

DRAFT

**S-30
2-Bay Spillway**

Revisions 9 August 2000 - Original submission

XY Coord 842970 590420

Location Confluence of C-9 and C-502B (US-27 Brdge)

Purpose Controls C-11 diverted flows to the C-9 Impoundment and NLBSA.
Controls Lake Okeechobee water supply to NLBSA..
Controls water supply deliveries from C-9 Impoundment to target destinations.

Notes 1. Reverse flow of 1,000 cfs is required.
2. Riprap requirements have not been verified with Geotech.

Design Conditions

Discharge (CFS)	2,500 cfs
Headwater Elevation	6.00 ft,NGVD
Tailwater Elevation	4.00 ft,NGVD

Reverse Flow Design Conditons

Discharge (CFS)	1,000 cfs
Headwater Elevation	5.75 ft,NGVD
Tailwater Elevation	6.00 ft,NGVD

Maximum Expected Stages

Headwater Elevation	9.00 ft,NGVD
Tailwater Elevation	7.00 ft,NGVD

Maximum Head Difference

Maximum Headwater Elevation	8.50 ft,NGVD
Minimum Tailwater Elevation	3.50 ft,NGVD

Crest Data

Shape	Ogee
Crest Elevation	-4.15 ft,NGVD
Ogee Flow Length	14.80 feet
Net Crest Length	40.00 feet
Number and Width of Piers	1@3.25 feet
Approach Apron Elevation	-8.40 ft,NGVD
Approach Apron Width	43.25 feet
Approach Apron Length	45.00 feet

Gates

Weir Control	Slide Gates
Number of Gates	2
Gate Bay Width	20.00 feet
Gate Height	14.40 feet
Gate Clearance Elevation	10.00 ft,NGVD
Base of Breastwall Elevation	N/A ft,NGVD

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Stilling Basin Data

Design Discharge	3,000 cfs
Apron Elevation	-9.40 ft,NGVD
Training Wall Elevation	7.00 ft,NGVD
Apron Length from Toe of Ogee to Toe of Endsill	29.25 feet
End Sill Elevation	-7.90 ft,NGVD
Slope from apron to Top of End Sill	5
Baffle Block Elevation	-7.60 ft,NGVD
Baffle Block Width	1.80 feet
Rows of Baffle Blocks	2
Distance from toe of Ogee to 1st Row of Baffle Blocks	16.00 feet
Distance from toe of Ogee to 2st Row of Baffle Blocks	21.25 feet

Canal Data

Side Slopes Cotangent	1
Upstream Bottom Width	Pool feet
Upstream Bottom Elevation	-10.00 ft,NGVD
Downstream Bottom Width	50.00 feet
Downstream Bottom Elevation	-16.00 ft,NGVD

Riprap Requirements

Design Endsill Velocity	5.95 fps
Design Riprap Velocity	8.00 fps
Riprap Protected Area	3,000 sq-ft
Riprap Thickness	2.00 feet
Riprap Bedding Thickness	1.00 feet