

**DRAFT**

**S-528A  
Gated Round Culverts**

**Revision** 5 January 2001 - Original Submission

**XY Coord** 896040 735210

**Location** On internal levee between H1 and H2. North of S-528B.

**Purpose** Equalizes water surface elevation for H1 and H2 impoundments.

**Notes** 1. Riprap requirements have not been verified with Geotech.

**Design Conditions**

Discharge (CFS)	300 cfs
Headwater Elevation	14.45 ft,NGVD
Tailwater Elevation	13.50 ft,NGVD

**Maximum Expected Stages**

Headwater Elevation	19.00 ft,NGVD
Tailwater Elevation	19.00 ft,NGVD

**Maximum Head Difference**

Maximum Headwater Elevation	16.00 ft,NGVD
Minimum Tailwater Elevation	10.00 ft,NGVD

**Culvert Data**

Number of Barrels	2
Barrel Type	Concrete
Barrel Diameter	6.0 feet
Barrel Length	85.0 feet
Barrel Invert Elevation	7.00 ft, NGVD
Type of Control	Slide Gate

**Canal Data**

Side Slopes Cotangent	3
Upstream Bottom Width	Pool feet
Upstream Bottom Elevation	5.00 ft,NGVD
Downstream Bottom Width	Pool feet
Downstream Bottom Elevation	5.00 ft,NGVD

**Riprap Requirements**

Design Barrel Velocity	5.31 fps
Design Riprap Velocity	8.00 fps
Riprap Protected Area	1,600 sq-ft
Riprap Thickness	2.00 feet
Riprap Bedding Thickness	1.00 feet

**Control Protection Elevation** 20.00 ft,NGVD