

STRUCTURE 193

This structure is a lock structure located at the mouth of Taylor Creek in L-D4 about 2 1/2 miles southeast of the City of Okeechobee. The lock structure is a modification of HGS-6.

PURPOSE

The lock structure permits boats to pass between Lake Okeechobee and Taylor Creek when the lake is high. It also acts as a hurricane control structure, preventing hurricane tides from entering Taylor Creek.

OPERATION

Both lock gates are opened full whenever the lake level is below 14.0 feet. The lock is operated whenever the lake is above 14.0 feet.

FLOOD DISCHARGE CHARACTERISTICS

There is no design flood for this structure as flood flows are discharged through the adjacent station S-133.

DESCRIPTION OF STRUCTURE

Lock Structure

Type: reinforced concrete lock chamber with two pairs of gates

Operating Deck Elevation 32.5 feet

Lock

Length 90 feet

Width 50 feet

Invert Elevation: 5.5 feet

Gates

Type: sector

Size: 27.0 feet high

15.5 feet radius

Control: manual

Operating Mechanism

Normal Power Source: commercial electricity

Emergency Power Source: LP engine driven generator

Type: double wire rope drum unit with worm type special reducer
powered by electric motor driven by hydraulic motor

DEWATERING FACILITIES

Location: Okeechobee Field Station

Type: needle beam and steel and aluminum needles

Size and Number:

Upstream Beam Box Girder 5' X 2' X 54'

Needles Upstream:

Size: 12" wide, tapered 12" to 6" deep, 20' long

Number: 53

Downstream: same

ACCESS: from U.S. 441 via 1/4 mile access road on west bank of Taylor Creek

HYDRAULIC AND HYDROLOGIC MEASUREMENTS

Water Depth: Lakeside and chamber depth gauges only.

Lakeside and landside water stage recorders at nearby S-133.

DEWATERING FACILITIES: None