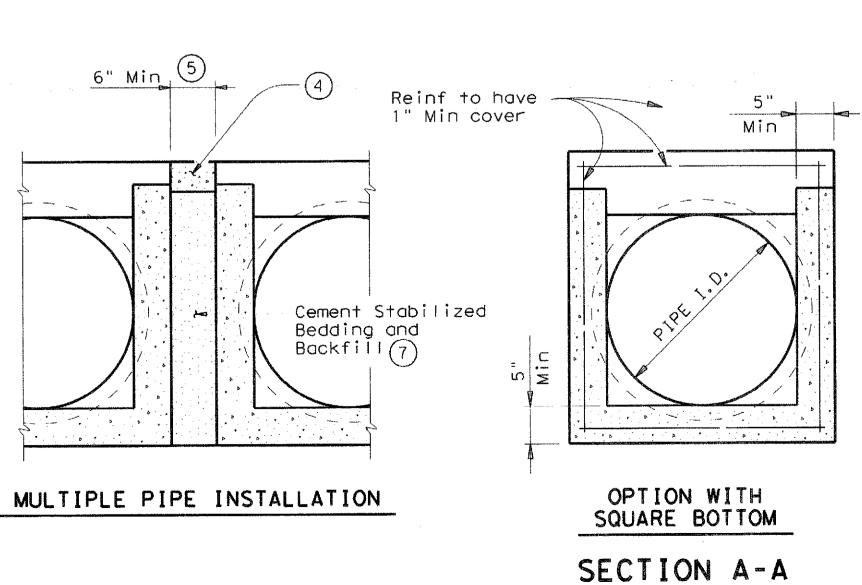
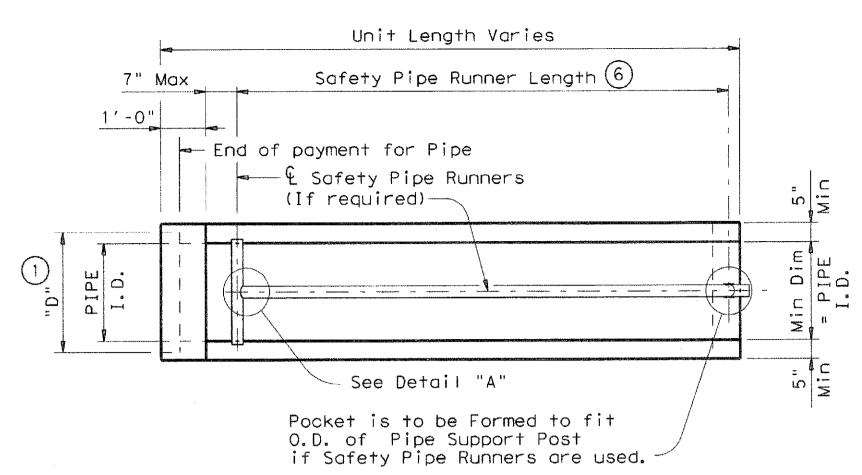


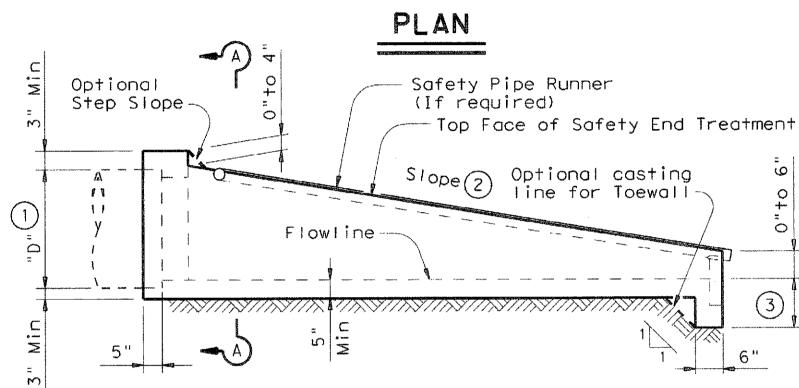
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## END DETAIL FOR INSTALLATION OF SAFETY PIPE RUNNERS

(If required)

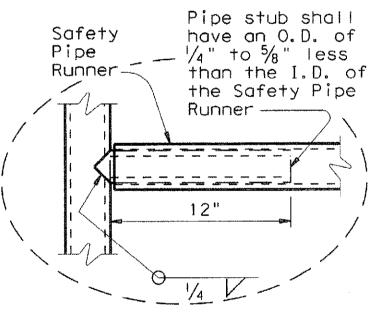


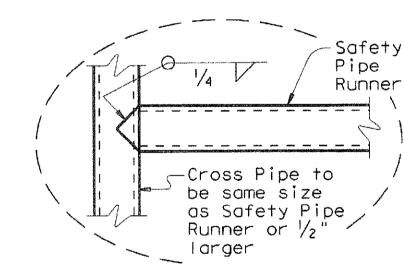




LONGITUDINAL ELEVATION

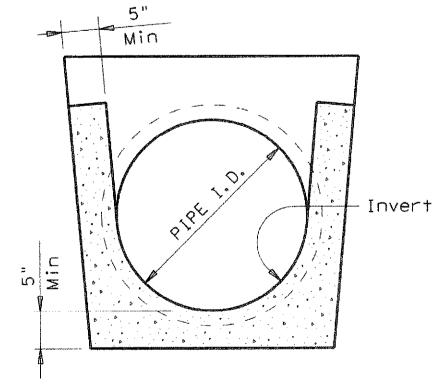
(If required)





OPTION B





OPTION WITH INVERT BOTTOM

⊥ Precast end section may / be produced 11 with spigot 11 or bell end \_ as required

OPTIONAL JOINT

(Showing joint between RCP and Precast Safety End Treatment)

Required Pipe Runner Size Safety Pipe Runner 0. D. I.D. Size Length 3" STD 3.068" 3.500" 11'- 2" 3 ½" STD | 4.000" 3.548" 15'- 6" 4.500" 4.026" 4" STD 20'-10" 5.047" 5" STD 5.563" 35' - 4"

Maximum

- (1) Dimension "D" is based on ASTM C-76, Class III, Wall thickness "B". If any other wall thickness is used, dimension "D" must be adjusted accordingly.
- (2)Slope as shown elsewhere in plans. Slope of 3:1 or flatter is required for vehicle safety.
- (3) Toewall to be used only when dimension is shown elsewhere in the plans.
- (4) The top 4" of void between precast end treatments shall be filled with concrete riprap and shall be considered subsidiary to Safety End Treatment.
- (5) Clear distance between pipes shall be adjusted to provide for the minimum distance between safety end treatments.
- (6) Measured along Slope.
- (7) Cement stabilized bedding and backfill shall be in accordance with the Item, "Excavation and Backfill for Structures". Bedding and backfill shall be considered subsidiary to the Item "Safety End Treatment". When concrete riprap is specified around the safety end treatment, backfill shall be as directed by Engineer.

## GENERAL NOTES:

Precast safety end treatment for reinforced concrete pipe may be used for TYPE II end treatment as specified in Item "Safety End Treatment". When Precast Safety End Treatment is used as a Contractor's alternate to mitered RCP, Riprap will not be required unless noted otherwise on

Manufacture of this product shall conform to requirements of Item "Safety End Treatment" except as noted below:

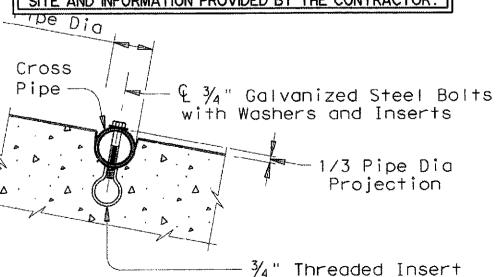
- A. Minimum reinforcing shall be #4 at 6" (Grade 40)
- or #4 at 9" (Grade 60) each way or 6 x 6 W12 x W12 or 5 x 5 - W10 x W10 welded wire fabric. B. Concrete for precast (steel formed) sections shall be Class "C"
- with a minimum compressive strength of 3600 psi.
  At the option and expense of the Contractor the next larger size of Safety End Treatment may be furnished; as long as the "D" dimension cast is that of the required size of pipe.

Pipe Runners are designed for a traversing load of 1,800 Lbs at yield as recommended by Research Report 280-1, "Safety Treatment of Roadside Cross-Drainage Structures", Texas Transportation Institute, March 1981. Safety Pipe Runners, Cross Pipes, Pipe Support Posts, and Pipe Stubs shall conform to the requirements of ASTM A53 (Type E or S, Grade B), ASTM A500 (Grade B), or API 5LX52.

All steel components except reinforcing, shall be galvanized after fabrication. Galvanizing damaged during transport or construction shall be repaired in accordance with the specifications.

RECORD

TO THE BEST OF OUR KNOWLEDGE WIER & ASSOCIATES, INC., HERBY STATES THAT THIS PLAN IS AS-BUILT. THIS INFORMATION PROVIDED IS BASED ON SURVEYING AT THE SITE AND INFORMATION PROVIDED BY THE CONTRACTOR.



INSTALLATION DETAIL FOR SAFETY PIPE RUNNERS

(If required)

Texas Department of Transportation Bridge Division

PRECAST SAFETY END TREATMENT TYPE II ~ CROSS DRAINAGE

PSET-SC

DN: RLW CK: KLR DW: JTR LE: psetscse.dgn FEDERAL AID PROJECT TxDOT May 2005 REVISIONS CONTROL SECT JOB HIGHWAY