

Dist	COUNTY	ROUTE	POST MILES TOTAL PROJECT	SHEET No.	TOTAL SHEETS
05	SLO, Mon	101	63.2/R69.3, RO.0/R1.9	601	858

REGISTERED CIVIL ENGINEER
 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:

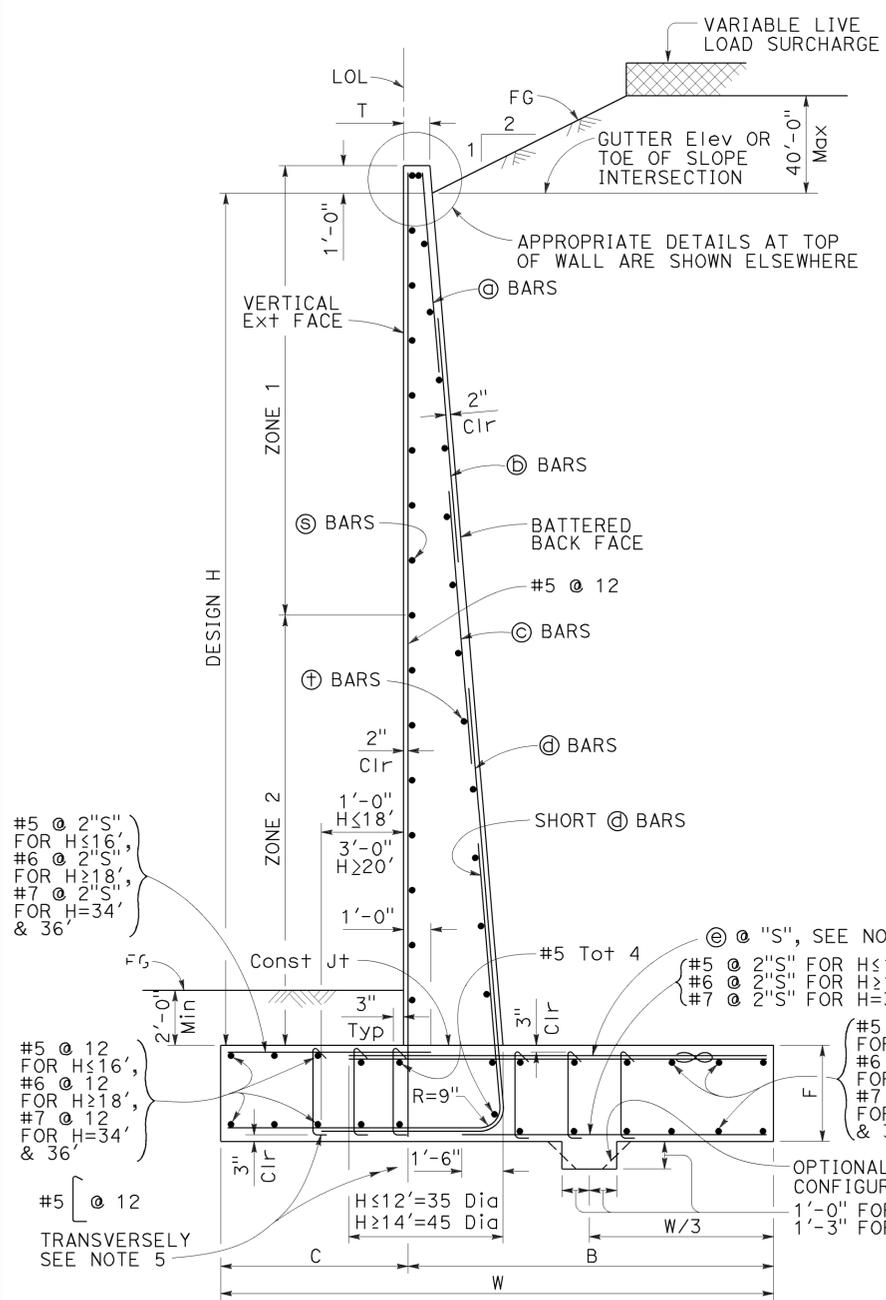
Design H may be exceeded by 6" before going to the next size. Special footing design is required where foundation material is incapable of supporting bearing stress listed in the table.

DESIGN NOTES:

- DESIGN:** AASHTO LRFD Bridge Design Specifications, 4th Edition with California Amendments
- LS:** Varied surcharge on level ground surface
- DC:** Stem Architectural Treatment of thickness up to 6" of concrete (75 psf) considered
- SEISMIC:** $k_h = 0.2$
 $k_v = 0.0$
- SOIL:** $\phi = 34^\circ$
 $\gamma = 120$ pcf
- REINFORCED CONCRETE:** $f'_c = 3,600$ psi
 $f_y = 60,000$ psi
- LOAD COMBINATIONS AND LIMIT STATES:**
 Service I $Q = 1.00DC + 1.00EV + 1.00EH + 1.00LS$
 Strength I $Q = \alpha DC + \beta EV + \eta EH + 1.75LS$
 Extreme I $Q = 1.00DC + 1.00EV + 1.00EH + 1.00EQD + 1.00EQE$
- Where:**
 Q: Force Effects
 α : 1.25 or 0.90, Whichever Controls Design
 β : 1.35 or 1.00, Whichever Controls Design
 η : 1.50 or 0.90, Whichever Controls Design
 DC: Dead Load of Structure Components
 EH: Horizontal Earth Fill Pressure
 EV: Vertical Earth Pressure from Earth Fill Weight
 LS: Live Load Surcharge
 EQE: Seismic Earth Pressure
 EQD: Soil and Structural and Nonstructural Components Inertia

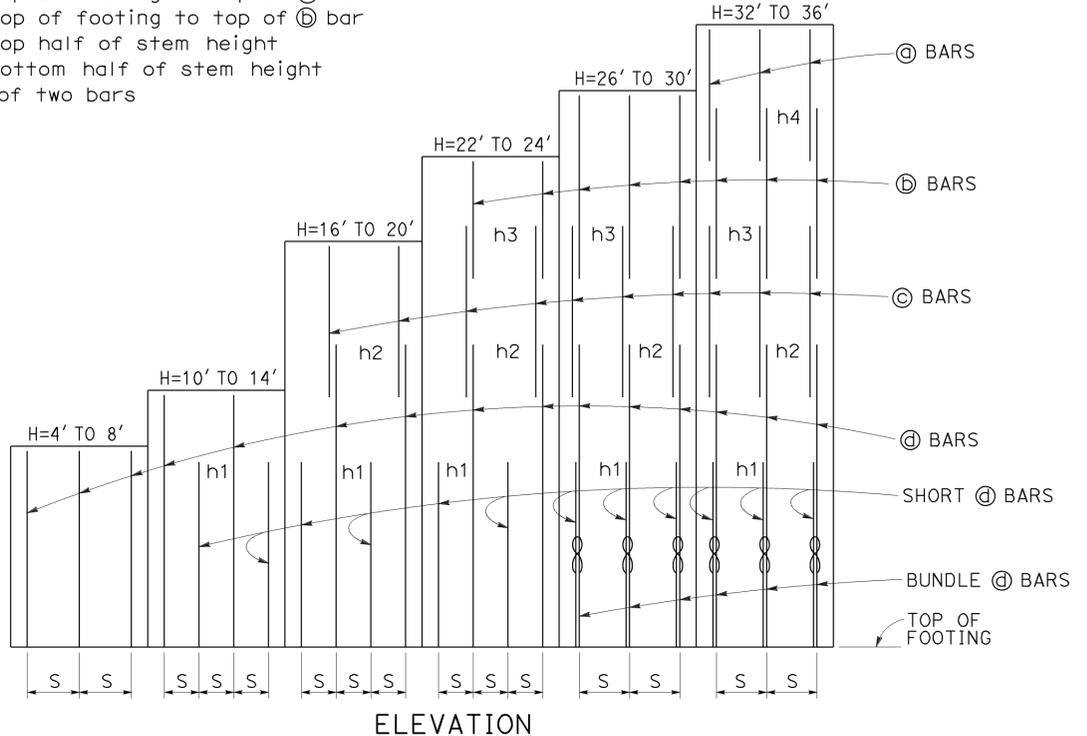
SYMBOLS:

- TO ACCOMPANY PLANS DATED 5-2-16
- Ser - service limit state I
 Str - strength limit state I
 Ext - extreme event limit state I
 B' - effective footing width (ft)
 q_0 - net bearing stress (ksf), OG assumed to be FG at toe
 q_0 - gross uniform bearing stress (ksf)
 h1 = Top of footing to top of short @ bar
 h2 = Top of footing to top of @ bar
 h3 = Top of footing to top of @ bar
 h4 = Top of footing to top of @ bar
 Zone 1 = Top half of stem height
 Zone 2 = Bottom half of stem height
 ∞ - Bundle of two bars



TYPICAL SECTION

- NOTES:**
- For details not shown and drainage notes see RSP B3-5
 - For wall stem joint details see B0-3/3-3 and B0-3/3-4
 - At @ and short @ 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 @ bars for $H \geq 26'$.
 - Hook stirrups around & space with alternating transverse reinforcement at $2 \times "S"$.



ELEVATION

DESIGN H	4'	6'	8'	10'	12'	14'	16'	18'	20'	22'	24'	26'	28'	30'	32'	34'	36'
W	6'-0"	7'-6"	9'-6"	11'-0"	12'-6"	15'-6"	17'-3"	19'-6"	21'-9"	23'-6"	26'-0"	28'-1"	30'-3"	31'-6"	33'-0"	34'-8"	35'-11"
C	2'-0"	2'-6"	3'-3"	3'-6"	4'-3"	5'-0"	5'-3"	5'-9"	6'-9"	7'-3"	8'-3"	8'-9"	9'-0"	9'-6"	10'-0"	10'-10"	11'-3"
B	4'-0"	5'-0"	6'-3"	7'-6"	8'-3"	10'-6"	12'-0"	13'-9"	15'-0"	16'-3"	17'-9"	19'-4"	21'-3"	22'-0"	23'-0"	23'-10"	24'-8"
F	1'-6"	1'-6"	2'-0"	2'-3"	2'-6"	2'-8"	2'-10"	3'-0"	3'-4"	3'-6"	3'-6"	3'-7"	3'-7"	3'-9"	3'-9"	4'-0"	4'-4"
T	11 1/2"	11 1/2"	11 1/2"	11 1/2"	11 1/2"	11 1/2"	11 1/2"	11 1/2"	11 1/2"	11 1/2"	11 1/2"	11 1/2"	1'-2"	1'-5"	1'-10"	2'-3"	2'-9"
BATTER	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 1/8: 12	1 1/8: 12	1 1/8: 12	1 1/8: 12	1 1/8: 12	1 1/8: 12	1 1/8: 12
SPACING "S"	16"	12"	10"	7"	7"	7"	7"	7"	6"	6"	10"	8"	8"	7"	7"	7"	7"
@ BARS	-	-	-	-	-	-	-	-	-	-	-	-	-	-	#5	#5	#5
@ BARS	-	-	-	-	-	-	-	-	-	#5	#5	#5	#5	#5	#7	#7	#7
@ BARS	-	-	-	-	-	-	#6	#6	#6	#7	#8	#8	#8	#8	#8	#9	#9
@ BARS	#5	#5	#6	#6	#7	#8	#9	#10	#10	#10	#11	#11	#11	#11	#11	#11	#11
@ BARS	#5	#5	#6	#6	#7	#8	#9	#10	#10	#10	#11	#11	#11	#11	#11	#11	#11
h1	-	-	-	5'-3"	6'-4"	7'-6"	8'-9"	9'-9"	11'-0"	11'-3"	11'-6"	10'-3"	11'-9"	12'-3"	12'-6"	13'-3"	13'-8"
h2	-	-	-	-	-	-	12'-8"	15'-6"	17'-0"	16'-6"	17'-3"	18'-0"	17'-6"	17'-4"	14'-10"	15'-9"	16'-4"
h3	-	-	-	-	-	-	-	-	-	18'-9"	21'-3"	21'-3"	22'-4"	22'-8"	18'-0"	18'-6"	19'-6"
h4	-	-	-	-	-	-	-	-	-	-	-	-	-	-	26'-3"	27'-4"	28'-6"
No. of Toe Stirrups	0	0	0	0	0	0	0	0	0	0	0	5	5	6	7	8	9
No. of Heel Stirrups	0	0	0	0	0	0	0	0	4	6	7	8	10	10	11	11	11
ZONE 1 @ BARS	#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	#6 @ 12	#6 @ 10	#6 @ 10
ZONE 2 @ BARS	#5 @ 18	#5 @ 18	#5 @ 18	#5 @ 18	#5 @ 18	#5 @ 12	#5 @ 12	#5 @ 12	#5 @ 12	#6 @ 12	#6 @ 12	#7 @ 12	#7 @ 12	#7 @ 12	#7 @ 12	#7 @ 10	#7 @ 10
ZONE 1 @ BARS	#4 @ 18	#4 @ 18	#4 @ 18	#4 @ 18	#4 @ 18	#4 @ 18	#4 @ 18	#4 @ 18	#4 @ 18	#4 @ 18	#4 @ 18	#4 @ 18	#4 @ 18	#4 @ 18	#5 @ 12	#5 @ 12	#5 @ 12
ZONE 2 @ BARS	#4 @ 18	#4 @ 18	#4 @ 18	#4 @ 18	#4 @ 18	#4 @ 12	#4 @ 12	#4 @ 12	#4 @ 12	#4 @ 12	#4 @ 12	#5 @ 12	#5 @ 12	#5 @ 12	#6 @ 12	#6 @ 12	#6 @ 12
Ser: B', q ₀	4.0, 0.9	5.5, 1.0	9.3, 1.0	10.9, 1.3	12.3, 1.5	14.8, 1.9	16.6, 2.1	18.7, 2.4	20.6, 2.7	22.3, 3.0	24.2, 3.3	26.1, 3.5	28.2, 3.9	29.6, 4.0	31.1, 4.2	32.7, 4.4	34.1, 4.6
Str: B', q ₀	2.2, 2.2	3.5, 2.2	5.1, 2.3	6.3, 2.6	7.6, 2.7	12.9, 3.1	14.3, 3.6	16.5, 3.9	19.4, 4.5	20.7, 4.8	22.5, 5.2	24.3, 5.6	26.2, 6.0	27.5, 6.3	28.8, 6.6	30.3, 6.9	31.8, 7.2
Ext: B', q ₀	2.3, 3.4	2.7, 4.4	3.6, 5.0	3.8, 6.5	4.5, 7.0	7.0, 6.1	7.6, 6.9	9.3, 7.0	11.0, 7.1	11.8, 7.6	14.1, 7.4	15.6, 7.7	17.1, 8.0	17.2, 8.7	18.1, 9.0	19.0, 9.4	19.4, 10.0

RETAINING WALL TYPE 1 (CASE 2)

NO SCALE

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

REVISED STANDARD PLAN RSP B3-1B

2010 REVISED STANDARD PLAN RSP B3-1B

2010 REVISED STANDARD PLAN RSP B3-5

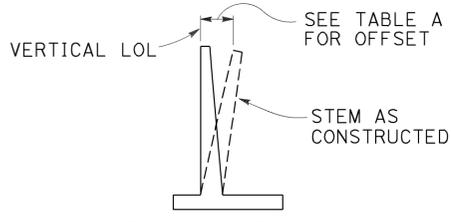
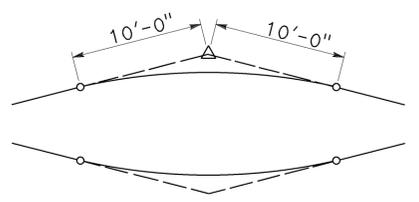


TABLE A

H	OFFSET
4'-12'	H/200
14'-16'	H/160
18'-20'	H/140
22'-24'	H/130
26'-36'	2 1/2"

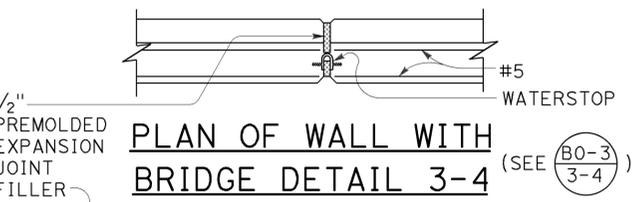
APPROXIMATE WALL OFFSET VALUES

Values for offsetting forms to be determined by the Engineer.

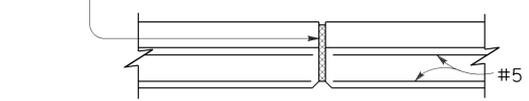


20'-0" VC AT TOP OF WALL SLOPE CHANGE

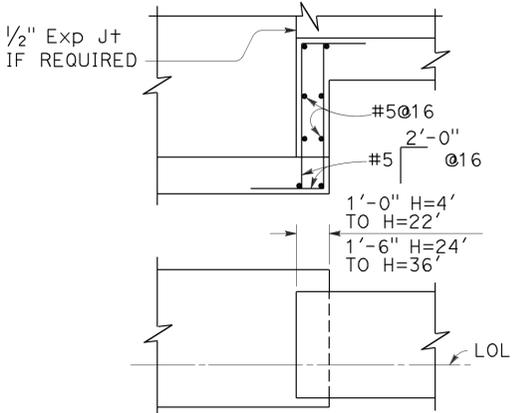
Where shown on the plans



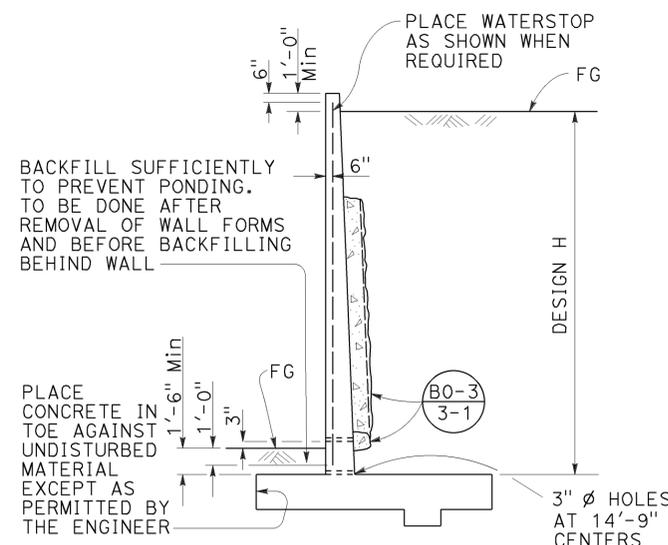
PLAN OF WALL WITH BRIDGE DETAIL 3-4



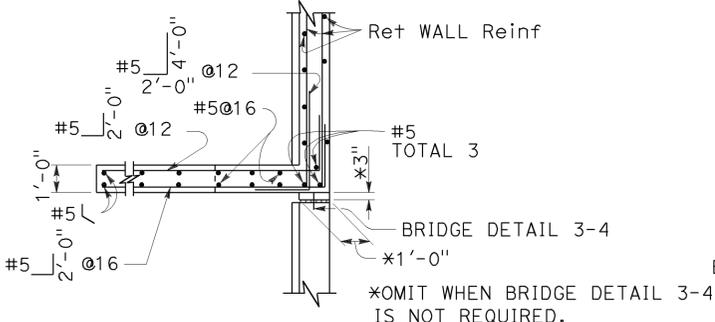
PLAN OF WALL WITH EXPANSION JOINT ONLY



FOOTING STEP

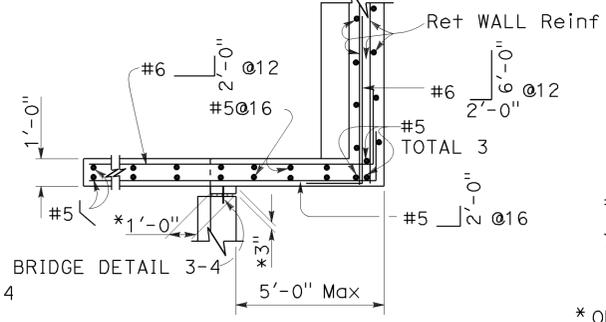


DESIGN AND DRAINAGE



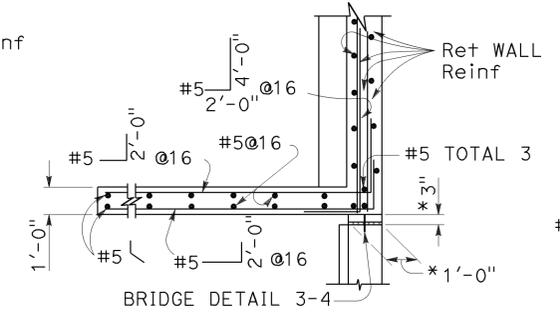
PLAN

(For return wall Type "A")



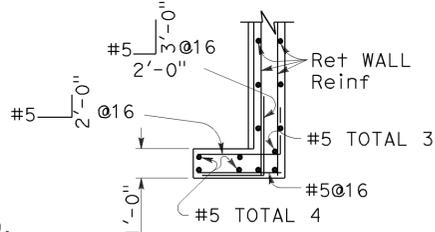
PLAN

(For return wall Type "B")



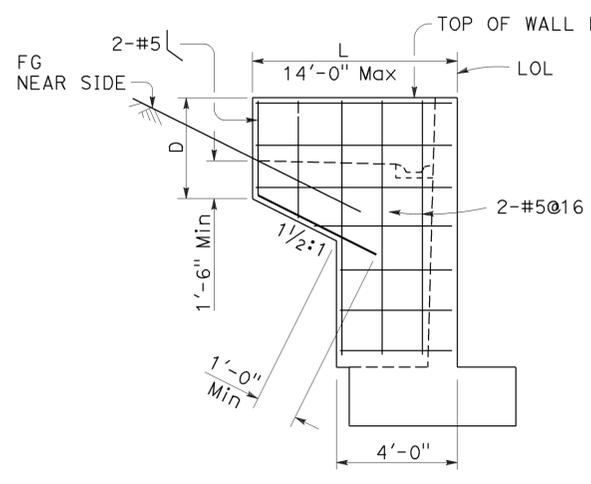
PLAN

(For return wall Type "C")



PLAN

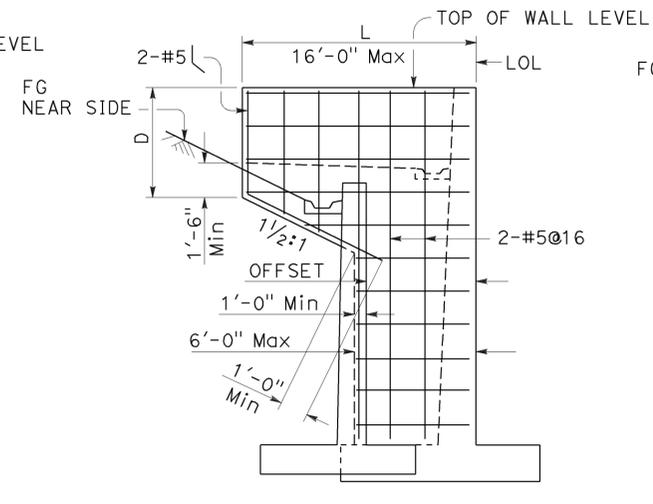
(For return wall Type "D")



ELEVATION

RETURN WALL TYPE "A"

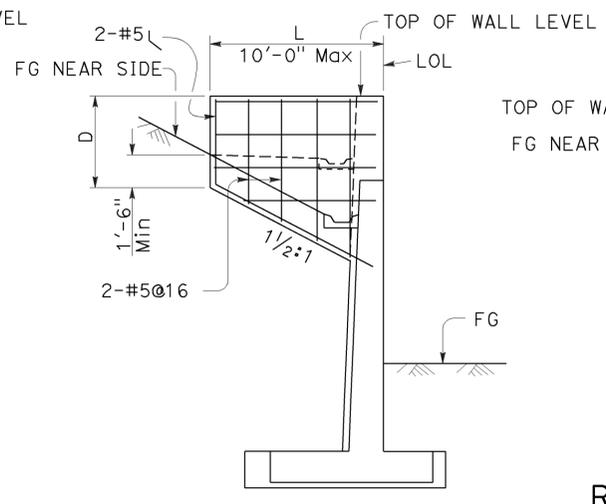
Use where H=8' or less



ELEVATION

RETURN WALL TYPE "B"

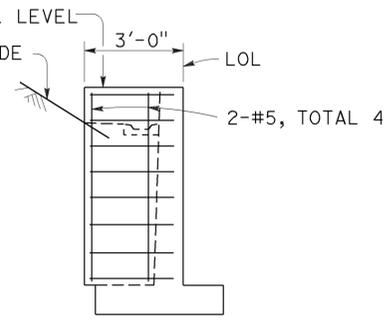
Use where H=10' or more on offset walls



ELEVATION

RETURN WALL TYPE "C"

Use where H=10' or more on straight walls



ELEVATION

RETURN WALL TYPE "D"

Use where H=6' or less

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 table

Return wall not required unless shown elsewhere

DESIGN NOTES:

DESIGN: AASHTO LRFD Bridge Design Specifications, 4th edition with California Amendments

LIVE LOAD: Surcharge on level ground surface

SOIL: $\phi = 34^\circ$
 $\gamma = 120$ pcf

REINFORCED CONCRETE: $f_y = 60,000$ psi
 $f_c' = 3,600$ psi

STATE OF CALIFORNIA
DEPARTMENT OF TRANSPORTATION

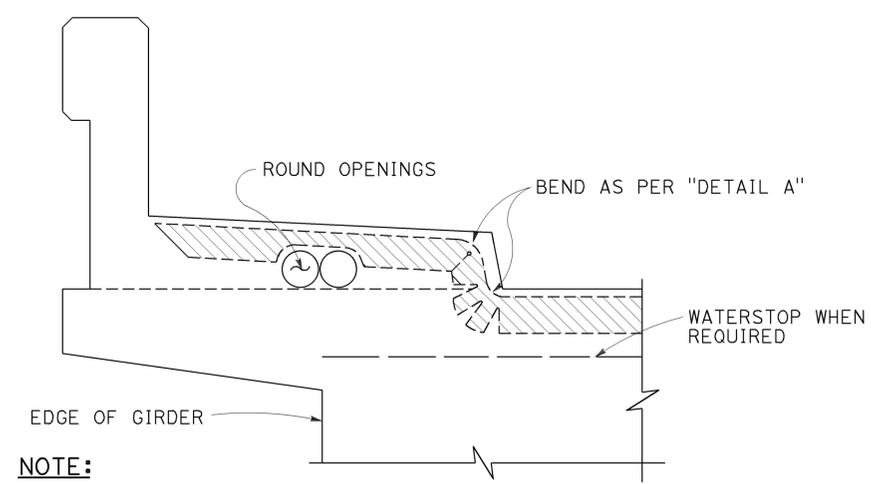
RETAINING WALL DETAILS No. 1

NO SCALE

RSP B3-5 DATED APRIL 20, 2012 SUPERSEDES STANDARD PLAN B3-5 DATED MAY 20, 2011 - PAGE 277 OF THE STANDARD PLANS BOOK DATED 2010.

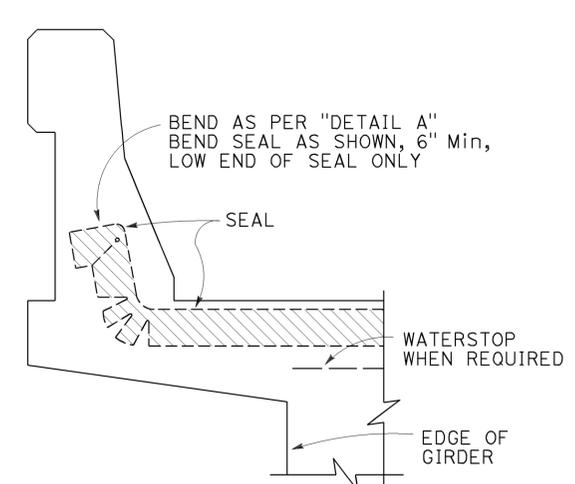
REVISED STANDARD PLAN RSP B3-5

TO ACCOMPANY PLANS DATED 5-2-16

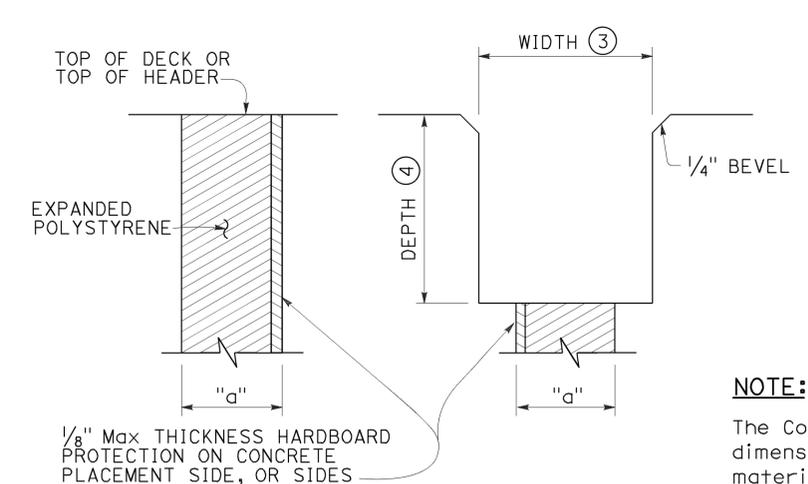


NOTE:
 Type "B" seal shown. Type "A" seals to conform to the general path of seal shown, cuts for bending not required. Bend type "A" seals 3" up into curb or barrier rail on only the low end of the seal.

CONCRETE BARRIER AND SIDEWALK



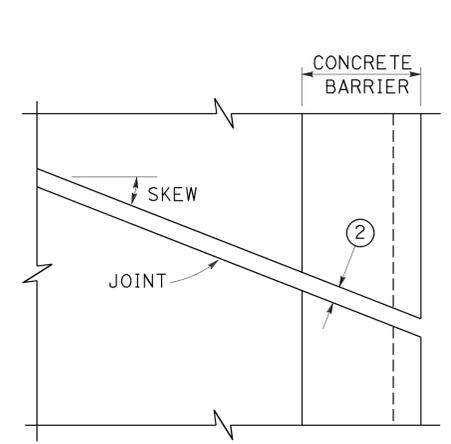
CONCRETE BARRIER



FORMING DETAIL SAWCUT DETAIL

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

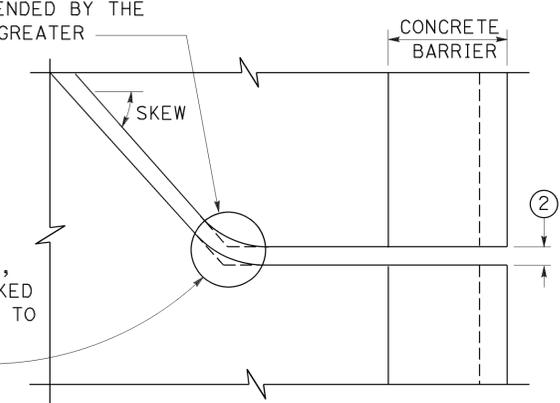
JOINT SEALS DETAILS



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

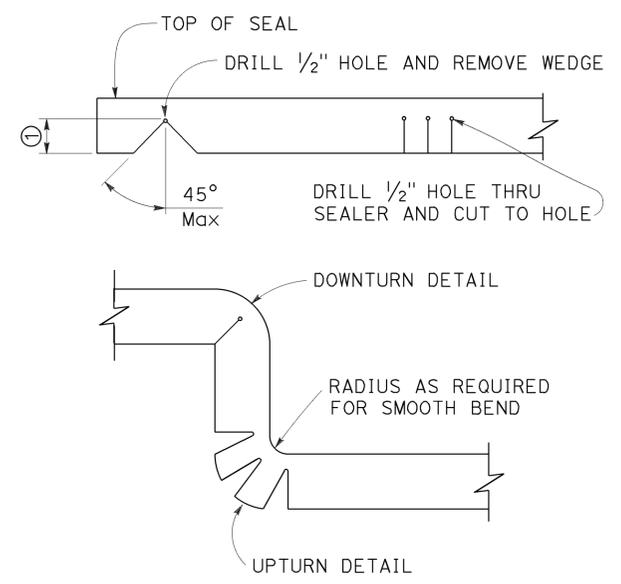
IN LIEU OF SAW CUTTING, THIS AREA MAY BE BLOCKED OUT AND RECONSTRUCTED TO MATCH SAW CUTTING ON BOTH SIDES.



PLAN OF JOINT (SKEW > 20°)

NOTES:

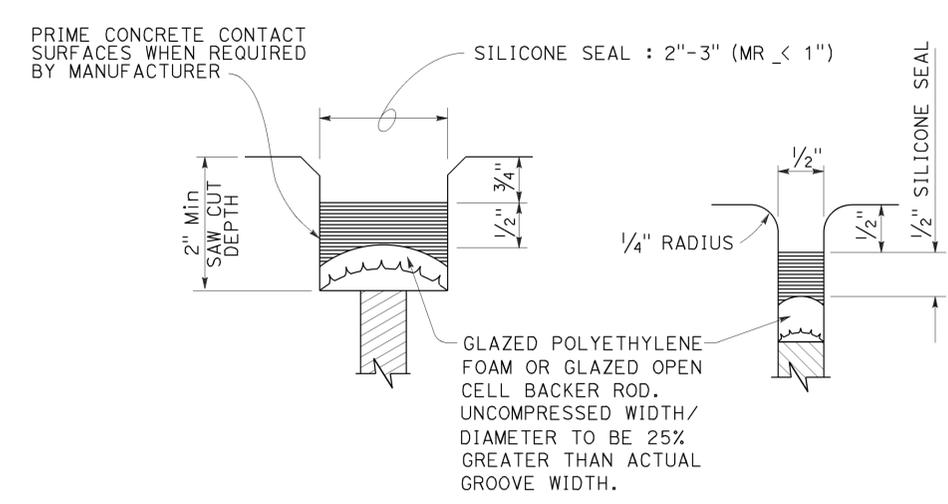
- Make smooth cuts from the bottom of seal to 1 1/2" clear of top leaving at least one complete cell between the top of the cut and top of the seal. When necessary cut back of seal to clear conduit and round openings.
- Opening in barrier to match width of sawn deck joint.
- Sawcut groove widths shall 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 (W₂) 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.



DETAIL A

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"

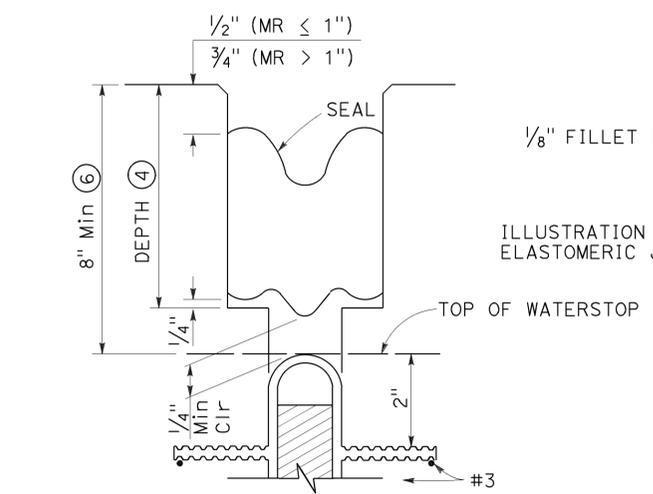


TYPE A SEAL

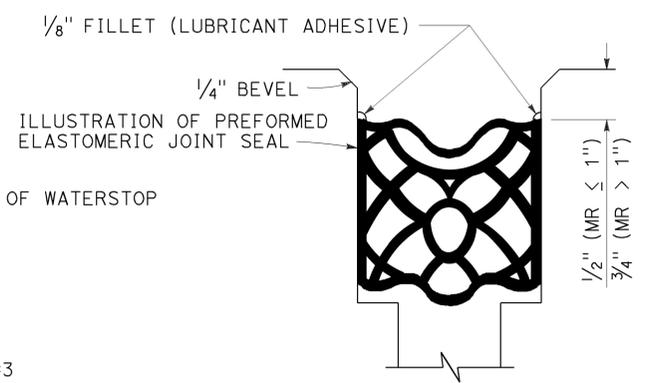
Movement rating : Silicone = 1" Max

TYPE AL SEAL

Longitudinal joints only



TYPE B JOINT SEAL IN MINIMUM WIDTH POSITION (W₂)



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
05	SLO, Mon	101	63.2/R69.3, RO.0/R1.9	604	858

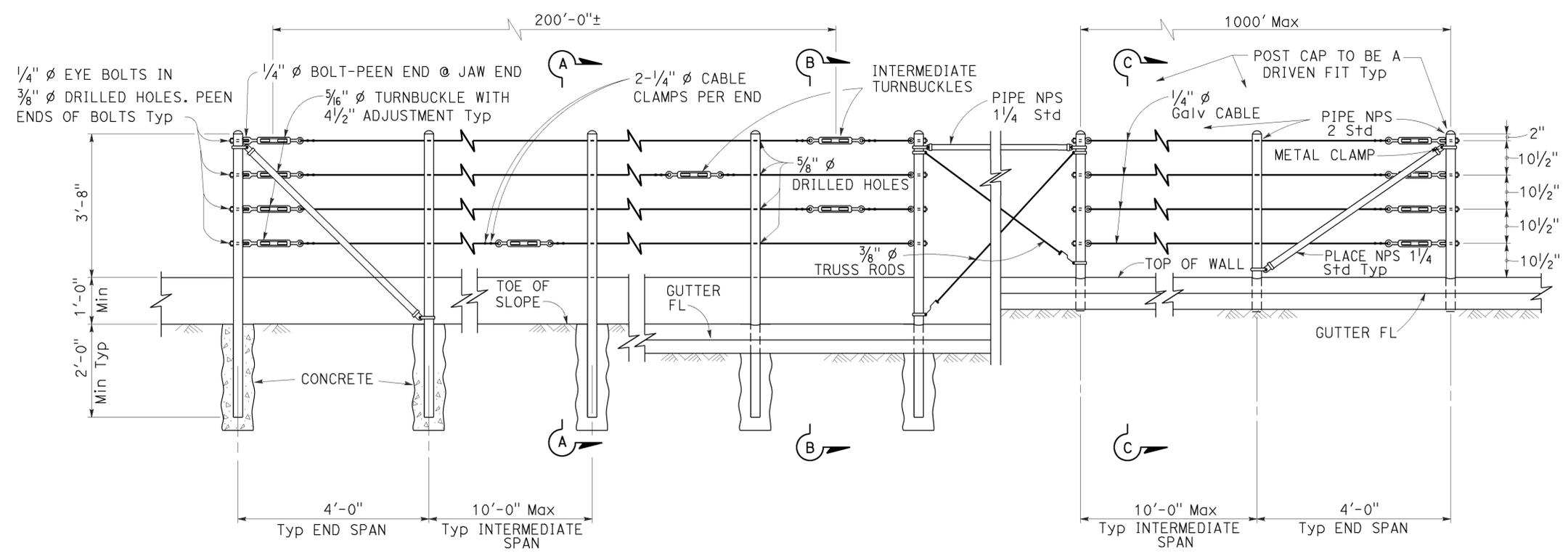
REGISTERED CIVIL ENGINEER

October 21, 2011
PLANS APPROVAL DATE

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

TO ACCOMPANY PLANS DATED 5-2-16

REGISTERED PROFESSIONAL ENGINEER
Tillat Satter
No. C42892
Exp. 3-31-12
CIVIL
STATE OF CALIFORNIA

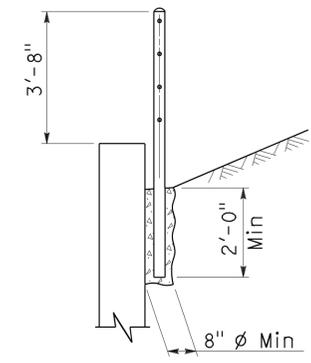


EXISTING WALL (WITHOUT GUTTER) Existing
RETAINING WALL (WITH GUTTER) Existing
RETAINING WALL (WITH GUTTER) New construction

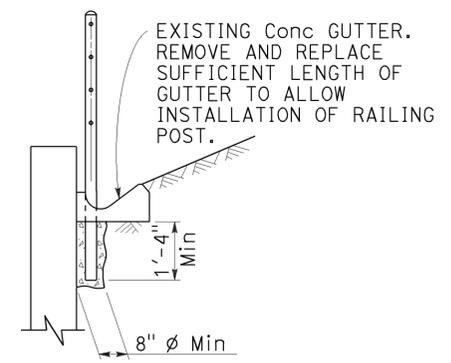
ELEVATION

NOTES:

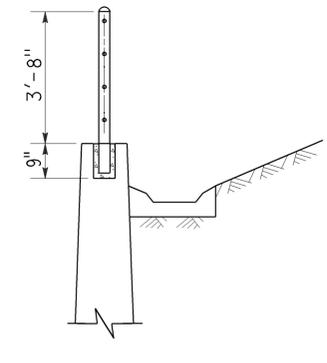
1. Maximum distance between turnbuckles shall be 200'-0"±.
2. Intermediate turnbuckles to be placed in adjacent spans.
3. Cable shall not be spliced between intermediate turnbuckles and end posts.
4. Posts to be vertical.
5. Alignment of holes in posts may vary to conform to slope of top of retaining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



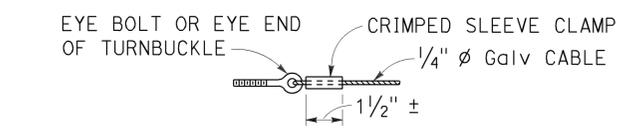
SECTION A-A
Existing



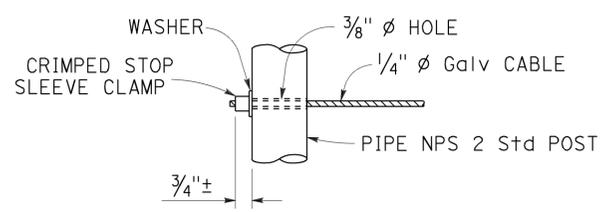
SECTION B-B
Existing



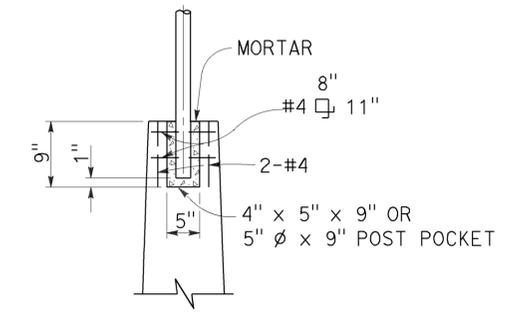
SECTION C-C
New construction



ALTERNATIVE CABLE CONNECTION



ALTERNATIVE DEAD END ANCHORAGE



POST POCKET

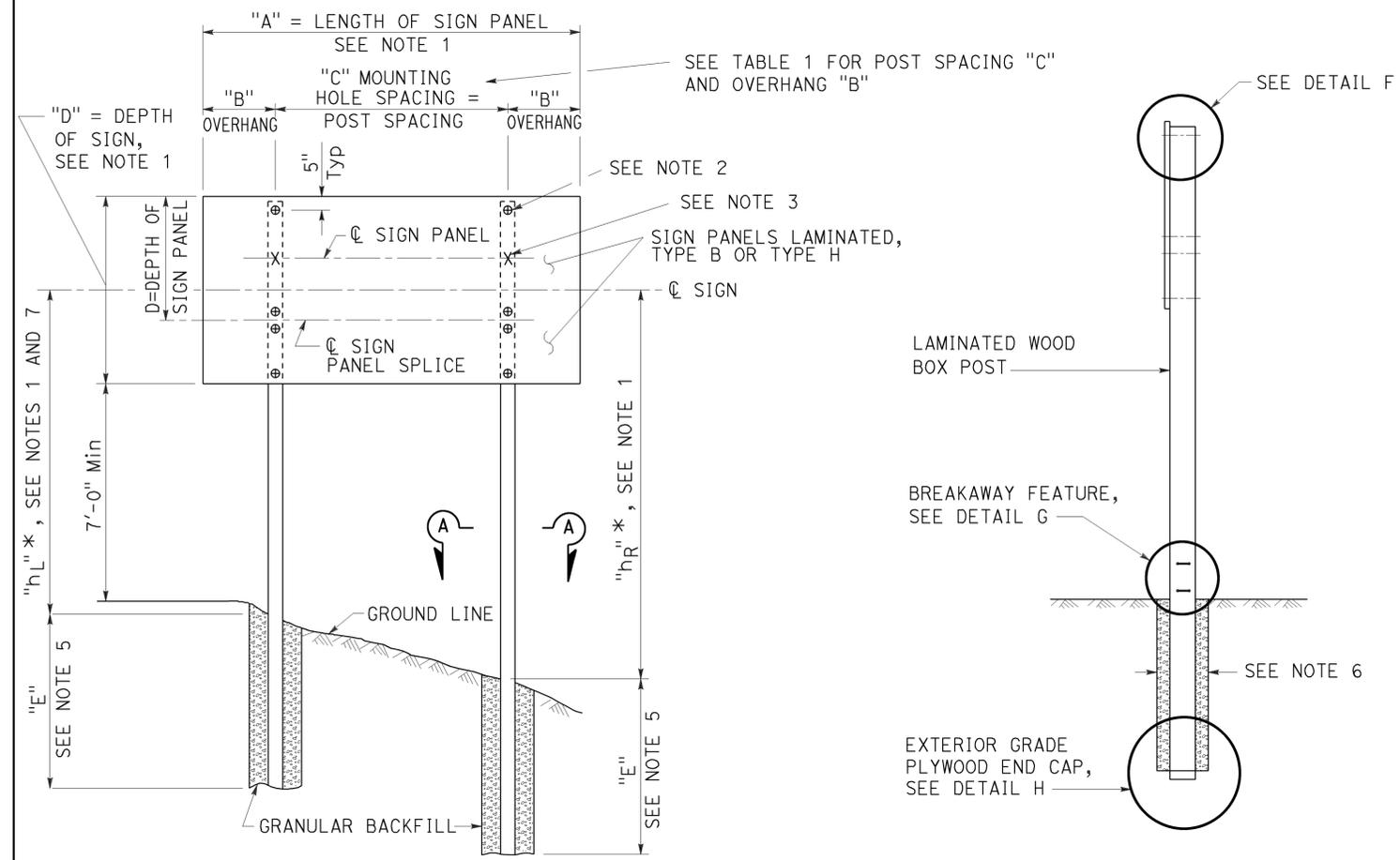
STATE OF CALIFORNIA
DEPARTMENT OF TRANSPORTATION
CABLE RAILING

NO SCALE

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

REVISED STANDARD PLAN RSP B11-47

2010 REVISED STANDARD PLAN RSP B11-47



SIGN PANEL LENGTH (SEE NOTE 1)	SIGN PANEL OVERHANG	MOUNTING HOLE SPACING
"A"	"B"	"C"
8'-0"	1'-6"	5'-0"
9'-0"	1'-10"	5'-4"
10'-0"	2'-0"	6'-0"
11'-0"	2'-0"	7'-0"
12'-0"	2'-6"	7'-0"
13'-0"	2'-6"	8'-0"
14'-0"	2'-6"	9'-0"
15'-0"	3'-0"	9'-0"
16'-0"	3'-3"	9'-6"
17'-0"	3'-3"	10'-6"
18'-0"	3'-6"	11'-0"
19'-0"	3'-9"	11'-6"
20'-0"	4'-0"	12'-0"
21'-0"	4'-3"	12'-6"
22'-0"	4'-3"	13'-6"
23'-0"	4'-6"	14'-0"
24'-0"	4'-9"	14'-6"

TABLE 1

"h _L " OR "h _R " (IN FEET)	TOTAL SIGN AREA SQFT				
	40 TO 90	90+ TO 140	140+ TO 190	190+ TO 240	240+ TO 290
9'-0" TO 13'-0"	6'	6.5'	7.5'	8.5'	9'
13'-0"+ TO 17'-0"	6'	7'	8'	9'	10'
17'-0"+ TO 21'-0"	6'	7.5'	9'	9'	
21'-0"+ TO 26'-0"	7'	8'	9'		

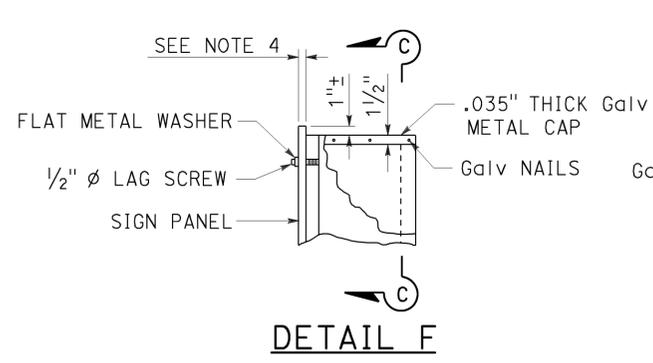
TABLE 2

See Note 8

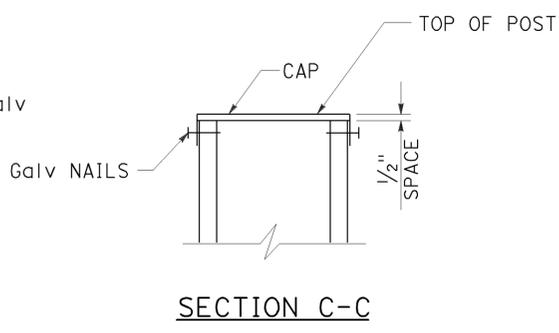
NOTES:

- See Project Plans for:
 Location of each sign.
 Length of sign panel "A".
 Depth of sign "D".
 Height "h_L" and "h_R" of centerline of sign above ground line at each post.
 Type of post, L and M.
 See Standard Plan RS1 for other details.
- "e" Indicates location of 1/2" lag screws and existing holes in panels. Lag screws are to be embedded at least 1" into post using 5/16" diameter pilot holes.
- "x" Indicates location of additional 1/2" lag screws required when the depth of sign panel (d) and the length of sign panel (A) are as follows:

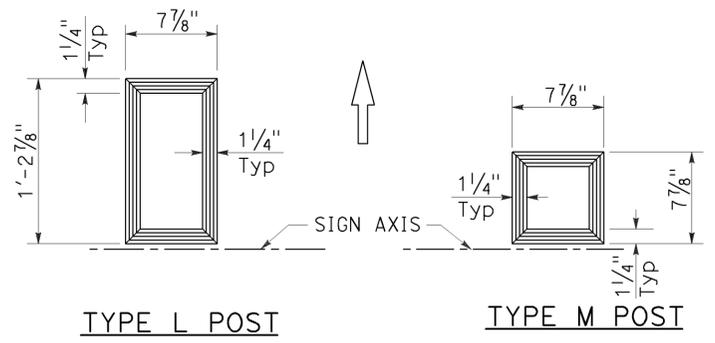
A	d
17'-0" to 24'-0"	5'-0"
19'-0" to 24'-0"	4'-6"
21'-0" to 24'-0"	4'-0"
24'-0"	3'-6"
- Type B laminated sign panels are 1" nominal thick for sign lengths of 15'-0" and less. Panels over 15'-0" in length and Type H laminated sign panels are 2 1/2" nominal thick.
- Embedment "E" for Type L post shall conform to the requirements in Table 2. Embedment for Type M posts shall be 6'-0" minimum.
- Diameter of post holes for Type L posts shall be at least 2'-6". Diameter of post holes for Type M posts shall be at least 2'-0".
- Dimensions shown on project plans are for fabrication. During installation adjust these dimensions to provide A level sign approximately 7'-0" above roadway shoulder.
- Minimum post embedment "E" for Type L post.



DETAIL F



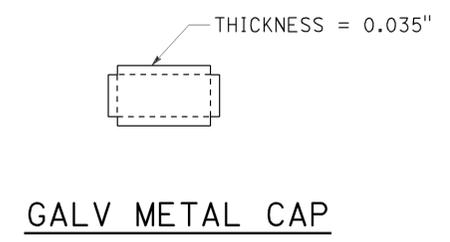
SECTION C-C



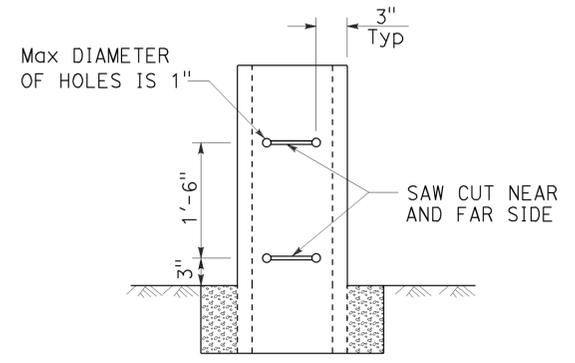
TYPE L POST

TYPE M POST

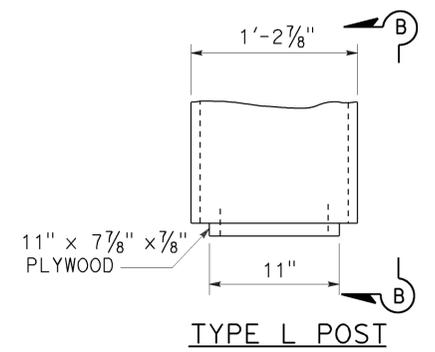
SECTION A-A



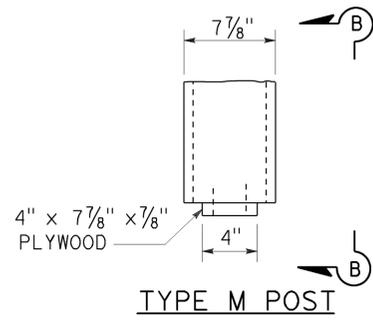
GALV METAL CAP



DETAIL G

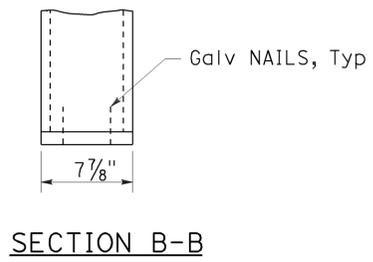


TYPE L POST



TYPE M POST

DETAIL H



SECTION B-B

STATE OF CALIFORNIA
 DEPARTMENT OF TRANSPORTATION
**ROADSIDE SIGNS
 LAMINATED WOOD BOX POST
 TYPICAL INSTALLATION
 DETAILS No. 3**

NO SCALE

RSP RS3 DATED OCTOBER 30, 2015 SUPERSEDES STANDARD PLAN RS3 DATED MAY 20, 2011 - PAGE 332 OF THE STANDARD PLANS BOOK DATED 2010.

2010 REVISED STANDARD PLAN RSP RS3

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

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

Dist	COUNTY	ROUTE	POST MILES TOTAL PROJECT	SHEET No.	TOTAL SHEETS
05	SLO, Mon	101	63.2/R69.3, R0.0/R1.9	607	858

Theresa Gabriel
REGISTERED ELECTRICAL ENGINEER

October 30, 2015
PLANS APPROVAL DATE

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

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 5-2-16

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(ac)	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

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
05	SLO, Mon	101	63.2/R69.3, R0.0/R1.9	608	858

Theresa Gabriel
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October 30, 2015
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No. E15129
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STATE OF CALIFORNIA

TO ACCOMPANY PLANS DATED 5-2-16

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CONDUIT

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

SIGNAL EQUIPMENT

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)
		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

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

SIGNAL EQUIPMENT Cont

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

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

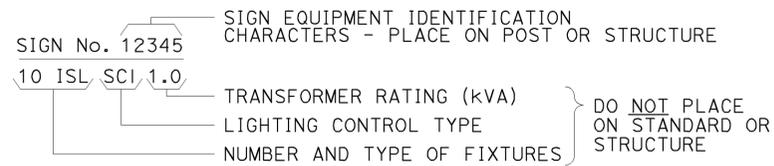
RSP ES-1B DATED OCTOBER 30, 2015 SUPERSEDES RSP ES-1B DATED JULY 19, 2013 AND STANDARD PLAN ES-1B DATED MAY 20, 2011 - PAGE 426 OF THE STANDARD PLANS BOOK DATED 2010.

REVISED STANDARD PLAN RSP ES-1B

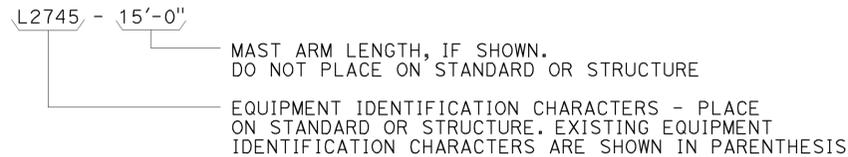
2010 REVISED STANDARD PLAN RSP ES-1B

EQUIPMENT IDENTIFICATION

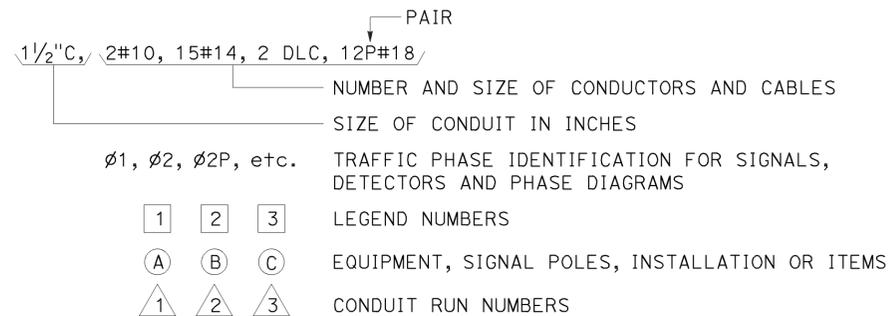
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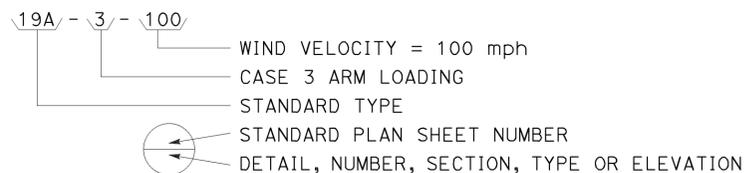
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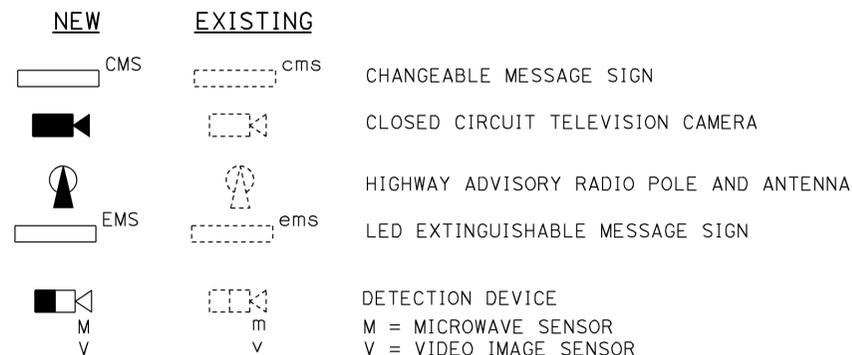
CONDUIT AND CONDUCTOR IDENTIFICATION:



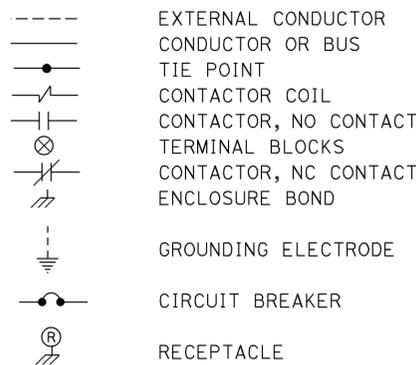
SIGNAL AND LIGHTING STANDARD (TYPICAL DESIGNATION):



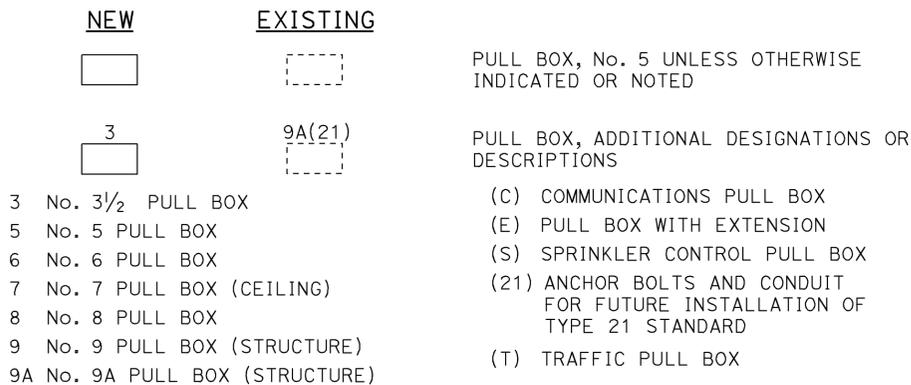
MISCELLANEOUS EQUIPMENT



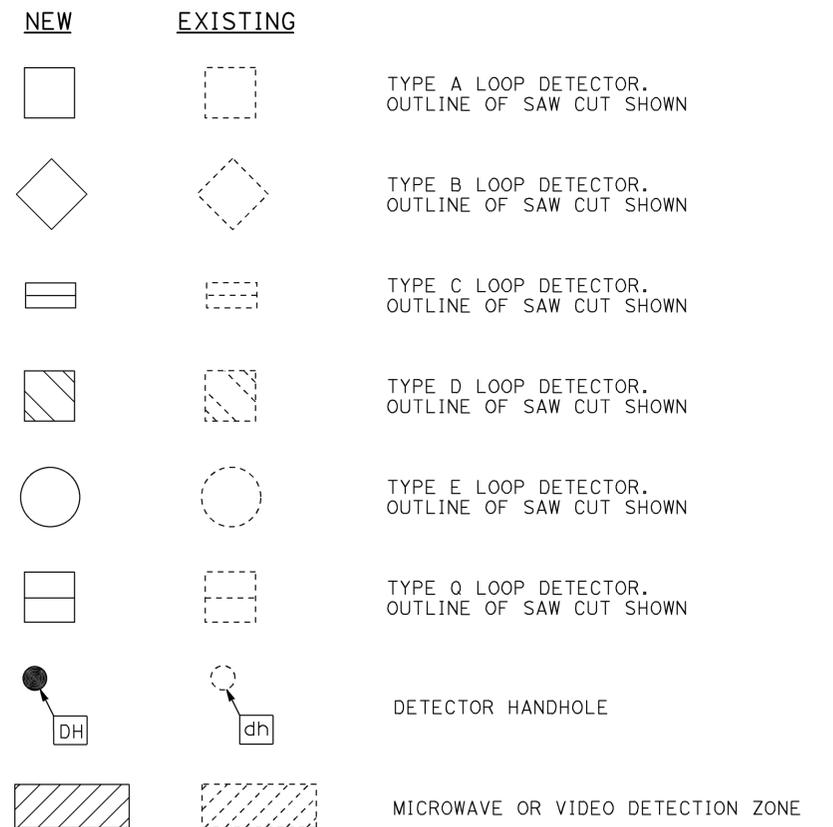
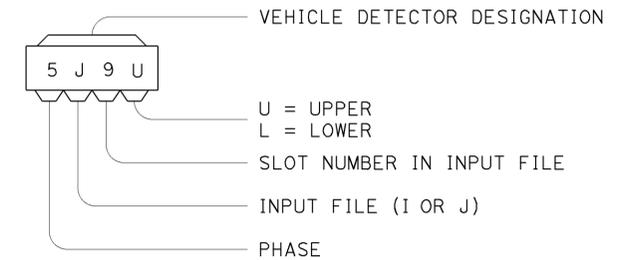
WIRING DIAGRAM LEGEND



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

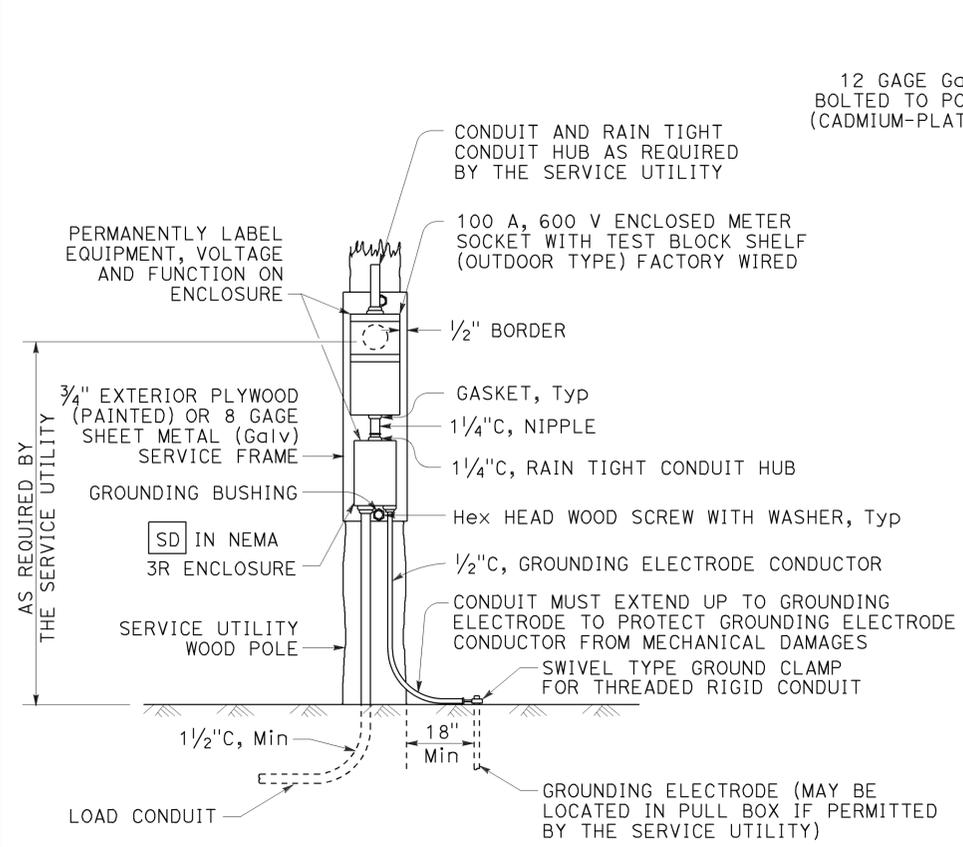
2010 REVISED STANDARD PLAN RSP ES-1C

Dist	COUNTY	ROUTE	POST MILES TOTAL PROJECT	SHEET No.	TOTAL SHEETS
05	SLO, Mon	101	63.2/R69.3, R0.0/R1.9	610	858

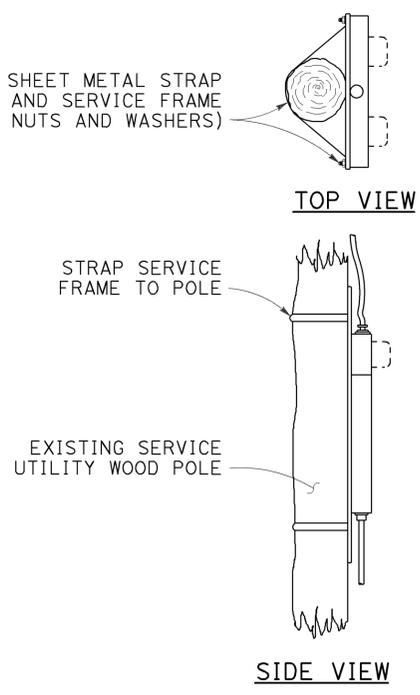
Theresa Gabriel
 REGISTERED ELECTRICAL ENGINEER
 October 30, 2015
 PLANS APPROVAL DATE
 THE STATE OF CALIFORNIA OR ITS OFFICERS OR AGENTS SHALL NOT BE RESPONSIBLE FOR THE ACCURACY OR COMPLETENESS OF SCANNED COPIES OF THIS PLAN SHEET.



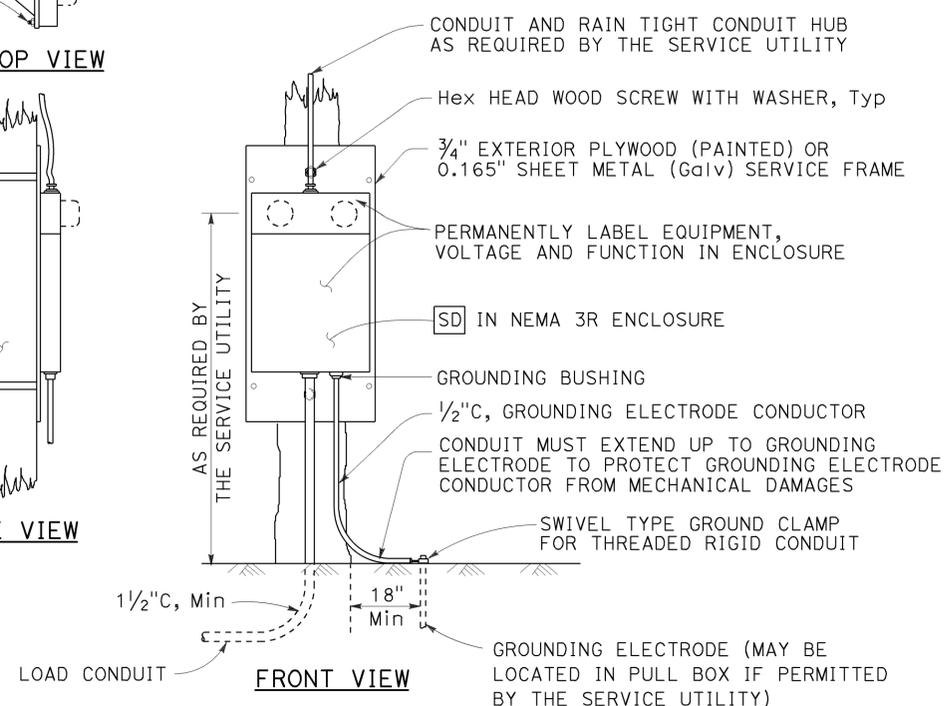
TO ACCOMPANY PLANS DATED 5-2-16



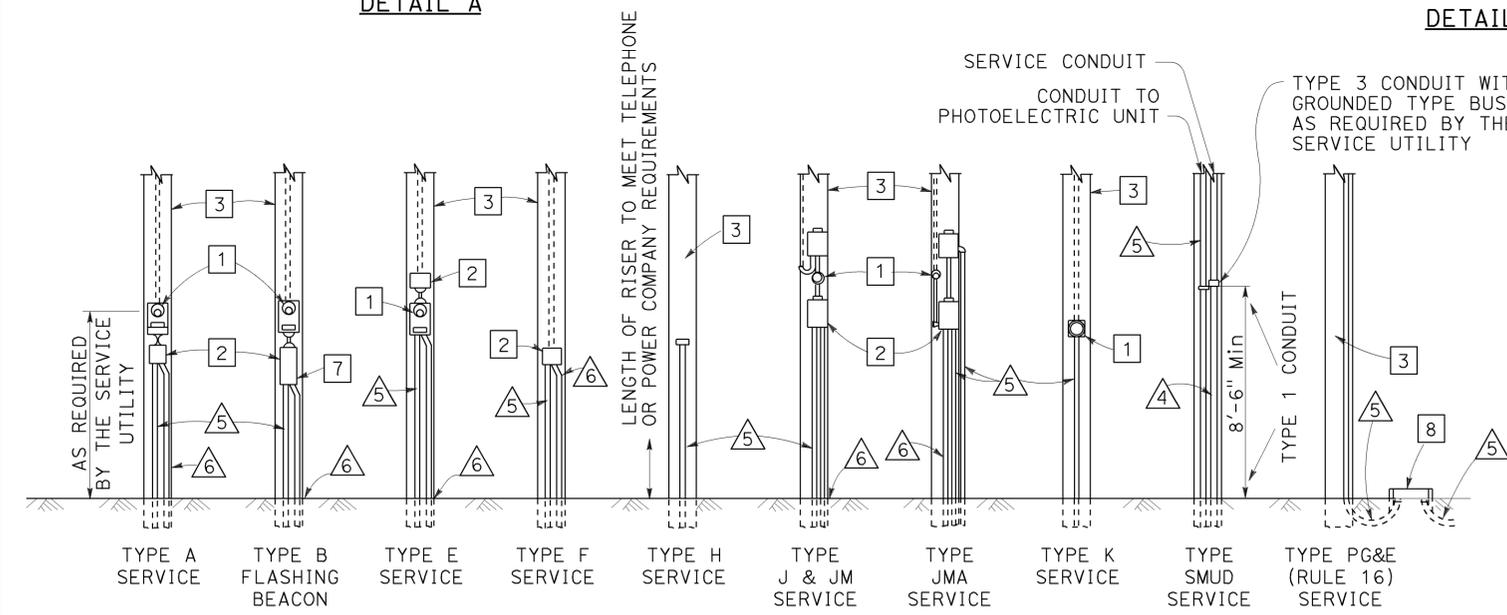
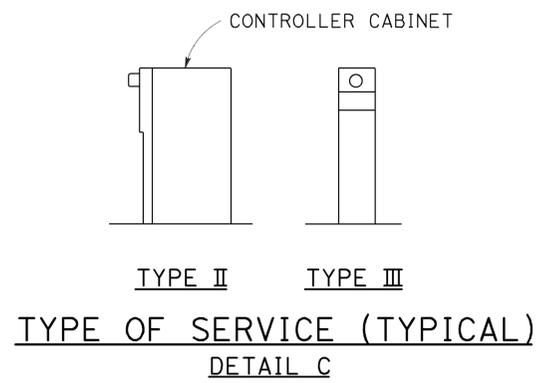
TYPE SCE-1
DETAIL A



TYPE SCE-2
DETAIL B

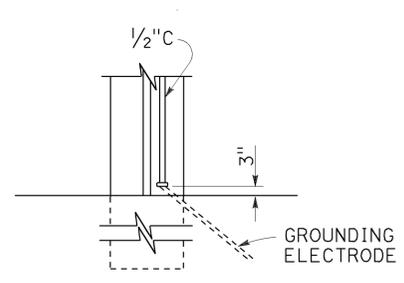


FRONT VIEW

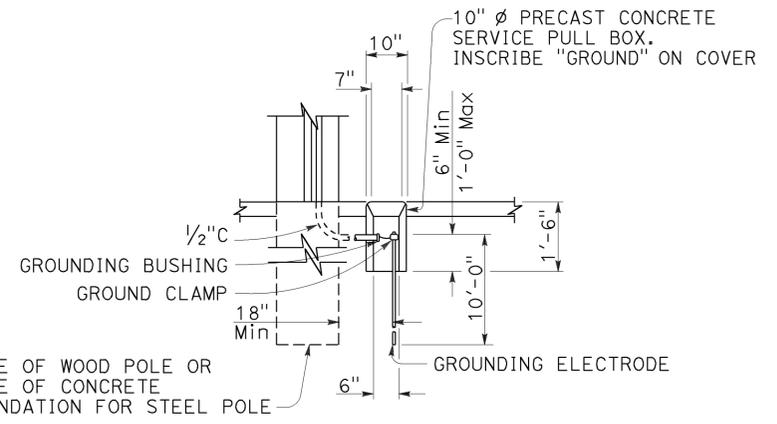


- LEGEND:**
- 1 METER SOCKET.
 - 2 SERVICE ENCLOSURE WITH A MINIMUM 60 A RATED MAIN CIRCUIT BREAKER, UNLESS OTHERWISE SHOWN.
 - 3 A. UTILITY OWNED POLE. THE SERVICE UTILITY WILL FURNISH AND INSTALL REQUIRED SERVICE RISER, PEU WITH CONDUCTORS AND OTHER EQUIPMENT AS NEEDED.
B. STATE OWNED POLE. THE CONTRACTOR 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
05	SLO, Mon	101	63.2/R69.3, R0.0/R1.9	611	858

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 5-2-16

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

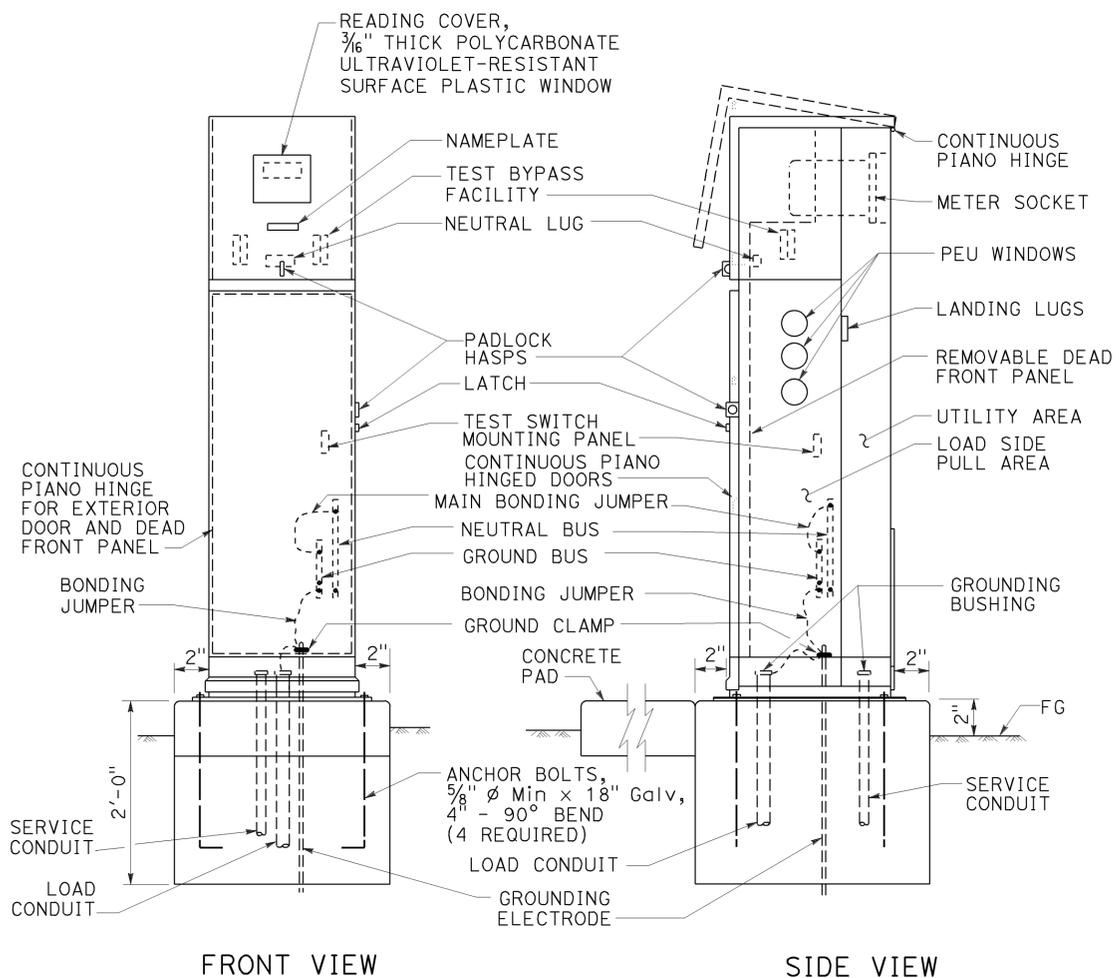
**ELECTRICAL SYSTEMS
(SERVICE EQUIPMENT ENCLOSURE
NOTES TYPE III SERIES)**

NO SCALE

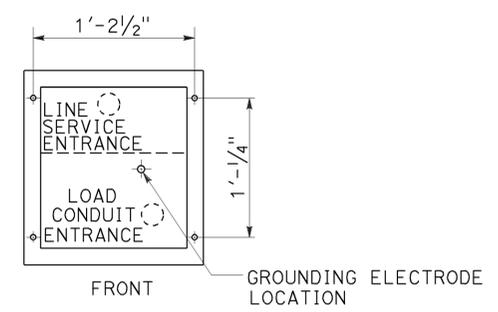
RSP ES-2C DATED OCTOBER 30, 2015 SUPERSEDES STANDARD PLAN ES-2C DATED MAY 20, 2011 - PAGE 430 OF THE STANDARD PLANS BOOK DATED 2010.

REVISED STANDARD PLAN RSP ES-2C

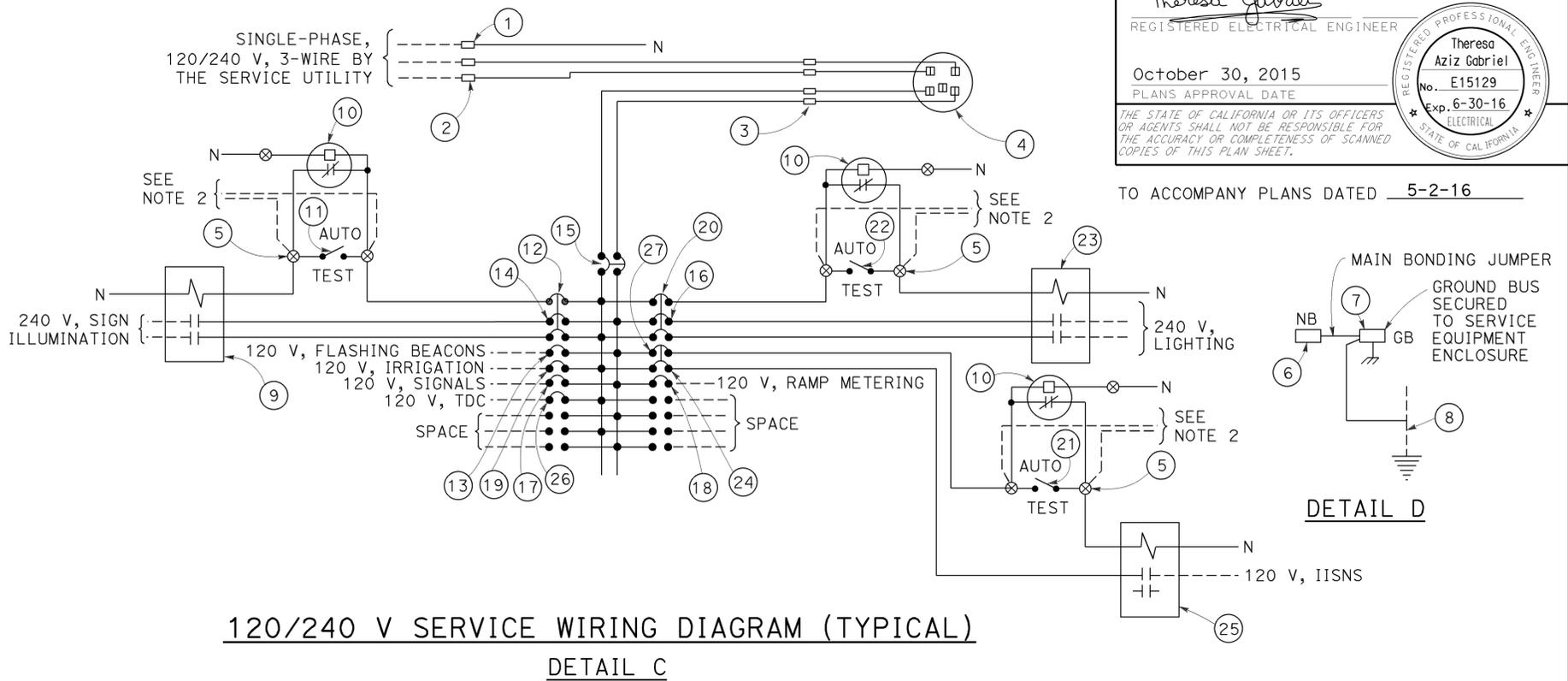
2010 REVISED STANDARD PLAN RSP ES-2C



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



BASE FOR TYPE III-B SERVICE EQUIPMENT ENCLOSURE
DETAIL B



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

TYPE III-B 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:**
- Unless otherwise indicated on the plans, service equipment items shall be provided for each service equipment enclosure as shown.
 - Connect to remote test switch mounted on lighting standards, sign post or structure when required.
 - Items ① and ⑥ shall be isolated from the service equipment enclosure.
 - Type I photoelectric control shall be used unless otherwise indicated on the plans.
 - 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-B SERIES)**

NO SCALE

RSP ES-2E DATED OCTOBER 30, 2015 SUPERSEDES STANDARD PLAN ES-2E DATED MAY 20, 2011 - PAGE 432 OF THE STANDARD PLANS BOOK DATED 2010.

2010 REVISED STANDARD PLAN RSP ES-2E

NOTES:

1. Controller units, plug-mounted equipment, shelf-mounted equipment and wall-mounted equipment shall be located to permit safe and easy removal or replacement without removing any other piece of equipment.
2. Cabinet fan may be installed at an alternate location near the top of the cabinet when approved by the Engineer.
3. Where telephone interconnect is required, a minimum of 5" clear vertical space shall be provided inside the cabinet for the equipment.
4. Telephone interconnect conductors shall be enclosed in a 3/4" or larger conduit through the foundation. Type 4 conduit shall be used to separate telephone and power conductors in cabinets.

Dist	COUNTY	ROUTE	POST MILES TOTAL PROJECT	SHEET No.	TOTAL SHEETS
05	SLO, Mon	101	63.2/R69.3, R0.0/R1.9	613	858

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

Theresa
Aziz Gabriel

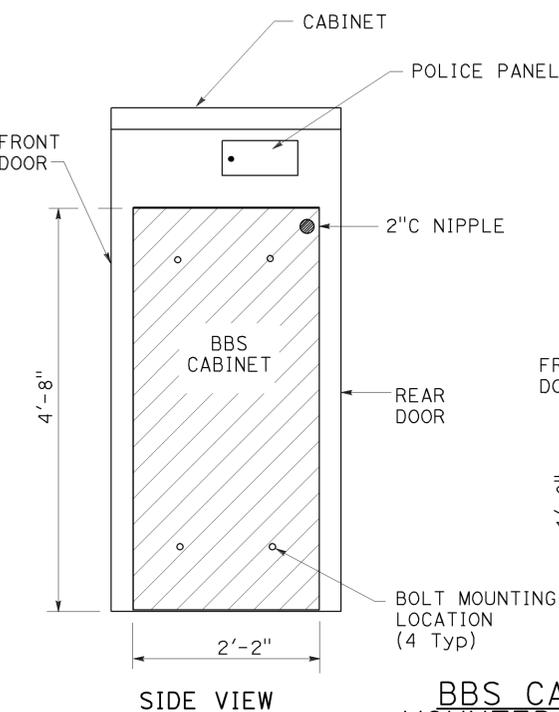
No. E15129

Exp. 6-30-16

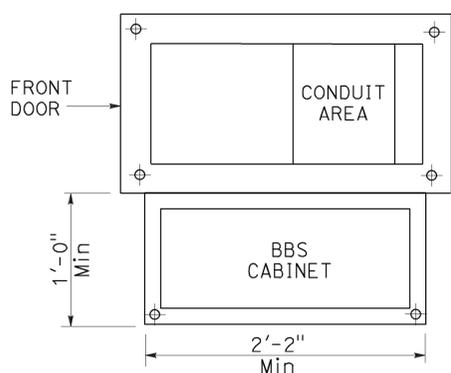
ELECTRICAL

STATE OF CALIFORNIA

TO ACCOMPANY PLANS DATED 5-2-16

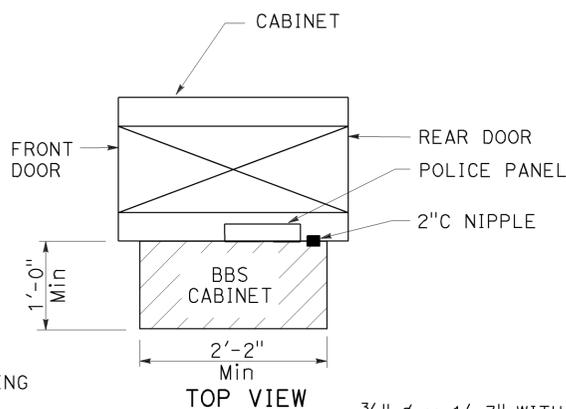


BBS CABINET MOUNTED TO THE MODEL 332L CABINET



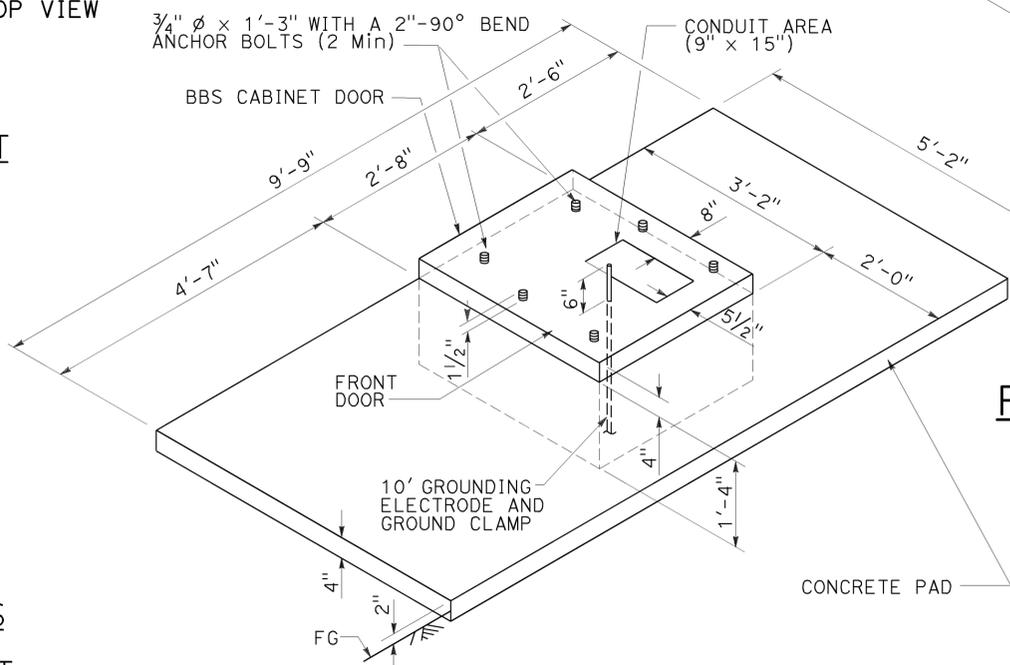
BASE PLAN FOR BBS MOUNTED TO THE MODEL 332L CABINET

(FOR DIMENSIONS AND DETAILS NOT SHOWN, SEE CABINET HOUSING DETAILS OF THE TRANSPORTATION ELECTRICAL EQUIPMENT SPECIFICATION (TEES))

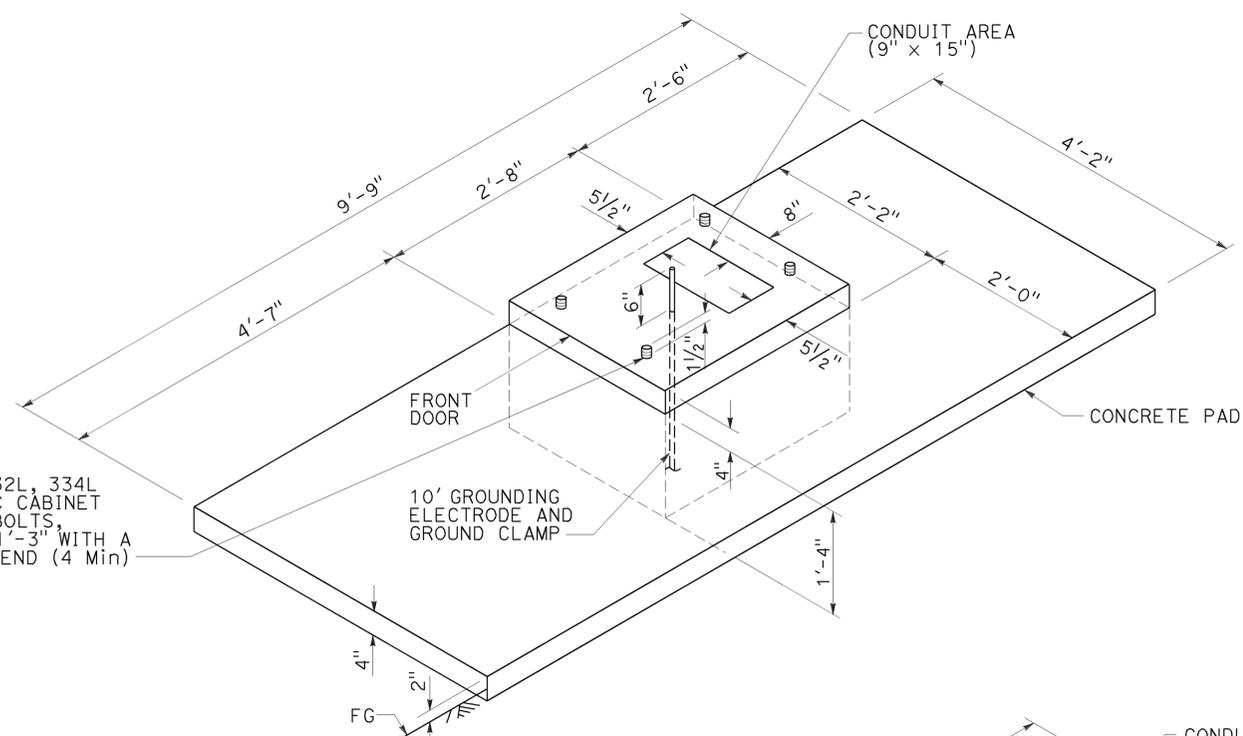


TOP VIEW

3/4" Ø x 1'-3" WITH A 2"-90° BEND ANCHOR BOLTS (2 Min)

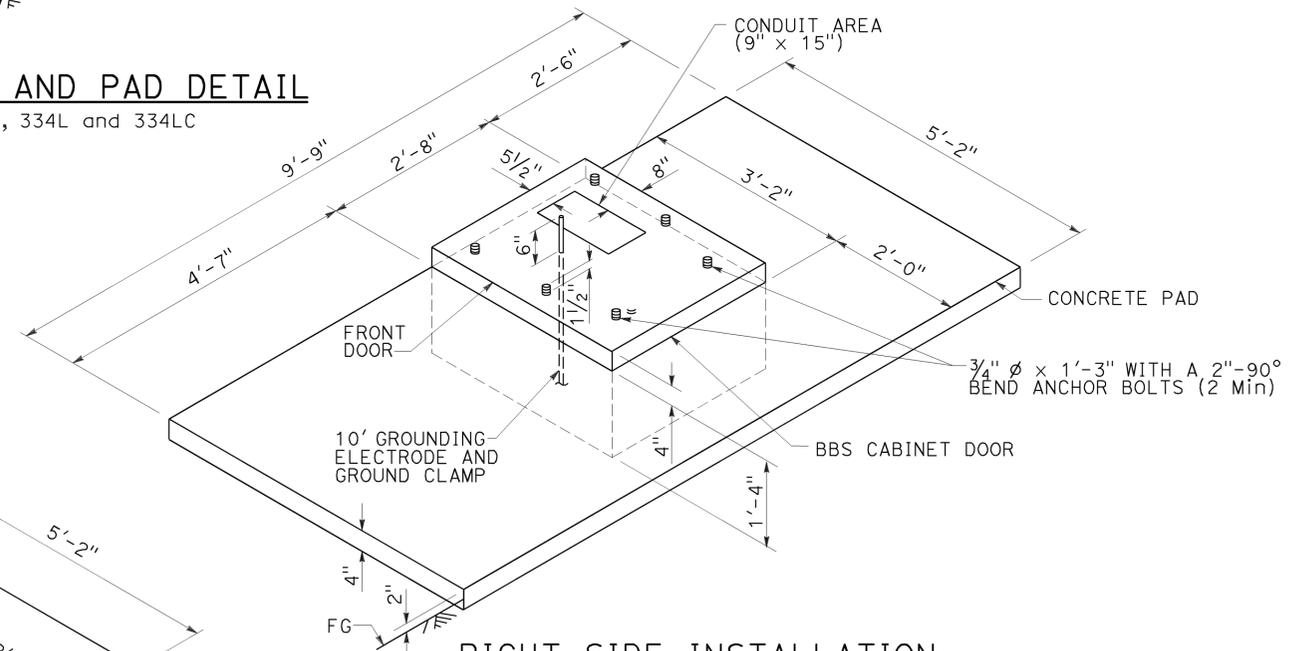


LEFT SIDE INSTALLATION DETAIL A



FOUNDATION AND PAD DETAIL

Model 332L, 334L and 334LC



RIGHT SIDE INSTALLATION DETAIL B

MODIFIED MODEL 332L CABINET FOUNDATION DETAIL FOR BATTERY BACKUP SYSTEM

STATE OF CALIFORNIA
DEPARTMENT OF TRANSPORTATION

ELECTRICAL SYSTEMS (CONTROLLER CABINET FOUNDATION AND PAD DETAILS)

NO SCALE

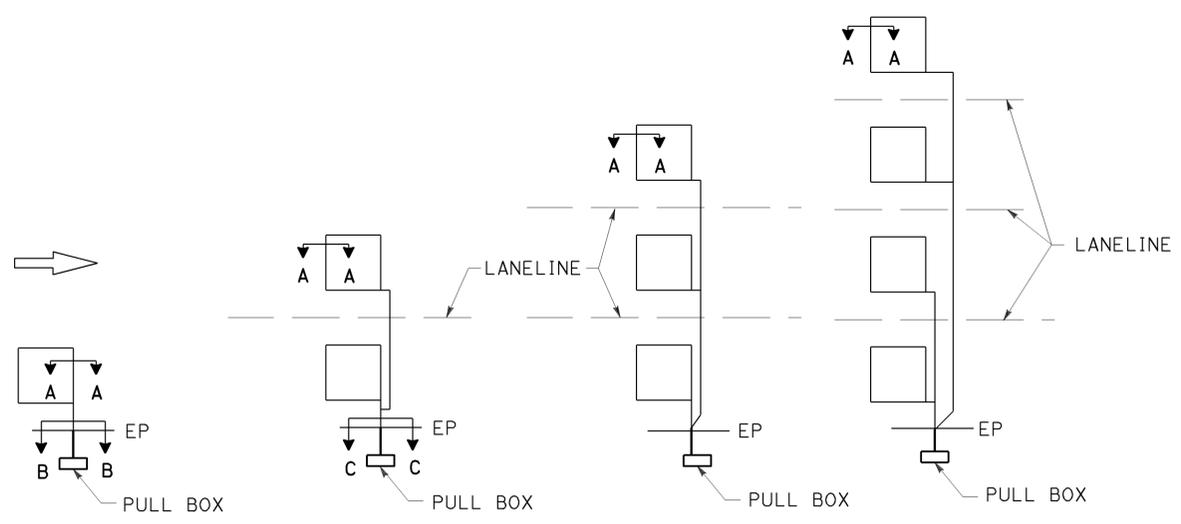
RSP ES-3C DATED APRIL 15, 2016 SUPERSEDES RSP ES-3C DATED OCTOBER 30, 2015 AND STANDARD PLAN ES-3C DATED MAY 20, 2011 - PAGE 437 OF THE STANDARD PLANS BOOK DATED 2010.

2010 REVISED STANDARD PLAN RSP ES-3C

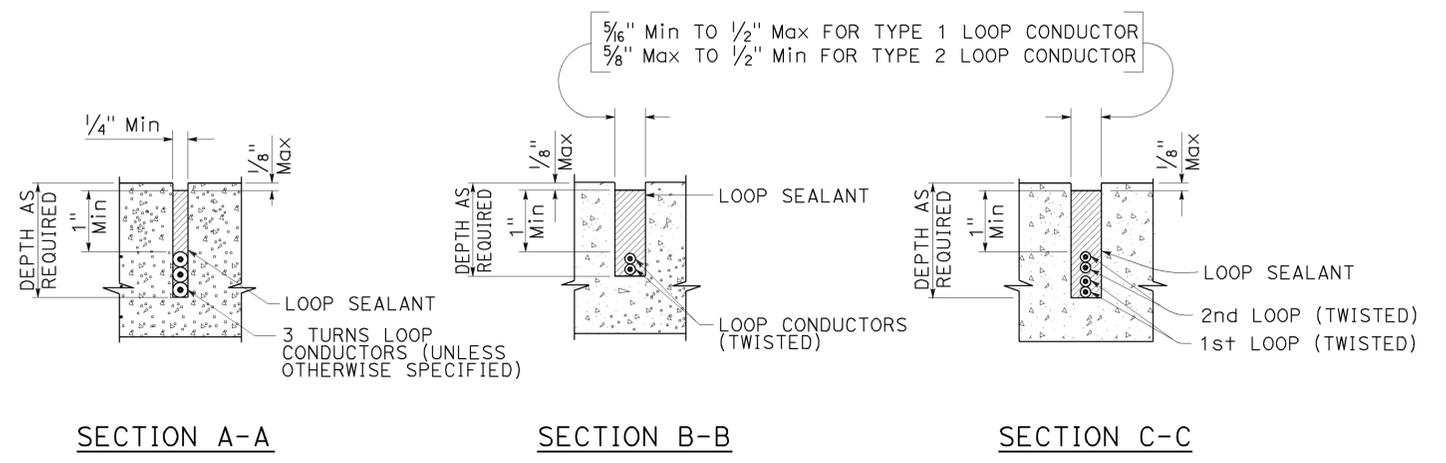
Dist	COUNTY	ROUTE	POST MILES TOTAL PROJECT	SHEET NO.	TOTAL SHEETS
05	SLO, Mon	101	63.2/R69.3, R0.0/R1.9	614	858

Theresa Gabriel
 REGISTERED ELECTRICAL ENGINEER
 April 15, 2016
 PLANS APPROVAL DATE
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TO ACCOMPANY PLANS DATED 5-2-16

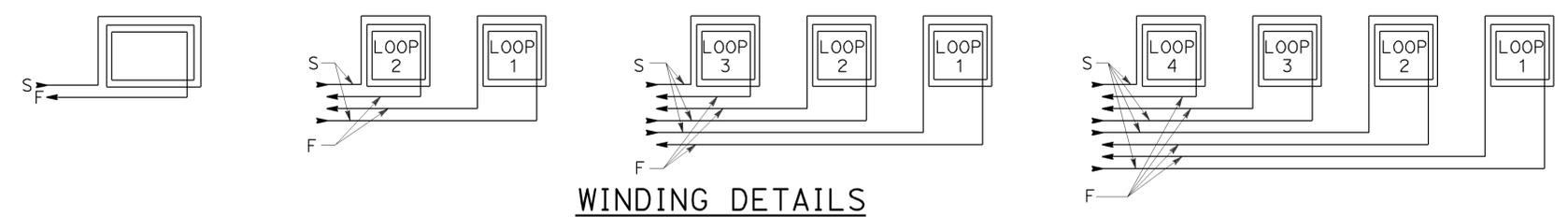


SAW CUT DETAILS
Type A loop detector configurations illustrated



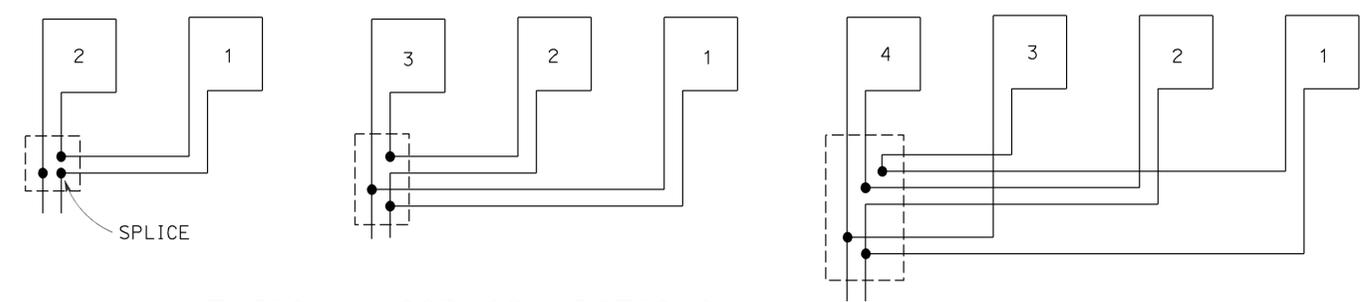
SECTION A-A SECTION B-B SECTION C-C

SLOT DETAILS - TYPE 1 AND TYPE 2 LOOP CONDUCTOR



WINDING DETAILS

ABBREVIATIONS:
 S - START
 F - FINISH



TYPICAL LOOP CONNECTIONS
Dashed lines represent the pull box

STATE OF CALIFORNIA
 DEPARTMENT OF TRANSPORTATION
**ELECTRICAL SYSTEMS
 (LOOP DETECTORS)**
 NO SCALE

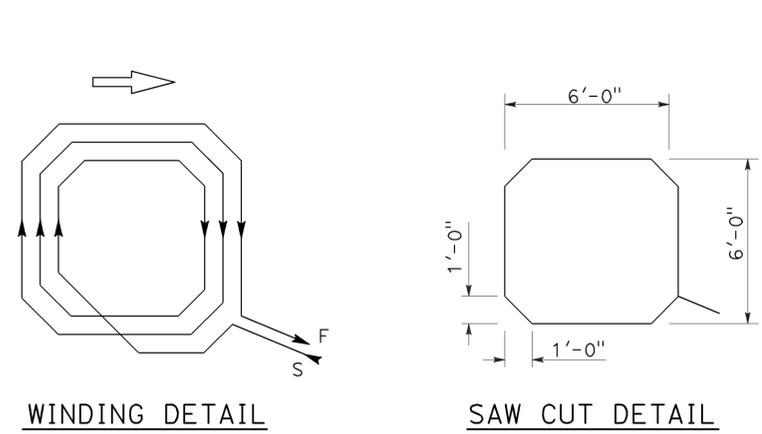
RSP ES-5A DATED APRIL 15, 2016 SUPERSEDES RSP ES-5A
 DATED OCTOBER 30, 2015 AND STANDARD PLAN ES-5A DATED
 MAY 20, 2011 - PAGE 448 OF THE STANDARD PLANS BOOK DATED 2010.

2010 REVISED STANDARD PLAN RSP ES-5A

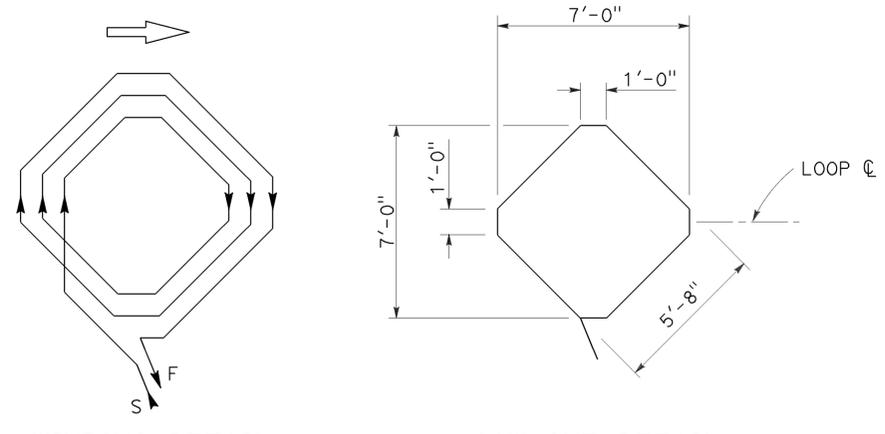
Dist	COUNTY	ROUTE	POST MILES TOTAL PROJECT	SHEET No.	TOTAL SHEETS
05	SLO, Mon	101	63.2/R69.3, R0.0/R1.9	615	858

Theresa Gabriel
 REGISTERED ELECTRICAL ENGINEER
 April 15, 2016
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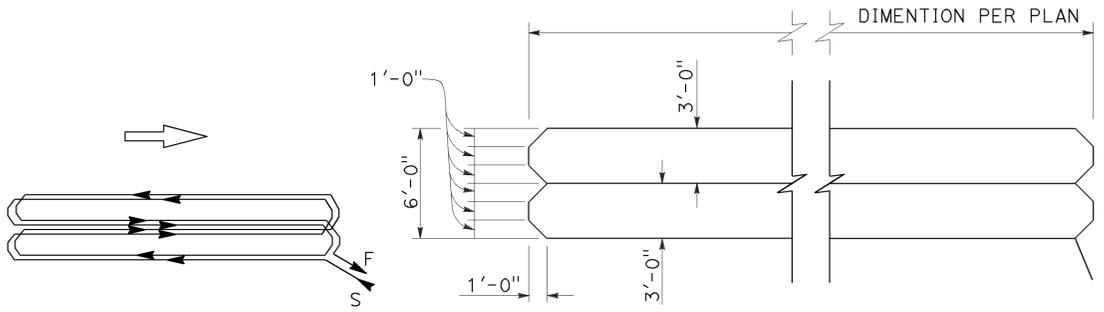
TO ACCOMPANY PLANS DATED 5-2-16



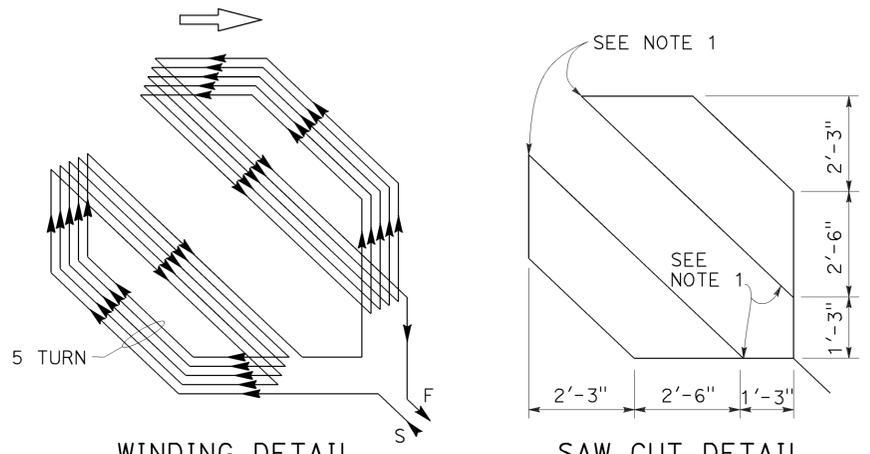
WINDING DETAIL
SAW CUT DETAIL
TYPE A LOOP DETECTOR CONFIGURATION



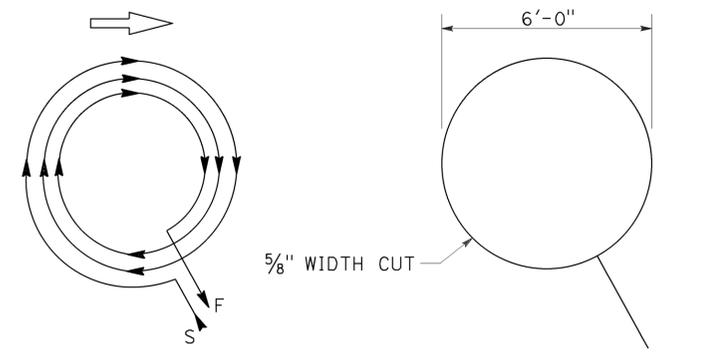
WINDING DETAIL
SAW CUT DETAIL
TYPE B LOOP DETECTOR CONFIGURATION



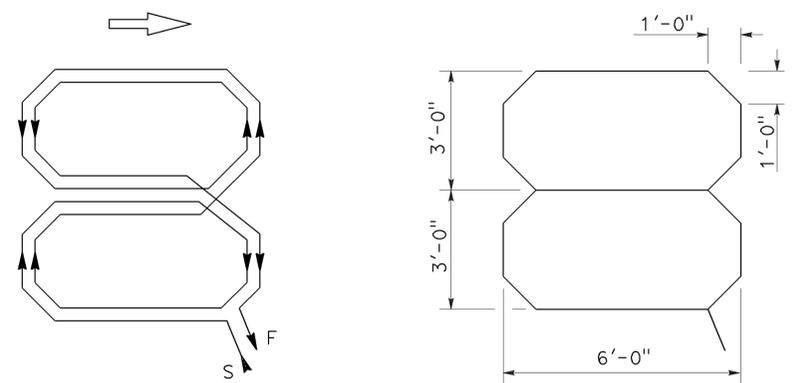
WINDING DETAIL
SAW CUT DETAIL
TYPE C LOOP DETECTOR CONFIGURATION



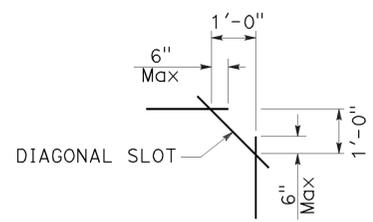
WINDING DETAIL
SAW CUT DETAIL
TYPE D LOOP DETECTOR CONFIGURATION



WINDING DETAIL
SAW CUT DETAIL
TYPE E LOOP DETECTOR CONFIGURATION



WINDING DETAIL
SAW CUT DETAIL
TYPE Q LOOP DETECTOR CONFIGURATION



PLAN VIEW OF DIAGONAL SLOT AT CORNERS

STATE OF CALIFORNIA
DEPARTMENT OF TRANSPORTATION

ELECTRICAL SYSTEMS (DETECTORS)
NO SCALE

- NOTES:**
1. Round corners of acute angle saw cuts to prevent damage to conductors.
 2. Typical distance separating loops from edge to edge is 10' for Type A, B, D and E installation in single lane.
 3. Use Type D loops for limit line detection and bicycle lanes.

RSP ES-5B DATED APRIL 15, 2016 SUPERSEDES RSP ES-5B DATED OCTOBER 30, 2015 AND RSP ES-5B DATED JULY 19, 2013 AND STANDARD PLAN ES-5B DATED MAY 20, 2011 - PAGE 449 OF THE STANDARD PLANS BOOK DATED 2010.

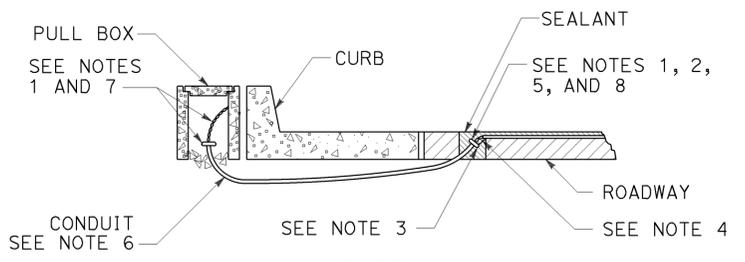
2010 REVISED STANDARD PLAN RSP ES-5B

Dist	COUNTY	ROUTE	POST MILES TOTAL PROJECT	SHEET No.	TOTAL SHEETS
05	SLO, Mon	101	63.2/R69.3, R0.0/R1.9	616	858

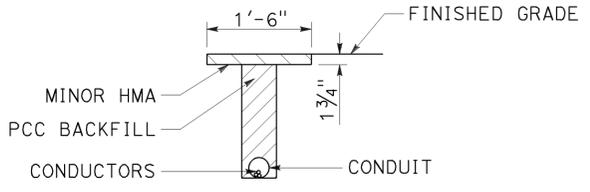
Theresa Gabriel
 REGISTERED ELECTRICAL ENGINEER
 Theresa Gabriel
 No. E15129
 Exp. 6-30-16
 ELECTRICAL
 STATE OF CALIFORNIA

October 30, 2015
 PLANS APPROVAL DATE
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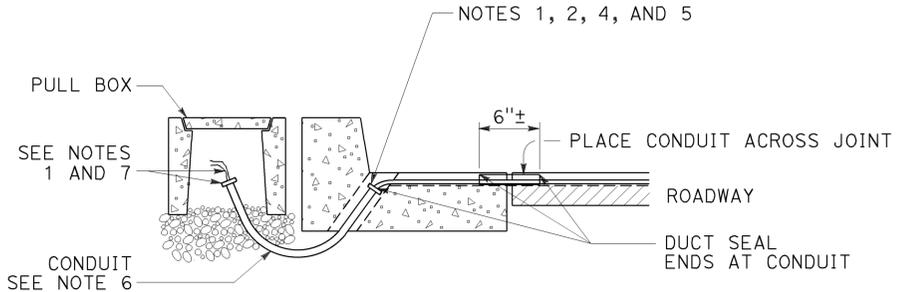
TO ACCOMPANY PLANS DATED 5-2-16



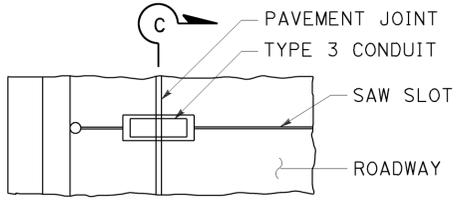
**TYPE A
CURB TERMINATION DETAIL**



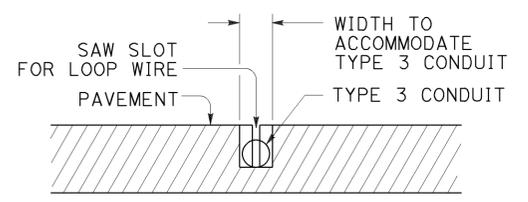
**"T" TRENCH
DETAIL 1**



CROSS SECTION

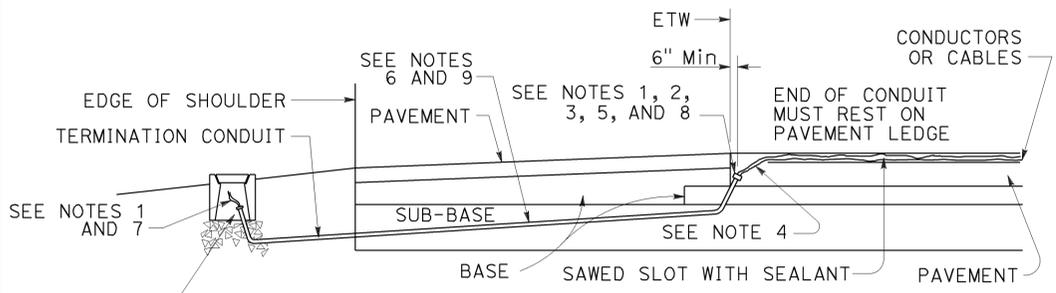


PLAN VIEW

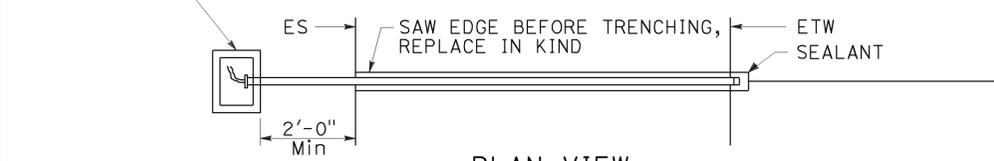


SECTION C-C

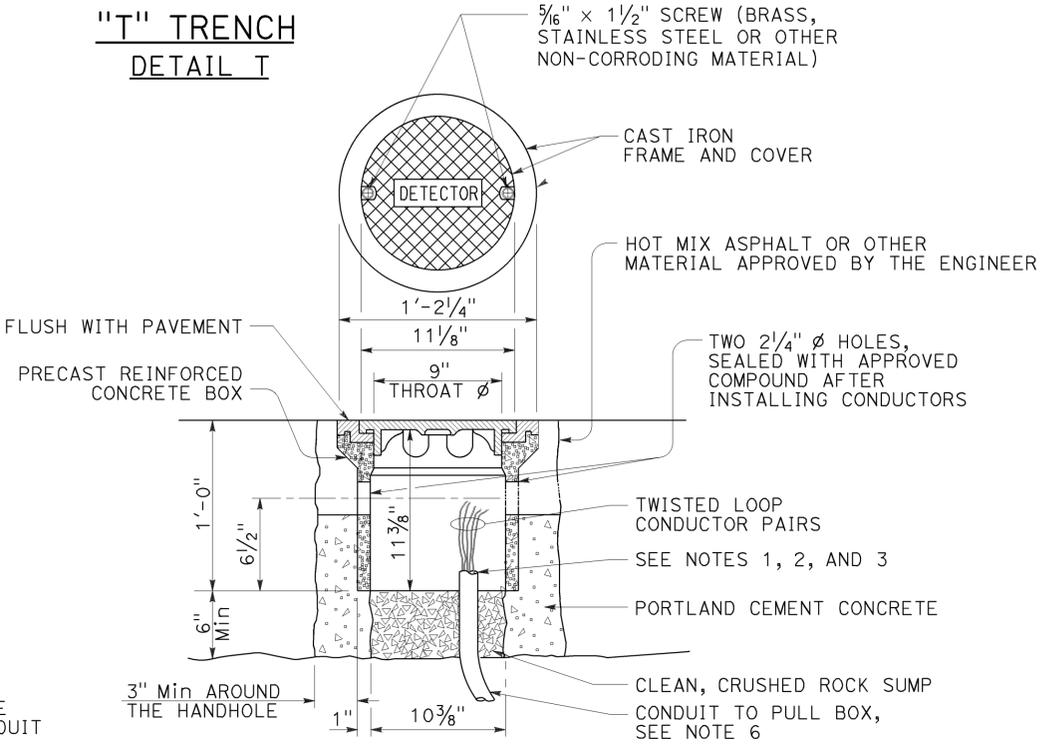
**TYPE B
CURB TERMINATION DETAIL**



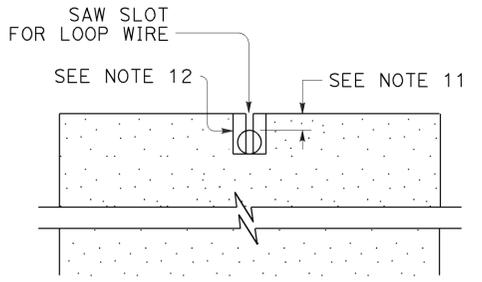
CROSS SECTION



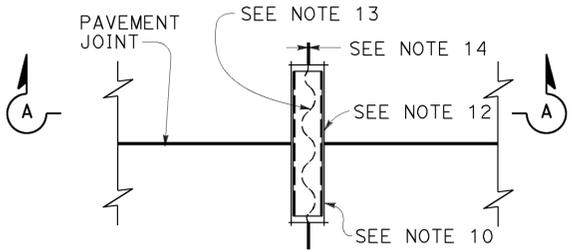
**PLAN VIEW
SHOULDER TERMINATION DETAILS**



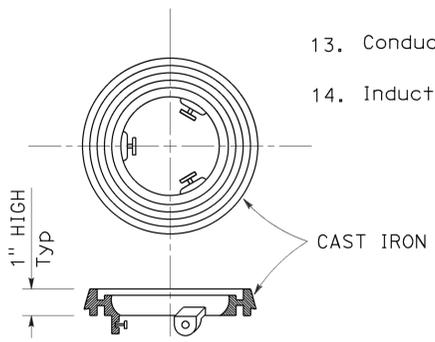
DETECTOR HANDHOLE DETAIL



SECTION A-A



**PLAN VIEW
TYPICAL LOOP LEAD-IN DETAIL
AT PAVEMENT JOINT**



LOCKING GRADE RING

NOTES:

- Bushing shall be used at end of conduit.
- Tape detector conductors or cables 3" each side of bushings.
- Install duct seal compound to each end of termination conduit before installing sealant.
- Round all sharp edges where detector conductors or cables have to pass.
- End of conduit shall be 3/8" below roadway surface.
- | | |
|-----------------|-----------------|
| Conduit size | Loop conductors |
| 1"C minimum | 1 to 2 pairs |
| 1 1/2"C minimum | 3 to 4 pairs |
| 2"C minimum | 5 or more pairs |
- Splice detector conductors or cables to detector lead-in-cable.
- Location of detector handhole when shown on plans.
- When the shoulder and traveled way are paved with the same material and there is no joint between them, the conduit shall extend only 2'-0" into the shoulder pavement.
- 3/4"C, Type 3 conduit 6" long minimum, plug both ends with duct compound to keep out sealant.
- 1/2" Minimum between top of conduit and pavement surface.
- Sawcut shall not exceed 1" in width and 1/8" longer than conduit to be installed.
- Conductors with 1/2" minimum slack inside conduit.
- Inductive loop detector saw slot.

STATE OF CALIFORNIA
DEPARTMENT OF TRANSPORTATION

**ELECTRICAL SYSTEMS
(CURB AND SHOULDER TERMINATION,
TRENCH, AND HANDHOLE DETAILS)**

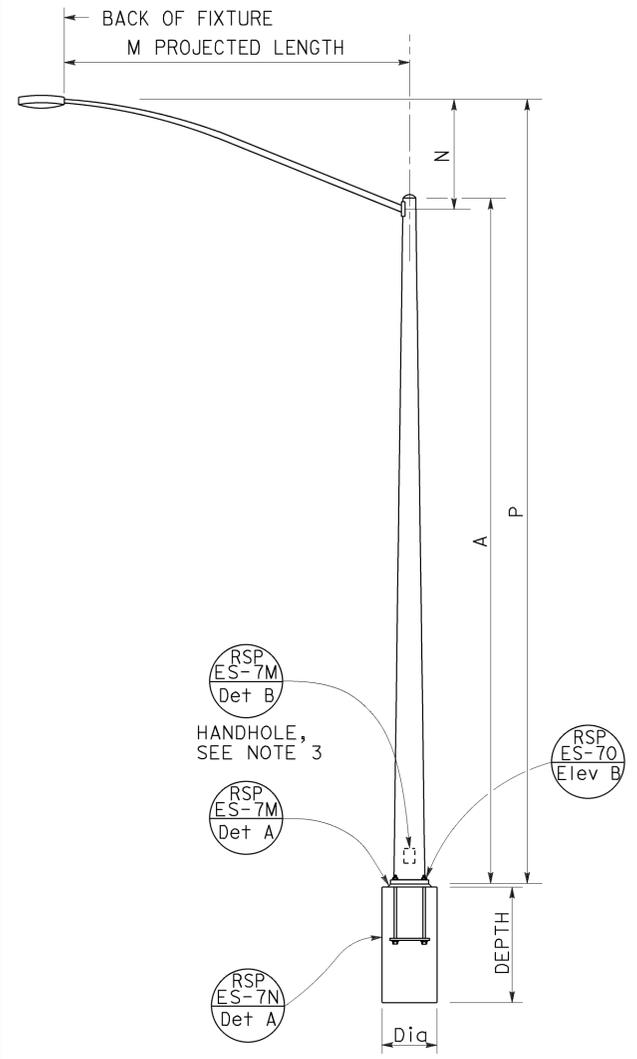
NO SCALE

RSP ES-5D DATED OCTOBER 30, 2015 SUPERSEDES RSP ES-5D DATED JULY 19, 2013 AND STANDARD PLAN ES-5D DATED MAY 20, 2011 - PAGE 451 OF THE STANDARD PLANS BOOK DATED 2010.

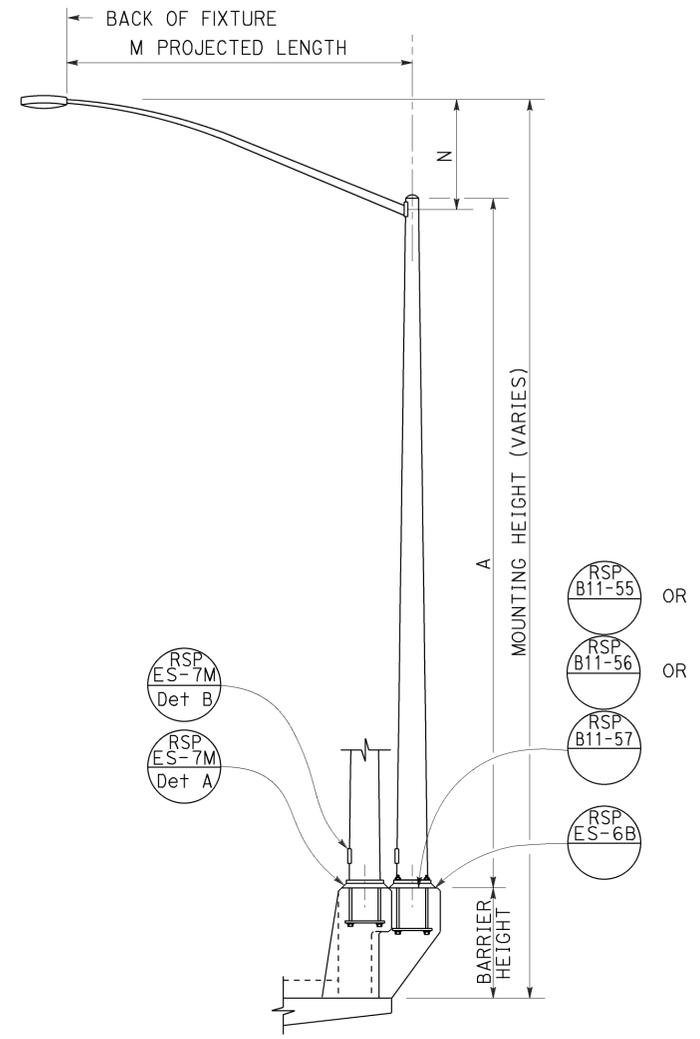
REVISED STANDARD PLAN RSP ES-5D

2010 REVISED STANDARD PLAN RSP ES-5D

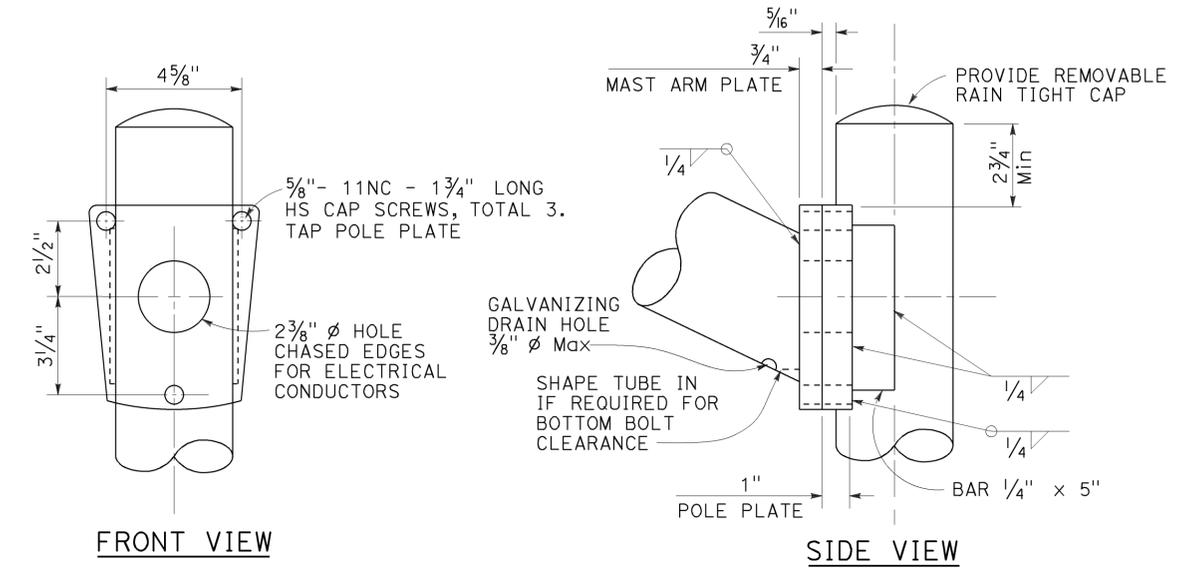
TO ACCOMPANY PLANS DATED 5-2-16



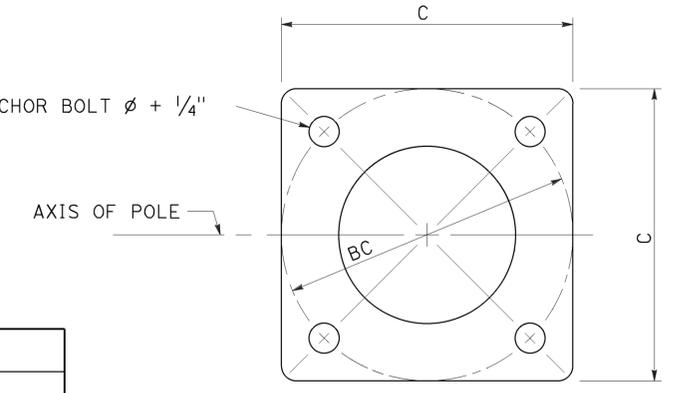
**TYPE 15 AND TYPE 21
ELEVATION A**



**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	Diø	DEPTH
15	30'-0"	8"	0.1196"	1'-0"	1'-0"	1 1/2"	1" ø x 36" *	2'-6"	6'-0"
21	35'-0"	8 5/8"	0.1793"	1'-0"	1'-0"	2"	1 1/4" ø x 36" *	2'-6"	7'-0"

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

NOTES:

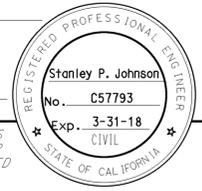
- Indicates mast arm length to be used unless otherwise noted on the plans.
- For Type 15-SB, use Type 15 standard with Type 30 slip base plate details, see Revised Standard Plan RSP ES-6F.
- Handhole shall be located on the downstream side of traffic.
- For additional notes and details, see Revised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

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

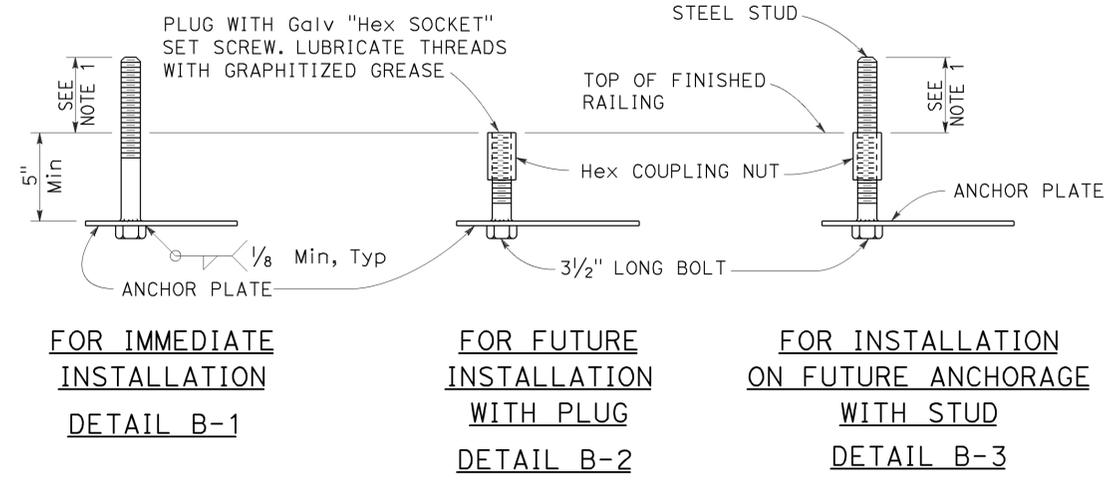
STATE OF CALIFORNIA
 DEPARTMENT OF TRANSPORTATION
**ELECTRICAL SYSTEMS
 (LIGHTING STANDARD,
 TYPES 15 AND 21)**
 NO SCALE

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 5-2-16



**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.

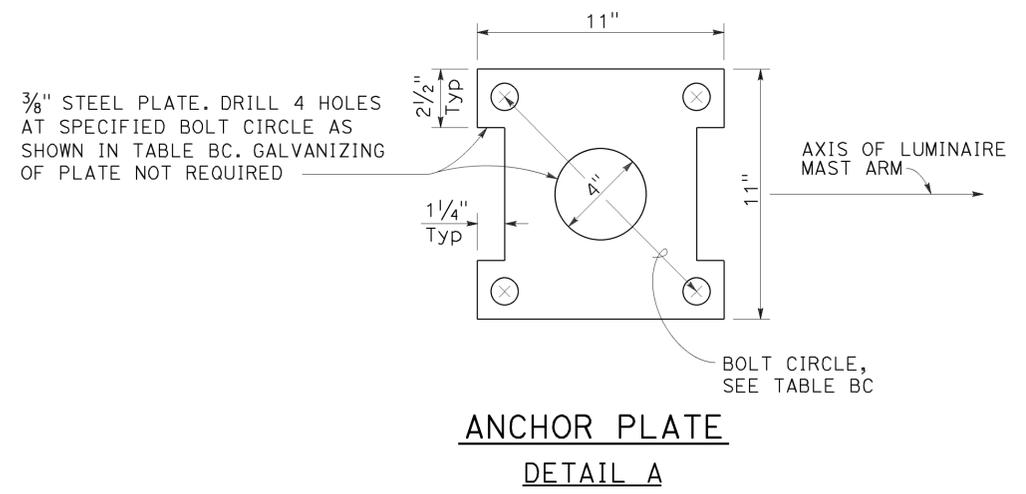
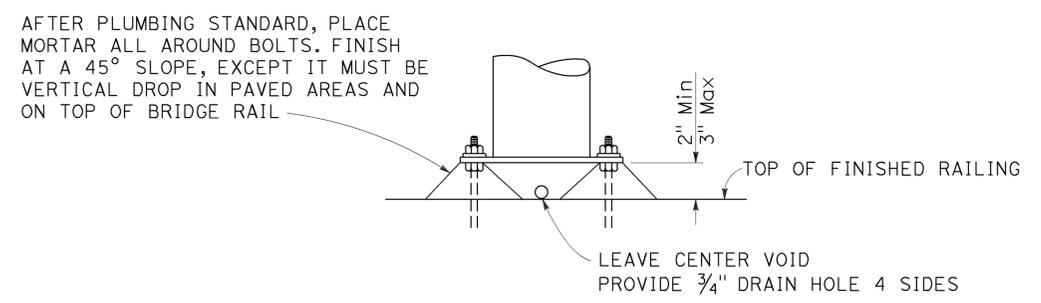


TABLE BC				
TYPE	BC = BOLT CIRCLE	ANCHOR BOLT DIAMETER	COUPLING NUT BASIC LENGTH	SET SCREW LENGTH DETAIL B-2
15	1'-0"	1"	3"	1 1/2"
21	1'-0"	1 1/4"	3 3/4"	1 7/8"



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

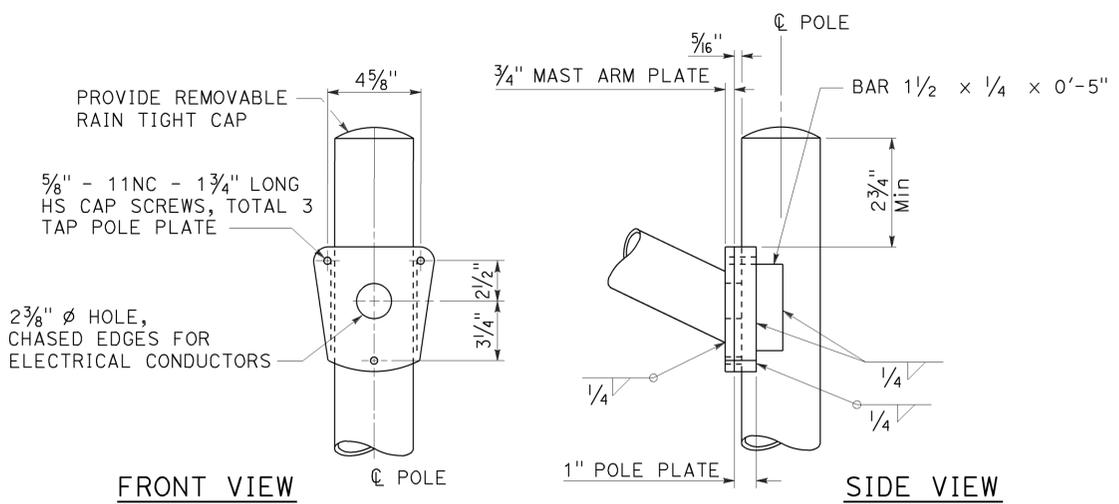
NO SCALE

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.

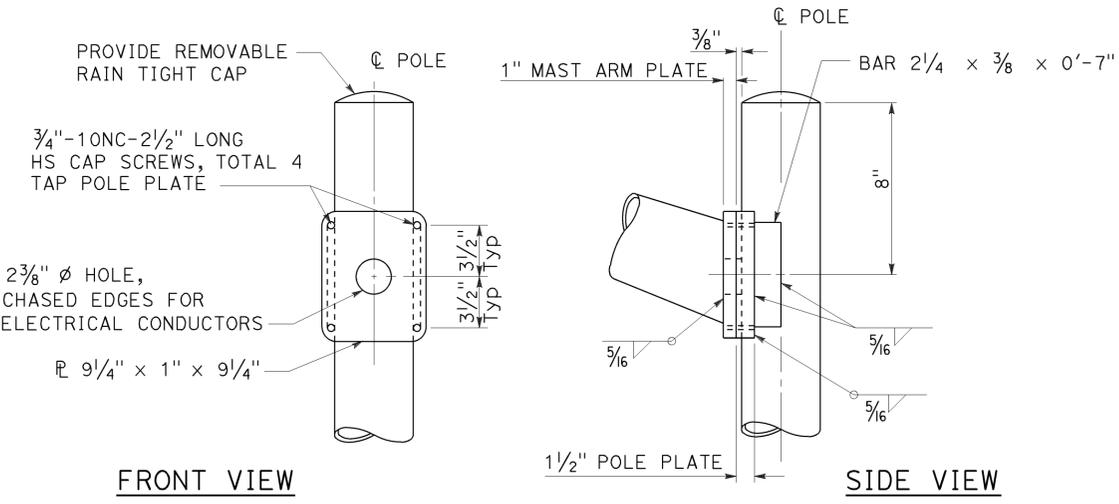
2010 REVISED STANDARD PLAN RSP ES-6B

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"±

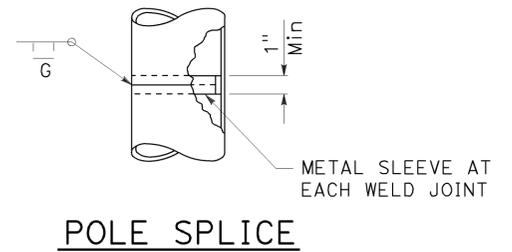
* TYPE 30
** TYPE 31



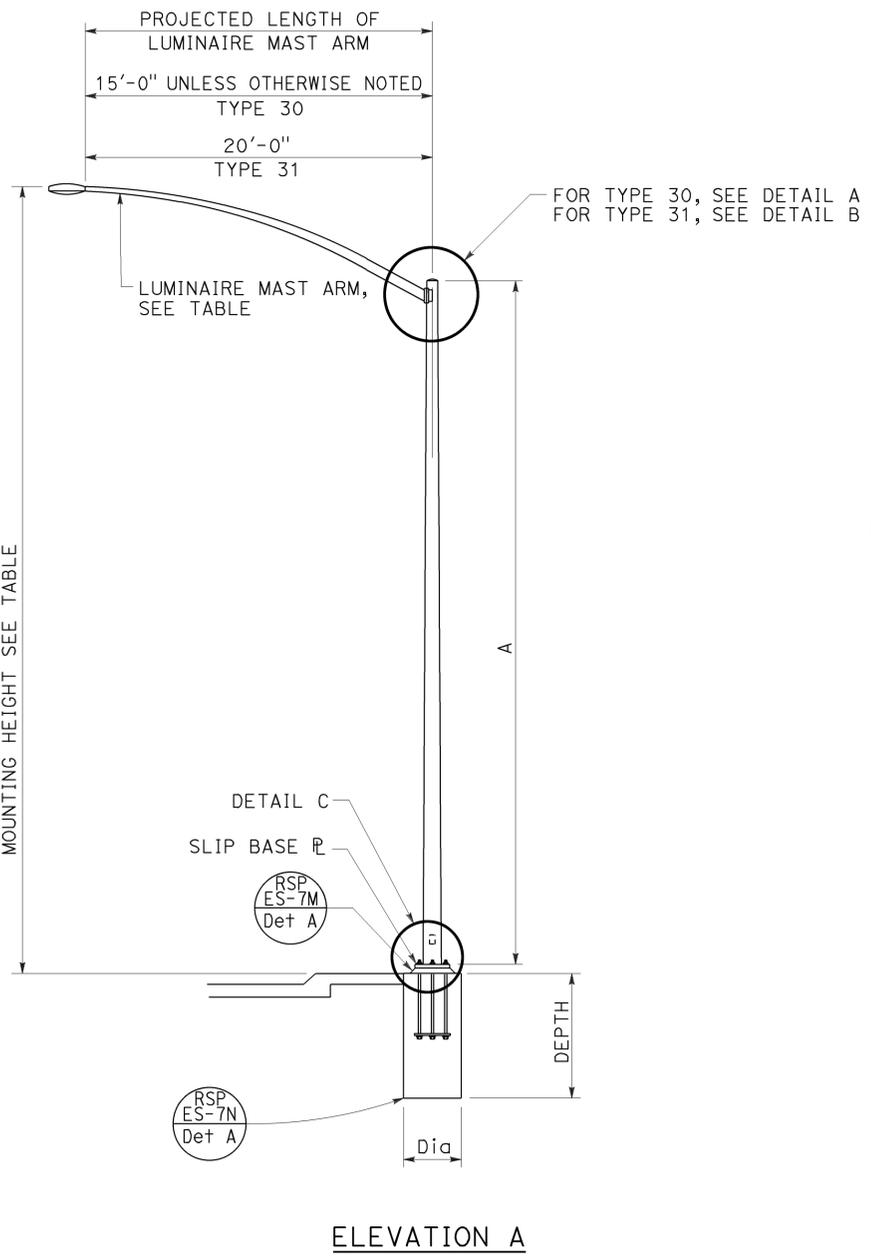
**TYPE 30
DETAIL A**



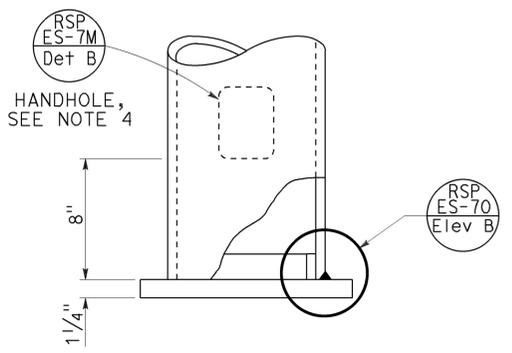
**TYPE 31
DETAIL B**



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 5-2-16

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 1/16"	0.1196"	2'-6"	7'-0"
31		10 3/4"	5 1/16"	0.1793"	3'-0"	8'-0"

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

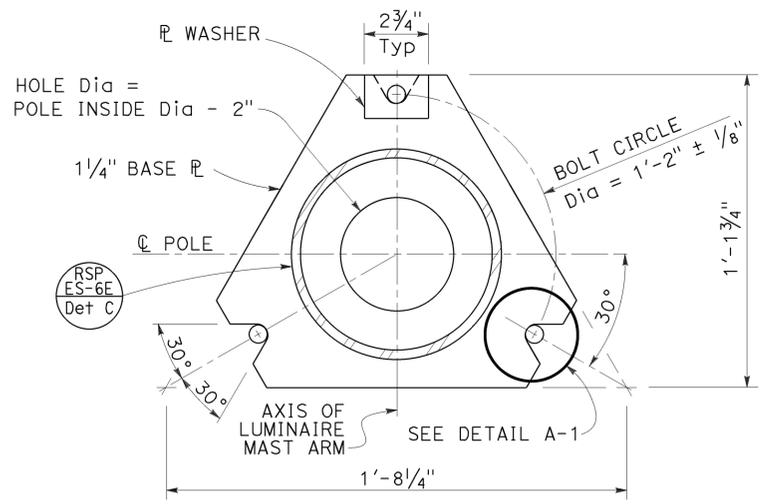
NO SCALE

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.

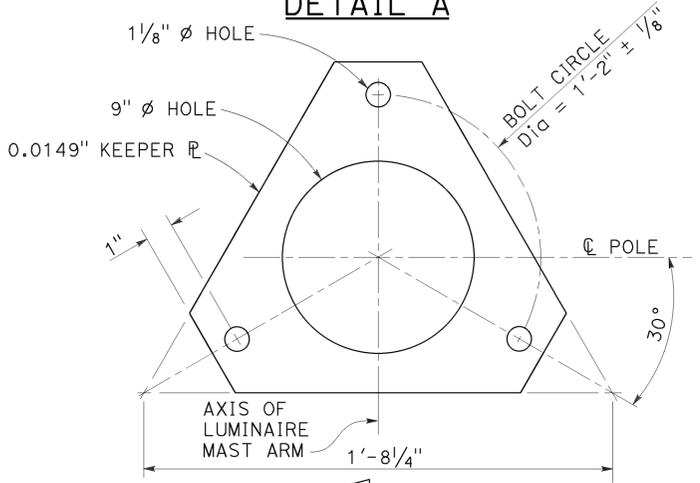
Dist	COUNTY	ROUTE	POST MILES TOTAL PROJECT	SHEET No.	TOTAL SHEETS
05	SLO, Mon	101	63.2/R69.3, R0.0/R1.9	620	858

Stanley P. Johnson
 REGISTERED CIVIL 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.

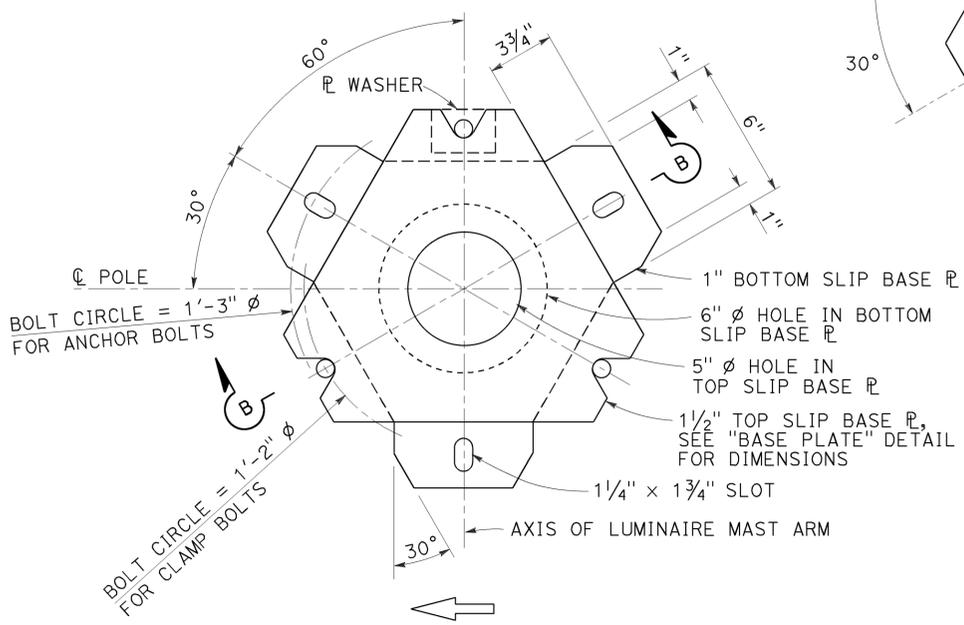
REGISTERED PROFESSIONAL ENGINEER
 Stanley P. Johnson
 No. C57793
 Exp. 3-31-16
 CIVIL
 STATE OF CALIFORNIA



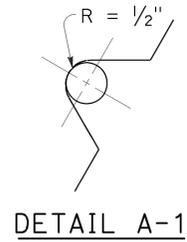
**BASE PLATE
DETAIL A**



**KEEPER PLATE
DETAIL B**

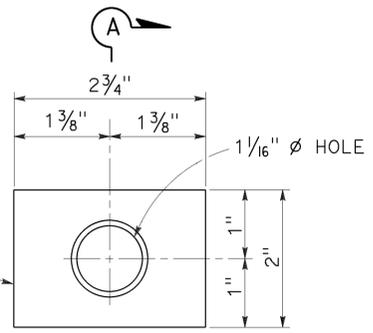


**BOTTOM PLATE
DETAIL C**

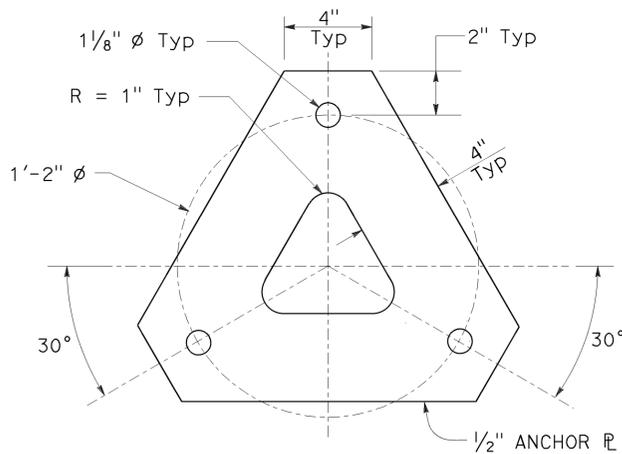


DETAIL A-1

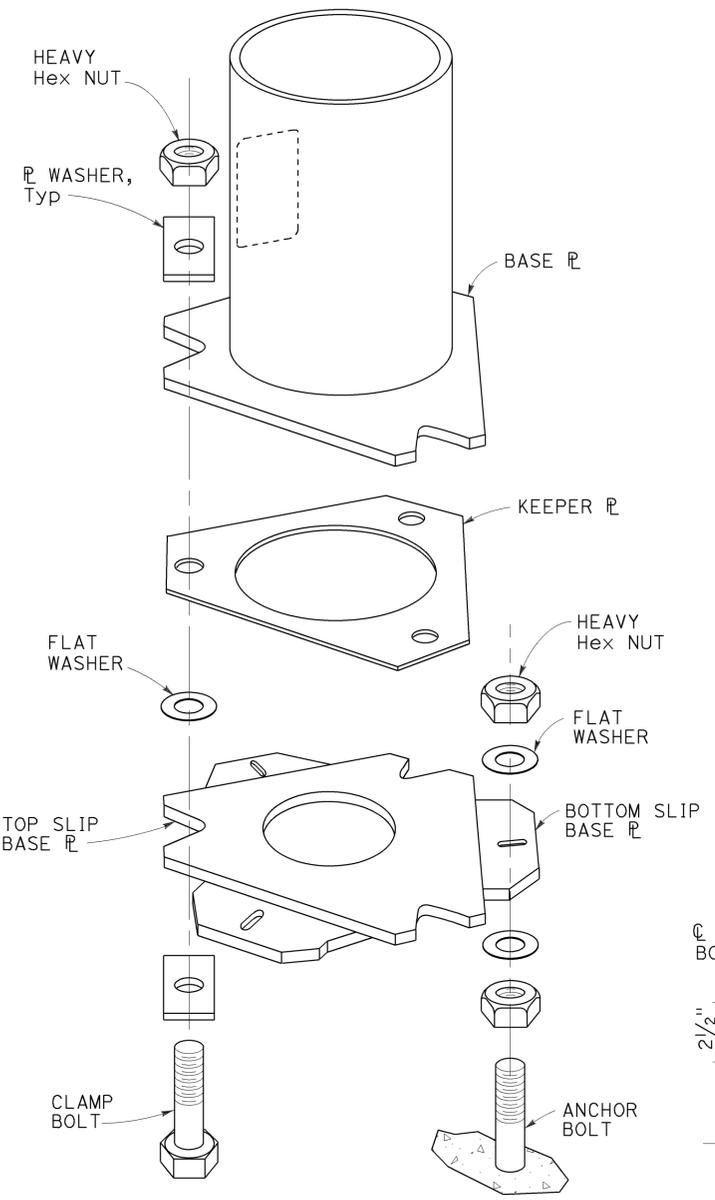
SECTION A-A



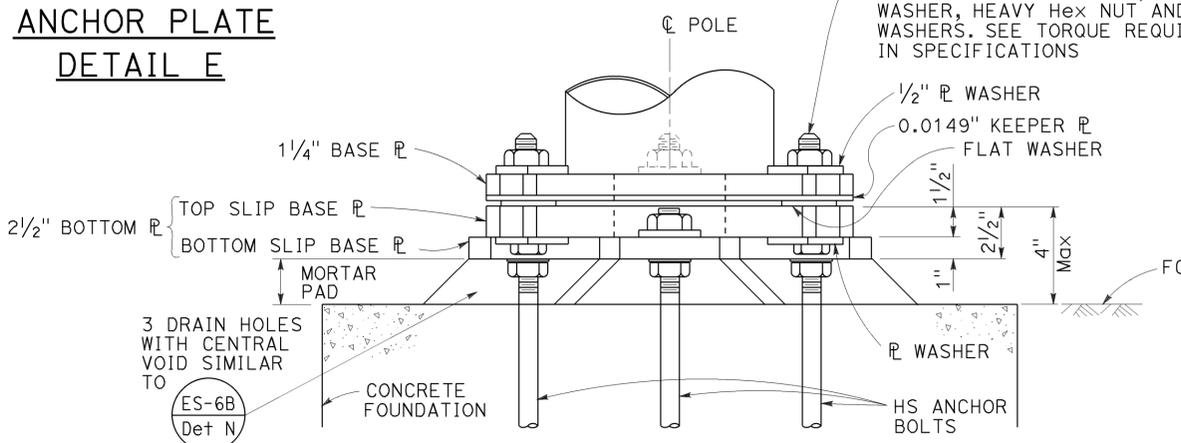
**PLATE WASHER
DETAIL D**



**ANCHOR PLATE
DETAIL E**



**SLIP BASE DETAIL
DETAIL F**

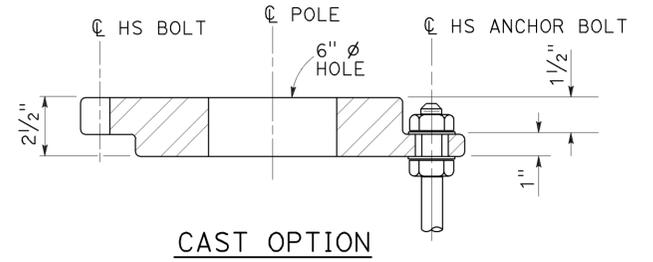


**SLIP BASE
ELEVATION A**

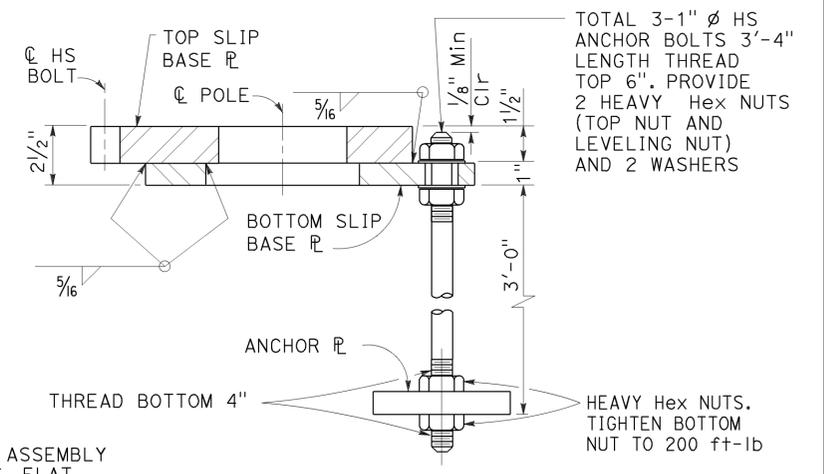
NOTES:

TO ACCOMPANY PLANS DATED 5-2-16

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)**

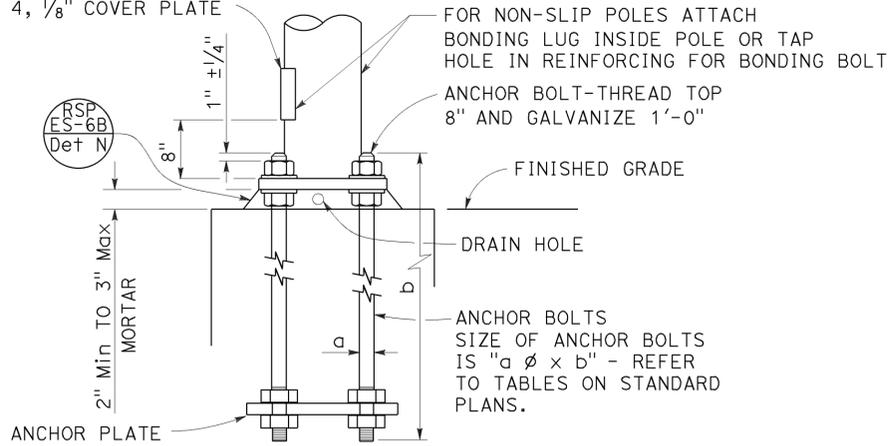
NO SCALE

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-6F

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.

Dist	COUNTY	ROUTE	POST MILES TOTAL PROJECT	SHEET No.	TOTAL SHEETS
05	SLO, Mon	101	63.2/R69.3, R0.0/R1.9	622	858

Stanley P. Johnson
REGISTERED CIVIL ENGINEER

July 15, 2016
PLANS APPROVAL DATE

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

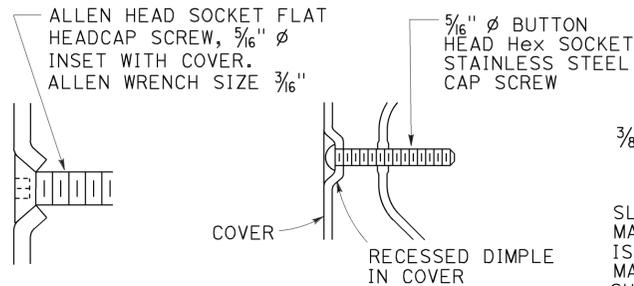
THE STATE OF CALIFORNIA OR ITS OFFICERS OR AGENTS SHALL NOT BE RESPONSIBLE FOR THE ACCURACY OR COMPLETENESS OF SCANNED COPIES OF THIS PLAN SHEET.

TO ACCOMPANY PLANS DATED 5-2-16

Type Load case (Use SL for special load case) Design wind velocity (mph) Signal mast arm length (ft) Standard plan year Only for poles or mast arms using Detail F Only for poles or mast arms using RSP ES-70

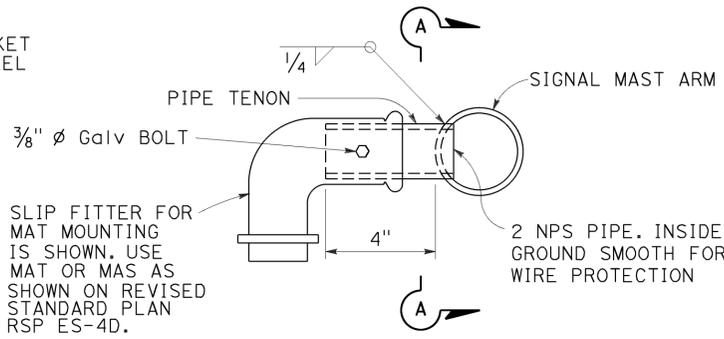
26A - 3 - 100 - 45 - 10 - F or FB

SAMPLE IDENTIFICATION NUMBER

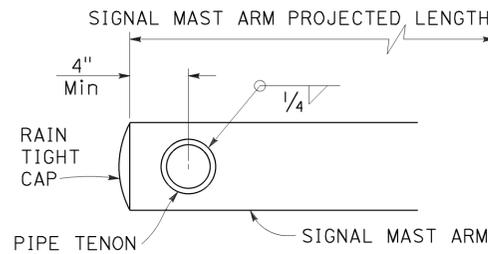


TYPICAL DETAIL
DETAIL B-1

ALTERNATIVE DETAIL
DETAIL B-2



SIDE TENON
DETAIL S-1



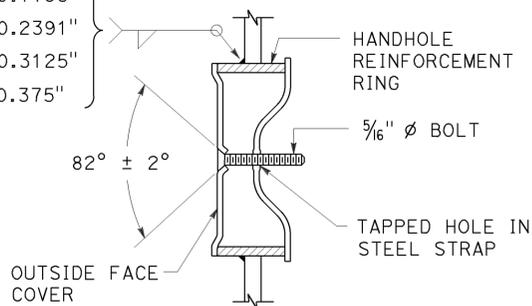
SECTION A-A

NOTES:

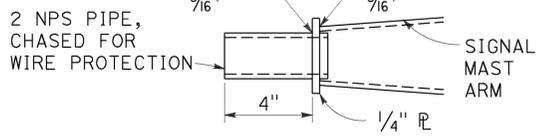
1. Provide a Hex nut, leveling nut and 2 washers for each bolt.
2. Luminaire mast arms shall be round, tapered steel tubes, taper of 0.1375" to 0.143-inch per foot with an end section 2 3/8" OD for mounting hardware. Extensions of 2 NPS Standard pipe and 7" long may be used at the option of the manufacturer. 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



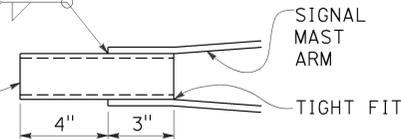
TIP TENON
DETAIL TL

This detail supersedes Detail S when so designated

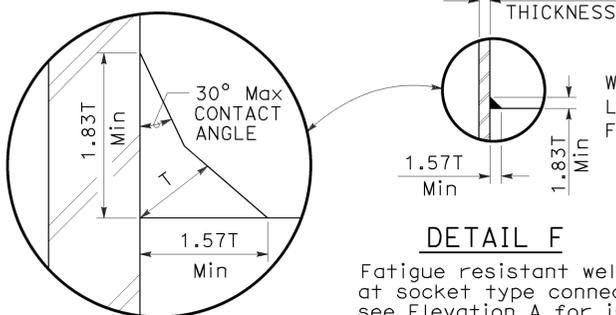
PIPE TENONS
DETAIL S

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

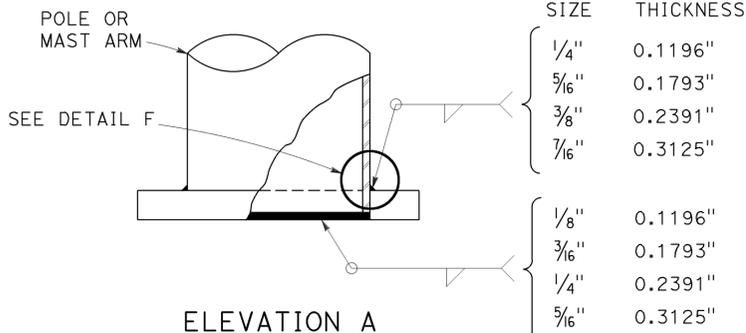


TIP TENON
DETAIL TS



DETAIL F

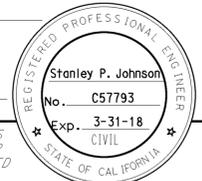
Fatigue resistant weld at socket type connection see Elevation A for inner weld



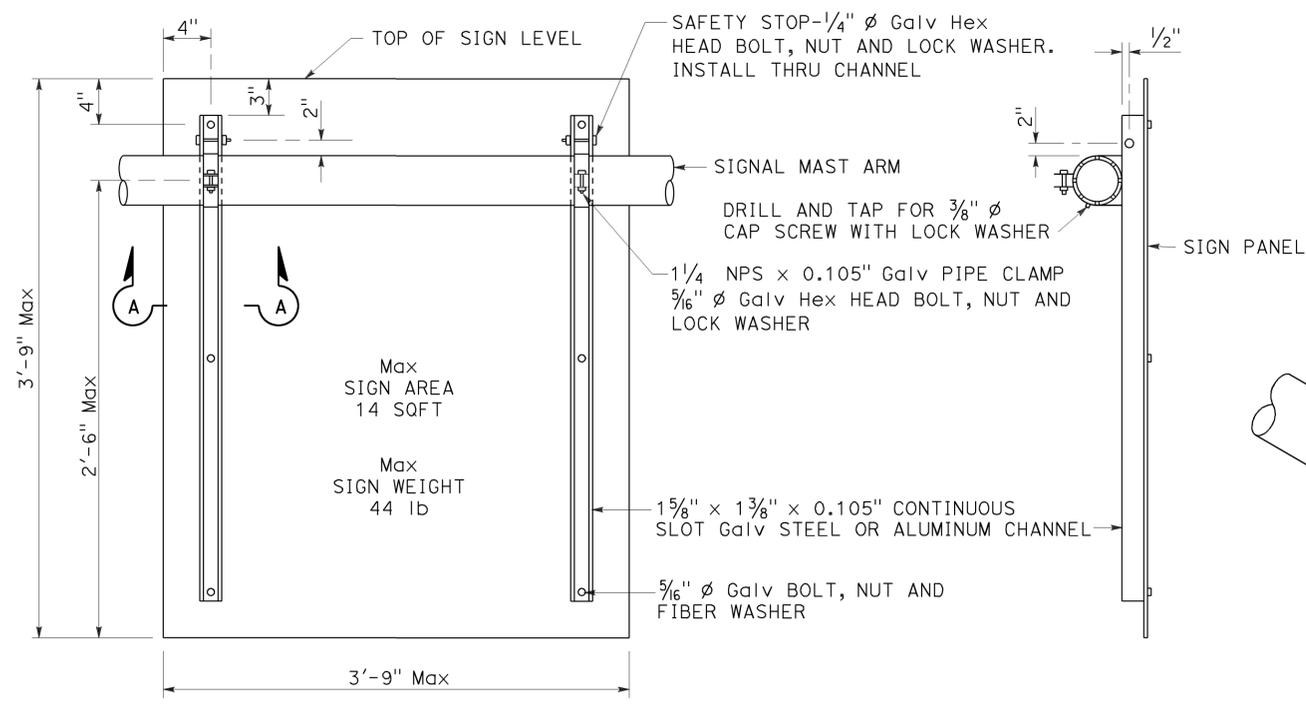
ELEVATION A

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.



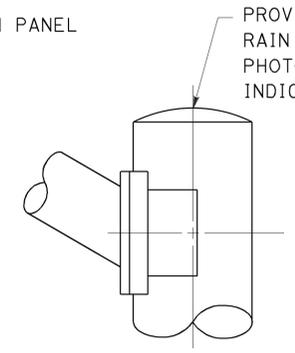
TO ACCOMPANY PLANS DATED 5-2-16



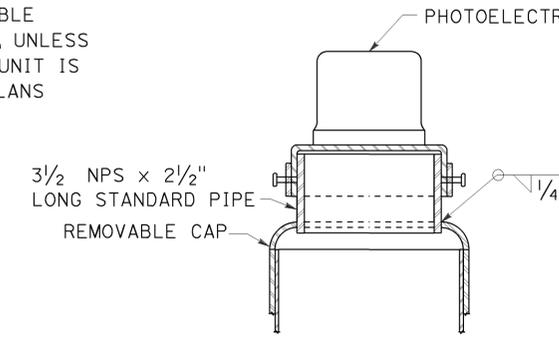
REAR VIEW

SIDE VIEW

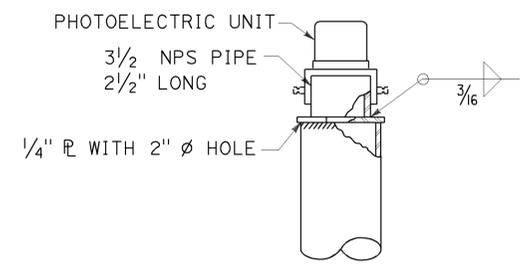
SIGN MOUNTING DETAILS
DETAIL U



STANDARD TOP
DETAIL B-1

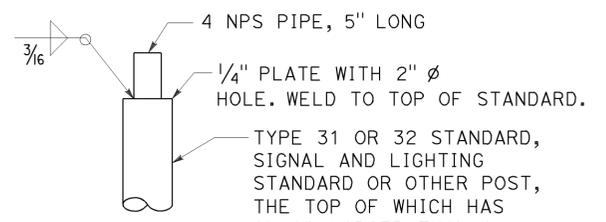


MOUNTING ADAPTER FOR
PHOTOELECTRIC UNIT
DETAIL B-2

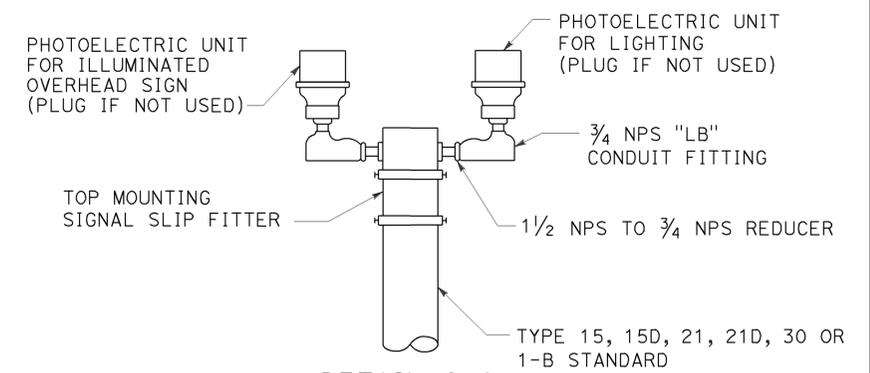


ALTERNATIVE
MOUNTING ADAPTER
DETAIL B-3

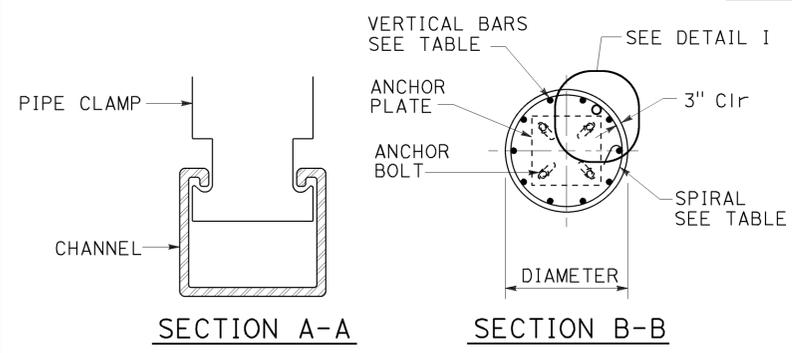
POLE TOP DETAILS
DETAIL B



DETAIL C-1

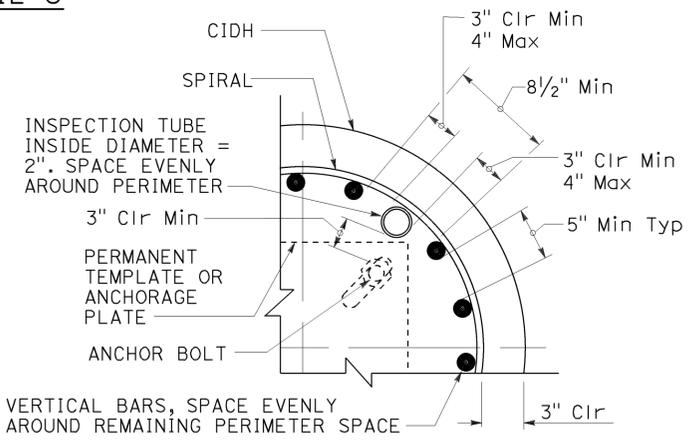


DUAL PHOTOELECTRIC UNIT MOUNTING DETAIL
DETAIL C



SECTION A-A

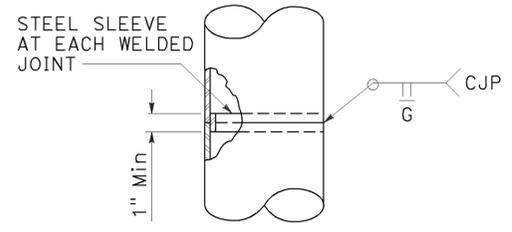
SECTION B-B



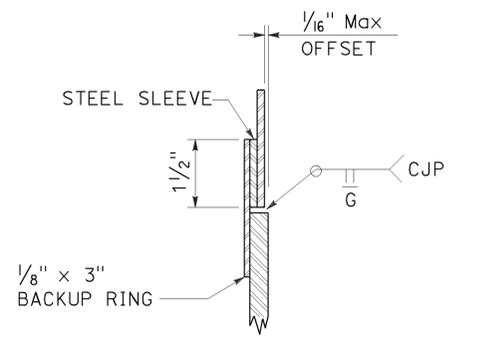
INSPECTION TUBE PLACEMENT
DETAIL I

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		4
4 ft	18-#9	2-#4 AT 7	5
4.5 ft	18-#9	2-#5 AT 7	5
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.

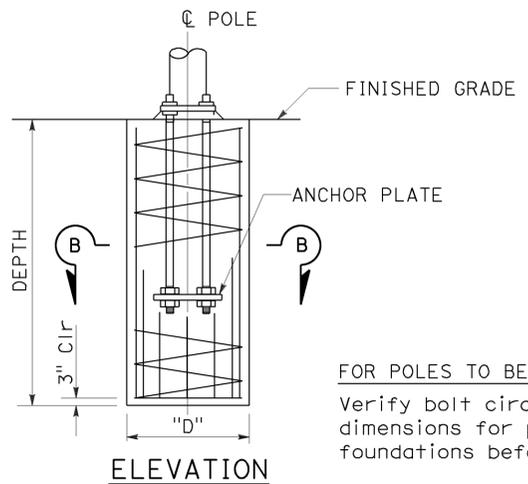


FOR UNIFORM TUBE THICKNESS
DETAIL T-1



AT TUBE THICKNESS CHANGE
DETAIL T-2

POLE SPLICES
DETAIL T



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.

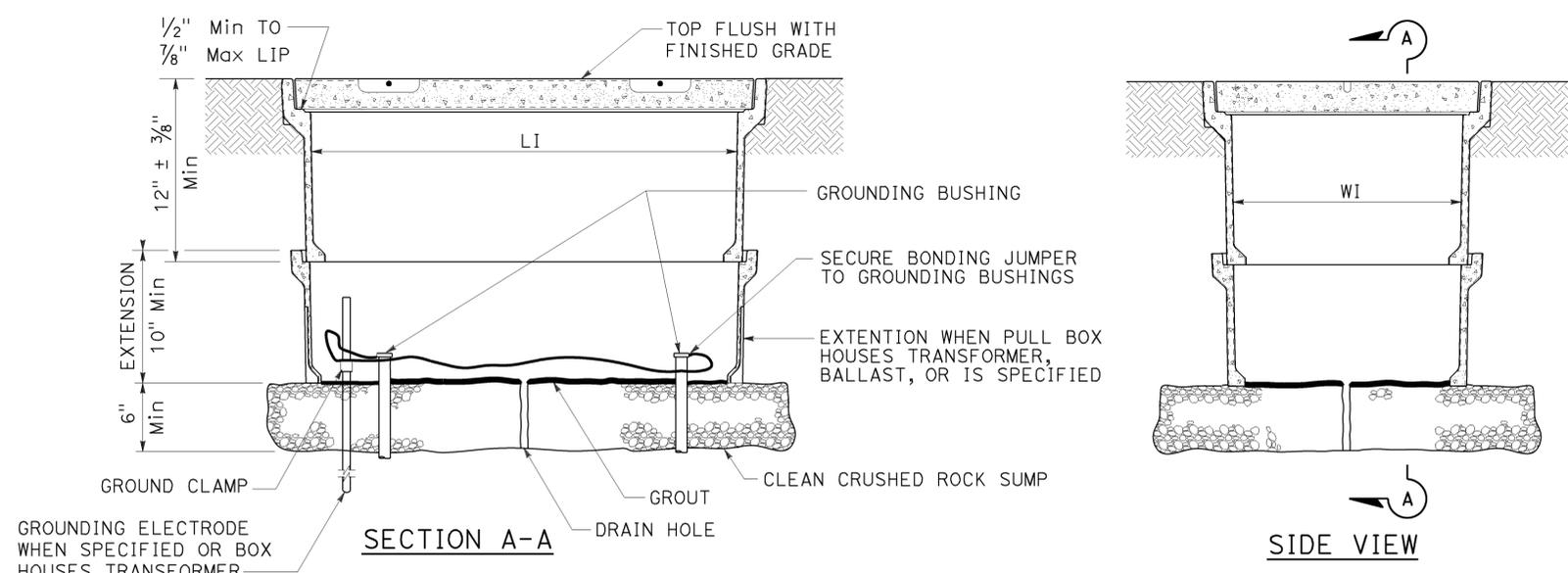
**ELECTRICAL SYSTEMS
(SIGNAL AND LIGHTING STANDARD,
DETAIL No. 2)**

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.

2010 REVISED STANDARD PLAN RSP ES-7N



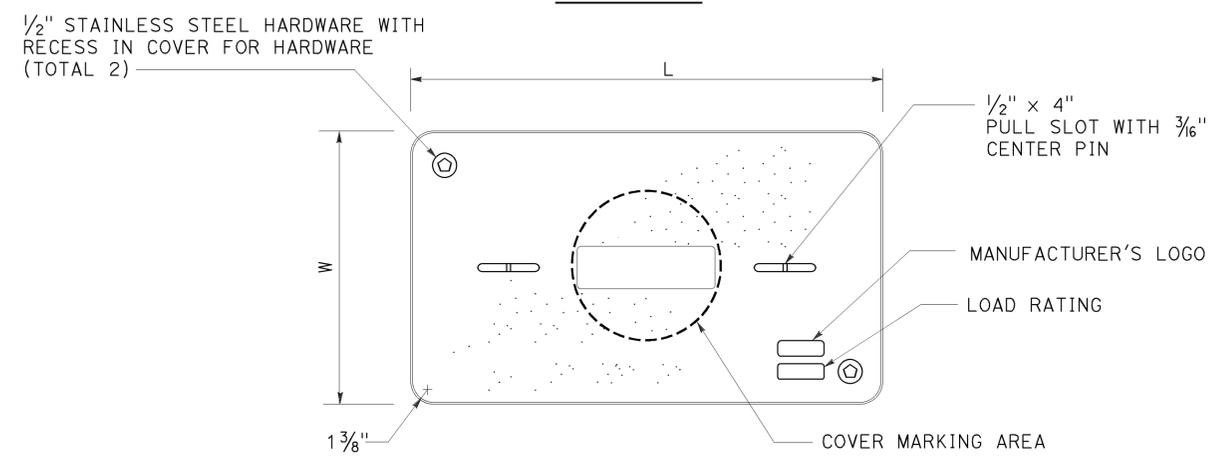
TO ACCOMPANY PLANS DATED 5-2-16



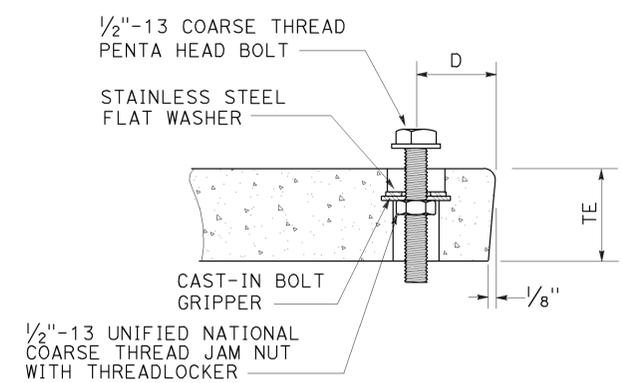
INSTALLATION DETAILS
DETAIL A

NOTES:

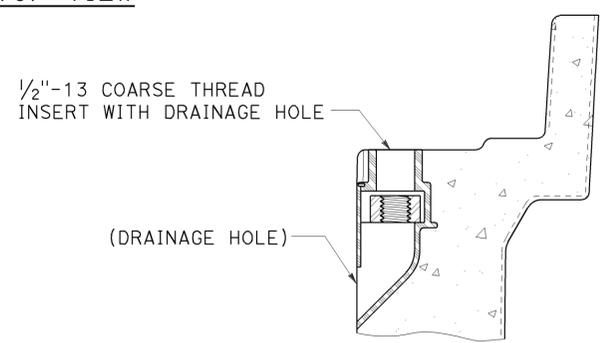
1. The nominal dimensions of the opening in which the cover sets shall be the same as the cover dimensions except the length and width dimensions shall be 1/8" greater.
2. Covers and boxes shall be interchangeable with California standard male and female gages. When interchanged with a standard male 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.

2010 REVISED STANDARD PLAN RSP ES-8A

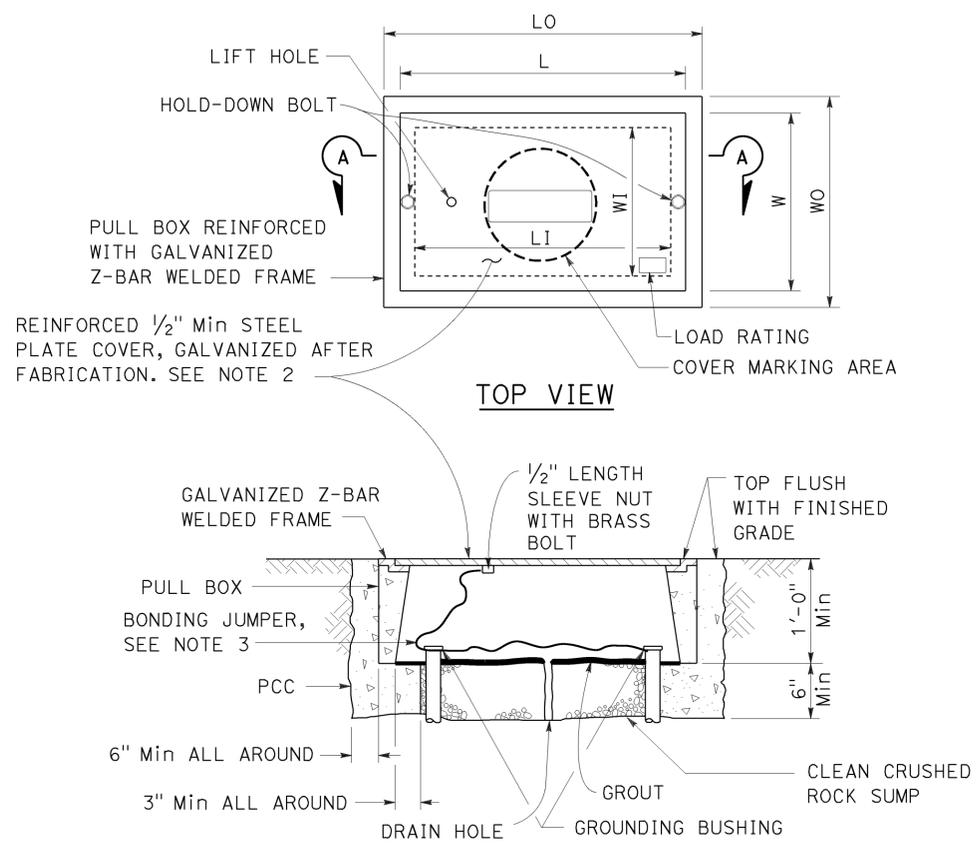
DIST	COUNTY	ROUTE	POST MILES TOTAL PROJECT	SHEET NO.	TOTAL SHEETS
05	SLO, Mon	101	63.2/R69.3, R0.0/R1.9	625	858

Theresa Gabriel
 REGISTERED ELECTRICAL ENGINEER
 April 15, 2016
 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 5-2-16



SECTION A-A
**No. 3 1/2(T), No. 5(T) AND
 No. 6(T) TRAFFIC PULL BOX**

NOTES:

- Traffic pull box shall be provided with steel cover and special concrete footing. Steel cover shall have embossed non-skid pattern.
- Steel reinforcing shall be as regularly used in the standard products of the respective manufacturer.
- Bonding jumper for metal covers shall be 3' long, minimum.
- 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.
- 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".

PULL BOX	PULL BOX				COVER			
	MINIMUM * THICKNESS	MINIMUM DEPTH BOX AND EXTENSION	L0	LI	W0	WI	L **	W **
No. 3 1/2(T)	1 1/2"	1'-0"	1'-10" - 1'-11"	1'-5" - 1'-6 1/2"	1'-3" - 1'-4"	10" - 1'-0"	1'-8" - 1'-8 1/2"	1'-1" - 1'-2"
No. 5(T)	1 3/4"	1'-0"	2'-5" - 2'-6"	2'-0" - 2'-1"	1'-6" - 1'-7"	1'-1" - 1'-2"	2'-3" - 2'-3 1/2"	1'-4" - 1'-4 1/2"
No. 6(T)	2"	1'-0"	2'-11" - 3'-1"	2'-6" - 2'-7"	1'-10" - 2'-0"	1'-5" - 1'-6"	2'-9" - 2'-9 1/2"	1'-8" - 1'-8 1/2"

* EXCLUDING CONDUIT WEB ** TOP DIMENSION

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

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

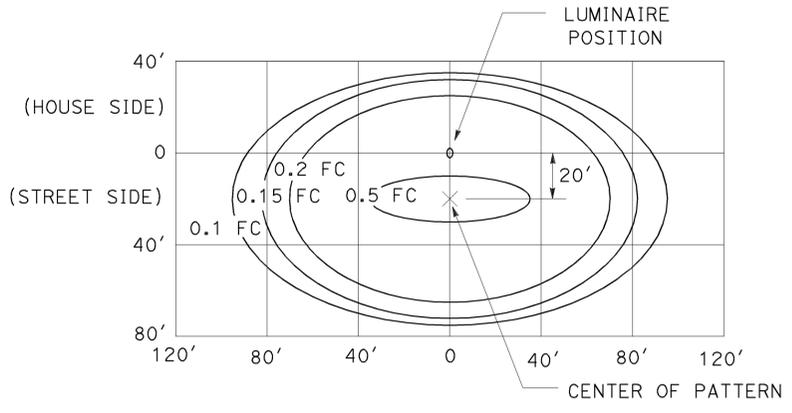
2010 REVISED STANDARD PLAN RSP ES-8B

DIST	COUNTY	ROUTE	POST MILES TOTAL PROJECT	SHEET NO.	TOTAL SHEETS
05	SLO, Mon	101	63.2/R69.3, R0.0/R1.9	626	858

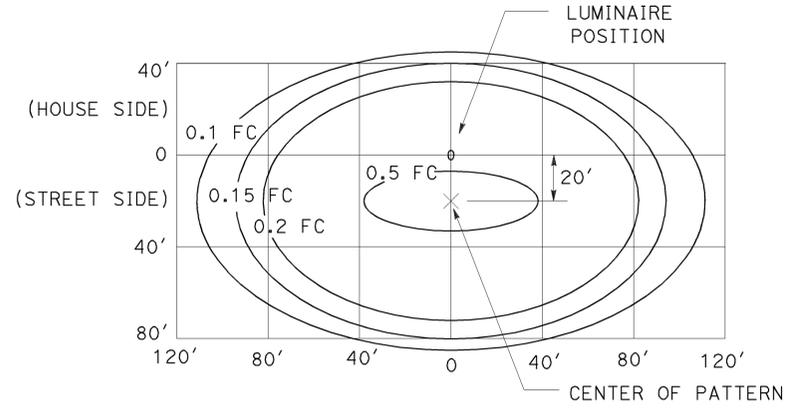
Theresa Gabriel
 REGISTERED ELECTRICAL ENGINEER
 October 30, 2015
 PLANS APPROVAL DATE
THE STATE OF CALIFORNIA OR ITS OFFICERS OR AGENTS SHALL NOT BE RESPONSIBLE FOR THE ACCURACY OR COMPLETENESS OF SCANNED COPIES OF THIS PLAN SHEET.

TO ACCOMPANY PLANS DATED 5-2-16

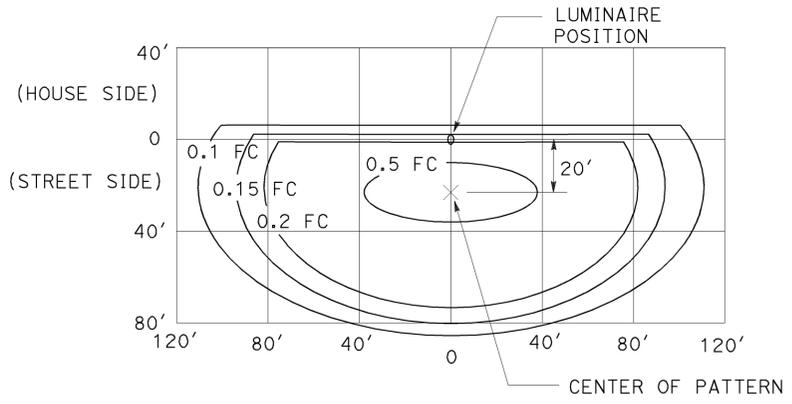
NOTE:
Curves represent the minimum footcandle (FC).



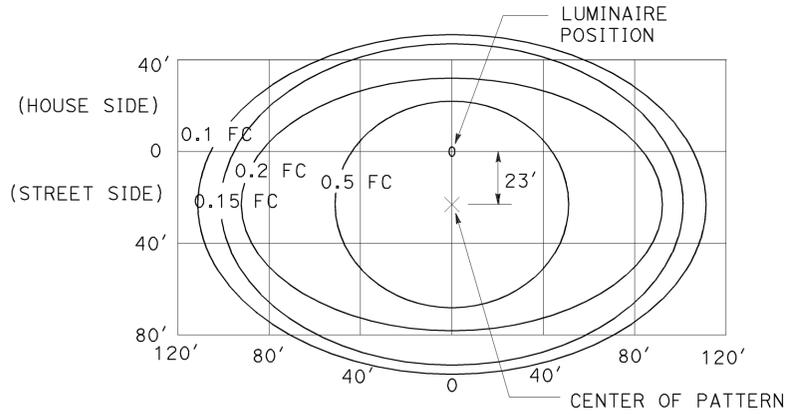
LED LUMINAIRE 165 W
34' Mounting Height



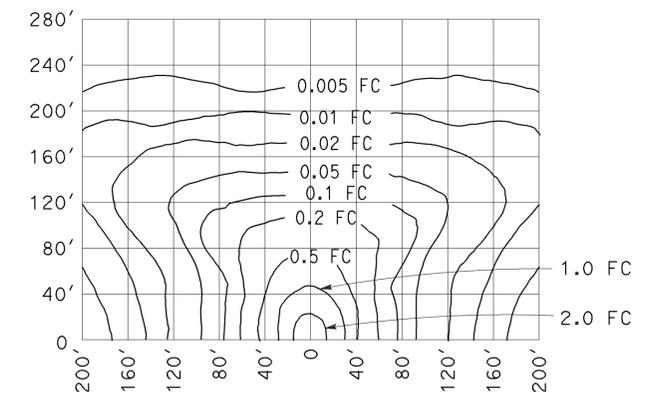
LED LUMINAIRE 235 W
40' Mounting Height



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



LED LUMINAIRE 300 W
40' Mounting Height



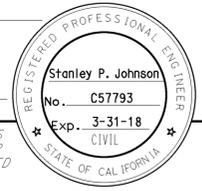
LOW-PRESSURE SODIUM LUMINAIRE 180 W
40' Mounting Height
Lamp operated at 33,000 lm

STATE OF CALIFORNIA
DEPARTMENT OF TRANSPORTATION
**ELECTRICAL SYSTEMS
(ISOFOOTCANDLE CURVES)**

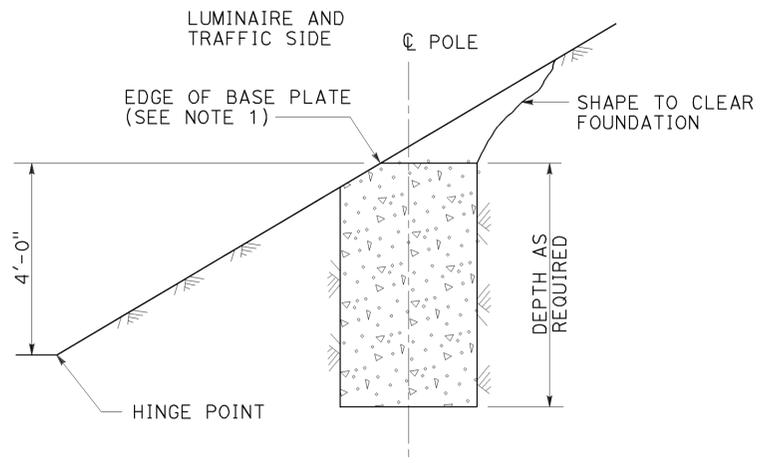
NO SCALE
RSP ES-10A DATED OCTOBER 30, 2015 SUPERSEDES RSP ES-10A DATED JULY 19, 2013
THAT SUPPLEMENTS THE STANDARD PLANS BOOK DATED 2010.

REVISED STANDARD PLAN RSP ES-10A

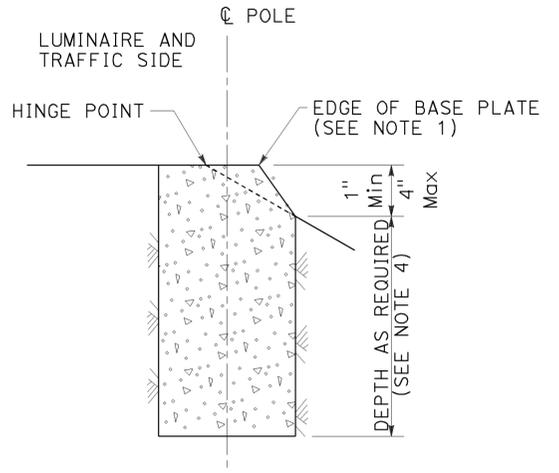
2010 REVISED STANDARD PLAN RSP ES-10A



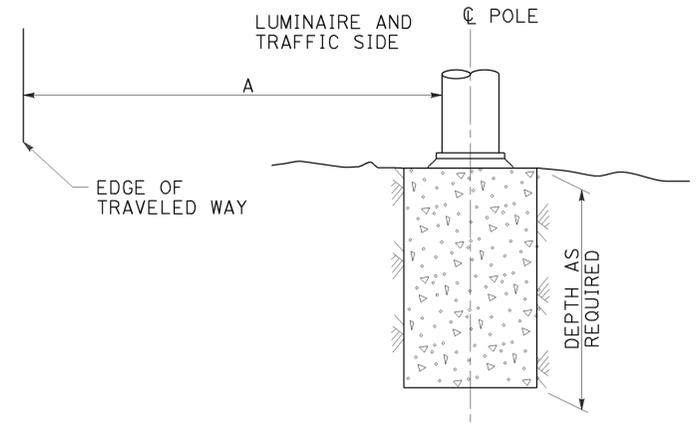
TO ACCOMPANY PLANS DATED 5-2-16



**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



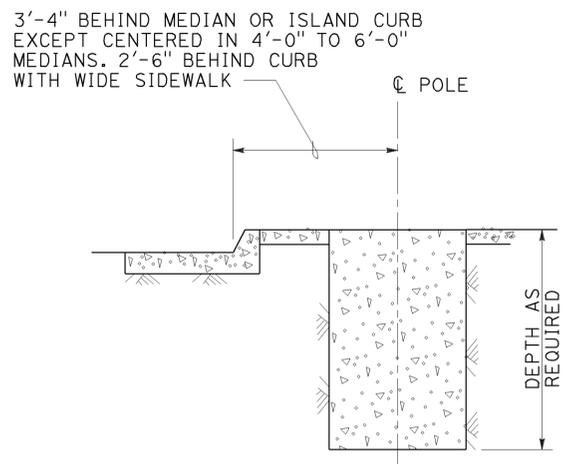
**FLAT SECTIONS, CUT OR FILL SLOPES
4:1 OR FLATTER
DETAIL A-3**
See Note 2

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

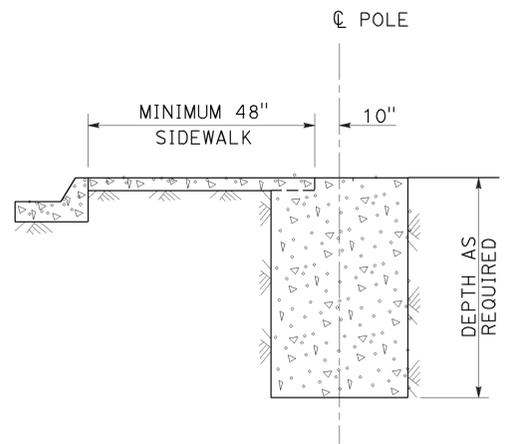
**FOUNDATIONS ADJACENT TO ALL ROADWAYS EXCEPT
IN SIDEWALK, MEDIAN AND ISLAND AREAS
DETAIL A**

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

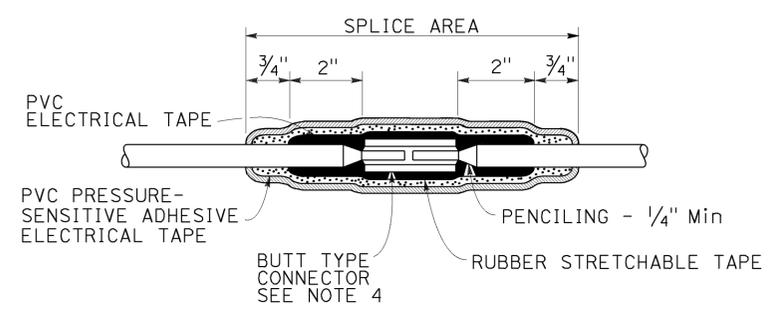
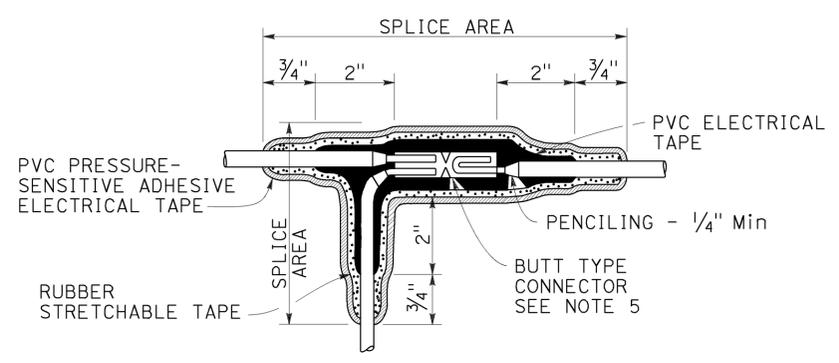
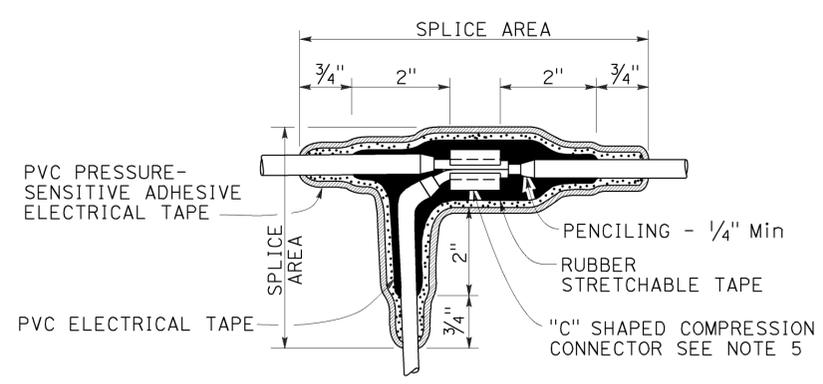
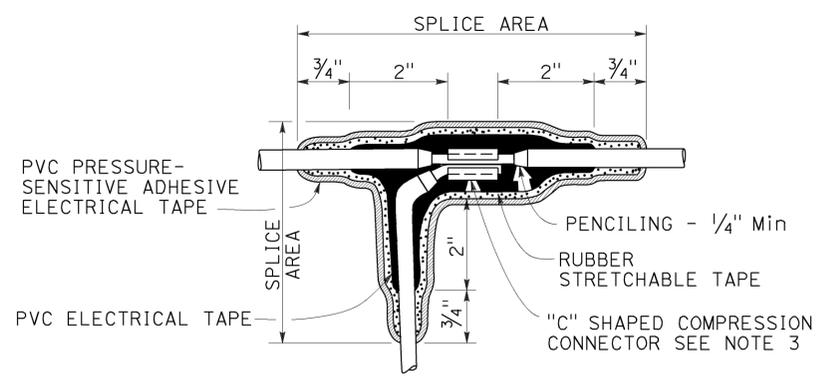
RSP ES-11 DATED JULY 15, 2016 SUPERSEDES RSP
ES-11 DATED JULY 19, 2013 AND STANDARD PLAN ES-11
DATED MAY 20, 2011 - PAGE 488 OF THE STANDARD PLANS BOOK DATED 2010.

2010 REVISED STANDARD PLAN RSP ES-11

Dist	COUNTY	ROUTE	POST MILES TOTAL PROJECT	SHEET No.	TOTAL SHEETS
05	SLO, Mon	101	63.2/R69.3, R0.0/R1.9	628	858
<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.					



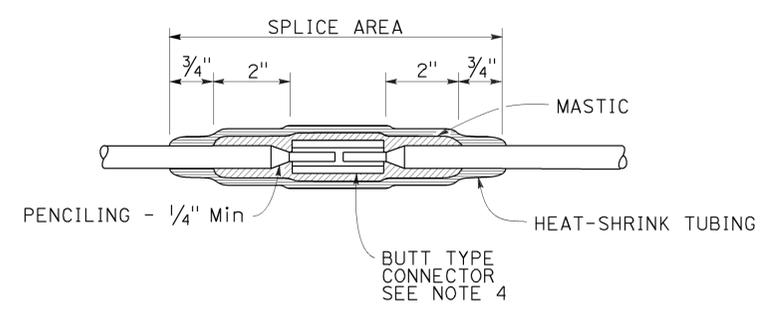
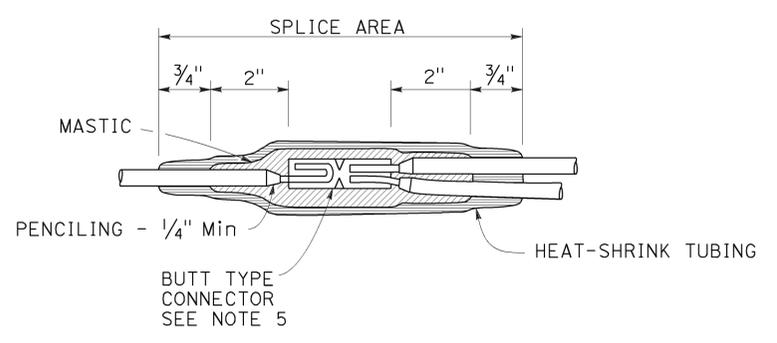
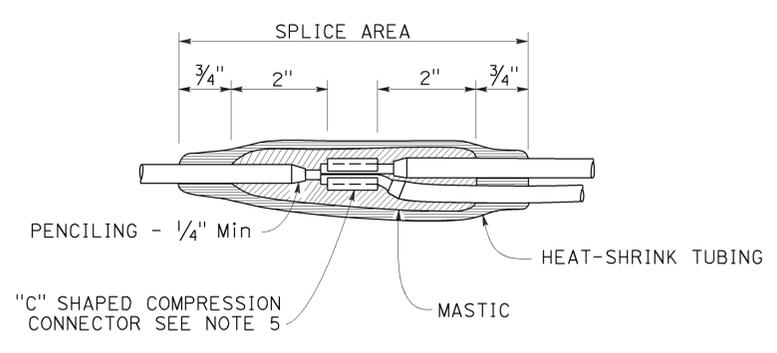
TO ACCOMPANY PLANS DATED 5-2-16



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
05	SLO, Mon	101	63.2/R69.3, R0.0/R1.9	629	858

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

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

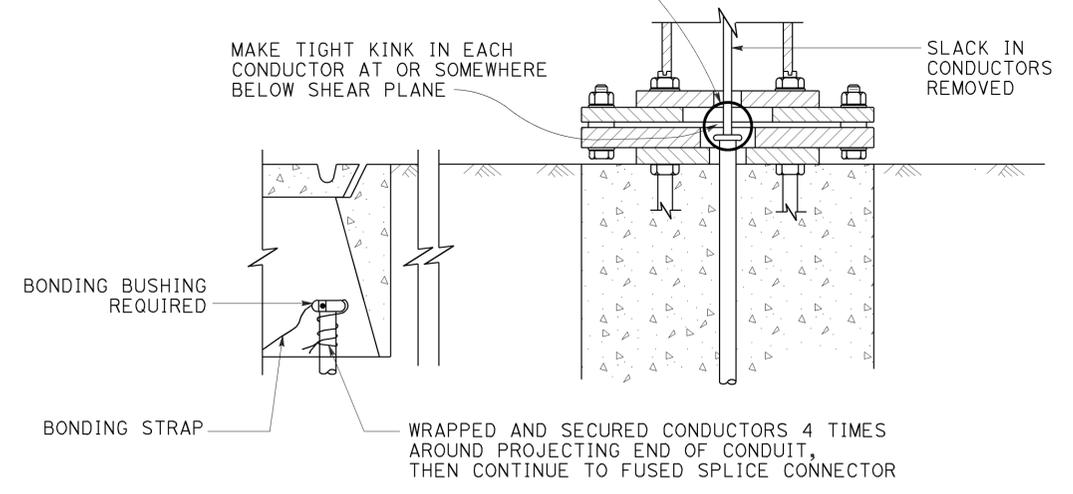
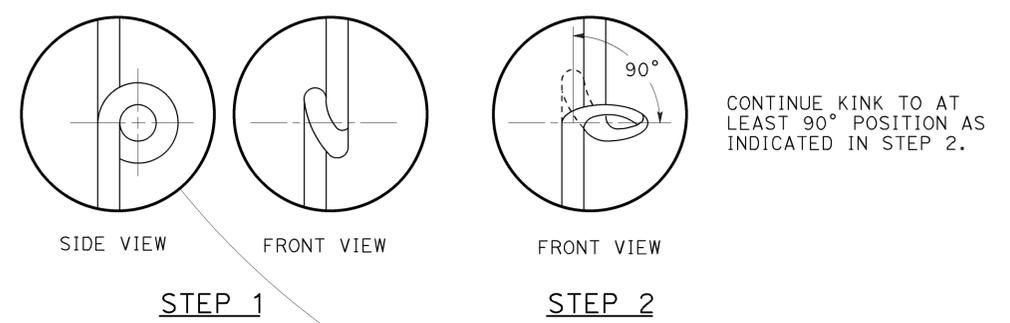
THE STATE OF CALIFORNIA OR ITS OFFICERS OR AGENTS SHALL NOT BE RESPONSIBLE FOR THE ACCURACY OR COMPLETENESS OF SCANNED COPIES OF THIS PLAN SHEET.

TO ACCOMPANY PLANS DATED 5-2-16

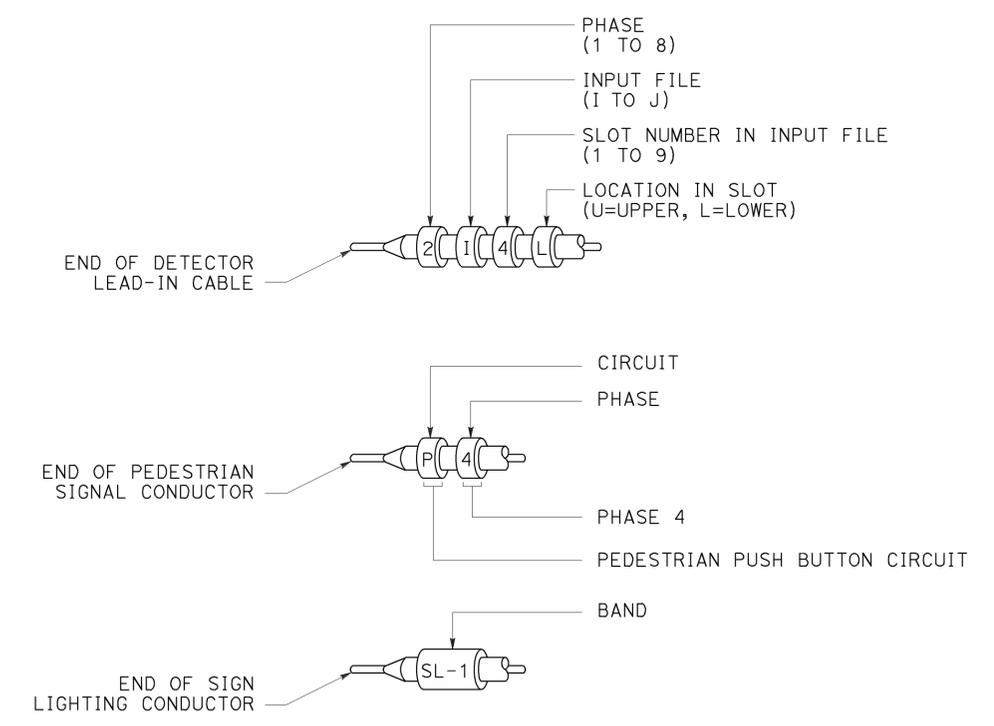
CIRCUIT VOLTAGE	FUSE VOLTAGE RATING	FUSE CURRENT RATING						
		HPS LAMP BALLAST		LOW PRESSURE SODIUM BALLAST	INDUCTION SIGN LIGHTING	SINGLE PHASE (TWO WIRE) TRANSFORMERS (PRIMARY SIDE)		
		70 W	100 W	180 W	85 W	1 KVA	2 KVA	3 KVA
120 V	250 V	5 A	5 A	5 A	5 A	10 A	20 A	30 A
240 V	250 V	5 A	5 A	5 A	5 A	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:**
- Primary lines of multiple ballasts shall be provided with fused connectors. Fuse ratings shall be as noted above.
 - 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)

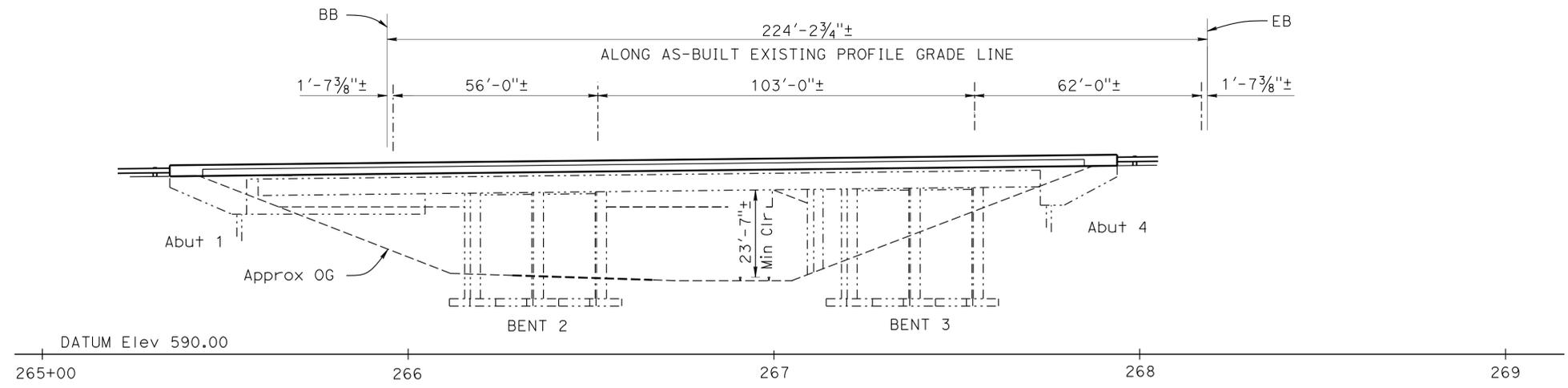
NO SCALE

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.

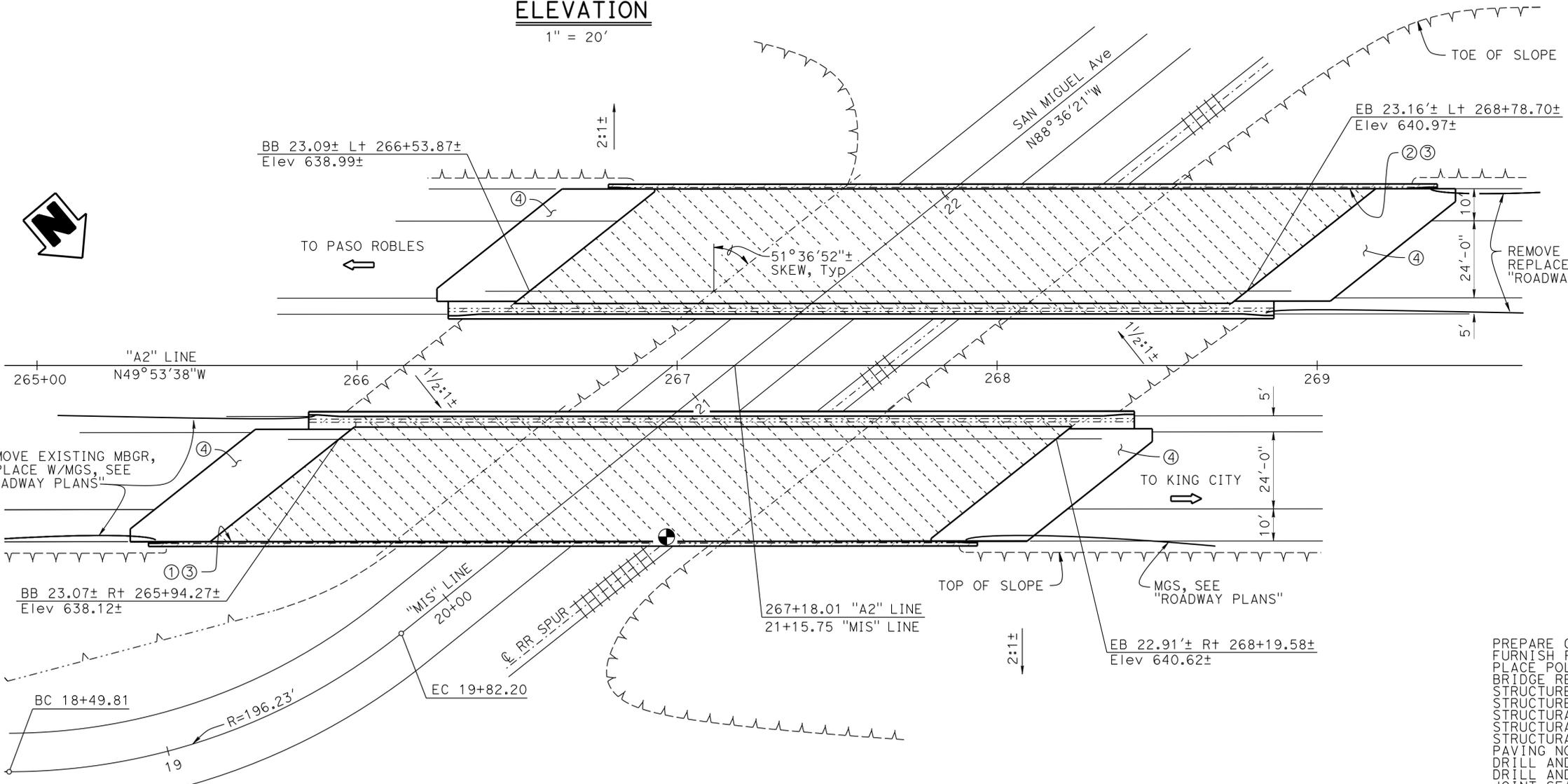
2010 REVISED STANDARD PLAN RSP ES-13B

DIST	COUNTY	ROUTE	POST MILES TOTAL PROJECT	SHEET No.	TOTAL SHEETS
05	SLO, Mon	101	63.2/R69.3, RO.0/R1.9	630	858

Jose M. Aquino III 4-22-16
 REGISTERED CIVIL ENGINEER DATE
 5-2-16
 PLANS APPROVAL DATE
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ELEVATION
1" = 20'



PLAN
1" = 20'

- LEGEND:**
- Indicates existing bridge
 - Indicates new construction
 - ▨ Indicates existing barrier removal
 - ▧ Indicates limits of prepare bridge deck and place Polyester Concrete Overlay
 - - Point of minimum vertical clearance

- NOTES:**
- Paint "Br. No. 49-0078R"
 - Paint "Br. No. 49-0078L"
 - Paint "SOUTH CAMP ROBERTS OH"
 - Structure Approach Type R (30D)
- For "TYPICAL SECTION" see "GENERAL PLAN No. 2" sheet
 For "GENERAL NOTES" and "INDEX TO PLANS", see "INDEX TO PLANS" sheet

QUANTITIES

PREPARE CONCRETE BRIDGE DECK SURFACE	17,490	SQFT
FURNISH POLYESTER CONCRETE OVERLAY	1,458	CF
PLACE POLYESTER CONCRETE OVERLAY	17,490	SQFT
BRIDGE REMOVAL (PORTION) LOCATION E	LUMP	SUM
STRUCTURE EXCAVATION (BRIDGE)	18	CY
STRUCTURE BACKFILL (BRIDGE)	8	CY
STRUCTURAL CONCRETE, BRIDGE	30	CY
STRUCTURAL CONCRETE, BRIDGE (POLYMER FIBER)	72	CY
STRUCTURAL CONCRETE, APPROACH SLAB (TYPE R)	200	CY
PAVING NOTCH EXTENSION	170	CF
DRILL AND BOND DOWEL	200	LF
DRILL AND BOND DOWEL (CHEMICAL ADHESIVE)	1300	EA
JOINT SEAL (MR 1/2")	228	LF
BAR REINFORCING STEEL (BRIDGE)	26,660	LB
CONCRETE BARRIER (TYPE 736)	530	LF
CONCRETE BARRIER (TYPE 736 MODIFIED)	530	LF

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

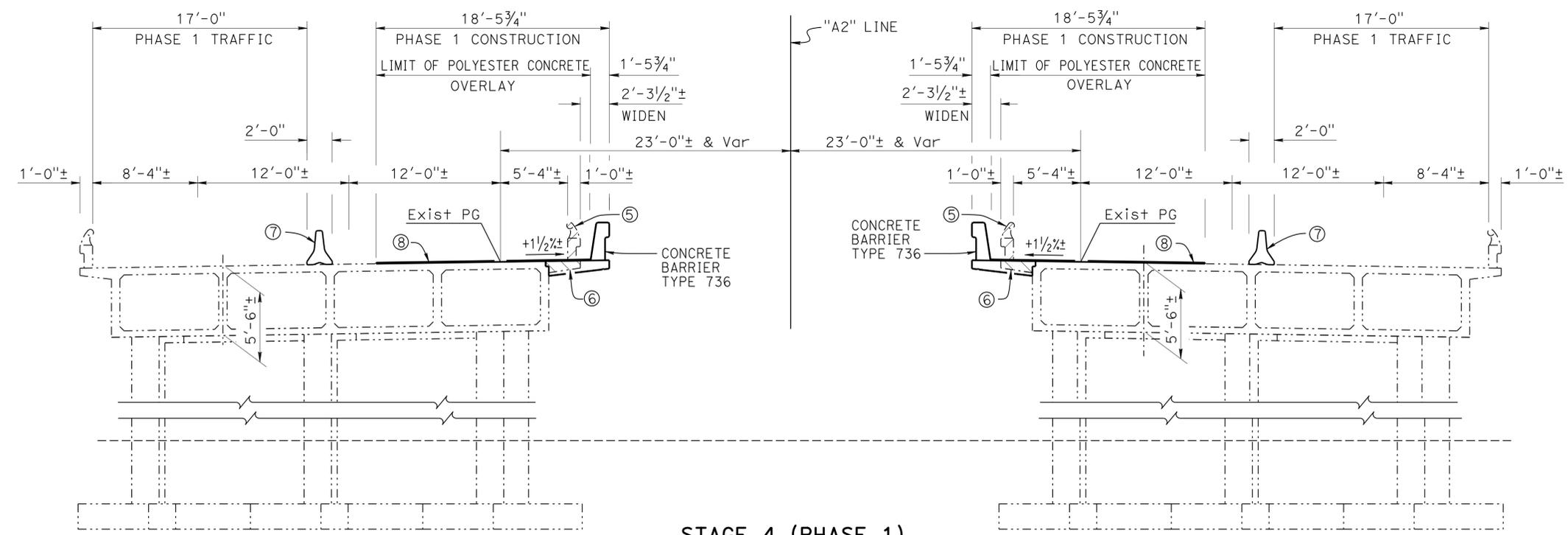
Joseph E Downing DESIGN ENGINEER	DESIGN	By Quang H Nguyen	CHECKED Ashraf Ahmed	LOAD FACTOR DESIGN	LIVE LOADING: HS20-44 & ALTERNATIVE	STATE OF CALIFORNIA DEPARTMENT OF TRANSPORTATION	DIVISION OF ENGINEERING SERVICES STRUCTURE DESIGN DESIGN BRANCH 3	BRIDGE NO.	49-0078L/R	SOUTH CAMP ROBERTS OH (WIDEN) GENERAL PLAN No. 1
	DETAILS	By Nancy C Gwynn	CHECKED Ashraf Ahmed	LAYOUT	By Quang H Nguyen			POST MILE	67.5	
	QUANTITIES	By Michael K Bergman	CHECKED Shadi Motalebi	SPECIFICATIONS	By Jim Corrado			PLANS AND SPECS COMPARED	Jim Corrado	

ORIGINAL SCALE IN INCHES FOR REDUCED PLANS
 0 1 2 3
 UNIT: 3578
 PROJECT NUMBER & PHASE: 05000200201
 CONTRACT NO.: 05-060404
 DISREGARD PRINTS BEARING EARLIER REVISION DATES
 REVISION DATES: 1-14-14, 12-14-14, 5-19-15
 SHEET 1 OF 16

DIST	COUNTY	ROUTE	POST MILES TOTAL PROJECT	SHEET No.	TOTAL SHEETS
05	SLO, Mon	101	63.2/R69.3, R0.0/R1.9	631	858

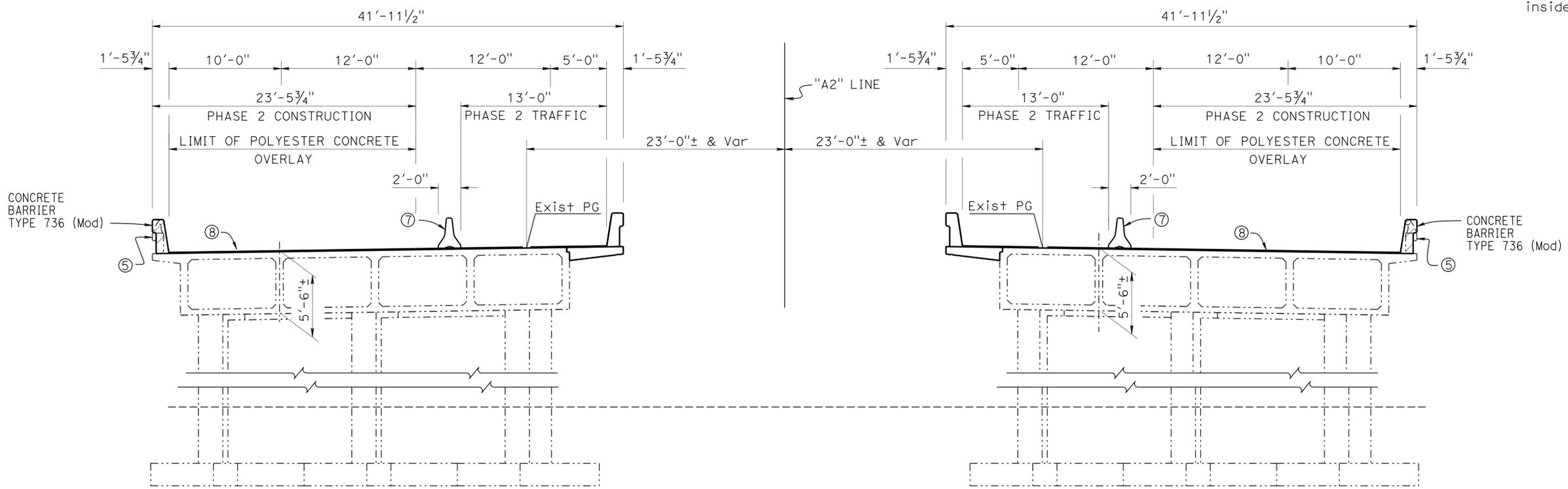
REGISTERED CIVIL ENGINEER DATE 4-22-16
 5-2-16
 PLANS APPROVAL DATE
 The State of California or its officers or agents shall not be responsible for the accuracy or completeness of scanned copies of this plan sheet.

REGISTERED PROFESSIONAL ENGINEER
 Jose M Aquino III
 No. 58386
 Exp. 12-31-16
 CIVIL
 STATE OF CALIFORNIA



**STAGE 4 (PHASE 1)
TYPICAL SECTION**
 $\frac{3}{16}'' = 1'-0''$

- LEGEND:**
- Indicates existing bridge
 - Indicates new construction
 - ▨ Indicates existing bridge removal, portion
 - ▩ Indicates existing barrier removal
- NOTES:**
- ⑤ Existing barrier to be removed
 - ⑥ Remove existing overhang
 - ⑦ Temporary Railing (Type K), see "ROADWAY PLANS"
 - ⑧ 1" & Varies Polyester concrete overlay
1. Other Stages not shown, see "ROADWAY PLANS"
 2. Structure Approach work must be performed inside each Phase Construction limits shown



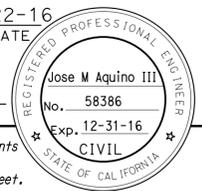
**STAGE 4 (PHASE 2)
TYPICAL SECTION**
 $\frac{3}{16}'' = 1'-0''$

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

DESIGN ENGINEER Joseph E Downing	DESIGN	BY Quang H Nguyen	CHECKED Ashraf Ahmed	LOAD FACTOR DESIGN	LIVE LOADING: HS20-44 & ALTERNATIVE	STATE OF CALIFORNIA DEPARTMENT OF TRANSPORTATION	DIVISION OF ENGINEERING SERVICES STRUCTURE DESIGN DESIGN BRANCH 3	BRIDGE NO. 49-0078L/R	SOUTH CAMP ROBERTS OH (WIDEN) GENERAL PLAN No. 2
	DETAILS	BY Nancy C Gwynn	CHECKED Ashraf Ahmed	LAYOUT	BY Quang H Nguyen			CHECKED Ashraf Ahmed	
	QUANTITIES	BY Michael K Bergman	CHECKED Shadi Motalebi	SPECIFICATIONS	BY Jim Corrado	CHECKED Jim Corrado			

ORIGINAL SCALE IN INCHES FOR REDUCED PLANS: 0 1 2 3
 UNIT: 3578 PROJECT NUMBER & PHASE: 05000200201 CONTRACT NO.: 05-060404
 DISREGARD PRINTS BEARING EARLIER REVISION DATES

DIST	COUNTY	ROUTE	POST MILES TOTAL PROJECT	SHEET No.	TOTAL SHEETS
05	SLO, Mon	101	63.2/R69.3, R0.0/R1.9	632	858
			4-22-16		
			REGISTERED CIVIL ENGINEER		
			5-2-16		
			PLANS APPROVAL DATE		
<i>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.</i>					



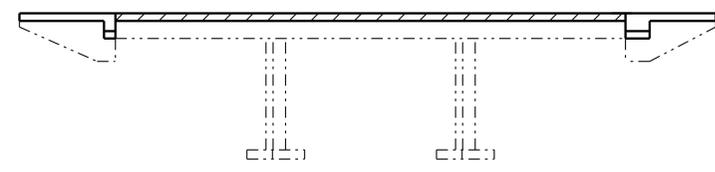
GENERAL NOTES

DESIGN:
 Bridge Design Specifications-April 2000 (LFD)
 (1996 AASHTO with Interims and Revisions by CALTRANS)

DEAD LOAD:
 Includes 11.67 psf for 1" polyester concrete overlay.
 No future additional deck surfacing/overlay allowed

LIVE LOADING:
 HS20-44 and alternative design load

REINFORCED CONCRETE:
 $f_y = 60$ ksi
 $f'_c = 4$ ksi
 $n = 9$



LEGEND:

Structural Concrete, Bridge

Structural Concrete, Bridge (Polymer Fiber)
 (4000 psi @ 28 days)

CONCRETE STRENGTH AND TYPE LIMITS

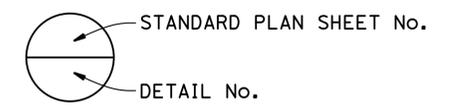
NO SCALE

INDEX TO PLANS

SHEET No.	TITLE
1	GENERAL PLAN No. 1
2	GENERAL PLAN No. 2
3	INDEX TO PLANS
4	FOUNDATION PLAN
5	ABUTMENT DETAILS No. 1
6	ABUTMENT DETAILS No. 2
7	ABUTMENT DETAILS No. 3
8	ABUTMENT DETAILS No. 4
9	ABUTMENT DETAILS No. 5
10	ABUTMENT DETAILS No. 6
11	TYPICAL SECTION
12	MISCELLANEOUS DETAILS
13	CONCRETE REMOVAL Det No. 1
14	CONCRETE REMOVAL Det No. 2
15	STRUCTURE APPROACH DRAINAGE DETAILS
16	STRUCTURE APPROACH TYPE R (30D)

STANDARD PLANS DATED 2010

RSP	A10A	ABBREVIATIONS (SHEET 1 OF 2)
	A10B	ABBREVIATIONS (SHEET 2 OF 2)
	A10C	LINES AND SYMBOLS (SHEET 1 OF 3)
	A10D	LINES AND SYMBOLS (SHEET 2 OF 3)
	A10E	LINES AND SYMBOLS (SHEET 3 OF 3)
	A62C	LIMITS OF PAYMENT FOR EXCAVATION AND BACKFILL BRIDGE
RSP	B6-21	JOINT SEALS (MAXIMUM MOVEMENT RATING = 2")
RSP	B11-56	CONCRETE BARRIER TYPE 736



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

STRUCTURES DESIGN DETAIL SHEET (ENGLISH) (REV. 09-01-10)	DESIGN	BY Quang H Nguyen	CHECKED Ashraf Ahmed	STATE OF CALIFORNIA DEPARTMENT OF TRANSPORTATION	DIVISION OF ENGINEERING SERVICES STRUCTURE DESIGN DESIGN BRANCH 3	BRIDGE NO.	SOUTH CAMP ROBERTS OH (WIDEN) INDEX TO PLANS		
	DETAILS	BY Nancy C Gwynn	CHECKED Ashraf Ahmed			49-0078L/R			
	QUANTITIES	BY Michael K Bergman	CHECKED Shadi Motalebi			POST MILE 67.5			
ORIGINAL SCALE IN INCHES FOR REDUCED PLANS					UNIT: 3578	PROJECT NUMBER & PHASE: 05000200201	CONTRACT NO.: 05-060404	REVISION DATES	SHEET 3 OF 16

CURVE DATA

No. ⁺	R	Δ	T	L
36	196.23	38° 39' 22"	68.83	132.39

NOTE:
ALL UTILITY LINES ARE PER DISTRICT UTILITY MAP.

SOFFIT ELEVATIONS

LEFT BRIDGE		RIGHT BRIDGE	
1 - 633.70	5 - 633.69	9 - 632.94	13 - 631.73
2 - 634.38	6 - 634.39	10 - 633.75	14 - 632.38
3 - 634.92	7 - 635.19	11 - 634.40	15 - 633.59
4 - 635.18	8 - 635.56	12 - 635.34	16 - 634.50

SURVEY CONTROL

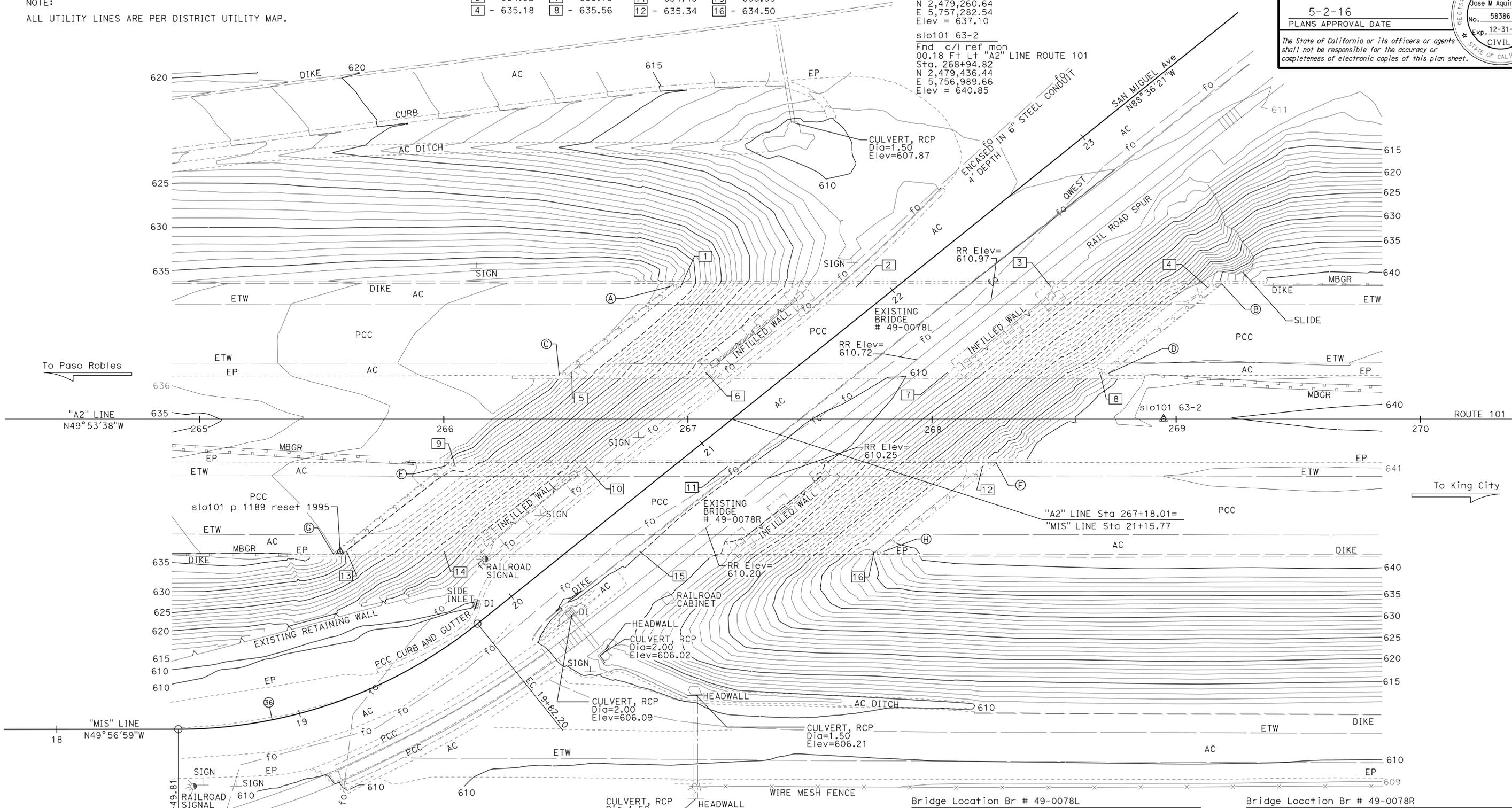
sl0101 p 1189 reset 1995
Fnd NGS BRASS DISK
54.02 Ft Rt "A2" LINE ROUTE 101
Sta. 265+57.55
N 2,479,260.64
E 5,757,282.54
Elev = 637.10

sl0101 63-2
Fnd c/l ref mon
00.18 Ft Lt "A2" LINE ROUTE 101
Sta. 268+94.82
N 2,479,436.44
E 5,756,989.66
Elev = 640.85

DIST	COUNTY	ROUTE	POST MILES TOTAL PROJECT	SHEET No.	TOTAL SHEETS
05	SLO, Mon	101	63.27/R69.3, R0.0/R1.9	633	858

Jose M. Aquino III
 REGISTERED CIVIL ENGINEER DATE 4-22-16
 PLANS APPROVAL DATE 5-2-16
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REGISTERED PROFESSIONAL ENGINEER
 Jose M Aquino III
 No. 58386
 Exp. 12-31-16
 CIVIL
 STATE OF CALIFORNIA



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

Bridge Location Br # 49-0078L		Bridge Location Br # 49-0078R	
A) - 54.31 Lt "A2" LINE Sta 266+92.98, Elev=639.09±	B) - 55.46 Lt "A2" LINE Sta 269+18.53, Elev=640.63±	E) - 18.97 Rt "A2" LINE Sta 266+00.77, Elev=638.31±	F) - 17.62 Rt "A2" LINE Sta 268+26.15, Elev=640.79±
C) - 17.86 Lt "A2" LINE Sta 266+47.32, Elev=639.01±	D) - 18.68 Lt "A2" LINE Sta 268+72.14, Elev=641.06±	G) - 55.40 Rt "A2" LINE Sta 265+54.96, Elev=637.03±	H) - 54.07 Rt "A2" LINE Sta 267+80.15, Elev=639.90±

PRELIMINARY INVESTIGATION SECTION			
SCALE	VERT. DATUM NAVD88	PHOTOGRAMMETRY AS OF: X	
1"=20'	HORZ. DATUM NAD83 (92)	SURVEYED BY DISTRICT	CHECKED BY C. FASSETT 09/2014
ALIGNMENT TIES Dist TRAVERSE SHEET	DRAFTED BY T. ZOLNIKOV 09/2014	CHECKED BY S. SOU 09/2014	

DESIGN	BY	CHECKED
BY	Quang H Nguyen	Ashraf Ahmed
DETAILS	Nancy C Gwynn	Ashraf Ahmed
QUANTITIES	Michael K Bergman	Shadi Motalebi

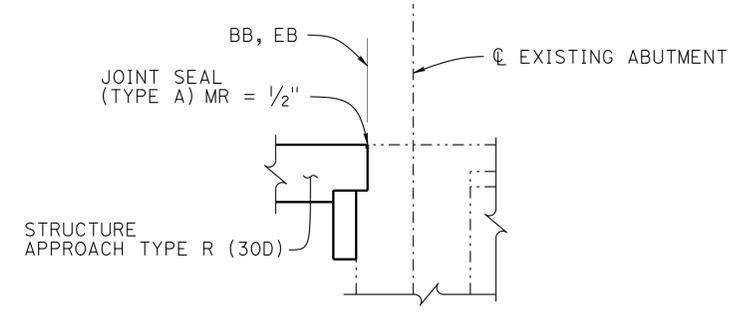
STATE OF CALIFORNIA
DEPARTMENT OF TRANSPORTATION

DIVISION OF ENGINEERING SERVICES
STRUCTURE DESIGN
DESIGN BRANCH 3

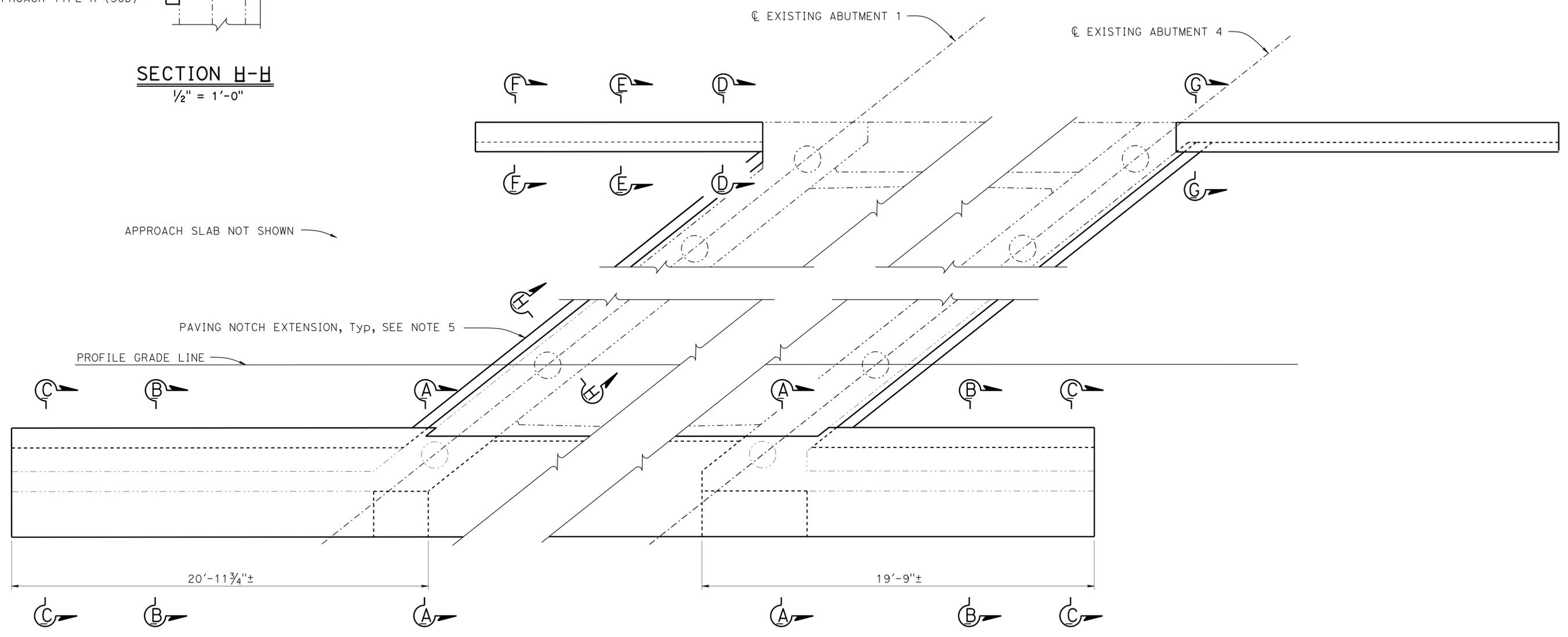
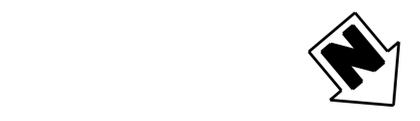
BRIDGE NO. 49-0078R/L
POST MILE R67.50
SOUTH CAMP ROBERTS OH (WIDEN) FOUNDATION PLAN

DIST	COUNTY	ROUTE	POST MILES TOTAL PROJECT	SHEET No.	TOTAL SHEETS
05	SLO, Mon	101	63.2/R69.3, R0.0/R1.9	634	858
			REGISTERED CIVIL ENGINEER	DATE	
			5-2-16	PLANS APPROVAL DATE	
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Jose M. Aquino III
 REGISTERED CIVIL ENGINEER
 No. 58386
 Exp. 12-31-16
 CIVIL
 STATE OF CALIFORNIA



SECTION H-H
1/2" = 1'-0"



PART PLAN
3/8" = 1'-0"

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

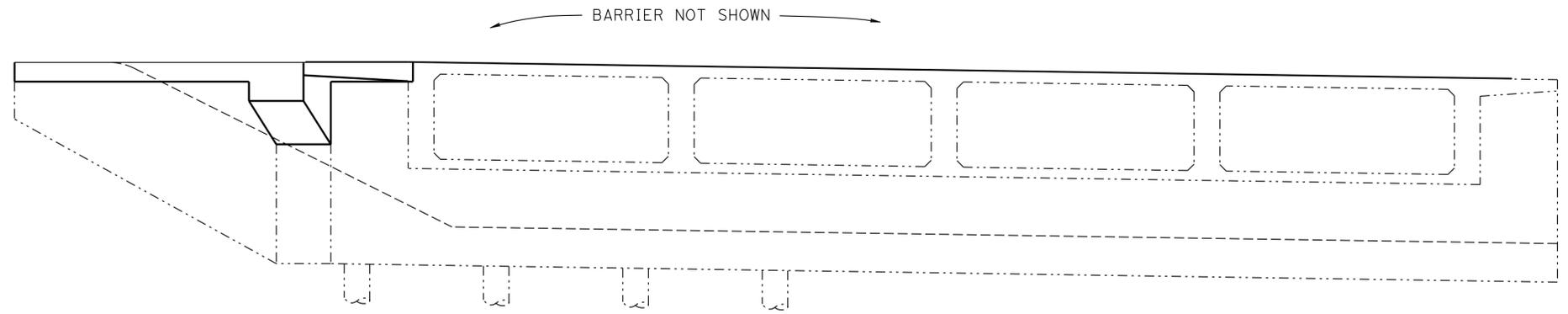
- NOTES:**
1. Left bridge shown, right bridge similar by opposite hand
 2. For "SECTION A-A", "SECTION B-B" and "SECTION C-C" see "ABUTMENT DETAILS No. 4" sheet
 3. For "SECTION D-D", "SECTION E-E", "SECTION F-F" and "SECTION G-G", see "ABUTMENT DETAILS No. 6" sheet
 4. For details not shown, see "CONCRETE REMOVAL Det No. 1" sheet
 5. For Approach Slab details not shown, see "STRUCTURE APPROACH TYPE R (30D)" sheet

STRUCTURES DESIGN DETAIL SHEET (ENGLISH) (REV. 09-01-10)	DESIGN	BY Quang H Nguyen	CHECKED Ashraf Ahmed	STATE OF CALIFORNIA DEPARTMENT OF TRANSPORTATION	DIVISION OF ENGINEERING SERVICES STRUCTURE DESIGN DESIGN BRANCH 3	BRIDGE NO.	SOUTH CAMP ROBERTS OH (WIDEN) ABUTMENT DETAILS No. 1	
	DETAILS	BY Nancy C Gwynn	CHECKED Ashraf Ahmed			49-0078L/R		
	QUANTITIES	BY Michael K Bergman	CHECKED Shadi Motalebi			POST MILE 67.5		
ORIGINAL SCALE IN INCHES FOR REDUCED PLANS					UNIT: 3578 PROJECT NUMBER & PHASE: 05000200201	CONTRACT NO.: 05-060404	DISREGARD PRINTS BEARING EARLIER REVISION DATES	REVISION DATES SHEET 5 OF 16

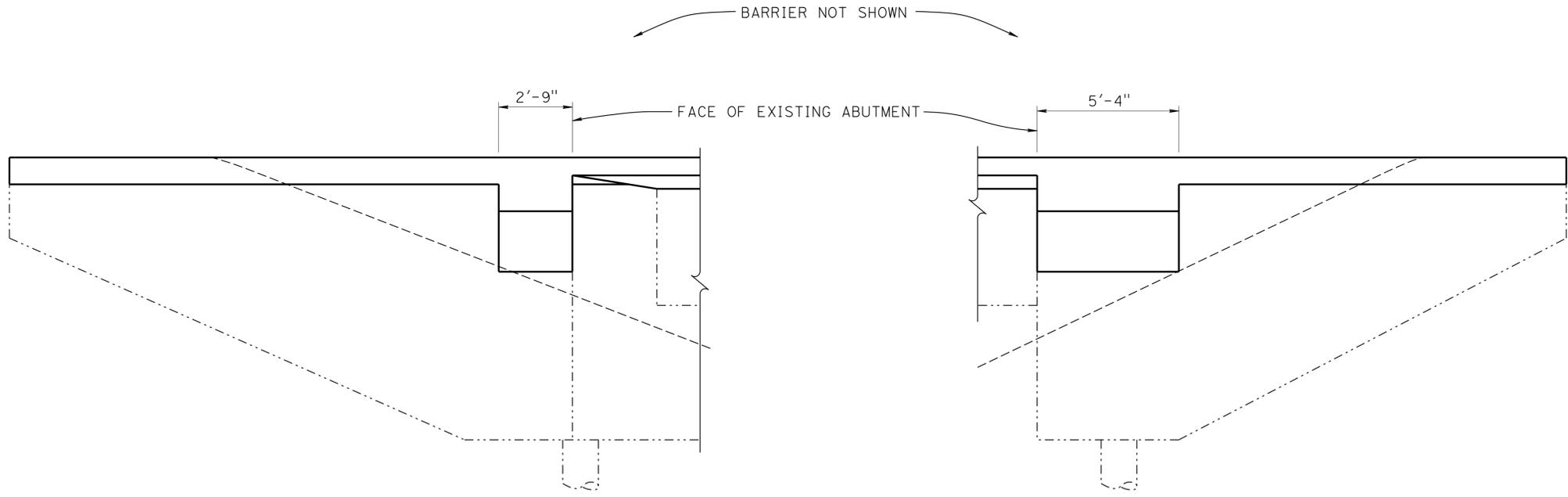
DIST	COUNTY	ROUTE	POST MILES TOTAL PROJECT	SHEET No.	TOTAL SHEETS
05	SLO, Mon	101	63.2/R69.3, R0.0/R1.9	635	858

Jose M. Aquino III 4-22-16
 REGISTERED CIVIL ENGINEER DATE
 5-2-16
 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.

REGISTERED PROFESSIONAL ENGINEER
 Jose M Aquino III
 No. 58386
 Exp. 12-31-16
 CIVIL
 STATE OF CALIFORNIA



ELEVATION
1/4" = 1'-0"



ABUTMENT 1 RIGHT WINGWALL ELEVATION
3/8" = 1'-0"

ABUTMENT 4 RIGHT WINGWALL ELEVATION
3/8" = 1'-0"

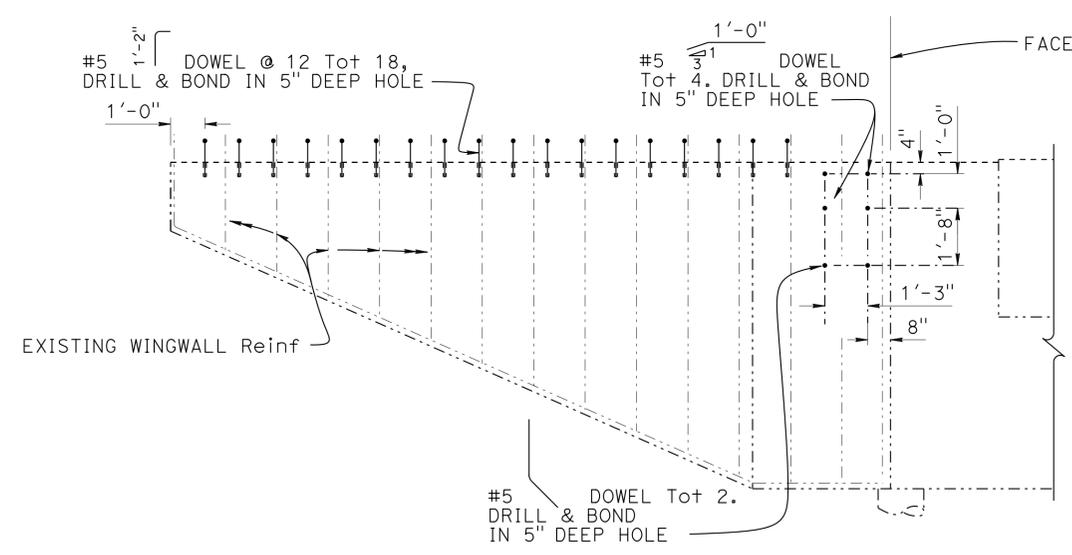
NOTE:
THE CONTRACTOR MUST VERIFY ALL CONTROLLING FIELD DIMENSIONS BEFORE ORDERING OR FABRICATING ANY MATERIAL.

NOTE:
Left bridge shown, right bridge similar by opposite hand

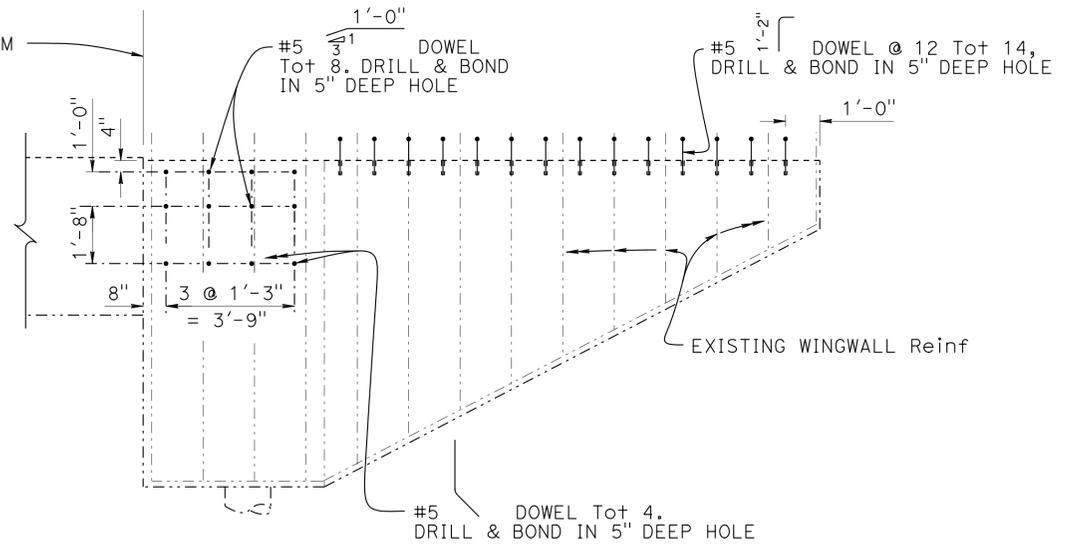
DESIGN BY Quang H Nguyen CHECKED Ashraf Ahmed DETAILS BY Nancy C Gwynn CHECKED Ashraf Ahmed QUANTITIES BY Michael K Bergman CHECKED Shadi Motalebi	STATE OF CALIFORNIA DEPARTMENT OF TRANSPORTATION	DIVISION OF ENGINEERING SERVICES STRUCTURE DESIGN DESIGN BRANCH 3	BRIDGE NO. 49-0078L/R	SOUTH CAMP ROBERTS OH (WIDEN) ABUTMENT DETAILS No. 2				
			POST MILE 67.5					
STRUCTURES DESIGN DETAIL SHEET (ENGLISH) (REV. 09-01-10)			ORIGINAL SCALE IN INCHES FOR REDUCED PLANS	UNIT: 3578 PROJECT NUMBER & PHASE: 05000200201	CONTRACT NO.: 05-060404	DISREGARD PRINTS BEARING EARLIER REVISION DATES	REVISION DATES 12-12-14 5-22-15	SHEET 6 OF 16

USERNAME => 8115765 DATE PLOTTED => 22-JUL-2016 TIME PLOTTED => 17:51

DIST	COUNTY	ROUTE	POST MILES TOTAL PROJECT	SHEET No.	TOTAL SHEETS
05	SLO, Mor	101	63.2/R69.3, R0.0/R1.9	636	858
Jose M. Aquino III REGISTERED CIVIL ENGINEER			DATE 4-22-16		
PLANS APPROVAL DATE 5-2-16			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.		



ABUTMENT 1 RIGHT WINGWALL ELEVATION



ABUTMENT 1 LEFT WINGWALL ELEVATION

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

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

DESIGN	BY Quang H Nguyen	CHECKED Ashraf Ahmed
DETAILS	BY Nancy C Gwynn	CHECKED Ashraf Ahmed
QUANTITIES	BY Michael K Bergman	CHECKED Shadi Motalebi

STATE OF CALIFORNIA
 DEPARTMENT OF TRANSPORTATION

DIVISION OF ENGINEERING SERVICES
 STRUCTURE DESIGN
DESIGN BRANCH 3

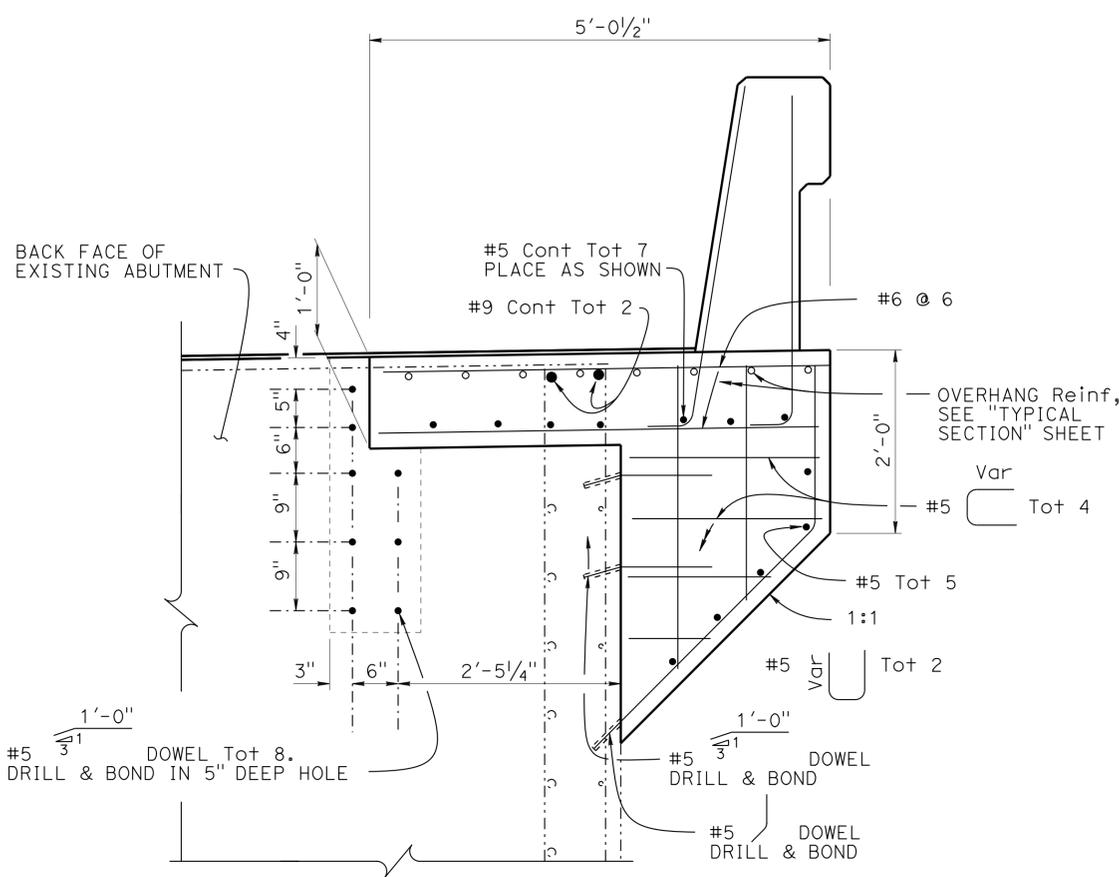
BRIDGE NO.	49-0078L/R
POST MILE	67.5

SOUTH CAMP ROBERTS OH (WIDEN)
ABUTMENT DETAILS No. 3

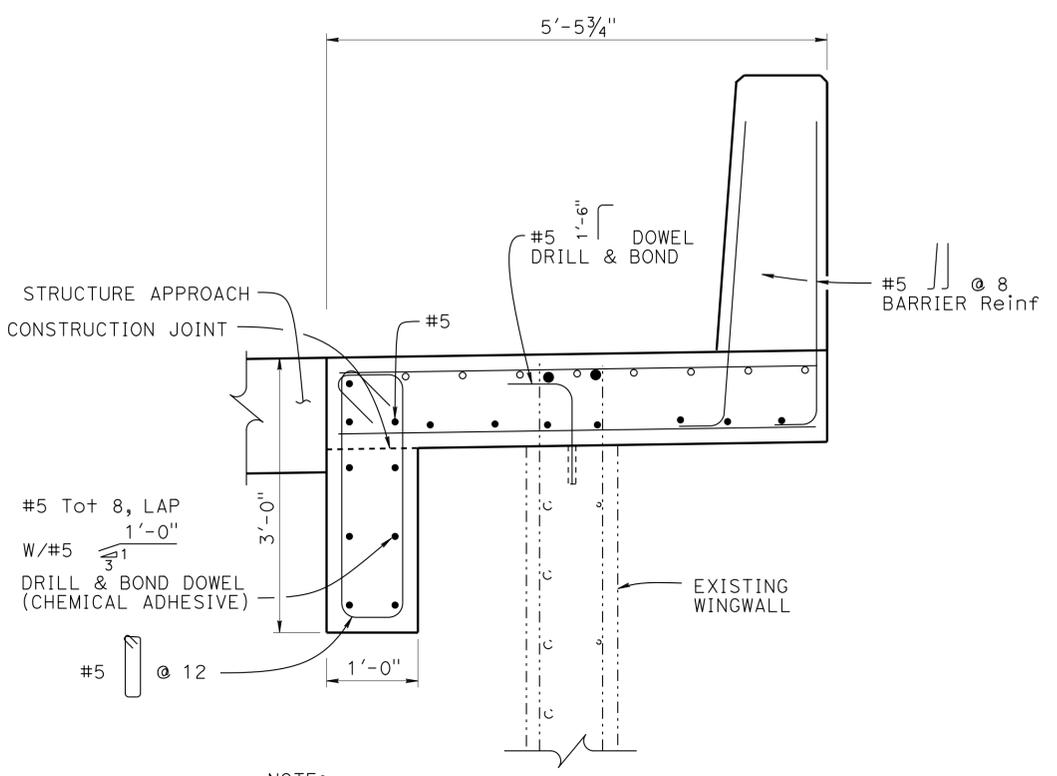
DIST	COUNTY	ROUTE	POST MILES TOTAL PROJECT	SHEET No.	TOTAL SHEETS
05	SLO, Mon	101	63.2/R69.3, R0.0/R1.9	637	858

Jose M. Aquino III 4-22-16
 REGISTERED CIVIL ENGINEER DATE
 5-2-16
 PLANS APPROVAL DATE
 No. 58386
 Exp. 12-31-16
 CIVIL
 STATE OF CALIFORNIA
 REGISTERED PROFESSIONAL ENGINEER

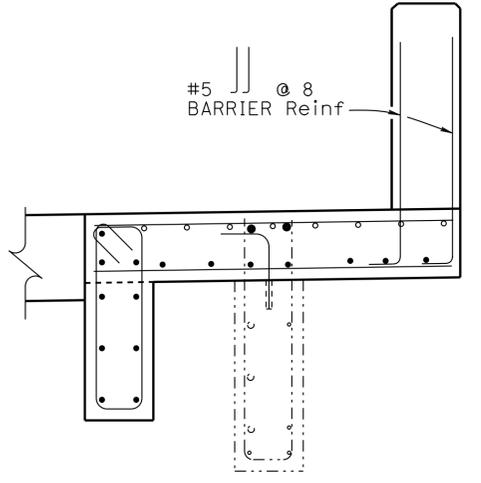
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SECTION A-A
1" = 1'-0"



SECTION B-B
1" = 1'-0"



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

NOTE:
For concrete barrier details not shown, see 

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

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

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

DESIGN	BY Quang H Nguyen	CHECKED Ashraf Ahmed
DETAILS	BY Nancy C Gwynn	CHECKED Ashraf Ahmed
QUANTITIES	BY Michael K Bergman	CHECKED Shadi Motalebi

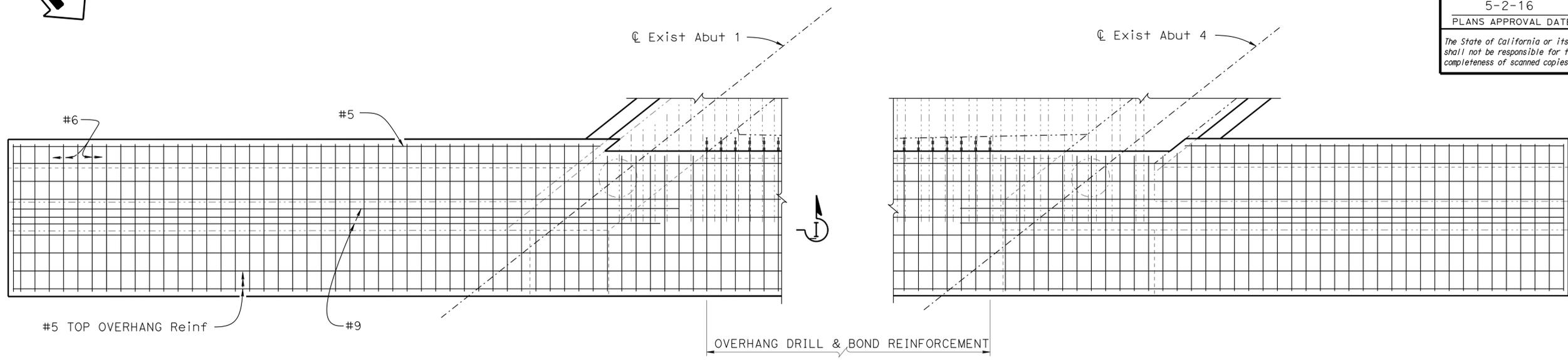
STATE OF CALIFORNIA
DEPARTMENT OF TRANSPORTATION

DIVISION OF ENGINEERING SERVICES
STRUCTURE DESIGN
DESIGN BRANCH 3

BRIDGE NO.	49-0078L/R
POST MILE	67.5

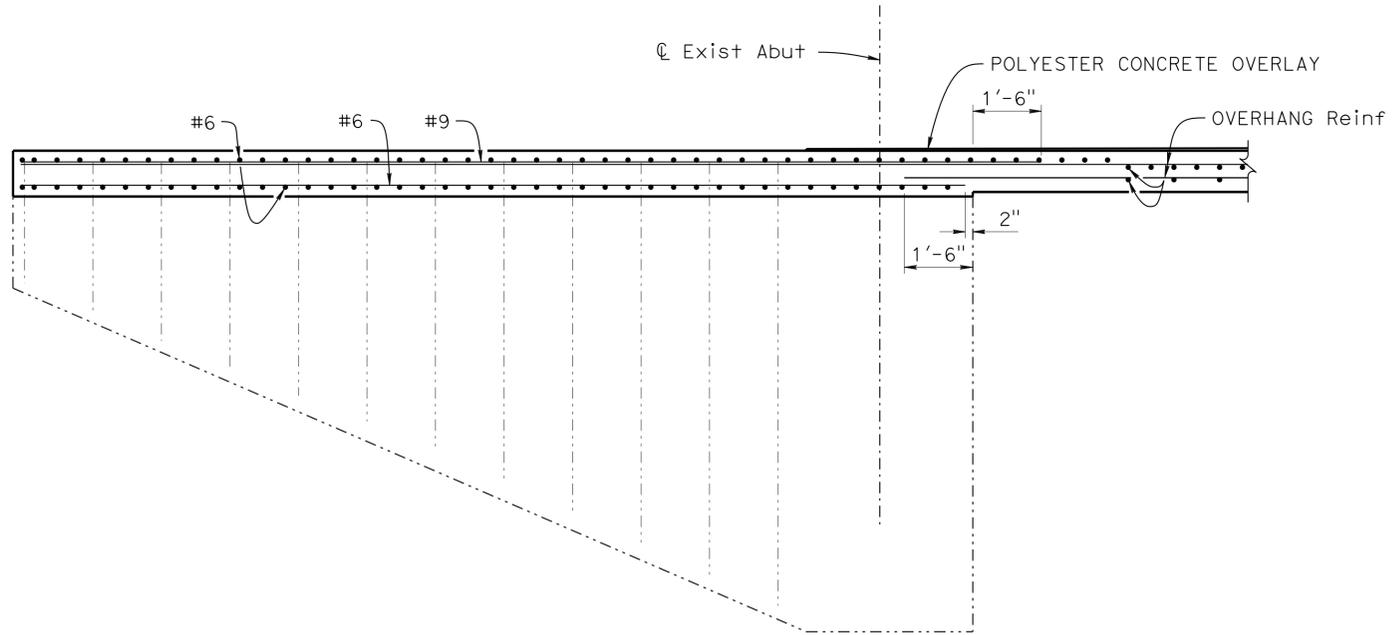
SOUTH CAMP ROBERTS OH (WIDEN)
ABUTMENT DETAILS No. 4

DIST	COUNTY	ROUTE	POST MILES TOTAL PROJECT	SHEET No.	TOTAL SHEETS
05	SLO, Mon	101	63.2/R69.3, R0.0/R1.9	638	858
			DATE		
			4-22-16		
			PLANS APPROVAL DATE		
			5-2-16		
REGISTERED PROFESSIONAL ENGINEER Jose M. Aquino III No. 58386 Exp. 12-31-16 CIVIL STATE OF CALIFORNIA					
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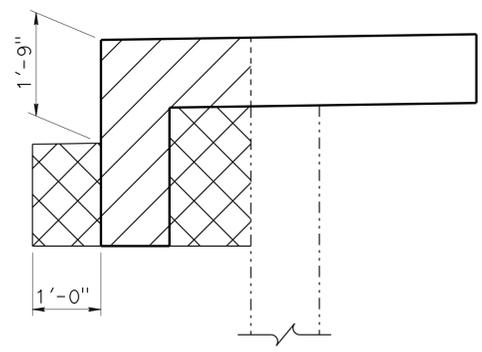
NOTE:
All reinforcement not shown

PART PLAN
1/2" = 1'-0"



SECTION I-I
1/2" = 1'-0"

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



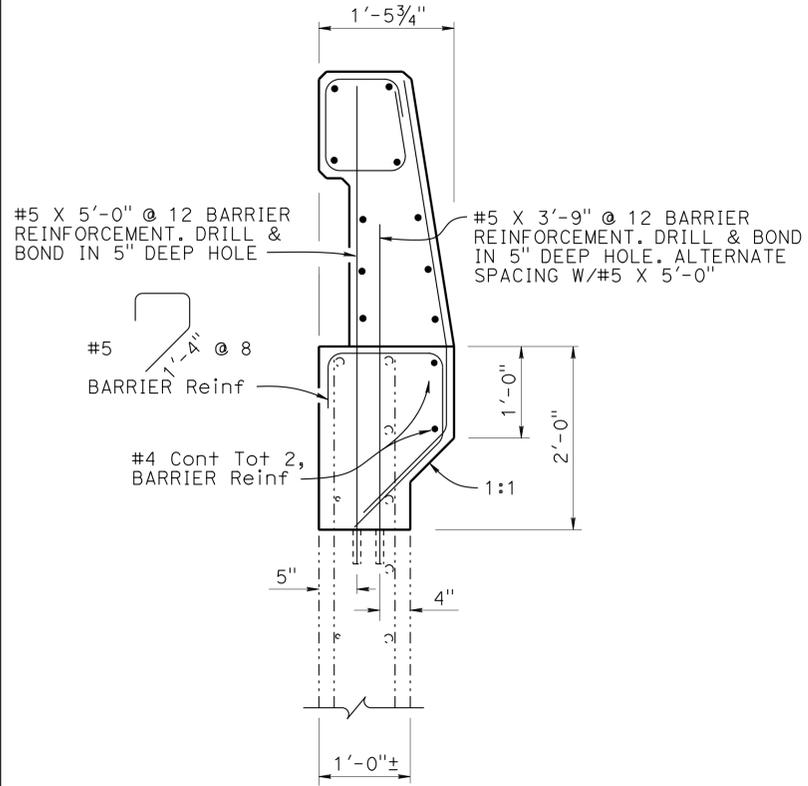
Structure Excavation
Structure Backfill

LIMITS OF EXCAVATION & BACKFILL
NO SCALE

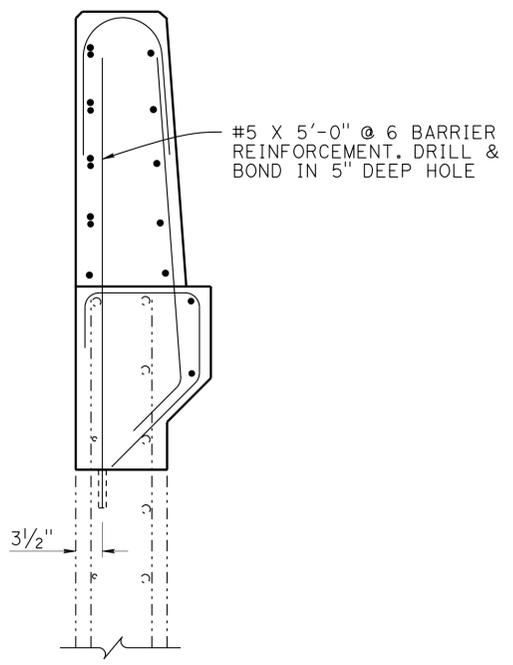
STRUCTURES DESIGN DETAIL SHEET (ENGLISH) (REV. 09-01-10)	DESIGN	BY Quang H Nguyen	CHECKED Ashraf Ahmed	STATE OF CALIFORNIA DEPARTMENT OF TRANSPORTATION	DIVISION OF ENGINEERING SERVICES STRUCTURE DESIGN DESIGN BRANCH 3	BRIDGE NO.	SOUTH CAMP ROBERTS OH (WIDEN) ABUTMENT DETAILS NO. 5			
	DETAILS	BY Nancy C Gwynn	CHECKED Ashraf Ahmed			49-0078L/R				
	QUANTITIES	BY Michael K Bergman	CHECKED Shadi Motalebi			POST MILE 67.5				
ORIGINAL SCALE IN INCHES FOR REDUCED PLANS					UNIT: 3578	PROJECT NUMBER & PHASE: 05000200201	CONTRACT NO.: 05-060404	DISREGARD PRINTS BEARING EARLIER REVISION DATES	REVISION DATES	SHEET 9 OF 16

USERNAME => 8115765 DATE PLOTTED => 22-JUL-2016 TIME PLOTTED => 17:51

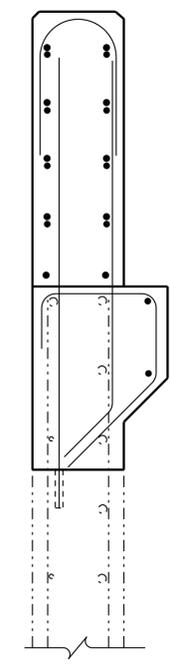
DIST	COUNTY	ROUTE	POST MILES TOTAL PROJECT	SHEET No.	TOTAL SHEETS
05	SLO, Mon	101	63.2/R69.3, R0.0/R1.9	639	858
			4-22-16		
			REGISTERED CIVIL ENGINEER		
			DATE		
			5-2-16		
			PLANS APPROVAL DATE		
The State of California or its officers or agents shall not be responsible for the accuracy or completeness of scanned copies of this plan sheet.					
					



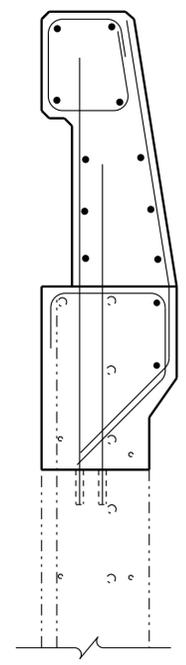
SECTION D-D
1" = 1'-0"



TRANSITION SECTION E-E
1" = 1'-0"



SECTION F-F
1" = 1'-0"



SECTION G-G
1" = 1'-0"

NOTE:
For details not shown see "SECTION E-E"

NOTE:
For details not shown see "SECTION F-F"

NOTES:
1. For details not shown see "SECTION E-E"
2. All abutment reinforcement not shown

NOTES:
1. For barrier details not shown, see 
2. Approach Slab not shown

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

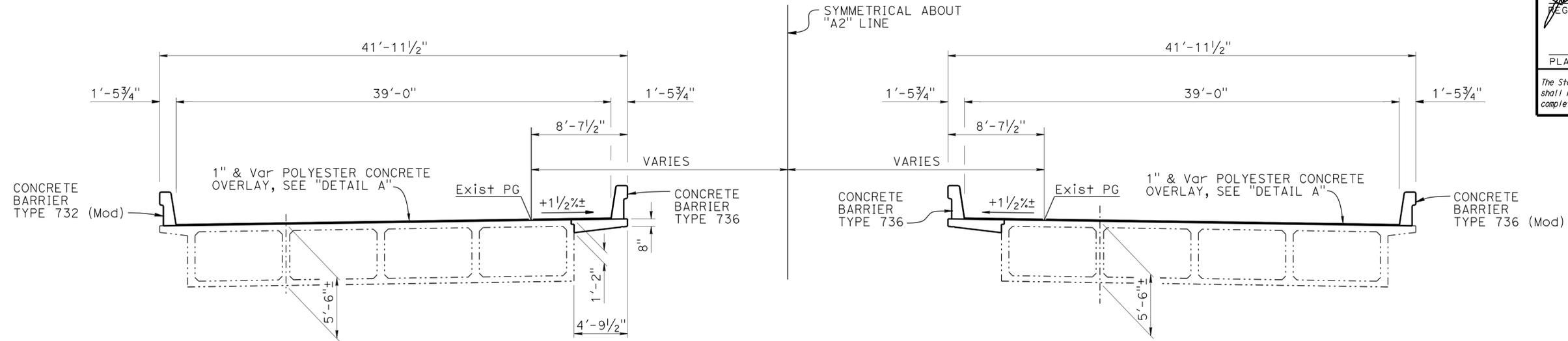
DESIGN BY Quang H Nguyen CHECKED Ashraf Ahmed DETAILS BY Nancy C Gwynn CHECKED Ashraf Ahmed QUANTITIES BY Michael K Bergman CHECKED Shadi Motalebi	STATE OF CALIFORNIA DEPARTMENT OF TRANSPORTATION	DIVISION OF ENGINEERING SERVICES STRUCTURE DESIGN DESIGN BRANCH 3	BRIDGE NO. 49-0078L/R POST MILE 67.5	SOUTH CAMP ROBERTS OH (WIDEN) ABUTMENT DETAILS No. 6
	UNIT: 3578 PROJECT NUMBER & PHASE: 05000200201		CONTRACT NO.: 05-060404	DISREGARD PRINTS BEARING EARLIER REVISION DATES
	ORIGINAL SCALE IN INCHES FOR REDUCED PLANS		REVISION DATES: 12-11-14, 5-26-15, 11-28-15	SHEET 10 OF 16

USERNAME => 8115765 DATE PLOTTED => 22-JUL-2016 TIME PLOTTED => 17:51

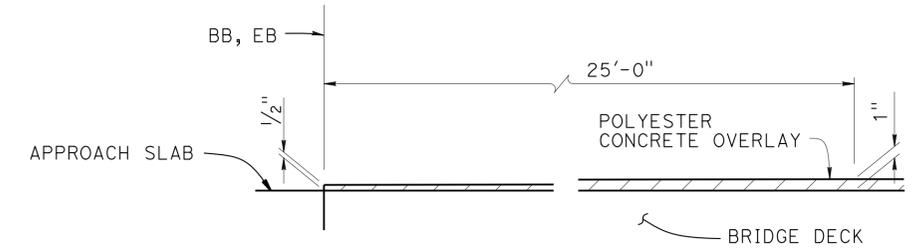
DIST	COUNTY	ROUTE	POST MILES TOTAL PROJECT	SHEET No.	TOTAL SHEETS
05	SLO, Mon	101	63.2/R69.3, R0.0/R1.9	640	858

Jose M. Aquino III 4-22-16
 REGISTERED CIVIL ENGINEER DATE
 5-2-16
 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.

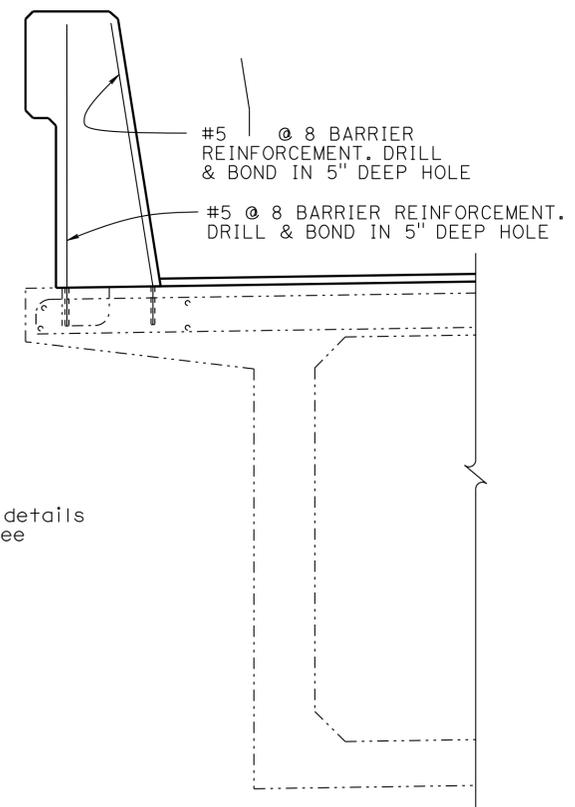
REGISTERED PROFESSIONAL ENGINEER
 Jose M. Aquino III
 No. 58386
 Exp. 12-31-16
 CIVIL
 STATE OF CALIFORNIA



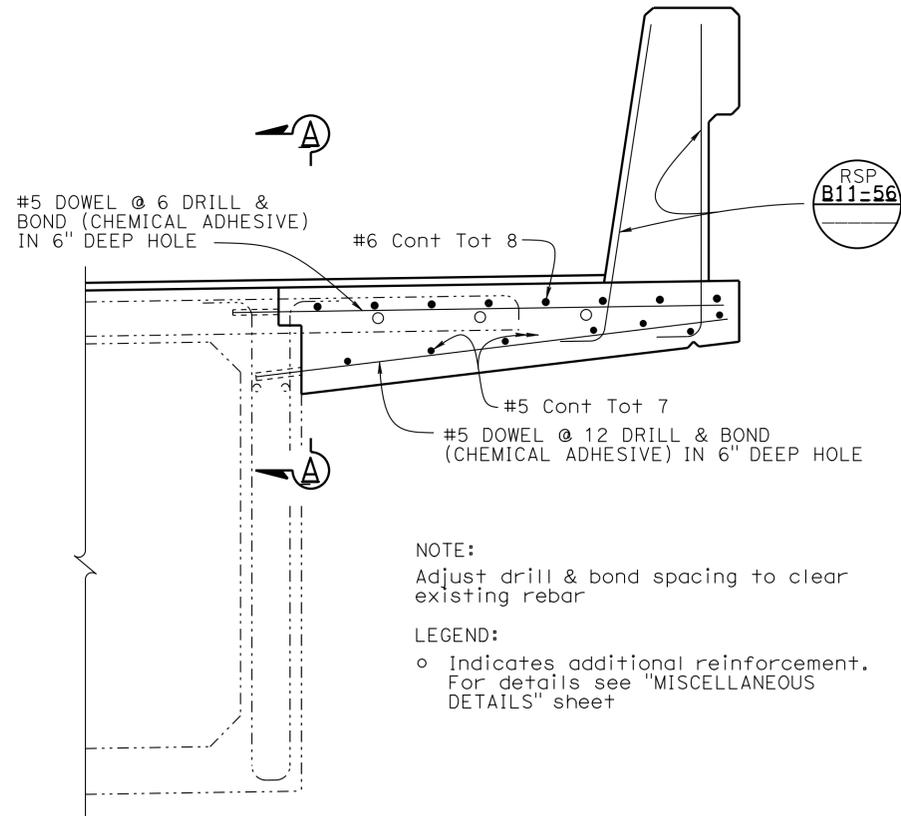
TYPICAL SECTION
 $\frac{3}{16}'' = 1'-0''$



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

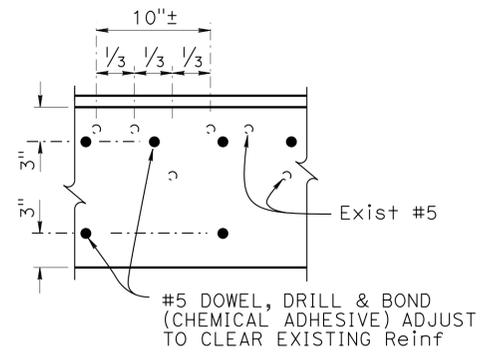


NOTE:
 For barrier details not shown, see



NOTE:
 Adjust drill & bond spacing to clear existing rebar

LEGEND:
 o Indicates additional reinforcement. For details see "MISCELLANEOUS DETAILS" sheet



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

PART TYPICAL SECTION
 $1'' = 1'-0''$

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

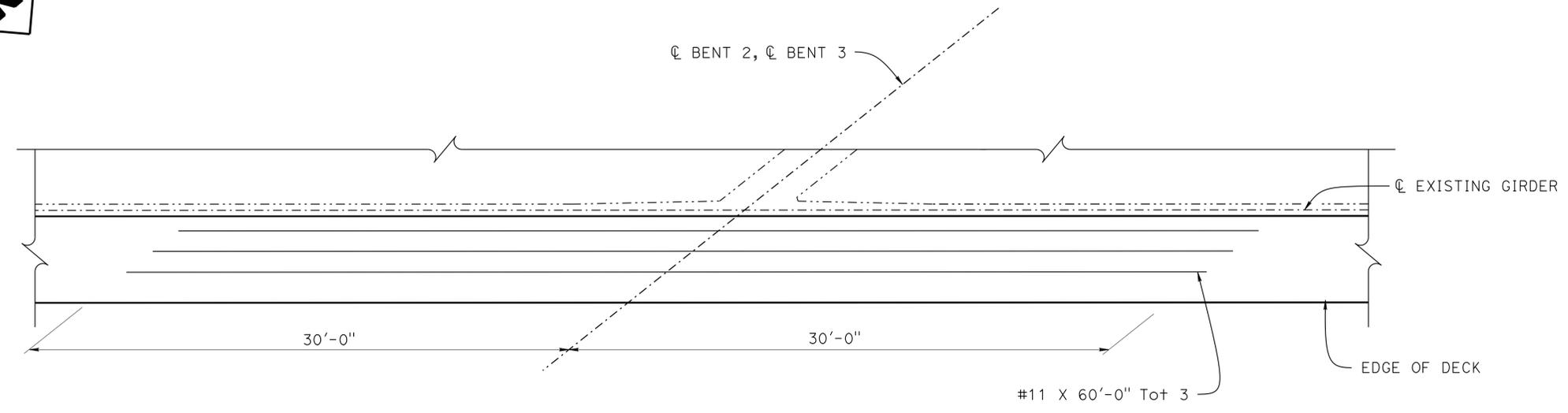
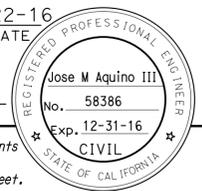
NOTE:
 Left bridge shown, right bridge similar

STRUCTURES DESIGN DETAIL SHEET (ENGLISH) (REV. 09-01-10)	DESIGN	BY Quang H Nguyen	CHECKED Ashraf Ahmed	STATE OF CALIFORNIA DEPARTMENT OF TRANSPORTATION	DIVISION OF ENGINEERING SERVICES STRUCTURE DESIGN DESIGN BRANCH 3	BRIDGE NO.	SOUTH CAMP ROBERTS OH (WIDEN) TYPICAL SECTION
	DETAILS	BY Nancy C Gwynn	CHECKED Ashraf Ahmed			49-0078L/R	
	QUANTITIES	BY Michael K Bergman	CHECKED Shadi Motalebi			POST MILE 67.5	
ORIGINAL SCALE IN INCHES FOR REDUCED PLANS				UNIT: 3578 PROJECT NUMBER & PHASE: 05000200201		CONTRACT NO.: 05-060404	
DISREGARD PRINTS BEARING EARLIER REVISION DATES							
REVISION DATES							SHEET 11 OF 16

DIST	COUNTY	ROUTE	POST MILES TOTAL PROJECT	SHEET No.	TOTAL SHEETS
05	SLO, Mon	101	63.2/R69.3, R0.0/R1.9	641	858

REGISTERED CIVIL ENGINEER DATE 4-22-16
 REGISTERED CIVIL ENGINEER DATE 5-2-16
 PLANS APPROVAL DATE

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PART PLAN
1/4" = 1'-0"

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

DESIGN	BY Quang H Nguyen	CHECKED Ashraf Ahmed
DETAILS	BY Nancy C Gwynn	CHECKED Ashraf Ahmed
QUANTITIES	BY Michael K Bergman	CHECKED Shadi Motalebi

STATE OF CALIFORNIA
DEPARTMENT OF TRANSPORTATION

DIVISION OF ENGINEERING SERVICES
STRUCTURE DESIGN
DESIGN BRANCH 3

BRIDGE NO.	49-0078L/R
POST MILE	67.5

SOUTH CAMP ROBERTS OH (WIDEN)
MISCELLANEOUS DETAILS

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

ORIGINAL SCALE IN INCHES FOR REDUCED PLANS



UNIT: 3578
PROJECT NUMBER & PHASE: 05000200201

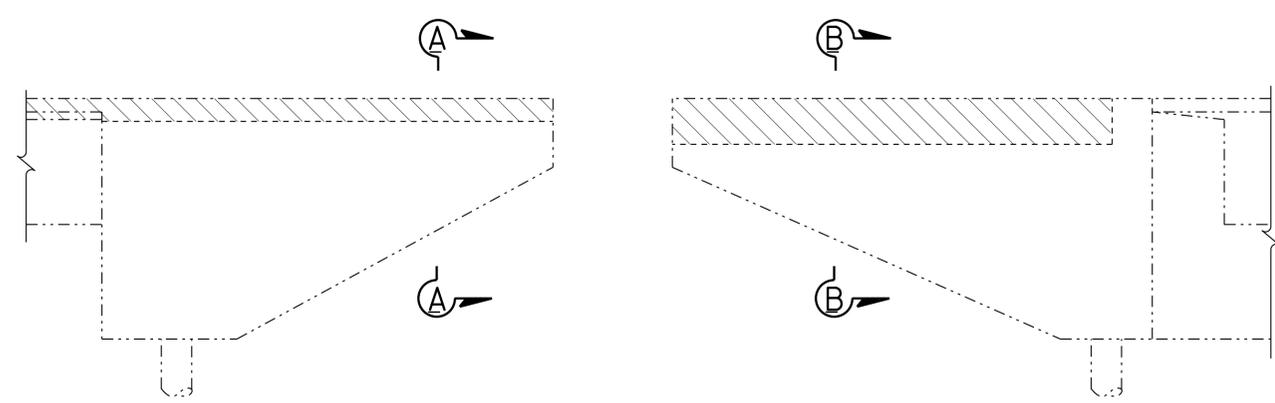
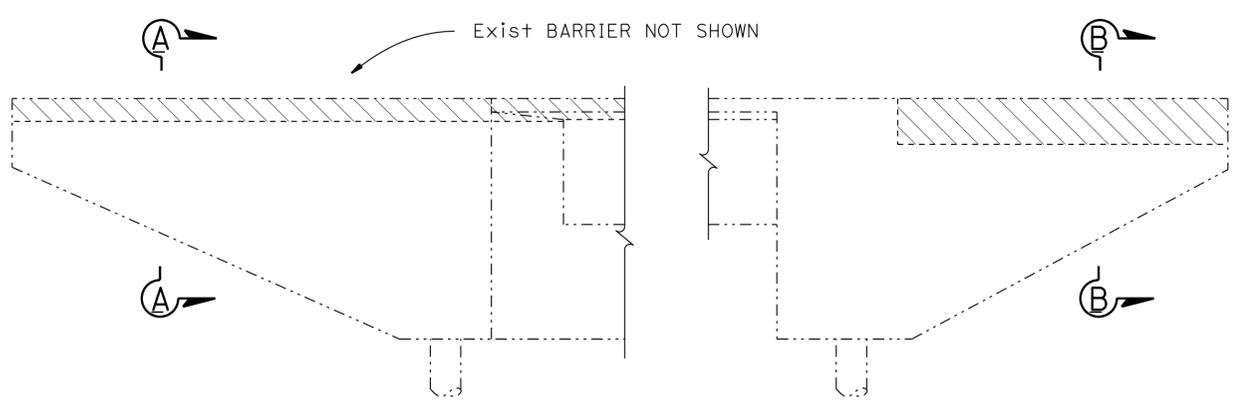
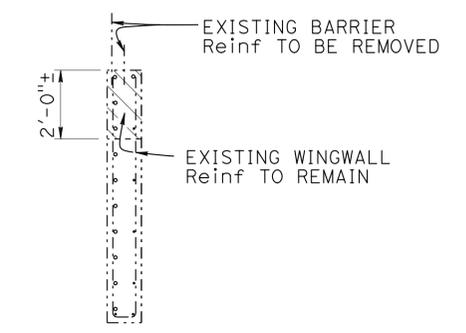
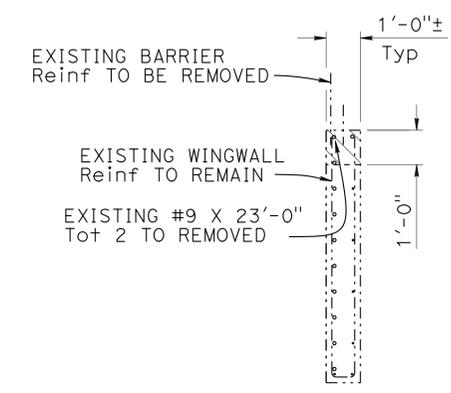
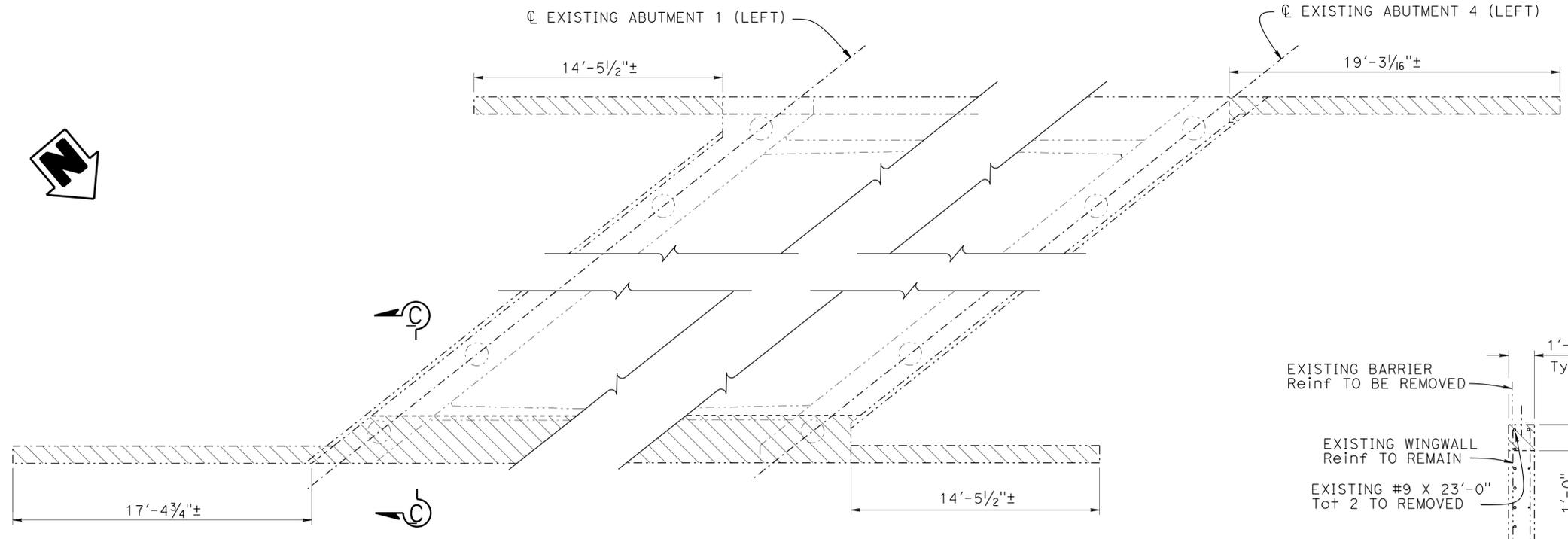
CONTRACT NO.: 05-060404

DISREGARD PRINTS BEARING EARLIER REVISION DATES

REVISION DATES	SHEET	OF
12-11-18	12	16

DIST	COUNTY	ROUTE	POST MILES TOTAL PROJECT	SHEET No.	TOTAL SHEETS
05	SLO, Mon	101	63.27/R69.3, R0.0/R1.9	642	858

Jose M. Aquino III 4-22-16
 REGISTERED CIVIL ENGINEER DATE
 5-2-16
 PLANS APPROVAL DATE
 Jose M Aquino III
 No. 58386
 Exp. 12-31-16
 CIVIL
 STATE OF CALIFORNIA
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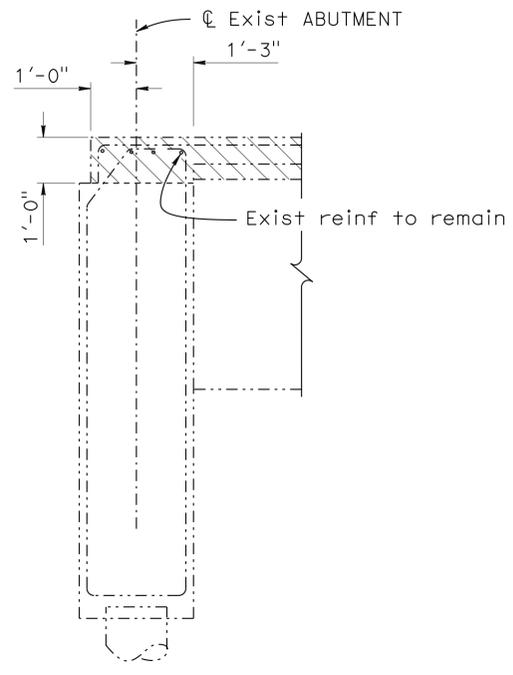
NOTE:
 THE CONTRACTOR MUST VERIFY ALL CONTROLLING FIELD DIMENSIONS BEFORE ORDERING OR FABRICATING ANY MATERIAL.

LEGEND:
 - - - - - Indicates existing bridge
 - Indicates existing bridge removal

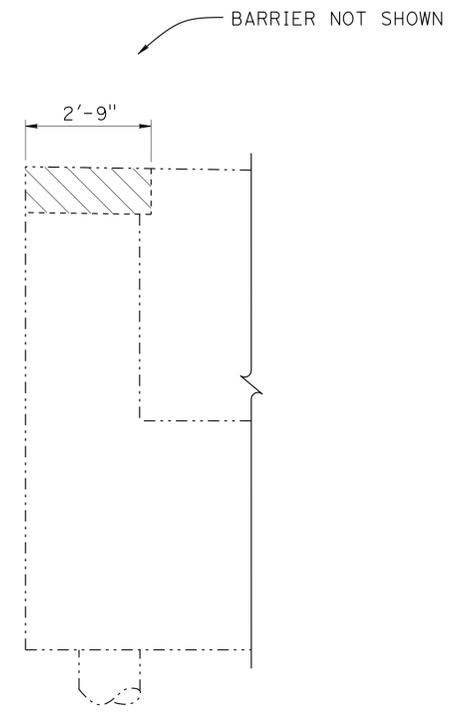
NOTES:
 1. For "SECTION C-C", see "CONCRETE REMOVAL Det No. 2" sheet
 2. Left bridge shown, right bridge similar by opposite hand

STRUCTURES DESIGN DETAIL SHEET (ENGLISH) (REV. 09-01-10)	DESIGN BY Quang H Nguyen CHECKED Ashraf Ahmed	STATE OF CALIFORNIA DEPARTMENT OF TRANSPORTATION	DIVISION OF ENGINEERING SERVICES STRUCTURE DESIGN	BRIDGE NO. 49-0078L/R	SOUTH CAMP ROBERTS OH (WIDEN) CONCRETE REMOVAL Det No. 1
	DETAILS BY Nancy C Gwynn CHECKED Ashraf Ahmed		DESIGN BRANCH 3	POST MILE 67.5	
	QUANTITIES BY Michael K Bergman CHECKED Shadi Motalebi				
	ORIGINAL SCALE IN INCHES FOR REDUCED PLANS	UNIT: 3578 PROJECT NUMBER & PHASE: 05000200201	CONTRACT NO.: 05-060404	DISREGARD PRINTS BEARING EARLIER REVISION DATES	SHEET 13 OF 16

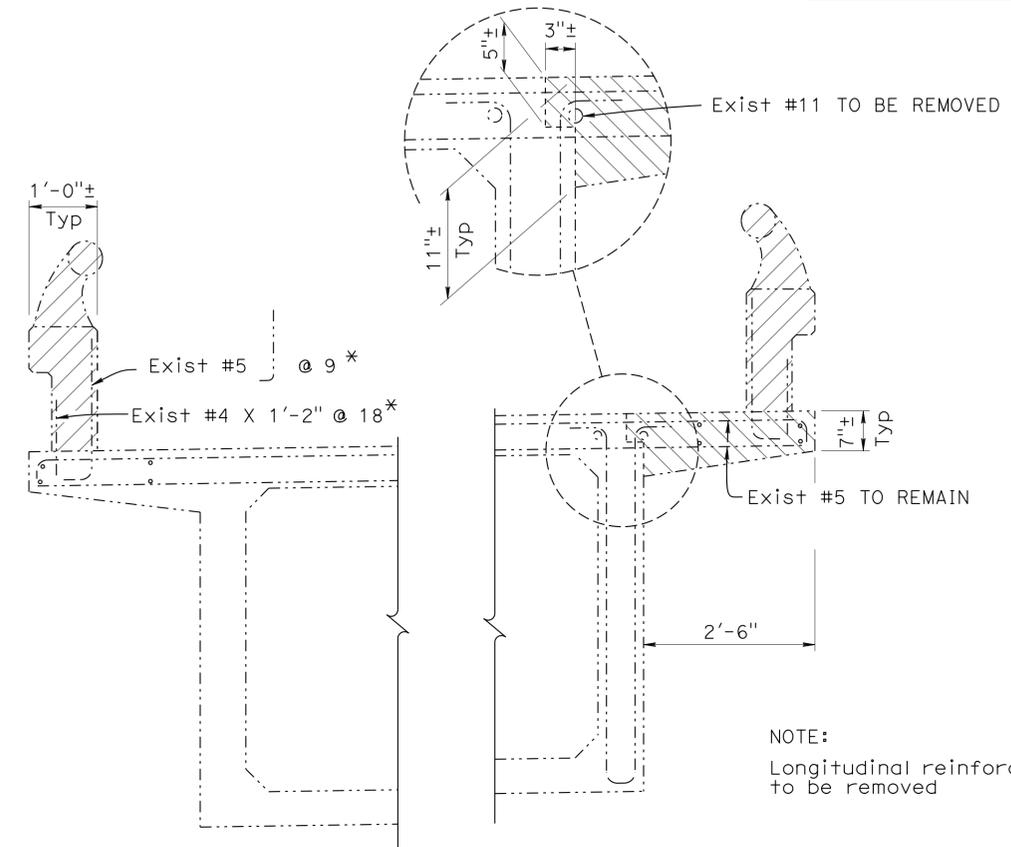
DIST	COUNTY	ROUTE	POST MILES TOTAL PROJECT	SHEET No.	TOTAL SHEETS
05	SLO, Mor	101	63.2/R69.3, R0.0/R1.9	643	858
Jose M. Aquino III REGISTERED CIVIL ENGINEER			4-22-16	DATE	
5-2-16			PLANS APPROVAL DATE		
Jose M. Aquino III No. 58386 Exp. 12-31-16 CIVIL STATE OF CALIFORNIA			REGISTERED PROFESSIONAL ENGINEER		
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ABUTMENT SECTION
1/2" = 1'-0"



SECTION C-C
1/2" = 1'-0"



PART TYPICAL SECTION
3/4" = 1'-0"

- LEGEND:
- - Indicates existing bridge
 - Indicates existing bridge removal
 - Indicates existing barrier removal
 - * Cut bar flush to deck

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

NOTE:
Left bridge shown, right bridge similar by opposite hand

STRUCTURES DESIGN DETAIL SHEET (ENGLISH) (REV. 09-01-10)	DESIGN	BY Quang H Nguyen	CHECKED Ashraf Ahmed	STATE OF CALIFORNIA DEPARTMENT OF TRANSPORTATION	DIVISION OF ENGINEERING SERVICES STRUCTURE DESIGN DESIGN BRANCH 3	BRIDGE NO.	SOUTH CAMP ROBERTS OH (WIDEN) CONCRETE REMOVAL Det No. 2
	DETAILS	BY Nancy C Gwynn	CHECKED Ashraf Ahmed			49-0078L/R	
	QUANTITIES	BY Michael K Bergman	CHECKED Shadi Motalebi			POST MILE	
						67.5	
				UNIT: 3578	PROJECT NUMBER & PHASE: 05000200201	CONTRACT NO.: 05-060404	DISREGARD PRINTS BEARING EARLIER REVISION DATES
				ORIGINAL SCALE IN INCHES FOR REDUCED PLANS	0 1 2 3	REVISION DATES	SHEET 14 OF 16

USERNAME => s115765 DATE PLOTTED => 22-JUL-2016 TIME PLOTTED => 17:52

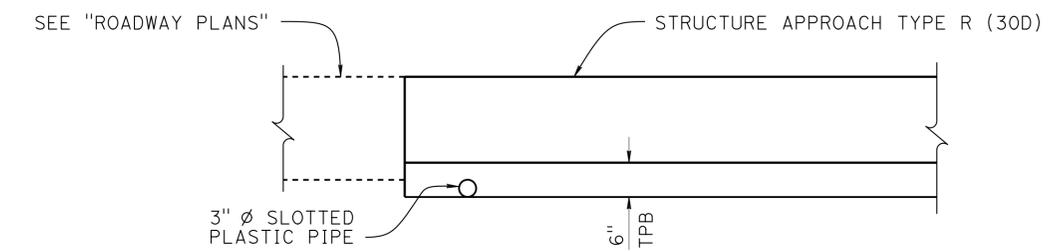
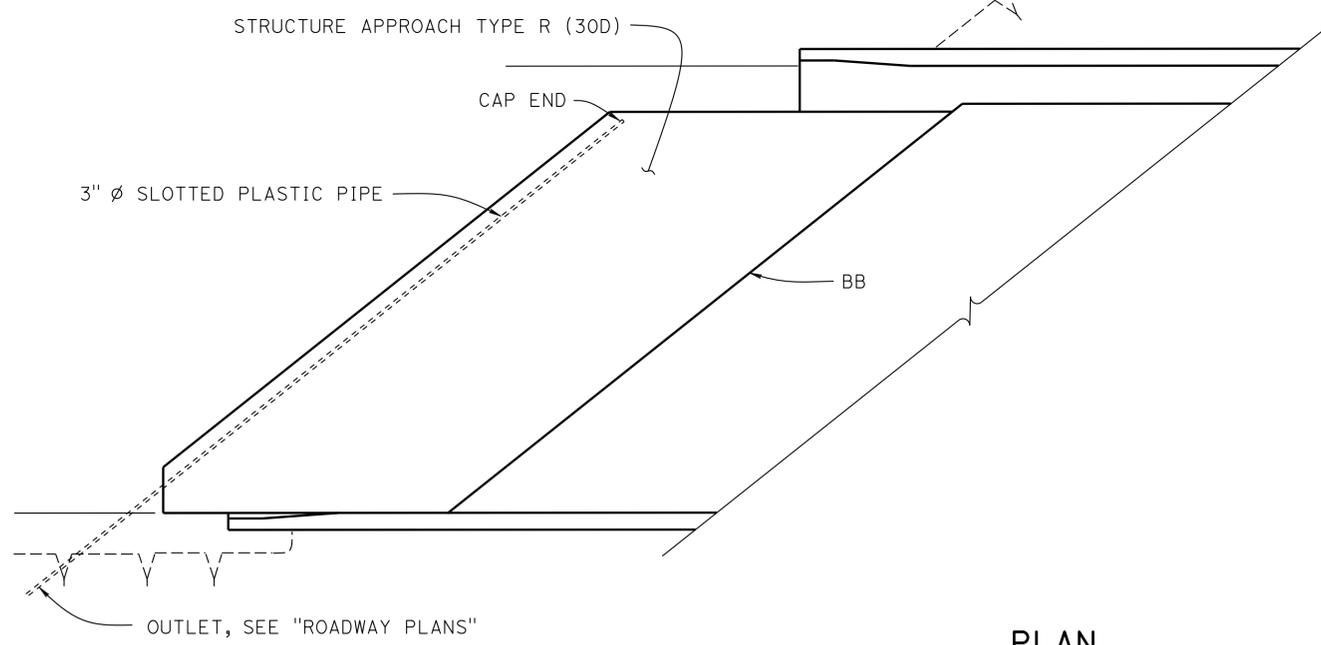
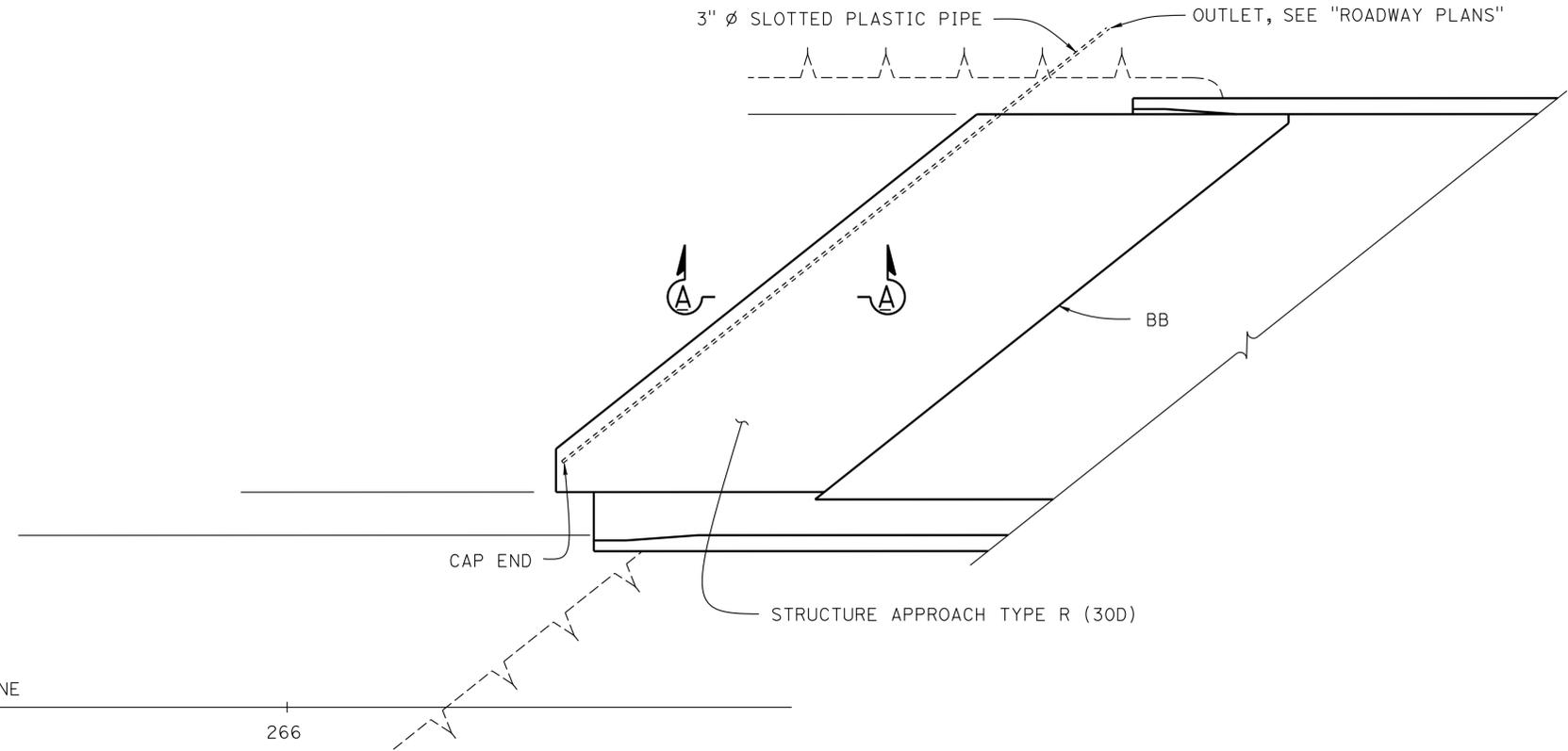
DIST	COUNTY	ROUTE	POST MILES TOTAL PROJECT	SHEET No.	TOTAL SHEETS
05	SLO, Mon	101	63.2/R69.3, R0.0/R1.9	644	858

Jose M. Aquino III 4-22-16
 REGISTERED CIVIL ENGINEER DATE
 5-2-16
 PLANS APPROVAL DATE
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REGISTERED PROFESSIONAL ENGINEER
 Jose M. Aquino III
 No. 58386
 Exp. 12-31-16
 CIVIL
 STATE OF CALIFORNIA



3" Ø SLOTTED PLASTIC PIPE OUTLET, SEE "ROADWAY PLANS"



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

PLAN
1/8" = 1'-0"

- NOTES:
1. Structure approach at BB shown, structure approach at EB similar
 2. For structure approach slab details not shown, see "STRUCTURE APPROACH TYPE R (30D)" sheet

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

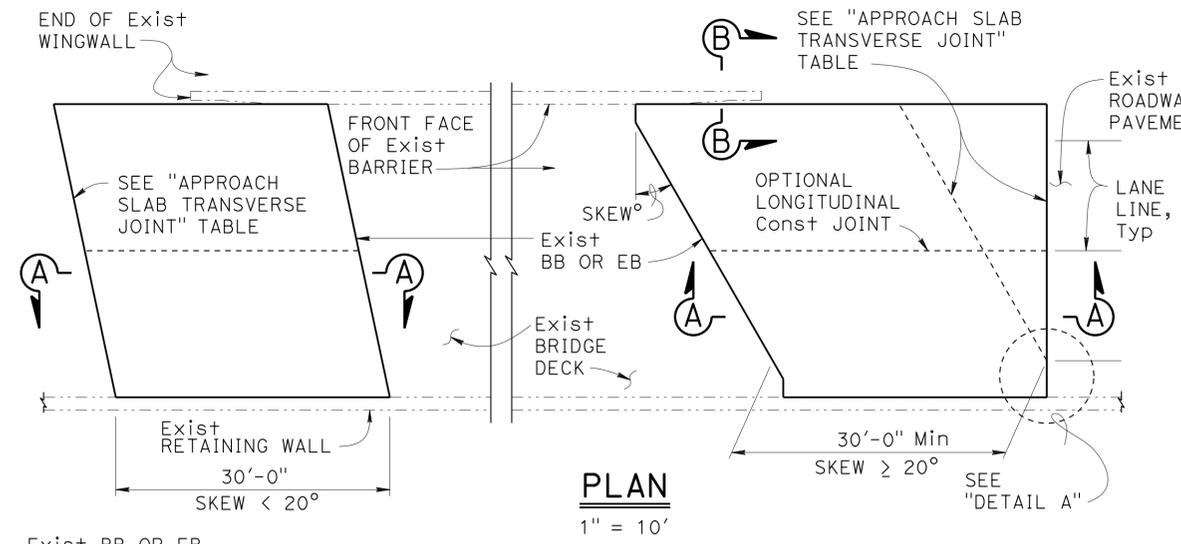
DESIGN BY Quang H Nguyen CHECKED Ashraf Ahmed DETAILS BY Nancy C Gwynn CHECKED Ashraf Ahmed QUANTITIES BY Michael K Bergman CHECKED Shadi Motalebi	STATE OF CALIFORNIA DEPARTMENT OF TRANSPORTATION	DIVISION OF ENGINEERING SERVICES STRUCTURE DESIGN DESIGN BRANCH 3	BRIDGE NO. 49-0078L/R POST MILE 67.5	SOUTH CAMP ROBERTS OH (WIDEN) STRUCTURE APPROACH DRAINAGE DETAILS
	STRUCTURES DESIGN DETAIL SHEET (ENGLISH) (REV. 09-01-10)	ORIGINAL SCALE IN INCHES FOR REDUCED PLANS 0 1 2 3	UNIT: 3578 PROJECT NUMBER & PHASE: 05000200201	CONTRACT NO.: 05-060404

USERNAME => s115765 DATE PLOTTED => 22-JUL-2016 TIME PLOTTED => 17:52

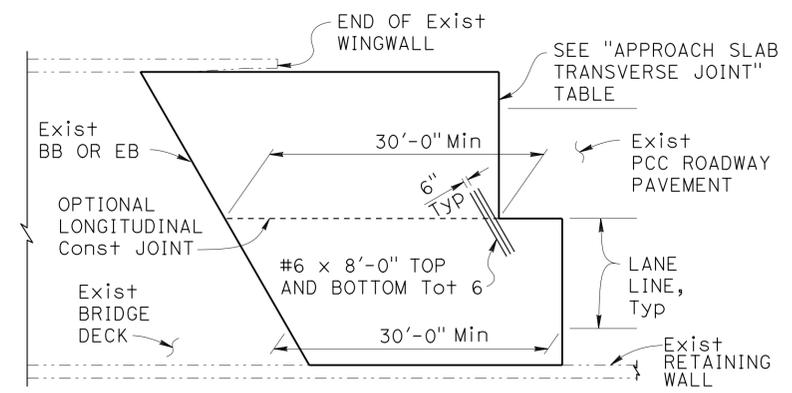
DIST	COUNTY	ROUTE	POST MILES TOTAL PROJECT	SHEET No.	TOTAL SHEETS
05	SLO, Mon	101	63.2/R69.3, R0.0/R1.9	645	858

Jose M. Aquino III
 REGISTERED CIVIL ENGINEER DATE 4-22-16
 5-2-16
 PLANS APPROVAL DATE
 The State of California or its officers or agents shall not be responsible for the accuracy or completeness of electronic copies of this plan sheet.

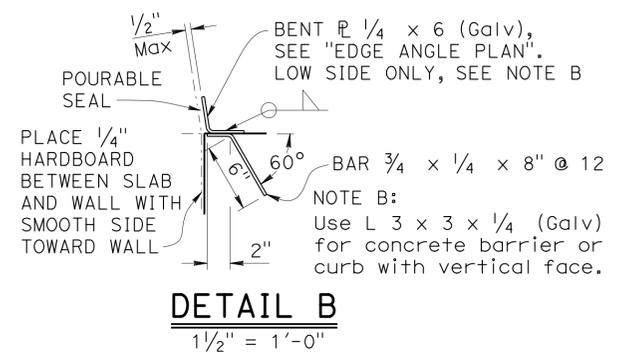
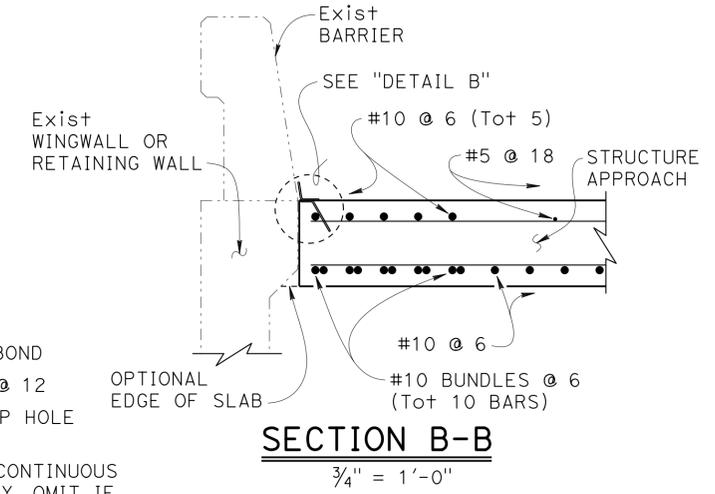
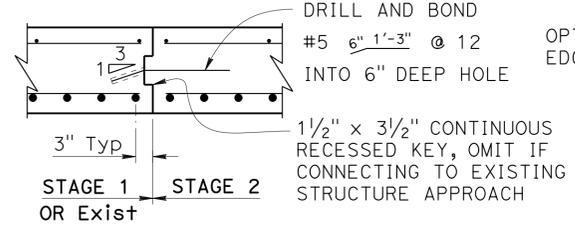
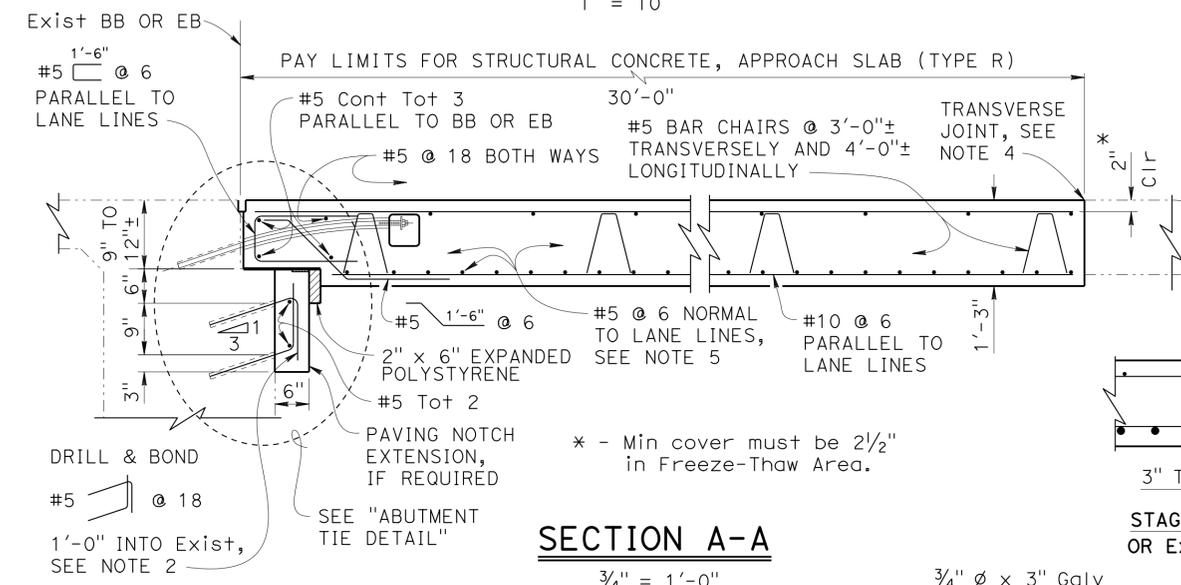
REGISTERED PROFESSIONAL ENGINEER
 Jose M Aquino III
 No. 58386
 Exp. 12-31-16
 CIVIL
 STATE OF CALIFORNIA



DETAIL A
No Scale



APPROACH SLAB TRANSVERSE JOINT		
APPROACH SKEW	WITH HMA ROADWAY PAVEMENT	WITH PCC ROADWAY PAVEMENT
< 20°	PARALLEL TO BB OR EB	PARALLEL TO BB OR EB
20° - 45°	PARALLEL TO BB OR EB USE "DETAIL A"	STAGGER AT LANE LINES 24' TO 36' APART, SEE "END STAGGER DETAIL"
> 45°	PARALLEL TO BB OR EB USE "DETAIL A"	STAGGER AT EACH LANE LINE, SEE "END STAGGER DETAIL"



DESIGN NOTES

DESIGN: AASHTO LRFD Bridge Design Specifications, 2012 Edition with Caltrans Amendments, preface dated January 2014

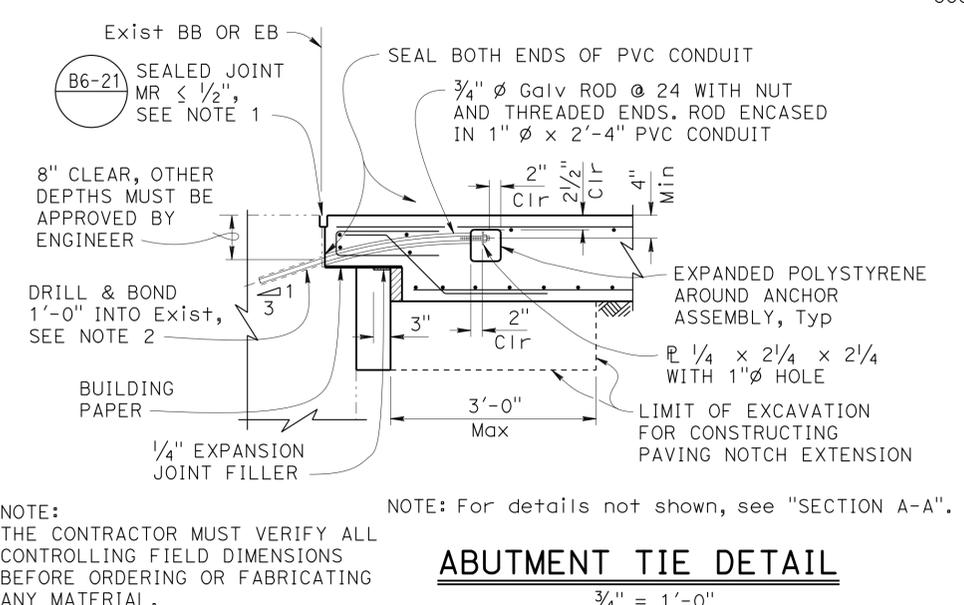
LIMIT STATES: Service I, Strength I & II, Extreme II and Fatigue I (γ_{FAT} = 1.0)

DEAD LOAD: Includes 35 psf for future wearing surface

LIVE LOAD: HL93 and permit design load
Equivalent strip width method: W₁ = 12 ft
Slab span: L₁ = 24.5 ft

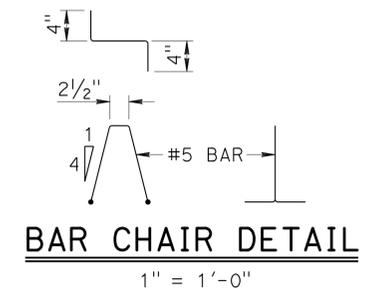
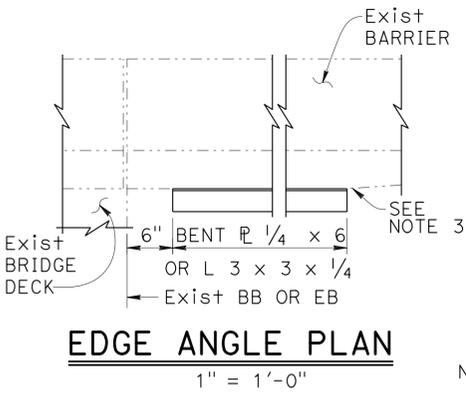
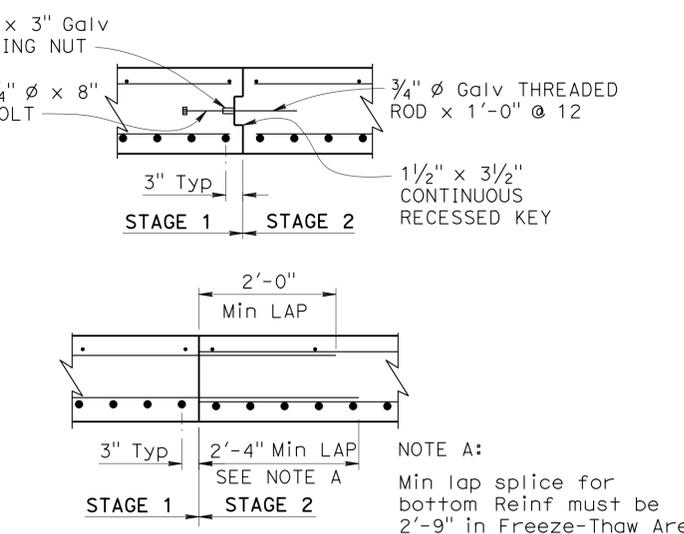
REINFORCED CONCRETE:
f_y = 60 ksi
f'_c = 3.6 ksi
n = 8

- NOTES:
- For details not shown, see other plan sheets. Adjust reinforcement to clear sawcut for sealed joint.
 - Space reinforcement to avoid existing prestress anchorages and other abutment reinforcement.
 - End the plate or edge angle at beginning of barrier transition, end of wingwall, or end of structure approach as applicable.
 - Transverse joint must be a minimum of 5'-0" from an existing or constructed weakened plane joint in approach PCC roadway pavement. Refer to Standard Plans P10 and P14.
 - At the Contractor's option, approach slab transverse reinforcement may be placed parallel to BB or EB. Spacing of transverse reinforcement is measured along \bar{c} roadway.
- Indicates Existing Structure



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

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



STANDARD DRAWING

FILE NO. **xs3-150**

APPROVAL DATE January 2015

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-sheet/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.

STATE OF CALIFORNIA
DEPARTMENT OF TRANSPORTATION

DIVISION OF 3 ENGINEERING SERVICES

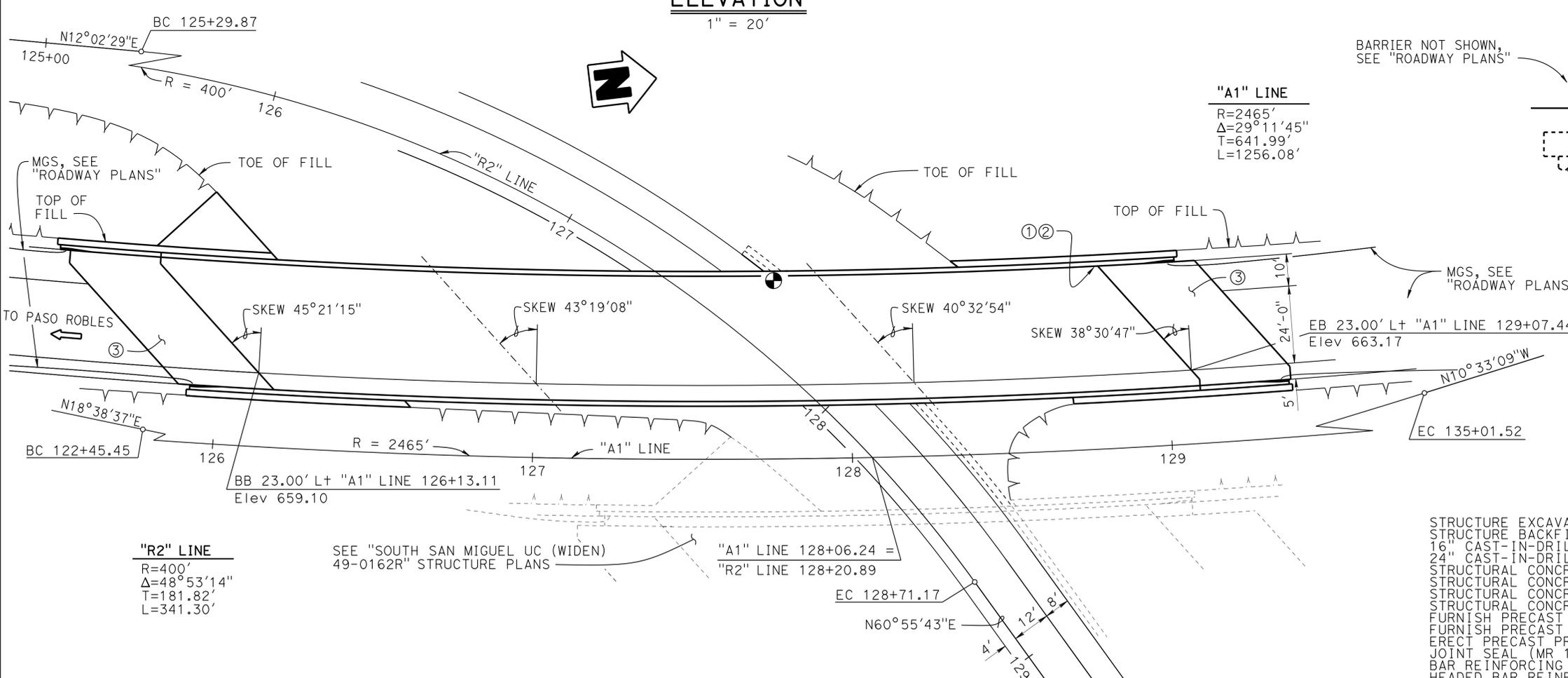
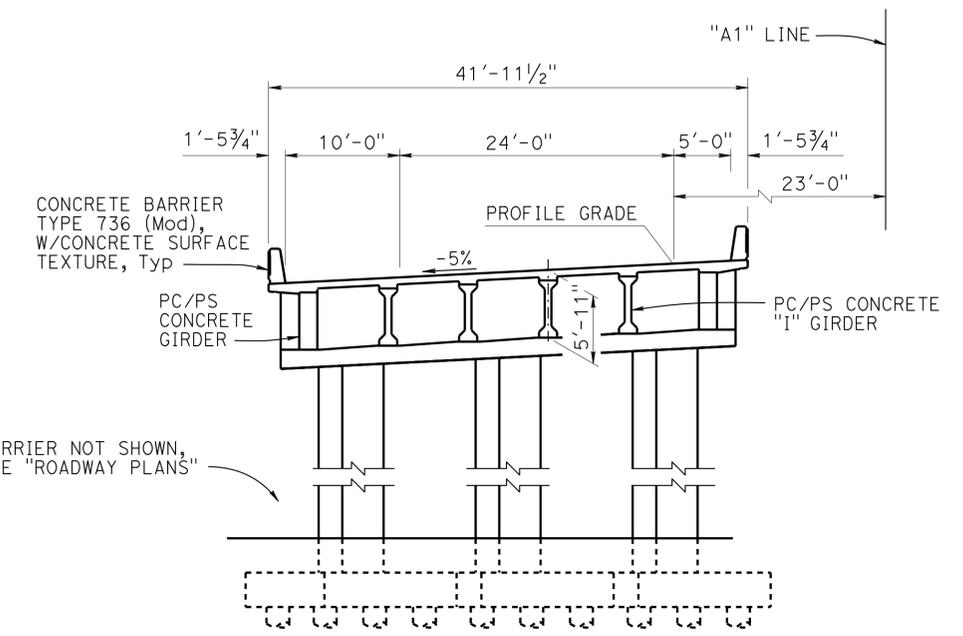
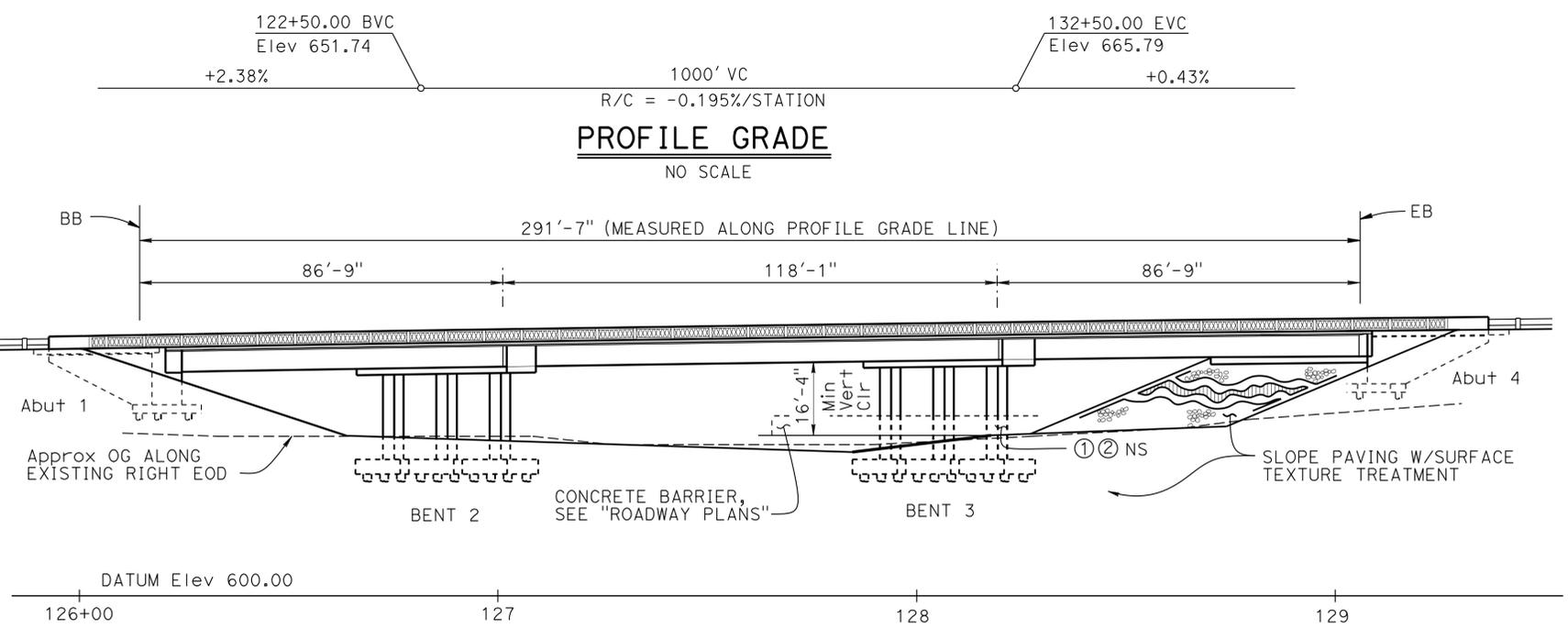
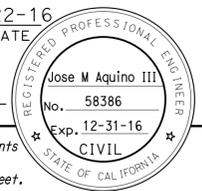
BRIDGE NO. 49-0078L/R

POST MILE 67.5

SOUTH CAMP ROBERTS OH (WIDEN)
STRUCTURE APPROACH TYPE R (30D)

DIST	COUNTY	ROUTE	POST MILES TOTAL PROJECT	SHEET No.	TOTAL SHEETS
05	SLO, Mon	101	63.2/R69.3, R0.0/R1.9	646	858

Jose M. Aquino III 4-22-16
 REGISTERED CIVIL ENGINEER DATE
 5-2-16
 PLANS APPROVAL DATE
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TYPICAL SECTION
1/8" = 1'-0"

- LEGEND:
 ● - Point of minimum vertical clearance
- NOTES:
 ① Paint "Br. No. 49-0162L"
 ② Paint "SOUTH SAN MIGUEL UC"
 ③ STRUCTURE APPROACH TYPE N (30S)
 For "GENERAL NOTES" and "INDEX TO PLANS", see "INDEX TO PLANS" sheet

QUANTITIES

STRUCTURE EXCAVATION (BRIDGE)	810	CY
STRUCTURE BACKFILL (BRIDGE)	500	CY
16" CAST-IN-DRILLED-HOLE CONCRETE PILING	2,093	LF
24" CAST-IN-DRILLED-HOLE CONCRETE PILING	1,791	LF
STRUCTURAL CONCRETE, BRIDGE FOOTING	198	CY
STRUCTURAL CONCRETE, BRIDGE	455	CY
STRUCTURAL CONCRETE, BRIDGE (POLYMER FIBER)	310	CY
STRUCTURAL CONCRETE, APPROACH SLAB (TYPE N)	108	CY
FURNISH PRECAST PRESTRESSED CONCRETE GIRDER (80'-90')	12	EA
FURNISH PRECAST PRESTRESSED CONCRETE GIRDER (110'-120')	6	EA
ERECT PRECAST PRESTRESSED CONCRETE GIRDER	18	EA
JOINT SEAL (MR 1")	111	LF
BAR REINFORCING STEEL (BRIDGE)	303,900	LB
HEADED BAR REINFORCEMENT	114	EA
PREPARE AND PAINT CONCRETE	1,135	SQFT
SLOPE PAVING (CONCRETE)	55	CY
CONCRETE BARRIER (TYPE 736 MODIFIED)	694	LF

DESIGN	BY Eric G Burgeson	CHECKED Arturo V Herrera	LOAD & RESISTANCE FACTOR DESIGN	LIVE LOADING: HL93 W/"LOW-BOY"; PERMIT DESIGN VEHICLE
DETAILS	BY Nancy C Gwynn	CHECKED Arturo V Herrera	LAYOUT	BY Eric G Burgeson
QUANTITIES	BY Sharon Yen	CHECKED Mufeed Khalaf	SPECIFICATIONS	BY Jim Corrado

STATE OF CALIFORNIA	DIVISION OF ENGINEERING SERVICES	BRIDGE NO.
DEPARTMENT OF TRANSPORTATION	STRUCTURE DESIGN	49-0162L
	DESIGN BRANCH 3	POST MILE
		65.1

SOUTH SAN MIGUEL UC	
GENERAL PLAN	

DIST	COUNTY	ROUTE	POST MILES TOTAL PROJECT	SHEET No.	TOTAL SHEETS
05	SLO, Mon	101	63.2/R69.3, R0.0/R1.9	647	858

DATE: 4-22-16
 REGISTERED CIVIL ENGINEER: Jose M. Aquino III
 No. 58386
 Exp. 12-31-16
 CIVIL
 STATE OF CALIFORNIA

5-2-16
 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.

GENERAL NOTES
LOAD AND RESISTANCE FACTOR DESIGN

DESIGN:
AASHTO LRFD Bridge Design Specifications, 2012 edition with the California Amendments 2012 edition

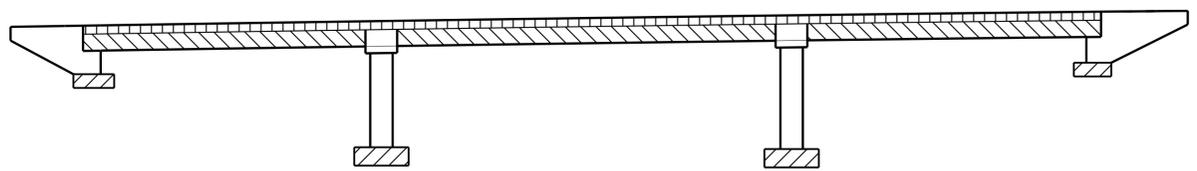
SEISMIC DESIGN:
Caltrans Seismic Design Criteria (SDC), Version 1.7 dated April 2013

DEAD LOAD:
Includes 35 psf for future wearing surface.

LIVE LOADING:
HL93 and permit design load

SEISMIC LOADING:
See "SITE SPECIFIC ARS CURVE"

CONCRETE:
fy = 60 ksi
f'c = 3.60 ksi
n = 8
See prestressing notes on "PRECAST PRESTRESSED I GIRDER" sheet

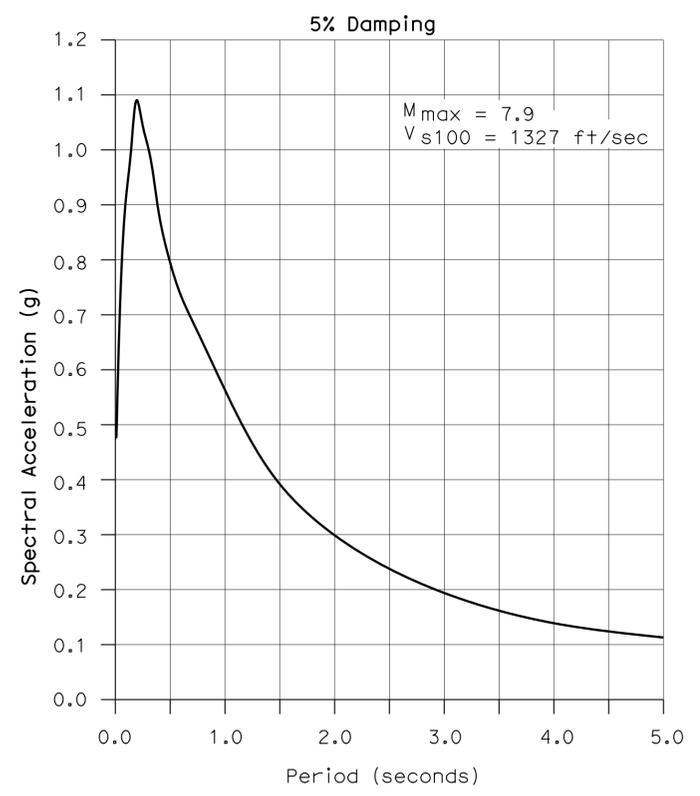


- Structural Concrete, Bridge
- Structural Concrete, Bridge (Polymer Fiber) (4.0 ksi @ 28 days)
- Prestressed I Girder, see "PRESTRESSED I GIRDER" sheet
- Structural Concrete, Bridge Footing

CONCRETE STRENGTH AND TYPE LIMITS

INDEX TO PLANS

SHEET No.	TITLE
1	GENERAL PLAN
2	INDEX TO PLANS No. 1
3	INDEX TO PLANS No. 2
4	DECK CONTOURS
5	FOUNDATION PLAN
6	ABUTMENT 1 LAYOUT
7	ABUTMENT 4 LAYOUT
8	ABUTMENT DETAILS No. 1
9	ABUTMENT DETAILS No. 2
10	ABUTMENT DETAILS No. 3
11	ABUTMENT DETAILS No. 4
12	BENT DETAILS No. 1
13	BENT DETAILS No. 2
14	BENT DETAILS No. 3
15	TYPICAL SECTION
16	GIRDER LAYOUT
17	GIRDER DETAILS
18	GIRDER REINFORCEMENT
19	PRECAST PRESTRESSED I GIRDER
20	PRECAST PRESTRESSED GIRDER
21	BARRIER SURFACE TEXTURE
22	SLOPE PAVING LAYOUT
23	SLOPE PAVING SURFACE TEXTURE Det No. 1
24	SLOPE PAVING SURFACE TEXTURE Det No. 2
25	SLOPE PAVING SURFACE TEXTURE Det No. 3
26	STRUCTURE APPROACH TYPE N (30S)
27	STRUCTURE APPROACH DRAINAGE DETAILS
28	SLOPE PAVING-FULL SLOPE-NO SKEW
29	LOG OF TEST BORINGS 1 OF 3
30	LOG OF TEST BORINGS 2 OF 3
31	LOG OF TEST BORINGS 3 OF 3



SITE SPECIFIC ARS CURVE
NO SCALE

PILE DATA TABLE

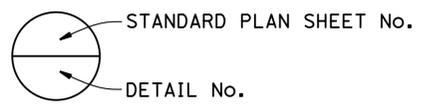
LOCATION	PILE TYPE	NOMINAL AXIAL RESISTANCE (kips)		DESIGN TIP ELEVATION	SPECIFIED TIP ELEVATION
		COMPRESSION	TENSION		
Abutment 1	16" ϕ CIDH Class 70	280	20	605.0 (a) 612.0 (c)	605.0
Bent 2	24" ϕ CIDH Class 100	390	50	595.0 (a)(d) 598.0 (b) 611.0 (c)	595.0
Bent 3	24" ϕ CIDH Class 100	390	50	595.0 (a)(d) 598.0 (b) 611.0 (c)	595.0
Abutment 4	16" ϕ CIDH Class 70	280	20	616.0 (a) 627.0 (c)	616.0

NOTES:

- Design tip elevations are controlled by: (a) Compression (Strength Limit), (b) Compression (Extreme Event), (c) Settlement (d) Lateral tip
- The specified tip elevation shall not be raised

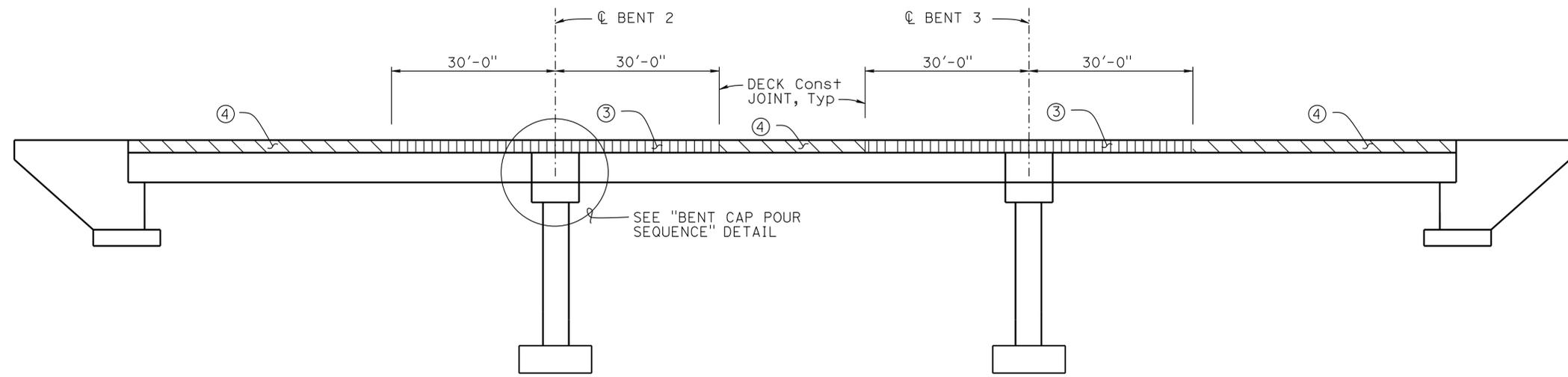
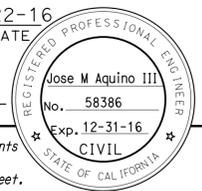
STANDARD PLANS DATED 2010

RSP	A10A	ABBREVIATIONS (SHEET 1 OF 2)
	A10B	ABBREVIATIONS (SHEET 2 OF 2)
	A10C	LINES AND SYMBOLS (SHEET 1 OF 3)
	A10D	LINES AND SYMBOLS (SHEET 2 OF 3)
	A10E	LINES AND SYMBOLS (SHEET 3 OF 3)
RSP	A10F	LEGEND - SOIL (SHEET 1 OF 2)
RSP	A10G	LEGEND - SOIL (SHEET 2 OF 2)
	A10H	LEGEND - ROCK
	A62C	LIMITS OF PAYMENT FOR EXCAVATION AND BACKFILL BRIDGE
	B0-1	BRIDGE DETAILS
	B0-3	BRIDGE DETAILS
	B0-5	BRIDGE DETAILS
	B0-13	BRIDGE DETAILS
	B2-3	16" AND 24" CAST-IN-DRILLED HOLE CONCRETE PILE
RSP	B6-21	JOINT SEAL (MAXIMUM MOVEMENT RATING = 2")
RSP	B11-56	CONCRETE BARRIER TYPE 736



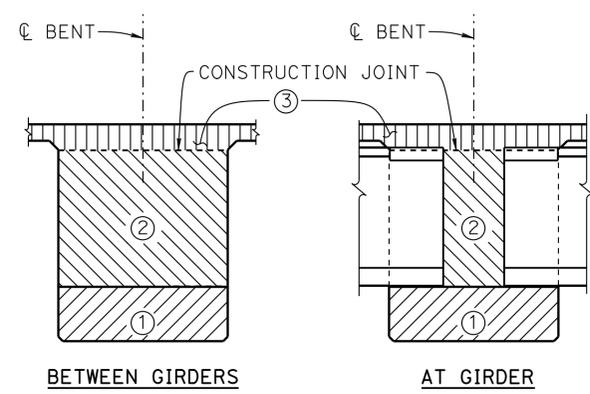
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	DETAILS BY: Nancy C Gwynn	CHECKED: Arturo V Herrera			POST MILE 65.1	
	QUANTITIES BY: Sharon Yen	CHECKED: Mufeed Khalaf				
ORIGINAL SCALE IN INCHES FOR REDUCED PLANS				UNIT: 3578	PROJECT NUMBER & PHASE: 05000200201	CONTRACT NO.: 05-060404
				FILE => 49-01621-a-1+p01.dgn	DISREGARD PRINTS BEARING EARLIER REVISION DATES	REVISION DATES: 10/11/15, 11/11/15, 11/20/15
						SHEET 2 OF 31

DIST	COUNTY	ROUTE	POST MILES TOTAL PROJECT	SHEET No.	TOTAL SHEETS
05	SLO, Mon	101	63.2/R69.3, R0.0/R1.9	648	858
			REGISTERED CIVIL ENGINEER	DATE	
			4-22-16		
			PLANS APPROVAL DATE		
			5-2-16		
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DECK POUR SEQUENCE
NO SCALE

- ① Pour drop cap. Allow a minimum of 7 day cure and $f'c = 3250$ psi prior to girder erection
- ② Pour bent cap diaphragm after girder erection. Allow a minimum of 7 day cure and $f'c = 3250$ psi prior to falsework removal and deck pour portion
- ③ Pour deck portion over bents within limits shown. Allow a minimum of 7 day water cure and $f'c = 3250$ psi prior to complete deck pour
- ④ Complete deck pour



BENT CAP POUR SEQUENCE
NO SCALE

CONCRETE POUR SEQUENCE

DESIGN	BY Eric G Burgeson	CHECKED Arturo V Herrera
DETAILS	BY Nancy C Gwynn	CHECKED Arturo V Herrera
QUANTITIES	BY Sharon Yen	CHECKED Mufeed Khalaf

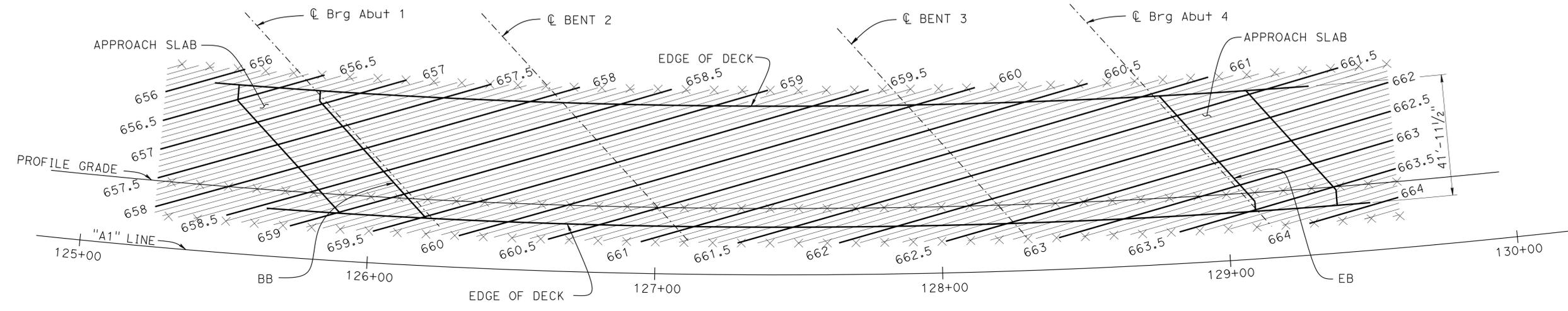
STATE OF CALIFORNIA
DEPARTMENT OF TRANSPORTATION

DIVISION OF ENGINEERING SERVICES
STRUCTURE DESIGN
DESIGN BRANCH 3

BRIDGE NO.	49-0162L
POST MILE	65.1

**SOUTH SAN MIGUEL UC
INDEX TO PLANS No. 2**

DIST	COUNTY	ROUTE	POST MILES TOTAL PROJECT	SHEET No.	TOTAL SHEETS
05	SLO, Mon	101	63.2/R69.3, R0.0/R1.9	649	858
			REGISTERED CIVIL ENGINEER	DATE	
			4-22-16		
			PLANS APPROVAL DATE		
			5-2-16		
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PLAN
1" = 20'

- NOTES:
1. Contours are at 0.1' intervals
 2. Contours do not include camber
- LEGEND:
- × Indicates 10' intervals along Station Line

STRUCTURES DESIGN DETAIL SHEET (ENGLISH) (REV. 09-01-10)	DESIGN	BY Eric G Burgeson	CHECKED Arturo V Herrera	STATE OF CALIFORNIA DEPARTMENT OF TRANSPORTATION	DIVISION OF ENGINEERING SERVICES STRUCTURE DESIGN DESIGN BRANCH 3	BRIDGE NO.	SOUTH SAN MIGUEL UC DECK CONTOURS	
	DETAILS	BY Nancy C Gwynn	CHECKED Arturo V Herrera			49-0162L		
	QUANTITIES	BY Sharon Yen	CHECKED Mufeed Khalaf			POST MILE 65.1		
ORIGINAL SCALE IN INCHES FOR REDUCED PLANS				0 1 2 3	UNIT: 3578 PROJECT NUMBER & PHASE: 05000200201	CONTRACT NO.: 05-060404	DISREGARD PRINTS BEARING EARLIER REVISION DATES	
							REVISION DATES	SHEET 4 OF 31

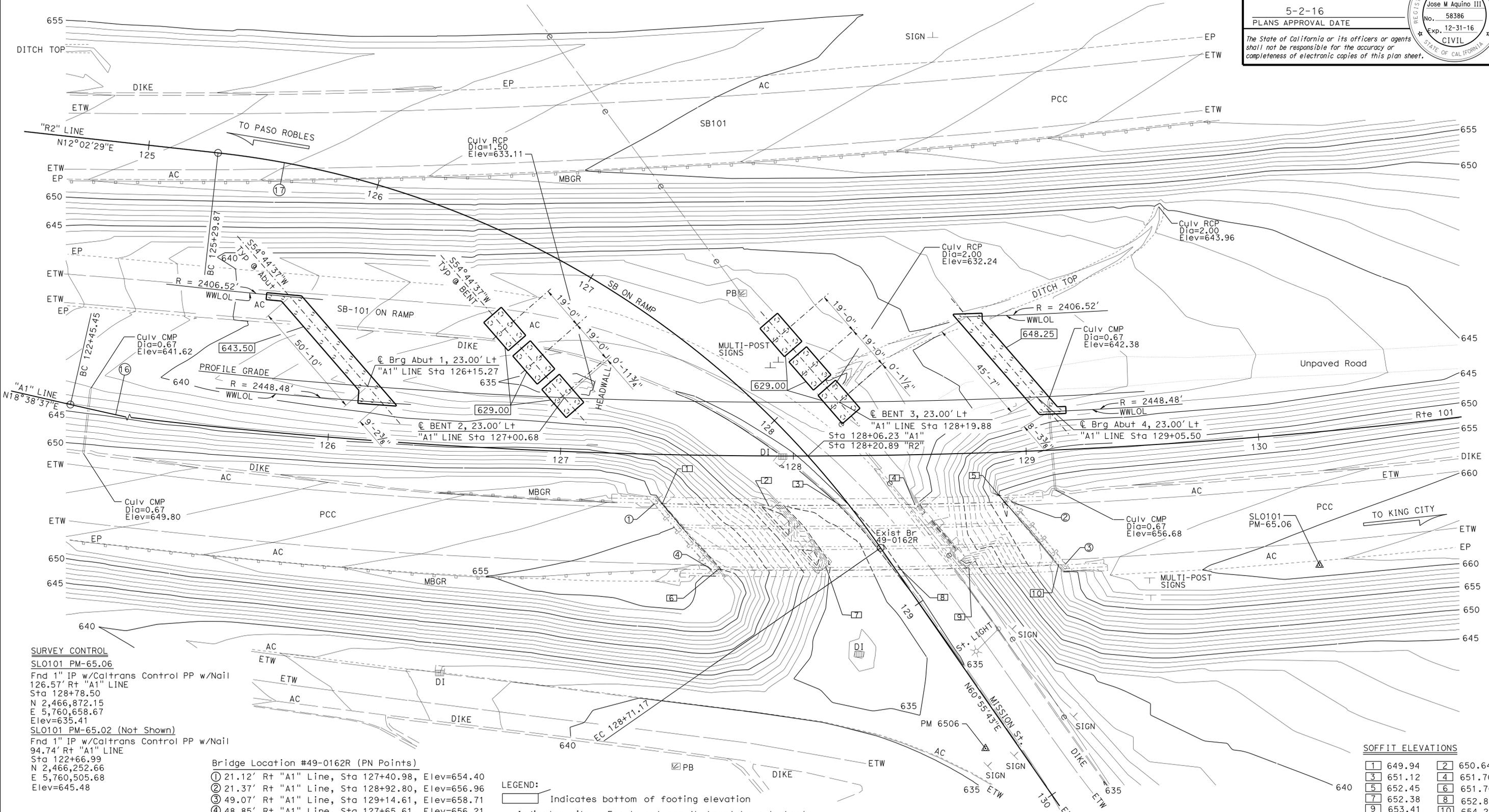
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CURVE DATA

No.	R	Δ	T	L
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17	400.00	48°53'14"	181.82	341.30

DIST	COUNTY	ROUTE	POST MILES TOTAL PROJECT	SHEET No.	TOTAL SHEETS
05	SLO, Mon	101	63.2/R69.3, R0.0/R1.9	650	858

Jose M. Aquino III 4-22-16
 REGISTERED CIVIL ENGINEER DATE
 5-2-16
 PLANS APPROVAL DATE
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SURVEY CONTROL
 SLO101 PM-65.06
 Fnd 1" IP w/Caltrans Control PP w/Nail
 Sta 126.57 Rt "A1" LINE
 Sta 128+78.50
 N 2,466,872.15
 E 5,760,658.67
 Elev=635.41
 SLO101 PM-65.02 (Not Shown)
 Fnd 1" IP w/Caltrans Control PP w/Nail
 Sta 122+66.99
 N 2,466,252.66
 E 5,760,505.68
 Elev=645.48

Bridge Location #49-0162R (PN Points)
 ① 21.12' Rt "A1" Line, Sta 127+40.98, Elev=654.30
 ② 21.37' Rt "A1" Line, Sta 128+92.80, Elev=656.96
 ③ 49.07' Rt "A1" Line, Sta 129+14.61, Elev=658.71
 ④ 48.85' Rt "A1" Line, Sta 127+65.61, Elev=656.21

LEGEND:
 Indicates bottom of footing elevation
 Indicates piles. For layout see Abutment Layout sheets

SOFFIT ELEVATIONS

①	649.94	②	650.64
③	651.12	④	651.70
⑤	652.45	⑥	651.70
⑦	652.38	⑧	652.89
⑨	653.41	⑩	654.25

PRELIMINARY INVESTIGATION SECTION

SCALE	VERT. DATUM NAVD88	PHOTOGRAMMETRY AS OF: X
1"=20'	HORIZ. DATUM NAD83 (92)	SURVEYED BY DISTRICT
ALIGNMENT TIES Dist. Traverse Sheet	DRAFTED BY S. ZHENG 08/2014	CHECKED BY S. SOU 08/2014

DESIGN	BY Eric G. Burgeson	CHECKED Arturo V. Herrera
DETAILS	BY Nancy C. Gwynn	CHECKED Arturo V. Herrera
QUANTITIES	BY Sharon Yen	CHECKED Mufeed Khalaf

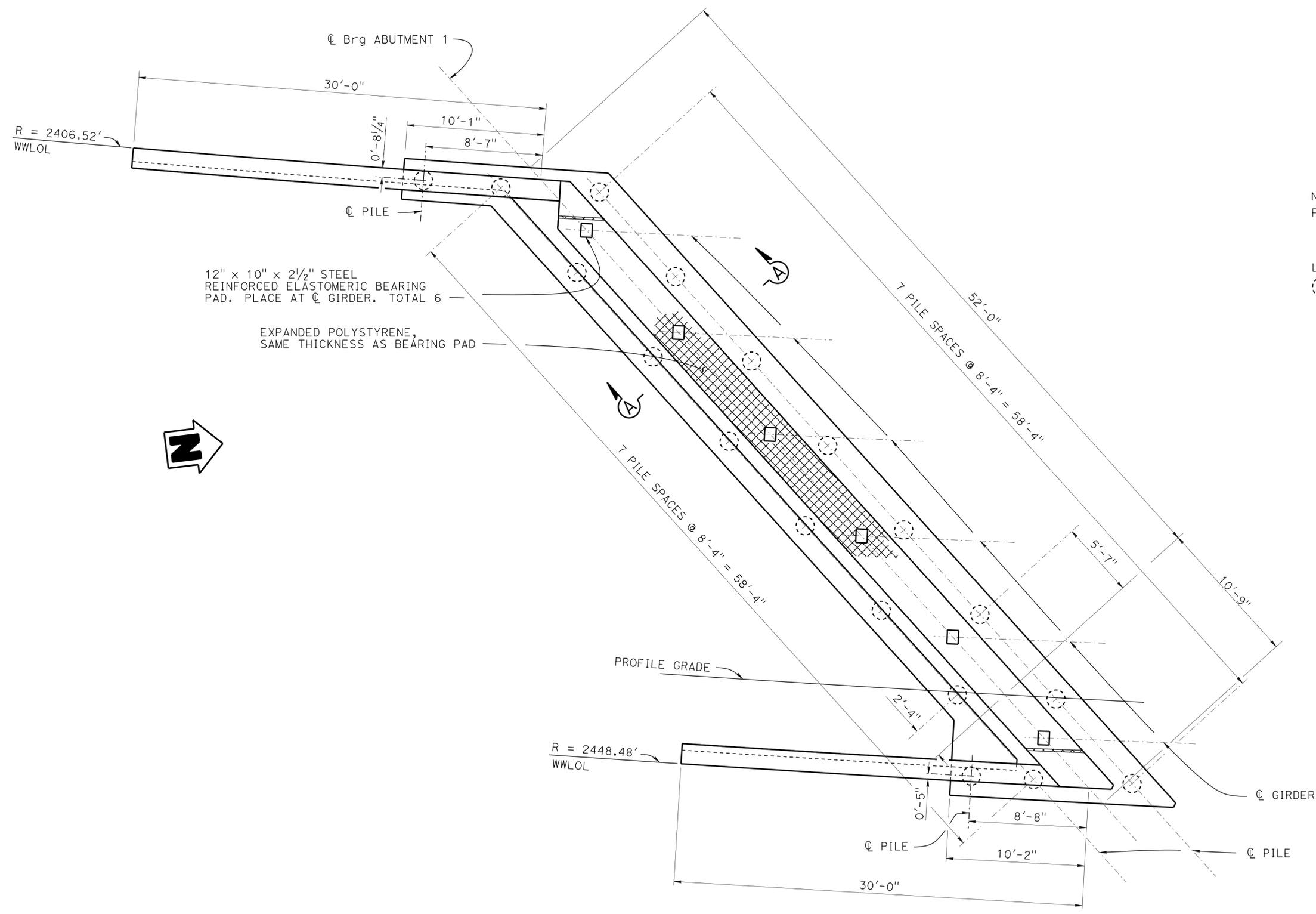
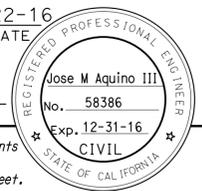
STATE OF CALIFORNIA
 DEPARTMENT OF TRANSPORTATION

DIVISION OF ENGINEERING SERVICES
 STRUCTURE DESIGN
DESIGN BRANCH 3

BRIDGE NO.	49-0162L
POST MILE	65.1

SOUTH SAN MIGUEL UC FOUNDATION PLAN

DIST	COUNTY	ROUTE	POST MILES TOTAL PROJECT	SHEET No.	TOTAL SHEETS
05	SLO, Mon	101	63.2/R69.3, R0.0/R1.9	651	858
			4-22-16		
REGISTERED CIVIL ENGINEER			DATE		
			5-2-16		
			PLANS APPROVAL DATE		
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NOTE:
For "SECTION A-A", see "ABUTMENT DETAILS NO. 1" sheet

LEGEND:
○ - Indicates Pile

12" x 10" x 2 1/2" STEEL REINFORCED ELASTOMERIC BEARING PAD. PLACE AT Q GIRDER. TOTAL 6
EXPANDED POLYSTYRENE, SAME THICKNESS AS BEARING PAD

PLAN
1/4" = 1'-0"

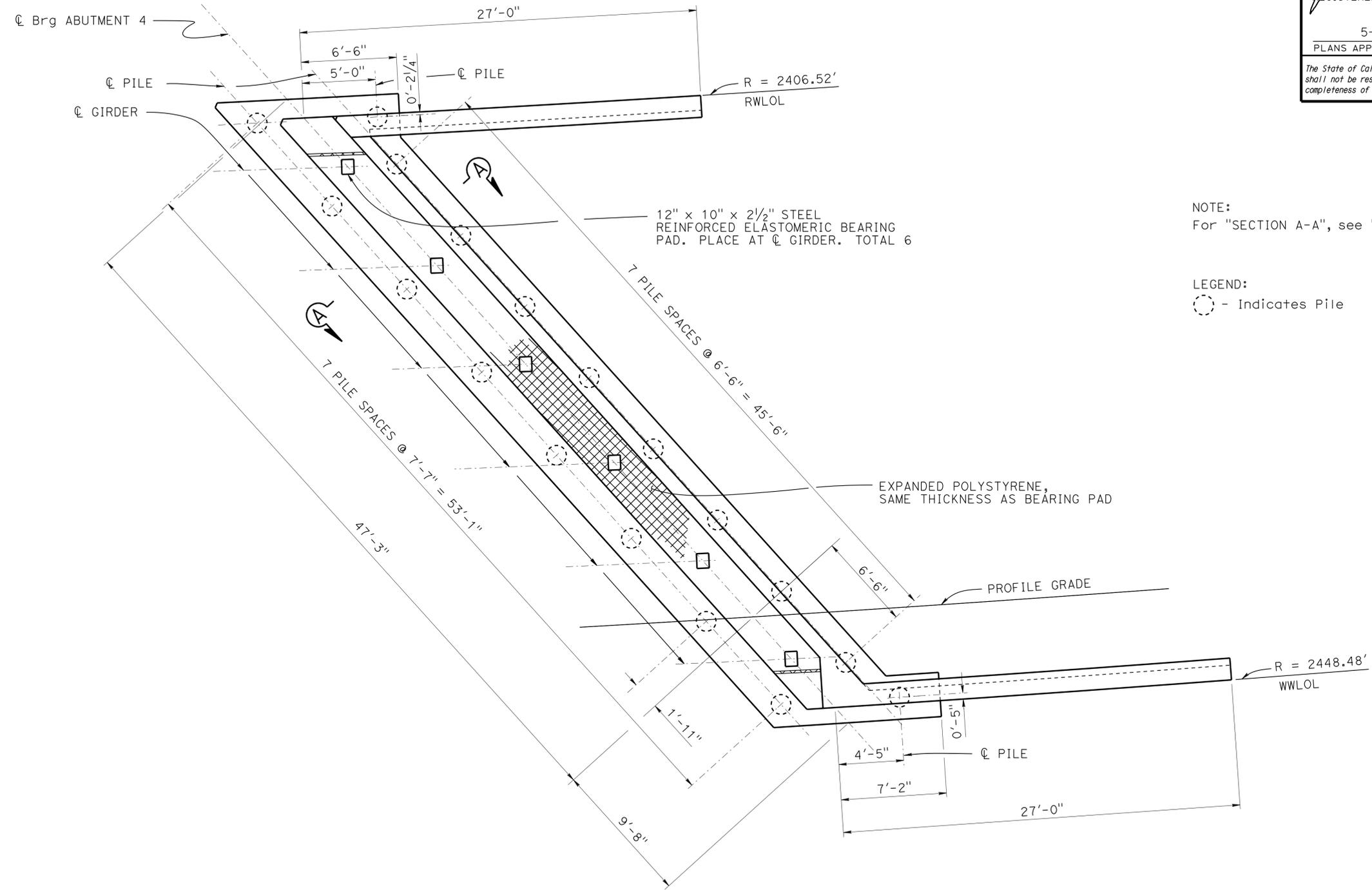
STRUCTURES DESIGN DETAIL SHEET (ENGLISH) (REV. 09-01-10)	DESIGN	BY Eric G Burgeson	CHECKED Arturo V Herrera	STATE OF CALIFORNIA DEPARTMENT OF TRANSPORTATION	DIVISION OF ENGINEERING SERVICES STRUCTURE DESIGN DESIGN BRANCH 3	BRIDGE NO.	SOUTH SAN MIGUEL UC ABUTMENT 1 LAYOUT
	DETAILS	BY Nancy C Gwynn	CHECKED Arturo V Herrera			49-0162L	
	QUANTITIES	BY Sharon Yen	CHECKED Mufeed Khalaf			POST MILE 65.1	
				ORIGINAL SCALE IN INCHES FOR REDUCED PLANS	UNIT: 3578 PROJECT NUMBER & PHASE: 05000200201	CONTRACT NO.: 05-060404	DISREGARD PRINTS BEARING EARLIER REVISION DATES
				0 1 2 3	FILE => 49-01621-f-ab01.dgn	REVISION DATES 12-12-14 12-08-14 12-12-15 03-15-15	SHEET OF 6 31

USERNAME => 8115765 DATE PLOTTED => 22-JUL-2016 TIME PLOTTED => 17:52

DIST	COUNTY	ROUTE	POST MILES TOTAL PROJECT	SHEET No.	TOTAL SHEETS
05	SLO, Mon	101	63.2/R69.3, R0.0/R1.9	652	858

Jose M. Aquino III 4-22-16
 REGISTERED CIVIL ENGINEER DATE
 5-2-16
 PLANS APPROVAL DATE
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REGISTERED PROFESSIONAL ENGINEER
 Jose M Aquino III
 No. 58386
 Exp. 12-31-16
 CIVIL
 STATE OF CALIFORNIA



NOTE:
For "SECTION A-A", see "ABUTMENT DETAILS NO. 1" sheet

LEGEND:
○ - Indicates Pile

PLAN
1/4" = 1'-0"

DESIGN	BY Eric G Burgeson	CHECKED Arturo V Herrera
DETAILS	BY Nancy C Gwynn	CHECKED Arturo V Herrera
QUANTITIES	BY Sharon Yen	CHECKED Mufeed Khalaf

STATE OF CALIFORNIA
DEPARTMENT OF TRANSPORTATION

DIVISION OF ENGINEERING SERVICES
STRUCTURE DESIGN
DESIGN BRANCH 3

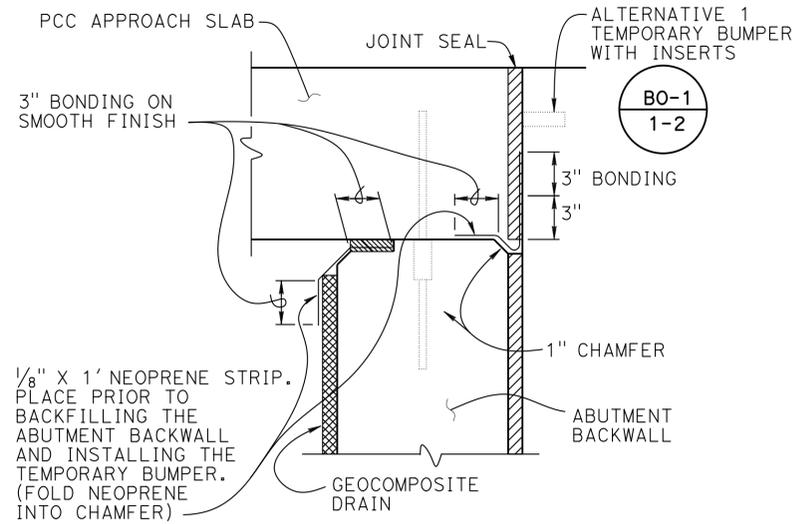
BRIDGE NO.	49-0162L
POST MILE	65.1

**SOUTH SAN MIGUEL UC
ABUTMENT 4 LAYOUT**

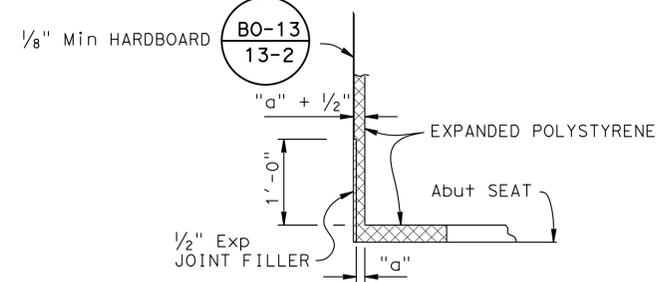
DIST	COUNTY	ROUTE	POST MILES TOTAL PROJECT	SHEET No.	TOTAL SHEETS
05	SLO, Mon	101	63.2/R69.3, R0.0/R1.9	653	858

Jose M. Aquino III 4-22-16
 REGISTERED CIVIL ENGINEER DATE
 5-2-16
 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.

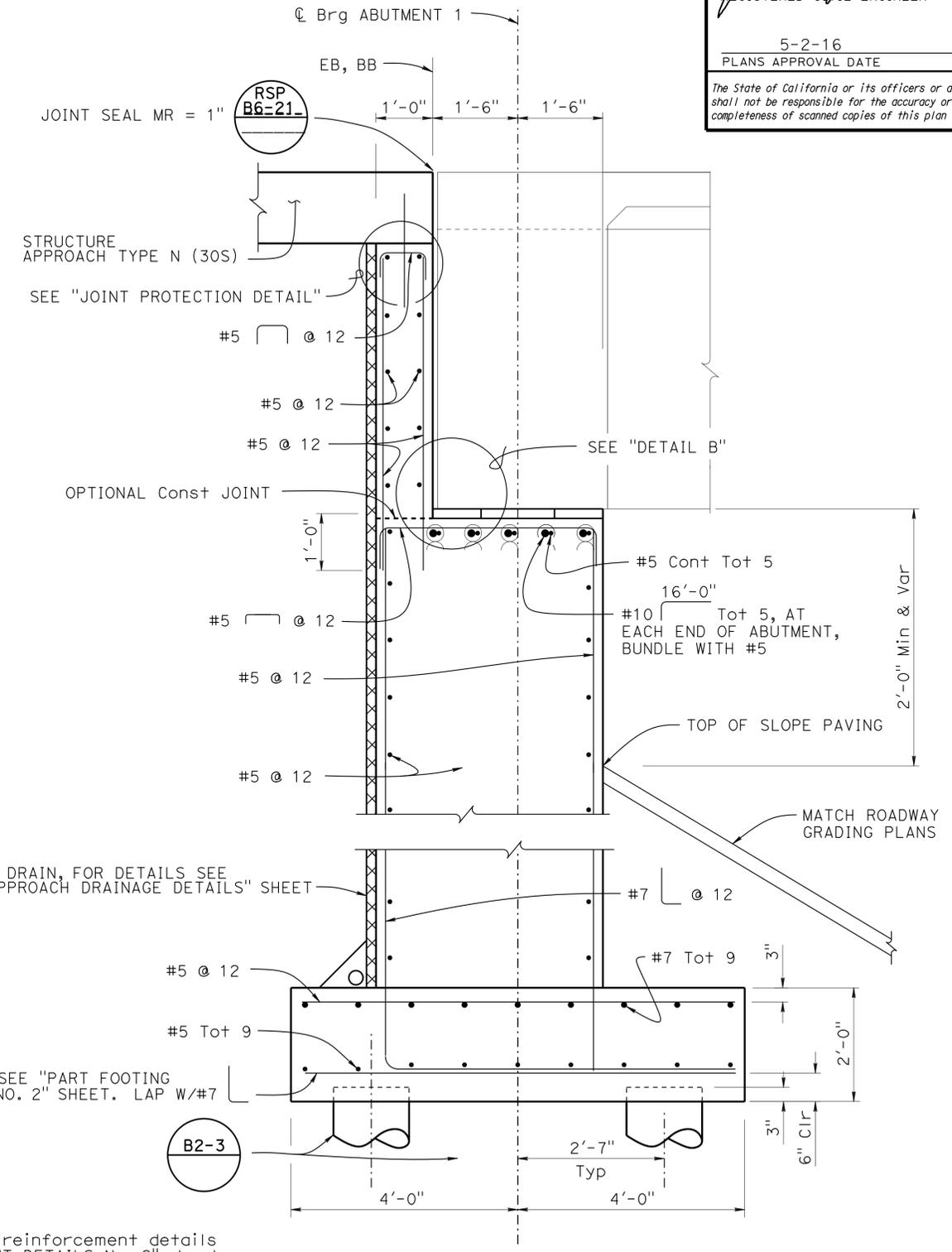
REGISTERED PROFESSIONAL ENGINEER
 Jose M Aquino III
 No. 58386
 Exp. 12-31-16
 CIVIL
 STATE OF CALIFORNIA



JOINT PROTECTION DETAIL
No Scale



DETAIL B
No Scale



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

NOTE:
For footing reinforcement details see "ABUTMENT DETAILS No. 2" sheet

LEGEND:
⊙ Indicates bundled bars

DESIGN	BY Eric G Burgeson	CHECKED Arturo V Herrera
DETAILS	BY Nancy C Gwynn	CHECKED Arturo V Herrera
QUANTITIES	BY Sharon Yen	CHECKED Mufeed Khalaf

STATE OF CALIFORNIA
DEPARTMENT OF TRANSPORTATION

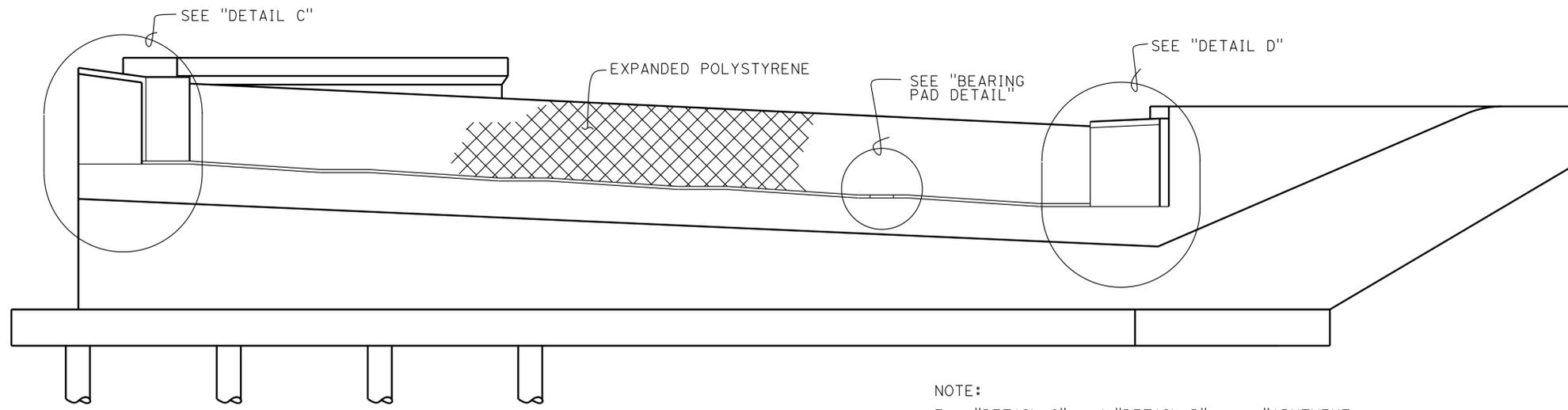
DIVISION OF ENGINEERING SERVICES
STRUCTURE DESIGN
DESIGN BRANCH 3
BRIDGE NO. 49-0162L
POST MILE 65.1

SOUTH SAN MIGUEL UC
ABUTMENT DETAILS No. 1

DIST	COUNTY	ROUTE	POST MILES TOTAL PROJECT	SHEET No.	TOTAL SHEETS
05	SLO, Mon	101	63.2/R69.3, R0.0/R1.9	654	858

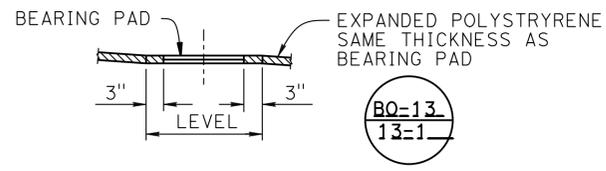
DATE: 4-22-16
 REGISTERED CIVIL ENGINEER
 PLANS APPROVAL DATE: 5-2-16
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REGISTERED PROFESSIONAL ENGINEER
 Jose M Aquino III
 No. 58386
 Exp. 12-31-16
 CIVIL
 STATE OF CALIFORNIA

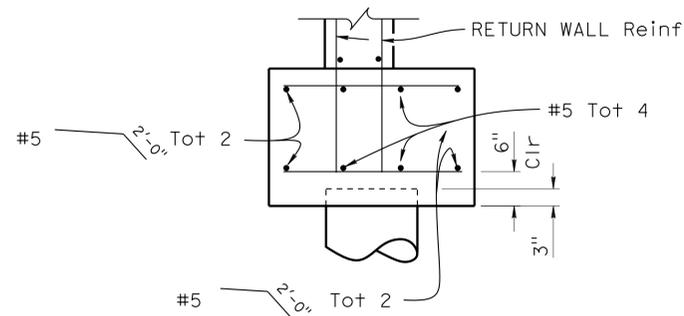


NOTE:
For "DETAIL C" and "DETAIL D", see "ABUTMENT DETAILS NO. 3" sheet

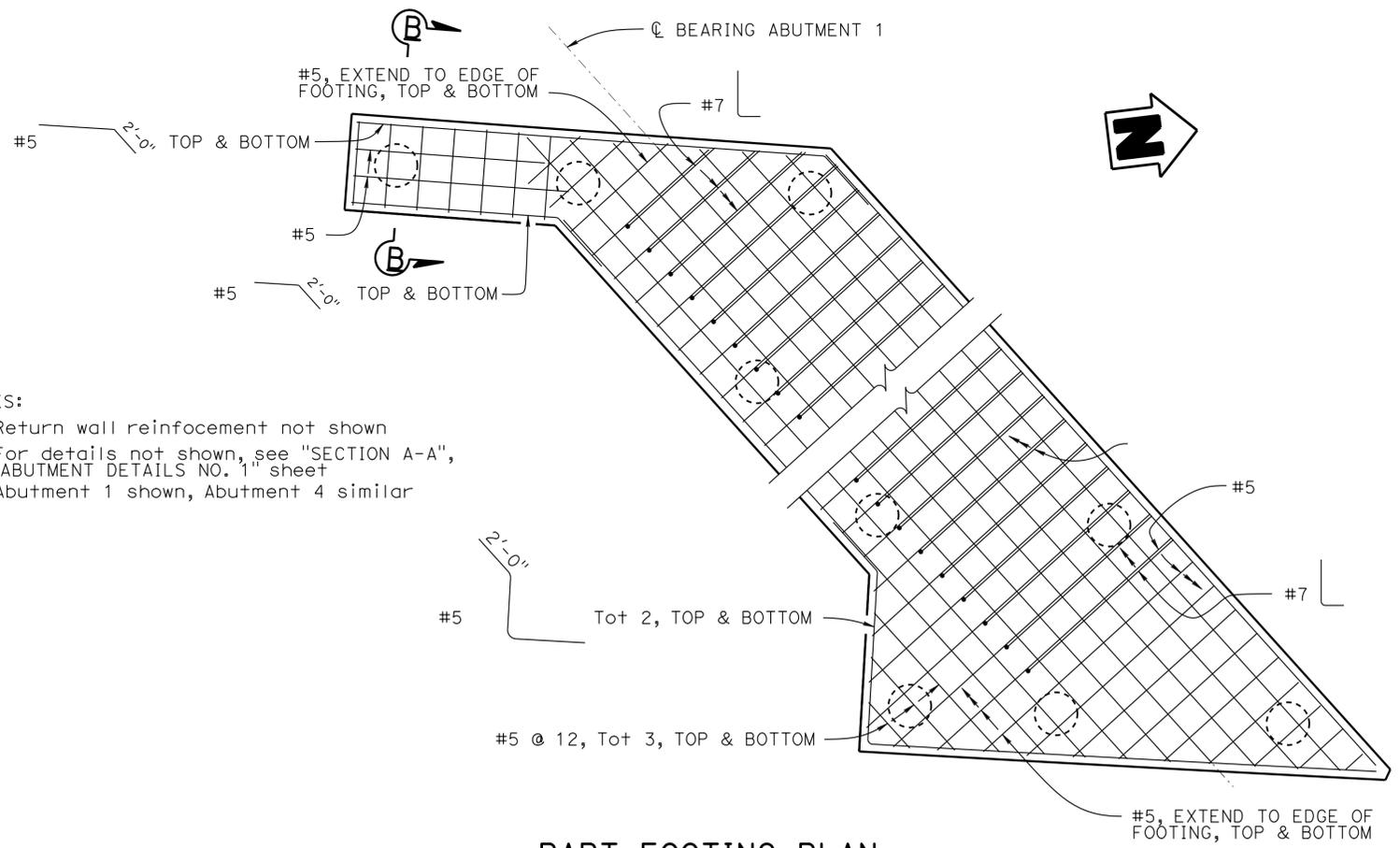
ELEVATION
1/4" = 1'-0"



Details typical at all bearing pads
BEARING PAD DETAIL
No Scale



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



NOTES:
1. Return wall reinforcement not shown
2. For details not shown, see "SECTION A-A", "ABUTMENT DETAILS NO. 1" sheet
3. Abutment 1 shown, Abutment 4 similar

PART FOOTING PLAN
3/8" = 1'-0"

DESIGN	BY Eric G Burgeson	CHECKED Arturo V Herrera
DETAILS	BY Nancy C Gwynn	CHECKED Arturo V Herrera
QUANTITIES	BY Sharon Yen	CHECKED Mufeed Khalaf

STATE OF CALIFORNIA
DEPARTMENT OF TRANSPORTATION

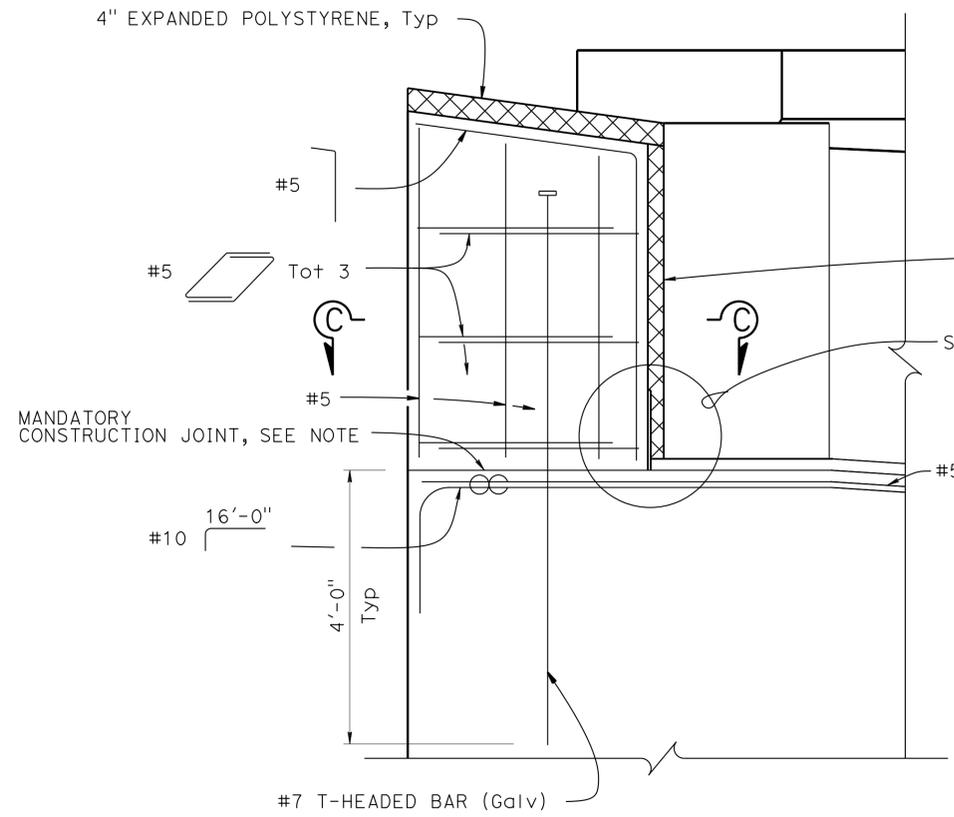
DIVISION OF ENGINEERING SERVICES
STRUCTURE DESIGN
DESIGN BRANCH 3

BRIDGE NO.	49-0162L
POST MILE	65.1

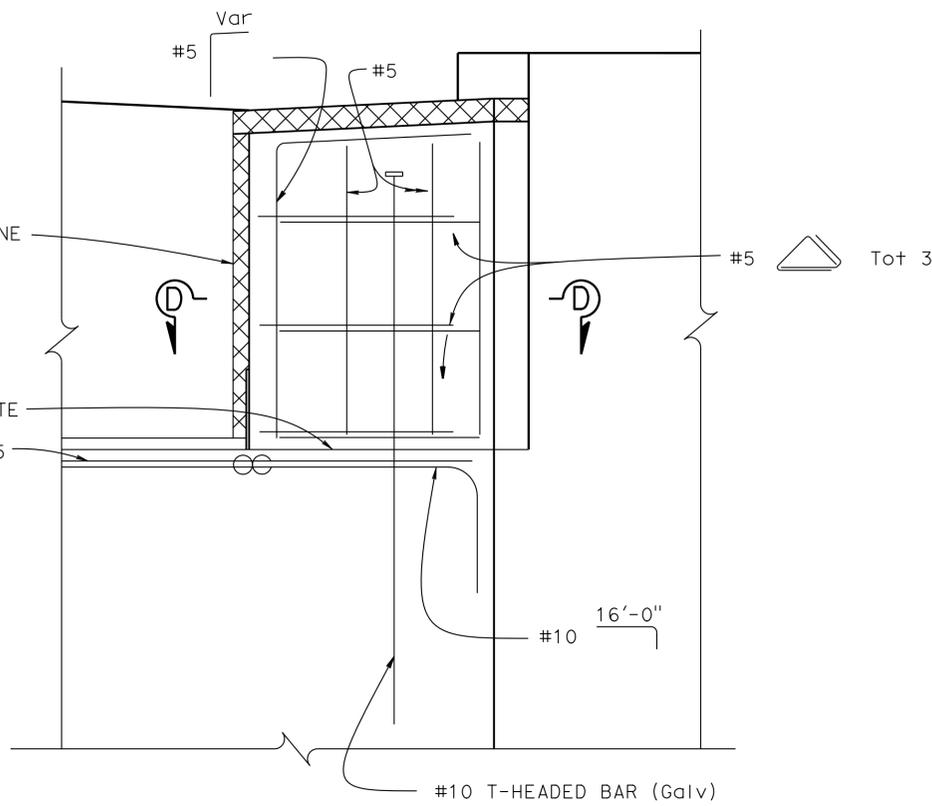
SOUTH SAN MIGUEL UC
ABUTMENT DETAILS No. 2

DIST	COUNTY	ROUTE	POST MILES TOTAL PROJECT	SHEET No.	TOTAL SHEETS
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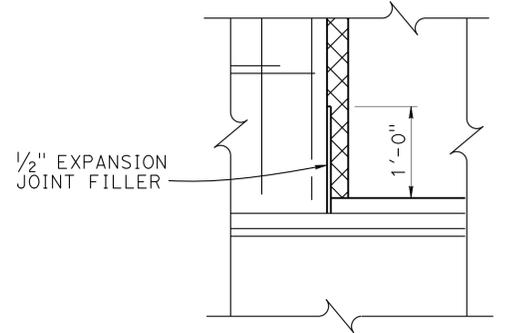
Jose M. Aquino III 4-22-16
 REGISTERED CIVIL ENGINEER DATE
 5-2-16
 PLANS APPROVAL DATE
 Jose M. Aquino III
 No. 58386
 Exp. 12-31-16
 CIVIL
 STATE OF CALIFORNIA
 REGISTERED PROFESSIONAL ENGINEER
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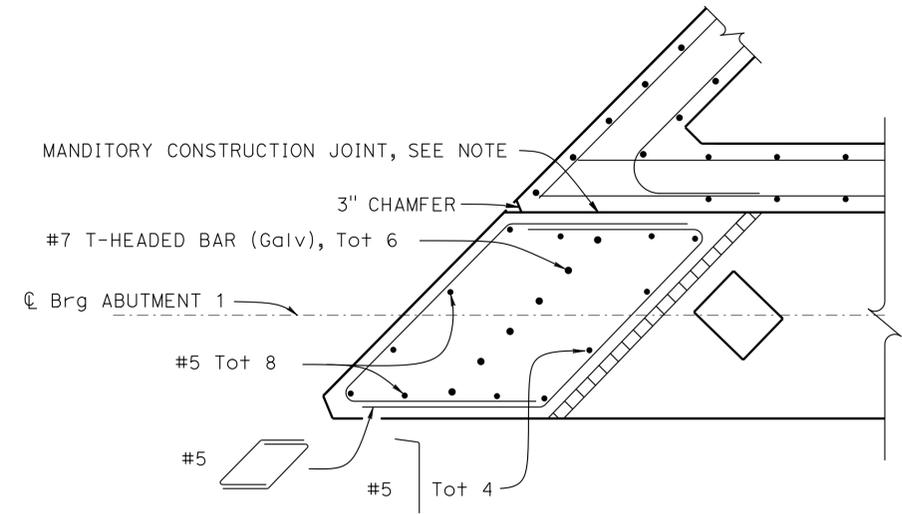
DETAIL C
3/4" = 1'-0"



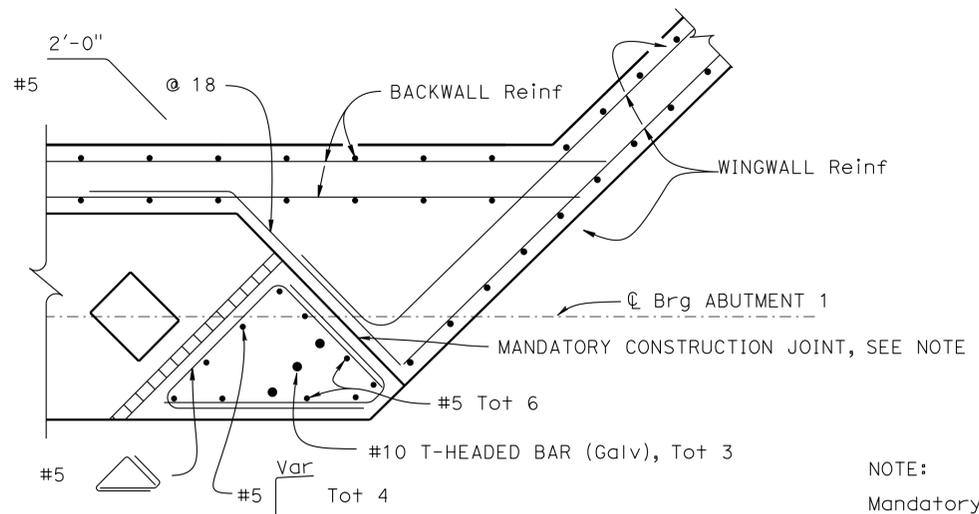
DETAIL D
3/4" = 1'-0"



DETAIL E
1" = 1'-0"



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



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

NOTE:
Mandatory Construction Joint surface to be smooth finished and lined with construction paper

DESIGN	BY Eric G Burgeson	CHECKED Arturo V Herrera
DETAILS	BY Nancy C Gwynn	CHECKED Arturo V Herrera
QUANTITIES	BY Sharon Yen	CHECKED Mufeed Khalaf

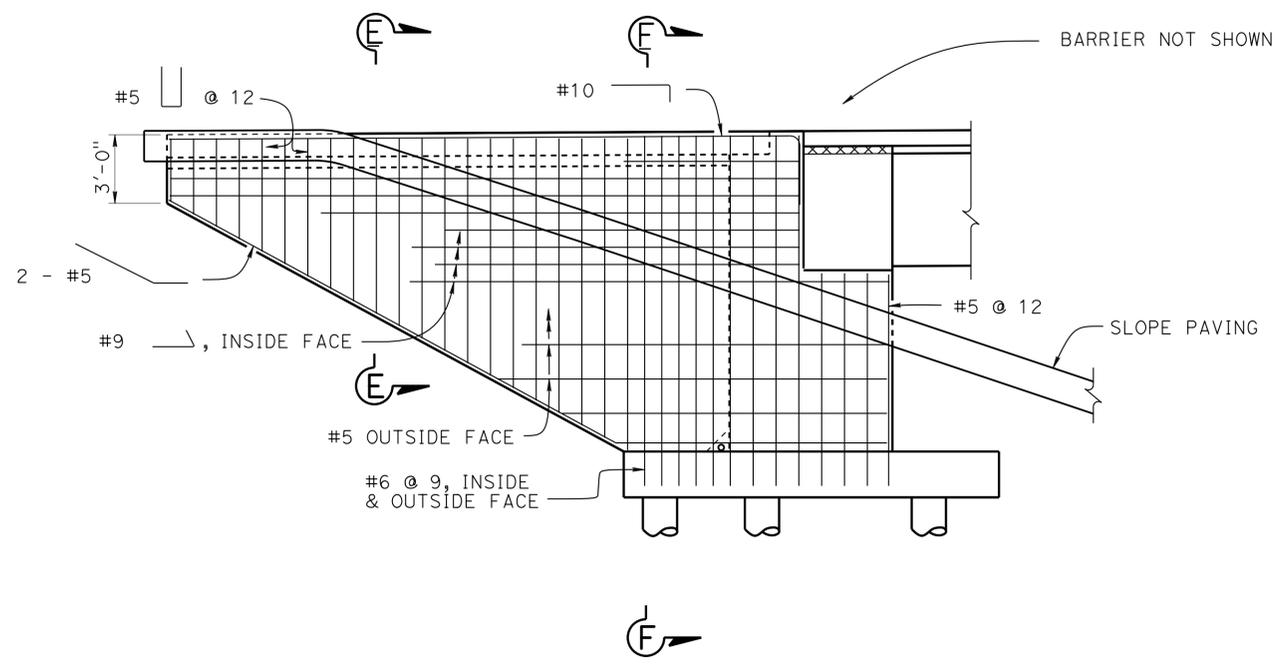
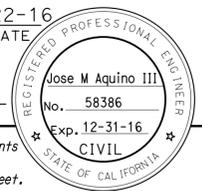
STATE OF CALIFORNIA
DEPARTMENT OF TRANSPORTATION

DIVISION OF ENGINEERING SERVICES
STRUCTURE DESIGN
DESIGN BRANCH 3

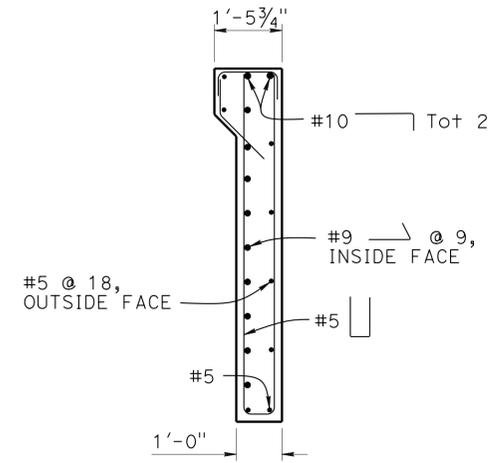
BRIDGE NO.	49-0162L
POST MILE	65.1

SOUTH SAN MIGUEL UC
ABUTMENT DETAILS No. 3

DIST	COUNTY	ROUTE	POST MILES TOTAL PROJECT	SHEET No.	TOTAL SHEETS
05	SLO, Mon	101	63.2/R69.3, R0.0/R1.9	656	858
			DATE		
			4-22-16		
			PLANS APPROVAL DATE		
			5-2-16		
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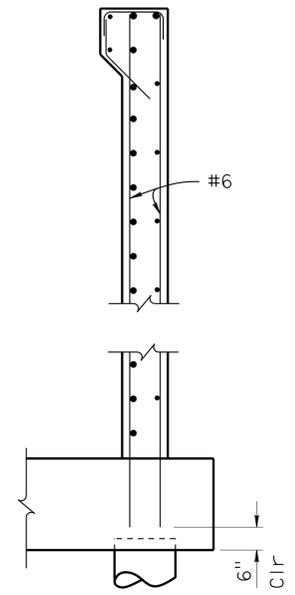


WINGWALL ELEVATION
1/4" = 1'-0"



SECTION E-E
1/2" = 1'-0"

- NOTES:
- All barrier reinforcement not shown
 - For details not shown, see



SECTION F-F
1/2" = 1'-0"

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

DESIGN	BY Eric G Burgeson	CHECKED Arturo V Herrera
DETAILS	BY Nancy C Gwynn	CHECKED Arturo V Herrera
QUANTITIES	BY Sharon Yen	CHECKED Mufeed Khalaf

STATE OF CALIFORNIA
DEPARTMENT OF TRANSPORTATION

DIVISION OF ENGINEERING SERVICES
STRUCTURE DESIGN
DESIGN BRANCH 3

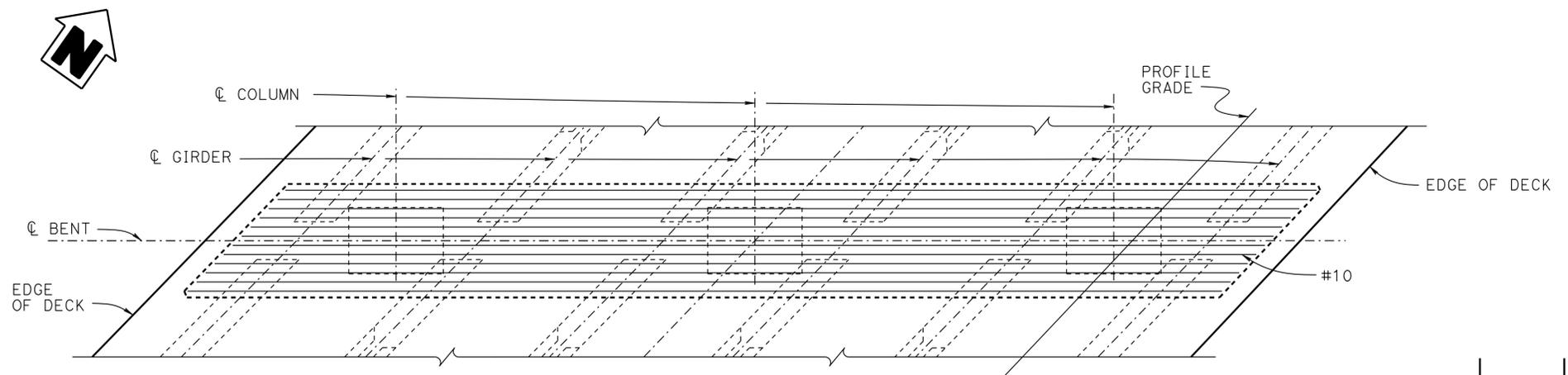
BRIDGE NO.	49-0162L
POST MILE	65.1

SOUTH SAN MIGUEL UC
ABUTMENT DETAILS No. 4

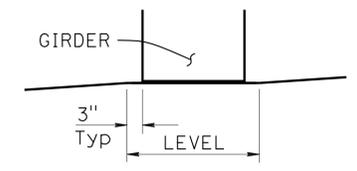
DIST	COUNTY	ROUTE	POST MILES TOTAL PROJECT	SHEET No.	TOTAL SHEETS
05	SLO, Mon	101	63.2/R69.3, R0.0/R1.9	657	858

Jose M. Aquino III 4-22-16
 REGISTERED CIVIL ENGINEER DATE
 5-2-16
 PLANS APPROVAL DATE
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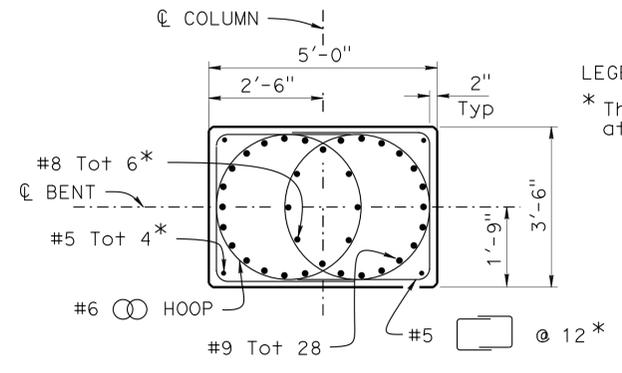
REGISTERED PROFESSIONAL ENGINEER
 Jose M. Aquino III
 No. 58386
 Exp. 12-31-16
 CIVIL
 STATE OF CALIFORNIA



PLAN
1/4" = 1'-0"

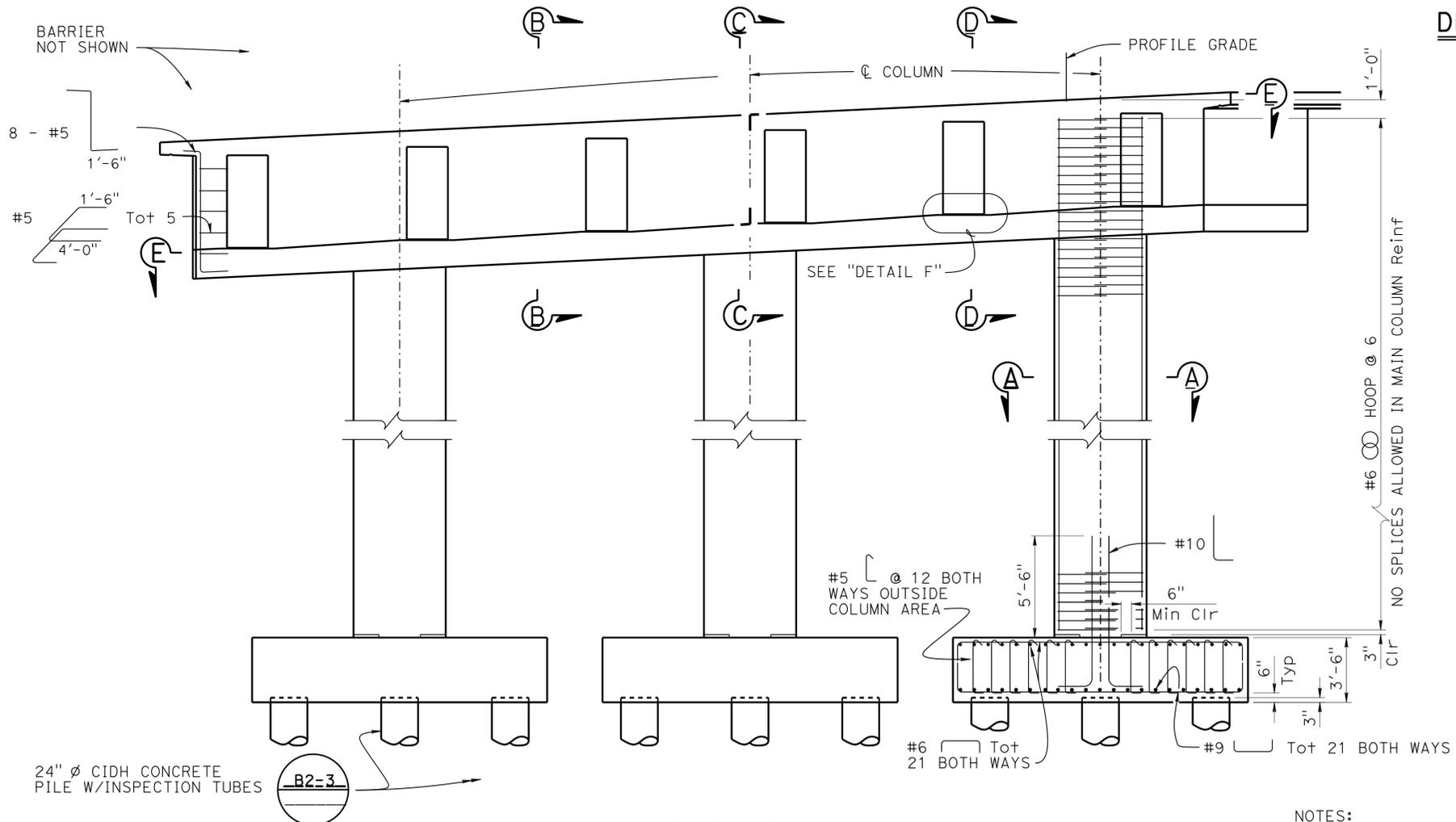


DETAIL F
NO SCALE

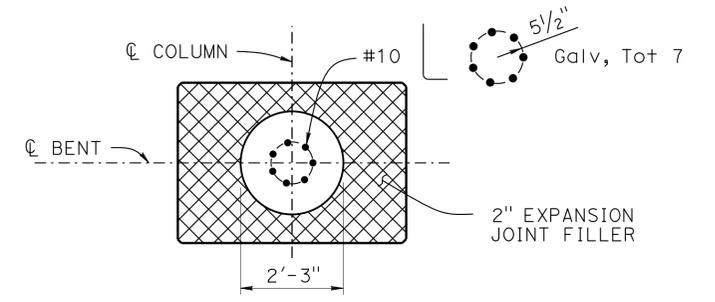


SECTION A-A
1/2" = 1'-0"

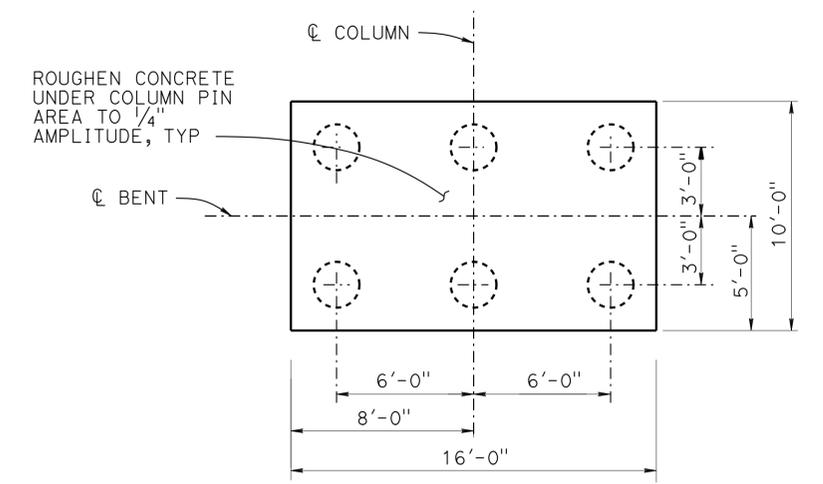
LEGEND:
* These bar terminate at drop cap



ELEVATION
1/4" = 1'-0"



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

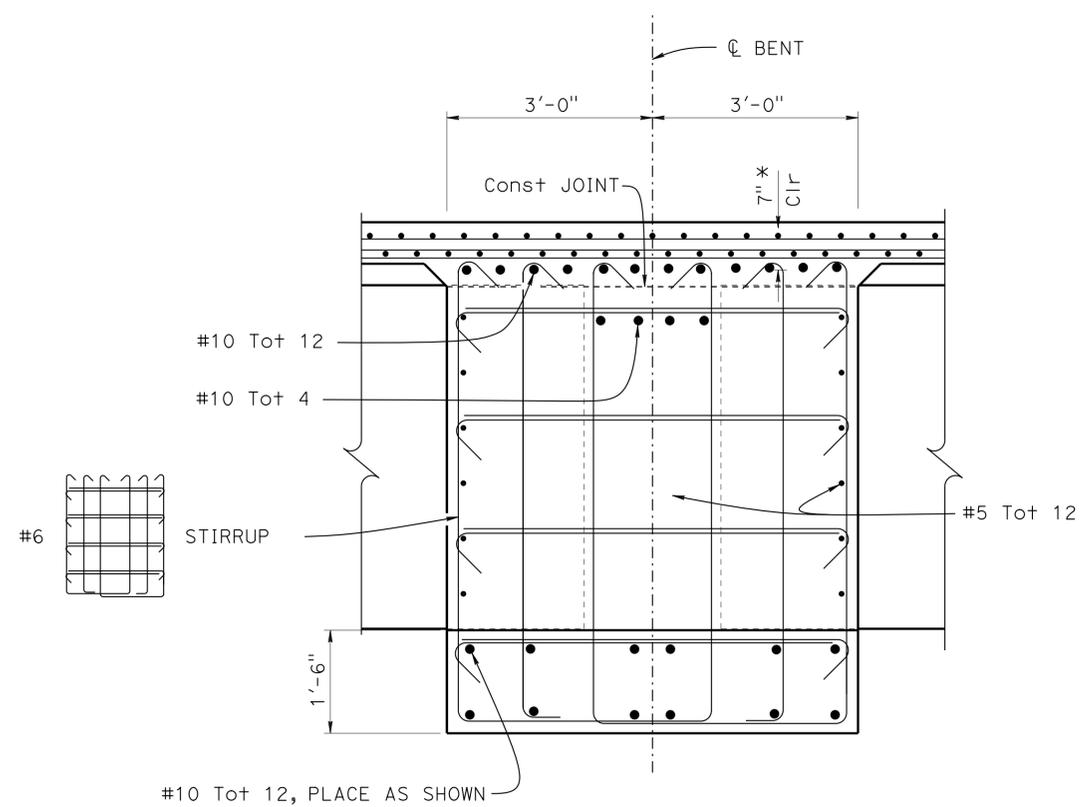


FOOTING PLAN
1/4" = 1'-0"

- NOTES:
- Bent 2 shown, Bent 3 similar
 - For "SECTION B-B", "SECTION C-C" AND "SECTION D-D", see "BENT DTAILS No. 2" sheet
 - For "SECTION E-E" see "BENT DTAILS No. 3" sheet

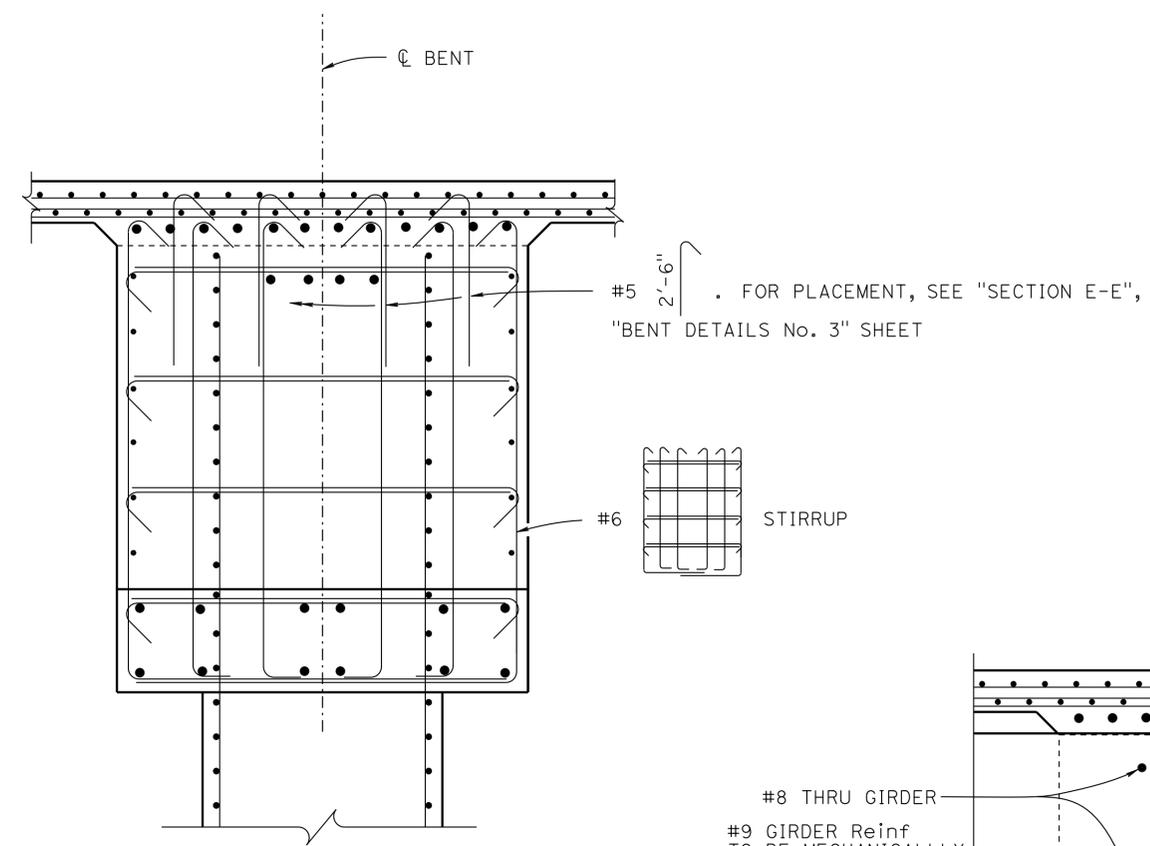
STRUCTURES DESIGN DETAIL SHEET (ENGLISH) (REV. 09-01-10)	DESIGN	BY Eric G Burgeson	CHECKED Arturo V Herrera	STATE OF CALIFORNIA DEPARTMENT OF TRANSPORTATION	DIVISION OF ENGINEERING SERVICES STRUCTURE DESIGN DESIGN BRANCH 3	BRIDGE NO.	SOUTH SAN MIGUEL UC BENT DETAILS NO. 1	
	DETAILS	BY Nancy C Gwynn	CHECKED Arturo V Herrera			49-0162L		
	QUANTITIES	BY Sharon Yen	CHECKED Mufeed Khalaf			POST MILE 65.1		
ORIGINAL SCALE IN INCHES FOR REDUCED PLANS				0 1 2 3	UNIT: 3578	PROJECT NUMBER & PHASE: 05000200201	CONTRACT NO.: 05-060404	DISREGARD PRINTS BEARING EARLIER REVISION DATES
							REVISION DATES	SHEET 12 OF 31

DIST	COUNTY	ROUTE	POST MILES TOTAL PROJECT	SHEET No.	TOTAL SHEETS
05	SLO, Mon	101	63.2/R69.3, R0.0/R1.9	658	858
			DATE		
			4-22-16		
			REGISTERED CIVIL ENGINEER		
			PLANS APPROVAL DATE		
			5-2-16		
			REGISTERED PROFESSIONAL ENGINEER		
			Jose M Aquino III		
			No. 58386		
			Exp. 12-31-16		
			CIVIL		
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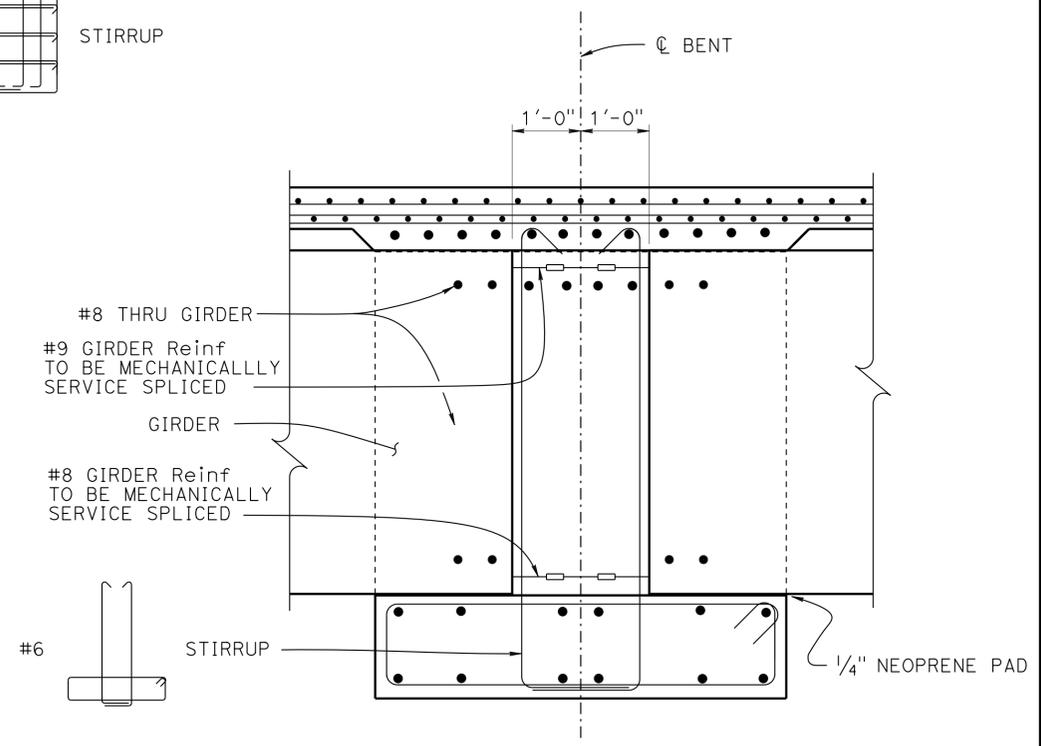
* Clearance to main cap reinforcement

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



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

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



NOTES:
 1. For details not shown, see "SECTION B-B"
 2. For limits of Neoprene pad, see "SECTION E-E", "BENT DETAILS No. 3" sheet

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

STRUCTURES DESIGN DETAIL SHEET (ENGLISH) (REV. 09-01-10)	DESIGN	BY Eric G Burgeson	CHECKED Arturo V Herrera	STATE OF CALIFORNIA DEPARTMENT OF TRANSPORTATION	DIVISION OF ENGINEERING SERVICES STRUCTURE DESIGN DESIGN BRANCH 3	BRIDGE NO.	SOUTH SAN MIGUEL UC BENT DETAILS NO. 2
	DETAILS	BY Nancy C Gwynn	CHECKED Arturo V Herrera			49-0162L	
	QUANTITIES	BY Sharon Yen	CHECKED Mufeed Khalaf			POST MILE 65.1	
ORIGINAL SCALE IN INCHES FOR REDUCED PLANS				UNIT: 3578	PROJECT NUMBER & PHASE: 05000200201	CONTRACT NO.: 05-060404	DISREGARD PRINTS BEARING EARLIER REVISION DATES REVISION DATES: 10-12-18, 1-22-16, 8-20-15 SHEET 13 OF 31

DIST	COUNTY	ROUTE	POST MILES TOTAL PROJECT	SHEET No.	TOTAL SHEETS
05	SLO, Mon	101	63.2/R69.3, R0.0/R1.9	660	858
			DATE		
			4-22-16		
			PLANS APPROVAL DATE		
			5-2-16		

REGISTERED PROFESSIONAL ENGINEER

Jose M. Aquino III

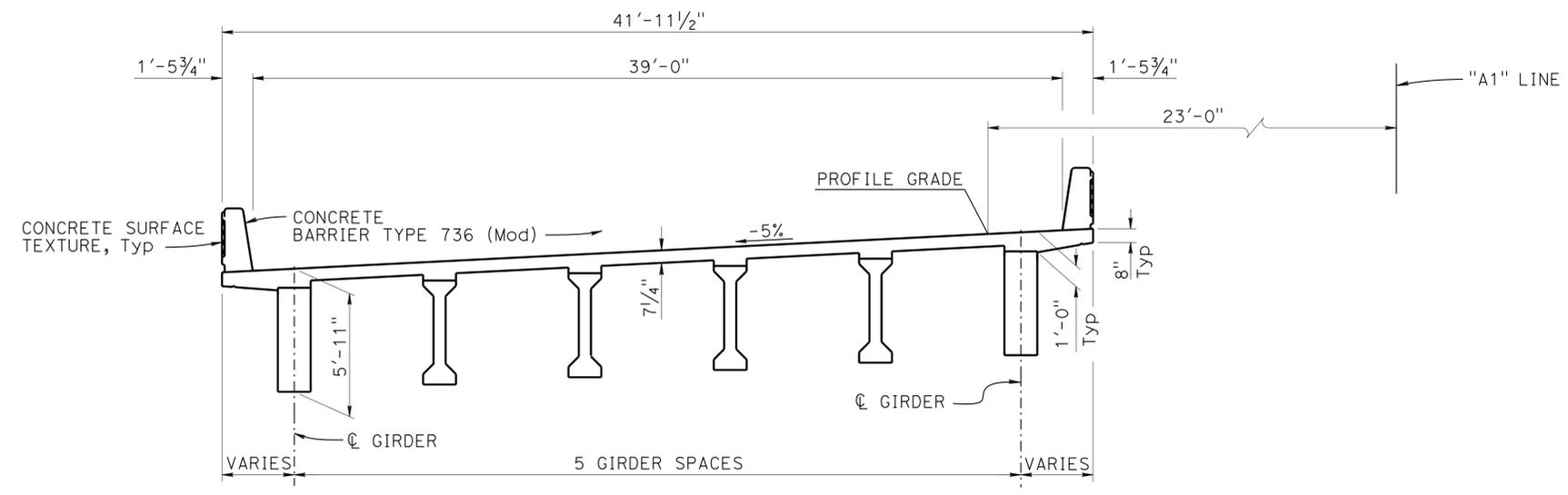
No. 58386

Exp. 12-31-16

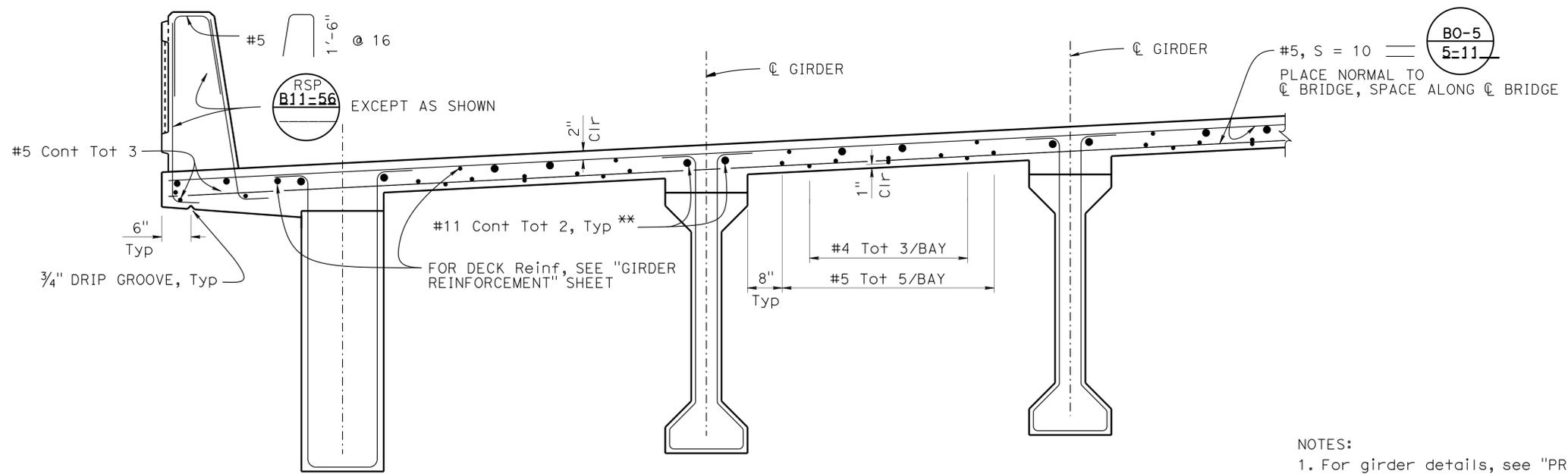
CIVIL

STATE OF CALIFORNIA

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TYPICAL SECTION
1/4" = 1'-0"



PART TYPICAL SECTION
1/4" = 1'-0"

NOTES:
 1. For girder details, see "PRECAST PRESTRESSED I GIRDER" and "PRECAST PRESTRESSED GIRDER" sheets
 2. For concrete surface texture, see "BARRIER SURFACE TEXTURE" sheet

LEGEND:
 **Only service splice allowed, see "DETAIL K", "GIRDER LAYOUT" sheet

DESIGN	BY Eric G Burgeson	CHECKED Arturo V Herrera
DETAILS	BY Nancy C Gwynn	CHECKED Arturo V Herrera
QUANTITIES	BY Sharon Yen	CHECKED Mufeed Khalaf

STATE OF CALIFORNIA
DEPARTMENT OF TRANSPORTATION

DIVISION OF ENGINEERING SERVICES
STRUCTURE DESIGN
DESIGN BRANCH 3

BRIDGE NO.	49-0162L
POST MILE	65.1

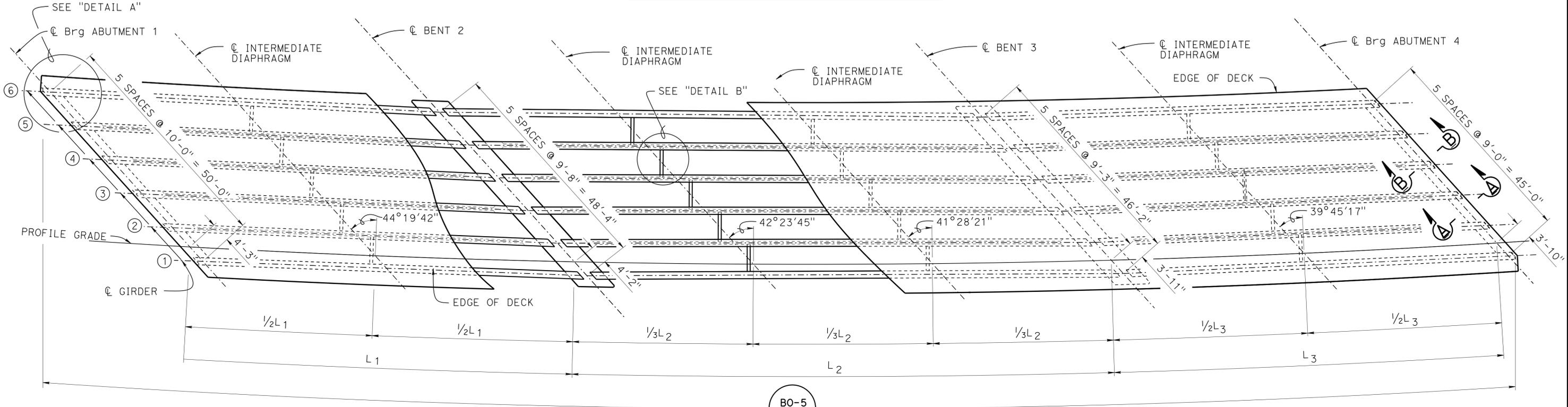
SOUTH SAN MIGUEL UC
TYPICAL SECTION

DIST	COUNTY	ROUTE	POST MILES TOTAL PROJECT	SHEET No.	TOTAL SHEETS
05	SLO, Mon	101	63.2/R69.3, R0.0/R1.9	661	858

Jose M. Aquino III
 REGISTERED CIVIL ENGINEER DATE 4-22-16
 PLANS APPROVAL DATE 5-2-16
 No. 58386
 Exp. 12-31-16
 CIVIL
 STATE OF CALIFORNIA

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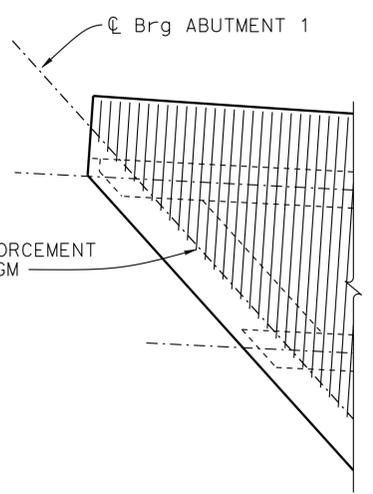
GIRDER	GIRDER LENGTH		
	SPAN 1	SPAN 2	SPAN 3
⑥	85'-9"	116'-7"	85'-7"
⑤	85'-6"	116'-4"	85'-5"
④	85'-3"	116'-0"	85'-3"
③	85'-0"	115'-9"	85'-1"
②	84'-9"	115'-6"	84'-11"
①	84'-6"	115'-3"	84'-9"



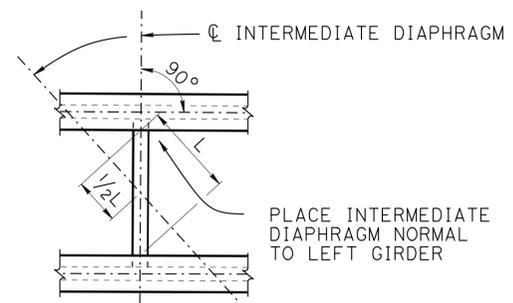
B0-5
 5-11

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

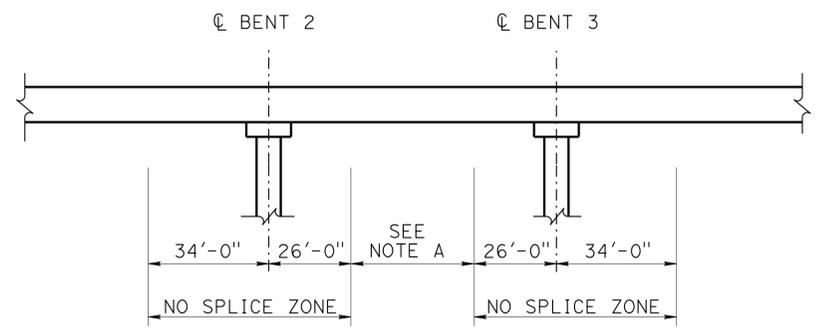
NOTE:
 For "SECTION A-A" and "SECTION B-B" see "GIRDER DETAILS" sheet



DETAIL A
 $\frac{1}{4}'' = 1'-0''$



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



NOTE A:
 Only service splices are allowed in #11 cont bars

DETAIL K
 NO SCALE

DESIGN	BY Eric G Burgeson	CHECKED Arturo V Herrera
DETAILS	BY Nancy C Gwynn	CHECKED Arturo V Herrera
QUANTITIES	BY Sharon Yen	CHECKED Mufeed Khalaf

STATE OF CALIFORNIA
 DEPARTMENT OF TRANSPORTATION

DIVISION OF ENGINEERING SERVICES
 STRUCTURE DESIGN
DESIGN BRANCH 3

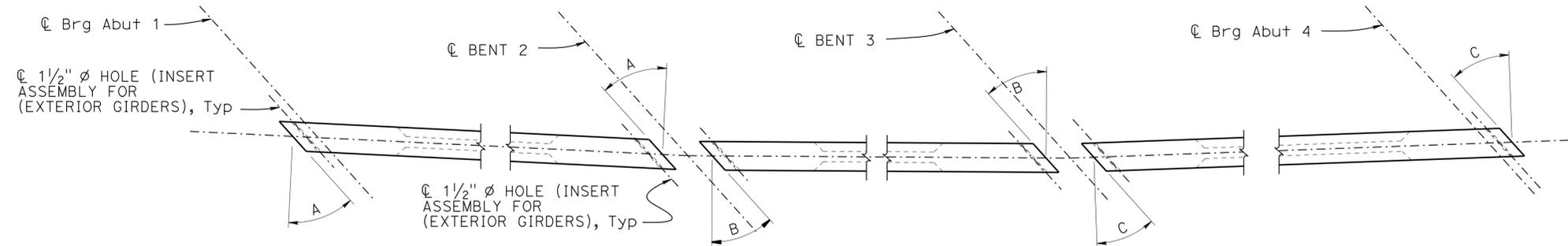
BRIDGE NO.	49-0162L
POST MILE	65.1

**SOUTH SAN MIGUEL UC
 GIRDER LAYOUT**

DIST	COUNTY	ROUTE	POST MILES TOTAL PROJECT	SHEET No.	TOTAL SHEETS
05	SLO, Mon	101	63.2/R69.3, R0.0/R1.9	662	858

Jose M. Aquino III 4-22-16
 REGISTERED CIVIL ENGINEER DATE
 5-2-16
 PLANS APPROVAL DATE
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REGISTERED PROFESSIONAL ENGINEER
 Jose M Aquino III
 No. 58386
 Exp. 12-31-16
 CIVIL
 STATE OF CALIFORNIA

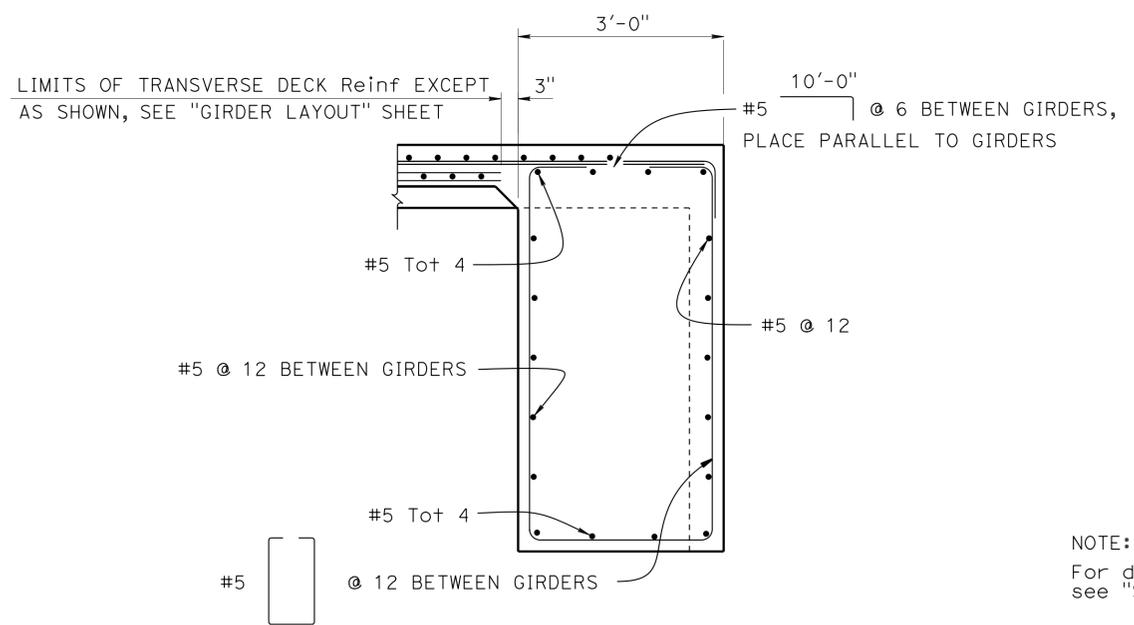


NOTE:
See Table for angle values

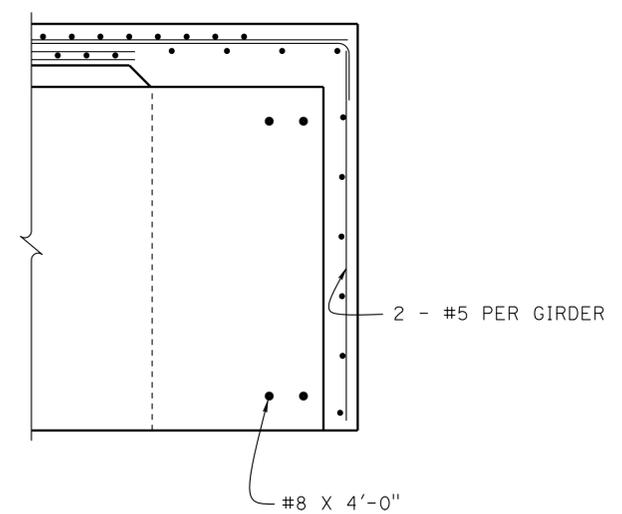
PART GIRDER PLAN
3/4" = 1'-0"

GIRDER	ANGLE		
	A	B	C
⑥	45°04'07"	42°35'19"	40°09'20"
⑤	44°54'40"	42°26'27"	40°01'38"
④	44°45'08"	42°17'33"	39°53'55"
③	44°35'34"	42°08'37"	39°46'10"
②	44°25'57"	41°59'37"	39°38'23"
①	44°16'16"	41°50'35"	39°30'35"

NOTE:
For girder location, see "GIRDER LAYOUT" sheet



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



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

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

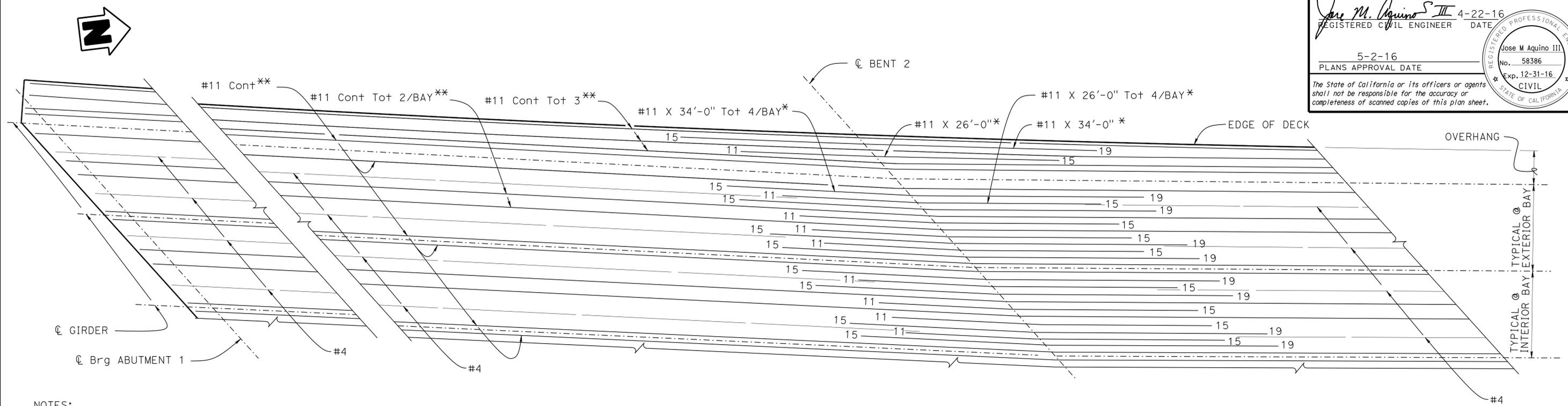
DESIGN BY Eric G Burgeson CHECKED Arturo V Herrera DETAILS BY Nancy C Gwynn CHECKED Arturo V Herrera QUANTITIES BY Sharon Yen CHECKED Mufeed Khalaf	STATE OF CALIFORNIA DEPARTMENT OF TRANSPORTATION	DIVISION OF ENGINEERING SERVICES STRUCTURE DESIGN DESIGN BRANCH 3	BRIDGE NO.	SOUTH SAN MIGUEL UC GIRDER DETAILS
			49-0162L	
			POST MILE	
			65.1	

STRUCTURES DESIGN DETAIL SHEET (ENGLISH) (REV. 09-01-10) ORIGINAL SCALE IN INCHES FOR REDUCED PLANS 0 1 2 3 UNIT: 3578 PROJECT NUMBER & PHASE: 05000200201 CONTRACT NO.: 05-060404 DISREGARD PRINTS BEARING EARLIER REVISION DATES

REVISION DATES	SHEET	OF
3-2-15, 1-15-15, 3-16-15, 1-22-16	17	31

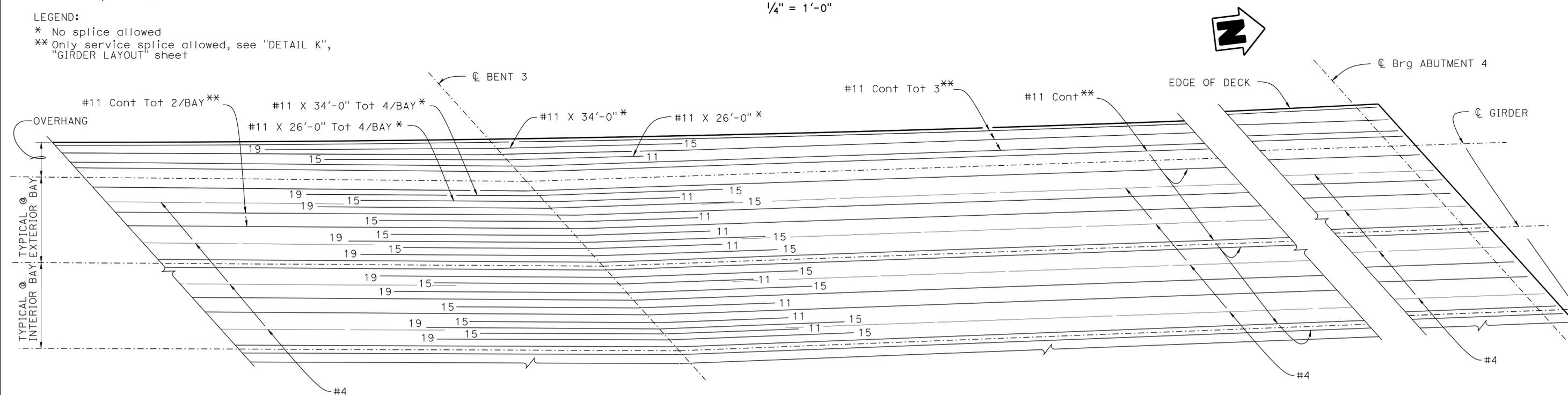
FILE => 49-01621-1-grdet.dgn

DIST	COUNTY	ROUTE	POST MILES TOTAL PROJECT	SHEET No.	TOTAL SHEETS
05	SLO, Mon	101	63.2/R69.3, R0.0/R1.9	663	858
			DATE		
			4-22-16		
			5-2-16		
			PLANS APPROVAL DATE		
			REGISTERED PROFESSIONAL ENGINEER Jose M. Aquino III No. 58386 Exp. 12-31-16 CIVIL STATE OF CALIFORNIA		
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PART PLAN
1/4" = 1'-0"

- NOTES:
 1. All reinforcement #11 unless otherwise noted
 2. Numbers at ends of bars indicates distance, in feet, from \O Bent
- LEGEND:
 * No splice allowed
 ** Only service splice allowed, see "DETAIL K", "GIRDER LAYOUT" sheet



PART PLAN
1/4" = 1'-0"

STRUCTURES DESIGN DETAIL SHEET (ENGLISH) (REV. 09-01-10)	DESIGN	BY Eric G Burgeson	CHECKED Arturo V Herrera	STATE OF CALIFORNIA DEPARTMENT OF TRANSPORTATION	DIVISION OF ENGINEERING SERVICES STRUCTURE DESIGN DESIGN BRANCH 3	BRIDGE NO.	SOUTH SAN MIGUEL UC GIRDER REINFORCEMENT
	DETAILS	BY Nancy C Gwynn	CHECKED Arturo V Herrera			49-0162L	
	QUANTITIES	BY Sharon Yen	CHECKED Mufeed Khalaf			POST MILE 65.1	
ORIGINAL SCALE IN INCHES FOR REDUCED PLANS				UNIT: 3578	PROJECT NUMBER & PHASE: 05000200201	CONTRACT NO.: 05-060404	DISREGARD PRINTS BEARING EARLIER REVISION DATES REVISION DATES: 11-28-15, 12-26-15 SHEET 18 OF 31

USERNAME => s115765 DATE PLOTTED => 22-JUL-2016 TIME PLOTTED => 17:52

GENERAL NOTES

JACKING FORCE (P): The jacking force required at the point of control along the span. The jacking force does not include any fabrication specific losses.

The maximum tensile stress in the prestressing steel upon release shall not exceed 75% of the specified minimum ultimate tensile strength of the prestressing steel.

The maximum temporary tensile stress (jacking stress) in the prestressing steel shall not exceed 80% of the specified minimum ultimate tensile strength of the prestressing steel.

CONCRETE STRENGTH: f'_{ci} is at time of initial stressing
 f'_c is at 28 days

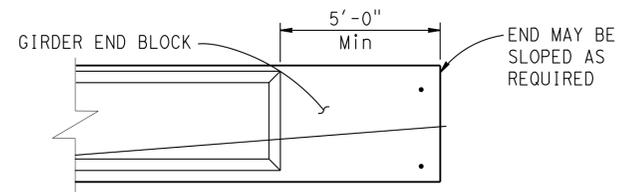
DEFLECTION COMPONENTS: Informational - to be used in setting screed line elevations

Screed line elevations for deck concrete will be determined by the Engineer.

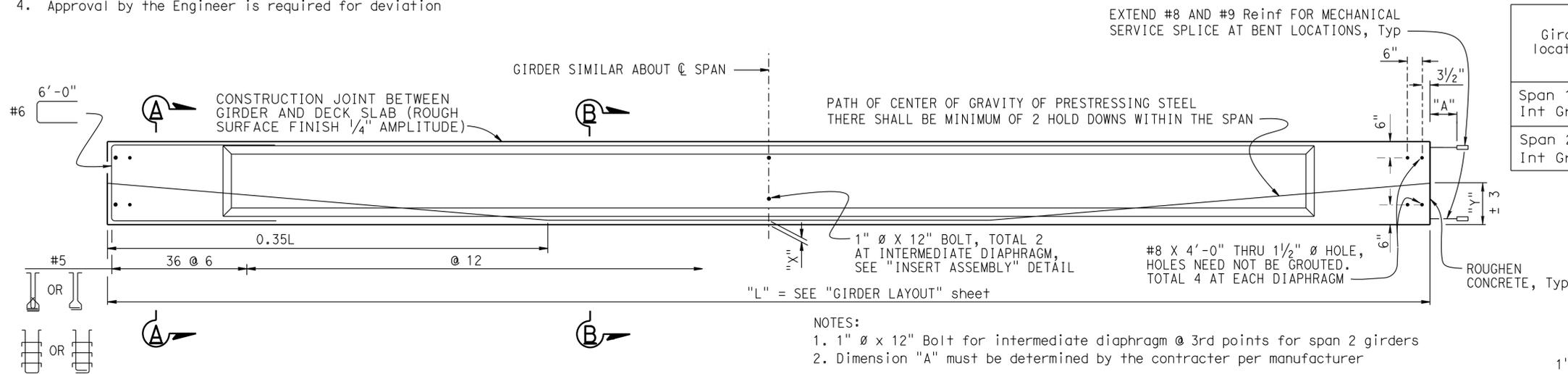
Contractor may interpolate "P" and "X" values between limits shown, as approved by the Engineer.

CLEARANCES FOR PRETENSIONED STRANDS

- Strands may be bundled in groups consisting of 3 vertically, 2 horizontally and separated at the ends
- The Min distance "S" between groups or individual strands is $1\frac{1}{2}$ " for $\frac{3}{8}$ " \varnothing strands, $1\frac{3}{4}$ " for $\frac{1}{2}$ " \varnothing strands, 2" for 0.6" \varnothing strands
- "S" is measured between centers of adjacent strands
- Approval by the Engineer is required for deviation



END DETAIL



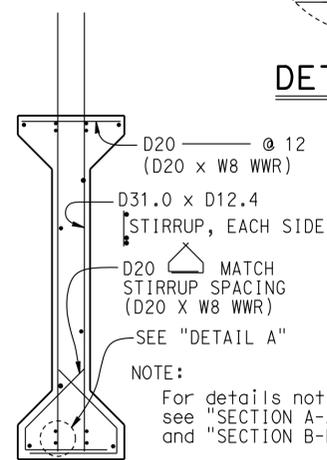
Girder location	Jacking Force (P) (Kips)		"Y" (in)	Concrete Strength (ksi)		Midspan Dead Load Deflection (inches)	
	"X"			f'_{ci}	f'_c	Deck	Rail
Span 1 & 3 Int Girder	4"	650	28	4.00	5.00	0.76	0.06
	6"	700	28	4.00	5.00	0.76	0.06
Span 2 Int Girder	4"	1040	28	5.50	6.00	2.45	0.26
	6"	1100	28	5.50	6.00	2.45	0.26

ELEVATION

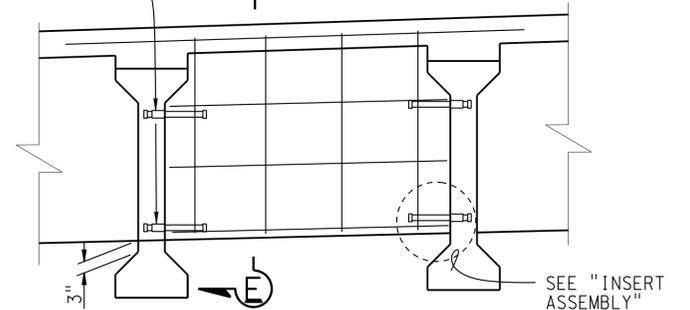
- NOTES:
- 1" \varnothing x 12" Bolt for intermediate diaphragm @ 3rd points for span 2 girders
 - Dimension "A" must be determined by the contractor per manufacturer

LONGITUDINAL WIRE AREA MUST BE 40% OR GREATER OF VERTICAL DEFORMED WIRE'S AREA

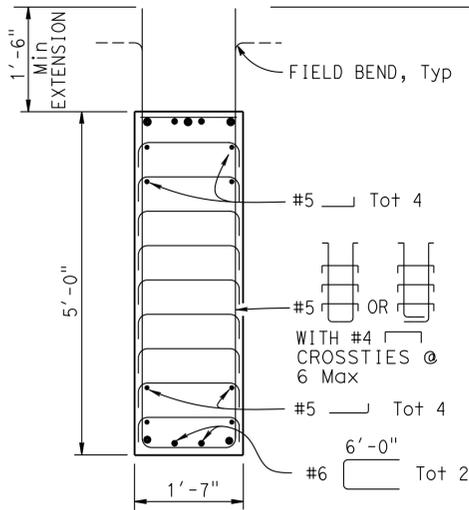
DETAIL A



1" \varnothing x 12" BOLTS WITH INSERT ASSEMBLIES

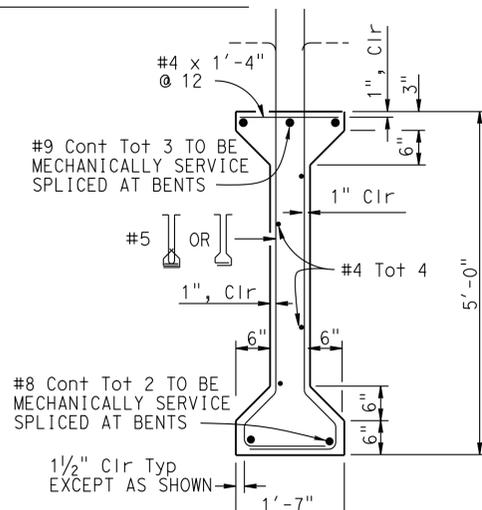


INTERMEDIATE DIAPHRAGM



SECTION A-A

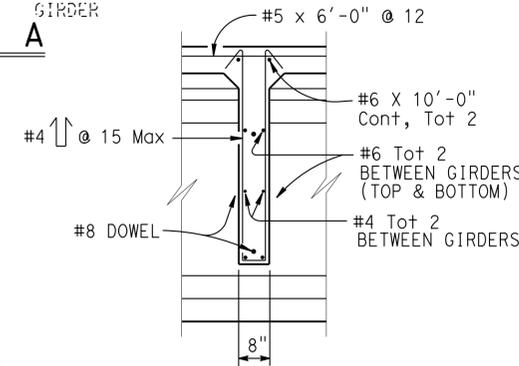
3/4" = 1'-0"



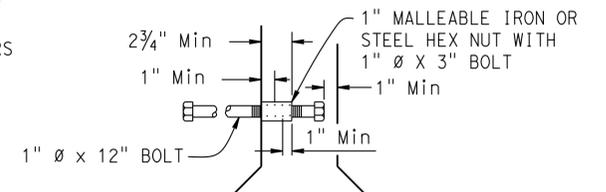
INTERIOR GIRDER SECTION B-B

3/4" = 1'-0"

OPTIONAL WELDED WIRE REINFORCEMENT (WWR) DETAIL



SECTION E-E



INSERT ASSEMBLY

WWR NOTE: MANUFACTURER'S SHOP DRAWING SHALL CONFORM TO THE REINFORCEMENT SHOWN ON THIS SHEET AS NOTED AND THE SPECIAL PROVISIONS

NO SCALE

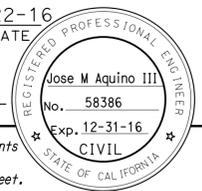
DESIGN	BY Eric G Burgeson	CHECKED Arturo V Herrera
DETAILS	BY Nancy C Gwynn	CHECKED Arturo V Herrera
QUANTITIES	BY Sharon Yen	CHECKED Mufeed Khalaf

STATE OF CALIFORNIA
DEPARTMENT OF TRANSPORTATION

DIVISION OF ENGINEERING SERVICES
STRUCTURE DESIGN
DESIGN BRANCH 3

BRIDGE NO.	49-0162L
POST MILE	65.1

SOUTH SAN MIGUEL UC
PRECAST PRESTRESSED I GIRDER



GENERAL NOTES

JACKING FORCE (P): The jacking force required at the point of control along the span. The jacking force does not include any fabrication specific losses.

The maximum tensile stress in the prestressing steel upon release shall not exceed 75% of the specified minimum ultimate tensile strength of the prestressing steel.

The maximum temporary tensile stress (jacking stress) in the prestressing steel shall not exceed 80% of the specified minimum ultimate tensile strength of the prestressing steel.

CONCRETE STRENGTH: f'_{ci} is at time of initial stressing
 f'_c is at 28 days

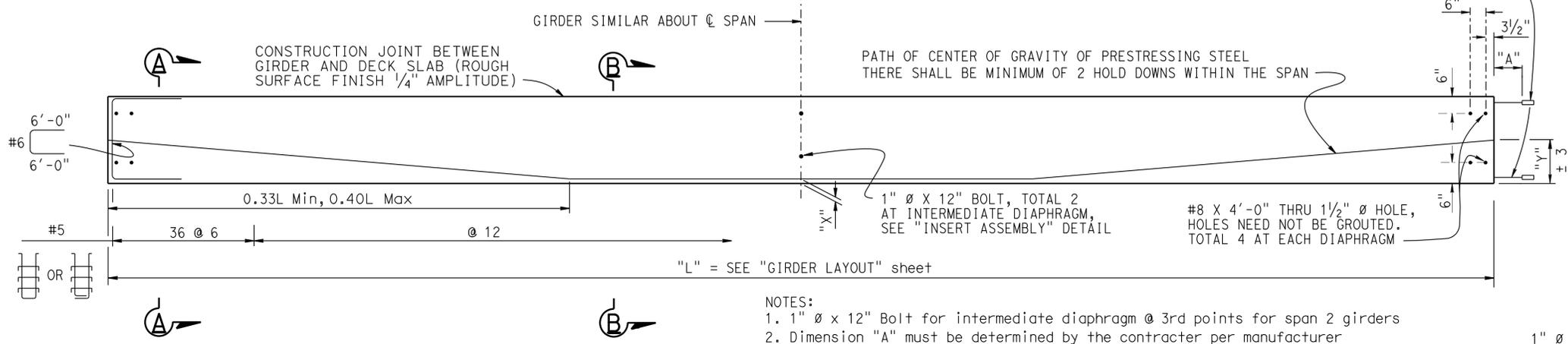
DEFLECTION COMPONENTS: Informational - to be used in setting screed line elevations

Screed line elevations for deck concrete will be determined by the Engineer.

Contractor may interpolate "P" and "X" values between limits shown,

CLEARANCES FOR PRETENSIONED STRANDS

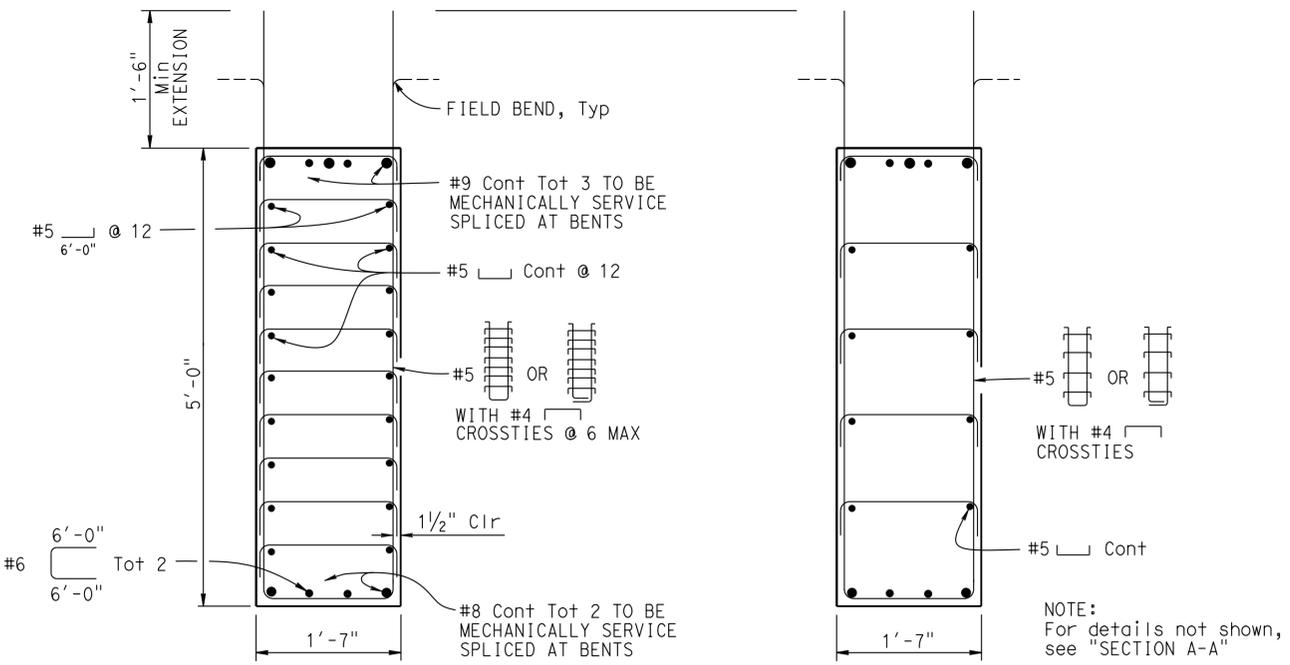
- Strands may be bundled in groups consisting of 3 vertically, 2 horizontally and separated at the ends
- The Min distance "S" between groups or individual strands is $1\frac{1}{2}$ " for $\frac{3}{8}$ " \varnothing strands, $1\frac{3}{4}$ " for $\frac{1}{2}$ " \varnothing strands, 2" for 0.6" \varnothing strands
- "S" is measured between centers of adjacent strands
- Approval by the Engineer is required for deviation



- NOTES:
- 1" \varnothing x 12" Bolt for intermediate diaphragm @ 3rd points for span 2 girders
 - Dimension "A" must be determined by the contractor per manufacturer

ELEVATION

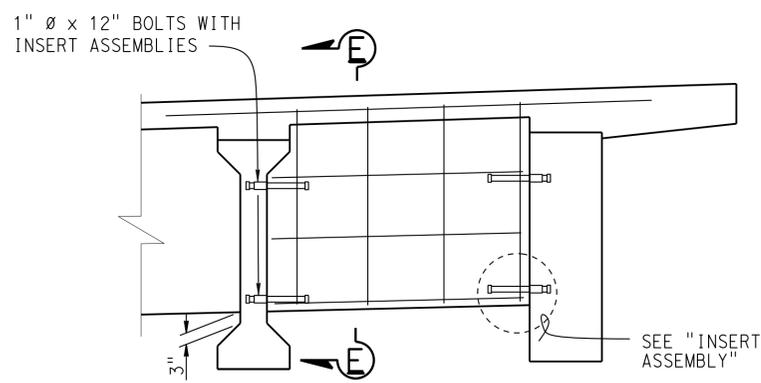
NO SCALE



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

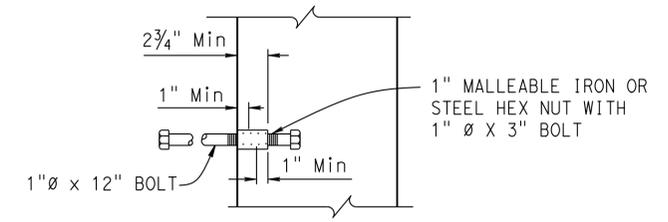
SECTION B-B
1" = 1'-0"

Girder location	"X"	Jacking Force (P) (Kips)	"Y" (in)	Concrete Strength (ksi)		Midspan Dead Load Deflection (inches)	
				f'_{ci}	f'_c	Deck	Rail
Span 1 & 3 Ext Girder	4"	700	30	5.00	4.00	0.56	0.05
	6"	790					
Span 2 Ext Girder	4"	1350	30	5.50	4.50	1.87	0.16
	6"	1480					



INTERMEDIATE DIAPHRAGM

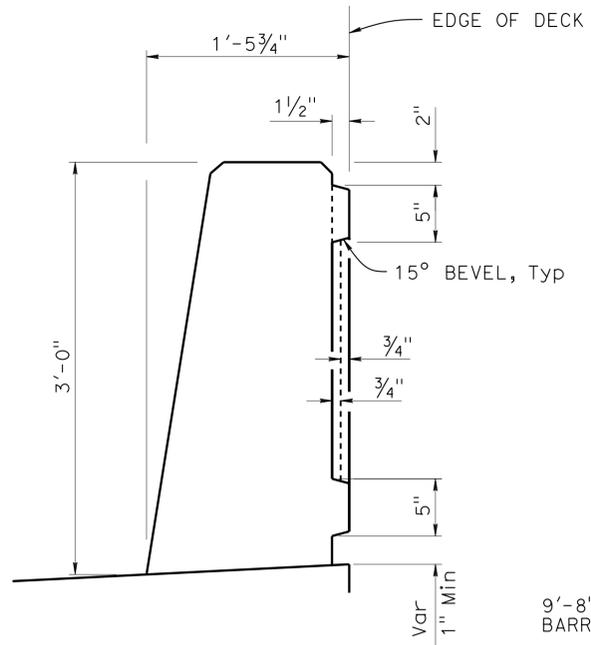
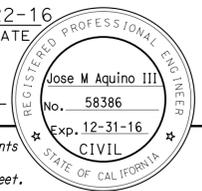
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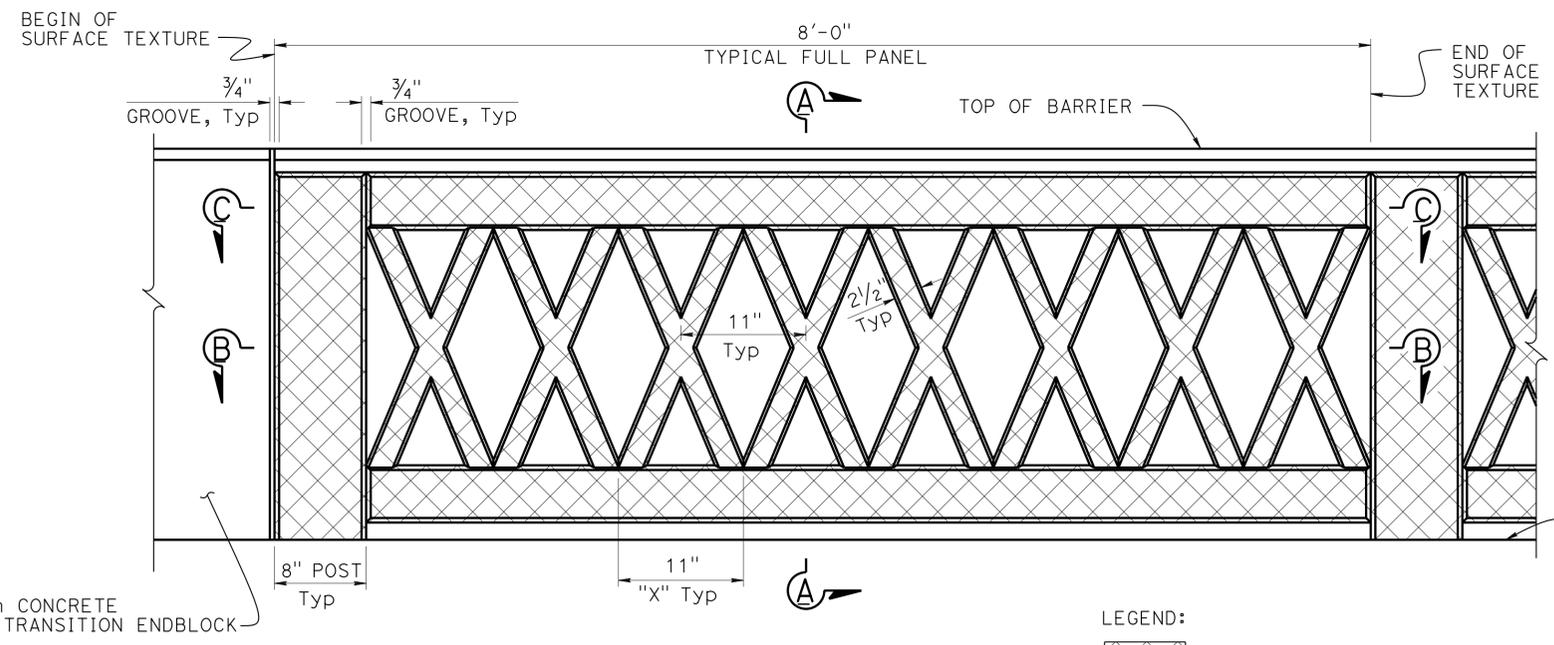
INSERT ASSEMBLY

NO SCALE

DIST	COUNTY	ROUTE	POST MILES TOTAL PROJECT	SHEET No.	TOTAL SHEETS
05	SLO, Mon	101	63.2/R69.3, R0.0/R1.9	666	858
			DATE		
			4-22-16		
			PLANS APPROVAL DATE		
			5-2-16		
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.					

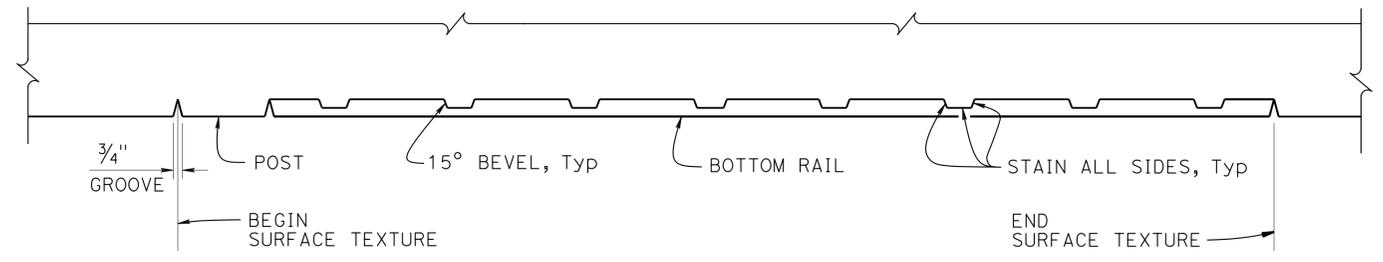


SECTION A-A
1/2" = 1'-0"

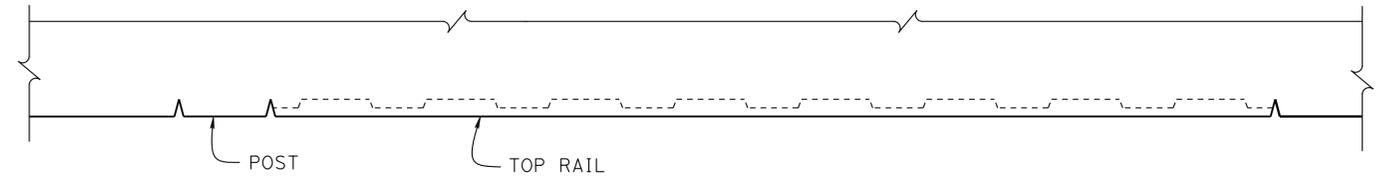


BARRIER MOTIF
1/2" = 1'-0"

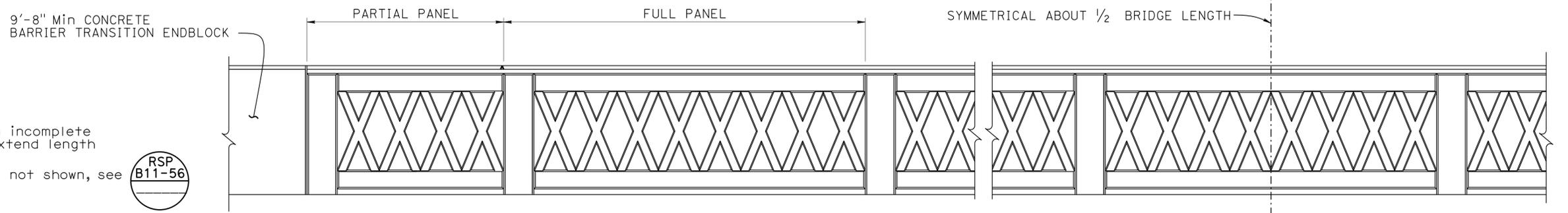
LEGEND:
 Prepare and paint concrete



SECTION B-B
1/2" = 1'-0"



SECTION C-C
1/2" = 1'-0"



ELEVATION
3/4" = 1'-0"

- NOTES:
- If partial panel ends with an incomplete "X", shorten last panel and extend length of concrete barrier endblock
 - For Concrete Barrier details not shown, see

DESIGN	BY David Fowkes	CHECKED Kantima Green
DETAILS	BY Nancy C Gwynn	CHECKED Kantima Green
QUANTITIES	BY Sharon Yen	CHECKED Mufeed Khalaf

STATE OF CALIFORNIA
DEPARTMENT OF TRANSPORTATION

DIVISION OF ENGINEERING SERVICES
STRUCTURE DESIGN
DESIGN BRANCH 3

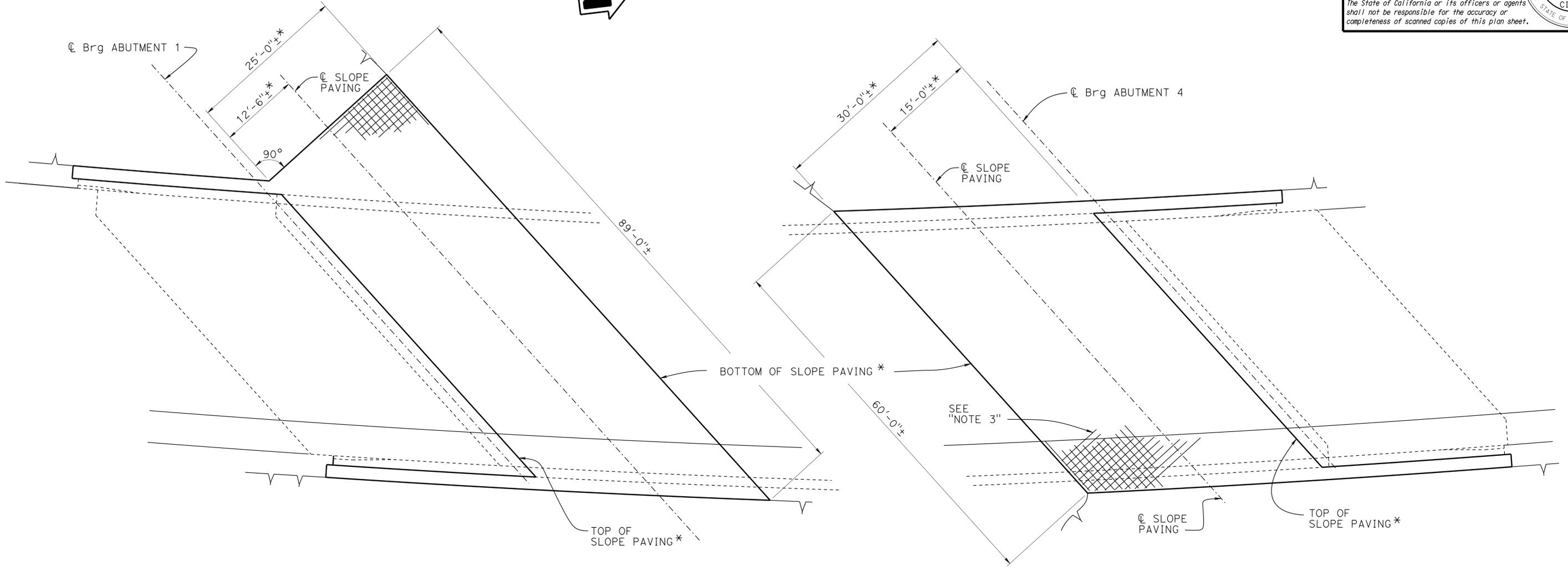
BRIDGE NO.	49-0162L
POST MILE	65.1

SOUTH SAN MIGUEL UC
BARRIER SURFACE TEXTURE

DIST	COUNTY	ROUTE	POST MILES TOTAL PROJECT	SHEET No.	TOTAL SHEETS
05	SLO, Mon	101	63.2/R69.3, R0.0/R1.9	667	858

Jose M. Aquino III 4-22-16
 REGISTERED CIVIL ENGINEER DATE
 5-2-16
 PLANS APPROVAL DATE
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REGISTERED PROFESSIONAL ENGINEER
 Jose M Aquino III
 No. 58386
 Exp. 12-31-16
 CIVIL
 STATE OF CALIFORNIA



PLAN
1/8" = 1'-0"

- NOTES:**
1. Dimensions are measured horizontally
 2. Concrete surface texture not shown
 3. Slope paving welded wire reinforcement to be placed normal to the bottom or top of slope paving
 4. For slope paving details not shown, see "SLOPE PAVING-FULL SLOPE-NO SKEW" sheet

LEGEND:

* Top and bottom slope and dimensions shown to match roadway grading plans

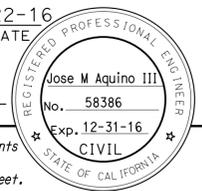
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DETAILS	BY Nancy C Gwynn	CHECKED Arturo V Herrera
QUANTITIES	BY Sharon Yen	CHECKED Mufeed Khalaf

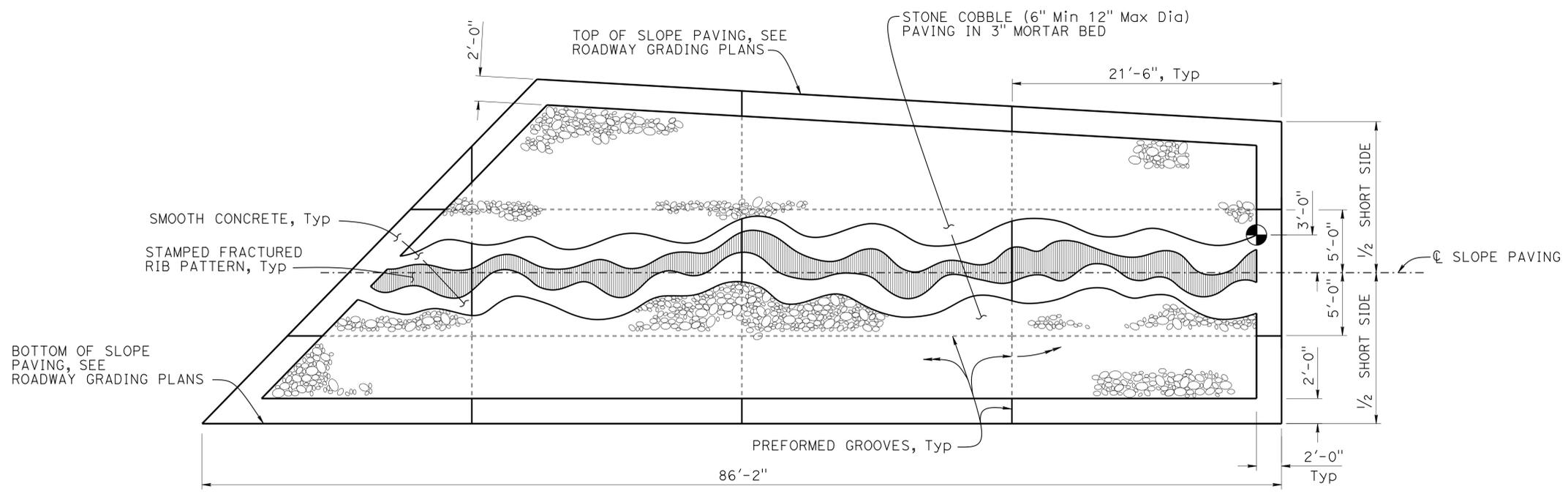
STATE OF CALIFORNIA
DEPARTMENT OF TRANSPORTATION

DIVISION OF ENGINEERING SERVICES
STRUCTURE DESIGN
DESIGN BRANCH 3

BRIDGE NO.	49-0162L
POST MILE	65.1

SOUTH SAN MIGUEL UC
SLOPE PAVING LAYOUT

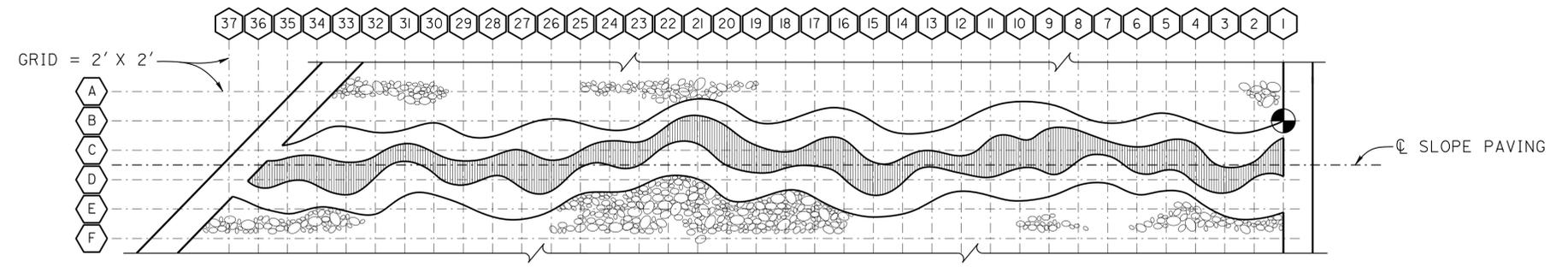
DIST	COUNTY	ROUTE	POST MILES TOTAL PROJECT	SHEET No.	TOTAL SHEETS
05	SLO, Mon	101	63.2/R69.3, R0.0/R1.9	668	858
Jose M. Aquino III REGISTERED CIVIL ENGINEER			4-22-16 DATE		
5-2-16 PLANS APPROVAL DATE					
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ABUTMENT 1 - SLOPE PAVING SURFACE TEXTURE
 $\frac{3}{16}'' = 1'-0''$

NOTE:
 For details not shown, see "SLOPE PAVING SURFACE TEXTURE Det No. 3" and "SLOPE PAVING-FULL SLOPE-NO SKEW" sheets

LEGEND:
  Working point at grid
 Working point



ABUTMENT 1 - SLOPE PAVING SURFACE TEXTURE GRID
 $\frac{3}{16}'' = 1'-0''$

DESIGN	BY David Fowkes	CHECKED Kantima Green
DETAILS	BY Nancy C Gwynn	CHECKED Kantima Green
QUANTITIES	BY Sharon Yen	CHECKED Mufeed Khalaf

STATE OF CALIFORNIA
 DEPARTMENT OF TRANSPORTATION

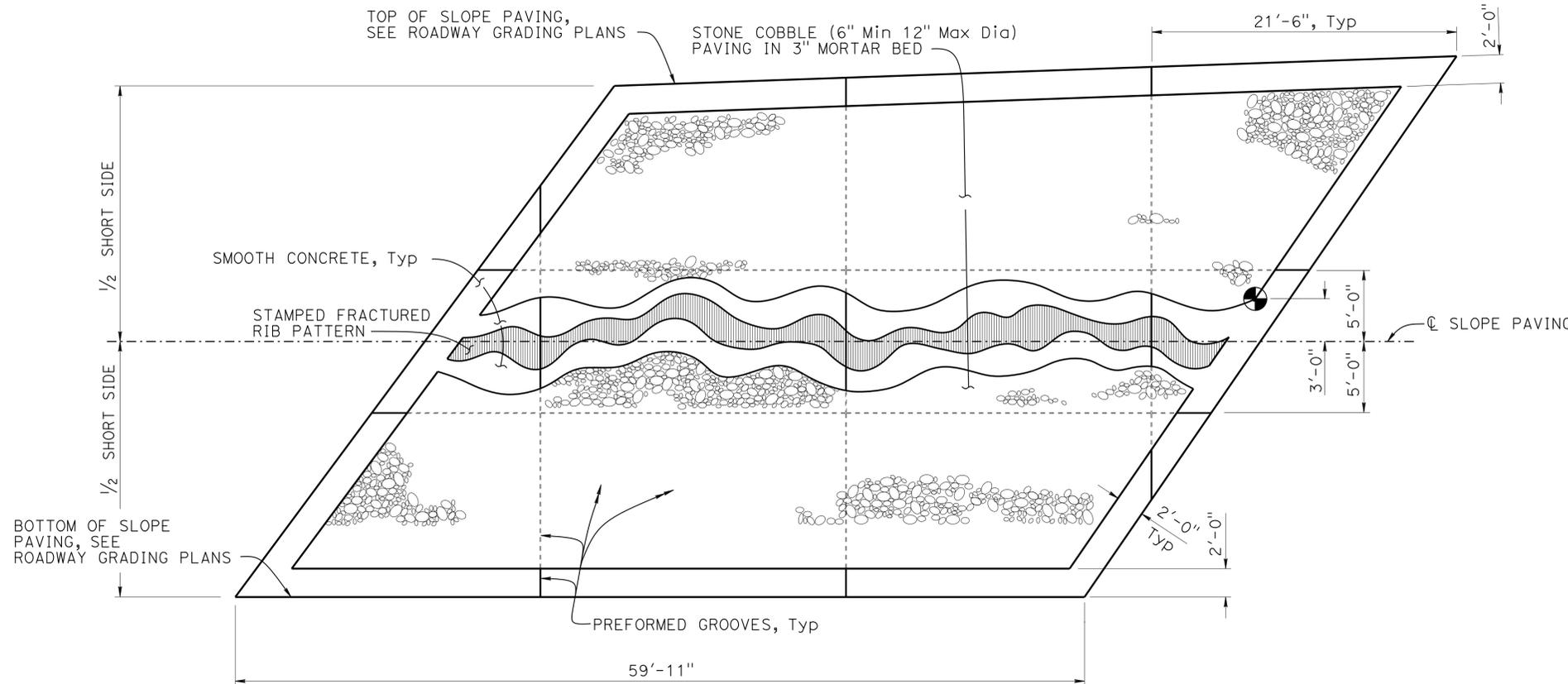
DIVISION OF ENGINEERING SERVICES
 STRUCTURE DESIGN
DESIGN BRANCH 3

BRIDGE NO.	49-0162L
POST MILE	65.1

SOUTH SAN MIGUEL UC
SLOPE PAVING SURFACE TEXTURE Det No. 1

DIST	COUNTY	ROUTE	POST MILES TOTAL PROJECT	SHEET No.	TOTAL SHEETS
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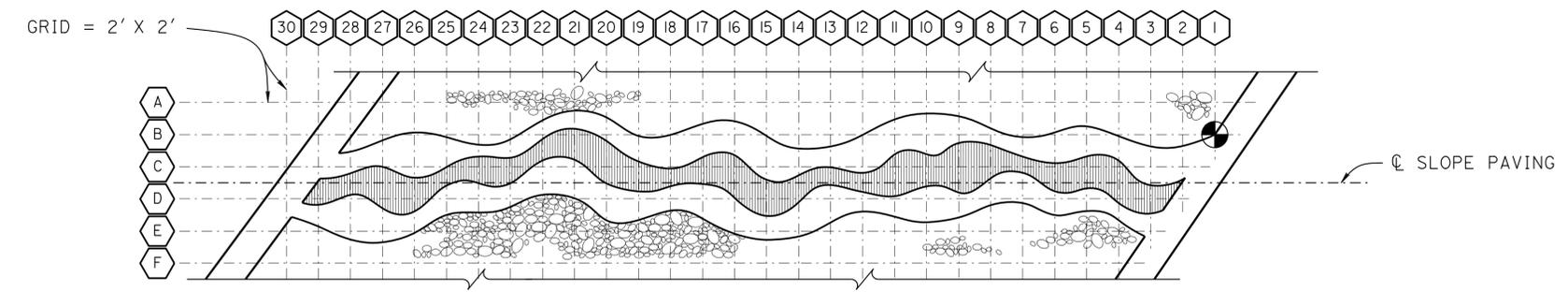
Jose M. Aquino III
 REGISTERED CIVIL ENGINEER DATE 4-22-16
 5-2-16
 PLANS APPROVAL DATE
 No. 58386
 Exp. 12-31-16
 CIVIL
 STATE OF CALIFORNIA
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ABUTMENT 4 - SLOPE PAVING SURFACE TEXTURE
 $\frac{3}{16}'' = 1'-0''$

NOTE:
 For details not shown, see "SLOPE PAVING SURFACE TEXTURE Det No. 3" and "SLOPE PAVING-FULL SLOPE-NO SKEW" sheets

LEGEND:
 Working point at grid
 Working point



ABUTMENT 4 - SLOPE PAVING SURFACE TEXTURE GRID
 $\frac{3}{16}'' = 1'-0''$

DESIGN	BY David Fowkes	CHECKED Kantima Green
DETAILS	BY Nancy C Gwynn	CHECKED Kantima Green
QUANTITIES	BY Sharon Yen	CHECKED Mufeed Khalaf

STATE OF CALIFORNIA
 DEPARTMENT OF TRANSPORTATION

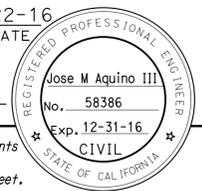
DIVISION OF ENGINEERING SERVICES
 STRUCTURE DESIGN
DESIGN BRANCH 3

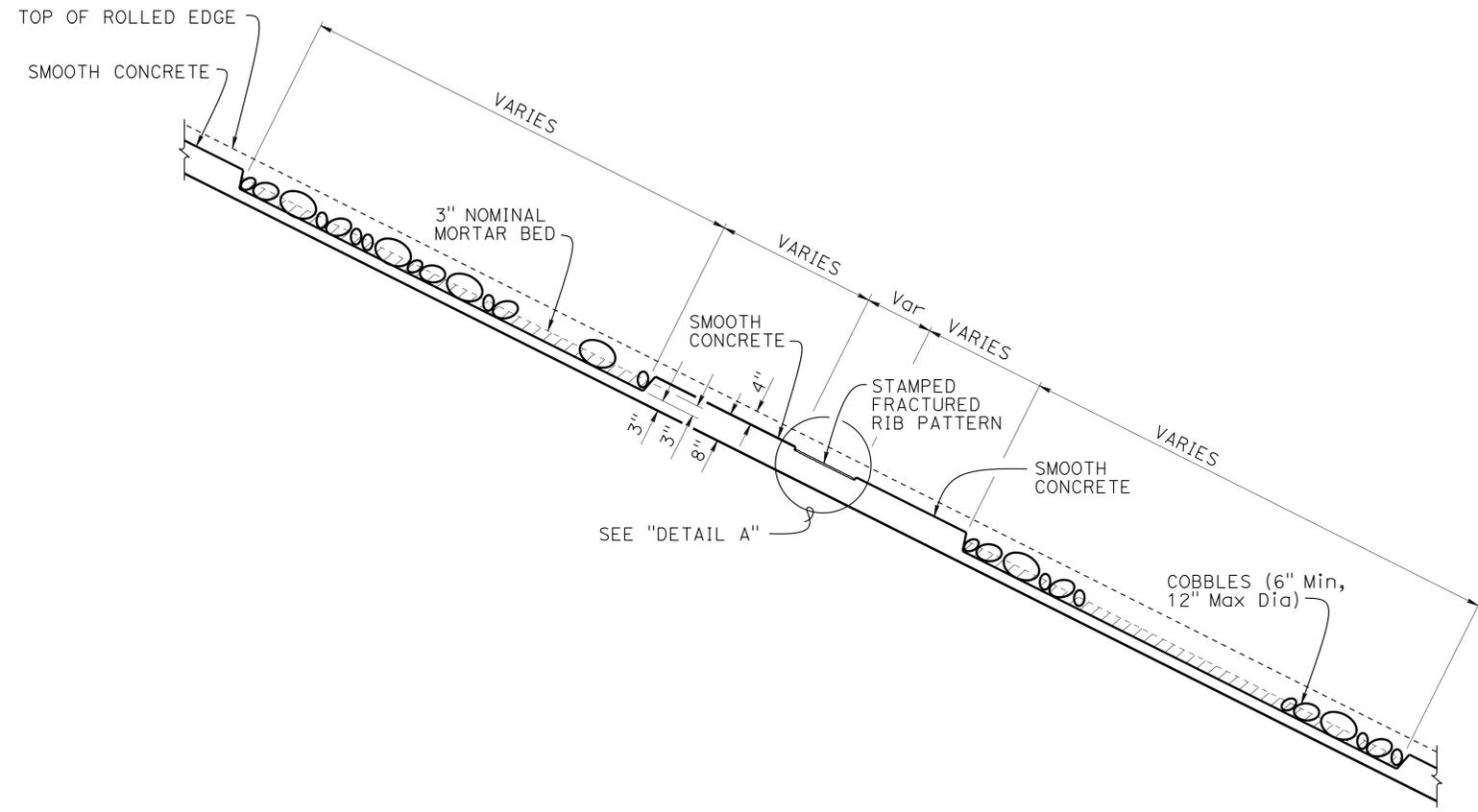
BRIDGE NO.	49-0162L
POST MILE	65.1

SOUTH SAN MIGUEL UC
SLOPE PAVING SURFACE TEXTURE Det No. 2

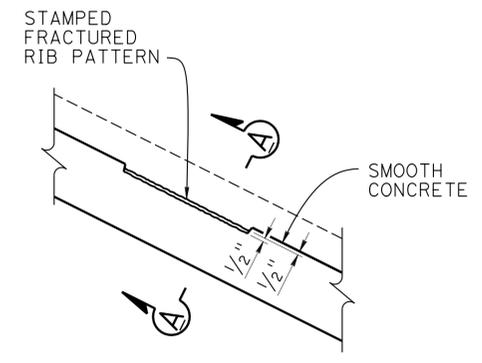


REVISION DATES	SHEET	OF
5-13-15	24	31

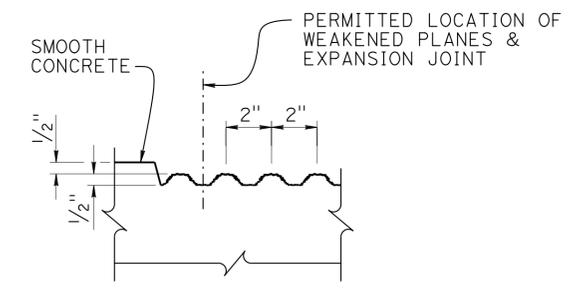
DIST	COUNTY	ROUTE	POST MILES TOTAL PROJECT	SHEET No.	TOTAL SHEETS
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Jose M. Aquino III REGISTERED CIVIL ENGINEER			4-22-16 DATE		
5-2-16 PLANS APPROVAL DATE			The State of California or its officers or agents shall not be responsible for the accuracy or completeness of scanned copies of this plan sheet.		



PART SLOPE PAVING SECTION
 $\frac{1}{2}'' = 1'-0''$



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



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

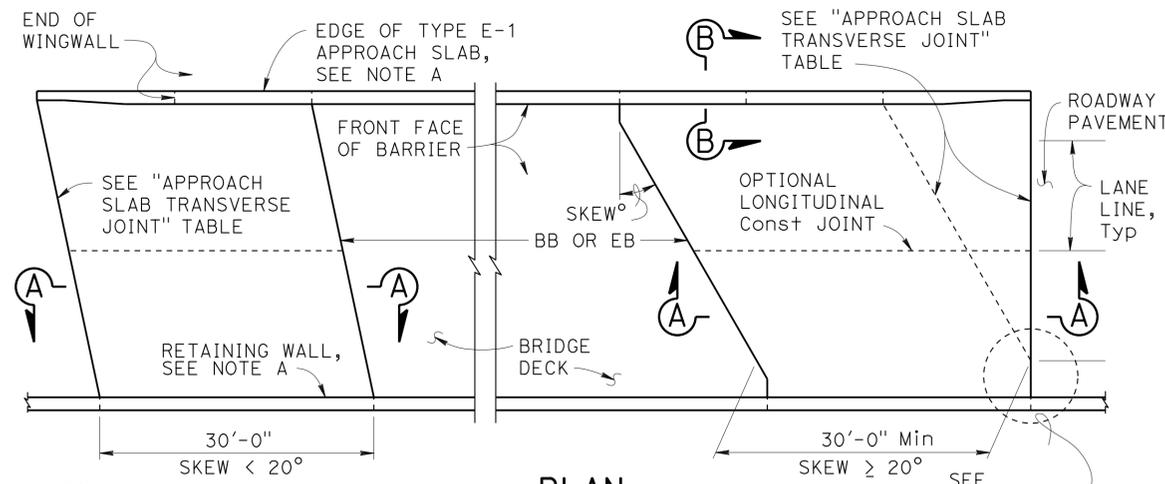
STRUCTURES DESIGN DETAIL SHEET (ENGLISH) (REV. 09-01-10)	DESIGN BY David Fowkes CHECKED Kantima Green	STATE OF CALIFORNIA DEPARTMENT OF TRANSPORTATION	DIVISION OF ENGINEERING SERVICES STRUCTURE DESIGN DESIGN BRANCH 3	BRIDGE NO. 49-0162L	SOUTH SAN MIGUEL UC SLOPE PAVING SURFACE TEXTURE Det No. 3
	DETAILS BY Nancy C Gwynn CHECKED Kantima Green			POST MILE 65.1	
QUANTITIES BY Sharon Yen CHECKED Mufeed Khalaf	ORIGINAL SCALE IN INCHES FOR REDUCED PLANS 0 1 2 3	UNIT: 3578 PROJECT NUMBER & PHASE: 05000200201	CONTRACT NO.: 05-060404	DISREGARD PRINTS BEARING EARLIER REVISION DATES	REVISION DATES SHEET 25 OF 31

USERNAME => s115765 DATE PLOTTED => 22-JUL-2016 TIME PLOTTED => 17:52

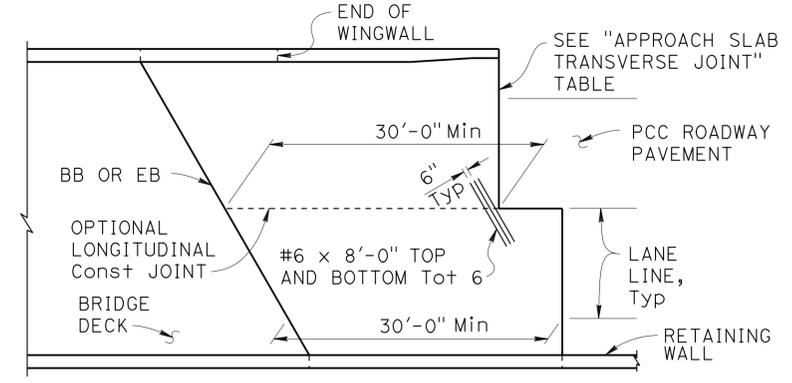
DIST	COUNTY	ROUTE	POST MILES TOTAL PROJECT	SHEET No.	TOTAL SHEETS
05	SLO, Mon	101	63.2/R69.3, R0.0/R1.9	671	858

Jose M. Aquino III
 REGISTERED CIVIL ENGINEER DATE 4-22-16
 5-2-16
 PLANS APPROVAL DATE
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REGISTERED PROFESSIONAL ENGINEER
 Jose M. Aquino III
 No. 58386
 Exp. 12-31-16
 CIVIL
 STATE OF CALIFORNIA

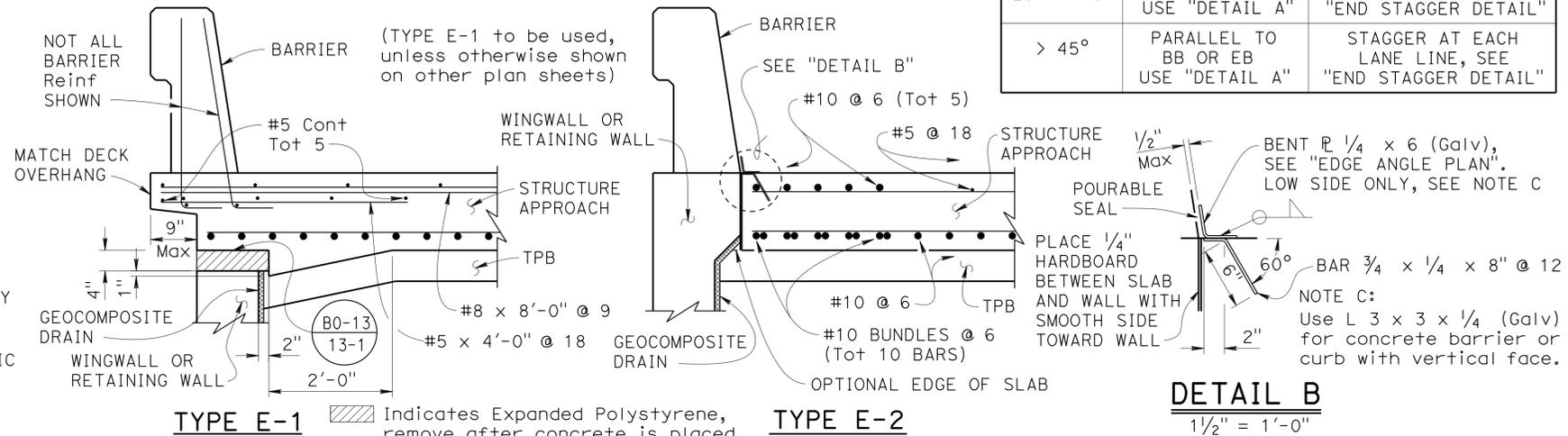
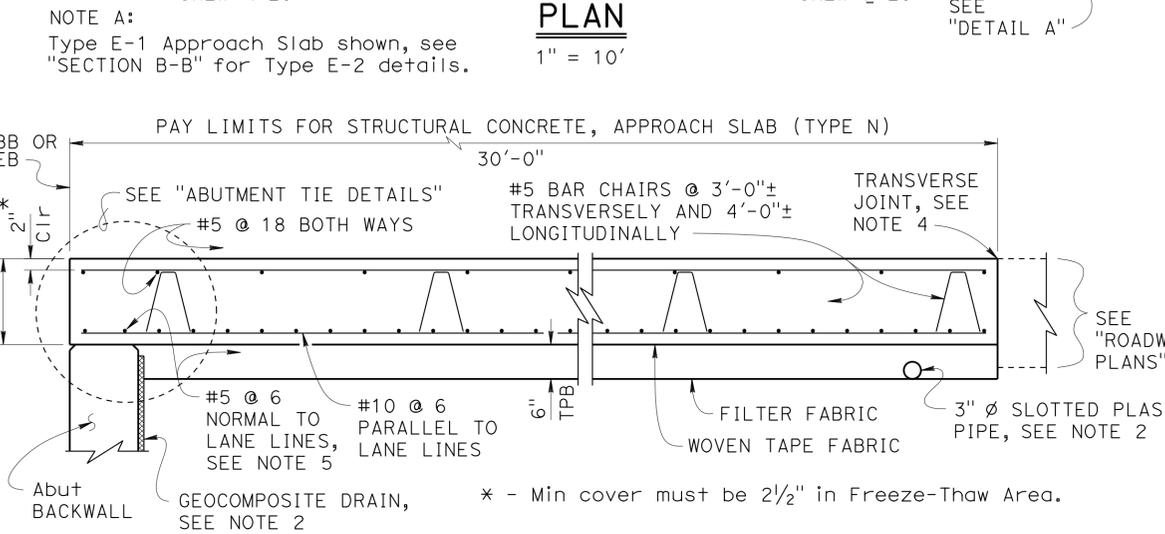


DETAIL A
No Scale

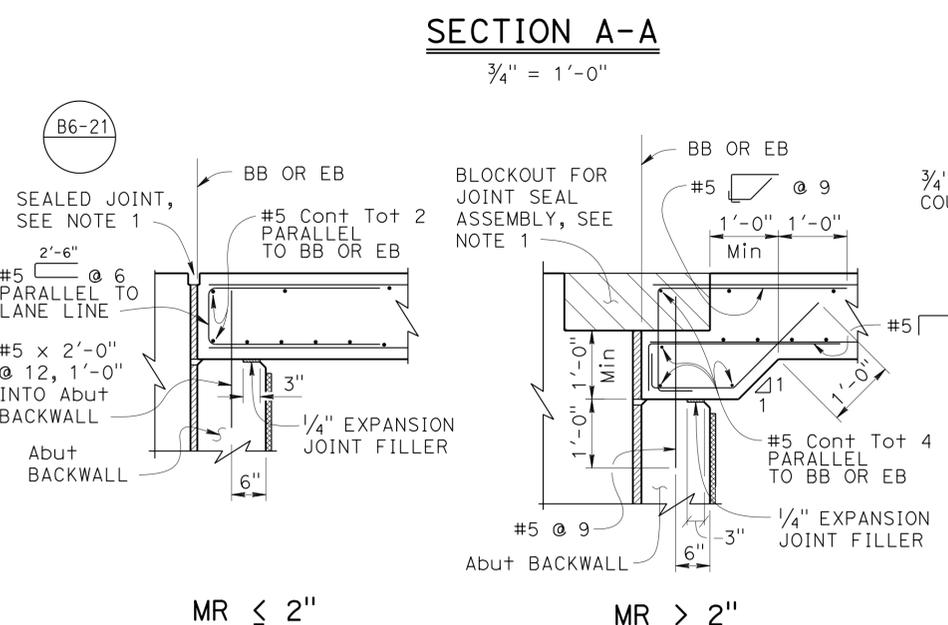


END STAGGER DETAIL
1" = 10'

APPROACH SLAB TRANSVERSE JOINT		
APPROACH SKEW	WITH HMA ROADWAY PAVEMENT	WITH PCC ROADWAY PAVEMENT
< 20°	PARALLEL TO BB OR EB	PARALLEL TO BB OR EB
20° - 45°	PARALLEL TO BB OR EB USE "DETAIL A"	STAGGER AT LANE LINES 24' TO 36' APART, SEE "END STAGGER DETAIL"
> 45°	PARALLEL TO BB OR EB USE "DETAIL A"	STAGGER AT EACH LANE LINE, SEE "END STAGGER DETAIL"

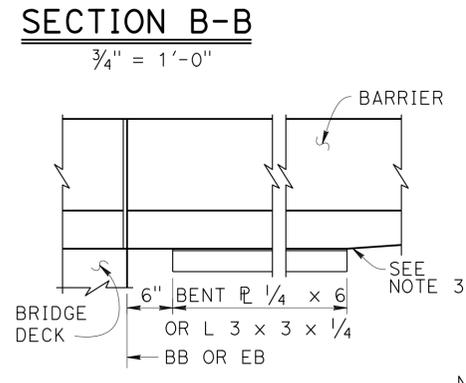


DETAIL B
1 1/2" = 1'-0"

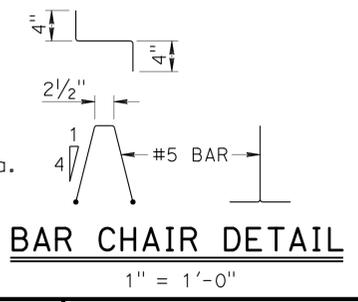


ABUTMENT TIE DETAILS
3/4" = 1'-0"

LONGITUDINAL CONSTRUCTION JOINT ALTERNATIVES
3/4" = 1'-0"



EDGE ANGLE PLAN
1" = 1'-0"



DESIGN NOTES

- DESIGN: AASHTO LRFD Bridge Design Specifications, 2012 Edition with Caltrans Amendments, preface dated January 2014
- LIMIT STATES: Service I, Strength I & II, Extreme II and Fatigue I (Y_{FAT} = 1.0)
- DEAD LOAD: Includes 35 psf for future wearing surface
- LIVE LOAD: HL93 and permit design load
Equivalent strip width method: W₁ = 12 ft
Slab span: L₁ = 24.5 ft
- REINFORCED CONCRETE:
f_y = 60 ksi
f'c = 3.6 ksi
n = 8
- NOTES:
- For joint protection details, blockout dimensions for joint seal assembly, and other details not shown, see other plan sheets. For MR ≤ 2", adjust reinforcement to clear sawcut for sealed joint. For MR > 2", haunch reinforcement placed for joint seal assembly blockout must be normal to BB or EB and spaced to avoid joint seal assembly anchorage.
 - For drainage details, see "STRUCTURE APPROACH DRAINAGE DETAILS" sheet.
 - End the plate or edge angle at beginning of barrier transition, end of wingwall, or end of structure approach as applicable.
 - Transverse joint must be a minimum of 5'-0" from an existing or constructed weakened plane joint in approach PCC roadway pavement. Refer to Standard Plans P10 and P14.
 - At the Contractor's option, approach slab transverse reinforcement may be placed parallel to BB or EB. Spacing of transverse reinforcement is measured along roadway.

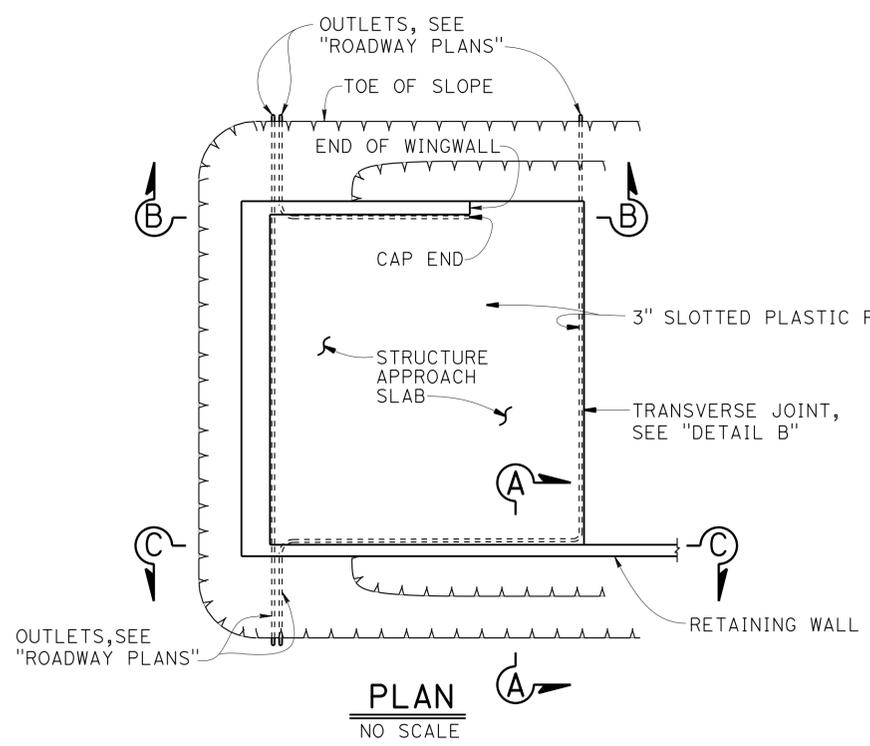
STANDARD DRAWING		The components of this Bridge Standard Drawing have been prepared under the responsible charge of the Technical Owner, a registered civil engineer in the State of California. Refer to: http://www.dot.ca.gov/hq/esc/techpubs/manual/bridgemanuals/bridge-standard-detail-sheet/index.html . 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.		STATE OF CALIFORNIA DEPARTMENT OF TRANSPORTATION		DIVISION OF ENGINEERING SERVICES		BRIDGE NO. 49-0162L		SOUTH SAN MIGUEL UC	
FILE NO. xs3-120	APPROVAL DATE January 2015							POST MILE 65.1		STRUCTURE APPROACH TYPE N (30S)	
DS OSD 2147A (ENGLISH STANDARD DRAWING "XS" BORDER REV. (10-01-14))		ORIGINAL SCALE IN INCHES FOR REDUCED PLANS		UNIT: 3578 PROJECT NUMBER & PHASE: 05000200201		CONTRACT NO.: 05-060404		DISREGARD PRINTS BEARING EARLIER REVISION DATES		REVISION DATES	
										SHEET	OF
										26	31

FILE => 49-01621-x-sapp30.dgn

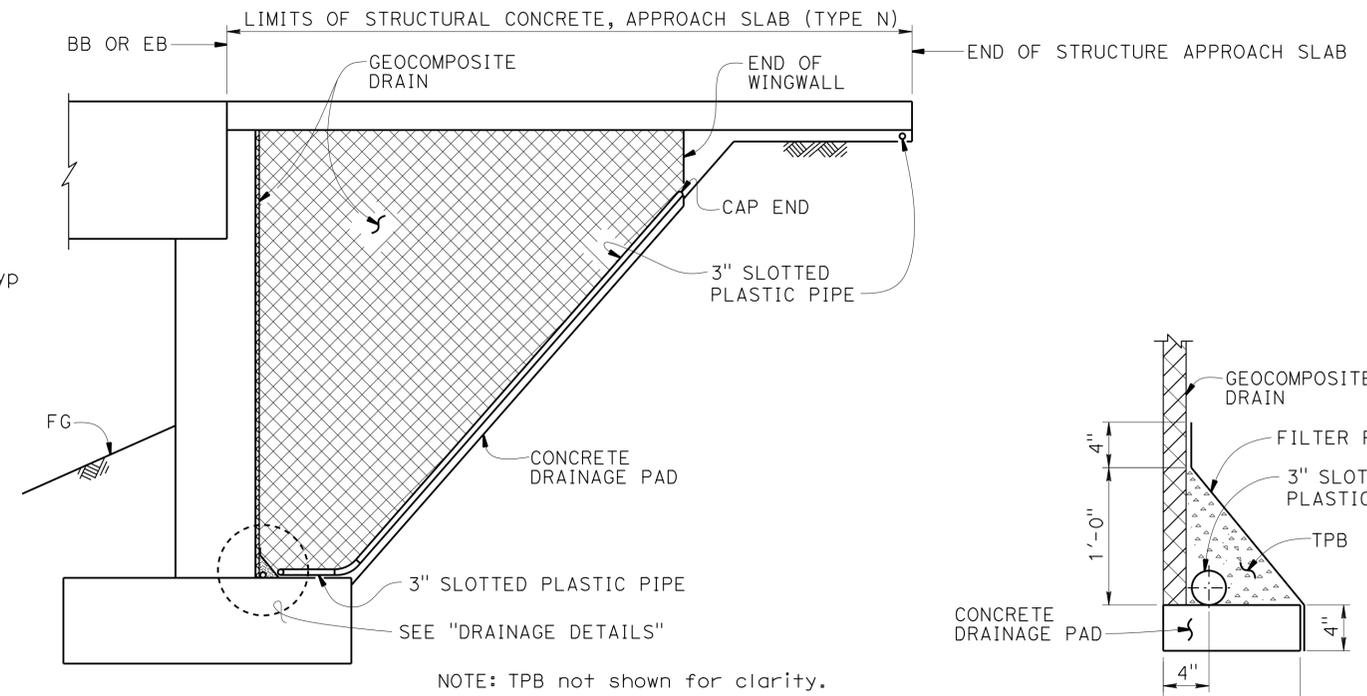
DIST	COUNTY	ROUTE	POST MILES TOTAL PROJECT	SHEET No.	TOTAL SHEETS
05	SLO, Mon	101	63.2/R69.3, R0.0/R1.9	672	858

Jose M. Aquino III 4-22-16
 REGISTERED CIVIL ENGINEER DATE
 5-2-16
 PLANS APPROVAL DATE
 No. 58386
 Exp. 12-31-16
 CIVIL
 STATE OF CALIFORNIA

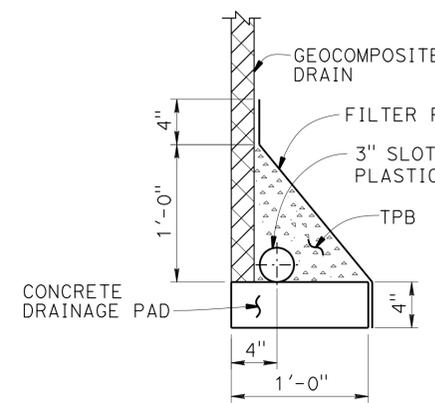
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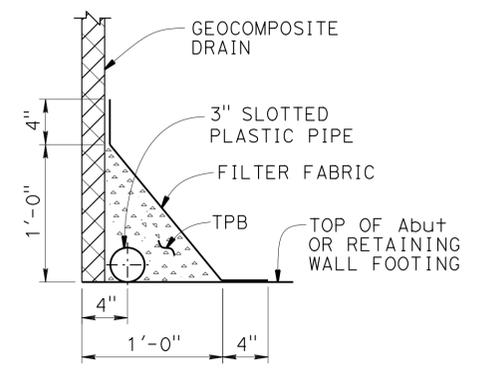
PLAN
NO SCALE



SECTION B-B
NO SCALE

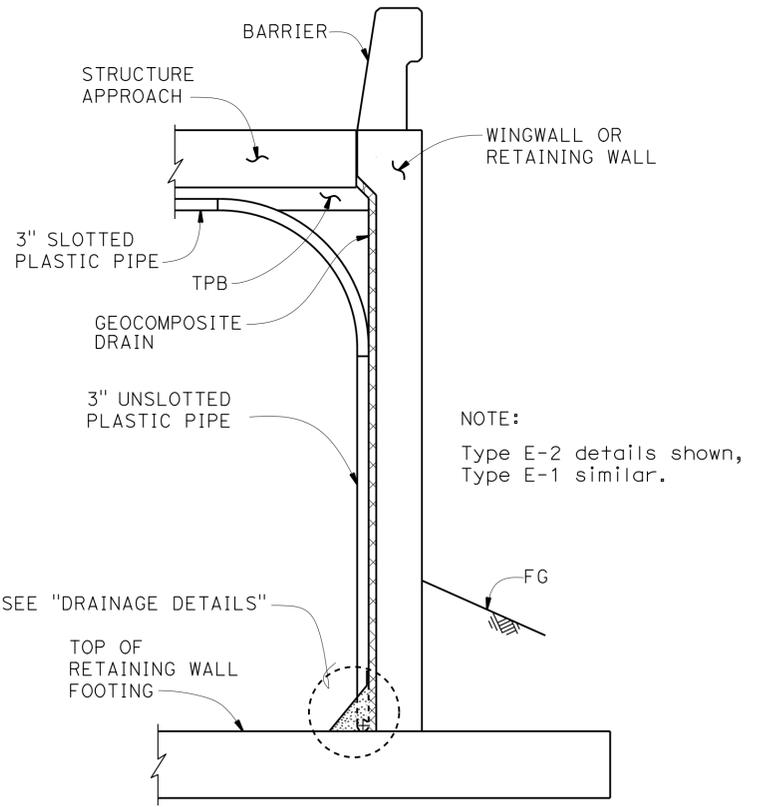


DRAINAGE PAD

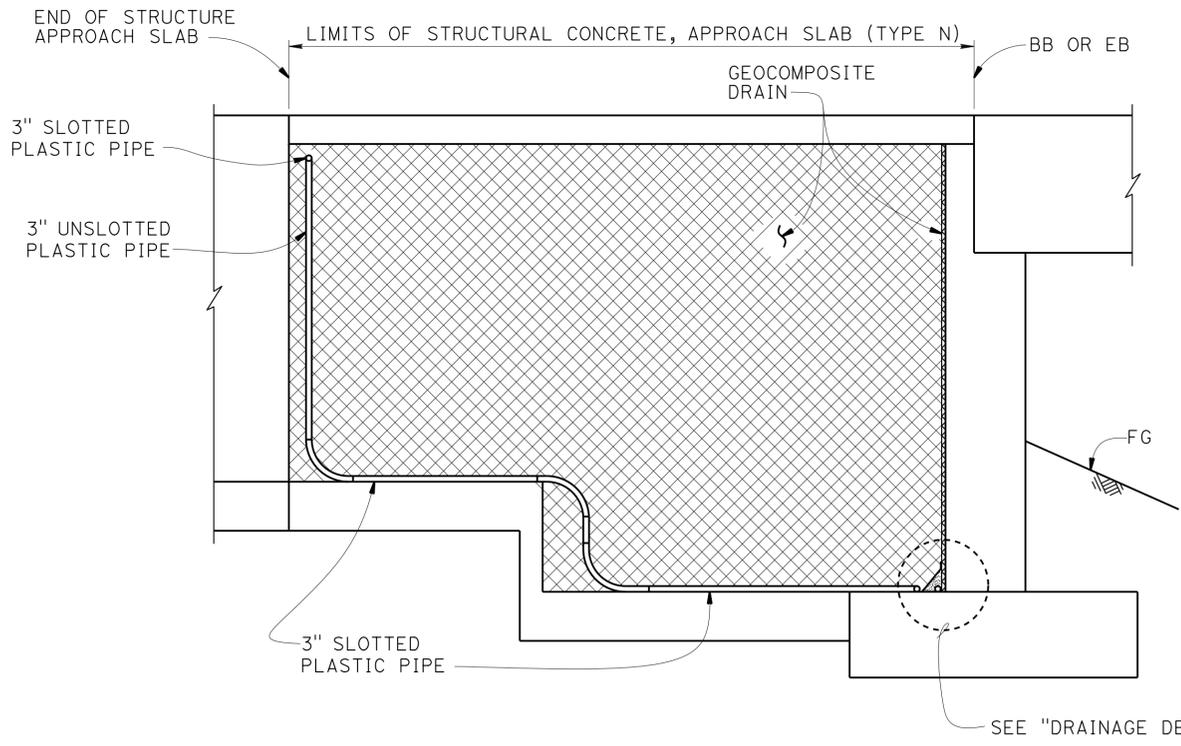


FOOTING

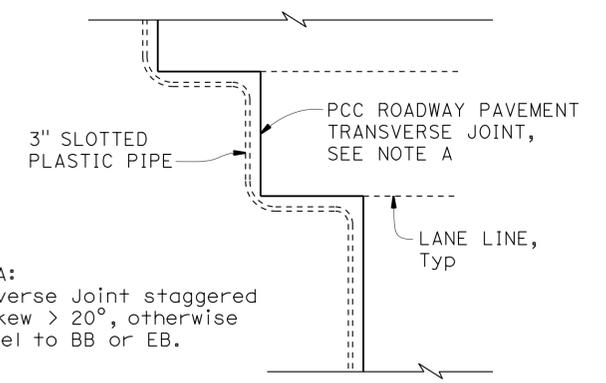
DRAINAGE DETAILS
1/2" = 1'-0"



SECTION A-A
NO SCALE



SECTION C-C
NO SCALE



DETAIL B
NO SCALE

NOTE A:
Transverse Joint staggered for Skew > 20°, otherwise parallel to BB or EB.

- NOTES:
1. For structural approach and other details not shown, see other plan sheets.
 2. All bends in plastic pipe must have 3'-0" minimum radius. Plastic pipe used for bends is not required to be slotted.

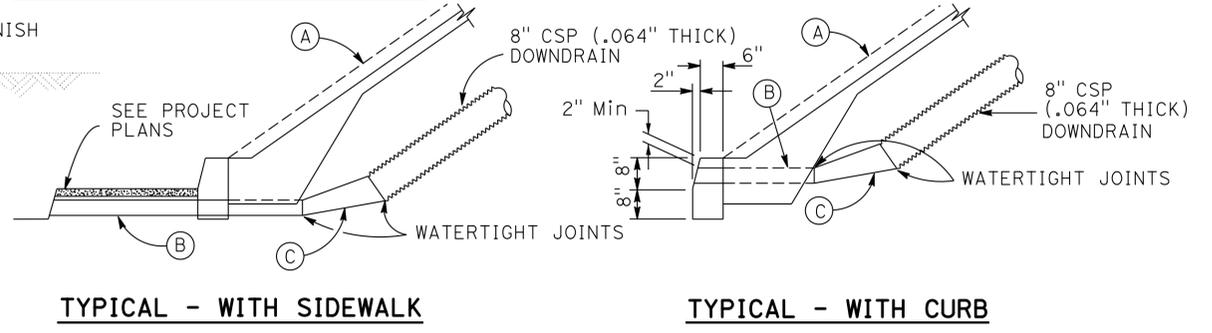
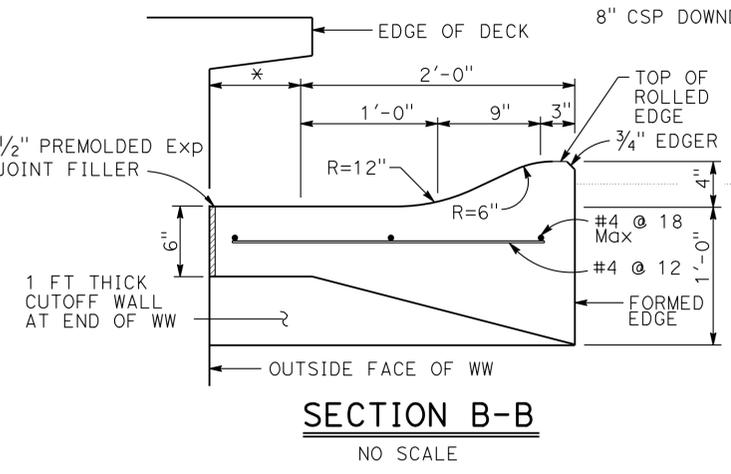
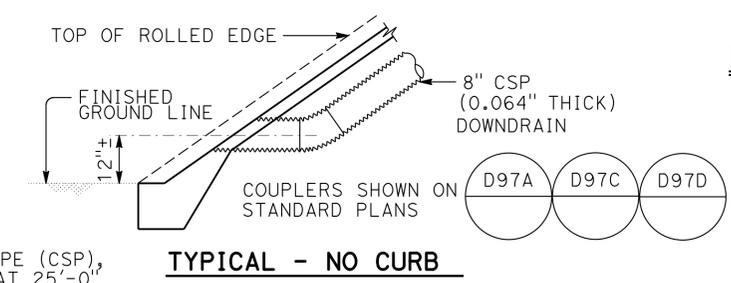
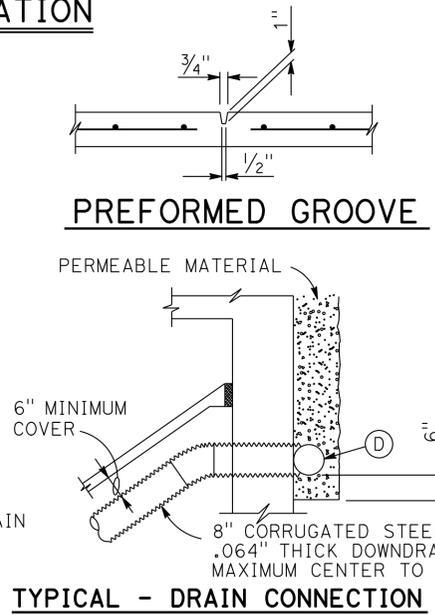
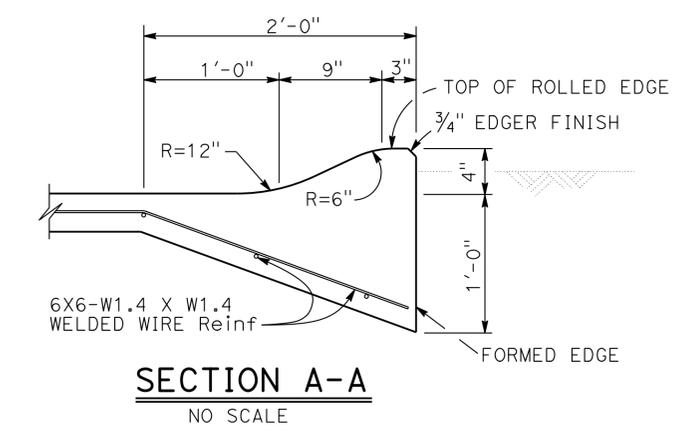
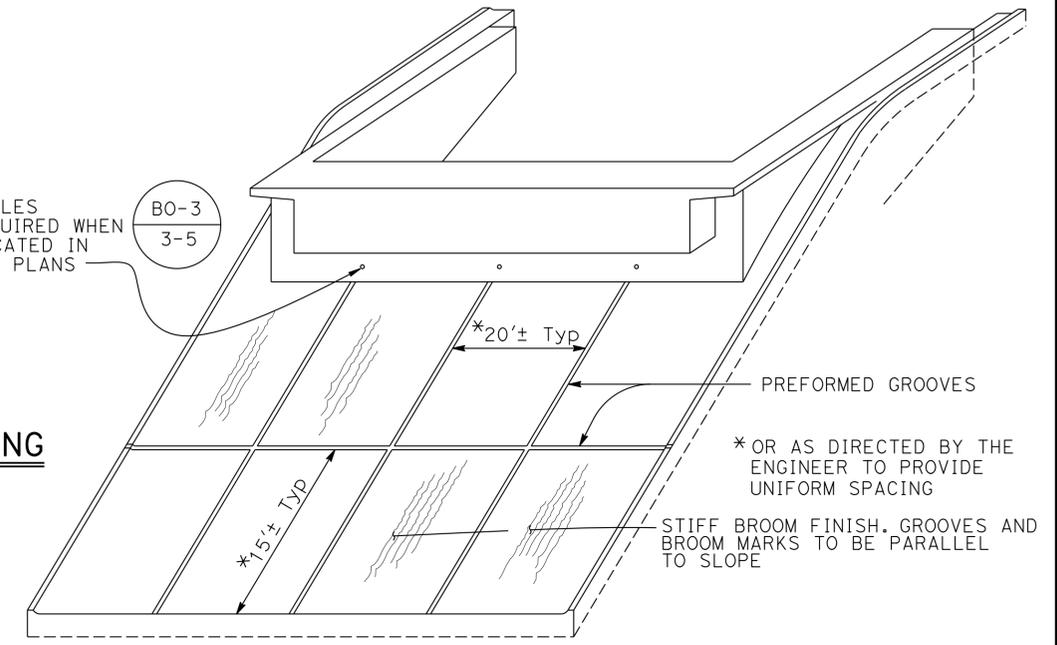
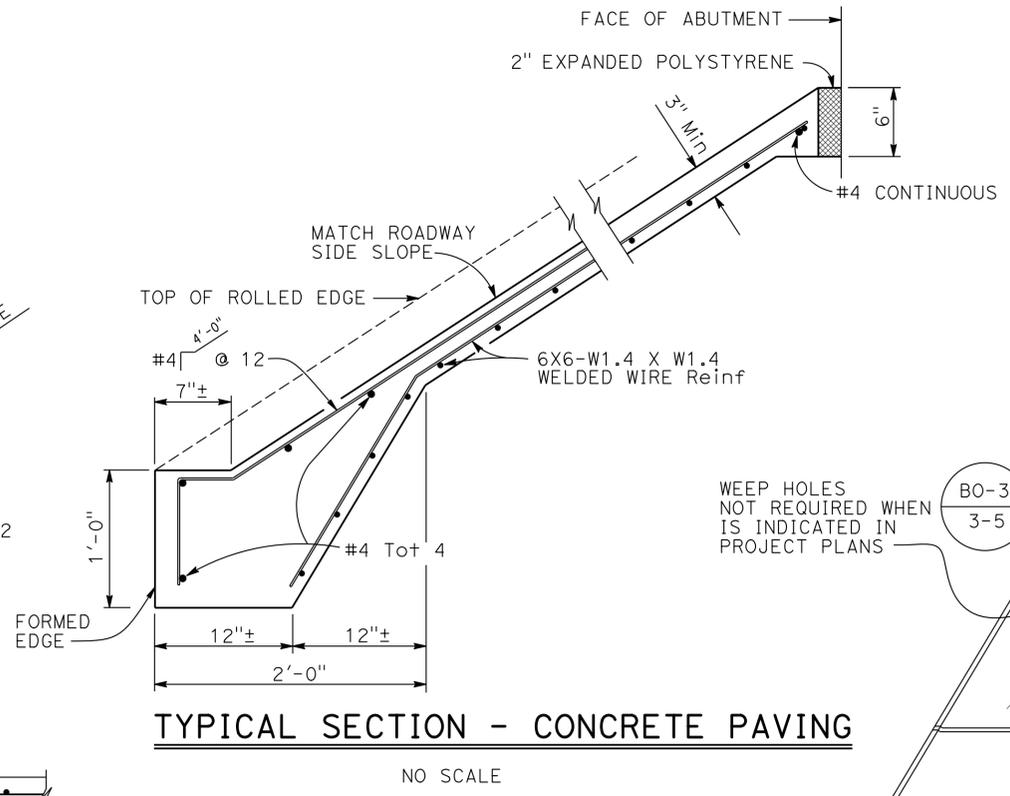
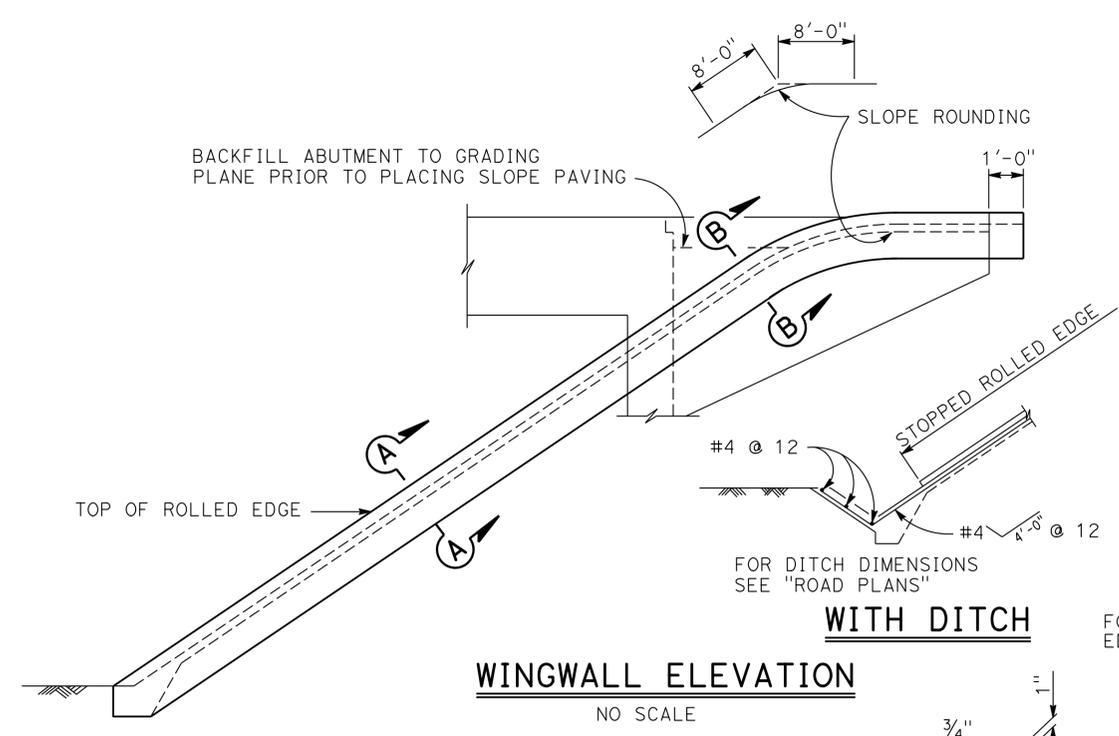
STANDARD DRAWING	
FILE NO. xs3-110	APPROVAL DATE <u>January 2015</u>

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-sheet/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.

STATE OF CALIFORNIA DEPARTMENT OF TRANSPORTATION	DIVISION OF ENGINEERING SERVICES
BRIDGE NO. 49-0162L	POST MILE 65.1

SOUTH SAN MIGUEL UC	
STRUCTURE APPROACH DRAINAGE DETAILS	
REVISION DATES	SHEET 27 OF 31

DIST	COUNTY	ROUTE	POST MILES TOTAL PROJECT	SHEET No.	TOTAL SHEETS
05	SLO, Mon	101	63.2/R69.3, R0.0/R1.9	673	858
Jose M. Aquino III REGISTERED CIVIL ENGINEER DATE 4-22-16			5-2-16 PLANS APPROVAL DATE		
REGISTERED PROFESSIONAL ENGINEER Jose M Aquino III No. 58386 Exp. 12-31-16 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.					



PICTORIAL VIEW OF TYPICAL INSTALLATION

NOTES

- (A) Top of rolled edge
- (B) Conduit:
0.064" galv corrugated steel or 0.109" smooth galv steel
- (C) Taper: { 0.064" galv corrugated steel or 0.109" smooth galv steel
- (D) 8" perforated steel pipe (0.064" thick) underdrain behind abutment.
- (E) See Project Plans for limits of Slope Paving & Drainage layout.

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

NO SCALE
Drainage details are only applicable when is indicated in project plans

NO SCALE

STANDARD DRAWING	
FILE NO. xs4-210	APPROVAL DATE <u>July 2014</u>

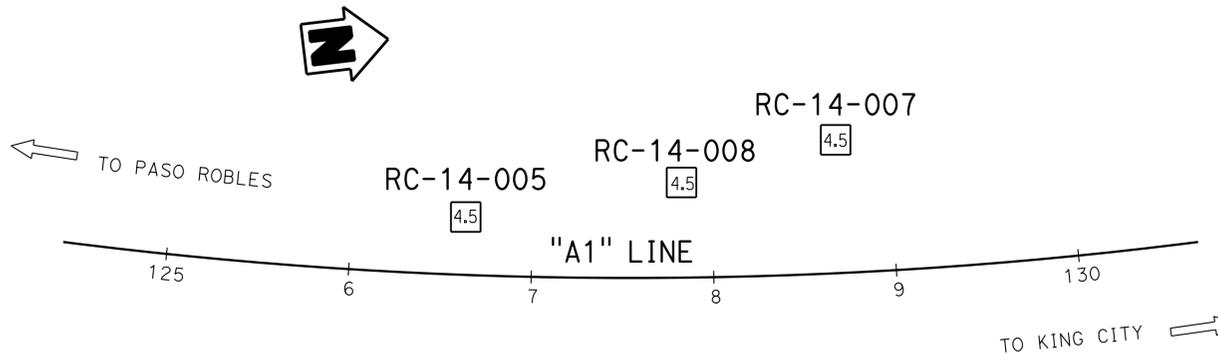
The components of this Bridge Standard Drawing have been prepared under the responsible charge of the Technical Owner, a registered civil engineer in the State of California. Refer to: <http://www.dot.ca.gov/hq/esc/techpubs/manual/bridgemanuals/bridge-standard-detail-sheet/index.html>. The selection 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.

STATE OF CALIFORNIA DEPARTMENT OF TRANSPORTATION	DIVISION OF 3 ENGINEERING SERVICES	BRIDGE NO. 49-0162L
		POST MILE 65.1
		SOUTH SAN MIGUEL UC SLOPE PAVING-FULL SLOPE-NO SKEW

BRIDGE NO. 49-0162L	SOUTH SAN MIGUEL UC SLOPE PAVING-FULL SLOPE-NO SKEW
POST MILE 65.1	

BENCH MARK

SLO-101-PM 65.05
 NAVD88 639.198-Approx NAD83
 N 2466835.618
 E: 5760565.907
 NGS brass disk.



PLAN
 1" = 50'

Note: Groundwater encountered but not measured in Boring RC-14-005.



PROFILE

Horiz: 1" = 10'
 Vert: 1" = 10'

DIST	COUNTY	ROUTE	POST MILES TOTAL PROJECT	SHEET No.	TOTAL SHEETS
05	SLO, Mon	101	63.2/R69.3, R0.0/R1.9	674	858

REGISTERED CIVIL ENGINEER DATE 11-16-15
 Ryan Turner
 No. 73956
 Exp. 6-30-17
 CIVIL
 STATE OF CALIFORNIA

PLANS APPROVAL DATE 5-2-16

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.

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.

ENGINEERING SERVICES		MATERIALS AND GEOTECHNICAL SERVICES		STATE OF CALIFORNIA		DIVISION OF ENGINEERING SERVICES		SOUTH SAN MIGUEL UC	
FUNCTIONAL SUPERVISOR	DRAWN BY: F. Nguyen	FIELD INVESTIGATION BY:		DEPARTMENT OF TRANSPORTATION		BRIDGE NO. 49-0162L		LOG OF TEST BORINGS 1 OF 3	
NAME: T. Menard	CHECKED BY: M. Jurasius	D. Appelbaum				DESIGN BRANCH 3			
06S CIVIL LOG OF TEST BORINGS SHEET		ORIGINAL SCALE IN INCHES FOR REDUCED PLANS		UNIT: 3650		PROJECT NUMBER & PHASE: 05000200201		CONTRACT NO.: 05-060404	
				0 1 2 3		DISREGARD PRINTS BEARING EARLIER REVISION DATES		REVISION DATES SHEET OF	
						10-26-15 09-27-15 10-29-15 11-10-15		29 31	

DIST	COUNTY	ROUTE	POST MILES TOTAL PROJECT	SHEET No.	TOTAL SHEETS
05	SLO, Mon	101	63.2/R69.3, R0.0/R1.9	676	858

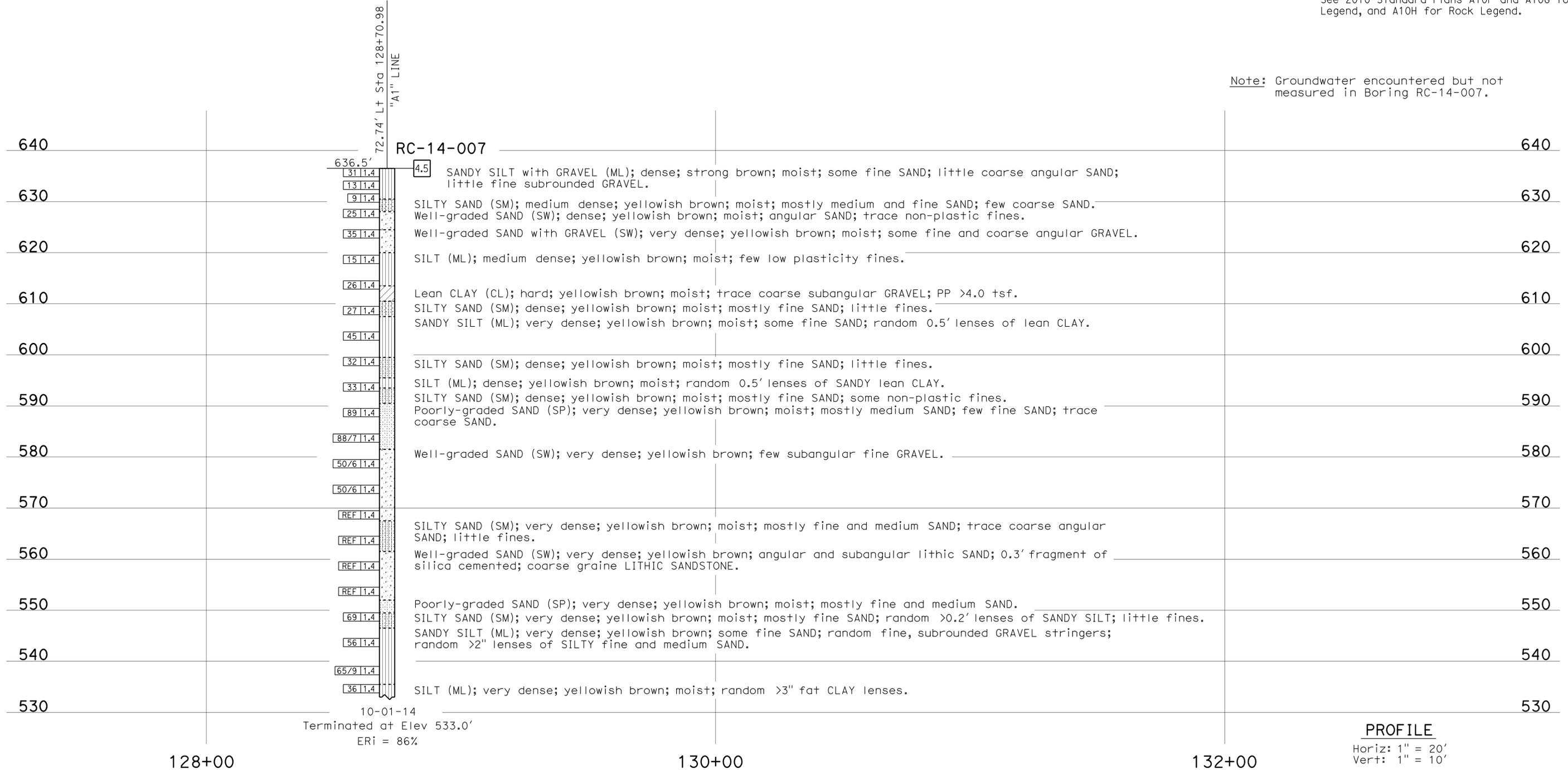
REGISTERED CIVIL ENGINEER *Ryan Turner* DATE 11-16-15
 PLANS APPROVAL DATE 5-2-16
 REGISTERED PROFESSIONAL ENGINEER
 Ryan Turner
 No. 73956
 Exp. 6-30-17
 CIVIL
 STATE OF CALIFORNIA

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FOR PLAN VIEW, SEE
"LOG OF TEST BORINGS 1 OF 3"

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: Groundwater encountered but not measured in Boring RC-14-007.



PROFILE
Horiz: 1" = 20'
Vert: 1" = 10'

ENGINEERING SERVICES		MATERIALS AND GEOTECHNICAL SERVICES		STATE OF CALIFORNIA		DIVISION OF ENGINEERING SERVICES		SOUTH SAN MIGUEL UC	
FUNCTIONAL SUPERVISOR		DRAWN BY: F. Nguyen		DEPARTMENT OF TRANSPORTATION		BRIDGE NO. 49-0162L		LOG OF TEST BORINGS 3 OF 3	
NAME: T. Menard		CHECKED BY: J. Scardine		FIELD INVESTIGATION BY: M. Jurasius		DESIGN BRANCH 3			
06S CIVIL LOG OF TEST BORINGS SHEET		ORIGINAL SCALE IN INCHES FOR REDUCED PLANS		UNIT: 3650		PROJECT NUMBER & PHASE: 05000200201		CONTRACT NO.: 05-060404	
				0 1 2 3		DISREGARD PRINTS BEARING EARLIER REVISION DATES		REVISION DATES	
								10-26-15 09-27-15 10-29-15 11-10-15	
								SHEET 31 OF 31	

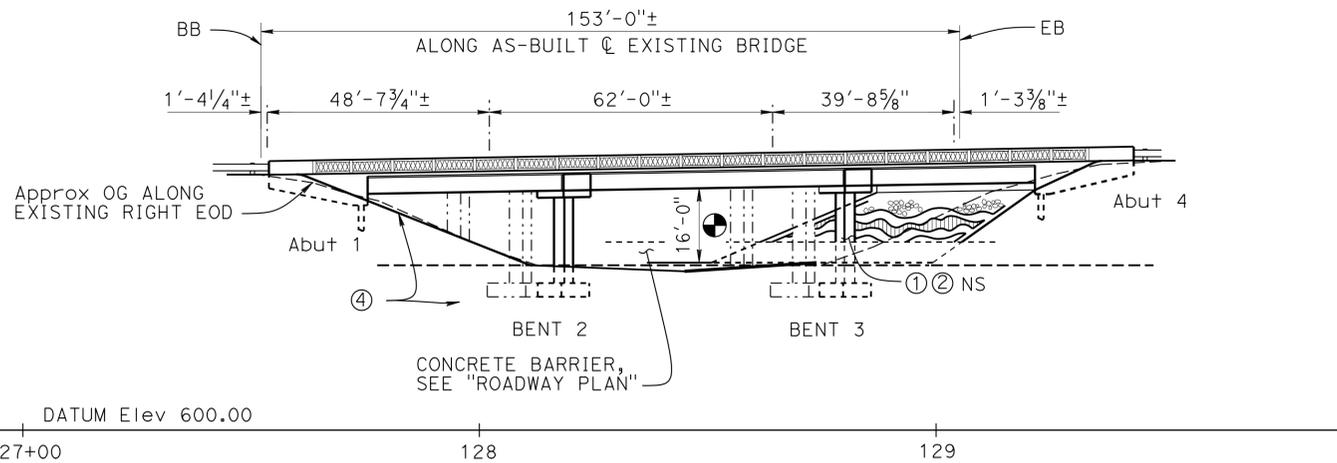
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USERNAME => s115755 DATE PLOTTED => 22-JUL-2016 TIME PLOTTED => 17:53

DIST	COUNTY	ROUTE	POST MILES TOTAL PROJECT	SHEET No.	TOTAL SHEETS
05	SLO, Mon	101	63.2/R69.3, R0.0/R1.9	677	858

Jose M. Aquino III 4-22-16
 REGISTERED CIVIL ENGINEER DATE
 5-2-16
 PLANS APPROVAL DATE
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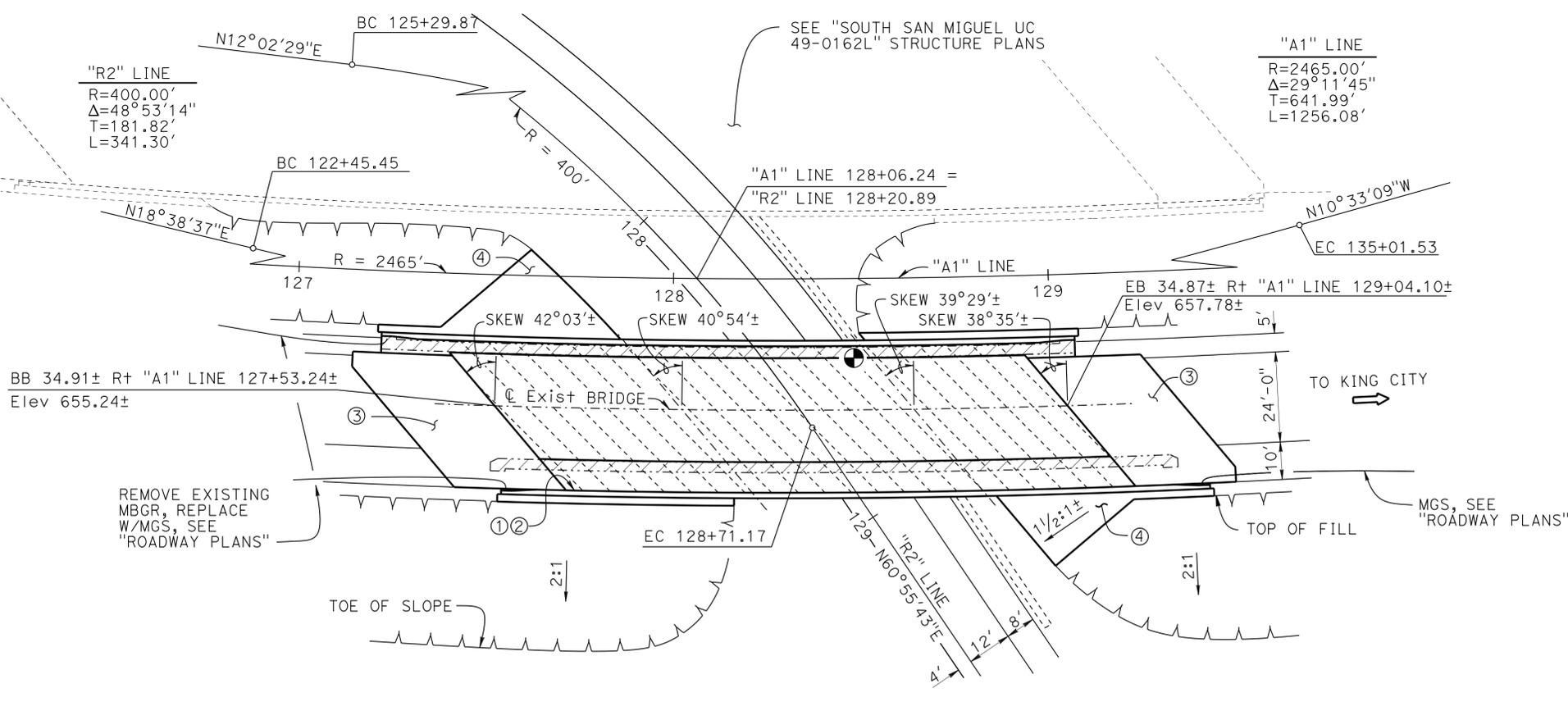
REGISTERED PROFESSIONAL ENGINEER
 Jose M Aquino III
 No. 58386
 Exp. 12-31-16
 CIVIL
 STATE OF CALIFORNIA



ELEVATION
1" = 20'

- LEGEND:**
- - - - - Indicates existing bridge
 - Indicates new construction
 - Indicates existing barrier removal
 - Indicates limits of prepare bridge deck and place Polyester Concrete Overlay
 - ⊕ - Point of minimum vertical clearance

- NOTES:**
- ① Paint "Br. No. 49-0162R"
 - ② Paint "SOUTH SAN MIGUEL UC"
 - ③ Structure Approach Type R (30D)
 - ④ Slope paving w/surface texture treatment
- For "TYPICAL SECTION", see "GENERAL PLAN NO. 2" sheet
 For "GENERAL NOTES" and "INDEX TO PLANS", see "INDEX TO PLANS" sheet



PLAN
1" = 20'

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

QUANTITIES

PREPARE CONCRETE BRIDGE DECK SURFACE	5,967	SQFT
FURNISH POLYESTER CONCRETE OVERLAY	457	CF
PLACE POLYESTER CONCRETE OVERLAY	5,967	SQFT
BRIDGE REMOVAL (PORTION), LOCATION A	LUMP	SUM
STRUCTURE EXCAVATION (BRIDGE)	170	CY
STRUCTURE BACKFILL (BRIDGE)	112	CY
16" CAST-IN-DRILLED-HOLE CONCRETE PILING	107	LF
STRUCTURAL CONCRETE, BRIDGE FOOTING	32	CY
STRUCTURAL CONCRETE, BRIDGE	65	CY
STRUCTURAL CONCRETE, BRIDGE (POLYMER FIBER)	59	CY
STRUCTURAL CONCRETE, APPROACH SLAB (TYPE R)	97	CY
PAVING NOTCH - EXTENSION	55	CF
DRILL AND PRESSURE GROUT BAR REINFORCING	32	LF
DRILL AND BOND DOWEL	228	LF
DRILL AND BOND DOWEL (CHEMICAL ADHESIVE)	20	EA
FURNISH PRECAST PRESTRESSED CONCRETE GIRDER (30'-40')	2	EA
FURNISH PRECAST PRESTRESSED CONCRETE GIRDER (40'-50')	2	EA
FURNISH PRECAST PRESTRESSED CONCRETE GIRDER (50'-60')	2	EA
ERECT PRECAST PRESTRESSED CONCRETE GIRDER	6	EA
JOINT SEAL (MR 1/2")	100	LF
BAR REINFORCING STEEL (BRIDGE)	44,300	LB
HEADED BAR REINFORCEMENT	32	EA
PREPARE AND PAINT CONCRETE	584	SQFT
SLOPE PAVING (CONCRETE)	57	CY
CONCRETE BARRIER (TYPE 736 MODIFIED)	376	LF

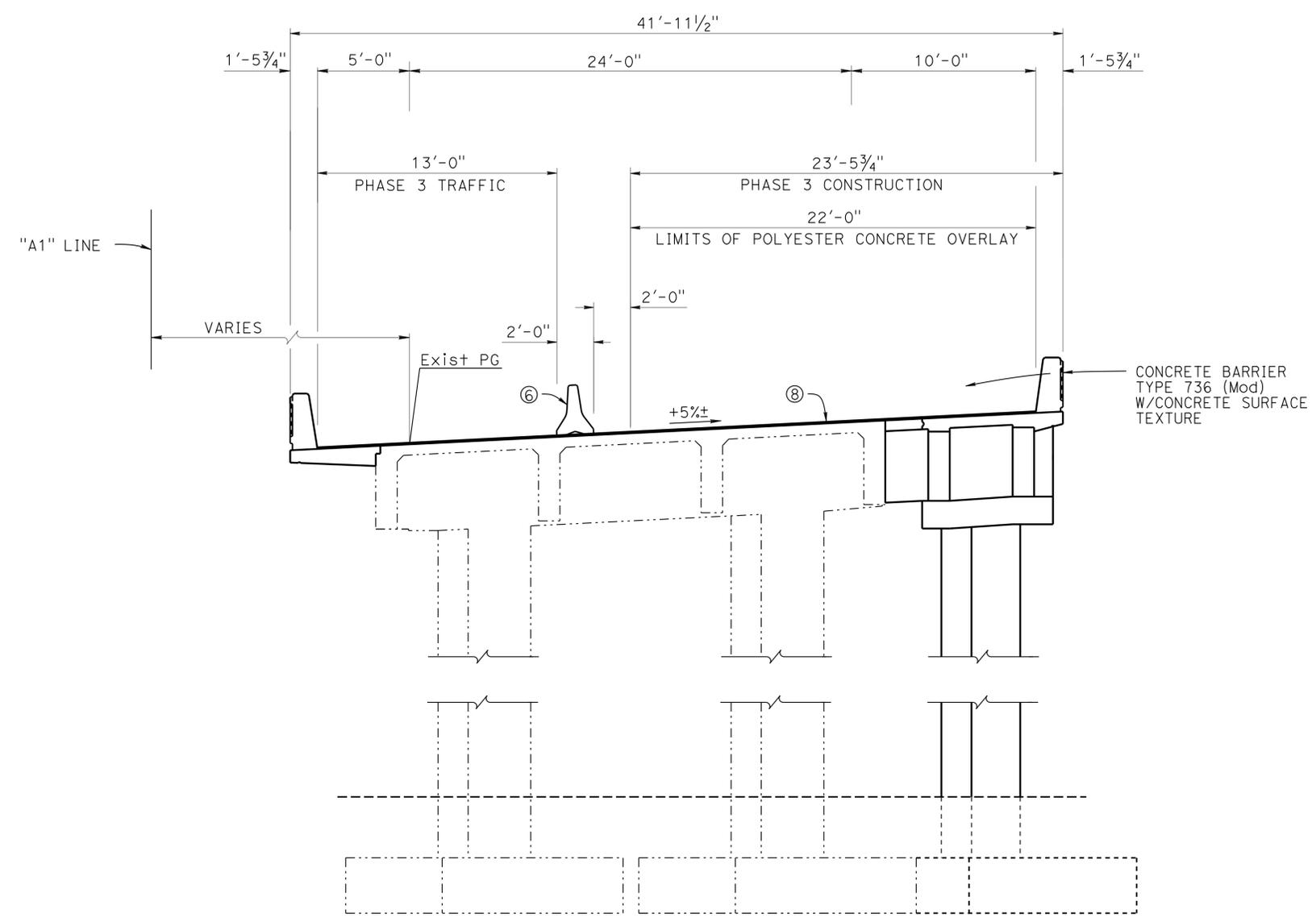
DESIGN ENGINEER Joseph E Downing	DESIGN	BY Arturo V Herrera	CHECKED Mufeed Khalaf	LOAD FACTOR DESIGN	LIVE LOADING: HS20-44 AND ALTERNATIVE AND PERMIT DESIGN LOAD	STATE OF CALIFORNIA DEPARTMENT OF TRANSPORTATION	DIVISION OF ENGINEERING SERVICES STRUCTURE DESIGN DESIGN BRANCH 3	BRIDGE NO.	SOUTH SAN MIGUEL UC (WIDEN) GENERAL PLAN NO. 1
	DETAILS	BY Nancy C Gwynn	CHECKED Mufeed Khalaf	LAYOUT	BY Arturo V Herrera			CHECKED Mufeed Khalaf	
QUANTITIES	BY Lewis L Shen	CHECKED Raman Guraya	SPECIFICATIONS	BY Jim Corrado	CHECKED Jim Corrado	PROJECT NUMBER & PHASE: 05000200201	POST MILE	65.1	CONTRACT NO.: 05-060404

ORIGINAL SCALE IN INCHES FOR REDUCED PLANS
 UNIT: 3578
 DISREGARD PRINTS BEARING EARLIER REVISION DATES
 REVISION DATES: 4-16-14, 9-30-15, 3-28-16
 SHEET 1 OF 33

DIST	COUNTY	ROUTE	POST MILES TOTAL PROJECT	SHEET No.	TOTAL SHEETS
05	SLO, Mon	101	63.2/R69.3, R0.0/R1.9	679	858

Jose M. Aquino III 4-22-16
 REGISTERED CIVIL ENGINEER DATE
 5-2-16
 PLANS APPROVAL DATE
 Jose M. Aquino III
 No. 58386
 Exp. 12-31-16
 CIVIL
 STATE OF CALIFORNIA

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**STAGE 1 (PHASE 3)
TYPICAL SECTION**
1/4" = 1'-0"

LEGEND:
 - - - - - Indicates existing bridge
 ———— Indicates new construction

- NOTES:**
- ⑥ Temporary Railing (Type K), see "ROADWAY PLANS"
 - ⑧ 1" & Var Polyester Concrete Overlay
 - 1. Other Stages not shown, see "ROADWAY PLANS"
 - 2. Structure Approach work must be performed during Phase 2 & 3 Construction limits

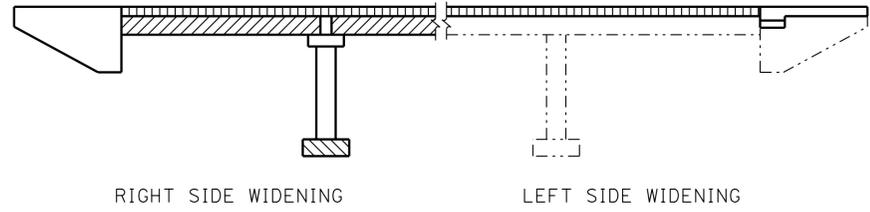
NOTE:
 THE CONTRACTOR MUST VERIFY ALL CONTROLLING FIELD DIMENSIONS BEFORE ORDERING OR FABRICATING ANY MATERIAL.

DESIGN ENGINEER Joseph E. Downing	DESIGN	BY Arturo V Herrera	CHECKED Mufeed Khalaf	LOAD FACTOR DESIGN	LIVE LOADING: HS20-44 AND ALTERNATIVE AND PERMIT DESIGN LOAD	STATE OF CALIFORNIA DEPARTMENT OF TRANSPORTATION	DIVISION OF ENGINEERING SERVICES STRUCTURE DESIGN DESIGN BRANCH 3	BRIDGE NO.	SOUTH SAN MIGUEL UC (WIDEN) GENERAL PLAN NO. 3
	DETAILS	BY Nancy C Gwynn	CHECKED Mufeed Khalaf	LAYOUT				BY Arturo V Herrera	
	QUANTITIES	BY Lewis L Shen	CHECKED Raman Guraya	SPECIFICATIONS	BY Jim Corrado	CHECKED Jim Corrado			

ORIGINAL SCALE IN INCHES FOR REDUCED PLANS
 0 1 2 3
 UNIT: 3578
 PROJECT NUMBER & PHASE: 05000200201
 CONTRACT NO.: 05-060404
 DISREGARD PRINTS BEARING EARLIER REVISION DATES
 REVISION DATES: 7-28-15, 9-15-15
 SHEET 3 OF 33

DIST	COUNTY	ROUTE	POST MILES TOTAL PROJECT	SHEET No.	TOTAL SHEETS
05	SLO, Mon	101	63.2/R69.3, R0.0/R1.9	680	858

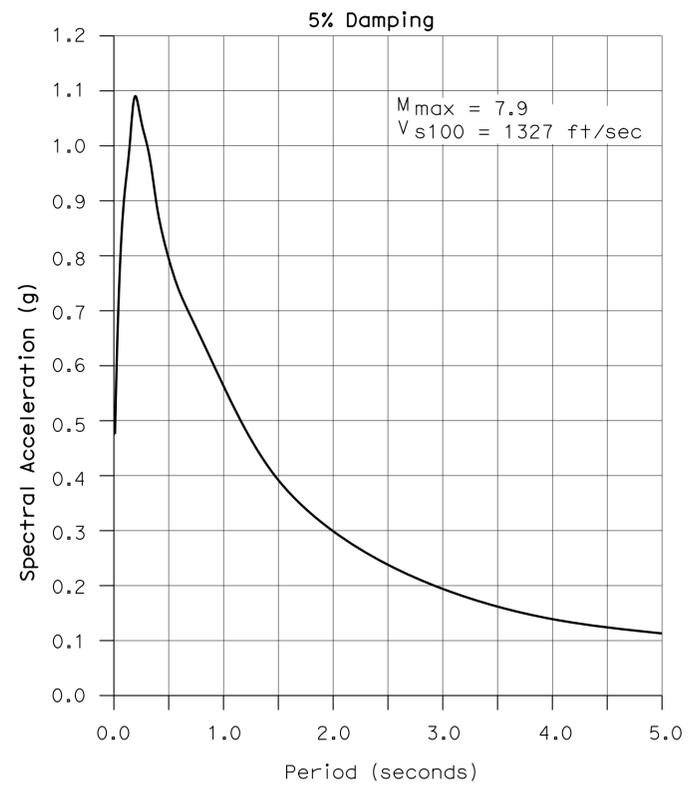
DATE: 4-22-16
 REGISTERED CIVIL ENGINEER: Jose M. Aquino III
 No. 58386
 Exp. 12-31-16
 CIVIL
 STATE OF CALIFORNIA
 PLANS APPROVAL DATE: 5-2-16
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- LEGEND:
- Structural Concrete, Bridge
 - Structural Concrete, Bridge (Polymer Fiber) (4000 psi @ 28 days)
 - Structural Concrete, Bridge Footing
 - Precast/PS Concrete Girder, Bridge (5000 psi @ 28 days)

CONCRETE STRENGTH AND TYPE LIMITS

NO SCALE



SITE SPECIFIC ARS CURVE

NO SCALE

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

GENERAL NOTES

- DESIGN:**
Bridge Design Specifications-April 2000 (LFD)
(1996 AASHTO with Interims and Revisions by CALTRANS)
- DEAD LOAD:**
Includes 11.67 psf for 1" polyester concrete overlay.
No future additional deck surfacing/overlay allowed
- LIVE LOADING:**
HS20-44 and permit load
- SEISMIC DESIGN:**
See "SITE SPECIFIC ARS CURVE"
- REINFORCED CONCRETE:**
f_y = 60 ksi
f'_c = 3600 psi
n = 8

INDEX TO PLANS

SHEET No.	TITLE
1	GENERAL PLAN No. 1
2	GENERAL PLAN No. 2
3	GENERAL PLAN No. 3
4	INDEX TO PLANS
5	FOUNDATION PLAN
6	ABUTMENT DETAILS No. 1
7	ABUTMENT DETAILS No. 2
8	ABUTMENT DETAILS No. 3
9	ABUTMENT DETAILS No. 4
10	ABUTMENT DETAILS No. 5
11	ABUTMENT DETAILS No. 6
12	BENT DETAILS No. 1
13	BENT DETAILS No. 2
14	BENT DETAILS No. 3
15	TYPICAL SECTION No. 1
16	TYPICAL SECTION No. 2
17	GIRDER LAYOUT
18	GIRDER DETAILS
19	PRECAST PRESTRESSED GIRDER
20	CONCRETE REMOVAL Det No. 1
21	CONCRETE REMOVAL Det No. 2
22	BARRIER SURFACE TEXTURE
23	SLOPE PAVING LAYOUT
24	SLOPE PAVING SURFACE TEXTURE Det No. 1
25	SLOPE PAVING SURFACE TEXTURE Det No. 2
26	SLOPE PAVING SURFACE TEXTURE Det No. 3
27	STRUCTURE APPROACH DRAINAGE DETAILS
28	STRUCTURE APPROACH TYPE N (30D)
29	SLOPE PAVING-FULL SLOPE-NO SKEW
30	LOG OF TEST BORINGS 1 OF 4
31	LOG OF TEST BORINGS 2 OF 4
32	LOG OF TEST BORINGS 3 OF 4
33	LOG OF TEST BORINGS 4 OF 4

PILE DATA TABLE

LOCATION	PILE TYPE	NOMINAL AXIAL RESISTANCE (kips) (LFD)		DESIGN TIP ELEVATION	SPECIFIED TIP ELEVATION
		COMPRESSION	TENSION		
Abutment 1	16" CIDH	170	N/A	622.70	622.70
Abutment 4	16" CIDH	170	N/A	626.20	626.20

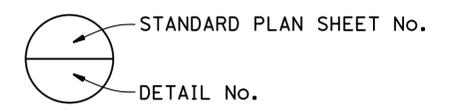
NOTE: Specified Tip elevation shall not be raised

SPREAD FOOTING DATA TABLE

LOCATION	PERMISSIBLE NET CONTACT STRESS (SETTLEMENT) (ksf)	FACTORED GROSS BEARING RESISTANCE (ksf)
Bent 2	3.0	10.0
Bent 3	2.8	10.0

STANDARD PLANS DATED 2010

RSP	A10A	ABBREVIATIONS (SHEET 1 OF 2)
	A10B	ABBREVIATIONS (SHEET 2 OF 2)
	A10C	LINE AND SYMBOLS (SHEET 1 OF 3)
	A10D	LINE AND SYMBOLS (SHEET 2 OF 3)
	A10E	LINE AND SYMBOLS (SHEET 3 OF 3)
RSP	A10F	LEGEND - SOIL (SHEET 1 OF 2)
RSP	A10G	LEGEND - SOIL (SHEET 2 OF 2)
	A10H	LEGEND - ROCK
	A62C	LIMITS OF PAYMENT FOR EXCAVATION AND BACKFILL BRIDGE
	B0-1	BRIDGE DETAILS
	B0-3	BRIDGE DETAILS
	B0-5	BRIDGE DETAILS
	B2-3	16" AND 24" CAST-IN-DRILLED-HOLE CONCRETE PILE
RSP	B6-21	JOINT SEALS (MAXIMUM MOVEMENT RATING = 2")
RSP	B11-56	CONCRETE BARRIER TYPE 736



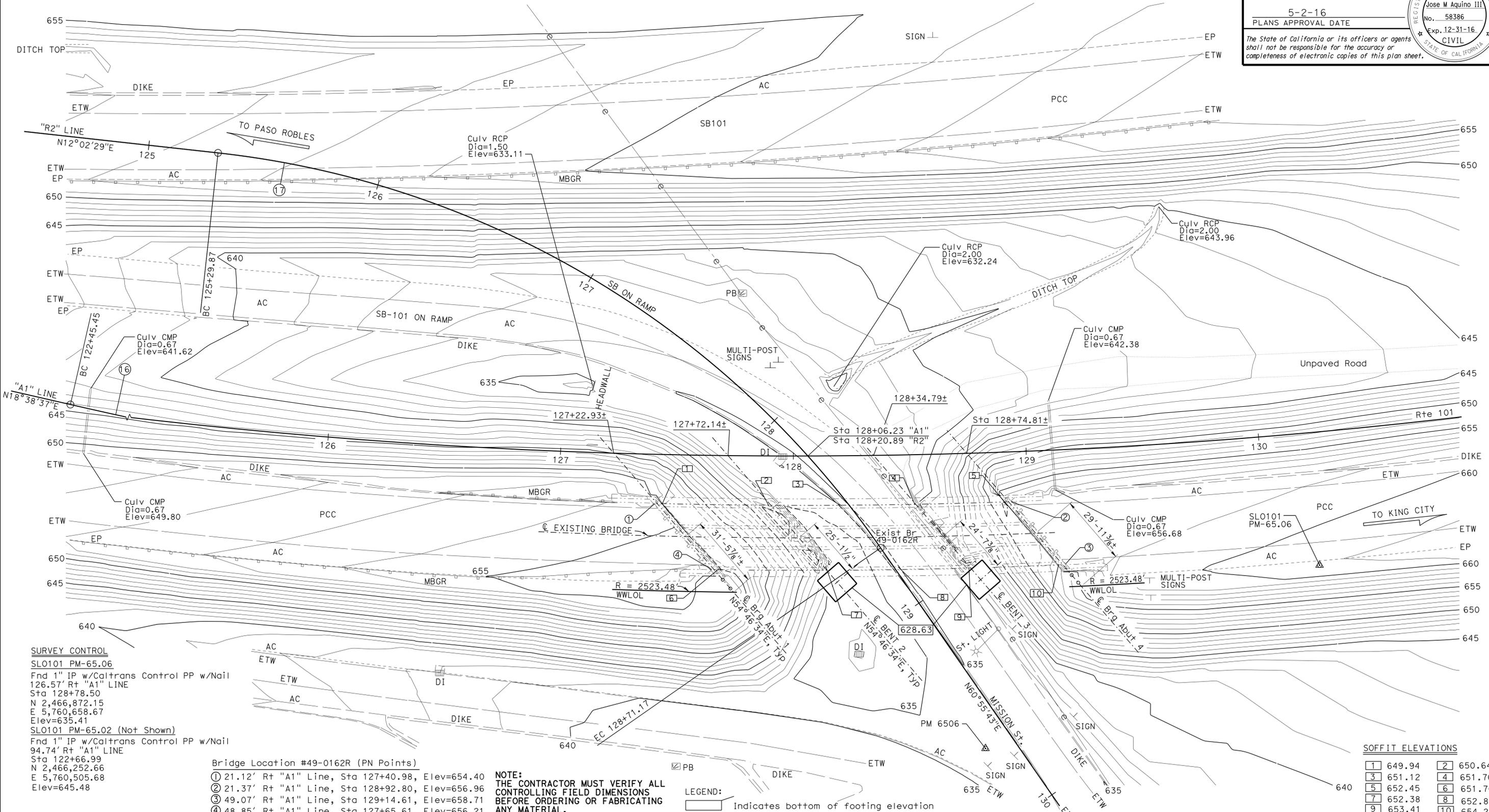
STRUCTURES DESIGN DETAIL SHEET (ENGLISH) (REV. 09-01-10)	DESIGN	BY Arturo V Herrera	CHECKED Mufeed Khalaf	STATE OF CALIFORNIA DEPARTMENT OF TRANSPORTATION	DIVISION OF ENGINEERING SERVICES STRUCTURE DESIGN DESIGN BRANCH 3	BRIDGE NO.	SOUTH SAN MIGUEL UC (WIDEN)			
	DETAILS	BY Nancy C Gwynn	CHECKED Mufeed Khalaf			49-0162R				
	QUANTITIES	BY Lewis L Shen	CHECKED Raman Guraya			POST MILE		65.1	INDEX TO PLANS	
ORIGINAL SCALE IN INCHES FOR REDUCED PLANS					UNIT: 3578	PROJECT NUMBER & PHASE: 05000200201	CONTRACT NO.: 05-0G0404	DISREGARD PRINTS BEARING EARLIER REVISION DATES	REVISION DATES	SHEET 4 OF 33

CURVE DATA

No.	R	Δ	T	L
16	2465.00	29°11'45"	641.99	1256.08
17	400.00	48°53'14"	181.82	341.30

DIST	COUNTY	ROUTE	POST MILES TOTAL PROJECT	SHEET No.	TOTAL SHEETS
05	SLO, Mon	101	63.2/R69.3, R0.0/R1.9	681	858

REGISTERED CIVIL ENGINEER DATE 4-22-16
 REGISTERED PROFESSIONAL ENGINEER
 Jose M. Aquino III No. 58386 Exp. 12-31-16 CIVIL
 STATE OF CALIFORNIA
 PLANS APPROVAL DATE 5-2-16
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SURVEY CONTROL
 SLO101 PM-65.06
 Fnd 1" IP w/Caltrans Control PP w/Nail
 126.57' Rt "A1" LINE
 Sta 128+78.50
 N 2,466,872.15
 E 5,760,658.67
 Elev=635.41
 SLO101 PM-65.02 (Not Shown)
 Fnd 1" IP w/Caltrans Control PP w/Nail
 94.74' Rt "A1" LINE
 Sta 122+66.99
 N 2,466,252.66
 E 5,760,505.68
 Elev=645.48

Bridge Location #49-0162R (PN Points)
 ① 21.12' Rt "A1" Line, Sta 127+40.98, Elev=654.40
 ② 21.37' Rt "A1" Line, Sta 128+92.80, Elev=656.96
 ③ 49.07' Rt "A1" Line, Sta 129+14.61, Elev=658.71
 ④ 48.85' Rt "A1" Line, Sta 127+65.61, Elev=656.21

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

LEGEND:
 [Symbol] Indicates bottom of footing elevation
 [Symbol] Indicates piles. For layout see "ABUTMENT DETAILS No. 1" sheet

SOFFIT ELEVATIONS

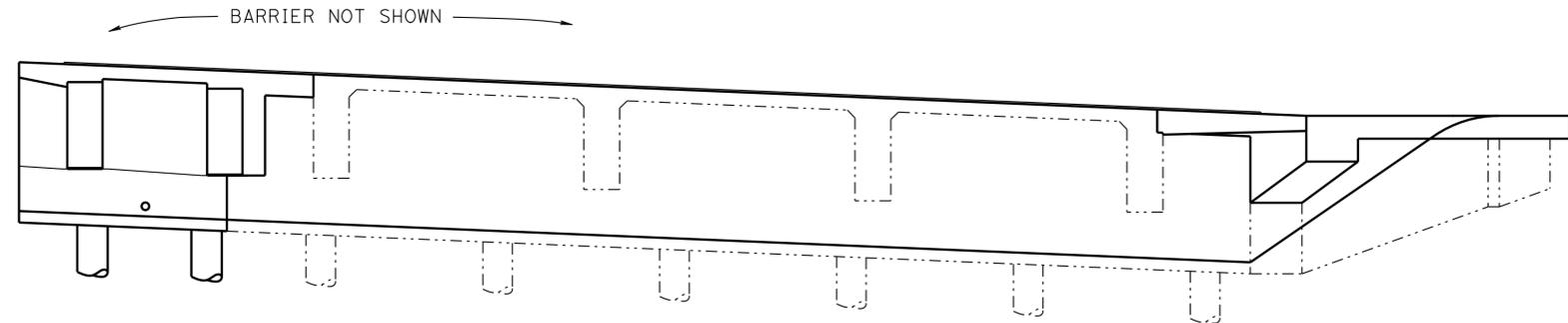
1	649.94	2	650.64
3	651.12	4	651.70
5	652.45	6	651.70
7	652.38	8	652.89
9	653.41	10	654.25

PRELIMINARY INVESTIGATION SECTION				DESIGN BY Arturo V Herrera	CHECKED Mufeed Khalaf	STATE OF CALIFORNIA DEPARTMENT OF TRANSPORTATION	DIVISION OF ENGINEERING SERVICES STRUCTURE DESIGN DESIGN BRANCH 3	BRIDGE NO. 49-0162R	SOUTH SAN MIGUEL UC (WIDEN) FOUNDATION PLAN	
SCALE VERT. DATUM NAVD88	PHOTOGRAMMETRY AS OF: X	BY Nancy C Gwynn	CHECKED Mufeed Khalaf	POST MILE 65.1						
1"=20'	HORIZ. DATUM NAD83 (92)	CHECKED BY S. ZHENG 08/2014	CHECKED Raman Guraya							
STRUCTURES FOUNDATION PLAN SHEET (ENGLISH) (REV. 09-01-10)				ORIGINAL SCALE IN INCHES FOR REDUCED PLANS	UNIT: 3646	PROJECT NUMBER & PHASE: 05000200201	CONTRACT NO.: 05-060404	DISREGARD PRINTS BEARING EARLIER REVISION DATES	REVISION DATES	SHEET 5 OF 33

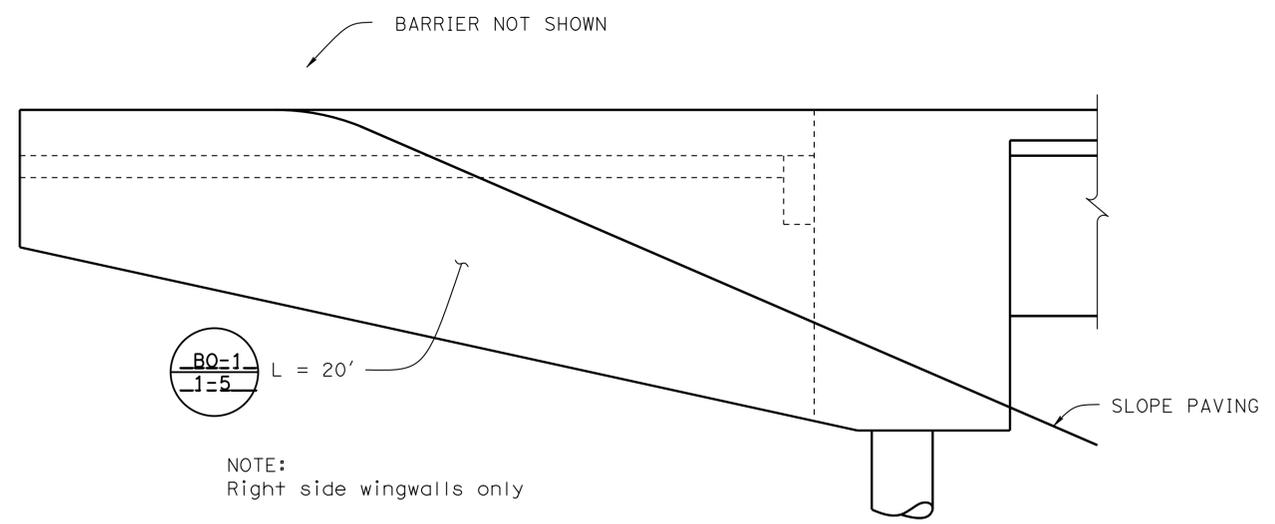
DIST	COUNTY	ROUTE	POST MILES TOTAL PROJECT	SHEET No.	TOTAL SHEETS
05	SLO, Mon	101	63.2/R69.3, R0.0/R1.9	683	858

Jose M. Aquino III 4-22-16
 REGISTERED CIVIL ENGINEER DATE
 5-2-16
 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.

REGISTERED PROFESSIONAL ENGINEER
 Jose M Aquino III
 No. 58386
 Exp. 12-31-16
 CIVIL
 STATE OF CALIFORNIA



ELEVATION
1/4" = 1'-0"

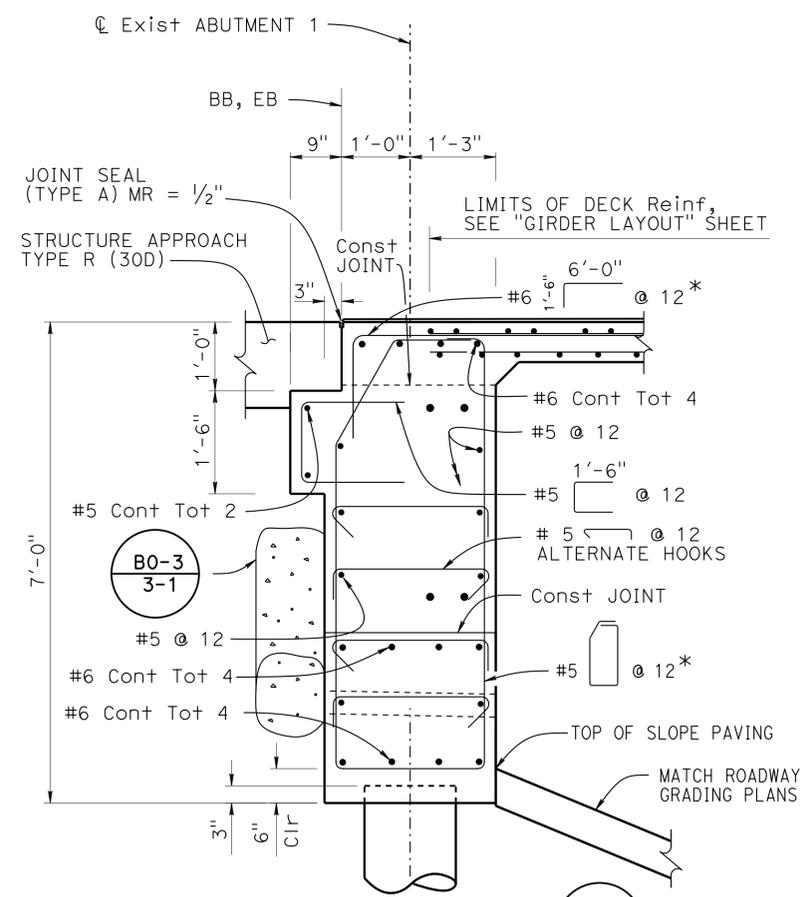


RIGHT SIDE WINGWALL ELEVATION
1/2" = 1'-0"

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

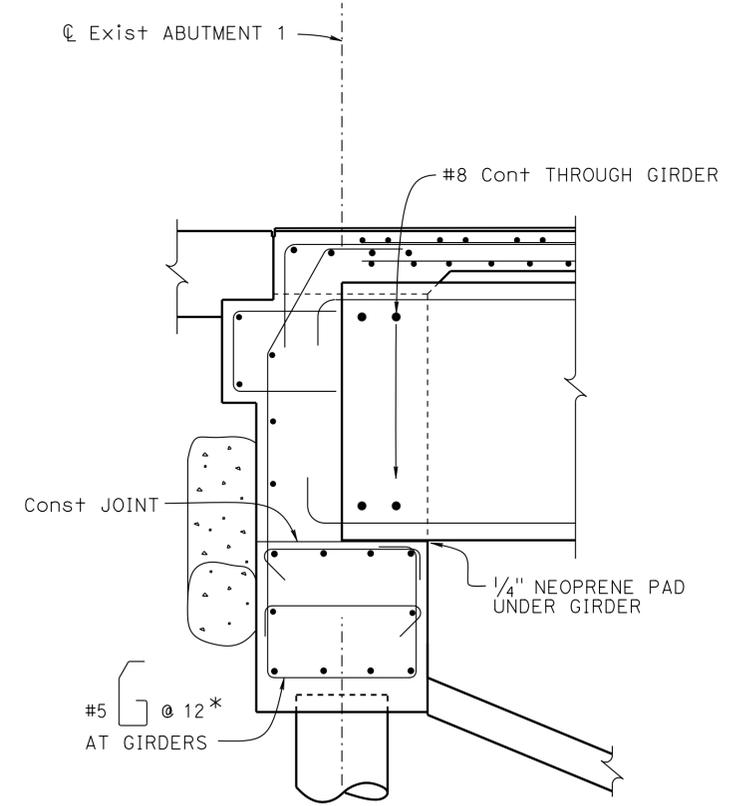
NOTE:
Abutment 1 shown, Abutment 4 similar

LEGEND:
* Place parallel to $\text{\textcircled{C}}$ girders



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

NOTES:
1. For alternative to Standard Plan see "WEEP HOLE, AND GEOCOMPOSITE DRAIN" detail, "ABUTMENT DETAILS NO. 3" sheet
2. For details not shown, see "SECTION B-B"



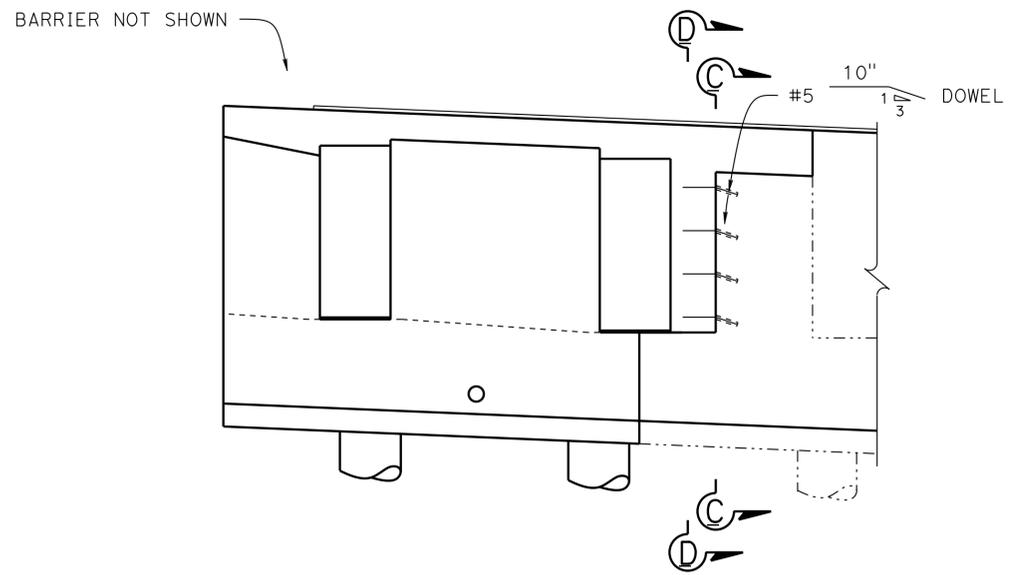
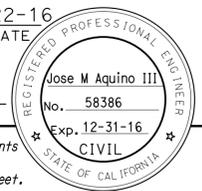
SECTION B-B
3/4" = 1'-0"

NOTES:
1. For details not shown, see "SECTION A-A"
2. For girder details, see "PRECAST PRESTRESSED GIRDER" details sheet

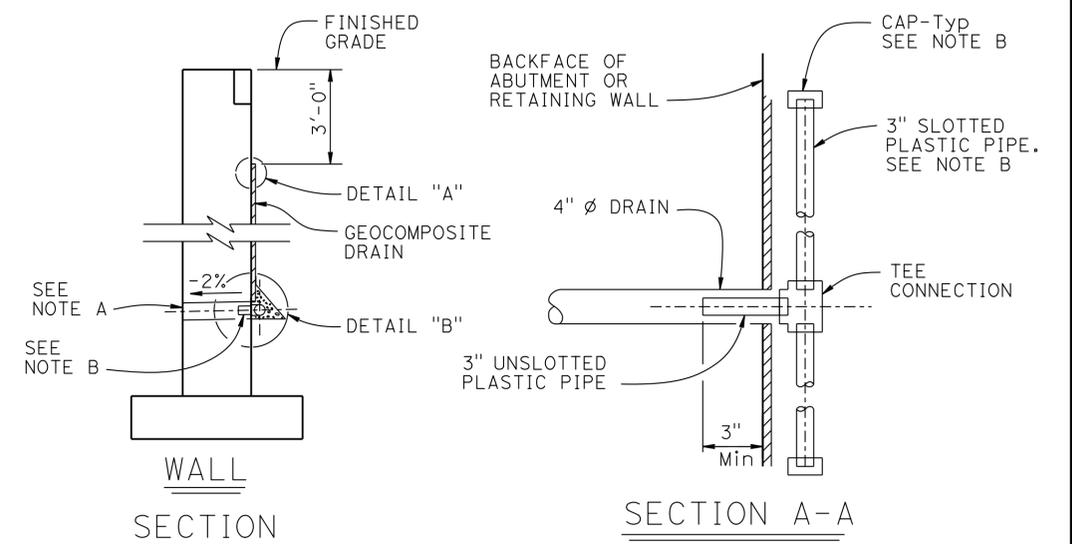
<table border="1" style="width: 100%; border-collapse: collapse;"> <tr> <td style="width: 30%;">DESIGN</td> <td style="width: 30%;">BY Arturo V Herrera</td> <td style="width: 40%;">CHECKED Mufeed Khalaf</td> </tr> <tr> <td>DETAILS</td> <td>BY Nancy C Gwynn</td> <td>CHECKED Mufeed Khalaf</td> </tr> <tr> <td>QUANTITIES</td> <td>BY Lewis L Shen</td> <td>CHECKED Raman Guraya</td> </tr> </table>	DESIGN	BY Arturo V Herrera	CHECKED Mufeed Khalaf	DETAILS	BY Nancy C Gwynn	CHECKED Mufeed Khalaf	QUANTITIES	BY Lewis L Shen	CHECKED Raman Guraya	STATE OF CALIFORNIA DEPARTMENT OF TRANSPORTATION	DIVISION OF ENGINEERING SERVICES STRUCTURE DESIGN DESIGN BRANCH 3	BRIDGE NO. 49-0162R POST MILE 65.1	SOUTH SAN MIGUEL UC (WIDEN) ABUTMENT DETAILS No. 2
DESIGN	BY Arturo V Herrera	CHECKED Mufeed Khalaf											
DETAILS	BY Nancy C Gwynn	CHECKED Mufeed Khalaf											
QUANTITIES	BY Lewis L Shen	CHECKED Raman Guraya											
STRUCTURES DESIGN DETAIL SHEET (ENGLISH) (REV. 09-01-10)		ORIGINAL SCALE IN INCHES FOR REDUCED PLANS	UNIT: 3578 PROJECT NUMBER & PHASE: 05000200201	CONTRACT NO.: 05-060404	DISREGARD PRINTS BEARING EARLIER REVISION DATES <table border="1" style="font-size: x-small; border-collapse: collapse;"> <tr> <th>REVISION</th> <th>DATE</th> <th>BY</th> <th>DESCRIPTION</th> </tr> <tr> <td> </td> <td> </td> <td> </td> <td> </td> </tr> </table>	REVISION	DATE	BY	DESCRIPTION				
REVISION	DATE	BY	DESCRIPTION										

USERNAME => 8115765 DATE PLOTTED => 22-JUL-2016 TIME PLOTTED => 17:53

DIST	COUNTY	ROUTE	POST MILES TOTAL PROJECT	SHEET No.	TOTAL SHEETS
05	SLO, Mon	101	63.2/R69.3, R0.0/R1.9	684	858
Jose M. Aquino III REGISTERED CIVIL ENGINEER			4-22-16	DATE	
5-2-16 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.					

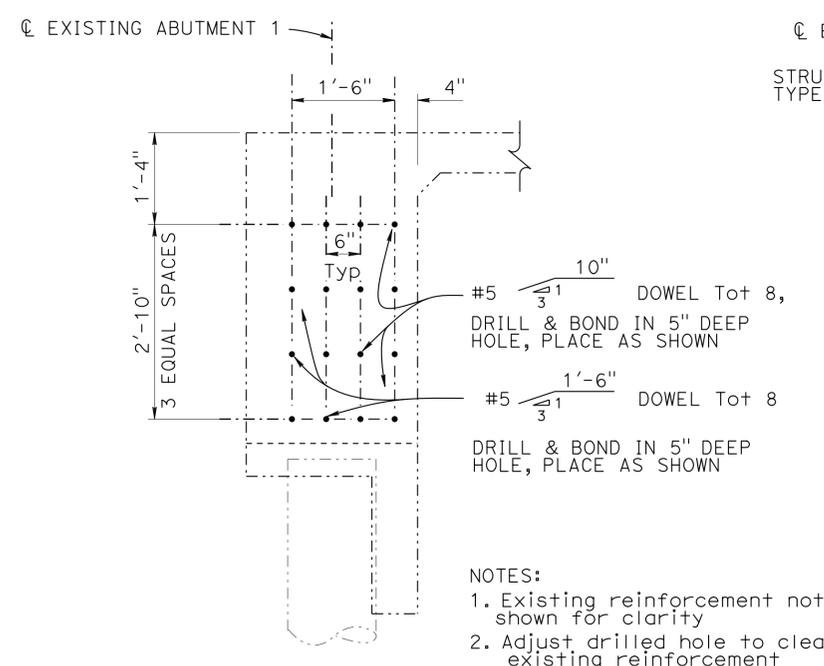


PART ELEVATION
1/4" = 1'-0"

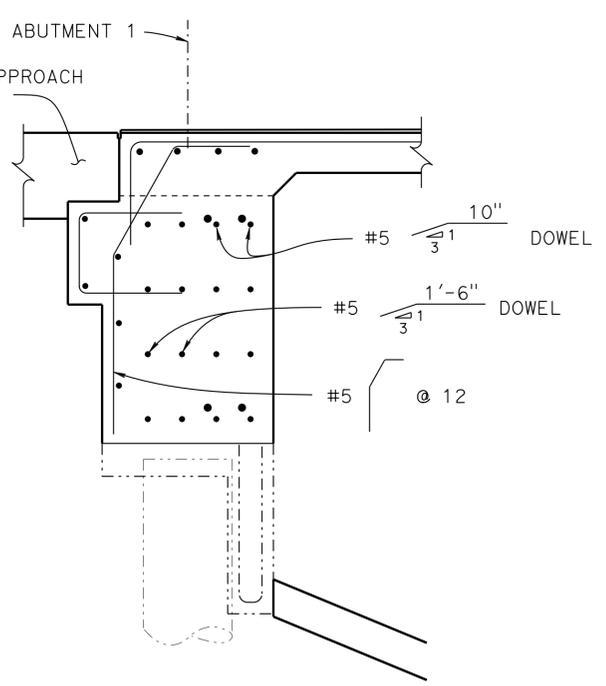


WALL SECTION

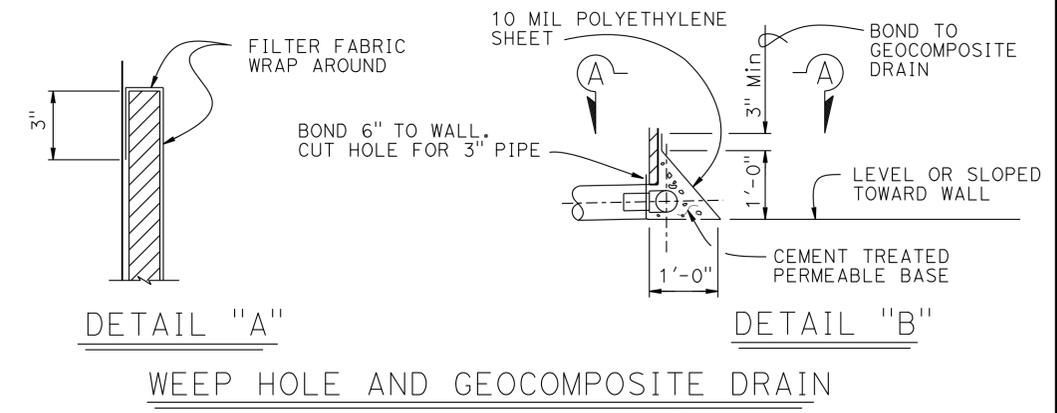
SECTION A-A



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



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



WEEP HOLE AND GEOCOMPOSITE DRAIN

ALTERNATIVE TO BRIDGE DETAIL BO-3
3-1

- NOTES:
- A. 4" \varnothing drains at intermediate s/g points and at 25' max center to center (9' c-c for Type 3 and 9'-3" c-c for Type 4 retaining walls). For walls adjacent to sidewalks or curbs, provide 4" \varnothing plastic pipe under the sidewalk to discharge through curb face. Exposed wall drains shall be located 3" \pm above finished grade.
 - B. Geocomposite drain, cement treated permeable base, and 3" \varnothing slotted plastic pipe continuous behind retaining wall or abutment. Cap ends of pipe. Provide "Tee" connection at each 4" \varnothing drain.
 - C. Connect the low end of plastic pipe to the main outlet pipe as applicable.

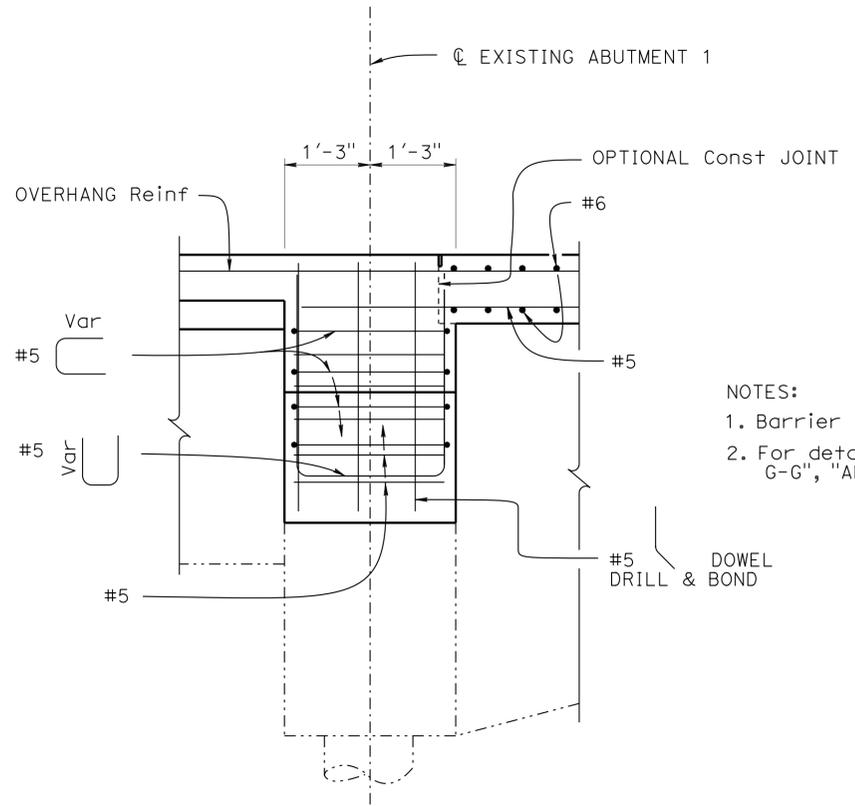
NOTE:
THE CONTRACTOR MUST VERIFY ALL CONTROLLING FIELD DIMENSIONS BEFORE ORDERING OR FABRICATING ANY MATERIAL.

NOTE:
Abutment 1 shown, Abutment 4 similar

STRUCTURES DESIGN DETAIL SHEET (ENGLISH) (REV. 09-01-10) ORIGINAL SCALE IN INCHES FOR REDUCED PLANS	DESIGN	BY Arturo V Herrera	CHECKED Mufeed Khalaf	STATE OF CALIFORNIA DEPARTMENT OF TRANSPORTATION	BRIDGE NO.	49-0162R	SOUTH SAN MIGUEL UC (WIDEN) ABUTMENT DETAILS No. 3
	DETAILS	BY Nancy C Gwynn	CHECKED Mufeed Khalaf		POST MILE	65.1	
	QUANTITIES	BY Lewis L Shen	CHECKED Raman Guraya		PROJECT NUMBER & PHASE: 05000200201	CONTRACT NO.: 05-060404	

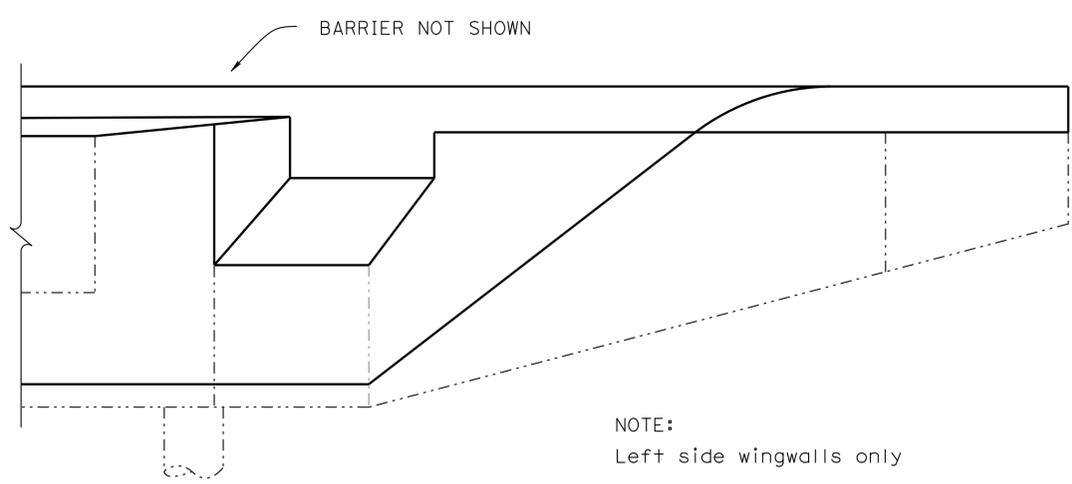
DIST	COUNTY	ROUTE	POST MILES TOTAL PROJECT	SHEET No.	TOTAL SHEETS
05	SLO, Mon	101	63.2/R69.3, R0.0/R1.9	685	858
			DATE		
			4-22-16		
			REGISTERED CIVIL ENGINEER		
			PLANS APPROVAL DATE		
			5-2-16		
			REGISTERED PROFESSIONAL ENGINEER		
			Jose M Aquino III		
			No. 58386		
			Exp. 12-31-16		
			CIVIL		
			STATE OF CALIFORNIA		

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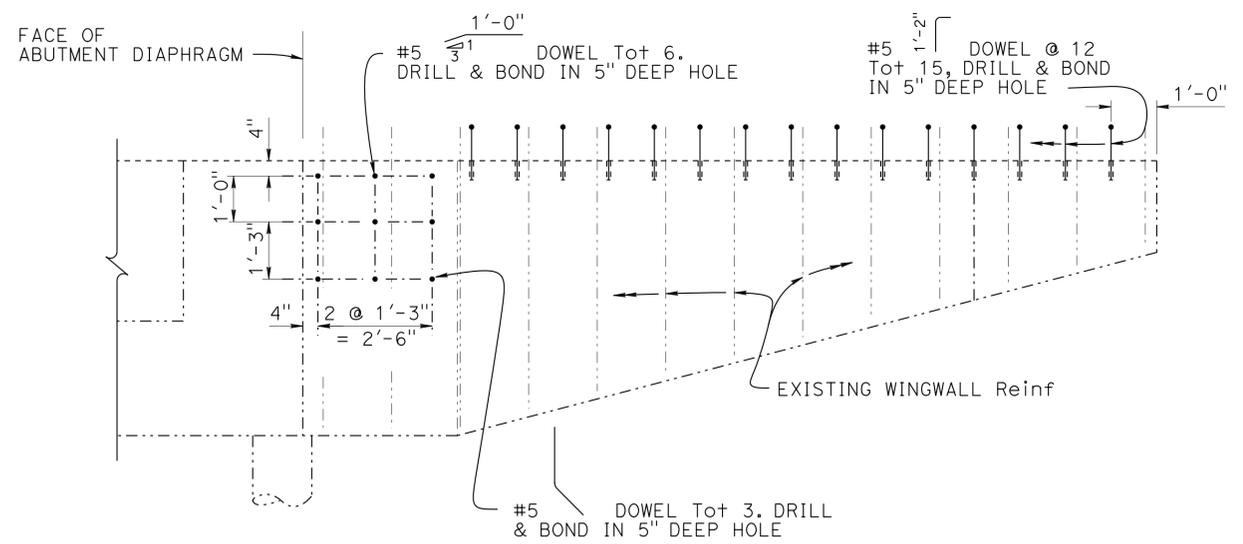
NOTES:
 1. Barrier reinf not shown
 2. For details not shown, see "SECTION G-G", "ABUTMENT DETAIL No. 5" sheet

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



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

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

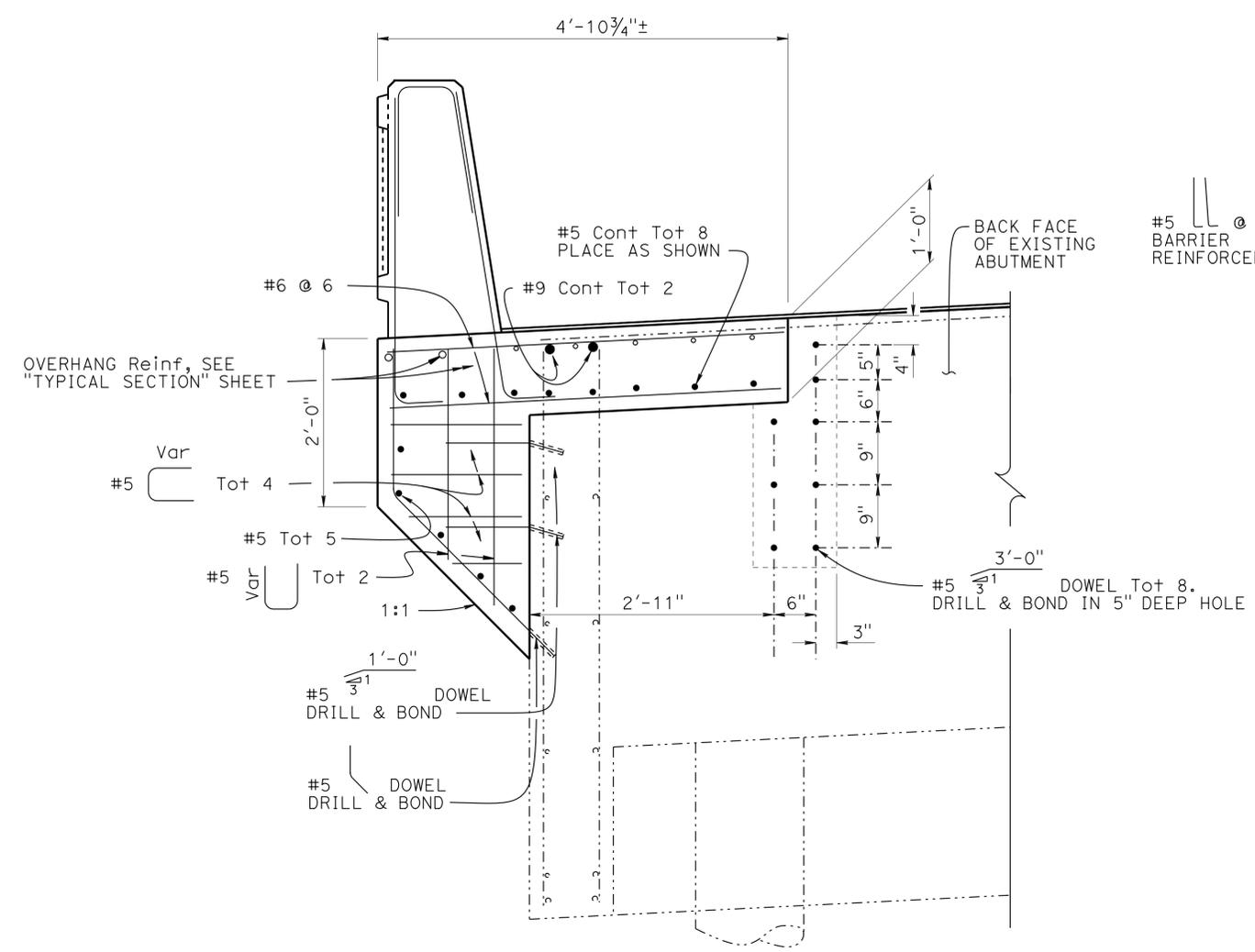
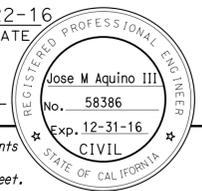


DRILL & BOND
 $\frac{1}{2}'' = 1'-0''$

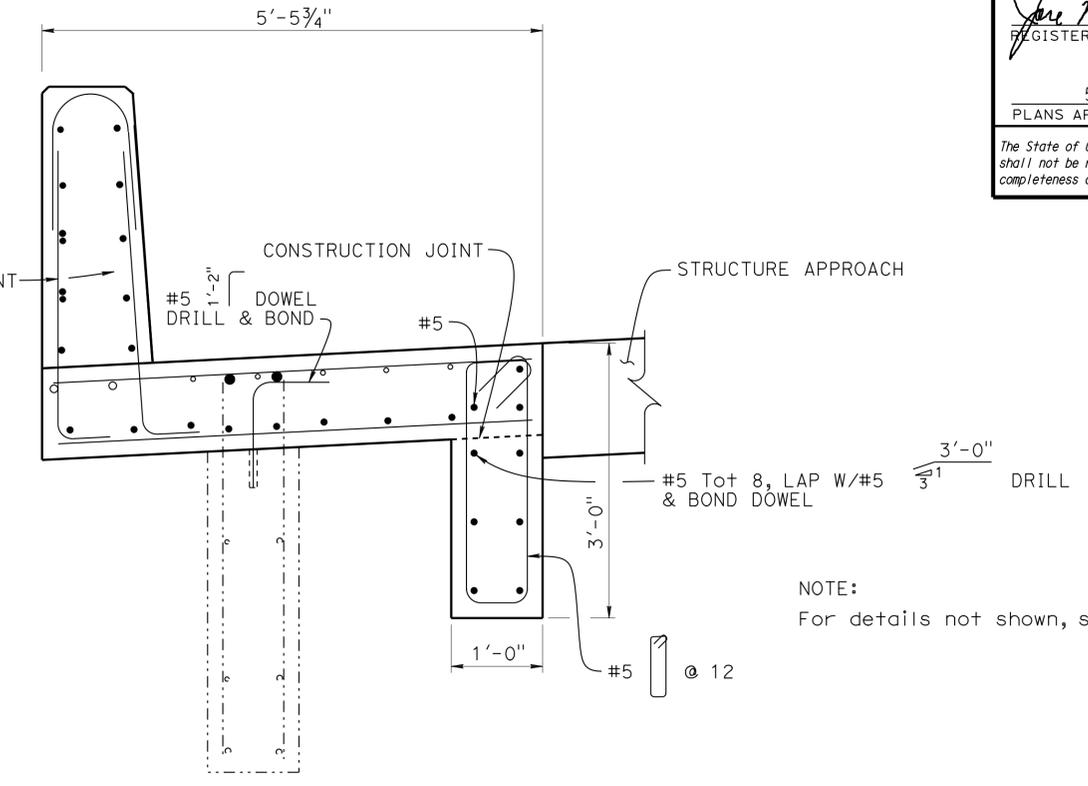
NOTE:
 Abutment 1 shown, Abutment 4 similar

STRUCTURES DESIGN DETAIL SHEET (ENGLISH) (REV. 09-01-10)	DESIGN	BY Arturo V Herrera	CHECKED Mufeed Khalaf	STATE OF CALIFORNIA DEPARTMENT OF TRANSPORTATION	DIVISION OF ENGINEERING SERVICES STRUCTURE DESIGN DESIGN BRANCH 3	BRIDGE NO.	SOUTH SAN MIGUEL UC (WIDEN) ABUTMENT DETAILS No. 4
	DETAILS	BY Nancy C Gwynn	CHECKED Mufeed Khalaf			49-0162R	
	QUANTITIES	BY Lewis L Shen	CHECKED Raman Guraya			POST MILE 65.1	
				ORIGINAL SCALE IN INCHES FOR REDUCED PLANS	UNIT: 3578 PROJECT NUMBER & PHASE: 05000200201	CONTRACT NO.: 05-060404	DISREGARD PRINTS BEARING EARLIER REVISION DATES
				0 1 2 3	REVISION DATES	SHEET 9	OF 33

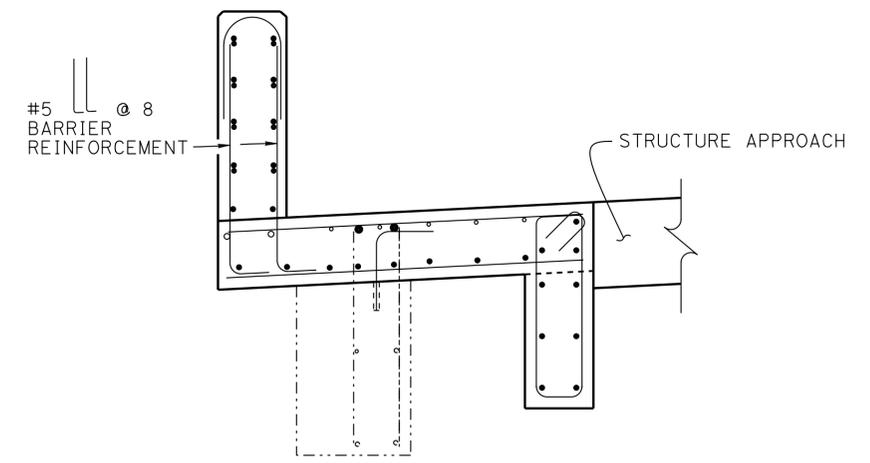
DIST	COUNTY	ROUTE	POST MILES TOTAL PROJECT	SHEET No.	TOTAL SHEETS
05	SLO, Mon	101	63.2/R69.3, R0.0/R1.9	686	858
Jose M. Aquino III REGISTERED CIVIL ENGINEER DATE			4-22-16		
5-2-16 PLANS APPROVAL DATE					
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SECTION F-F
1" = 1'-0"



SECTION G-G
1" = 1'-0"



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

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

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

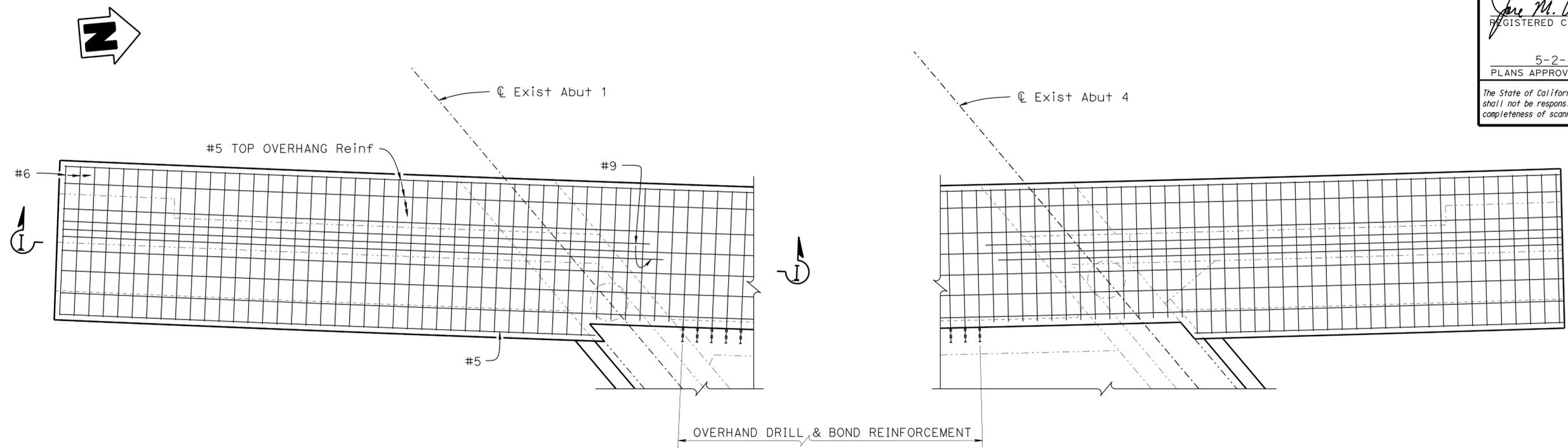
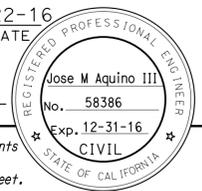
- NOTES:
- For barrier details not shown, see RSP B11-56 and "TYPICAL SECTION" sheet
 - Abutment 1 shown, Abutment 4 similar

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

STRUCTURES DESIGN DETAIL SHEET (ENGLISH) (REV. 09-01-10)	DESIGN	BY Arturo V Herrera	CHECKED Mufeed Khalaf	STATE OF CALIFORNIA DEPARTMENT OF TRANSPORTATION	DIVISION OF ENGINEERING SERVICES STRUCTURE DESIGN DESIGN BRANCH 3	BRIDGE NO.	SOUTH SAN MIGUEL UC (WIDEN) ABUTMENT DETAILS No. 5
	DETAILS	BY Nancy C Gwynn	CHECKED Mufeed Khalaf			49-0162R	
	QUANTITIES	BY Lewis L Shen	CHECKED Raman Guraya			POST MILE	
						65.1	
				UNIT: 3578	PROJECT NUMBER & PHASE: 05000200201	CONTRACT NO.: 05-060404	DISREGARD PRINTS BEARING EARLIER REVISION DATES
				ORIGINAL SCALE IN INCHES FOR REDUCED PLANS	0 1 2 3	REVISION DATES	SHEET 10 OF 33

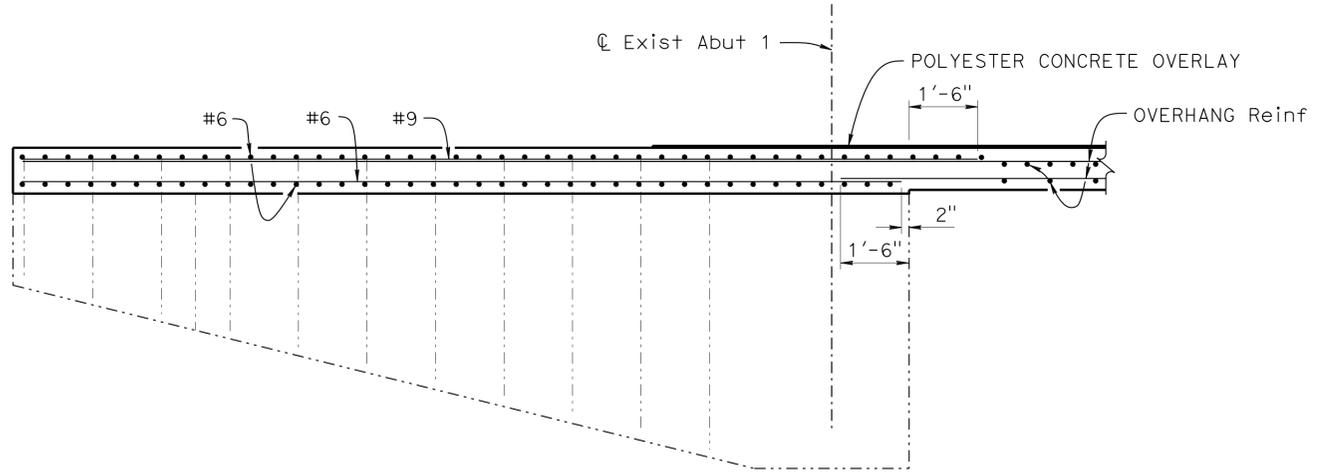
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DIST	COUNTY	ROUTE	POST MILES TOTAL PROJECT	SHEET No.	TOTAL SHEETS
05	SLO, Mon	101	63.2/R69.3, R0.0/R1.9	687	858
			REGISTERED CIVIL ENGINEER	DATE	
			5-2-16	PLANS APPROVAL DATE	
The State of California or its officers or agents shall not be responsible for the accuracy or completeness of scanned copies of this plan sheet.					

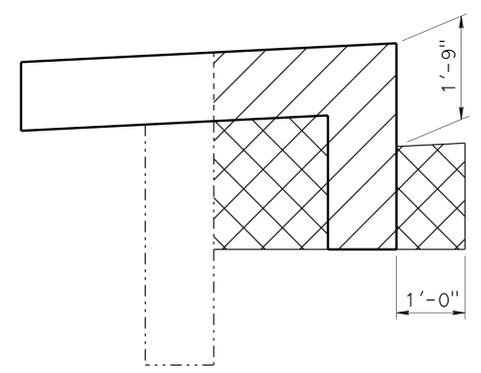


NOTE:
All reinforcement not shown

PART PLAN
1/2" = 1'-0"



SECTION I-I
1/2" = 1'-0"



LIMITS OF EXCAVATION & BACKFILL
NO SCALE

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

DESIGN	BY Arturo V Herrera	CHECKED Mufeed Khalaf
DETAILS	BY Nancy C Gwynn	CHECKED Mufeed Khalaf
QUANTITIES	BY Lewis L Shen	CHECKED Raman Guraya

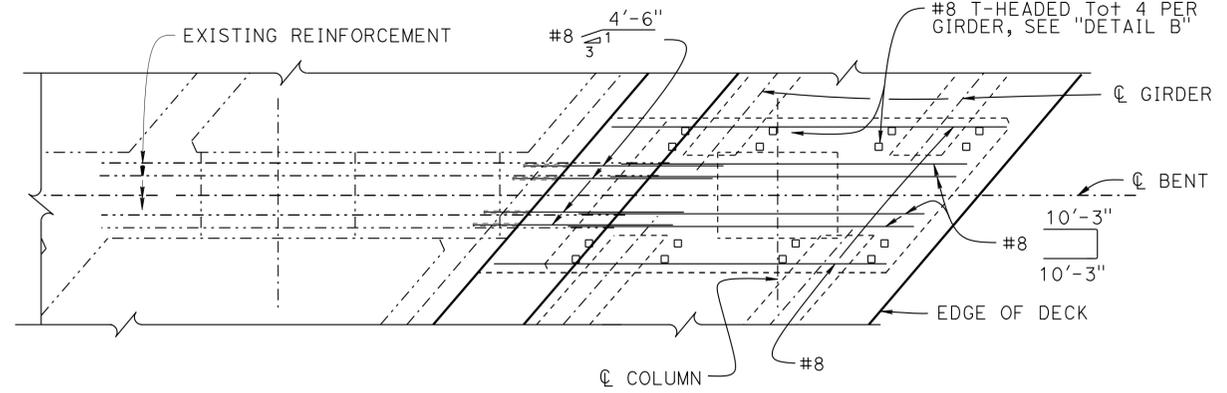
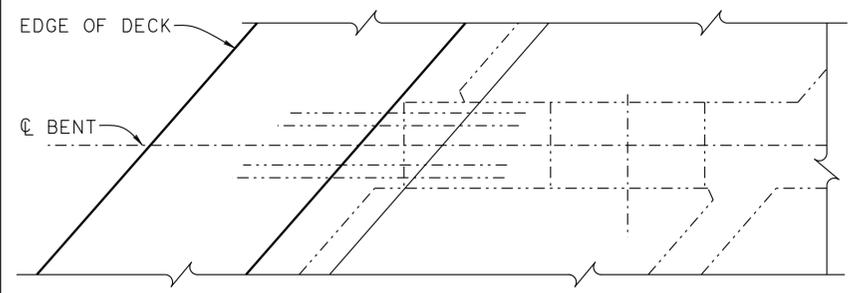
STATE OF CALIFORNIA
DEPARTMENT OF TRANSPORTATION

DIVISION OF ENGINEERING SERVICES
STRUCTURE DESIGN
DESIGN BRANCH 3

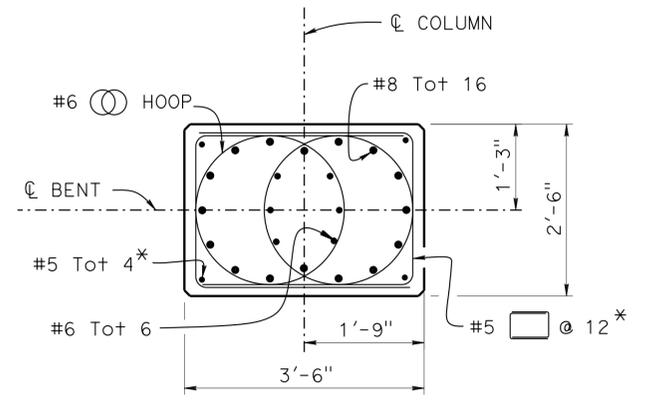
BRIDGE NO.	49-0162R
POST MILE	65.1

SOUTH SAN MIGUEL UC (WIDEN)
ABUTMENT DETAILS No. 6

DIST	COUNTY	ROUTE	POST MILES TOTAL PROJECT	SHEET No.	TOTAL SHEETS
05	SLO, Mon	101	63.2/R69.3, R0.0/R1.9	688	858
Jose M. Aquino III REGISTERED CIVIL ENGINEER			4-22-16	DATE	
5-2-16			PLANS APPROVAL DATE		
Jose M. Aquino III No. 58386 Exp. 12-31-16 CIVIL STATE OF CALIFORNIA			REGISTERED PROFESSIONAL ENGINEER		
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.					

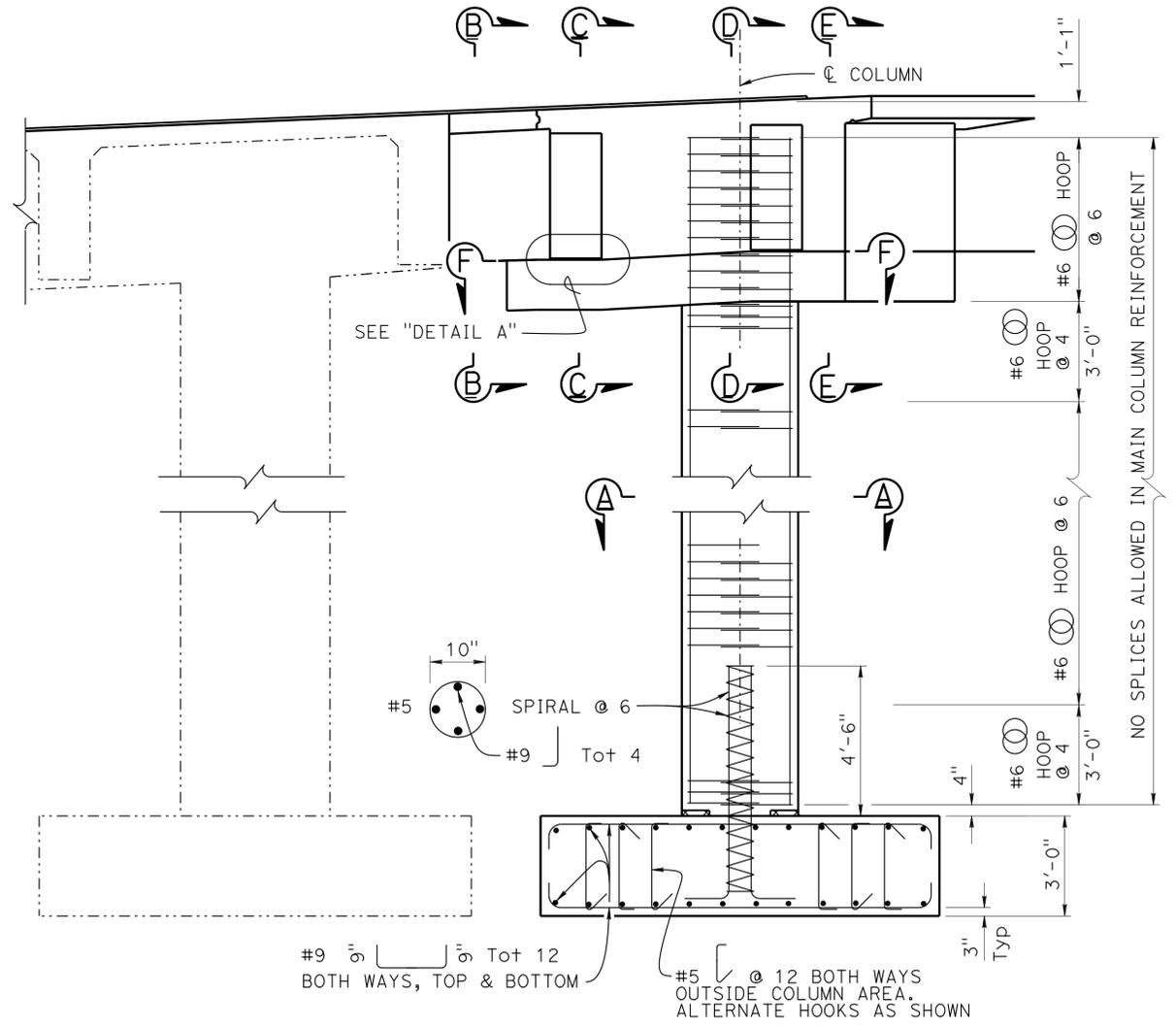
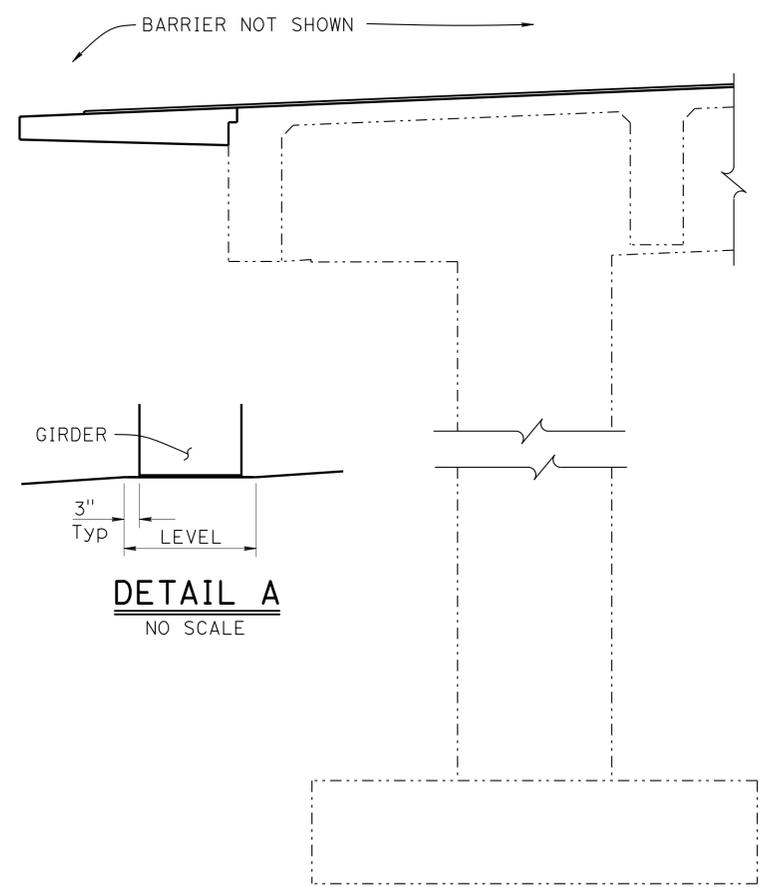


PART PLAN
3/8" = 1'-0"

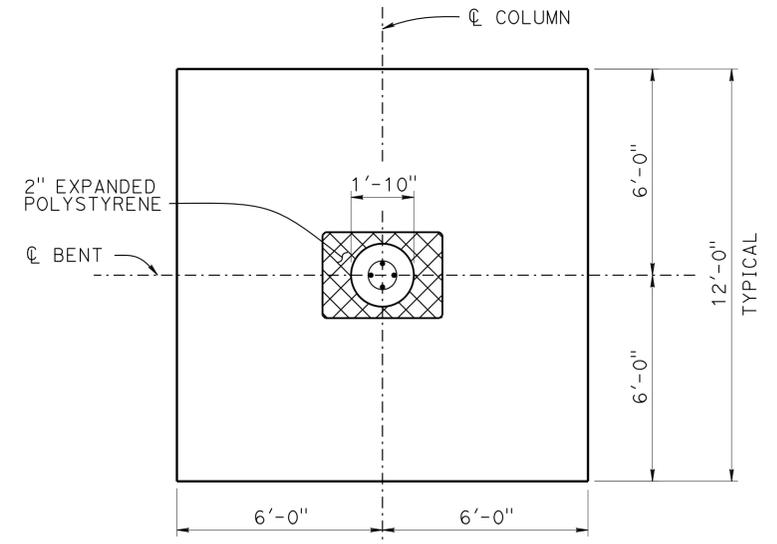


LEGEND:
* These bars terminate at drop cap

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



PART ELEVATION
3/8" = 1'-0"



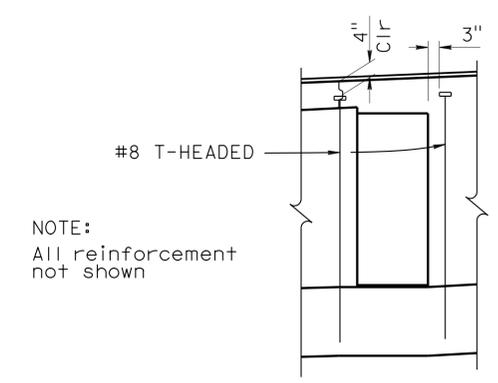
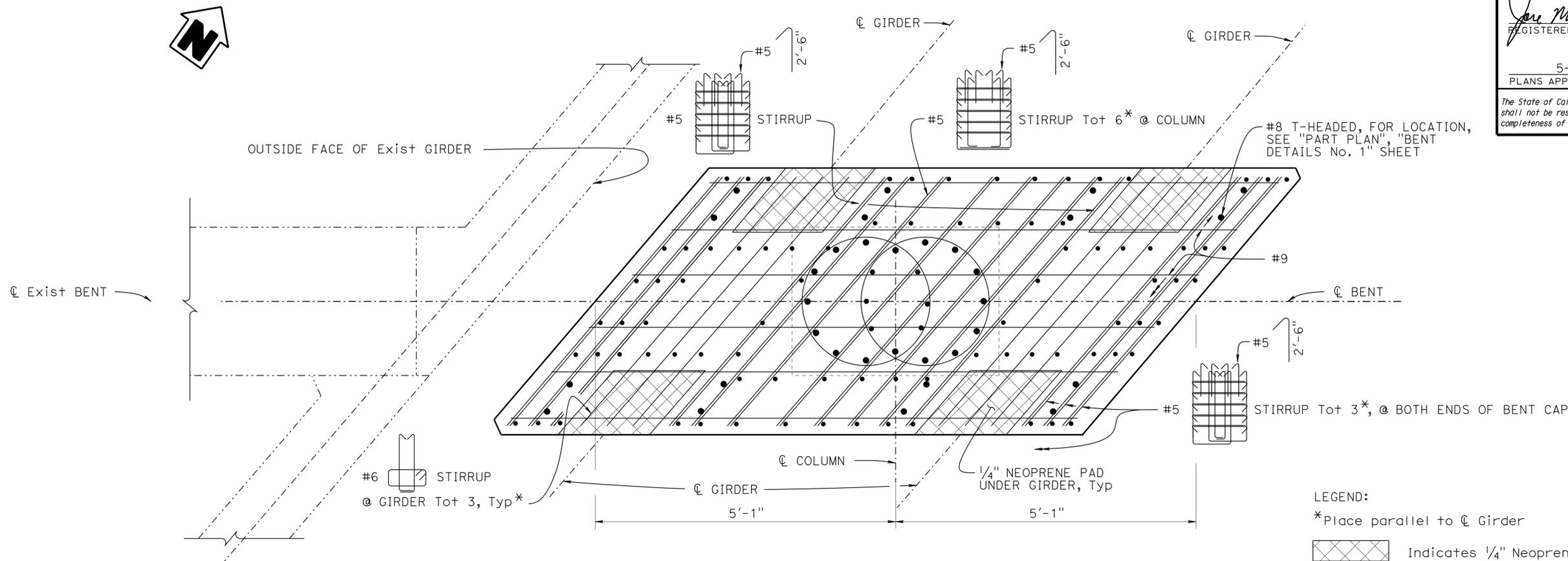
FOOTING PLAN
3/8" = 1'-0"

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

- NOTES:
- For "SECTION B-B", "SECTION C-C", "SECTION D-D" and "SECTION E-E" and details not shown, see "PIER DETAILS No. 2" sheet
 - For "SECTION F-F" and "DETAIL B", see "BENT DETAILS No. 3" sheet
 - Lapped splices in spiral column pin reinf shall be lapped at least 80 bar diameters. Spiral pin reinf at splices and at ends shall be terminated with a 135° hook with a 6" tail hooked around a longitudinal bar

DESIGN	BY	Arturo V Herrera	CHECKED	Mufeed Khalaf	STATE OF CALIFORNIA DEPARTMENT OF TRANSPORTATION	DIVISION OF ENGINEERING SERVICES STRUCTURE DESIGN DESIGN BRANCH 3	BRIDGE NO.	49-0162R	SOUTH SAN MIGUEL UC (WIDEN) BENT DETAILS No. 1						
	DETAILS	BY	Nancy C Gwynn	CHECKED			Mufeed Khalaf	POST MILE		65.1					
QUANTITIES	BY	Lewis L Shen	CHECKED	Raman Guraya	UNIT: 3578	PROJECT NUMBER & PHASE: 05000200201	CONTRACT NO.: 05-060404	DISREGARD PRINTS BEARING EARLIER REVISION DATES	<table border="1"> <tr> <td>REVISION DATES</td> <td>SHEET</td> <td>OF</td> </tr> <tr> <td>10-22-13 11-12-13 3-15-15</td> <td>12</td> <td>33</td> </tr> </table>	REVISION DATES	SHEET	OF	10-22-13 11-12-13 3-15-15	12	33
REVISION DATES	SHEET	OF													
10-22-13 11-12-13 3-15-15	12	33													

DIST	COUNTY	ROUTE	POST MILES TOTAL PROJECT	SHEET No.	TOTAL SHEETS
05	SLO, Mon	101	63.2/R69.3, R0.0/R1.9	690	858
Jose M. Aquino III REGISTERED CIVIL ENGINEER			DATE		
5-2-16 PLANS APPROVAL DATE					
REGISTERED PROFESSIONAL ENGINEER Jose M Aquino III No. 58386 Exp. 12-31-16 CIVIL STATE OF CALIFORNIA					
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NOTE:
 THE CONTRACTOR MUST VERIFY ALL CONTROLLING FIELD DIMENSIONS BEFORE ORDERING OR FABRICATING ANY MATERIAL.

DESIGN	BY Arturo V Herrera	CHECKED Mufeed Khalaf
DETAILS	BY Nancy C Gwynn	CHECKED Mufeed Khalaf
QUANTITIES	BY Lewis L Shen	CHECKED Raman Guraya

STATE OF CALIFORNIA
 DEPARTMENT OF TRANSPORTATION

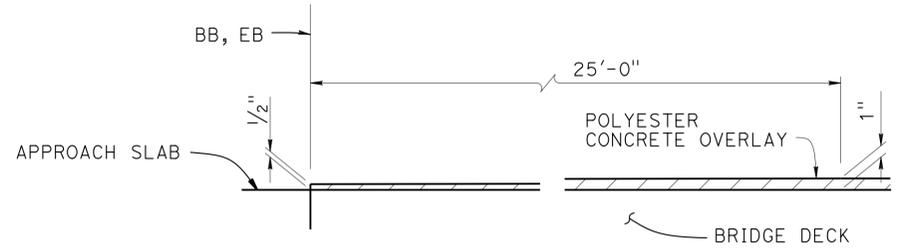
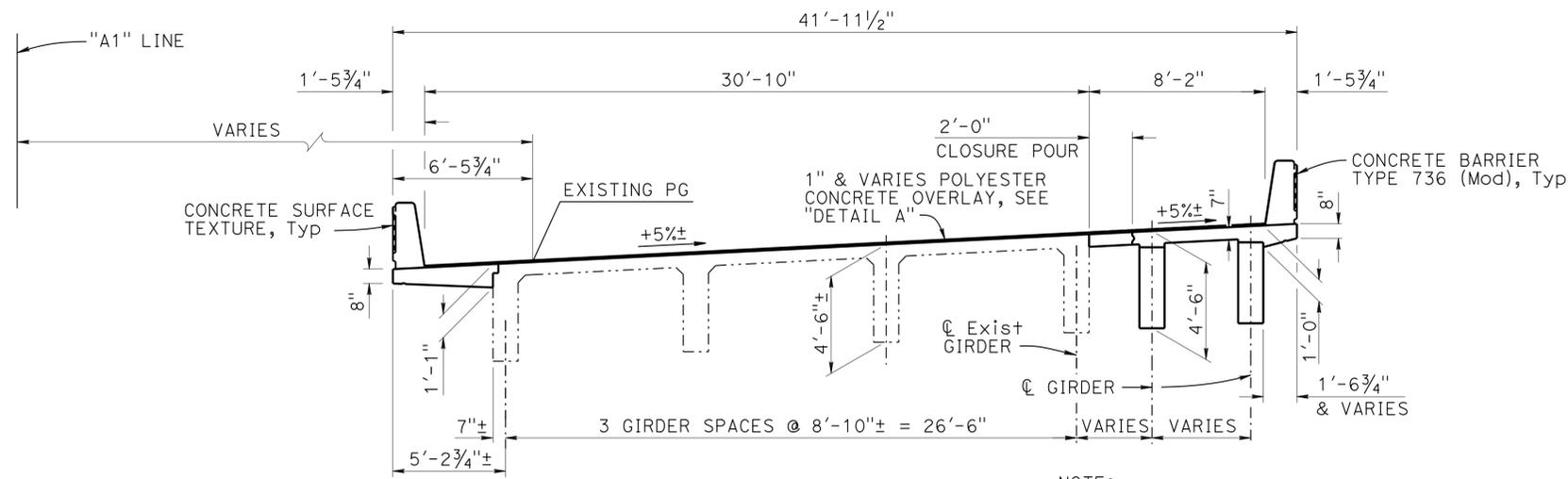
DIVISION OF ENGINEERING SERVICES
 STRUCTURE DESIGN
 DESIGN BRANCH 3

BRIDGE NO.	49-0162R
POST MILE	65.1

SOUTH SAN MIGUEL UC (WIDEN)
BENT DETAILS No. 3

DIST	COUNTY	ROUTE	POST MILES TOTAL PROJECT	SHEET No.	TOTAL SHEETS
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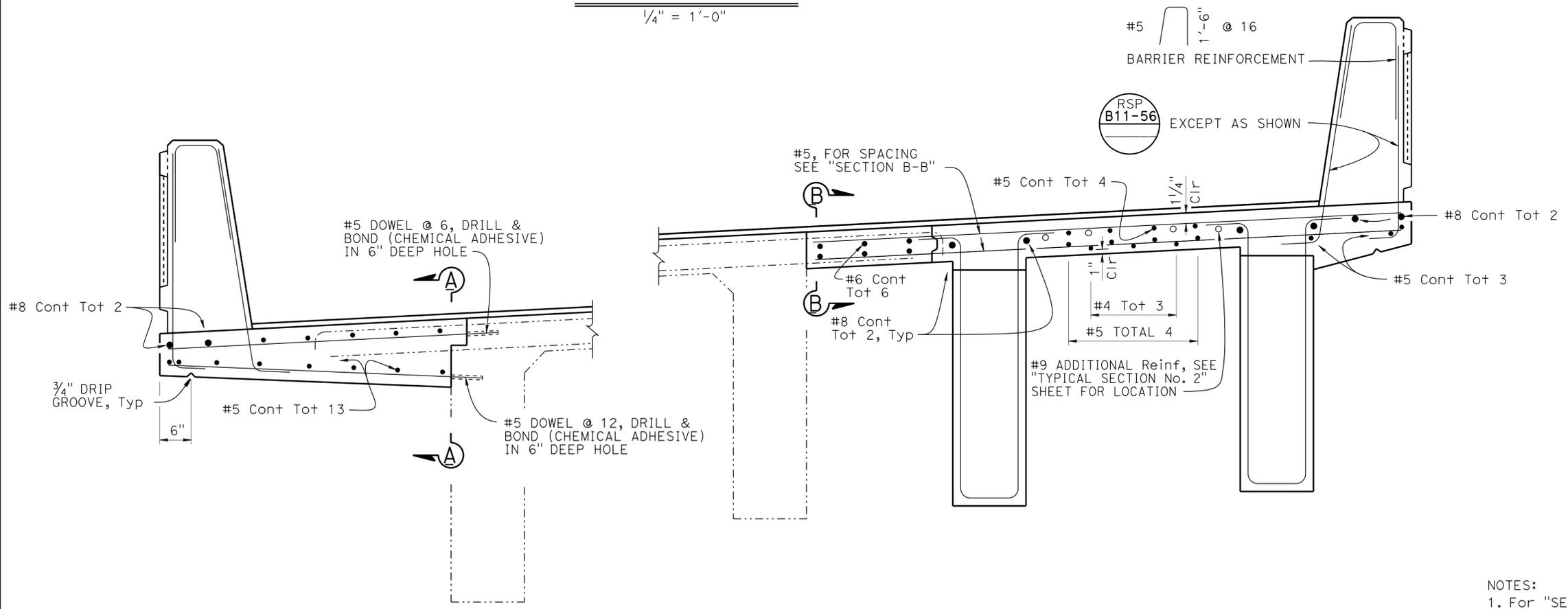
Jose M. Aquino III 4-22-16
 REGISTERED CIVIL ENGINEER DATE
 5-2-16
 PLANS APPROVAL DATE
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DETAIL A
1/2" = 1'-0"

NOTE:
Closure pour concrete shall not be placed until 15 days after adjacent deck pours are completed

TYPICAL SECTION
1/4" = 1'-0"



PART TYPICAL SECTION
1" = 1'-0"

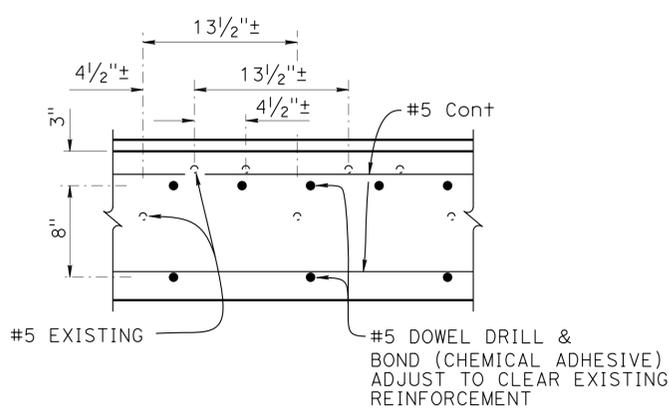
NOTE:
THE CONTRACTOR MUST VERIFY ALL CONTROLLING FIELD DIMENSIONS BEFORE ORDERING OR FABRICATING ANY MATERIAL.

- NOTES:
1. For "SECTION A-A" and "SECTION B-B", see "TYPICAL SECTION No. 2" sheet
 2. For girder reinforcement, see "PRECAST PRESTRESSED GIRDER" sheet
 3. For concrete surface texture, see "BARRIER SURFACE TEXTURE" sheet

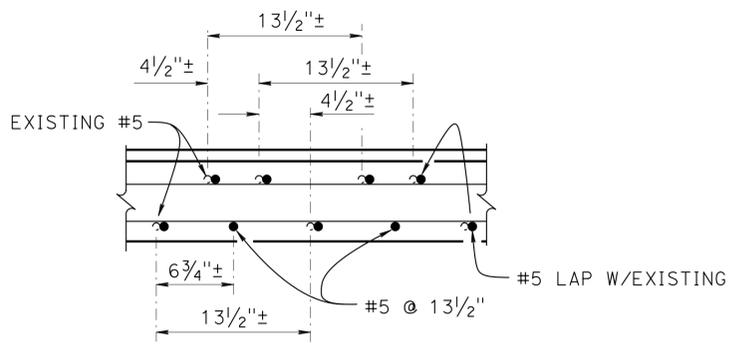
DESIGN	BY Arturo V Herrera	CHECKED Mufeed Khalaf	STATE OF CALIFORNIA DEPARTMENT OF TRANSPORTATION	DIVISION OF ENGINEERING SERVICES STRUCTURE DESIGN DESIGN BRANCH 3	BRIDGE NO.	SOUTH SAN MIGUEL UC (WIDEN) TYPICAL SECTION No. 1
DETAILS	BY Nancy C Gwynn	CHECKED Mufeed Khalaf			49-0162R	
QUANTITIES	BY Lewis L Shen	CHECKED Raman Guraya			POST MILE 65.1	

STRUCTURES DESIGN DETAIL SHEET (ENGLISH) (REV. 09-01-10) ORIGINAL SCALE IN INCHES FOR REDUCED PLANS 0 1 2 3 UNIT: 3578 PROJECT NUMBER & PHASE: 05000200201 CONTRACT NO.: 05-060404 DISREGARD PRINTS BEARING EARLIER REVISION DATES

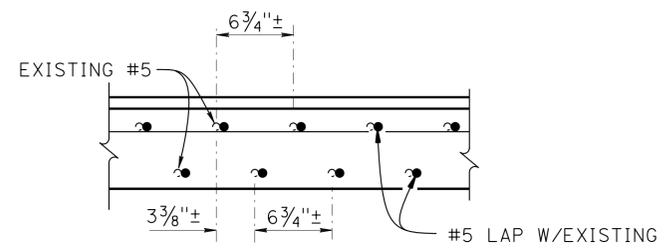
DIST	COUNTY	ROUTE	POST MILES TOTAL PROJECT	SHEET No.	TOTAL SHEETS
05	SLO, Mon	101	63.2/R69.3, R0.0/R1.9	692	858
			4-22-16		
REGISTERED CIVIL ENGINEER			DATE		
			5-2-16		
			PLANS APPROVAL DATE		
REGISTERED PROFESSIONAL ENGINEER Jose M Aquino III No. 58386 Exp. 12-31-16 CIVIL STATE OF CALIFORNIA					
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SECTION A-A
1/2" = 1'-0"



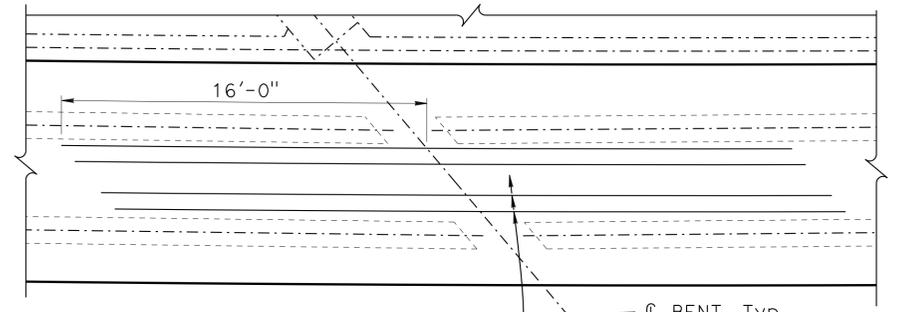
SPACING A



SPACING B

NOTE:
For limits of "SPACING A" and "SPACING B", see "GIRDER LAYOUT" sheet

SECTION B-B
1/2" = 1'-0"



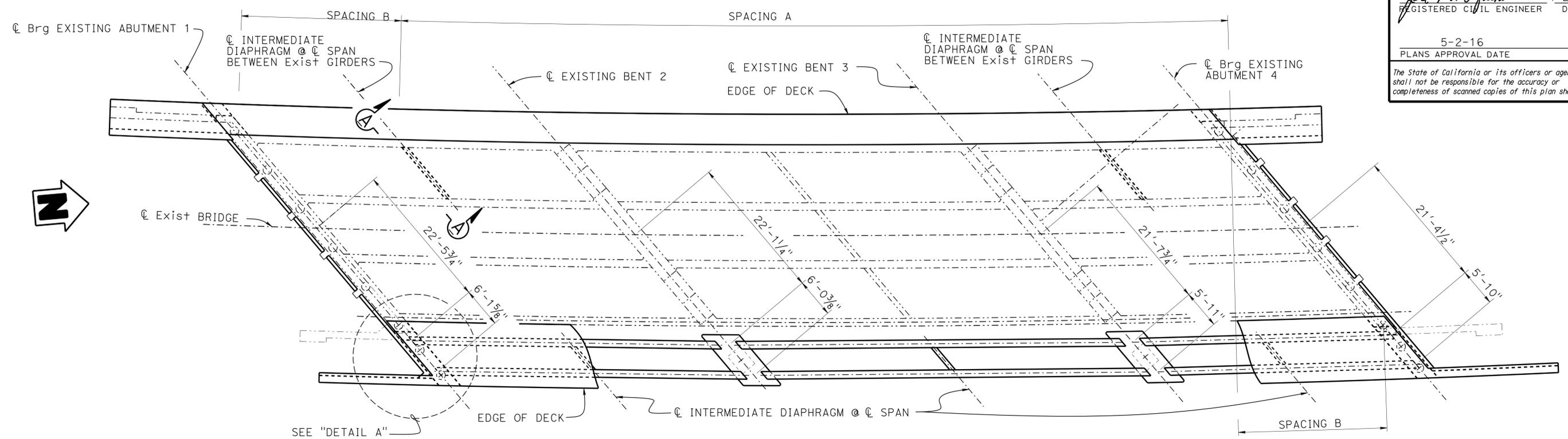
LEGEND:
* No splice allowed

PART PLAN
1/4" = 1'-0"

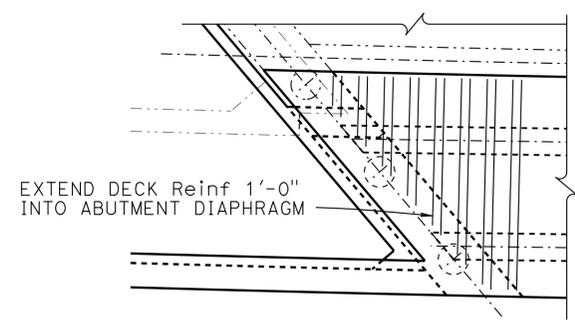
NOTE:
THE CONTRACTOR MUST VERIFY ALL CONTROLLING FIELD DIMENSIONS BEFORE ORDERING OR FABRICATING ANY MATERIAL.

STRUCTURES DESIGN DETAIL SHEET (ENGLISH) (REV. 09-01-10)	DESIGN	BY Arturo V Herrera	CHECKED Mufeed Khalaf	STATE OF CALIFORNIA DEPARTMENT OF TRANSPORTATION	DIVISION OF ENGINEERING SERVICES STRUCTURE DESIGN DESIGN BRANCH 3	BRIDGE NO.	SOUTH SAN MIGUEL UC (WIDEN) TYPICAL SECTION No. 2				
	DETAILS	BY Nancy C Gwynn	CHECKED Mufeed Khalaf			49-0162R					
	QUANTITIES	BY Lewis L Shen	CHECKED Raman Guraya			POST MILE 65.1					
ORIGINAL SCALE IN INCHES FOR REDUCED PLANS					UNIT: 3578	PROJECT NUMBER & PHASE: 05000200201	CONTRACT NO.: 05-060404	DISREGARD PRINTS BEARING EARLIER REVISION DATES	REVISION DATES	SHEET 16	OF 33

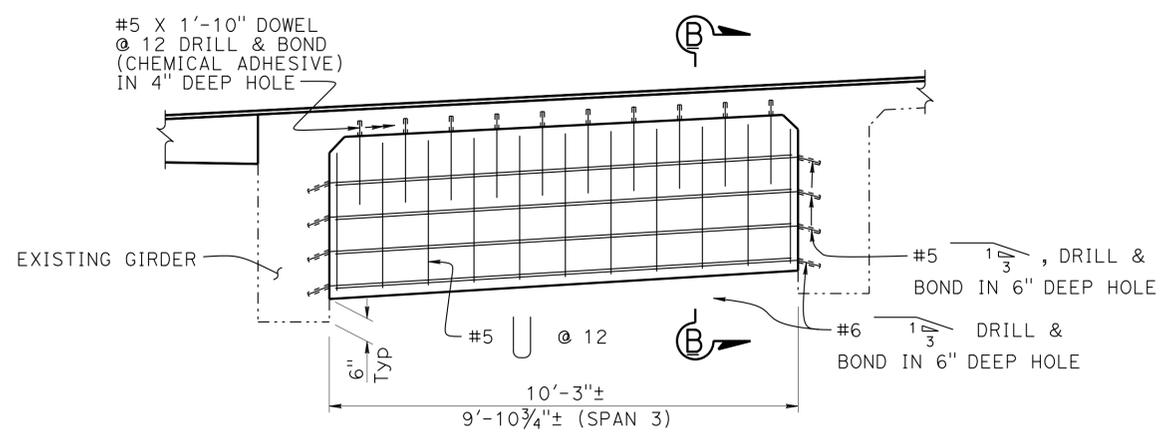
DIST	COUNTY	ROUTE	POST MILES TOTAL PROJECT	SHEET No.	TOTAL SHEETS
05	SLO, Mon	101	63.2/R69.3, R0.0/R1.9	693	858
			DATE		
			4-22-16		
			PLANS APPROVAL DATE		
			5-2-16		
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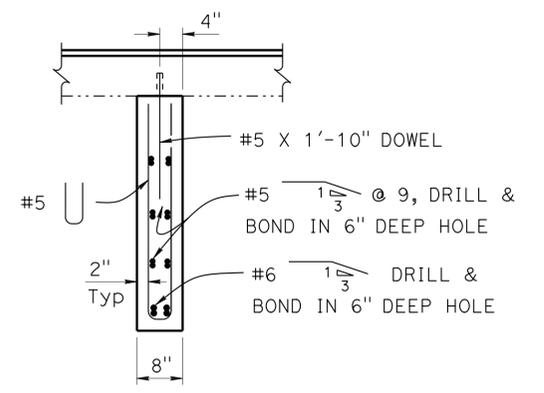
PLAN
1/8" = 1'-0"



DETAIL A
1/4" = 1'-0"



SECTION A-A
1/2" = 1'-0"



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

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

DESIGN	BY Arturo V Herrera	CHECKED Mufeed Khalaf
DETAILS	BY Nancy C Gwynn	CHECKED Mufeed Khalaf
QUANTITIES	BY Lewis L Shen	CHECKED Raman Guraya

STATE OF CALIFORNIA
DEPARTMENT OF TRANSPORTATION

DIVISION OF ENGINEERING SERVICES
STRUCTURE DESIGN
DESIGN BRANCH 3

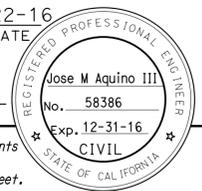
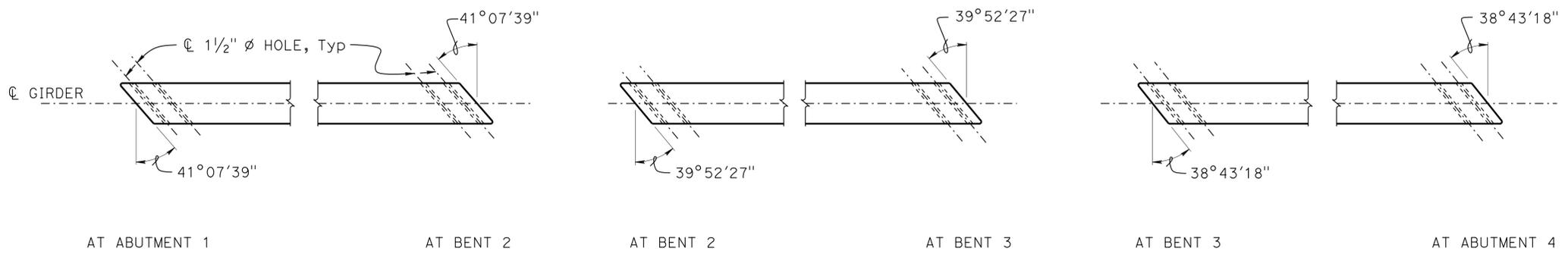
BRIDGE NO.	49-0162R
POST MILE	65.1

SOUTH SAN MIGUEL UC (WIDEN)
GIRDER LAYOUT

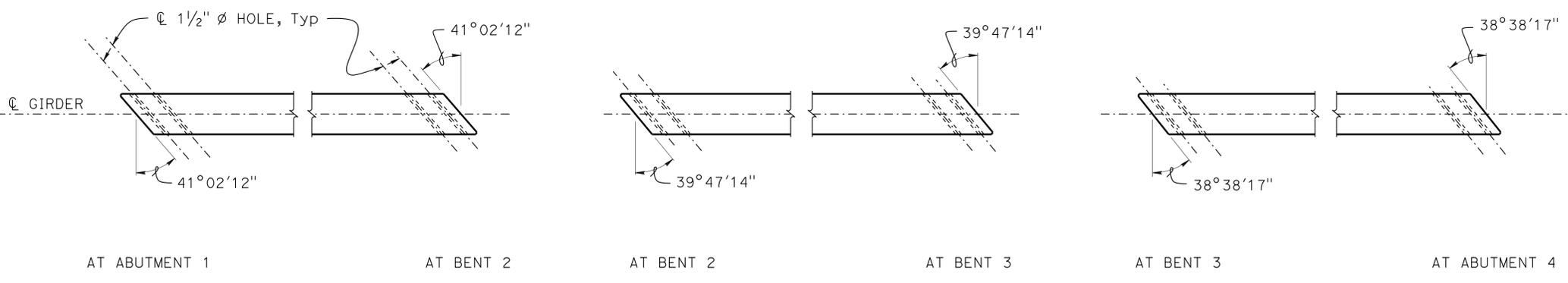
DIST	COUNTY	ROUTE	POST MILES TOTAL PROJECT	SHEET No.	TOTAL SHEETS
05	SLO, Mon	101	63.2/R69.3, R0.0/R1.9	694	858

Jose M. Aquino III 4-22-16
 REGISTERED CIVIL ENGINEER DATE
 5-2-16
 PLANS APPROVAL DATE

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INTERIOR GIRDERS
1/2" = 1'-0"



EXTERIOR GIRDERS
1/2" = 1'-0"

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

DESIGN BY Arturo V Herrera CHECKED Mufeed Khalaf DETAILS BY Nancy C Gwynn CHECKED Mufeed Khalaf QUANTITIES BY Lewis L Shen CHECKED Raman Guraya	STATE OF CALIFORNIA DEPARTMENT OF TRANSPORTATION	DIVISION OF ENGINEERING SERVICES STRUCTURE DESIGN DESIGN BRANCH 3	BRIDGE NO. 49-0162R POST MILE 65.1	SOUTH SAN MIGUEL UC (WIDEN) GIRDER DETAILS	
	ORIGINAL SCALE IN INCHES FOR REDUCED PLANS 0 1 2 3	UNIT: 3578 PROJECT NUMBER & PHASE: 05000200201	CONTRACT NO.: 05-060404	DISREGARD PRINTS BEARING EARLIER REVISION DATES	REVISION DATES SHEET 18 OF 33
	STRUCTURES DESIGN DETAIL SHEET (ENGLISH) (REV. 09-01-10)	FILE => 49-0162r-m-girdet.dgn			

USERNAME => s1157655 DATE PLOTTED => 22-JUL-2016 TIME PLOTTED => 17:53

GENERAL NOTES

JACKING FORCE (P): The jacking force required at the point of control along the span. The jacking force does not include any fabrication specific losses.

The maximum tensile stress in the prestressing steel upon release shall not exceed 75% of the specified minimum ultimate tensile strength of the prestressing steel.

The maximum temporary tensile stress (jacking stress) in the prestressing steel shall not exceed 80% of the specified minimum ultimate tensile strength of the prestressing steel.

CONCRETE STRENGTH: f'_{ci} is at time of initial stressing
 f'_c is at 28 days

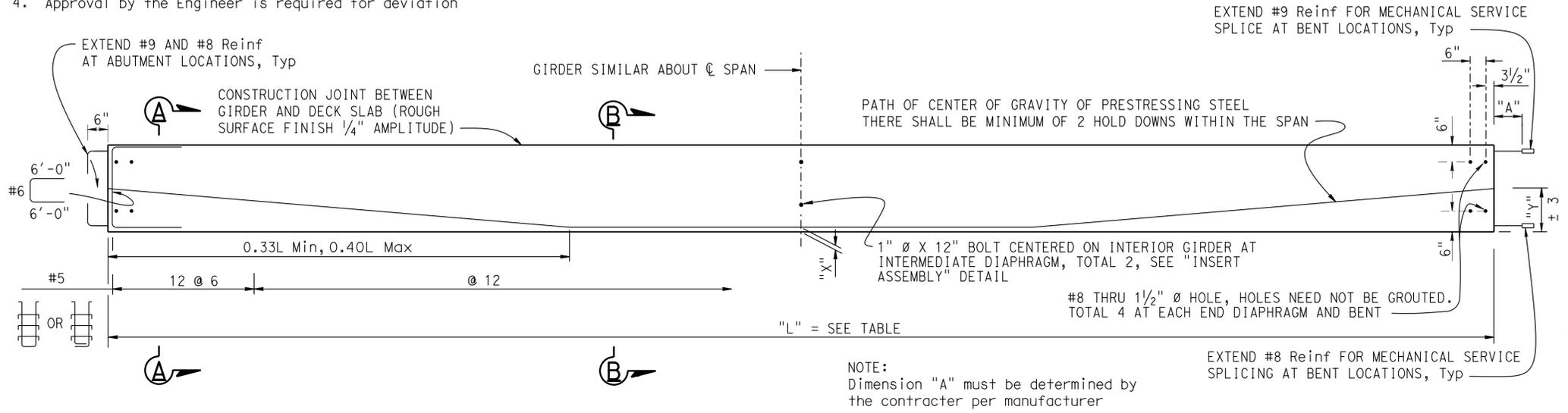
DEFLECTION COMPONENTS: Informational - to be used in setting screed line elevations

Screed line elevations for deck concrete will be determined by the Engineer.

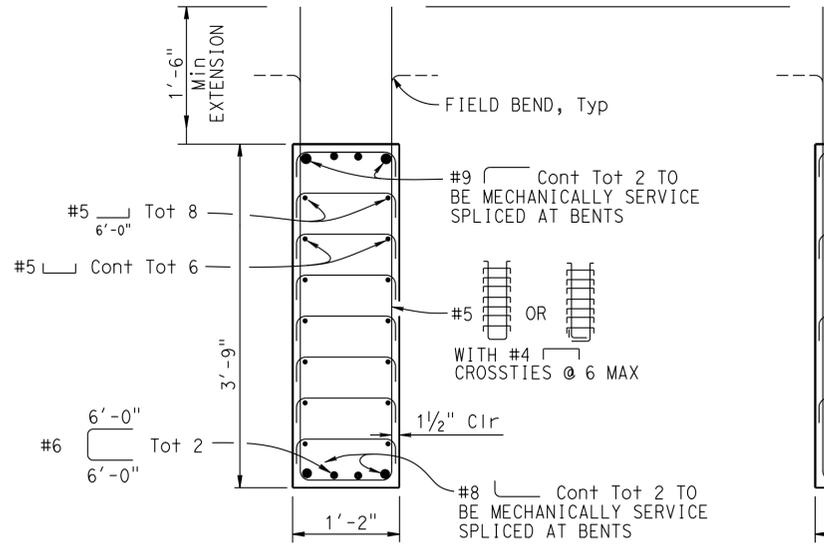
Contractor may interpolate "P" and "X" values between limits shown,

CLEARANCES FOR PRETENSIONED STRANDS

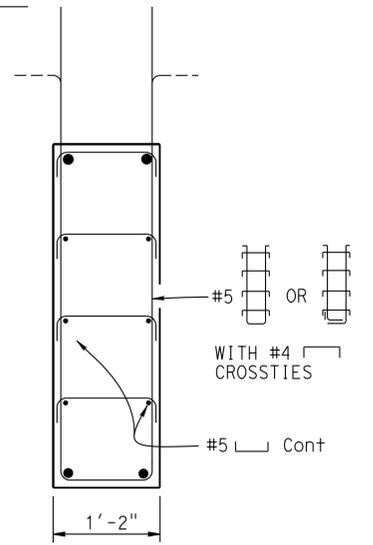
1. Strands may be bundled in groups consisting of 3 vertically, 2 horizontally and separated at the ends
2. The Min distance "S" between groups or individual strands is 1 1/2" for 3/8" ϕ strands, 1 3/4" for 1/2" ϕ strands, 2" for 0.6" ϕ strands
3. "S" is measured between centers of adjacent strands
4. Approval by the Engineer is required for deviation



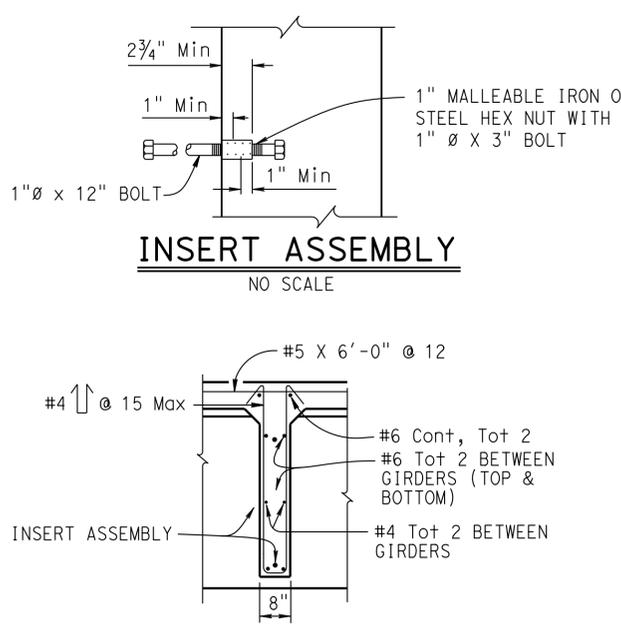
ELEVATION
NO SCALE



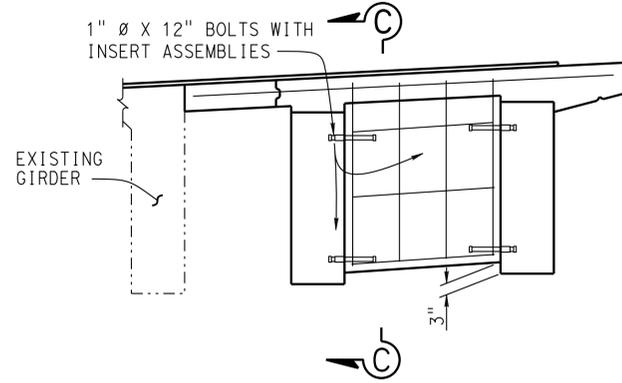
SECTION A-A
1" = 1'-0"



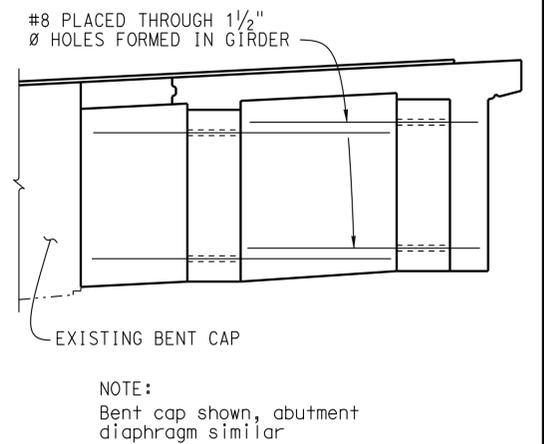
SECTION B-B
1" = 1'-0"



SECTION C-C
1/2" = 1'-0"



INTERMEDIATE DIAPHRAGM
1/2" = 1'-0"

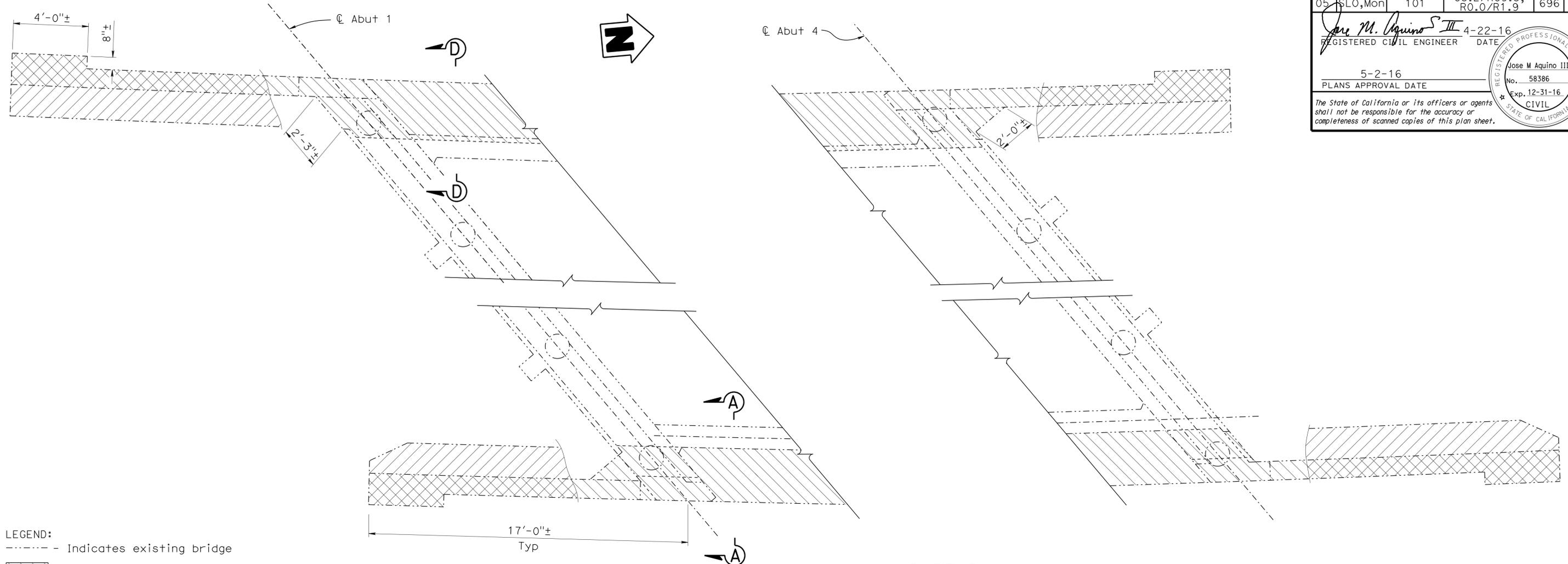


BENT CAP/Abut DIAPHRAGM
1/2" = 1'-0"

Span	Girder location and length	"X"	Jacking Force (P) (Kips)	"Y" (in)	Concrete Strength (ksi)		Midspan Dead Load Deflection (inches)	
					f'_{ci}	f'_c	Deck	Rail
Span 1	Exterior L = 46'-9 1/2"	4" / 6"	220 / 240	22.5	4.0	5.0	0.0	0.0
	Interior L = 46'-10 1/4"	4" / 6"	240 / 260	22.5	4.0	5.0	0.0	0.0
Span 2	Exterior L = 58'-7"	4" / 6"	310 / 340	22.5	4.0	5.0	0.25	0.0
	Interior L = 58'-8"	4" / 6"	340 / 360	22.5	4.0	5.0	0.25	0.0
Span 3	Exterior L = 38'-0"	4" / 6"	140 / 160	22.5	4.0	5.0	0.0	0.0
	Interior L = 38'-0 1/2"	4" / 6"	160 / 170	22.5	4.0	5.0	0.0	0.0

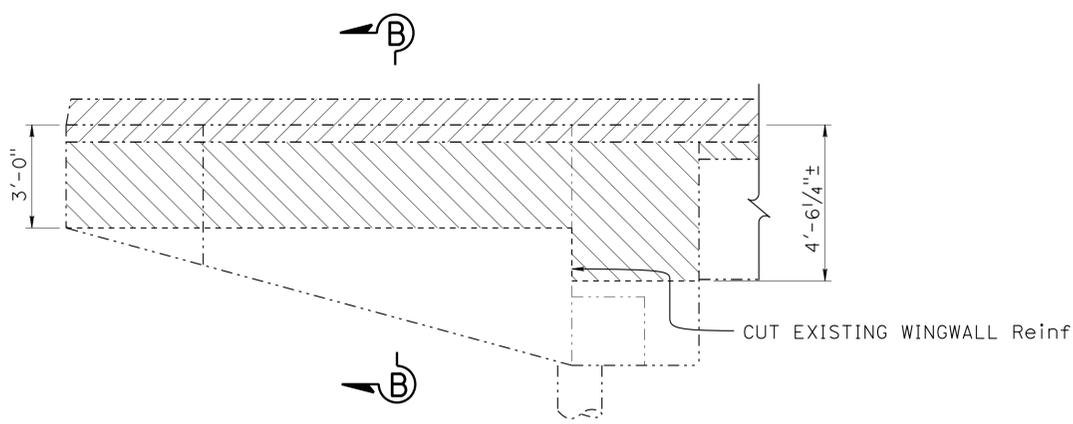
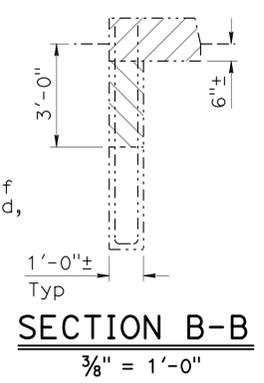
DIST	COUNTY	ROUTE	POST MILES TOTAL PROJECT	SHEET No.	TOTAL SHEETS
05	SLO, Mon	101	63.2/R69.3, R0.0/R1.9	696	858
			DATE		
			4-22-16		
			REGISTERED CIVIL ENGINEER		
			PLANS APPROVAL DATE		
			5-2-16		
			REGISTERED PROFESSIONAL ENGINEER		
			Jose M Aquino III		
			No. 58386		
			Exp. 12-31-16		
			CIVIL		
			STATE OF CALIFORNIA		

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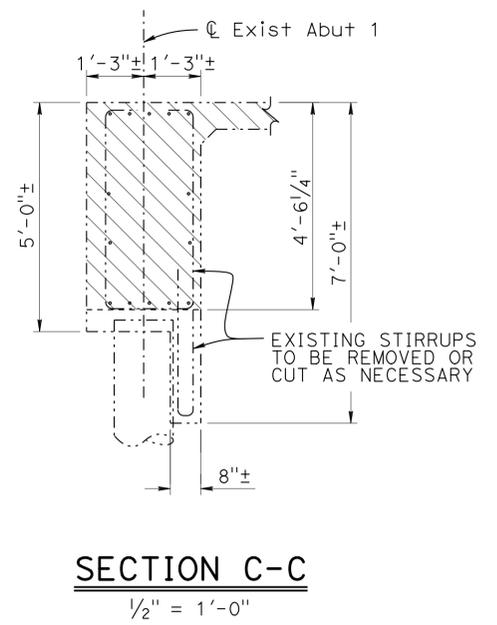
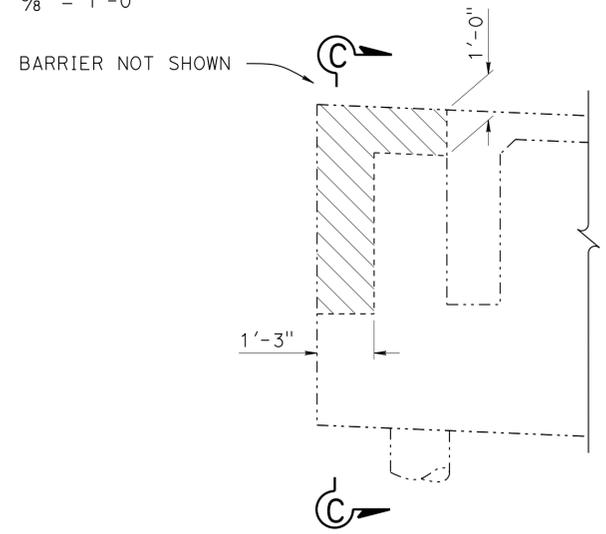


LEGEND:
 - - - - - Indicates existing bridge
 ▨ Indicates existing bridge removal
 ▩ Indicates existing barrier removal

NOTE:
 Existing reinf to be removed, cut stirrups



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



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

NOTE:
 For "ELEVATION D-D" and details not shown, see "CONCRETE REMOVAL Det No. 2" sheet

DESIGN	BY Arturo V Herrera	CHECKED Mufeed Khalaf
DETAILS	BY Nancy C Gwynn	CHECKED Mufeed Khalaf
QUANTITIES	BY Lewis L Shen	CHECKED Raman Guraya

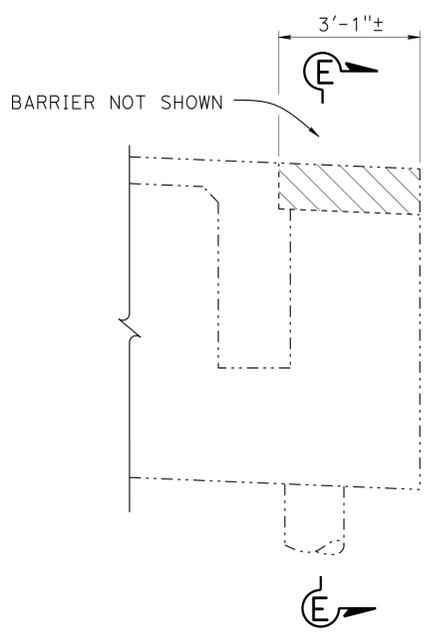
STATE OF CALIFORNIA
 DEPARTMENT OF TRANSPORTATION

DIVISION OF ENGINEERING SERVICES
 STRUCTURE DESIGN
DESIGN BRANCH 3

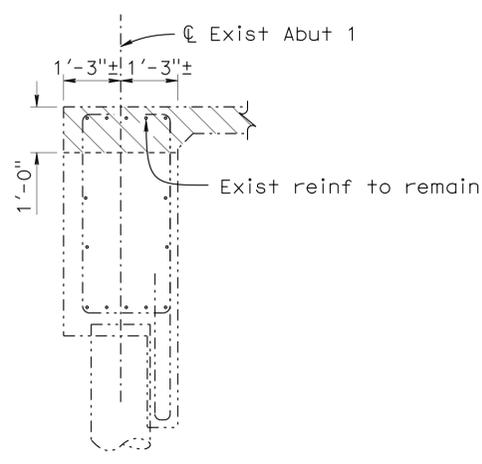
BRIDGE NO.	49-0162R
POST MILE	65.1

SOUTH SAN MIGUEL UC (WIDEN)
CONCRETE REMOVAL Det No. 1

DIST	COUNTY	ROUTE	POST MILES TOTAL PROJECT	SHEET No.	TOTAL SHEETS
05	SLO, Mon	101	63.2/R69.3, R0.0/R1.9	697	858
Jose M. Aquino III REGISTERED CIVIL ENGINEER			4-22-16 DATE		
5-2-16 PLANS APPROVAL DATE					
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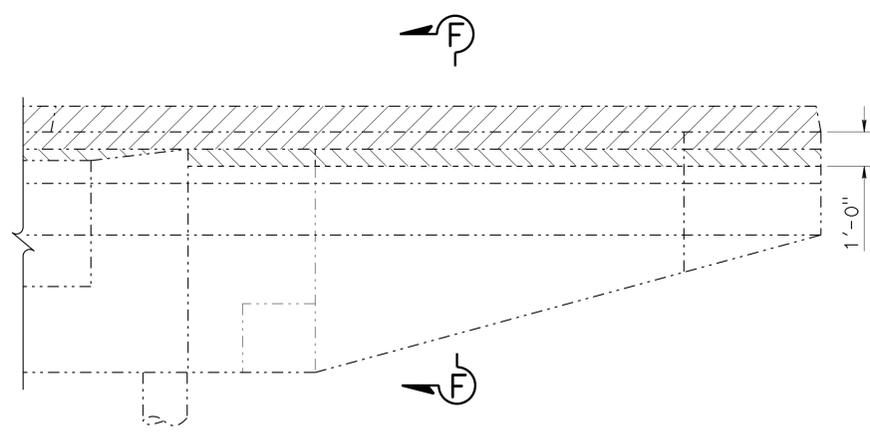


ELEVATION D-D
1/2" = 1'-0"

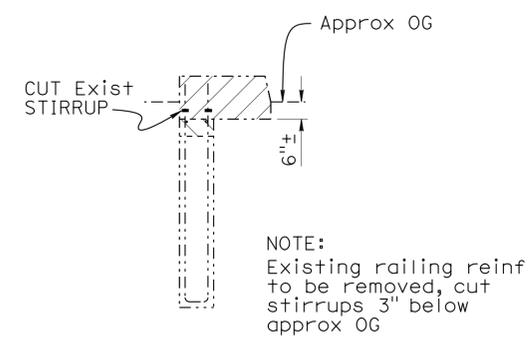


SECTION E-E
1/2" = 1'-0"

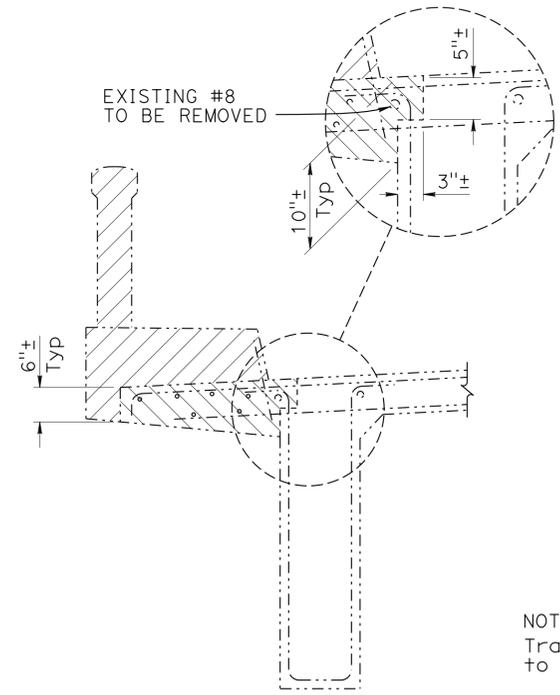
- LEGEND:**
- Indicates existing bridge
 - Indicates existing bridge removal
 - Indicates existing barrier removal



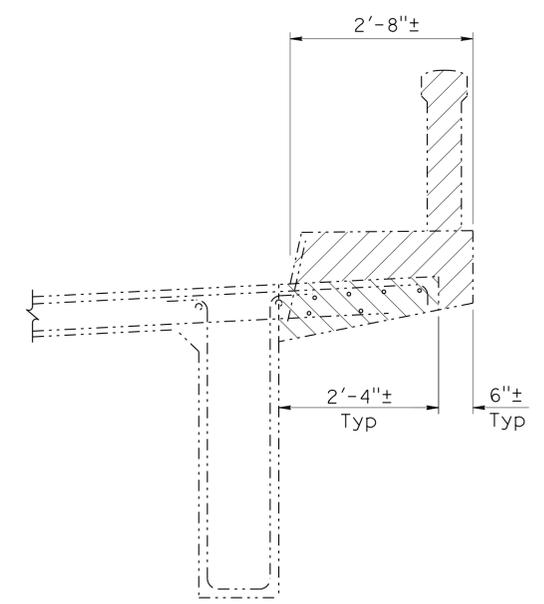
LEFT WINGWALL ELEVATION
3/8" = 1'-0"



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



PART TYPICAL SECTION
3/4" = 1'-0"

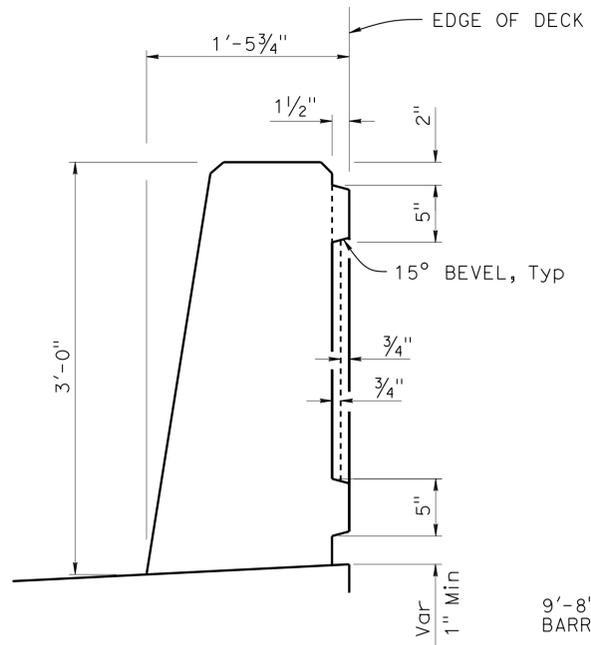


NOTE:
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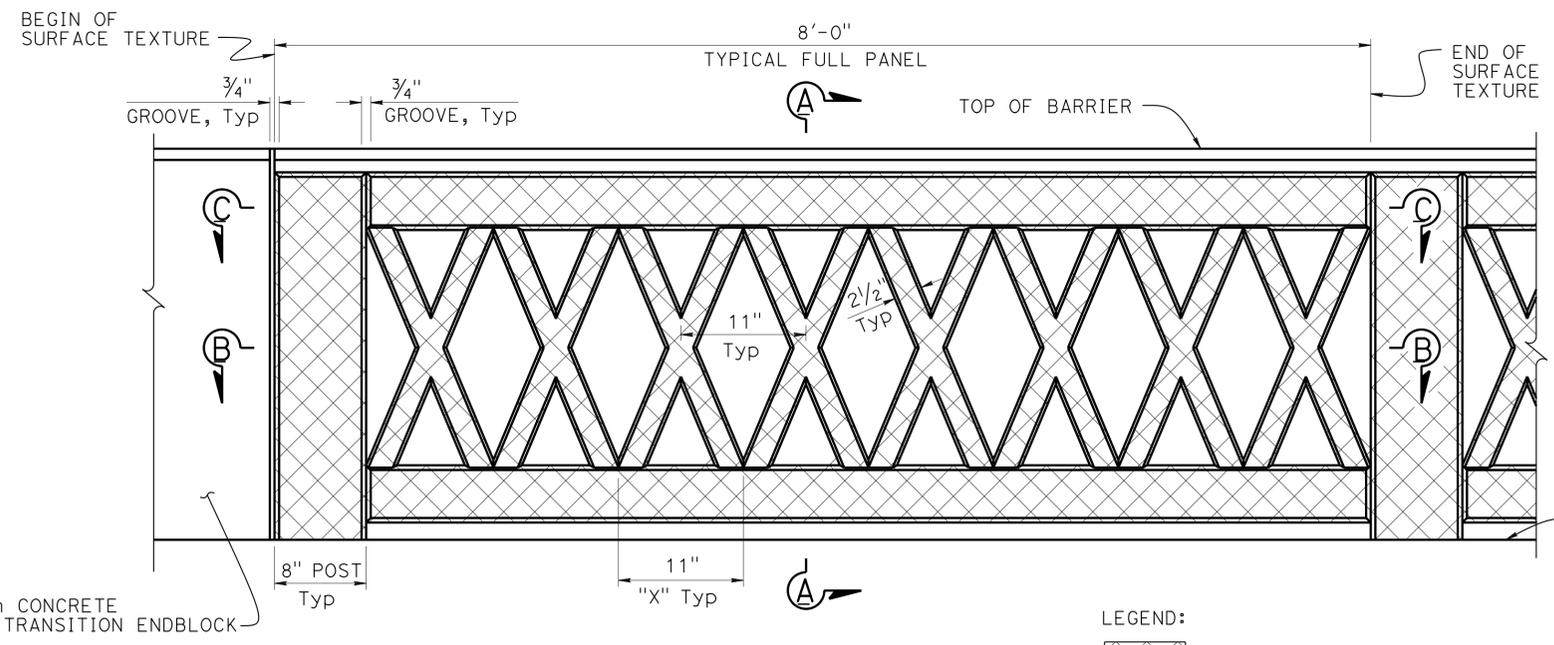
DESIGN BY Arturo V Herrera CHECKED Mufeed Khalaf DETAILS BY Nancy C Gwynn CHECKED Mufeed Khalaf QUANTITIES BY Lewis L Shen CHECKED Raman Guraya	STATE OF CALIFORNIA DEPARTMENT OF TRANSPORTATION	DIVISION OF ENGINEERING SERVICES STRUCTURE DESIGN DESIGN BRANCH 3	BRIDGE NO.	SOUTH SAN MIGUEL UC (WIDEN) CONCRETE REMOVAL Det No. 2
			49-0162R	
PROJECT NUMBER & PHASE: 05000200201			POST MILE	CONTRACT NO.: 05-060404
ORIGINAL SCALE IN INCHES FOR REDUCED PLANS			65.1	DISREGARD PRINTS BEARING EARLIER REVISION DATES
STRUCTURES DESIGN DETAIL SHEET (ENGLISH) (REV. 09-01-10)			REVISION DATES	SHEET 21 OF 33

USERNAME => 8115765 DATE PLOTTED => 22-JUL-2016 TIME PLOTTED => 17:53

DIST	COUNTY	ROUTE	POST MILES TOTAL PROJECT	SHEET No.	TOTAL SHEETS
05	SLO, Mon	101	63.2/R69.3, R0.0/R1.9	698	858
			DATE		
			4-22-16		
			PLANS APPROVAL DATE		
			5-2-16		
REGISTERED PROFESSIONAL ENGINEER Jose M. Aquino III No. 58386 Exp. 12-31-16 CIVIL STATE OF CALIFORNIA					
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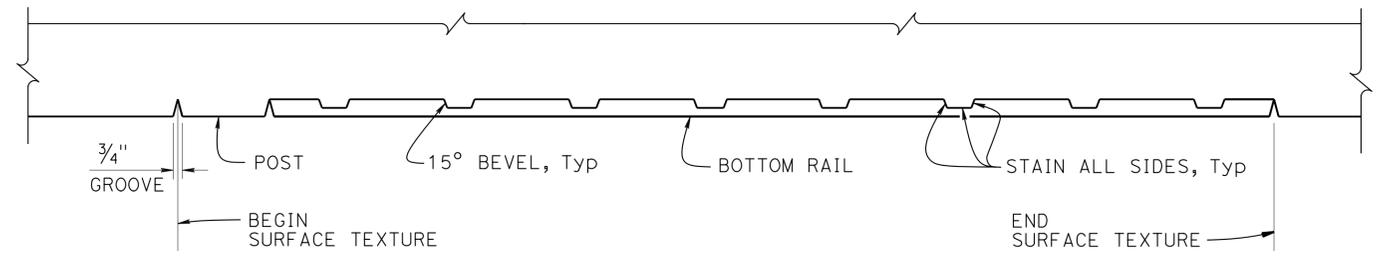


SECTION A-A
1/2" = 1'-0"

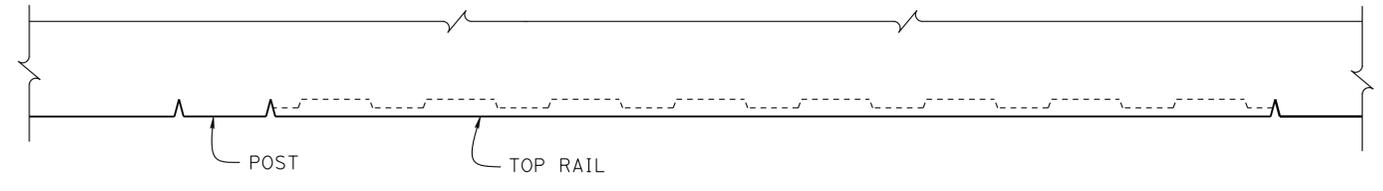


BARRIER MOTIF
1/2" = 1'-0"

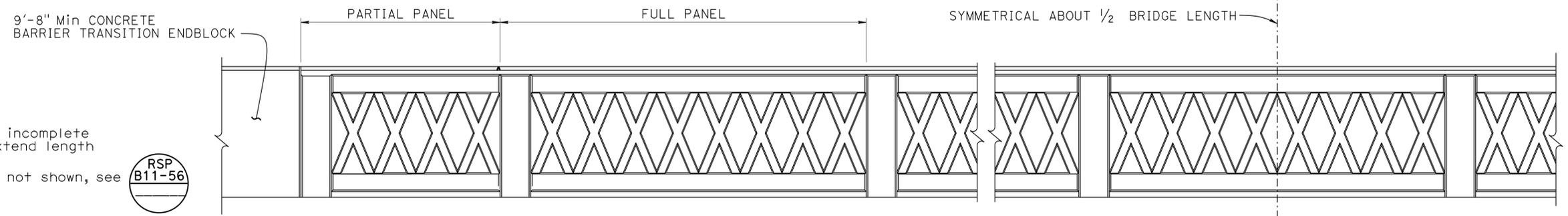
LEGEND:
 Prepare and paint concrete



SECTION B-B
1/2" = 1'-0"



SECTION C-C
1/2" = 1'-0"



ELEVATION
3/4" = 1'-0"

- NOTES:
1. If partial panel ends with an incomplete "X", shorten last panel and extend length of concrete barrier endblock
 2. For Concrete Barrier details not shown, see

DESIGN	BY David Fowkes	CHECKED Kantima Green
DETAILS	BY Nancy C Gwynn	CHECKED Kantima Green
QUANTITIES	BY Lewis L Shen	CHECKED Raman Guraya

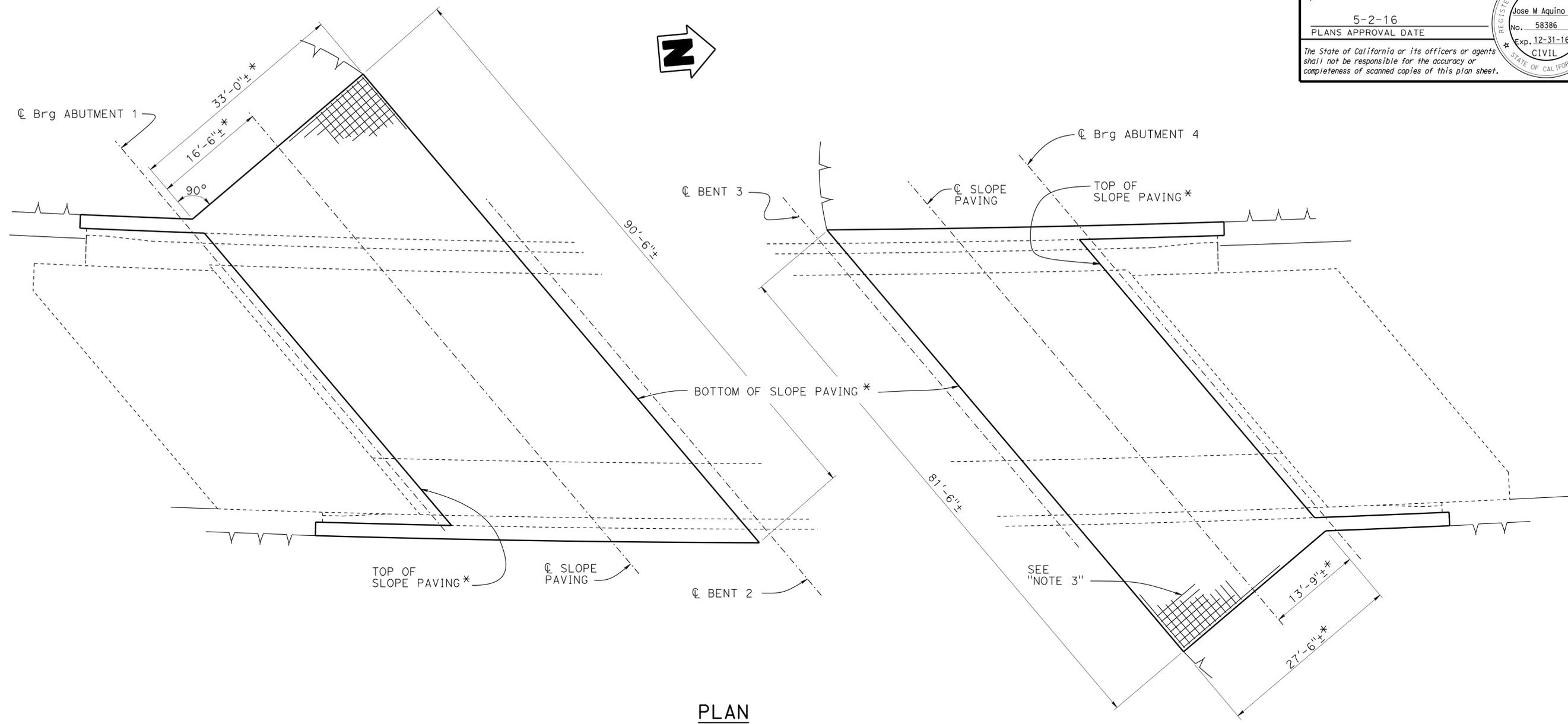
STATE OF CALIFORNIA
 DEPARTMENT OF TRANSPORTATION

DIVISION OF ENGINEERING SERVICES
 STRUCTURE DESIGN
 DESIGN BRANCH 3

BRIDGE NO.	49-0162R
POST MILE	65.1

SOUTH SAN MIGUEL UC (WIDEN)
BARRIER SURFACE TEXTURE

DIST	COUNTY	ROUTE	POST MILES TOTAL PROJECT	SHEET No.	TOTAL SHEETS
05	SLO, Mon	101	63.2/R69.3, R0.0/R1.9	699	858
Jose M. Aquino III REGISTERED CIVIL ENGINEER			4-22-16 DATE		
5-2-16 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.		



PLAN
1/8" = 1'-0"

- NOTES:
1. Dimensions are measured horizontally
 2. Concrete surface texture not shown
 3. Slope paving welded wire reinforcement to be placed normal to the bottom or top of slope paving
 4. For slope paving details not shown, see "SLOPE PAVING-FULL SLOPE-NO SKEW" sheet

LEGEND:
* Top and bottom slope and dimensions shown to match roadway grading plans

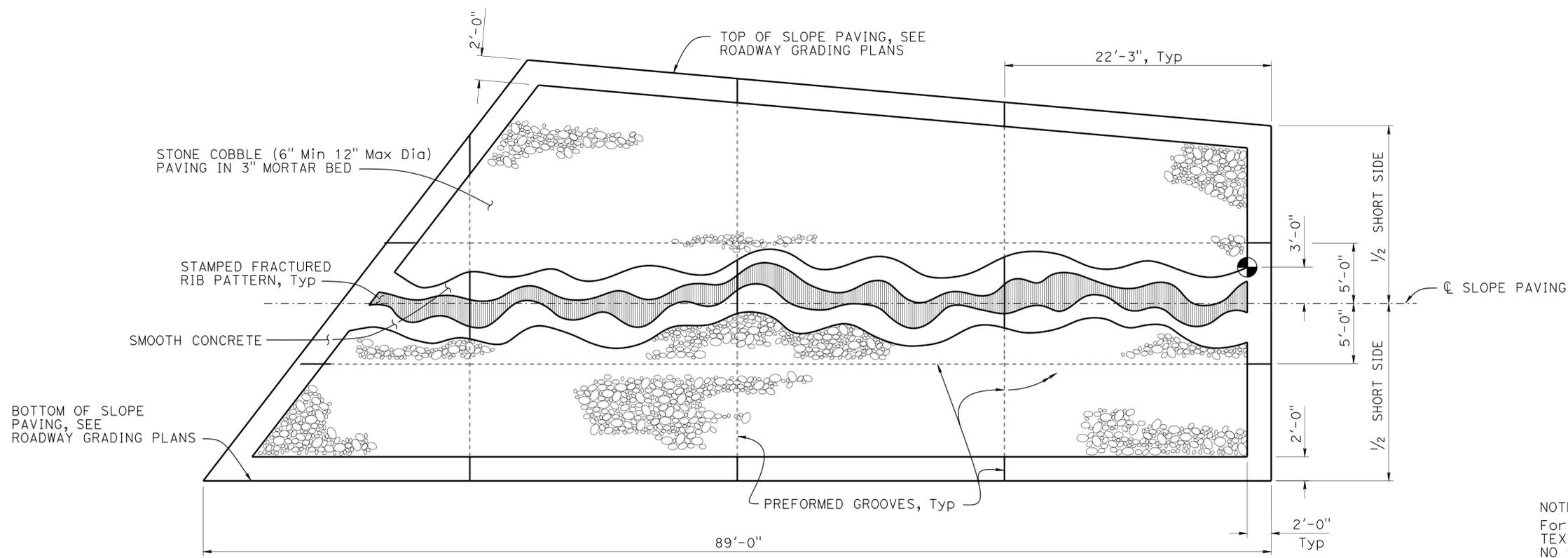
NOTE:
THE CONTRACTOR MUST VERIFY ALL CONTROLLING FIELD DIMENSIONS BEFORE ORDERING OR FABRICATING ANY MATERIAL.

STRUCTURES DESIGN DETAIL SHEET (ENGLISH) (REV. 09-01-10)	DESIGN	BY Arturo V Herrera	CHECKED Mufeed Khalaf	STATE OF CALIFORNIA DEPARTMENT OF TRANSPORTATION	DIVISION OF ENGINEERING SERVICES STRUCTURE DESIGN DESIGN BRANCH 3	BRIDGE NO.	SOUTH SAN MIGUEL UC (WIDEN) SLOPE PAVING LAYOUT
	DETAILS	BY Nancy C Gwynn	CHECKED Mufeed Khalaf			49-0162R	
	QUANTITIES	BY Lewis L Shen	CHECKED Raman Guraya			POST MILE 65.1	
ORIGINAL SCALE IN INCHES FOR REDUCED PLANS				UNIT: 3578 PROJECT NUMBER & PHASE: 05000200201	CONTRACT NO.: 05-060404	DISREGARD PRINTS BEARING EARLIER REVISION DATES	
				0 1 2 3	REVISION DATES 3-18-15 3-25-15 11-12-16		SHEET 23 OF 33

DIST	COUNTY	ROUTE	POST MILES TOTAL PROJECT	SHEET No.	TOTAL SHEETS
05	SLO, Mon	101	63.2/R69.3, R0.0/R1.9	700	858

Jose M. Aquino III 4-22-16
 REGISTERED CIVIL ENGINEER DATE
 5-2-16
 PLANS APPROVAL DATE
 No. 58386
 Exp. 12-31-16
 CIVIL
 STATE OF CALIFORNIA

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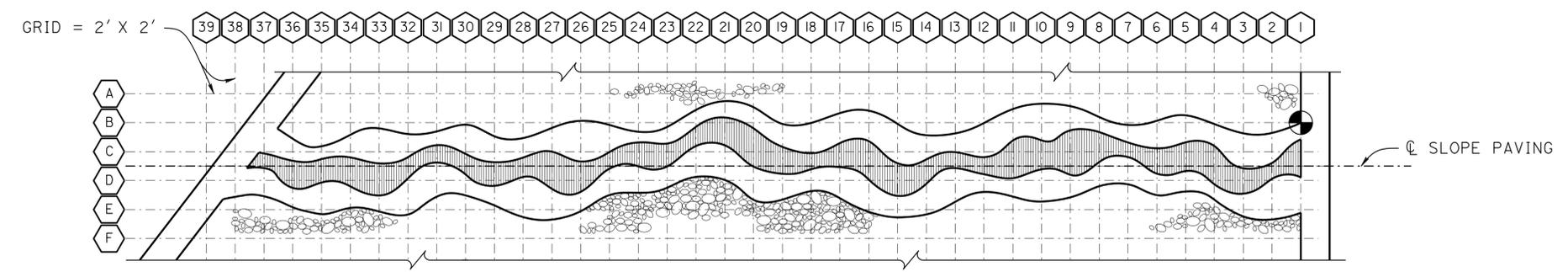


ABUTMENT 1 - SLOPE PAVING SURFACE TEXTURE

3/16" = 1'-0"

NOTE:
 For details not shown, see "SLOPE PAVING SURFACE TEXTURE Det No. 3" and "SLOPE PAVING-FULL SLOPE-NO SKEW" sheets

- LEGEND:
- Working point at grid
 - Working point



ABUTMENT 1 - SLOPE PAVING SURFACE TEXTURE GRID

3/16" = 1'-0"

NOTE:
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STRUCTURES DESIGN DETAIL SHEET (ENGLISH) (REV. 09-01-10)	DESIGN	BY David Fowkes	CHECKED Kantima Green	STATE OF CALIFORNIA DEPARTMENT OF TRANSPORTATION	DIVISION OF ENGINEERING SERVICES STRUCTURE DESIGN DESIGN BRANCH 3	BRIDGE NO.	SOUTH SAN MIGUEL UC (WIDEN) SLOPE PAVING SURFACE TEXTURE Det No. 1			
	DETAILS	BY Nancy C Gwynn	CHECKED Kantima Green			49-0162R				
	QUANTITIES	BY Lewis L Shen	CHECKED Raman Guraya			POST MILE 65.1				
ORIGINAL SCALE IN INCHES FOR REDUCED PLANS					UNIT: 3578	PROJECT NUMBER & PHASE: 05000200201	CONTRACT NO.: 05-060404	DISREGARD PRINTS BEARING EARLIER REVISION DATES	REVISION DATES	SHEET 24 OF 33