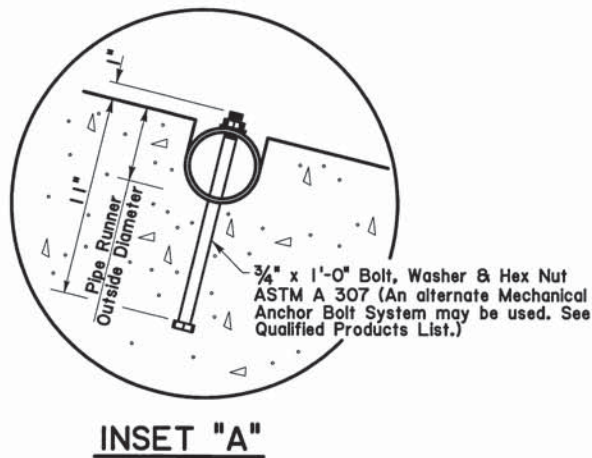
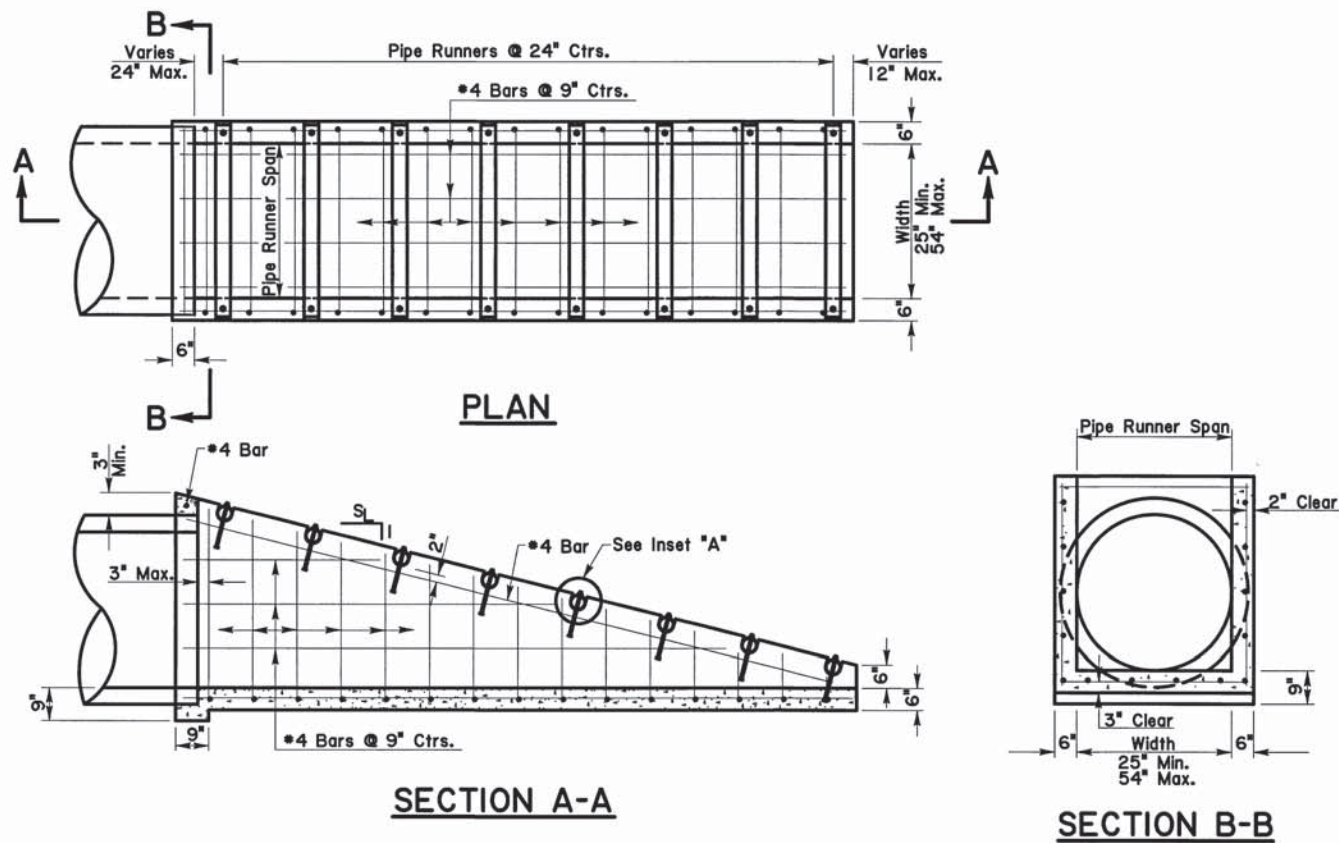
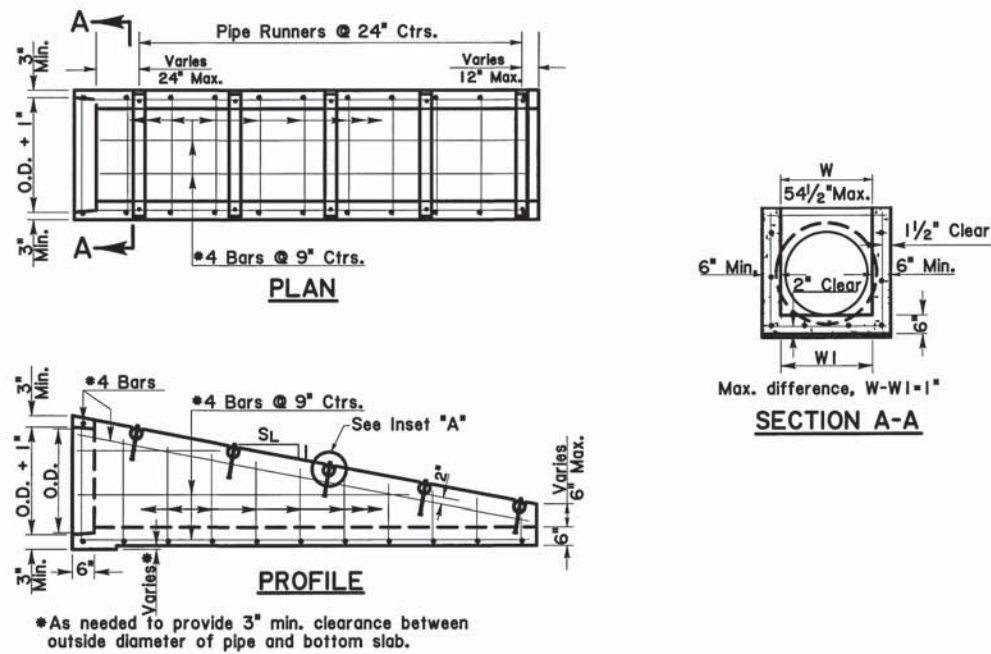


CAST-IN-PLACE ALTERNATE



PRECAST ALTERNATE

- Notes:
1. Concrete to be class A1 & reinforcing steel to be Grade 60.
 2. RCP bell ends which exceed the normal pipe outside diameter (O.D.) shall be removed.
 3. Pipe connections shall be sealed with flexible gasket material.
 4. Exposed corners may be chamfered $\frac{3}{4}$ ".



General Notes: (Cast-in-Place & Precast)

- 1) While a RCP culvert is detailed, this Safety End shall also be used with RCPA, CMP, CMPA, and RCB culverts. Multiple culverts will require multiple ends.
- 2) Slope of Safety End walls ($S_L:1$) shall match the required sideslope. If no sideslope is given, a slope of 6:1 shall be required.
- 3) Pipe Runners shall be galvanized steel pipe conforming to ASTM A53, Type E or S, Grade B, 35ksi; or ASTM A501, 36ksi. Required Pipe Runner diameters and strengths for various maximum spans are:

Nominal Diameter	Strength/Schedule	Maximum* Span	Outside Diameter	Wall Thickness	Weight Per Foot
3"	Std/40	11'-2"	3.5"	0.216"	7.58 lbs

*Pipe Runners are designed for a traversing load of 1800 pounds at yield.

- 4) Side Drain Safety Ends may be provided as cast-in-place or precast, and shall be in accordance with Section 702 of the LA DOTD Standard Specifications.