

CARLTON ROAD CONTROL STRUCTURE

G-79

This structure is a triple barreled corrugated metal pipe culvert, located at the junction of C-23 and C-24, about 15 miles southwest of Fort Pierce. Control is effected by gates mounted on a riser pipe on the west (C-23) end of the culverts. The new structure was completed in June 1999 to replace an existing structure at this location.

PURPOSE

This structure acts as a drainage structure for C-23 between G-78 and G-79, and it permits flow to be transferred from C-23 to C-24 as required.

OPERATION

This structure is used to control stage in C-23 between G-78 and G-79. It adds flexibility to the system by allowing transfers of water from C-23 to C-24 when the western portion of the former basin is well in excess of optimum and the C-24 basin has capacity to spare. It is also used during dry periods when the C-23 basin has ample water and the C-24 and/or C-25 basins are deficient.

Flood Condition, normally May 15 to October 15:

Set the top of the upper gate at elevation 19.5, or other position as needed.

Low-water condition, normally October 15 to May 15:

Set the top of the upper gate at elevation 22.0, or other position as needed.

Each culvert is controlled by two gates. An upper gate and a lower gate. Both gates can be raised for releasing water from bottom of gates under high flow conditions. When the lower gate is in the closed position, the upper gate can be adjusted up or down as needed to maintain the desired upstream water level.

FLOOD DISCHARGE CHARACTERISTICS

	Design
Discharge Rate	<u>195</u> cfs
	<u>10</u> year storm

