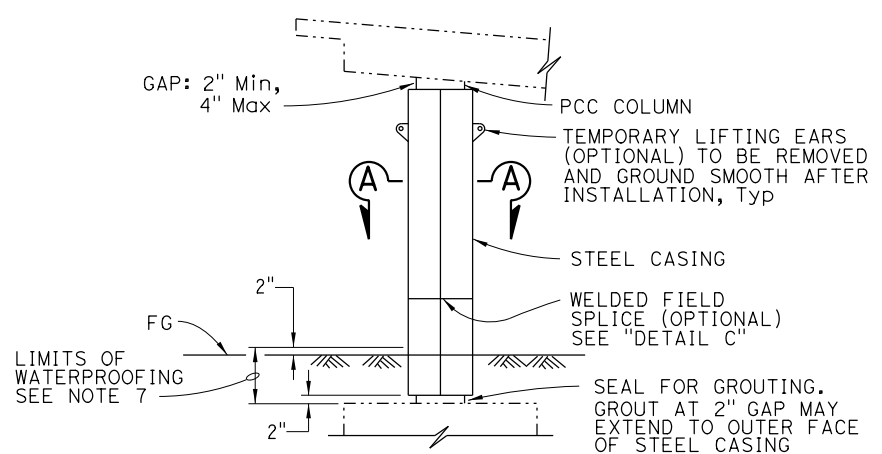
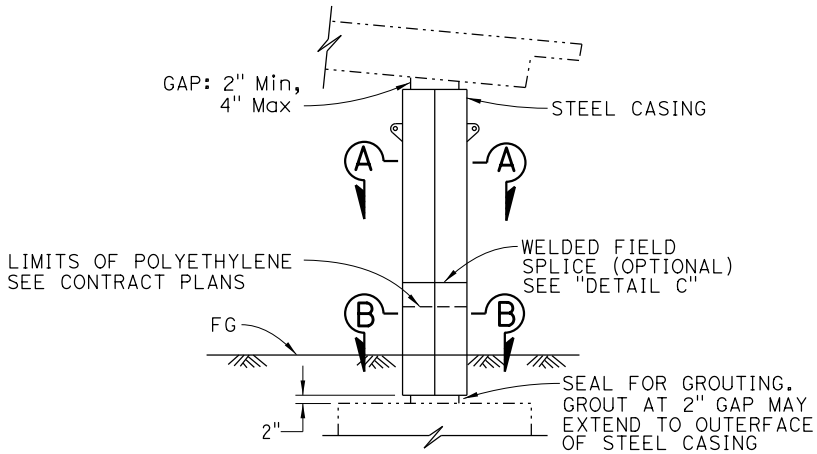


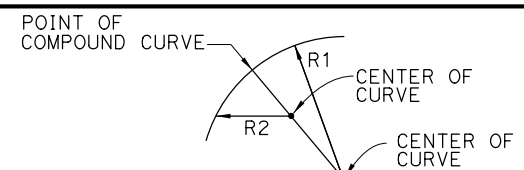
DIST	COUNTY	ROUTE	POST MILES TOTAL PROJECT	SHEET No.	TOTAL SHEETS
REGISTERED CIVIL ENGINEER			DATE		
PLANS APPROVAL DATE			REGISTERED PROFESSIONAL ENGINEER		
			No. _____		
			Exp. _____		
			CIVIL		
			STATE OF CALIFORNIA		
The State of California or its officers or agents shall not be responsible for the accuracy or completeness of scanned copies of this plan sheet.					
The Registered Civil Engineer for the project is responsible for the selection and proper application of the component design and any modifications shown.					



TYPE F COLUMN

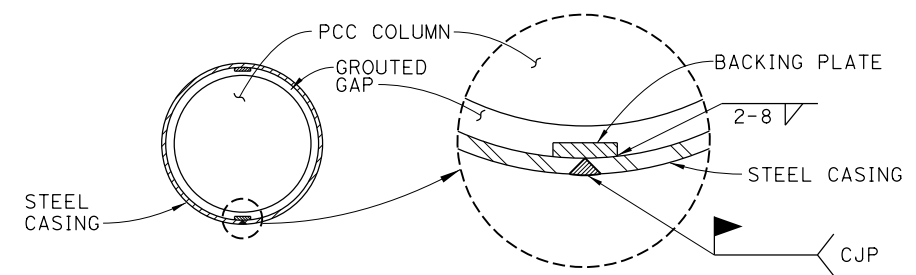


TYPE P/F COLUMN



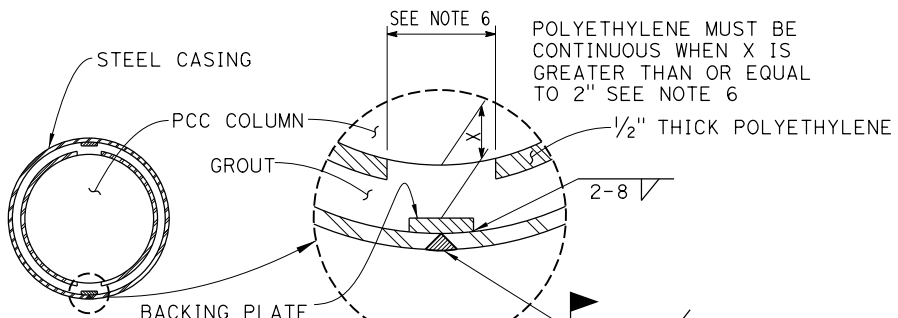
ELLIPTICAL CASING DETAIL TYPE F AND P/F COLUMN

RADII R1 AND R2 TO BE DETERMINED BY THE CONTRACTOR SUBJECT TO THE APPROVAL OF THE ENGINEER



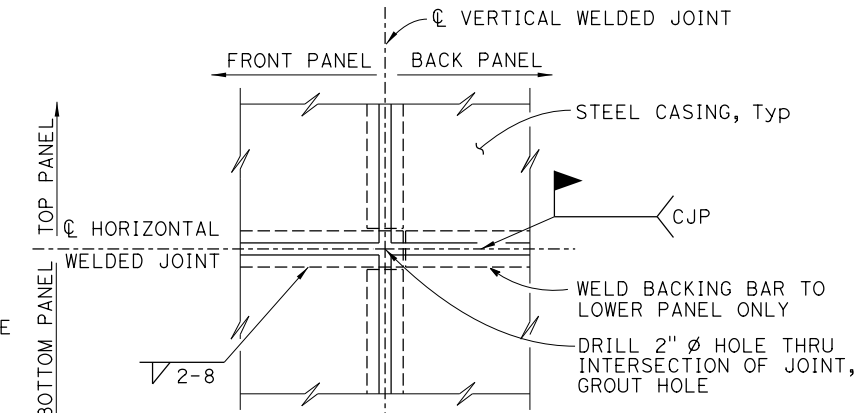
SECTION A-A

MINIMUM INSIDE DIAMETER OF STEEL CASING = 1/2" GREATER THAN NOMINAL COLUMN DIAMETER FOR TYPE F AND 2/2" FOR TYPE P/F



SECTION B-B

MINIMUM INSIDE DIAMETER OF STEEL CASING = 2/2" GREATER THAN NOMINAL COLUMN DIAMETER FOR TYPE P/F

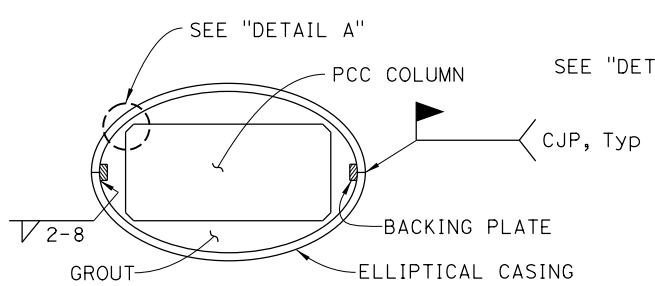


WELD FIELD SPLICE (OPTIONAL) DETAIL C

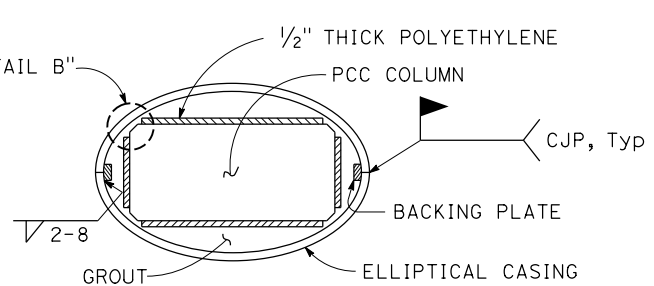
LEGEND:

- Indicates Existing structure
- Indicates new structure

ROUND COLUMN

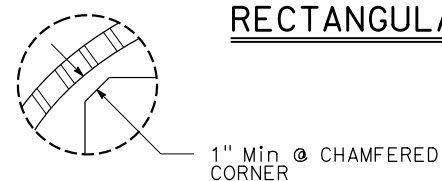


SECTION A-A

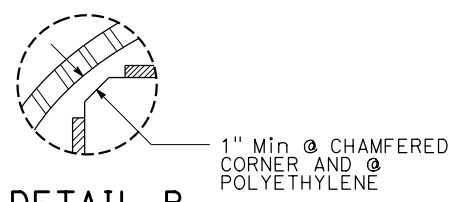


SECTION B-B

RECTANGULAR COLUMN

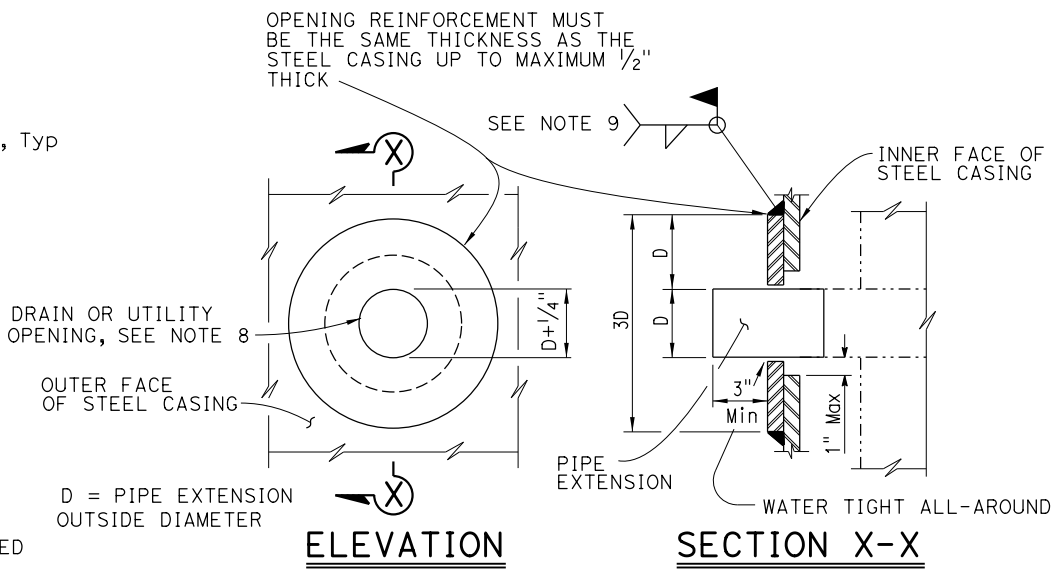


DETAIL A



DETAIL B

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



ELEVATION

SECTION X-X

CASING OPENING

NOTE: OPENING REINFORCEMENT REQUIRED FOR DRAIN OR UTILITY OPENINGS LARGER THAN 4"

NO SCALE

NOTES:

- For varying thickness, steel casing inside surface to remain flush. Minimum clearance from PCC column to casing shall be maintained.
- Appropriate injection nozzles to be provided on casing, but removed and ground flush following completion of grouting operation.
- All voids between steel casing and polyethylene (TYPE P/F), and steel casing and PCC column (TYPE F) to be filled with grout.
- Location and number of vertical and horizontal welds to be determined by the Contractor and subject to the approval of the Engineer. The location of casing welds are for illustration. No skip welds allowed.
- Circular steel casing to be 1/4" thick minimum for casings with a 4'-4" diameter or less; all other steel casings to be 3/8" thick unless noted differently on contract plans. Backing plates to be the same thickness as casing up to maximum 3/8" thick.
- Contractor must remove 12" polyethylene strip behind backing plate if backing plate is closer than 2" from face of column.
- Waterproof limits for steel casings. Typical for TYPE "F" and TYPE "P/F".
- For pipe extensions, opening must be no more than 1/4" greater than the pipe extension diameter. For other openings, the opening diameter to be determined by the Engineer.
- Minimum size of fillet weld must not be less than thickness of opening reinforcement.

BRIDGE STANDARD DETAILS		The components of the Bridge Standard Details have been prepared under the responsible charge of the Technical Owner, a registered civil engineer in the State of California.	STATE OF CALIFORNIA DEPARTMENT OF TRANSPORTATION	DIVISION OF ENGINEERING SERVICES	BRIDGE NO.	COLUMN CASING - STEEL
FILE NO. xs7-010	APPROVAL DATE October 2015				POST MILE	
Refer to: http://www.dot.ca.gov/hq/esc/techpubs/manual/bridgemanuals/bridge-standard-detail-sheets/index.html		FILE => xs7-010.dgn	ORIGINAL SCALE IN INCHES FOR REDUCED PLANS	UNIT: PROJECT NUMBER & PHASE:	CONTRACT NO.:	DISREGARD PRINTS BEARING EARLIER REVISION DATES
USERNAME => s136236	TIME PLOTTED => 07:27	DATE PLOTTED => 12-JUL-2016	0 1 2 3	REVISION DATES		SHEET OF
				7-8-16	11-4-14	8-31-15