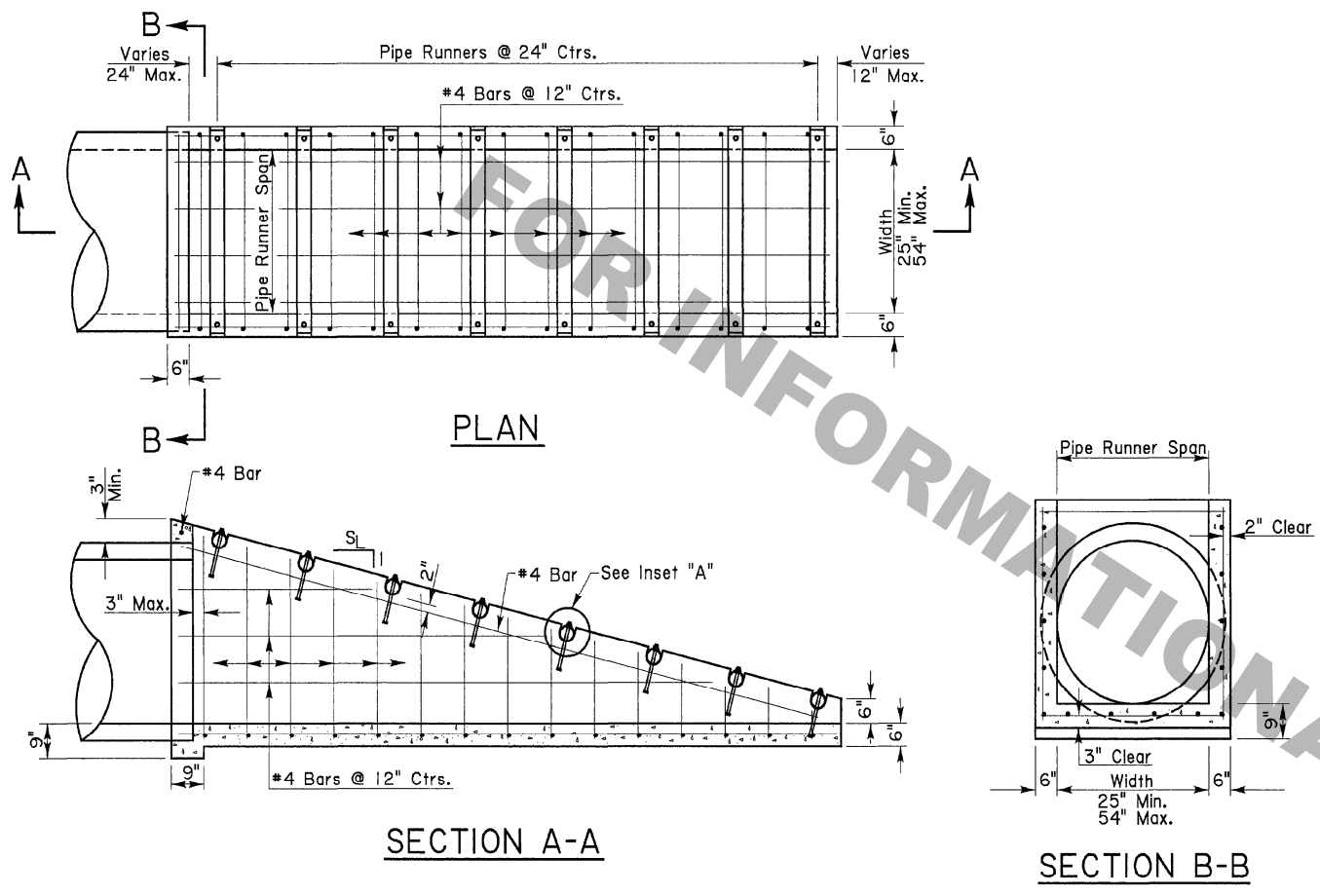


28-NOV-2007 11:19

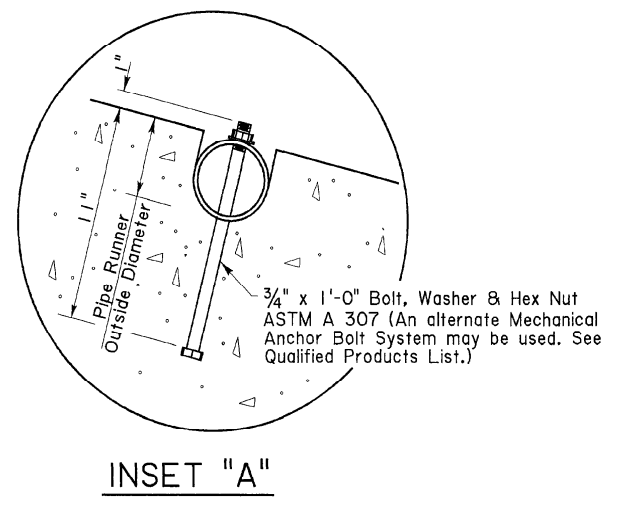
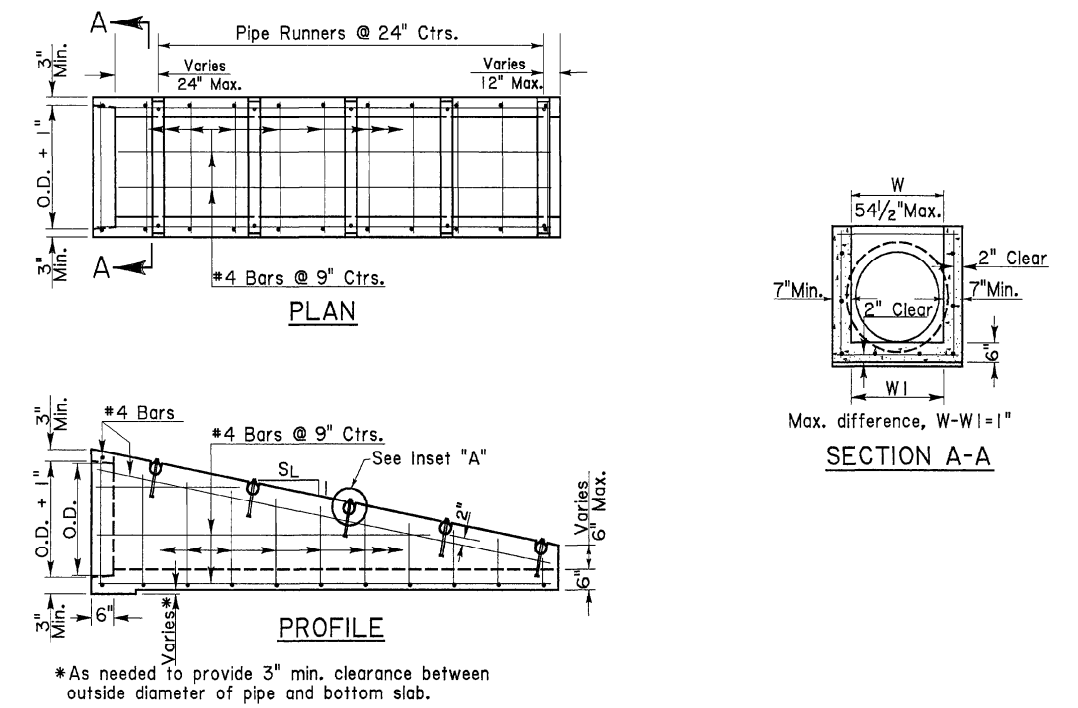
FEDERAL PROJECT	STATE PROJECT	PARISH	SHEET NO.

# CAST-IN-PLACE ALTERNATE



# PRECAST ALTERNATE

- Notes:
- Concrete to be 4000 psi & reinforcing steel to be Grade 60.
  - RCP bell ends which exceed the normal pipe outside diameter (O.D.) shall be removed.
  - Pipe connections shall be sealed with flexible gasket material.
  - Exposed corners may be chamfered 3/4".



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

- 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.
  - Slope of Safety End walls (S<sub>L</sub>:1) shall match the required sideslope. If no sideslope is given, a slope of 6:1 shall be required.
  - 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.
- 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.



SPECIAL DETAIL NO.	<b>SETSD2</b>	SHEET	1 OF 1
<b>SIDE DRAIN SAFETY END TYPE 2</b>			
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. spdetal/softyend	
CHECKED JCM	CHECKED PAA	FILE softysd2.dgn	
HYDRAULICS SECTION			

DATE	DESCRIPTION	BY
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

R:\Standard Plans\Special Details\English\Old Sheets\setsd2.dgn