

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 #SAC-2013-00837-2G

8 AUGUST 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

**MILLBROOK LIMITED PARTNERSHIP**  
**C/O JAMES RADER**  
**DUCKS UNLIMITED, INC**  
**3294 ASHLEY PHOSPHATE ROAD, SUITE 2A**  
**NORTH CHARLESTON, SC 29418**

for a permit to perform excavation and place fill material in wetlands; install water control structures with wing walls and bulkheads; and install a sheet pile bulkhead with rip rap in an existing managed tidal impoundment adjacent to

**MINIM CREEK AND THE ATLANTIC INTRACOASTAL WATERWAY (AIWW)**

at a location, within the existing impoundments of Annandale Plantation, located off of North Santee Road, off of US Highway 17 North, near Georgetown, Georgetown County, South Carolina. (Latitude 33.200278° - Longitude -79.283009°)

In order to give all interested parties an opportunity to express their views

**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 performing excavation in wetlands for construction of borrow canals and placing the excavated fill material in wetlands for construction of two embankments (cross-dikes); installation of four spillway boxes with 25' bulkheads and 8' wing walls for stabilization; and installation of one rice trunk for increased water circulation and

management capabilities in the existing impoundment. In addition, the applicant proposes to install 200 linear feet of vinyl sheet pile bulkhead with rip rap stabilization at the end of the structure for erosion control of the existing embankment on Minim Creek. The proposed total impacts to waters of the U. S. are approximately 12.75 acres, all within the existing managed tidal impoundments except for the sheet pile bulkhead on Minim Creek as shown on the attached plans. To minimize potential impacts the proposed work will be conducted in the dry and drawdown in the late winter and early spring. The applicant will perform the proposed work with a long reach excavator on tracks using wooden mats for stability. In addition, all fill material will be obtained from within the managed tidal impoundment fields and the embankment construction and canal excavation will be conducted simultaneously. Due to the nature of the proposed work which is management of the existing impoundments; since the project is being performed with grant money from the North America Wetland Conservation Act (NAWCA); the project is consistent with the habitat goals for The North American Waterfowl Management Plan, South Atlantic Migratory Bird Initiative and the Atlantic Coast Joint Venture; and since Annandale Plantation is protected under a conservation easement with Wetlands America Trust, the applicant has not proposed compensatory mitigation for the proposed work. The purpose of the proposed work as stated by the applicant is for enhancement of water circulation capability; improvement and diversification of habitats within the managed tidal impoundment for wildlife species; improved management capability; and minimization of negative impacts from failure of the perimeter embankment.

**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 (12.75) acres of estuarine 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. This worksite is included as a registered property in the National Register. The nature of the proposed work is for management and maintenance of the existing impoundments which has been ongoing in these existing impoundments since they were created. In addition, if these existing impoundments are not maintained, they will no longer exist. Therefore, the Charleston District has determined that the proposed work will have "no potential to cause effect" on the historic property. 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 Mary Hope Green at 843-329-8044 or toll free at 1-866-329-8187.



**DUCKS**

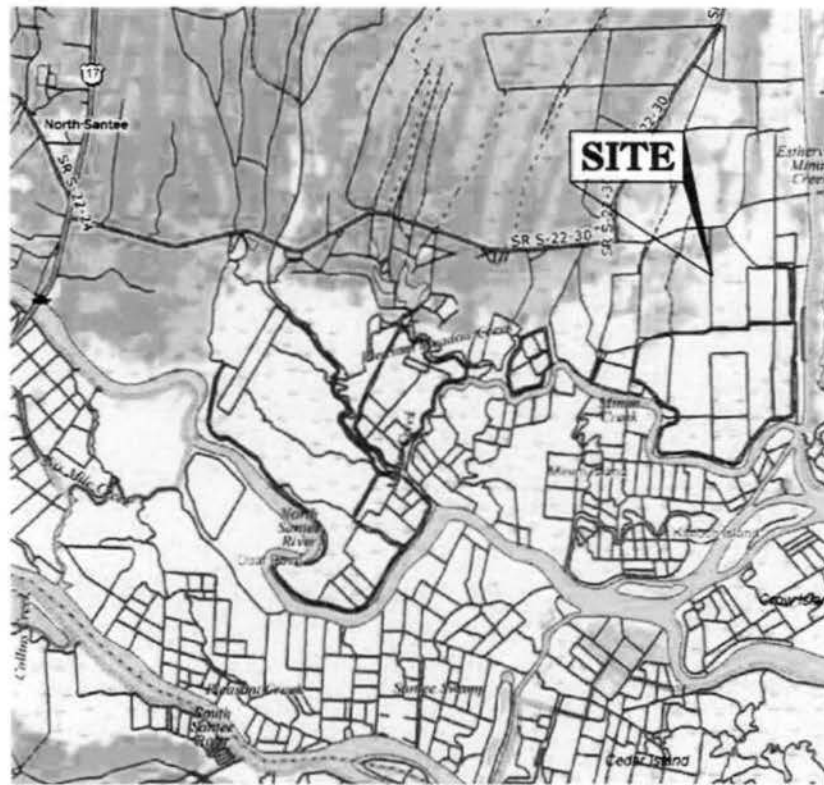
**UNLIMITED**

# ANNANDALE PLANTATION GEORGETOWN COUNTY, SOUTH CAROLINA

**OWNED BY**

**MILLBROOK PLANTATION LIMITED**

**PARTNERSHIP**



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SCDHEC-OCRM CRITICAL LINE  
PLAT APPROVED 6-17-13 BY  
CHRISTOPHER STOUT.

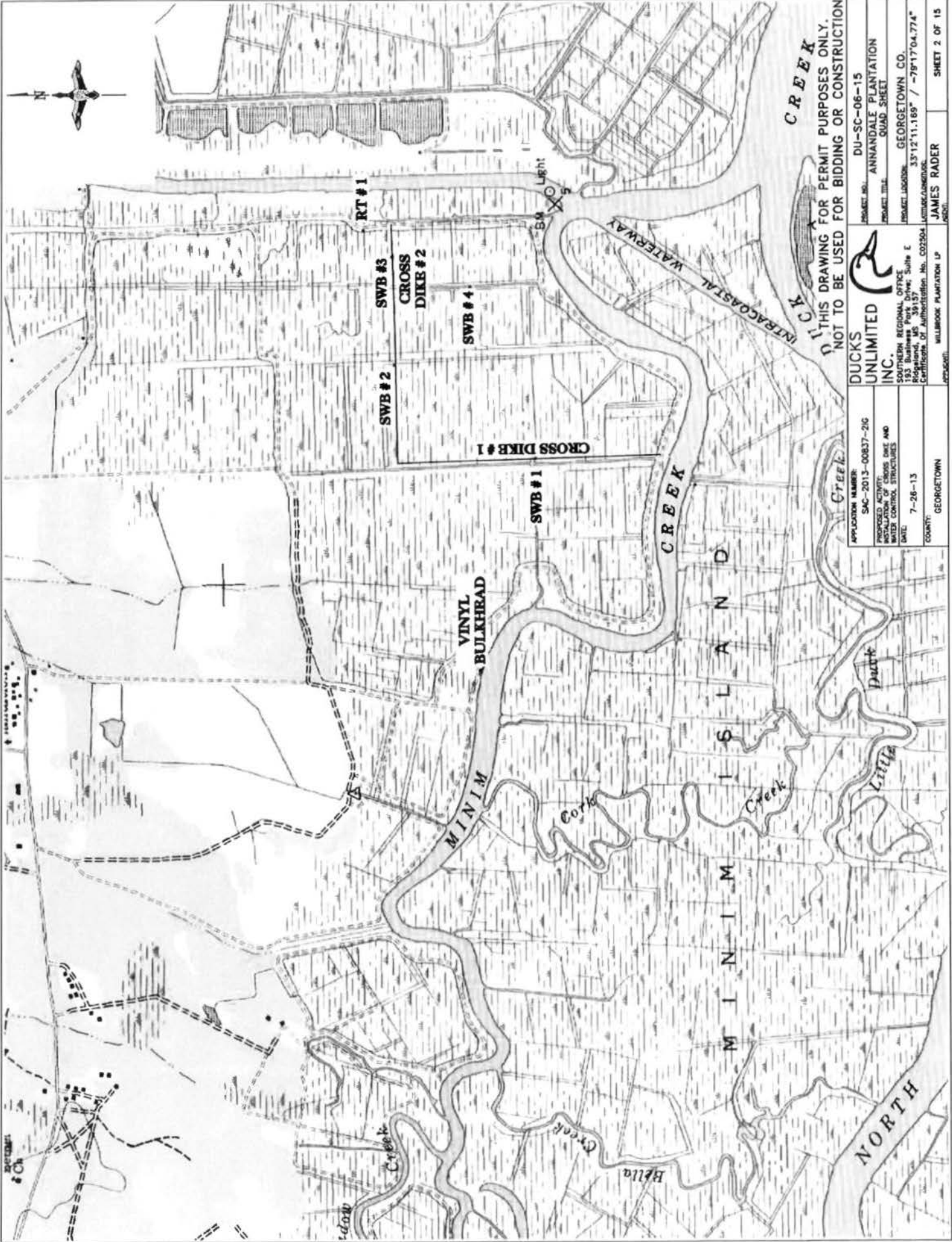
**VICINITY MAP**

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

### CAUTION

The engineer preparing these plans will not be responsible for, or liable for, unauthorized changes to or uses of these plans. All changes to the plans must be in writing and must be approved by the preparer of these plans.

APPLICATION NUMBER: SAC-2013-00837-2IG	<b>DUCKS UNLIMITED INC.</b> 	PROJECT NO.: DU-SC-06-15
PROPOSED ACTIVITY: INSTALLATION OF CROSS DIKE AND WATER CONTROL STRUCTURES		PROJECT TITLE: ANNANDALE PLANTATION OVERALL SITE PLAN
DATE: 7-26-13	SOUTHERN REGIONAL OFFICE 193 Business Park Drive, Suite E Ridgeland, MS 39157 Certificate Of Authorization No. C02504	PROJECT LOCATION: GEORGETOWN CO.
COUNTY: GEORGETOWN	MILLBROOK PLANTATION LP	LATITUDE/LONGITUDE: 33°12'11.169" / -79°17'04.774"
		JAMES RADER
		SHEET 1 OF 15

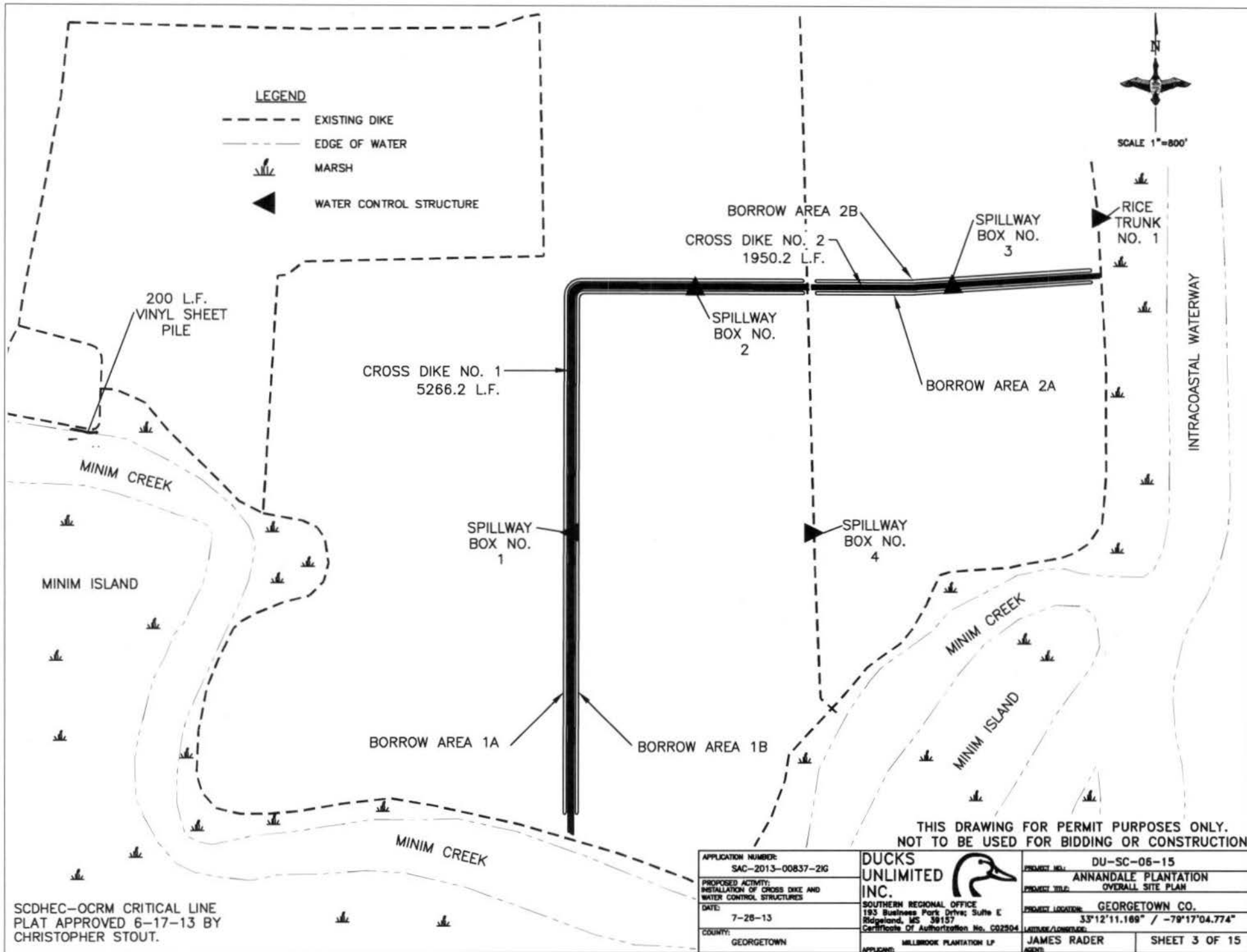


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NOT TO BE USED FOR BIDDING OR CONSTRUCTION

APPLICATION NUMBER: SAC-2013-00837-2/G	PROJECT NO.: DU-SC-06-15
PROPOSED ACTIVITY: INSTALLATION OF CROSS DIKE AND WATER CONTROL STRUCTURES	PROJECT TITLE: ANNANDALE PLANTATION SQUAD SHEET
DATE: 7-26-13	PROJECT LOCATION: GEORGETOWN CO.
COUNTY: GEORGETOWN	CERTIFICATE OF AUTHORIZATION NO.: C02204
	PROJECT LOCATION: 33°12'11.169" / -79°17'04.774"
	CONTRACTOR: JAMES RADER
	PLANTATION: WILLBROOK PLANTATION LP
	SHEET 2 OF 15

**DUCKS UNLIMITED INC.**  
SOUTHERN REGIONAL OFFICE  
193 Business Park Drive, Suite E  
Ridgeland, MS 39157  
Certification of Authorization No. C02204

ANNANDALE PLANTATION  
SQUAD SHEET



**LEGEND**

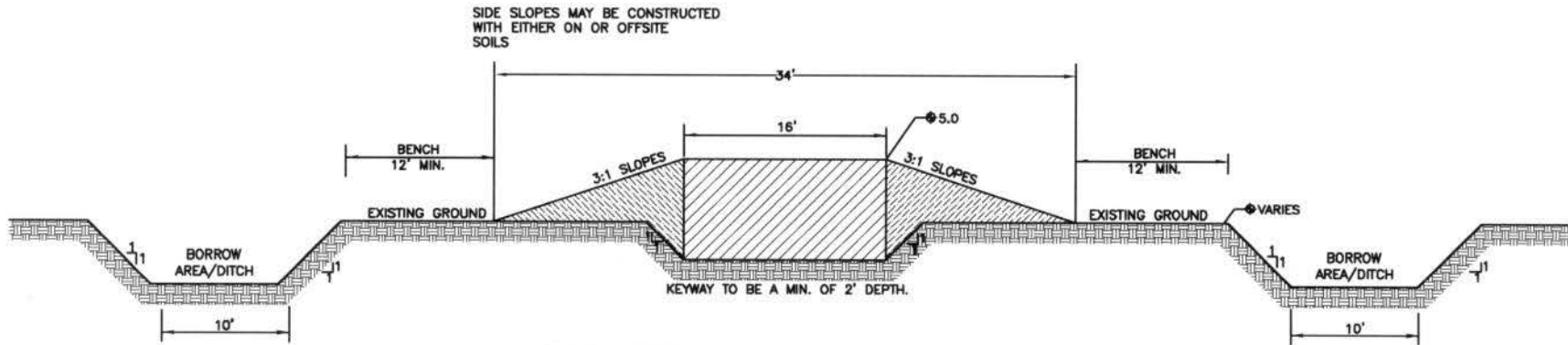
- EXISTING DIKE
- - - EDGE OF WATER
- ▬ MARSH
- ◀ WATER CONTROL STRUCTURE

SCALE 1"=800'

SCDHEC-OCRM CRITICAL LINE  
 PLAT APPROVED 6-17-13 BY  
 CHRISTOPHER STOUT.

THIS DRAWING FOR PERMIT PURPOSES ONLY.  
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APPLICATION NUMBER: SAC-2013-00837-2IG	<b>DUCKS UNLIMITED INC.</b>  SOUTHERN REGIONAL OFFICE 193 Business Park Drive, Suite E Ridgeland, MS 39157 Certificate Of Authorization No. C02904	PROJECT NO.: DU-SC-06-15
PROPOSED ACTIVITY: INSTALLATION OF CROSS DIKE AND WATER CONTROL STRUCTURES		PROJECT TITLE: ANNANDALE PLANTATION OVERALL SITE PLAN
DATE: 7-28-13		PROJECT LOCATION: GEORGETOWN CO.
COUNTY: GEORGETOWN	APPLICANT: MILLBROOK PLANTATION LP	LATITUDE/LONGITUDE: 33°12'11.169" / -79°17'04.774"
		JAMES RADER
		SHEET 3 OF 15



TYPICAL SECTION OF CROSS DIKE 1 AND 2  
NOT TO SCALE

CROSS DIKE NO. 1 IMPACTS

CROSSDIKE NO. 1 4.61 AC. / 22,430 CYD BORROW AREA 1A  
2.37 AC./14,468 CYD  
BORROW AREA 1B 2.31 AC. / 14,005 CYD

CROSS DIKE NO. 2 IMPACTS

CROSS DIKE 2 1.71 AC. / 8,306 CYD  
BORROW AREA 2A 0.86 AC. / 5198 CYD  
BORROW AREA 2B 0.86 AC. / 5,191 CYD

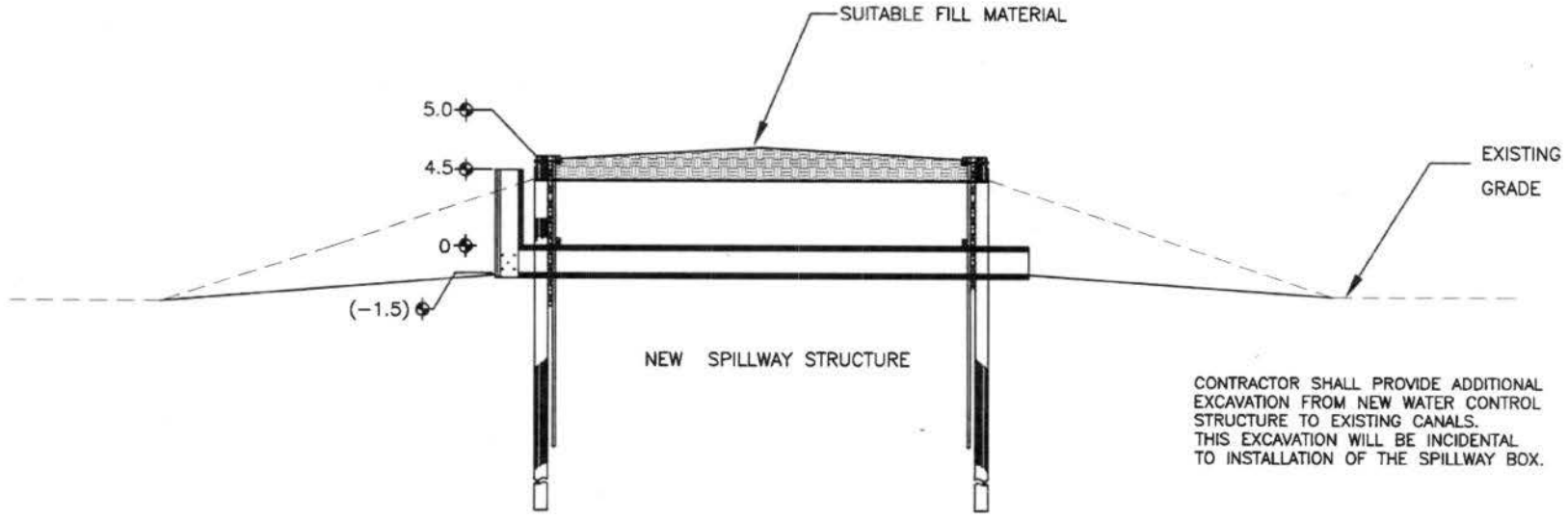
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NOT TO BE USED FOR BIDDING OR CONSTRUCTION

APPLICATION NUMBER: SAC-2013-00837-2IG	<b>DUCKS UNLIMITED INC.</b>  SOUTHERN REGIONAL OFFICE 193 Business Park Drive, Suite E Ridgeland, MS 39157 Certificate Of Authorization No. C02504	PROJECT NO.: DU-SC-06-15
PROPOSED ACTIVITY: INSTALLATION OF CROSS DIKE AND WATER CONTROL STRUCTURES		PROJECT TITLE: ANNANDALE PLANTATION CROSS DIKE SECTION AND IMPACTS
DATE: 7-26-13	COUNTY: GEORGETOWN	PROJECT LOCATION: GEORGETOWN CO. 33°12'11.169" / -79°17'04.774"
APPLICANT: MILLBROOK PLANTATION LP		LATITUDE/LONGITUDE: JAMES RADER SHEET 4 OF 15






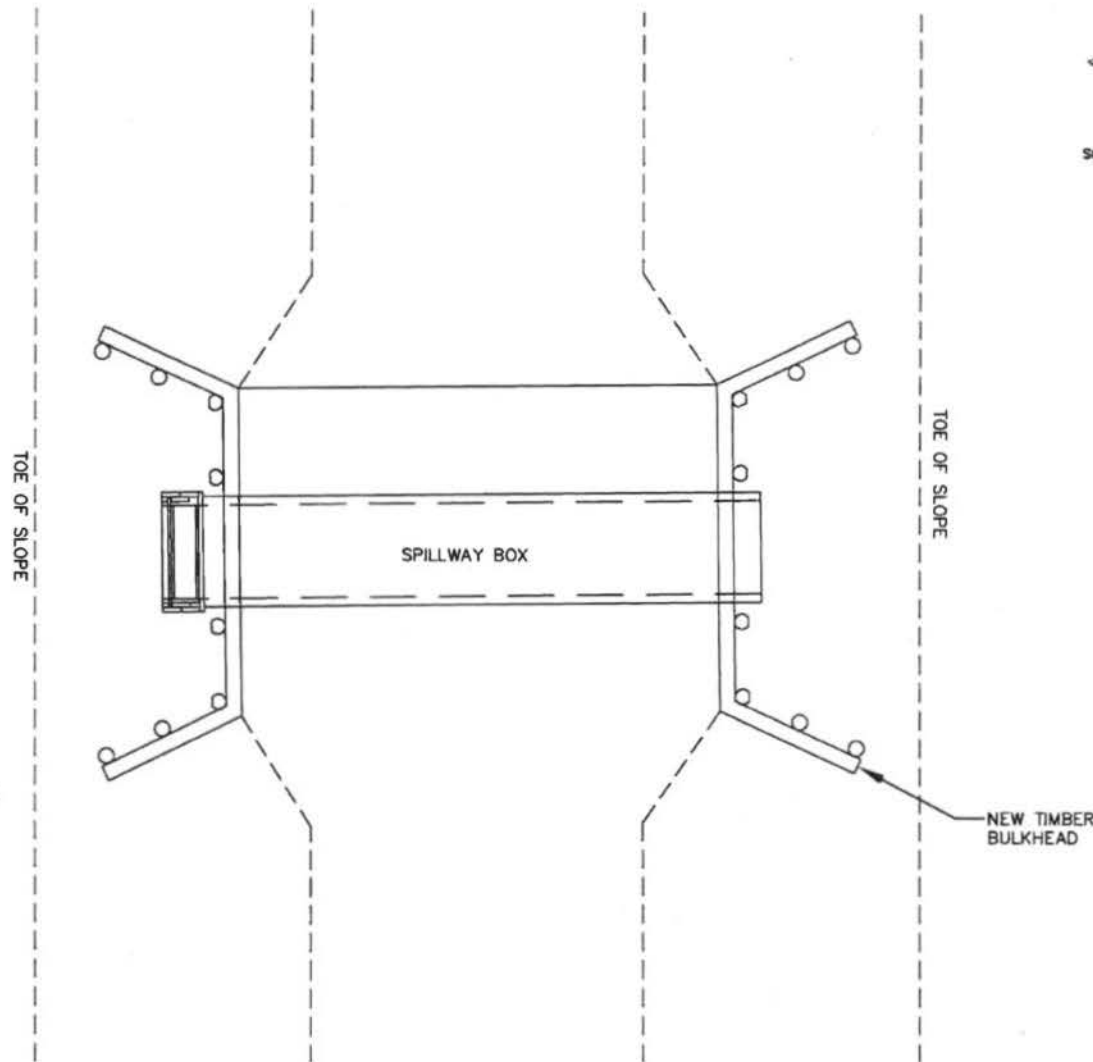
SCALE 1"=10'



TYPICAL SPILLWAY BOX NO. 1-3 SECTION  
 INSTALLED IN CROSS-DIKE 1 AND 2  
 SCALE 1"=10'

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APPLICATION NUMBER: SAC-2013-00837-2IG	<b>DUCKS UNLIMITED INC.</b>  SOUTHERN REGIONAL OFFICE 193 Business Park Drive, Suite E Ridgeland, MS 39157 Certificate Of Authorization No. C02504	PROJECT NO.: DU-SC-06-15
PROPOSED ACTIVITY: INSTALLATION OF CROSS DIKE AND WATER CONTROL STRUCTURES		PROJECT TITLE: SECTION VIEW SPILLWAY BOX 1-3
DATE: 7-26-13	COUNTY: GEORGETOWN	PROJECT LOCATION: GEORGETOWN CO. 33°12'11.169" / -79°17'04.774"
	APPLICANT: MILLBROOK PLANTATION LP	DESIGNER: JAMES RADER
		SHEET 5 OF 15



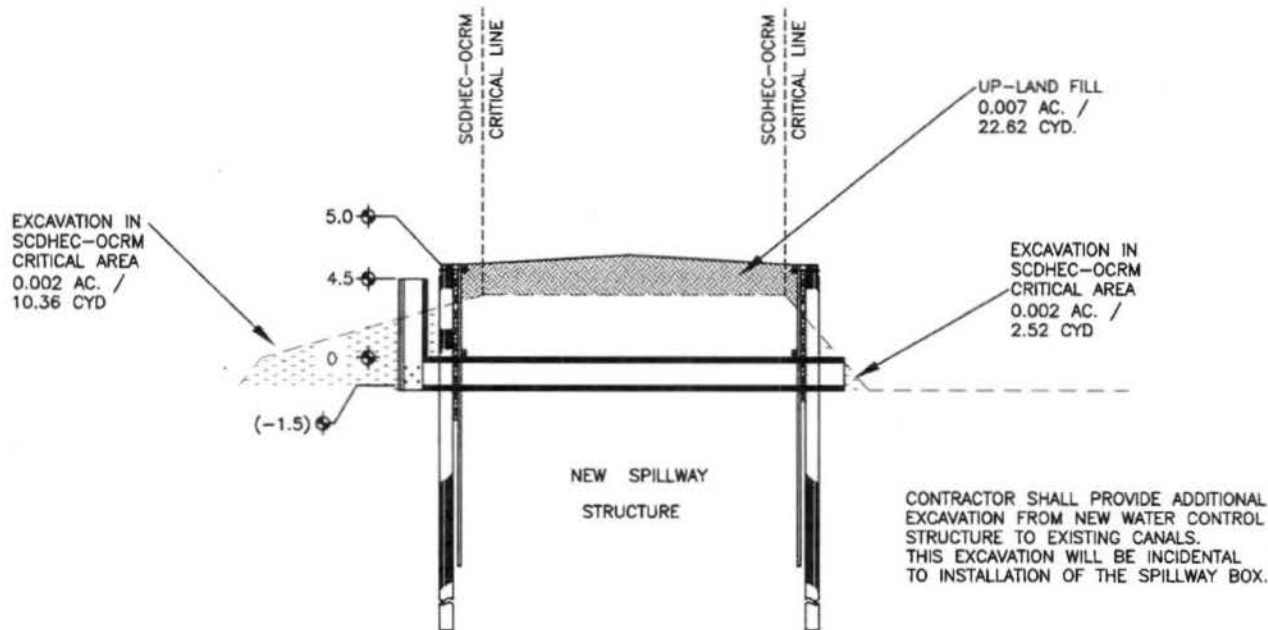
NOTE: ALL MATERIAL GENERATED DURING EXCAVATION IN CRITICAL AREA WILL BE DISPOSED OF ON UPLANDS

TYPICAL SPILLWAY BOX NO. 1-3 PLAN VIEW  
 INSTALLED IN CROSS-DIKE 1 AND 2  
 SCALE 1"=10'

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 NOT TO BE USED FOR BIDDING OR CONSTRUCTION

APPLICATION NUMBER: SAC-2013-00837-2IG	<b>DUCKS UNLIMITED INC.</b>  SOUTHERN REGIONAL OFFICE 195 Business Park Drive, Suite E Ridgeland, MS 39157 Certificate of Authorization No. C02504	PROJECT NO.: DU-SC-06-15
PROPOSED ACTIVITY: INSTALLATION OF CROSS DIKE AND WATER CONTROL STRUCTURES		PROJECT TITLE: ANNANDALE PLANTATION PLAN VIEW SPILLWAY BOX 1-3
DATE: 7-26-13		PROJECT LOCATION: GEORGETOWN CO. 33°12'11.169" / -79°17'04.774"
COUNTY: GEORGETOWN	APPLICANT: MILLBROOK PLANTATION LP	DESIGNER: JAMES RADER SHEET 6 OF 15

SCDHEC-OCRM CRITICAL LINE PLAT APPROVED  
 6-17-13 BY  
 CHRISTOPHER STOUT.




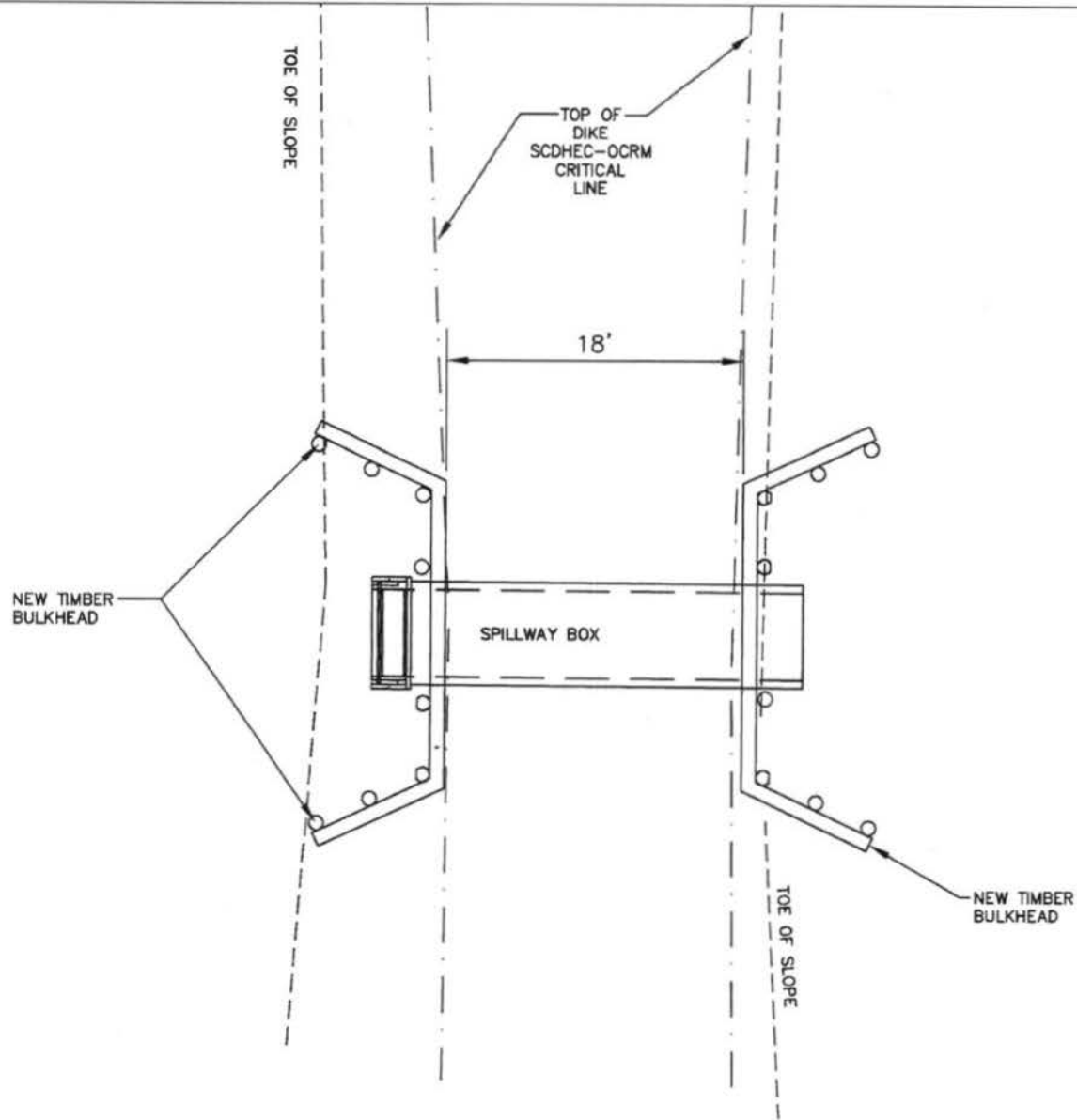
CONTRACTOR SHALL PROVIDE ADDITIONAL EXCAVATION FROM NEW WATER CONTROL STRUCTURE TO EXISTING CANALS. THIS EXCAVATION WILL BE INCIDENTAL TO INSTALLATION OF THE SPILLWAY BOX.

**SPILLWAY BOX NO. 4 SECTION VIEW**  
SCALE 1"=10'

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

SCDHEC-OCRM CRITICAL LINE PLAT APPROVED  
6-17-13 BY  
CHRISTOPHER STOUT.


APPLICATION NUMBER: SAC-2013-00837-2IG	<b>DUCKS UNLIMITED INC.</b>  SOUTHERN REGIONAL OFFICE 193 Business Park Drive, Suite E Ridgeland, MS 39157 Certificate Of Authorization No. C02504	PROJECT NO.: DU-SC-06-15
PROPOSED ACTIVITY: INSTALLATION OF CROSS DIKE AND WATER CONTROL STRUCTURES		PROJECT TITLE: SECTION VIEW SPILLWAY BOX #4
DATE: 7-26-13		PROJECT LOCATION: GEORGETOWN CO. 33°12'11.169" / -79°17'04.774"
COUNTY: GEORGETOWN	APPLICANT: MILLBROOK PLANTATION LP	JAMES RADER SHEET 7 OF 15



SPILLWAY BOX NO. 4 PLAN VIEW  
SCALE 1"=10'

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

SCDHEC-OCRM CRITICAL LINE PLAT APPROVED  
6-17-13 BY  
CHRISTOPHER STOUT.

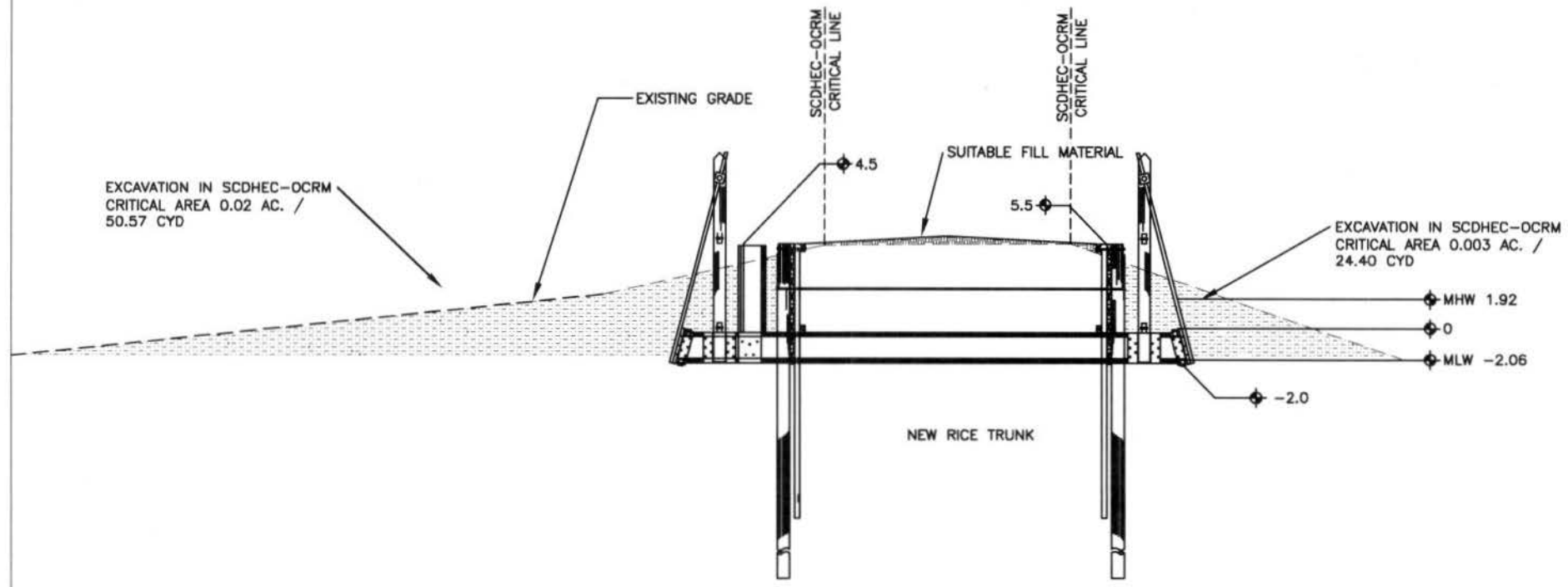
APPLICATION NUMBER: SAC-2013-00837-2IG	<b>DUCKS UNLIMITED INC.</b>  SOUTHERN REGIONAL OFFICE 193 Business Park Drive, Suite E Ridgeland, MS 39157 Certificate of Authorization No. C02504	PROJECT NO.: DU-SC-06-15
PROPOSED ACTIVITY: INSTALLATION OF CROSS DIKE AND WATER CONTROL STRUCTURES		PROJECT TITLE: ANNANDALE PLANTATION PLAN VIEW SPILLWAY BOX #4
DATE: 7-26-13		PROJECT LOCATION: GEORGETOWN CO. 33°12'11.169" / -79°17'04.774"
COUNTY: GEORGETOWN	APPLICANT: MILLBROOK PLANTATION LP	JAMES RADER SHEET 8 OF 15



UP-LAND FILL  
0.02 AC. /  
5.60 CYD.

EXCAVATION IN SCDHEC-OCRM  
CRITICAL AREA 0.02 AC. /  
50.57 CYD

EXCAVATION IN SCDHEC-OCRM  
CRITICAL AREA 0.003 AC. /  
24.40 CYD




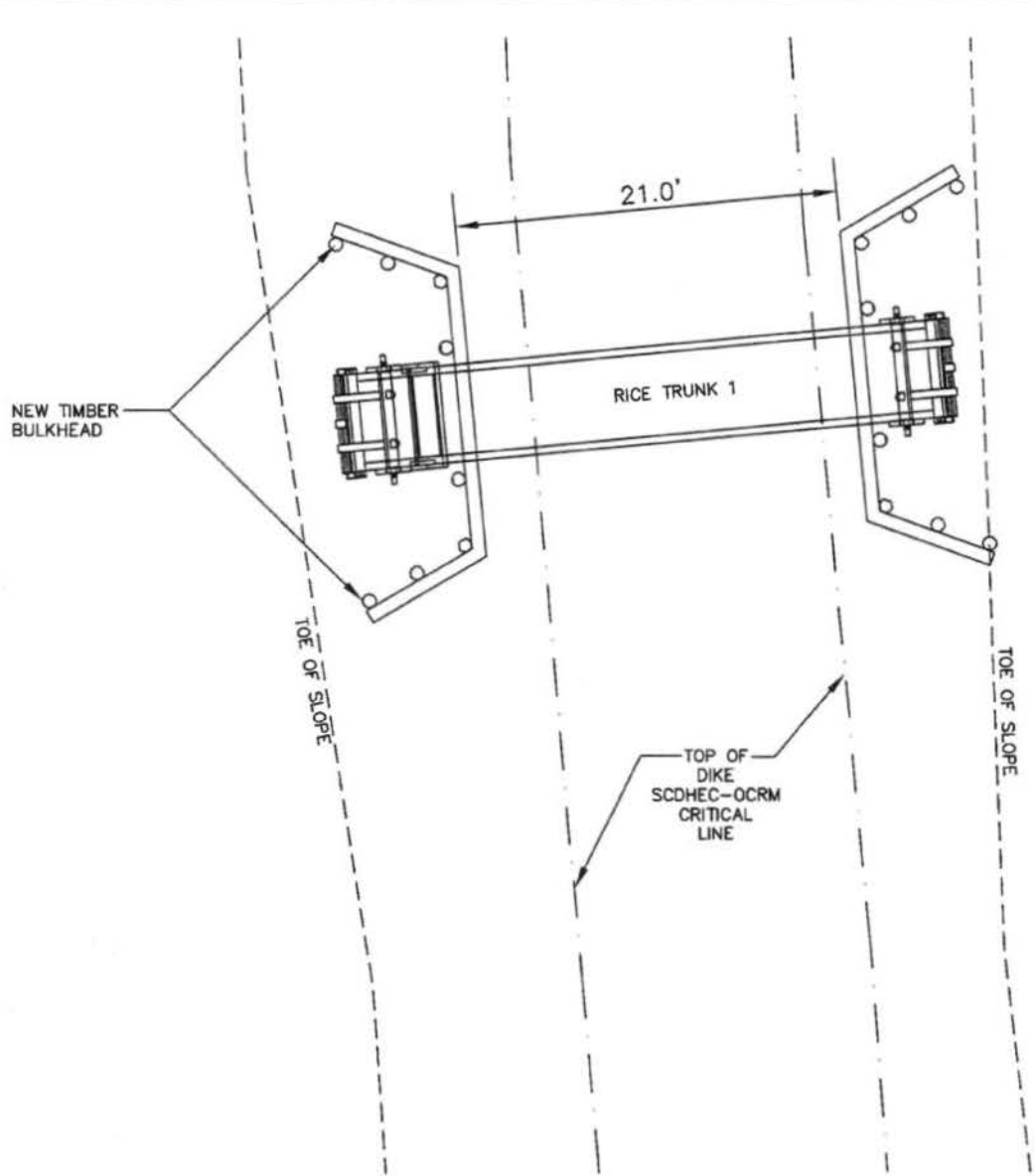
RICE TRUNK NO. 1 SECTION  
SCALE 1"=10'

CONTRACTOR SHALL PROVIDE ADDITIONAL  
EXCAVATION FROM NEW WATER CONTROL  
STRUCTURE TO EXISTING CANALS.  
THIS EXCAVATION WILL BE INCIDENTAL  
TO INSTALLATION OF THE SPILLWAY BOX.

THIS DRAWING FOR PERMIT PURPOSES ONLY.  
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SCDHEC-OCRM CRITICAL LINE PLAT APPROVED  
6-17-13 BY  
CHRISTOPHER STOUT.

APPLICATION NUMBER: SAC-2013-00837-2IG	<b>DUCKS UNLIMITED INC.</b>  SOUTHERN REGIONAL OFFICE 193 Business Park Drive, Suite E Ridgeland, MS 39157 Certificate of Authorization No. C02504	PROJECT NO.: DU-SC-06-15
PROPOSED ACTIVITY: INSTALLATION OF CROSS DIKE AND WATER CONTROL STRUCTURES		PROJECT TITLE: ANNANDALE PLANTATION SECTION VIEW RICE TRUNK #1
DATE: 7-26-13	COUNTY: GEORGETOWN	PROJECT LOCATION: GEORGETOWN CO. 33°12'11.169" / -79°17'04.774"
APPLICANT: MILLBROOK PLANTATION LP	APPROVED: JAMES RADER	SHEET 9 OF 15

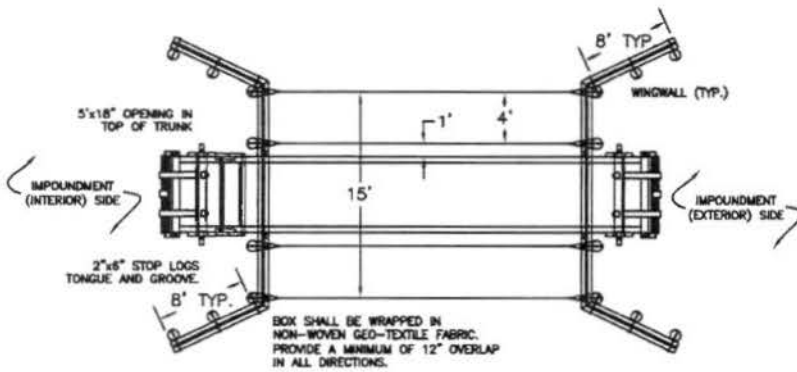


RICE TRUNK NO. 1 PLAN VIEW  
SCALE 1"=10'

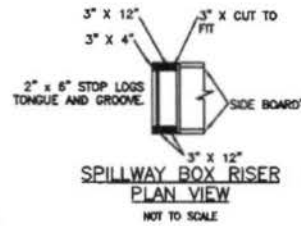
THIS DRAWING FOR PERMIT PURPOSES ONLY.  
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SCDHEC-OCRM CRITICAL LINE PLAT APPROVED  
6-17-13 BY  
CHRISTOPHER STOUT.

APPLICATION NUMBER: SAC-2013-00837-2IG	<b>DUCKS UNLIMITED INC.</b>  SOUTHERN REGIONAL OFFICE 195 Business Park Drive, Suite E Ridgeland, MS 39157 Certificate Of Authorization No. C02504	PROJECT NO.: DU-SC-06-15
PROPOSED ACTIVITY: INSTALLATION OF GROSS DIKE AND WATER CONTROL STRUCTURES		PROJECT TITLE: ANNANDALE PLANTATION PLAN VIEW RICE TRUNK # 1
DATE: 7-26-13		PROJECT LOCATION: GEORGETOWN CO. 33°12'11.169" / -79°17'04.774"
COUNTY: GEORGETOWN	APPLICANT: MILLBROOK PLANTATION LP	JAMES RADER AGENT: SHEET 10 OF 15



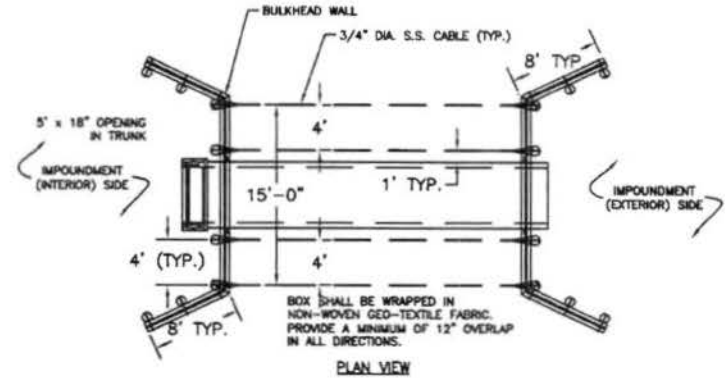
PLAN VIEW



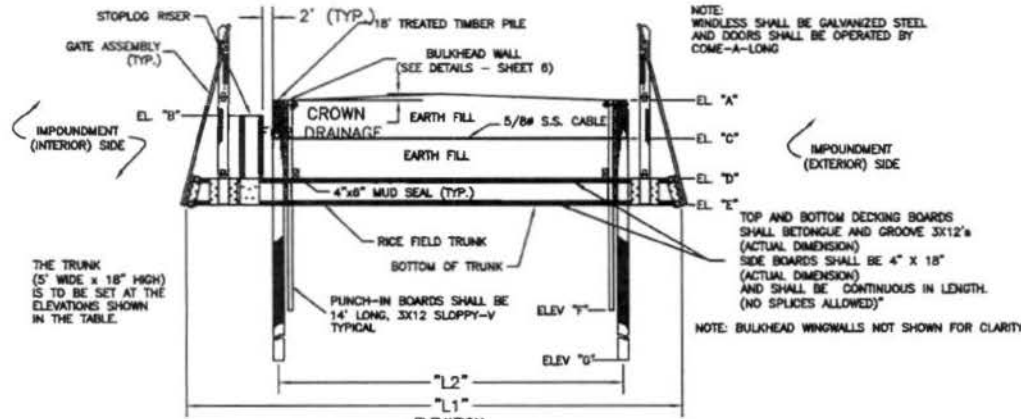
SPILLWAY BOX RISER  
PLAN VIEW  
NOT TO SCALE



SPILLWAY BOX RISER  
SIDE VIEW  
NOT TO SCALE

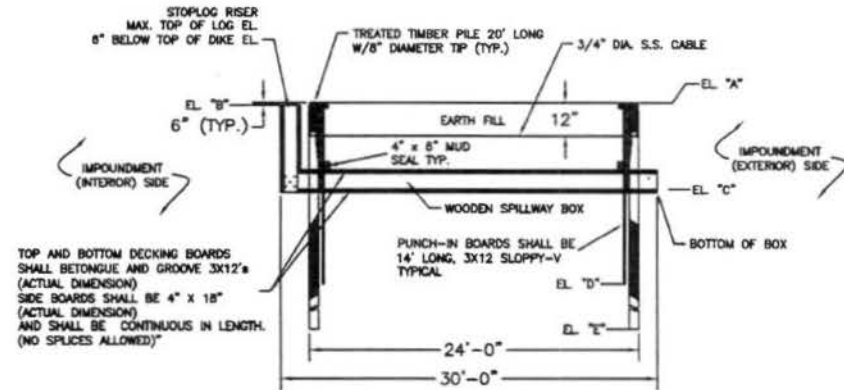


PLAN VIEW



RICE TRUNK DETAILS  
NOT TO SCALE

RICE TRUNK TABLE										
STRUCTURE	TRUNK SIZE INSIDE DIMENSION	EL. "A"	EL. "B"	EL. "C"	EL. "D"	EL. "E"	EL. "F"	EL. "G"	"L1"	"L2"
PROPOSED RICE TRUNK #1	5' x 18"	5.5	4.5	4.0	-0.5	-2.25	-8.5	-12.5	32'	24'



DOUBLE SPILLWAY BOX DETAILS  
NOT TO SCALE

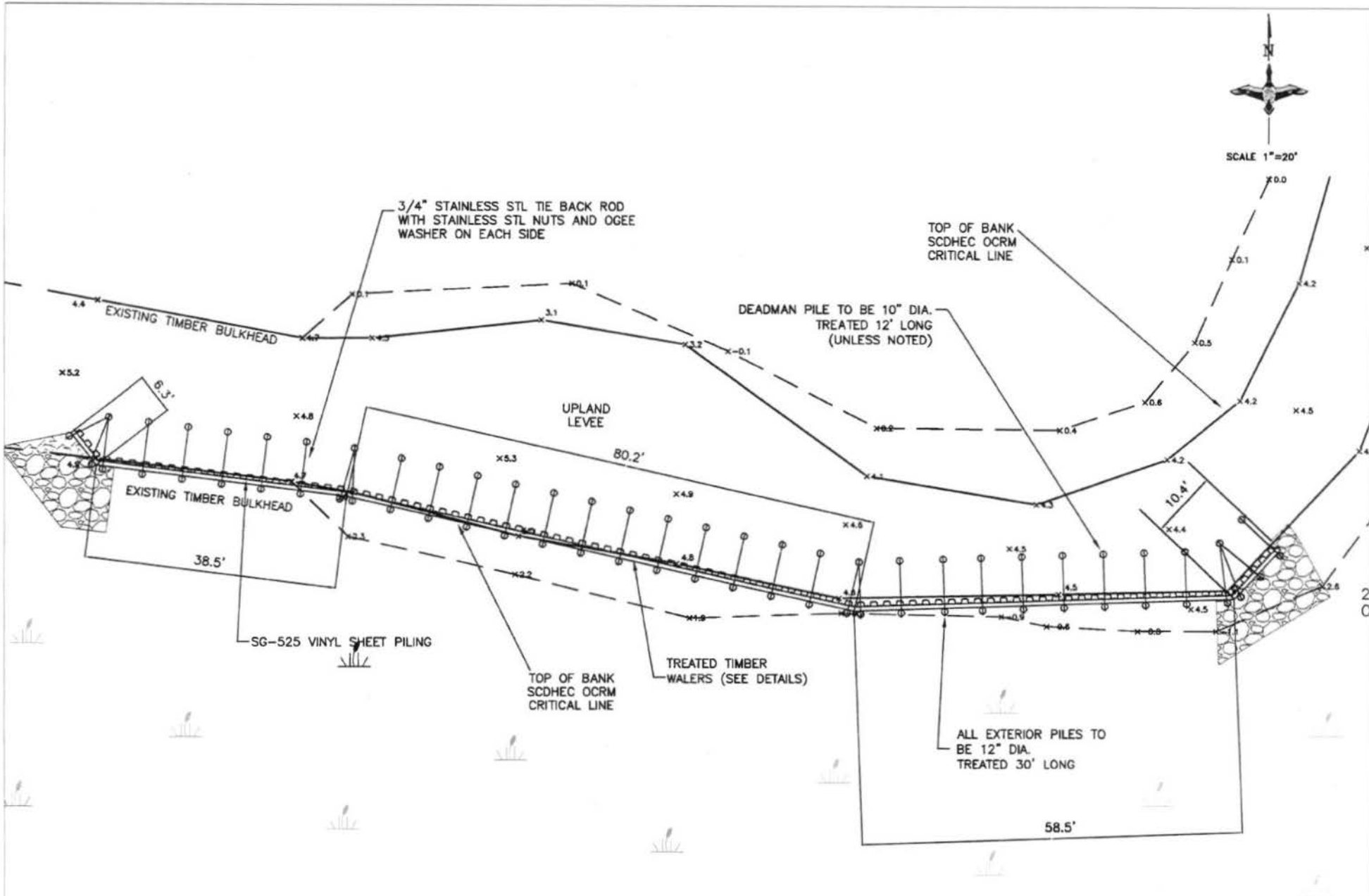
DOUBLE SPILLWAY BOX TABLE						
STRUCTURE	TRUNK SIZE INSIDE DIMENSION	EL. "A"	EL. "B"	EL. "C"	EL. "D"	EL. "E"
SPILLWAY BOX #1	5' x 18"	5.0	4.5	-1.5	-9.0	-13.0
SPILLWAY BOX #2	5' x 18"	5.0	4.5	-1.5	-9.0	-13.0
SPILLWAY BOX #3	5' x 18"	5.0	4.5	-1.5	-9.0	-13.0
SPILLWAY BOX #4	5' x 18"	5.0	4.5	-1.5	-9.0	-13.0

NOTES:

1. THE CONTRACTOR IS RESPONSIBLE FOR DEWATERING AND CONSTRUCTING COFFER DAMS AS NECESSARY TO ALLOW FOR THE INSTALLATION OF THE STRUCTURE. AFTER COMPLETION OF THE STRUCTURE INSTALLATION, THE CONTRACTOR SHALL REMOVE ANY COFFER DAMS AND RESHAPE THE GROUND AND CANAL TO THE PRECONSTRUCTION ELEVATIONS AND SHAPE.
2. THE CONTRACTOR IS RESPONSIBLE FOR THE REMOVAL OF ALL MATERIAL WHICH MAY BE PRESENT THAT MAY INHIBIT THE DRIVING OF THE TIMBER PILES AND VERTICAL 3 x 12 MEMBERS.
3. THE CONTRACTOR SHALL FIELD VERIFY ALL MEASUREMENTS BEFORE ORDERING MATERIALS.
4. THE CONTRACTOR IS RESPONSIBLE FOR THE REMOVAL OF THE EXISTING ALUMINUM RISER.

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

APPLICATION NUMBER: SAC-2013-00837-2IG	<b>DUCKS UNLIMITED INC.</b>  SOUTHERN REGIONAL OFFICE 193 Business Park Drive, Suite E Ridgeland, MS 39157 Certificate Of Authorization No. C02504	PROJECT NO.: DU-SC-06-15
PROPOSED ACTIVITY: INSTALLATION OF CROSS DIKE AND WATER CONTROL STRUCTURES		PROJECT TITLE: ANNANDALE PLANTATION WCS DETAILS
DATE: 7-26-13	COUNTY: GEORGETOWN	PROJECT LOCATION: GEORGETOWN CO. 33°12'11.169" / -79°17'04.774"
APPLICANT: MILLBROOK PLANTATION LP		AGENT: JAMES RADER
		SHEET 11 OF 15

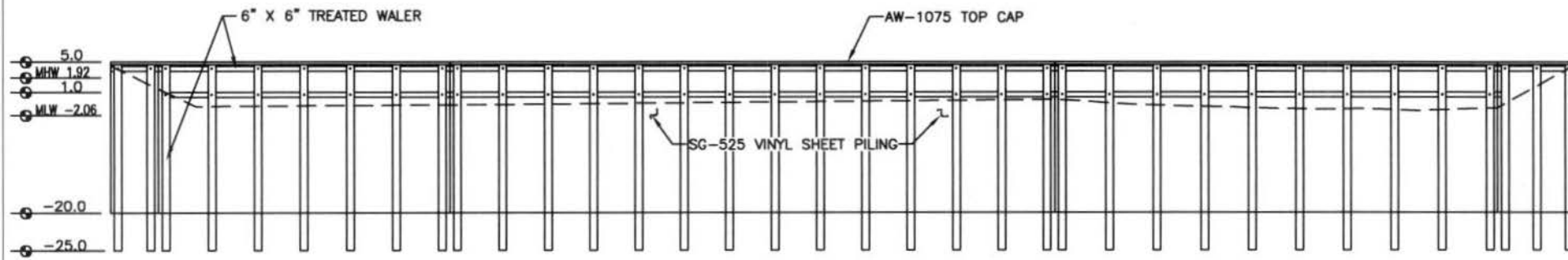


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NOT TO BE USED FOR BIDDING OR CONSTRUCTION


APPLICATION NUMBER: SAC-2013-00837-2IG	<b>DUCKS UNLIMITED INC.</b>  SOUTHERN REGIONAL OFFICE 193 Business Park Drive, Suite E Ridgeland, MS 39157 Certificate Of Authorization No. C02504	PROJECT NO.: DU-SC-06-15
PROPOSED ACTIVITY: INSTALLATION OF CROSS DIKE AND WATER CONTROL STRUCTURES		PROJECT TITLE: ANNANDALE PLANTATION PLAN VIEW VINYL BULKHEAD
DATE: 7-26-13		PROJECT LOCATION: GEORGETOWN CO. 33°12'11.169" / -79°17'04.774"
COUNTY: GEORGETOWN	APPLICANT: MILLBROOK PLANTATION LP	LOT/LAKE/ADJACENCY: JAMES RADER SHEET 12 OF 15

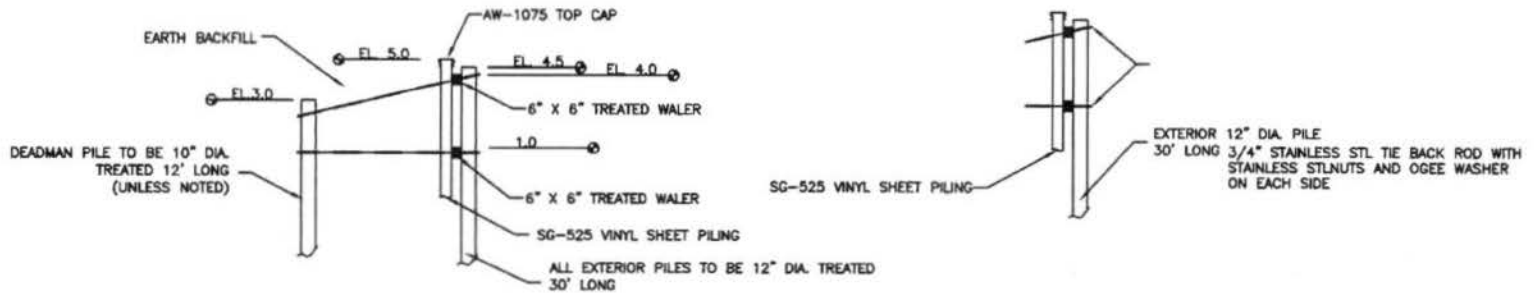
SCDHEC-OCRM CRITICAL LINE PLAT APPROVED  
6-17-13 BY  
CHRISTOPHER STOUT.



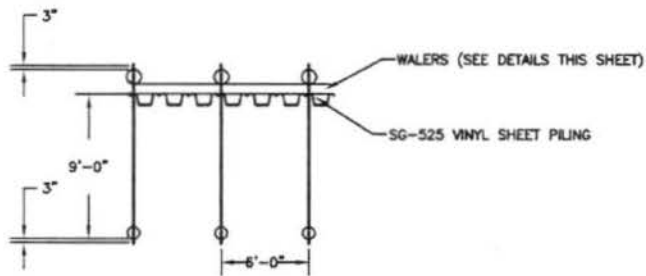


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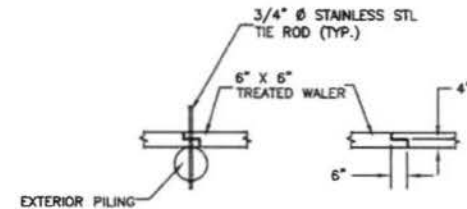
APPLICATION NUMBER: SAC-2013-00837-2IG	<b>DUCKS UNLIMITED INC.</b>  SOUTHERN REGIONAL OFFICE 193 Business Park Drive; Suite E Ridgeland, MS 39157 Certificate Of Authorization No. C02304	PROJECT NO.: DU-SC-06-15
PROPOSED ACTIVITY: INSTALLATION OF CROSS DIKE AND WATER CONTROL STRUCTURES		PROJECT TITLE: ANNANDALE PLANTATION BULKHEAD PROFILE
DATE: 7-26-13		PROJECT LOCATION: GEORGETOWN CO. 33°12'11.189" / -79°17'04.774"
COUNTY: GEORGETOWN	APPLICANT: MILLBROOK PLANTATION LP	LAYOUT/OWNER: JAMES RADER
		SHEET 13 OF 15



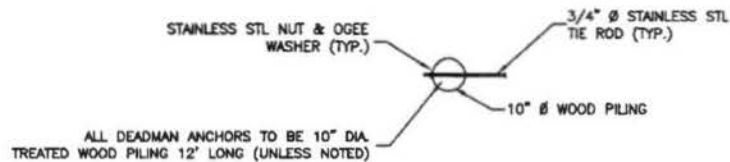
**TYPICAL DETAILS OF 25' VINYL SHEET PILING  
& CORNER TIE BACKS**  
NOT TO SCALE



NOTE: TIE BACK POST VARY IN DISTANCE, NORMALLY 6'.  
**DEADMAN TIE BACK DETAILS FOR 25' VINYL SHEET PILING  
& CORNER TIE BACKS**  
SCALE: 1" = 5'



NOTE: ALTERNATE UPPER/LOWER WALER SPICES ON EXTERIOR PILES.  
**WALER SPICE DETAILS**  
NOT TO SCALE



**TYPICAL DEADMAN ANCHOR DETAILS**  
NOT TO SCALE

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APPLICATION NUMBER: SAC-2013-00637-2IG	<b>DUCKS UNLIMITED INC.</b> 	PROJECT NO.: DU-SC-06-15
PROPOSED ACTIVITY: INSTALLATION OF CROSS DIKE AND WATER CONTROL STRUCTURES		PROJECT TITLE: ANNANDALE PLANTATION BULKHEAD DETAILS
DATE: 7-26-13	SOUTHERN REGIONAL OFFICE 193 Business Park Drive, Suite E Ridgeland, MS 39157 Certificate Of Authorization No. C02504	PROJECT LOCATION: GEORGETOWN CO. 33°12'11.169" / -79°17'04.774"
COUNTY: GEORGETOWN	APPLICANT: MILLBROOK PLANTATION LP	JAMES RADER SHEET 14 OF 15

## SUMMARY OF IMPACTS

CROSS-DIKE NO. 1

FILL IN CRITICAL AREA : 4.61 AC. / 22,430 CYD  
 EXCAVATION IN SCDHEC-OCRM CRITICAL AREA: 4.68 AC. / 28,473 CYD

CROSS-DIKE NO. 2

FILL IN CRITICAL AREA : 1.71 AC. / 8,306 CYD  
 EXCAVATION IN SCDHEC-OCRM CRITICAL AREA: 1.72 AC. / 10,396 CYD

SPILLWAY BOX 1 THRU 3

FILL IN CRITICAL AREA : 0.00  
 EXCAVATION IN SCDHEC-OCRM CRITICAL AREA: 0.00

SPILLWAY BOX 4

UPLAND FILL : 0.07 AC. / 22.62 CYD  
 FILL IN CRITICAL AREA : 0.00  
 EXCAVATION IN SCDHEC-OCRM CRITICAL AREA: 0.004 AC / 22.62 CYD 0.00

RICE TRUNK NO. 1

UPLAND FILL : 0.02 AC. / 5.65 CYD  
 FILL IN CRITICAL AREA : 0.00  
 EXCAVATION IN SCDHEC-OCRM CRITICAL AREA: 0.023 AC / 74.97 CYD 0.00

VINYL BULKHEAD

UPLAND FILL : 0.01 AC. / 74.1 CYD  
 FILL IN CRITICAL AREA : 0.007 AC/ 24 CYD  
 EXCAVATION IN SCDHEC-OCRM CRITICAL AREA: 0.00

PROJECT TOTAL

UPLAND FILL : 0.10 / 102.37 CYD  
 FILL IN CRITICAL AREA : 6.327 AC/ 30,760 CYD  
 EXCAVATION IN SCDHEC-OCRM CRITICAL AREA: 6.427 AC / 38,966.59

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APPLICATION NUMBER: SAC-2013-00837-2IG	<b>DUCKS UNLIMITED INC.</b> SOUTHERN REGIONAL OFFICE 193 Business Park Drive; Suite E Ridgeland, MS 39157 Certificate Of Authorization No. C02504	PROJECT NO.: DU-SC-06-15 PROJECT TITLE: ANNANDALE PLANTATION IMPACT SUMMARY PROJECT LOCATION: GEORGETOWN CO. 33°12'11.169" / -79°17'04.774"
PROPOSED ACTIVITY: INSTALLATION OF CROSS DIKE AND WATER CONTROL STRUCTURES	DATE: 7-26-13	COUNTY: GEORGETOWN
MILLBROOK PLANTATION LP		JAMES RADER SHEET 15 OF 15