

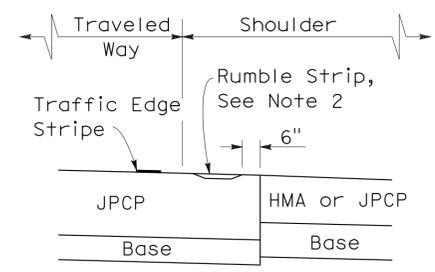
DIST	COUNTY	ROUTE	POST MILES TOTAL PROJECT	SHEET NO.	TOTAL SHEETS
07	LA	5	15.8/16.9	101	145

William K. Farnbach  
 REGISTERED CIVIL ENGINEER  
 June 5, 2009  
 PLANS APPROVAL DATE  
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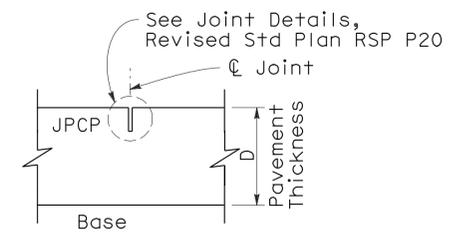
REGISTERED PROFESSIONAL ENGINEER  
 William K. Farnbach  
 No. C49042  
 Exp. 9-30-10  
 CIVIL  
 STATE OF CALIFORNIA

To accompany plans dated 5-24-10

- NOTES:**
- Transverse joints shall be constructed at right angles to the longitudinal pavement joints in new Jointed Plain Concrete Pavement and spaced at successive repeated intervals of 12', 15', 13' and 14'.
  - For locations of rumble strips, see project plans. For rumble strip details not shown, see Standard Plans A40A and A40B.
  - Joint spacing patterns do not apply to intersections.



**DETAIL "A"**



**SECTION C-C  
TRANSVERSE/LONGITUDINAL JOINT**  
(no dowel bars/tie bars)

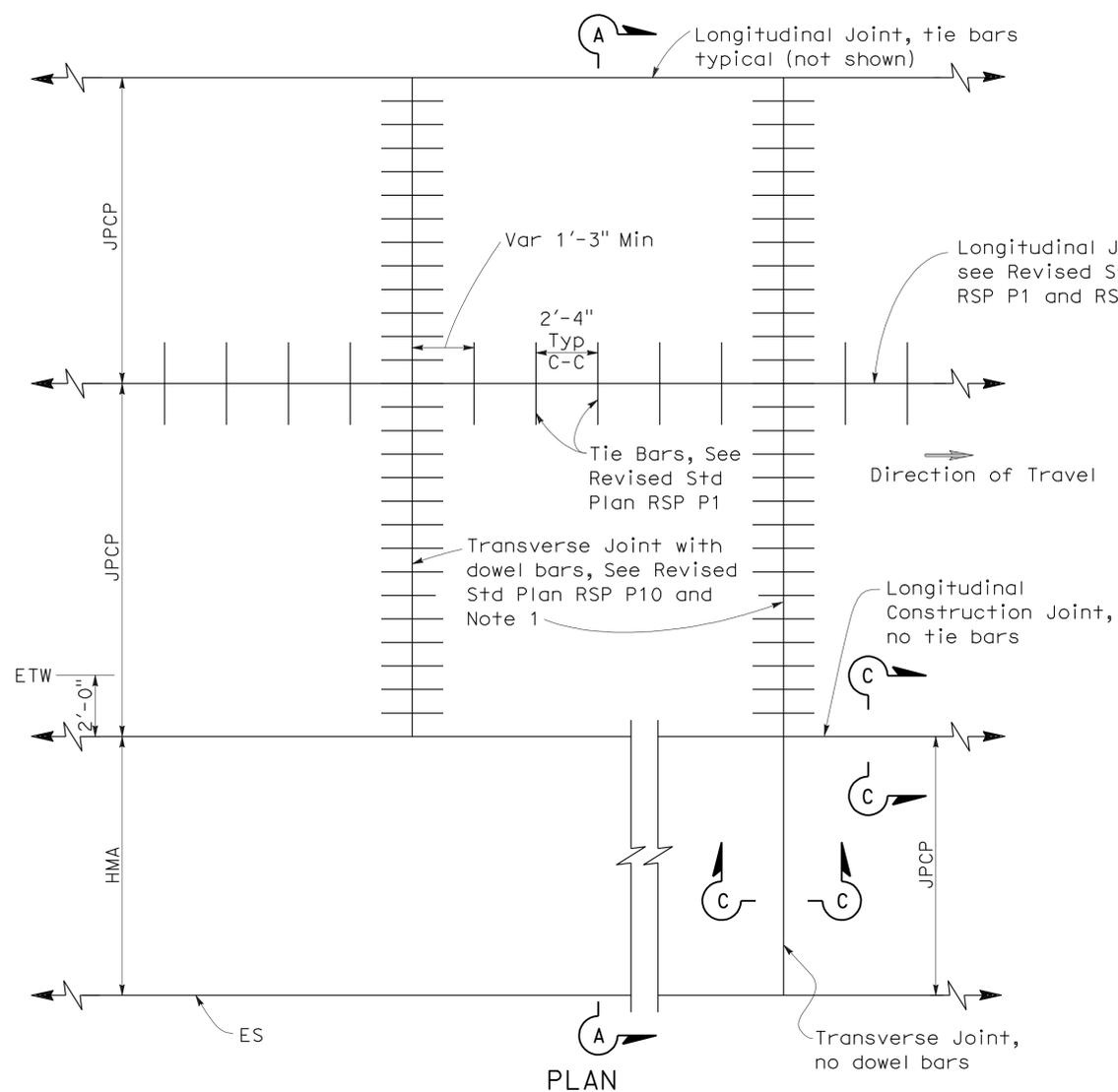
STATE OF CALIFORNIA  
DEPARTMENT OF TRANSPORTATION

**JOINTED PLAIN CONCRETE  
PAVEMENT-WIDENED SLAB DETAILS**

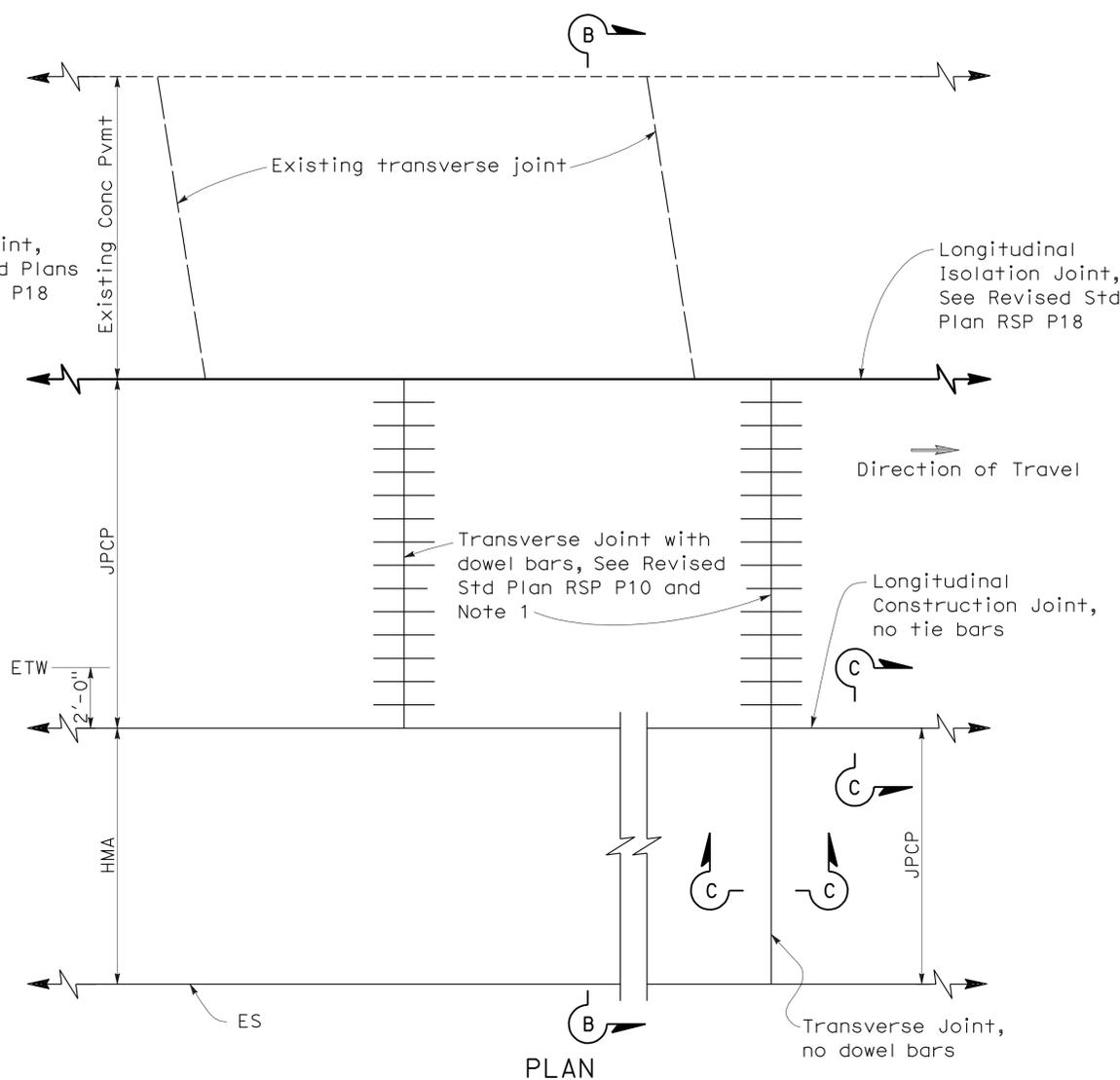
NO SCALE

RSP P2 DATED JUNE 5, 2009 SUPERCEDES STANDARD PLAN P2  
DATED MAY 1, 2006 - PAGE 120 OF THE STANDARD PLANS BOOK DATED MAY 2006.

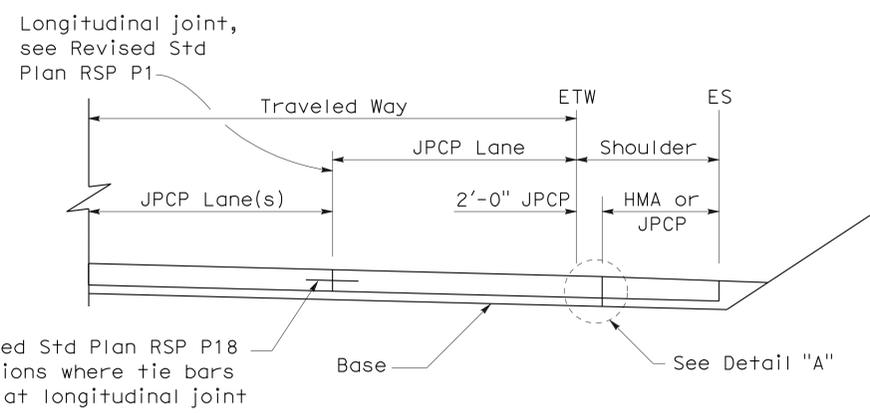
**REVISED STANDARD PLAN RSP P2**



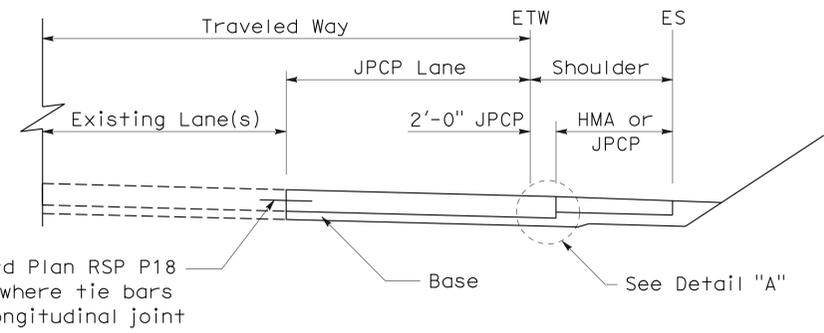
**PLAN  
NEW CONSTRUCTION**



**PLAN  
LANE/SHOULDER ADDITION OR RECONSTRUCTION**

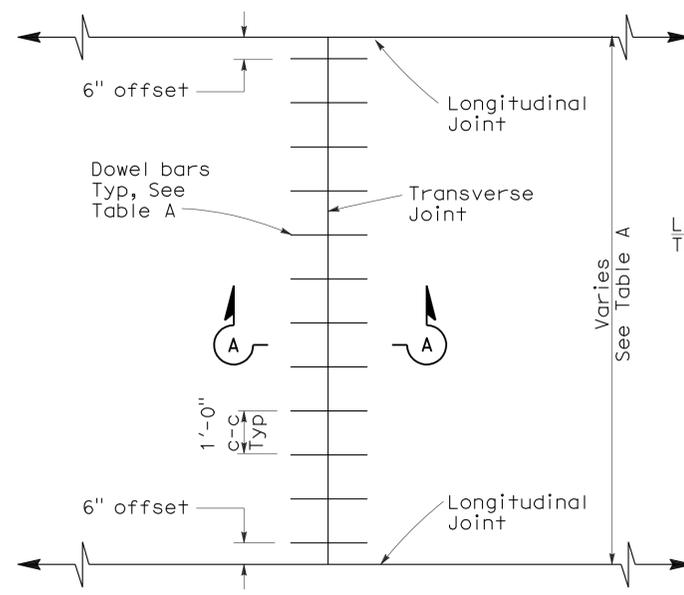


**SECTION A-A**

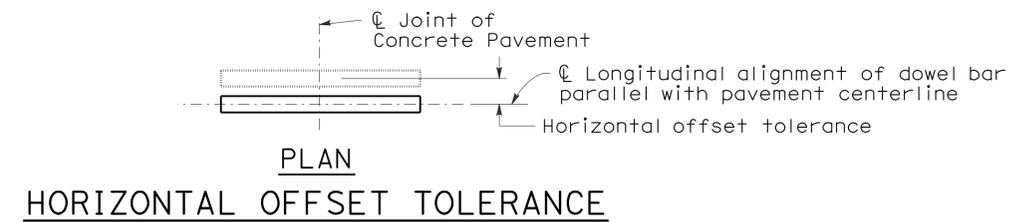


**SECTION B-B**

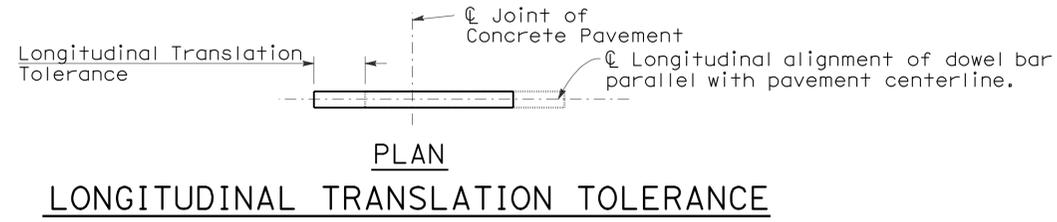
2006 REVISED STANDARD PLAN RSP P2



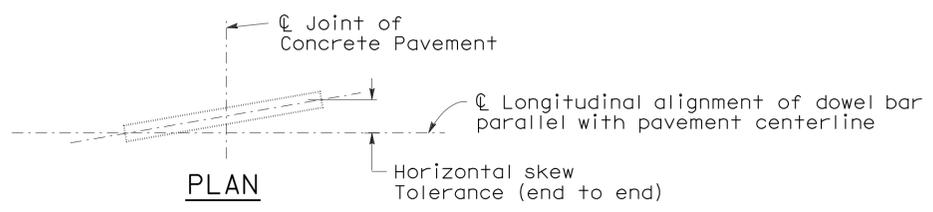
**TRANSVERSE JOINT DOWEL BAR LAYOUT**



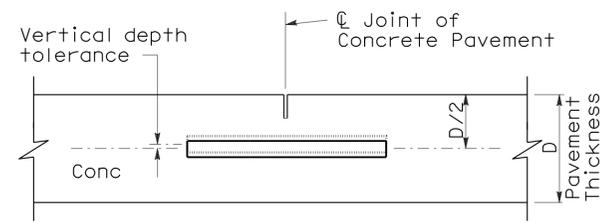
**HORIZONTAL OFFSET TOLERANCE**



**LONGITUDINAL TRANSLATION TOLERANCE**

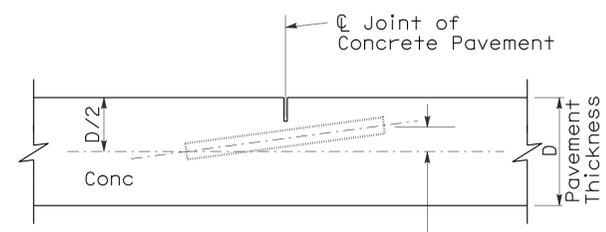


**HORIZONTAL SKEW TOLERANCE**



**ELEVATION**

**VERTICAL DEPTH TOLERANCE**



**ELEVATION**

**VERTICAL SKEW TOLERANCE**

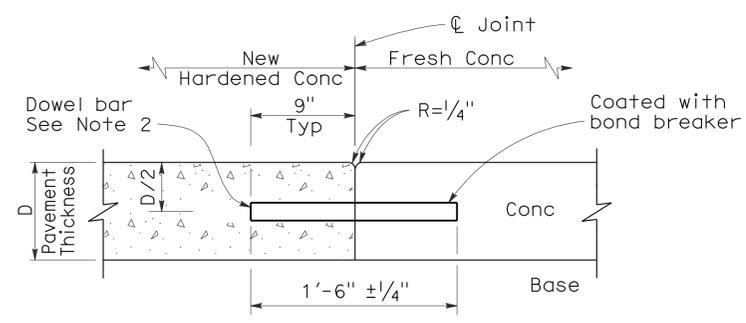
To accompany plans dated 5-24-10

**NOTES:**

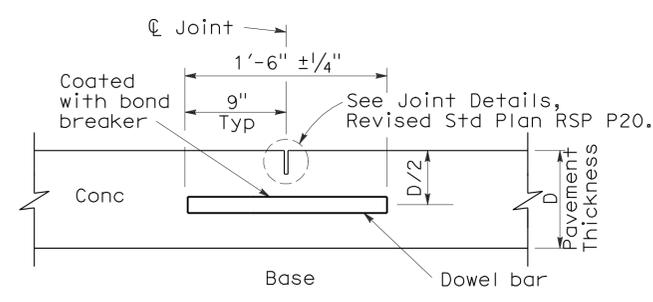
- See Revised Standard Plan RSP P1 for typical dowel bar placement and locations.
- 1 1/2" Dia smooth dowel bars are to be used with a pavement thickness, D, equal to or greater than 0.70 feet. For pavement thickness, D, less than 0.70 feet, use 1 1/4" Dia smooth dowel bars.
- For widths not shown, see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

**TABLE A (See Note 3)**

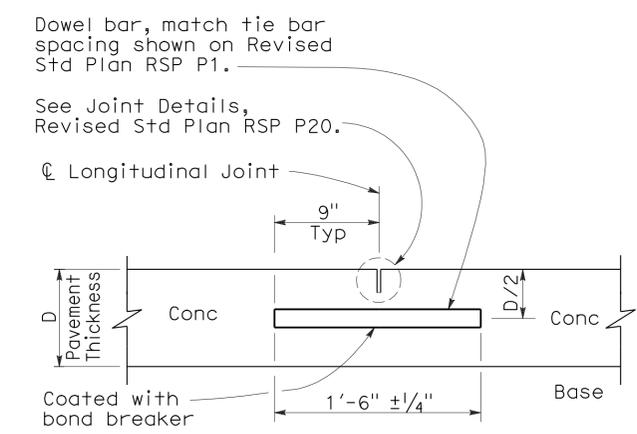
Dowel Bar Transverse Spacing Table	
Width between Longitudinal Joints	Number of Dowels between Longitudinal Joints
14'-0"	14
13'-0"	13
12'-0"	12
11'-0"	11
10'-0"	10
8'-0"	8
5'-0"	5
4'-0"	4



**SECTION A-A TRANSVERSE CONSTRUCTION JOINT DETAIL**

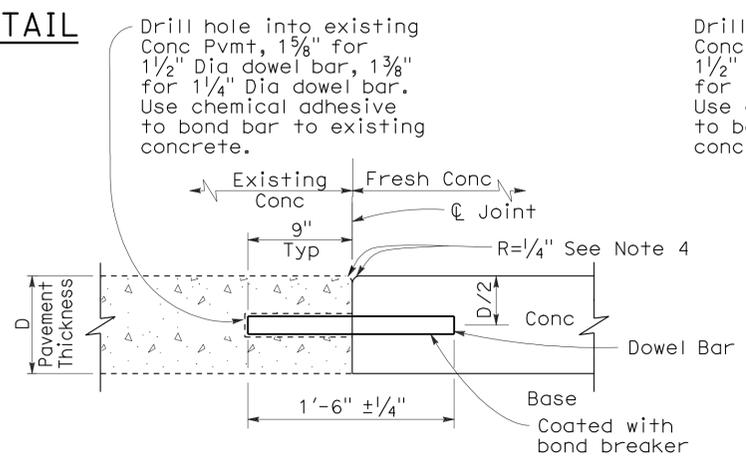


**TRANSVERSE CONTRACTION JOINT**



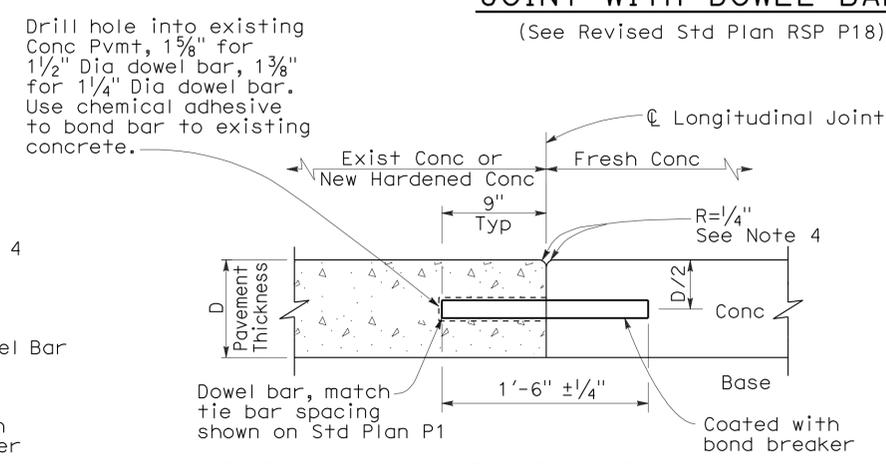
**LONGITUDINAL CONTRACTION JOINT WITH DOWEL BARS**

(See Revised Std Plan RSP P18)



**TRANSVERSE CONSTRUCTION JOINT FOR EXISTING CONCRETE PAVEMENT**

(Drill and bond locations)



**LONGITUDINAL CONSTRUCTION JOINT WITH DOWEL BARS**

(See Revised Std Plan RSP P18)

STATE OF CALIFORNIA  
DEPARTMENT OF TRANSPORTATION  
**CONCRETE PAVEMENT-DOWEL BAR DETAILS**  
NO SCALE

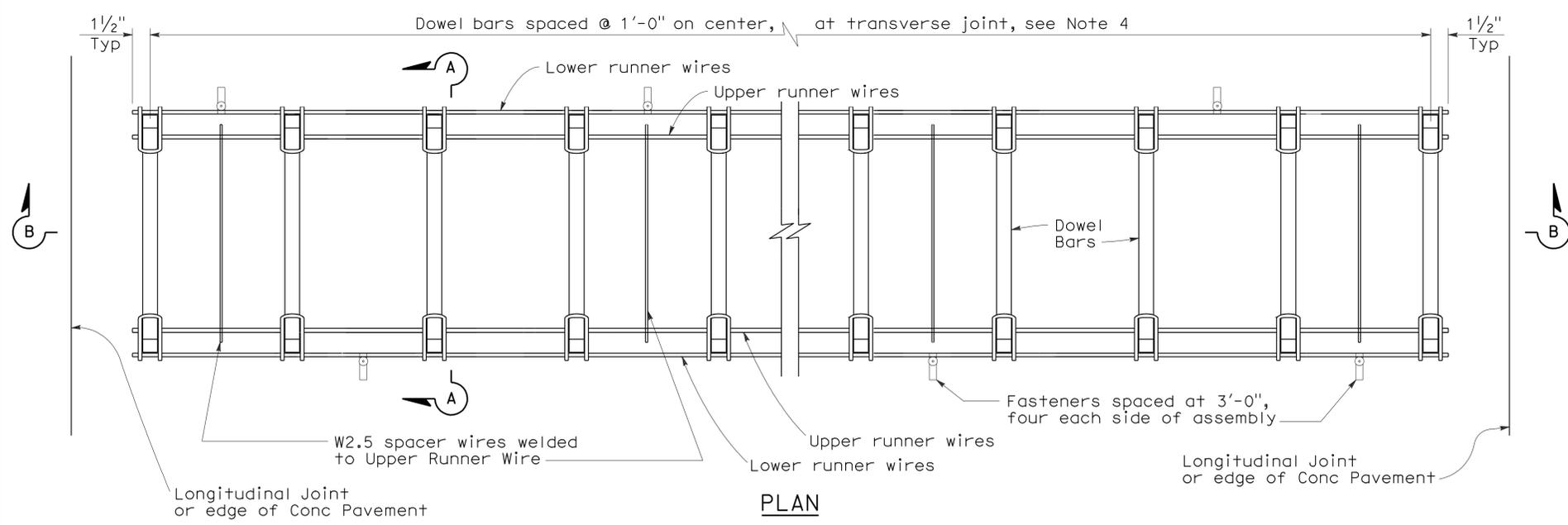
RSP P10 DATED MAY 15, 2009 SUPERSEDES STANDARD PLAN P10 DATED MAY 1, 2006 - PAGE 124 OF THE STANDARD PLANS BOOK DATED MAY 2006.

DIST	COUNTY	ROUTE	POST MILES TOTAL PROJECT	SHEET NO.	TOTAL SHEETS
07	LA	5	15.8/16.9	103	145

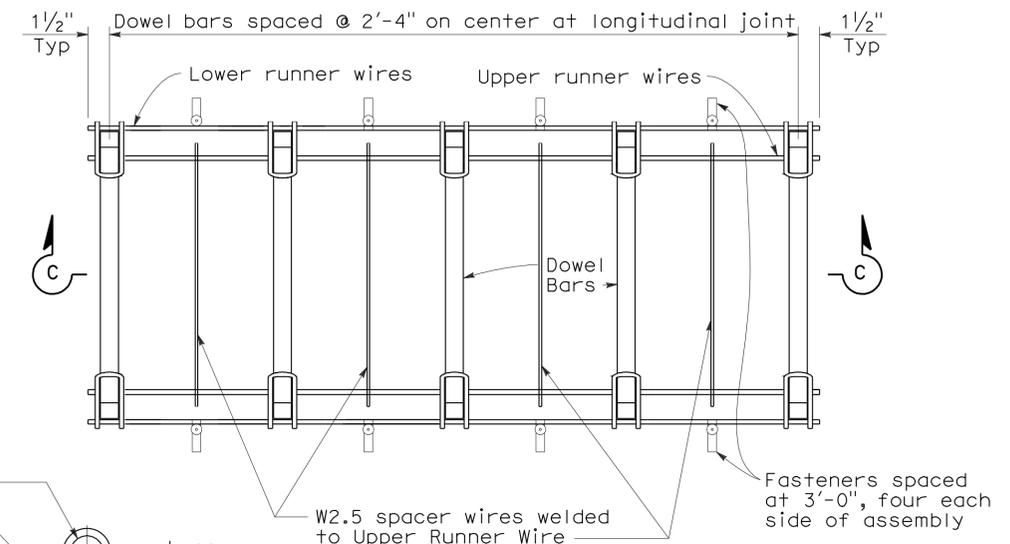
William K. Farnbach  
 REGISTERED CIVIL ENGINEER  
 May 15, 2009  
 PLANS APPROVAL DATE  
 The State of California or its officers or agents shall not be responsible for the accuracy or completeness of electronic copies of this plan sheet.

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

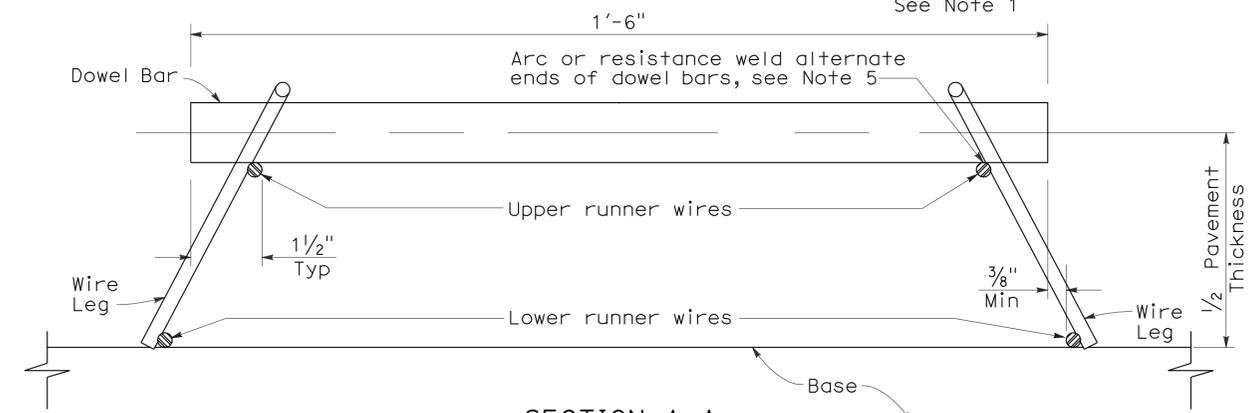
To accompany plans dated 5-24-10



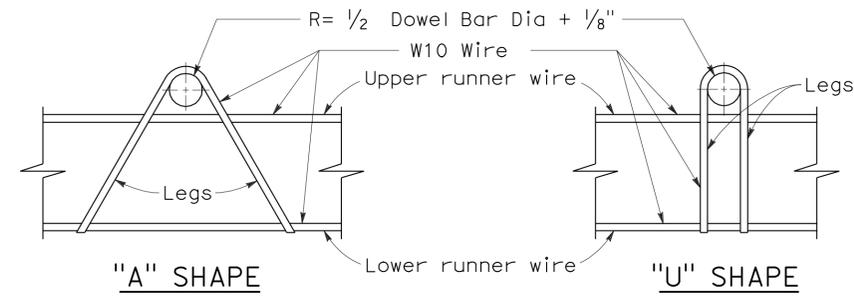
**PLAN**  
**DOWEL BAR BASKET**  
**(TRANSVERSE JOINT)**  
 See Note 1



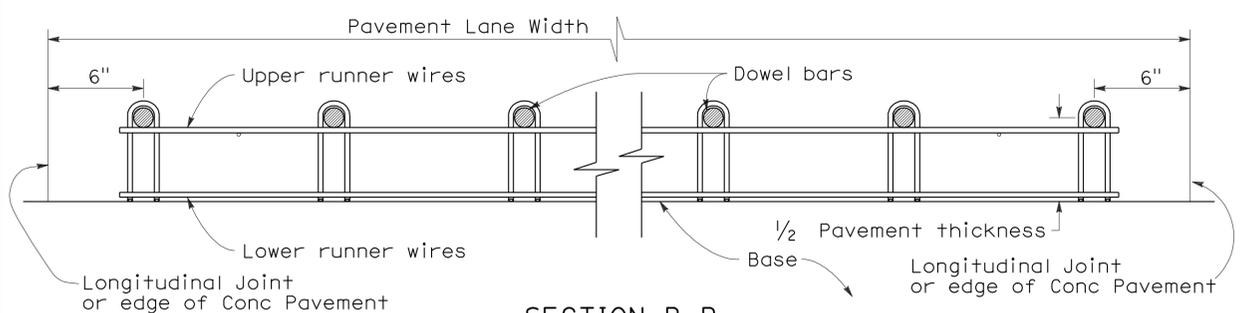
**PLAN**  
**DOWEL BAR BASKET**  
**(LONGITUDINAL JOINT)**  
 See Note 1



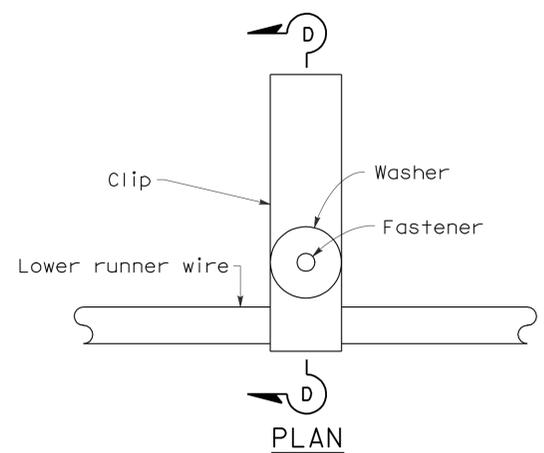
**SECTION A-A**



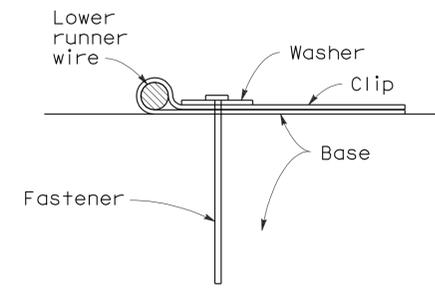
**ASSEMBLY FRAME DETAILS**



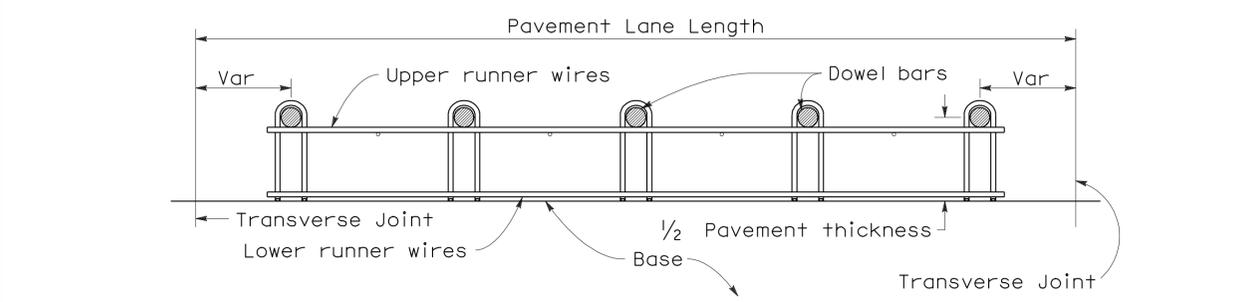
**SECTION B-B**



**FASTENER DETAIL**



**SECTION D-D**



**SECTION C-C**  
 See Notes 1 and 4

**NOTES:**

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

STATE OF CALIFORNIA  
DEPARTMENT OF TRANSPORTATION

**CONCRETE PAVEMENT -  
DOWEL BAR BASKET  
DETAILS**

NO SCALE

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

**REVISED STANDARD PLAN RSP P12**

2006 REVISED STANDARD PLAN RSP P12

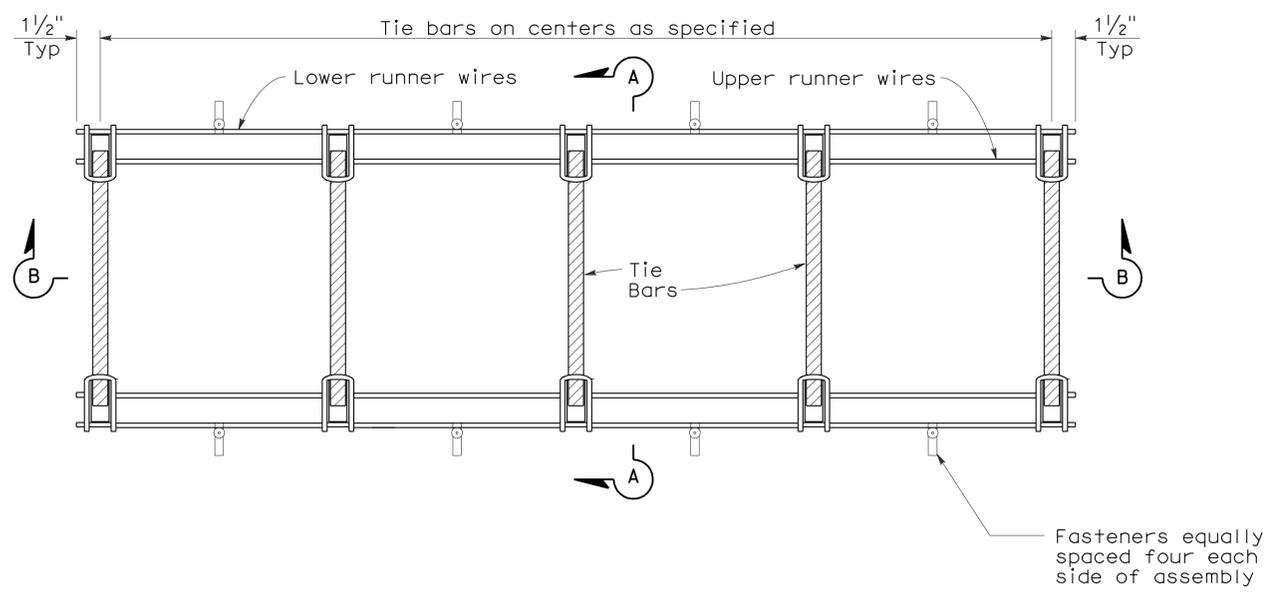
DIST	COUNTY	ROUTE	POST MILES TOTAL PROJECT	SHEET NO.	TOTAL SHEETS
07	LA	5	15.8/16.9	104	145

*William K. Farnbach*  
 REGISTERED CIVIL ENGINEER  
 May 15, 2009  
 PLANS APPROVAL DATE

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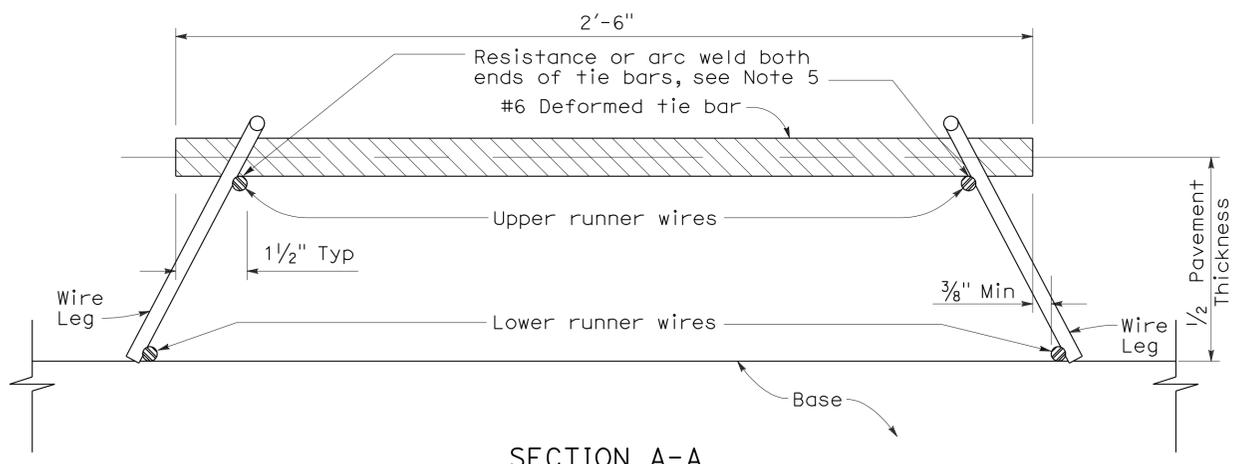
REGISTERED PROFESSIONAL ENGINEER  
 William K. Farnbach  
 No. C49042  
 Exp. 9-30-10  
 CIVIL  
 STATE OF CALIFORNIA

To accompany plans dated 5-24-10

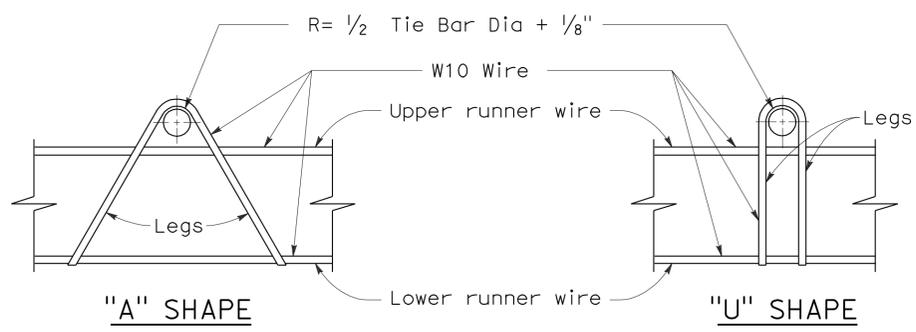


**PLAN**  
**TIE BAR BASKET**  
 (TIE BARS AT LONGITUDINAL JOINT)  
 See Note 1

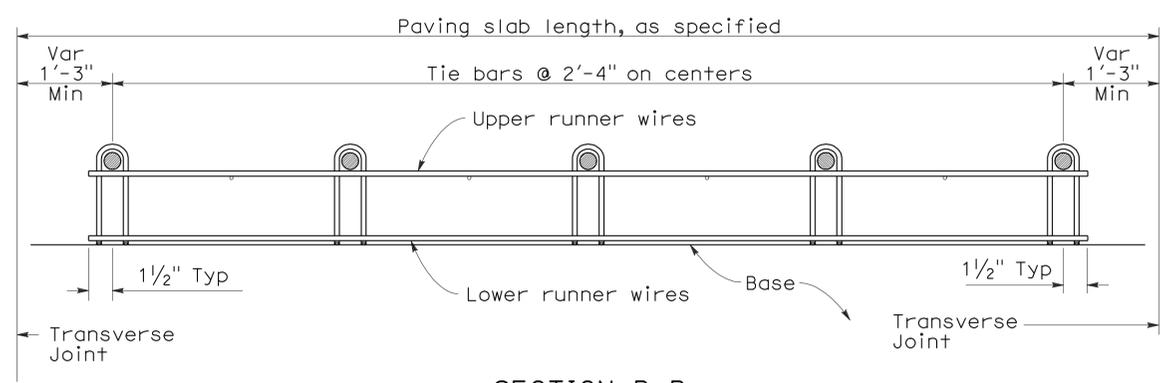
- NOTES:**
- "U" frame shape assembly shown. "U" frame shape or "A" frame shape are acceptable.
  - Wire sizes shown are minimum required.
  - All wire intersections are to be resistance welded.
  - Not for use on nondoweled skewed jointed plain concrete pavement.
  - Weld may be at top or bottom of tie bar.



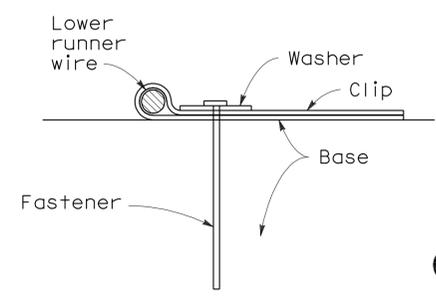
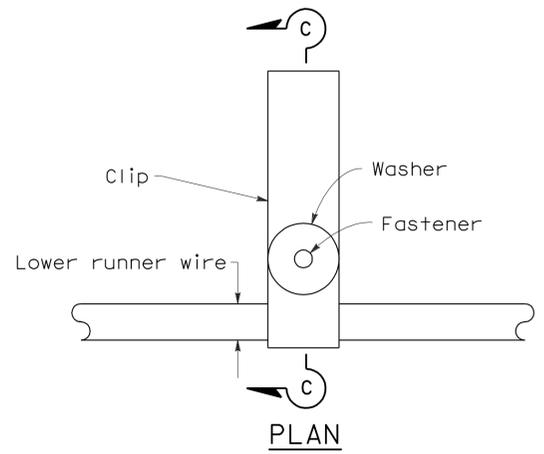
**SECTION A-A**



**ASSEMBLY FRAME DETAILS**



**SECTION B-B**  
 See Note 1



**FASTENER DETAIL**

STATE OF CALIFORNIA  
 DEPARTMENT OF TRANSPORTATION  
**CONCRETE PAVEMENT -  
 TIE BAR BASKET  
 DETAILS**

NO SCALE

RSP P17 DATED MAY 15, 2009 SUPERSEDES RSP P17 DATED NOVEMBER 17, 2006 AND STANDARD PLAN P17 DATED MAY 1, 2006 - PAGE 126 OF THE STANDARD PLANS BOOK DATED MAY 2006.

**REVISED STANDARD PLAN RSP P17**

2006 REVISED STANDARD PLAN RSP P17

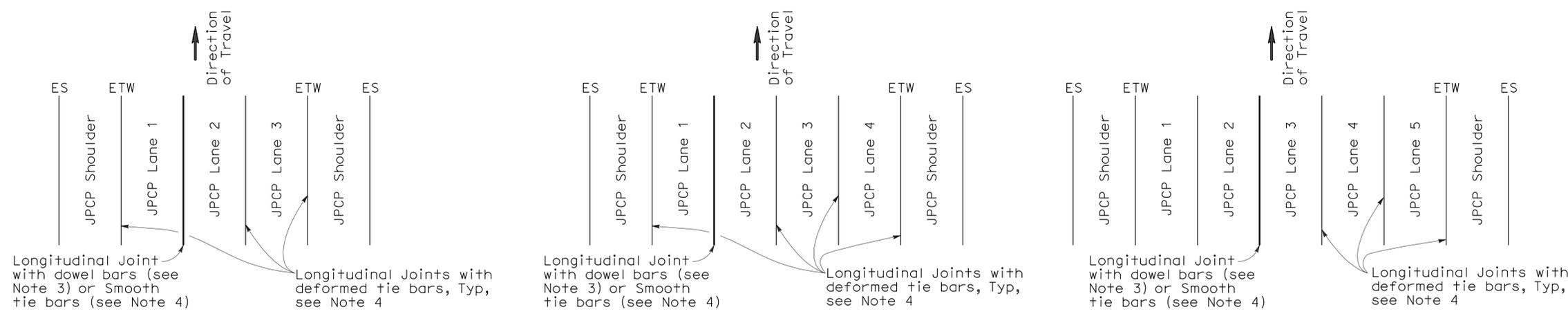
DIST	COUNTY	ROUTE	POST MILES TOTAL PROJECT	SHEET NO.	TOTAL SHEETS
07	LA	5	15.8/16.9	105	145

William K. Farnbach  
 REGISTERED CIVIL ENGINEER  
 June 5, 2009  
 PLANS APPROVAL DATE

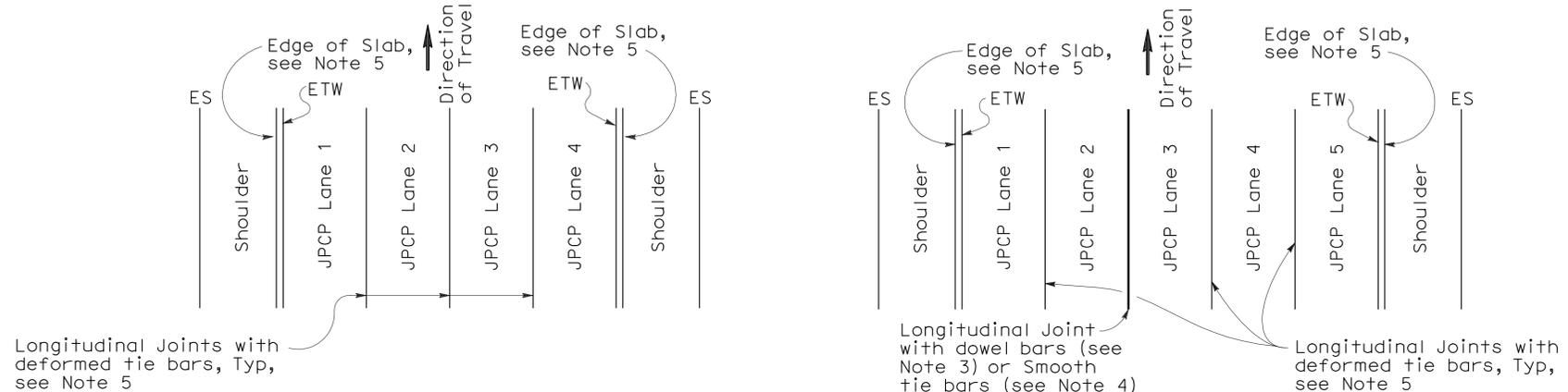
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REGISTERED PROFESSIONAL ENGINEER  
 William K. Farnbach  
 No. C49042  
 Exp. 9-30-10  
 CIVIL  
 STATE OF CALIFORNIA

To accompany plans dated 5-24-10

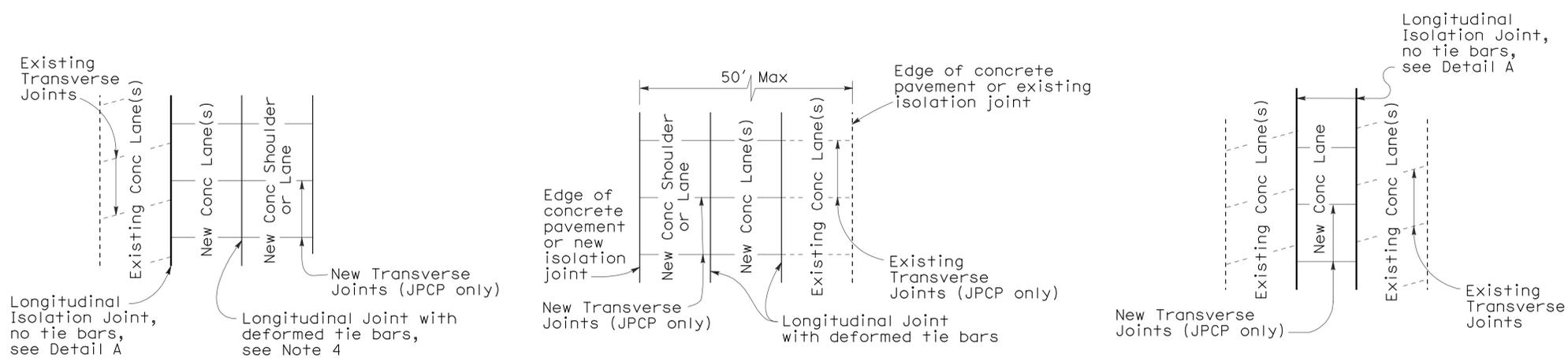


**3 LANES WITH TIED CONCRETE SHOULDERS PLAN**      **4 LANES WITH TIED CONCRETE SHOULDERS PLAN**      **5 LANES WITH TIED CONCRETE SHOULDERS PLAN**



**4 LANES OR LESS WITH WIDENED SLAB PLAN**      **5 LANES WITH WIDENED SLAB PLAN**

**NEW CONSTRUCTION**  
Location of Longitudinal Joints (For JPCP)



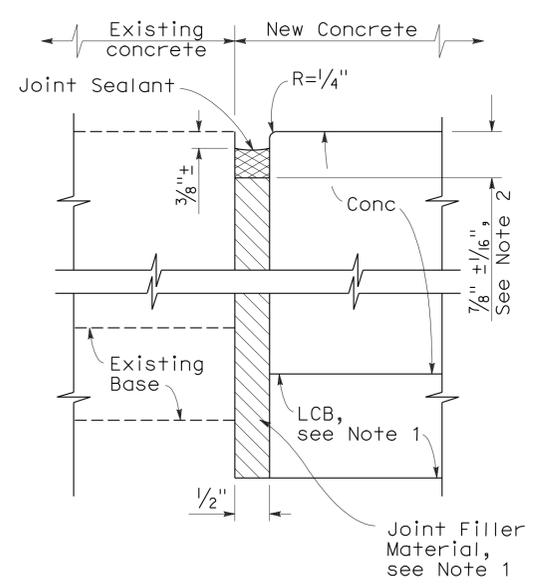
**CASE 1 PLAN**      **CASE 2 PLAN**      **CASE 3 (INTERIOR LANE REPLACEMENT) PLAN**

Transverse Joints do not align between new and existing      Transverse Joints align between new and existing      Transverse Joints do not align between new and existing

**LANE/SHOULDER ADDITION OR RECONSTRUCTION**  
(For JPCP and CRCP)

**NOTES:**

- Where Lean Concrete Base is not used as base material, the joint filler material used for the longitudinal isolation joint shall only extend to the bottom of the new concrete slab. See Detail A.
- Use 5/8" ± 1/16" dimension for silicone sealant.
- See Revised Standard Plan RSP P10 for longitudinal joint with dowel bars.
- See Revised Standard Plan RSP P1.
- See Revised Standard Plan RSP P2.



**DETAIL A**  
**ISOLATION JOINT**

STATE OF CALIFORNIA  
DEPARTMENT OF TRANSPORTATION  
**CONCRETE PAVEMENT-LANE SCHEMATICS AND ISOLATION JOINT DETAIL**

NO SCALE

RSP P18 DATED JUNE 5, 2009 SUPERSEDES RSP P18 DATED MAY 15, 2009, RSP P18 DATED NOVEMBER 17, 2006 AND STANDARD PLAN P18 DATED MAY 1, 2006 - PAGE 127 OF THE STANDARD PLANS BOOK DATED MAY 2006.

**REVISED STANDARD PLAN RSP P18**

2006 REVISED STANDARD PLAN RSP P18

**NOTE:**

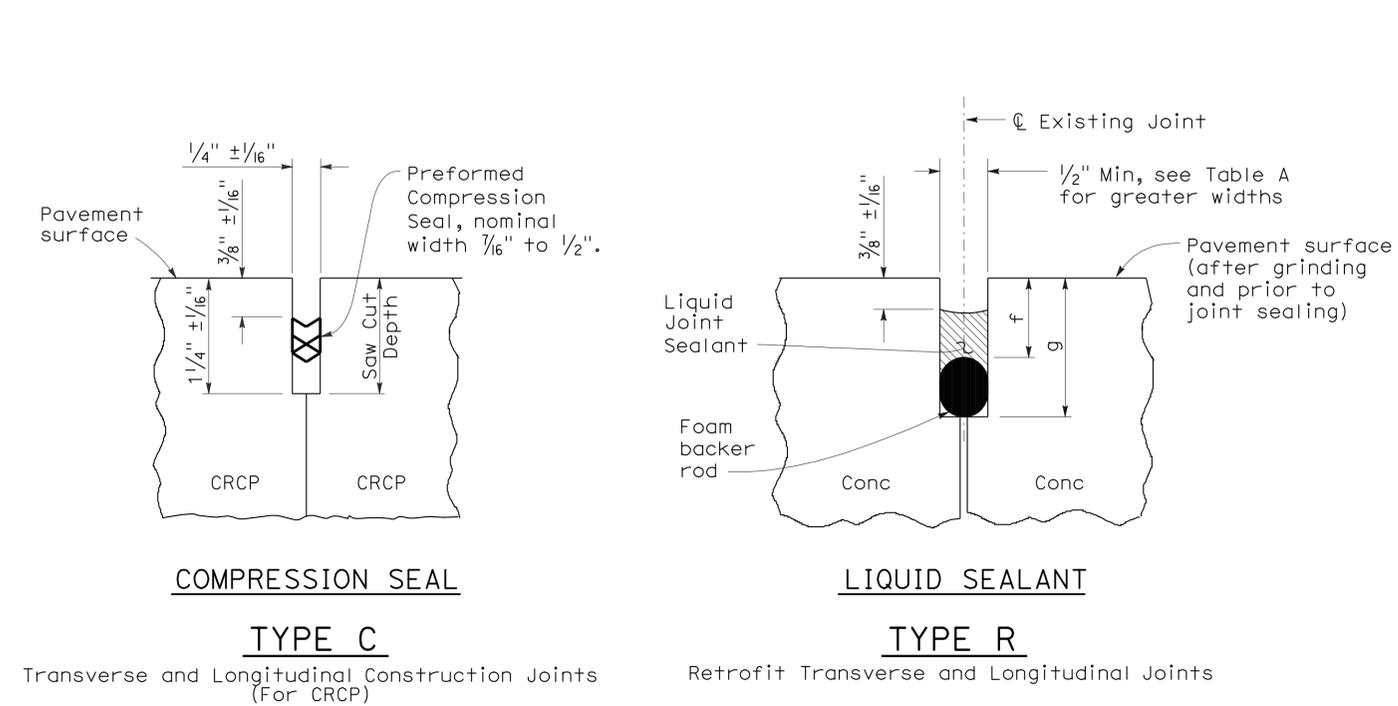
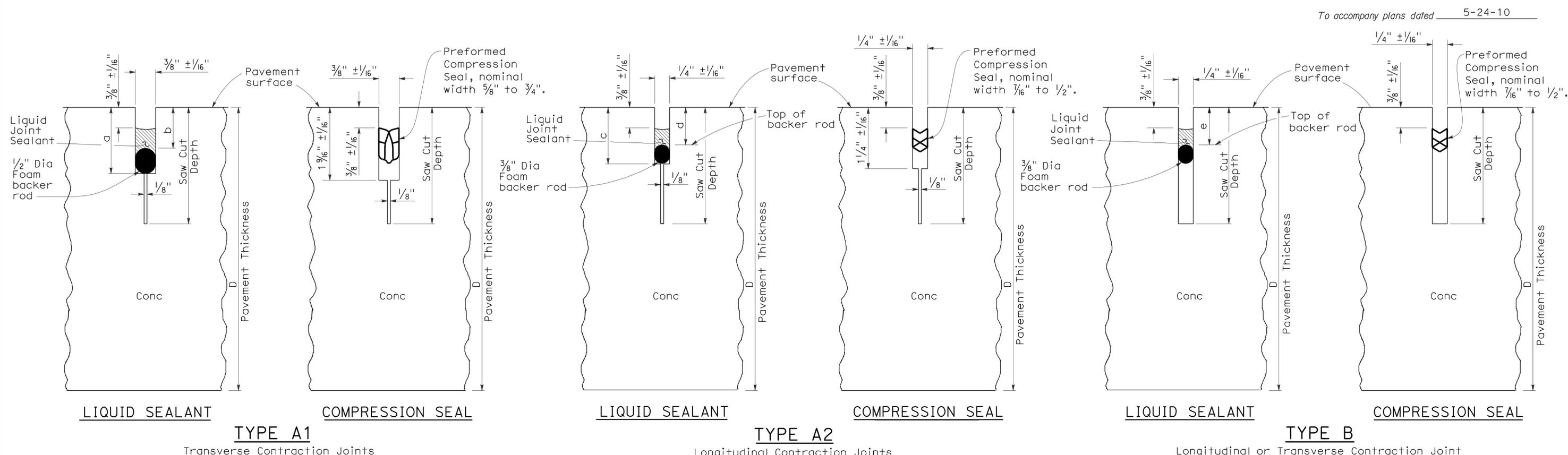
1. Tie bars, dowel bars, and reinforcement are not shown in joint seal details, see Revised Standard Plans RSP P1, RSP P3, RSP P10, RSP P35, RSP P45, or RSP P46 as applicable.

DIST	COUNTY	ROUTE	POST MILES TOTAL PROJECT	SHEET NO.	TOTAL SHEETS
07	LA	5	15.8/16.9	106	145

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

May 15, 2009  
 PLANS APPROVAL DATE

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**LIQUID SEALANT RESERVOIR DEPTH**

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

**TABLE A (TYPE R JOINT)**

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

STATE OF CALIFORNIA  
 DEPARTMENT OF TRANSPORTATION  
**CONCRETE PAVEMENT-  
 JOINT DETAILS**  
 NO SCALE

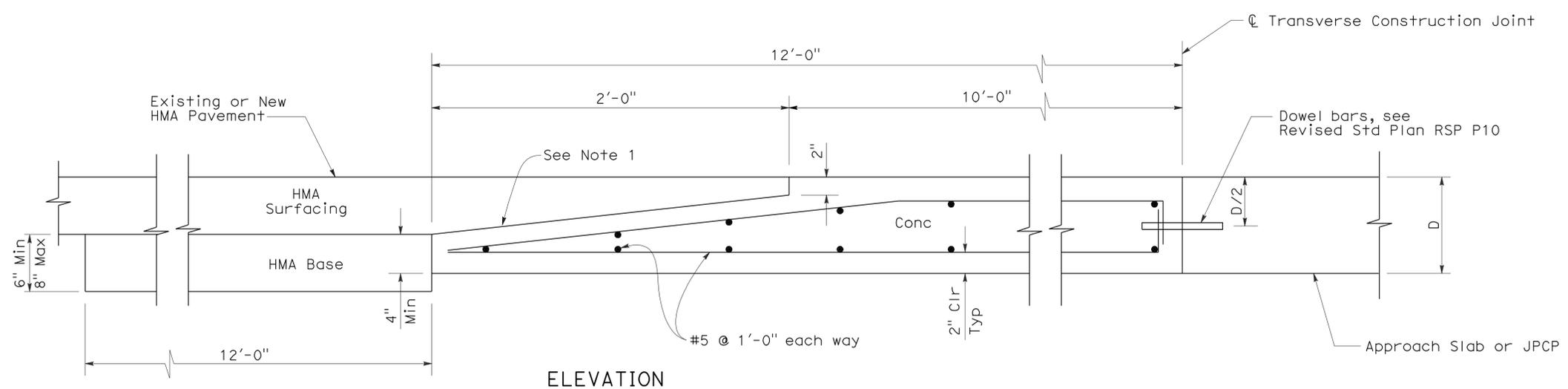
RSP P20 DATED MAY 15, 2009 SUPERSEDES STANDARD PLAN P20  
 DATED MAY 1, 2006 - PAGE 128 OF THE STANDARD PLANS BOOK DATED MAY 2006.

**REVISED STANDARD PLAN RSP P20**

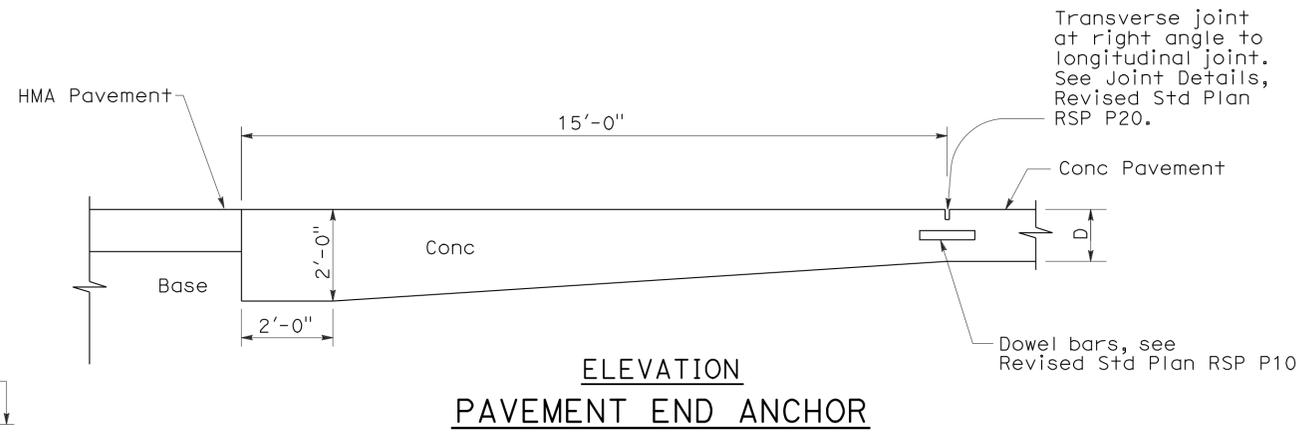
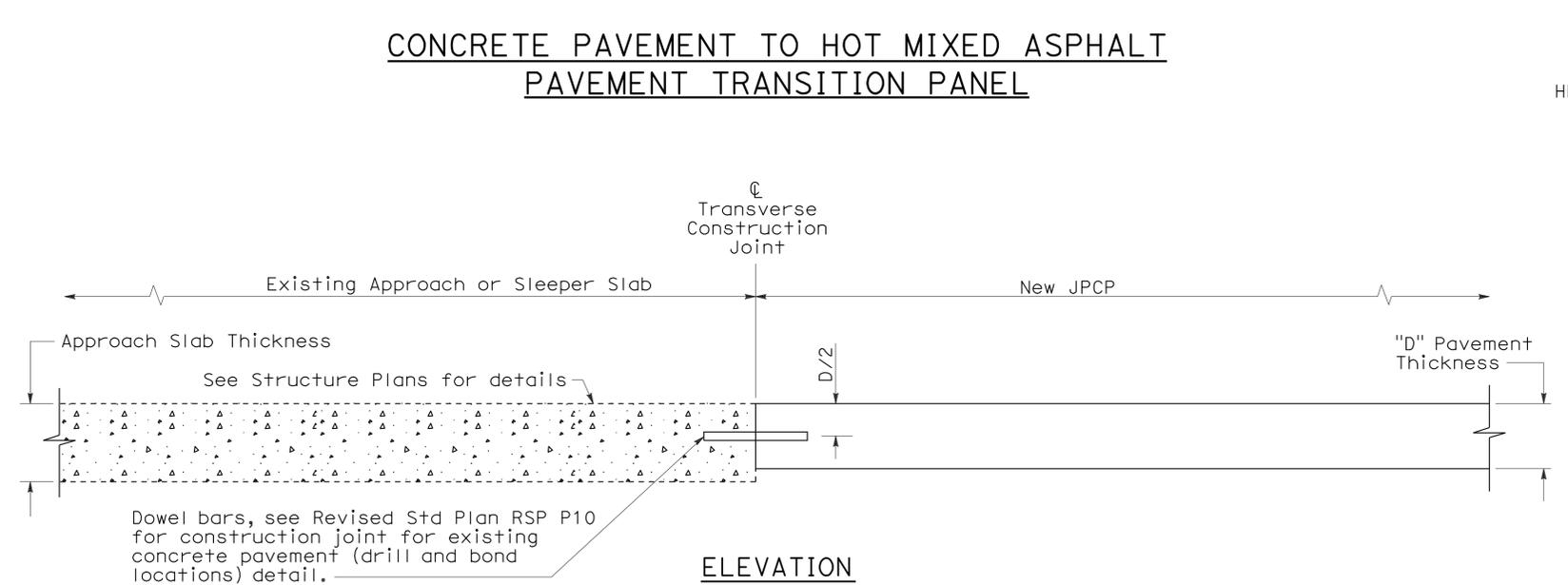
2006 REVISED STANDARD PLAN RSP P20

DIST	COUNTY	ROUTE	POST MILES TOTAL PROJECT	SHEET NO.	TOTAL SHEETS
07	LA	5	15.8/16.9	107	145

William K. Farnbach  
 REGISTERED CIVIL ENGINEER  
 May 15, 2009  
 PLANS APPROVAL DATE  
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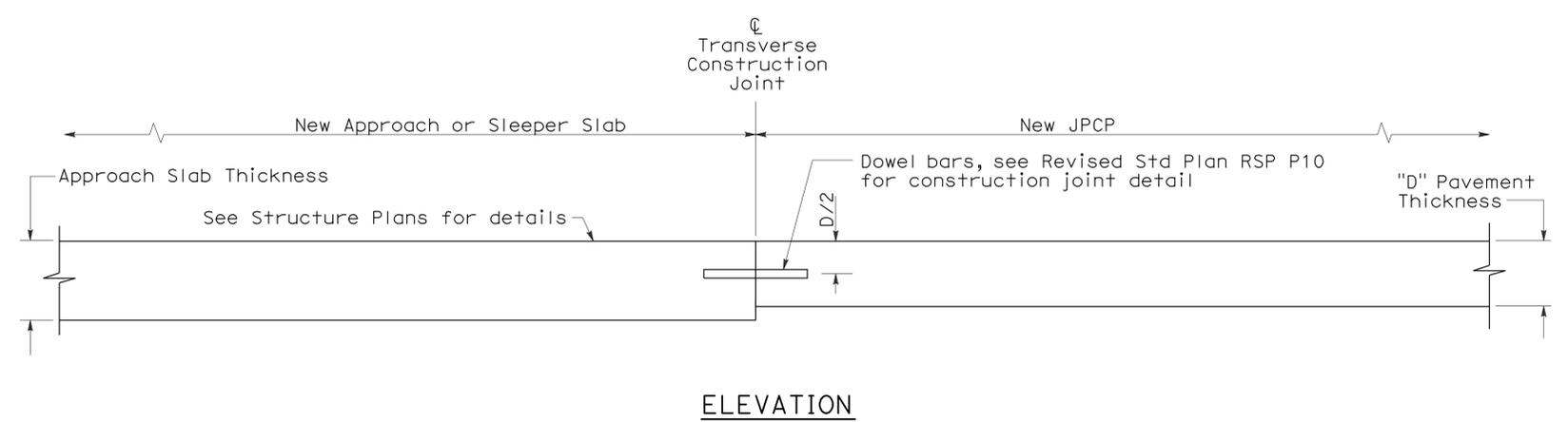


**CONCRETE PAVEMENT TO HOT MIXED ASPHALT PAVEMENT TRANSITION PANEL**



**PAVEMENT END ANCHOR**

**NOTE:**  
1. Heavy broom finish.



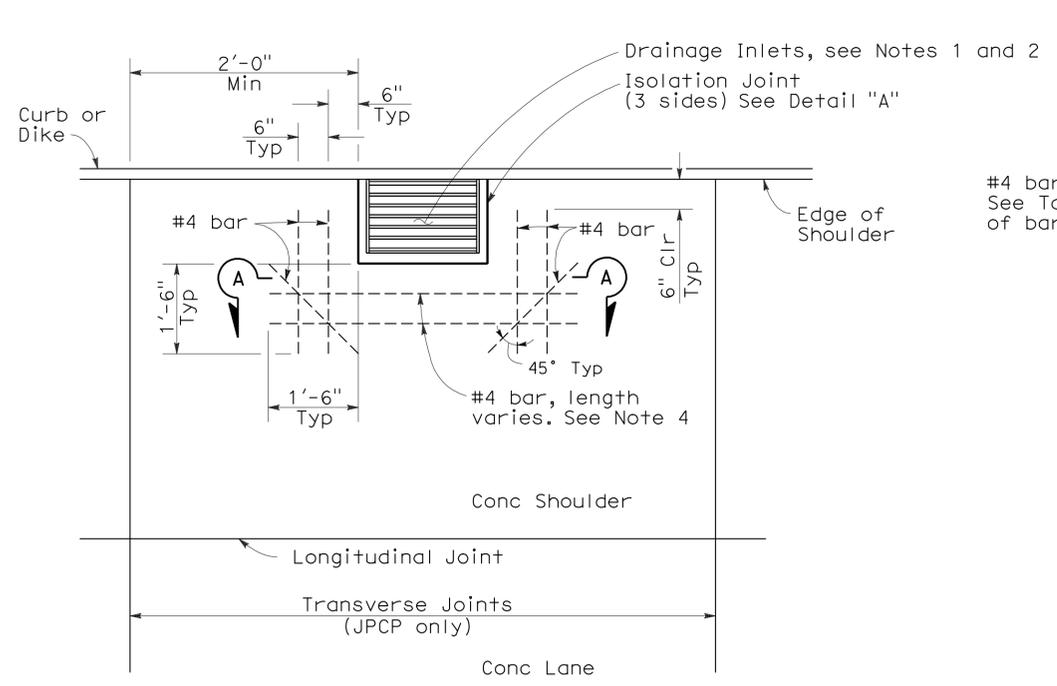
**CONCRETE PAVEMENT TRANSITION TO APPROACH OR SLEEPER SLAB**

STATE OF CALIFORNIA  
DEPARTMENT OF TRANSPORTATION  
**JOINTED PLAIN CONCRETE PAVEMENT-  
END PANEL  
PAVEMENT TRANSITIONS**  
NO SCALE

RSP P30 DATED MAY 15, 2009 SUPERSEDES STANDARD PLAN P30  
DATED MAY 1, 2006 - PAGE 129 OF THE STANDARD PLANS BOOK DATED MAY 2006.

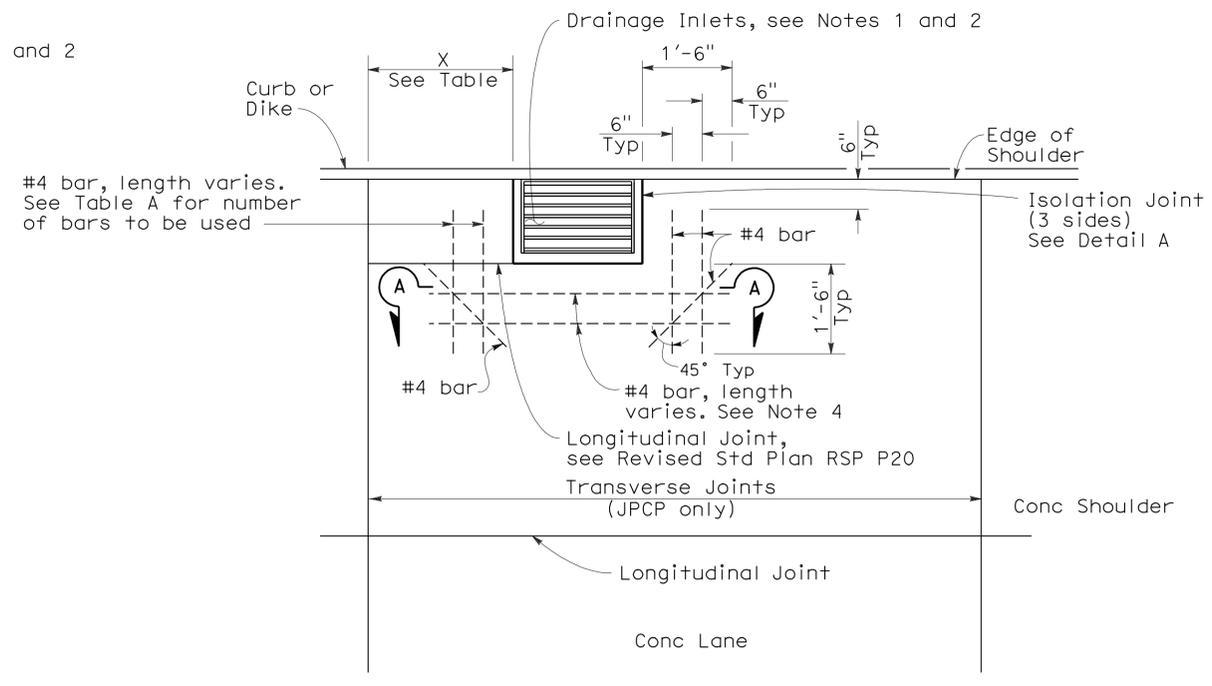
**REVISED STANDARD PLAN RSP P30**

2006 REVISED STANDARD PLAN RSP P30



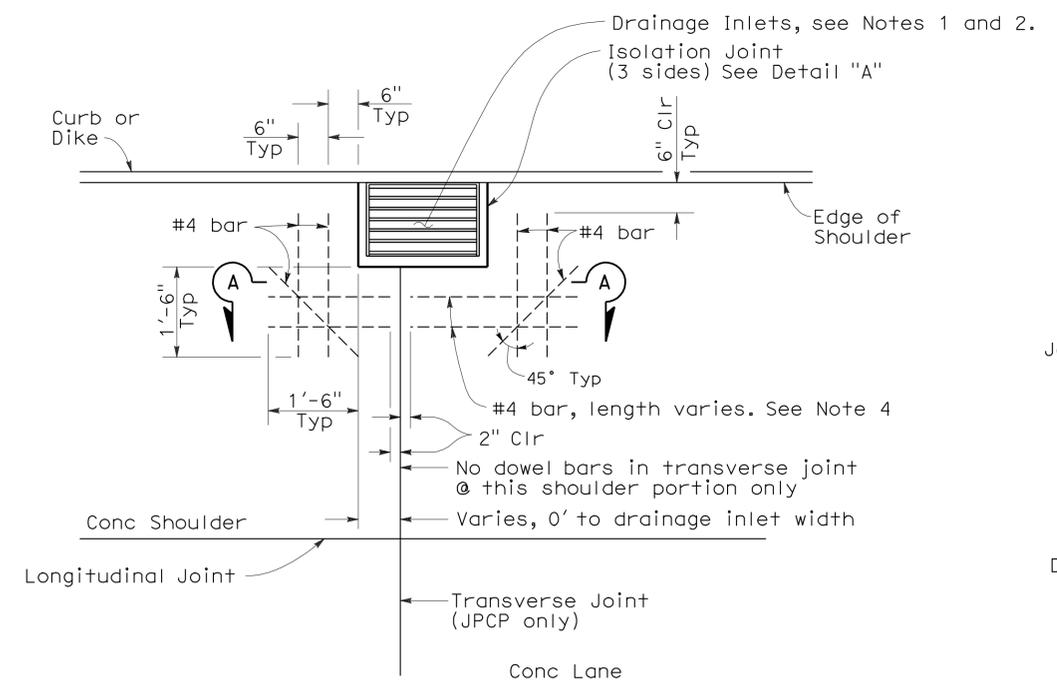
**CASE 1**

Transverse joint more than 2'-0" clear of drainage inlet wall or no transverse joint



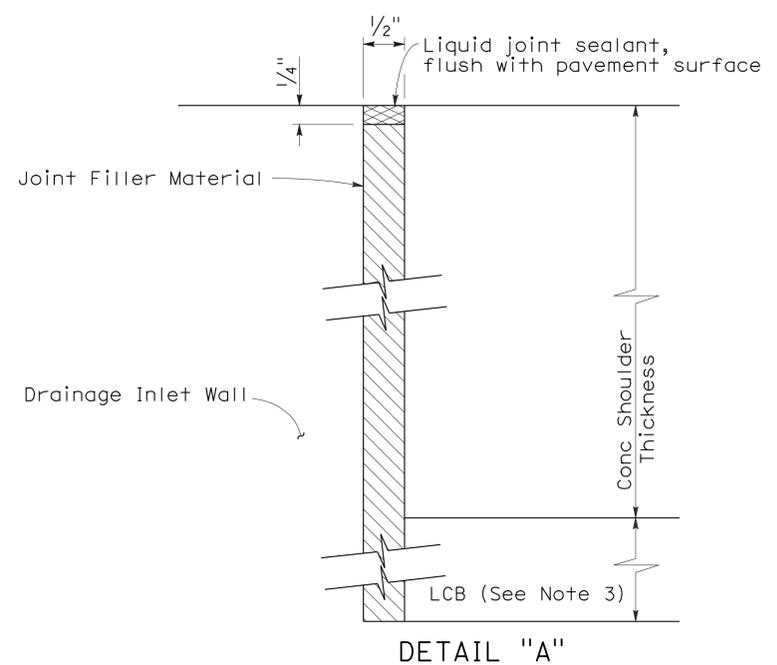
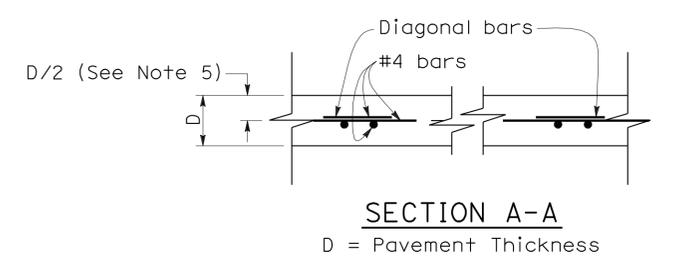
**CASE 3**

Transverse joint within 2'-0" of drainage inlet wall, or matches drainage inlet wall.



**CASE 2**

Transverse joint intersects drainage inlet, or matches drainage inlet wall.



**NOTES:**

1. Refer to Project Plans for location and Type of drainage inlets.
2. Top of inlet shall be flush with shoulder surface.
3. Extend joint filler material to bottom of Lean Concrete Base. Where Lean Concrete Base is not used as base material, the joint filler material shall only extend to the bottom of the new concrete pavement.
4. For Jointed Plain Concrete Pavement only. For Continuously Reinforced Concrete Pavement, terminate pavement steel reinforcement 2" clear from all outside edges of isolation joint.
5. For Jointed Plain Concrete Pavement only. For Continuously Reinforced Concrete Pavement, see New Standard Plan NSP P4.
6. Dowel and tie bars not shown, see Revised Standard Plan RSP P1.

**TABLE A**

DISTANCE X	BARS REQUIRED
2'-0" to 1'-6"	2
1'-6" to 9"	1 @ X/2
9" or less	None

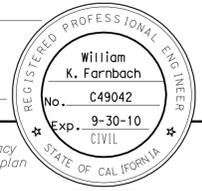
STATE OF CALIFORNIA  
DEPARTMENT OF TRANSPORTATION  
**CONCRETE PAVEMENT-  
DRAINAGE INLET  
DETAILS No. 1**  
NO SCALE

**ISOLATION JOINT AROUND DRAINAGE INLET**

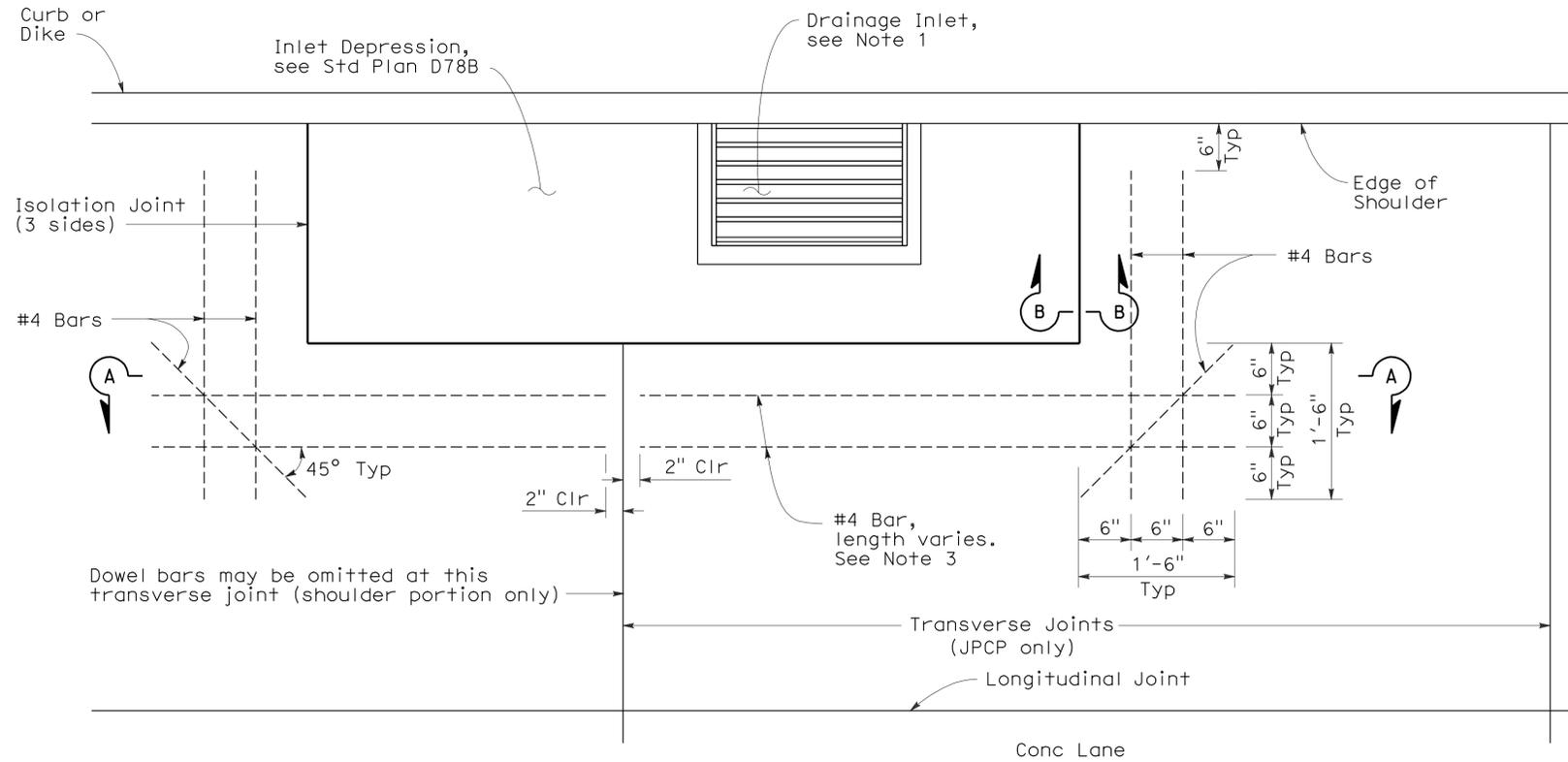
RSP P45 DATED MAY 15, 2009 SUPERSEDES STANDARD PLAN P45  
DATED MAY 1, 2006 - PAGE 132 OF THE STANDARD PLANS BOOK DATED MAY 2006.

**REVISED STANDARD PLAN RSP P45**

**2006 REVISED STANDARD PLAN RSP P45**

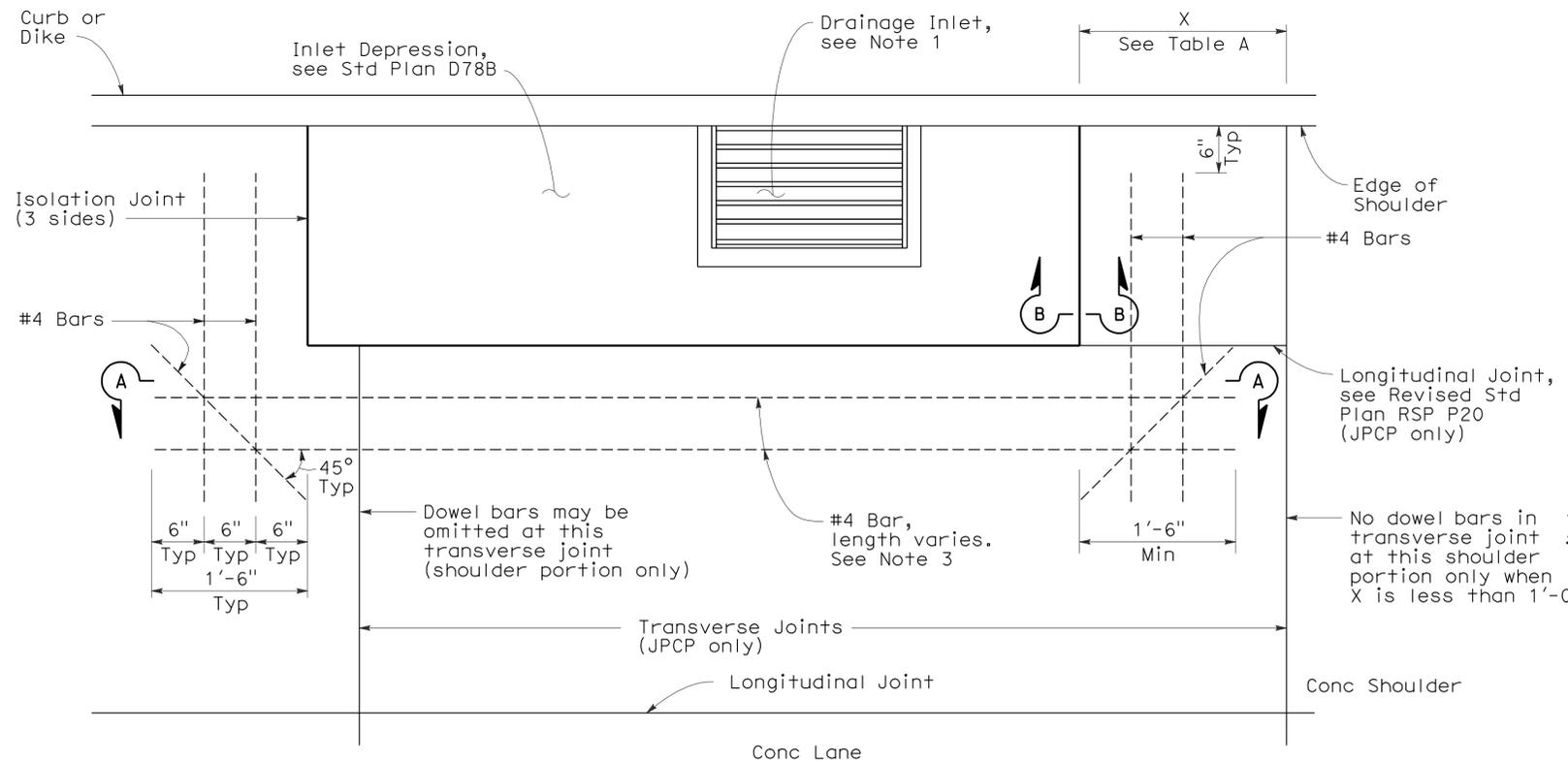


To accompany plans dated 5-24-10



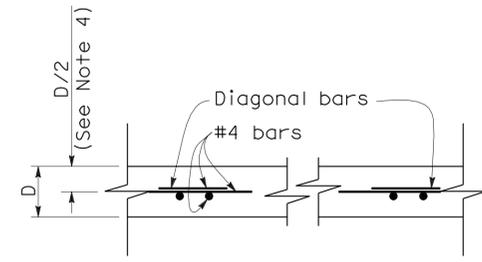
**CASE A**

Transverse Joint intersects inlet depression or no transverse joints.



**CASE B**

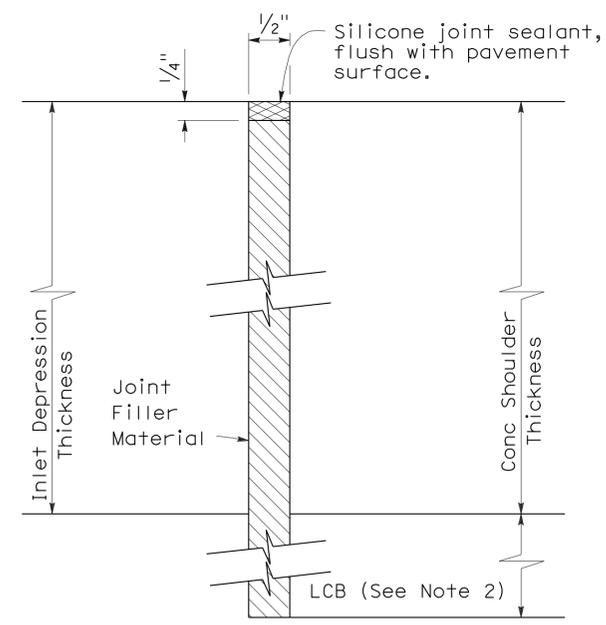
Transverse Joint within 2'-0" of edge of inlet depression.



**SECTION A-A**  
D = Pavement Thickness

**TABLE A**

DISTANCE X	BARS REQUIRED
2'-0" to 1'-6"	2
1'-6" to 1'-0"	1
1'-0" or less	None



**SECTION B-B**

**NOTES:**

1. Refer to Project Plans for location and type of drainage inlets.
2. Extend joint filler material to bottom of Lean Concrete Base. Where Lean Concrete Base is not used as base material, the joint filler material shall only extend to the bottom of the new concrete pavement.
3. For Jointed Plain Concrete Pavement only. For Continuously Reinforced Concrete Pavement, terminate pavement steel reinforcement 2" clear from all outside edges of isolation joint.
4. For Jointed Plain Concrete Pavement only. For Continuously Reinforced Concrete Pavement, see New Standard Plan NSP P4.

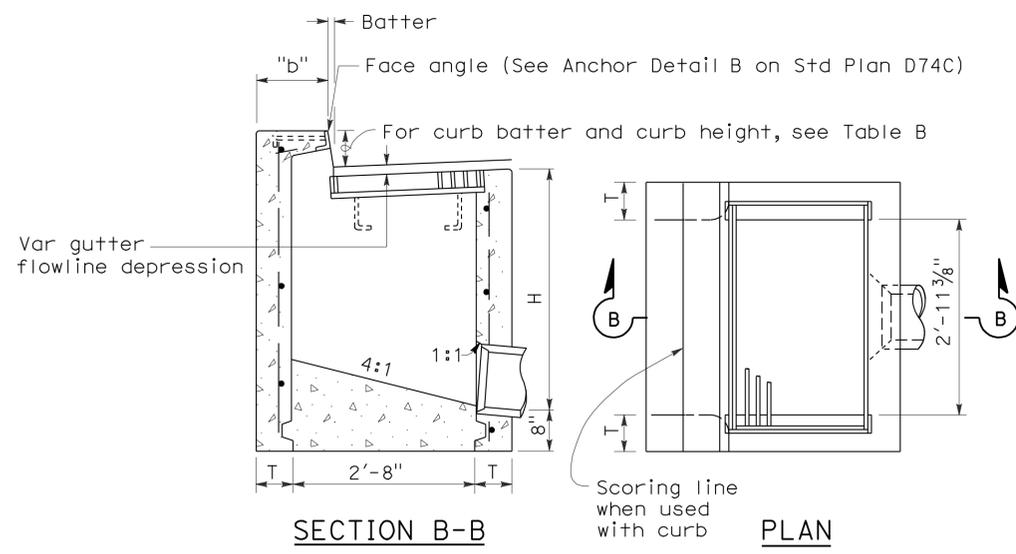
**ISOLATION JOINT AROUND INLET DEPRESSION**

STATE OF CALIFORNIA  
DEPARTMENT OF TRANSPORTATION  
**CONCRETE PAVEMENT-  
DRAINAGE INLET  
DETAILS No. 2**  
NO SCALE

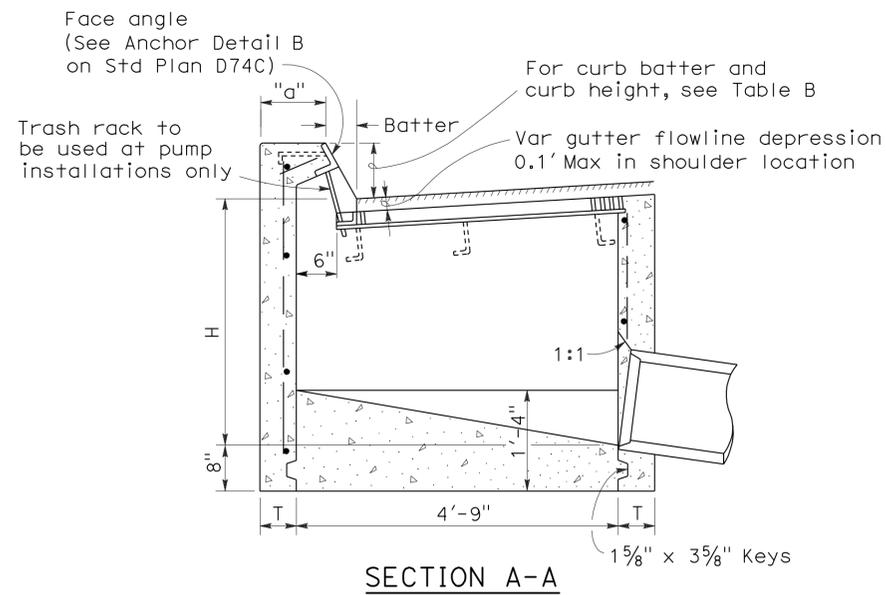
RSP P46 DATED MAY 15, 2009 SUPERSEDES STANDARD PLAN P46  
DATED MAY 1, 2006 - PAGE 133 OF THE STANDARD PLANS BOOK DATED MAY 2006.

**REVISED STANDARD PLAN RSP P46**

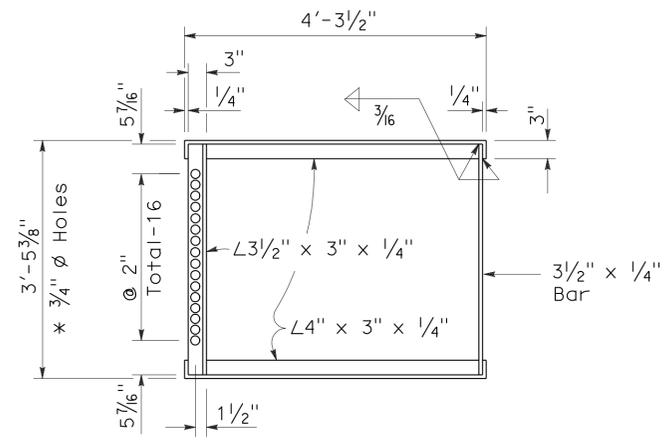
2006 REVISED STANDARD PLAN RSP P46



TYPE GO



SECTION A-A



GRATE FRAME FOR TYPE GDO INLET

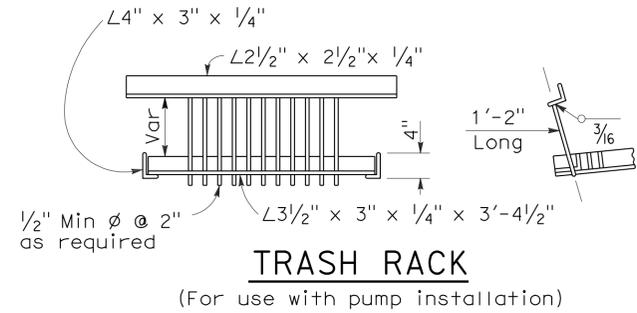
 \* 3/4"  $\phi$  Holes required only with trash rack

 TRASH RACK  
 (For use with pump installation)

TABLE A  
CONCRETE QUANTITIES

TYPE	H=3'-0" TO 8'-0" (T=6")		H=8'-1" TO 20'-0" (T=8")	
	H=3'-0" (CY)	ADDITIONAL PCC PER FOOT (CY)	H=8'-1" (CY)	ADDITIONAL PCC PER FOOT (CY)
GO	1.24	0.245	3.39	0.346
GDO	1.62	0.322	4.36	0.446

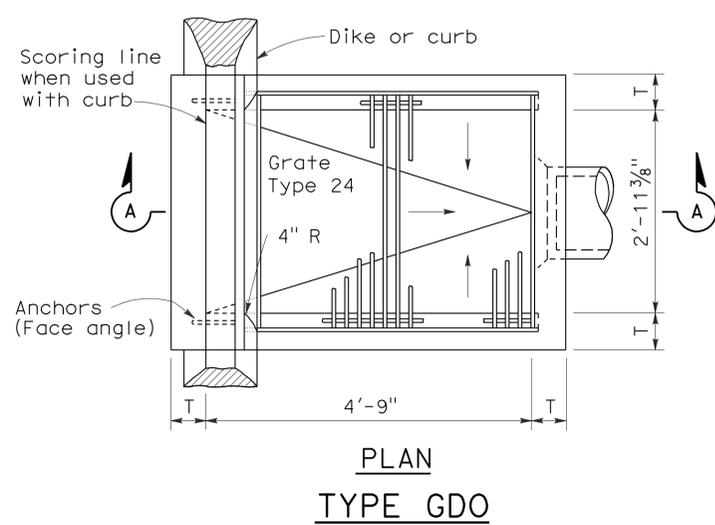
Table based on 8" floor slab, no deduction for pipe openings, and curb type giving highest quantity of concrete. No deductions or adjustments are to be made to these quantities because of pipe openings, different floor alternatives or different curb type.

TABLE B

CURB TYPE	NORMAL CURB HEIGHT	CURB BATTER	"a" DIMENSION	"b" DIMENSION
A1-6	6"	1 1/2"	T+7 1/2"	T+6 1/2"
A1-8	8"	2"	T+7"	T+6"
B1-6	6"	4"	T+5"	T+4"
Type A Dike	6"	3"	T+6"	T+5"

## NOTES:

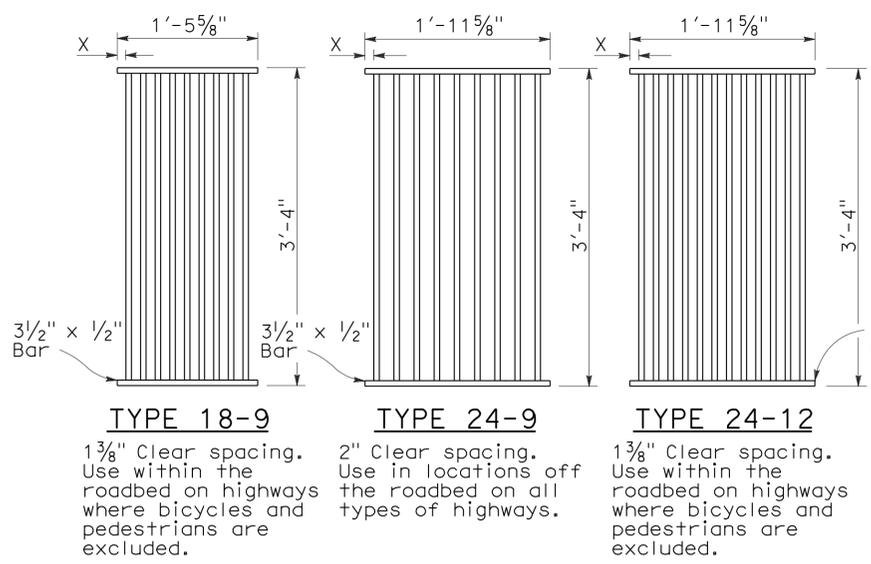
- "H" is the difference in elevation between the outlet pipe flow line and the normal gutter grade line undeepressed.
- For "T" wall thickness, see Table A below.
- Wall reinforcing not required when "H" is 8'-0" or less and the unsupported width or length is 7'-0" or less. Walls exceeding these limits shall be reinforced with #4 @ 18"± centers placed 1/2" clear to inside of box unless otherwise shown.
- Inlet bottom reinforcing not required. See Standard Plan D74C for alternative reinforced bottom.
- Steps - None required where "H" is less than 2'-6". Where "H" is 2'-6" or more, install steps with lowest rung 1'-0" above the floor and highest rung not more than 6" below top of inlet. The distance between steps shall not exceed 1'-0" and shall be uniform throughout the length of the wall. Place steps in the wall without an opening. Step inserts may be substituted for the bar steps. Step Inserts shall comply with State Industrial Safety requirements. See Standard Plan D74C for step details.
- When shown on the project plans, place a 3/4" plain round protection bar horizontally across the length of the opening and bend back 4" into the inlet wall on each side.
- Pipe(s) can be placed in any wall.
- Curb section shall match adjacent curb.
- Basin floors shall have wood trowel finish and shall slope toward the outlet pipe as shown.
- Galvanizing - See Standard Specifications or Special Provisions.
- See Standard Plan D77A and D77B for grate and frame details and weights of miscellaneous iron and Steel.
- See Standard Plan D78A for gutter depression details.
- Full penetration butt welds may be substituted for the fillet welds on all anchors.
- Standard square, hexagon, round or equivalent headed anchors may be substituted for the right angle hooks on the anchors shown on this plan.
- Cast-in-place or precast alternative is optional with contractor. See Standard Specifications.
- Cast-in-place inlets to be formed around all pipes/stubs intersecting the inlet and concrete poured in one continuous operation. Precast inlets shall have mortared pipe connections conforming to details for Type GCP inlets on Standard Plan D75B. See Standard Specifications for mortar composition.


 PLAN  
 TYPE GDO

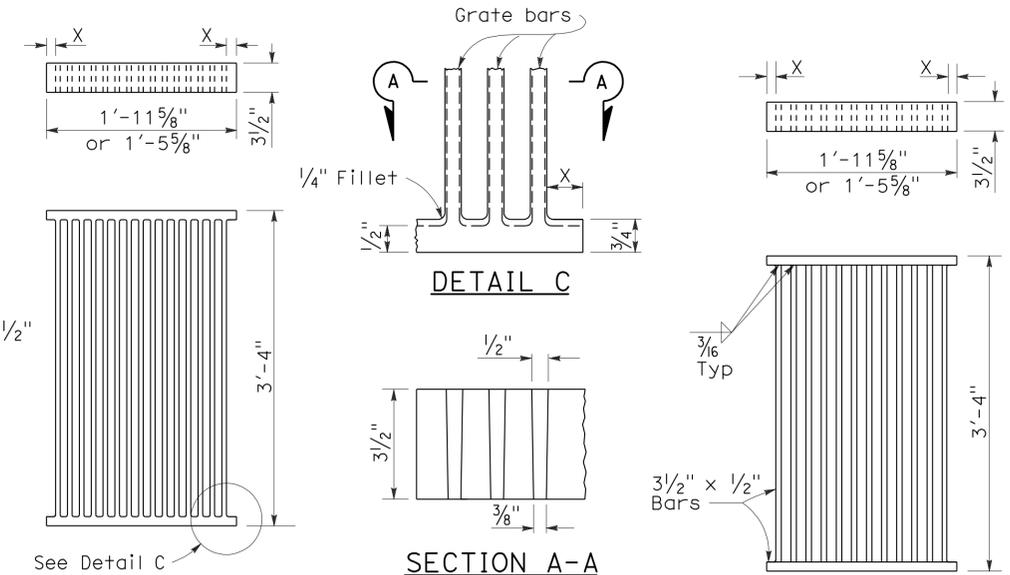
 STATE OF CALIFORNIA  
 DEPARTMENT OF TRANSPORTATION  
**DRAINAGE INLETS**  
 NO SCALE



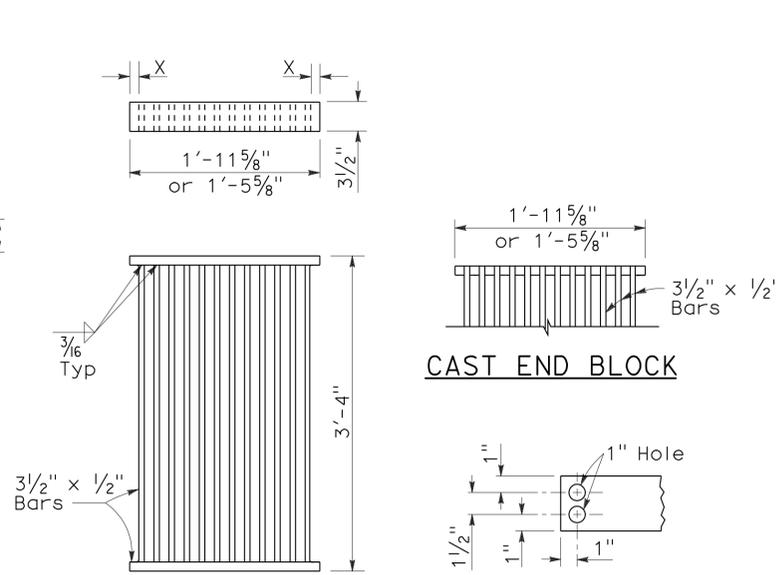
To accompany plans dated 5-24-10



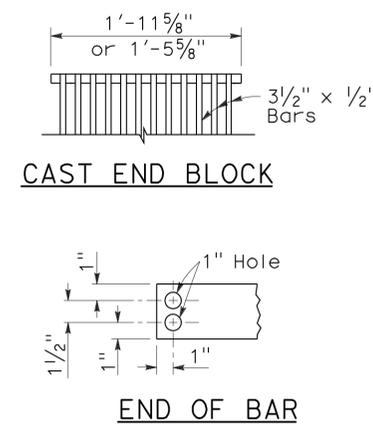
**RECTANGULAR GRATE DETAILS**  
(See table below)



**ALTERNATIVE CAST NODULAR IRON GRATE OR CAST STEEL GRATE**



**ALTERNATIVE WELDED GRATE**

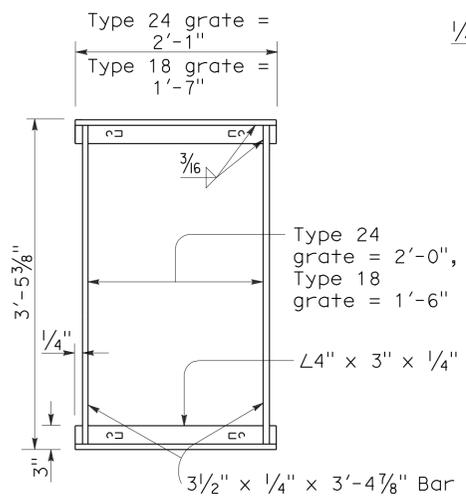


**CAST END BLOCK**

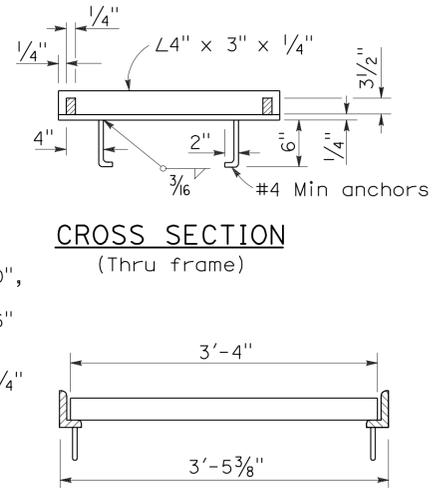
**END OF BAR**

**NOTES:**

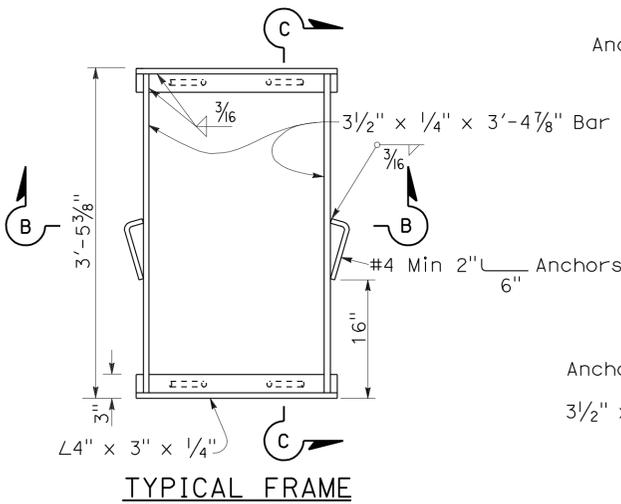
1. Grate type numbers refer to approximate width of grate in inches and number of bars, respectively.
2. Contractor has the option of using cast nodular iron, cast steel, welded, bolted, or cast end block grate.
3. See Special Provisions for requirements pertaining to galvanizing or asphalt dipping of grates and frames.
4. Rounded top of bars optional on all grates.
5. Pipe inlets with a grate shall be placed so that bars parallel direction of principle surface flow.
6. Full penetration butt welds may be substituted for the fillet welds on all anchors.
7. Standard square, hexagon, round or equivalent headed anchors may be substituted for the right angle hooks on the anchors shown on this plan.
8. Grate and frame weights are based on welded grates (weights of face angles, steps, protection bars, etc. are not included).



**TYPICAL FRAME**

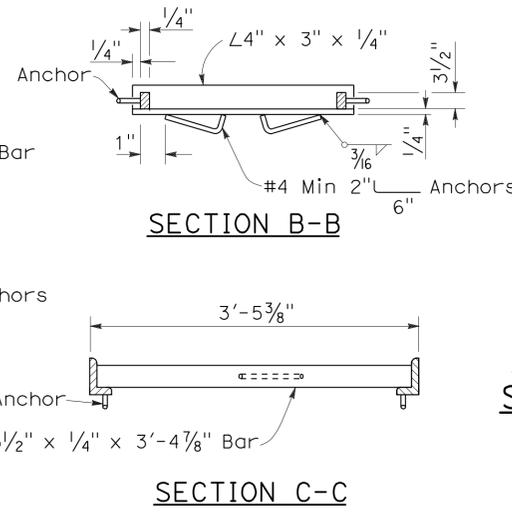


**LONGITUDINAL SECTION**  
(Thru frame and grate)



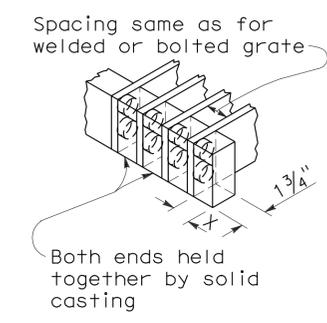
**TYPICAL FRAME**

**ALTERNATIVE ANCHOR FOR RECTANGULAR FRAME**  
(For details not shown, See Rectangular Frame Details)



**SECTION B-B**

**SECTION C-C**



**ALTERNATIVE CAST NODULAR IRON OR CAST STEEL END BLOCK GRATE**

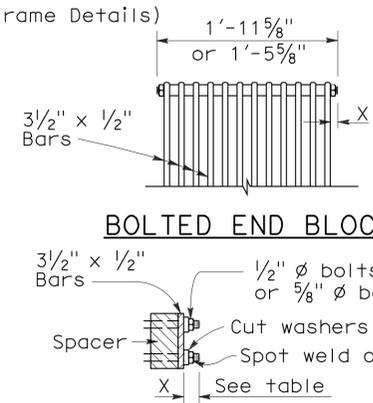
**RECTANGULAR FRAME DETAILS**  
(For all rectangular grates)

**GRATE BAR SPACING TABLE**

TYPE	NO. OF BARS	CLEAR BAR SPACING	X
18-9	9	1 3/8"	1 1/16"
24-9	9	2"	1 9/16"
24-12	12	1 3/8"	1 1/4"

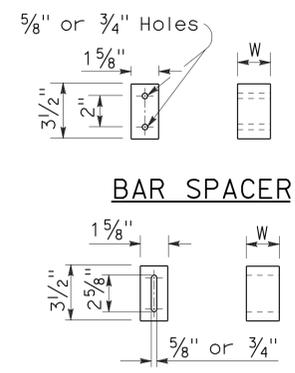
INLET TYPE	COVER TYPE	WEIGHT LB
OS	PLATE	174
OL-7	PLATE	170
OL-10	PLATE	170
OL-14	PLATE	170
OL-21	PLATE	170
OCPI	PLATE	112
OCPI	REDWOOD	42
OMP	PLATE	177
OMPI	PLATE	177

INLET TYPE	GRATE TYPE	NO. OF GRATES	WEIGHT LB
GDO	24-12	2	634
GOL-7	24-12	1	326
GOL-10	24-12	1	326
G0,G1,G2,G3,G4 (TYPE 24)	24-9	1	263
	24-12	1	326
G4 (TYPE 18),G5,G6	18-9	1	249
GT1	18-9	2	498
GT2	18-9	2	498
GT3	24-12	2	652
GT4	24-12	2	652
TRASH RACK			22



**BOLTED END BLOCK**

**BOLTING DETAIL**  
**ALTERNATIVE BOLTED GRATE**



**BAR SPACER**

**ALTERNATIVE SPACER**  
W = 1 3/8" or 2"

**BASIS FOR MISC IRON & STEEL FINAL PAY WEIGHTS FOR DRAINAGE INLETS**

(See General Notes, No 8)

2006 REVISED STANDARD PLAN RSP D77A

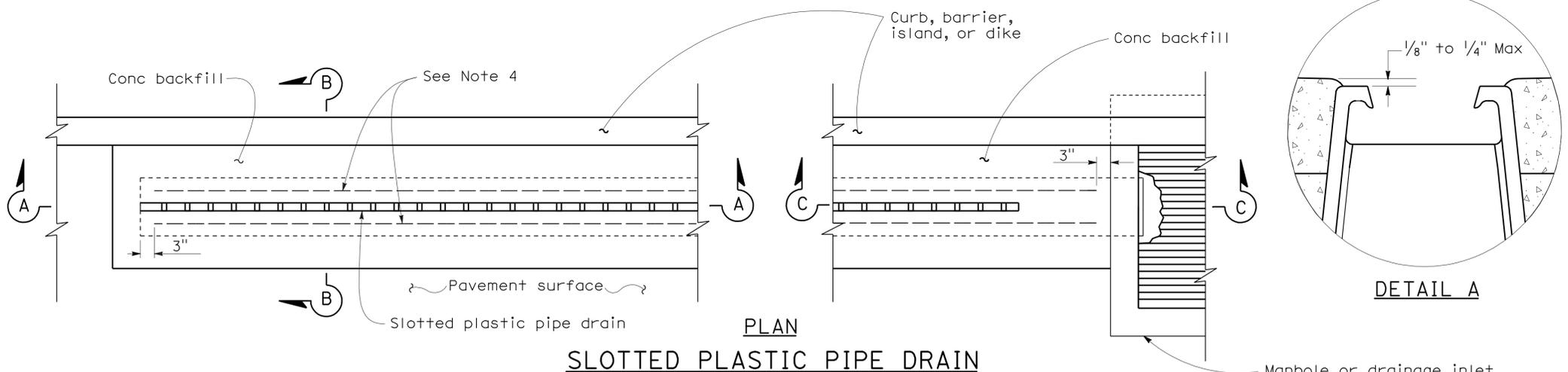
RSP D77A DATED JANUARY 18, 2008 SUPERSEDES STANDARD PLAN D77A DATED MAY 1, 2006 - PAGE 155 OF THE STANDARD PLANS BOOK DATED MAY 2006.

STATE OF CALIFORNIA  
DEPARTMENT OF TRANSPORTATION  
**GRATE DETAILS**  
NO SCALE

DIST	COUNTY	ROUTE	POST MILES TOTAL PROJECT	SHEET NO.	TOTAL SHEETS
07	LA	5	15.8/16.9	112	145

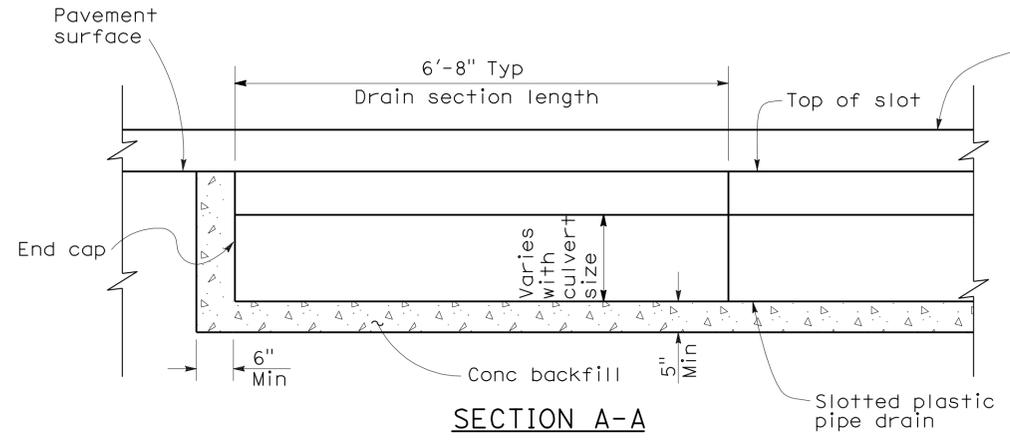
Raymond Don Tsztso  
 REGISTERED CIVIL ENGINEER  
 January 18, 2008  
 PLANS APPROVAL DATE  
 No. C37332  
 Exp. 6-30-08  
 CIVIL  
 STATE OF CALIFORNIA

To accompany plans dated 5-24-10

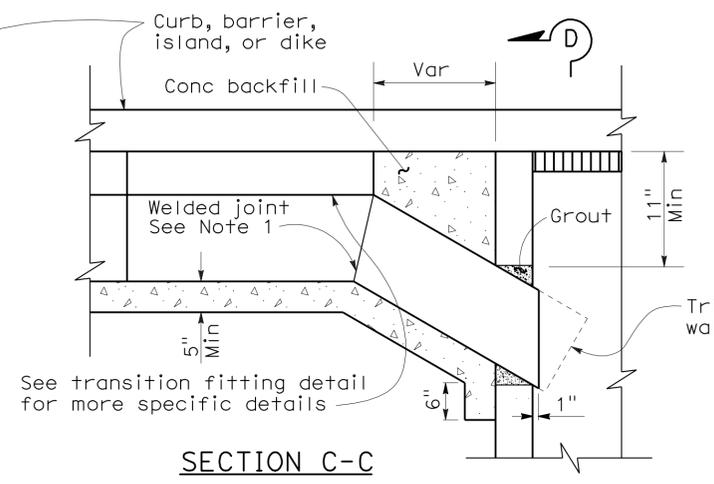


**PLAN**  
**SLOTTED PLASTIC PIPE DRAIN**

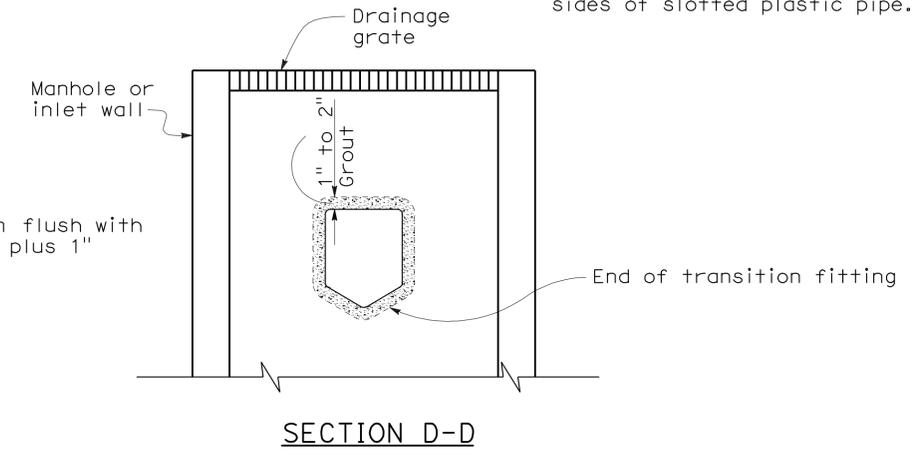
- NOTES:**
1. Plastic weld shall be factory fabricated.
  2. When Heel Resistant Grate is to be used, see New Standard Plan NSP D98E for details.
  3. Exterior wall stiffener ridges and details not shown on section views. See transition fitting detail for typical exterior ridges and throat stiffeners.
  4. Lateral support, #4 bar, to be placed on both sides of slotted plastic pipe.



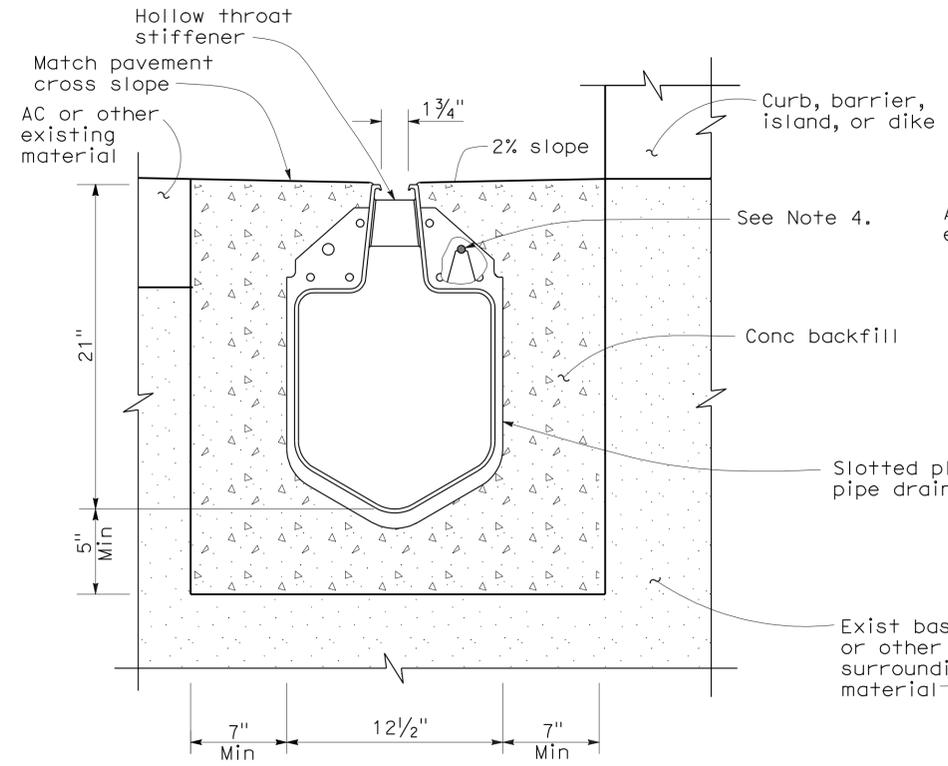
**SECTION A-A**



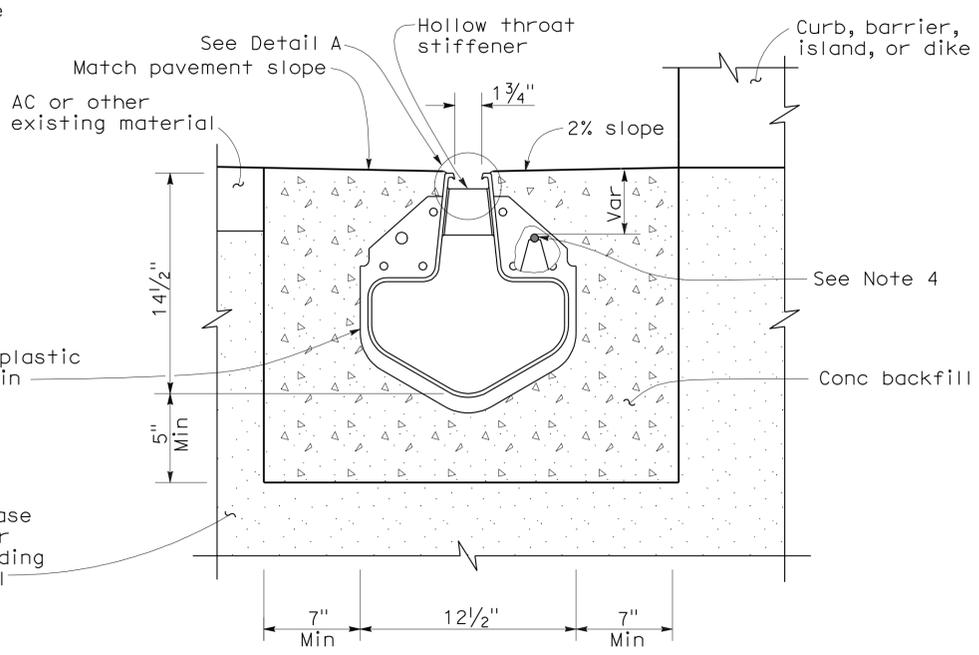
**SECTION C-C**



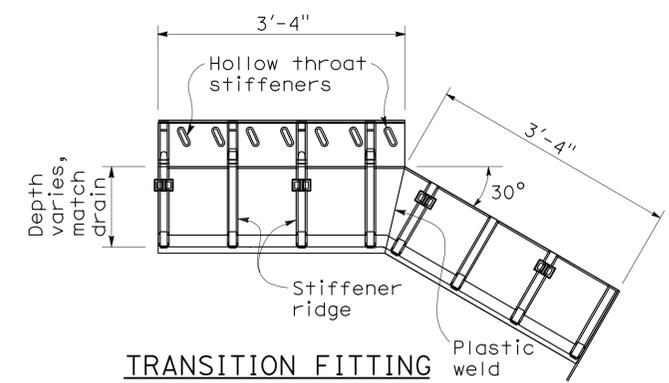
**SECTION D-D**



**SECTION B-B**  
18" Slotted Plastic Pipe Drain



**SECTION B-B**  
12" Slotted Plastic Pipe Drain



**TRANSITION FITTING**  
with stiffeners and details shown

STATE OF CALIFORNIA  
DEPARTMENT OF TRANSPORTATION  
**SLOTTED PLASTIC PIPE DRAIN DETAILS**

NO SCALE  
NSP D98D DATED JANUARY 18, 2008 SUPPLEMENTS  
THE STANDARD PLANS BOOK DATED MAY 2006.

2006 NEW STANDARD PLAN NSP D98D

DIST	COUNTY	ROUTE	POST MILES TOTAL PROJECT	SHEET NO.	TOTAL SHEETS
07	LA	5	15.8/16.9	113	145

*Gregory A. Balzer*  
LICENSED LANDSCAPE ARCHITECT

June 5, 2009  
PLANS APPROVAL DATE

*Gregory A. Balzer*  
LICENSED LANDSCAPE ARCHITECT  
2-28-11  
5-14-09  
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.

To accompany plans dated 5-24-10

2006 REVISED STANDARD PLAN RSP H1

**A**

AB aggregate base  
 ABS acrylonitrile-butadiene-styrene  
 AC asphalt concrete  
 Adj adjacent/adjustable  
 AIC auxiliary irrigation controller  
 Alt alternative  
 AMEND amendment  
 ARV air release valve  
 AUTO automatic  
 AUX auxiliary  
 AVB atmospheric vacuum breaker

**B**

B&B balled and burlapped  
 B/B brass/bronze  
 B/B/PL brass/bronze/plastic  
 B/PL brass/plastic  
 BFM bonded fiber matrix  
 Bit Ctd bituminous coated  
 BP booster pump  
 BPA backflow preventer assembly  
 BPAE backflow preventer assembly in enclosure  
 BPE backflow preventer enclosure  
 BV ball valve

**C**

CAP corrugated aluminum pipe  
 CARV combination air release valve  
 CCA cam coupler assembly  
 CEC controller enclosure cabinet  
 CHDPE corrugated high density polyethylene  
 CL chain link  
 CNC control and neutral conductors  
 Conc concrete  
 Cond conduit  
 CSP corrugated steel pipe  
 CST center strip  
 CV check valve

**D**

Dia diameter  
 DIP ductile iron pipe  
 DN diameter nominal

**E**

EA each  
 Elect electric/electrical  
 Elev elevation  
 ENCL enclosure  
 EP edge of pavement  
 ES edge of shoulder  
 EST end strip  
 ESTB establishment  
 ETW edge of traveled way

**F**

F full circle  
 F/P full/part circle  
 FAU filter assembly unit  
 FCV flow control valve  
 FERT fertilizer  
 FG finished grade  
 FIPT female iron pipe thread  
 FIS fertilizer injector system  
 FL flow line  
 FM flow monitor  
 FS flow sensor  
 Ft foot/feet  
 FV flush valve

**G**

GAL Gallon(s)  
 Galv galvanized  
 GARV garden valve  
 GPH gallons per hour  
 GPM gallons per minute  
 GSP galvanized steel pipe  
 GV gate valve

**H**

H half circle  
 HB hose bib  
 HDPE high density polyethylene  
 HP horsepower/hinge point  
 HPL high pressure line  
 Hwy highway

**I**

IC irrigation controller  
 ICC irrigation controller(s) in controller enclosure cabinet  
 ID inside diameter  
 In inches  
 IFS irrigation filtration system  
 IPS iron pipe size  
 IPT iron pipe thread  
 Irr irrigation

**L**

L length  
 LF linear foot

**M**

Max maximum  
 MBGR metal beam guard railing  
 MCV manual control valve  
 MIC master irrigation controller  
 Min minimum  
 MIPT male iron pipe thread  
 Misc miscellaneous  
 Mtl material  
 MVP maintenance vehicle pullout

**N**

NCN no common name  
 NL nozzle line  
 No. number  
 NPT national pipe thread

**O**

O/C on center  
 OD outside diameter  
 Oz ounce

**P**

P part circle  
 PB pull box  
 PCC portland cement concrete  
 PE polyethylene  
 Pkt packet  
 PL plastic  
 PLT plant/planting  
 PLT ESTB plant establishment  
 PM post mile  
 PR pressure rated  
 PRLV pressure relief valve  
 PSFM polymer stabilized fiber matrix  
 PSI pounds per square inch  
 PRV pressure reducing valve  
 PVC polyvinyl chloride  
 Pvmt pavement

**Q**

Q quarter circle  
 QCV quick coupling valve

**R**

R radius  
 RCP reinforced concrete pipe  
 RCV remote control valve  
 RCVM remote control valve (master)  
 RCVMF remote control valve (master) w/ flow meter  
 RCW recycled/reclaimed water  
 RECP rolled erosion control product  
 REQ required  
 R/W right of way

**S**

S slip  
 SCC sprinkler control conduit  
 SCH schedule  
 SF state-furnished  
 Shld shoulder  
 SQFT square foot/feet  
 SQYD square yard(s)  
 SST side strip  
 Sta station  
 Std standard  
 SW sidewalk/sound wall

**T**

T third circle/thread  
 TLS truck loading standpipe  
 TQ three quarter circle  
 TRM turf reinforcement mat  
 TRVD traveled  
 TT two third circle  
 Typ typical

**U**

UG underground

**V**

VAU valve assembly unit

**W**

W width  
 W/ with  
 WM water meter  
 WS wye strainer  
 WSP welded steel pipe  
 WWM welded wire mesh

**NOTE:**  
 FOR ADDITIONAL ABBREVIATIONS,  
 SEE STANDARD PLANS A10A AND A10B.

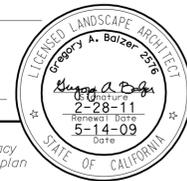
STATE OF CALIFORNIA  
 DEPARTMENT OF TRANSPORTATION  
**PLANTING AND IRRIGATION  
 ABBREVIATIONS**

NO SCALE  
 RSP H1 DATED JUNE 5, 2009 SUPERSEDES STANDARD PLAN H1  
 DATED MAY 1, 2006 - PAGE 201 OF THE STANDARD PLANS BOOK DATED MAY 2006.

**REVISED STANDARD PLAN RSP H1**

DIST	COUNTY	ROUTE	POST MILES TOTAL PROJECT	SHEET NO.	TOTAL SHEETS
07	LA	5	15.8/16.9	114	145

*Gregory A. Balzer*  
 LICENSED LANDSCAPE ARCHITECT  
 June 5, 2009  
 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.

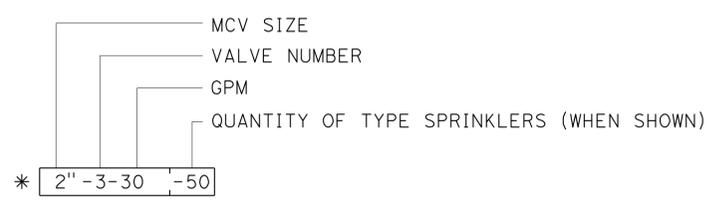
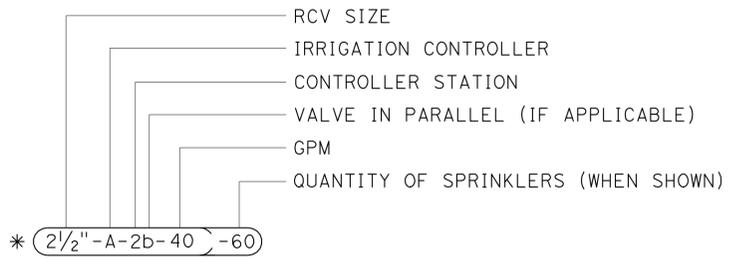


To accompany plans dated 5-24-10

EXISTING	PROPOSED	ITEM DESCRIPTION
		WATER METER (WM)
		BACKFLOW PREVENTER ASSEMBLY (BPA)
		BACKFLOW PREVENTER ASSEMBLY IN ENCLOSURE (BPAE)
		BACKFLOW PREVENTER ENCLOSURE (BPE)
		BOOSTER PUMP (BP)
		TRUCK LOADING STANDPIPE (TLS)
		FLOW SENSOR (FS)
		MASTER IRRIGATION CONTROLLER (MIC)
		AUXILIARY IRRIGATION CONTROLLER (AIC)
		IRRIGATION CONTROLLER (IC)/ IRRIGATION CONTROLLER (IC) (BATTERY) IRRIGATION CONTROLLER (IC) (SOLAR)
		IRRIGATION CONTROLLER(S) IN CONTROLLER ENCLOSURE CABINET (ICC)
		CONTROL AND NEUTRAL CONDUCTORS (CNC)
		SPRINKLER CONTROL CONDUIT (SCC)
		IRRIGATION CROSSOVER
		EXTEND IRRIGATION CROSSOVER
		IRRIGATION SLEEVE
		DUCTILE IRON PIPE (SUPPLY LINE) (MAIN) (DIP)
		GALVANIZED STEEL PIPE (SUPPLY LINE) (MAIN) (GSP)
		GALVANIZED STEEL PIPE (SUPPLY LINE) (LATERAL) (GSP)
		PLASTIC PIPE (PR 200) (SUPPLY LINE) (MAIN)
		PLASTIC PIPE (PR 200) (SUPPLY LINE) (LATERAL)
		PLASTIC PIPE (IRRIGATION LINE)
		REMOTE CONTROL VALVE (RCV) REMOTE CONTROL VALVE (MASTER) (RCVM) REMOTE CONTROL VALVE (MASTER) W/FLOW METER (RCVMF)
		MANUAL CONTROL VALVE (MCV)
		VALVE ASSEMBLY UNIT (VAU)
		WYE STRAINER (WS)
		FILTER ASSEMBLY UNIT (FAU)
		GATE VALVE (GV)
		BALL VALVE (BV)

EXISTING	PROPOSED	ITEM DESCRIPTION
		QUICK COUPLING VALVE (QCV)
		CAM COUPLER ASSEMBLY (CCA)
		PRESSURE REDUCING VALVE (PRV)
		PRESSURE RELIEF VALVE (PRLV)
		FLOW CONTROL VALVE (FCV)
		COMBINATION AIR RELEASE VALVE (CARV)
		CHECK VALVE (CV)
		FLUSH VALVE (FV)
		NOZZLE LINE W/TURNING UNION
		IRRIGATION SYSTEM
		IRRIGATION SYSTEM TO BE REMOVED
		CHAIN LINK GATE
		QUICK COUPLING VALVE W/SPRINKLER PROTECTOR
		SPRINKLER W/SPRINKLER PROTECTOR
		CONNECT TO EXISTING SYSTEM
		CAP
		CAP EXISTING

**VALVE CODE**



\* VALVE CODES FOR EXISTING VALVES ARE SHOWN IN A DASHED ENCLOSURE.

**PLANTING AND IRRIGATION SYMBOLS**

STATE OF CALIFORNIA  
DEPARTMENT OF TRANSPORTATION

NO SCALE

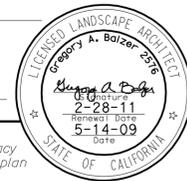
RSP H2 DATED JUNE 5, 2009 SUPERSEDES RSP H2 DATED MARCH 7, 2008 AND STANDARD PLAN H2 DATED MAY 1, 2006 - PAGE 202 OF THE STANDARD PLANS BOOK DATED MAY 2006.

**REVISED STANDARD PLAN RSP H2**

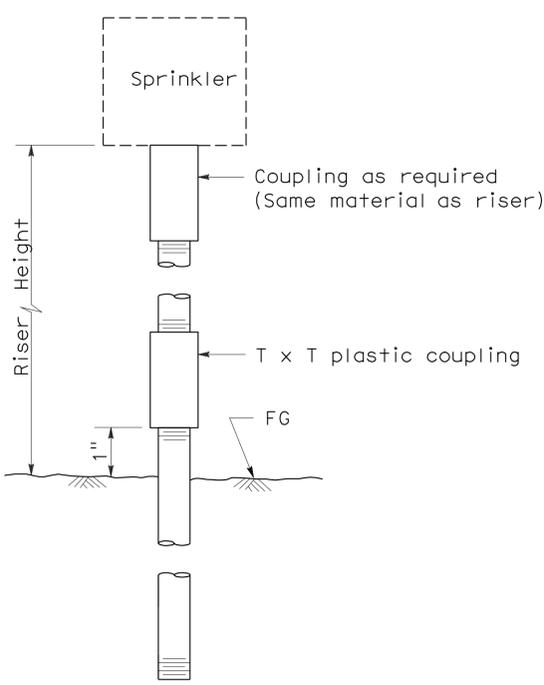
2006 REVISED STANDARD PLAN RSP H2

DIST	COUNTY	ROUTE	POST MILES TOTAL PROJECT	SHEET NO.	TOTAL SHEETS
07	LA	5	15.8/16.9	115	145

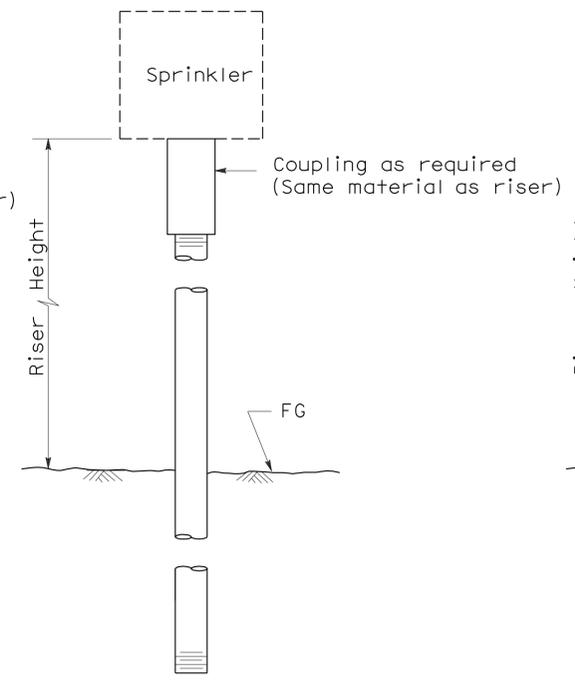
*Gregory A. Balzer*  
 LICENSED LANDSCAPE ARCHITECT  
 June 5, 2009  
 PLANS APPROVAL DATE  
The State of California or its officers or agents shall not be responsible for the accuracy or completeness of electronic copies of this plan sheet.



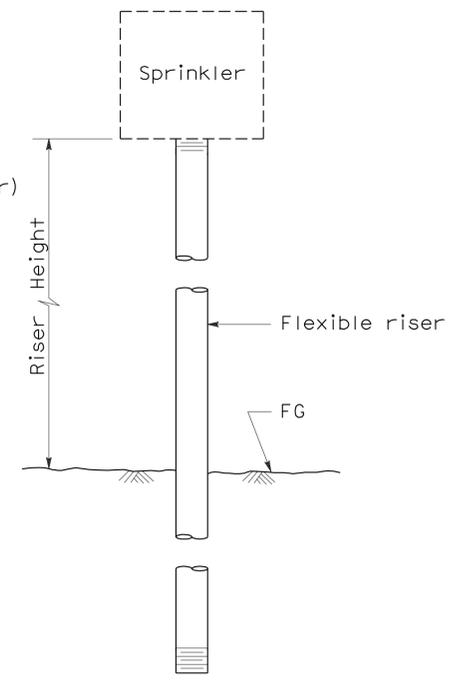
To accompany plans dated 5-24-10



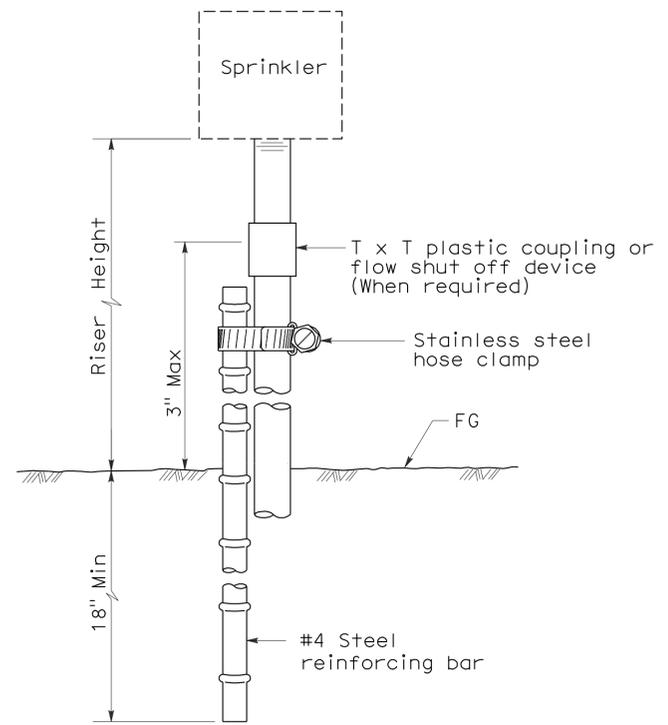
ELEVATION  
RISER TYPE I



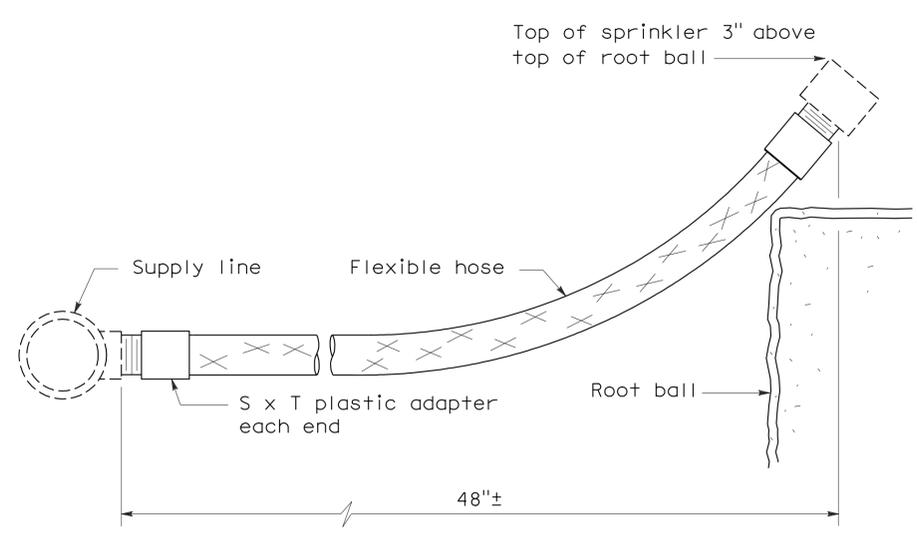
ELEVATION  
RISER TYPE II



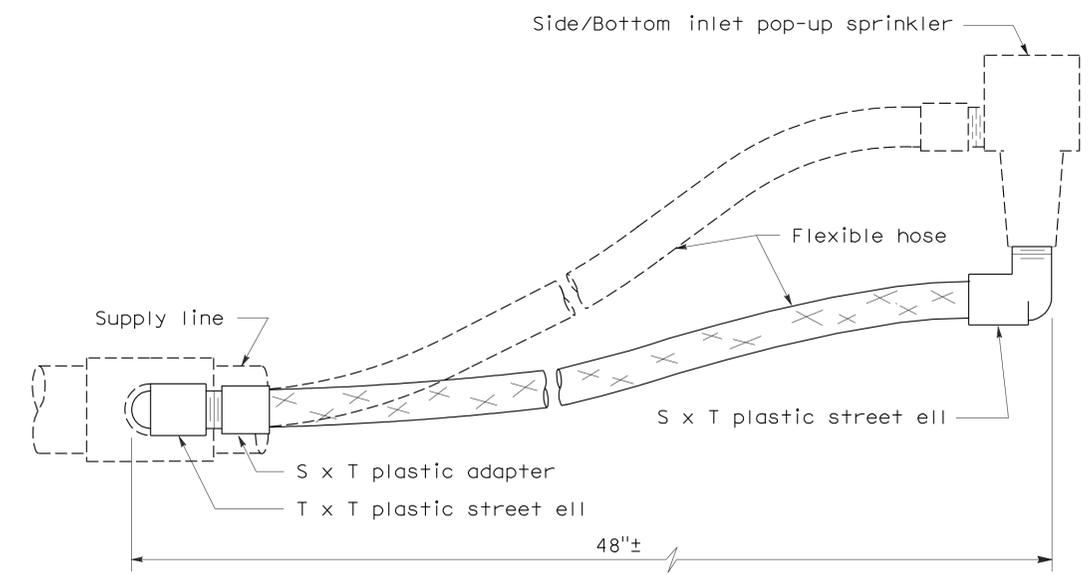
ELEVATION  
RISER TYPE III



ELEVATION  
RISER TYPE IV



ELEVATION  
RISER TYPE V



ELEVATION  
RISER TYPE VI

STATE OF CALIFORNIA  
DEPARTMENT OF TRANSPORTATION  
**PLANTING AND IRRIGATION  
DETAILS**  
NO SCALE

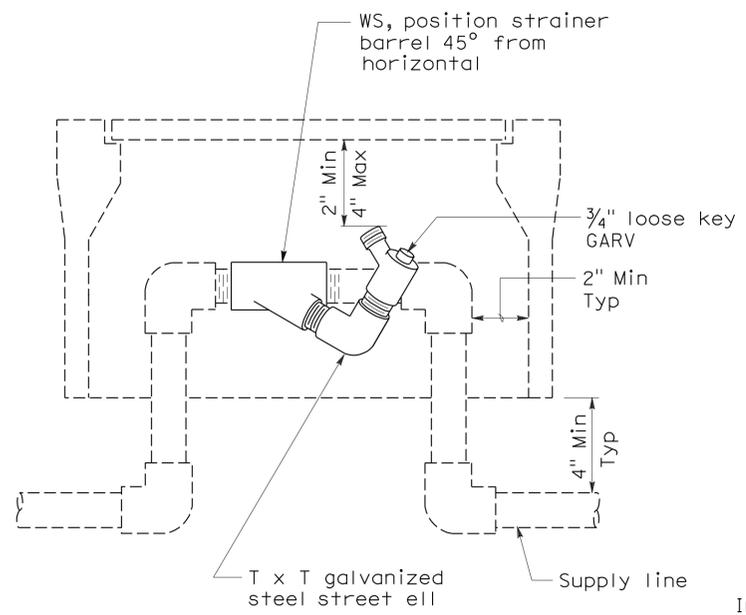
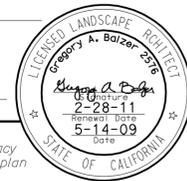
RSP H5 DATED JUNE 5, 2009 SUPERSEDES STANDARD PLAN H5  
DATED MAY 1, 2006 - PAGE 205 OF THE STANDARD PLANS BOOK DATED MAY 2006.

**REVISED STANDARD PLAN RSP H5**

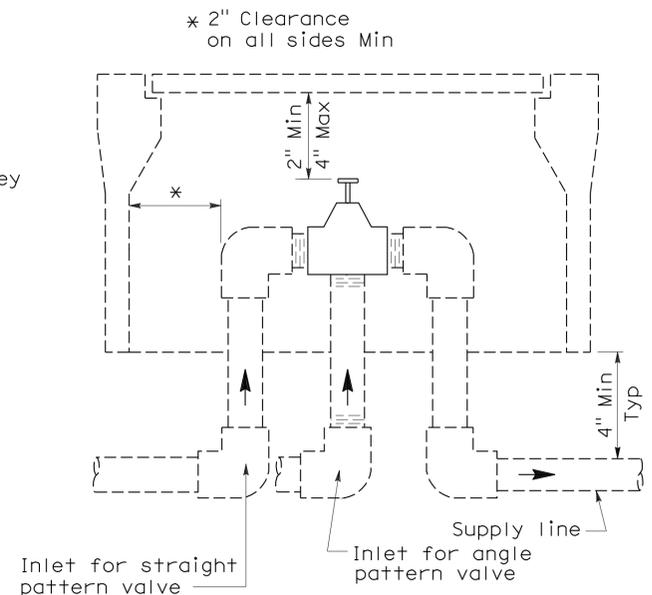
2006 REVISED STANDARD PLAN RSP H5

DIST	COUNTY	ROUTE	POST MILES TOTAL PROJECT	SHEET NO.	TOTAL SHEETS
07	LA	5	15.8/16.9	116	145

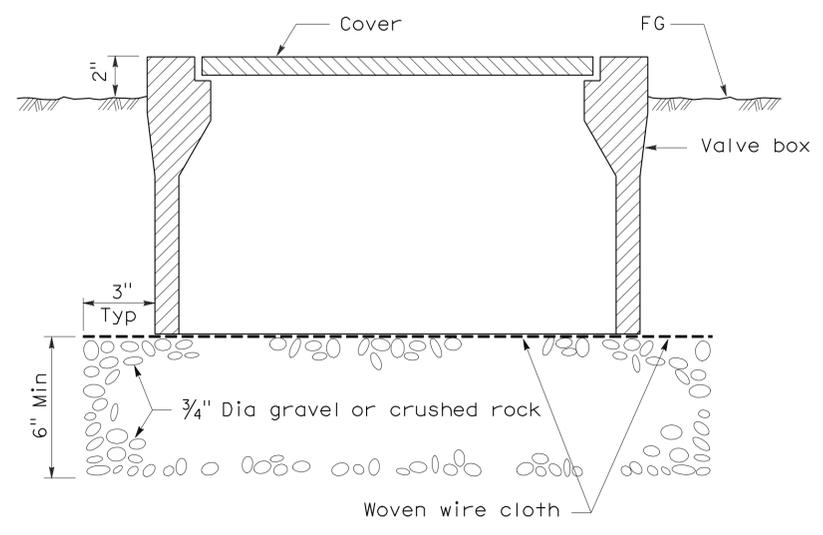
*Gregory A. Balzer*  
 LICENSED LANDSCAPE ARCHITECT  
 June 5, 2009  
 PLANS APPROVAL DATE  
The State of California or its officers or agents shall not be responsible for the accuracy or completeness of electronic copies of this plan sheet.



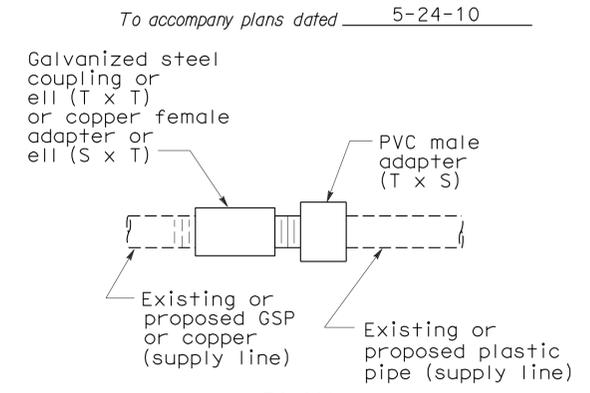
**ELEVATION**  
**WYE STRAINER**



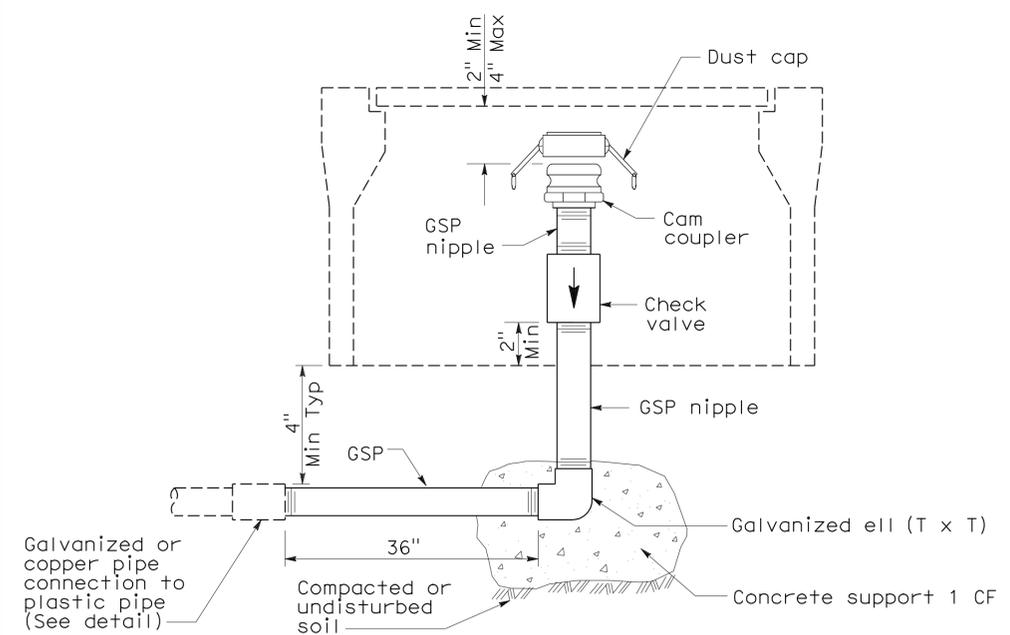
**ELEVATION**  
**VALVE**



**SECTION**  
**VALVE BOX**

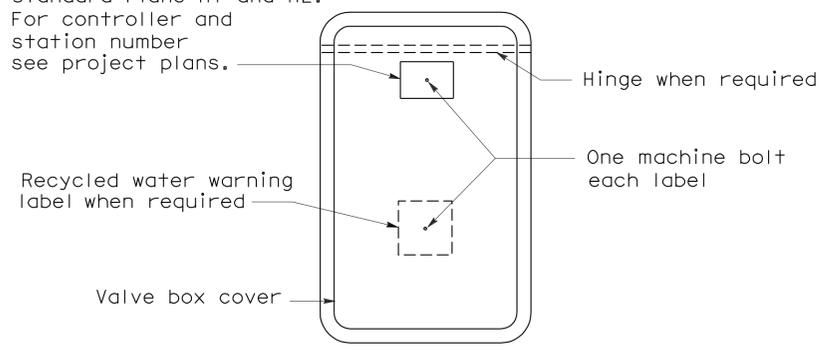


**PLAN**  
**GALVANIZED OR COPPER PIPE CONNECTION TO PLASTIC PIPE**

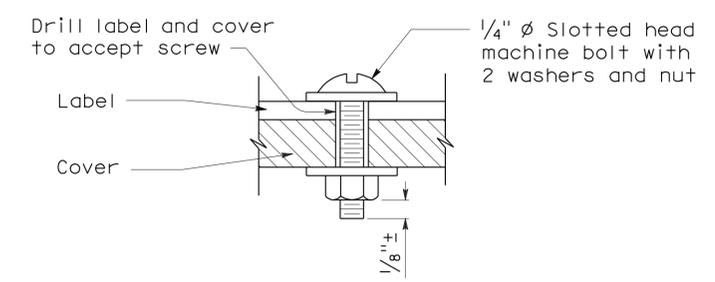


**ELEVATION**  
**CAM COUPLER ASSEMBLY**

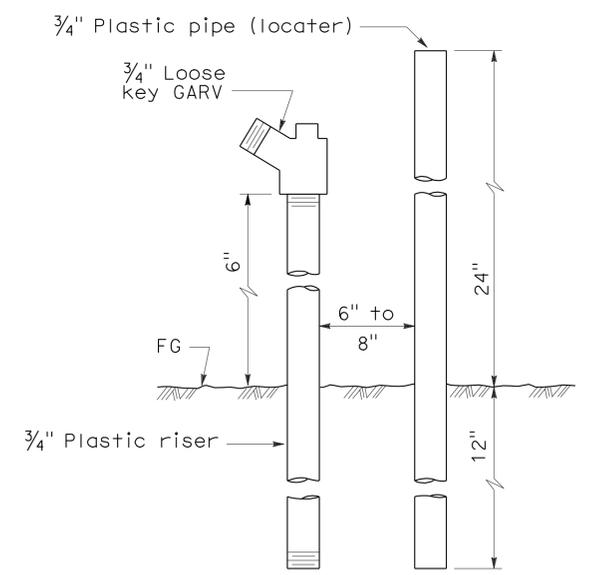
Identification label:  
 For abbreviations see Revised Standard Plans H1 and H2.  
 For controller and station number see project plans.



**PLAN**  
**VALVE BOX IDENTIFICATION**



**SECTION**  
**VALVE BOX IDENTIFICATION**



**ELEVATION**  
**FLUSH VALVE**

STATE OF CALIFORNIA  
 DEPARTMENT OF TRANSPORTATION

**PLANTING AND IRRIGATION DETAILS**

NO SCALE

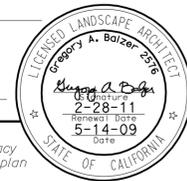
RSP H7 DATED JUNE 5, 2009 SUPERSEDES STANDARD PLAN H7  
 DATED MAY 1, 2006 - PAGE 207 OF THE STANDARD PLANS BOOK DATED MAY 2006.

**REVISED STANDARD PLAN RSP H7**

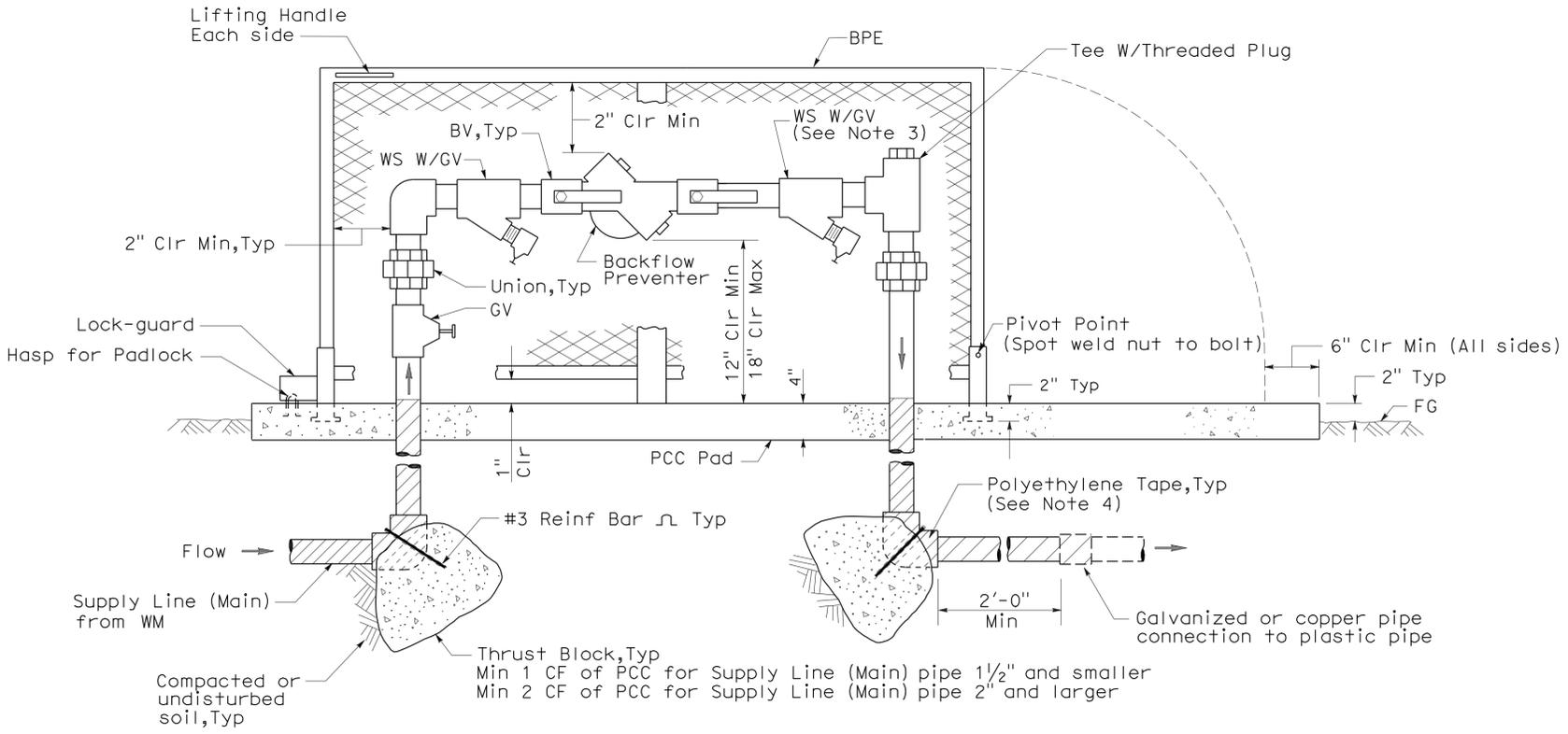
2006 REVISED STANDARD PLAN RSP H7

DIST	COUNTY	ROUTE	POST MILES TOTAL PROJECT	SHEET NO.	TOTAL SHEETS
07	LA	5	15.8/16.9	117	145

*Gregory A. Balzer*  
 LICENSED LANDSCAPE ARCHITECT  
 June 5, 2009  
 PLANS APPROVAL DATE  
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To accompany plans dated 5-24-10

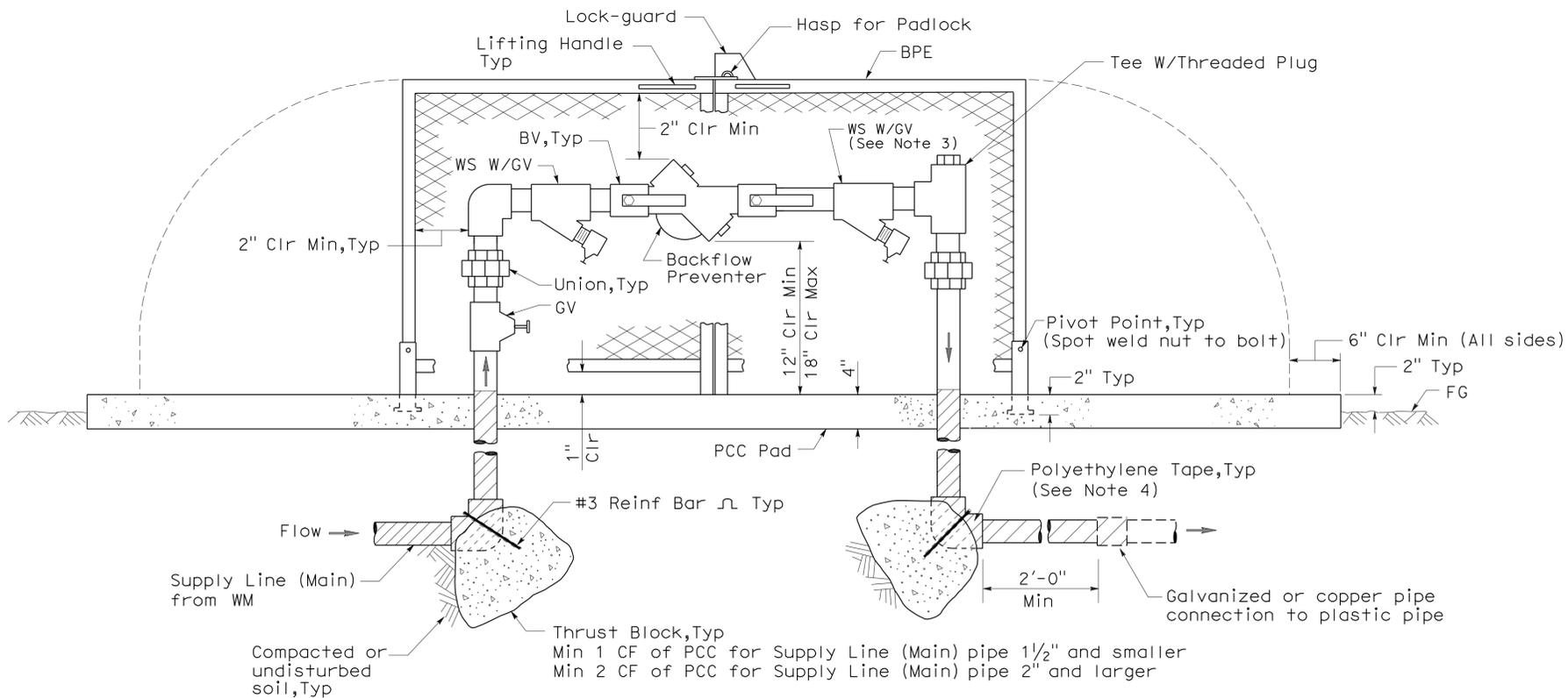


**ELEVATION**

**BACKFLOW PREVENTER ASSEMBLY IN ENCLOSURE (ONE PIECE)**

**NOTES:**

1. Wye strainer and fittings must be the same size as the backflow preventer shown on the plans.
2. Backflow preventer assembly manifold pipe must be the same pipe as the supply line (main) pipe to be installed from the water meter to the backflow preventer assembly.
3. Wye strainer location shown downstream of the backflow preventer is for District 11 projects only.
4. All metal in contact with soil and Portland Cement Concrete must be polyethylene wrapped using 2" wide plastic backed adhesive tape 20 mil thick with 1/2" overlap.



**ELEVATION**

**BACKFLOW PREVENTER ASSEMBLY IN ENCLOSURE (TWO PIECE)**

STATE OF CALIFORNIA  
 DEPARTMENT OF TRANSPORTATION  
**PLANTING AND IRRIGATION  
 DETAILS**

NO SCALE

RSP H8 DATED JUNE 5, 2009 SUPERSEDES STANDARD PLAN H8  
 DATED MAY 1, 2006 - PAGE 208 OF THE STANDARD PLANS BOOK DATED MAY 2006.

**REVISED STANDARD PLAN RSP H8**

2006 REVISED STANDARD PLAN RSP H8

DIST	COUNTY	ROUTE	POST MILES TOTAL PROJECT	SHEET NO.	TOTAL SHEETS
07	LA	5	15.8/16.9	118	145

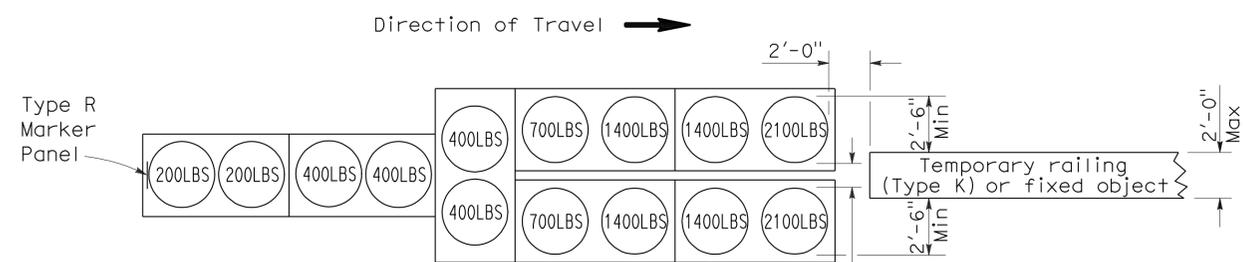
*Randell D. Hiatt*  
REGISTERED CIVIL ENGINEER

June 6, 2008  
PLANS APPROVAL DATE

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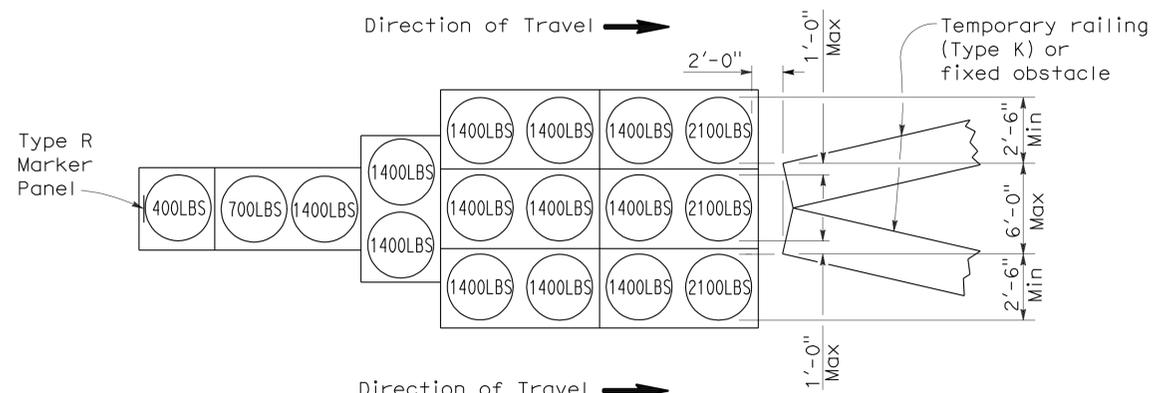
REGISTERED PROFESSIONAL ENGINEER  
Randell D. Hiatt  
No. C50200  
Exp. 6-30-09  
CIVIL  
STATE OF CALIFORNIA

To accompany plans dated 5-24-10



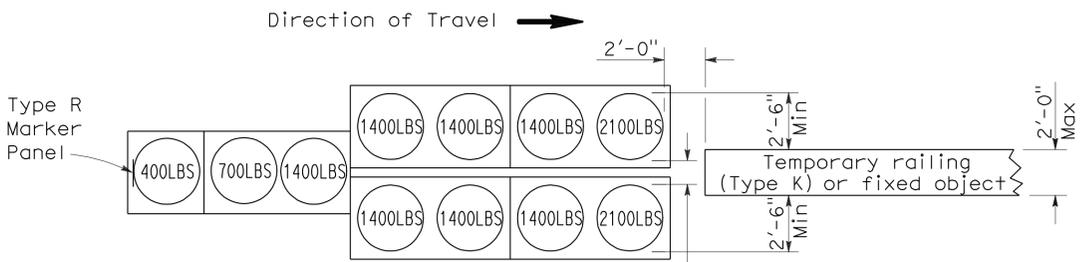
**ARRAY 'TU14'**

Approach speed 45 mph or more



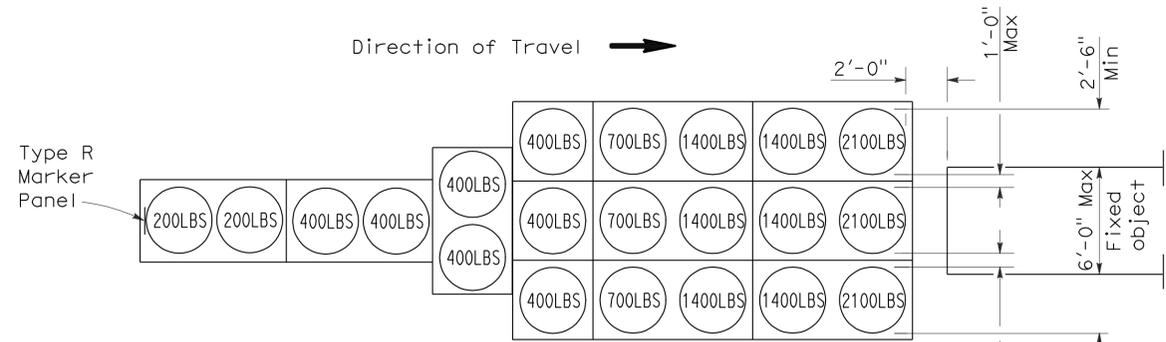
**ARRAY 'TU17'**

Approach speed less than 45 mph



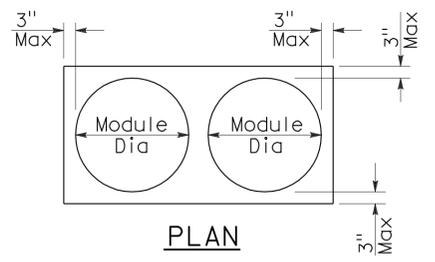
**ARRAY 'TU11'**

Approach speed less than 45 mph

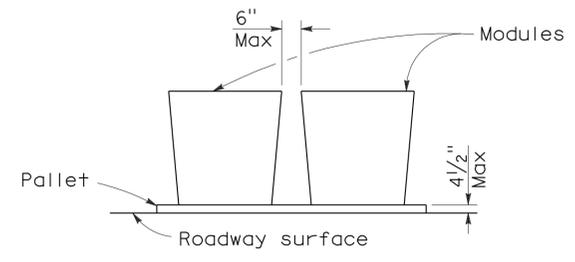


**ARRAY 'TU21'**

Approach speed 45 mph or more



**PLAN**



**ELEVATION**

**CRASH CUSHION PALLET DETAIL**

See Note 7

**NOTES:**

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

STATE OF CALIFORNIA  
DEPARTMENT OF TRANSPORTATION

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

NO SCALE

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

**REVISED STANDARD PLAN RSP T1A**

2006 REVISED STANDARD PLAN RSP T1A

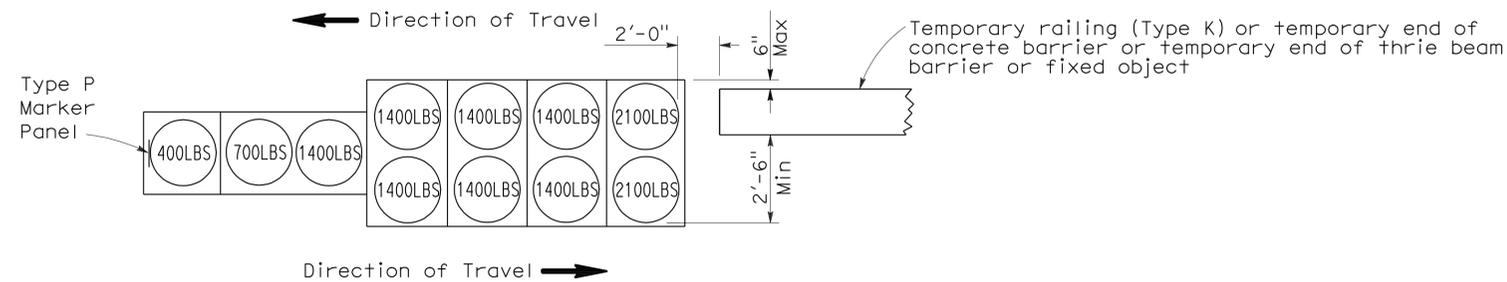
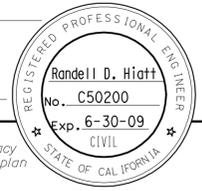
DIST	COUNTY	ROUTE	POST MILES TOTAL PROJECT	SHEET NO.	TOTAL SHEETS
07	LA	5	15.8/16.9	119	145

*Randell D. Hiatt*  
REGISTERED CIVIL ENGINEER

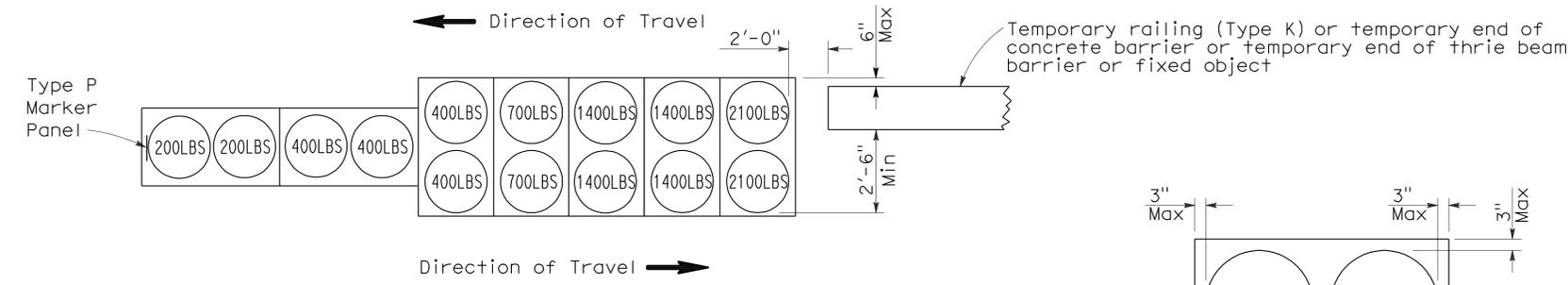
June 6, 2008  
PLANS APPROVAL DATE

*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.*

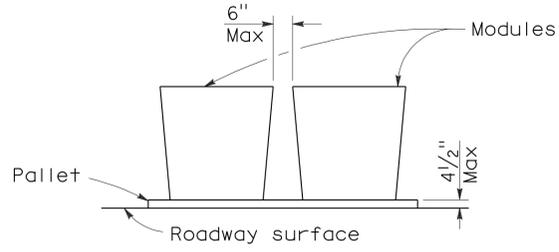
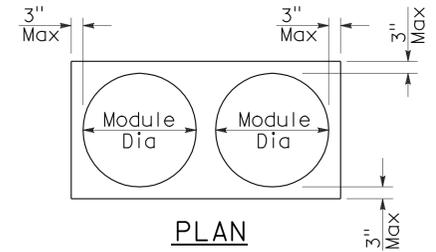
To accompany plans dated 5-24-10



**ARRAY 'TB11'**  
Approach speed less than 45 mph



**ARRAY 'TB14'**  
Approach speed 45 mph or more



**CRASH CUSHION PALLET DETAIL**  
See Note 7

**NOTES:**

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

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

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

**REVISED STANDARD PLAN RSP T1B**

2006 REVISED STANDARD PLAN RSP T1B

DIST	COUNTY	ROUTE	POST MILES TOTAL PROJECT	SHEET NO.	TOTAL SHEETS
07	LA	5	15.8/16.9	120	145

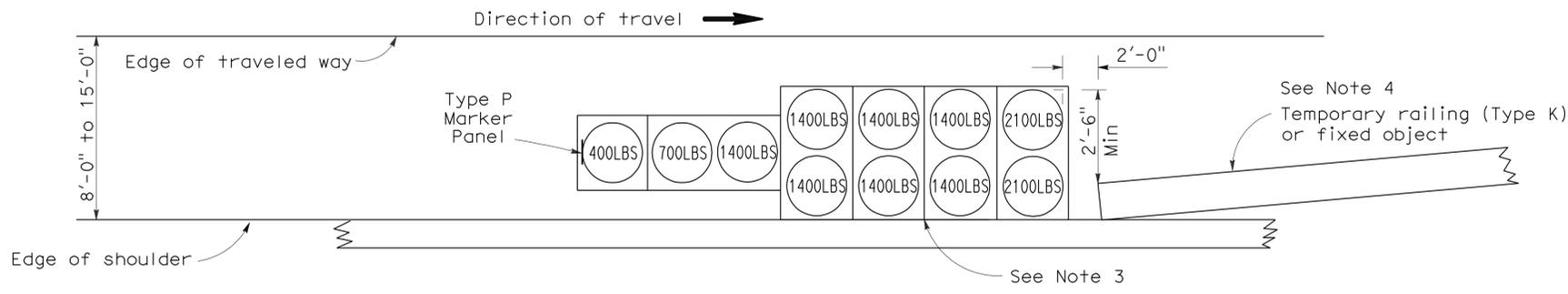
*Randell D. Hiatt*  
REGISTERED CIVIL ENGINEER

June 6, 2008  
PLANS APPROVAL DATE

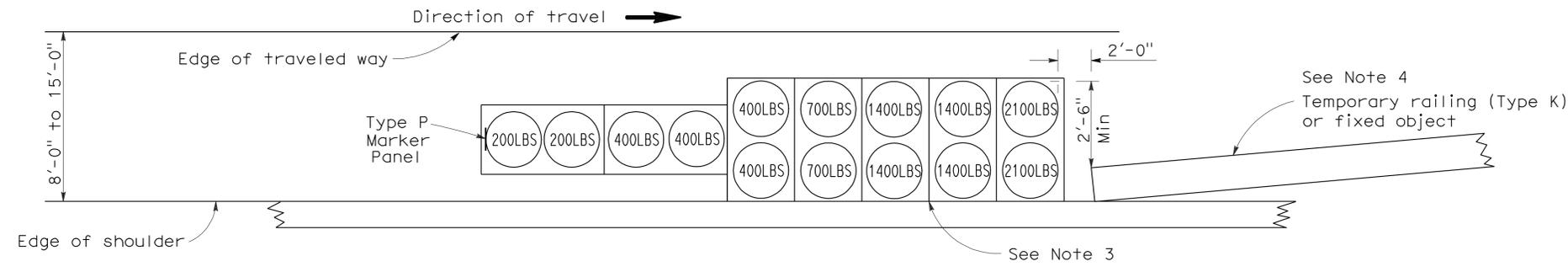
*The State of California or its officers or agents shall not be responsible for the accuracy or completeness of electronic copies of this plan sheet.*

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

To accompany plans dated 5-24-10



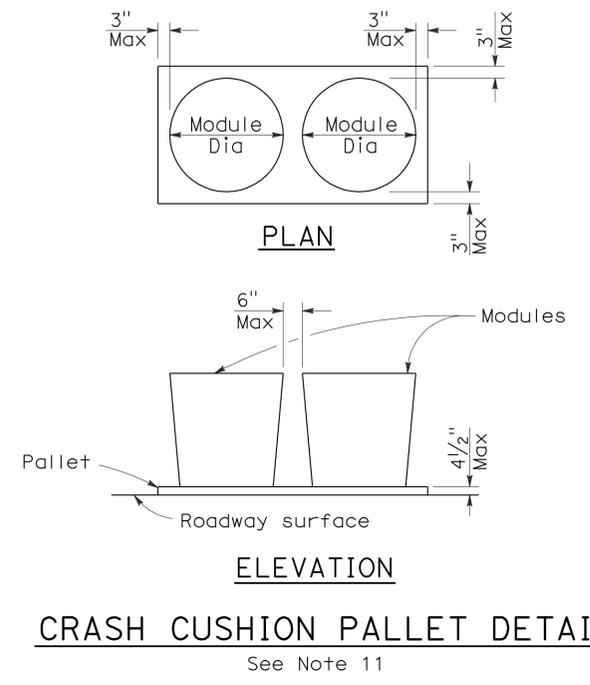
**ARRAY 'TS11'**  
Approach speed less than 45 mph  
See Note 9



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

**NOTES:**

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



STATE OF CALIFORNIA  
DEPARTMENT OF TRANSPORTATION

**TEMPORARY CRASH CUSHION,  
SAND FILLED  
(SHOULDER INSTALLATIONS)**

NO SCALE

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

**REVISED STANDARD PLAN RSP T2**

2006 REVISED STANDARD PLAN RSP T2

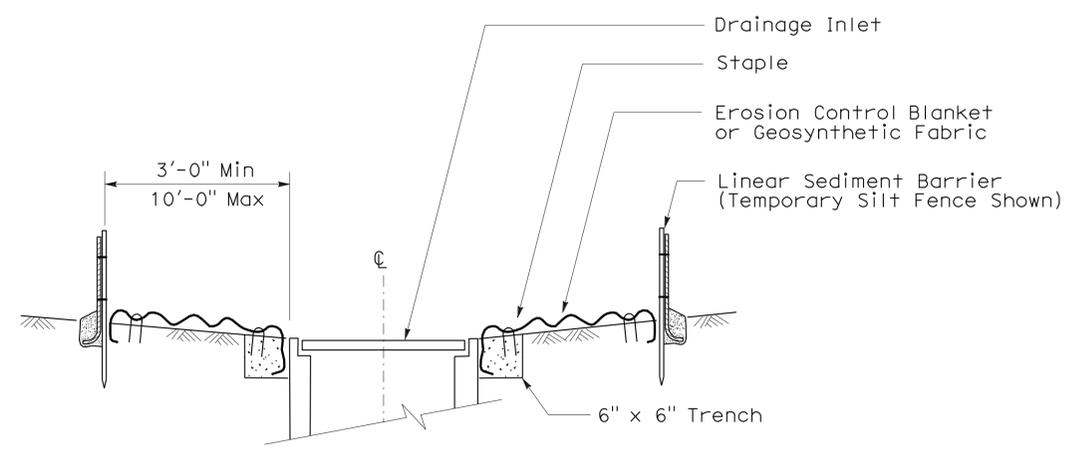


DIST	COUNTY	ROUTE	POST MILES TOTAL PROJECT	SHEET NO.	TOTAL SHEETS
07	LA	5	15.8/16.9	122	145

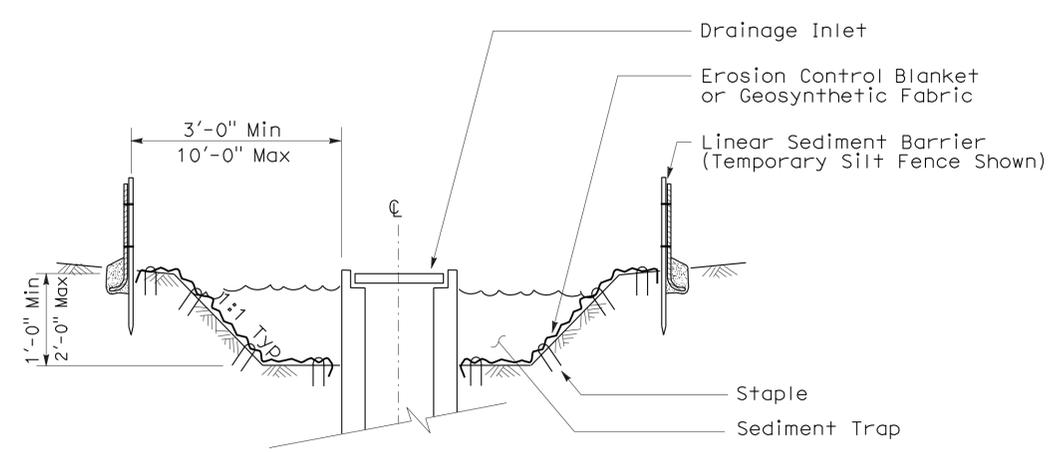
*Robert B. Schott*  
 LICENSED LANDSCAPE ARCHITECT  
 August 15, 2008  
 PLANS Approval DATE  
The State of California or its officers or agents shall not be responsible for the accuracy or completeness of electronic copies of this plan sheet.

To accompany plans dated 5-24-10

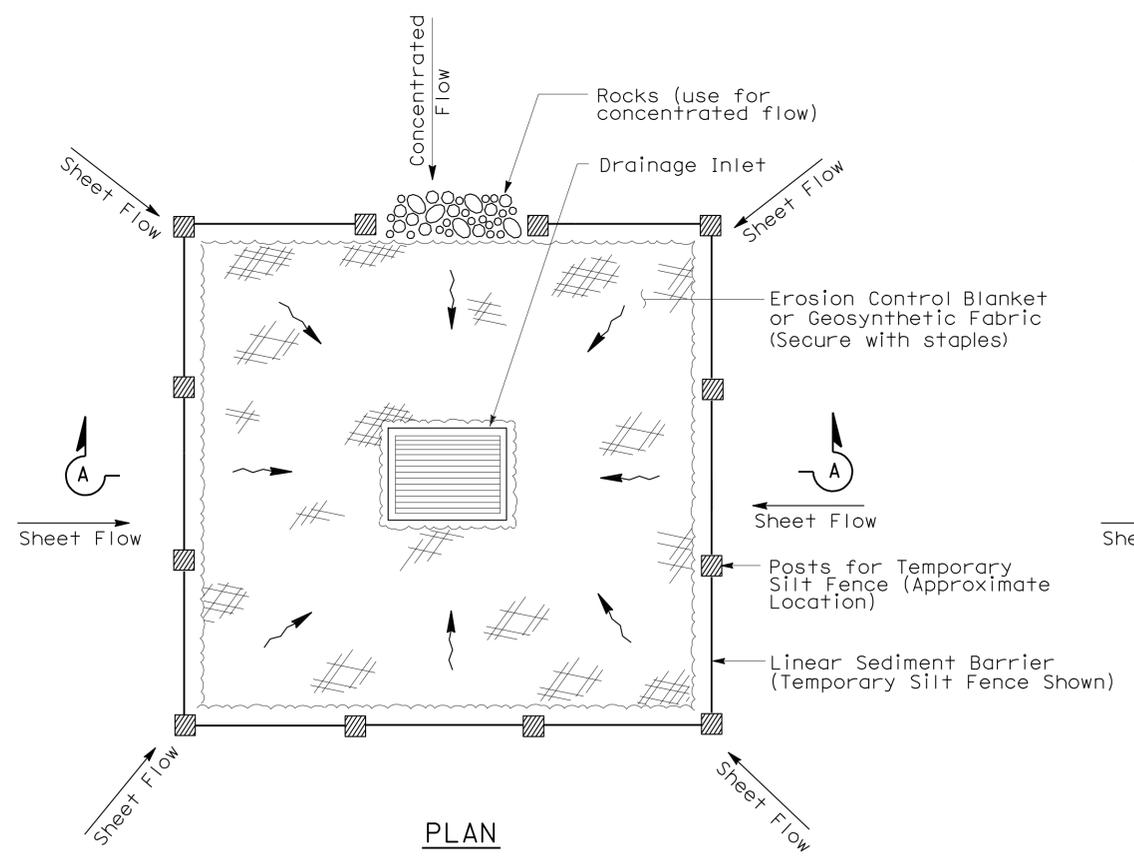
- NOTES:**
1. See Standard Plan T51 for Temporary Silt Fence.
  2. Dimensions may vary to fit field conditions.



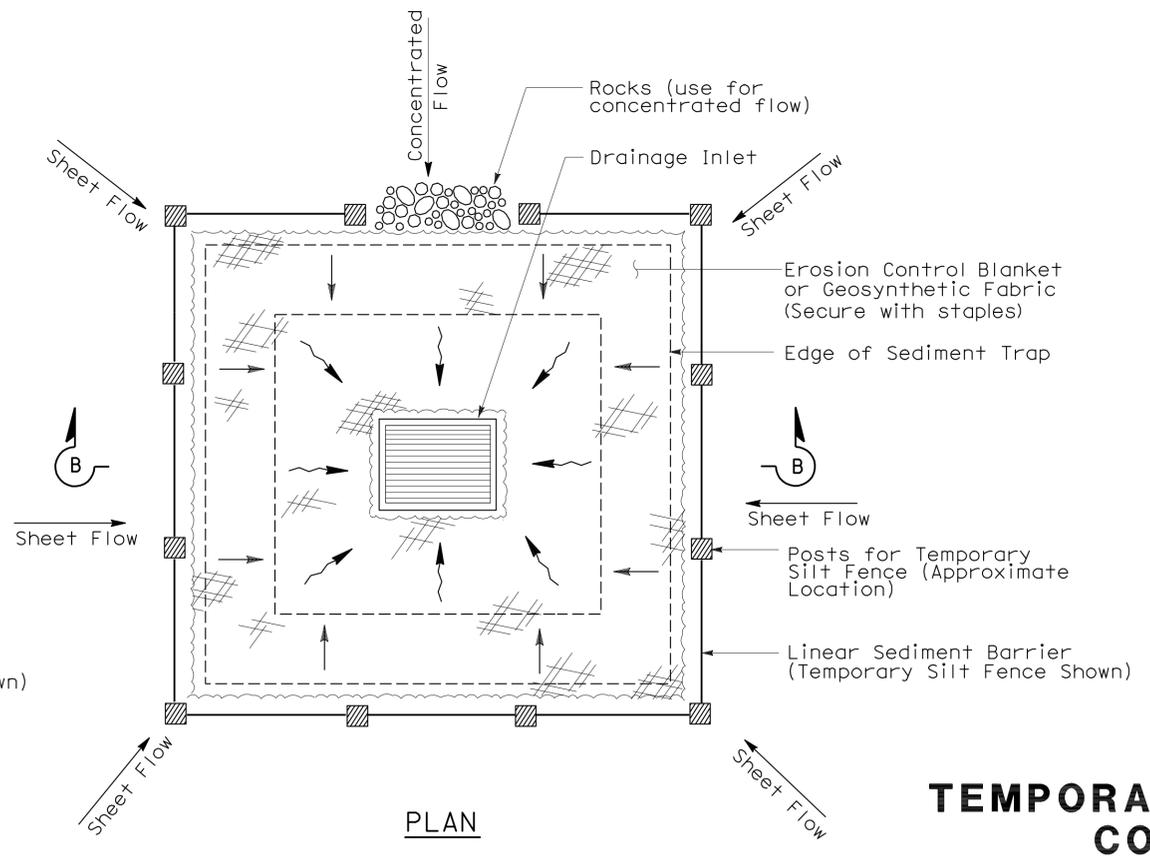
**SECTION A-A**



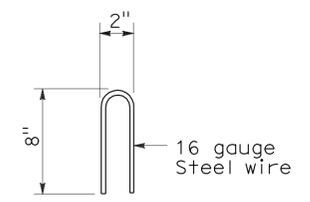
**SECTION B-B**



**TEMPORARY DRAINAGE INLET PROTECTION (TYPE 1)**



**TEMPORARY DRAINAGE INLET PROTECTION (TYPE 2) (EXCAVATED SEDIMENT TRAP)**



**STAPLE DETAIL**

STATE OF CALIFORNIA  
 DEPARTMENT OF TRANSPORTATION  
**TEMPORARY WATER POLLUTION CONTROL DETAILS (TEMPORARY DRAINAGE INLET PROTECTION)**  
 NO SCALE

NSP T61 DATED AUGUST 15, 2008 SUPPLEMENTS THE STANDARD PLANS BOOK DATED MAY 2006.

2006 NEW STANDARD PLAN NSP T61

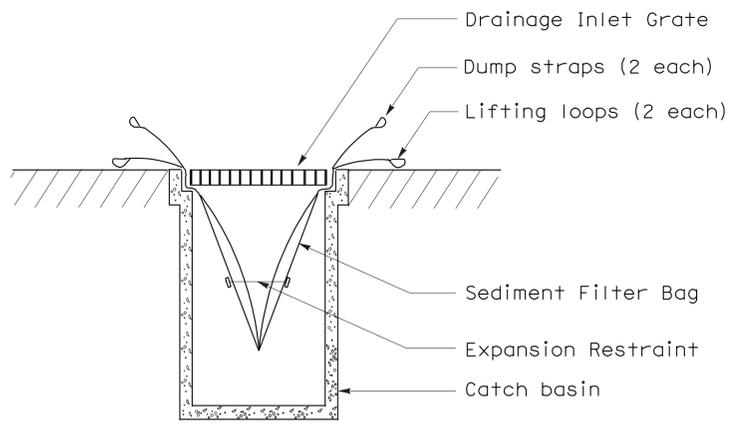
DIST	COUNTY	ROUTE	POST MILES TOTAL PROJECT	SHEET NO.	TOTAL SHEETS
07	LA	5	15.8/16.9	123	145

*Robert B. Schott*  
 LICENSED LANDSCAPE ARCHITECT

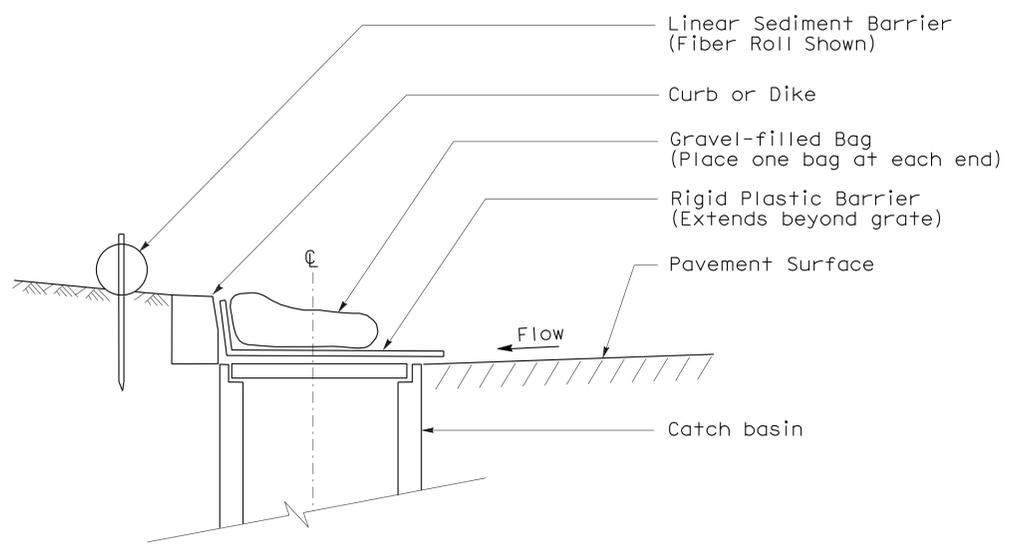
August 15, 2008  
 PLANS APPROVAL DATE

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.

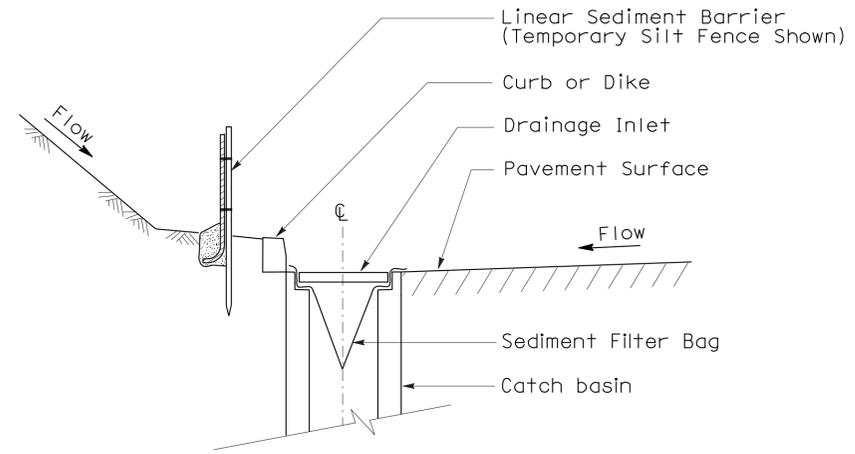
To accompany plans dated 5-24-10



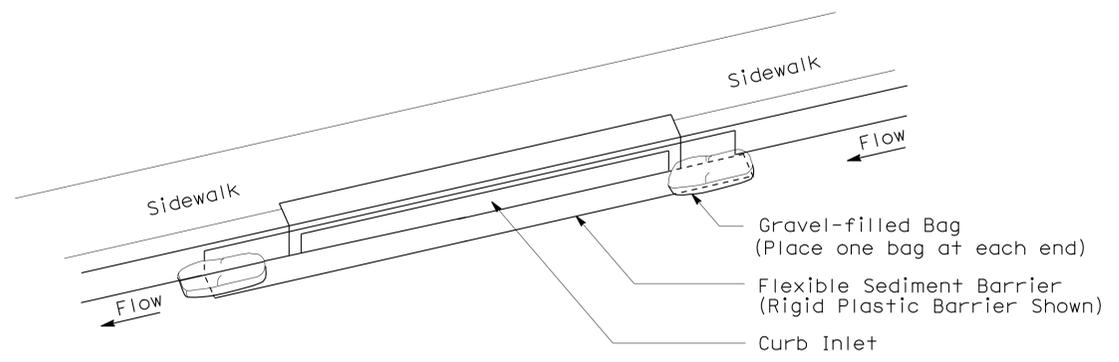
SECTION B-B  
SEDIMENT FILTER BAG DETAIL



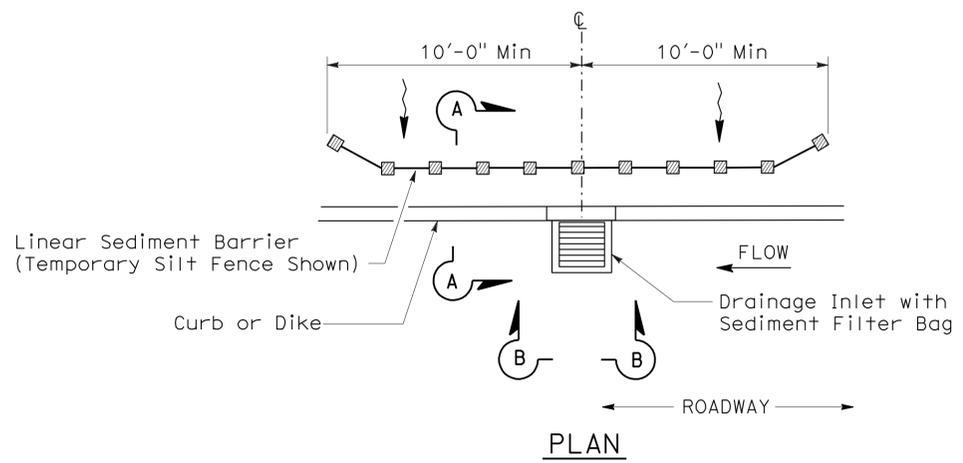
SECTION  
TEMPORARY DRAINAGE  
INLET PROTECTION (TYPE 6A)  
(CATCH BASIN WITH GRATE)



SECTION A-A



PERSPECTIVE  
TEMPORARY DRAINAGE  
INLET PROTECTION (TYPE 6B)  
(CURB INLET WITHOUT GRATE)



PLAN  
TEMPORARY DRAINAGE  
INLET PROTECTION (TYPE 5)  
(SEDIMENT FILTER BAG)

- NOTES:**
1. See Standard Plan T51 for Temporary Silt Fence.
  2. Dimensions may vary to fit field conditions.

STATE OF CALIFORNIA  
DEPARTMENT OF TRANSPORTATION

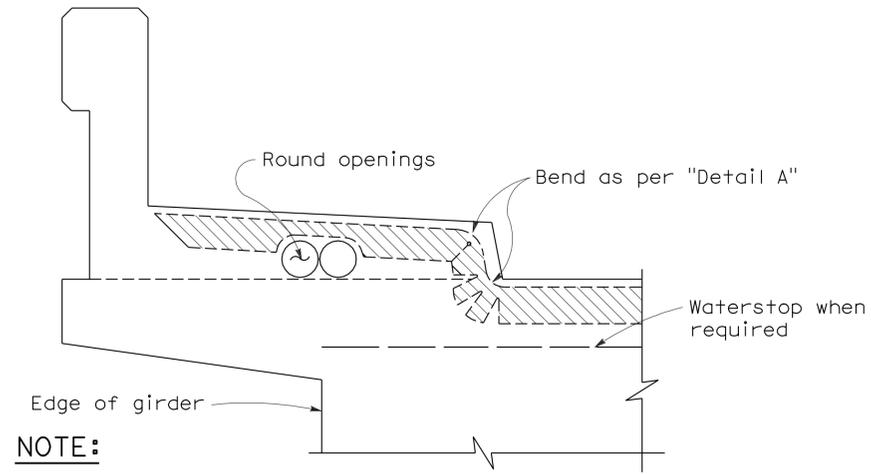
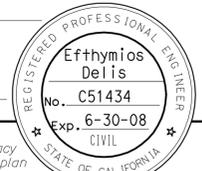
**TEMPORARY WATER POLLUTION  
CONTROL DETAILS  
(TEMPORARY DRAINAGE  
INLET PROTECTION)**

NO SCALE

NSP T64 DATED AUGUST 15, 2008 SUPPLEMENTS  
THE STANDARD PLANS BOOK DATED MAY 2006.

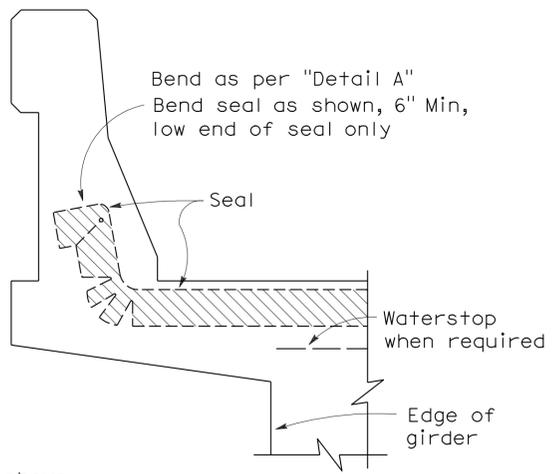
**NEW STANDARD PLAN NSP T64**

2006 NEW STANDARD PLAN NSP T64

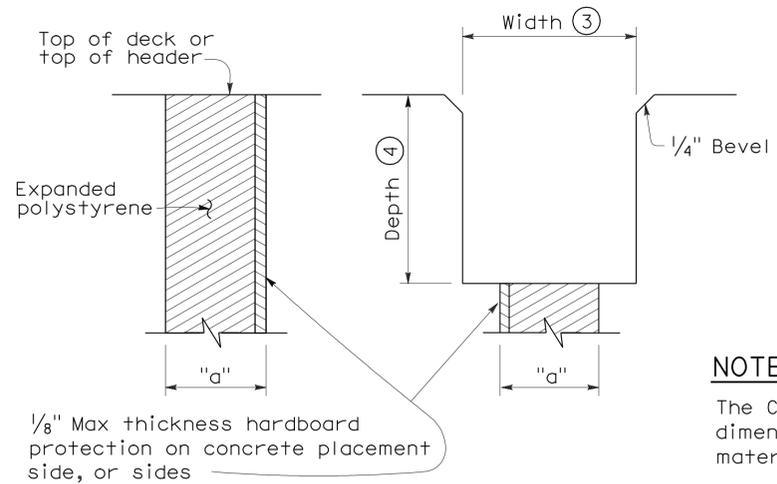


**NOTE:**  
 Type "B" seal shown. Type "A" seals to conform to the general path of seal shown, cuts for bending not required. Bend Type "A" seals 3" up into curb or barrier rail on only the low end of the seal.

**CONCRETE BARRIER AND SIDEWALK**



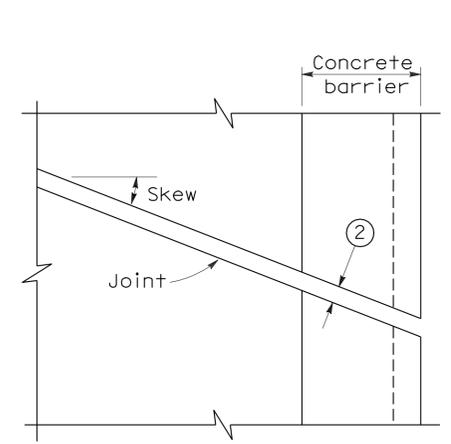
**CONCRETE BARRIER**



**FORMING DETAIL SAWCUT DETAIL**

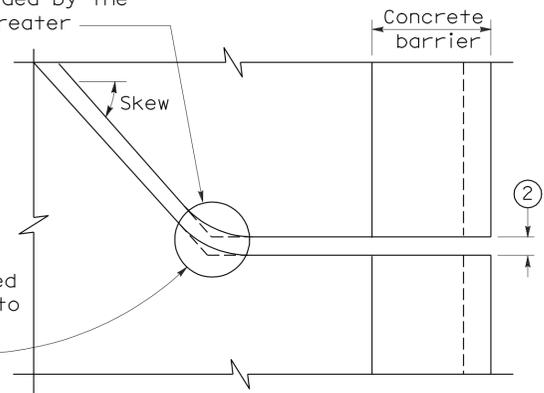
**NOTE:**  
 The Contractor shall verify all controlling field dimensions before ordering or fabricating any material.

**JOINT SEALS DETAILS**



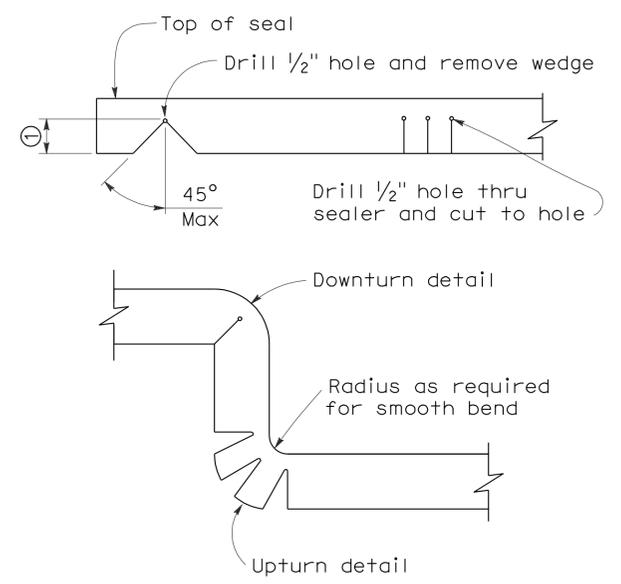
**PLAN OF JOINT (SKEW ≤ 20°)**

Min  $\phi$  radius to be 4 times uncompressed width of seal or as recommended by the manufacturer, whichever is greater



**PLAN OF JOINT (SKEW > 20°)**

In lieu of saw cutting, this area may be blocked out and reconstructed to match saw cutting on both sides.



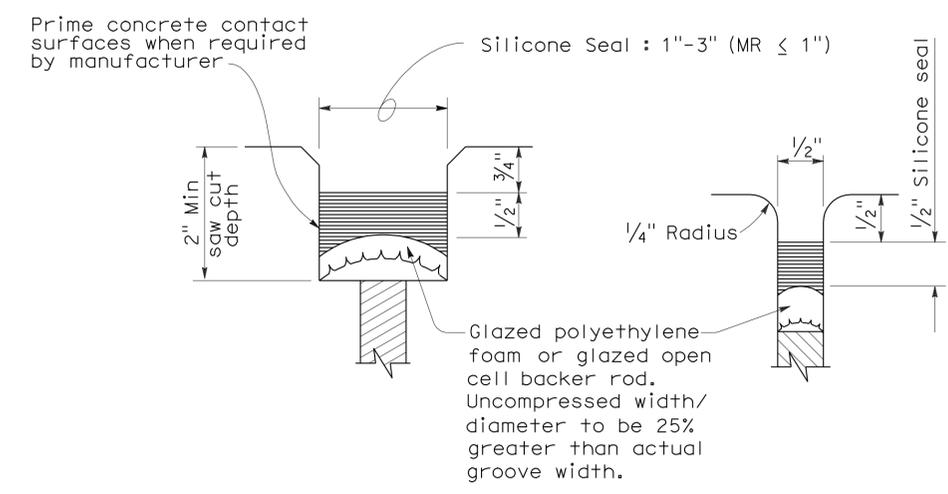
**DETAIL A**

**NOTES:**

- 1 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.
- 2 Opening in barrier to match width of sawn deck joint.
- 3 Sawcut groove widths shall be as ordered by the Engineer.
- 4 Depth of sawcut: Type A - Depth to be 2" minimum.  
 Type B - Depth to be equal to or greater than the depth of seal measured along the contact surface, when compressed to minimum width position (W<sub>2</sub>) plus dimensions shown.
- 5 MR (movement rating) as shown on other plan sheets.
- 6 Other depths must be approved by the Engineer.

**DIMENSIONS "a" OF JOINT REQUIRED**

Movement Rating (MR) ⑤	Bridge Type	"a" Dimension		
		Deck Concrete Placed		
		Winter	Fall-Spring	Summer
2"	All except CIP/PS	1 1/2"	1 1/4"	3/4"
	CIP/PS	1 1/4"	1"	1/2"
1 1/2"	All except CIP/PS	1 1/4"	1"	1/2"
	CIP/PS	1"	3/4"	1/2"
1"	All except CIP/PS	1"	3/4"	1/2"
	CIP/PS	3/4"	1/2"	1/2"
1/2"	All except CIP/PS	3/4"	3/4"	1/2"
	CIP/PS	1/2"	1/2"	1/2"

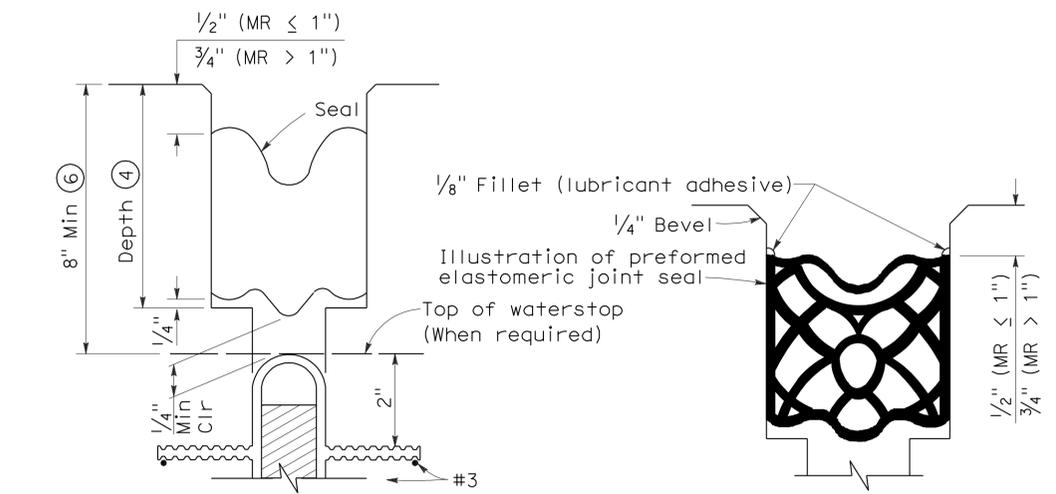


**TYPE A SEAL**

Movement rating : Silicone = 1" Max

**TYPE AL SEAL**

Longitudinal joints only



**TYPE B JOINT SEAL IN MINIMUM WIDTH POSITION (W<sub>2</sub>)**

**TYPE B SEAL**

Movement Rating ≤ 2"

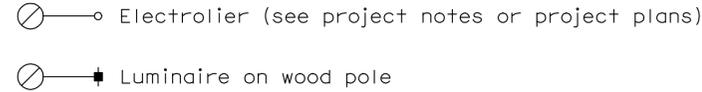
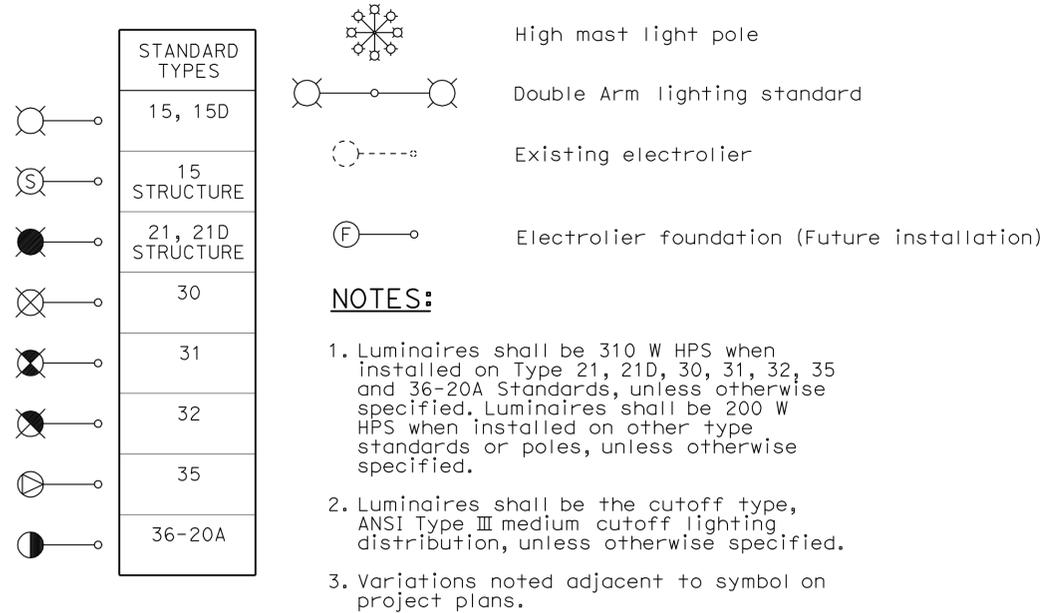
STATE OF CALIFORNIA  
 DEPARTMENT OF TRANSPORTATION  
**JOINT SEALS**  
**(MAXIMUM MOVEMENT RATING = 2")**  
 NO SCALE

RSP B6-21 DATED OCTOBER 5, 2007 SUPERSEDES STANDARD PLAN B6-21 DATED MAY 1, 2006 - PAGE 258 OF THE STANDARD PLANS BOOK DATED MAY 2006.

**REVISED STANDARD PLAN RSP B6-21**

2006 REVISED STANDARD PLAN RSP B6-21

# ELECTROLIERS



## STANDARD NOTES:

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

# ABBREVIATIONS AND EQUIPMENT DESIGNATIONS

## PROPOSED EXISTING

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

DIST	COUNTY	ROUTE	POST MILES TOTAL PROJECT	SHEET NO.	TOTAL SHEETS
07	LA	5	15.8/16.9	125	145

*Jeffrey G. McRae*  
REGISTERED ELECTRICAL ENGINEER

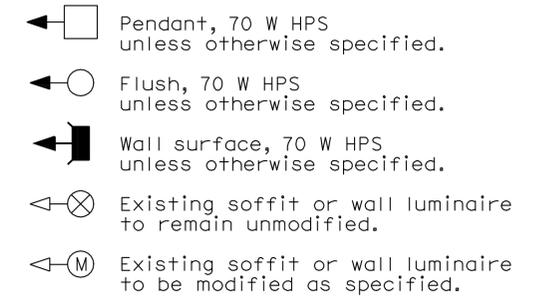
October 5, 2007  
PLANS APPROVAL DATE

Jeffrey G. McRae  
No. E14512  
Exp. 6-30-08  
ELECTRICAL  
STATE OF CALIFORNIA

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To accompany plans dated 5-24-10

## SOFFIT AND WALL MOUNTED LUMINAIRES



**NOTE:**  
Arrow indicates "street side" of luminaire.

STATE OF CALIFORNIA  
DEPARTMENT OF TRANSPORTATION

# ELECTRICAL SYSTEMS (SYMBOLS AND ABBREVIATIONS)

NO SCALE

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

## REVISED STANDARD PLAN RSP ES-1A

2006 REVISED STANDARD PLAN RSP ES-1A

DIST	COUNTY	ROUTE	POST MILES TOTAL PROJECT	SHEET NO.	TOTAL SHEETS
07	LA	5	15.8/16.9	126	145

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

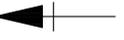
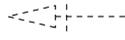
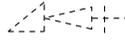
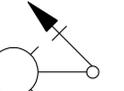
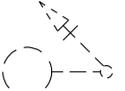
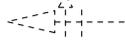
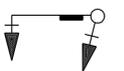
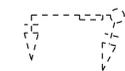
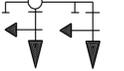
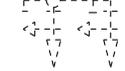
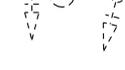
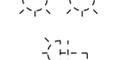
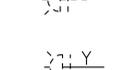
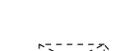
October 5, 2007  
 PLANS APPROVAL DATE

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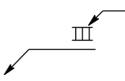
### CONDUIT

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

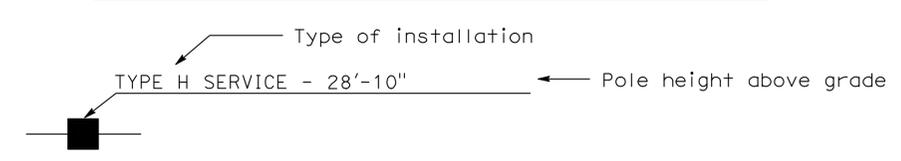
### SIGNAL EQUIPMENT

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

### SERVICE EQUIPMENT

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

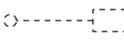
### POLE-MOUNTED SERVICE DESIGNATION



### ILLUMINATED OVERHEAD SIGN

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

### SIGNAL EQUIPMENT Cont

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

### NOTES:

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

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

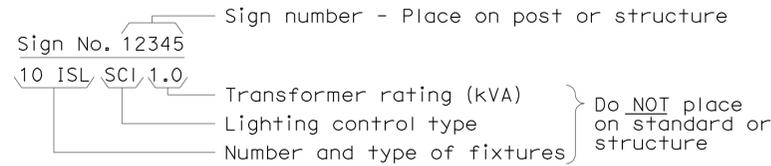
RSP ES-1B DATED OCTOBER 5, 2007 SUPERCEDES STANDARD PLAN ES-1B  
 DATED MAY 1, 2006 - PAGE 401 OF THE STANDARD PLANS BOOK DATED MAY 2006.

**REVISED STANDARD PLAN RSP ES-1B**

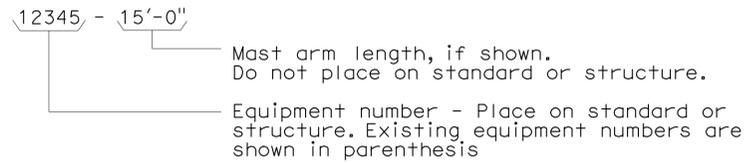
2006 REVISED STANDARD PLAN RSP ES-1B

### EQUIPMENT IDENTIFICATION

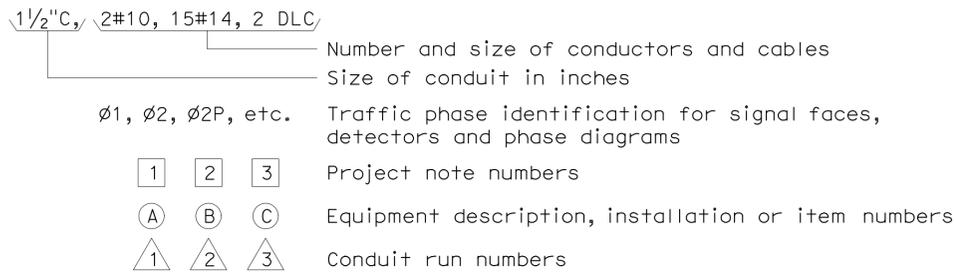
#### ILLUMINATED SIGN IDENTIFICATION NUMBER:



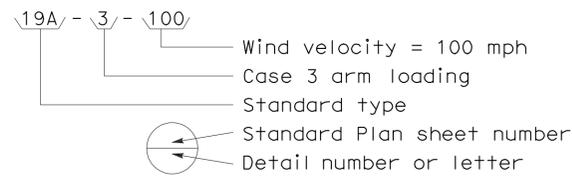
#### ELECTROLIER OR EQUIPMENT IDENTIFICATION NUMBER:



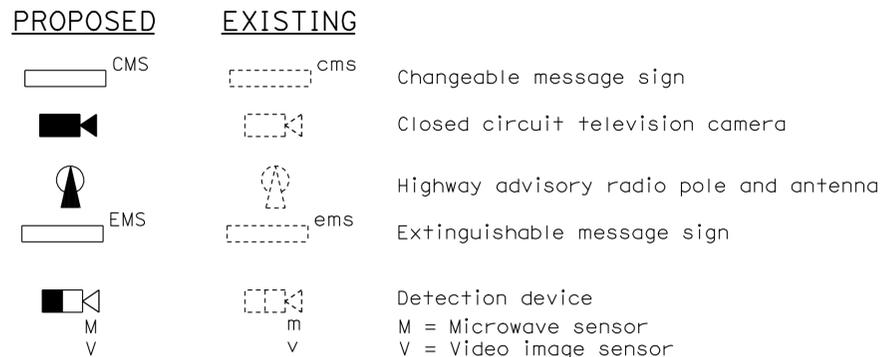
#### CONDUIT AND CONDUCTOR IDENTIFICATION:



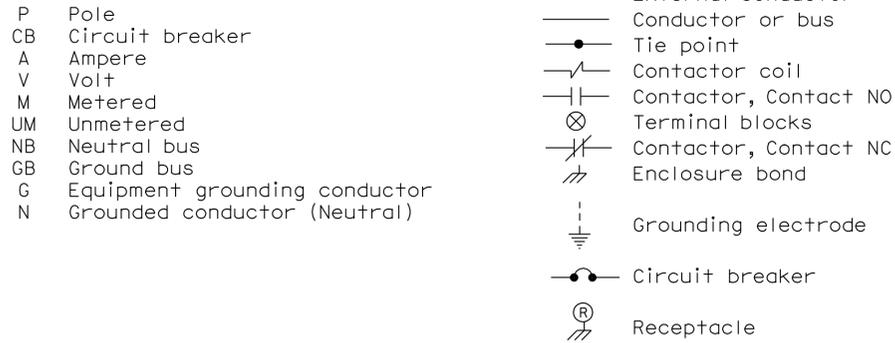
#### SIGNAL AND LIGHTING STANDARD (TYPICAL DESIGNATION):



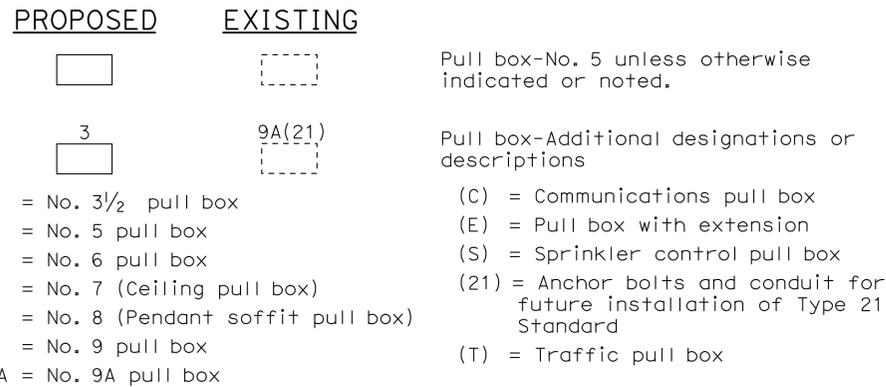
### MISCELLANEOUS EQUIPMENT



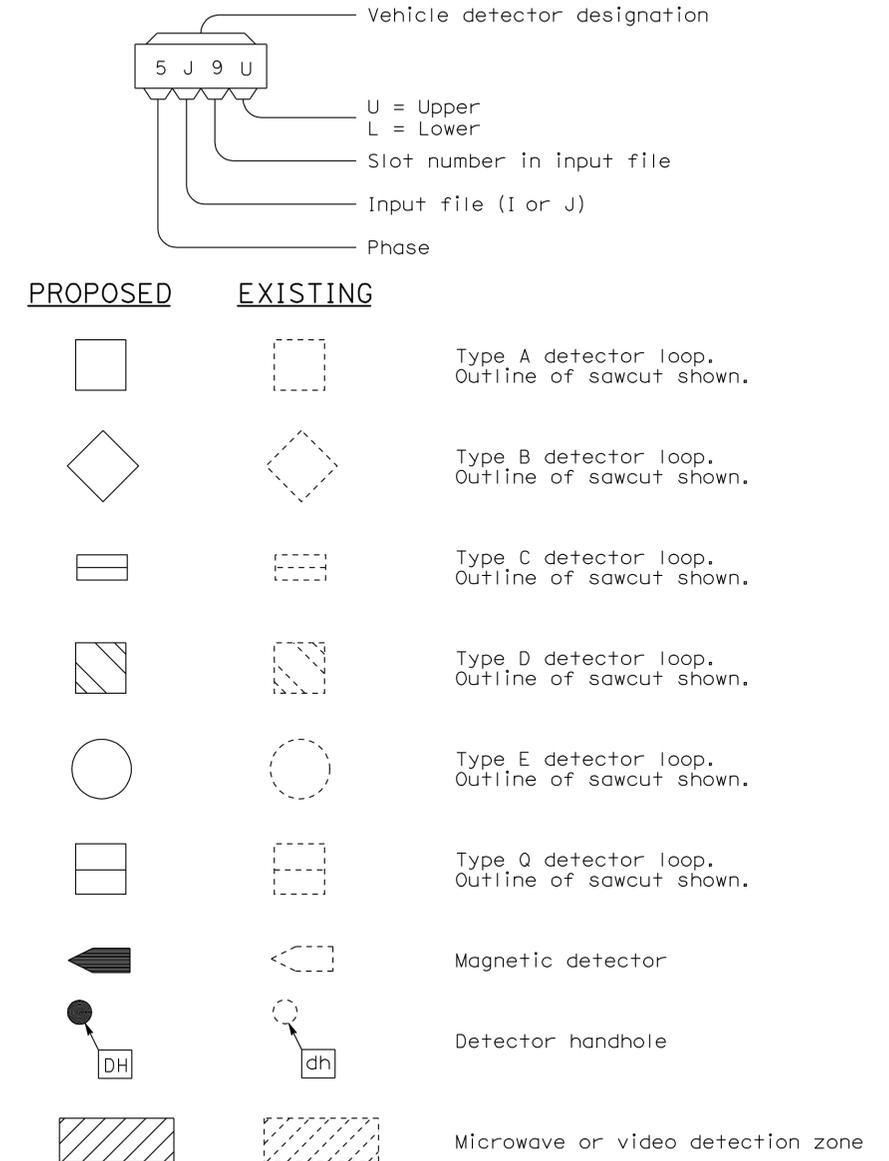
### WIRING DIAGRAM LEGEND



### PULL BOXES



### VEHICLE DETECTORS



STATE OF CALIFORNIA  
 DEPARTMENT OF TRANSPORTATION

## ELECTRICAL SYSTEMS (SYMBOLS AND ABBREVIATIONS)

NO SCALE

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

2006 REVISED STANDARD PLAN RSP ES-1C

DIST	COUNTY	ROUTE	POST MILES TOTAL PROJECT	SHEET NO.	TOTAL SHEETS
07	LA	5	15.8/16.9	128	145

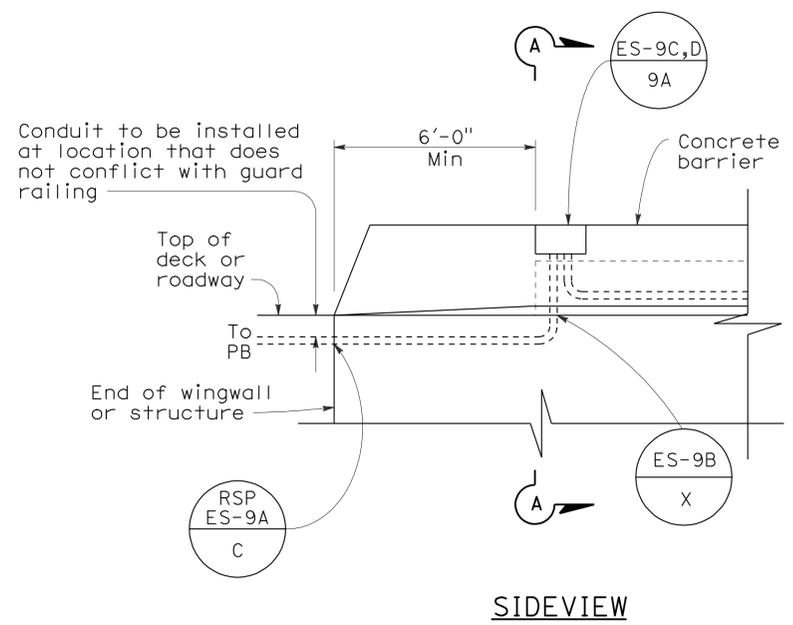
*Jeffery G. McRae*  
 REGISTERED ELECTRICAL ENGINEER  
 No. E14512  
 Exp. 6-30-08  
 STATE OF CALIFORNIA

October 5, 2007  
 PLANS APPROVAL DATE

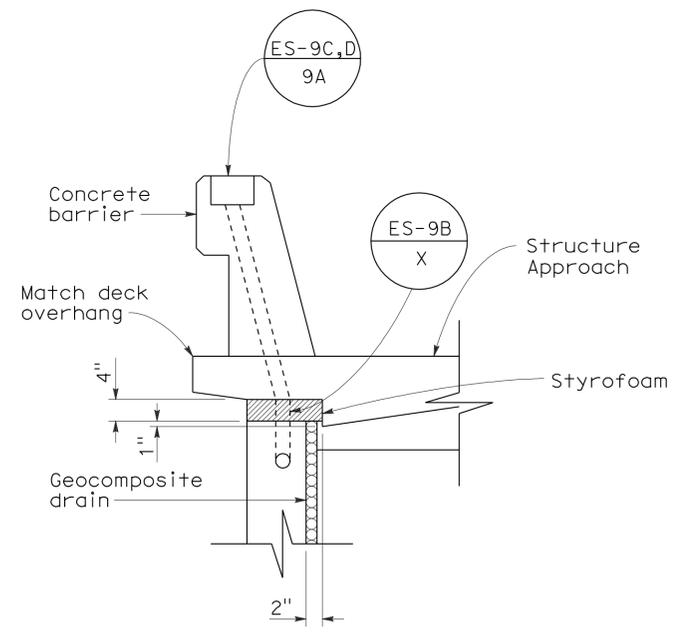
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To accompany plans dated 5-24-10

2006 REVISED STANDARD PLAN RSP ES-9A

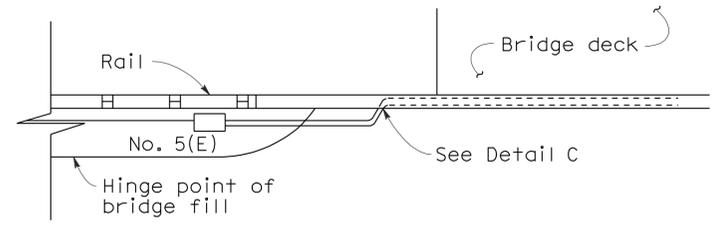


**SIDEVIEW**

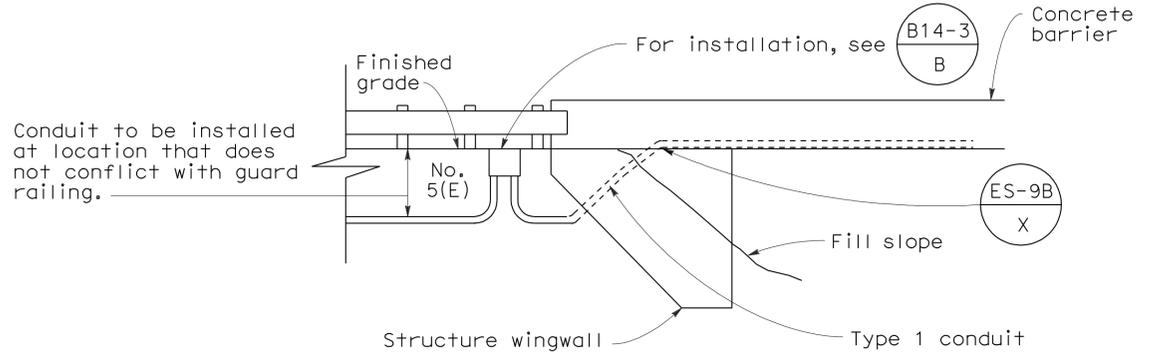


**SECTION A-A**

**DETAIL A  
CONDUIT TERMINATION**

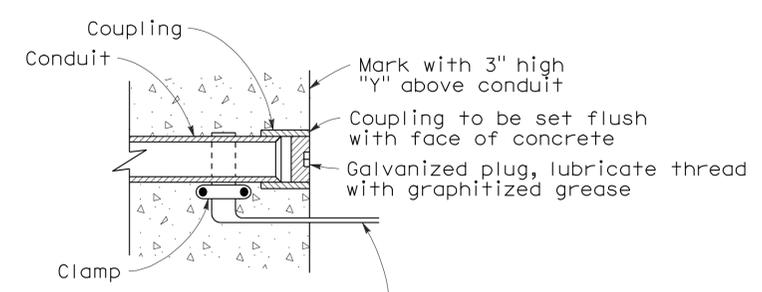


**TOP VIEW**



**SIDE VIEW  
DETAIL I**

**CONDUIT TERMINATION**



**DETAIL C**

**CONDUIT TERMINATION**

Copper bonding strap install only at structure construction joint, extend at least 6" from face of concrete

STATE OF CALIFORNIA  
DEPARTMENT OF TRANSPORTATION

**ELECTRICAL SYSTEMS  
(ELECTRICAL DETAILS  
STRUCTURE INSTALLATIONS)**

NO SCALE

RSP ES-9A DATED OCTOBER 5, 2007 SUPERCEDES STANDARD PLAN ES-9A DATED MAY 1, 2006 - PAGE 454 OF THE STANDARD PLANS BOOK DATED MAY 2006.

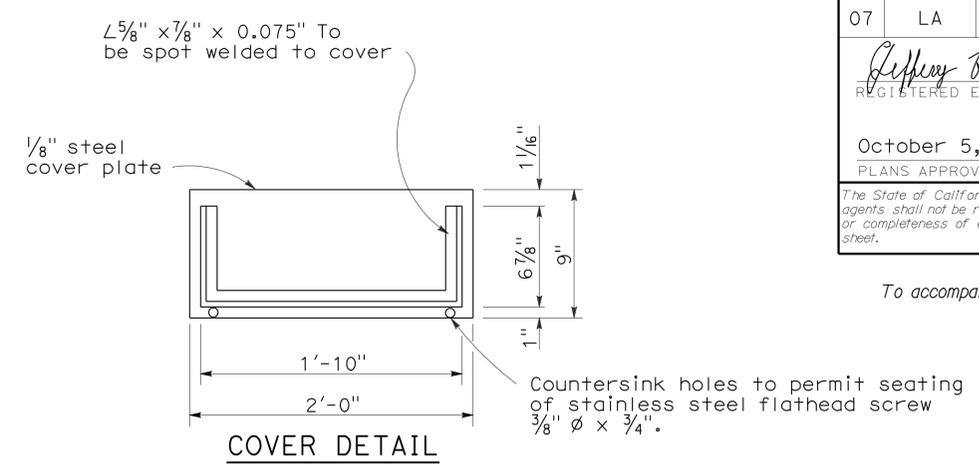
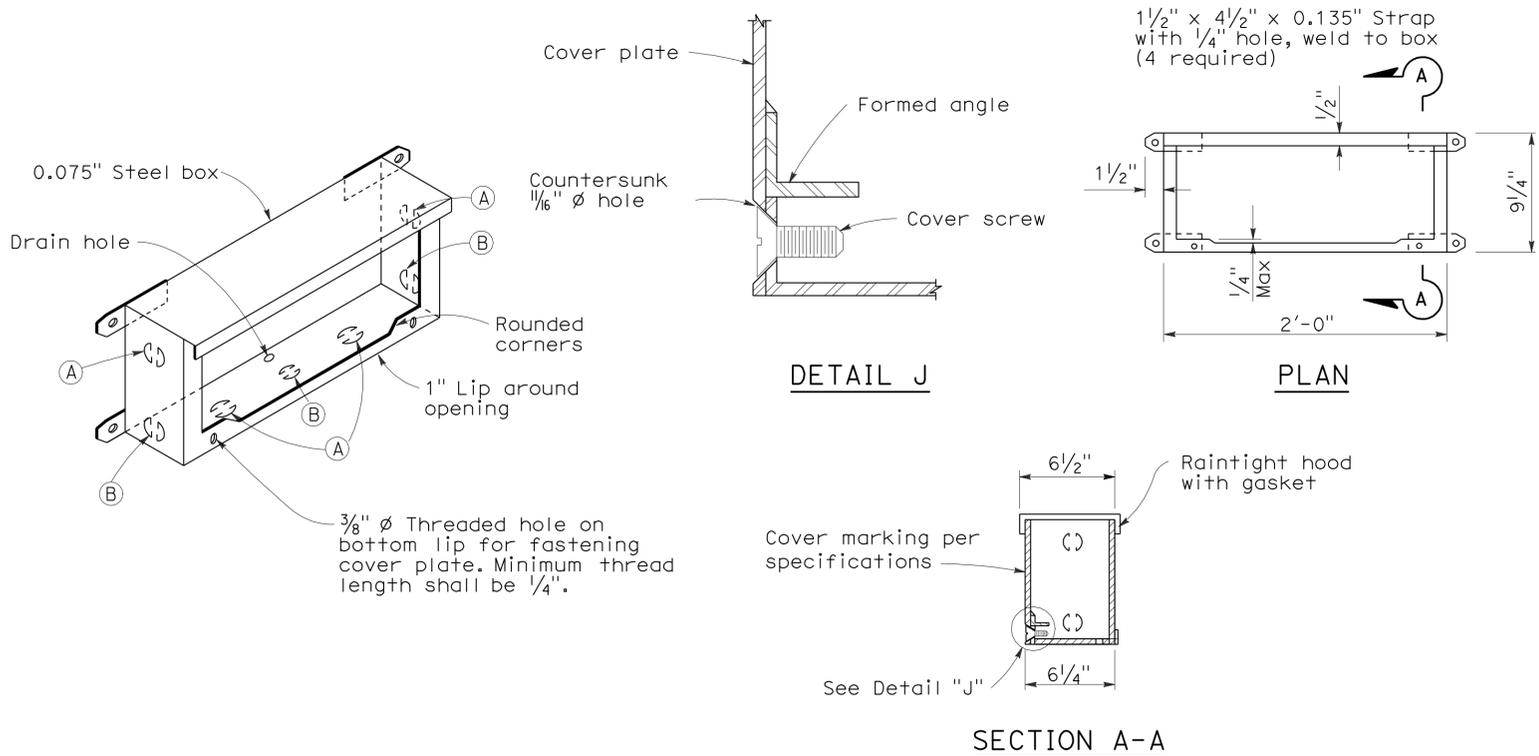
**REVISED STANDARD PLAN RSP ES-9A**

DIST	COUNTY	ROUTE	POST MILES TOTAL PROJECT	SHEET NO.	TOTAL SHEETS
07	LA	5	15.8/16.9	129	145

Jeffrey G. McRae  
 REGISTERED ELECTRICAL ENGINEER  
 October 5, 2007  
 PLANS APPROVAL DATE  
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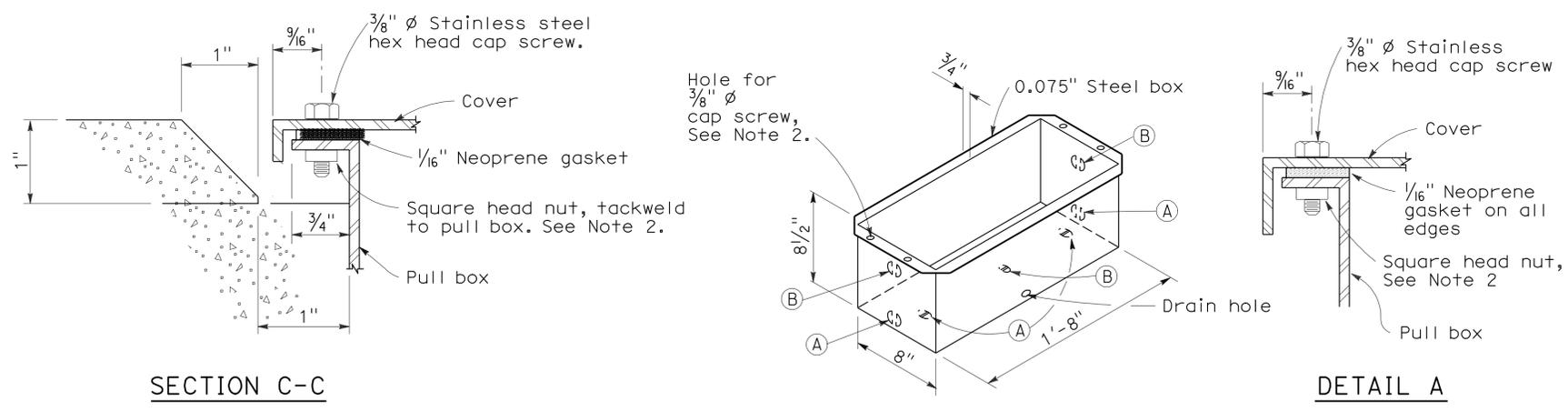
REGISTERED PROFESSIONAL ENGINEER  
 Jeffrey G. McRae  
 No. E14512  
 Exp. 6-30-08  
 ELECTRICAL  
 STATE OF CALIFORNIA

To accompany plans dated 5-24-10



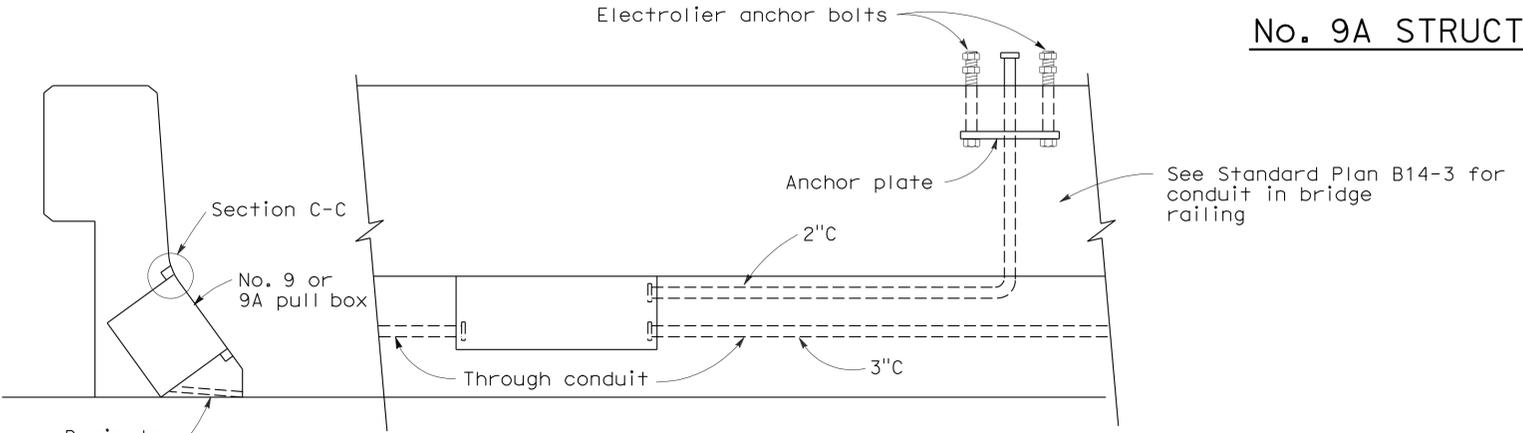
**INSTALLATION NOTE:**  
 Box shall be parallel to top of railing. Close cover box during pouring with 1/4" plywood of sufficient size to provide 1:1 chamfer on 3 sides of cover. Upper edge of plywood shall fit against lower edge of raintight hood.

**No. 9 STRUCTURE PULL BOX**



- NOTES:** No. 9 and 9A Pull Box
- Corner joints shall be lapped and secured by spot welding or riveting.
  - Where cap screws are used to attach cover to box, either of the following methods of providing adequate threading may be used:
    - Tack weld square nut to bottom of flange (Total 4), or
    - Tack weld a 1/4" x 5/8" x 8" bar beneath flange (Total 2).
  - Pound knockouts flat after punching.
  - Multiple size knockouts shall not be permitted.
  - Pull box covers shall be marked as shown on Standard Plan ES-8.

**No. 9A STRUCTURE PULL BOX**



**INSTALLATION IN SLOPING PARAPETS**

For reinforcement in area of electrolier, see railing sheets. For electrolier anchor bolts, see Standard Plan ES-6B.

- KNOCKOUT SCHEDULE**  
**No. 9 AND 9A PULL BOX**
- (A) 2"C, 1 each end, 2 on bottom.
  - (B) 3"C, 1 each end, 1 on bottom.

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

NO SCALE  
 RSP ES-9C DATED OCTOBER 5, 2007 SUPERCEDES STANDARD PLAN ES-9C  
 DATED MAY 1, 2006 - PAGE 456 OF THE STANDARD PLANS BOOK DATED MAY 2006.

**REVISED STANDARD PLAN RSP ES-9C**

2006 REVISED STANDARD PLAN RSP ES-9C

DIST	COUNTY	ROUTE	POST MILES TOTAL PROJECT	SHEET NO.	TOTAL SHEETS
07	LA	5	15.8/16.9	130	145

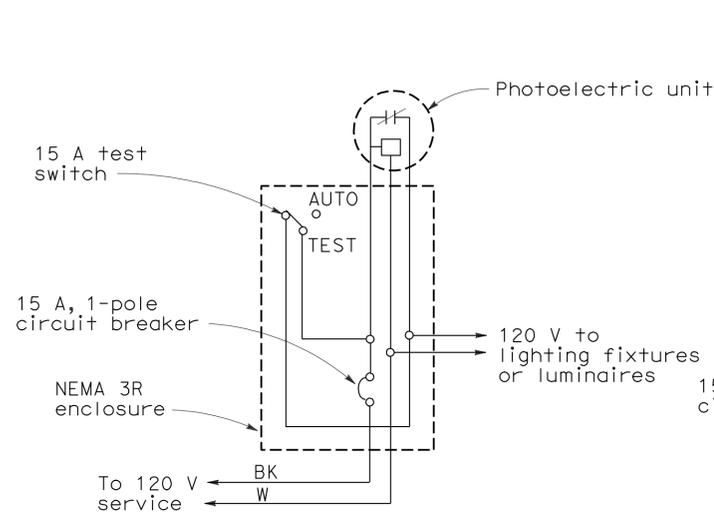
*Jeffery G. McRae*  
 REGISTERED ELECTRICAL ENGINEER  
 October 5, 2007  
 PLANS APPROVAL DATE  
 No. E14512  
 Exp. 6-30-08  
 ELECTRICAL  
 STATE OF CALIFORNIA

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**NOTES:** (FOR LIGHTING AND SIGN ILLUMINATION CONTROL)

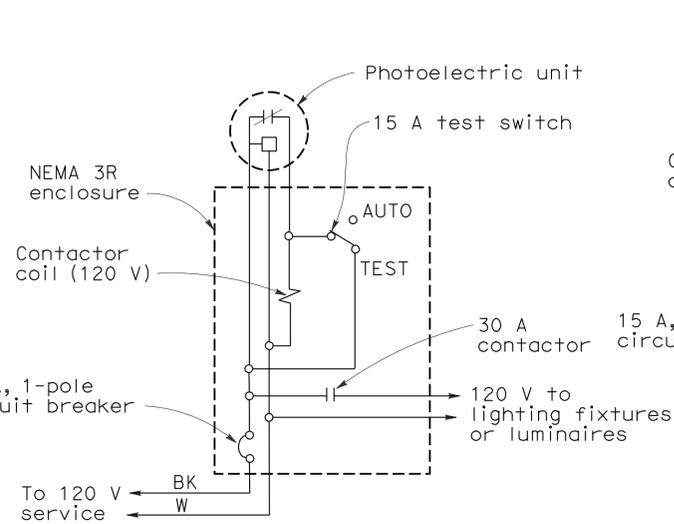
1. The ballast voltages of lighting fixtures and luminaires shall match line service voltages.
2. Voltage rating of photoelectric controls shall conform to the service voltage indicated on the plans.
3. Terminal strip shall be provided for wiring to fixtures.
4. Type SC1A, SC2A, SC3A controls are similar to Types SC1, SC2 and SC3 controls respectively except test switch and wiring are not required.

To accompany plans dated 5-24-10



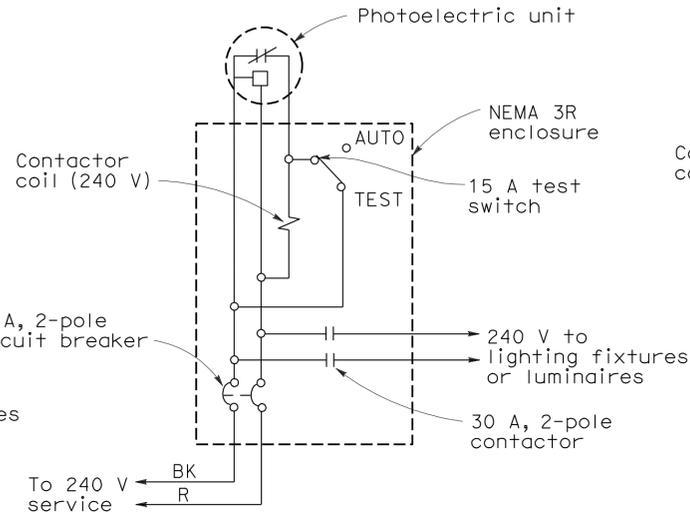
**TYPE LC1 CONTROL**

For 120 V unswitched circuit with no more than 800 W load.



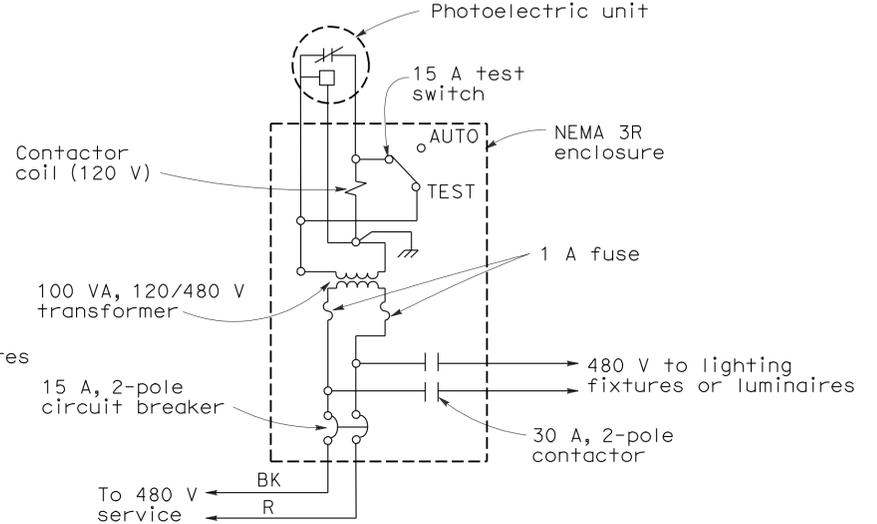
**TYPE LC2 CONTROL**

For 120 V unswitched circuit



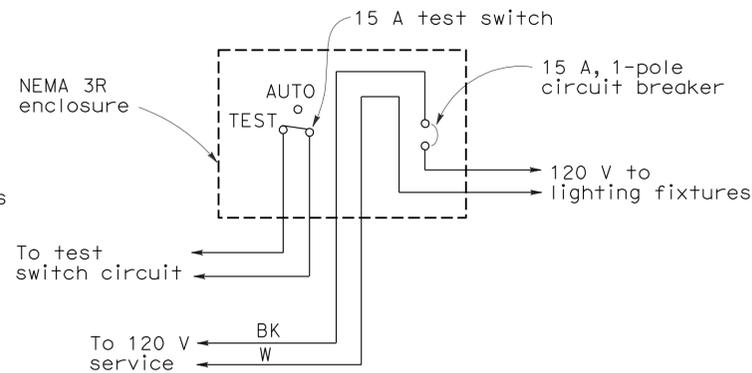
**TYPE LC3 CONTROL**

For 240 V and 480 V unswitched circuits



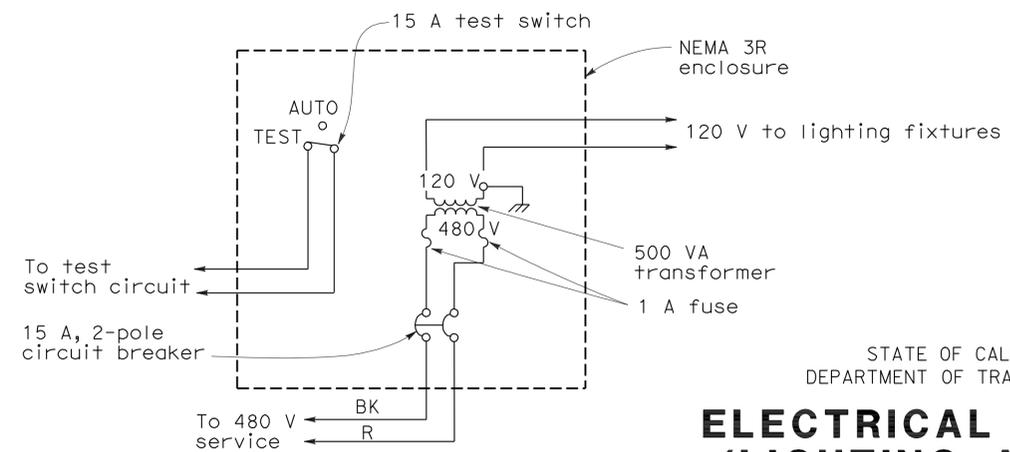
**TYPE SC1 CONTROL**

For 240 V or 480 V switched circuit, see Note 4 for Type SC1A



**TYPE SC2 CONTROL**

For 120 V switched circuit, see Note 4 for Type SC2A



**TYPE SC3 CONTROL**

For 480 V switched sign circuit, see Note 4 for Type SC3A

STATE OF CALIFORNIA  
 DEPARTMENT OF TRANSPORTATION  
**ELECTRICAL SYSTEMS  
 (LIGHTING AND SIGN  
 ILLUMINATION CONTROL)**

NO SCALE

RSP ES-15D DATED OCTOBER 5, 2007 SUPERCEDES STANDARD PLAN ES-15D DATED MAY 1, 2006 - PAGE 472 OF THE STANDARD PLANS BOOK DATED MAY 2006.

**REVISED STANDARD PLAN RSP ES-15D**

2006 REVISED STANDARD PLAN RSP ES-15D

**NOTES:**

- ① Temporary railing (Type K), see "ROAD PLANS".
- ② Remove existing fill material, barrier, barrier pads, curbs and overhangs, pipe, or/and any asphalt cover
- ③ Construct new bridge overhang to match existing cross slope
- ④ Construct Barrier Rail Type 736(MOD) B11-56
- ⑤ Refinish bridge deck
- ⑥ Remove any portion of existing asphalt & fabric membrane waterproofing
- ⑦ Saw cut, remove exist reinforcing steel to 1.5" amplitude and refinish concrete surface
- ⑧ Construct Barrier Rail Type 736R (Mod)
- ⑨ Expose and keep exist bar reinforcing steel

**STANDARD PLANS DATED MAY 2006**

- A10A ACRONYMS AND ABBREVIATIONS (A-L)
- A10B ACRONYMS AND ABBREVIATIONS (M-Z)
- A10C SYMBOLS (SHEET 1 OF 2)
- A10D SYMBOLS (SHEET 2 OF 2)
- RSP B6-21 JOINT SEALS (MAXIMUM MOVEMENT RATING = 1/2")
- B11-56 CONCRETE BARRIER TYPE 736



**LEGEND**

- Indicates existing structure
- Indicates new structure
- ➔ Indicates direction of traffic
- ▨ Indicates limit of bridge removal
- Point of minimum vertical clearance

DIST	COUNTY	ROUTE	POST MILES TOTAL PROJECT	SHEET No	TOTAL SHEETS
07	LA	5	15.8/16.9	131	145

09-03-09  
REGISTERED CIVIL ENGINEER DATE

5-24-10  
PLANS APPROVAL DATE

TIENTH CHU  
No. 72324  
Exp. 06/30/2010  
CIVIL  
STATE OF CALIFORNIA

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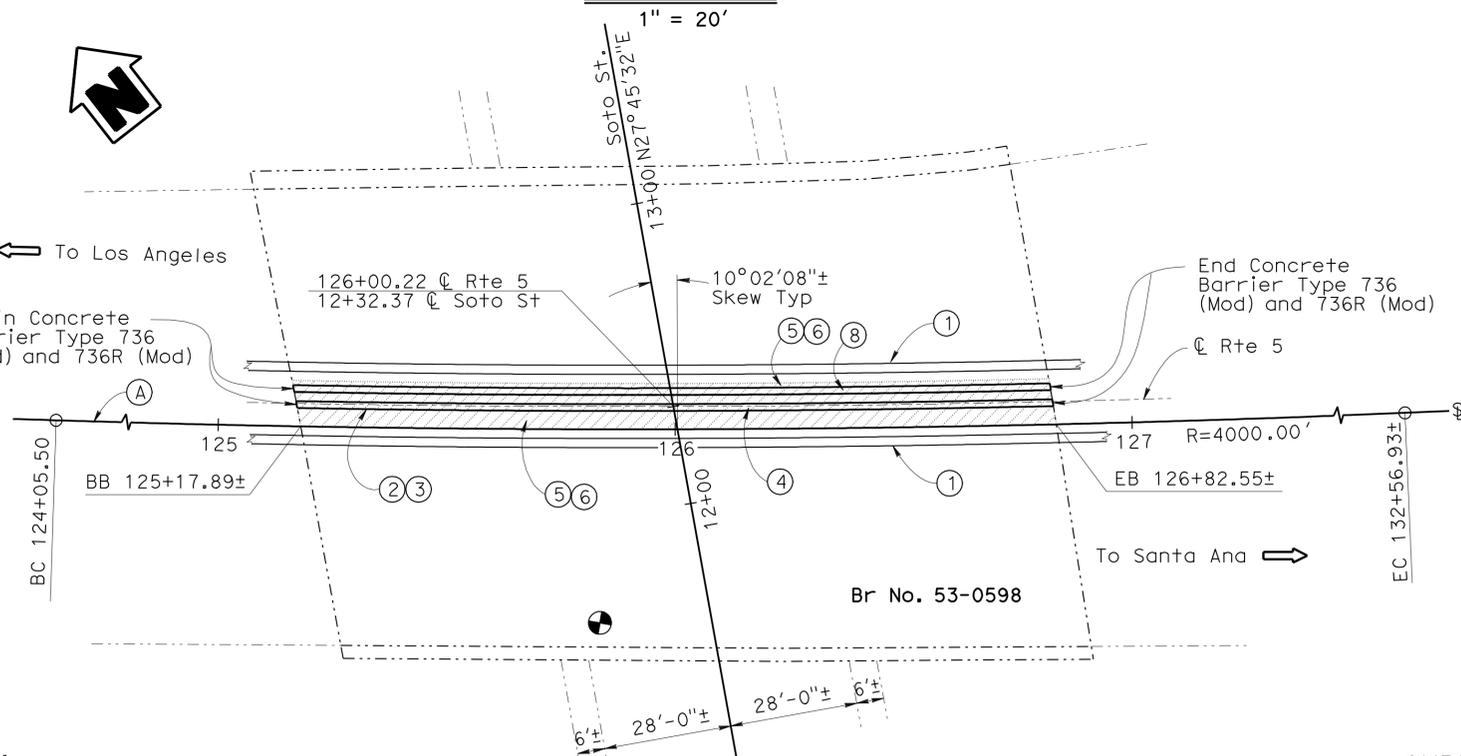
**INDEX TO PLANS**

NO.	SHEET NAME
1	GENERAL PLAN
2	OVERHANG DETAILS No. 1
3	OVERHANG DETAILS No. 2

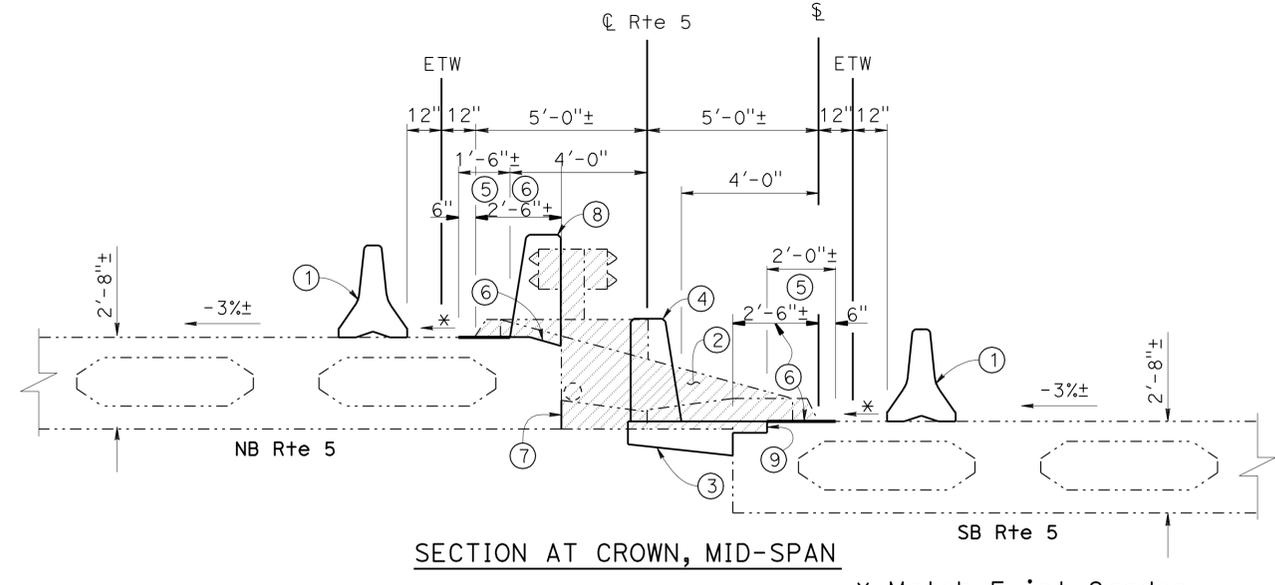
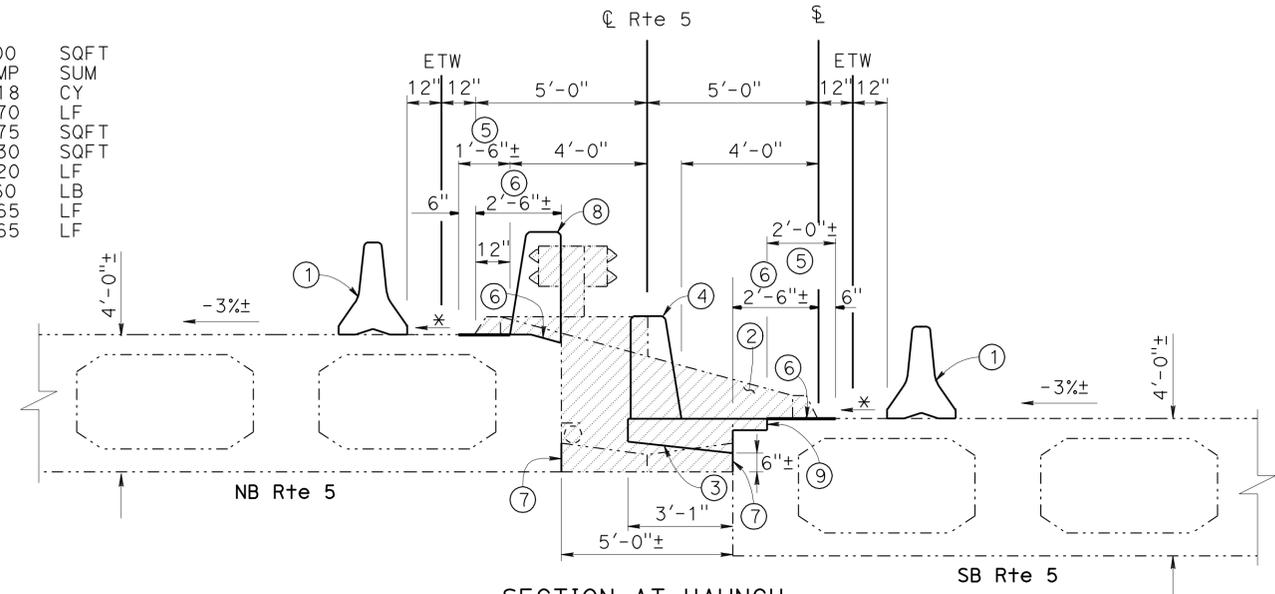
**QUANTITIES**

- REMOVE ASPHALT CONCRETE SURFACING
- BRIDGE REMOVAL (PORTION), LOCATION A
- STRUCTURAL CONCRETE, BRIDGE
- DRILL AND BOND DOWEL
- REFINISH BRIDGE DECK
- REFINISH CONCRETE SURFACE
- JOINT SEAL (MR 1/2")
- BAR REINFORCING STEEL (BRIDGE)
- CONCRETE BARRIER (TYPE 736 MODIFIED)
- CONCRETE BARRIER (TYPE 736R MODIFIED)

1,400	SQFT
LUMP	SUM
18	CY
170	LF
575	SQFT
130	SQFT
20	LF
4,360	LB
165	LF
165	LF



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



**CURVE DATA**

No.	R	Δ	T	L
(A)	4000.00'	27°5'34"	963.74'	1891.43'

**TYPICAL SECTION**

3/8" = 1'

**MEDIAN BARRIER REPLACEMENT  
SOTO STREET UC (MODIFY)  
GENERAL PLAN**

MINA PEZESHPOUR DESIGN ENGINEER	DESIGN	BY Tien Chu	CHECKED Kenneth Vo	LOAD & RESISTANCE 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 22	BRIDGE NO.	53-0598	
	DETAILS	BY Tom Dang/Thanh Nguyen	CHECKED Kenneth Vo	LAYOUT	BY Tom Dang			CHECKED Tien Chu	POST MILE	16.59
	QUANTITIES	BY Tien Chu	CHECKED B. Shen/B. Patel	SPECIFICATIONS	BY James Choi			PLANS AND SPECS COMPARED James Choi		

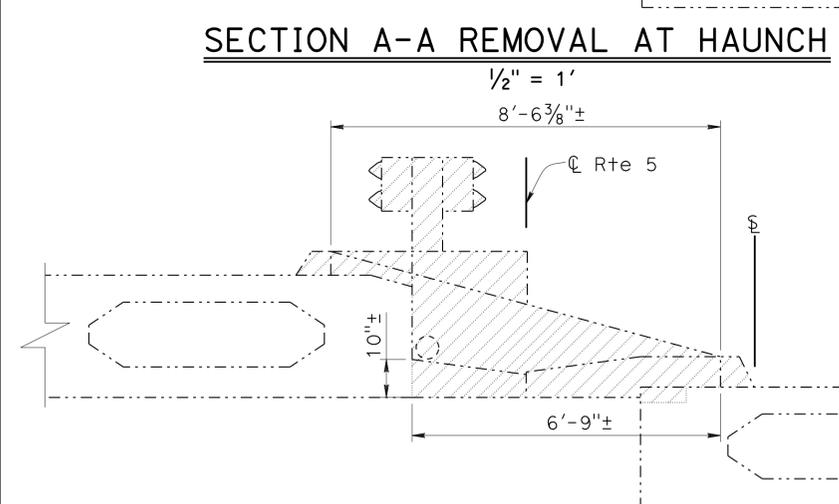
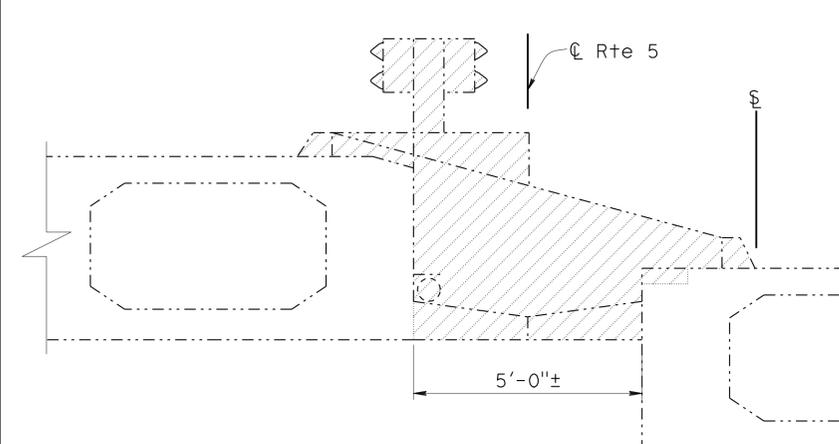
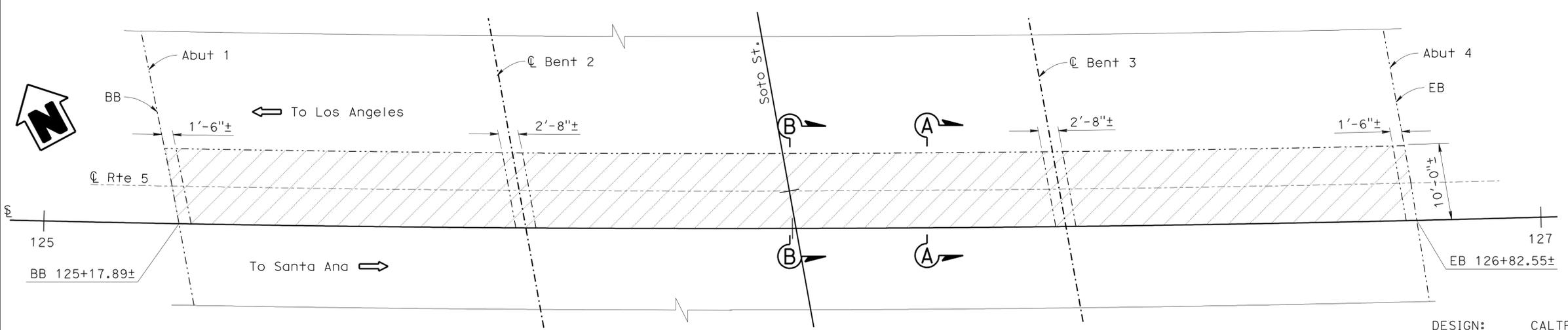
DIST	COUNTY	ROUTE	POST MILES TOTAL PROJECT	SHEET No	TOTAL SHEETS
07	LA	5	15.8/16.9	132	145

09-03-09  
REGISTERED CIVIL ENGINEER DATE

5-24-10  
PLANS APPROVAL DATE

Tien Chu  
No. 72324  
Exp. 06/30/2010  
CIVIL  
STATE OF CALIFORNIA

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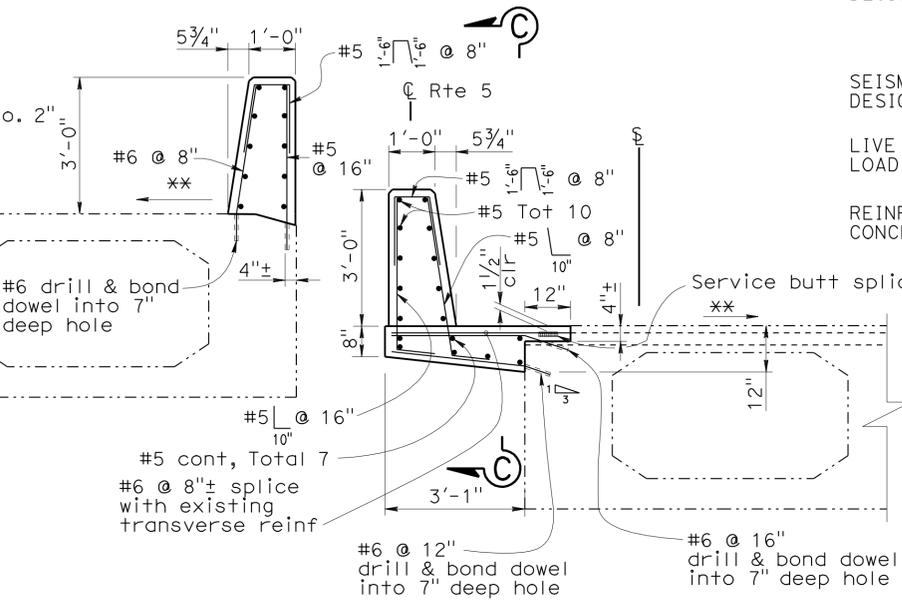
**SECTION B-B REMOVAL AT CROWN, MID-SPAN**  
1/2" = 1'

Note: Refer to "SECTION A-A" for information not shown.

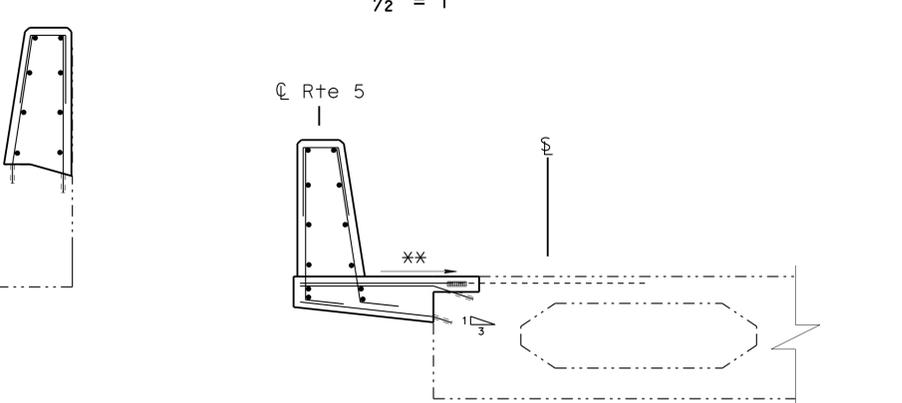
NOTE:  
THE CONTRACTOR SHALL VERIFY ALL CONTROLLING FIELD DIMENSIONS BEFORE ORDERING OR FABRICATING ANY MATERIAL.

**PLAN - REMOVAL LIMITS**  
1/8" = 1'

Notes: Refer to "OVERHANG DETAILS No. 2" sheet for bridge concrete removal at bent & abutment.



**SECTION A-A - NEW CONSTRUCTION AT HAUNCH**  
1/2" = 1'

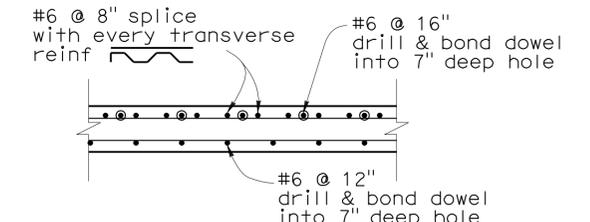


**SECTION B-B NEW CONSTRUCTION AT CROWN, MID-SPAN**  
1/2" = 1'

Note: Refer to "SECTION A-A" for information not shown.

**GENERAL NOTES  
LOAD FACTOR DESIGN**

- DESIGN: CALTRANS BRIDGE DESIGN SPECIFICATIONS - April 2000 (LFD) (1996 16th Edition AASHTO with Interims and Revisions by CALTRANS)
- SEISMIC DESIGN: Caltrans Seismic Design Criteria (SDC) version 1.4 June 2006
- LIVE LOADING: HS20 - 44 and Alternative and Permit design load.
- REINFORCED CONCRETE: fy =60,000 psi  
f'c =3600 psi  
n=10  
Transverse Deck Slabs (Working Stress Design)  
fs=20,000 psi  
fc=1200 psi  
n=10



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

- LEGEND**
- Indicates existing structure
  - Indicates new structure
  - ▨ Indicates limit of bridge removal
  - ➔ Indicates direction of traffic
  - \*\* Match existing grade and cross slope

**MEDIAN BARRIER REPLACEMENT**

**SOTO STREET UC (MODIFY)**

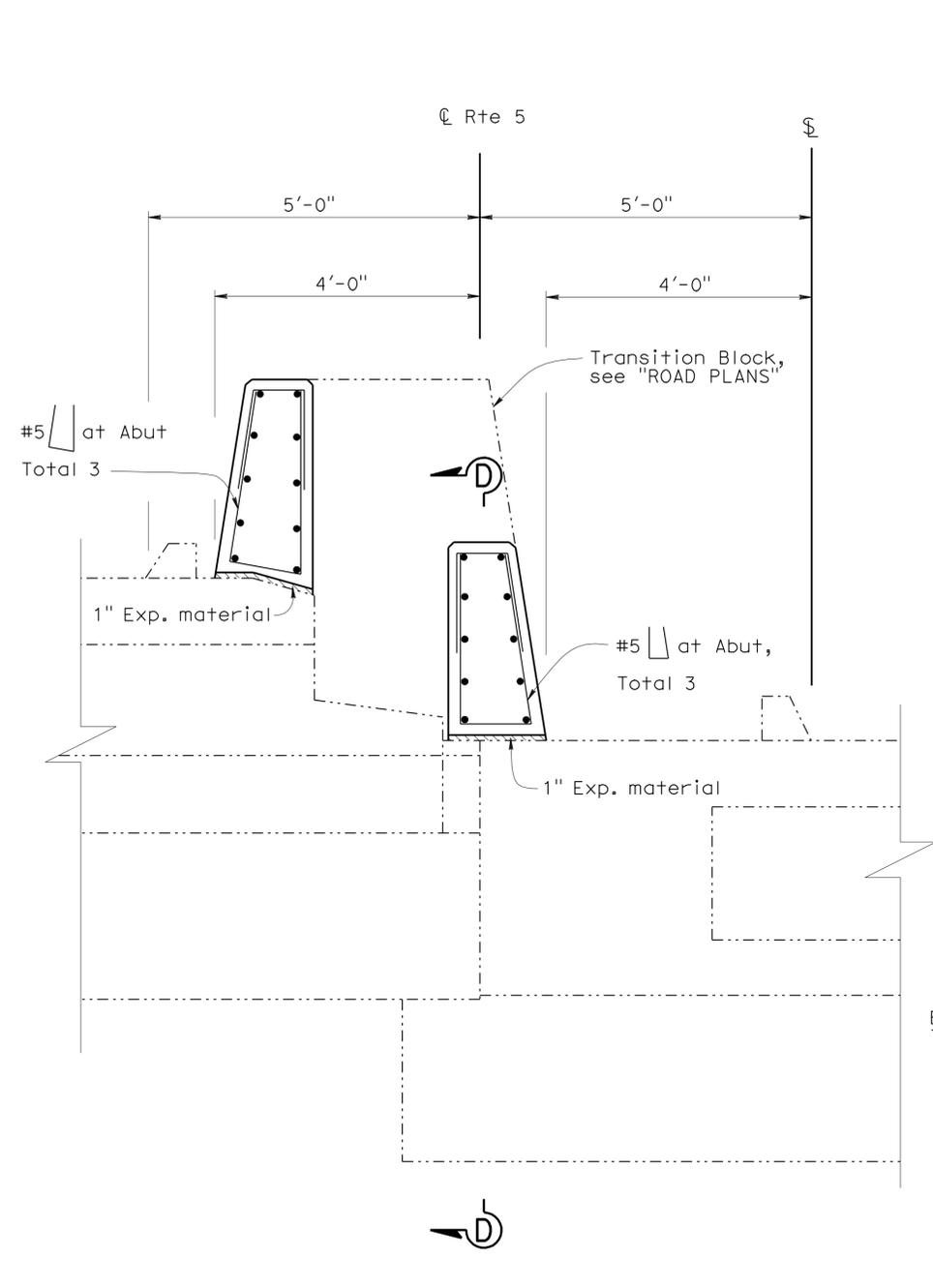
**OVERHANG DETAILS No. 1**

DESIGN	BY	Tien Chu	CHECKED	Kenneth Vo	<b>STATE OF CALIFORNIA</b> DEPARTMENT OF TRANSPORTATION	<b>DIVISION OF ENGINEERING SERVICES</b> STRUCTURE DESIGN <b>DESIGN BRANCH 22</b>	BRIDGE NO.	53-0598	
	DETAILS	BY	Tom Dang/Thanh Nguyen	CHECKED			Kenneth Vo	POST MILE	16.59
	QUANTITIES	BY	Tien Chu	CHECKED			B. Shen/B. Patel		

REVISION DATES		SHEET	OF
02/02/09	03/04/09	2	3

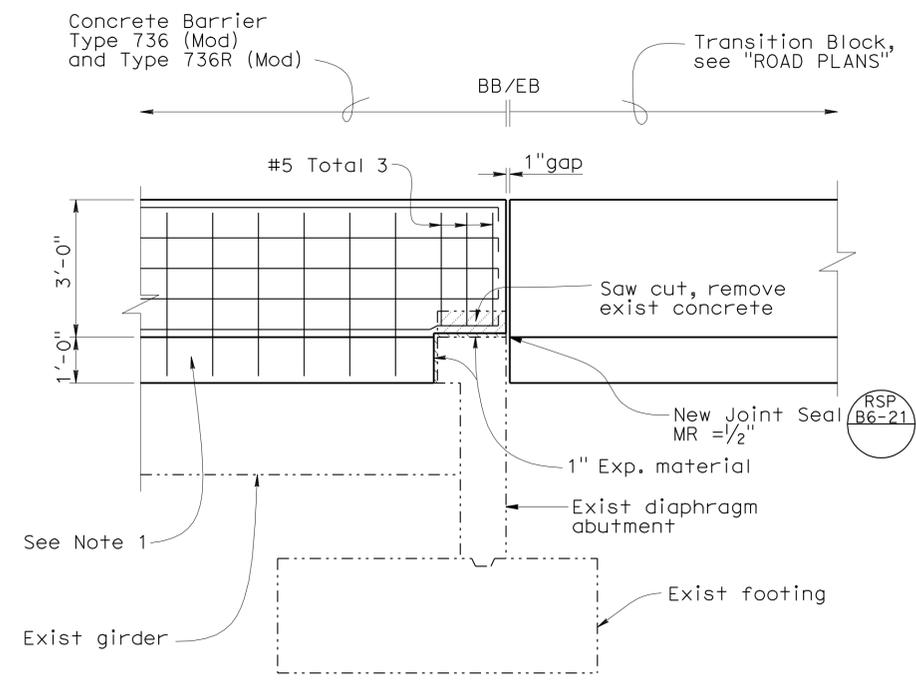
USERNAME => hrright DATE PLOTTED => 27-MAY-2010 TIME PLOTTED => 12:59

DIST	COUNTY	ROUTE	POST MILES TOTAL PROJECT	SHEET No	TOTAL SHEETS
07	LA	5	15.8/16.9	133	145
			09-03-09	REGISTERED CIVIL ENGINEER DATE	
5-24-10			PLANS APPROVAL DATE		
<small>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.</small>					

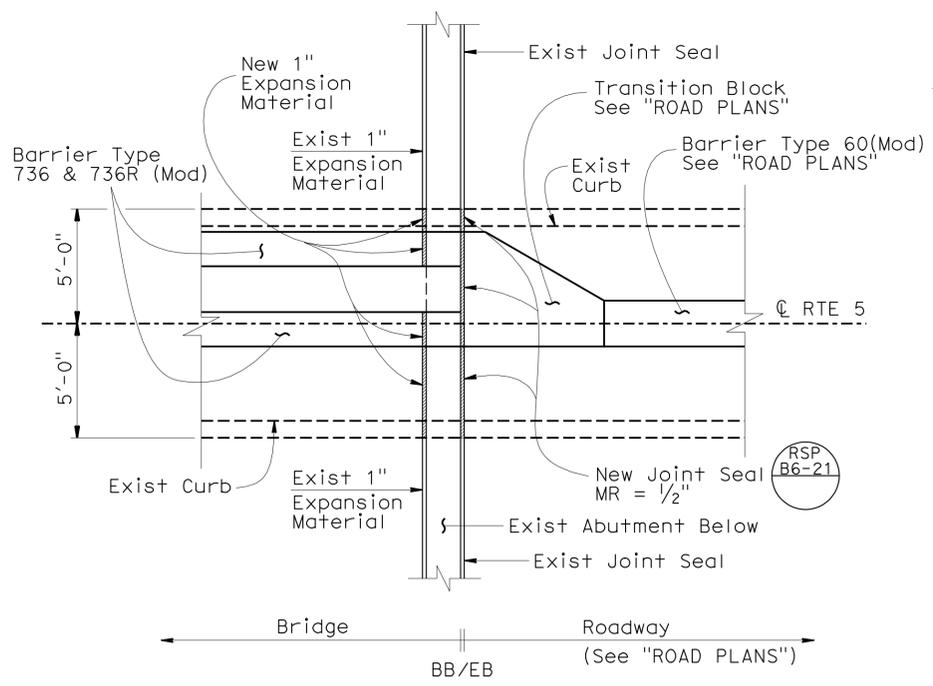


**CONNECTION AT ABUTMENT**  
 $\frac{3}{4}'' = 1'$   
 (See Note 1)

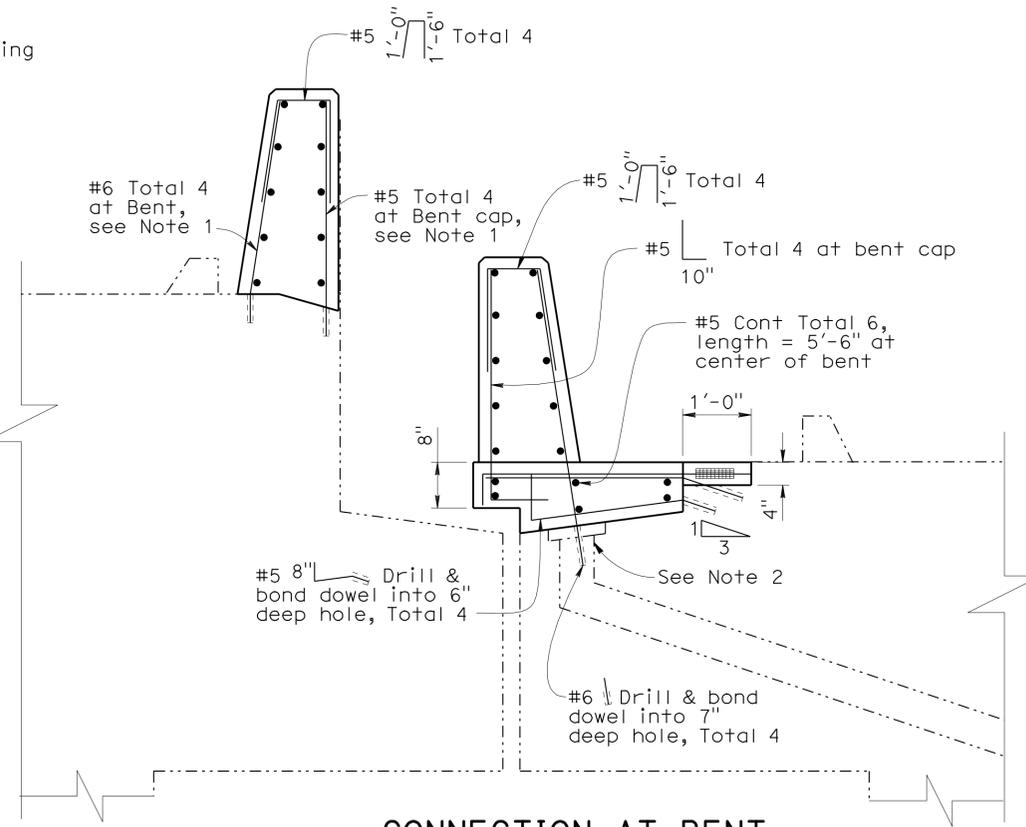
NOTE:  
 THE CONTRACTOR SHALL VERIFY ALL CONTROLLING FIELD DIMENSIONS BEFORE ORDERING OR FABRICATING ANY MATERIAL.



**SECTION D-D AT ABUTMENT**  
 $\frac{1}{2}'' = 1'$   
 (See Note #1)



**ABUTMENT (PLAN VIEW)**  
 $\frac{1}{4}'' = 1'$



**CONNECTION AT BENT**  
 $\frac{3}{4}'' = 1'$   
 (See Note 1)

- Note:**
1. Refer to "GENERAL PLAN" sheet for dimensions & "OVERHANG DETAILS No. 1" sheet for detail and reinforcement not shown.
  2. Cap existing drainage inlet at bent.

DESIGN BY Tien Chu CHECKED Kenneth Vo				<b>STATE OF CALIFORNIA</b> DEPARTMENT OF TRANSPORTATION	DIVISION OF ENGINEERING SERVICES STRUCTURE DESIGN <b>DESIGN BRANCH 22</b>	BRIDGE NO.	53-0598	<b>MEDIAN BARRIER REPLACEMENT</b> <b>SOTO STREET UC (MODIFY)</b> <b>OVERHANG DETAILS No. 2</b>			
DETAILS BY Tom Dang/Thanh Nguyen CHECKED Kenneth Vo						POST MILE	16.59				
QUANTITIES BY Tien Chu CHECKED B. Shen/B. Patel						CU 07-226 EA 184101	DISREGARD PRINTS BEARING EARLIER REVISION DATES	REVISION DATES 02/02/09 03/02/09 03/14/09 04/28/09 6/1/09 6/18/09 6/30/09 1/22/10 09/03/09	SHEET	OF	
STRUCTURES DESIGN DETAIL SHEET (ENGLISH) (REV. 10/25/05)				ORIGINAL SCALE IN INCHES FOR REDUCED PLANS	0 1 2 3	FILE => 53-0598_ovrnhng-dt02.dgn	3	3			

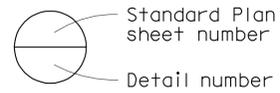
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**QUANTITIES**

REMOVE ASPHALT CONCRETE SURFACING	2,465	SQFT
BRIDGE REMOVAL (PORTION), LOCATION B	LUMP	SUM
STRUCTURAL CONCRETE, BRIDGE	30	CY
DRILL AND BOND DOWEL	255	LF
REFINISH BRIDGE DECK	1,330	SQFT
REFINISH CONCRETE SURFACE	1,180	SQFT
JOINT SEAL (MR <sup>1/2</sup> "	20	LF
BAR REINFORCING STEEL (BRIDGE)	6,930	LB
BRIDGE DECK DRAINAGE SYSTEM	1,170	LB
CONCRETE BARRIER (TYPE 736 MODIFIED)	290	LF
CONCRETE BARRIER (TYPE736R MODIFIED)	290	LF

**STANDARD PLANS DATED MAY 2006**

A10A	ACRONYMS AND ABBREVIATIONS (A-L)
A10B	ACRONYMS AND ABBREVIATIONS (M-Z)
A10C	SYMBOLS (SHEET 1 OF 2)
A10D	SYMBOLS (SHEET 2 OF 2)
B6-21	JOINT SEALS (MAXIMUM MOVEMENT RATING =1/2")
B7-6	DECK DRAINS - TYPE D-1 AND D-2
B7-8	DECK DRAINAGE DETAILS
B11-56	CONCRETE BARRIER TYPE 736
T3	TEMPORARY RAILING TYPE K



**LEGEND**

- Indicates existing structure
- Indicates new structure
- ➔ Indicates direction of traffic
- ▨ Indicates limit of bridge removal

DIST	COUNTY	ROUTE	POST MILES TOTAL PROJECT	SHEET No	TOTAL SHEETS
07	LA	5	15.8/16.9	134	145

09-03-09  
REGISTERED CIVIL ENGINEER DATE

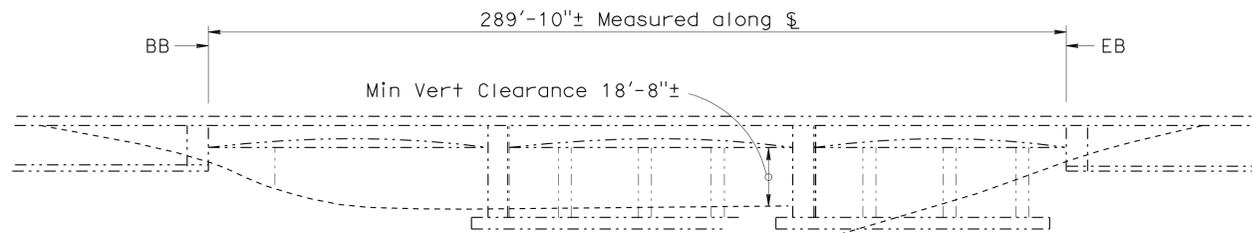
5-24-10  
PLANS APPROVAL DATE

TIEN CHU  
No. 72324  
Exp. 06/30/2010  
CIVIL  
STATE OF CALIFORNIA

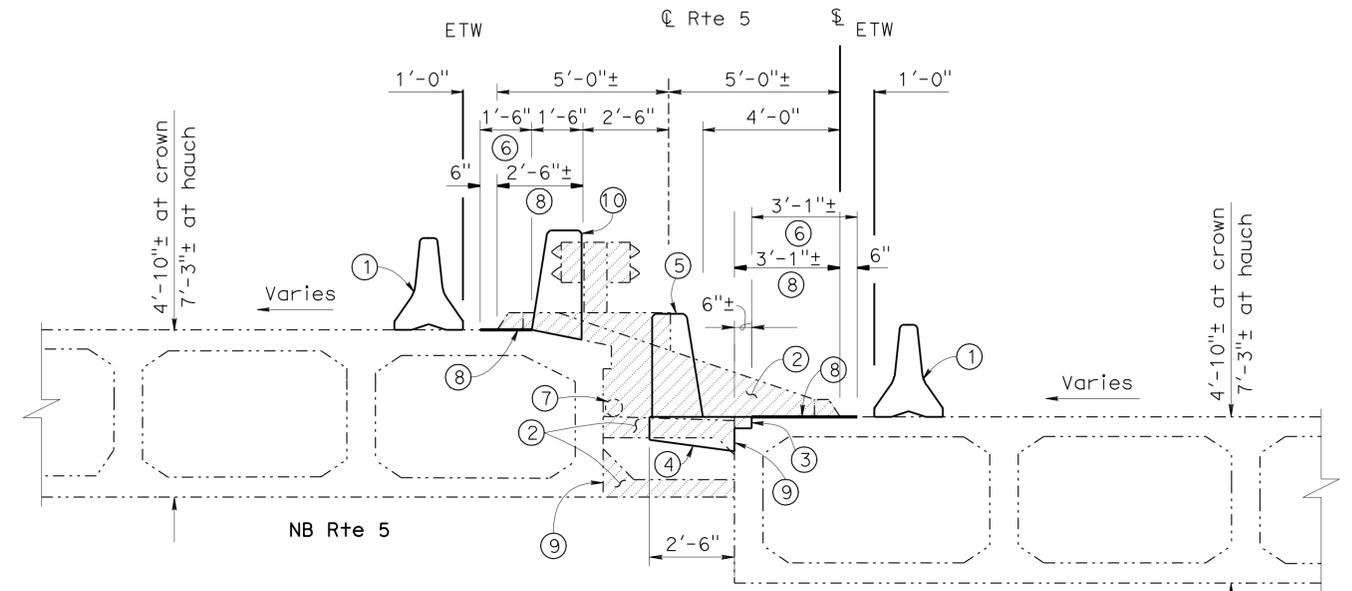
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**INDEX TO PLANS**

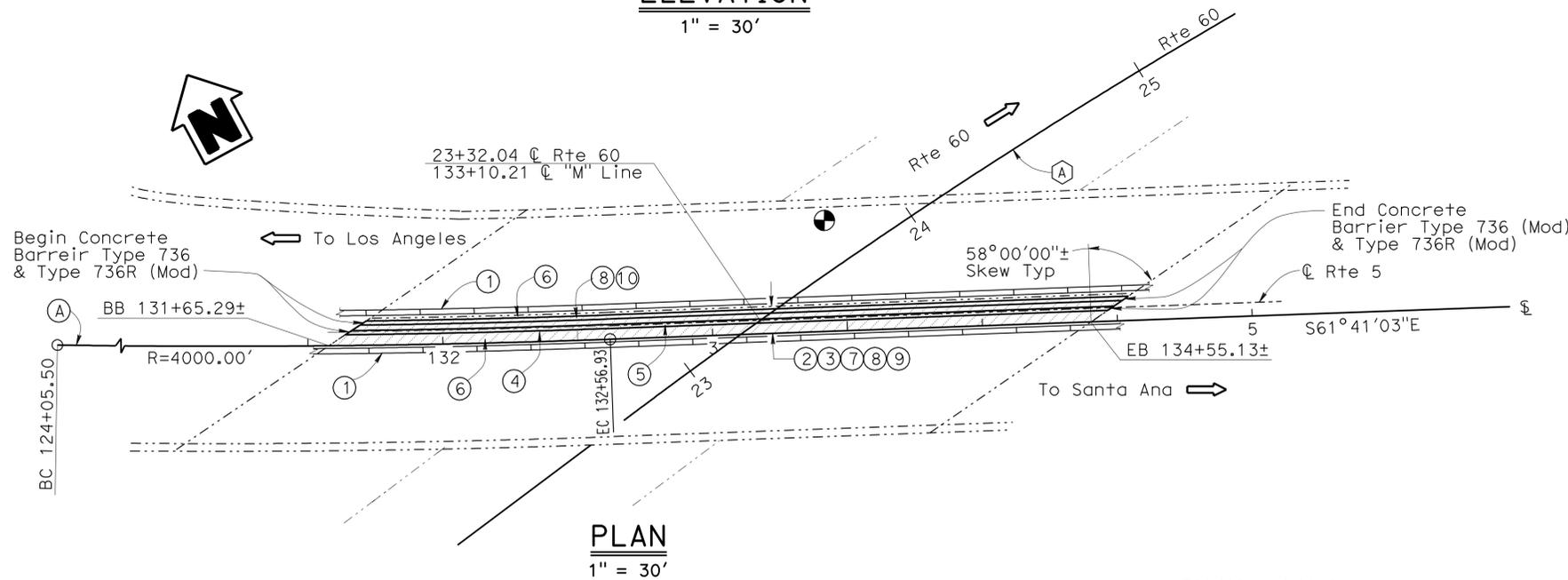
NO.	SHEET NAME
1	GENERAL PLAN
2	OVERHANG DETAILS No. 1
3	OVERHANG DETAILS No. 2
4	DRAINAGE DETAILS



**ELEVATION**  
1" = 30'



**TYPICAL SECTION**  
3/8" = 1'



**PLAN**  
1" = 30'

**CURVE DATA**

No.	R	Δ	T	L
(A)	4000.00'	27°05'34"	963.74'	1891.43'

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

**NOTES:**

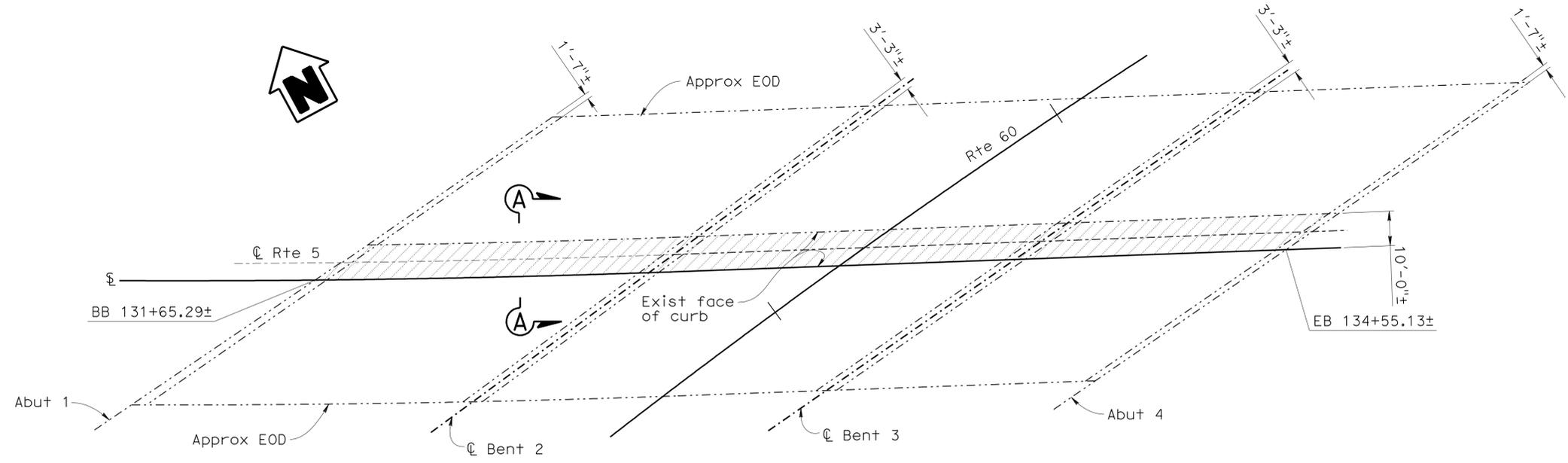
- ① Temporary railing (Type K), see "Type K Railing Detail" on "OVERHANG DETAILS No. 2" sheet and "ROAD PLANS"
- ② Remove existing barrier, curbs, sidewalk, earthfill or any asphalt cover and existing overhang
- ③ Expose and keep exist bar reinforcing steel
- ④ Construct new bridge overhang to match existing cross slope
- ⑤ Construct Barrier Rail Type 736(MOD) (B11-56)
- ⑥ Refinish bridge deck
- ⑦ Existing 6" Perforated Metal Pipe to be removed
- ⑧ Remove any portion of existing asphalt & fabric membrane water proofing
- ⑨ Saw cut, remove exist reinforcing steel to 1.5" amplitude and refinish concrete surface
- ⑩ Construct Barrier Rail Type 736R (Mod) (B11-56)

**MEDIAN BARRIER REPLACEMENT  
ROUTE 60/5 SEPARATION (MODIFY)  
GENERAL PLAN**

MINA PEZESHPOUR DESIGN ENGINEER	DESIGN	BY Tien Chu	CHECKED Kenneth Vo	LOAD & RESISTANCE 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 22	BRIDGE NO.	53-0599	
	DETAILS	BY Tom Dang/Thanh Nguyen	CHECKED Kenneth Vo	LAYOUT	BY Tom Dang			CHECKED Tien Chu	POST MILE	16.44
	QUANTITIES	BY Tien Chu	CHECKED B. Shen/B. Patel	SPECIFICATIONS	BY James Choi			PLANS AND SPECS COMPARED James Choi		

DIST	COUNTY	ROUTE	POST MILES TOTAL PROJECT	SHEET No	TOTAL SHEETS
07	LA	5	15.8/16.9	135	145

REGISTERED CIVIL ENGINEER DATE 09-03-09  
 5-24-10  
 PLANS APPROVAL DATE  
 TIEN CHU  
 No. 72324  
 Exp. 06/30/2010  
 CIVIL  
 STATE OF CALIFORNIA  
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**PLAN - BRIDGE REMOVAL LIMITS**  
1" = 20'

Notes: Refer to "OVERHANG DETAILS No. 2" sheet for bridge concrete removal at bent & abutment.

**GENERAL NOTES**  
**LOAD FACTOR DESIGN**

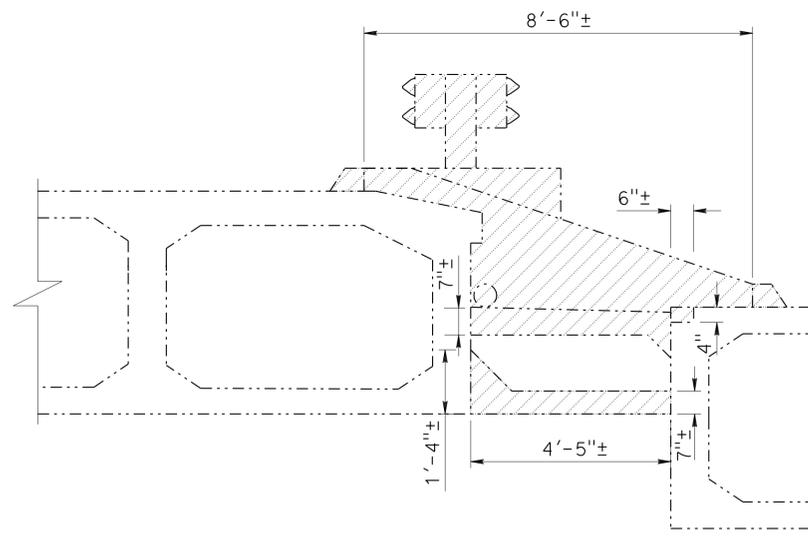
DESIGN: CALTRANS BRIDGE DESIGN SPECIFICATIONS - April 2000 (LFD) (1996 16th Edition AASHTO with Interims and Revisions by CALTRANS)

SEISMIC DESIGN: Caltrans Seismic Design Criteria (SDC) version 1.4 June 2006

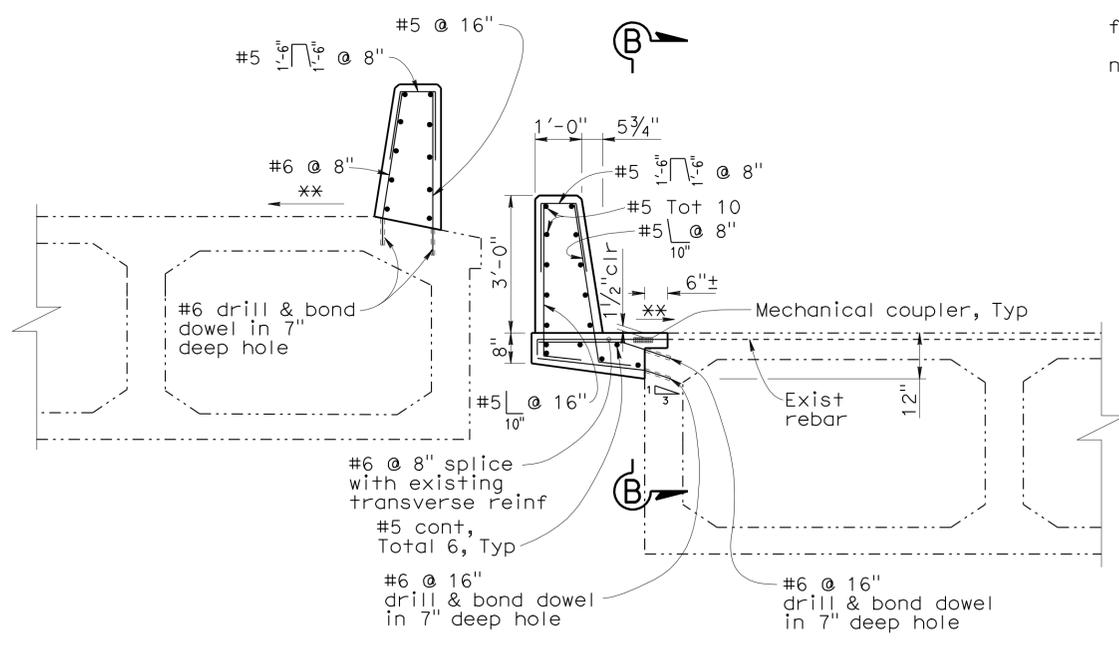
LIVE LOADING: HS20 - 44 and Alternative and Permit design load.

REINFORCED CONCRETE:  $f_y = 60,000$  psi  
 $f'_c = 3600$  psi  
 $n = 10$   
Transverse Deck Slabs (Working Stress Design)

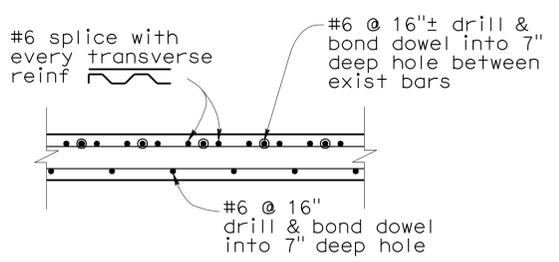
$f_s = 20,000$  psi  
 $f_c = 1200$  psi  
 $n = 10$



**SECTION A-A (REMOVAL)**  
1/2" = 1'



**SECTION A-A (NEW CONSTRUCTION)**  
1/2" = 1'



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

**LEGEND**

- Indicates existing structure
- Indicates new structure
- ▨ Indicates limit of bridge removal

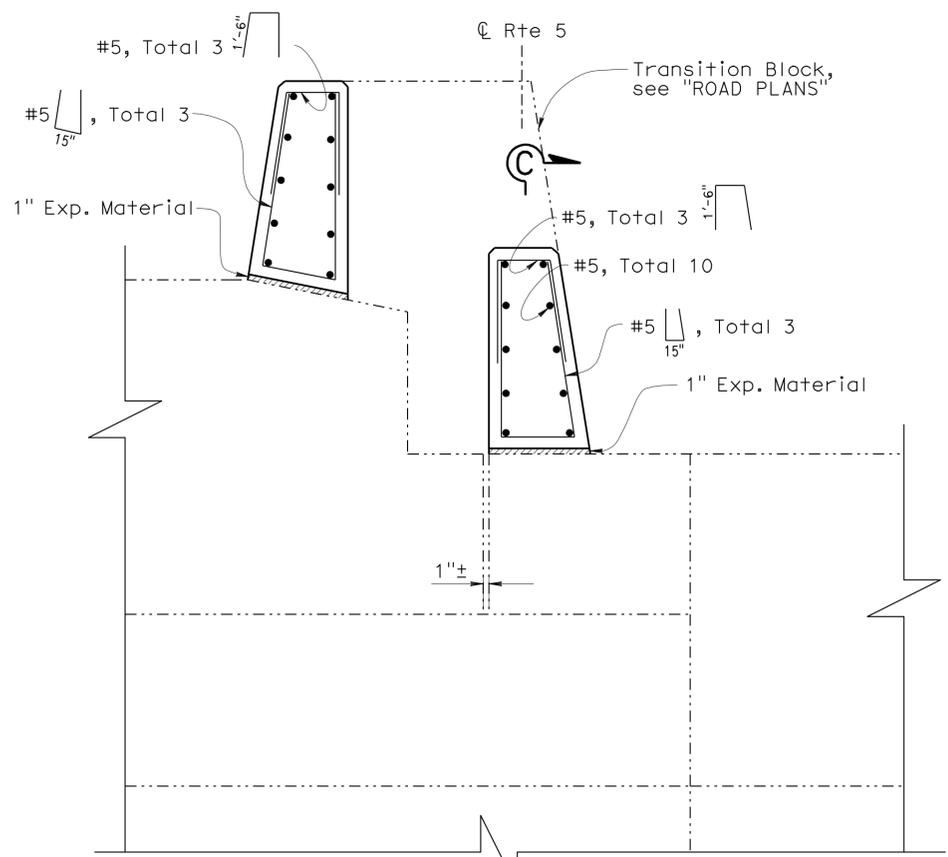
NOTE: THE CONTRACTOR SHALL VERIFY ALL CONTROLLING FIELD DIMENSIONS BEFORE ORDERING OR FABRICATING ANY MATERIAL.

\*\* Match existing grade and cross slope

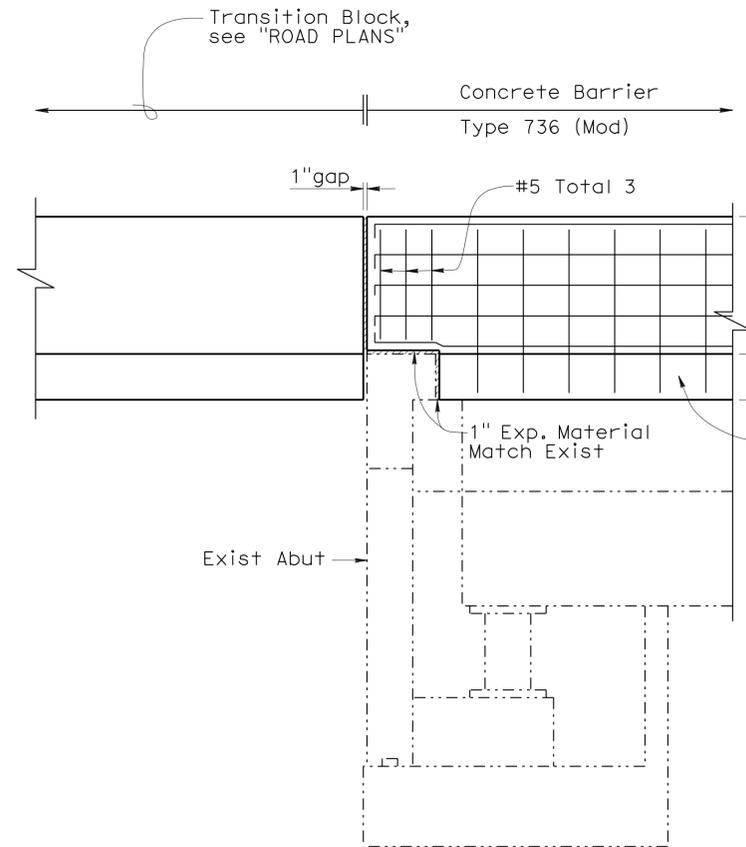
DESIGN BY Tien Chu CHECKED Kenneth Vo DETAILS BY Tom Dang/Thanh Nguyen CHECKED Kenneth Vo QUANTITIES BY Tien Chu CHECKED B. Shen/B. Patel				<b>STATE OF CALIFORNIA</b> DEPARTMENT OF TRANSPORTATION		DIVISION OF ENGINEERING SERVICES STRUCTURE DESIGN <b>DESIGN BRANCH 22</b>		BRIDGE NO. 53-0599 POST MILE 16.44		<b>MEDIAN BARRIER REPLACEMENT</b> <b>ROUTE 60/5 SEPARATION (MODIFY)</b> <b>OVERHANG DETAILS No. 1</b>					
STRUCTURES DESIGN DETAIL SHEET (ENGLISH) (REV. 10/25/05) ORIGINAL SCALE IN INCHES FOR REDUCED PLANS						CU 07-226 EA 184101		DISREGARD PRINTS BEARING EARLIER REVISION DATES				REVISION DATES: 02/04/09, 02/08/09, 03/04/09, 03/19/09, 04/27/09, 05/21/09, 09/08/09		SHEET 2 OF 4	

USERNAME => hrr1ght DATE PLOTTED => 27-MAY-2010 TIME PLOTTED => 12:59

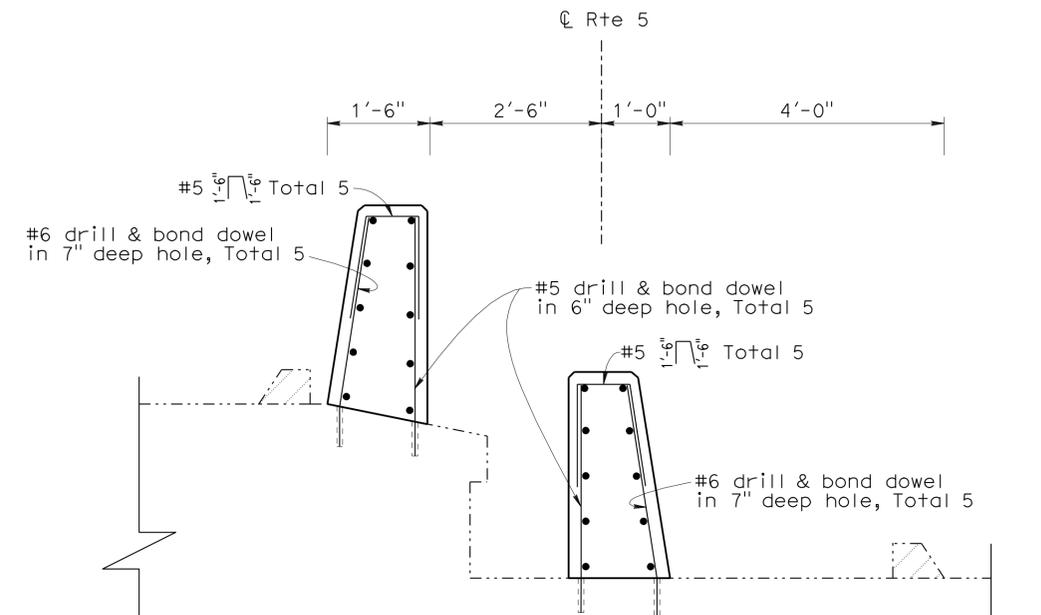
DIST	COUNTY	ROUTE	POST MILES TOTAL PROJECT	SHEET No	TOTAL SHEETS
07	LA	5	15.8/16.9	136	145
			09-03-09	REGISTERED CIVIL ENGINEER DATE	
			5-24-10	PLANS APPROVAL DATE	
			REGISTERED PROFESSIONAL ENGINEER TIEN CHU No. 72324 Exp. 06/30/2010 CIVIL STATE OF CALIFORNIA		
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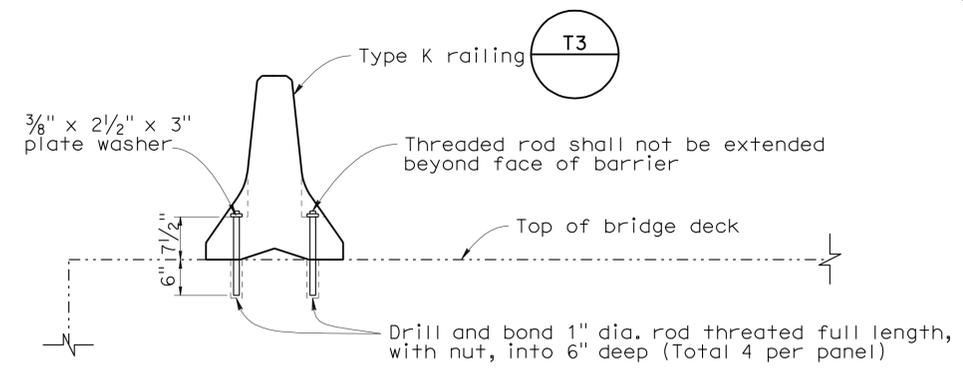
**PART. ELEVATION AT ABUTMENT**  
 $\frac{3}{4}'' = 1'$   
 (See Note 1)



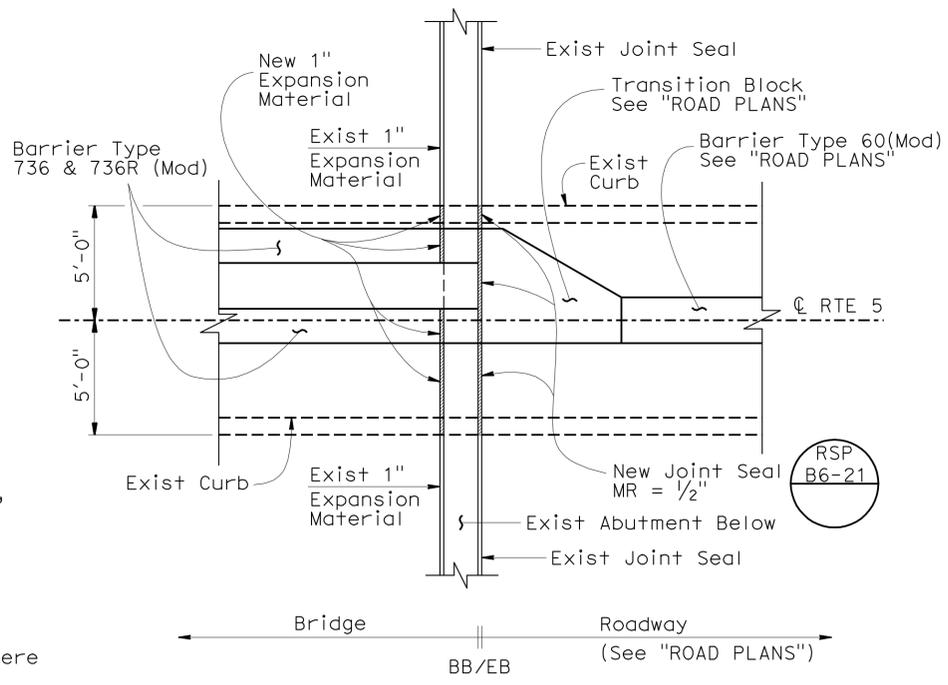
**SECTION C-C AT ABUTMENT**  
 $\frac{1}{2}'' = 1'$   
 (See Note 1)



**SECTION AT BENT**  
 $\frac{3}{4}'' = 1'$   
 (See Note 1)



**TYPE K RAILING ATTACHMENT DETAIL**  
 $\frac{3}{4}'' = 1'$



**ABUTMENT (PLAN VIEW)**  
 $\frac{1}{4}'' = 1'$

**Note:**  
 1. Refer to "GENERAL PLAN" sheet for dimensions & "OVERHANG DETAILS No. 1" sheet for detail and reinforcement not shown.

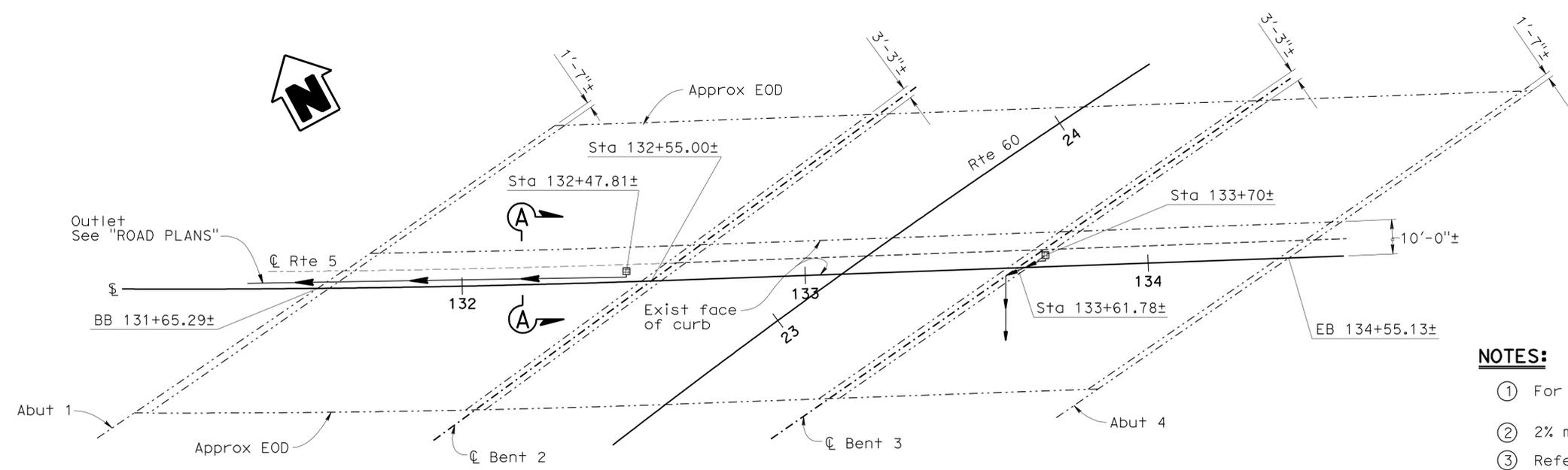
NOTE:  
 THE CONTRACTOR SHALL VERIFY ALL CONTROLLING FIELD DIMENSIONS BEFORE ORDERING OR FABRICATING ANY MATERIAL.

DESIGN BY Tien Chu CHECKED Kenneth Vo DETAILS BY Tom Dang/Thanh Nguyen CHECKED Kenneth Vo QUANTITIES BY Tien Chu CHECKED B. Shen/B. Patel	STATE OF CALIFORNIA DEPARTMENT OF TRANSPORTATION	DIVISION OF ENGINEERING SERVICES STRUCTURE DESIGN DESIGN BRANCH <b>22</b>	BRIDGE NO. 53-0599	<b>MEDIAN BARRIER REPLACEMENT</b> <b>ROUTE 60/5 SEPARATION (MODIFY)</b> <b>OVERHANG DETAILS No. 2</b>
			POST MILE 16.44	
			REVISION DATES 02/04/09 03/02/09 03/14/09 04/27/09 05/07/09 6/24/09 6/19/09 1/23/09 09/08/09	
STRUCTURES DESIGN DETAIL SHEET (ENGLISH) (REV. 10/25/05)	ORIGINAL SCALE IN INCHES FOR REDUCED PLANS 0 1 2 3	CU 07-226 EA 184101	DISREGARD PRINTS BEARING EARLIER REVISION DATES	SHEET 3 OF 4

DIST	COUNTY	ROUTE	POST MILES TOTAL PROJECT	SHEET No	TOTAL SHEETS
07	LA	5	15.8/16.9	137	145

09-03-09  
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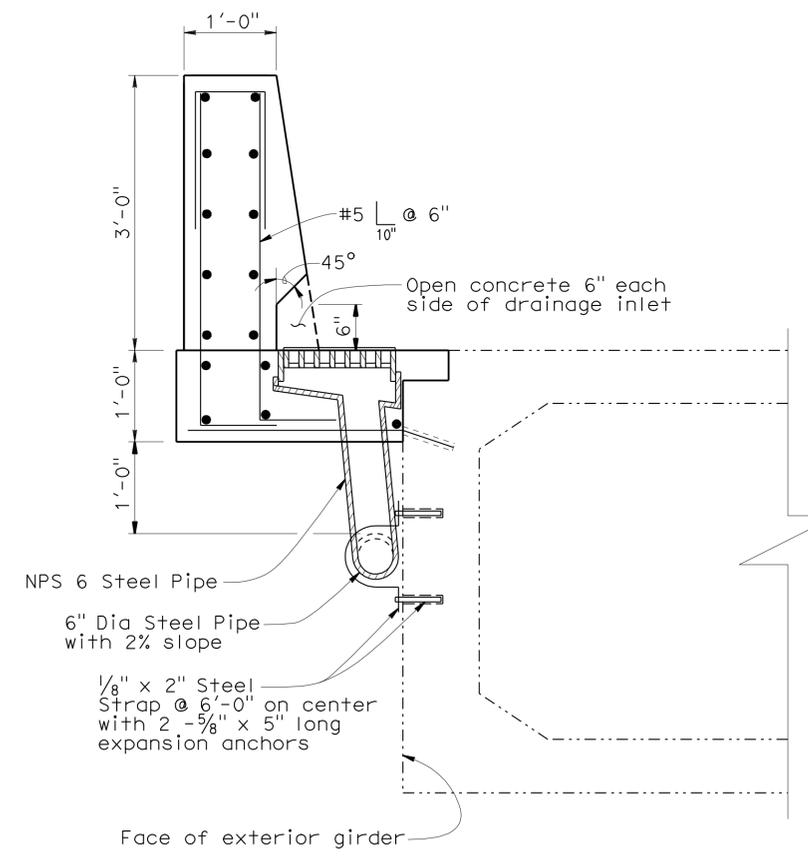
REGISTERED PROFESSIONAL ENGINEER  
 TIEN CHU  
 No. 72324  
 Exp. 06/30/2010  
 CIVIL  
 STATE OF CALIFORNIA



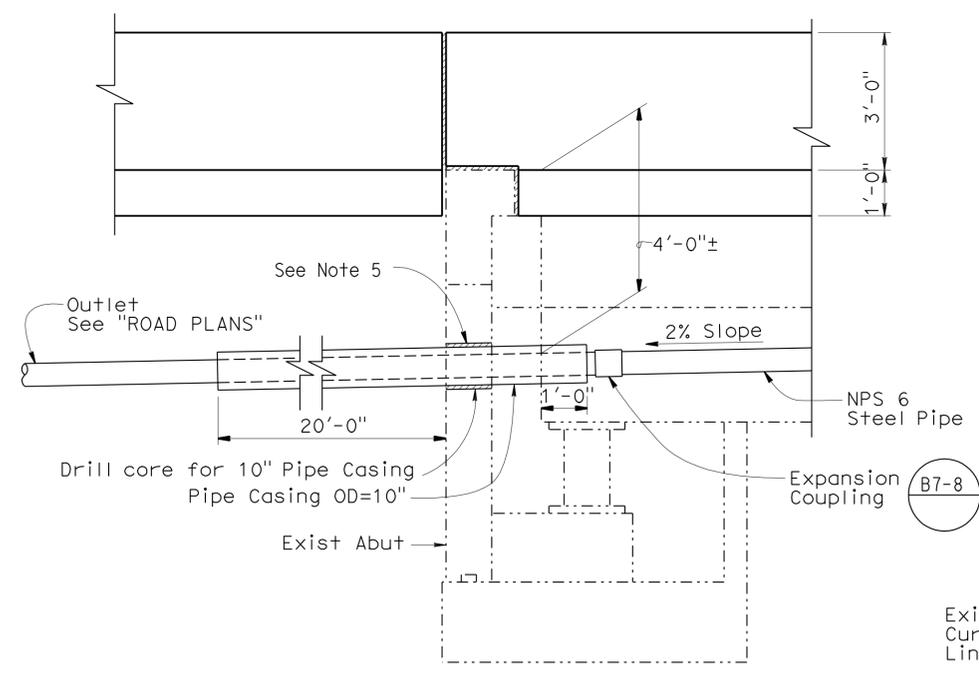
- LEGEND**
- Indicates Deck Drain Type D-2 (MOD) (B7-6)
  - Indicates 6" Dia Galvanized Steel Pipe

- NOTES:**
- For dimensional details not shown, see (B7-6)
  - 2% minimum slope for drainage pipe.
  - Refer to "OVERHANG DETAIL NO. 1" for rebars and dimensions not shown.
  - All joints or connections are to be butt welded or connected by a steel pipe sleeve and to be smooth throughout inside of pipe.
  - Seal utilities at abutments with concrete or mortar after tightly wrapping utility with 2 layers of 15 lbs building paper.

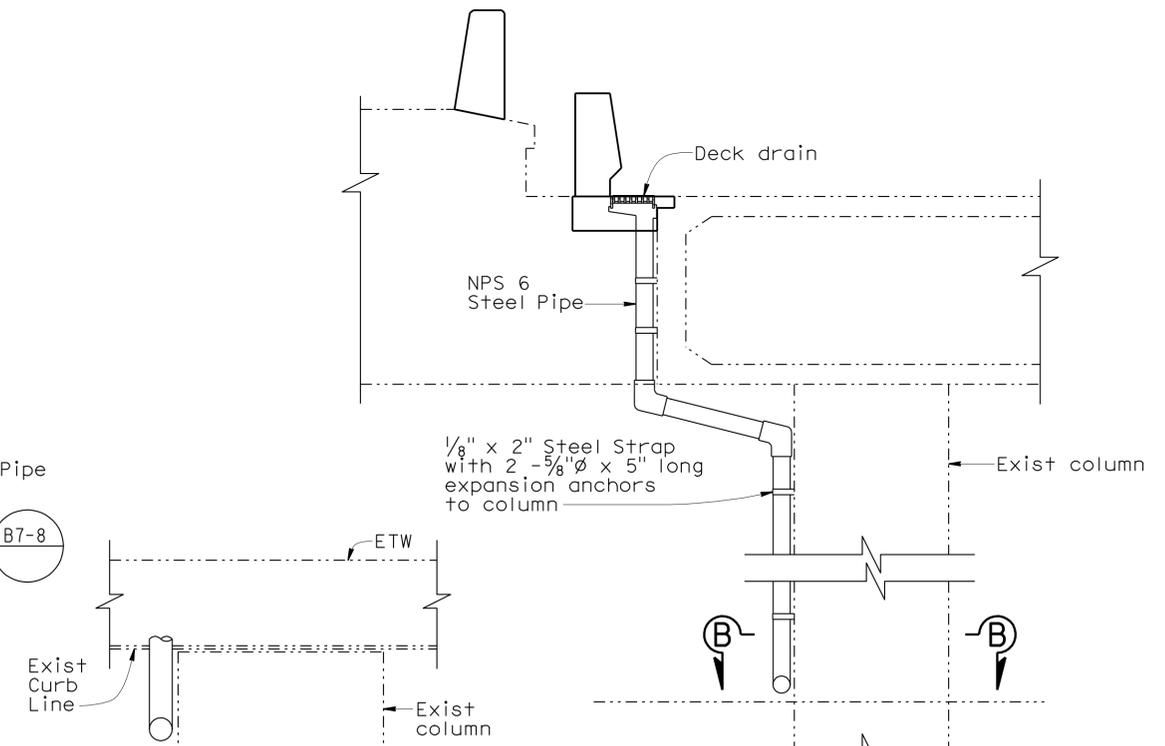
**PLAN**  
1" = 20'



**SECTION A-A**  
1" = 1'



**CONNECTION AT ABUTMENT**  
1/2" = 1'



**SECTION B-B**  
No Scale

**CONNECTION AT BENT**  
3/8" = 1'

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

DESIGN BY Tien Chu		CHECKED Kenneth Vo	<b>STATE OF CALIFORNIA</b> DEPARTMENT OF TRANSPORTATION	DIVISION OF ENGINEERING SERVICES STRUCTURE DESIGN <b>DESIGN BRANCH 22</b>	BRIDGE NO. 53-0599	<b>MEDIAN BARRIER REPLACEMENT</b> <b>ROUTE 60/5 SEPARATION (MODIFY)</b> <b>DRAINAGE DETAILS</b>
DETAILS BY J. Valencia		CHECKED Kenneth Vo			POST MILE 16.44	
QUANTITIES BY Tien Chu		CHECKED B. Shen/B. Patel				

STRUCTURES DESIGN DETAIL SHEET (ENGLISH) (REV. 10/25/05) ORIGINAL SCALE IN INCHES FOR REDUCED PLANS 0 1 2 3 CU 07-226 EA 184101 DISREGARD PRINTS BEARING EARLIER REVISION DATES

REVISION DATES				SHEET 4	OF 4
6/16/09	6/18/09	6/26/09	7/1/09	09/08/09	

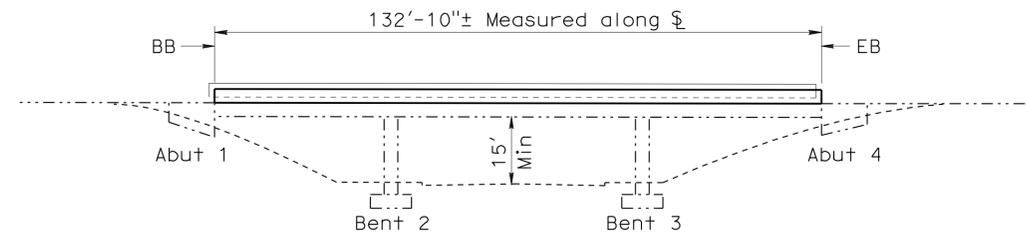
FILE => 53-0599-drain-dt01.dgn

DIST	COUNTY	ROUTE	POST MILES TOTAL PROJECT	SHEET No	TOTAL SHEETS
07	LA	5	15.8/16.9	138	145

REGISTERED CIVIL ENGINEER DATE 09-03-09  
 5-24-10 PLANS APPROVAL DATE  
 TIEN CHU No. 72324 Exp. 06/30/2010 CIVIL  
 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.

**STANDARD PLANS DATED MAY 2006**

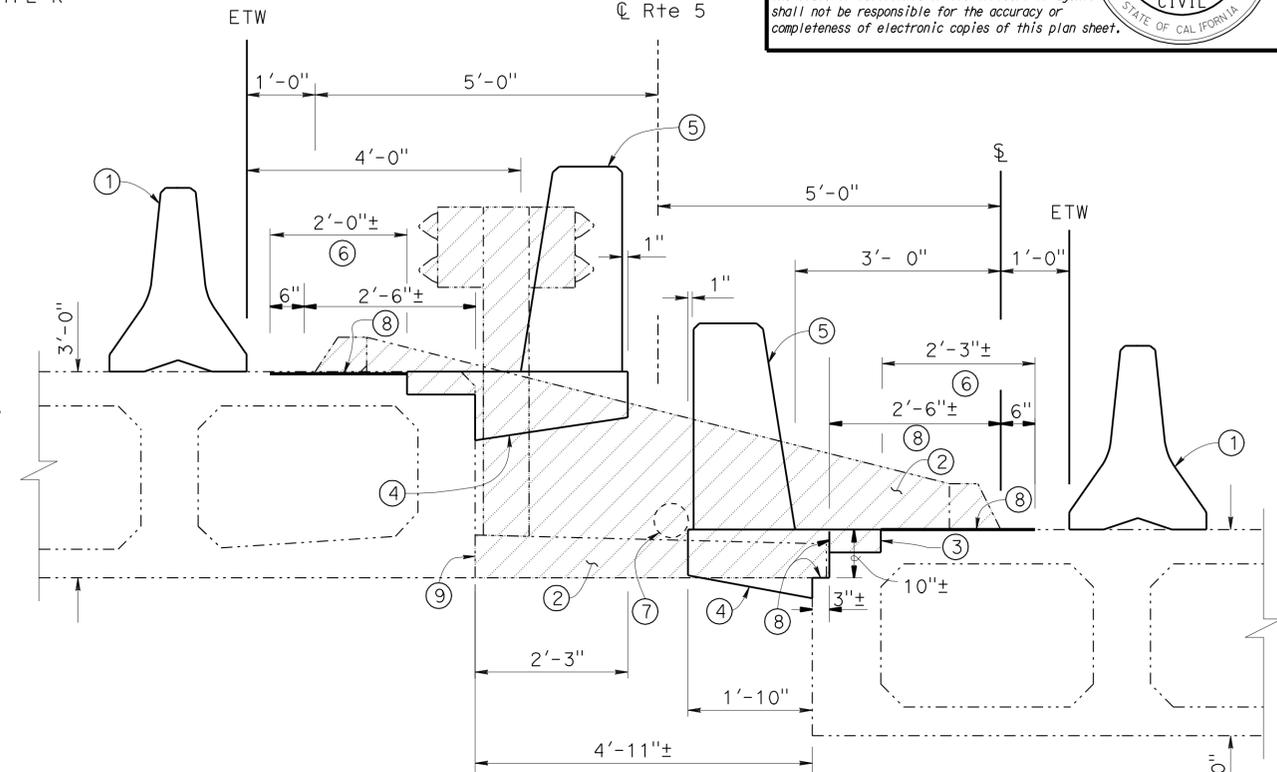
- A10A ACRONYMS AND ABBREVIATIONS (A-L)
- A10B ACRONYMS AND ABBREVIATIONS (M-Z)
- A10C SYMBOLS (SHEET 1 OF 2)
- A10D SYMBOLS (SHEET 2 OF 2)
- RSP B6-21 JOINT SEALS (MAXIMUM MOVEMENT RATING = 1/2")
- B11-56 CONCRETE BARRIER TYPE 736
- T3 TEMPORARY RAILING, TYPE K



**ELEVATION**  
1" = 20'

**INDEX TO PLANS**

NO.	SHEET NAME
1	GENERAL PLAN
2	OVERHANG DETAILS No. 1
3	OVERHANG DETAILS No. 2
4	SOFFIT ACCESS OPENING DETAILS



**TYPICAL SECTION**  
3/4" = 1'

**LEGEND**

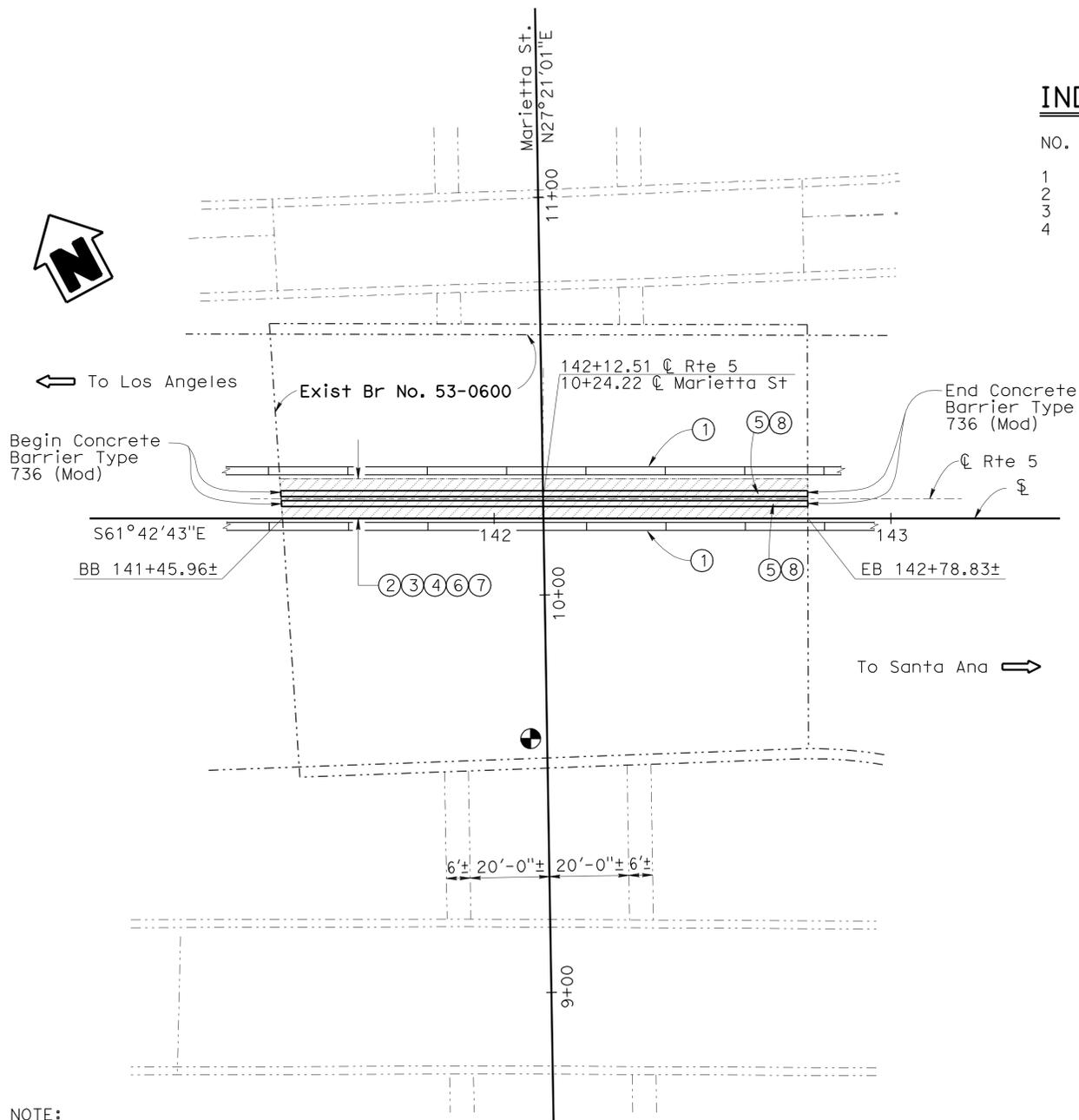
- Indicates existing structure
- Indicates new structure
- ➔ Indicates direction of traffic
- ▨ Indicates limit of bridge removal
- Point of minimum vertical clearance

**NOTES:**

- ① Temporary railing (Type K), see "Type K Railing attachment Detail" on "OVERHANG DETAILS No. 2" sheet
- ② Remove existing barrier, barrier pads, curbs, sidewalk, earthfill and/or any asphalt cover, soffit overhang
- ③ Expose and keep exist bar reinforcing steel
- ④ Construct new bridge overhang to match existing cross slope
- ⑤ Construct Barrier Type 736(MOD) (B11-56)
- ⑥ Refinish bridge deck
- ⑦ Existing 6" Pipe to be removed
- ⑧ Remove any portion of existing asphalt & fabric membrane waterproofing if encounter
- ⑨ Saw cut, remove exist reinforcing steel to 1.5" amplitude and refinish concrete surface

**QUANTITIES**

REMOVE ASPHALT CONCRETE SURFACING	1,130	SQFT
PREPARE CONCRETE BRIDGE DECK SURFACE	3	SQFT
ACCESS OPENING, SOFFIT	2	EA
BRIDGE REMOVAL (PORTION), LOCATION C	LUMP	SUM
STRUCTURAL CONCRETE, BRIDGE	26	CY
DRILL AND BOND DOWEL	290	LF
REFINISH BRIDGE DECK	565	SQFT
REFINISH CONCRETE SURFACE	160	SQFT
FURNISH POLYESTER CONCRETE OVERLAY	2	CF
PLACE POLYESTER CONCRETE OVERLAY	6	SQFT
PUBLIC SAFETY PLAN	LUMP	SUM
JOINT SEAL (MR 1/2")	20	LF
BAR REINFORCING STEEL (BRIDGE)	5,220	LB
CONCRETE BARRIER (TYPE 736 MODIFIED)	266	LF



**PLAN**  
1" = 20'

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

MINA PEZESHPOUR DESIGN ENGINEER	DESIGN	BY Tien Chu	CHECKED Kenneth Vo	LOAD & RESISTANCE 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 22	BRIDGE NO.	53-0600	
	DETAILS	BY Tom Dang/Thanh Nguyen	CHECKED Kenneth Vo	LAYOUT	BY Tom Dang			CHECKED Tien Chu	POST MILE	16.29
	QUANTITIES	BY Tien Chu	CHECKED B. Shen/B. Patel	SPECIFICATIONS	BY James Choi			PLANS AND SPECS COMPARED James Choi		

<b>MEDIAN BARRIER REPLACEMENT</b>	
<b>MARIETTA STREET UC (MODIFY)</b>	
<b>GENERAL PLAN</b>	



DIST	COUNTY	ROUTE	POST MILES TOTAL PROJECT	SHEET No	TOTAL SHEETS
07	LA	5	15.8/16.9	140	145

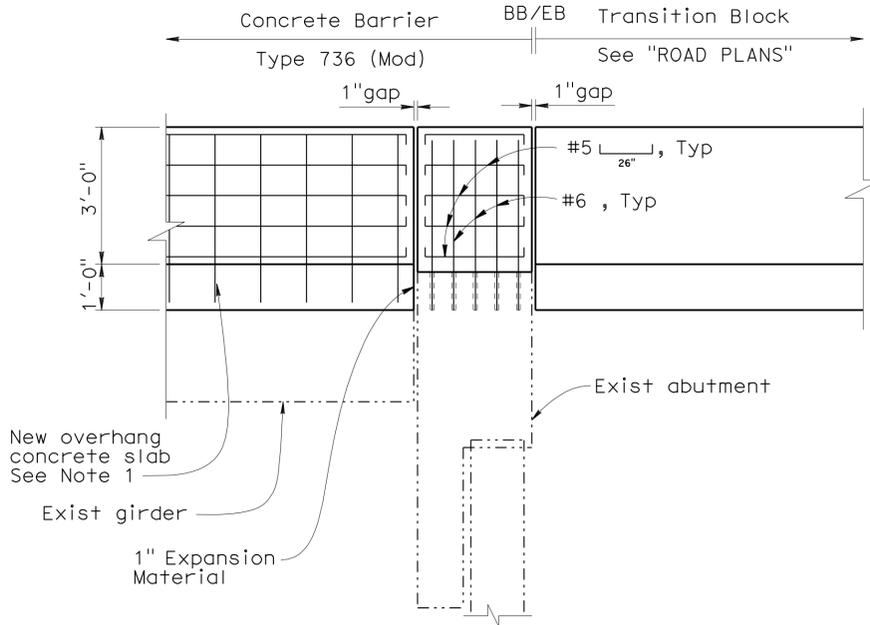
  

REGISTERED CIVIL ENGINEER	DATE
Tien Chu	09-03-09
PLANS APPROVAL DATE	
5-24-10	

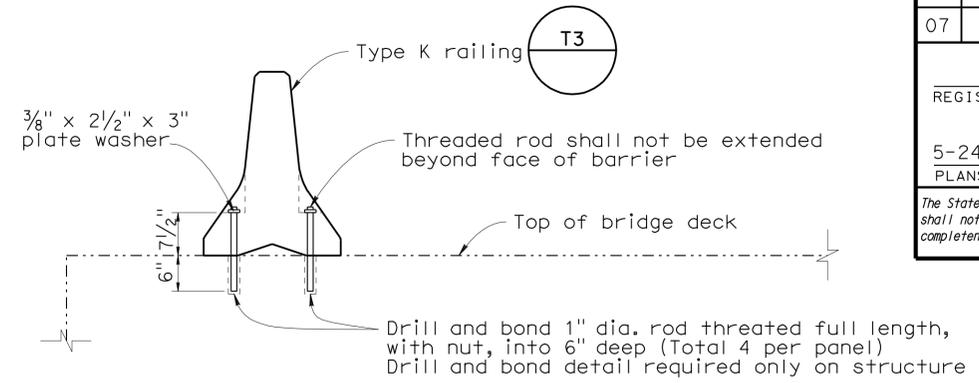
  

REGISTERED PROFESSIONAL ENGINEER	
Tien Chu	
No. 72324	
Exp. 06/30/2010	
CIVIL	

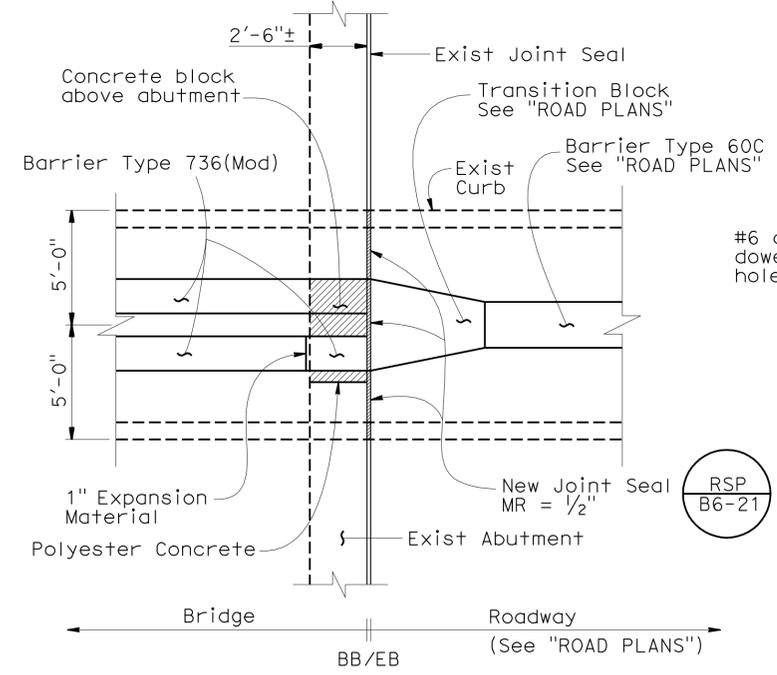
*The State of California or its officers or agents shall not be responsible for the accuracy or completeness of electronic copies of this plan sheet.*



**SECTION C-C AT ABUTMENT**  
 $\frac{1}{2}'' = 1'$   
 (See Note 1)

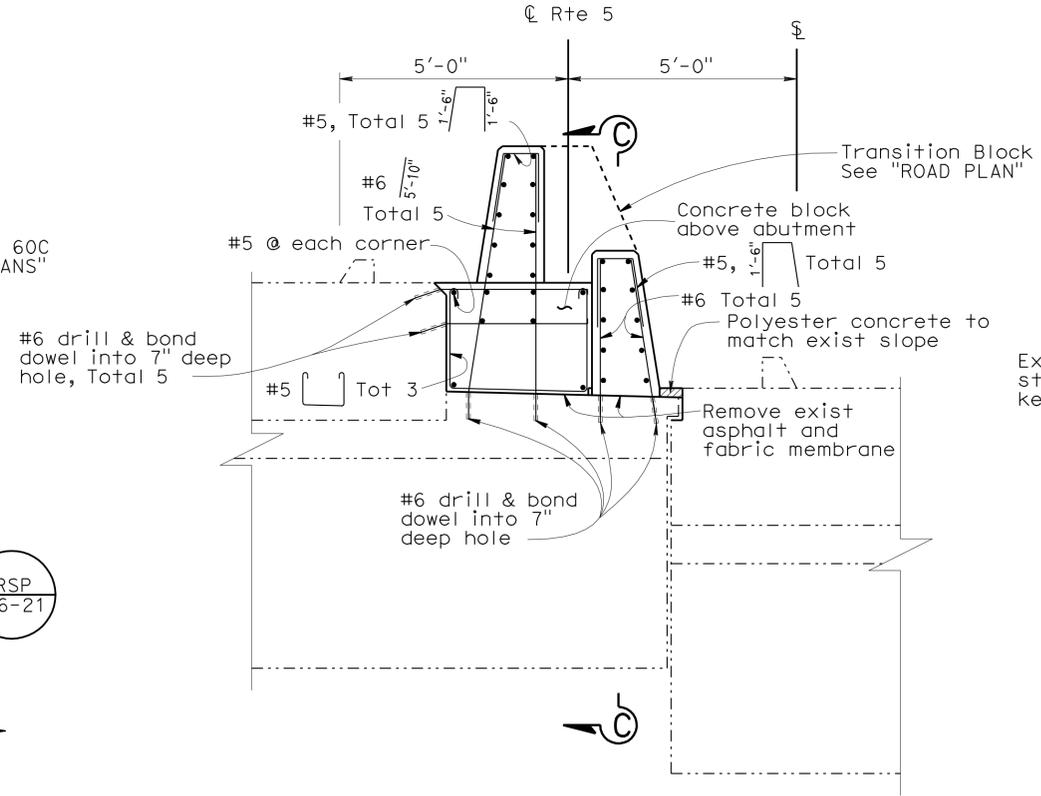


**TYPE K RAILING ATTACHMENT DETAIL**  
 $\frac{3}{4}'' = 1'$   
 NOTE: See "ROAD PLANS" for "Temporary Railing Type K", information not shown here

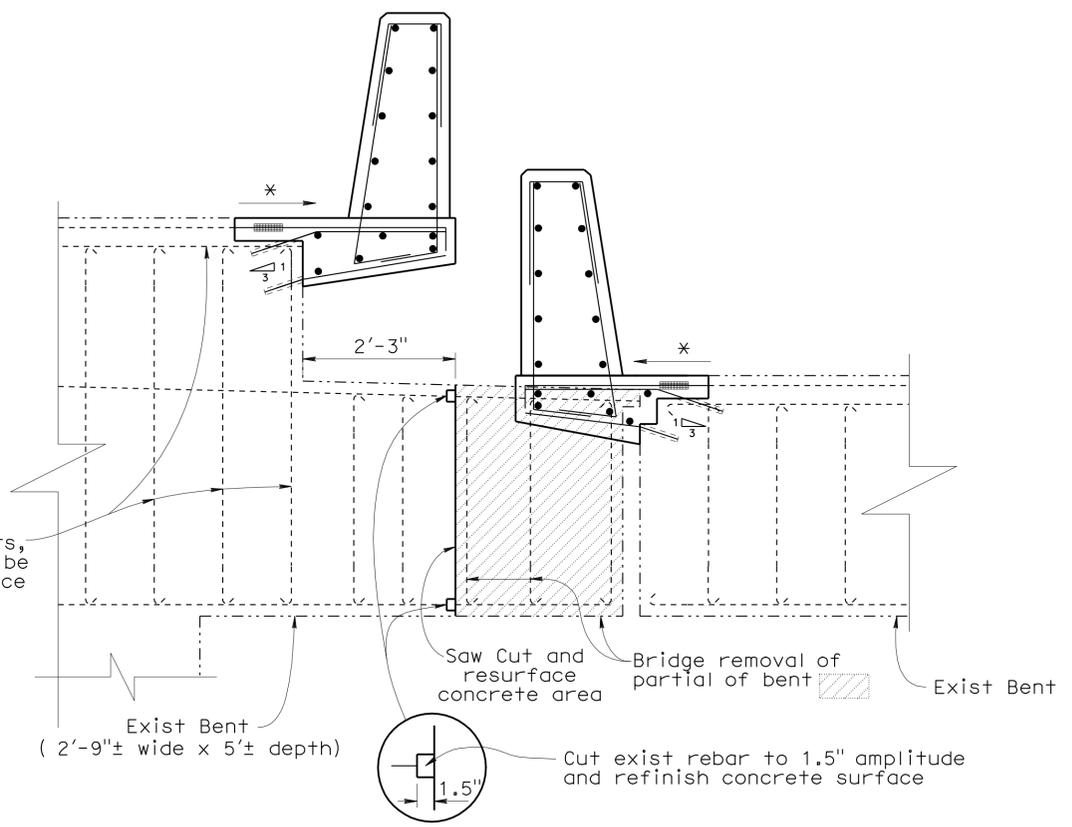


**ABUTMENT (PLAN VIEW)**  
 $\frac{1}{4}'' = 1'$

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



**CONNECTION AT ABUTMENT**  
 $\frac{1}{2}'' = 1'$   
 (See Note 1)

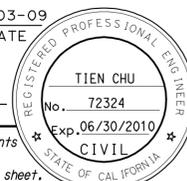


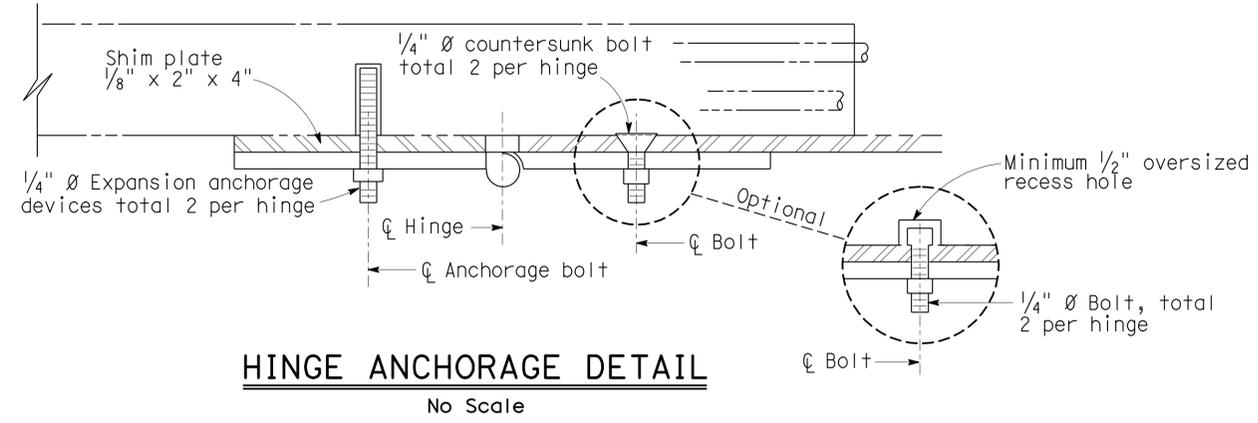
**CONNECTION AT BENT**  
 $\frac{3}{4}'' = 1'$   
 (See Note 1)

- NOTES:
- Refer to "TYPICAL SECTION" on "GENERAL PLAN" sheet and "SECTION A-A" on "OVERHANG DETAILS No. 1" sheet for information not shown.
- \* → Match Exist Grades

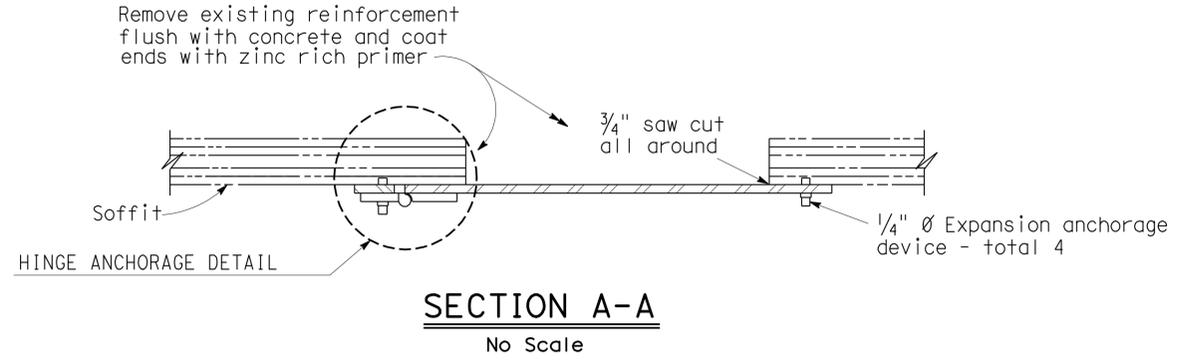
**MEDIAN BARRIER REPLACEMENT**  
**MARIETTA STREET UC (MODIFY)**  
**OVERHANG DETAILS No. 2**

DESIGN	BY Tien Chu	CHECKED Kenneth Vo	STATE OF CALIFORNIA DEPARTMENT OF TRANSPORTATION	DIVISION OF ENGINEERING SERVICES STRUCTURE DESIGN DESIGN BRANCH <b>22</b>	BRIDGE NO.	53-0600
DETAILS	BY Tom Dang/Thanh Nguyen	CHECKED Kenneth Vo			POST MILE	16.29
QUANTITIES	BY Tien Chu	CHECKED B. Shen/B. Patel				

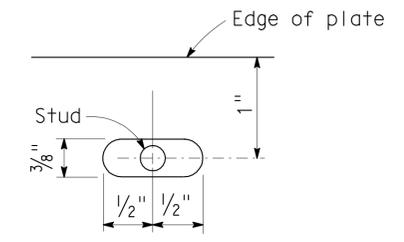
DIST	COUNTY	ROUTE	POST MILES TOTAL PROJECT	SHEET No	TOTAL SHEETS
07	LA	5	15.8/16.9	141	145
			09-03-09	REGISTERED CIVIL ENGINEER DATE	
			5-24-10	PLANS APPROVAL DATE	
					
<small>The State of California or its officers or agents shall not be responsible for the accuracy or completeness of electronic copies of this plan sheet.</small>					



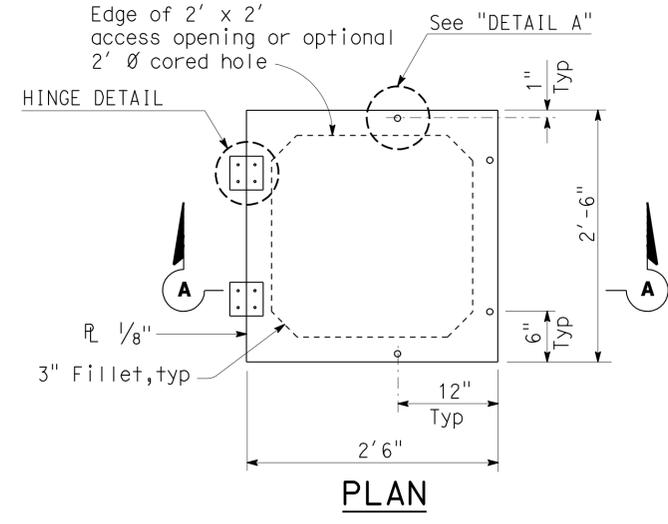
**HINGE ANCHORAGE DETAIL**  
No Scale



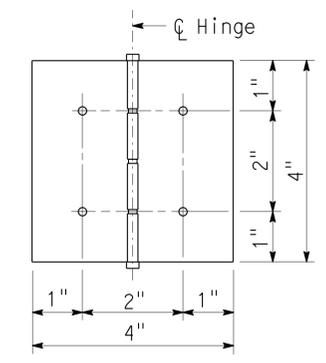
**SECTION A-A**  
No Scale



**DETAIL A**  
No Scale



**PLAN**



**HINGE DETAIL**

**SOFFIT ACCESS DOOR ASSEMBLY**  
No Scale

Note: Soffit access door opening location shown on "OVERHANG DETAILS No. 1" sheet

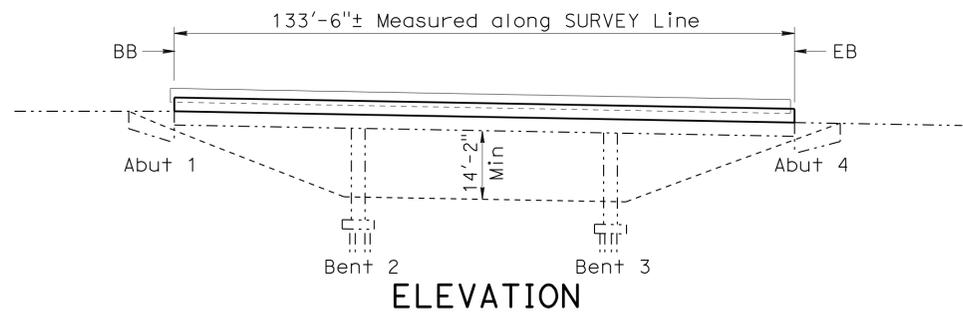
**NOTES:**

1. Non-removable pin in hinge.
2. Hinge assembly to be galvanized, brass or stainless steel.
3. Use thread locking system for all hinge nuts.
4. Hinge assembly to be minimum 1/8" thick.

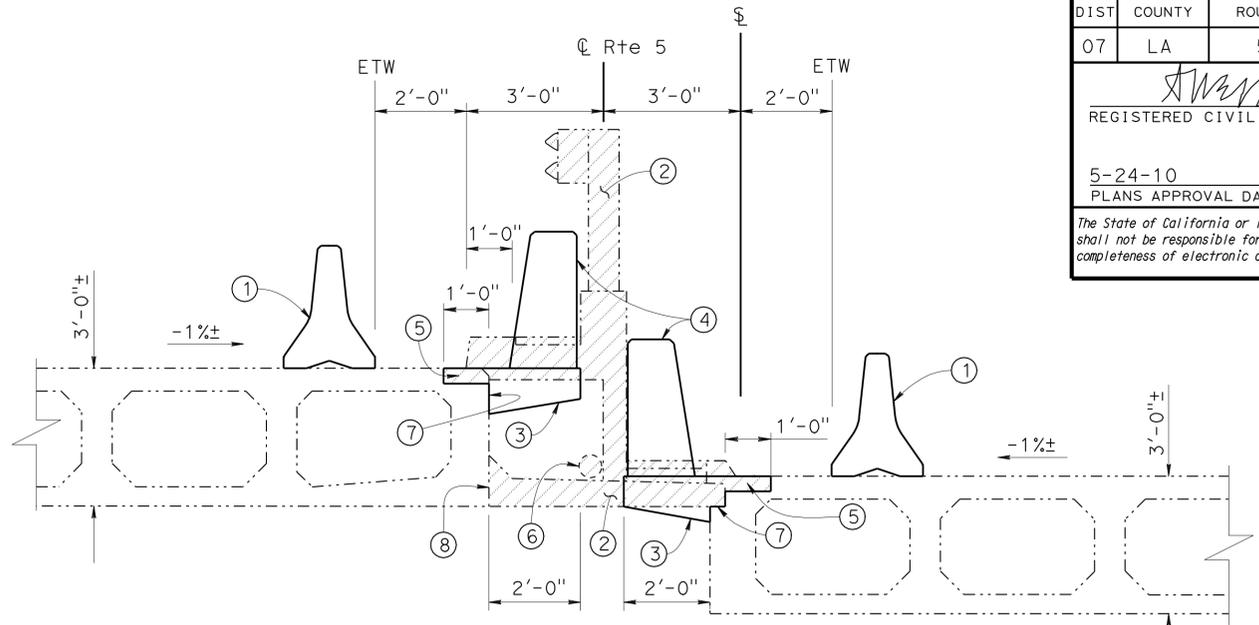
NOTE:  
THE CONTRACTOR SHALL VERIFY ALL CONTROLLING FIELD DIMENSIONS BEFORE ORDERING OR FABRICATING ANY MATERIAL.

DESIGN BY Tien Chu CHECKED Kenneth Vo DETAILS BY J. Valencia CHECKED Kenneth Vo QUANTITIES BY Tien Chu CHECKED B. Shen/B. Patel			STATE OF CALIFORNIA DEPARTMENT OF TRANSPORTATION	DIVISION OF ENGINEERING SERVICES STRUCTURE DESIGN DESIGN BRANCH <b>22</b>	BRIDGE NO. 53-0600 POST MILE 16.29	<b>MEDIAN BARRIER REPLACEMENT</b> <b>MARIETTA STREET UC (MODIFY)</b> <b>SOFFIT ACCESS OPENING DETAILS</b>
STRUCTURES DESIGN DETAIL SHEET (ENGLISH) (REV. 10/25/05)			ORIGINAL SCALE IN INCHES FOR REDUCED PLANS 0 1 2 3	CU 07-226 EA 184101	DISREGARD PRINTS BEARING EARLIER REVISION DATES 09/08/09	SHEET 4 OF 4

DIST	COUNTY	ROUTE	POST MILES TOTAL PROJECT	SHEET No	TOTAL SHEETS
07	LA	5	15.8/16.9	142	145
			09-03-09	REGISTERED CIVIL ENGINEER DATE	
			5-24-10	PLANS APPROVAL DATE	
			REGISTERED PROFESSIONAL ENGINEER TIEN CHU No. 72324 Exp. 06/30/2010 CIVIL STATE OF CALIFORNIA		



**ELEVATION**  
1" = 20'



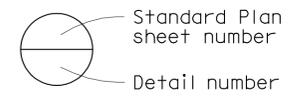
**TYPICAL SECTION**  
1/2" = 1'

**QUANTITIES**

REMOVE ASPHALT CONCRETE SURFACING	235	SQFT
PREPARE CONCRETE BRIDGE DECK SURFACE	4	SQFT
ACCESS OPENING, SOFFIT	2	EA
BRIDGE REMOVAL (PORTION), LOCATION D	LUMP	SUM
STRUCTURAL CONCRETE, BRIDGE	27	CY
DRILL AND BOND DOWEL	290	LF
REFINISH CONCRETE SURFACE	210	SQFT
FURNISH POLYESTER CONCRETE OVERLAY	2	CF
PLACE POLYESTER CONCRETE OVERLAY	9	SQFT
PUBLIC SAFETY PLAN	LUMP	SUM
JOINT SEAL (MR 1/2")	20	LF
BAR REINFORCING STEEL (BRIDGE)	5,440	LB
CONCRETE BARRIER (TYPE 736 MODIFIED)	267	LF

**STANDARD PLANS DATED MAY 2006**

A10A	ACRONYMS AND ABBREVIATIONS (A-L)
A10B	ACRONYMS AND ABBREVIATIONS (M-Z)
A10C	SYMBOLS (SHEET 1 OF 2)
A10D	SYMBOLS (SHEET 2 OF 2)
RSP B6-21	JOINT SEALS (MAXIMUM MOVEMENT RATING = 1/2")
B11-56	CONCRETE BARRIER TYPE 736



**INDEX TO PLANS**

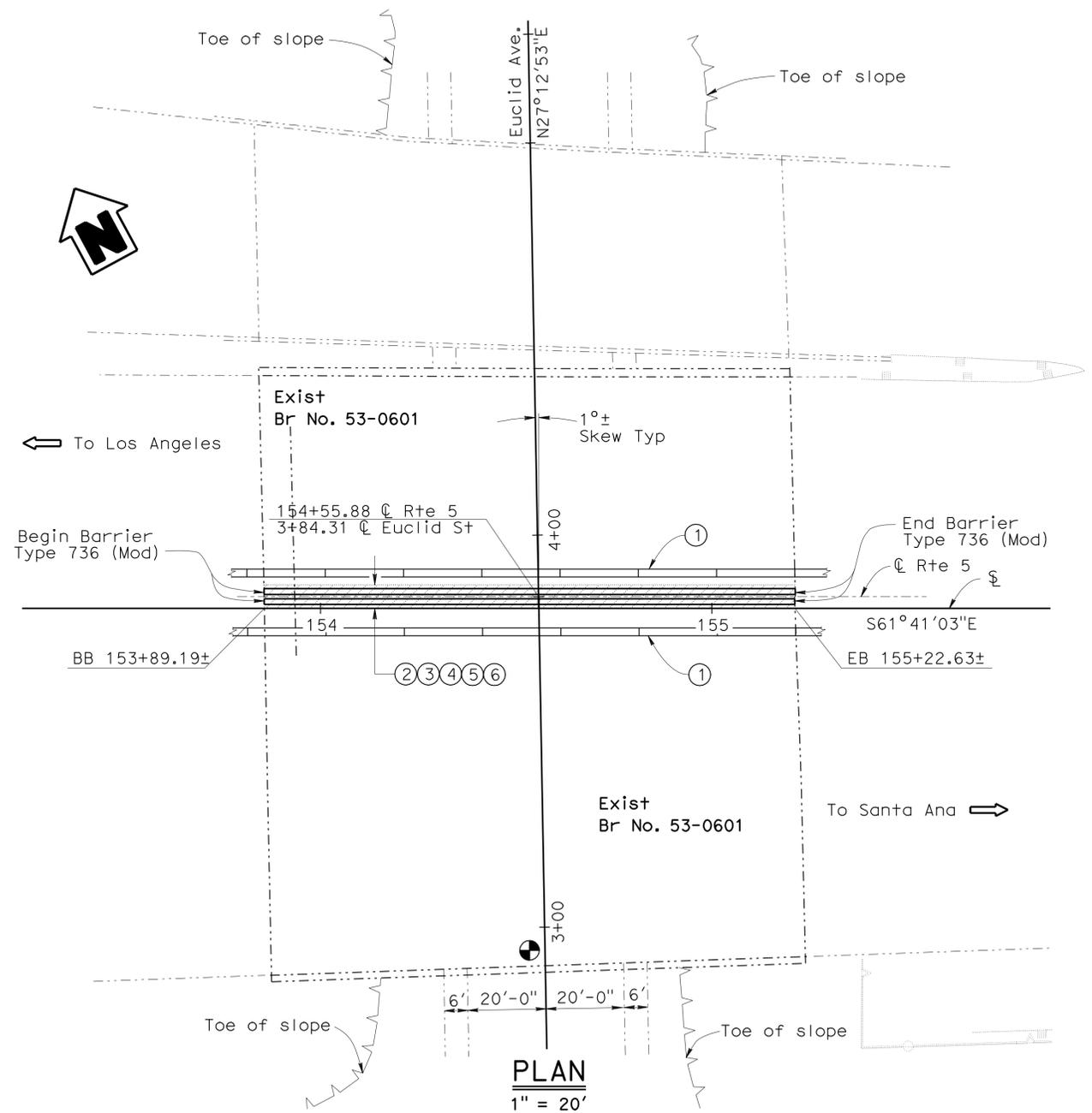
NO.	SHEET NAME
1	GENERAL PLAN
2	OVERHANG DETAILS No. 1
3	OVERHANG DETAILS No. 2
4	SOFFIT ACCESS OPENING DETAILS

**LEGEND**

- Indicates existing structure
- Indicates new structure
- Indicates direction of traffic
- ▨ Indicates limit of bridge removal
- ⊙ Point of minimum vertical clearance

**NOTES:**

- ① Temporary railing (Type K)
- ② Remove existing barrier, curbs, sidewalk and overhang
- ③ Construct new bridge overhang to match existing cross slope
- ④ Construct Barrier Type 736(MOD) (B11-56)
- ⑤ Expose and keep exist bar reinforcing steel
- ⑥ Exist 6" ø Pipe to be removed
- ⑦ Remove any portion of the existing asphalt and fabric membrane
- ⑧ Saw cut, remove exist reinforcing steel to 1.5" amplitude & refinish concrete surface



**PLAN**  
1" = 20'

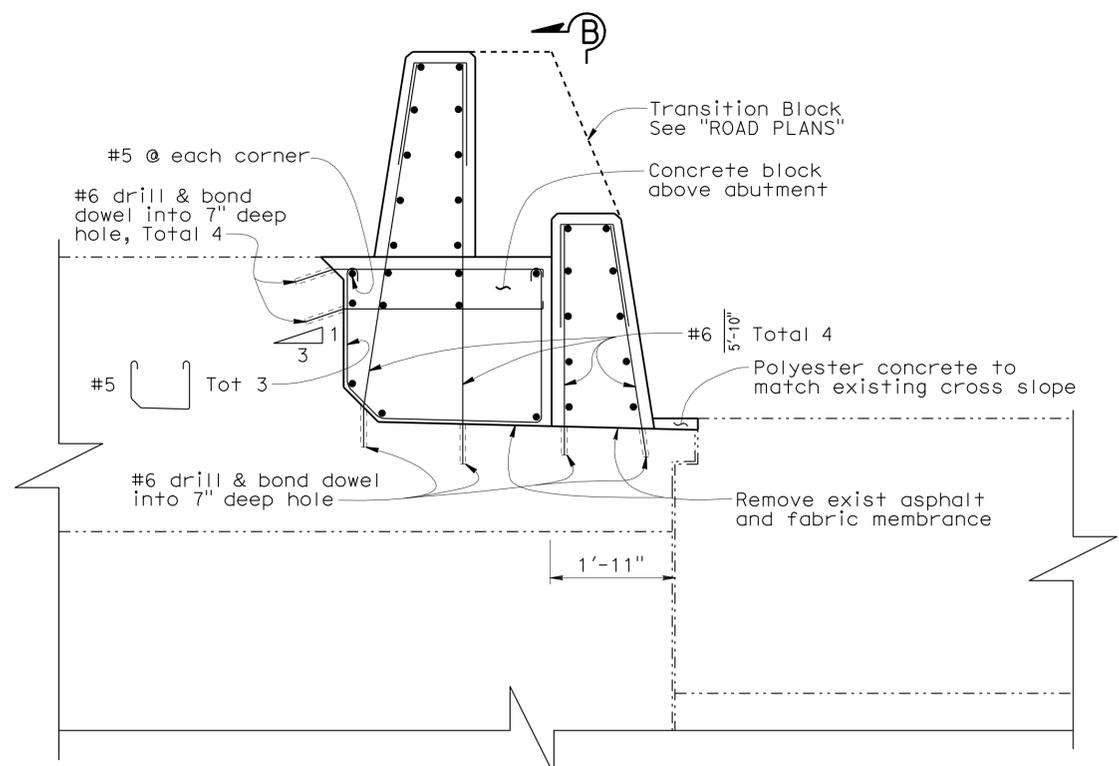
NOTE:  
THE CONTRACTOR SHALL VERIFY ALL CONTROLLING FIELD DIMENSIONS BEFORE ORDERING OR FABRICATING ANY MATERIAL.

MINA PEZESHPOUR DESIGN ENGINEER	DESIGN	BY Tien Chu	CHECKED Kenneth Vo	LOAD & RESISTANCE 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 22	BRIDGE NO.	53-0601	
	DETAILS	BY Tom Dang/Thanh Nguyen	CHECKED Kenneth Vo	LAYOUT	BY Tom Dang			CHECKED Tien Chu	POST MILE	16.05
	QUANTITIES	BY Tien Chu	CHECKED B. Shen/B. Patel	SPECIFICATIONS	BY James Choi			PLANS AND SPECS COMPARED James Choi		

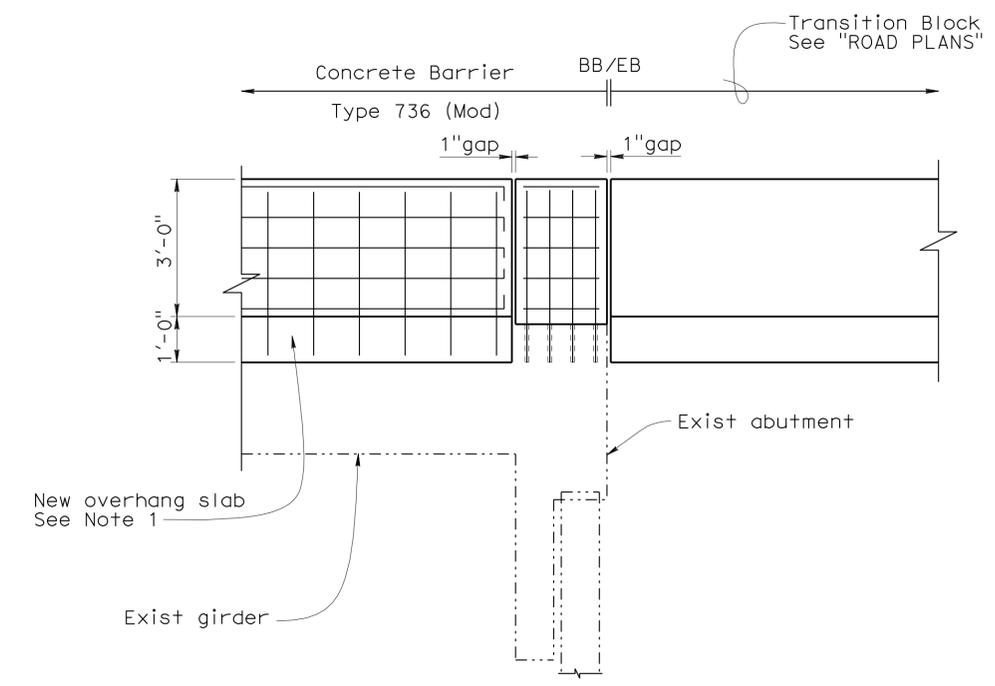
**MEDIAN BARRIER REPLACEMENT**  
**EUCLID AVENUE UC (MODIFY)**  
**GENERAL PLAN**



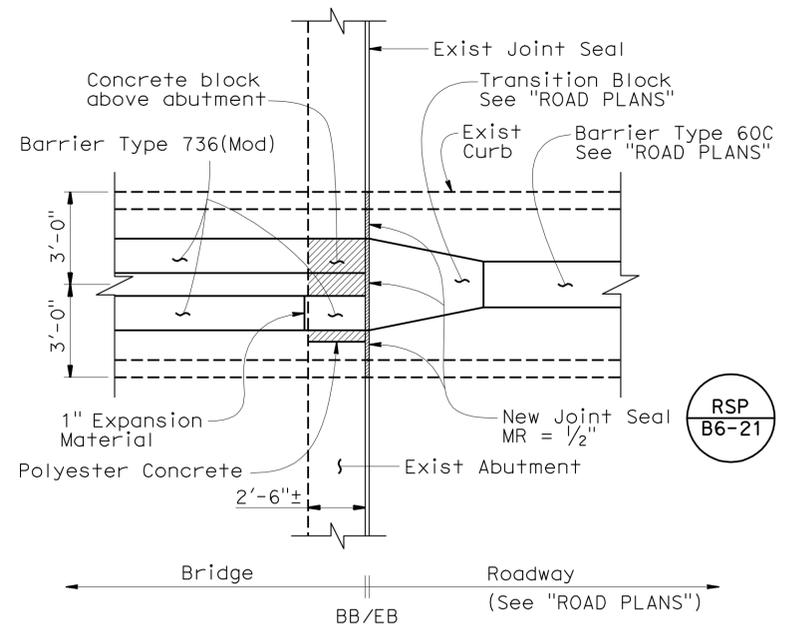
DIST	COUNTY	ROUTE	POST MILES TOTAL PROJECT	SHEET No	TOTAL SHEETS
07	LA	5	15.8/16.9	144	145
			09-03-09	DATE	
REGISTERED CIVIL ENGINEER			DATE		
5-24-10			PLANS APPROVAL DATE		
			<small>The State of California or its officers or agents shall not be responsible for the accuracy or completeness of electronic copies of this plan sheet.</small>		



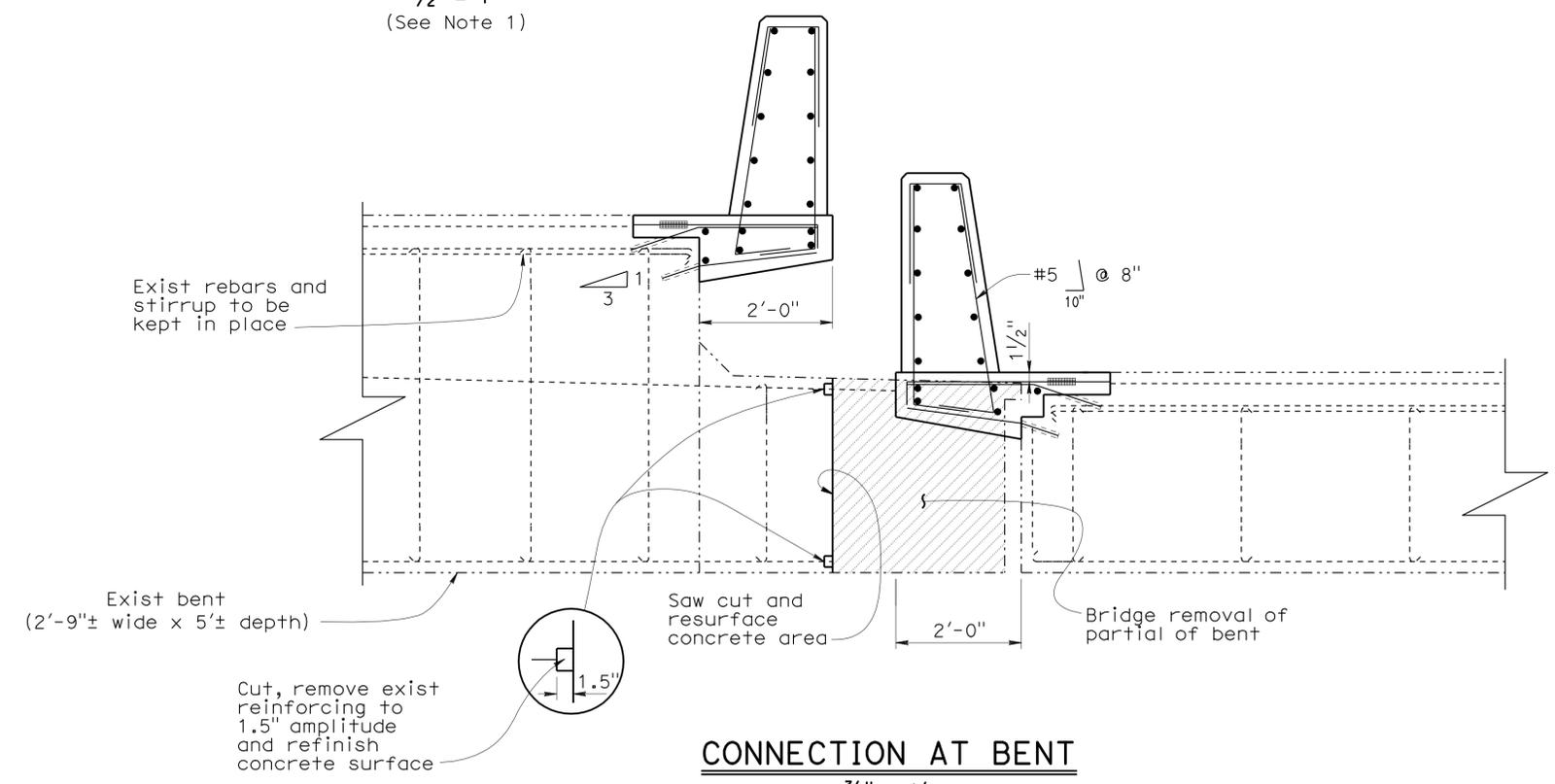
**CONNECTION AT ABUTMENT**  
 $\frac{3}{4}'' = 1'$   
 (See Note #1)



**SECTION B-B AT ABUTMENT**  
 $\frac{1}{2}'' = 1'$   
 (See Note 1)



**ABUTMENT (PLAN VIEW)**  
 No Scale



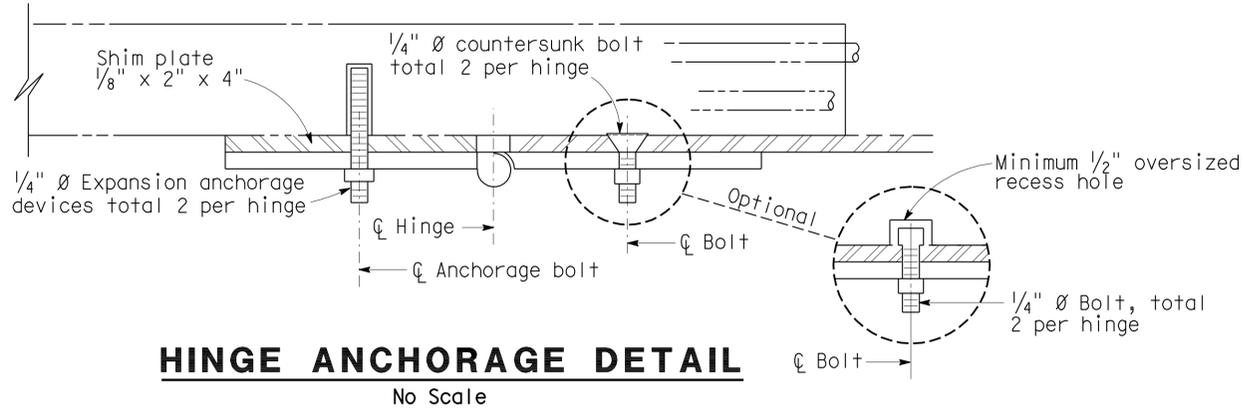
**CONNECTION AT BENT**  
 $\frac{3}{4}'' = 1'$   
 (See Note 1)

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

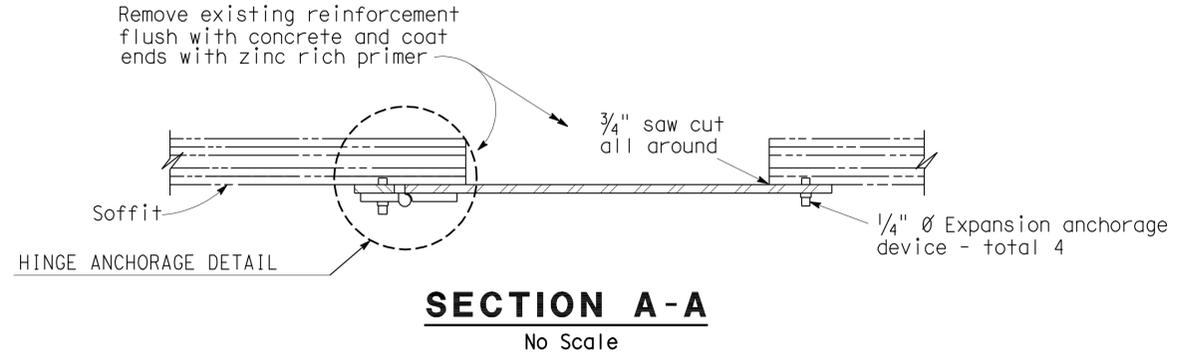
Note:  
 1. Refer to "SECTION A-A" on "OVERHANG DETAILS No. 1" sheet for information not shown

DESIGN BY Tien Chu CHECKED Kenneth Vo DETAILS BY Tom Dang/Thanh Nguyen CHECKED Kenneth Vo QUANTITIES BY Tien Chu CHECKED B. Shen/B. Patel				STATE OF CALIFORNIA DEPARTMENT OF TRANSPORTATION	DIVISION OF ENGINEERING SERVICES STRUCTURE DESIGN DESIGN BRANCH <b>22</b>	BRIDGE NO. 53-0601 POST MILE 16.05	<b>MEDIAN BARRIER REPLACEMENT</b> <b>EUCLID AVENUE UC (MODIFY)</b> <b>OVERHANG DETAIL No. 2</b>
STRUCTURES DESIGN DETAIL SHEET (ENGLISH) (REV. 10/25/05)				ORIGINAL SCALE IN INCHES FOR REDUCED PLANS	CU 07-226 EA 184101	DISREGARD PRINTS BEARING EARLIER REVISION DATES	REVISION DATES 09/08/09 03/16/09 03/19/09 04/27/09 6/28/09 6/19/09 6/28/09 6/30/09 7/28/09 SHEET 3 OF 4

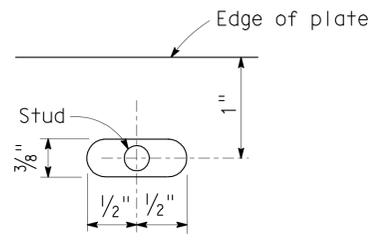
DIST	COUNTY	ROUTE	POST MILES TOTAL PROJECT	SHEET No	TOTAL SHEETS
07	LA	5	15.8/16.9	145	145
			09-03-09	REGISTERED CIVIL ENGINEER DATE	
			5-24-10	PLANS APPROVAL DATE	
			REGISTERED PROFESSIONAL ENGINEER TIEN CHU No. 72324 Exp. 06/30/2010 CIVIL STATE OF CALIFORNIA		
The State of California or its officers or agents shall not be responsible for the accuracy or completeness of electronic copies of this plan sheet.					



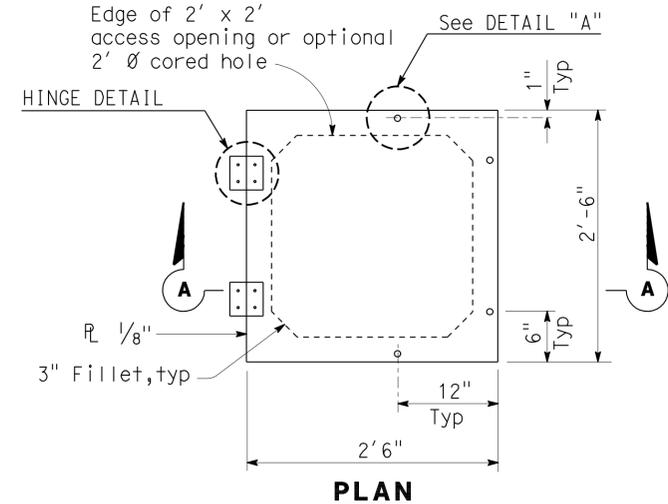
**HINGE ANCHORAGE DETAIL**  
No Scale



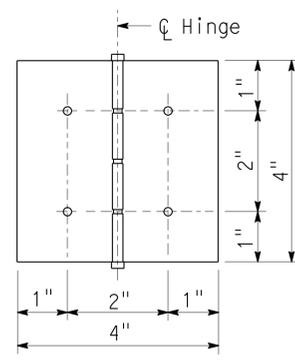
**SECTION A-A**  
No Scale



**DETAIL "A"**  
No Scale



**PLAN**



**HINGE DETAIL**

**SOFFIT ACCESS DOOR ASSEMBLY**

No Scale  
Note: Soffit access door opening location shown on "OVERHANG DETAILS No. 1" sheet

**NOTES:**

1. Non-removable pin in hinge.
2. Hinge assembly to be galvanized, brass or stainless steel.
3. Use thread locking system for all hinge nuts.
4. Hinge assembly to be minimum 1/8" thick.

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

DESIGN BY Tien Chu CHECKED Kenneth Vo			<b>STATE OF CALIFORNIA</b> DEPARTMENT OF TRANSPORTATION	DIVISION OF ENGINEERING SERVICES STRUCTURE DESIGN <b>DESIGN BRANCH 22</b>	BRIDGE NO.	<b>MEDIAN BARRIER REPLACEMENT</b>	
DETAILS BY J. Valencia / Hector CHECKED Kenneth Vo					53-0601	<b>EUCLID AVENUE UC (MODIFY)</b>	
QUANTITIES BY Tien Chu CHECKED B. Shen/B. Patel					16.05	<b>SOFFIT ACCESS OPENING DETAILS</b>	
STRUCTURES DESIGN DETAIL SHEET (ENGLISH) (REV. 10/25/05)			ORIGINAL SCALE IN INCHES FOR REDUCED PLANS 0 1 2 3	CU 07-226 EA 184101	DISREGARD PRINTS BEARING EARLIER REVISION DATES	REVISION DATES 7/11/09 9/08/09	SHEET 4 OF 4