

**DRAFT**

**S-506  
Gated Round Culverts**

**Revision** 5 December 2000 - Original Submission

**XY Coord** 844590 638625

**Location** Northern C-11 Impoundment adjacent to the mitigation area.

**Purpose** Controls discharge from impoundment to mitigation area to gain extra storage.  
Assist hydroperiod management in mitigation area.

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

**Design Conditions**

Discharge (CFS)	100 cfs
Headwater Elevation	8.50 ft,NGVD
Tailwater Elevation	7.50 ft,NGVD

**Maximum Expected Stages**

Headwater Elevation	13.00 ft,NGVD
Tailwater Elevation	10.50 ft,NGVD

**Maximum Head Difference**

Maximum Headwater Elevation	11.20 ft,NGVD
Minimum Tailwater Elevation	7.50 ft,NGVD

**Culvert Data**

Number of Barrels	2
Barrel Type	Concrete
Barrel Diameter	4.0 feet
Barrel Length	84.0 feet
Barrel Invert Elevation	-0.50 ft, NGVD
Type of Control	Slide Gate

**Canal Data**

Side Slopes Cotangent	1
Upstream Bottom Width	Pool feet
Upstream Bottom Elevation	-1.00 ft,NGVD
Downstream Bottom Width	Pool feet
Downstream Bottom Elevation	-1.00 ft,NGVD

**Riprap Requirements**

Design Barrel Velocity	4.81 fps
Design Riprap Velocity	8.00 fps
Riprap Protected Area	800 sq-ft
Riprap Thickness	2.00 feet
Riprap Bedding Thickness	1.00 feet

**Control Protection Elevation** 13.50 ft,NGVD