Concept design drawings for the alternatives in the final array are presented in the following pages. A detailed design for the recommended plan (Alternative 2-6D) is being developed and will be included upon finalization of this report.
**North Channel Section**

**Typical Bank & Bottom Protection Section**

**Typical Weir Section**

**Conceptual Fish Passage System**
CONCEPTUAL FISH PASSAGE SYSTEM
North Channel Section

Stepper bottom elevation to meet pool depth requirements (1' depth for sturgeon)

~130'(10% maximum slope)

El. 112.0 existing normal pool

Ga Abutment

SC Abutment

Riprap & bedding stone channel liner

7' depth for sturgeon

Meet pool depth requirements

Stepped bottom elevation to

1' vertical step @ each transition

Rock weir crest elevation

Conceptual fish passage system

Typical weir section

Typical bank & bottom protection section

US Army Corps of Engineers

South Atlantic Division

Alternative 2A (107' weir crest)

New Savannah Bluff Lock and Dam

Fish passage system

AlTERNATIVES 2-3 (107' WEIR CREST)
CONCEPTUAL FISH PASSAGE SYSTEM
North Channel Section

- 111.6 Normal Pool
- Floodplain Bench 275' wide excavated to ELEV 110
- Stepped bottom elevation to meet pool depth requirements (7' depth for sturgeon)
- Rock weir crest elevation 1' vertical step at each transition
- Riprap & bedding stone channel liner
- 12" bedding stone
- 24" armor stone (CDOT type 1 typical)
- Geotextile

Conceptual Fish Passage System

Typical Bank & Bottom Protection Section

Typical Weir Section
CONCEPTUAL FISH PASSAGE SYSTEM
CURRENT DAM STRUCTURE

2
2
1

UPSTREAM TOE OF WEIR
DOWNSTREAM BANK PROTECTION

BANK EROSION PROTECTION

WEIR LENGTH ~870 FT
CHANNEL WIDTH ~500 FT
CREST OF CONTROL WEIR - 10' WIDTH
SPACED AT 60' O.C.
CREST OF POOL WEIRS

EL. 93.8
EL. 95.0
EL. 96.2
EL. 97.4
EL. 98.6
EL. 99.8
EL. 101.0
EL. 102.2
EL. 103.4
EL. 104.6
EL. 105.8
EL. 107.0
EL. 92.6

SILL ELEV 92.0

2x 50' GATES

EXCAVATE DIVERSION CHANNEL TO ELEVATION 92

EXISTING PARKING AREA

CONCEPTUAL FISH PASSAGE SYSTEM

FISHERY BASIN STRUCTURE

GEORGIA TERRACE - 1' BELOW CENTER CHANNEL
SOUTH CAROLINA TERRACE - 1' ABOVE CENTER CHANNEL

CENTER CHANNEL - 150 FT WIDTH

2-LANE ACCESS ROAD TO CONTROL BLDG

BAFFLE BLOCKS (GENERATOR SLAB @ EL. 123')
FUEL TANK & EMERGENCY GENERATOR
CONTROL ROOM

GEORGIA
SOUTH CAROLINA

CONCEPTUAL FISH PASSAGE SYSTEM
SECTION A-A TYPICAL AT PIERS 1, 2, 3

SECTION B-B

NOTES:
1. VERTICAL LIFT GATES OPERATED BY ELECTRIC MOTOR

VERTICAL LIFT GATES OPERATED BY ELECTRIC MOTOR