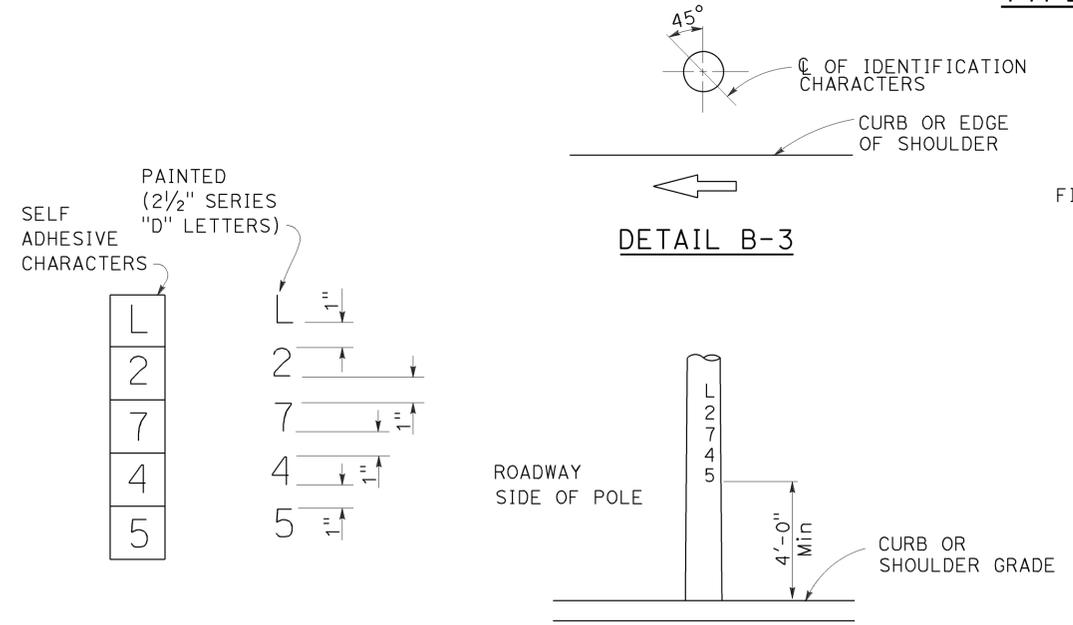
2010 REVISED STANDARD PLAN RSP ES-7B



TO ACCOMPANY PLANS DATED 5-18-16

- NOTES:**
- Standards shall be 10'-0" ± 2" for vehicle signals and 7'-0" ± 2" for pedestrian signals unless shorter pole is noted on project plans.
 - Top of standards shall be 4 1/2" OD.
 - Conduits shall extend 2" maximum above finished surface of foundation and for Types 1-A, 1-C and 1-D shall be sloped toward handhole.
 - Anchor bolts shall be bonded to conduit or grounding conductor.
 - For additional notes and details, see Revised Standard Plans RSP ES-7M and RSP ES-7N.
 - Pour foundation concrete against undisturbed soil.
 - For standards with handhole, locate in the downstream side of traffic.
 - Coupling nuts to be used only when shown or specified on project plans.

TYPE 1 SIGNAL STANDARDS



BOLT DIAMETER	NUT TABLE THICKNESS 'H'
3/4"	2 1/4"
1"	3"

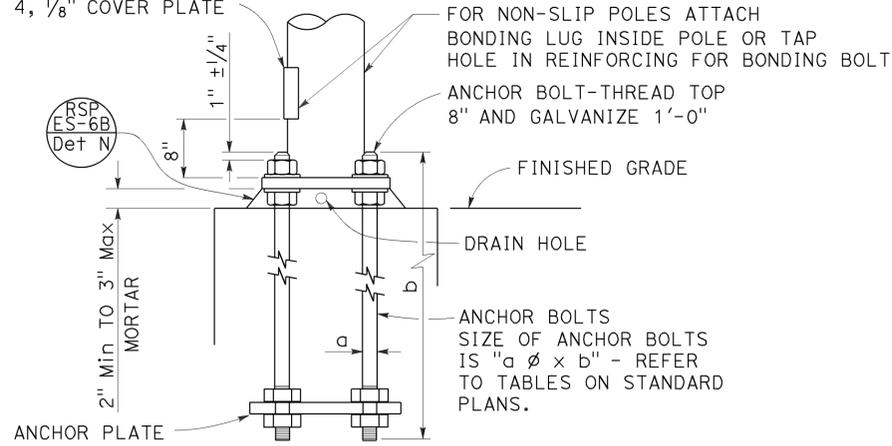
STATE OF CALIFORNIA
DEPARTMENT OF TRANSPORTATION

**ELECTRICAL SYSTEMS
(SIGNAL AND LIGHTING STANDARD, TYPE 1
AND EQUIPMENT IDENTIFICATION CHARACTERS)**

NO SCALE

RSP ES-7B DATED JULY 15, 2016 SUPERSEDES RSP ES-7B DATED OCTOBER 30, 2015 AND STANDARD PLAN ES-7B DATED MAY 20, 2011 - PAGE 463 OF THE STANDARD PLANS BOOK DATED 2010.

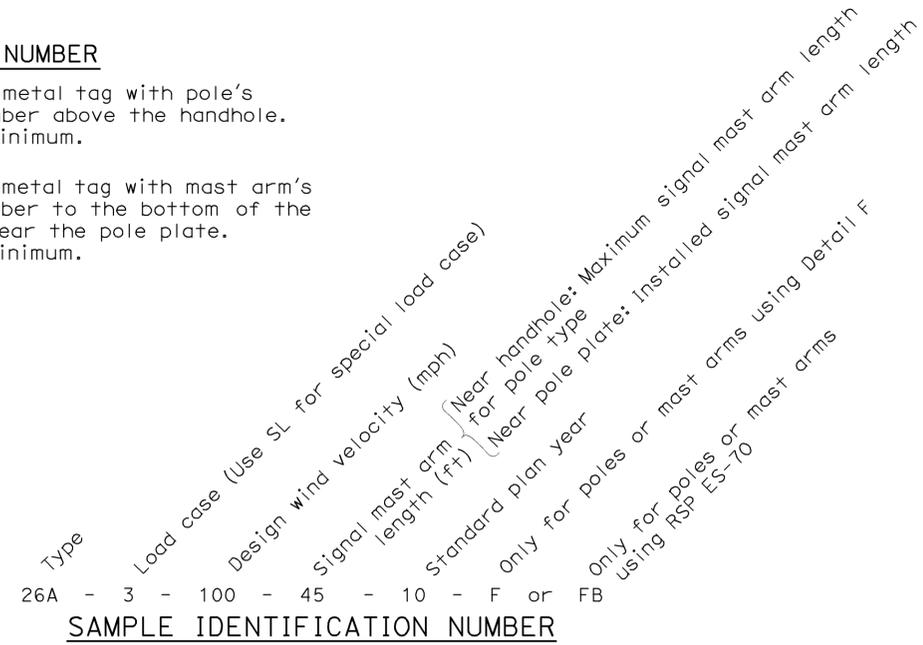
4" x 6 1/2" ROUNDED RECTANGLE HANDHOLE REINFORCED WITH RING WELDED TO OUTSIDE OF POLE. SEE NOTE 4, 1/8" COVER PLATE



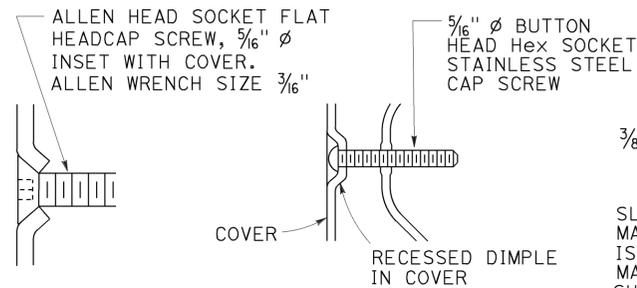
**HANDHOLE AND ANCHORAGE
DETAIL A**

IDENTIFICATION NUMBER

1. Attach a stamped metal tag with pole's identification number above the handhole. 1/4" high number, minimum.
2. Attach a stamped metal tag with mast arm's identification number to the bottom of the signal mast arm near the pole plate. 1/4" high number, minimum.

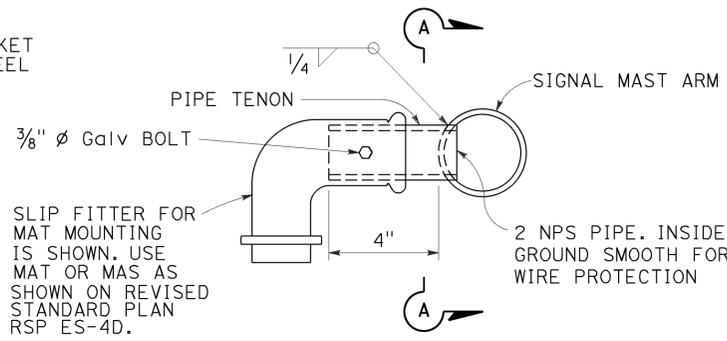


SAMPLE IDENTIFICATION NUMBER

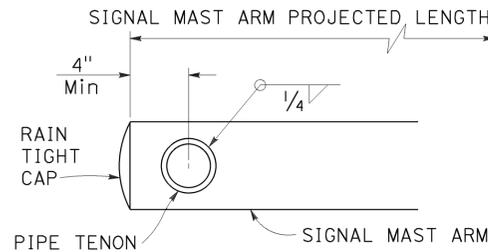


**TYPICAL DETAIL
DETAIL B-1**

**ALTERNATIVE DETAIL
DETAIL B-2**



**SIDE TENON
DETAIL S-1**



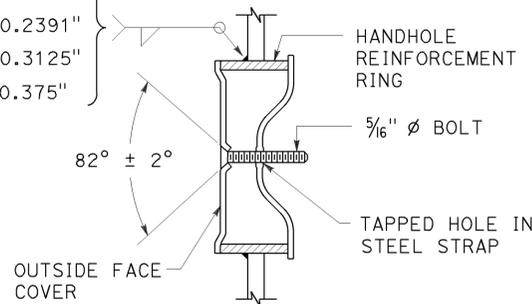
SECTION A-A

NOTES:

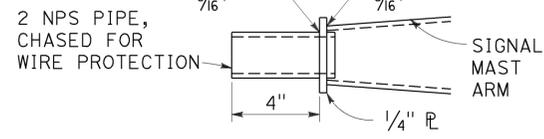
1. Provide a Hex nut, leveling nut and 2 washers for each bolt.
2. Luminaire mast arms shall be round, tapered steel tubes, taper of 0.1375" to 0.143-inch per foot with an end section 2 3/8" OD for mounting hardware. Extensions of 2 NPS Standard pipe and 7" long may be used at the option of the manufacturer. When low pressure sodium luminaires are required, the extension shall be 1'-3".
3. Signal mast arms shall be round, tapered steel tubes, maximum taper 0.143-inch per foot.
4. Handhole reinforcement ring shall be 1/4" x 2" for 0.1196" to 0.2391" thick poles, 3/8" x 2" for 0.3125" to 0.375" thick poles.
5. Handholes shall be located on the downstream side of traffic.
6. Detail F, fatigue resistant weld, is required at socket welded signal mast arm plate and pole base plate.
7. Cap screws shall be tightened by the turn-of-nut method 1/3 turn from a snug tight condition. No washer will be required.
8. Outside diameter, wall thickness, and corresponding section properties of poles and mast arms as shown in the Standard Plans are minimums. Unless otherwise specified, alternative sections shall require approval by the Engineer.
9. Design: AASHTO Standard Specifications for Structural Support for Highway Signs, Luminaires, and Traffic Signals, 6th Edition. Basic Wind Speed = 100 mph (3 seconds gust). Yearly Mean Wind Velocity = 15.6 mph.
10. Materials (Structural steel):
fy = 55,000 psi (tapered steel tube and anchor bolts)
fy = 50,000 psi (unless otherwise noted)
11. Materials (Reinforced concrete):
f'c = 3,625 psi
fy = 60,000 psi

WELD SIZE WALL THICKNESS

3/16"	0.1196"
1/4"	0.1793"
5/16"	0.2391"
3/8"	0.3125"
1/2"	0.375"



**TAMPER RESISTANT HANDHOLE COVER
DETAIL B**



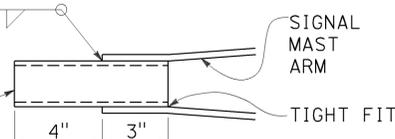
**TIP TENON
DETAIL TL**

This detail supersedes Detail S when so designated

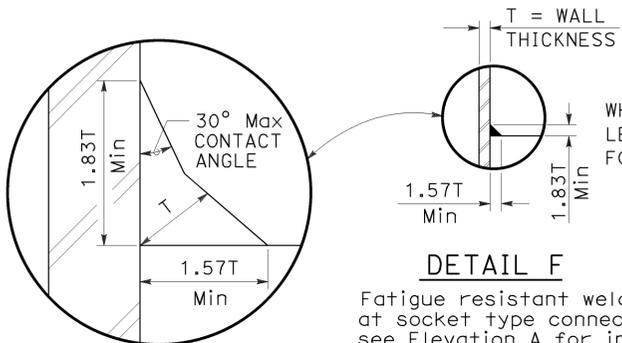
**PIPE TENONS
DETAIL S**

WELD SIZE	WALL THICKNESS
1/8"	0.1196"
3/16"	0.1793"
1/4"	0.2391"

2 NPS PIPE, CHASED FOR WIRE PROTECTION SEE NOTE 2

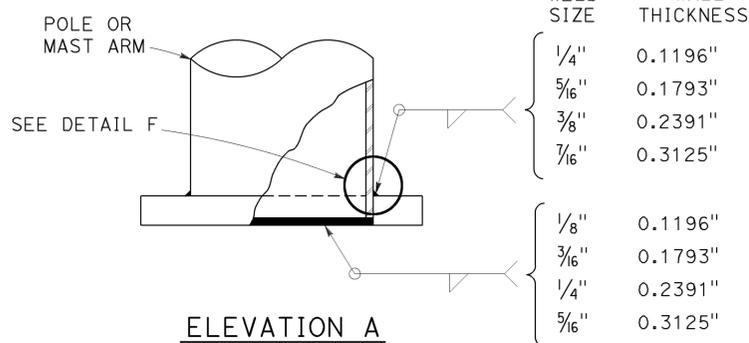


**TIP TENON
DETAIL TS**



DETAIL F

Fatigue resistant weld at socket type connection see Elevation A for inner weld



ELEVATION A

STATE OF CALIFORNIA
DEPARTMENT OF TRANSPORTATION
**ELECTRICAL SYSTEMS
(SIGNAL AND LIGHTING STANDARD,
DETAIL No. 1)**
NO SCALE

RSP ES-7M DATED JULY 15, 2016 SUPERSEDES RSP ES-7M DATED OCTOBER 30, 2015 AND STANDARD PLAN ES-7M DATED MAY 20, 2011 - PAGE 474 OF THE STANDARD PLANS BOOK DATED 2010.

REVISED STANDARD PLAN RSP ES-7M

Dist	COUNTY	ROUTE	POST MILES TOTAL PROJECT	SHEET No.	TOTAL SHEETS
04	SoI	780	7.1	117	160

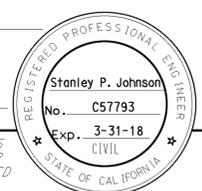
Stanley P. Johnson
REGISTERED CIVIL ENGINEER

July 15, 2016
PLANS APPROVAL DATE

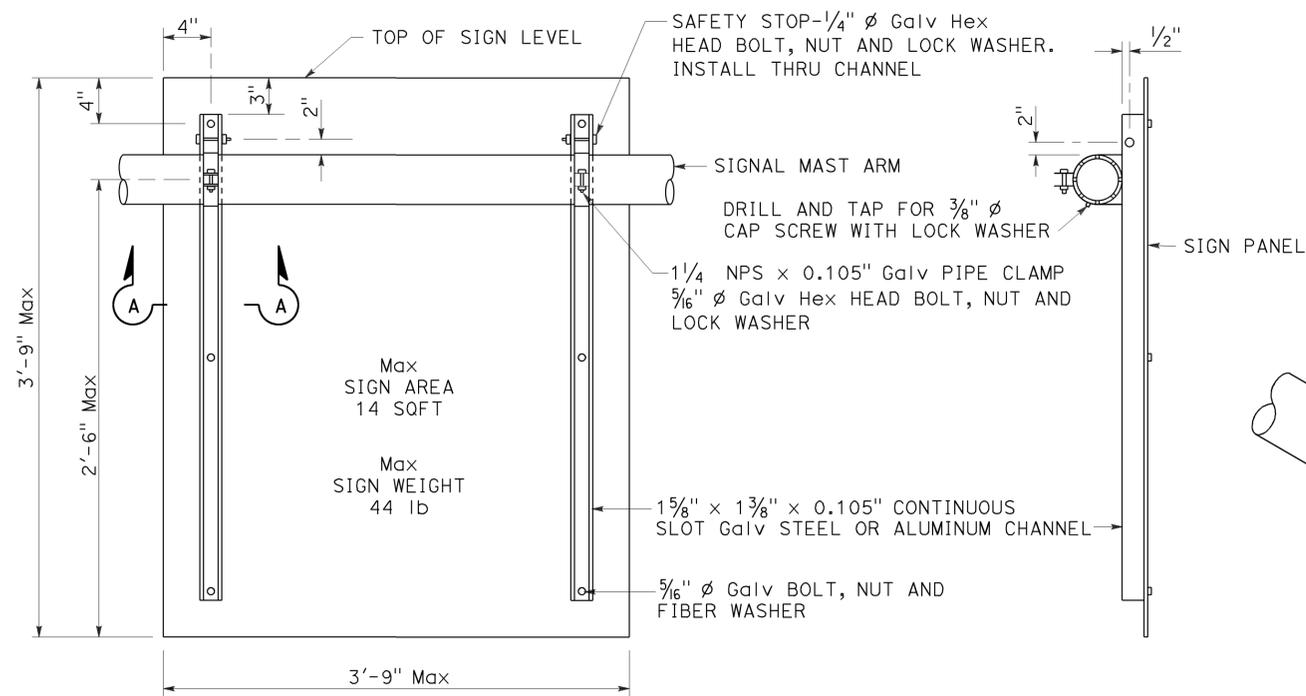
Stanley P. Johnson
No. C57793
Exp. 3-31-18
CIVIL
STATE OF CALIFORNIA

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TO ACCOMPANY PLANS DATED 5-18-16



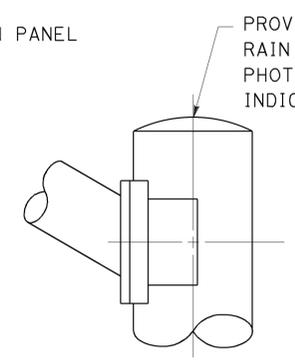
TO ACCOMPANY PLANS DATED 5-18-16



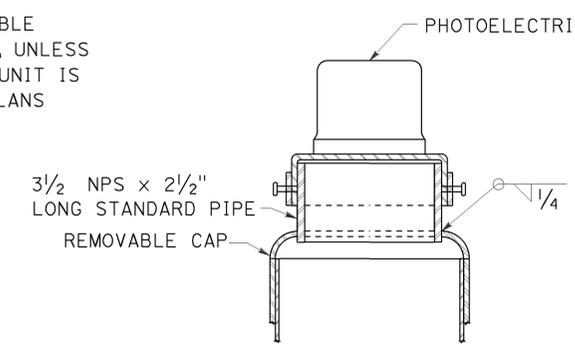
REAR VIEW

SIDE VIEW

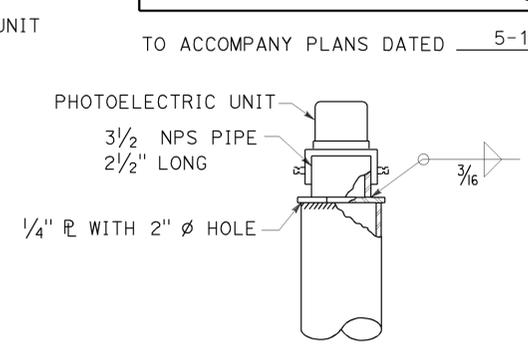
SIGN MOUNTING DETAILS
DETAIL U



STANDARD TOP
DETAIL B-1

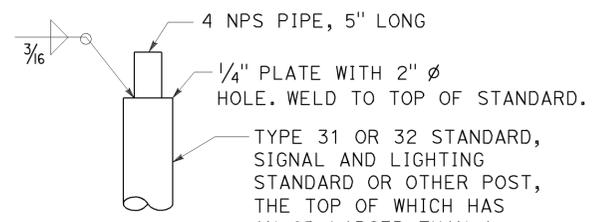


MOUNTING ADAPTER FOR
PHOTOELECTRIC UNIT
DETAIL B-2

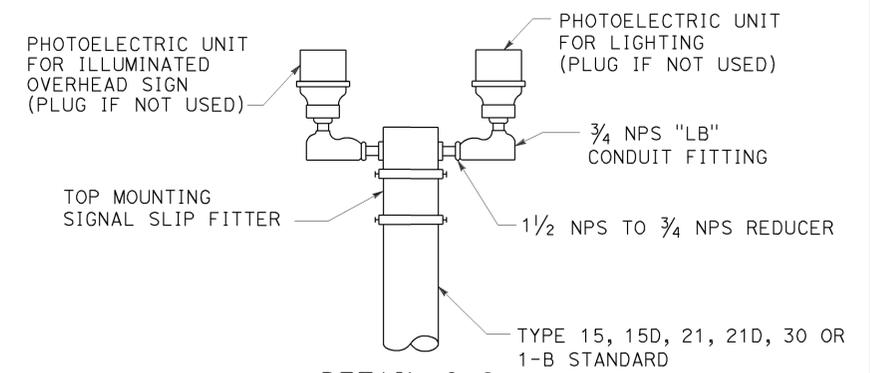


ALTERNATIVE
MOUNTING ADAPTER
DETAIL B-3

POLE TOP DETAILS
DETAIL B



DETAIL C-1



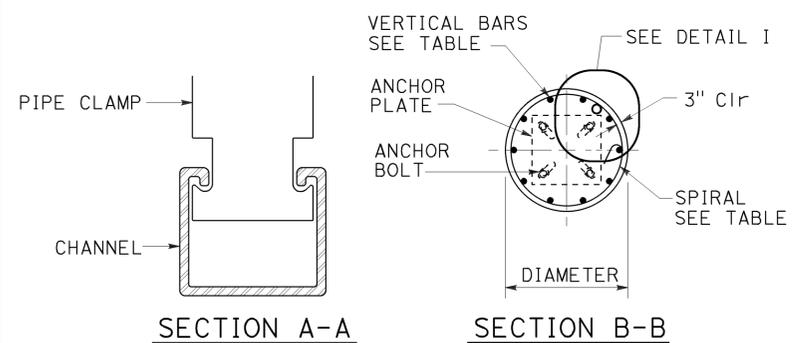
DUAL PHOTOELECTRIC UNIT MOUNTING DETAIL
DETAIL C

STATE OF CALIFORNIA
DEPARTMENT OF TRANSPORTATION

ELECTRICAL SYSTEMS
(SIGNAL AND LIGHTING STANDARD,
DETAIL No. 2)
NO SCALE

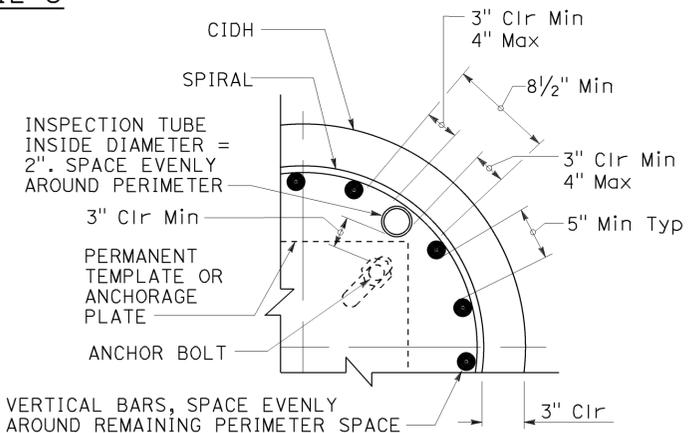
RSP ES-7N DATED JULY 15, 2016 SUPERSEDES RSP ES-7N DATED OCTOBER 30, 2015 AND STANDARD PLAN ES-7N DATED MAY 20, 2011 - PAGE 475 OF THE STANDARD PLANS BOOK DATED 2010.

REVISED STANDARD PLAN RSP ES-7N



SECTION A-A

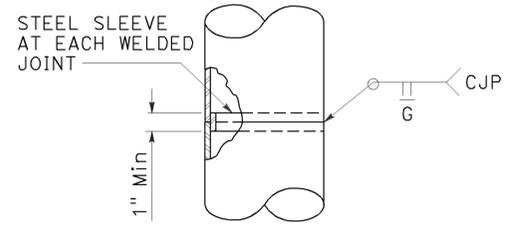
SECTION B-B



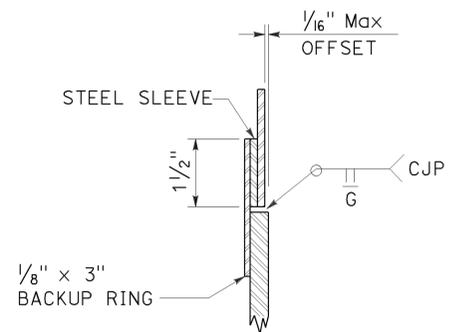
INSPECTION TUBE PLACEMENT
DETAIL I

CIDH DIAMETER	VERTICAL BARS	SPIRAL	INSPECTION TUBE
2 ft	8-#5	#4 AT 6	2
2.5 ft	10-#6		4*
3 ft	12-#7	#5 AT 6	4
3.5 ft	14-#8		5
4 ft	18-#9	2-#4 AT 7	5
4.5 ft	18-#9	2-#5 AT 7	6
5 ft	22-#10	2-#5 AT 7	6
6 ft	26-#11	2-#6 AT 7	7

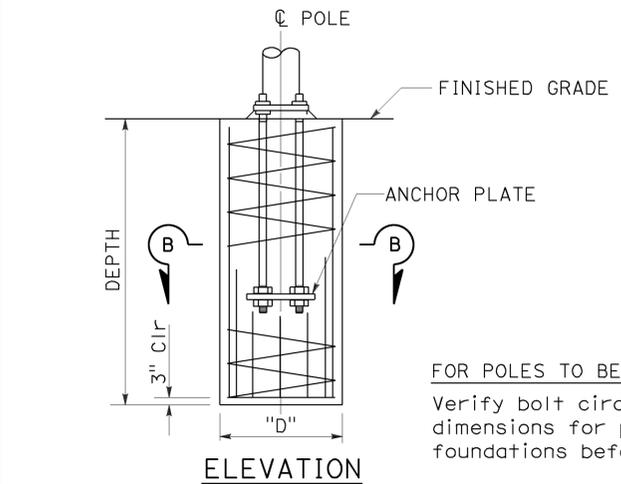
* FOR SLIP BASE VERSIONS WITH 3 ANCHOR BOLTS USE 3 INSPECTION TUBES.



FOR UNIFORM TUBE THICKNESS
DETAIL T-1



AT TUBE THICKNESS CHANGE
DETAIL T-2



ELEVATION

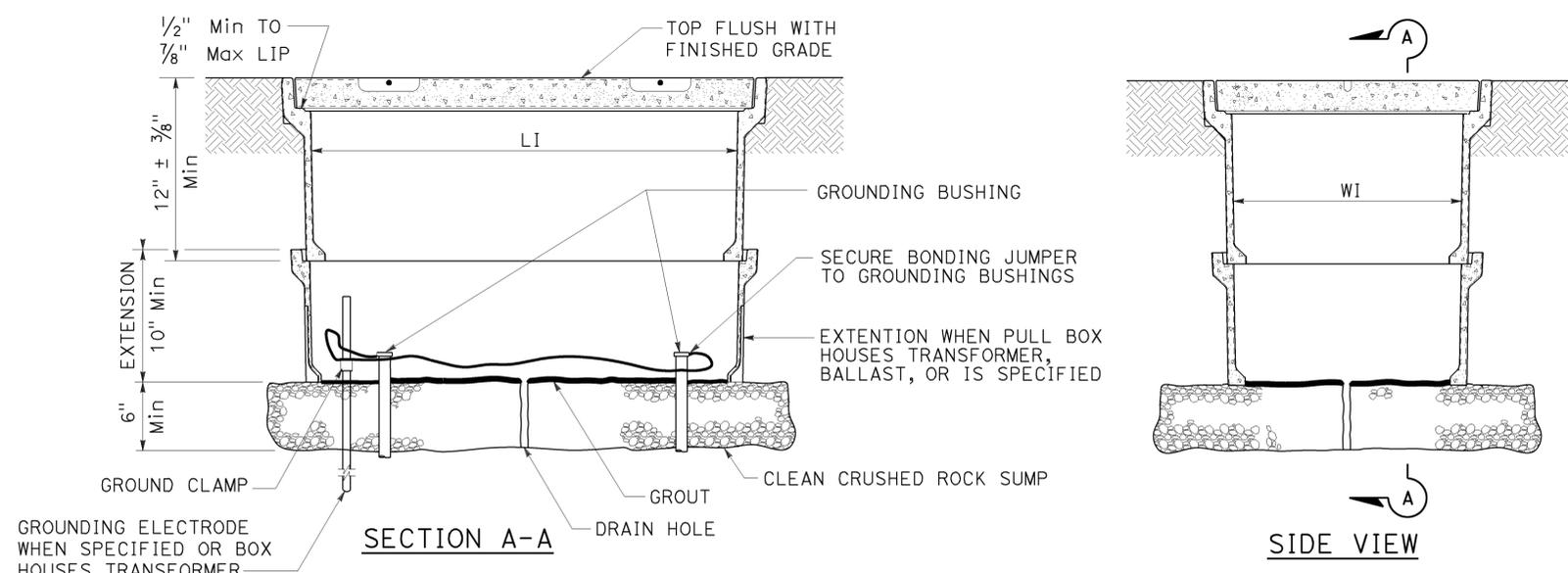
CAST-IN-DRILLED-HOLE PILE FOUNDATION,
REINFORCED PILE
DETAIL A

FOR POLES TO BE INSTALLED ON EXISTING FOUNDATION:
Verify bolt circles, anchor bolt sizes and dependent dimensions for poles to be installed on existing foundations before fabricating the poles.

2010 REVISED STANDARD PLAN RSP ES-7N

DIST	COUNTY	ROUTE	POST MILES TOTAL PROJECT	SHEET NO.	TOTAL SHEETS
04	SoI	780	7.1	119	160
<i>Theresa Gabriel</i> REGISTERED ELECTRICAL ENGINEER April 15, 2016 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.					

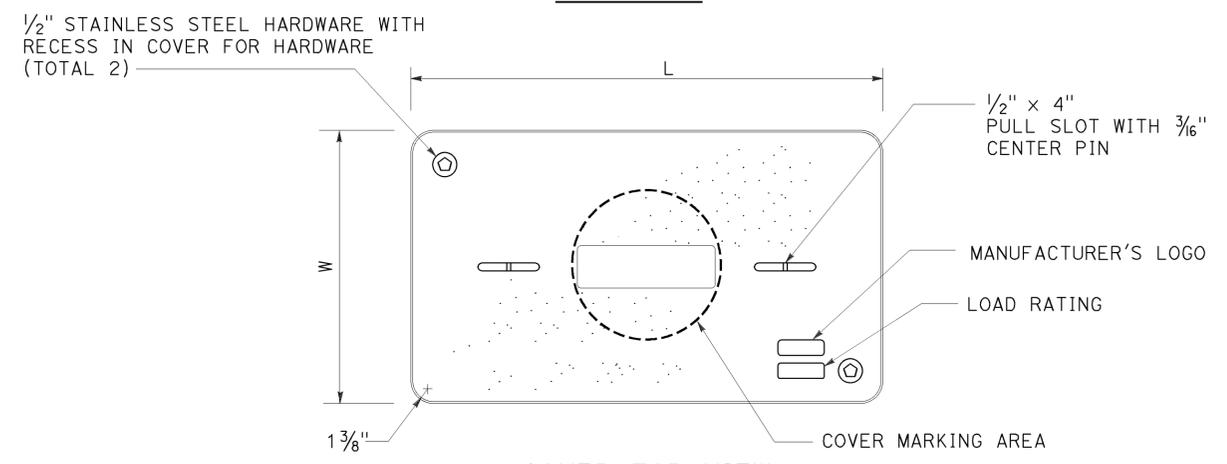
TO ACCOMPANY PLANS DATED 5-18-16



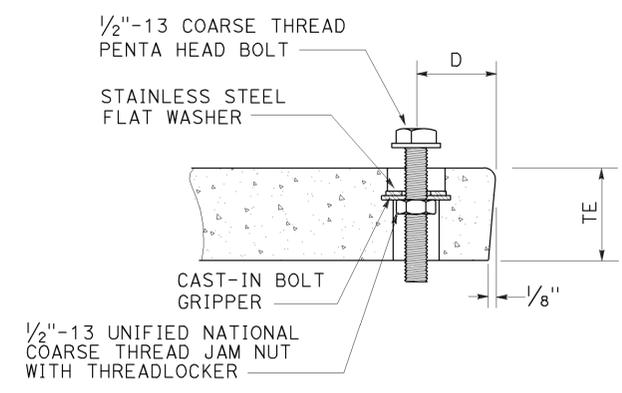
INSTALLATION DETAILS
DETAIL A

NOTES:

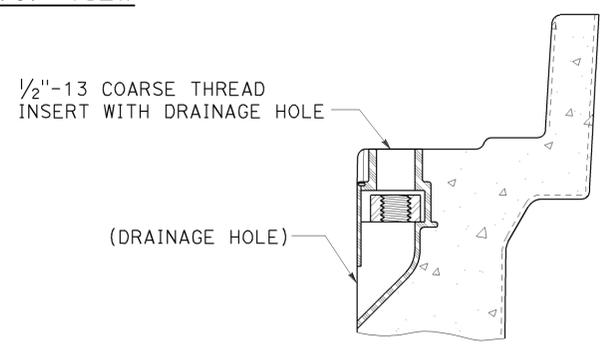
1. The nominal dimensions of the opening in which the cover sets shall be the same as the cover dimensions except the length and width dimensions shall be 1/8" greater.
2. Covers and boxes shall be interchangeable with California standard male and female gages. When interchanged with a standard male or female gage, the top surfaces shall be flush within 1/8". Top outside radius of covers and pull boxes shall have a 1/8" radius.
3. Dimensions for the cover for non-traffic pull box are nominal values.



COVER TOP VIEW



TYPICAL COVER CAPTIVE BOLT
OR SIMILAR



TYPICAL THREADED INSERT
OR SIMILAR

DIMENSION TABLE										
PULL BOX	PULL BOX			COVER						
	MINIMUM DEPTH BOX	MINIMUM DEPTH EXTENSION	MINIMUM WEIGHT	LI Min	WI Min	TE	D	L	W	MINIMUM WEIGHT
No. 3 1/2	12"	N/A	40 lb	1' - 3"	9"	1 3/4"	1 3/4"	1'-3 1/4" - 1'-3 3/8"	10" - 10 1/8"	30 lb
No. 5	12"	10"	55 lb	1' - 8"	11"	2"	1 3/4"	1'-11 1/4"	1'-1 3/4"	60 lb
No. 6	12"	10"	70 lb	2' - 4 1/4"	1' - 3 1/4"	2"	2"	2'-6 1/2"	1'-5 1/2"	85 lb

STATE OF CALIFORNIA
DEPARTMENT OF TRANSPORTATION
ELECTRICAL SYSTEMS
(NON-TRAFFIC PULL BOX)
NO SCALE

RSP ES-8A DATED APRIL 15, 2016 SUPERSEDES RSP ES-8A DATED OCTOBER 30, 2015 AND RSP ES-8A DATED JULY 19, 2013 AND RSP ES-8A DATED JANUARY 20, 2012 THAT SUPPLEMENTS THE STANDARD PLANS BOOK DATED 2010.

REVISED STANDARD PLAN RSP ES-8A

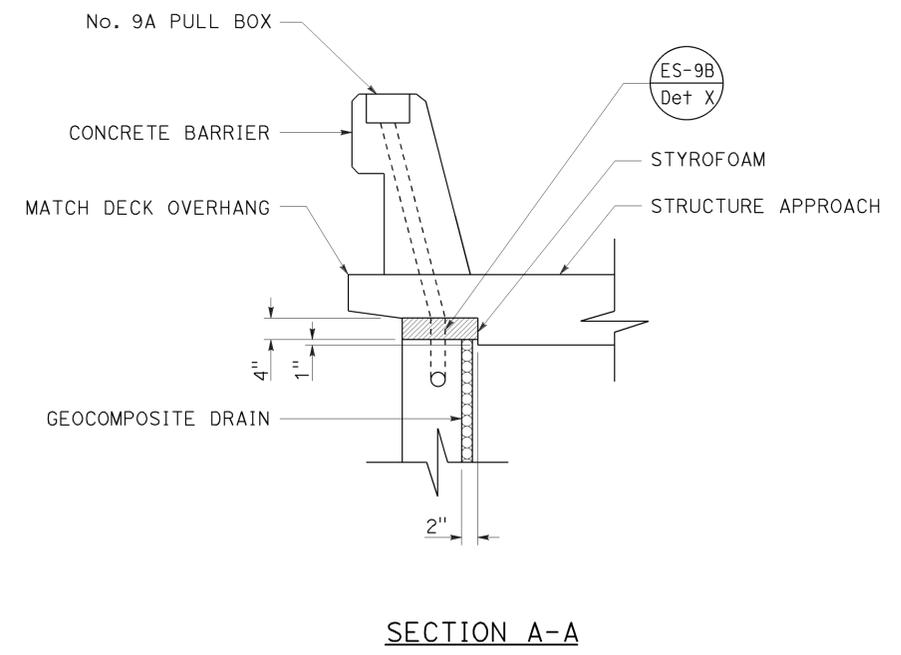
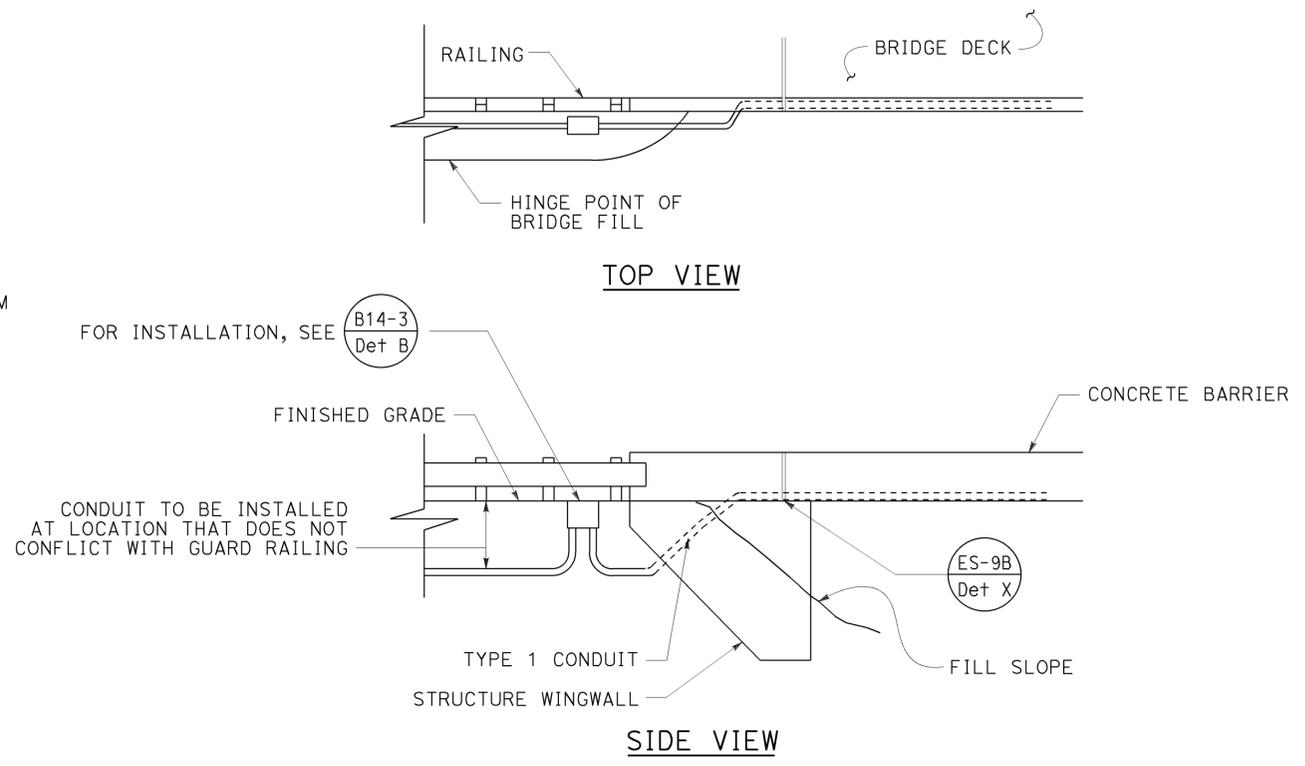
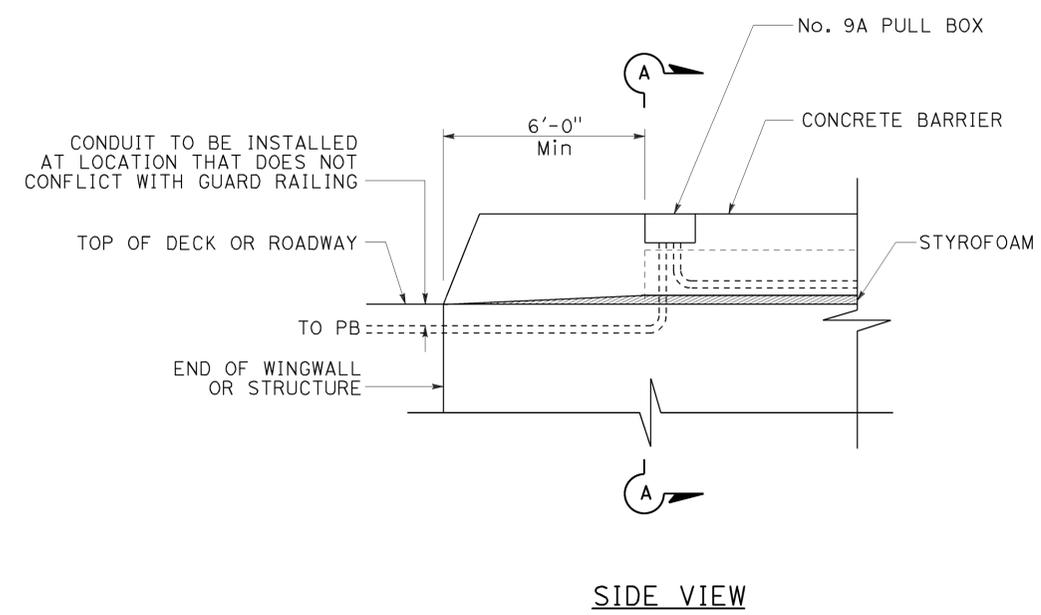
2010 REVISED STANDARD PLAN RSP ES-8A

DIST	COUNTY	ROUTE	POST MILES TOTAL PROJECT	SHEET NO.	TOTAL SHEETS
04	SoI	780	7.1	120	160

Theresa Gabriel
 REGISTERED ELECTRICAL ENGINEER
 Theresa Aziz Gabriel
 No. E15129
 Exp. 6-30-16
 ELECTRICAL
 STATE OF CALIFORNIA

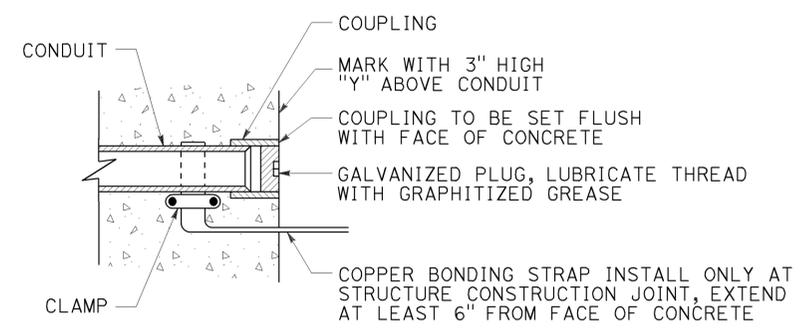
October 30, 2015
 PLANS APPROVAL DATE
THE STATE OF CALIFORNIA OR ITS OFFICERS OR AGENTS SHALL NOT BE RESPONSIBLE FOR THE ACCURACY OR COMPLETENESS OF SCANNED COPIES OF THIS PLAN SHEET.

TO ACCOMPANY PLANS DATED 5-18-16



**CONDUIT TERMINATION
DETAIL A**

**CONDUIT TERMINATION
DETAIL I**



**CONDUIT TERMINATION
DETAIL C**

STATE OF CALIFORNIA
 DEPARTMENT OF TRANSPORTATION
**ELECTRICAL SYSTEMS
 (STRUCTURE PULL BOX
 INSTALLATIONS)**

NO SCALE

RSP ES-9A DATED OCTOBER 30, 2015 SUPERSEDES STANDARD PLAN ES-9A DATED MAY 20, 2011 - PAGE 481 OF THE STANDARD PLANS BOOK DATED 2010.

REVISED STANDARD PLAN RSP ES-9A

2010 REVISED STANDARD PLAN RSP ES-9A

Dist	COUNTY	ROUTE	POST MILES TOTAL PROJECT	SHEET No.	TOTAL SHEETS
04	SoI	780	7.1	121	160

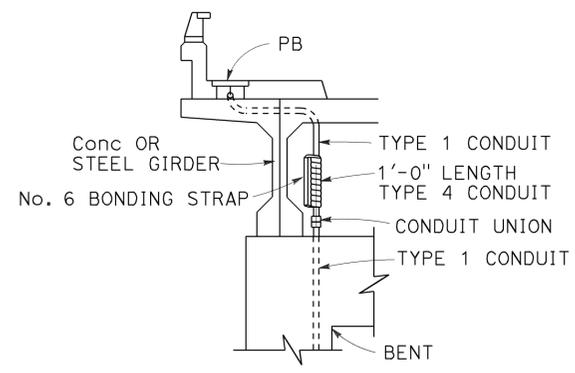
Jagwinder & Co
REGISTERED ELECTRICAL ENGINEER

October 30, 2015
PLANS APPROVAL DATE

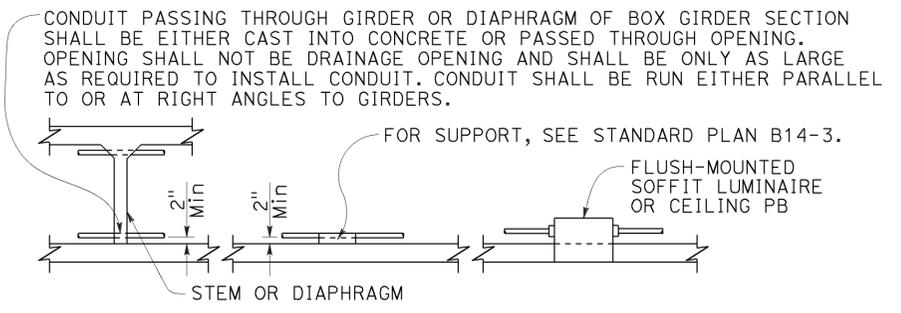
THE STATE OF CALIFORNIA OR ITS OFFICERS OR AGENTS SHALL NOT BE RESPONSIBLE FOR THE ACCURACY OR COMPLETENESS OF SCANNED COPIES OF THIS PLAN SHEET.

REGISTERED PROFESSIONAL ENGINEER
No. E18551
Exp. 12-31-16
ELECTRICAL
STATE OF CALIFORNIA

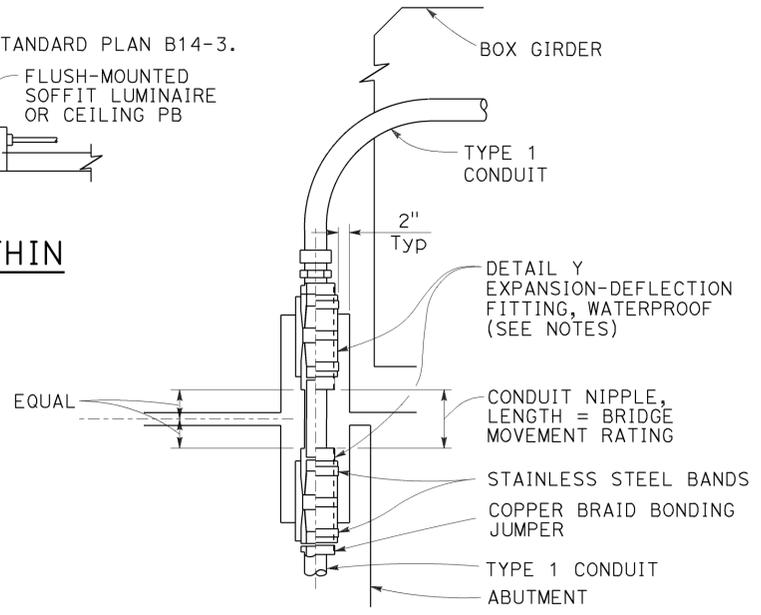
TO ACCOMPANY PLANS DATED 5-18-16



CONDUIT RISER CONNECTION
DETAIL R

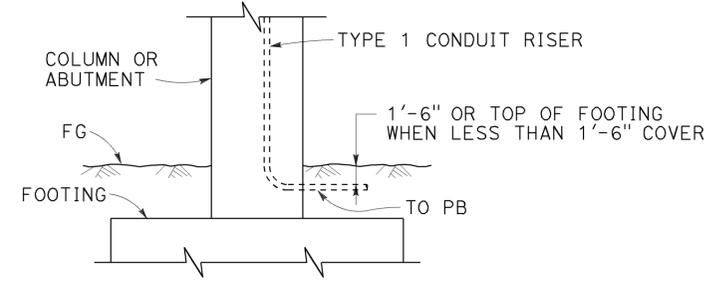


CONDUIT INSTALLATION WITHIN BOX GIRDER SECTIONS
DETAIL S

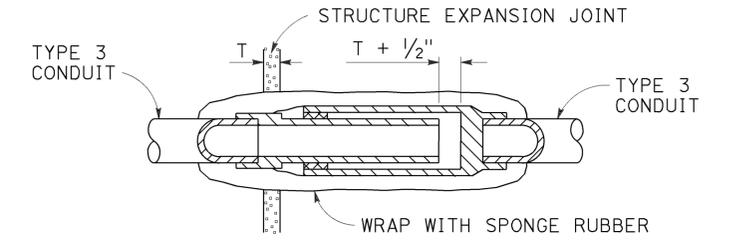


- NOTES:**
1. Fitting and pocket required only where movement can occur between girder and abutment.
 2. Fill pocket around fitting with resilient waterproof compound.

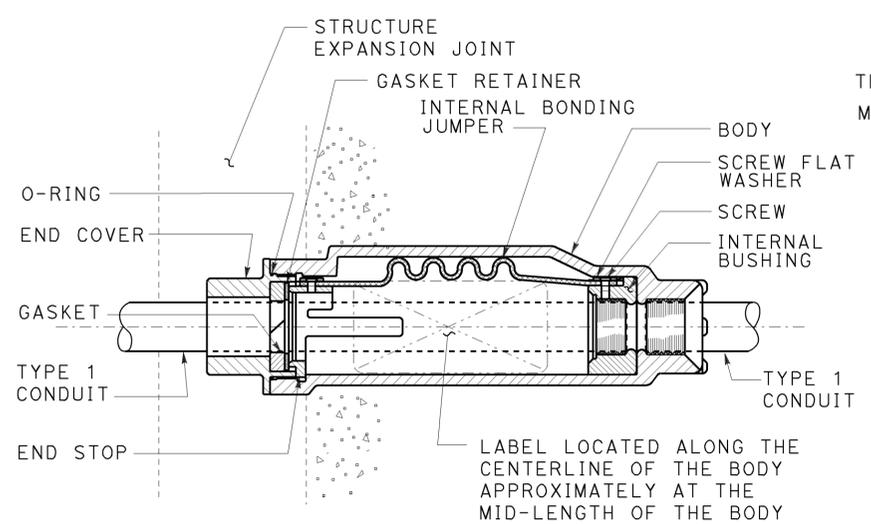
CONDUIT RISER CONNECTION AT COLUMN, ABUTMENT OR STRUCTURE WING WALL
DETAIL U



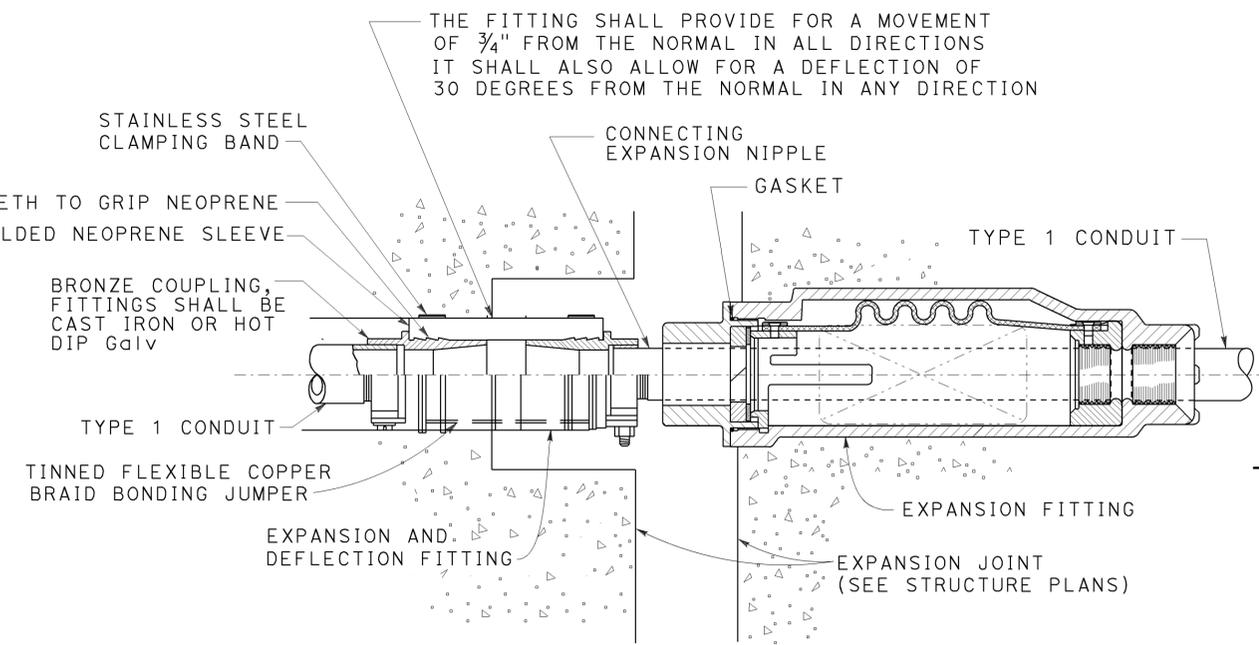
LOWER END OF CONDUIT RISER AT COLUMN OR ABUTMENT
DETAIL T



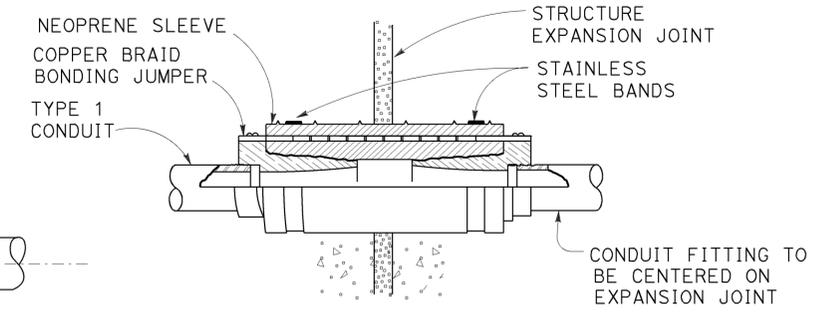
NON-METALLIC CONDUIT EXPANSION FITTING INSTALLATION DETAIL
DETAIL V



CONDUIT EXPANSION FITTING
DETAIL X



COMBINATION EXPANSION-DEFLECTION FITTINGS METALLIC CONDUIT INSTALLATION
DETAIL XY



CONDUIT EXPANSION-DEFLECTION FITTING
DETAIL Y

NOTES:

1. Except for sidewalk joints, a conduit expansion fitting or expansion-deflection fitting shall be installed at each 1/2" or greater structure joint, hinge or abutment.
2. Fittings or combination of fittings shall be installed to accommodate the movement rating as shown on the structure plans.
3. Fittings shall be installed parallel to superstructure girders.
4. Where lateral movement greater than 1/4" may occur, a neoprene sleeve expansion-deflection fitting shall be installed straddling the joint.

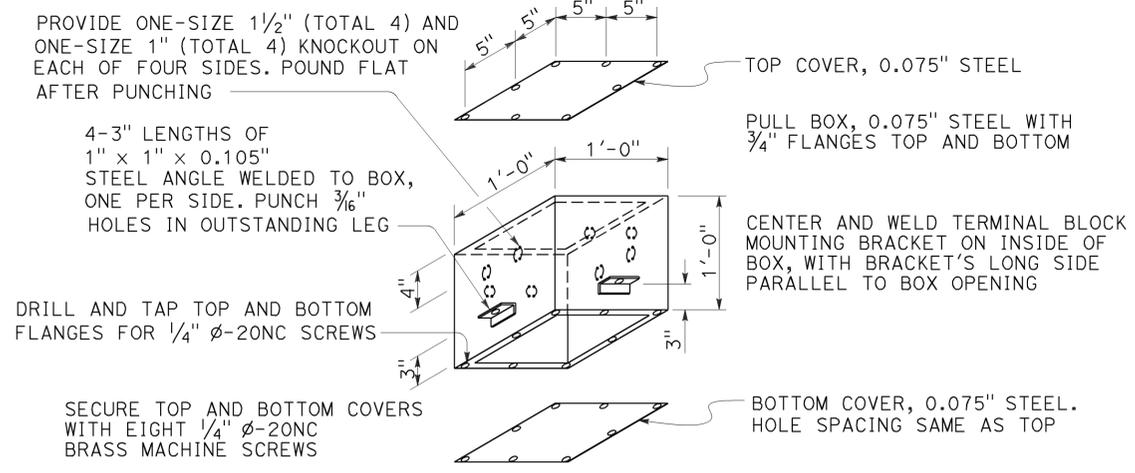
STATE OF CALIFORNIA
DEPARTMENT OF TRANSPORTATION
ELECTRICAL SYSTEMS (CONDUIT RISER AND EXPANSION FITTING, STRUCTURE INSTALLATIONS)
NO SCALE

RSP ES-9B DATED OCTOBER 30, 2015 SUPERSEDES STANDARD PLAN ES-9B DATED MAY 20, 2011 - PAGE 482 OF THE STANDARD PLANS BOOK DATED 2010.

2010 REVISED STANDARD PLAN RSP ES-9B

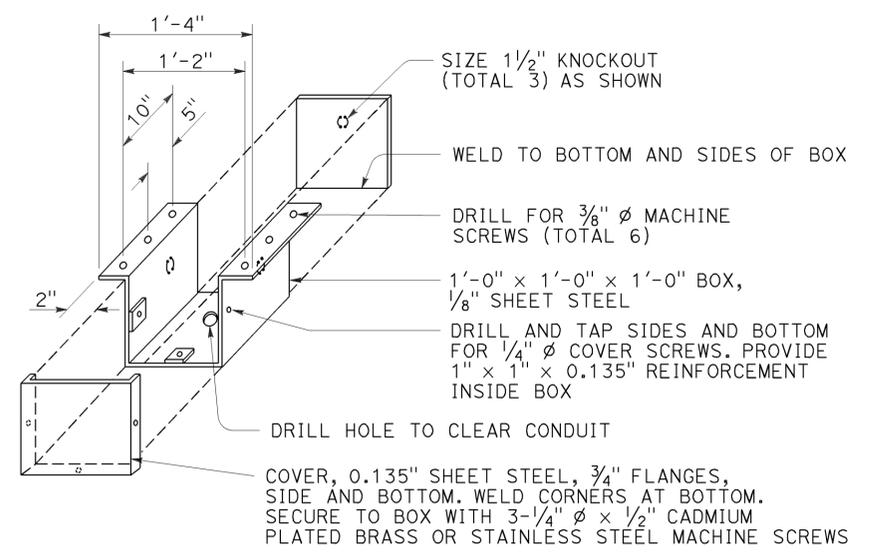
Dist	COUNTY	ROUTE	POST MILES TOTAL PROJECT	SHEET No.	TOTAL SHEETS
04	SoI	780	7.1	122	160

Theresa Gabriel
 REGISTERED ELECTRICAL ENGINEER
 April 15, 2016
 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.



No. 7 PULL BOX (CEILING)

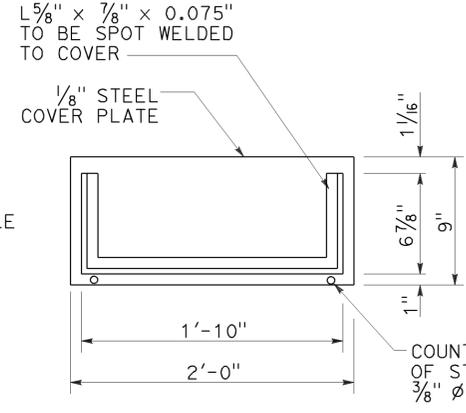
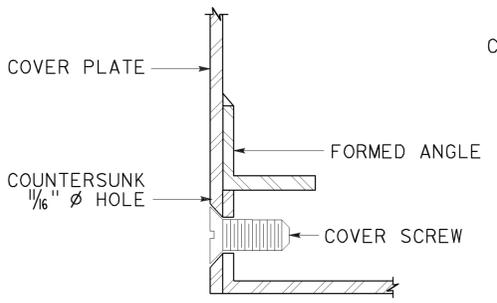
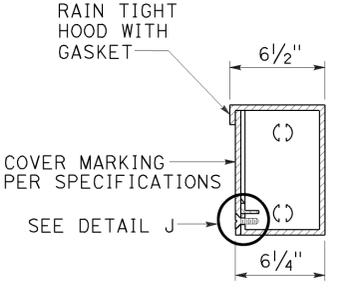
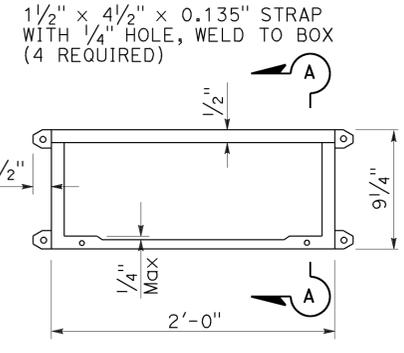
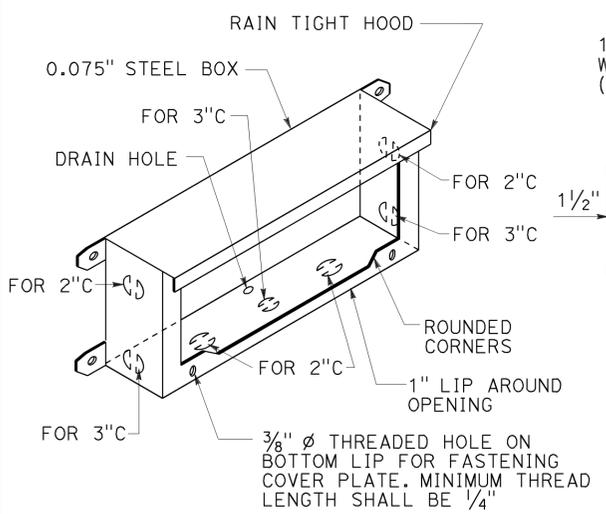
See Note 6



No. 8 PULL BOX

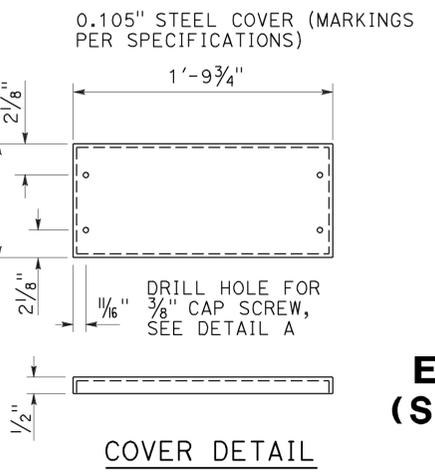
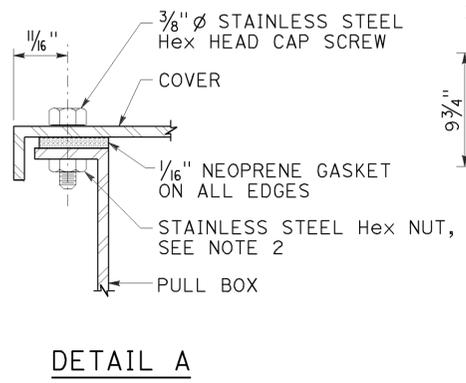
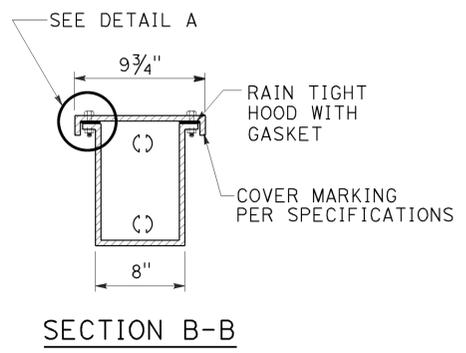
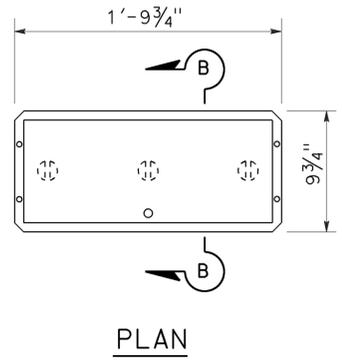
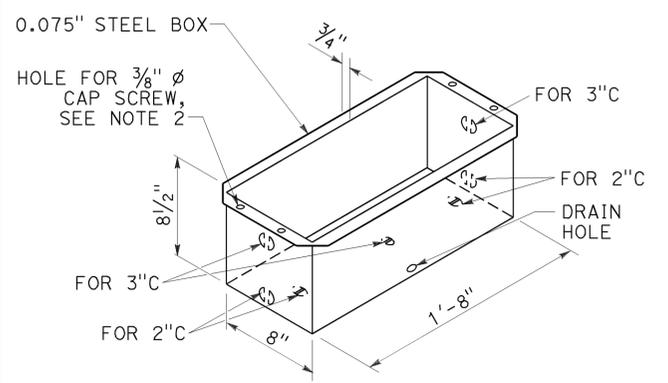
NOTES:

- Corner joints shall be lapped and secured by spot welding or riveting.
- Where cap screws are used to attach cover to box, either of the following methods of providing adequate threading may be used:
 - Tack weld stainless steel Hex nut to bottom of flange (total 4)
 - Tack weld a 1/4" x 5/8" x 8" bar beneath flange (total 2)
- Pound knockouts flat after punching.
- Multiple size knockouts (concentric) shall not be permitted.
- Pull box covers shall be marked as specified.
- Installation of No. 7 pull box:
 - Install with bottom flange flush with concrete.
 - Both covers shall be on a box during pouring.
- Install box parallel to top of railing. Cover box during pouring with 1/4" plywood of sufficient size to provide 1:1 chamfer on 3 sides of cover. Upper edge of plywood shall fit against lower edge of rain tight hood.



No. 9 PULL BOX (STRUCTURE)

See Note 7



No. 9A PULL BOX (STRUCTURE)

STATE OF CALIFORNIA
 DEPARTMENT OF TRANSPORTATION
ELECTRICAL SYSTEMS (STRUCTURE PULL BOX)
 NO SCALE

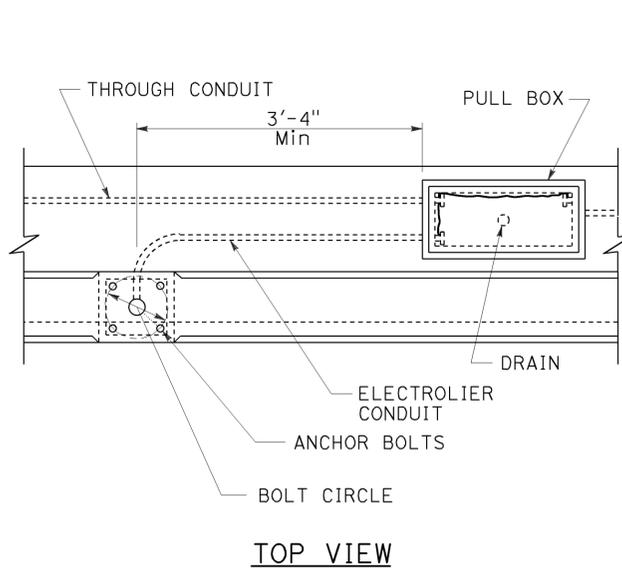
RSP ES-9C DATED APRIL 15, 2016 SUPERSEDES RSP ES-9C DATED OCTOBER 30, 2015 AND STANDARD PLAN ES-9C DATED MAY 20, 2011 - PAGE 483 OF THE STANDARD PLANS BOOK DATED 2010.

2010 REVISED STANDARD PLAN RSP ES-9C

DIST	COUNTY	ROUTE	POST MILES TOTAL PROJECT	SHEET NO.	TOTAL SHEETS
04	SoI	780	7.1	123	160

Theresa Gabriel
REGISTERED ELECTRICAL ENGINEER
April 15, 2016
PLANS APPROVAL DATE
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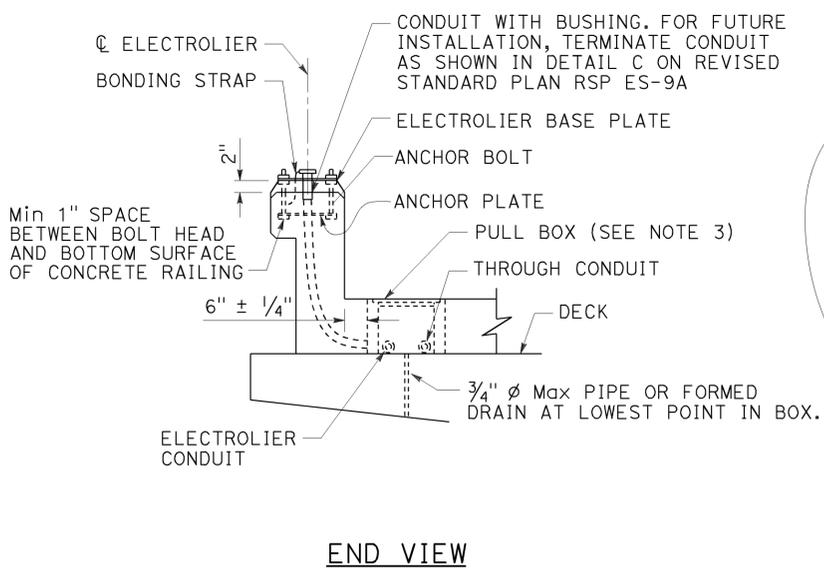
Theresa Aziz Gabriel
No. E15129
Exp. 6-30-16
ELECTRICAL
STATE OF CALIFORNIA



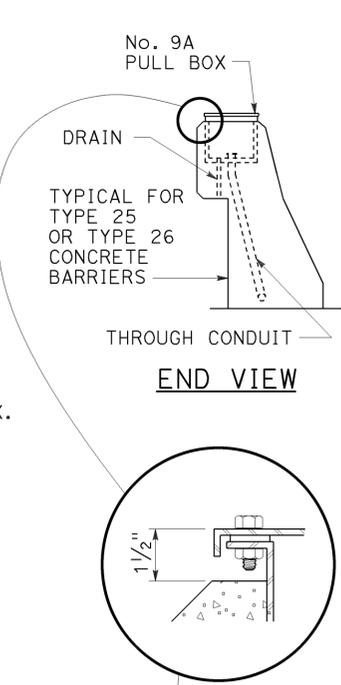
TOP VIEW

No. 3 1/2, 5, OR 6 PULL BOX INSTALLATION

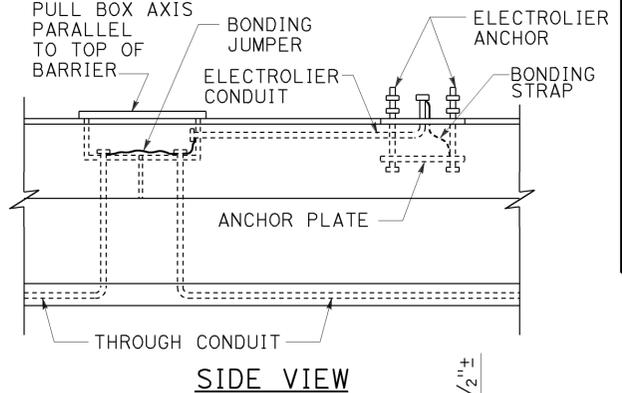
DETAIL A



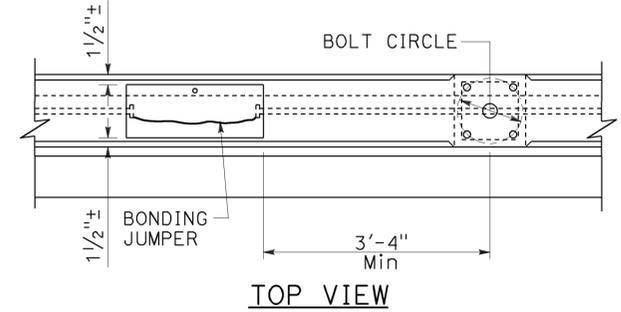
END VIEW



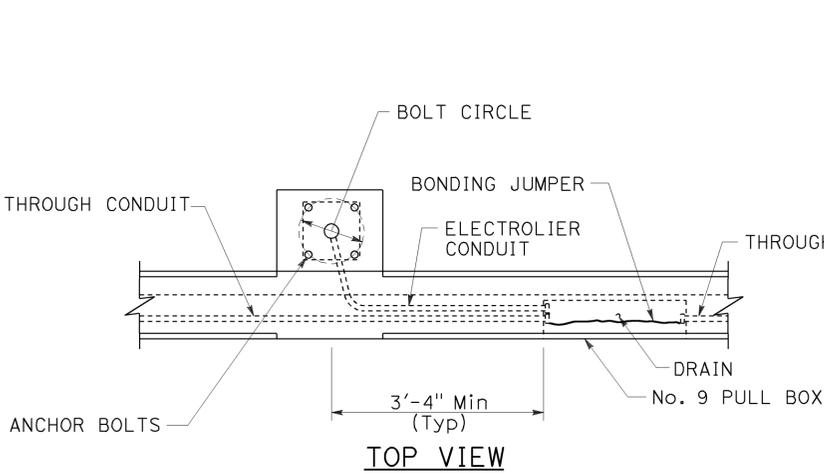
END VIEW



SIDE VIEW



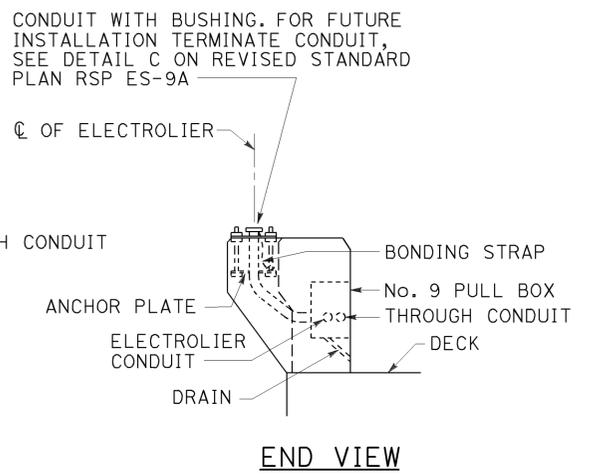
TOP VIEW



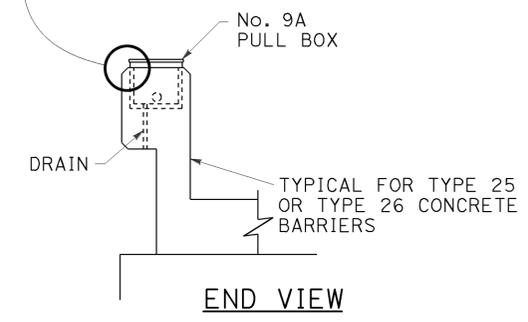
TOP VIEW

No. 9 PULL BOX INSTALLATION

DETAIL B



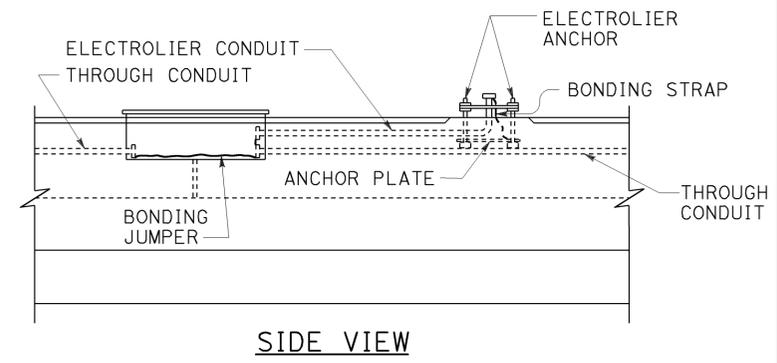
END VIEW



END VIEW

No. 9A PULL BOX INSTALLATION

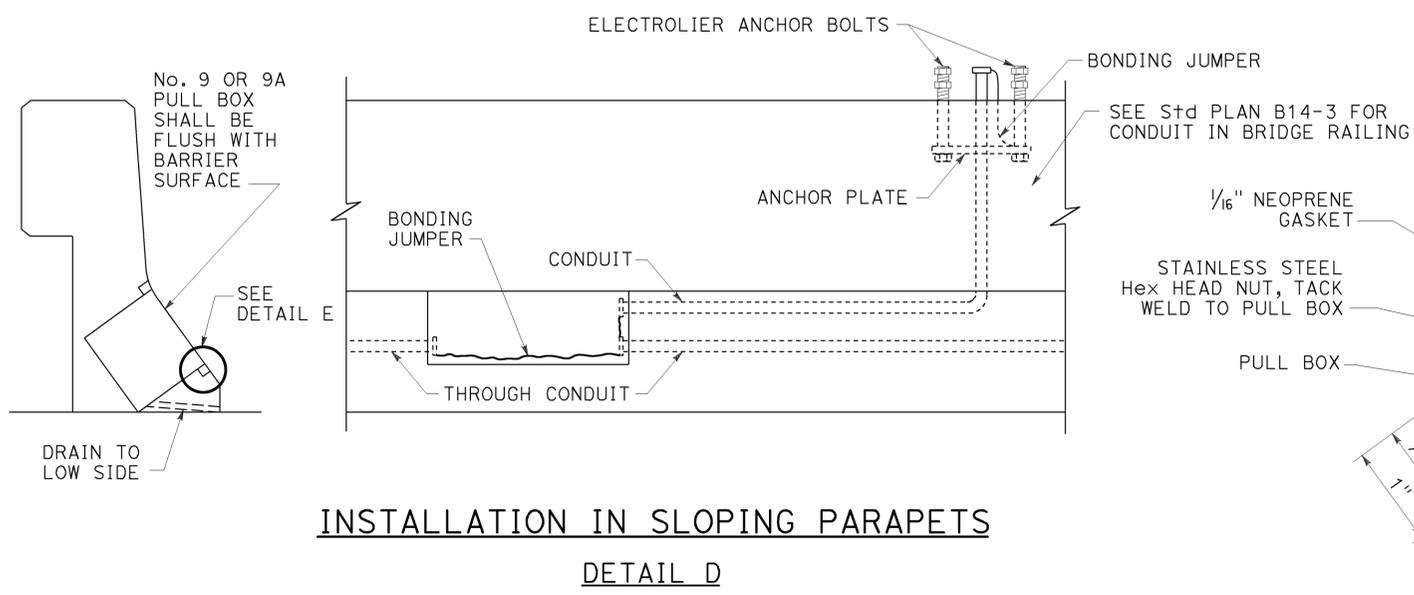
DETAIL C



SIDE VIEW

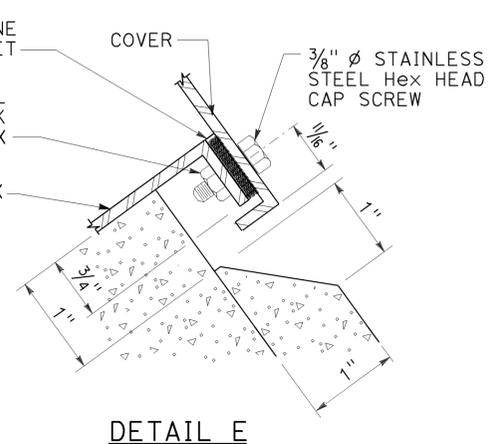
NOTES:

1. Axis of pull box shall be parallel to top of barrier, sidewalk or railing.
2. See railing sheet for reinforcement and structural details at electroliers and pull boxes.
3. Top of pull boxes in sidewalk areas shall be flush with sidewalk. Modify base of pull box as required.
4. Boxes inside of vertical barrier or railing shall be closed during pouring of PCC with 1/4" plywood of sufficient size to provide 1:1 chamfer on 3 sides of cover. Upper edge of plywood shall fit against lower edge of raintight hood.
5. Use drain in center if box is horizontal, or at low end if box is inclined. When box is mounted in sloping parapet 1/2" elongated drain hole inside at center or near end as required for drainage.
6. For electrolier anchorage bolts and grouting details, see Revised Standard Plan RSP ES-6B.
7. See Standard Plan B14-3 for conduit in concrete barrier.



INSTALLATION IN SLOPING PARAPETS

DETAIL D



DETAIL E

STATE OF CALIFORNIA
DEPARTMENT OF TRANSPORTATION
**ELECTRICAL SYSTEMS
(STRUCTURE PULL BOX
INSTALLATIONS)**
NO SCALE

RSP ES-9D DATED APRIL 15, 2016 SUPERSEDES RSP ES-9D
DATED OCTOBER 30, 2015 AND STANDARD PLAN ES-9D DATED
MAY 20, 2011 - PAGE 484 OF THE STANDARD PLANS BOOK DATED 2010.

2010 REVISED STANDARD PLAN RSP ES-9D

DIST	COUNTY	ROUTE	POST MILES TOTAL PROJECT	SHEET No.	TOTAL SHEETS
04	SoI	780	7.1	124	160

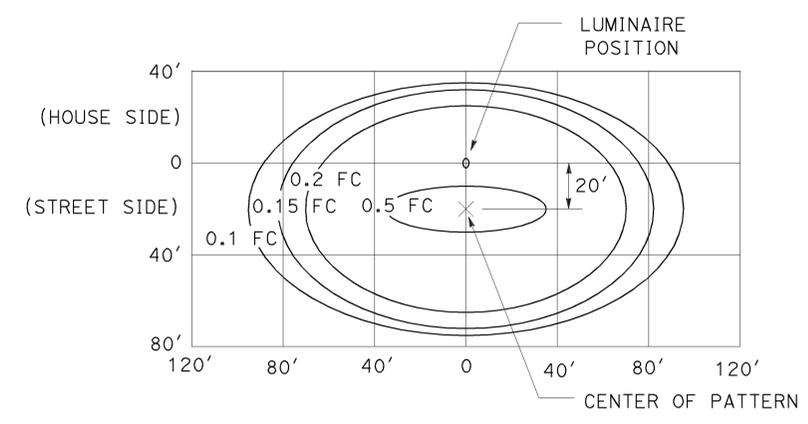
Theresa Gabriel
 REGISTERED ELECTRICAL ENGINEER
 Theresa Aziz Gabriel
 No. E15129
 Exp. 6-30-16
 ELECTRICAL
 STATE OF CALIFORNIA

October 30, 2015
 PLANS APPROVAL DATE

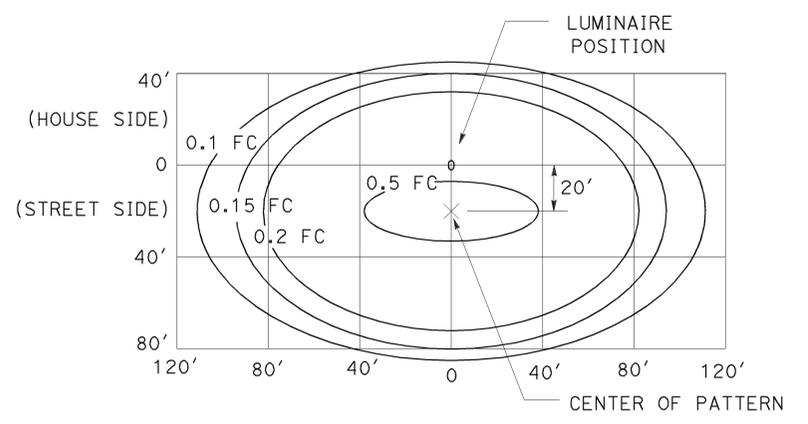
THE STATE OF CALIFORNIA OR ITS OFFICERS OR AGENTS SHALL NOT BE RESPONSIBLE FOR THE ACCURACY OR COMPLETENESS OF SCANNED COPIES OF THIS PLAN SHEET.

TO ACCOMPANY PLANS DATED 5-18-16

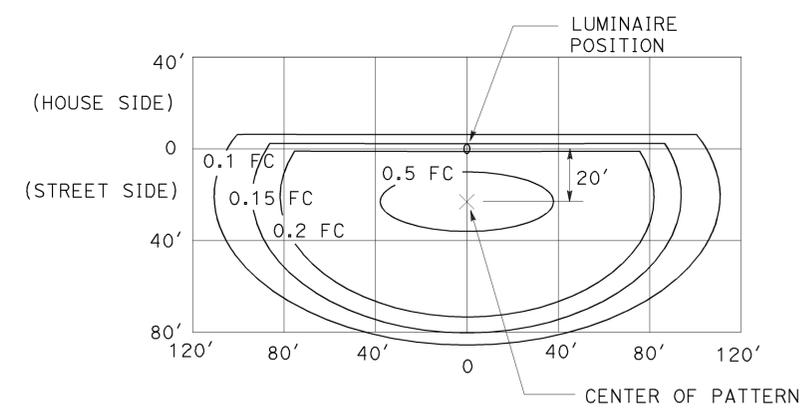
NOTE:
Curves represent the minimum footcandle (FC).



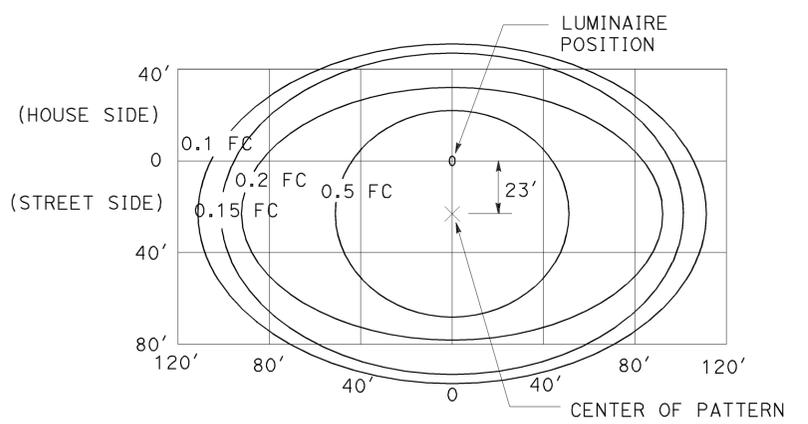
LED LUMINAIRE 165 W
34' Mounting Height



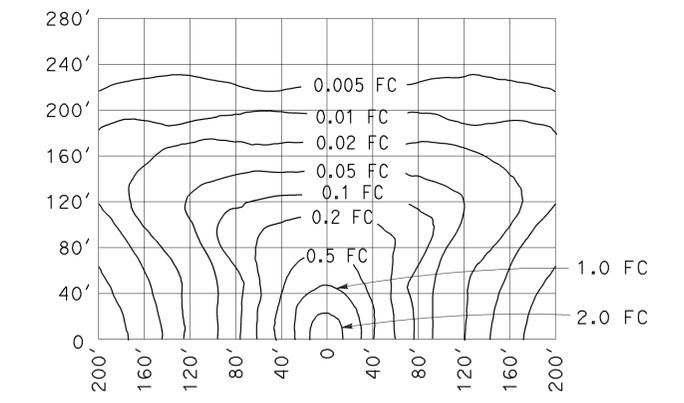
LED LUMINAIRE 235 W
40' Mounting Height



LED LUMINAIRE 235 W
40' Mounting Height
with back side control



LED LUMINAIRE 300 W
40' Mounting Height



LOW-PRESSURE SODIUM LUMINAIRE 180 W
40' Mounting Height
Lamp operated at 33,000 lm

STATE OF CALIFORNIA
DEPARTMENT OF TRANSPORTATION

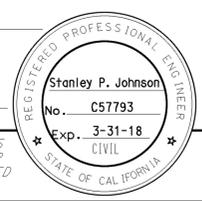
**ELECTRICAL SYSTEMS
(ISOFOOTCANDLE CURVES)**

NO SCALE

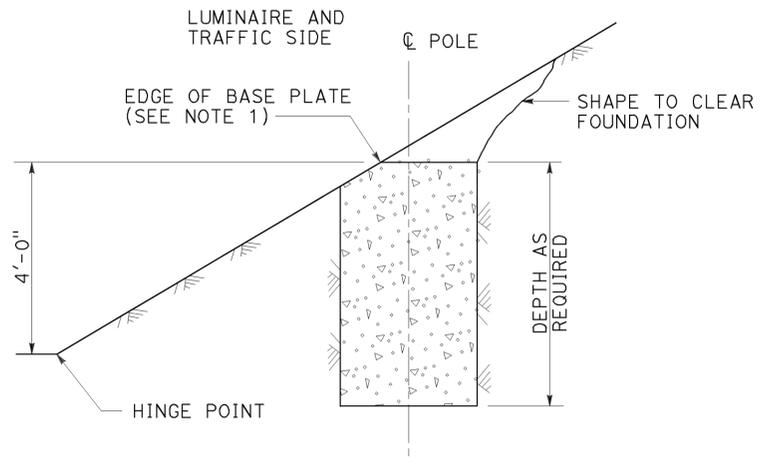
RSP ES-10A DATED OCTOBER 30, 2015 SUPERSEDES RSP ES-10A DATED JULY 19, 2013 THAT SUPPLEMENTS THE STANDARD PLANS BOOK DATED 2010.

REVISED STANDARD PLAN RSP ES-10A

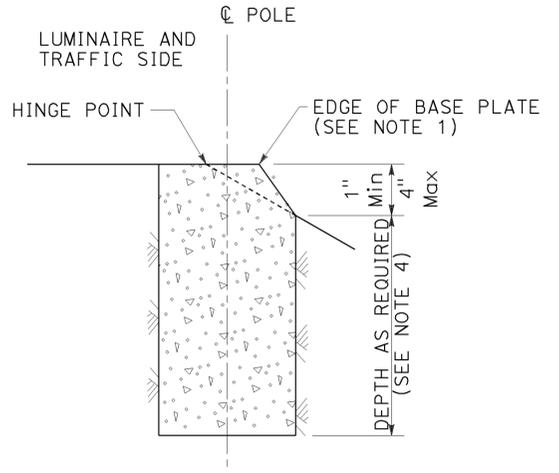
2010 REVISED STANDARD PLAN RSP ES-10A



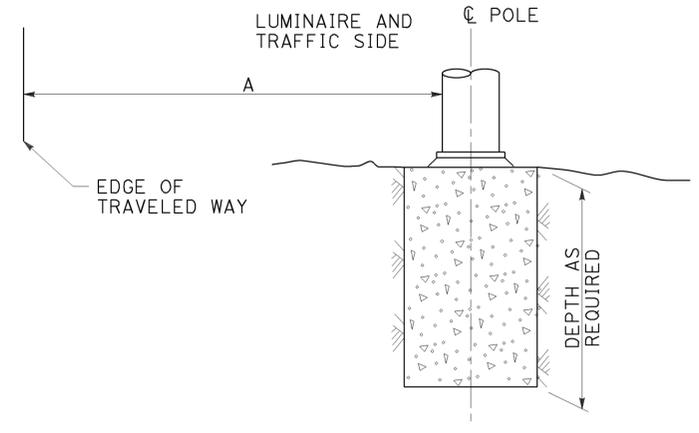
TO ACCOMPANY PLANS DATED 5-18-16



**CUT SLOPES
STEEPER THAN 4:1,
LESS THAN 2:1
DETAIL A-1**
See Note 2 and 3



**FILL SLOPES
STEEPER THAN 4:1,
LESS THAN 2:1
DETAIL A-2**
See Note 2 and 3



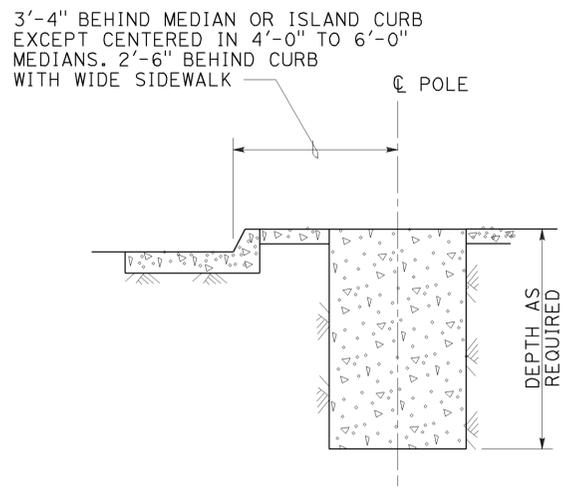
**FLAT SECTIONS, CUT OR FILL SLOPES
4:1 OR FLATTER
DETAIL A-3**
See Note 2

STANDARD TYPE	SETBACK (DIMENSION A)
32	30'-0" (Min)
31	20'-0" (Min)
15, 15D, 15-SB, 21, 21D, 30	ARM LENGTH (Min)

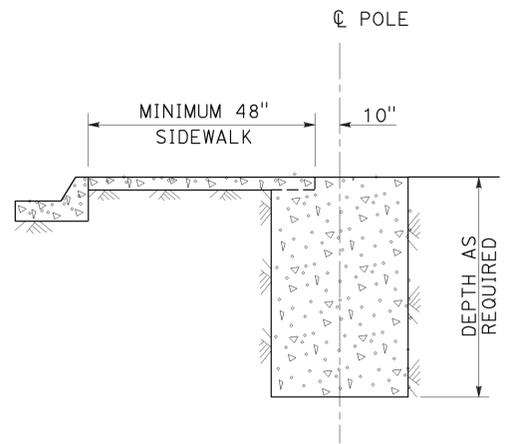
**FOUNDATIONS ADJACENT TO ALL ROADWAYS EXCEPT
IN SIDEWALK, MEDIAN AND ISLAND AREAS
DETAIL A**

NOTES:

- Where a portion of the foundation is above grade, the top edges shall have a 1" chamfer.
- Slopes shall be horizontal to vertical ratio (Horizontal : Vertical).
- Horizontal setbacks on cut and fill slopes steeper than 4:1 shall not exceed the distance shown for flat sections.
- CIDH embedment depth shall be increased beyond standard depths by the diameter of the CIDH.



**MEDIAN, ISLAND
OR WIDE SIDEWALK
DETAIL B-1**
7' Wide and wider



**NARROW SIDEWALK
DETAIL B-2**
Less than 7' wide

**FOUNDATIONS IN SIDEWALK, MEDIAN AND ISLAND AREAS
DETAIL B**

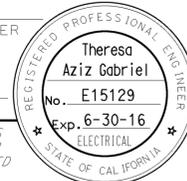
STATE OF CALIFORNIA
DEPARTMENT OF TRANSPORTATION
**ELECTRICAL SYSTEMS
(FOUNDATION INSTALLATIONS)**
NO SCALE

RSP ES-11 DATED JULY 15, 2016 SUPERSEDES RSP
ES-11 DATED JULY 19, 2013 AND STANDARD PLAN ES-11
DATED MAY 20, 2011 - PAGE 488 OF THE STANDARD PLANS BOOK DATED 2010.

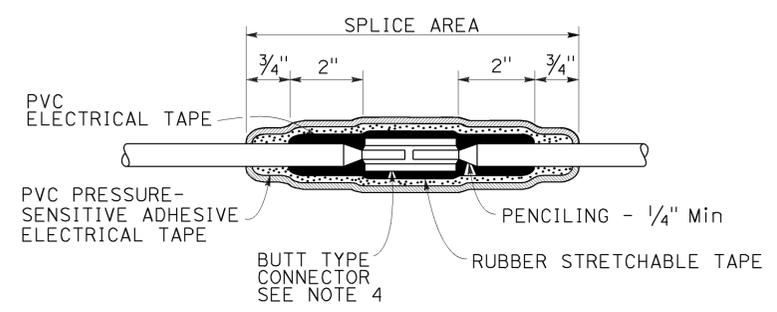
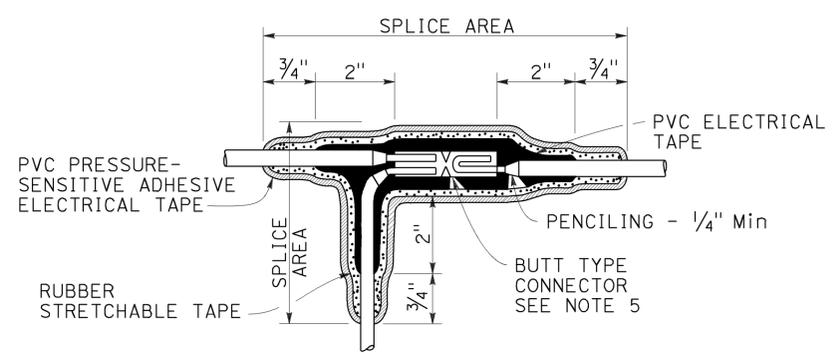
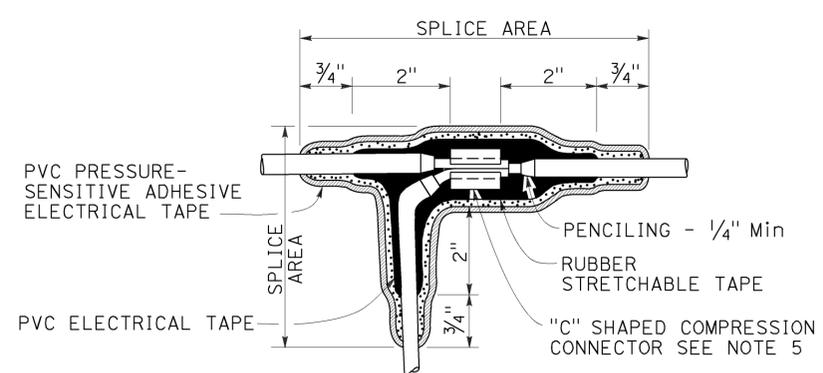
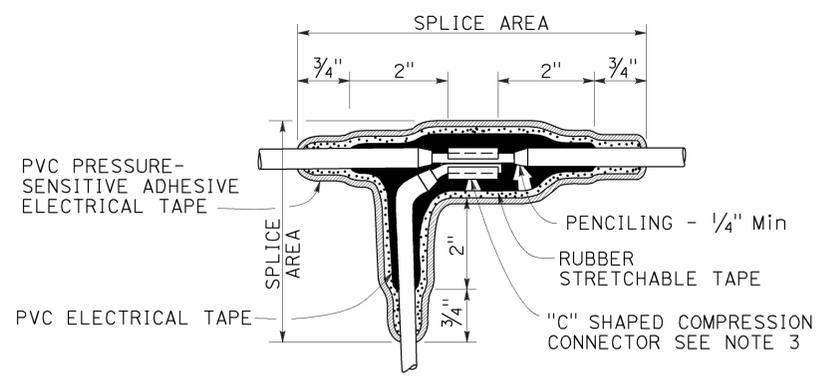
2010 REVISED STANDARD PLAN RSP ES-11

DIST	COUNTY	ROUTE	POST MILES TOTAL PROJECT	SHEET NO.	TOTAL SHEETS
04	SoI	780	7.1	126	160

Theresa Gabriel
 REGISTERED ELECTRICAL ENGINEER
 April 15, 2016
 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.



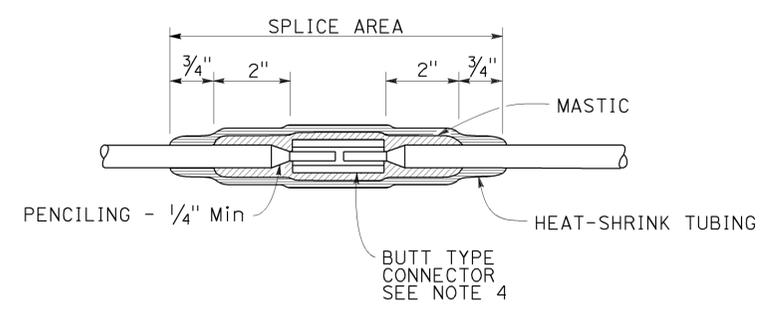
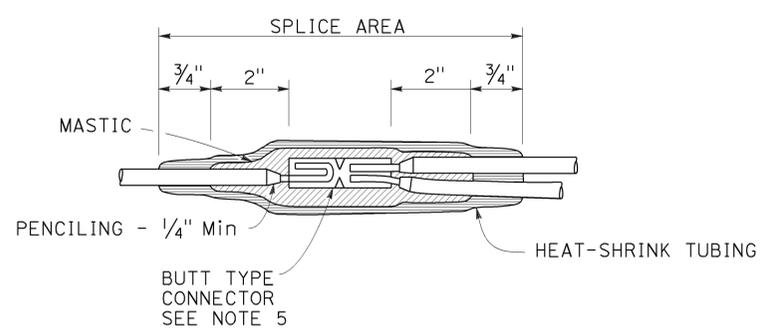
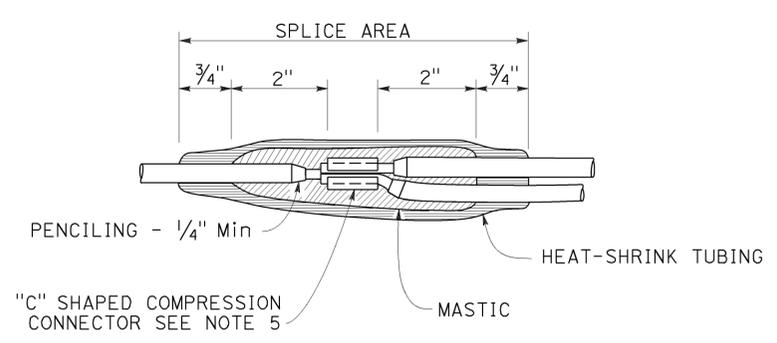
TO ACCOMPANY PLANS DATED 5-18-16



NOTES:

1. Dimensions are minimum.
2. Rubber tapes shall be rolled after application.
3. Between 1 free-end and 1 through conductor.
4. Between 2 free-end conductors.
5. Between 3 free-end conductors.

TYPICAL SPLICE INSULATION METHOD B



TYPICAL SPLICE INSULATION HEAT-SHRINK TUBING

STATE OF CALIFORNIA
 DEPARTMENT OF TRANSPORTATION
ELECTRICAL SYSTEMS
(SPLICE INSULATION METHODS DETAILS)

NO SCALE

RSP ES-13A DATED APRIL 15, 2016 SUPERSEDES RSP ES-13A DATED OCTOBER 30, 2015 AND STANDARD PLAN ES-13A DATED MAY 20, 2011 - PAGE 491 OF THE STANDARD PLANS BOOK DATED 2010.

REVISED STANDARD PLAN RSP ES-13A

2010 REVISED STANDARD PLAN RSP ES-13A

Dist	COUNTY	ROUTE	POST MILES TOTAL PROJECT	SHEET No.	TOTAL SHEETS
04	SoI	780	7.1	127	160

Theresa Gabriel
 REGISTERED ELECTRICAL ENGINEER
 April 15, 2016
 PLANS APPROVAL DATE

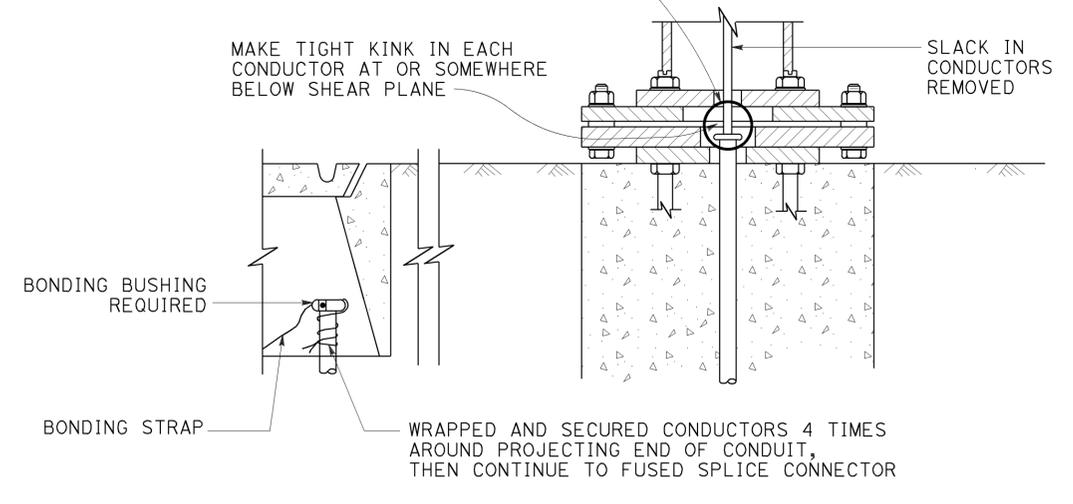
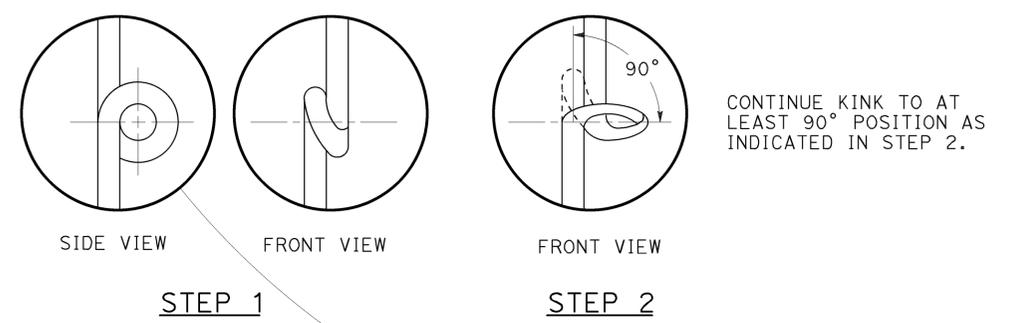
THE STATE OF CALIFORNIA OR ITS OFFICERS OR AGENTS SHALL NOT BE RESPONSIBLE FOR THE ACCURACY OR COMPLETENESS OF SCANNED COPIES OF THIS PLAN SHEET.

TO ACCOMPANY PLANS DATED 5-18-16

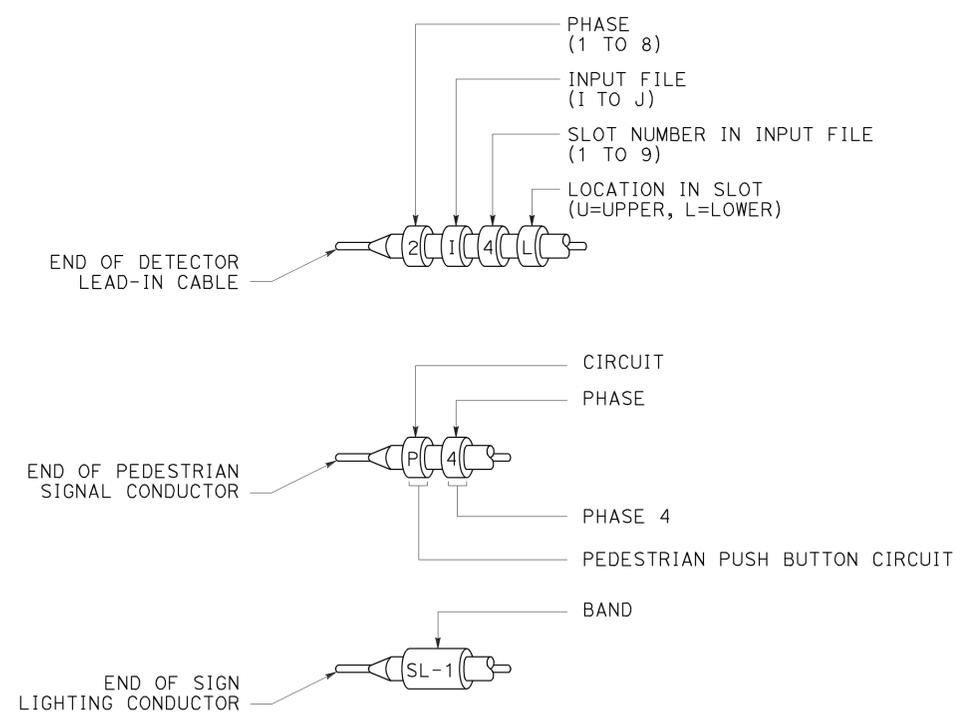
CIRCUIT VOLTAGE	FUSE VOLTAGE RATING	FUSE CURRENT RATING						
		HPS LAMP BALLAST		LOW PRESSURE SODIUM BALLAST	INDUCTION SIGN LIGHTING	SINGLE PHASE (TWO WIRE) TRANSFORMERS (PRIMARY SIDE)		
		70 W	100 W	180 W	85 W	1 KVA	2 KVA	3 KVA
120 V	250 V	5 A	5 A	5 A	5 A	10 A	20 A	30 A
240 V	250 V	5 A	5 A	5 A	5 A	6 A	10 A	20 A
480 V	500-600 V	5 A	5 A	3 A	1 A (SEE NOTE 2)	3 A	6 A	10 A

- NOTES:**
1. Primary lines of multiple ballasts shall be provided with fused connectors. Fuse ratings shall be as noted above.
 2. See Revised Standard Plan RSP ES-15D, Type SC3 control.

FUSE RATINGS FOR FUSED CONNECTORS



KINKING DETAIL FOR SLIP BASE STANDARDS
DETAIL A



TYPICAL BANDING DETAILS
DETAIL B

STATE OF CALIFORNIA
 DEPARTMENT OF TRANSPORTATION
ELECTRICAL SYSTEMS
(FUSE RATING, KINKING AND BANDING DETAIL)

NO SCALE

RSP ES-13B DATED APRIL 15, 2016 SUPERSEDES STANDARD PLAN ES-13B DATED MAY 20, 2011 - PAGE 492 OF THE STANDARD PLANS BOOK DATED 2010.

2010 REVISED STANDARD PLAN RSP ES-13B

DIST	COUNTY	ROUTE	POST MILES TOTAL PROJECT	SHEET No.	TOTAL SHEETS
04	SoI	780	7.1	128	160

Theresa Gabriel
 REGISTERED ELECTRICAL ENGINEER
 Theresa Aziz Gabriel
 No. E15129
 Exp. 6-30-16
 ELECTRICAL
 STATE OF CALIFORNIA

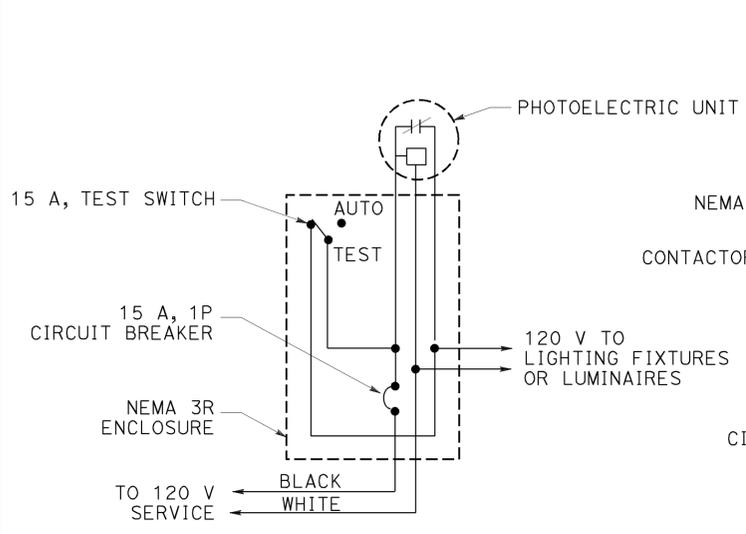
October 30, 2015
 PLANS APPROVAL DATE
THE STATE OF CALIFORNIA OR ITS OFFICERS OR AGENTS SHALL NOT BE RESPONSIBLE FOR THE ACCURACY OR COMPLETENESS OF SCANNED COPIES OF THIS PLAN SHEET.

TO ACCOMPANY PLANS DATED 5-18-16

2010 REVISED STANDARD PLAN RSP ES-15D

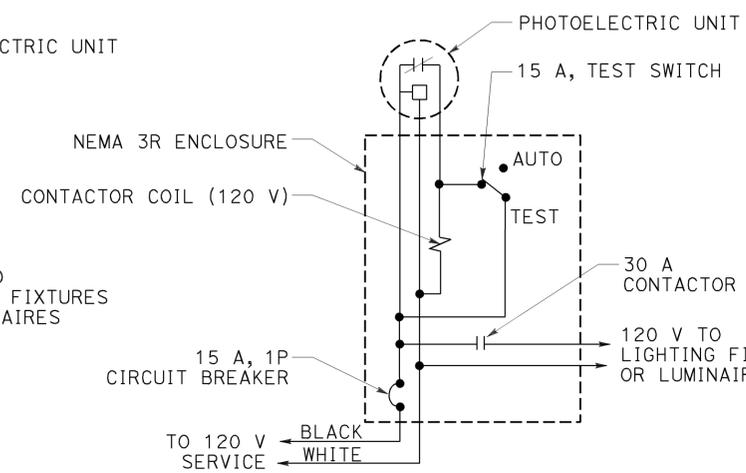
NOTE:

Type SC1A, SC2A, SC3A controls are similar to Types SC1, SC2 and SC controls respectively except test switch and wiring are not required.



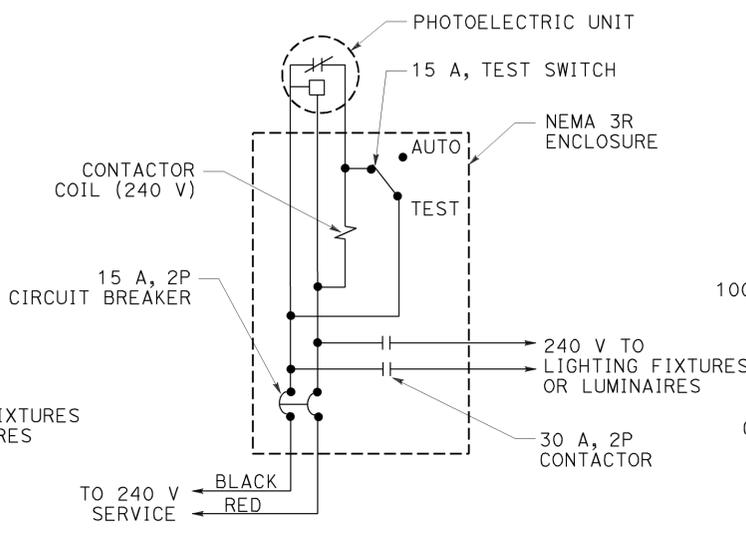
TYPE LC1 CONTROL

For 120 V unswitched circuit with no more than 1000 W load.



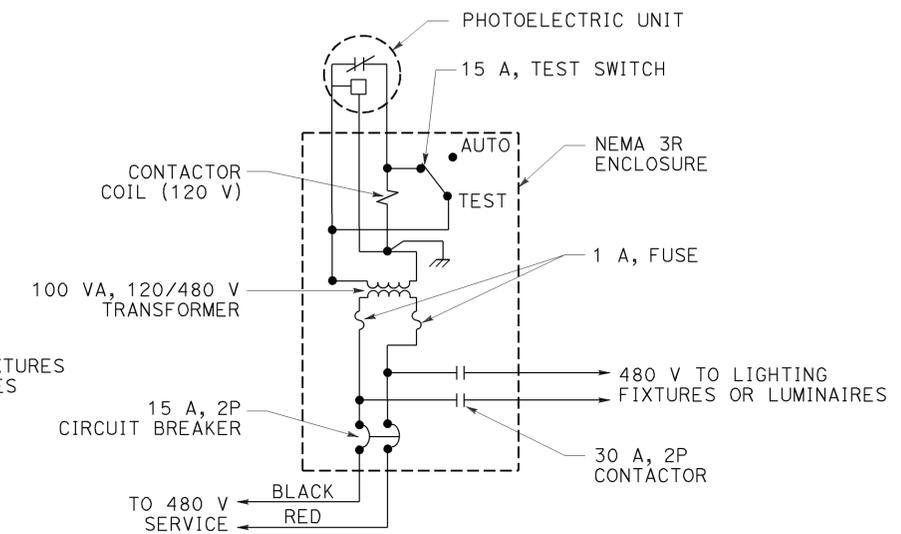
TYPE LC2 CONTROL

For 120 V unswitched circuit



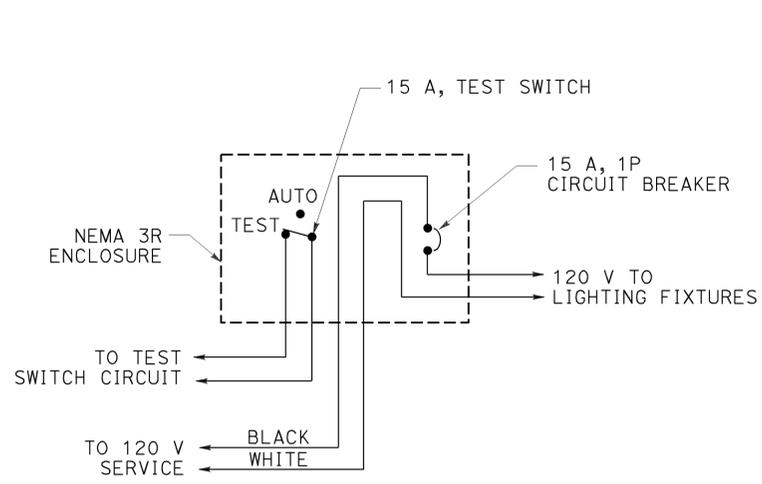
TYPE LC3 CONTROL

For 240 V unswitched circuits



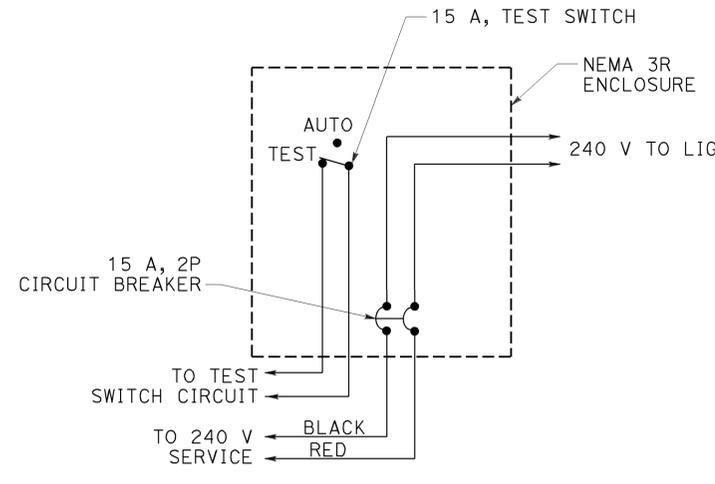
TYPE LC4 CONTROL

For 480 V unswitched circuits



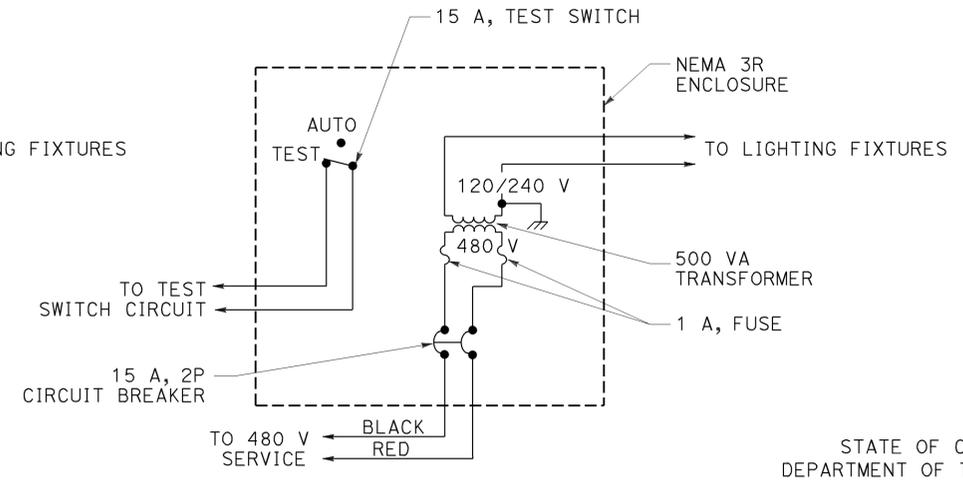
TYPE SC1 CONTROL

For 120 V switched circuit, see Note 1 for Type SC1A



TYPE SC2 CONTROL

For 240 V switched circuit, see Note 1 for Type SC2A



TYPE SC3 CONTROL

For 480 V switched sign circuit, see Note 1 for Type SC3A

ELECTRICAL SYSTEMS (LIGHTING AND SIGN ILLUMINATION CONTROL)

NO SCALE

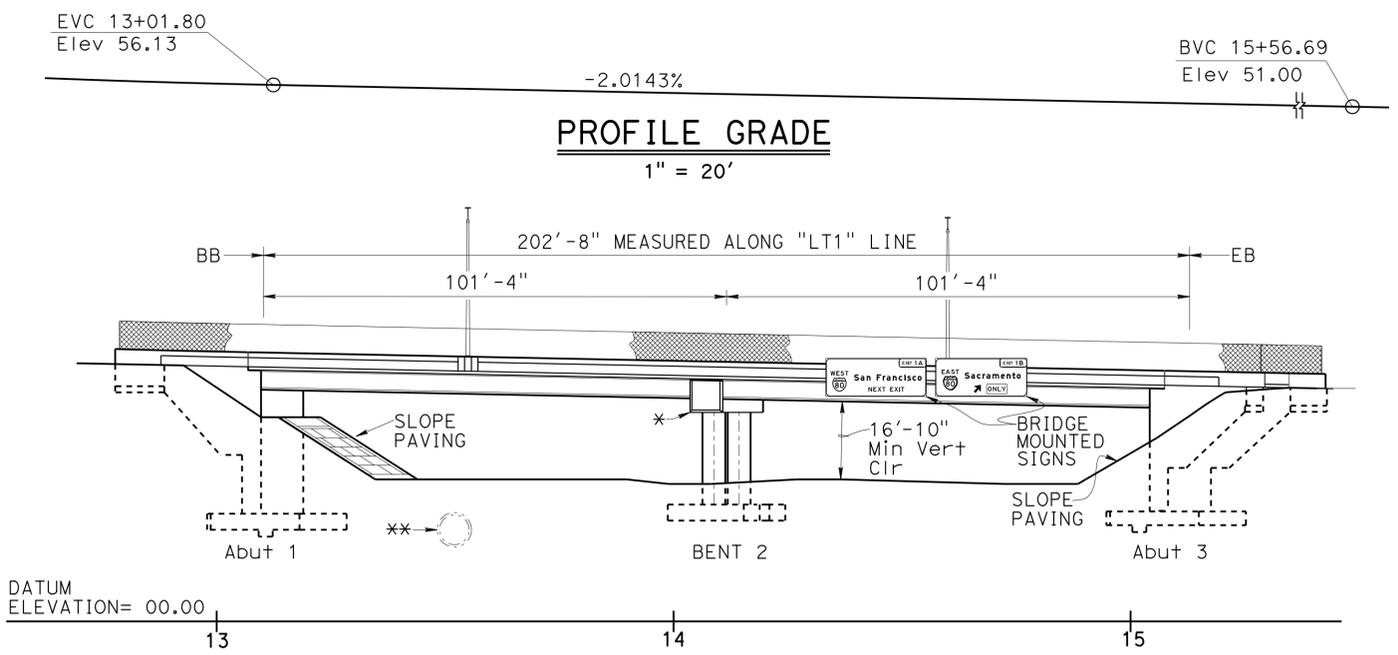
RSP ES-15D DATED OCTOBER 30, 2015 SUPERSEDES STANDARD PLAN ES-15D DATED MAY 20, 2011 - PAGE 499 OF THE STANDARD PLANS BOOK DATED 2010.

REVISED STANDARD PLAN RSP ES-15D

Dist	COUNTY	ROUTE	POST MILES TOTAL PROJECT	SHEET No.	TOTAL SHEETS
04	Soi	780	7.1	129	160

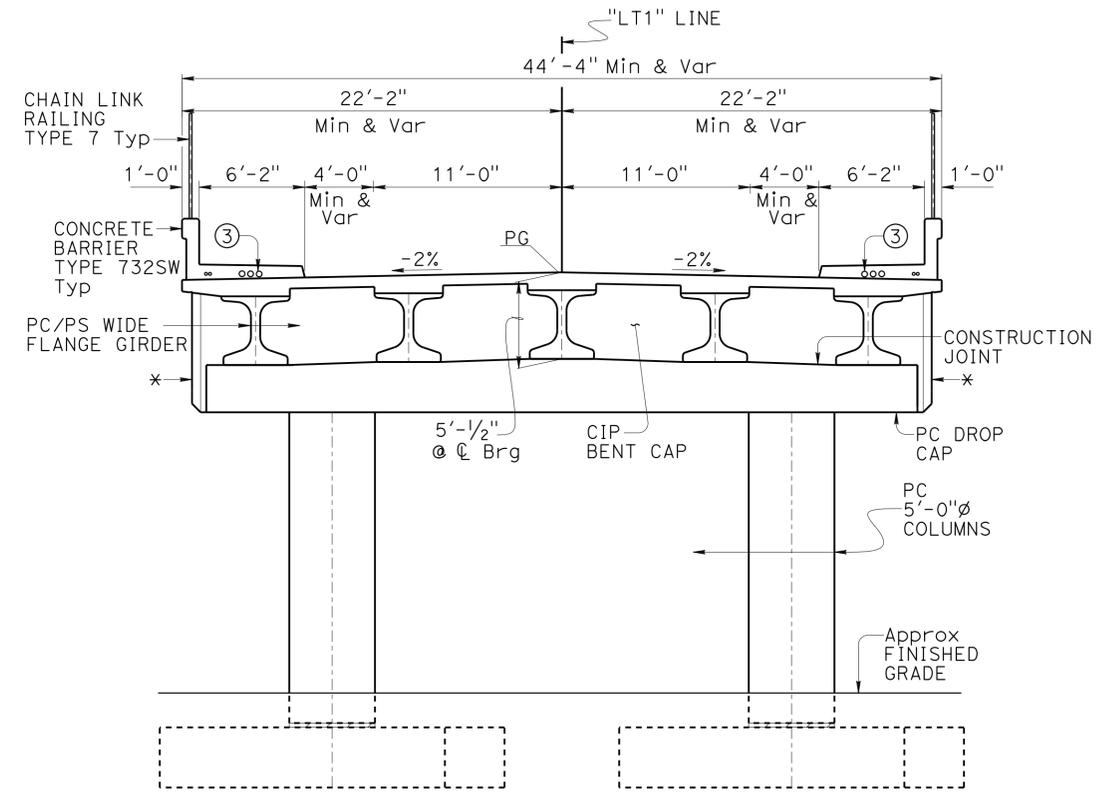
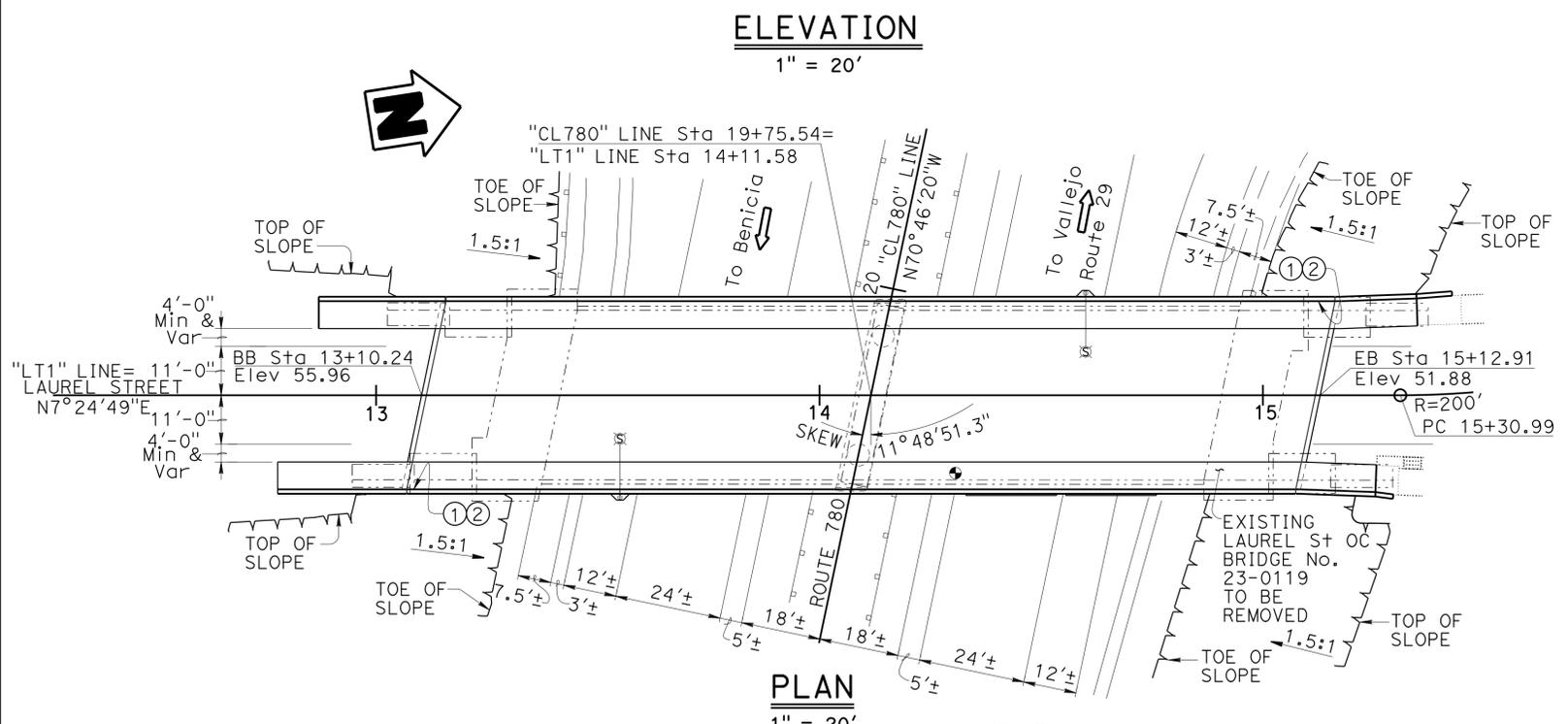
REGISTERED CIVIL ENGINEER **Isaias D. Yalan** No. 68269 Exp. 9-30-17
 DATE 8-3-16
 PLANS APPROVAL DATE 5-18-16
 CIVIL
 STATE OF CALIFORNIA
 The State of California or its officers or agents shall not be responsible for the accuracy or completeness of scanned copies of this plan sheet.

Caltrans
 ACCELERATED BRIDGE CONSTRUCTION



QUANTITIES

BRIDGE REMOVAL	LUMP	SUM
STRUCTURE EXCAVATION (BRIDGE)	2,940	CY
STRUCTURE BACKFILL (BRIDGE)	1,894	CY
STRUCTURAL CONCRETE, BRIDGE FOOTING	350	CY
STRUCTURAL CONCRETE, BRIDGE	470	CY
STRUCTURAL CONCRETE, BRIDGE (ULTRA HIGH PERFORMANCE)	41	CF
STRUCTURAL CONCRETE, BRIDGE (RSC)	277	CY
TRIAL SLAB (RSC)	LUMP	SUM
BENT CAP WITH COLUMN MOCK-UP	LUMP	SUM
PULL-OUT TEST MOCK-UP	LUMP	SUM
FURNISH PRECAST PRESTRESSED CONCRETE	2	EA
WIDE FLANGE GIRDER (100'-110')	10	EA
FURNISH PRECAST CONCRETE COLUMN	2	EA
FURNISH PRECAST CONCRETE BENT CAP	1	EA
ERECT PRECAST CONCRETE COLUMN	2	EA
ERECT PRECAST CONCRETE BENT CAP	1	EA
ERECT PRECAST PRESTRESSED CONCRETE GIRDER	10	EA
JOINT SEAL (MR 1")	91	LF
BAR REINFORCING STEEL (BRIDGE)	282,850	LB
HEADED BAR REINFORCEMENT	8	EA
SLOPE PAVING (CONCRETE PAVERS)	1159	SOFT
MISCELLANEOUS METAL (BRIDGE)	700	LB
CHAIN LINK RAILING (TYPE 7)	512	LF
CONCRETE BARRIER (TYPE 732SW)	500	LF
CONCRETE BARRIER (TYPE 742A)	12	LF



- LEGEND:
- Indicates Existing Structure
 - Indicates New Structure
 - Indicates Point of Minimum Vertical Clearance
 - ⊕ Electroliner, for location see "Roadway Plans"
 - * Architectural Treatment, see "ARCHITECTURAL DETAILS" sheet
 - ** Approximate location 78" Ø RCP under existing Abutment footing

- NOTES:
- Paint "LAUREL St. OVERCROSSING"
 - Paint "BRIDGE No. 23-0255"
 - For Utilities see "TYPICAL SECTION" sheet
 - For Index to Plans, Standard Plans List see "INDEX TO PLANS" sheet
 - For Bridge Mounted Sign details see "Roadway Plans"
 - The contractor shall verify all controlling field dimensions before ordering or fabricating any material.

Richard Melko DESIGN ENGINEER	DESIGN	BY Isaias Yalan	CHECKED Rosa Candiotti	LOAD & RESISTANCE FACTOR DESIGN	LIVE LOADING: HL93 W/"LOW-BOY" PERMIT DESIGN VEHICLE	STATE OF CALIFORNIA DEPARTMENT OF TRANSPORTATION	BRIDGE No.	23-0255	LAUREL St OVERCROSSING (REPLACE) GENERAL PLAN	
	DETAILS	BY Tim Fairall	CHECKED Rosa Candiotti	LAYOUT	BY Isaias Yalan		CHECKED Rosa Candiotti	POST MILE		7.1
	QUANTITIES	BY Isaias Yalan	CHECKED Rosa Candiotti	SPECIFICATIONS	BY Sharon Hansen		CHECKED Sharon Hansen	PLANS AND SPECIFICATIONS COMPARED		7.1

ORIGINAL SCALE IN INCHES FOR REDUCED PLANS: 0 1 2 3
 UNIT: 3594
 PROJECT NUMBER & PHASE: 0412000477 1
 CONTRACT No.: 04-4G4504
 DISREGARD PRINTS BEARING EARLIER REVISION DATES
 REVISION DATES: 06-16-15, 11-16-15, 3-21-16, 3-30-16
 SHEET 1 OF 32

GENERAL NOTES
LOAD AND RESISTANCE FACTOR DESIGN

DESIGN:

AASHTO LRFD Bridge Design Specifications, 6th edition and the Caltrans Amendments preface dated 2012

SEISMIC DESIGN:

Caltrans Seismic Design Criteria (SDC), Version 1.7 dated April 2013

DEAD LOAD:

Includes 35 psf for future wearing surface.

LIVE LOADING:

HL93 and permit design load.

SEISMIC LOADING:

Soil profile type: $V_{s30} = 560$ m/sec
Moment Magnitude: $M_w = 6.5$
Peak Rock Acceleration 0.55 g
See Site Specific Acceleration Response Spectra Curve

CONCRETE:

$f_y = 60$ ksi
 $f'_c = 3.6$ ksi
 $n = 8$
See Concrete Strength And Type Limits

STRUCTURAL STEEL:

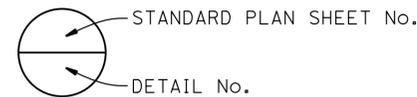
$f_y =$ Grade 50

PRESTRESSING:

See "PC/PS WIDE FLANGE GIRDER" sheets.

STANDARD PLANS 2010

RSP	A10A	ABBREVIATIONS (SHEET 1 OF 2)
RSP	A10B	ABBREVIATIONS (SHEET 2 OF 2)
RSP	A10C	LINES AND SYMBOLS (SHEET 1 OF 3)
RSP	A10D	LINES AND SYMBOLS (SHEET 2 OF 3)
RSP	A10E	LINES AND SYMBOLS (SHEET 3 OF 3)
RSP	A10F	LEGEND - SOIL (SHEET 1 OF 2)
RSP	A10G	LEGEND - SOIL (SHEET 2 OF 2)
RSP	A10H	LEGEND - ROCK
RSP	A62C	LIMITS OF PAYMENT FOR EXCAVATION AND BACKFILL-BRIDGE
RSP	B0-1	BRIDGE DETAILS
RSP	B0-3	BRIDGE DETAILS
RSP	B0-5	BRIDGE DETAILS
RSP	B0-13	BRIDGE DETAILS
RSP	B3-1A	RETAINING WALL TYPE 1 (CASE 1)
RSP	B6-21	JOINT SEALS (MAXIMUM MOVEMENT RATING = 2")
RSP	B11-52	CHAIN LINK RAILING TYPE 7
RSP	B11-57	CONCRETE BARRIER TYPE 742
RSP	ES-6A	ELECTRICAL SYSTEMS (LIGHTING STANDARD, TYPES 15 AND 21)
RSP	ES-6B	ELECTRICAL SYSTEMS (ELECTROLIER ANCHORAGE AND GROUTING FOR TYPE 15 AND TYPE 21 BARRIER RAIL MOUNTED)



INDEX TO PLANS

SHEET No.	TITLE
1	GENERAL PLAN
2	INDEX TO PLANS
3	DECK CONTOURS
4	MOCK-UP DETAILS No. 1
5	MOCK-UP DETAILS No. 2
6	FOUNDATION PLAN
7	ABUTMENT LAYOUT No. 1
8	ABUTMENT LAYOUT No. 2
9	ABUTMENT LAYOUT No. 3
10	ABUTMENT DETAILS No. 1
11	ABUTMENT DETAILS No. 2
12	ABUTMENT DETAILS No. 3
13	BENT LAYOUT
14	BENT DETAILS No. 1
15	BENT DETAILS No. 2
16	BENT DETAILS No. 3
17	BENT DETAILS No. 4
18	TYPICAL SECTION
19	GIRDER LAYOUT
20	DECK REINFORCEMENT
21	GIRDER DETAILS No. 1
22	GIRDER DETAILS No. 2
23	PC/PS WIDE FLANGE GIRDER (DEBONDED STRANDS)
24	ARCHITECTURAL DETAILS
25	CONCRETE BARRIER TYPE 732SW DETAILS No. 1
26	CONCRETE BARRIER TYPE 732SW DETAILS No. 2
27	JOINT ARMOR FOR PEDESTRIAN WALKWAYS
28	DRAINAGE DETAILS
29	SLOPE PAVING-FULL SLOPE
30	LOG OF TEST BORINGS 1 OF 2
31	LOG OF TEST BORINGS 2 OF 2
32	AS-BUILT LOG OF TEST BORINGS

Dist	COUNTY	ROUTE	POST MILES TOTAL PROJECT	SHEET No.	TOTAL SHEETS
04	So1	780	7.1	130	160

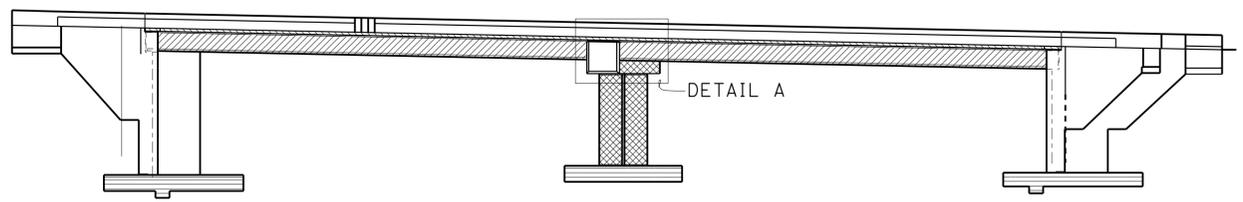
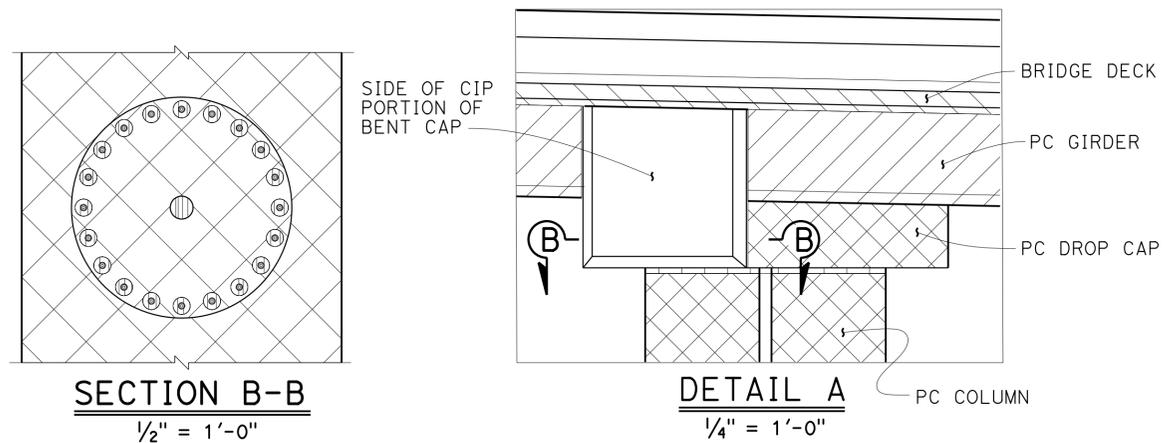
8-3-16
DATE

5-18-16
PLANS APPROVAL DATE

REGISTERED CIVIL ENGINEER
ISAIAS D. YALAN
No. 68269
Exp. 9-30-17
CIVIL
STATE OF CALIFORNIA

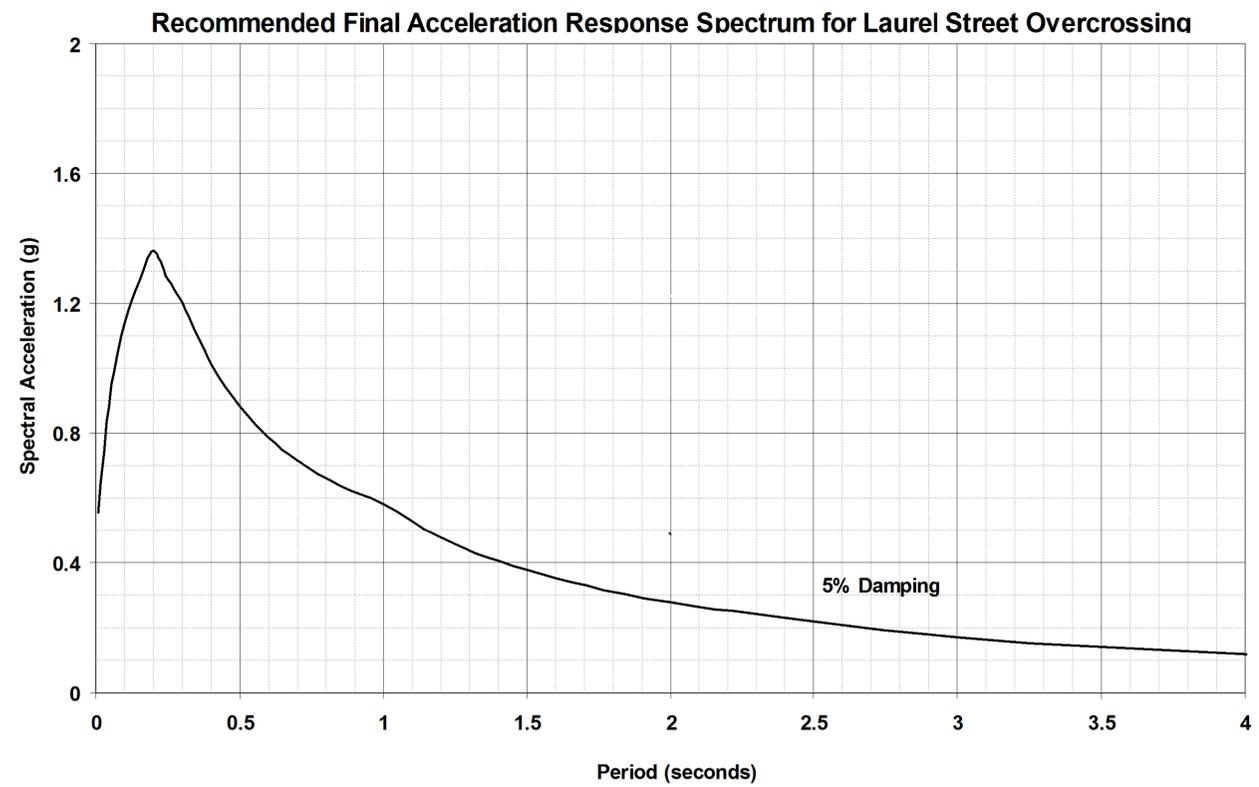
Caltrans
ACCELERATED BRIDGE CONSTRUCTION

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	Structural Concrete, Bridge Rapid Strength Concrete (RSC) ($f'_{ci} = 3,250$ psi in 4 hours $f'_c = 5,000$ psi at 28 days)
	Structural Concrete, Bridge Ultra-High Performance Concrete (UHPC)
	Structural Concrete, Bridge ($f'_c = 8,000$ psi at 28 days)
	Structural Concrete, Bridge ($f'_c = 5,000$ psi at 28 days)
	Structural Concrete, Bridge Footing
	Structural Concrete, Bridge ($f'_c = 4,000$ psi at 28 days)

CONCRETE STRENGTH AND TYPE LIMITS
1" = 20'



DESIGN	BY Isaias Yalan	CHECKED Rosa Candiotti
DETAILS	BY Tim Fairall	CHECKED Rosa Candiotti
QUANTITIES	BY Isaias Yalan	CHECKED Phil Lutz/Kim Mori

STATE OF CALIFORNIA
DEPARTMENT OF TRANSPORTATION

DIVISION OF ENGINEERING SERVICES
STRUCTURE DESIGN
DESIGN BRANCH 9

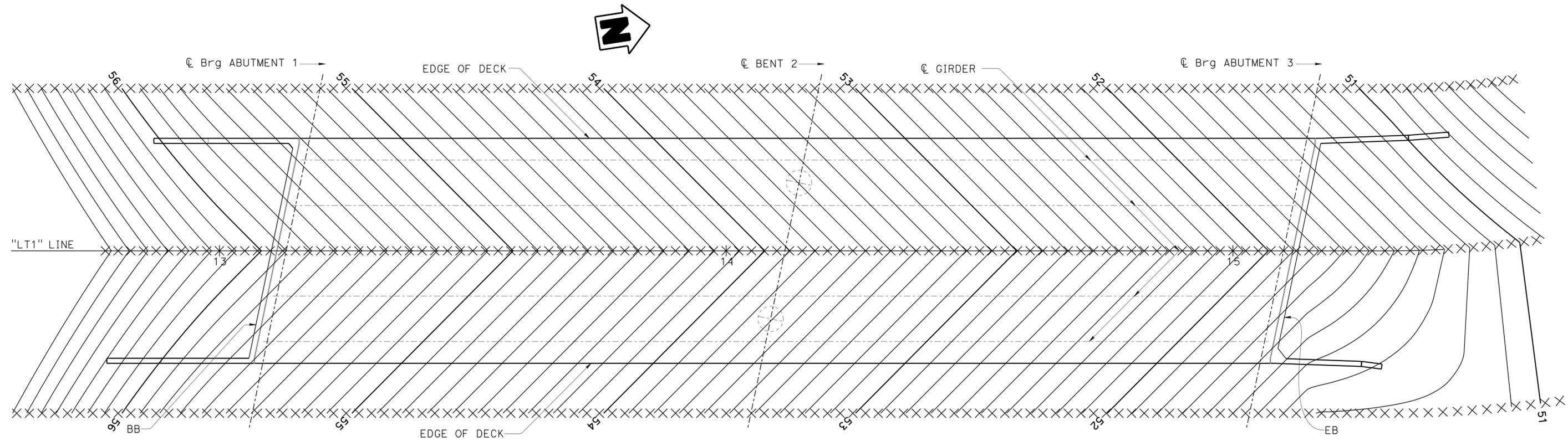
BRIDGE No.	23-0255
POST MILE	7.1

LAUREL St OVERCROSSING (REPLACE)
INDEX TO PLANS

Dist	COUNTY	ROUTE	POST MILES TOTAL PROJECT	SHEET No.	TOTAL SHEETS
04	SoI	780	7.1	131	160


 REGISTERED CIVIL ENGINEER DATE 4-26-16
 PLANS APPROVAL DATE 5-18-16
 REGISTERED PROFESSIONAL ENGINEER
 ISAIAS D. YALAN
 No. 68269
 Exp. 9-30-17
 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.


ACCELERATED BRIDGE CONSTRUCTION



- NOTES:
1. Contour Interval = 0.1'
 2. x = 2.5' Intervals along station line
 3. Contours do not include camber

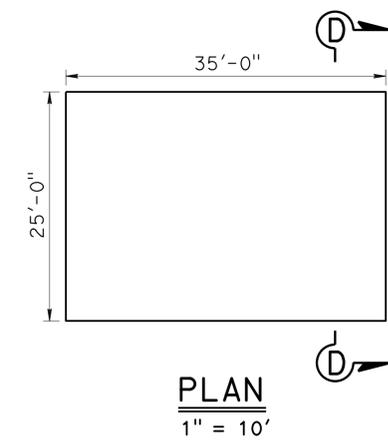
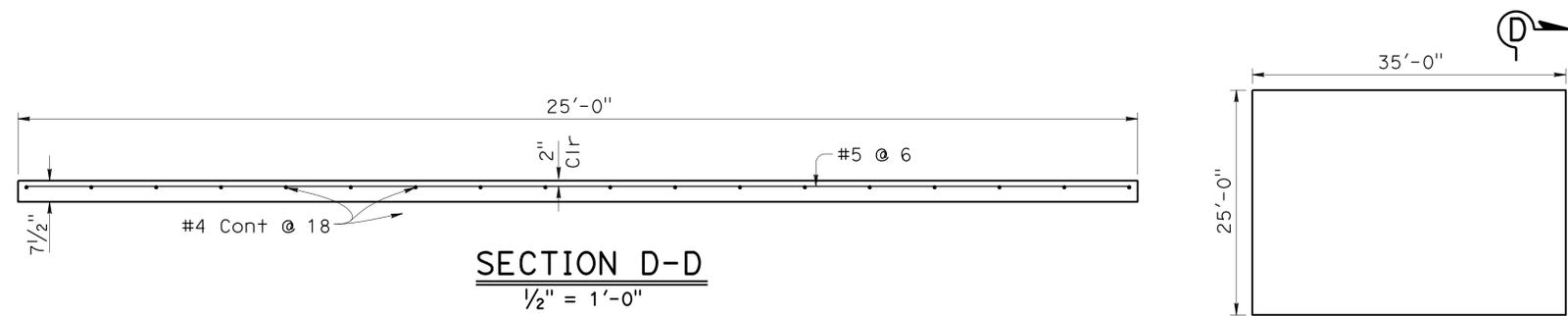
DECK CONTOURS
1" = 10'

STRUCTURES DESIGN DETAIL SHEET (ENGLISH) (REV. 09-01-10)	DESIGN	BY Isaias Yalan	CHECKED Rosa Candiotti	STATE OF CALIFORNIA DEPARTMENT OF TRANSPORTATION	DIVISION OF ENGINEERING SERVICES STRUCTURE DESIGN DESIGN BRANCH 9	BRIDGE No.	LAUREL St OVERCROSSING (REPLACE)	
	DETAILS	BY Tim Fairall	CHECKED Rosa Candiotti			23-0255	DECK CONTOURS	
	QUANTITIES	BY Isaias Yalan	CHECKED Phil Lutz/Kim Mori			POST MILE	7.1	REVISION DATES
ORIGINAL SCALE IN INCHES FOR REDUCED PLANS				0 1 2 3	UNIT: 3594	PROJECT NUMBER & PHASE: 0412000477 1	CONTRACT No.: 04-4G4504	DISREGARD PRINTS BEARING EARLIER REVISION DATES

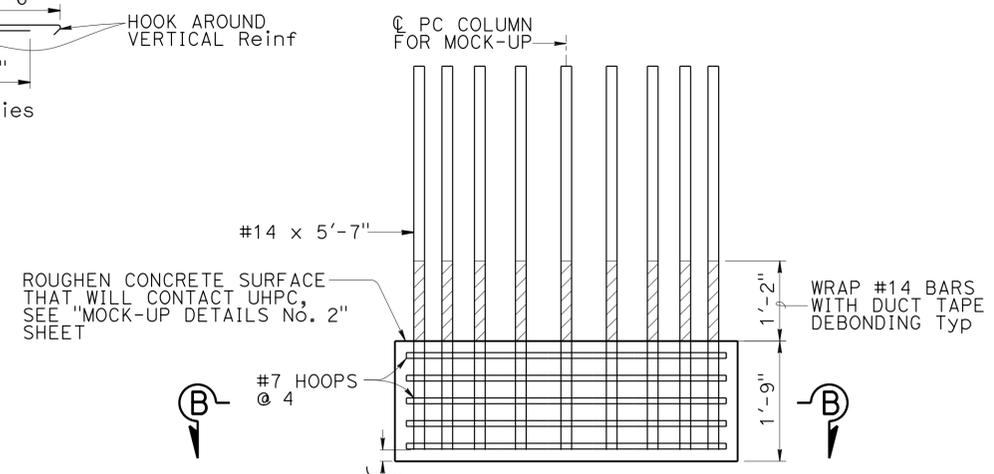
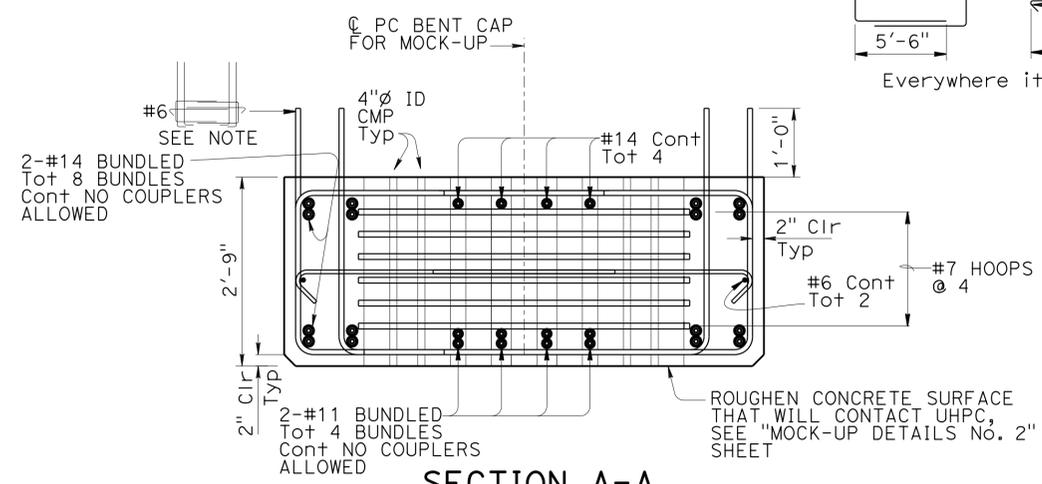
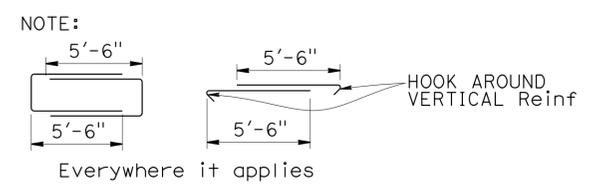
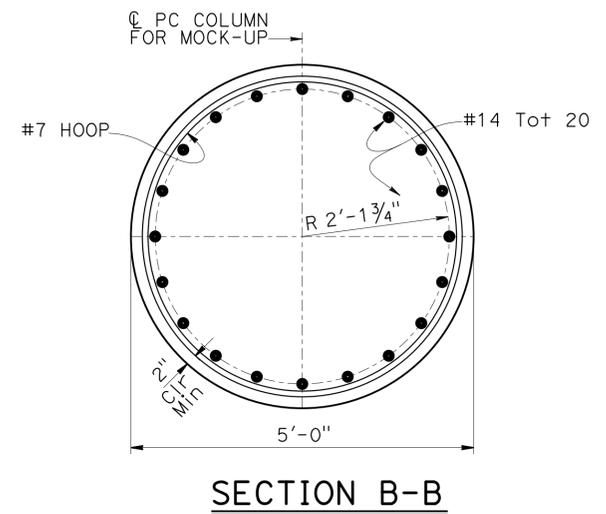
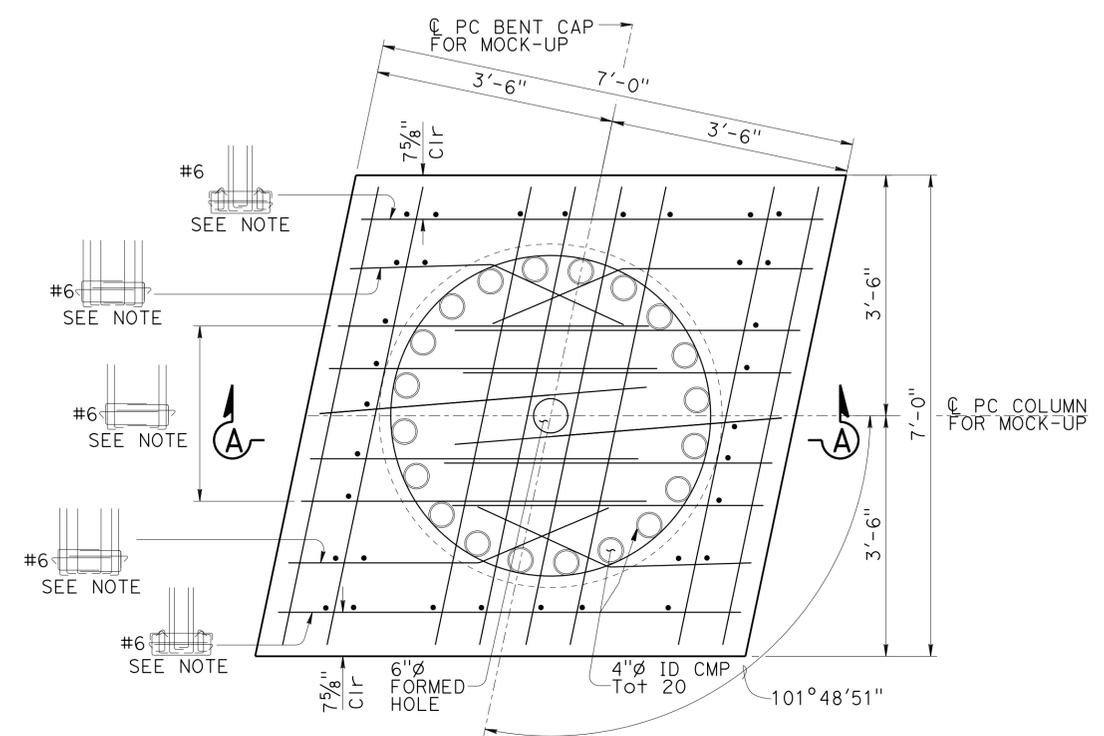
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Dist	COUNTY	ROUTE	POST MILES TOTAL PROJECT	SHEET No.	TOTAL SHEETS
04	Soi	780	7.1	132	160

REGISTERED CIVIL ENGINEER	DATE 4-26-16
PLANS APPROVAL DATE 5-18-16	
<small>The State of California or its officers or agents shall not be responsible for the accuracy or completeness of scanned copies of this plan sheet.</small>	
 ACCELERATED BRIDGE CONSTRUCTION	



TRIAL SLAB (RSC)



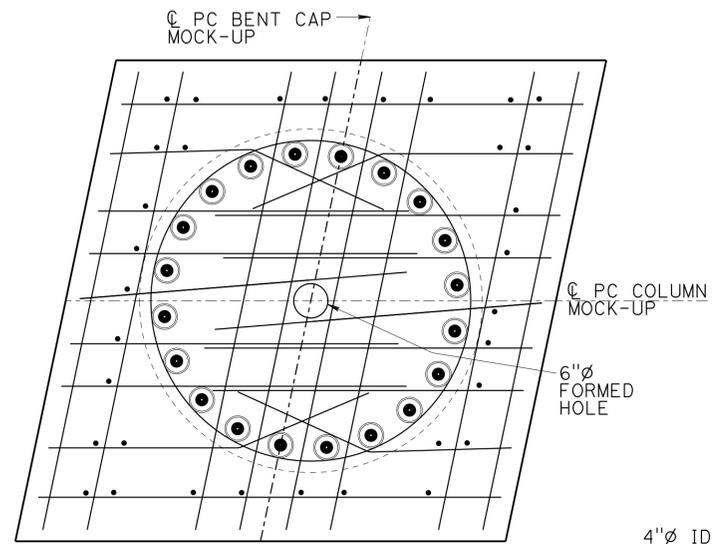
DESIGN	BY Isaias Yalan	CHECKED Rosa Candiotti
DETAILS	BY Tim Fairall	CHECKED Rosa Candiotti
QUANTITIES	BY Isaias Yalan	CHECKED Kim Mori

STATE OF CALIFORNIA
DEPARTMENT OF TRANSPORTATION

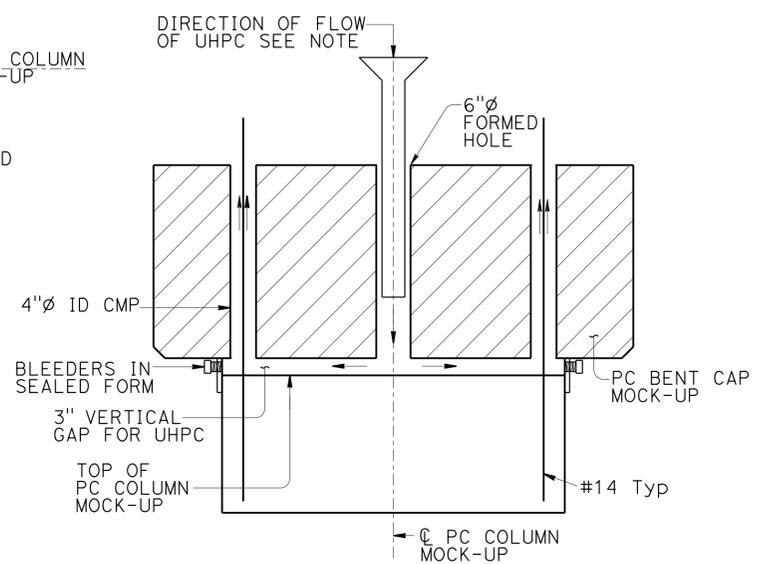
DIVISION OF ENGINEERING SERVICES
STRUCTURE DESIGN
DESIGN BRANCH 9

BRIDGE No.	23-0255
POST MILE	7.1

LAUREL St OVERCROSSING (REPLACE)
MOCK UP DETAILS No. 1



PLAN

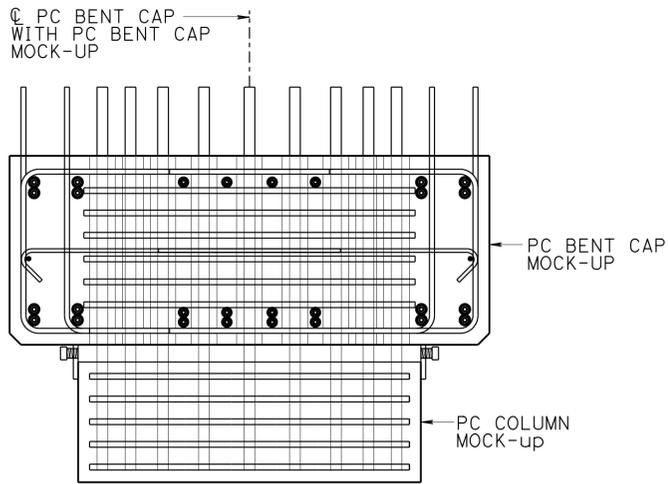


UHPC PLACEMENT

1/2" = 1'-0"

NOTE:
 Place UHPC in the center of the 6" ϕ formed hole. Completely fill annulus around #14 column bars, the 3" gap between the column and the cap, and the 6" ϕ formed hole.

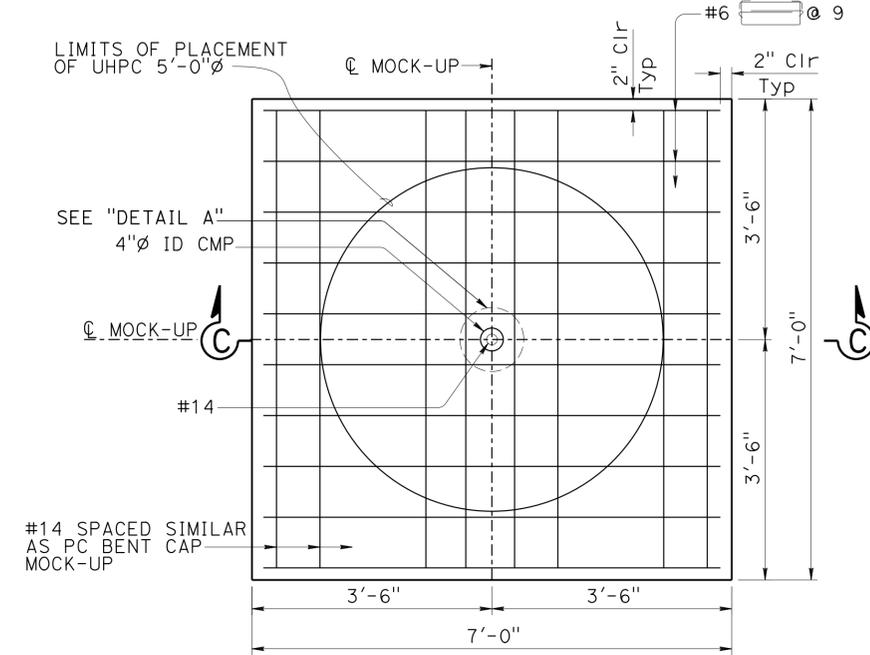
Denotes PC Drop Cap



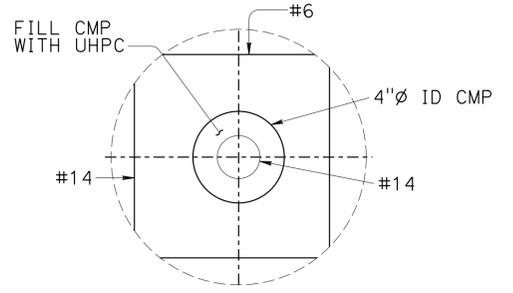
ELEVATION

PC BENT CAP WITH COLUMN MOCK-UP

3/4" = 1'-0"

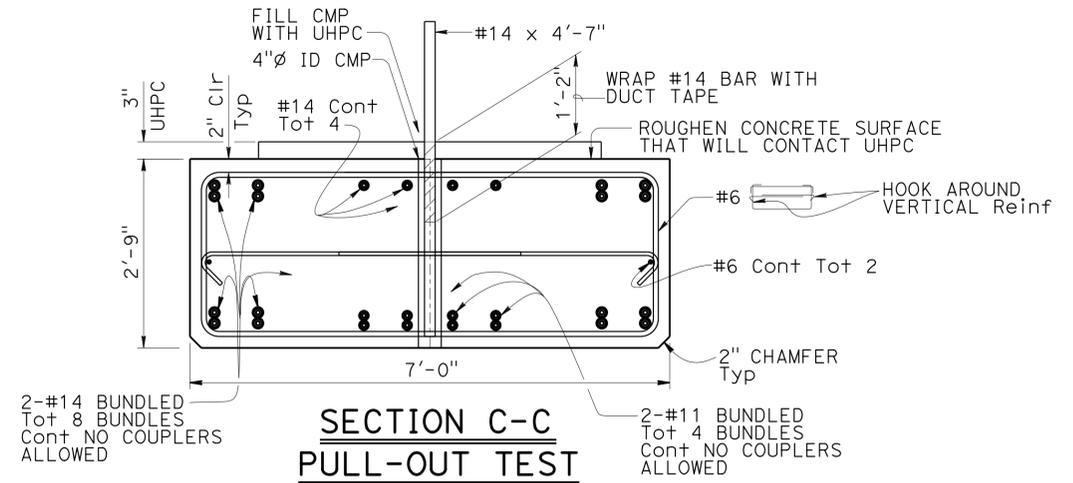


PLAN



DETAIL A

3" = 1'-0"



SECTION C-C PULL-OUT TEST MOCK-UP

3/4" = 1'-0"

- NOTES:**
- 1 pull out test shown, 2 required
 - Load monitoring required during test

STRUCTURES DESIGN DETAIL SHEET (ENGLISH) (REV. 09-01-10)	DESIGN	BY Isaias Yalan	CHECKED Rosa Candiotti	STATE OF CALIFORNIA DEPARTMENT OF TRANSPORTATION	DIVISION OF ENGINEERING SERVICES STRUCTURE DESIGN DESIGN BRANCH 9	BRIDGE No.	LAUREL St OVERCROSSING (REPLACE)		
	DETAILS	BY Tim Fairall	CHECKED Rosa Candiotti			23-0255			
	QUANTITIES	BY Isaias Yalan	CHECKED Phil Lutz/Kim Mori			POST MILE 7.1			
ORIGINAL SCALE IN INCHES FOR REDUCED PLANS					UNIT: 3594 PROJECT NUMBER & PHASE: 0412000477 1	CONTRACT No.: 04-4G4504	DISREGARD PRINTS BEARING EARLIER REVISION DATES	REVISION DATES	SHEET 5 OF 32

CURVE DATA

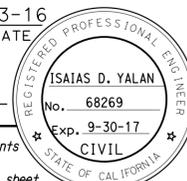
No.	R	Δ	T	L
1	1000.00	07°05'00"	61.89	123.63
2	200.00	33°47'55"	60.76	117.98

NOTE:
ALL UTILITY LINES ARE PER DISTRICT UTILITY PLAN.

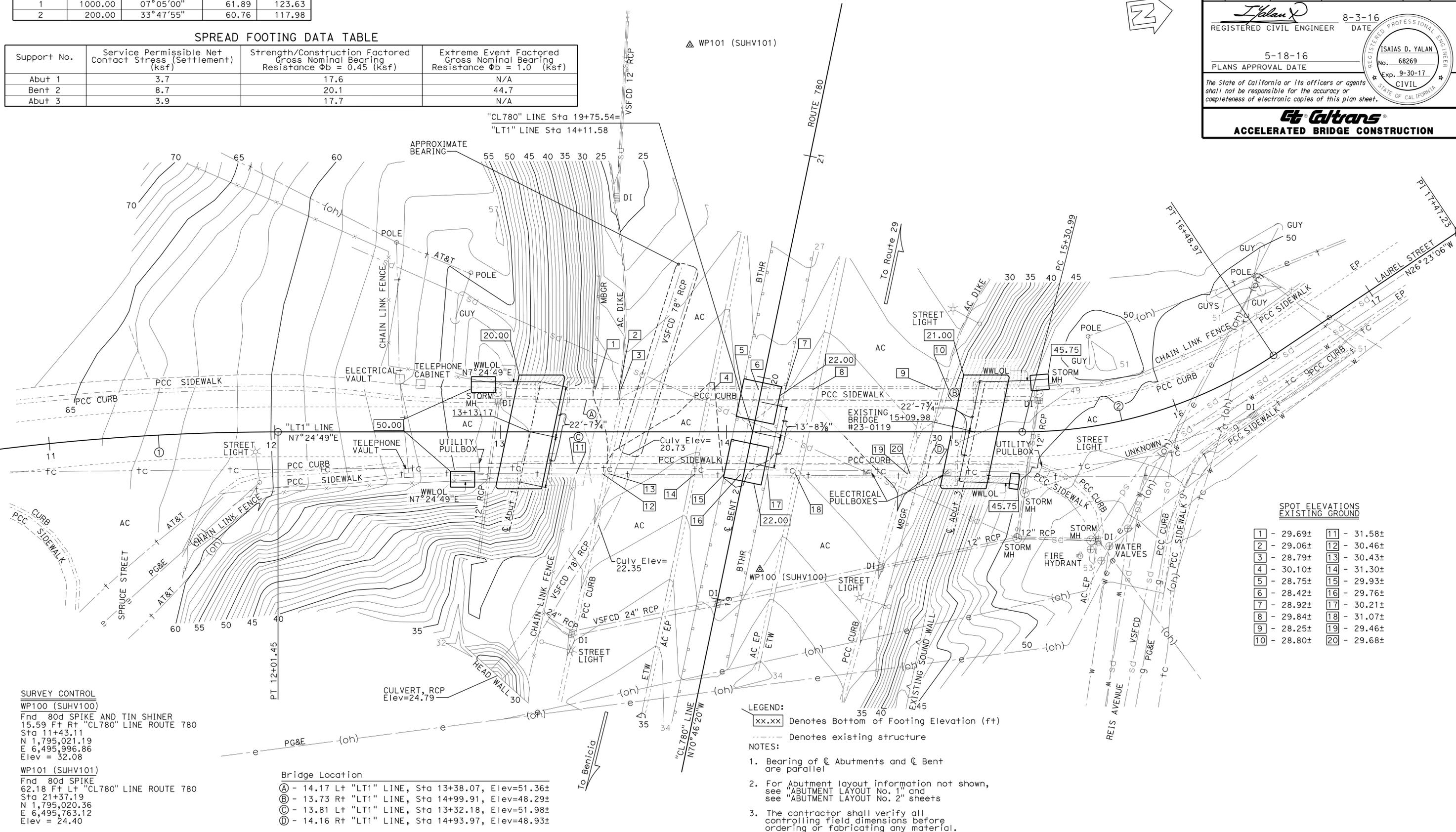
SPREAD FOOTING DATA TABLE

Support No.	Service Permissible Net Contact Stress (Settlement) (ksf)	Strength/Construction Factored Gross Nominal Bearing Resistance $\Phi_b = 0.45$ (ksf)	Extreme Event Factored Gross Nominal Bearing Resistance $\Phi_b = 1.0$ (ksf)
Abut 1	3.7	17.6	N/A
Bent 2	8.7	20.1	44.7
Abut 3	3.9	17.7	N/A

Dist	COUNTY	ROUTE	POST MILES TOTAL PROJECT	SHEET No.	TOTAL SHEETS
04	Soi	780	7.1	134	160


Isaias D. Yalan
 REGISTERED CIVIL ENGINEER
 DATE: 8-3-16
 PLANS APPROVAL DATE: 5-18-16
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ACCELERATED BRIDGE CONSTRUCTION



SPOT ELEVATIONS EXISTING GROUND

1	- 29.69±	11	- 31.58±
2	- 29.06±	12	- 30.46±
3	- 28.79±	13	- 30.43±
4	- 30.10±	14	- 31.30±
5	- 28.75±	15	- 29.93±
6	- 28.42±	16	- 29.76±
7	- 28.92±	17	- 30.21±
8	- 29.84±	18	- 31.07±
9	- 28.25±	19	- 29.46±
10	- 28.80±	20	- 29.68±

SURVEY CONTROL
 WP100 (SUHV100)
 Fnd 80d SPIKE AND TIN SHINER
 15.59 Ft Rt "CL780" LINE ROUTE 780
 Sta 11+43.11
 N 1,795,021.19
 E 6,495,996.86
 Elev = 32.08
 WP101 (SUHV101)
 Fnd 80d SPIKE
 62.18 Ft Lt "CL780" LINE ROUTE 780
 Sta 21+37.19
 N 1,795,020.36
 E 6,495,763.12
 Elev = 24.40

Bridge Location
 A - 14.17 Lt "LT1" LINE, Sta 13+38.07, Elev=51.36±
 B - 13.73 Rt "LT1" LINE, Sta 14+99.91, Elev=48.29±
 C - 13.81 Lt "LT1" LINE, Sta 13+32.18, Elev=51.98±
 D - 14.16 Rt "LT1" LINE, Sta 14+93.97, Elev=48.93±

- LEGEND:**
 [xx.xx] Denotes Bottom of Footing Elevation (ft)
 --- Denotes existing structure
- NOTES:**
- Bearing of Φ Abutments and Φ Bent are parallel
 - For Abutment layout information not shown, see "ABUTMENT LAYOUT No. 1" and see "ABUTMENT LAYOUT No. 2" sheets
 - The contractor shall verify all controlling field dimensions before ordering or fabricating any material.

PRELIMINARY INVESTIGATION SECTION				DESIGN BY Isaias Yalan	CHECKED Phil Lutz	STATE OF CALIFORNIA DEPARTMENT OF TRANSPORTATION	DIVISION OF ENGINEERING SERVICES STRUCTURE DESIGN DESIGN BRANCH 9	BRIDGE No. 23-0255	LAUREL St OVERCROSSING (REPLACE) FOUNDATION PLAN	
SCALE: Vert DATUM NAVD88	PHOTOGRAMMETRY AS OF: X	SURVEYED BY DISTRICT	CHECKED BY D. IVY	DATE 11/2014	QUANTITIES BY Isaias Yalan			CHECKED Phil Lutz		POST MILE 7.1
1"=20'	Horiz DATUM NAD83 (1991.35)	DRAFTED BY T. ZOLNIKOV	CHECKED BY L. LEW	DATE 11/2014						

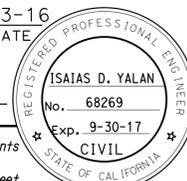
STRUCTURES FOUNDATION PLAN SHEET (ENGLISH) (REV. 09-01-10) ORIGINAL SCALE IN INCHES FOR REDUCED PLANS

UNIT: 3646 PROJECT NUMBER & PHASE: 0412000477 1 CONTRACT No.: 04-4G4504

SUBMITTAL DATE	REVISION DATES	SHEET	OF
12/05/14	03/12/15 08/12/15 12/04/15	6	32

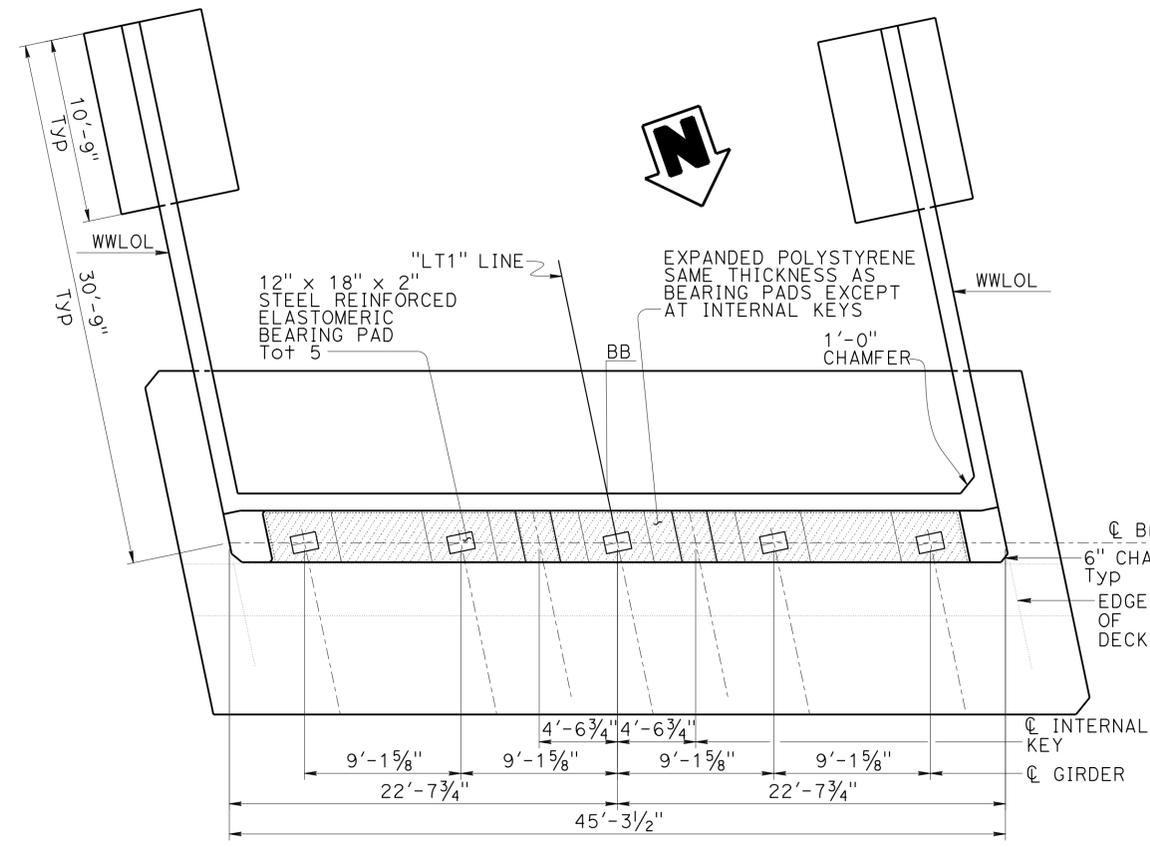
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Dist	COUNTY	ROUTE	POST MILES TOTAL PROJECT	SHEET No.	TOTAL SHEETS
04	SoI	780	7.1	135	160

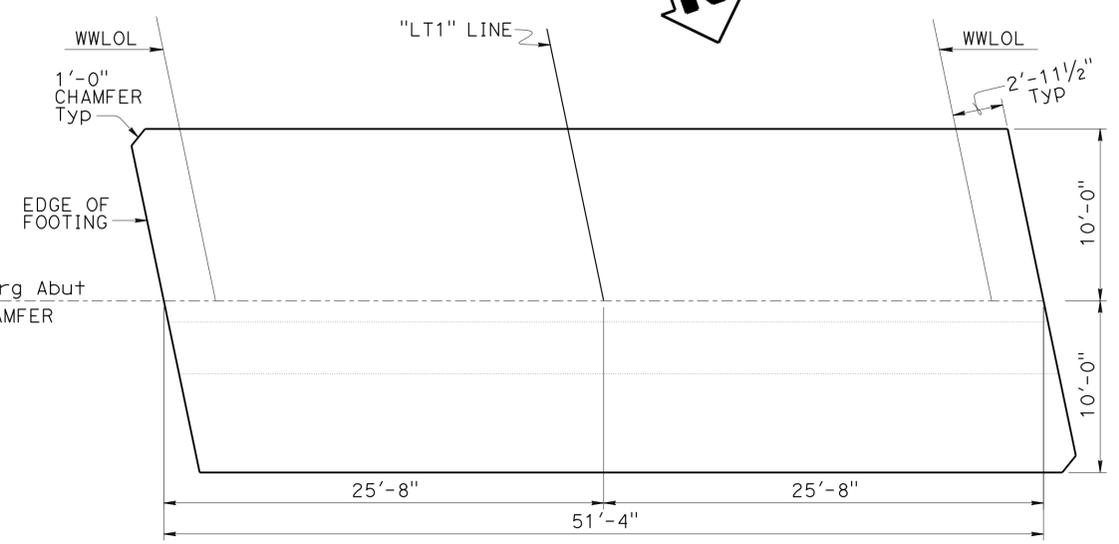


Isaias D. Yalan
 REGISTERED CIVIL ENGINEER DATE 8-3-16
 PLANS APPROVAL DATE 5-18-16
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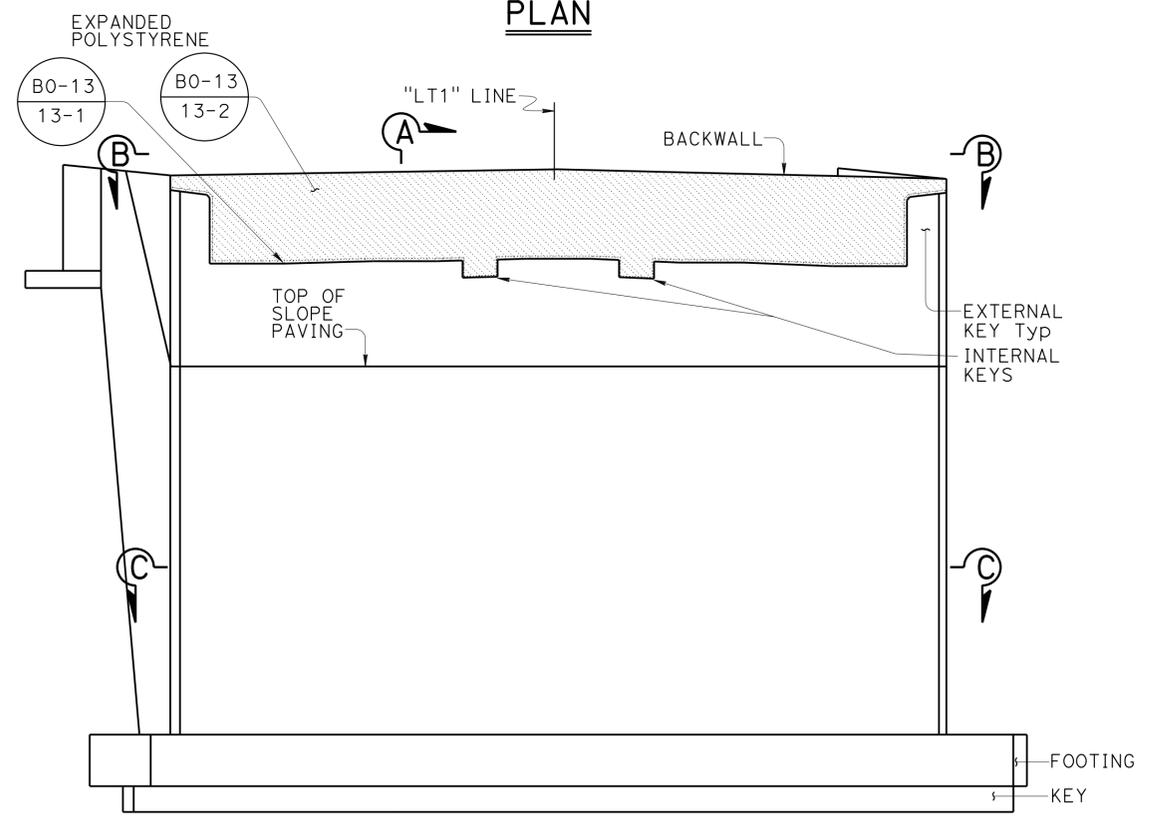
Caltrans
ACCELERATED BRIDGE CONSTRUCTION



PLAN



FOOTING PLAN



ELEVATION

ABUTMENT 1
3/16" = 1'-0"

- NOTES:
1. For Section A-A see "ABUTMENT DETAILS No. 1" sheet
 2. For View B-B, see "ABUTMENT LAYOUT No. 3" sheet
 3. For Section C-C see "ABUTMENT DETAILS No. 2" sheet
 4. For Abutment Diaphragm details, see "ABUTMENT LAYOUT No. 3" and "GIRDER DETAILS" sheets

DESIGN	BY Isaias Yalan	CHECKED Phil Lutz
DETAILS	BY Tim Fairall	CHECKED Phil Lutz
QUANTITIES	BY Isaias Yalan	CHECKED Phil Lutz

STATE OF CALIFORNIA
DEPARTMENT OF TRANSPORTATION

DIVISION OF ENGINEERING SERVICES
STRUCTURE DESIGN
DESIGN BRANCH 9

BRIDGE No.	23-0255
POST MILE	7.1

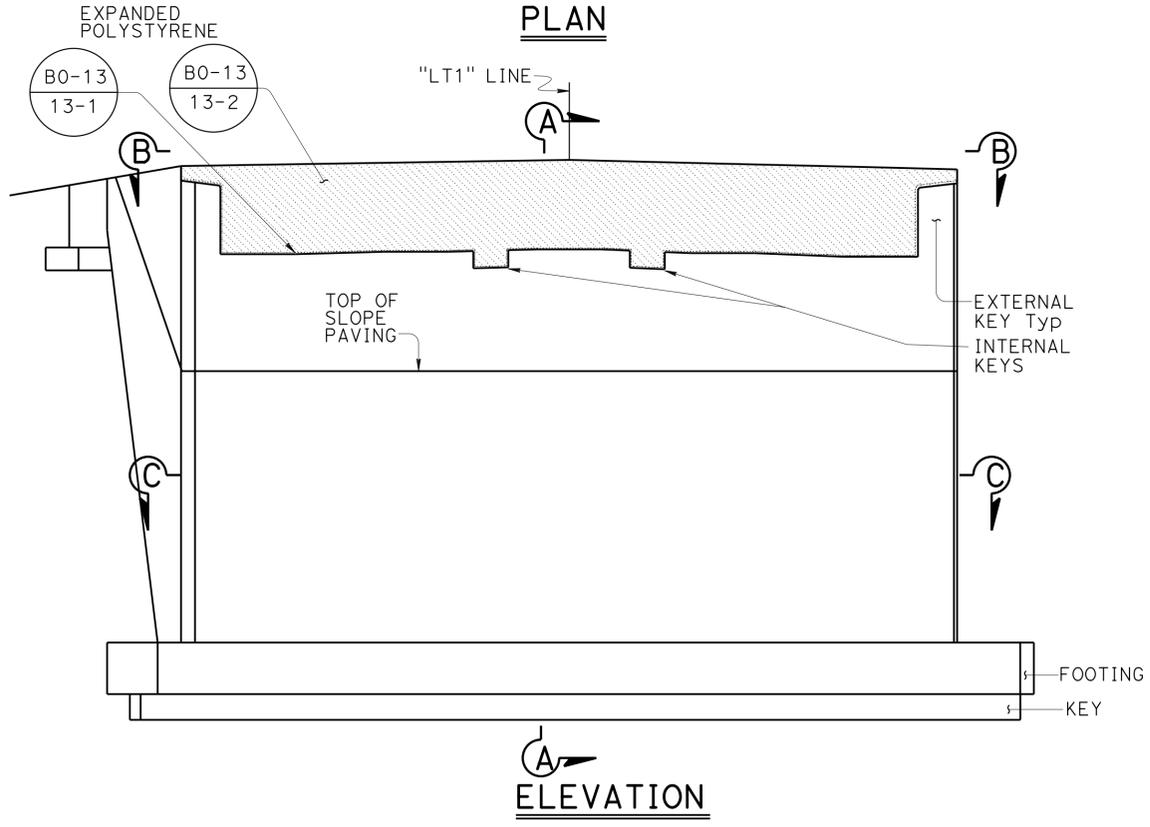
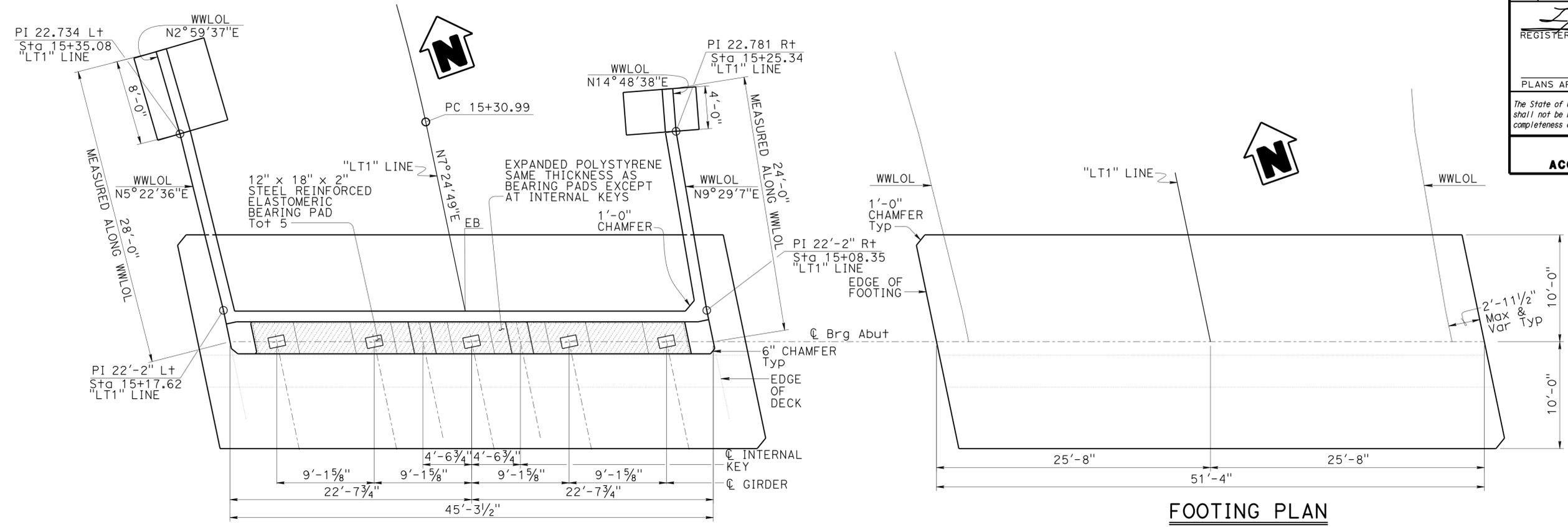
LAUREL St OVERCROSSING (REPLACE)
ABUTMENT LAYOUT No. 1

Dist	COUNTY	ROUTE	POST MILES TOTAL PROJECT	SHEET No.	TOTAL SHEETS
04	Soi	780	7.1	136	160

REGISTERED CIVIL ENGINEER **Isaias D. Yalan** DATE 8-3-16
 PLANS APPROVAL DATE 5-18-16
 No. 68269
 Exp. 9-30-17
 CIVIL
 STATE OF CALIFORNIA

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 ACCELERATED BRIDGE CONSTRUCTION



- NOTES:
- For Section A-A see "ABUTMENT DETAILS No. 1" sheet
 - For View B-B, see "ABUTMENT LAYOUT No. 3" sheet
 - For Section C-C see "ABUTMENT DETAILS No. 2" sheet
 - For Abutment Diaphragm details, see "ABUTMENT LAYOUT No. 3" and "GIRDER DETAILS" sheets

ABUTMENT 3
 $\frac{3}{16}'' = 1'-0''$

DESIGN	BY Isaias Yalan	CHECKED Phil Lutz
DETAILS	BY Tim Fairall	CHECKED Phil Lutz
QUANTITIES	BY Isaias Yalan	CHECKED Phil Lutz

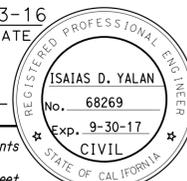
STATE OF CALIFORNIA
 DEPARTMENT OF TRANSPORTATION

DIVISION OF ENGINEERING SERVICES
 STRUCTURE DESIGN
DESIGN BRANCH 9

BRIDGE No.	23-0255
POST MILE	7.1

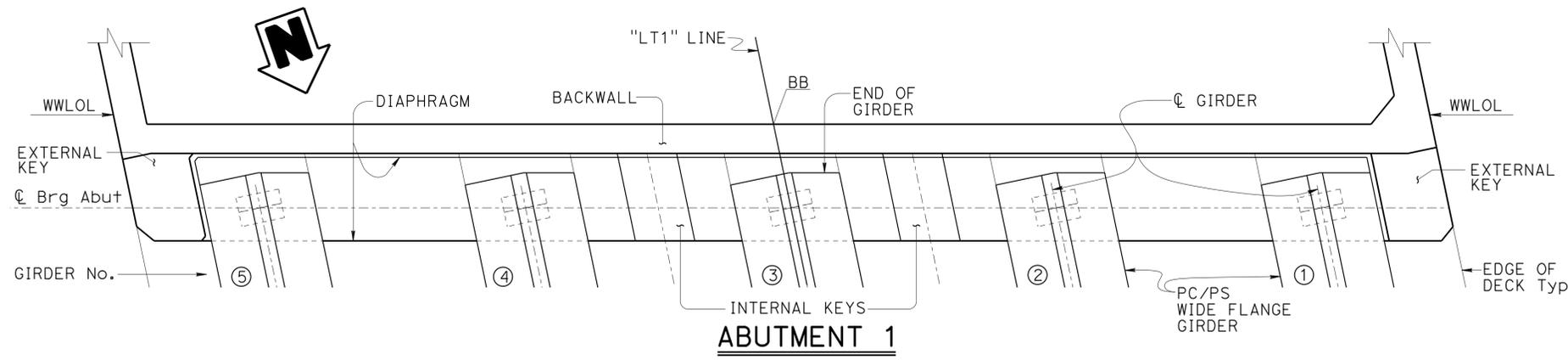
LAUREL St OVERCROSSING (REPLACE)
ABUTMENT LAYOUT No. 2

Dist	COUNTY	ROUTE	POST MILES TOTAL PROJECT	SHEET No.	TOTAL SHEETS
04	Soi	780	7.1	137	160


 8-3-16
 REGISTERED CIVIL ENGINEER DATE
 5-18-16
 PLANS APPROVAL DATE

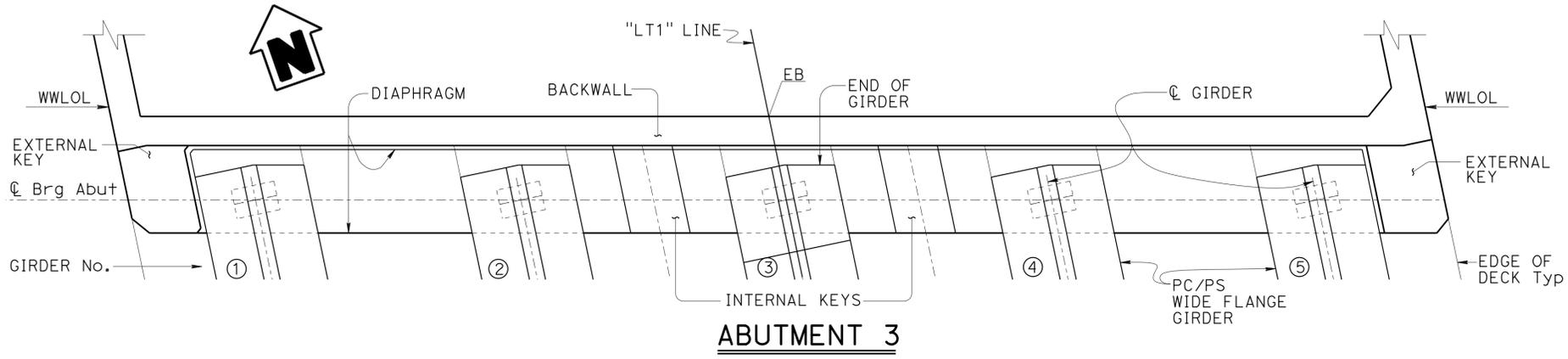
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ACCELERATED BRIDGE CONSTRUCTION



ABUTMENT 1
GIRDER BEARING SEAT ELEVATIONS

GIRDER	SPAN	ELEVATION
①	1	50.22
②	1	50.44
③	1	50.66
④	1	50.52
⑤	1	50.38



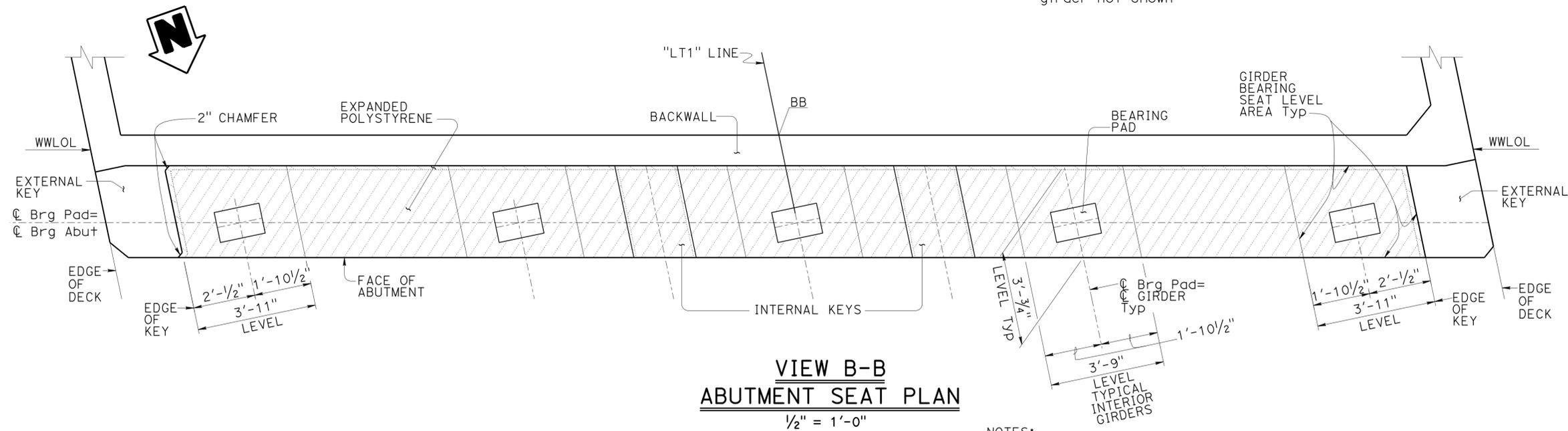
ABUTMENT 3
GIRDER BEARING SEAT ELEVATIONS

GIRDER	SPAN	ELEVATION
①	2	46.27
②	2	46.49
③	2	46.71
④	2	46.56
⑤	2	46.42

GIRDER/DIAPHRAGM PLAN

$\frac{3}{8}'' = 1'-0''$

- NOTE:
- Upper flange of PC/PS wide flange girder not shown



**VIEW B-B
ABUTMENT SEAT PLAN**

$\frac{1}{2}'' = 1'-0''$

- NOTES:
- Abutment 1 shown, Abutment 3 similar
 - For location of View B-B, see "ABUTMENT LAYOUT No. 1" and "ABUTMENT LAYOUT No. 2" sheets

DESIGN	BY Isaias Yalan	CHECKED Phil Lutz
DETAILS	BY Tim Fairall	CHECKED Phil Lutz
QUANTITIES	BY Isaias Yalan	CHECKED Phil Lutz

STATE OF CALIFORNIA
 DEPARTMENT OF TRANSPORTATION

DIVISION OF ENGINEERING SERVICES
 STRUCTURE DESIGN
DESIGN BRANCH 9

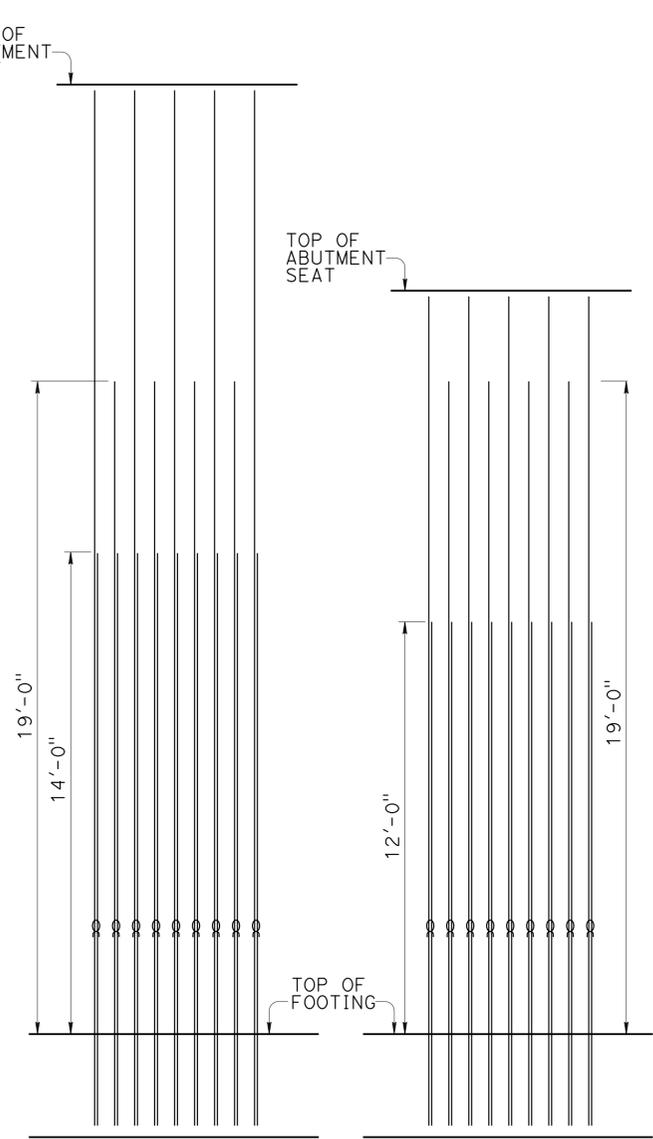
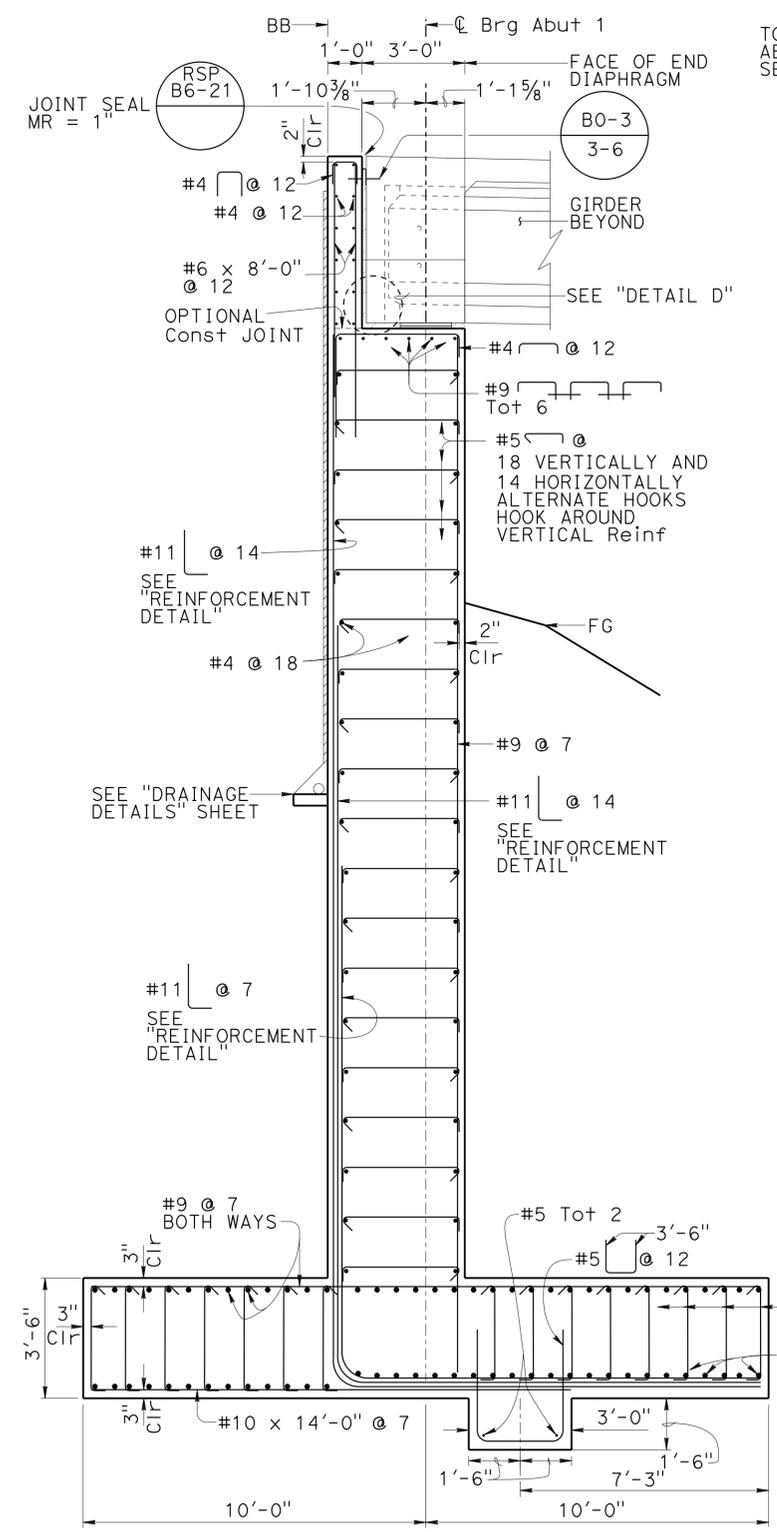
BRIDGE No.	23-0255
POST MILE	7.1

LAUREL St OVERCROSSING (REPLACE)
ABUTMENT LAYOUT No. 3

Dist	COUNTY	ROUTE	POST MILES TOTAL PROJECT	SHEET No.	TOTAL SHEETS
04	SoI	780	7.1	138	160

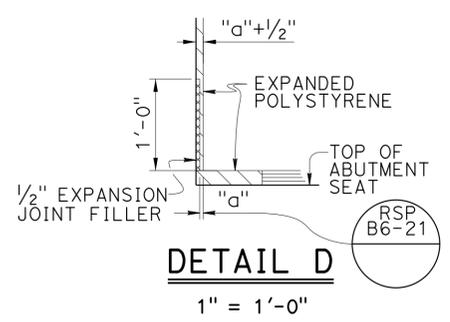
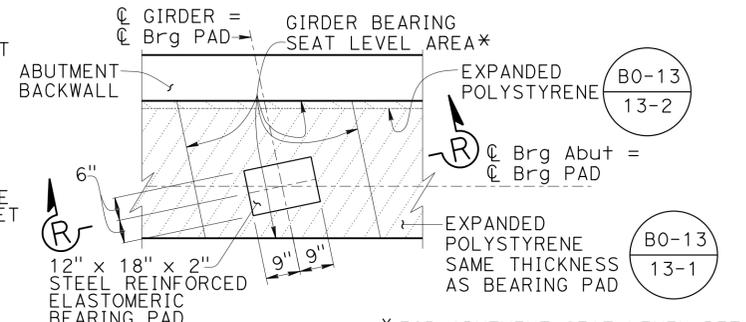
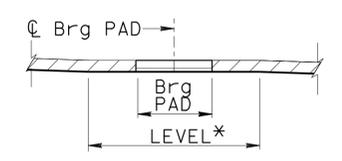
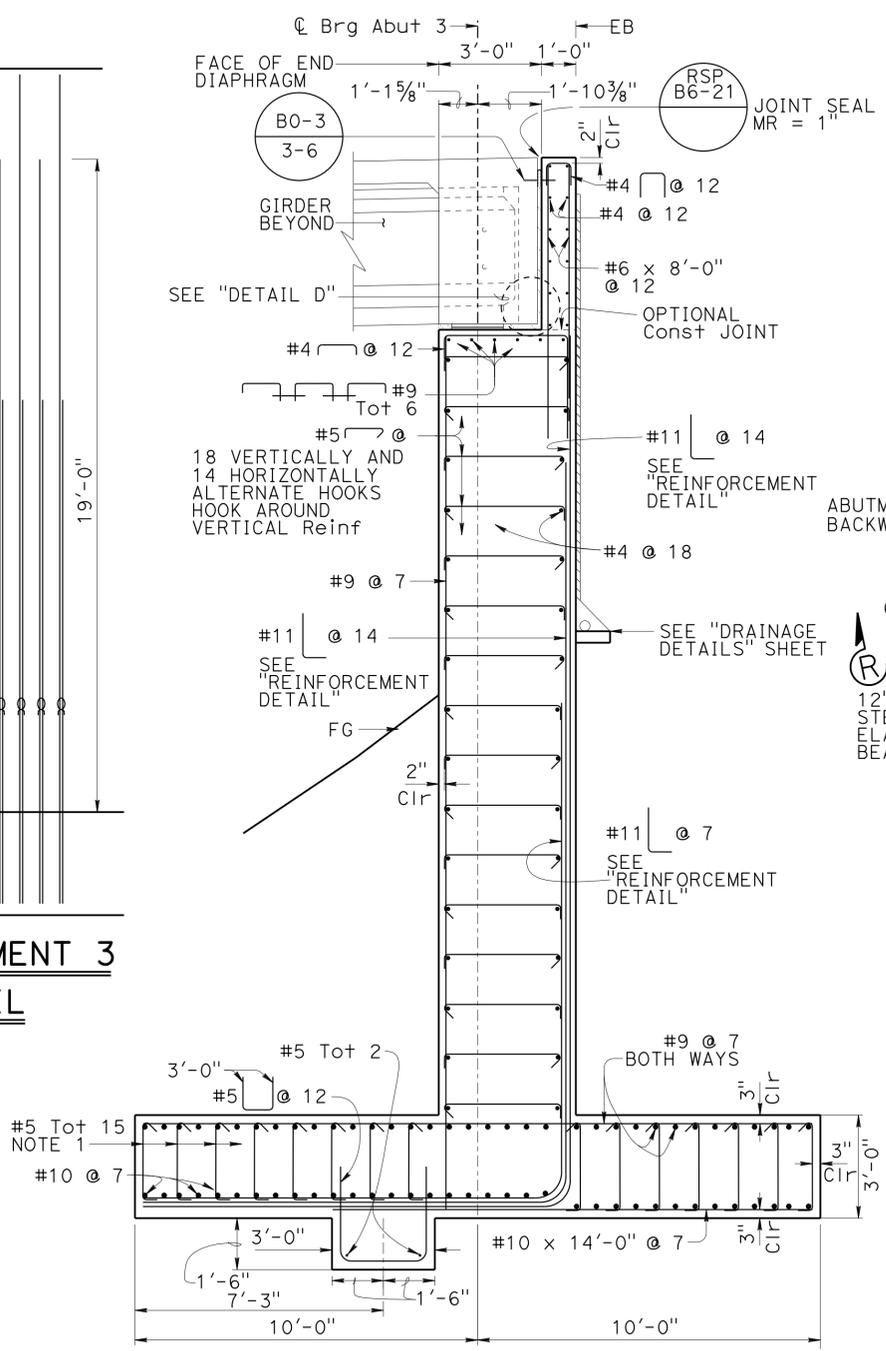
REGISTERED CIVIL ENGINEER **Isaias D. Yalan** DATE 4-26-16
 PLANS APPROVAL DATE 5-18-16
 No. 68269 Exp. 9-30-17
 CIVIL STATE OF CALIFORNIA

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 ACCELERATED BRIDGE CONSTRUCTION



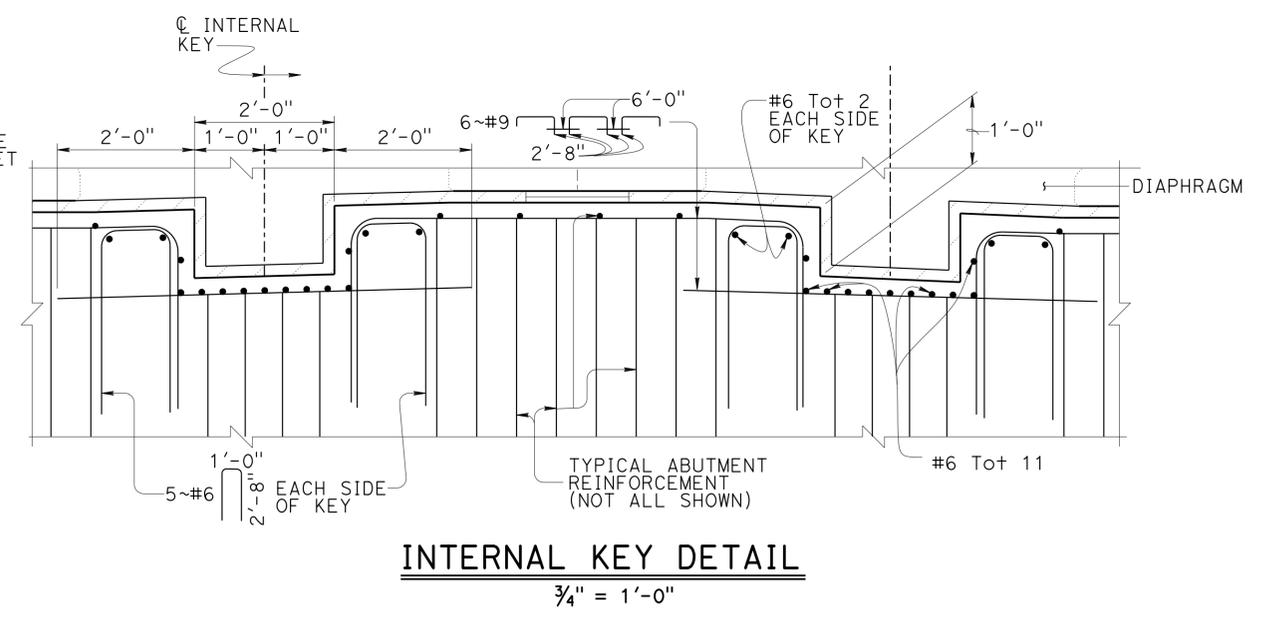
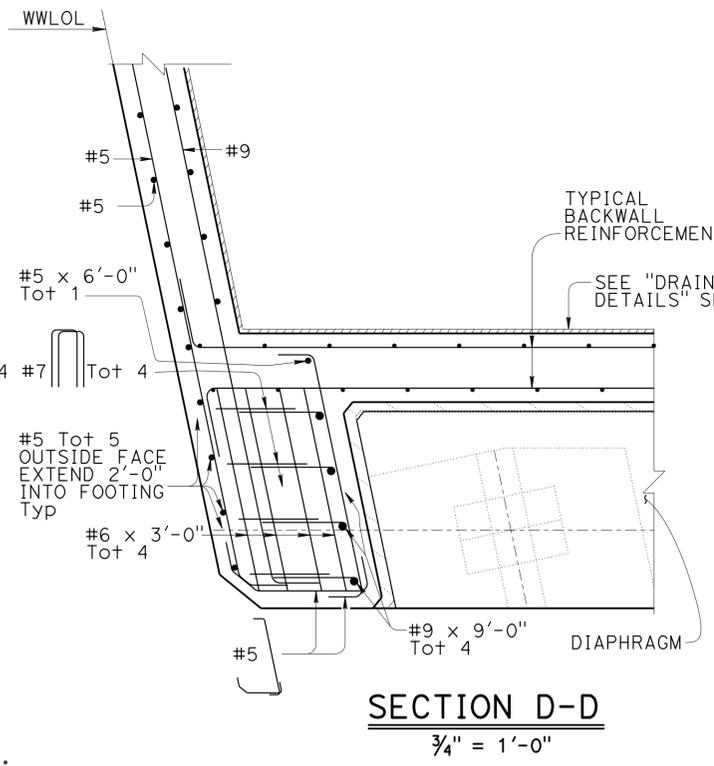
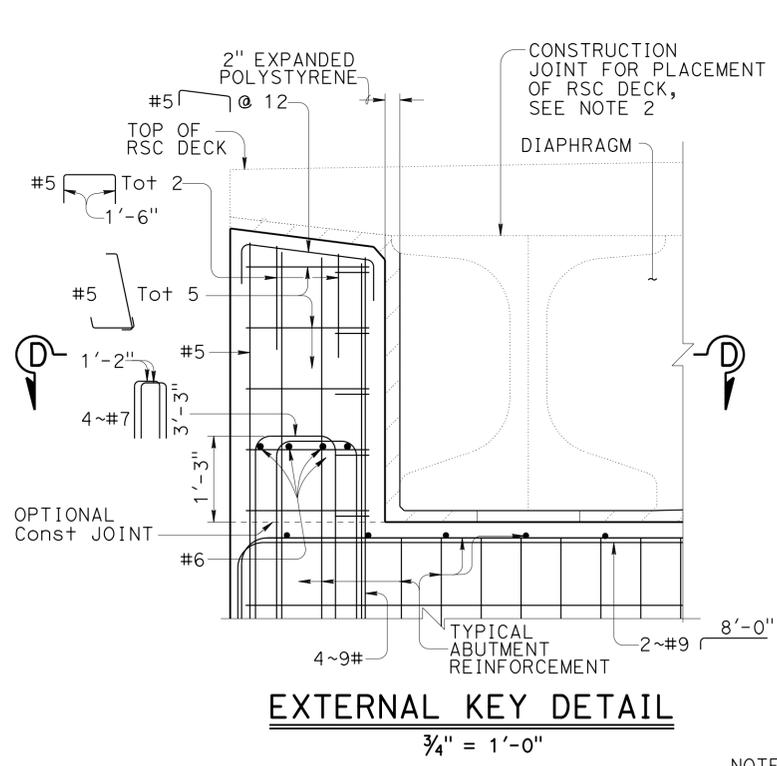
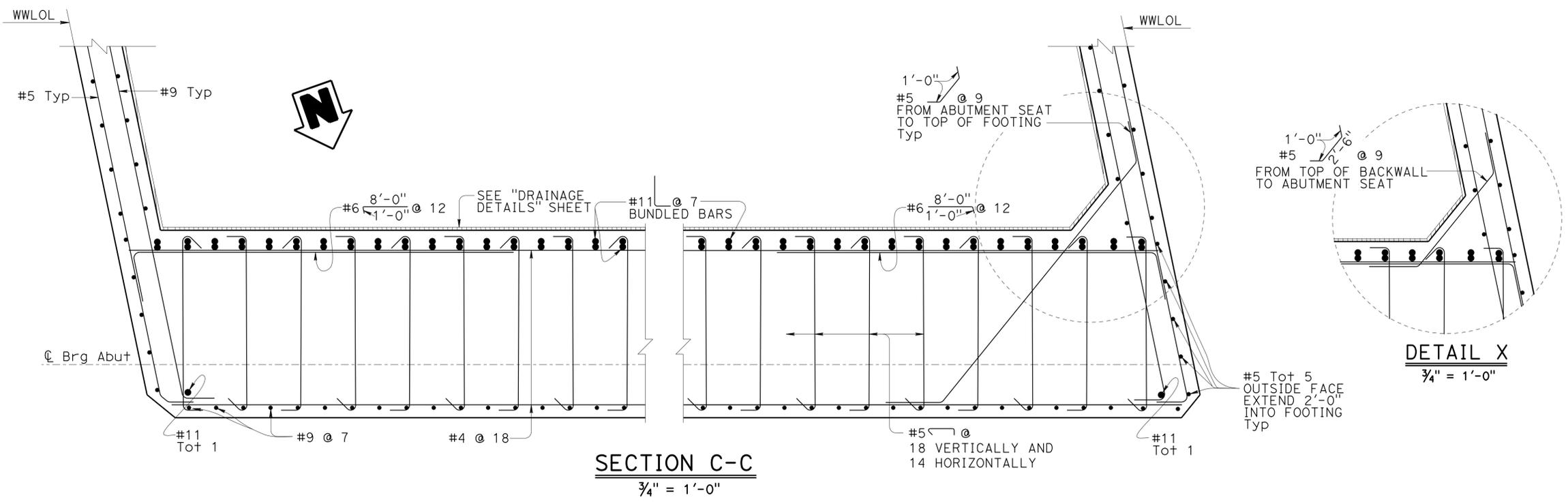
LEGEND:
 Ⓚ Denotes bundled bars

- NOTES:
- Place as shown, space @ 14 along \bar{C} Brg Abutment. Hook around top and bottom mats
 - For location of Sections A-A see "ABUTMENT LAYOUT No. 1" and "ABUTMENT LAYOUT No. 2" sheets



DESIGN	BY Isaias Yalan	CHECKED Phil Lutz	STATE OF CALIFORNIA DEPARTMENT OF TRANSPORTATION	DIVISION OF ENGINEERING SERVICES STRUCTURE DESIGN DESIGN BRANCH 9	BRIDGE No.	LAUREL St OVERCROSSING (REPLACE) ABUTMENT DETAILS No. 1
DETAILS	BY Tim Fairall	CHECKED Phil Lutz			23-0255	
QUANTITIES	BY Isaias Yalan	CHECKED Phil Lutz			POST MILE 7.1	

Dist	COUNTY	ROUTE	POST MILES TOTAL PROJECT	SHEET No.	TOTAL SHEETS
04	Soi	780	7.1	139	160
			8-3-16	DATE	
			5-18-16	PLANS APPROVAL DATE	
REGISTERED CIVIL ENGINEER ISAIAS D. YALAN No. 68269 Exp. 9-30-17 CIVIL STATE OF CALIFORNIA					
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- NOTES:
- Abutment 1 shown, Abutment 3 similar
 - For limits of Rapid Strength Concrete (RSC), see Concrete Strength and Type Limits diagram on "INDEX TO PLANS" sheet
 - For location of Section C-C, see "ABUTMENT LAYOUT No. 1" and "ABUTMENT LAYOUT No. 2" sheets

DESIGN	BY Isaias Yalan	CHECKED Phil Lutz
DETAILS	BY Tim Fairall	CHECKED Phil Lutz
QUANTITIES	BY Isaias Yalan	CHECKED Phil Lutz/Kim Mori

STATE OF CALIFORNIA
DEPARTMENT OF TRANSPORTATION

DIVISION OF ENGINEERING SERVICES
STRUCTURE DESIGN
DESIGN BRANCH 9

BRIDGE No.	23-0255
POST MILE	7.1

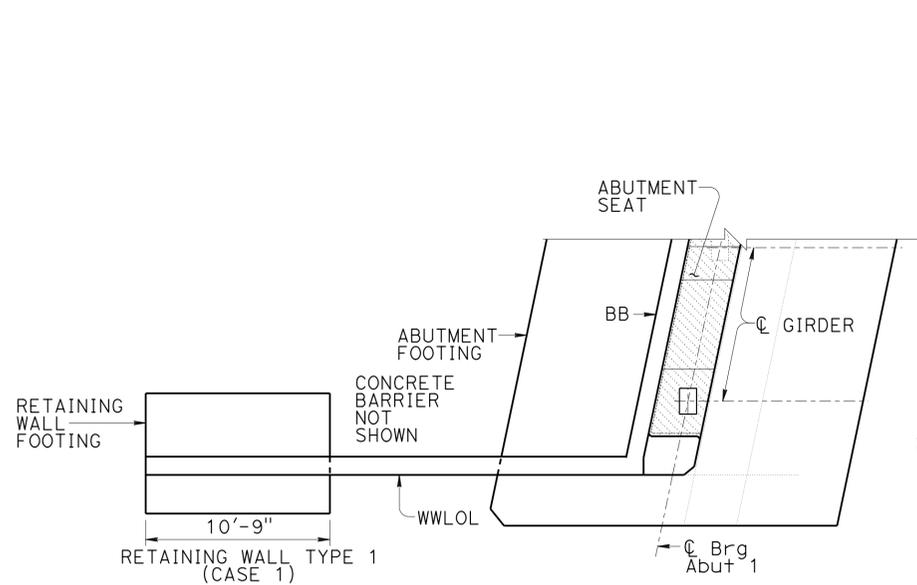
LAUREL St OVERCROSSING (REPLACE)
ABUTMENT DETAILS No. 2

Dist	COUNTY	ROUTE	POST MILES TOTAL PROJECT	SHEET No.	TOTAL SHEETS
04	Soi	780	7.1	140	160

REGISTERED CIVIL ENGINEER **Isaias D. Yalan** No. 68269
 DATE 8-3-16
 PLANS APPROVAL DATE 5-18-16
 Exp. 9-30-17
 CIVIL
 STATE OF CALIFORNIA

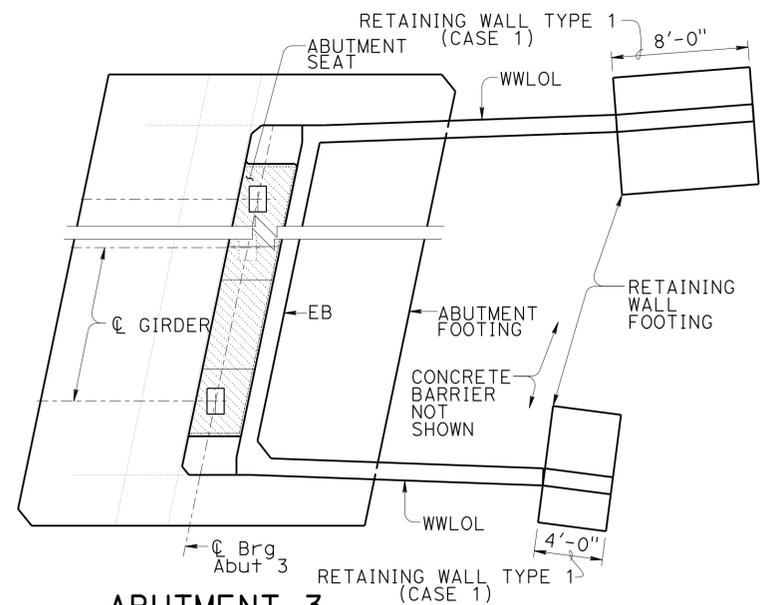
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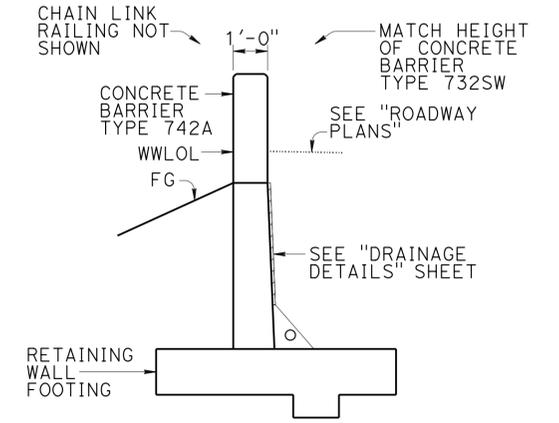


ABUTMENT 1 PLAN
3/16" = 1'-0"

NOTE:
1. Abutment 1 right Wingwall shown, Abutment 1 left Wingwall similar

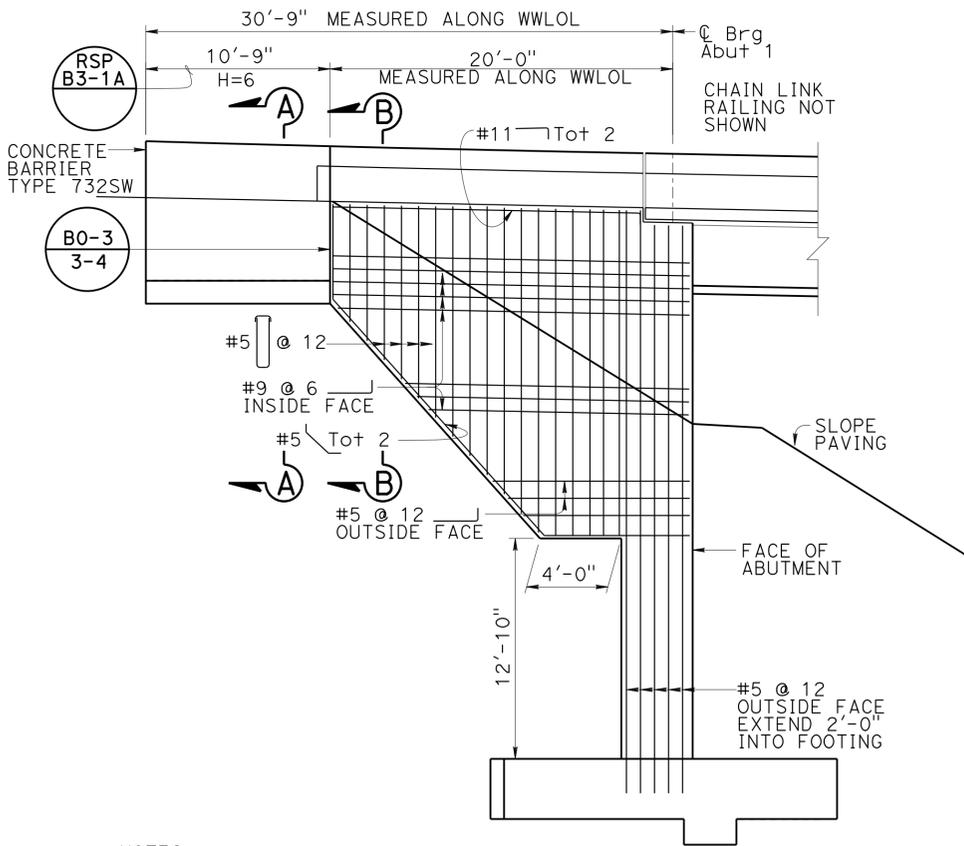


ABUTMENT 3 PLAN
3/16" = 1'-0"



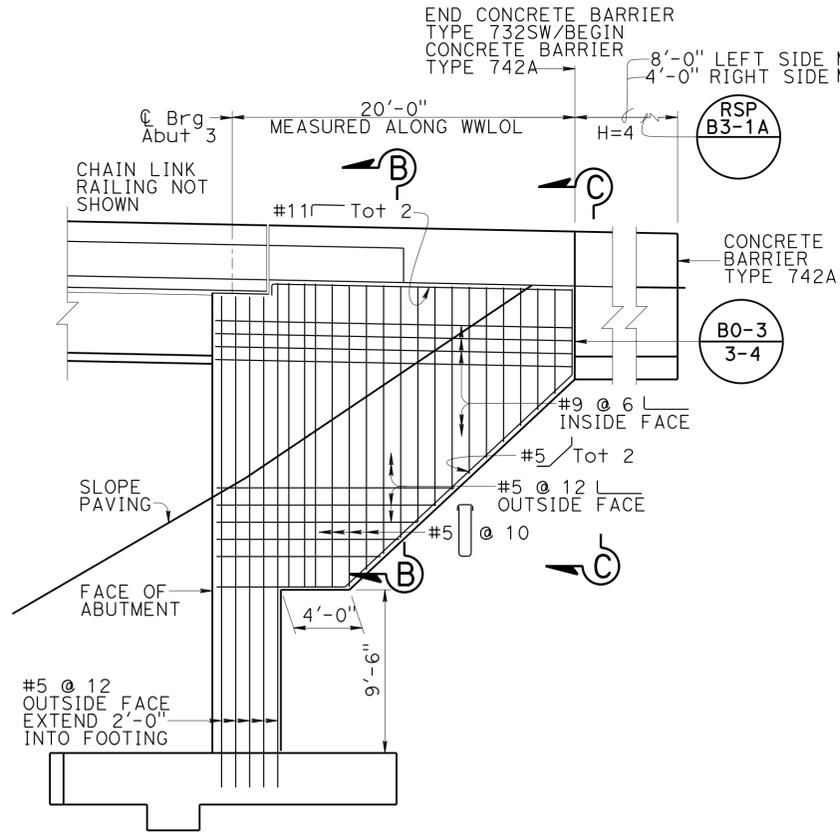
SECTION C-C
3/8" = 1'-0"

NOTE:
Refer to Section E-E and Section A-A on RSP B11-57.



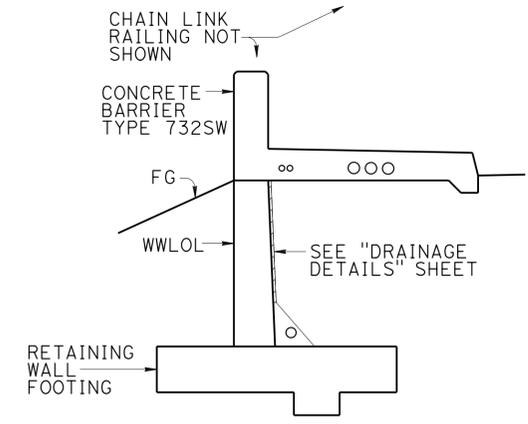
ABUTMENT 1 ELEVATION
3/16" = 1'-0"

NOTES:
1. Abutment 1 right Wingwall shown, Abutment 1 left Wingwall similar
2. Retaining wall key not shown

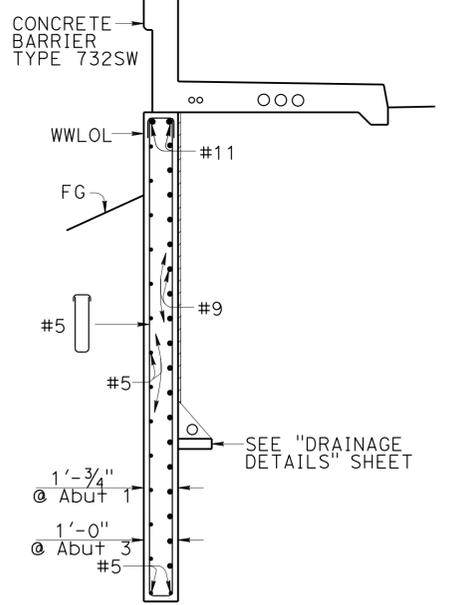


ABUTMENT 3 ELEVATION
3/16" = 1'-0"

NOTE:
1. Abutment 3 right Wingwall shown, Abutment 3 left Wingwall similar except where noted
2. Retaining wall key not shown



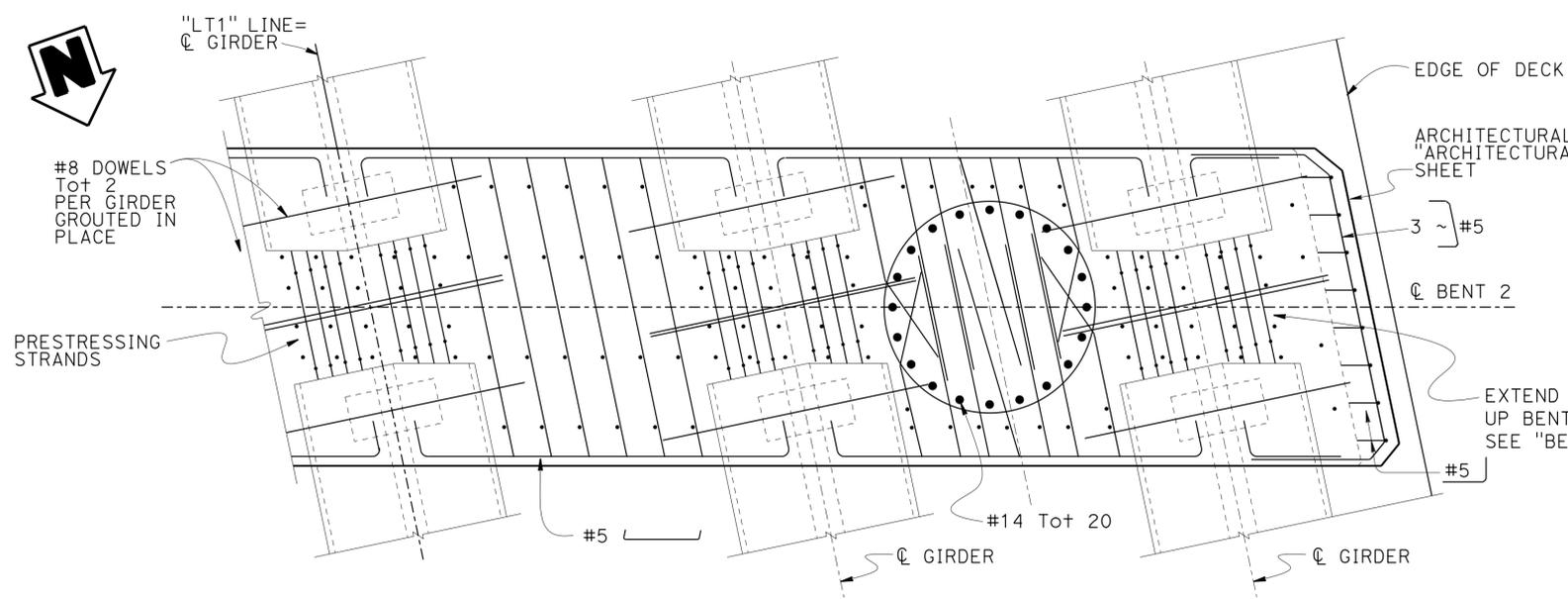
SECTION A-A
3/8" = 1'-0"



SECTION B-B
3/8" = 1'-0"

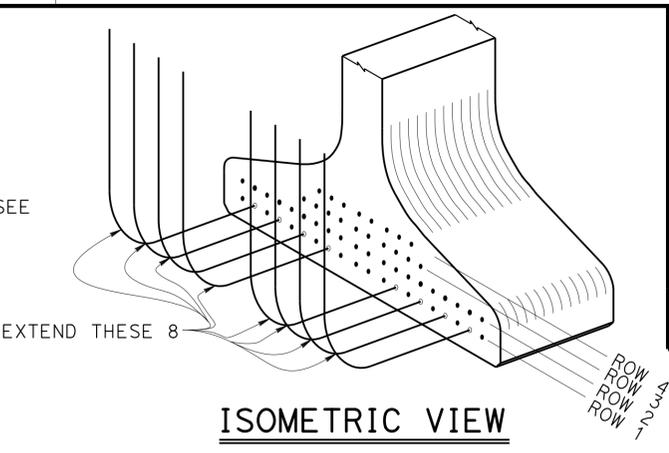
DESIGN	BY Isaias Yalan	CHECKED Phil Lutz	STATE OF CALIFORNIA DEPARTMENT OF TRANSPORTATION	DIVISION OF ENGINEERING SERVICES STRUCTURE DESIGN DESIGN BRANCH 9	BRIDGE No.	LAUREL St OVERCROSSING (REPLACE) ABUTMENT DETAILS No. 3
DETAILS	BY Tim Fairall	CHECKED Phil Lutz			23-0255	
QUANTITIES	BY Isaias Yalan	CHECKED Phil Lutz			7.1	

Dist	COUNTY	ROUTE	POST MILES TOTAL PROJECT	SHEET No.	TOTAL SHEETS
04	Soi	780	7.1	142	160
			8-3-16	DATE	
			5-18-16	PLANS APPROVAL DATE	
REGISTERED CIVIL ENGINEER ISAIAS D. YALAN No. 68269 Exp. 9-30-17 CIVIL STATE OF CALIFORNIA					
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 ACCELERATED BRIDGE CONSTRUCTION					



PARTIAL BENT CAP REINFORCEMENT (TOP CIP BENT CAP)

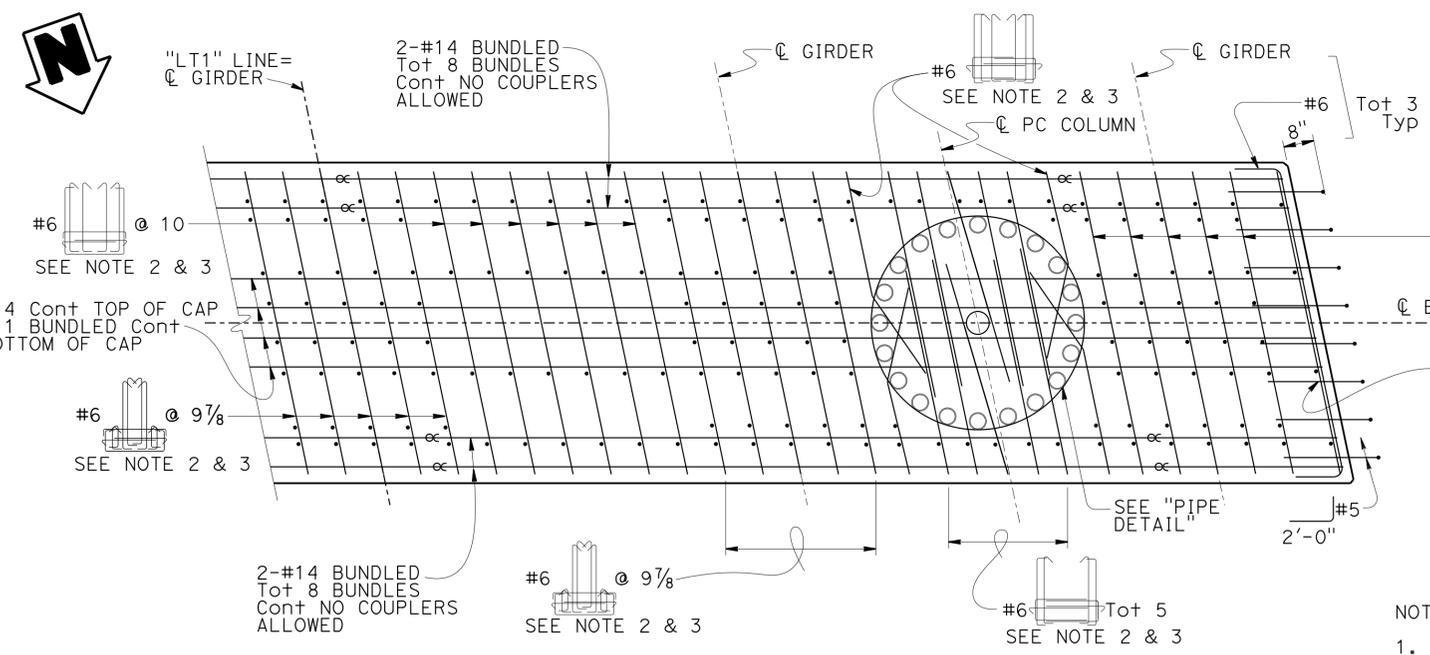
1/2" = 1'-0"



ISOMETRIC VIEW

NO SCALE

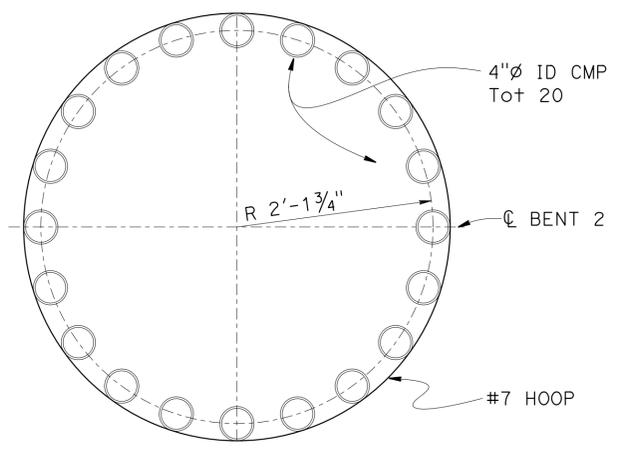
EXTEND 8 PRESTRESSING STRANDS UP BENT REGION, TYPICAL EACH GIRDER OVERLAP SEE "BENT DETAILS No. 2" SHEET FOR DETAILS



PARTIAL BENT CAP REINFORCEMENT (BOTTOM PC DROP CAP)

1/2" = 1'-0"

LEGEND:
α Denotes bundled bars

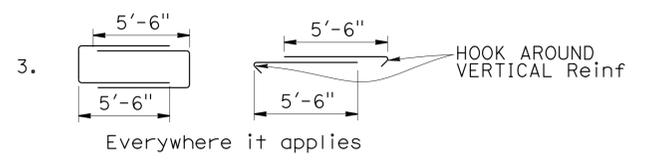


PIPE DETAIL

1" = 1'-0"

NOTES:

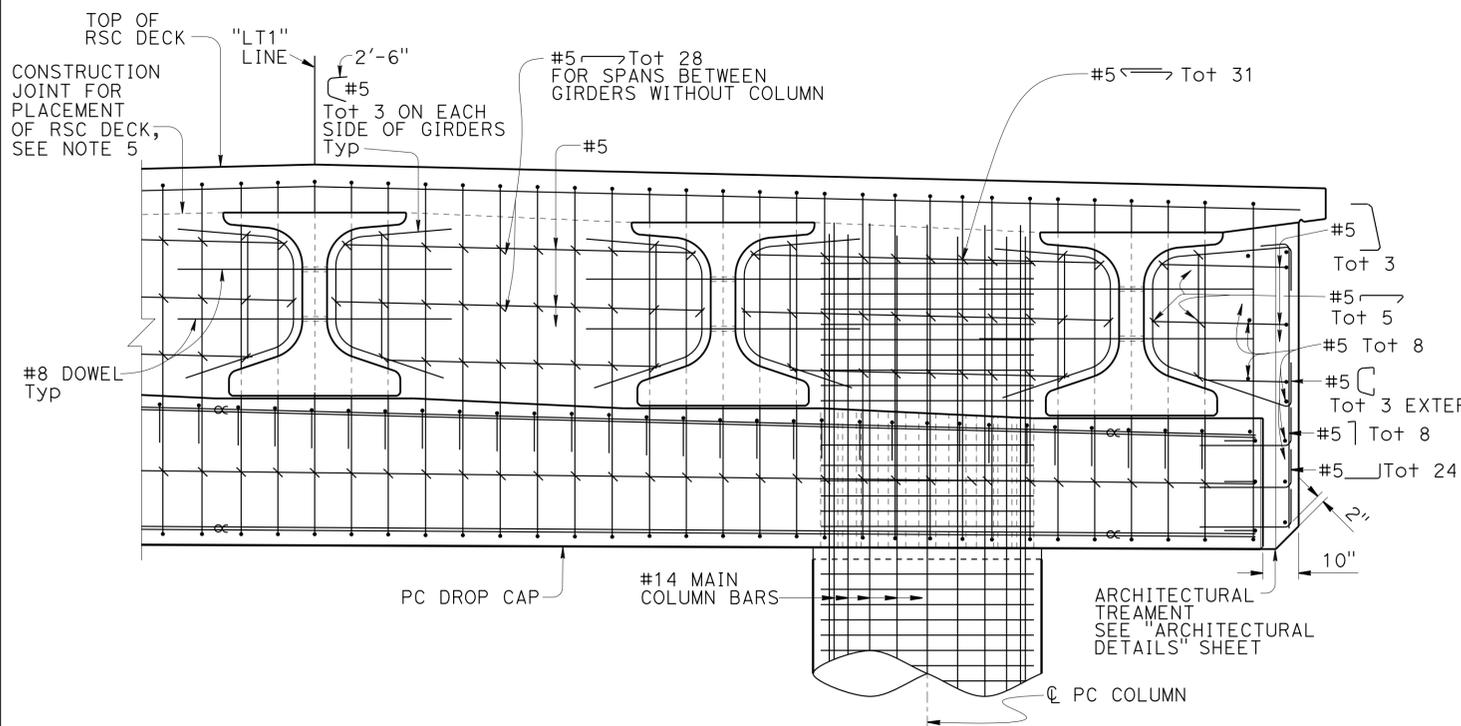
1. Details symmetrical about CL Bridge
2. Optional to field bend #6 vertical reinforcement extending out of PC Drop Cap



STRUCTURES DESIGN DETAIL SHEET (ENGLISH) (REV. 09-01-10)	DESIGN	BY Phil Lutz	CHECKED Isaias Yalan	STATE OF CALIFORNIA DEPARTMENT OF TRANSPORTATION	DIVISION OF ENGINEERING SERVICES STRUCTURE DESIGN DESIGN BRANCH 9	BRIDGE No.	LAUREL St OVERCROSSING (REPLACE) BENT DETAILS No. 1
	DETAILS	BY Min Yu	CHECKED Isaias Yalan			23-0255	
	QUANTITIES	BY Isaias Yalan	CHECKED Phil Lutz/Kim Mori			POST MILE 7.1	
ORIGINAL SCALE IN INCHES FOR REDUCED PLANS				UNIT: 3594 PROJECT NUMBER & PHASE: 0412000477 1 CONTRACT No.: 04-4G4504		DISREGARD PRINTS BEARING EARLIER REVISION DATES	
				0 1 2 3		REVISION DATES: 11-02-15, 1-5-16, 2-23-16 SHEET 14 OF 32	

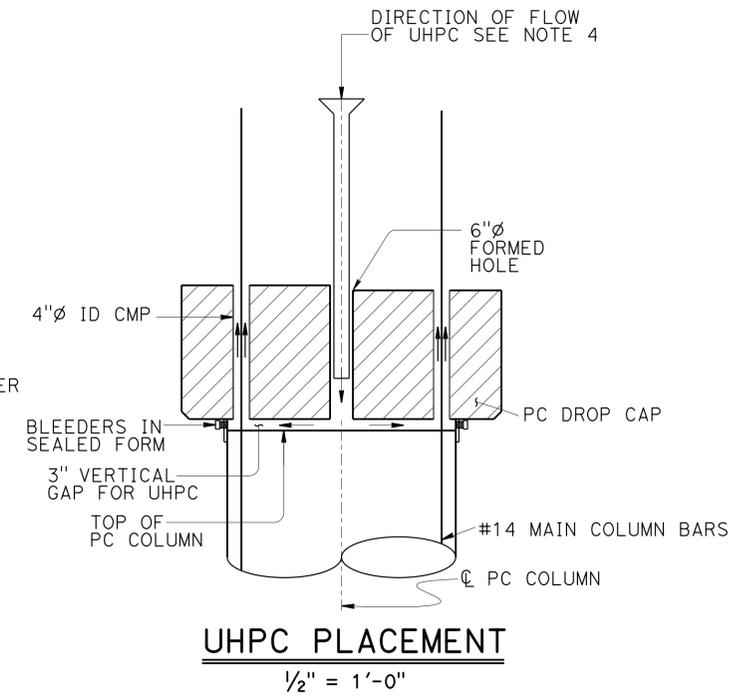
Dist	COUNTY	ROUTE	POST MILES TOTAL PROJECT	SHEET No.	TOTAL SHEETS
04	Soi	780	7.1	143	160

REGISTERED CIVIL ENGINEER **Isaias D. Yalan** No. 68269 Exp. 9-30-17
 DATE 4-26-16
 PLANS APPROVAL DATE 5-18-16
 REGISTERED PROFESSIONAL ENGINEER
 STATE OF CALIFORNIA
Caltrans
 ACCELERATED BRIDGE CONSTRUCTION

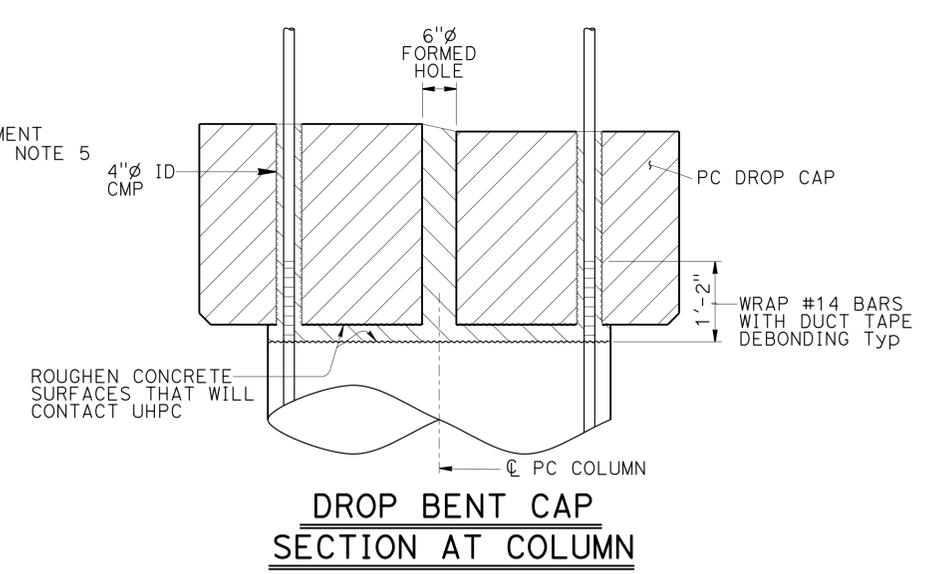
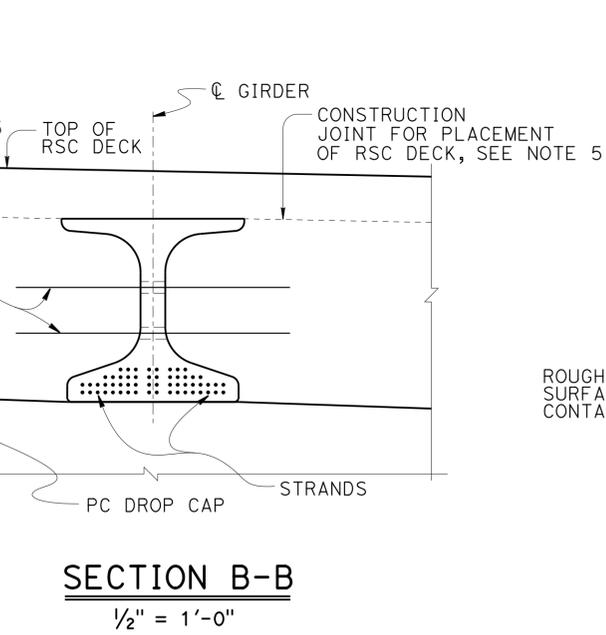
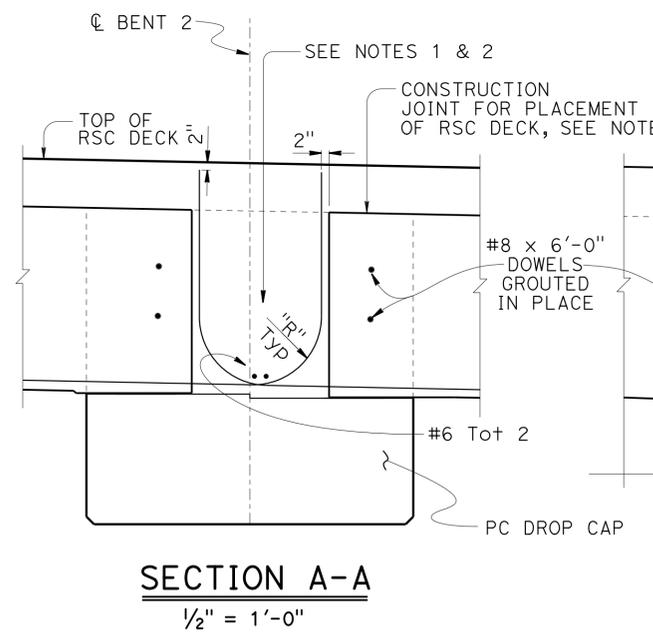
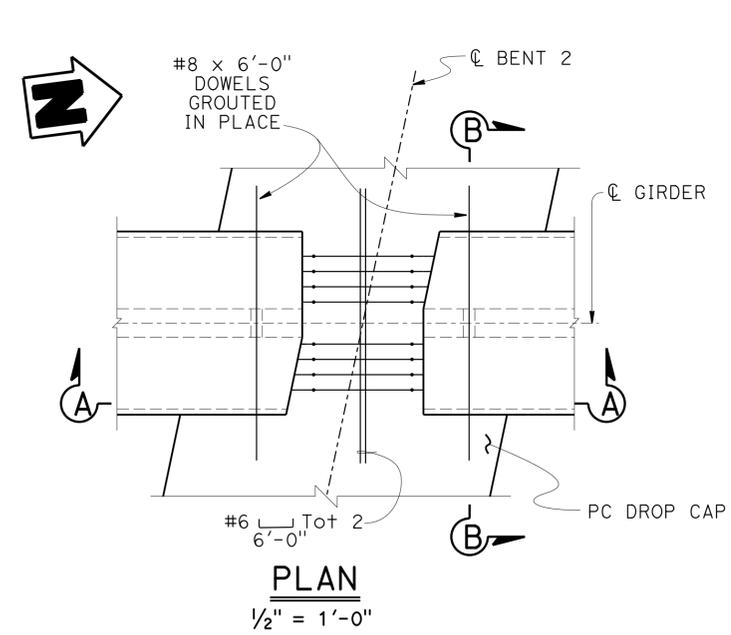


BENT PART ELEVATION
1/2" = 1'-0"

LEGEND:
 α Denotes bundled bars
 TYPICAL DECK Reinf NOT SHOWN



- NOTES:
- "R" Must be 15 times diameter of the Strand
 - Extend Strand tails 8 inches minimum before start of bend
 - Not all reinforcing steel is shown. See "BENT DETAILS No. 1", "BENT DETAILS No. 2", "BENT DETAILS No. 3" and "BENT DETAILS No. 4" sheets
 - Place UHPC in the center of the 6" diameter hole. Completely fill annulus around #14 column bars, the 3" gap between the column and the cap, and the 6" diameter hole.
 - For limits of Rapid Strength Concrete (RSC), see Concrete Strength and Type Limits diagram on "INDEX TO PLANS" sheet



LEGEND:
 [Hatched Box] Denotes UHPC
 [Hatched Box] Denotes PC Drop Cap

DESIGN BY Phil Lutz CHECKED Isaias Yalan DETAILS BY Min Yu/Tim Fairall CHECKED Isaias Yalan QUANTITIES BY Isaias Yalan CHECKED Phil Lutz/Kim Mori	STATE OF CALIFORNIA DEPARTMENT OF TRANSPORTATION	DIVISION OF ENGINEERING SERVICES STRUCTURE DESIGN DESIGN BRANCH 9	BRIDGE No. 23-0255	LAUREL St OVERCROSSING (REPLACE) BENT DETAILS No. 2
			POST MILE 7.1	
			UNIT: 3594 PROJECT NUMBER & PHASE: 0412000477 1 CONTRACT No.: 04-4G4504	
STRUCTURES DESIGN DETAIL SHEET (ENGLISH) (REV. 09-01-10) ORIGINAL SCALE IN INCHES FOR REDUCED PLANS	0 1 2 3	DISREGARD PRINTS BEARING EARLIER REVISION DATES	REVISION DATES 11-02-15 1-5-16 3-23-16	SHEET 15 OF 32

FILE => 23-0255-h-b01d02.dgn

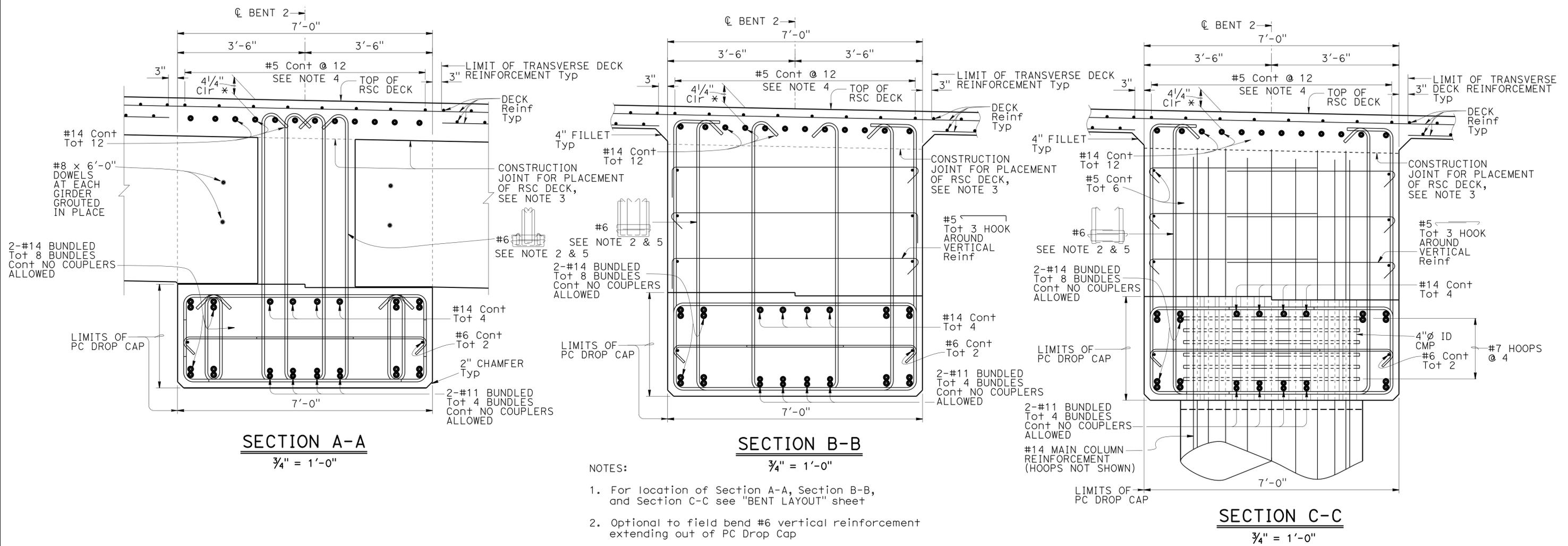
Dist	COUNTY	ROUTE	POST MILES TOTAL PROJECT	SHEET No.	TOTAL SHEETS
04	Soi	780	7.1	144	160

4-26-16
 REGISTERED CIVIL ENGINEER DATE
 5-18-16
 PLANS APPROVAL DATE

REGISTERED PROFESSIONAL ENGINEER
 ISAIAS D. YALAN
 No. 68269
 Exp. 9-30-17
 CIVIL
 STATE OF CALIFORNIA

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ACCELERATED BRIDGE CONSTRUCTION

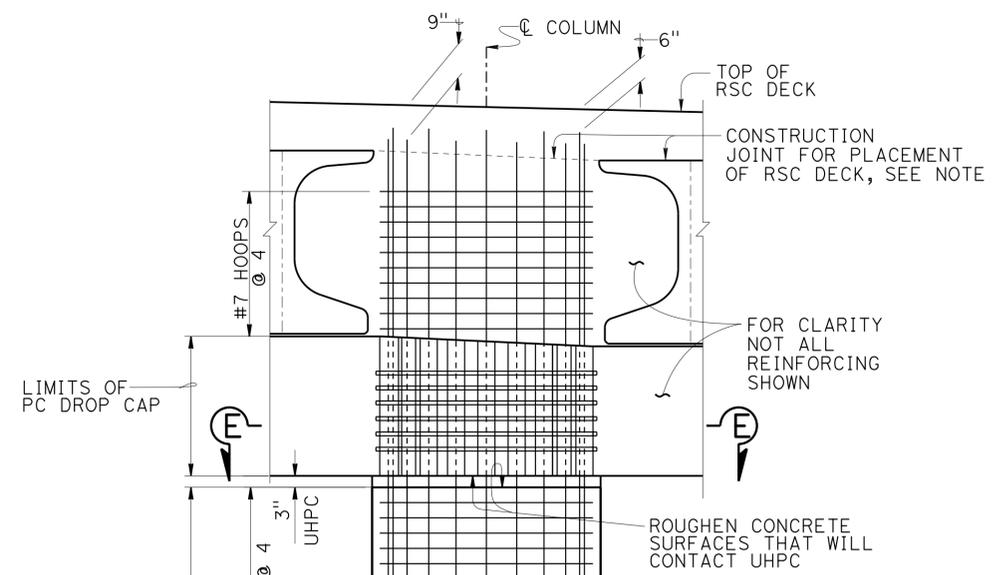


- NOTES:
- For location of Section A-A, Section B-B, and Section C-C see "BENT LAYOUT" sheet
 - Optional to field bend #6 vertical reinforcement extending out of PC Drop Cap
 - For limits of Rapid Strength Concrete (RSC), see Concrete Strength and Type Limits diagram on "INDEX TO PLANS" sheet
 - Place parallel to C Bent and space along C of Bridge
5. HOOK AROUND VERTICAL Reinf

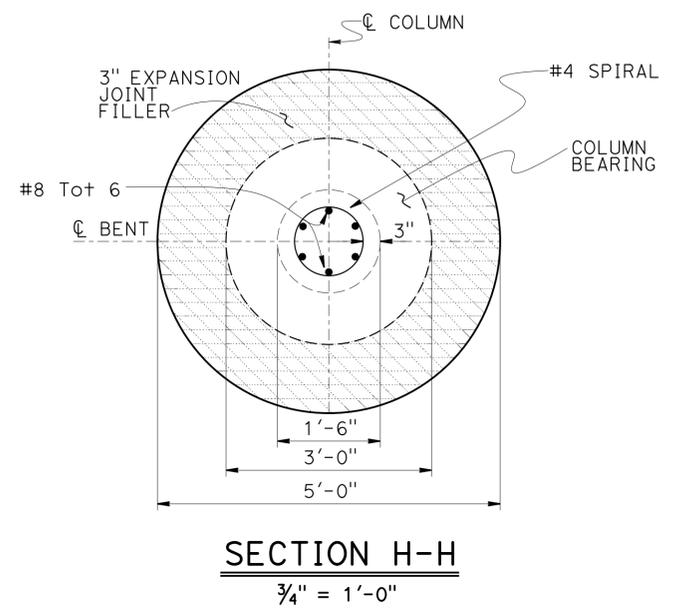
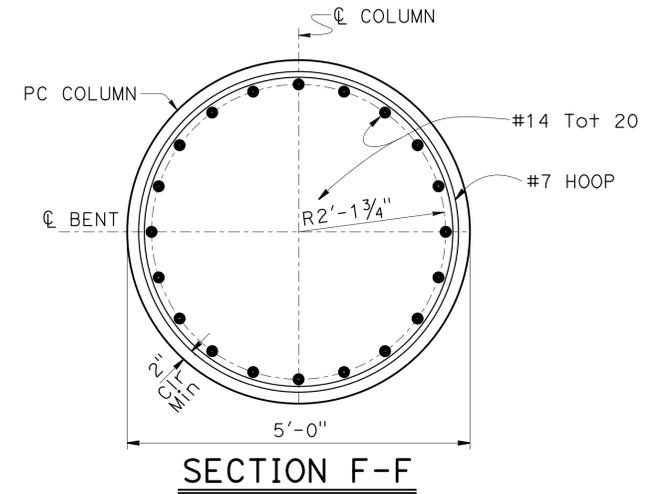
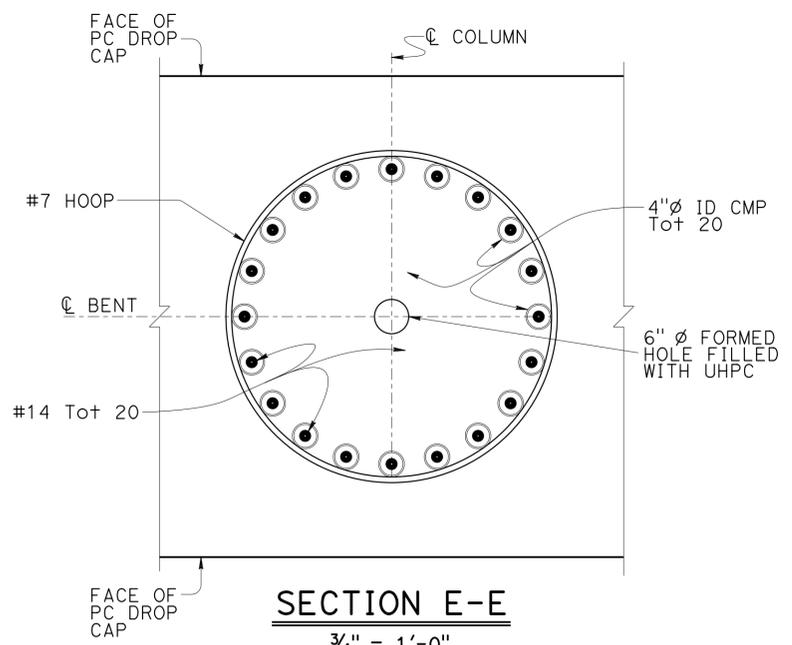
Everywhere it applies
- * Clearance to main Cap reinforcement

<table border="1" style="width: 100%; border-collapse: collapse;"> <tr> <td style="font-size: x-small;">DESIGN</td> <td style="font-size: x-small;">BY Isaias Yalan</td> <td style="font-size: x-small;">CHECKED Rosa Candiotti</td> </tr> <tr> <td style="font-size: x-small;">DETAILS</td> <td style="font-size: x-small;">BY Min Yu/Tim Fairall</td> <td style="font-size: x-small;">CHECKED Rosa Candiotti</td> </tr> <tr> <td style="font-size: x-small;">QUANTITIES</td> <td style="font-size: x-small;">BY Isaias Yalan</td> <td style="font-size: x-small;">CHECKED Phil Lutz/Kim Mori</td> </tr> </table>	DESIGN	BY Isaias Yalan	CHECKED Rosa Candiotti	DETAILS	BY Min Yu/Tim Fairall	CHECKED Rosa Candiotti	QUANTITIES	BY Isaias Yalan	CHECKED Phil Lutz/Kim Mori	STATE OF CALIFORNIA DEPARTMENT OF TRANSPORTATION	DIVISION OF ENGINEERING SERVICES STRUCTURE DESIGN DESIGN BRANCH 9	BRIDGE No. 23-0255 POST MILE 7.1	LAUREL St OVERCROSSING (REPLACE) BENT DETAILS No. 3
DESIGN	BY Isaias Yalan	CHECKED Rosa Candiotti											
DETAILS	BY Min Yu/Tim Fairall	CHECKED Rosa Candiotti											
QUANTITIES	BY Isaias Yalan	CHECKED Phil Lutz/Kim Mori											
STRUCTURES DESIGN DETAIL SHEET (ENGLISH) (REV. 09-01-10)	ORIGINAL SCALE IN INCHES FOR REDUCED PLANS	UNIT: 3594 PROJECT NUMBER & PHASE: 0412000477 1 CONTRACT No.: 04-4G4504	DISREGARD PRINTS BEARING EARLIER REVISION DATES	REVISION DATES 11-02-15 12-08-15 3-21-16 SHEET 16 OF 32									

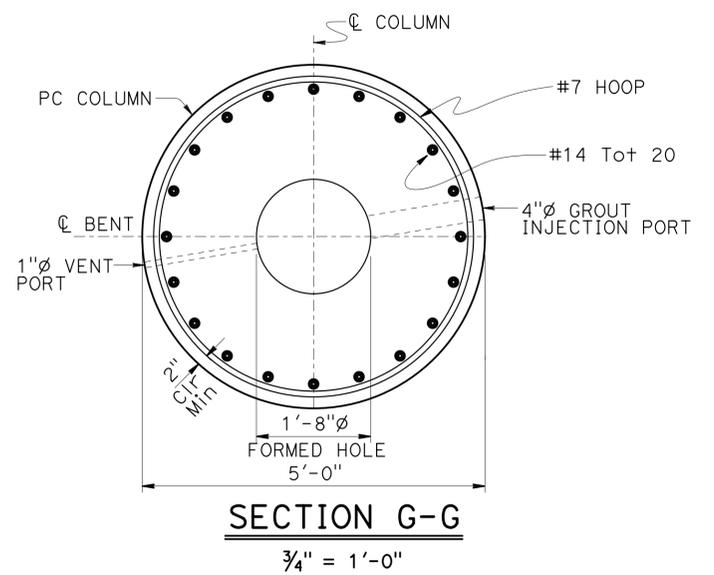
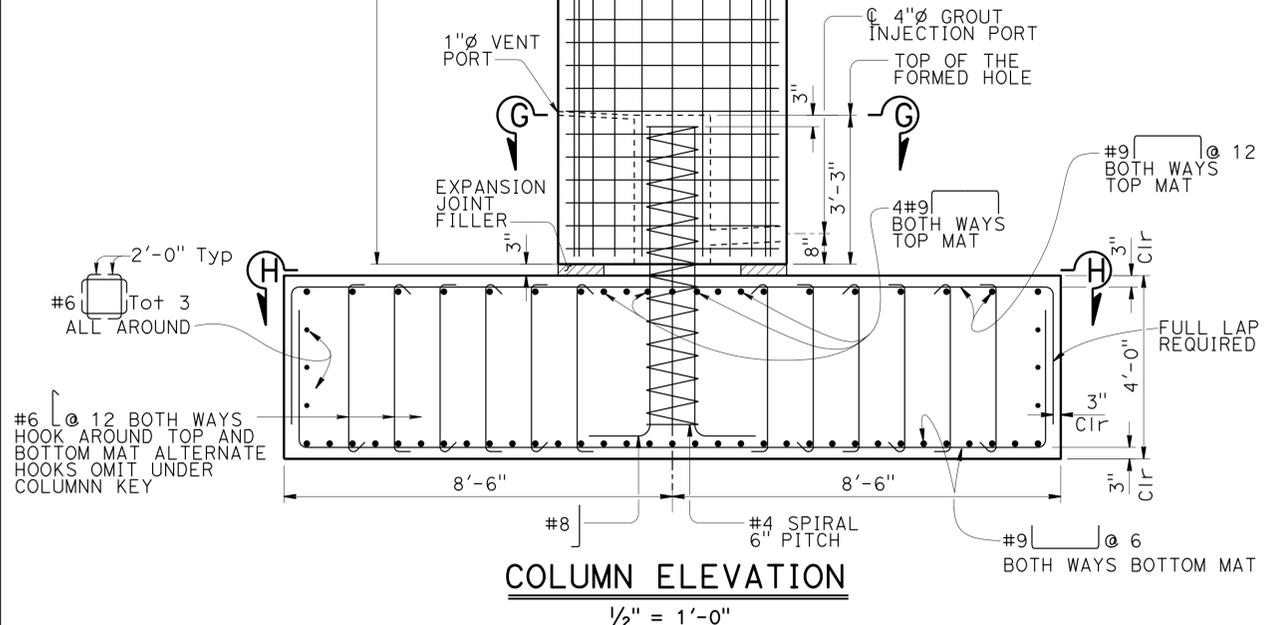
Dist	COUNTY	ROUTE	POST MILES TOTAL PROJECT	SHEET No.	TOTAL SHEETS
04	Soi	780	7.1	145	160
			4-26-16	DATE	
			5-18-16	DATE	
			REGISTERED CIVIL ENGINEER		
			PLANS APPROVAL DATE		
			REGISTERED PROFESSIONAL ENGINEER ISAIAS D. YALAN No. 68269 Exp. 9-30-17 CIVIL STATE OF CALIFORNIA		
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NOTE:
 For limits of Rapid Strength Concrete (RSC), see Concrete Strength and Type Limits diagram on "INDEX TO PLANS" sheet



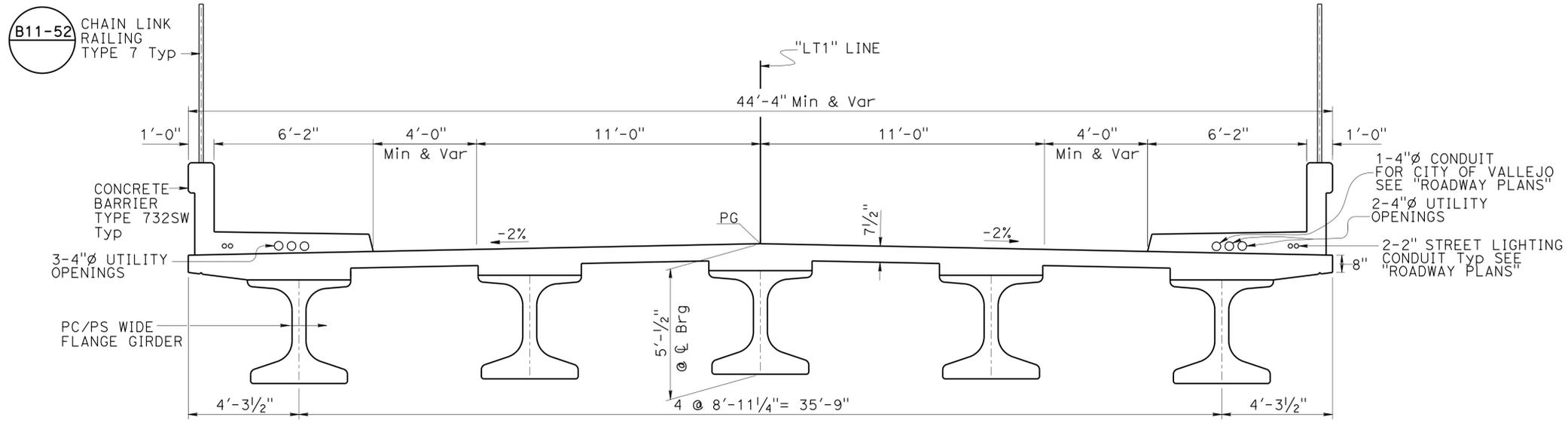
- CONSTRUCTION SEQUENCE:
1. Erect Columns
 2. Erect PC Drop Bent cap
 3. Place grout at the bottom of Columns.
 4. After the grout has cured minimum 24 hours, place UHPC at the Drop Bent Cap.
 5. After UHPC reaches a compressive strength of at least 14 ksi, erect Girders.



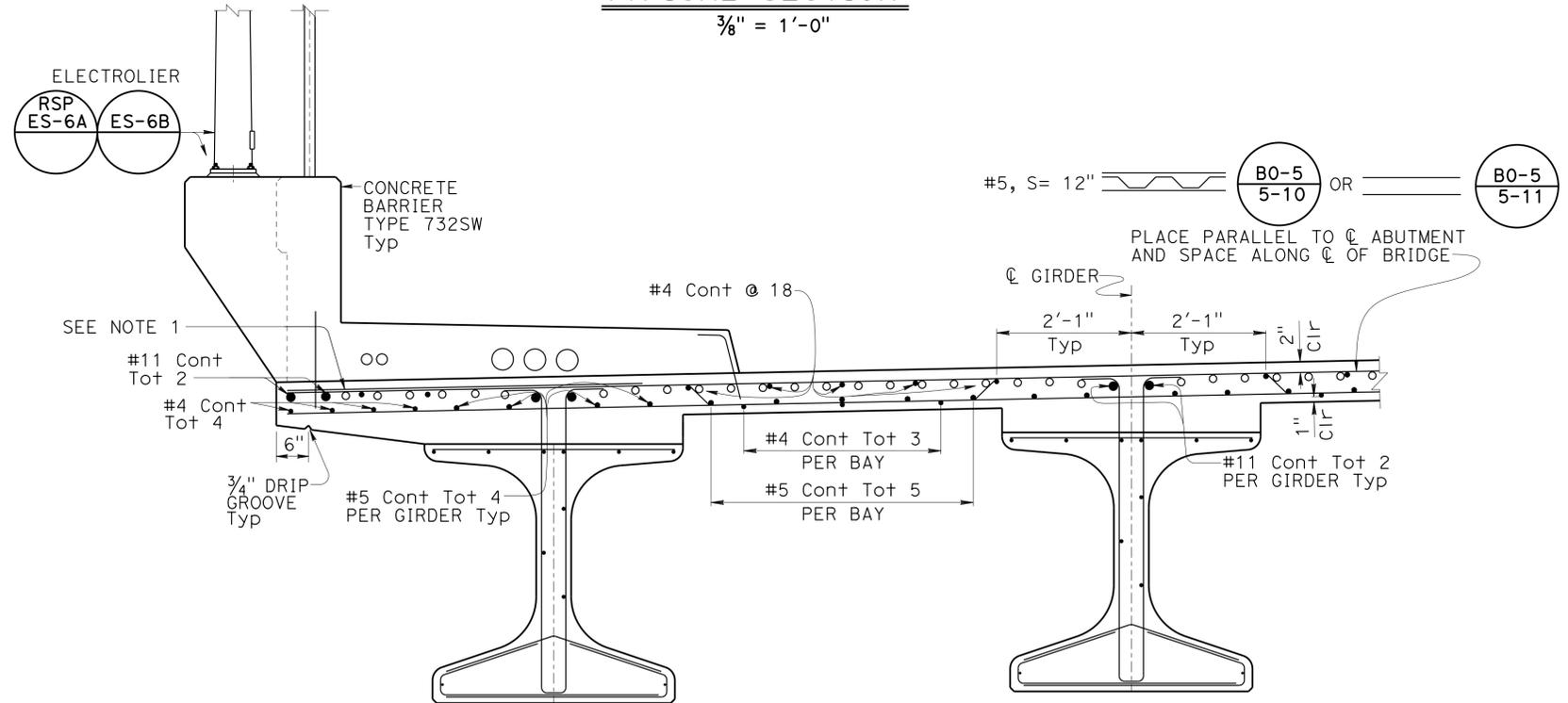
STRUCTURES DESIGN DETAIL SHEET (ENGLISH) (REV. 09-01-10)	DESIGN	BY Isaias Yalan	CHECKED Rosa Candiotti	STATE OF CALIFORNIA DEPARTMENT OF TRANSPORTATION	DIVISION OF ENGINEERING SERVICES STRUCTURE DESIGN DESIGN BRANCH 9	BRIDGE No.	23-0255	LAUREL St OVERCROSSING (REPLACE) BENT DETAILS No. 4			
	DETAILS	BY Min Yu	CHECKED Rosa Candiotti			POST MILE	7.1				
	QUANTITIES	BY Isaias Yalan	CHECKED Phil Lutz/Kim Mori			CONTRACT No.	04-4G4504				
ORIGINAL SCALE IN INCHES FOR REDUCED PLANS				UNIT: 3594 PROJECT NUMBER & PHASE: 0412000477 1		CONTRACT No.: 04-4G4504		DISREGARD PRINTS BEARING EARLIER REVISION DATES			
								REVISION DATES	SHEET	OF	
								11-02-15	1-8-16	17	32

Dist	COUNTY	ROUTE	POST MILES TOTAL PROJECT	SHEET No.	TOTAL SHEETS
04	SoI	780	7.1	146	160

REGISTERED CIVIL ENGINEER **Isaias D. Yalan** DATE 8-3-16
 PLANS APPROVAL DATE 5-18-16
 No. 68269 Exp. 9-30-17
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TYPICAL SECTION
 $\frac{3}{8}'' = 1'-0''$



PART TYPICAL SECTION
 $\frac{3}{4}'' = 1'-0''$

NOTE:

- #5 x 5'-6" Bundle with each alternating top transverse bar. Place only for a distance of 5'-0" from expansion joint in the Concrete Barrier on both sides of each end of the Deck at the BB and EB.

LEGEND:

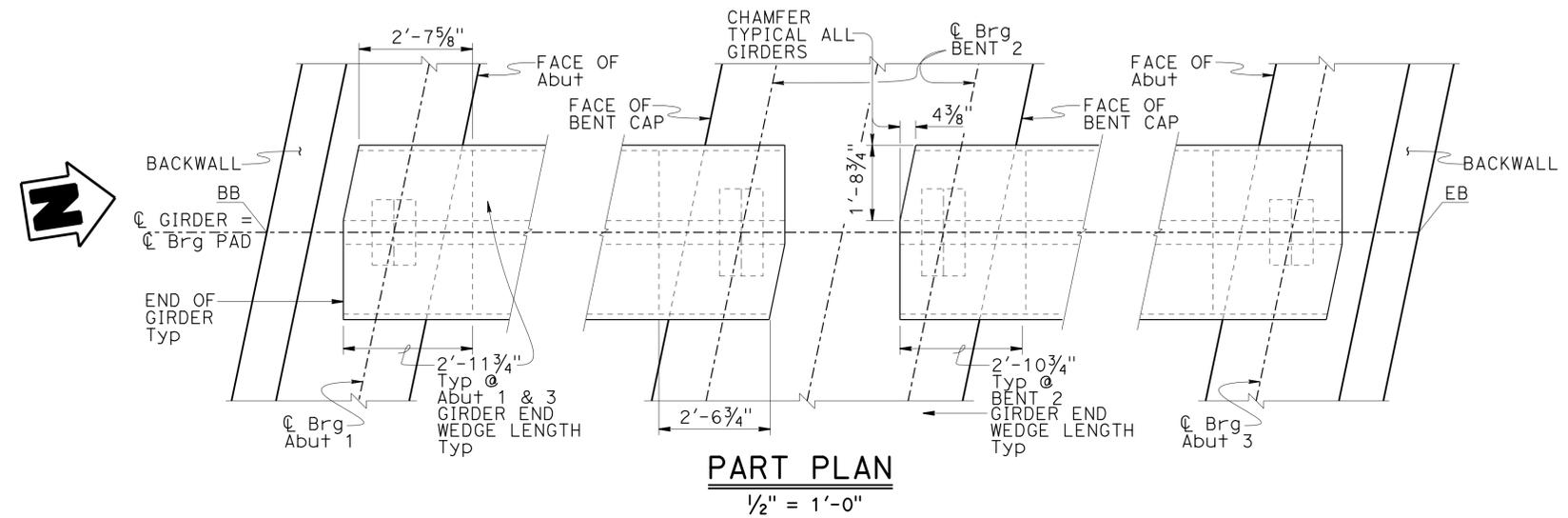
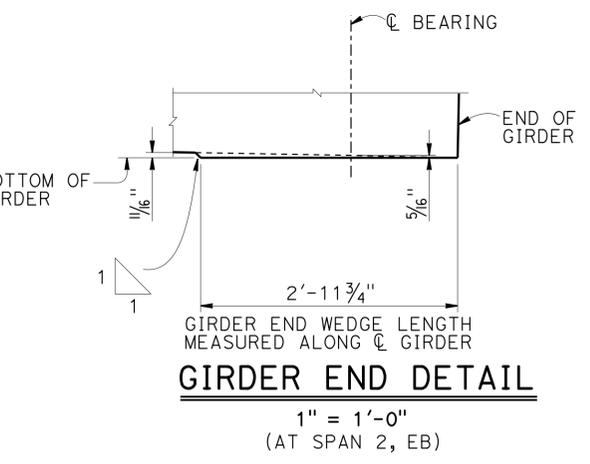
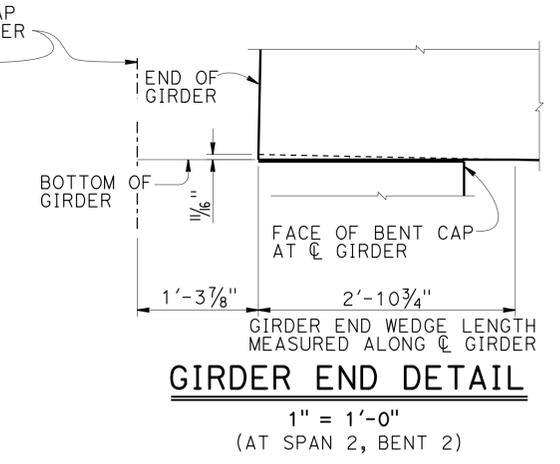
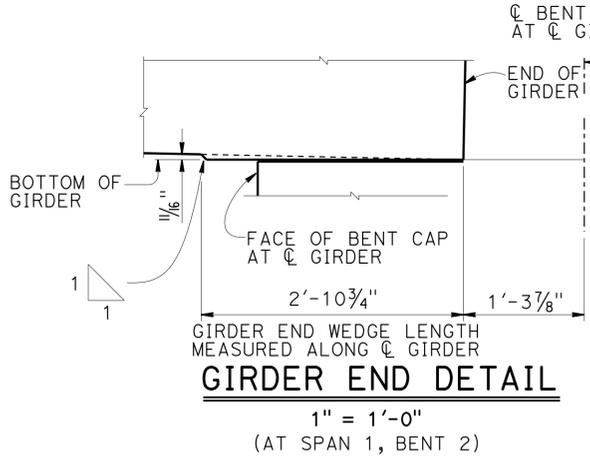
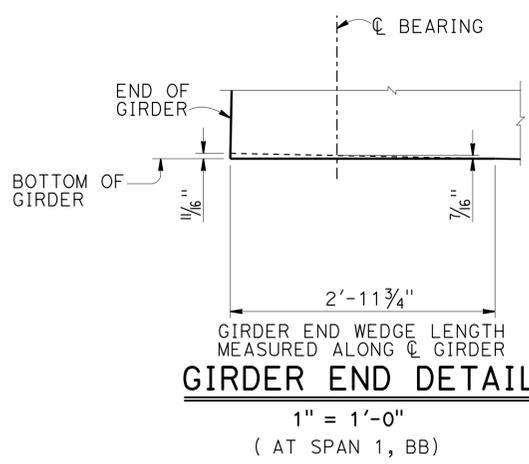
o Denotes additional longitudinal reinforcement see SEE "DECK REINFORCEMENT" sheet

DESIGN	BY Isaias Yalan	CHECKED Phil Lutz	STATE OF CALIFORNIA DEPARTMENT OF TRANSPORTATION	DIVISION OF ENGINEERING SERVICES STRUCTURE DESIGN DESIGN BRANCH 9	BRIDGE No. 23-0255	LAUREL St OVERCROSSING (REPLACE)
	DETAILS	BY Tim Fairall			CHECKED Phil Lutz	
QUANTITIES	BY Isaias Yalan	CHECKED Phil Lutz/Kim Mori	UNIT: 3594 PROJECT NUMBER & PHASE: 0412000477 1	CONTRACT No.: 04-4G4504	REVISION DATES 7-09-15 12-01-15 12-10-15	SHEET 18 OF 32

STRUCTURES DESIGN DETAIL SHEET (ENGLISH) (REV. 09-01-10) ORIGINAL SCALE IN INCHES FOR REDUCED PLANS 0 1 2 3

Dist	COUNTY	ROUTE	POST MILES TOTAL PROJECT	SHEET No.	TOTAL SHEETS
04	SoI	780	7.1	147	160

4-26-16
 REGISTERED CIVIL ENGINEER DATE
 5-18-16
 PLANS APPROVAL DATE
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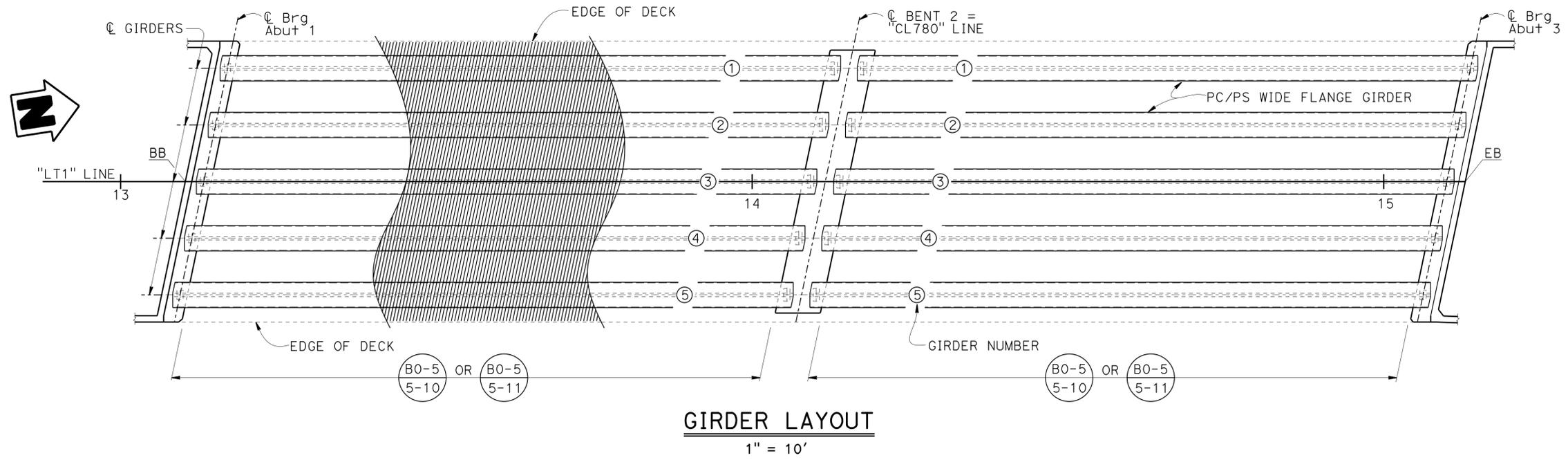


BENT 2 AT SPAN 1
GIRDER BEARING SEAT ELEVATIONS

GIRDER #	SPAN	ELEVATION
①	1	48.45
②	1	48.67
③	1	48.89
④	1	48.74
⑤	1	48.60

BENT 2 AT SPAN 2
GIRDER BEARING SEAT ELEVATIONS

GIRDER #	SPAN	ELEVATION
①	2	48.34
②	2	48.56
③	2	48.78
④	2	48.63
⑤	2	48.49



DESIGN	BY Phil Lutz	CHECKED Isaias Yalan
DETAILS	BY Min Yu	CHECKED Isaias Yalan
QUANTITIES	BY Isaias Yalan	CHECKED Phil Lutz

STATE OF CALIFORNIA
 DEPARTMENT OF TRANSPORTATION

DIVISION OF ENGINEERING SERVICES
 STRUCTURE DESIGN
DESIGN BRANCH 9

BRIDGE No. 23-0255
 POST MILE 7.1

LAUREL St OVERCROSSING (REPLACE)
GIRDER LAYOUT

Dist	COUNTY	ROUTE	POST MILES TOTAL PROJECT	SHEET No.	TOTAL SHEETS
04	Soi	780	7.1	148	160

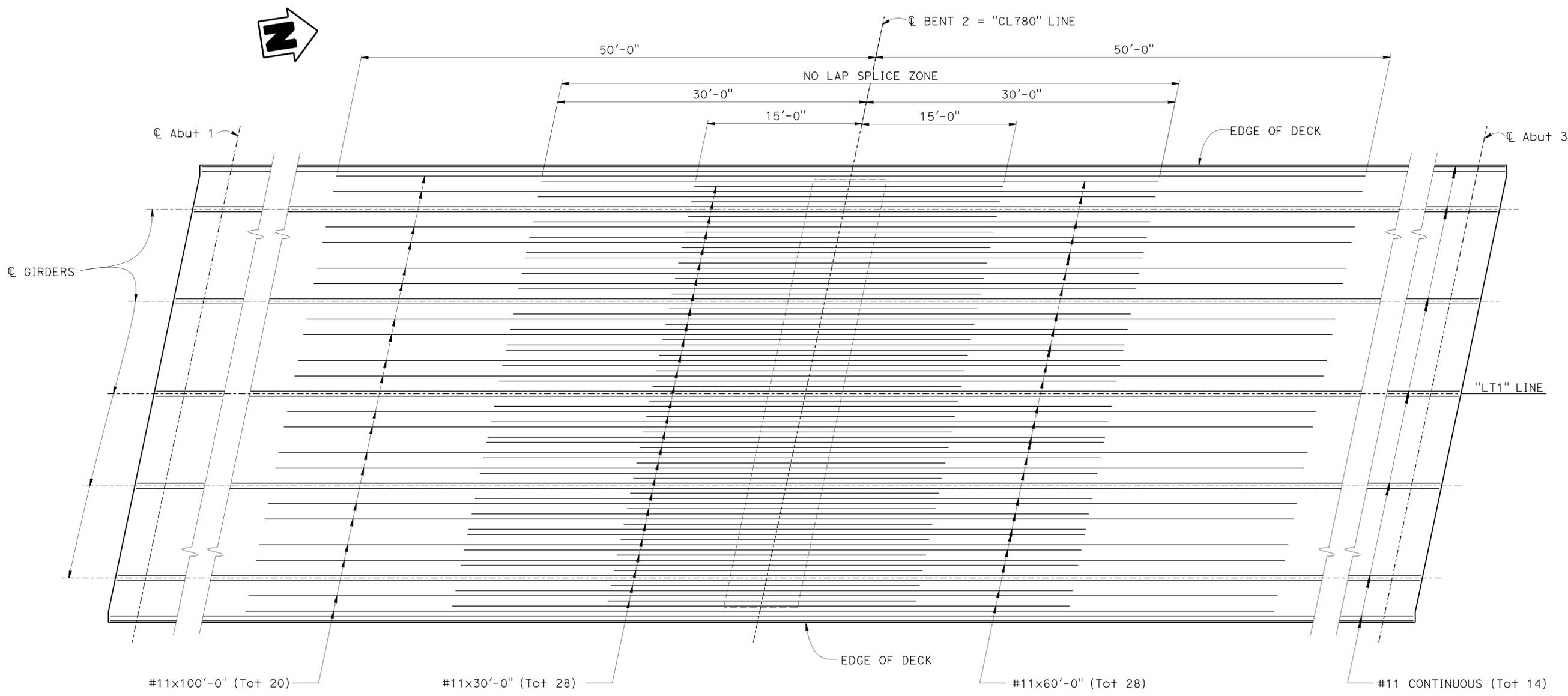

 REGISTERED CIVIL ENGINEER DATE 4-26-16

5-18-16
 PLANS APPROVAL DATE

REGISTERED PROFESSIONAL ENGINEER
 ISAIAS D. YALAN
 No. 68269
 Exp. 9-30-17
 CIVIL
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ACCELERATED BRIDGE CONSTRUCTION



GIRDER REINFORCEMENT

$\frac{3}{16}'' = 1'-0''$

DESIGN	BY Phil Lutz	CHECKED Isaias Yalan
DETAILS	BY Min Yu	CHECKED Isaias Yalan
QUANTITIES	BY Isaias Yalan	CHECKED Phil Lutz/Kim Mori

STATE OF CALIFORNIA
 DEPARTMENT OF TRANSPORTATION

DIVISION OF ENGINEERING SERVICES
 STRUCTURE DESIGN
DESIGN BRANCH 9

BRIDGE No.	23-0255
POST MILE	7.1

LAUREL St OVERCROSSING (REPLACE)
DECK REINFORCEMENT

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

ORIGINAL SCALE IN INCHES FOR REDUCED PLANS



UNIT: 3594
 PROJECT NUMBER & PHASE: 0412000477 1

CONTRACT No.: 04-4G4504

DISREGARD PRINTS BEARING EARLIER REVISION DATES

REVISION DATES	SHEET	OF
11-02-15 3-3-16	20	32

USERNAME => s141095 DATE PLOTTED => 16-AUG-2016 TIME PLOTTED => 1:31:14

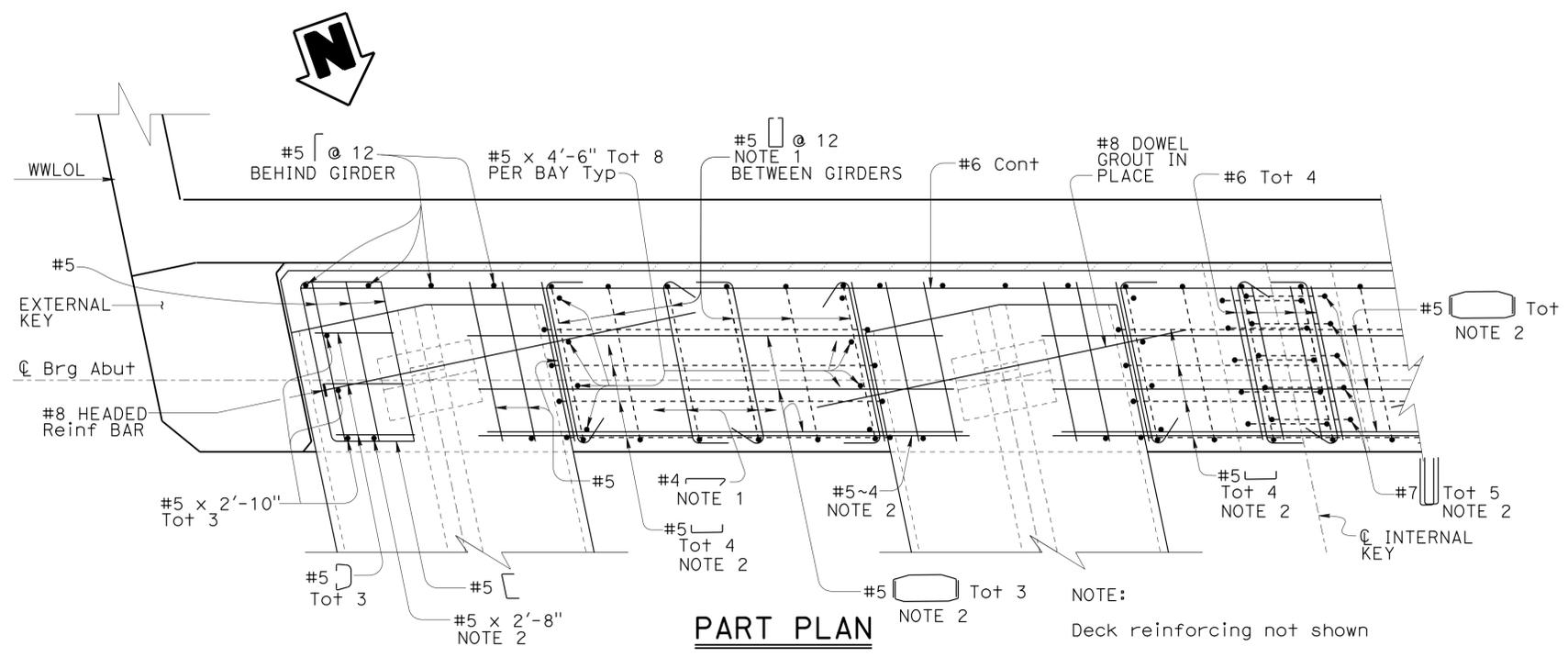
DIST	COUNTY	ROUTE	POST MILES TOTAL PROJECT	SHEET No.	TOTAL SHEETS
04	SoI	780	7.1	149	160

4-26-16
 REGISTERED CIVIL ENGINEER DATE
 5-18-16
 PLANS APPROVAL DATE

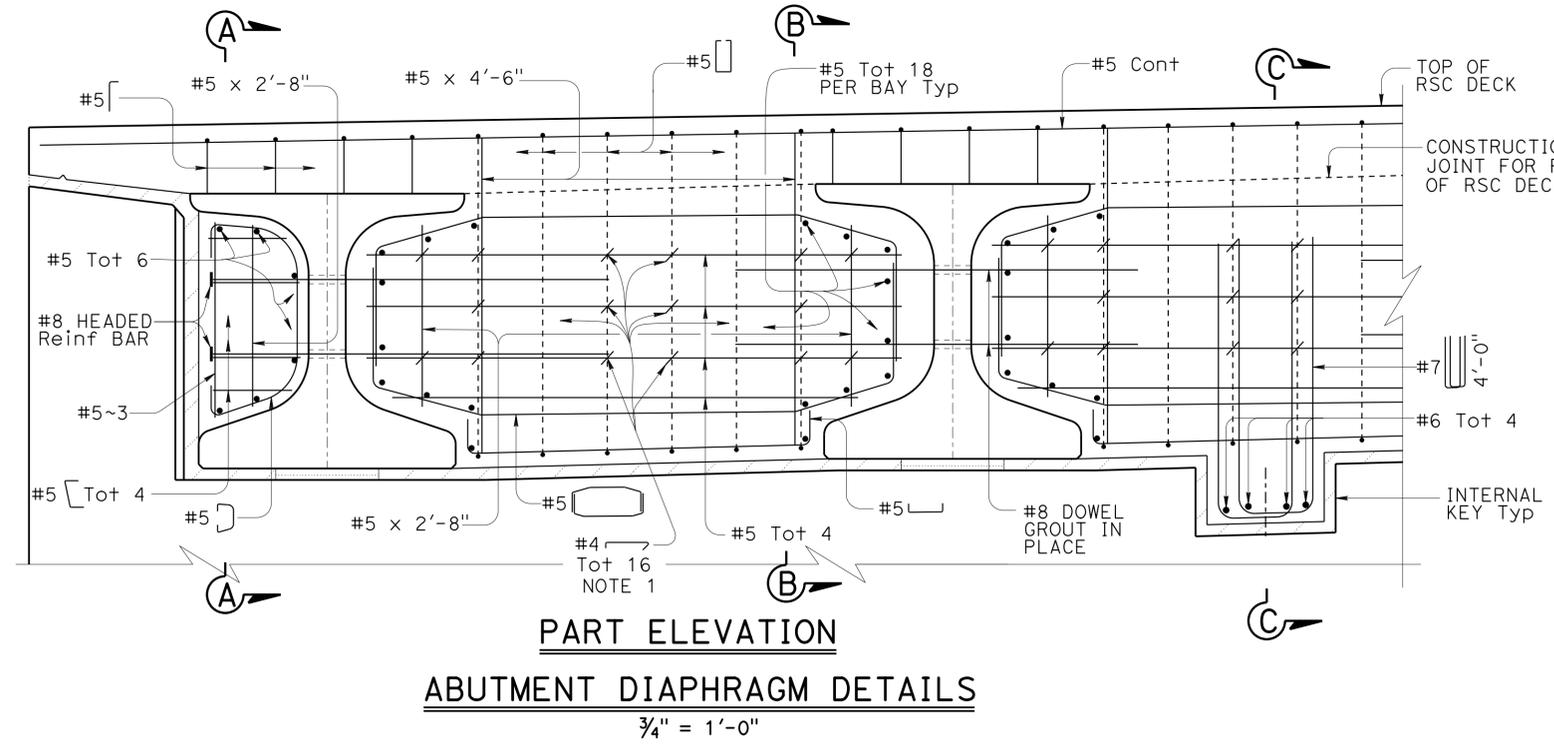
ISAIAS D. YALAN
 No. 68269
 Exp. 9-30-17
 CIVIL
 STATE OF CALIFORNIA

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- NOTES:
1. Place parallel to C Girder and spaced along C Bearing Abutment, hook around vertical reinforcement
 2. Place parallel to C Bearing Abutment and spaced along C Girder
 3. Abutment 1 diaphragm shown, Abutment 3 similar
 4. Details symmetrical about C of bridge
 5. For Section A-A, Section B-B and Section C-C see "GIRDER DETAILS No. 2" sheet
 6. For limits of Rapid Strength Concrete (RSC), see Concrete Strength and Type Limits diagram on "INDEX TO PLANS" sheet



PART ELEVATION
ABUTMENT DIAPHRAGM DETAILS
 3/4" = 1'-0"

DESIGN	BY Phil Lutz	CHECKED Isaias Yalan
DETAILS	BY Tim Fairall	CHECKED Isaias Yalan
QUANTITIES	BY Isaias Yalan	CHECKED Phil Lutz/Kim Mori

STATE OF CALIFORNIA
 DEPARTMENT OF TRANSPORTATION

DIVISION OF ENGINEERING SERVICES
 STRUCTURE DESIGN
DESIGN BRANCH 9

BRIDGE No.	23-0255
POST MILE	7.1

LAUREL St OVERCROSSING (REPLACE)
GIRDER DETAILS No. 1

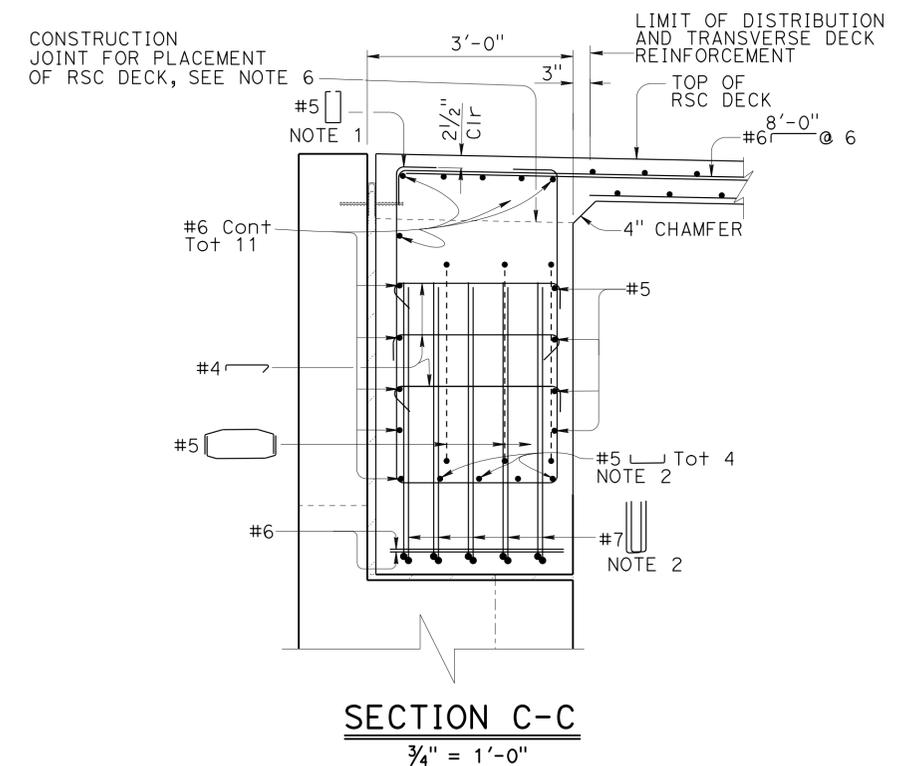
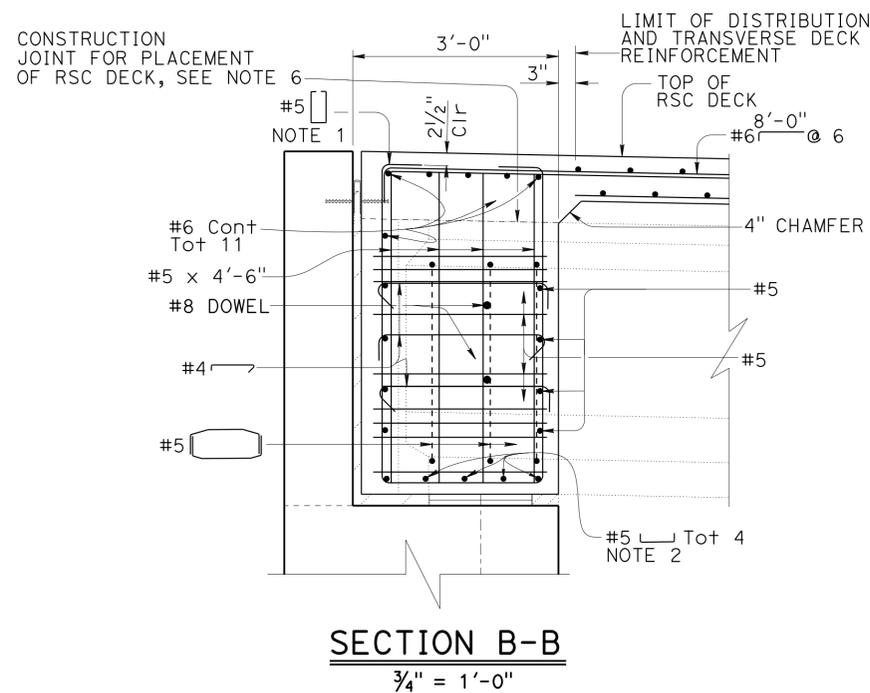
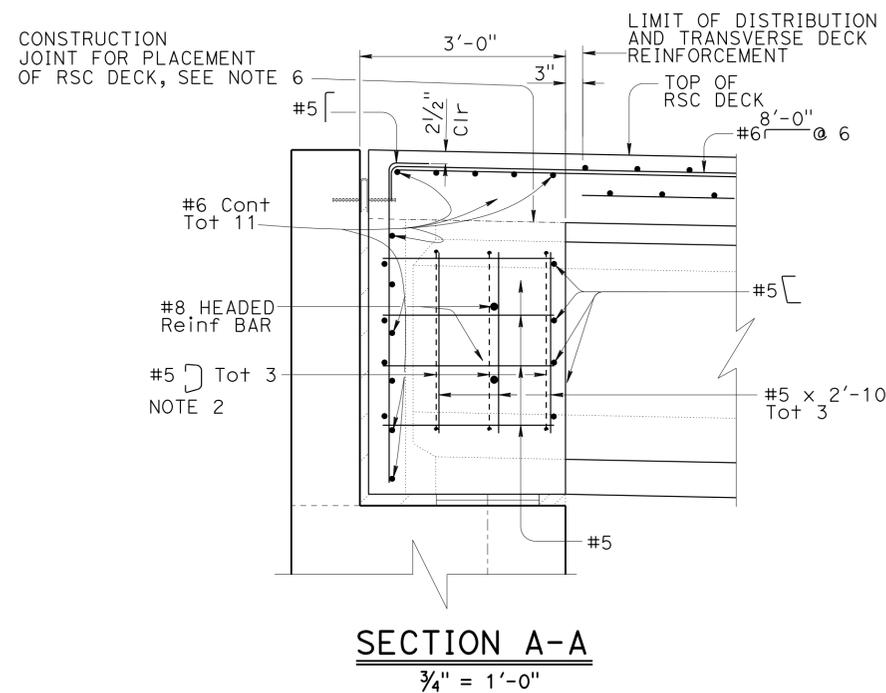
Dist	COUNTY	ROUTE	POST MILES TOTAL PROJECT	SHEET No.	TOTAL SHEETS
04	SoI	780	7.1	150	160

4-26-16
 REGISTERED CIVIL ENGINEER DATE
 5-18-16
 PLANS APPROVAL DATE

ISAIAS D. YALAN
 No. 68269
 Exp. 9-30-17
 CIVIL
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NOTES:

- Place parallel to $\text{\textcircled{C}}$ Girder and spaced along $\text{\textcircled{C}}$ Bearing Abutment
- Place parallel to $\text{\textcircled{C}}$ Bearing Abutment and spaced along $\text{\textcircled{C}}$ Girder
- Abutment 1 Diaphragm shown, Abutment 3 similar
- For locations of Section A-A, Section B-B and Section C-C see "GIRDER DETAILS No. 1" sheet
- For limits of Rapid Strength Concrete (RSC), see Concrete Strength and Type Limits diagram on "INDEX TO PLANS" sheet

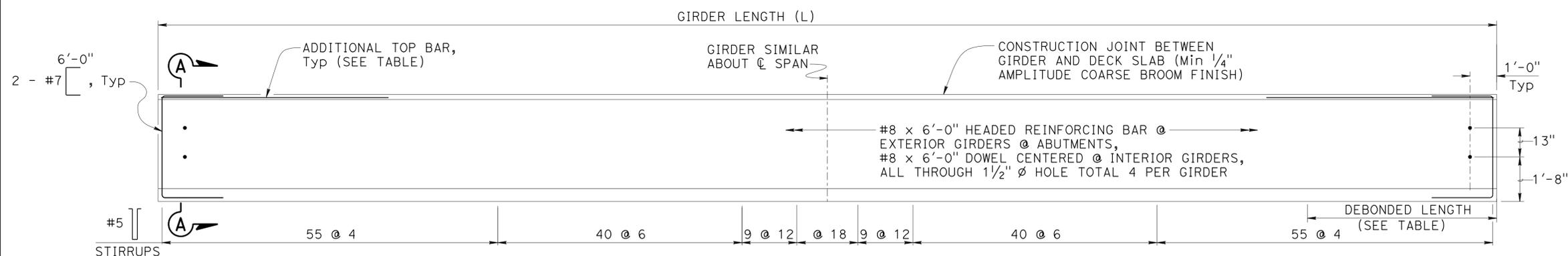
STRUCTURES DESIGN DETAIL SHEET (ENGLISH) (REV. 09-01-10)	DESIGN	BY Phil Lutz	CHECKED Isaias Yalan	STATE OF CALIFORNIA DEPARTMENT OF TRANSPORTATION	DIVISION OF ENGINEERING SERVICES STRUCTURE DESIGN DESIGN BRANCH 9	BRIDGE No.	LAUREL St OVERCROSSING (REPLACE) GIRDER DETAILS No. 2			
	DETAILS	BY Tim Fairall	CHECKED Isaias Yalan			23-0255				
	QUANTITIES	BY Isaias Yalan	CHECKED Phil Lutz/Kim Mori			POST MILE		7.1		
ORIGINAL SCALE IN INCHES FOR REDUCED PLANS					UNIT: 3594	PROJECT NUMBER & PHASE: 0412000477 1	CONTRACT No.: 04-4G4504	DISREGARD PRINTS BEARING EARLIER REVISION DATES	REVISION DATES 10-14-15 11-4-15 1-14-16	SHEET 22 OF 32

Dist	COUNTY	ROUTE	POST MILES TOTAL PROJECT	SHEET No.	TOTAL SHEETS
04	SoI	780	7.1	151	160

REGISTERED CIVIL ENGINEER **Isaias D. Yalan** DATE 4-26-16
 PLANS APPROVAL DATE 5-18-16
 No. 68269
 Exp. 9-30-17
 CIVIL
 STATE OF CALIFORNIA

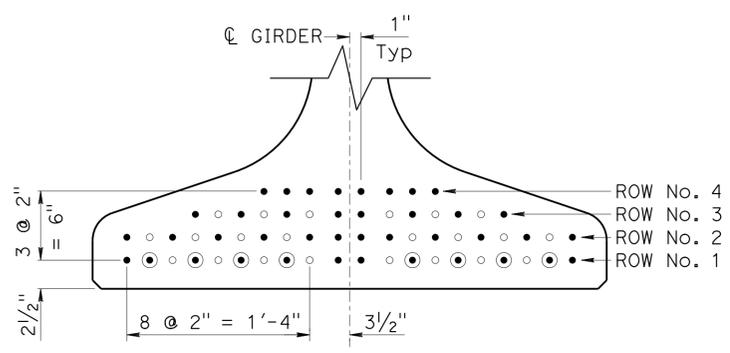
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 ACCELERATED BRIDGE CONSTRUCTION



ELEVATION
NTS

SPANS	GIRDER	GIRDER LENGTH (L)	GIRDER DEPTH (D)	NUMBER OF 0.6" Ø STRANDS	JACKING FORCE (P)	CONCRETE STRENGTH (ksi)		MIDSPAN DEAD LOAD DEFLECTION (in)		ADDITIONAL TOP BAR (EACH END)
						f'ci	f'c	DECK	RAIL	
1 & 2	1 - 5	98'-3"	4'-0"	34	1496 kips (44 kips/STRAND)	5.5	8.0	1.30	.4	#6 x 15'-0" Tot 4

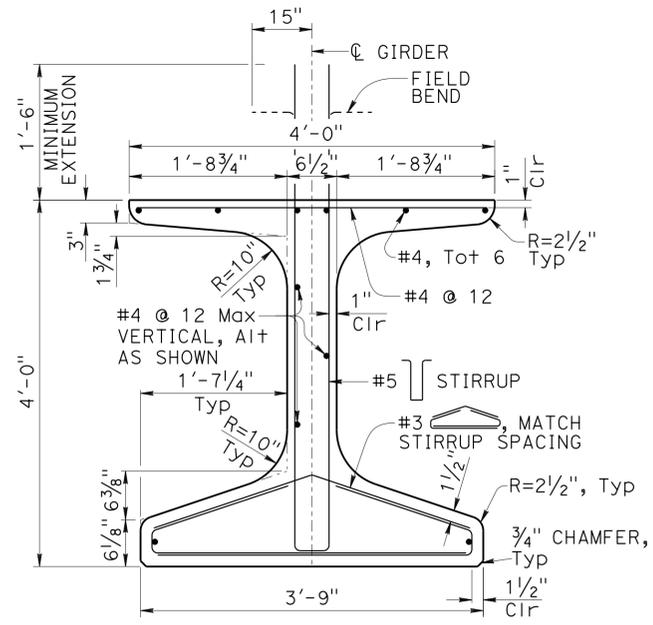


STRAND TEMPLATE & DEBONDING PATTERN
NTS

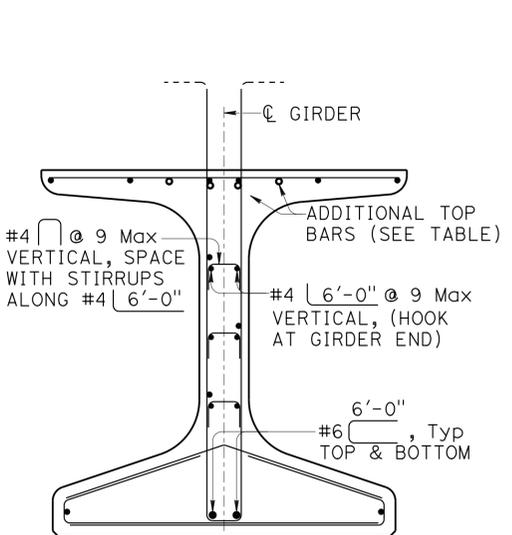
SPAN 1 AND SPAN 2 GIRDERS 1 - 5			
ROW No.	TOTAL No. OF STRANDS	No. OF DEBONDED STRANDS	DEBONDED LENGTH
4	-	-	-
3	-	-	-
2	14	0	N/A
1	20	2	5'-0"

LEGEND:
 • Denotes continuously bonded strand location
 ○ Denotes permissible debonded strand location
 ⊙ Denotes continuously bonded strand extended into Cap pour. See Isometric View on "BENT DETAILS No. 1" sheet

- NOTES:
- The Jacking Force (P) is the jacking force required at the point of control along the span. The jacking force does not include any fabrication specific losses.
 - Concrete strength:
f'ci is at time of initial stressing
f'c is at 28 days
 - Deflection components are informational and will be used to set screed line elevations.
 - Screed line elevations for deck concrete will be determined by the Engineer.
 - Prestressing strand shall be 270 ksi low relaxation.
 - Strands shall be placed as low as possible in the strand template and symmetrically about C_L of Girder.
 - No more than 33% of the total number of strands and 50% of the strands per horizontal row may be debonded.
 - Girder ends to be cast such that a level surface is provided at bearing pads. See "GIRDER LAYOUT" sheet for Girder end details

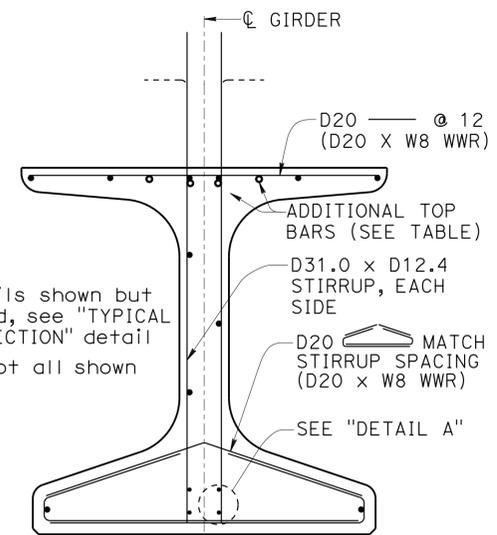


TYPICAL GIRDER SECTION
1" = 1'-0"

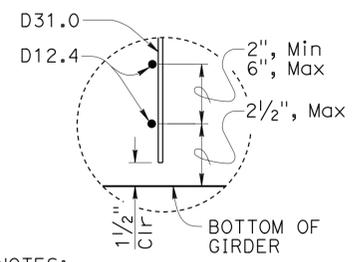


SECTION A-A
1" = 1'-0"

- NOTES:
- For details shown but not noted, see "TYPICAL GIRDER SECTION" detail
 - W8 WWR not all shown



WELDED WIRE REINFORCEMENT (WWR) ALTERNATIVE
1" = 1'-0"



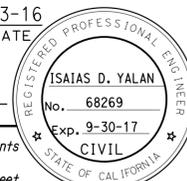
- NOTES:
- Bottom of stirrup WWR detail shown, top similar
 - Longitudinal wire area shall be 40% or greater of vertical deformed wire's area

DETAIL A

DESIGN BY Phil Lutz	CHECKED Isaias Yalan	STATE OF CALIFORNIA DEPARTMENT OF TRANSPORTATION	BRIDGE No. 23-0255	LAUREL St OVERCROSSING (REPLACE) PC/PS WIDE FLANGE GIRDER (DEBONDED STRANDS)
DETAILS BY Tim Fairall	CHECKED Isaias Yalan		POST MILE 7.1	
QUANTITIES BY Isaias Yalan	CHECKED Phil Lutz		DESIGN BRANCH 9	

ORIGINAL SCALE IN INCHES FOR REDUCED PLANS
 UNIT: 3594
 PROJECT NUMBER & PHASE: 0412000477 1
 CONTRACT No.: 04-4G4504
 DISREGARD PRINTS BEARING EARLIER REVISION DATES
 REVISION DATES: 10-27-15, 11-18-15, 12-30-15
 SHEET 23 OF 32

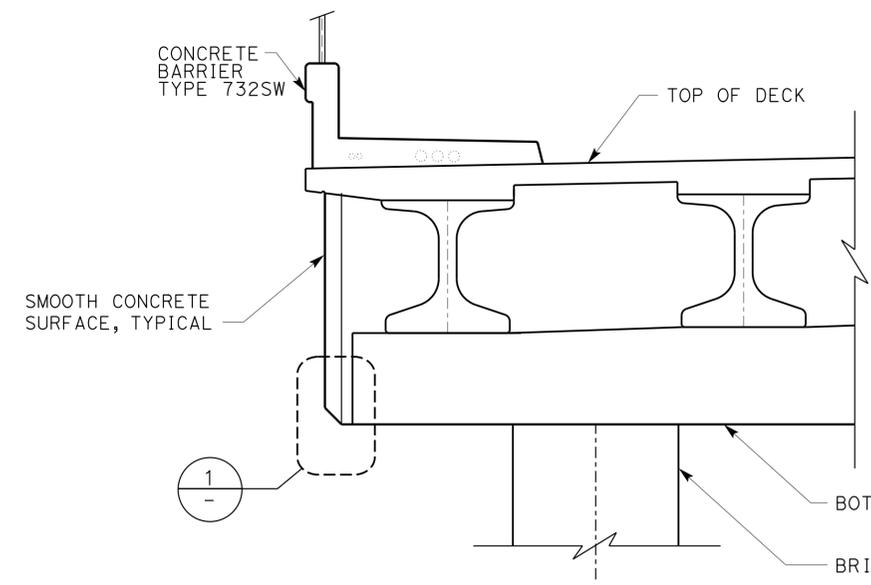
DIST	COUNTY	ROUTE	POST MILES TOTAL PROJECT	SHEET No.	TOTAL SHEETS
04	SoI	780	7.1	152	160



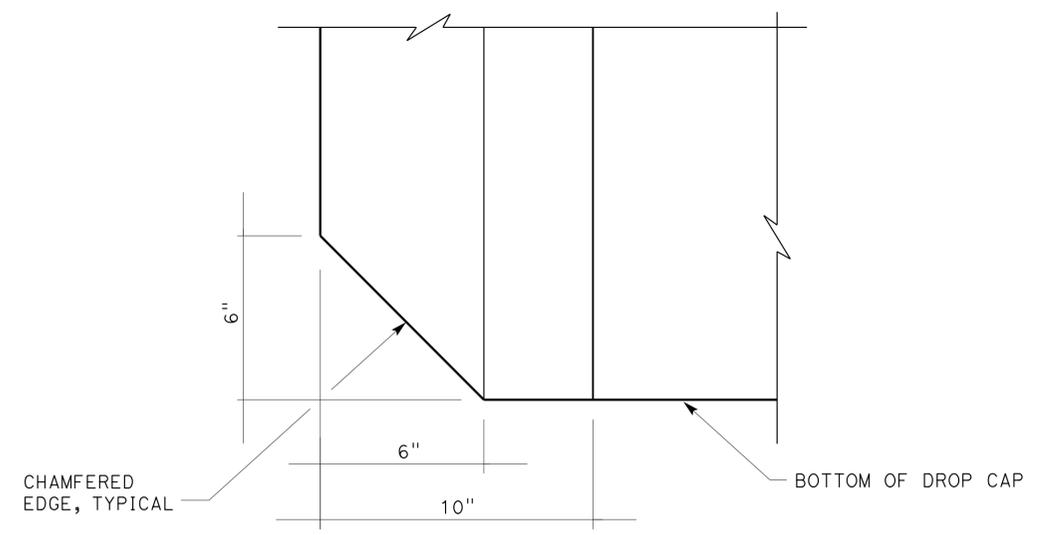
 8-3-16 DATE
 REGISTERED CIVIL ENGINEER
 5-18-16 PLANS APPROVAL DATE
The State of California or its officers or agents shall not be responsible for the accuracy or completeness of scanned copies of this plan sheet.

Caltrans
ACCELERATED BRIDGE CONSTRUCTION

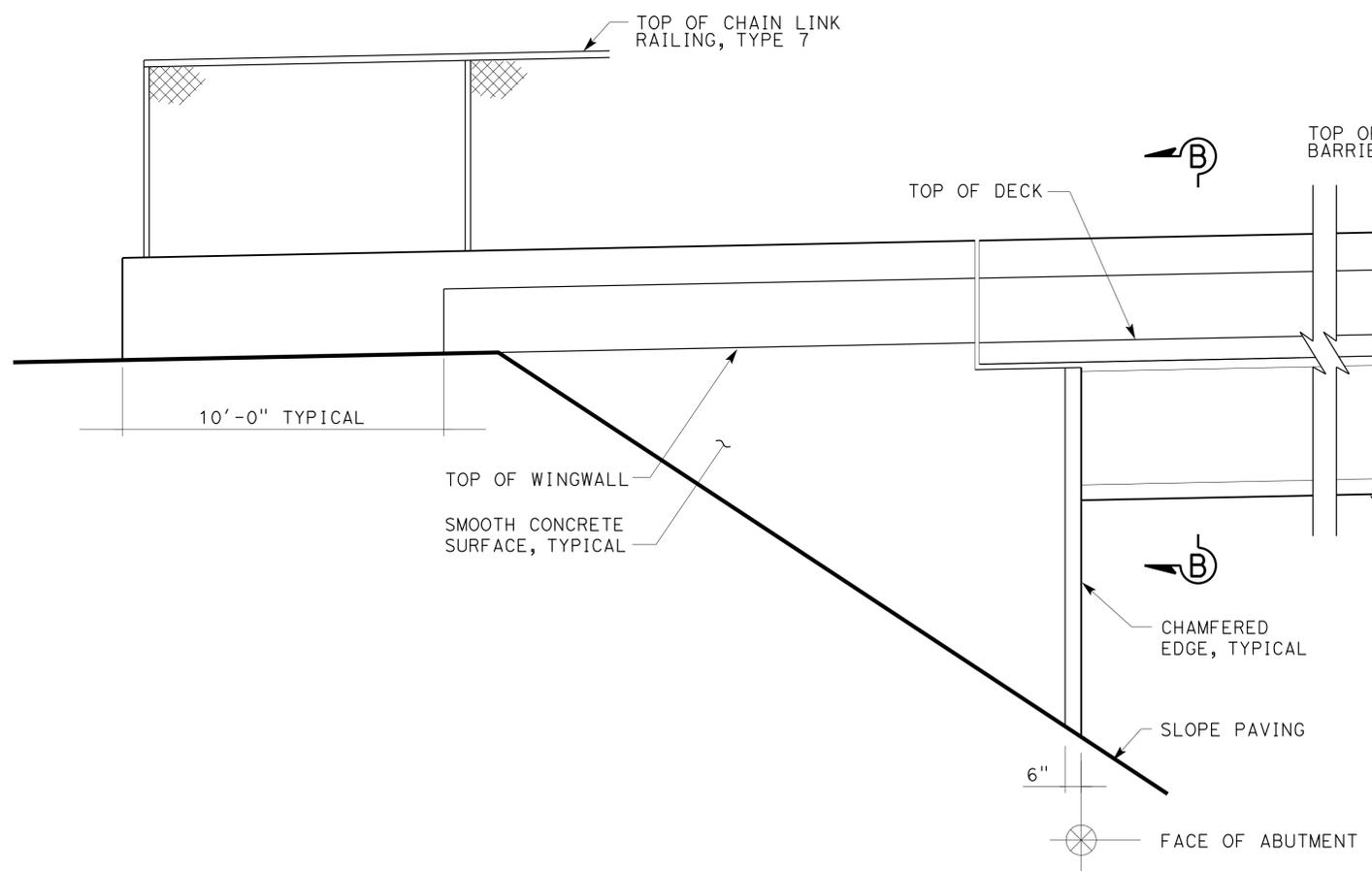
- NOTES:
1. THE CONTRACTOR SHALL VERIFY ALL CONTROLLING FIELD DIMENSIONS BEFORE ORDERING OR FABRICATING ANY MATERIAL.



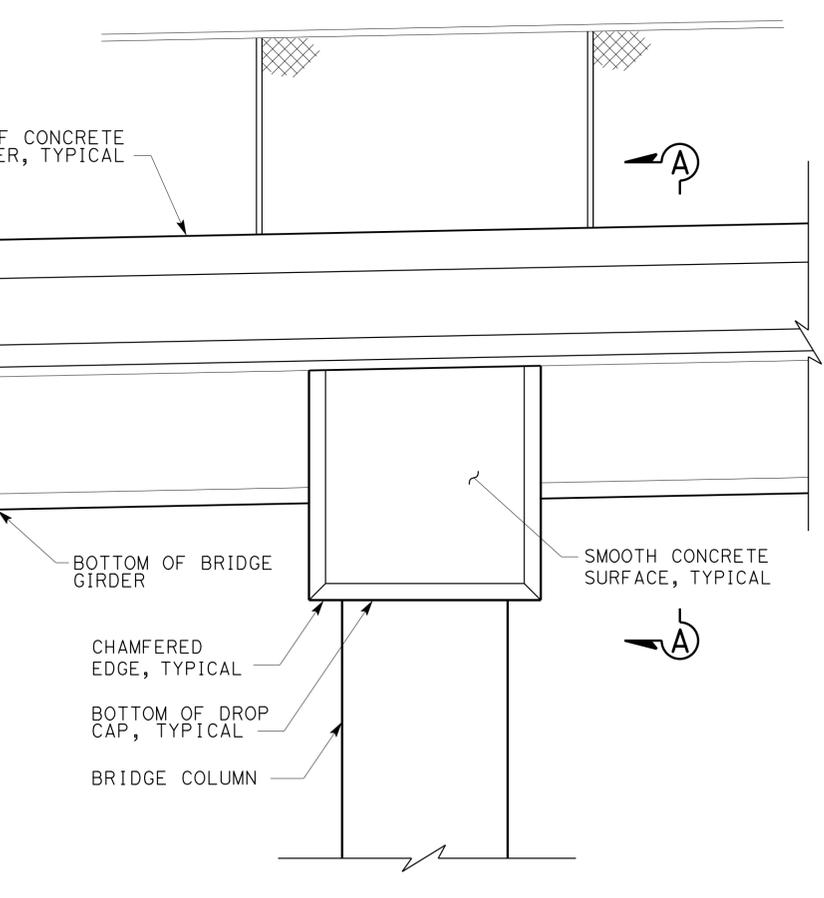
PARTIAL VIEW A-A
NO SCALE



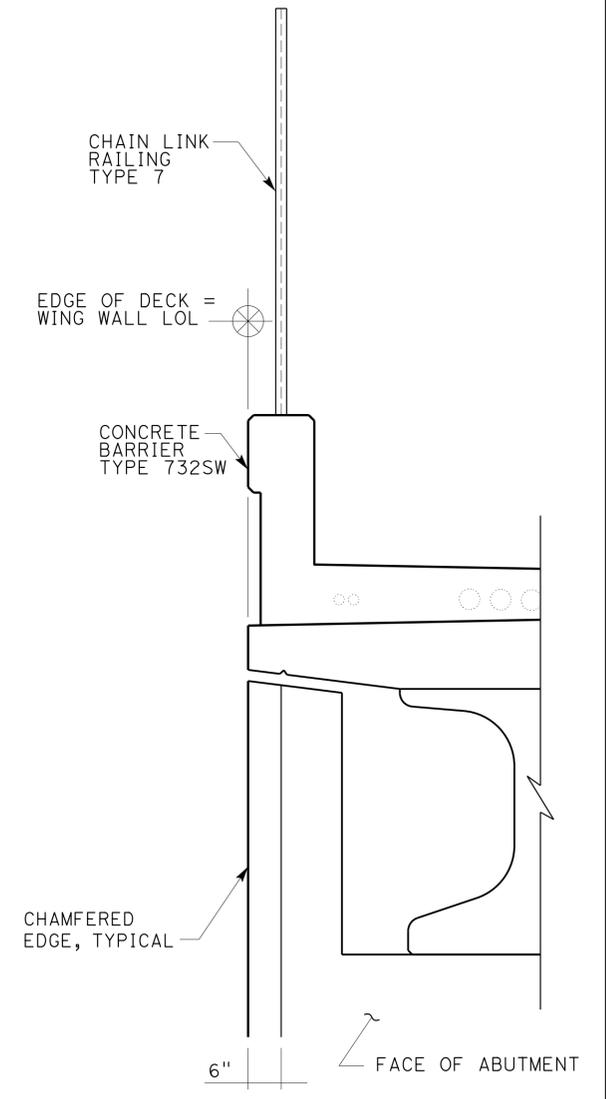
1 DETAIL
NO SCALE



TYPICAL WINGWALL ELEVATION
NO SCALE



TYPICAL BENT ELEVATION
NO SCALE



PARTIAL VIEW B-B
NO SCALE

DESIGN	BY Isaac Tasabia	CHECKED Isaias Yalan
DETAILS	BY Isaac Tasabia	CHECKED Isaias Yalan
QUANTITIES	BY Isaias Yalan	CHECKED Kimberly Mori

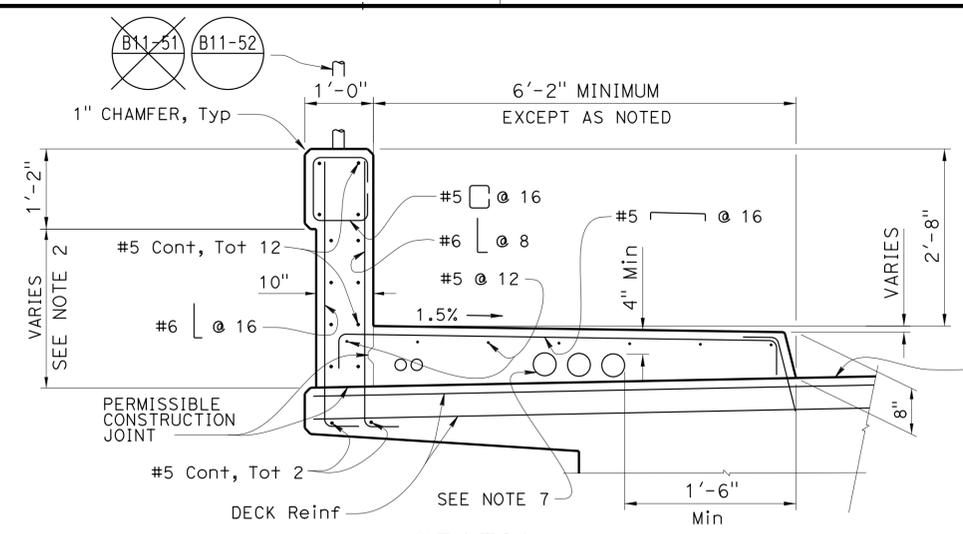
STATE OF CALIFORNIA
DEPARTMENT OF TRANSPORTATION

DIVISION OF ENGINEERING SERVICES
STRUCTURE DESIGN
DESIGN BRANCH 9

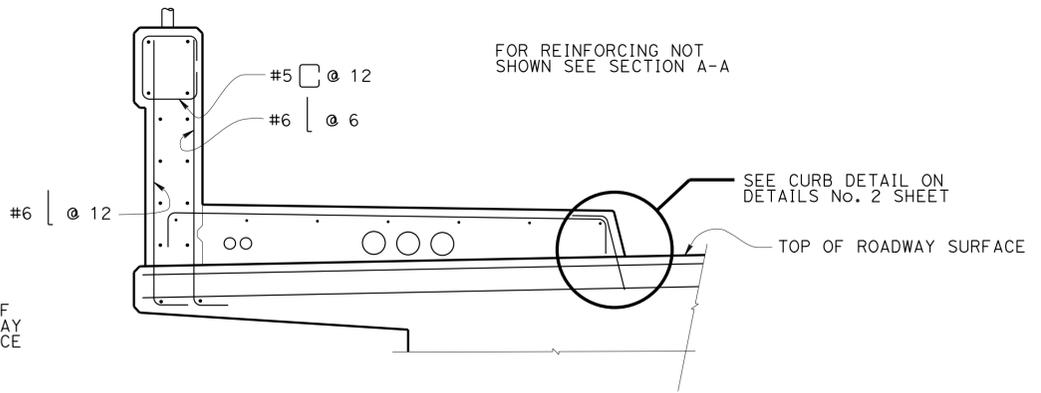
BRIDGE No.	23-0255
POST MILE	7.1

LAUREL St OVERCROSSING (REPLACE)
ARCHITECTURAL DETAILS

DIST	COUNTY	ROUTE	POST MILES TOTAL PROJECT	SHEET No.	TOTAL SHEETS
04	SoI	780	7.1	153	160
			8-3-16		
REGISTERED CIVIL ENGINEER			DATE		
			5-18-16		
			PLANS APPROVAL DATE		
<small>The State of California or its officers or agents shall not be responsible for the accuracy or completeness of scanned copies of this plan sheet.</small>					
<small>The Registered Civil Engineer for the project is responsible for the selection and proper application of the component design and any modifications shown.</small>					
ACCELERATED BRIDGE CONSTRUCTION					

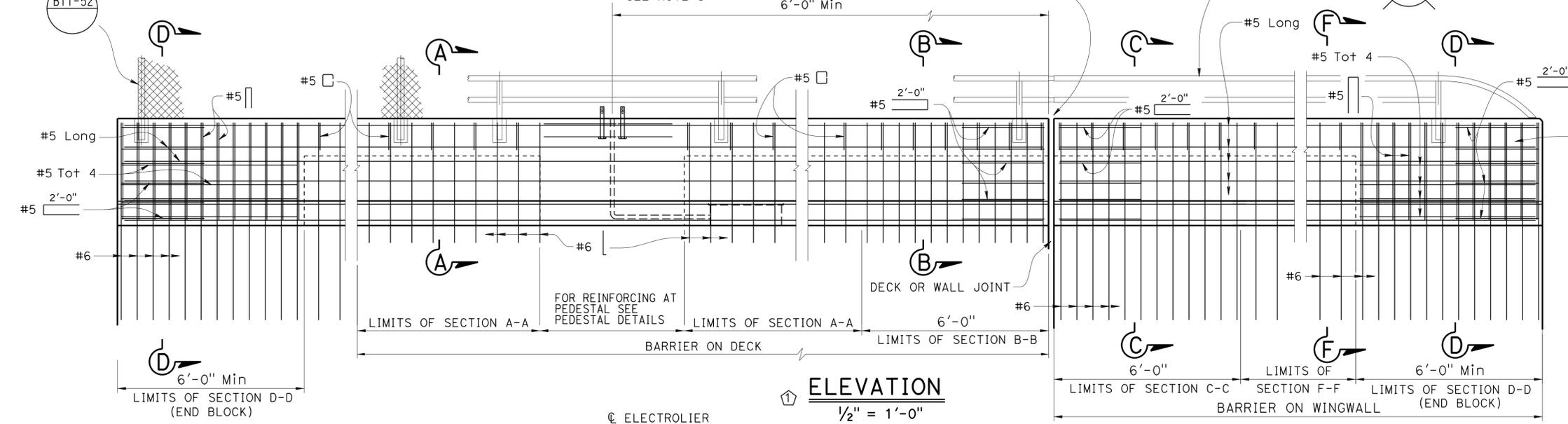


SECTION A-A
 $\frac{3}{4}'' = 1'-0''$
 TYPICAL SECTION ON DECK



SECTION B-B
 $\frac{3}{4}'' = 1'-0''$

FOR CHAIN LINK RAILING DETAILS SEE B11-52

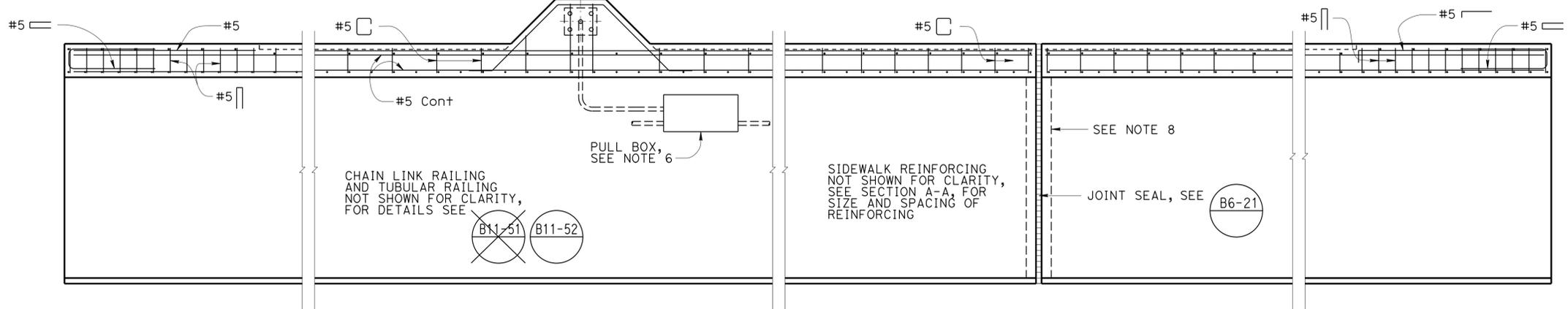


ELEVATION
 $\frac{1}{2}'' = 1'-0''$

FOR TYPICAL METAL RAILING CONNECTIONS NOT SHOWN, SEE A77-V1 A77-V2

NOTES:

- This barrier is to be used only for speeds of 45 MPH or less. For speeds greater than 45 MPH, pedestrians should be protected by a separation traffic barrier.
- Dimensions will vary with cross slope and surfacing thickness. See other sheets.
- Walls must be backfilled before curb and parapet is placed.
- Clearance to reinforcing steel in curb and railing is 2" except as noted. Longitudinal reinforcement to stop at all expansion joints.
- See Project Plans for electrolier locations and pull box type.
- For electrical details, see Standard Plans ES-9A, ES-9B, ES-9C, ES-9D, and ES-9E.
- Three - 4" round openings for future utilities must be located a minimum of 6" from face of barrier and a minimum of 1'-6" from the face of curb. Openings must be sealed at ends and extended 8" minimum past end of sidewalk if not used. Duct forms must be tied down. For exact number and placement of utility openings see project plans.
- See Project Plans for "Joint Armor For Pedestrian Walkways" details.
- Tubular hand railing and chain link railing continuous at pedestal.



PLAN
 $\frac{1}{2}'' = 1'-0''$

LAUREL St OVERCROSSING (REPLACE)
CONCRETE BARRIER TYPE 732SW
DETAILS No. 1

BRIDGE STANDARD DETAILS		
xs16-110-1	July 2016	<small>The components of the Bridge Standard Details have been prepared under the responsible charge of the Technical Owner, a registered civil engineer in the State of California.</small>
FILE NO.	APPROVAL DATE	

Detail Revised	FILE => 23-0255-q-asidewalk_dets01.dgn
	USERNAME => s141095
	TIME PLOTTED => 13:14
	DATE PLOTTED => 16-AUG-2016

STATE OF CALIFORNIA	DIVISION OF ENGINEERING SERVICES
DEPARTMENT OF TRANSPORTATION	
BRIDGE NO. 23-0255	POST MILE 7.1

DIST	COUNTY	ROUTE	POST MILES TOTAL PROJECT	SHEET No.	TOTAL SHEETS
04	Soi	780	7.1	154	160

8-3-16
DATE

REGISTERED CIVIL ENGINEER

5-18-16
PLANS APPROVAL DATE

ISAIAS D. YALAN
No. 68269
Exp. 9-30-17
CIVIL
STATE OF CALIFORNIA

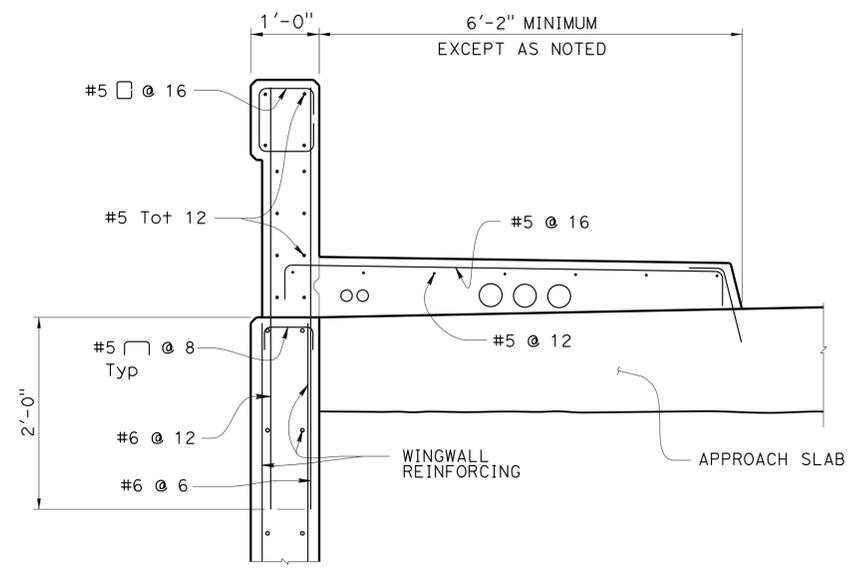
The State of California or its officers or agents shall not be responsible for the accuracy or completeness of scanned copies of this plan sheet.

The Registered Civil Engineer for the project is responsible for the selection and proper application of the component design and any modifications shown.

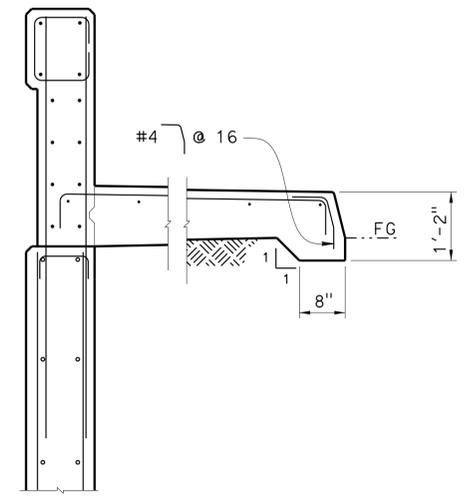
Caltrans
ACCELERATED BRIDGE CONSTRUCTION

RAILING AND FENCE NOT SHOWN FOR CLARITY

FOR DIMENSIONS AND REINFORCING NOT SHOWN SEE SECTION C-C (WITH APPROACH SLAB)

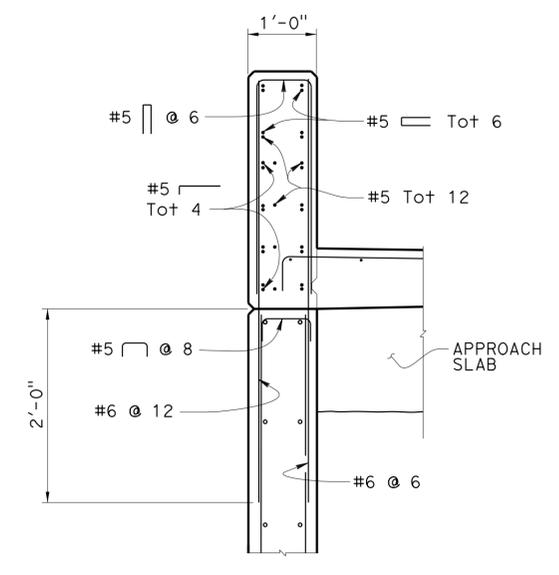


(WITH APPROACH SLAB)



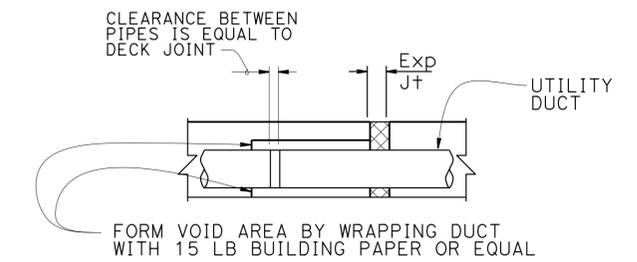
(WITHOUT APPROACH SLAB)

SECTION C-C
3/4" = 1'-0"

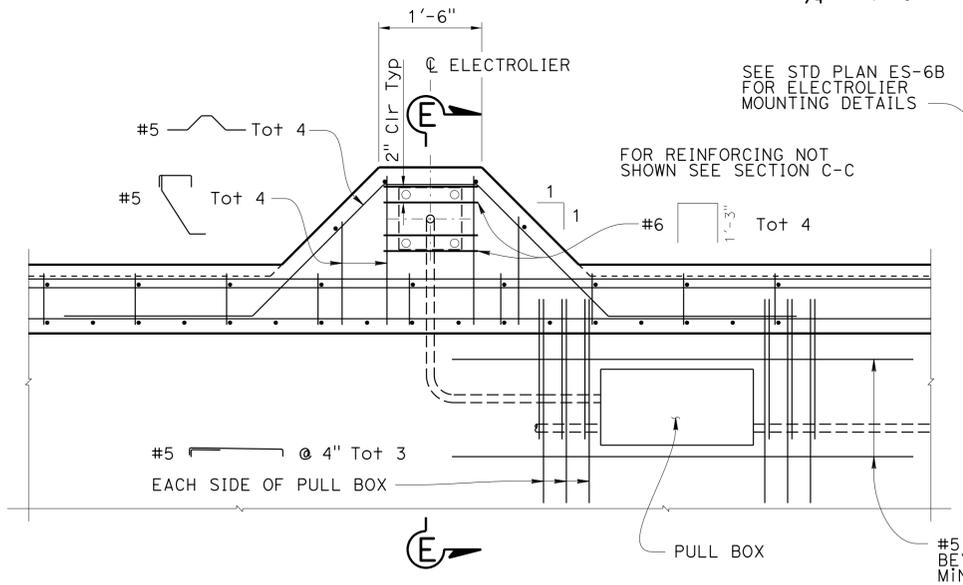


NOTE:
FOR SIDEWALK SEE SECTION C-C

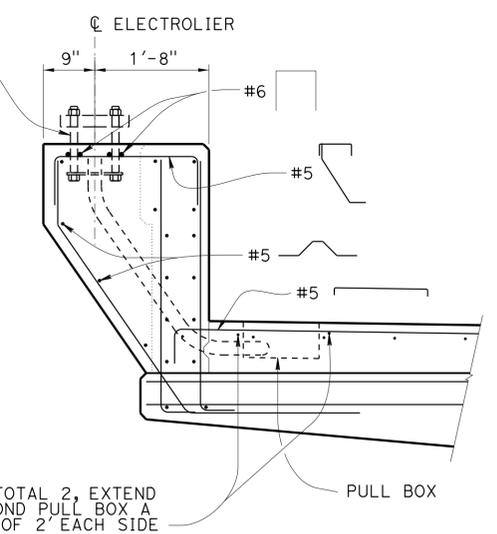
SECTION D-D
3/4" = 1'-0"



UTILITY DUCT EXPANSION JOINT
1 1/2" = 1'-0"



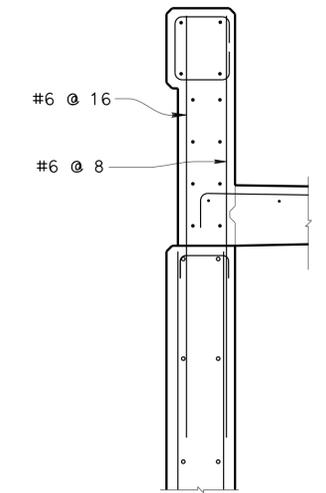
PEDESTAL PLAN



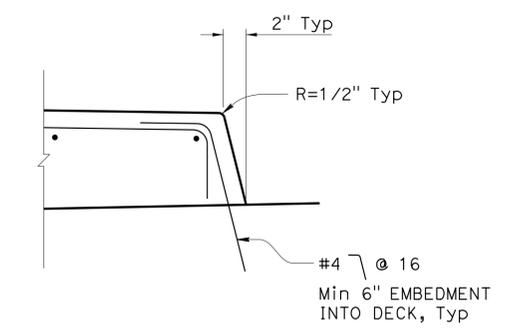
SECTION E-E

PEDESTAL DETAILS
3/4" = 1'-0"

FOR DIMENSIONS AND REINF NOT SHOWN SEE SECTION C-C



SECTION F-F
3/4" = 1'-0"



CURB DETAIL
1 1/2" = 1'-0"

LAUREL St OVERCROSSING (REPLACE)

CONCRETE BARRIER TYPE 732SW

DETAILS No. 2

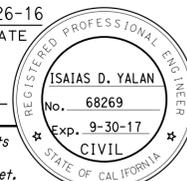
BRIDGE STANDARD DETAILS		
xs16-110-2 FILE NO.	July 2016 APPROVAL DATE	The components of the Bridge Standard Details have been prepared under the responsible charge of the Technical Owner, a registered civil engineer in the State of California.

STATE OF CALIFORNIA DEPARTMENT OF TRANSPORTATION	BRIDGE NO. 23-0255	POST MILE 7.1
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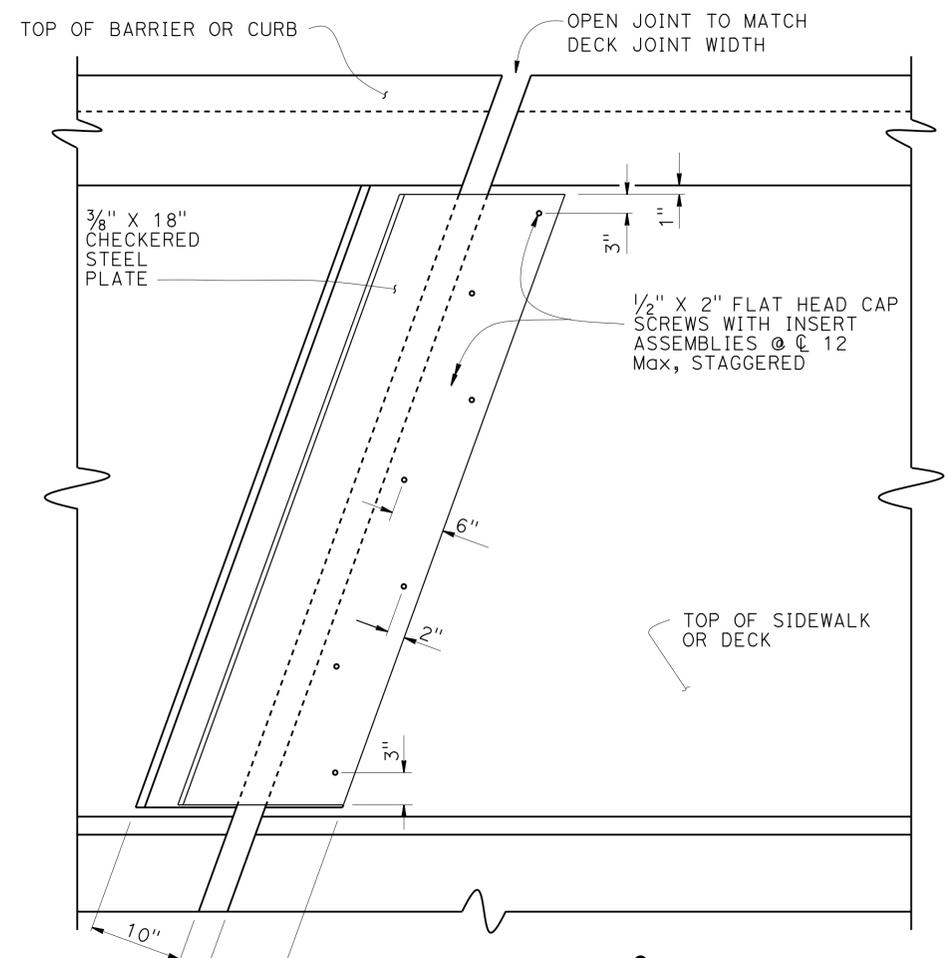
DIVISION OF ENGINEERING SERVICES	UNIT: PROJECT NUMBER & PHASE: 0412000477 1	CONTRACT NO.: 04-4G4504
----------------------------------	---	-------------------------

DISREGARD PRINTS BEARING EARLIER REVISION DATES	REVISION DATES	SHEET	OF
	6-18-16 7-1-16	26	32

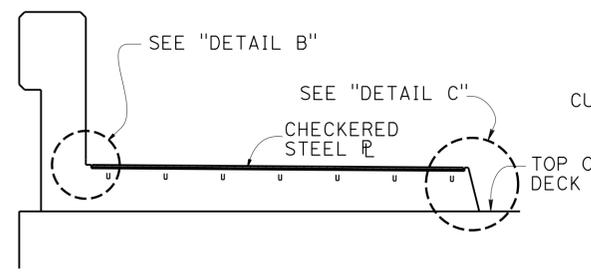
DIST	COUNTY	ROUTE	POST MILES TOTAL PROJECT	SHEET No.	TOTAL SHEETS
04	SoI	780	7.1	155	160


 4-26-16
 REGISTERED CIVIL ENGINEER DATE
 5-18-16
 PLANS APPROVAL DATE
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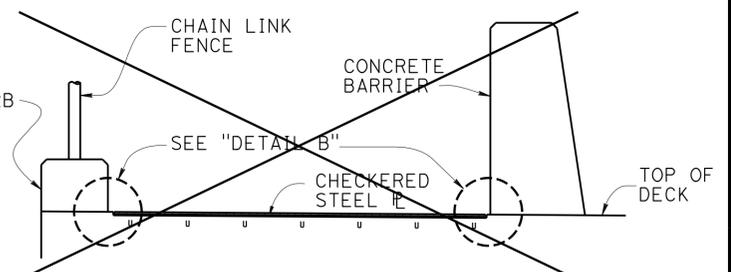
The components of this Bridge Standard Drawing have been prepared under the responsible charge of the Technical Owner, a registered civil engineer in the State of California. Refer to: <http://www.dot.ca.gov/hq/esc/techpubs/manual/bridgemanuals/bridge-standard-detail-sheets/index.html>. The selection and proper application of the component design and any modifications shown have been prepared under the responsible charge of the registered civil engineer for the project.



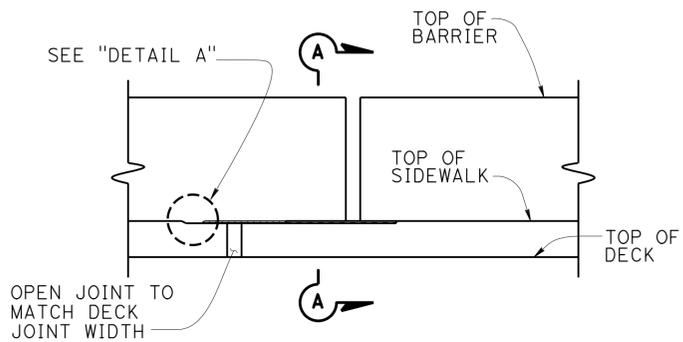
PLAN SKEW ≤ 20°
NO SCALE
← DIRECTION OF TRAFFIC



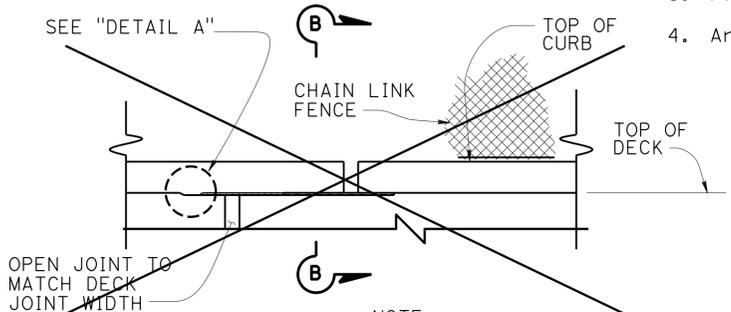
SECTION A-A
NO SCALE



SECTION B-B ⚠
NO SCALE

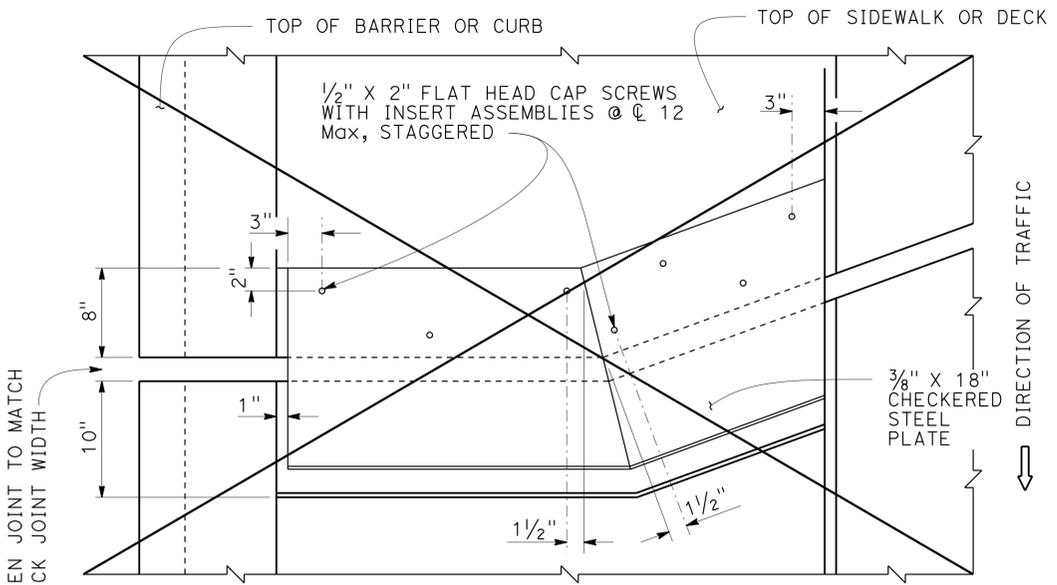


ELEVATION
NO SCALE

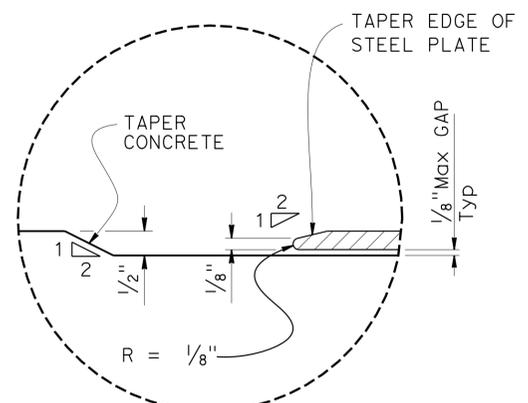


ELEVATION ⚠
NO SCALE

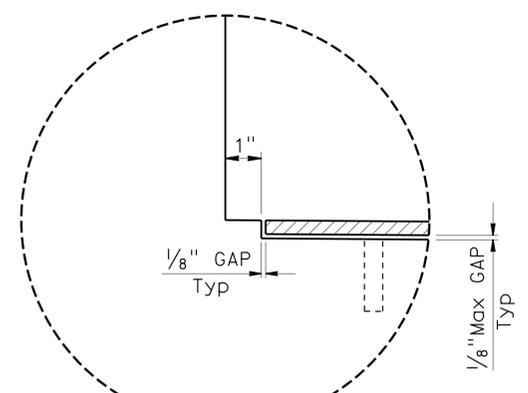
- NOTES:
- Utility openings and expansion joints not shown for clarity.
 - Recess concrete 1/2" for plates.
 - Plates to be galvanized.
 - Architectural treatment not shown



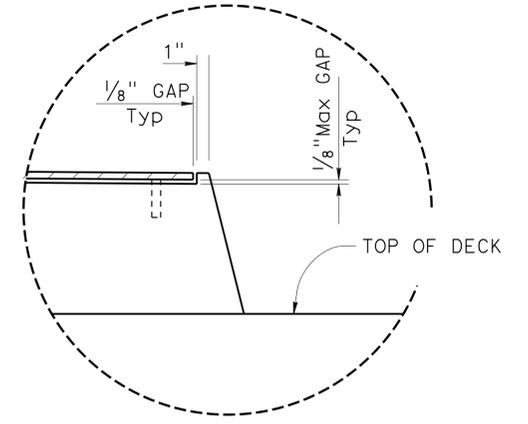
PLAN SKEW > 20° ⚠
NO SCALE



DETAIL A
NO SCALE



DETAIL B
NO SCALE



DETAIL C
NO SCALE

STANDARD DRAWING		⚠ DETAIL NOT APPLICABLE
FILE NO. xs8-050	APPROVAL DATE July 2014	

STATE OF CALIFORNIA DEPARTMENT OF TRANSPORTATION		BRIDGE No. 23-0255 POST MILE 7.1	LAUREL St OVERCROSSING (REPLACE) JOINT ARMOR FOR PEDESTRIAN WALKWAYS
---	--	-------------------------------------	---

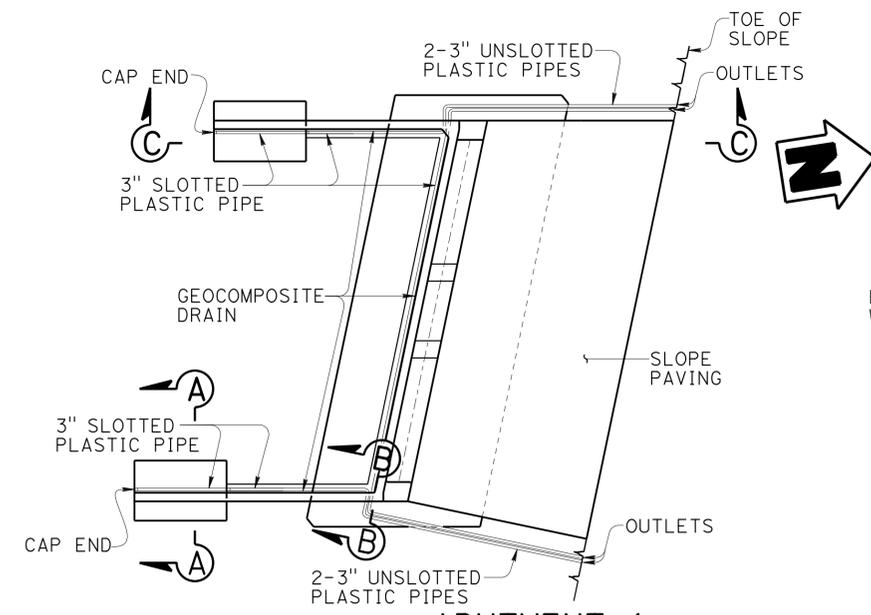
PROJECT NUMBER & PHASE: 0412000477 1	CONTRACT No.: 04-4G4504
--------------------------------------	-------------------------

DISREGARD PRINTS BEARING EARLIER REVISION DATES	REVISION DATES	SHEET 27 OF 32
	7-21-14 3-8-16	

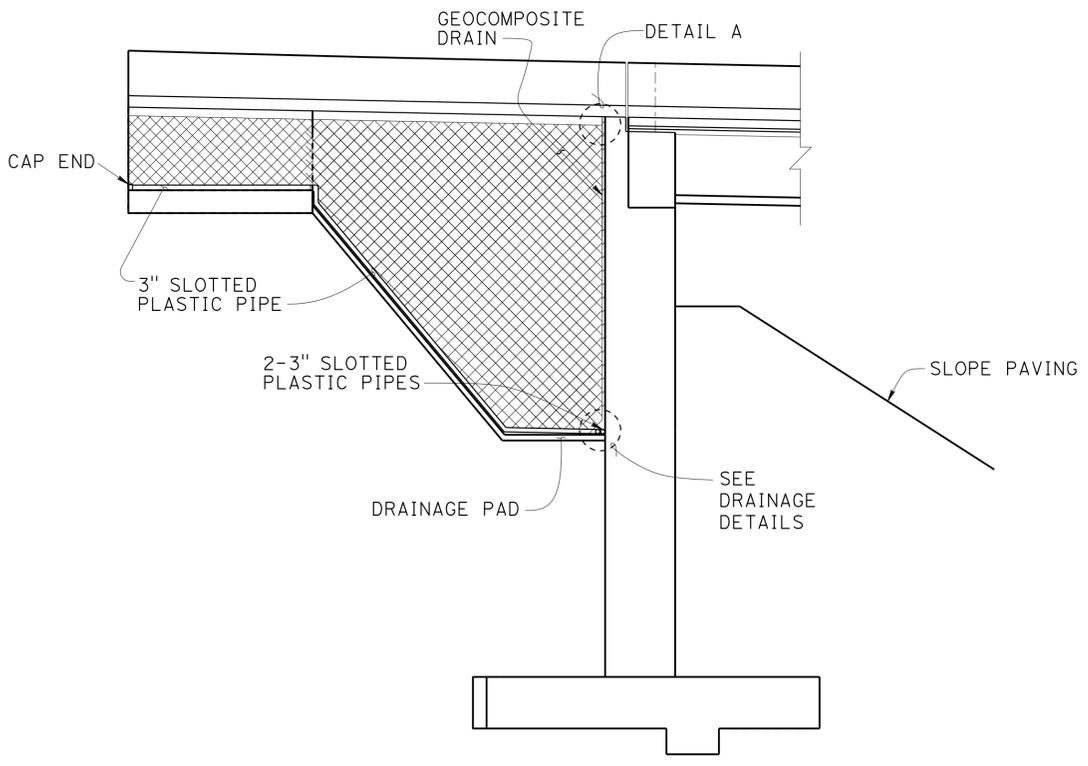
Dist	COUNTY	ROUTE	POST MILES TOTAL PROJECT	SHEET No.	TOTAL SHEETS
04	SoI	780	7.1	156	160

REGISTERED CIVIL ENGINEER DATE 8-3-16
 ISAIAS D. YALAN No. 68269 Exp. 9-30-17 CIVIL
 PLANS APPROVAL DATE 5-18-16
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Caltrans
 ACCELERATED BRIDGE CONSTRUCTION

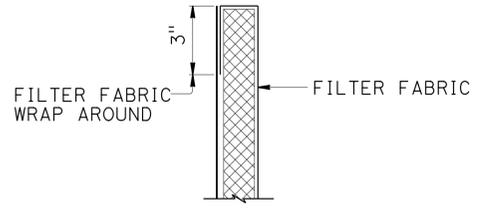


ABUTMENT 1
PLAN
 $\frac{3}{32}'' = 1'-0''$

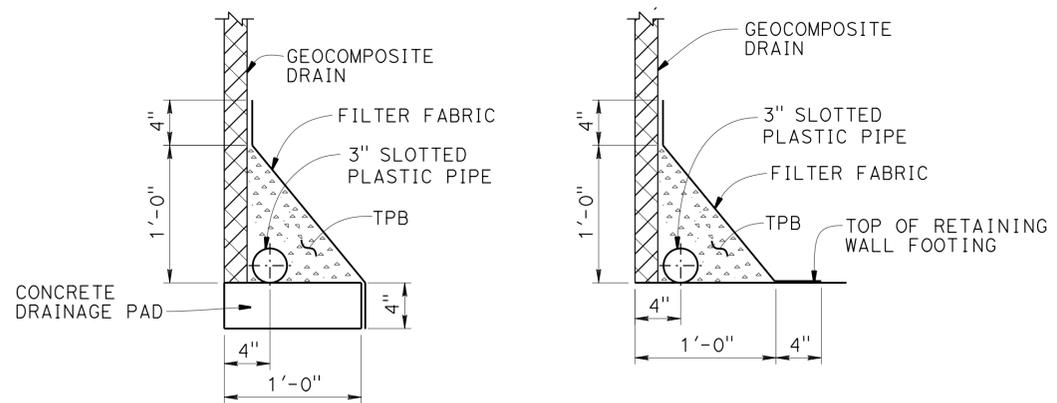


SECTION C-C
 $\frac{3}{16}'' = 1'-0''$

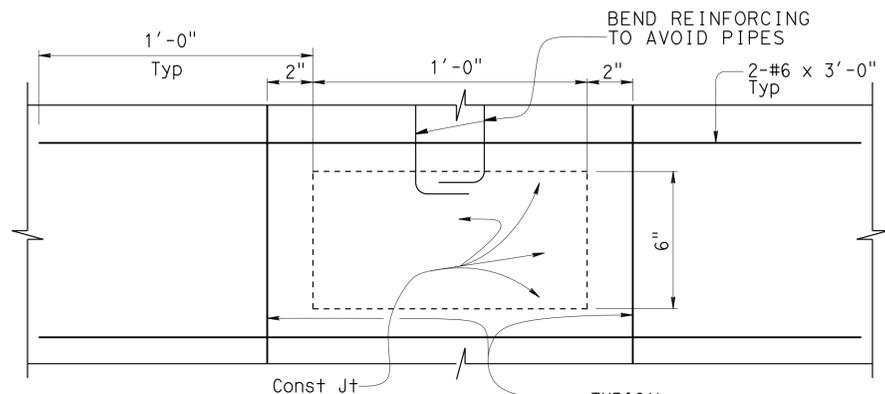
- NOTE:
1. Abutment 1 shown, Abutment 3 similar.
 2. Bends and junctions in 3" plastic pipe are 30" radius minimum



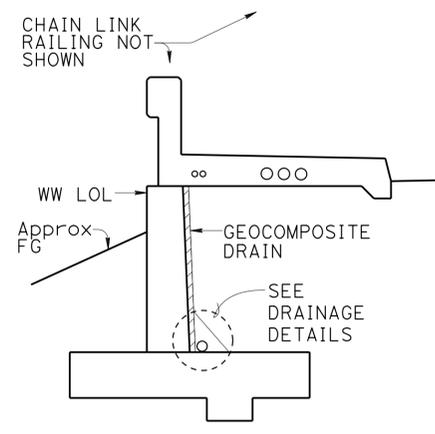
DETAIL A
 $3'' = 1'-0''$



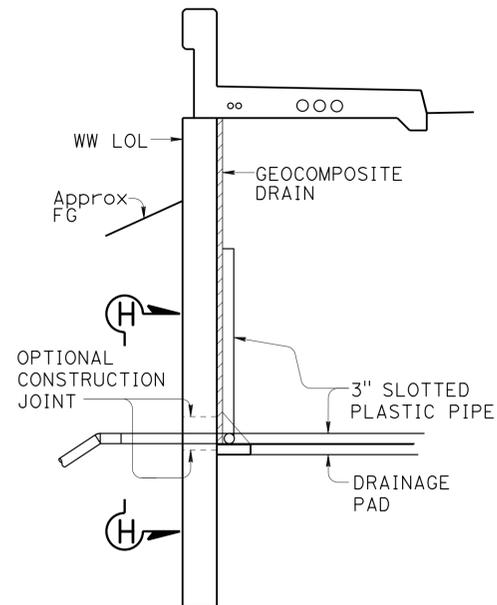
DRAINAGE PAD
FOOTING
DRAINAGE DETAILS
 $\frac{1}{2}'' = 1'-0''$



VIEW H-H
 $3'' = 1'-0''$



SECTION A-A
 $\frac{3}{8}'' = 1'-0''$



SECTION B-B
 $\frac{3}{8}'' = 1'-0''$

DESIGN	BY Isaias Yalan	CHECKED Phil Lutz
DETAILS	BY Tim Fairall	CHECKED Phil Lutz
QUANTITIES	BY Isaias Yalan	CHECKED Phil Lutz

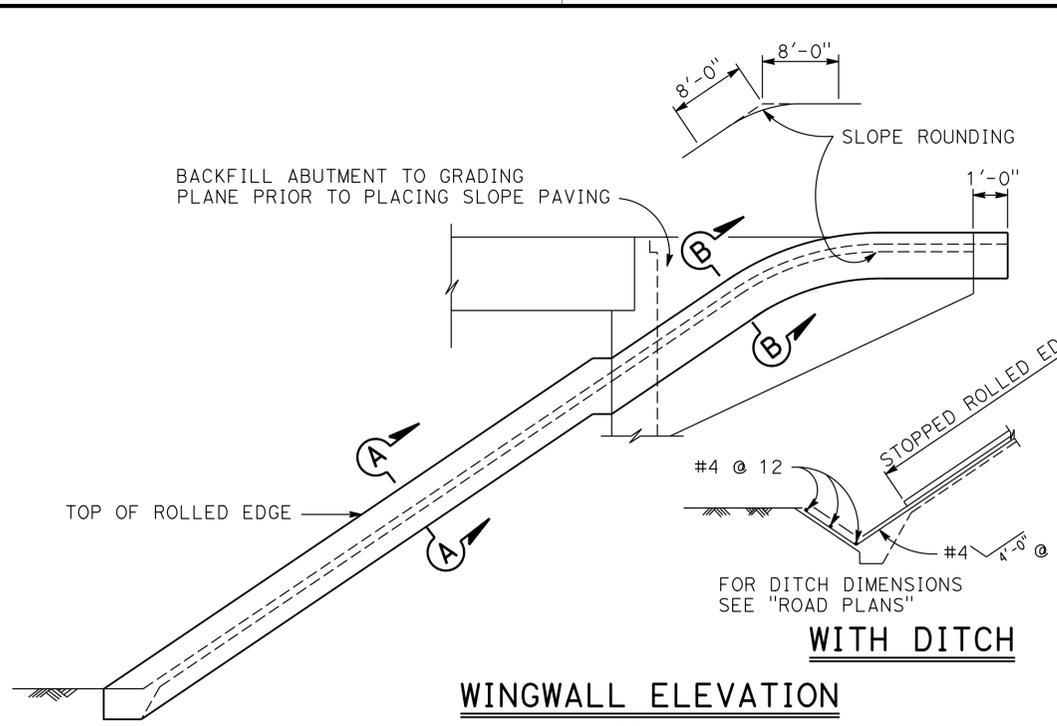
STATE OF CALIFORNIA
 DEPARTMENT OF TRANSPORTATION

DIVISION OF ENGINEERING SERVICES
 STRUCTURE DESIGN
DESIGN BRANCH 9

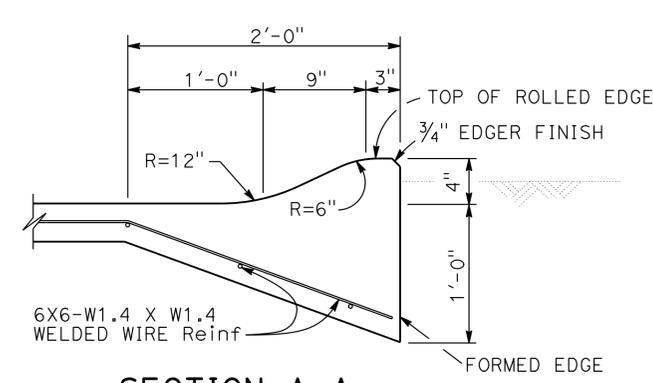
BRIDGE No.	23-0255
POST MILE	7.1

LAUREL St OVERCROSSING (REPLACE)
DRAINAGE DETAILS

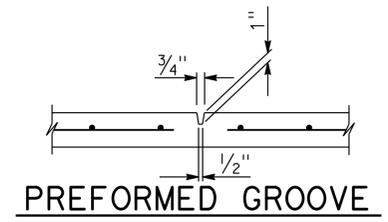
Dist	COUNTY	ROUTE	POST MILES TOTAL PROJECT	SHEET No.	TOTAL SHEETS
04	Soi	780	7.1	157	160
			4-26-16	DATE	
REGISTERED CIVIL ENGINEER			5-18-16	PLANS APPROVAL DATE	
The State of California or its officers or agents shall not be responsible for the accuracy or completeness of scanned copies of this plan sheet.					
 ACCELERATED BRIDGE CONSTRUCTION					



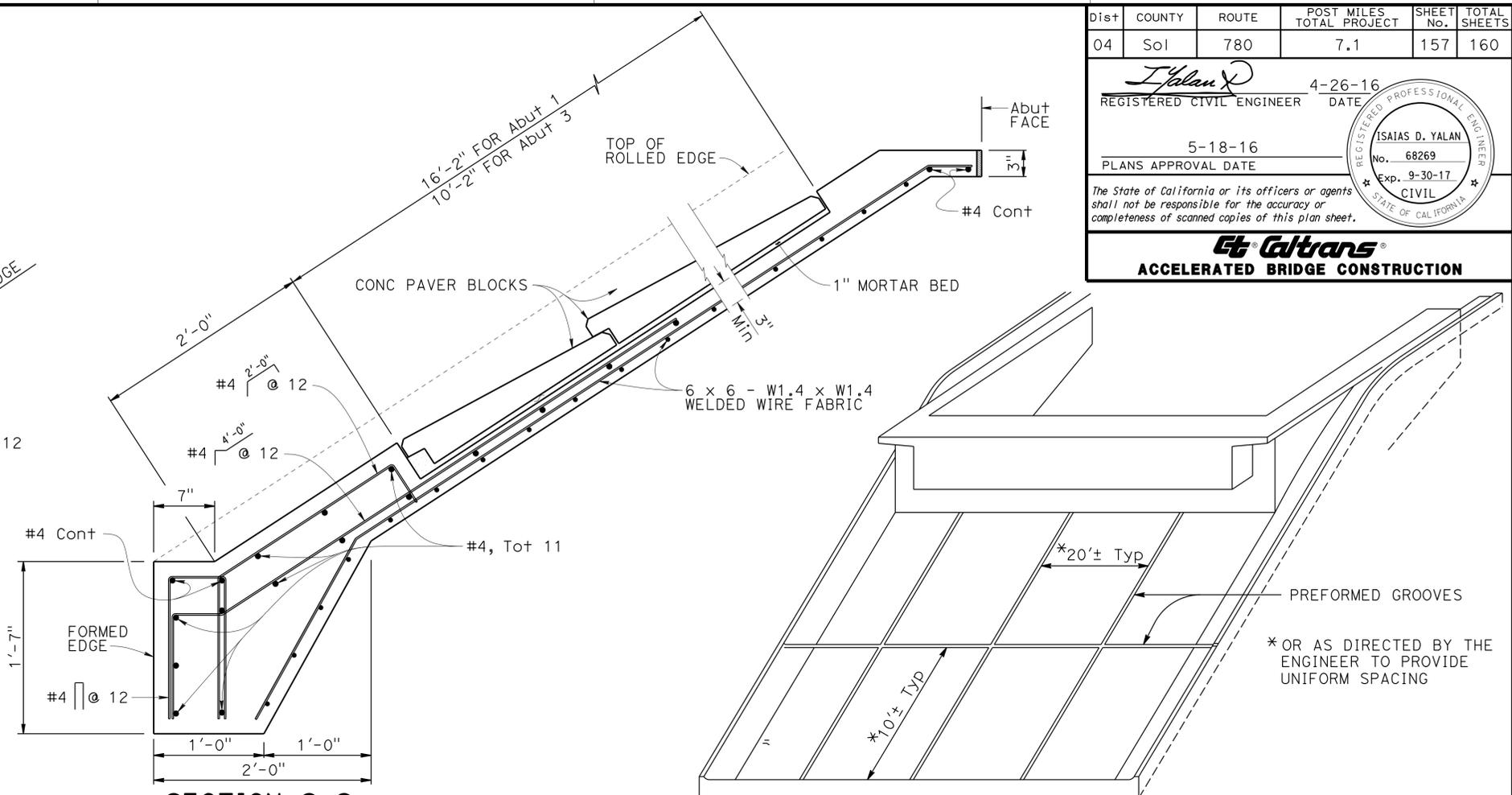
WINGWALL ELEVATION
NO SCALE



SECTION A-A
NO SCALE

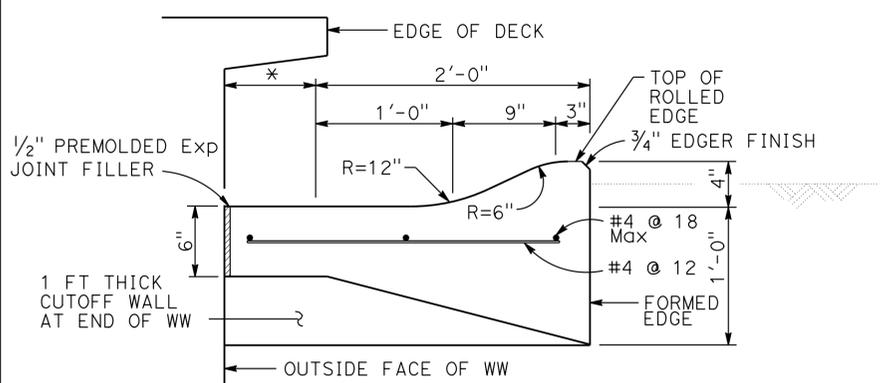


PREFORMED GROOVE

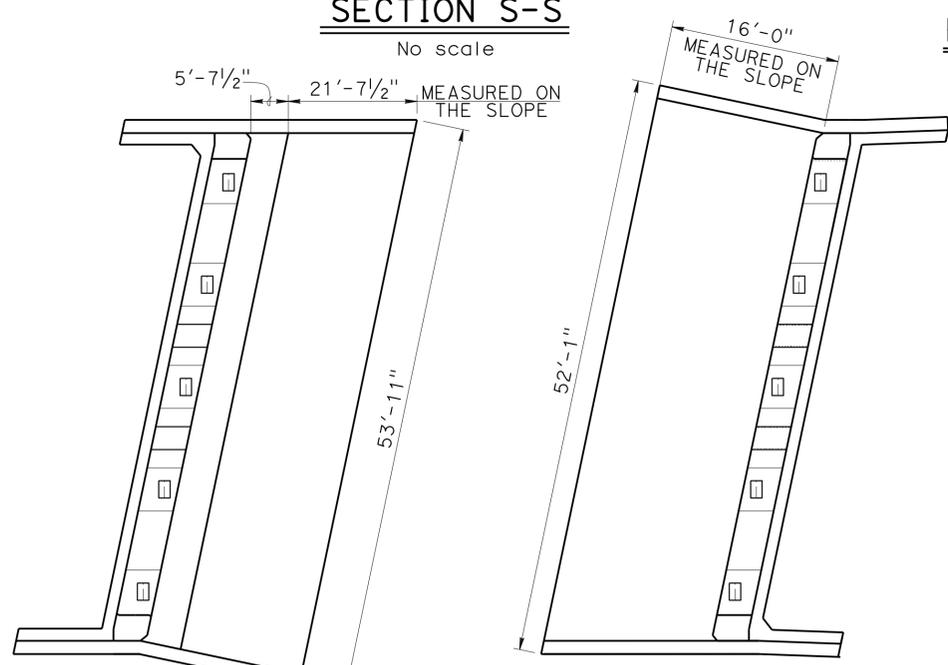


SECTION S-S
No scale

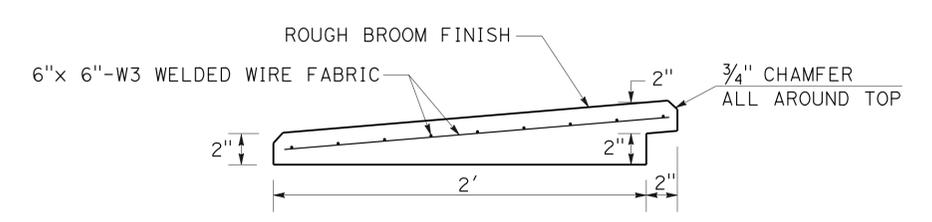
PICTORIAL VIEW OF TYPICAL INSTALLATION



SECTION B-B
NO SCALE



ABUTMENT 1 **ABUTMENT 3**
LIMITS OF SLOPE PAVING
No Scale



PRECAST CONCRETE PAVER DETAIL
No Scale

PRECAST CONCRETE PAVER TO BE 4'-0" LONG AND CUT AS REQUIRED.

* THIS DIMENSION BECOMES ZERO WHEN EDGE OF DECK IS AT OUTSIDE FACE OF WW

STRUCTURES DESIGN DETAIL SHEET (ENGLISH) (REV. 09-01-10)	DESIGN	BY Isaias Yalan	CHECKED Rosa Candiotti	STATE OF CALIFORNIA DEPARTMENT OF TRANSPORTATION	DIVISION OF ENGINEERING SERVICES STRUCTURE DESIGN DESIGN BRANCH 9	BRIDGE No.	LAUREL St OVERCROSSING (REPLACE)	
	DETAILS	BY David Elliott	CHECKED Rosa Candiotti			23-0255		SLOPE PAVING-FULL SLOPE
	QUANTITIES	BY Isaias Yalan	CHECKED Rosa Candiotti			7.1		
ORIGINAL SCALE IN INCHES FOR REDUCED PLANS				UNIT: 3594	PROJECT NUMBER & PHASE: 0412000477 1	CONTRACT No.: 04-4G4504	DISREGARD PRINTS BEARING EARLIER REVISION DATES	
0 1 2 3				3-23-16		SHEET 29	OF 32	

DIST	COUNTY	ROUTE	POST MILES TOTAL PROJECT	SHEET No	TOTAL SHEETS
04	So1	780	7.1	158	160

07-13-15
REGISTERED CIVIL ENGINEER

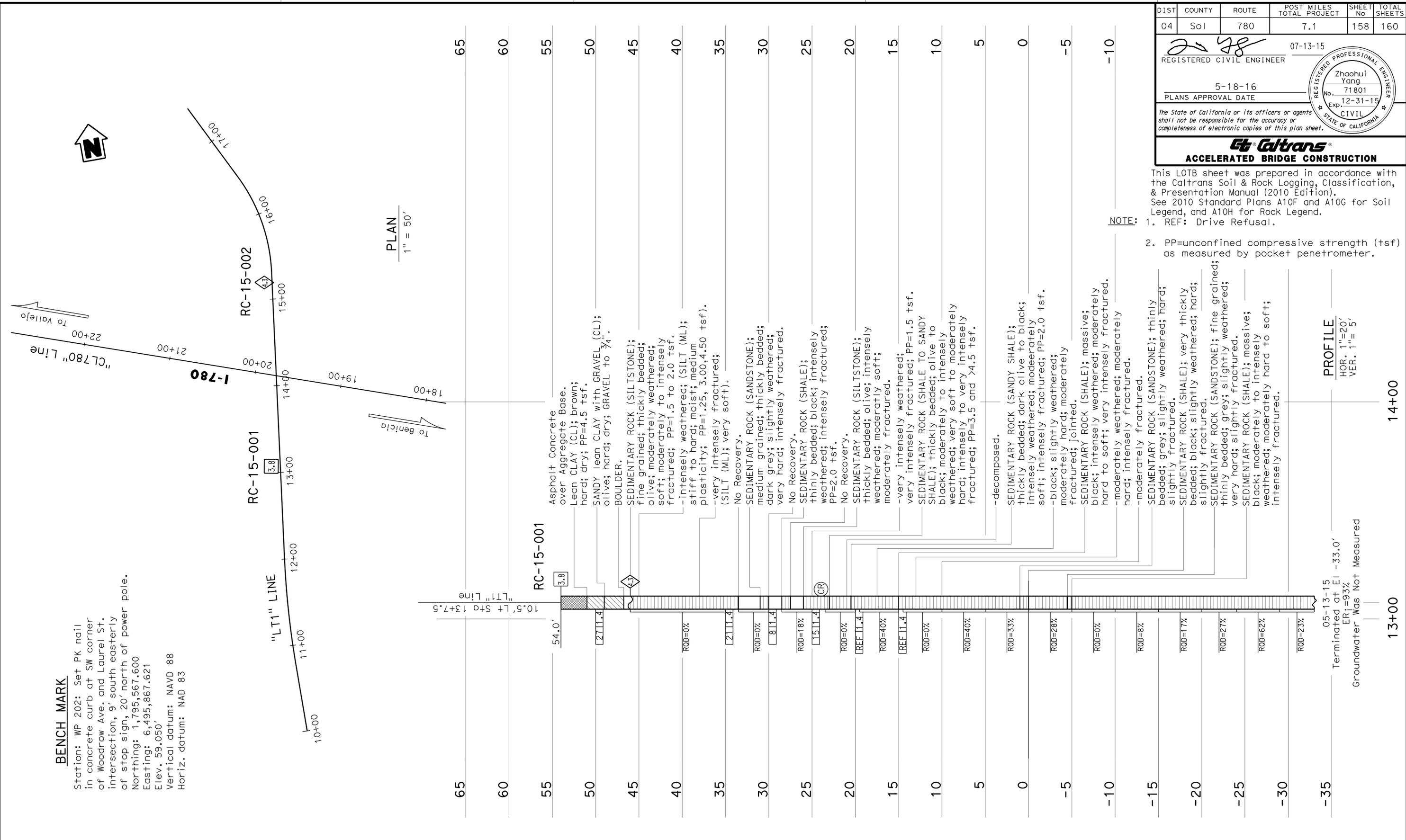
5-18-16
PLANS APPROVAL DATE

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Caltrans
ACCELERATED BRIDGE CONSTRUCTION

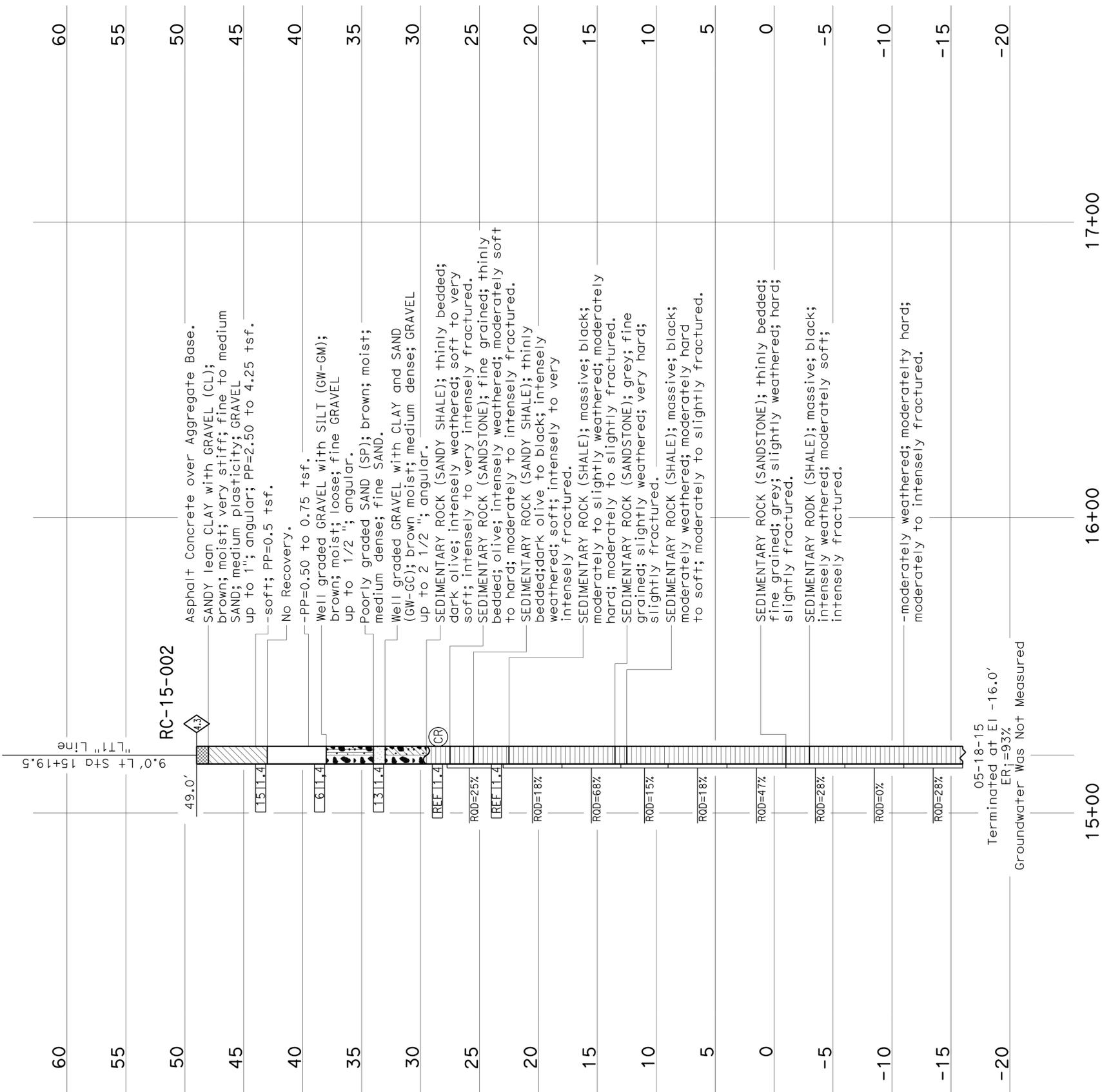
This LOTB sheet was prepared in accordance with the Caltrans Soil & Rock Logging, Classification, & Presentation Manual (2010 Edition). See 2010 Standard Plans A10F and A10G for Soil Legend, and A10H for Rock Legend.

NOTE: 1. REF: Drive Refusal.
2. PP=unconfined compressive strength (tsf) as measured by pocket penetrometer.



ENGINEERING SERVICES		GEOTECHNICAL SERVICES		STATE OF CALIFORNIA		GEOTECHNICAL SERVICES		BRIDGE No.		LAUREL St OVERCROSSING (REPLACE)	
FUNCTIONAL SUPERVISOR		DRAWN BY: M. Reynolds 06/15		DEPARTMENT OF TRANSPORTATION		OFFICE OF GEOTECHNICAL DESIGN - WEST		23-0255		LOG OF TEST BORINGS 1 of 2	
NAME: H. Nikouei		CHECKED BY: S. Awad		FIELD INVESTIGATION BY: S. Yang				POST MILES		REVISION DATES	
								7.1		02-08-16	
065 CIVIL LOG OF TEST BORINGS SHEET		ORIGINAL SCALE IN INCHES FOR REDUCED PLANS		UNIT: 3660		PROJECT NUMBER & PHASE: 04120004771		CONTRACT No.: 04-4G4504		SHEET OF	
										30 32	

(For Boring Location See Plan, LOTB Sheet 1 of 2)



DIST	COUNTY	ROUTE	POST MILES TOTAL PROJECT	SHEET No	TOTAL SHEETS
04	SoI	780	7.1	159	160

07-13-15
REGISTERED CIVIL ENGINEER

5-18-16
PLANS APPROVAL DATE

Zhaohui Yang
No. 71801
Exp. 12-31-15
CIVIL
STATE OF CALIFORNIA

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

Caltrans
ACCELERATED BRIDGE CONSTRUCTION

This LOTB sheet was prepared in accordance with the Caltrans Soil & Rock Logging, Classification, & Presentation Manual (2010 Edition). See 2010 Standard Plans A10F and A10G for Soil Legend, and A10H for Rock Legend.

- NOTE:**
1. REF: Drive Refusal.
 2. PP=unconfined compressive strength (tsf) as measured by pocket penetrometer.

PROFILE
HOR. 1"=20'
VER. 1"= 5'

ENGINEERING SERVICES		GEOTECHNICAL SERVICES		STATE OF CALIFORNIA		GEOTECHNICAL SERVICES		BRIDGE No.		LAUREL St OVERCROSSING (REPLACE)	
FUNCTIONAL SUPERVISOR		DRAWN BY: M. Reynolds 06/15		FIELD INVESTIGATION BY: S. Yang		OFFICE OF GEOTECHNICAL DESIGN - WEST		23-0255		LOG OF TEST BORINGS 2 of 2	
NAME: N. Nikouï		CHECKED BY: S. Awad				DEPARTMENT OF TRANSPORTATION		POST MILES			
								7.1			
06S CIVIL LOG OF TEST BORINGS SHEET		ORIGINAL SCALE IN INCHES FOR REDUCED PLANS		UNIT: 3660		PROJECT NUMBER & PHASE: 04120004771		CONTRACT No.: 04-4G4504		DISREGARD PRINTS BEARING EARLIER REVISION DATES	
										REVISION DATES	
										SHEET OF	
										31 32	

680
 Mar 11 1957

BRIDGE DEPARTMENT

AS BUILT PLANS
 Contract No. SB-10766
 Date Completed _____
 Document No. 0000914

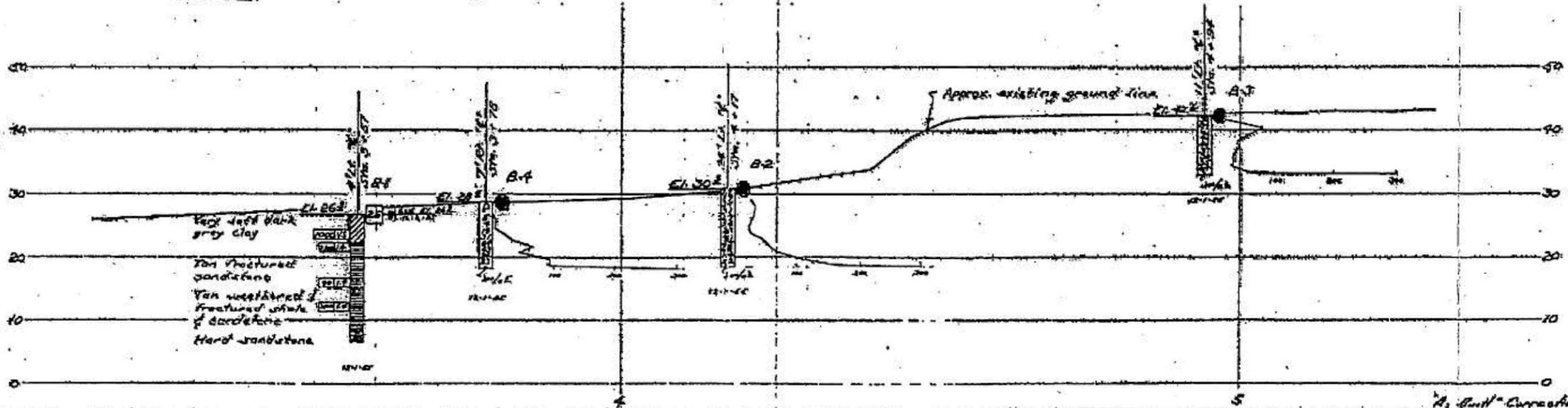
DIVISION OF ENGINEERING SERVICES - GEOTECHNICAL SERVICES
 As-Built Log of Test Borings sheet is considered an informational document only. As such, the State of California registration seal with signature, license number and registration certificate expiration date confirm that this is a true and accurate copy of the original document. This drawing is available and presented only for the convenience of any bidder, contractor or other interested party.

DIST.	COUNTY	ROUTE	POST MILES-TOTAL PROJECT	Sheet No.	Total Sheets
04	Soi	780	7.1	160	160

REGISTERED CIVIL ENGINEER
 DATE 04-18-2016
LAUREL St OVERCROSSING (REPLACE)
AS-BUILT LOG OF TEST BORINGS
 NOTE: A COPY OF THIS LOG OF TEST BORINGS IS AVAILABLE AT OFFICE OF STRUCTURE MAINTENANCE AND INVESTIGATIONS, SACRAMENTO, CALIFORNIA
 UNIT: 3594
 PROJECT NUMBER & PHASE: 04120004771
 BRIDGE No. Sheet of
 23-0255 32 32



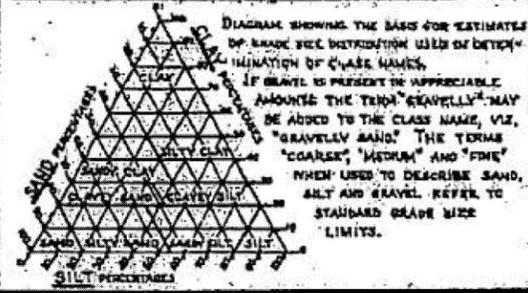
BM "A" - Head of galv. roofing nail in exposed eucalyptus root.
 107' 11" Sta. 5+01 "E Laurel St. OC."
 Elev. 43.98
 BM "B" - RR Spike in RR
 131' Rt. Sta. 4+08 "E Laurel St. OC."
 Elev. 37.458



AS BUILT
 CORRECTIONS BY _____
 CONTRACT NO. _____

As Built Correction 10 Apr 1958 P.M.H.

CLASSIFICATION OF MATERIAL BASED ON STANDARD GRAIN SIZE LIMITS



LEGEND OF EARTH MATERIALS

- GRAVEL
- SAND
- SILT
- CLAY
- SANDY CLAY OR CLAYEY SAND
- SANDY SILT OR SILTY SAND
- SILTY CLAY OR CLAYEY SILT
- PEAT AND/OR ORGANIC MATTER
- FILL MATERIAL
- IGNEOUS ROCK
- SEDIMENTARY ROCK
- METAMORPHIC ROCK

LEGEND OF BORING OPERATIONS

- PLAN OF ANY BORING
- PENETROMETER
- 2 1/2" CONE PENETROMETER
- SAMPLER BORING (DRY)
- ROTARY BORING (WET)
- AUGER BORING (DRY)
- JET BORING
- CORE BORING
- TEST PIT

NOTES

The contractor's attention is directed to Section 2, Article (c) of the Standard Specifications and to the Special Provisions accompanying this set of plans. Classification of work required on sheets on this sheet is based upon field inspection and is not to be construed as implying mechanical analysis.

LAUREL STREET OVERCROSSING
LOG OF TEST BORINGS

SCALE 1" = 10' BRIDGE 23-119 PAGE 23 DRAWING C-4798-B

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