

JOINT
PUBLIC NOTICE

CHARLESTON DISTRICT, CORPS OF ENGINEERS
69A Hagood Avenue
Charleston, South Carolina 29403-5107
and the
S.C. DEPARTMENT OF HEALTH AND ENVIRONMENTAL CONTROL
OFFICE OF OCEAN AND COASTAL RESOURCE MANAGEMENT
1362 McMillan Avenue, Suite 400
Charleston, South Carolina 29405

REGULATORY DIVISION

Refer to: P/N # 2013-00244-1T

29 March 2013

Pursuant to Section 10 of the Rivers and Harbors Act of 1899 (33 U.S.C. 403), Sections 401 and 404 of the Clean Water Act (33 U.S.C. 1344), and the South Carolina Coastal Zone Management Act (48-39-10 et.seq.) an application has been submitted to the Department of the Army and the S.C. Department of Health and Environmental Control by

U.S. FISH AND WILDLIFE SERVICE (USFWS)
SAVANNAH NATIONAL WILDLIFE REFUGE (NWR)
C/O LINDSAY COLDIRON
694 BEECH HILL LANE
HARDEEVILLE, SOUTH CAROLINA 29927

for a permit to excavate and fill wetlands within the managed tidal wetlands located on the

LITTLE BACK RIVER

at Pool 4/5 in the Savannah National Wildlife Refuge located off of U.S. Highway 170 near Hardeeville in Jasper County, South Carolina (Latitude 32.181714/ Longitude -81.108426)

NOTICE

is hereby given that written statements regarding the proposed work will be received by the **Corps** until

15 Days from the Date of this Notice,

and **SCDHEC** will receive written statements regarding the proposed work until

30 Days from the Date of this Notice

from those interested in the activity and whose interests may be affected by the proposed work.

The proposed work consists of the construction of a new cross-embankment through an existing 310 acre managed tidal impoundment cell known as Pool 4/5 at the Savannah National Wildlife Refuge (NWR). The work will occur by first excavating 1.31 acres (19,760 cy) of wetlands and waters thereby creating two new canals. The 19,760 cy of excavated material will be used as the fill material to construct the new cross-embankment. Approximately 3.02 acres of wetlands and waters within the managed tidal impoundment will be impacted for the new proposed cross-embankment.

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The new embankment will divide the current 310 acre tidal impoundment cell, known as Pool 4/5, into a 190 acre unit (Pool 4) and a 120 acre (Pool 5) unit. The proposed new cross-embankment will be 2,470 linear feet and will connect to the perimeter embankments on either side of the impoundment. The proposed new embankment will have a top width of 18', a bottom width of 48', and a height of approximately 6'. The two new canals, which were excavated for fill material, will be located on both sides of the new cross-embankment and will each be 2,330 feet in length. The canals will have a top width of 30', bottom width of 6', and a depth of 4'. A concrete double-spillway box will be added to the proposed cross-embankment to allow for flow between the new Pool 4 and Pool 5 impoundments.

The purpose of the proposed project is to enhance water management capabilities of the managed tidal impoundment by dividing the existing Pool 4/5 into two smaller units to improve habitat for wetland dependent species. The proposed project will allow for more effective water management across the area.

According to the applicant, the congressionally mandated mission of the Savannah NWR is to provide foraging and wintering habitats for migrating and wintering waterbirds and other wetland dependant species. The biological and ecological needs of these varied species can be better provided once the impoundment is divided into smaller, more manageable units and adequate water control is restored. The project includes rehabilitation of 310 acres located within a 6,000 acre moist soil management area at Savannah NWR. Historically, Pools 4/5 were part of a rice plantation and had varied water management. Currently, Pool 4/5 is managed as a single unit, but it is difficult to manage due to its large size.

The proposed project objective addresses the significant elevation differences between the western end (Pool 4) and the eastern end (Pool 5) of the impoundment with the latter being higher. The difference in elevation restricts dynamic wetland management due to the variances in water elevations across the impoundment when water is delivered into and across the system. Water in Pool 4 is adequately managed through an existing rice trunk located on the main embankment off of Back River. Pool 4 is currently being managed for target freshwater aquatic plant species. The higher elevation in Pool 5 has resulted in non-target and woody vegetation growth throughout this area due to the inability to adequately flood water across this area. The higher elevation in Pool 5 also creates a problem with drainage through the existing concrete structure located along the freshwater canal resulting in the necessity to install a riser-board structure on the proposed embankment. The new riser-board structure will increase the management capabilities by allowing separate manipulation of the two impoundments.

The new Pool 4 and Pool 5 impoundments will be managed as moist soil management units as described in the revised 2013 Savannah NWR Annual Habitat Work Plan, Pool 5 will be intensively manipulated annually over several years to convert current vegetation cover to more desirable moist soil plant species such as smart weeds, panic grass, and millets. The suite of conditions resulting from this enhancement will provide excellent habitat for wintering and migrating waterfowl and a variety of other wetland dependent species. Utilization by wintering waterfowl in this impoundment is expected to increase 90% compared to its current condition. Pool 4 will continue to be manipulated on an annual basis to provide desirable habitat for wintering and migrating water fowl.

According to the applicant, the project impacts have been minimized by locating the excavation and fill for the new embankment within the footprint of a remnant embankment. There will also be no net loss of wetlands or double handling of any material during the proposed work. In addition, the applicant provided a construction sequence of how the work will occur that will further minimize impacts associated with the proposed work. The construction sequence is as follows: 1) Mobilize equipment and materials; 2) Dewater Pools 4 and 5; 3) Install erosion and sediment control measures; 4) excavate and prepare keyway of new embankment; 5) excavate borrow areas and utilize excavated material for embankment construction; 6) install new water control structures; 7) Fine grade, seed, and mulch new embankment; and 8) demobilize equipment.

The applicant is not proposing compensatory mitigation for the proposed project because the project is designed to enhance wetland habitat through better water management capabilities. In addition, the connectivity between wetland provided by the new water control structures will improve water quality through overall circulation.

NOTE: Plans depicting the work described in this notice are available and will be provided, upon receipt of a written request, to anyone that is interested in obtaining a copy of the plans for the specific project. The request must identify the project of interest by public notice number and a self-addressed stamped envelope must also be provided for mailing the drawings to you. Your request for drawings should be addressed to the

**U.S. Army Corps of Engineers
ATTN: REGULATORY DIVISION
69A Hagood Avenue
Charleston, South Carolina 29403-5107**

The District Engineer has concluded that the discharges associated with this project, both direct and indirect, should be reviewed by the South Carolina Department of Health and Environmental Control in accordance with provisions of Section 401 of the Clean Water Act. As such, this notice constitutes a request, on behalf of the applicant, for certification that this project will comply with applicable effluent limitations and water quality standards. The work shown on this application must also be certified as consistent with applicable provisions the Coastal Zone Management Program (15 CFR 930). The District Engineer will not process this application to a conclusion until such certifications are received. The applicant is hereby advised that supplemental information may be required by the State to facilitate the review.

This notice initiates the Essential Fish Habitat (EFH) consultation requirements of the Magnuson-Stevens Fishery Conservation and Management Act. Implementation of the proposed project would impact 4.33 acres of substrates and emergent wetlands utilized by various life stages of species comprising the red drum, shrimp, and snapper-grouper management complexes. Our initial determination is that the proposed action would not have a substantial individual or cumulative adverse impact on EFH or fisheries managed by the South Atlantic Fishery Management Council and the National Marine Fisheries Service (NMFS). Our final determination relative to project impacts and the need for mitigation measures is subject to review by and coordination with the NMFS.

The District Engineer has consulted the most recently available information and has determined that the project will have no effect on any Federally endangered, threatened, or proposed species and will not result in the destruction or adverse modification of designated or proposed critical habitat. This public notice serves as a request to the U.S. Fish and Wildlife

Service and the National Marine Fisheries Service for any additional information they may have on whether any listed or proposed endangered or threatened species or designated or proposed critical habitat may be present in the area which would be affected by the activity, pursuant to Section 7(c) of the Endangered Species Act of 1973 (as amended).

Pursuant to Section 106 of the National Historic Preservation Act (NHPA), this public notice also constitutes a request to Indian Tribes to notify the District Engineer of any historic properties of religious and cultural significance to them that may be affected by the proposed undertaking.

In accordance with the NHPA, the District Engineer has also consulted the latest published version of the National Register of Historic Places for the presence or absence of registered properties, or properties listed as being eligible for inclusion therein, and this worksite is not included as a registered property or property listed as being eligible for inclusion in the Register. To insure that other cultural resources that the District Engineer is not aware of are not overlooked, this public notice also serves as a request to the State Historic Preservation Office to provide any information it may have with regard to historic and cultural resources.

Any person may request, in writing, within the comment period specified in this notice, that a public hearing be held to consider this application. Requests for a public hearing shall state, with particularity, the reasons for holding a public hearing.

The decision whether to issue a permit will be based on an evaluation of the probable impact including cumulative impacts of the activity on the public interest and will include application of the guidelines promulgated by the Administrator, Environmental Protection Agency (EPA), under authority of Section 404(b) of the Clean Water Act and, as appropriate, the criteria established under authority of Section 102 of the Marine Protection, Research and Sanctuaries Act of 1972, as amended. That decision will reflect the national concern for both protection and utilization of important resources. The benefit which reasonably may be expected to accrue from the project must be balanced against its reasonably foreseeable detriments. All factors which may be relevant to the project will be considered including the cumulative effects thereof; among those are conservation, economics, aesthetics, general environmental concerns, wetlands, historic properties, fish and wildlife values, flood hazards, flood plain values, land use, navigation, shoreline erosion and accretion, recreation, water supply and conservation, water quality, energy needs, safety, food and fiber production and, in general, the needs and welfare of the people. A permit will be granted unless the District Engineer determines that it would be contrary to the public interest. In cases of conflicting property rights, the Corps of Engineers cannot undertake to adjudicate rival claims.

The Corps of Engineers is soliciting comments from the public; Federal, state, and local agencies and officials; Indian Tribes; and other interested parties in order to consider and evaluate the impacts of this activity. Any comments received will be considered by the Corps of Engineers to determine whether to issue, modify, condition or deny a permit for this project. To make this decision, comments are used to assess impacts on endangered species, historic properties, water quality, general environmental effects, and the other public interest factors listed above. Comments are used in the preparation of an Environmental Assessment and/or an Environmental Impact Statement pursuant to the National Environmental Policy Act. Comments are also used to determine the need for a public hearing and to determine the overall public interest of the activity.

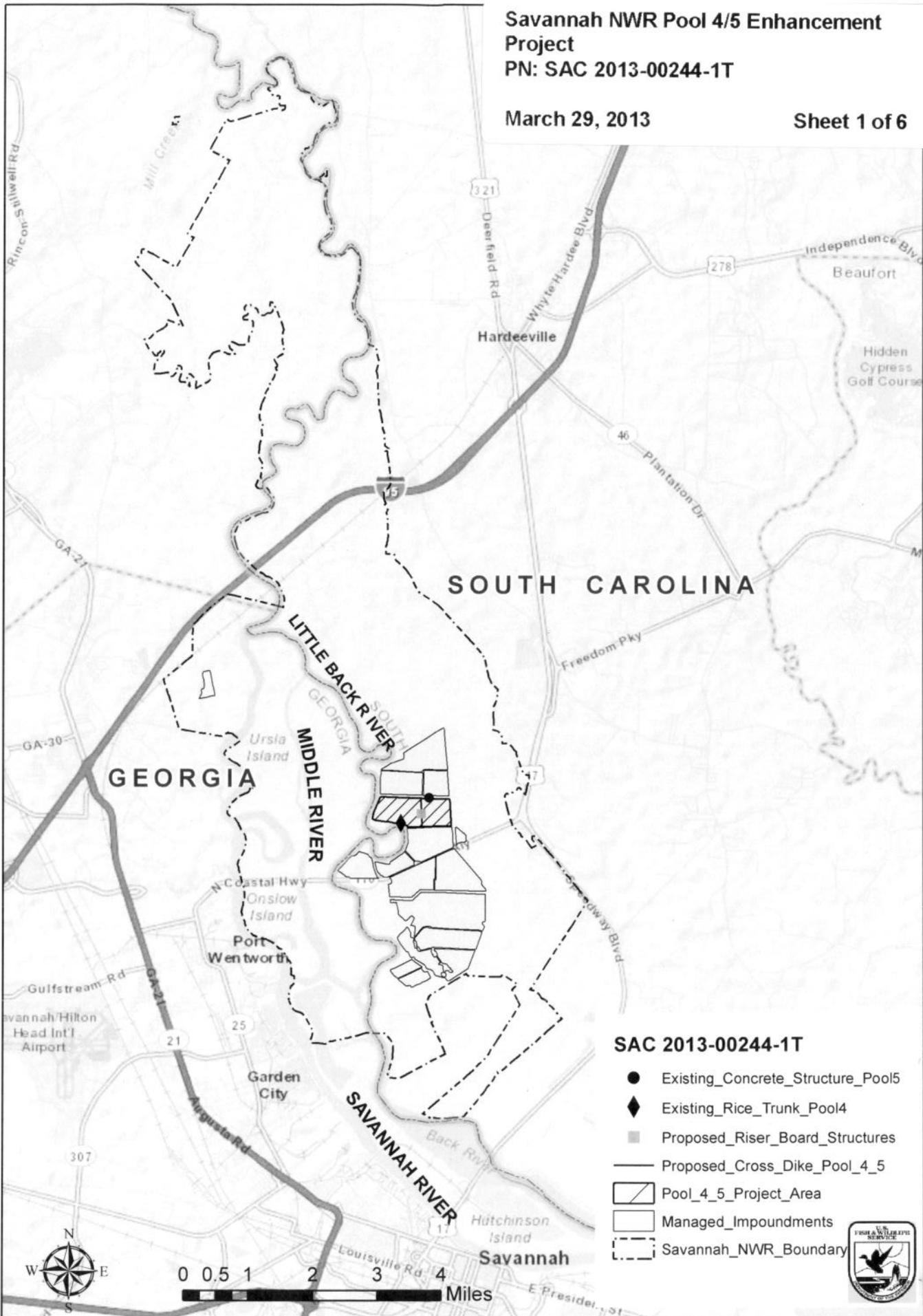
If there are any questions concerning this public notice, please contact **Tracy Dotolo Sanders** at 843-329-8044 or toll free at 1-866-329-8187.

Savannah NWR Pool 4/5 Enhancement Project

PN: SAC 2013-00244-1T

March 29, 2013

Sheet 1 of 6



SAC 2013-00244-1T

- Existing_Concrete_Structure_Pool5
- ◆ Existing_Rice_Trunk_Pool4
- Proposed_Riser_Board_Structures
- Proposed_Cross_Dike_Pool_4_5
- ▨ Pool_4_5_Project_Area
- Managed_Impoundments
- - - Savannah_NWR_Boundary



Savannah NWR Pool 4/5 Enhancement Project

PN: SAC 2013-00244-1T

March 29, 2013

Sheet 2 of 6

Total acreage of project area Pool 4/5 = 310 Acres
Size of units after completion: Pool 4 = 190 Acres; Pool 5 = 120 Acres

SITE LOCATION

SAC 2013-00244-1T

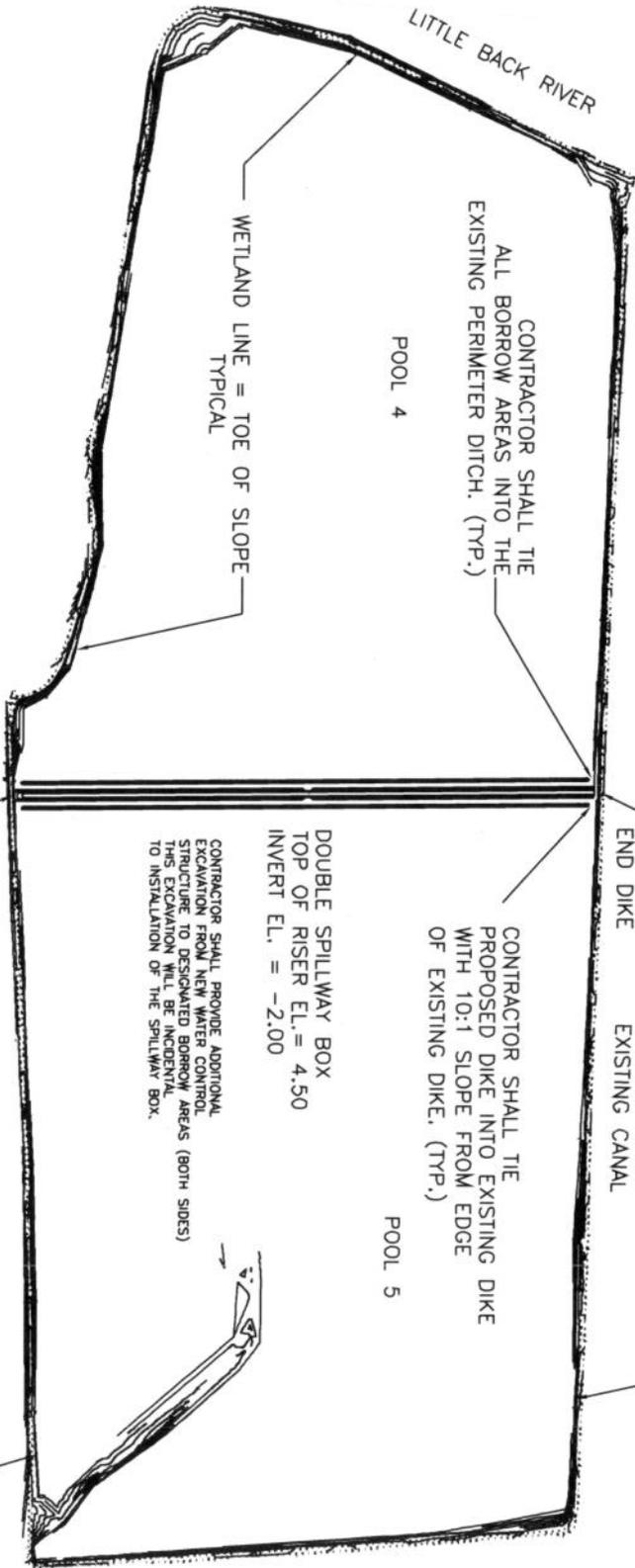
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- ◆ Existing_Rice_Trunk_Pool4
- Proposed_Riser_Board_Structures
- Proposed_Cross_Dike_Pool_4_5
- ▨ Pool_4_5_Project_Area
- Managed_Impoundments
- - - Savannah_NWR_Boundary



0 0.125 0.25 0.5 0.75 1 Miles



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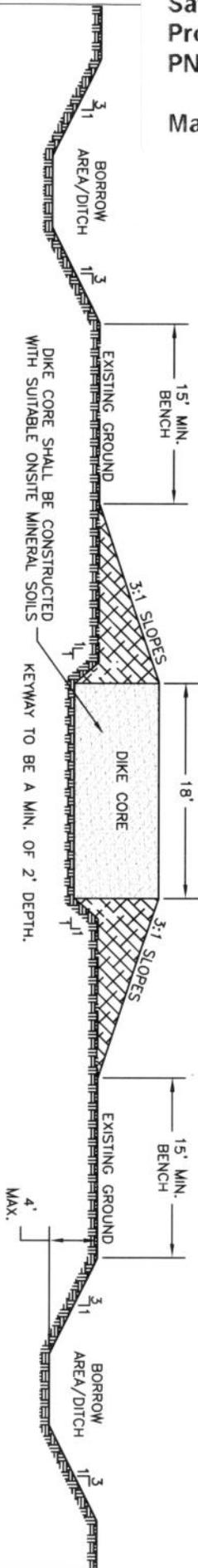
- CONSTRUCTION SEQUENCE:
1. MOBILIZE EQUIPMENT AND MATERIALS.
 2. DEMATER POOLS 4 AND 5.
 3. INSTALL EROSION AND SEDIMENT CONTROL MEASURES.
 4. EXCAVATE KEYWAY OF NEW DIKE.
 5. EXCAVATE BORROW AREAS AND UTILIZE EXCAVATED MATERIAL FOR CONSTRUCTION OF NEW DIKE.
 6. INSTALL NEW WATER CONTROL STRUCTURES.
 7. FINE GRADE, MULCH AND SEED.

SCALE 1"=750'



THIS DRAWING FOR PERMIT PURPOSES ONLY.
 NOT TO BE USED FOR BIDDING OR CONSTRUCTION

PROJECT NUMBER	01-21-13	PROJECT NAME	SAVANNAH NWR
DESIGNED BY	JAGPBR	PROJECT NO.	01-SC-52-01
CHECKED BY	JAGPBR	PROJECT LOCATION	SAVANNAH NWR
DATE	01-21-13	PROJECT NO.	01-SC-52-01
APPROVED BY	JAGPBR	PROJECT NO.	01-SC-52-01
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APPROVED BY	JAGPBR	PROJECT NO.	01-SC-52-01
DATE	01-21-13	PROJECT NO.	01-SC-52-01



EXTERIOR AND INTERIOR SLOPES SHALL BE CONSTRUCTED UTILIZING SUITABLE ORGANIC AND/OR MINERAL SOILS EXCAVATED FROM DESIGNATED BORROW AREA AND/OR DIKE KEYWAY. DIKE SIDE SLOPES SHALL VARY IN ORDER TO STAY WITHIN THE FOOTPRINT TO THE EXISTING DIKE.

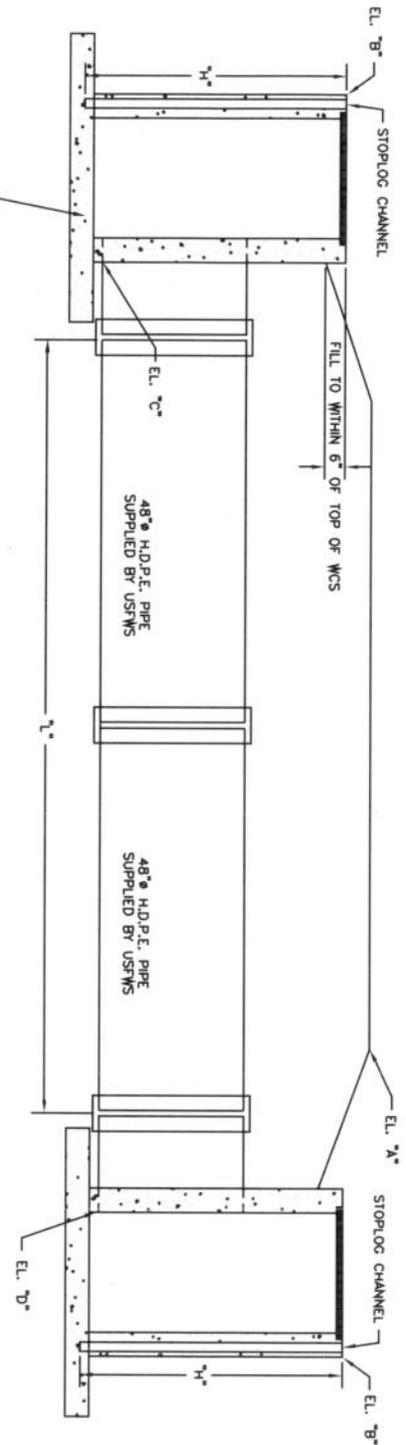
TYPICAL SECTION OF DIKE
NOT TO SCALE

ORGANIC AND/OR MINERAL SOILS EXCAVATED FROM DESIGNATED BORROW AREA OR DIKE KEYWAY THAT ARE UNSUITABLE FOR DIKE CONSTRUCTION SHALL BE DEPOSITED IN THE DESIGNATED BORROW AREA. NO SPECIFIC COMPACTION SHALL BE REQUIRED OF THE UNSUITABLE MATERIALS. HOWEVER, THE BORROW AREA SHALL BE GRADED TO ACHIEVE SIDE SLOPES OF 3:1 OR FLATTER. THE BOTTOM WIDTH OF THE BORROW AREA WILL BE VARIABLE.

IMPACTS
FILL PLACED IN WETLAND : 14,887.0 CYD.
2.72 ACRES
EXCAVATION IN WETLAND : 19,760 CYD.
3.02 ACRES

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APPROVAL NUMBER	PROJECT NUMBER	PROJECT TITLE	SHEET NUMBER
01-21-13	DU-SC-52-01	SAVANNAH NWR	5 OF 6
DATE	PROJECT LOCATION	PROJECT TITLE	SHEET NUMBER
01-21-13	SAVANNAH NWR	SAVANNAH NWR	5 OF 6
DESIGNER	PROJECT NUMBER	PROJECT TITLE	SHEET NUMBER
JASPER	DU-SC-52-01	SAVANNAH NWR	5 OF 6
APPROVAL NUMBER	PROJECT NUMBER	PROJECT TITLE	SHEET NUMBER
01-21-13	DU-SC-52-01	SAVANNAH NWR	5 OF 6
DATE	PROJECT LOCATION	PROJECT TITLE	SHEET NUMBER
01-21-13	SAVANNAH NWR	SAVANNAH NWR	5 OF 6
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JASPER	DU-SC-52-01	SAVANNAH NWR	5 OF 6



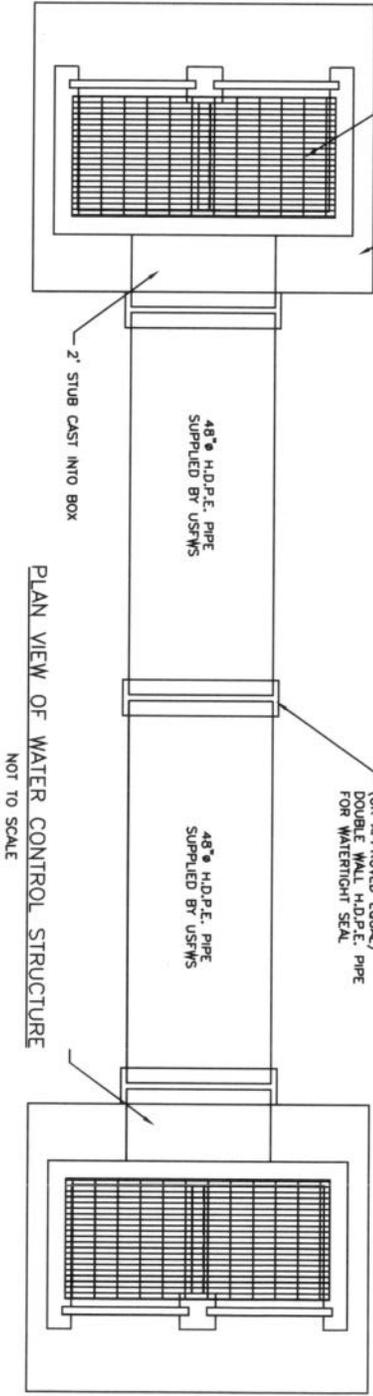
TYPICAL SECTION OF WATER CONTROL STRUCTURE
NOT TO SCALE

SAVANNAH NWR						
STRUCTURE	PIPE SIZE	EL. 'A'	EL. 'B'	EL. 'C'	EL. 'D'	NO. OF STOPLOGS
POOL 4 WCS	48"	5.0	4.5	-2.2	-2.2	15

ONE PIECE PRE-CAST CONCRETE RISER WITH BASE MANUFACTURED BY KNUFENS PRE-CAST OR AN APPROVED EQUAL.

ALUMINUM GRATE 3'-10" WIDE, 7'-4" LONG. GRATE TO BE SET FLUSH WITH TOP OF RISER BOX

INTEGRAL BELL-AND-SPIGOT JOINTS 48" DIAMETER ADS N-12 WT 1B (OR APPROVED EQUAL) DOUBLE WALL H.D.P.E. PIPE FOR WATERIGHT SEAL



THIS DRAWING FOR PERMIT PURPOSES ONLY.
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APPLICATION NUMBER SAVANNAH NWR PROJECT NO. DU-SG-52-01 PROJECT TITLE WATER CONTROL STRUCTURE RETAIL PROJECT LOCATION SAVANNAH NWR PROJECT NO. 32710.53.015 / 81'06.31.946" DRAWN BY JAMES RADER CHECKED BY JAMES RADER DATE 01-21-13	USFWS UNITED STATES FISH AND WILDLIFE SERVICE SAVANNAH WILDLIFE REFUGE 1000 W. BERRY AVE., SUITE 200 SAVANNAH, GA 31404	PROJECT NO. DU-SG-52-01 PROJECT TITLE WATER CONTROL STRUCTURE RETAIL PROJECT LOCATION SAVANNAH NWR PROJECT NO. 32710.53.015 / 81'06.31.946" DRAWN BY JAMES RADER CHECKED BY JAMES RADER SHEET 6 OF 6
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