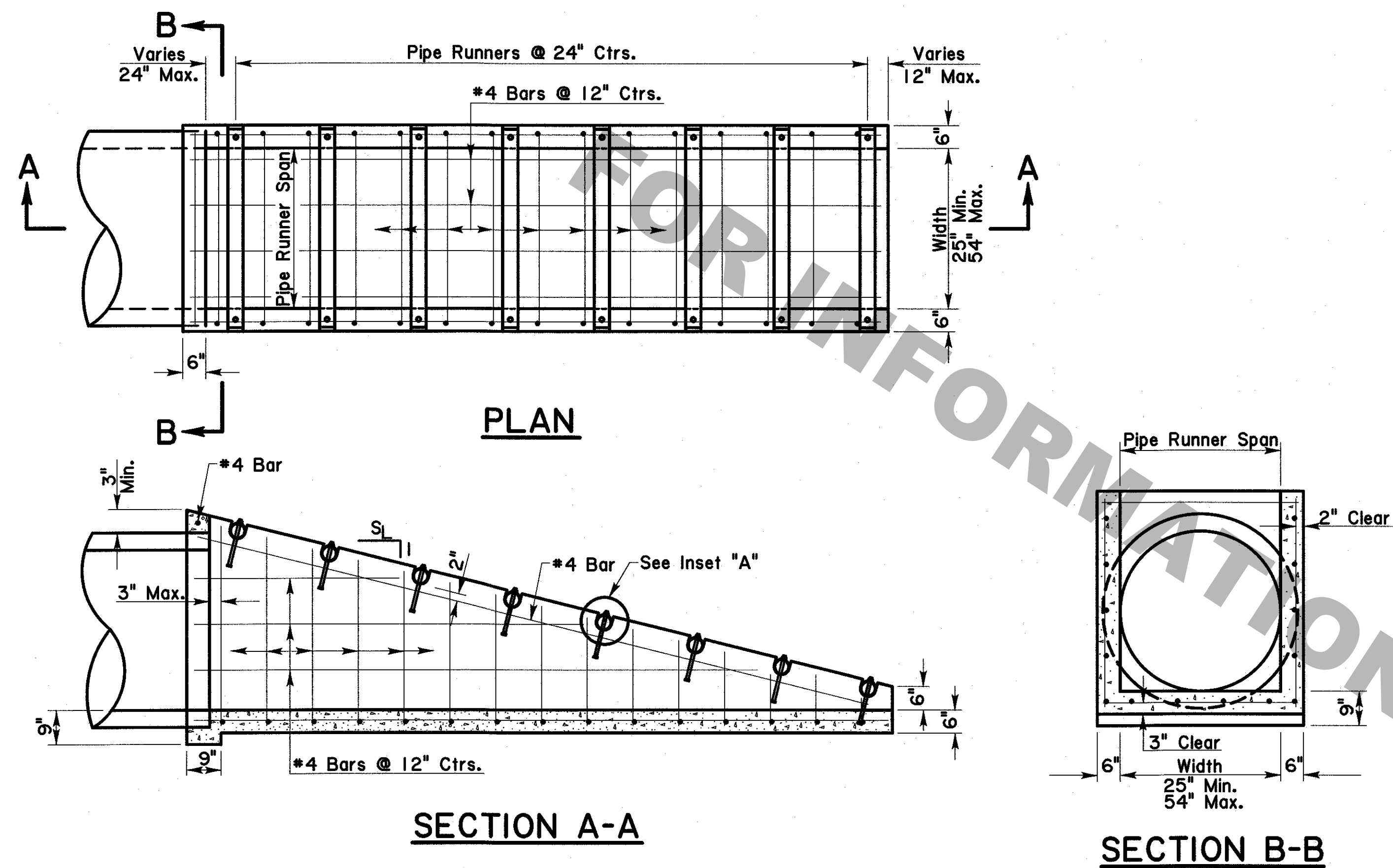


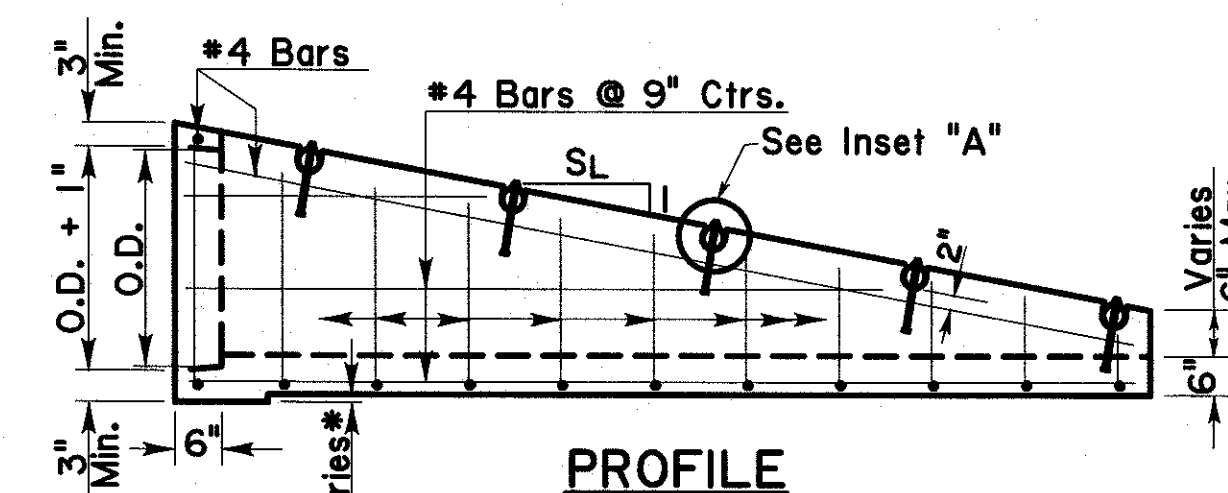
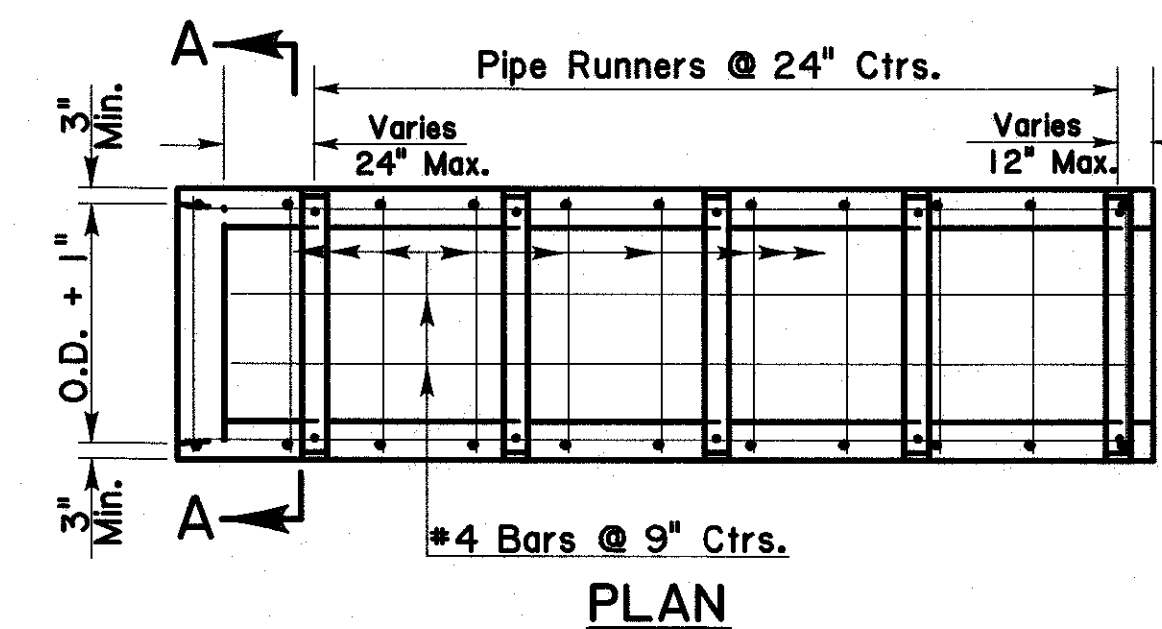
CAST-IN-PLACE ALTERNATE



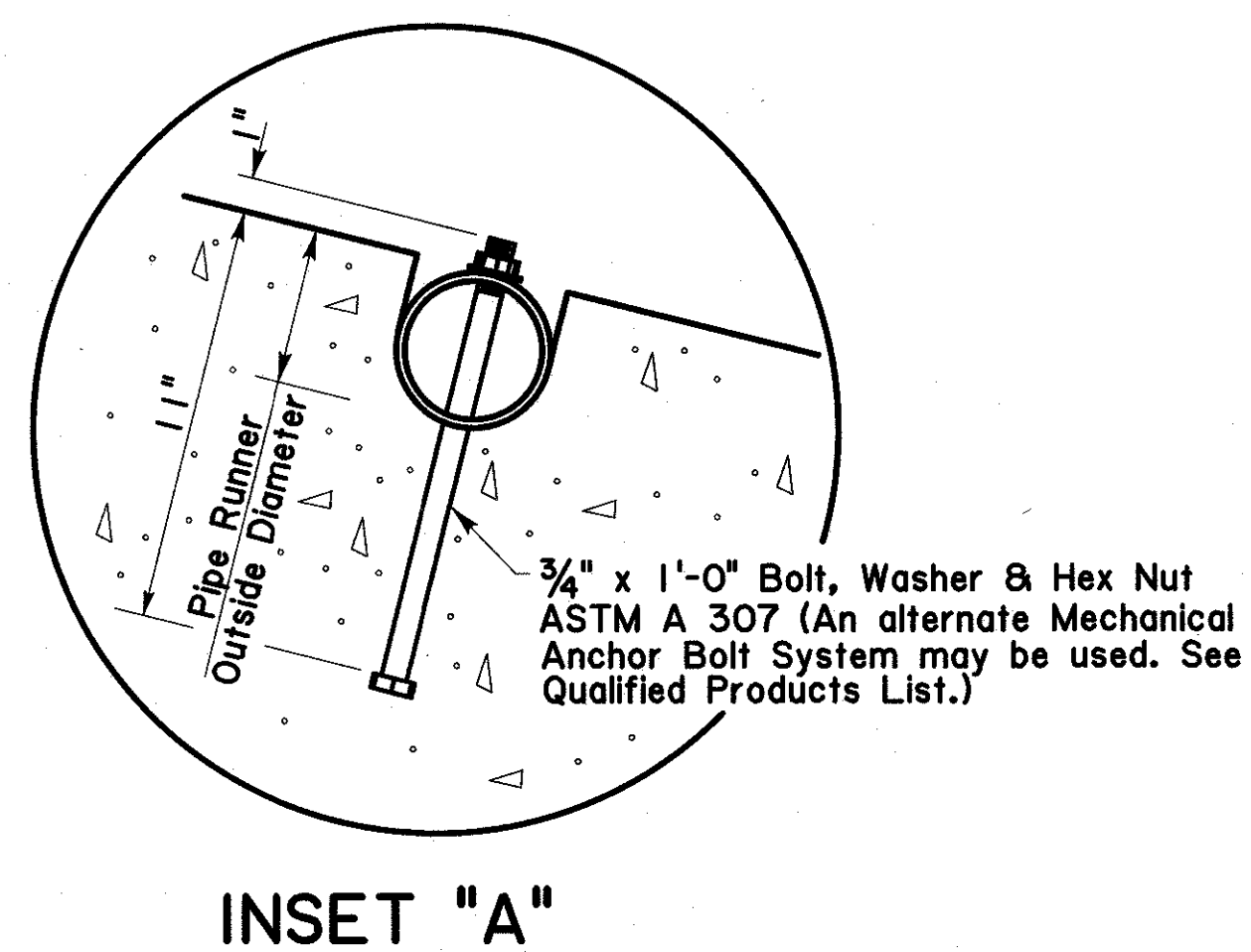
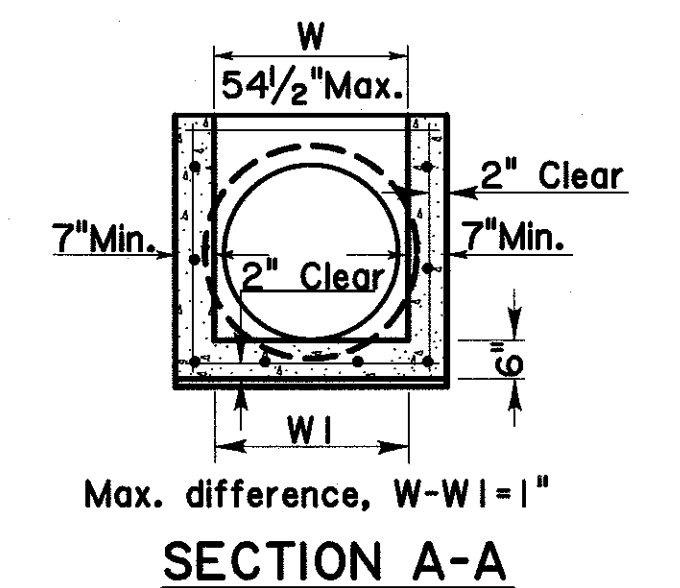
PRECAST ALTERNATE

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 $\frac{3}{4}$ ".



*As needed to provide 3" min. clearance between outside diameter of pipe and bottom slab.



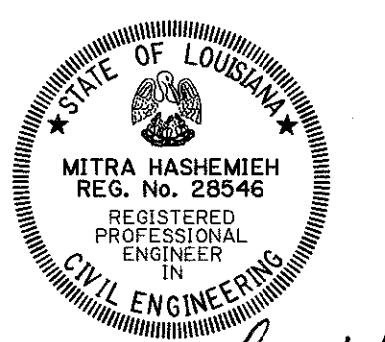
General Notes: (Cast-In-Place & Precast)

- 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.



Mitra Hashemieh
7/30/2019

DATE	DESCRIPTION	BY
7-29-19	Changed 4000 psi to class A1	MH
1-16-98	Added Special Detail Name SETSD2	JCM
1-24-94	General Revisions	MR
6-24-92	Added Precast Alternate & revised Cast-In-Place	PAA
8-5-91	General Revisions	PAA

SPECIAL DETAIL NO. SETSD2		SHEET 1 OF 1	
SIDE DRAIN SAFETY END TYPE 2			
Pipe Sizes: 30" - 48" RCP 30" - 54" CMP 24" Eq. - 36" Eq. RCPA 24" Eq. - 42" Eq. CMPA			
DATED April 22, 1991			
STATE OF LOUISIANA DEPARTMENT OF TRANSPORTATION AND DEVELOPMENT			
DESIGNED PAA	DETAILED KAJ	DIR. spdetail/safyend	
CHECKED JCM	CHECKED PAA	FILE setsd2.dgn	
HYDRAULICS SECTION			