

DRAFT

S-505B
Gated Round Culverts

Revision 1 December 2000 - Original Submission

XY Coord 849720 638050

Location C-11's eastern C-511 seepage canal, junction with mitigation area and impoundment.

Purpose Seepage canal stage divide.
Access road to Impoundment passes over structure.

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

Design Conditions

Discharge (CFS)	75 cfs
Headwater Elevation	4.40 ft,NGVD
Tailwater Elevation	4.25 ft,NGVD

Maximum Expected Stages

Headwater Elevation	8.00 ft,NGVD
Tailwater Elevation	7.00 ft,NGVD

Maximum Head Difference

Maximum Headwater Elevation	6.00 ft,NGVD
Minimum Tailwater Elevation	4.00 ft,NGVD

Culvert Data

Number of Barrels	2
Barrel Type	Concrete
Barrel Diameter	5.0 feet
Barrel Length	60.0 feet
Barrel Invert Elevation	-1.25 ft, NGVD
Type of Control	Slide Gate

Canal Data

Side Slopes Cotangent	3
Upstream Bottom Width	20.00 feet
Upstream Bottom Elevation	-2.50 ft,NGVD
Downstream Bottom Width	40.00 feet
Downstream Bottom Elevation	-10.00 ft,NGVD

Riprap Requirements

Design Barrel Velocity	1.95 fps
Design Riprap Velocity	4.00 fps
Riprap Protected Area	625 sq-ft
Riprap Thickness	2.5 ft
Riprap Bedding Thickness	1.5 ft

Control Protection Elevation 9.00 ft,NGVD