

STRUCTURE 190

This structure is a reinforced concrete, gated spillway with discharge controlled by two cable operated, vertical lift gates. Operation of the gates is automatically controlled in accordance with the established operational criteria. The structure is located on the L-28 Interceptor Canal about 32 miles south of Clewiston.

PURPOSE

This structure maintains optimum upstream water control stages in the North and West Feeder Canals; and prevents over drainage of these canals.

OPERATION

This structure will be operated on either a low or a high setting, through automatic controls as follows:

During the normal condition, the low setting is used.

When the headwater elevation rises to 14.8, the gates will open at six inches per minute but the maximum gate opening will be limited to the amounts shown on the "Limiting Gate Opening" curve.

When the headwater elevation rises or falls to 14.5, the gates will become stationary. When the headwater elevation falls to 14.2, the gates will close at six inches per minute.

During the dry condition, the high setting is used.

When the headwater elevation rises to 15.8, the gates will open at six inches per minute.

When the headwater elevation rises or falls to 15.5, the gates will become stationary.

When the headwater elevation falls to 15.2, the gates will close at six inches per minute.

During low water periods, releases will be made to meet downstream irrigation requirements even though necessary releases will violate the optimum headwater criteria.

FLOOD DISCHARGE CHARACTERISTICS

	Design
Discharge Rate	<u>2960</u> cfs

* % SPF

Headwater Elevation 16.6 feet

Tailwater Elevation 16.1 feet

Type Discharge uncontrolled
 submerged

*Structure designed to pass the one in ten year flood.

DESCRIPTION OF STRUCTURE

Type reinforced concrete, gated spillway

Weir Crest

 Net Length 48.0 feet

 Elevation 3.5 feet

Service Bridge Elevation 20.5 feet

Water Level which will by-pass structure 20.5 feet

Gates

 Number 2

 Size 12.1 ft. high by 24.8 ft. wide

 Type vertical lift

 Bottom elevation of gates, full open 18.4 feet

 Top elevation of gates, full closed 15.5 feet

 Control Automatic, on-site control and remote computer control

 Lifting Mechanism

 Normal power source commercial electricity

 Emergency power source LP gas engine driven generator

 Type Hoist hydraulic cylinder actuated by electric motor
 driven pump, and connected to gates by steel cables

Date of Transfer: July 12, 1967

ACCESS: via State Road #833 and gravel road in Indian Reservation

HYDRAULIC AND HYDROLOGIC MEASUREMENTS

Water Level Remote digital headwater and tailwater recorders

Gate Position Recorder Remote digital recorder on all gates

DEWATERING FACILITIES

Storage West Palm Beach Field Station

Type Steel needle beam and aluminum needles

Size and Number (Per bay)

Upstream needles 4 @ 5' wide, 2 @ 2' wide
beam 33WF 200, 26'-11" long

Downstream same