

DRAFT

**S-532A
Gated Round Culverts**

Revisions 1 November 2000 - Original Submission

XY Coord 899980 827105

Location NW corner of Acme Impoundment.

Purpose Controls Acme Impoundment bleed down when opportunity exists.
Controls deliveries to Acme STA before discharging into regional system.

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

Design Conditions

Discharge (CFS)	150 cfs
Headwater Elevation	15.40 ft,NGVD
Tailwater Elevation	14.00 ft,NGVD

Maximum Expected Stages

Headwater Elevation	27.00 ft,NGVD
Tailwater Elevation	16.50 ft,NGVD

Maximum Head Difference

Maximum Headwater Elevation	25.20 ft,NGVD
Minimum Tailwater Elevation	14.00 ft,NGVD

Culvert Data

Number of Barrels	2
Barrel Type	Concrete
Barrel Diameter	4.0 feet
Barrel Length	100.0 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	6.00 ft,NGVD
Downstream Bottom Width	Pool feet
Downstream Bottom Elevation	6.00 ft,NGVD

Riprap Requirements

Design Barrel Velocity	5.97 fps
Design Riprap Velocity	8.00 fps
Riprap Protected Area	1,000 sq-ft
Riprap Thickness	2.0 feet
Riprap Bedding Thickness	1.0 feet

Control Protection Elevation 28.00 ft,NGVD