

## STRUCTURE 76

This structure is a reinforced concrete, gated spillway with discharge controlled by three stem operated, vertical lift gates. Operation of the gates is manually controlled and the gate operated in accordance with the seasonal operational criteria. The structure is located on the borrow pit of Levee 8, about 2 miles east of Lake Okeechobee.

### PURPOSE

The structure prevents runoff from the area east of Levee 8 from overtopping levees in the developed area between the structure and Lake Okeechobee. The gates will normally be operated to prevent stages west of the structure from exceeding 17.5 feet at U.S. 441; however, until highway and railroad bridges over the canal are relocated, flow through Structure 76 will be regulated to prevent damage at those structures. The structure also makes discharges from the Lake during dry periods, via Corps operated culverts 10A through LD-9.

### OPERATING CRITERIA

This structure is manually operated under either flood or normal conditions.

#### Normal Conditions

No specific criteria have been developed. Discharges are manually controlled to provide releases to meet agricultural requirements as water is available. Gates are full open at this time.

#### Flood Conditions

The gates remain open until the water approaches damage stage west of the structures, 17.5 feet at U.S. 441 or 19.0 feet at the structure. The gates are then operated to allow maximum releases without exceeding damage stages.

### FLOOD DISCHARGE CHARACTERISTICS

	Design
Discharge Rate	<u>1000</u> cfs <u>   </u> * <u>   </u> % SPF
Headwater Elevation	<u>20.3</u> feet
Tailwater Elevation	<u>19.6</u> feet
Type Discharge	submerged <u>controlled</u>

\*Design not related to Standard Project Flood

### DESCRIPTION OF STRUCTURE

Type fixed crest, reinforced concrete spillway

Weir Crest

Net Length 36.0 feet

Elevation 7.0 feet

Service Bridge Elevation 24.0 feet

Water Level which will by-pass structure 24.0 feet

Gates

Number 3

Size 7.5 ft. high by 12.0 ft. wide

Type vertical lift

Bottom elevation of gates, full open \_\_\_\_\_ feet

Top elevation of gates, full closed 14.5 feet

Control manual

Lifting Mechanism

Normal power source manually operated

Emergency power source none

Type Hoist pedestal mounted

Date of Transfer: November 13, 1953; S-76 to 3.9 mi. from So. end, May 7, 1954

**ACCESS:** Via State Road 700 about 0.7 miles north of Sand Cut Siding (or 4 miles north of Canal Point) to intersection with farm road, then east on farm road about 1 mile, then north and east on second farm road about 1 1/4 miles to S-76.

### HYDRAULIC AND HYDROLOGIC MEASUREMENTS

Water Level Upstream and downstream, on-site recorders

Gate Position Recorder None

Other \_\_\_\_\_

**DEWATERING FACILITIES**

Storage      unknown \_\_\_\_\_ Field Station

Type          stop logs

Size and Number (per bay)      unknown