

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-2016-01710

DATE: December 23, 2016

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

Mr. Robert Perry
SC Department of Natural Resources
c/o Mr. Malcolm Baldwin
Ducks Unlimited
3294 Ashley Phosphate Road, Suite 2A
North Charleston, South Carolina 29418

for a permit to excavate and place fill material in wetlands and waters of the

Ashepoo River

Within existing managed tidal impoundments (historic rice fields) of Bear Island Wildlife Management Area (WMA) in Green Pond, Colleton County, South Carolina (Latitude: 32.5731 °N, Longitude: -80.4875 °W), **Bennetts Point – Topo Quad**.

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 the creation of two managed tidal impoundments (Proposed Units

31-A and 31-B) from an existing managed tidal impoundment (Unit 31) on Bear Island West Wildlife Management Area (WMA). The proposed work will entail the excavation of 0.243 acres of wetlands and waters of the United States, the excavation of 0.043 acres of uplands to create new waters of the United States, and the discharge of fill material in 0.342 acres of wetlands and waters of the United States. The proposed work is detailed as follows:

Proposed Unit 31-A - Unit 31 is an existing 189.7 acre managed tidal impoundment on Bear Island West WMA. To create the two proposed managed tidal impoundments, a new interior embankment (levee) will be constructed, dividing the existing Unit 31 into 2 smaller managed tidal impoundments, identified as Proposed Unit 31-A and Proposed Unit 31-B. The proposed construction of the new interior field-dike will result in 0.338 acres (1304 cubic yards) of fill material (Impact #1) being placed in wetlands and waters of the United States. The proposed interior field-dike will measure 388 linear feet, with 290 linear feet within wetlands and waters of the United States. The field-dike will be sloped at a 3:1 ratio with a 12' wide bench between the edge of the field-dike and edge of the borrow area/interior cross canal. Included in this 0.338 acres of fill material is a new 18"x5'x30' double spillway box. The double spillway box will have a 4.5' flashboard riser with 16' bulkheads and 8' wing walls. The double spillway box will be placed in the existing center interior canal and will be utilized to manage water levels between Proposed Unit 31-A and Proposed Unit 31-B. The fill material utilized for the construction of the interior field-dike will be obtained by excavating from the proposed borrow areas/interior cross canals. The proposed borrow areas/interior cross canals are currently within waters of the United States. The proposed borrow area/cross canal north of the proposed interior field dike (Impact #2) will be within the Proposed Unit 31-A managed tidal impoundment. Approximately 0.11 acres (834 cubic yards) of material will be excavated from wetlands and waters of the United States in Proposed Unit 31-A and subsequently utilized as fill material for the interior field dike referenced above. The borrow area/interior cross canals within Proposed Unit 31-A will be 240 linear feet and 10' wide and will be parallel with the interior field dike.

Proposed Unit 31-B – The proposed construction of the interior field-dike, as referenced and outlined above, will also require excavation in wetlands and waters of the United States within Proposed Unit 31-B (Impact #3). These proposed borrow areas/interior cross canals will be south of the proposed interior field-dike. Approximately 0.12 acres (910 cubic yards) of material will be excavated from wetlands and waters of the United States in Proposed Unit 31-B and subsequently utilized as fill material for the interior field dike referenced above. The borrow area/interior cross canals within Proposed Unit 31-B will be 245 linear feet and 10' wide, running parallel with the interior field dike.

In addition to the above referenced work for Proposed Unit 31-B, the applicant is planning to install a new rice trunk in order to provide inflow/outflow into this proposed managed tidal impoundment. Existing trunk #47 will continue to serve Proposed Unit 31-A. The proposed rice trunk (Impact #5) is 18"x5'x32' with a 4.5' tall flash board riser, 16' bulkheads, and 8' wing walls on each side. In order to install the proposed rice trunk, 0.004 acres (12 cubic yards) of material will be excavated (Impact #4) from wetlands and waters of the United States. This excavation area will be within the currently serviceable interior cross canal of the managed tidal impoundment. In order to provide inflow/outflow from the tidal creek of the Ashepoo River for Proposed Unit 31-B, 0.043 acres (1875 cubic yards) of upland material will be excavated in order to create a new tidally influenced inflow/outflow open canal. This new canal will be 125'x15'. To provide for elevation alignment of the proposed tidally influenced inflow/outflow canal, 0.002 acres (10 cubic yards) of material will be excavated (Impact #7) from wetlands and waters of the United States. These waters are within a tidal creek of the Ashepoo River.

The basic project purpose for the proposed activities listed above is to create managed tidal impoundments. The overall project purpose for the proposed activities listed above is to subdivide currently existing and serviceable managed tidal impoundments on Bear Island West WMA in order to better manage for water circulation/quality, wildlife habitat, flood retention and climate change resiliency. The applicant has not developed a compensatory mitigation plan for the proposed project for several reasons, which are to follow. The proposed project aids in the management of a more diverse set of habitats by allowing multiple water management regimes within a fully-functioning tidal impoundment. According to the applicant, construction of a new cross embankment is the only practical way to allow the property owner to achieve better management of the goals listed above. The applicant states that the proposed activity is in line with traditional activities within managed tidal impoundments in the ACE Basin. The applicant notes that USACE permits have been recently issued to SCDNR (Santee Coastal Reserve and Bear Island) for the installation of cross embankments and that the agent (Ducks Unlimited) has completed this permitted work to the benefit of these systems. The applicant states that the proposed project is consistent with the past stewardship of Bear Island WMA and notes that the project has secured funding through a grant from the North American Wetland Conservation Act (NAWCA). The applicant notes that 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. Based on these reasons, the applicant believes that compensatory mitigation is not required for the proposed project.

The applicant states that avoidance strategies are limited for the proposed work; however, efforts to minimize impacts to wetlands and waters of the United States were made. The location of the proposed cross embankment was selected, as this was the narrowest crossing within the large tidal impoundment. The point of crossing is 290 linear feet. The applicant also notes the following with regards to impact minimization: the width and height of the proposed interior field-dike are only sufficient for access with traditional agricultural equipment and implements, all proposed work will occur in during dry weather periods after the managed tidal impoundments have been drained in late winter and early spring, all fill material needed for the proposed work will be obtained from within the existing managed tidal impoundment Unit 31, the proposed field embankment construction and canal excavation activities will occur simultaneously so no materials will be double handled, the proposed work will be completed with a long-reach excavator on tracks using wooden mats for stability if required, the machinery will start at one end of a proposed field embankment/canal and continue until one section is completed, the proposed wooden spillway box will be installed as the proposed interior field dike is constructed, bulkheads will be constructed on either side of the newly installed spillway box and trunk to minimize the footprint of the fill and provide stability, and the newly constructed interior field-dike will be vegetated by broadcast seeding of a fast growing herbaceous species (e.g. brown top millet).

NOTE: This public notice and associated plans are available on the Corps' website at:
<http://www.sac.usace.army.mil/Missions/Regulatory/PublicNotices> .

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 of the Coastal Zone Management Program (15 CFR 930). This activity may also require evaluation for compliance with the S. C. Construction in Navigable Waters Permit Program. State review, permitting and certification is conducted by the S. C. Department of Health and Environmental Control. 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 0.58 acres of estuarine substrates and emergent wetlands utilized by various life stages of species comprising the shrimp, and snapper-grouper management complexes. The District Engineer's 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). The District Engineer's final determination relative to project impacts and the need for mitigation measures is subject to review by and coordination with the NMFS.

Pursuant to the Section 7 of the Endangered Species Act of 1973 (as amended), the Corps has reviewed the project area, examined all information provided by the applicant, and the District Engineer has determined that the project is not likely to adversely affect any Federally endangered, threatened, or proposed species or result in the destruction or adverse modification of designated or proposed critical habitat. This public notice serves as a request for written concurrence from the U.S. Fish and Wildlife Service and/or the National Marine Fisheries Service on this determination.

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 Section 106 of the NHPA, the District Engineer has consulted South Carolina ArchSite (GIS), for the presence or absence of historic properties (as defined in 36 C.F.R. 800.16)(1)(1)), and has initially determined that there are historic properties present, but they will not be affected; therefore, there will be no adverse effect on historic properties. To ensure that other historic properties 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 and other interested parties to provide any information they may have with regard to historic properties. This public notice serves as a request for concurrence within 30 days from the SHPO (and/or Tribal Historic Preservation Officer).

The District Engineer's final eligibility and effect determination will be based upon coordination with the SHPO and/or THPO, as appropriate and required and with full consideration given to the proposed undertaking's potential direct and indirect effects on historic properties within the Corps-identified permit area.

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 cannot undertake to adjudicate rival claims.

The Corps 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 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. Please submit comments in writing, identifying the project of interest by public notice number, to the following address:

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

If there are any questions concerning this public notice, please contact Tyler L. Sgro, Project Manager, at 843-329-8037 or toll free at 1-866-329-8187.

Joint Federal and State Application Form For Activities Affecting Waters of the United States Or Critical Areas of the State of South Carolina		This Space for Official Use Only	
<i>Authorities:</i> 33 USC 401, 33 USC 403, 33 USC 407, 33 USC 408, 33 USC 1341, 33 USC 1344, 33 USC 1413 and Section 48-39-10 et. Seq of the South Carolina Code of Laws. These laws require permits for activities in, or affecting, navigable waters of the United States, the discharge of dredged or fill material into waters of the United States, and the transportation of dredged material for the purpose of dumping it into ocean waters. The Corps of Engineers and the State of South Carolina have established a joint application process for activities requiring both Federal and State review or approval. Under this joint process, you may use this form, together with the required drawings and supporting information, to apply for both the Federal and/or State permit(s).		Application No. _____ Date Received _____ Project Manager _____ Watershed # _____	
<i>Drawings and Supplemental Information Requirements:</i> In addition to the information on this form, you must submit a set of drawings and, in some cases, additional information. A completed application form together with all required drawings and supplemental information is required before an application can be considered complete. See the attached instruction sheets for details regarding these requirements. You may attach additional sheets if necessary to provide complete information.			
1. Applicant Last Name: Perry		11. Agent Last Name (agent is not required): Baldwin	
2. Applicant First Name: Robert		12. Agent First Name: Malcolm	
3. Applicant Company Name: SC Department of Natural Resources		13. Agent Company Name: Ducks Unlimited	
4. Applicant Mailing Address: 1000 Assembly St		14. Agent Mailing Address: 3294 Ashley Phosphate Rd; Suite 2A	
5. Applicant City: Columbia		15. Agent City: North Charleston	
6. Applicant State: SC	7. Applicant Zip: 29202	16. Agent State: SC	17. Agent Zip: 29418
8. Applicant Area Code and Phone No.: 803-734-3766		18. Agent Area Code and Phone No.: 843-789-0417	
9. Applicant Fax No.:		19. Agent Fax No.: 843-745-9112	
10. Applicant E-mail: PerryB@dnr.sc.gov		20. Agent E-mail: mbaldwin@ducks.org	
21. Project Name: Bear Island West WMA		22. Project Street Address: 12260 Bennetts Point Rd	
23. Project City: Green Pond	24. Project County: Colleton	25. Project Zip Code: 29446	26. Nearest Waterbody: Ashepoo River
27. Tax Parcel ID: 327-00-00-001.00		28. Property Size (acres): 1005	
29. Latitude: N 32.5731		30. Longitude: W 80.4875	
31. Directions to Project Site (Include Street Numbers, Street Names, and Landmarks and attach additional sheet if necessary): From Jacksonboro, take Hwy 17 south for approximately 7 miles. Turn left onto Bennetts Point Rd. Follow for 28 miles. Bear Island West WMA is immediately on the right across from the management offices.			
32. Description of the Overall Project and of Each Activity in or Affecting U.S. Waters or State Critical Areas (attach additional sheets if needed) Construction of a new earthen levee with wooden double spillway box to subdivide large managed tidal impoundment into two sections to improve water control ability. In addition, an additional new rice trunks is proposed on Unit 29 to provide increased water flow and improved water management within the system. Another new trunk is proposed to provide a water source for the resulting Unit 31-B created by the proposed bisecting levee in Unit 31.			
33. Overall Project Purpose and the Basic Purpose of Each Activity In or Affecting U.S. Waters (attach additional sheets if needed): The new levee will divide the existing 189.7 acre managed tidal impoundment into two smaller units that will improve the ability to manage and water quality within the impoundments. The additional trunks provide increased water flow and improved water management within the system.			
34. Type and quantity of Materials to Be Discharged		35. Type and Quantity of Impacts to U.S. Waters (including wetlands).	
Dirt or Topsoil: _____ <input type="checkbox"/> cubic yards Clean Sand: _____ <input type="checkbox"/> cubic yards Mud: 1314 <input checked="" type="checkbox"/> cubic yards Clay: _____ <input type="checkbox"/> cubic yards Gravel, Rock, or Stone: _____ <input checked="" type="checkbox"/> cubic yards Concrete: _____ <input type="checkbox"/> cubic yards Other (describe): _____ <input type="checkbox"/> cubic yards TOTAL: 1314 cubic yards		Filling: 0.342 <input checked="" type="checkbox"/> acres <input type="checkbox"/> sq ft 1314 <input checked="" type="checkbox"/> cubic yards Backfill & Bedding: _____ <input type="checkbox"/> acres <input type="checkbox"/> sq ft _____ <input type="checkbox"/> cubic yards Landclearing: _____ <input type="checkbox"/> acres <input type="checkbox"/> sq ft _____ <input type="checkbox"/> cubic yards Dredging: _____ <input type="checkbox"/> acres <input type="checkbox"/> sq ft _____ <input type="checkbox"/> cubic yards Flooding: _____ <input type="checkbox"/> acres <input type="checkbox"/> sq ft _____ <input type="checkbox"/> cubic yards Draining/Excavation: 0.288 <input checked="" type="checkbox"/> acres <input type="checkbox"/> sq ft 2021 <input checked="" type="checkbox"/> cubic yards Shading: _____ <input type="checkbox"/> acres <input type="checkbox"/> sq ft _____ <input type="checkbox"/> cubic yards TOTALS: 0.628 acres _____ sq ft 3335 cubic yards	

36. Individually list wetland impacts including mechanized clearing, fill, excavation, flooding, draining, shading, etc. and attach a site map with location of each impact (attach additional sheets if needed).

Impact No.	Wetland Type	Distance to Receiving Water body (LF)	Purpose of Impact (road crossing, impoundment, flooding, etc)	Impact Size (acres)
See Attached				See Attached
Total Wetland Impacts (acres)				0.628

37. Individually list all seasonal and perennial stream impacts and attach a site map with location of each impact (attach additional sheets)

Impact No.	Seasonal or Perennial Flow	Average Stream Width (LF)	Impact Type (road crossing, impoundment, flooding, etc)	Impact Length (LF)
Total Stream Impacts (Linear Feet)				

38. Have you commenced work on the project site? YES NO If yes, describe all work that has occurred and provide dates.

39. Describe measures taken to avoid and minimize impacts to Waters of the United States:

The location of the proposed levee is at the narrowest portion of the existing impoundment and is at a location that is only 230 feet wide. Trunks utilize wooden bulkheads to minimize footprint of impact.

40. Provide a brief description of the proposed mitigation plan to compensate for impacts to aquatic resources or provide justification as to why mitigation should not be required (Attach a copy of the proposed mitigation plan for review).

None proposed. Proposed work creates minimal impact and will have a net enhancement on the entire system of managed tidal wetlands upon completion.

41. See the attached sheet to list the names and addresses of adjacent property owners.
See Attached

42. List all Corps Permit Authorizations and other Federal, State, or Local Certifications, Approvals, Denials received for work described in this application.

USACOE MTIGP SAC-2013-01187-1GG

43. Authorization of Agent. I hereby authorize the agent whose name is given on page one of this application to act in my behalf in the processing of this application and to furnish supplemental information in support of this application.

FOR SCDNR

Applicant's Signature

12.8.16

Date

44. Certification. Application is hereby made for a permit or permits to authorize the work and uses of the work as described in this application. I certify that the information in this application is complete and accurate. I further certify that I possess the authority to undertake the work described herein or am acting as the duly authorized agent for the applicant.

Applicant's Signature

Date

12.8.16

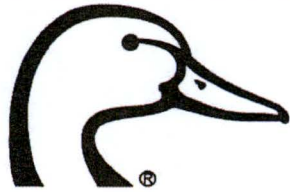
Malcolm Baldwin, PE

Agent's Signature

12/05/16

Date

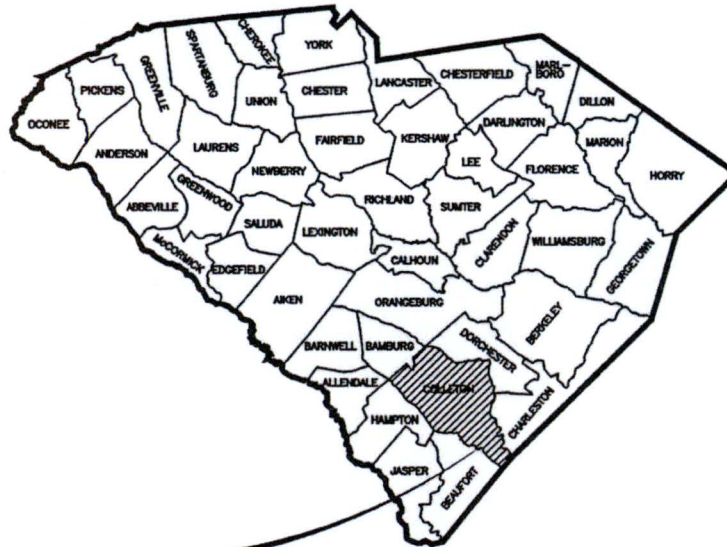
¹The application must be signed by the person who desires to undertake the proposed activity or it may be signed by a duly authorized agent if the authorization statement in blocks 11 and 43 have been completed and signed. 18 U.S.C. Section 1001 provides that: Whoever, in any manner within the jurisdiction of any department of the United States knowingly and willfully falsifies, conceals, or covers up any trick, scheme, or disguises a material fact or makes any false, fictitious or fraudulent statements or representations or makes or uses any false writing or document knowing same to contain any false, fictitious or fraudulent statements or entry, shall be fined not more than \$10,000 or imprisoned not more than five years or both.



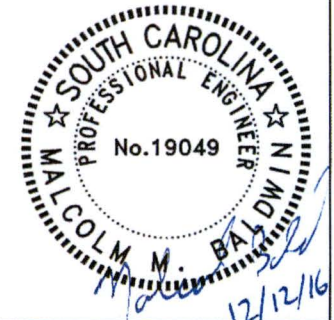
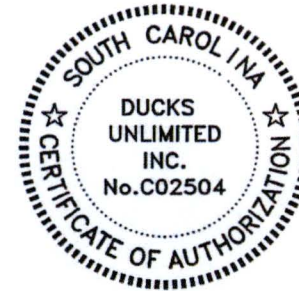
DUCKS
UNLIMITED

DUCKS UNLIMITED, INC. BEAR ISLAND WEST WMA NAWCA PROJECT

COLLETON COUNTY
IN COOPERATION WITH
SOUTH CAROLINA DEPARTMENT
OF NATURAL RESOURCES



PROJECT LOCATION



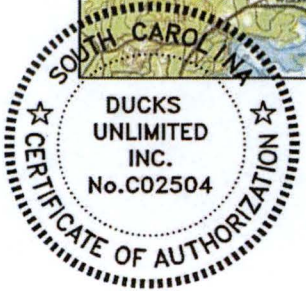
CAUTION

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:	DUCKS UNLIMITED INC.  SOUTHERN REGIONAL OFFICE 193 Business Park Drive; Suite E Ridgeland, MS 39157 Certificate Of Authorization No. C02504	PROJECT NO.:	DU-SC-20-3
PROPOSED ACTIVITY: INDIVIDUAL PERMIT FOR FILL FOR LEVEE AND WCS INSTALLATION.		PROJECT TITLE:	BEAR ISLAND WEST WMA
DATE: REV 12-12-16		SHEET TITLE:	COVER SHEET
COUNTY: COLLETON	APPLICANT: SCDNR	LATITUDE/LONGITUDE: 32.5806°/80.4758°	MALCOLM BALDWIN SHEET 1 OF 10



BEAR ISLAND WEST



APPLICATION NUMBER:	DUCKS UNLIMITED INC.  SOUTHERN REGIONAL OFFICE 193 Business Park Drive; Suite E Ridgeland, MS 39157 Certificate Of Authorization No. C02504	PROJECT NO.: DU-SC-20-3
PROPOSED ACTIVITY: INDIVIDUAL PERMIT FOR FILL FOR LEVEE AND WCS INSTALLATION.		PROJECT TITLE: BEAR ISLAND WEST WMA
DATE: REV 12-12-16		SHEET TITLE: LOCATION MAP
COUNTY: COLLETON		LATITUDE/LONGITUDE: 32.5806°/80.4758°
	APPLICANT: SCDNR	AGENT: MALCOLM BALDWIN SHEET 2 OF 10



SCALE 1"=1000'

ASHEPOO RIVER

UNIT 29

UPLANDS

UNIT 30

UPLANDS

UPLANDS

EXISTING
UNIT 31
189.7 AC

UPLANDS

EX
SPILLWAY
#24

EX
TRUNK
#47

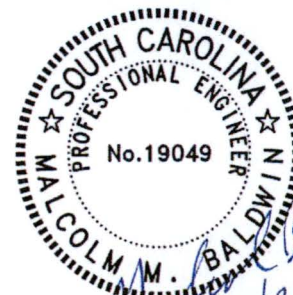
UNIT 33

UPLANDS

UPLANDS

UNIT 34

TIDAL CREEK



APPLICATION NUMBER:

PROPOSED ACTIVITY:
INDIVIDUAL PERMIT FOR FILL FOR LEVEE
AND WCS INSTALLATION.

DATE:
REV 12-12-16

COUNTY:
COLLETON

DUCKS
UNLIMITED
INC.



SOUTHERN REGIONAL OFFICE
193 Business Park Drive, Suite E
Ridgeland, MS 39157
Certificate of Authorization No. C02504

APPLICANT:
SCDNR

PROJECT NO.: DU-SC-20-3

PROJECT TITLE: BEAR ISLAND WEST WMA

SHEET TITLE: EXISTING CONDITIONS

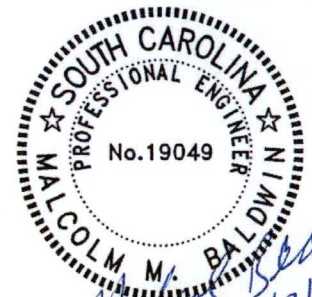
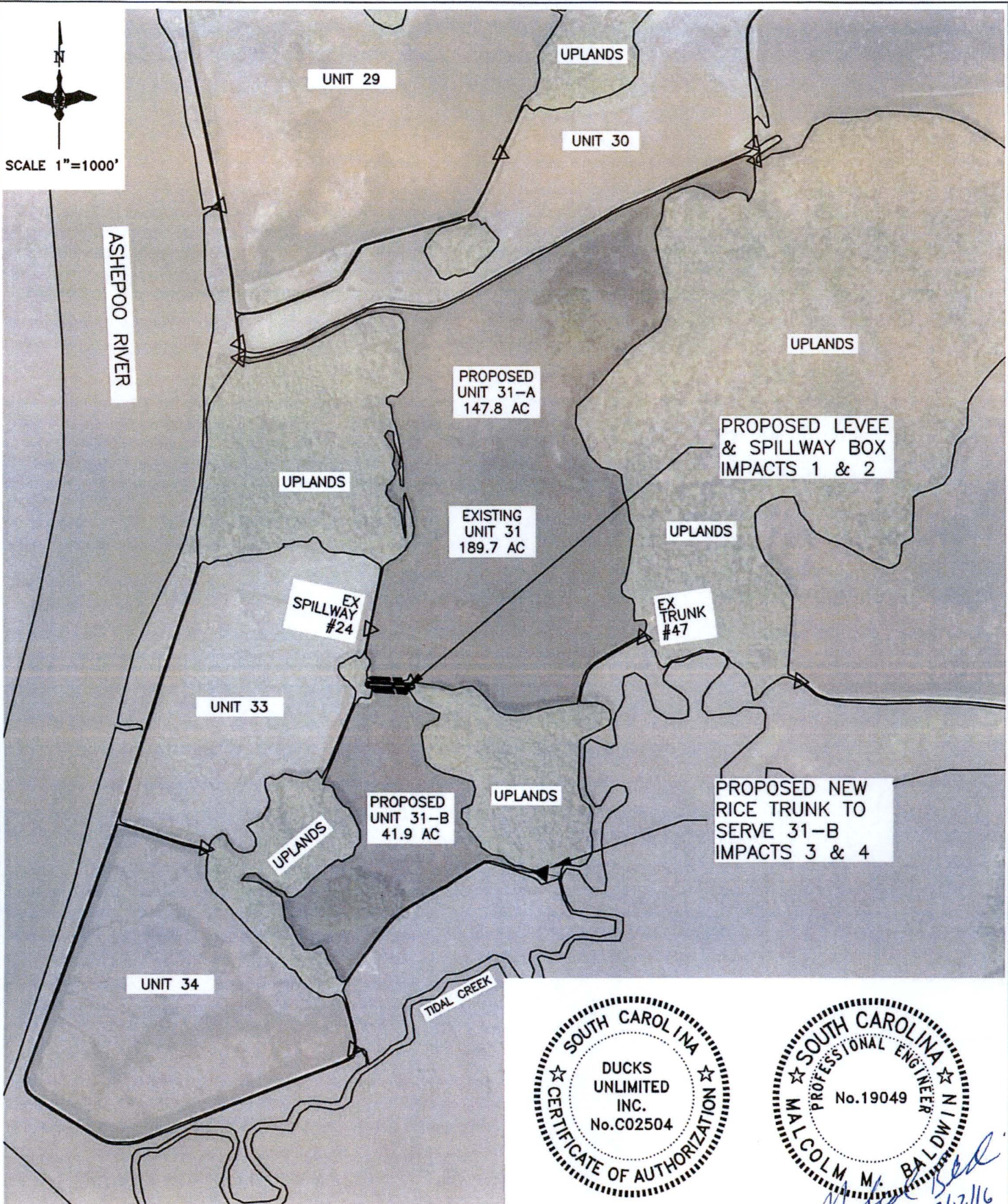
LATITUDE/LONGITUDE: 32.5806°/80.4758°

AGENT:
MALCOLM BALDWIN

SHEET 3 OF 10




SCALE 1"=1000'



Malcolm Baldwin
12/2/16

APPLICATION NUMBER:	
PROPOSED ACTIVITY: INDIVIDUAL PERMIT FOR FILL FOR LEVEE AND WCS INSTALLATION.	
DATE:	REV 12-12-16
COUNTY:	COLLETON

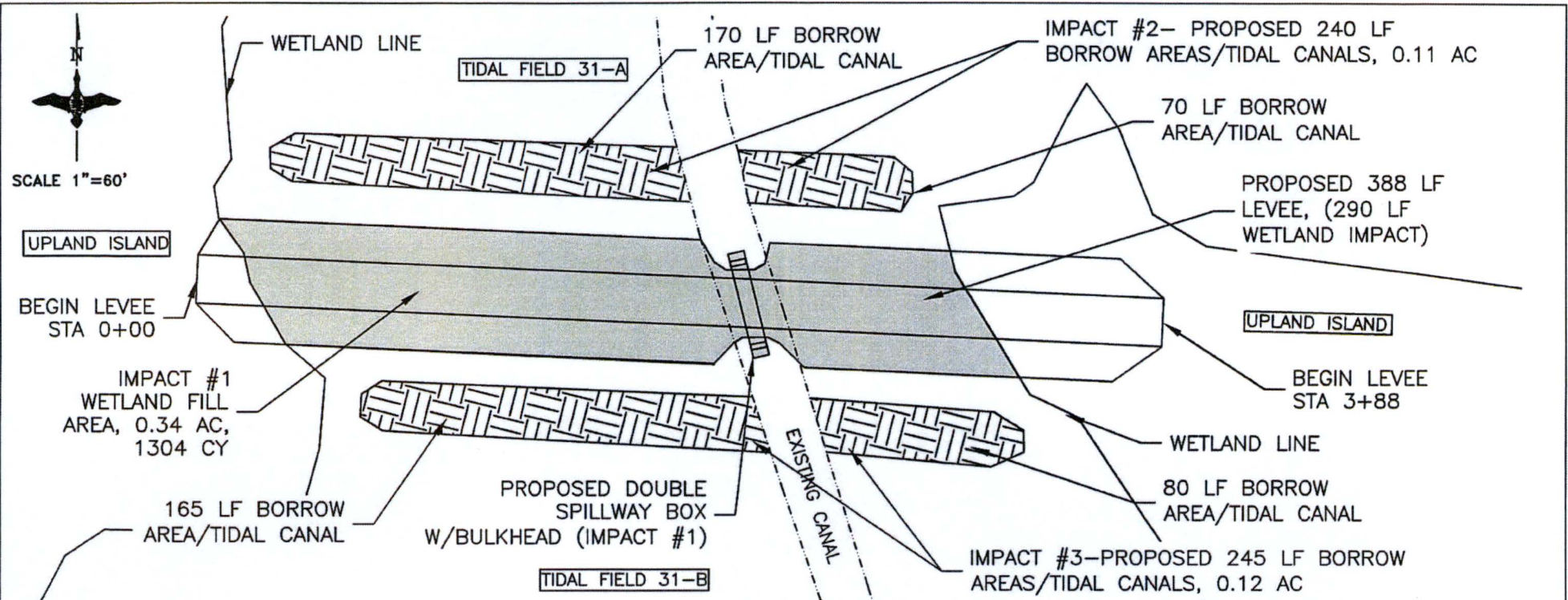
DUCKS UNLIMITED INC.



SOUTHERN REGIONAL OFFICE
193 Business Park Drive; Suite E
Ridgeland, MS 39157
Certificate of Authorization No. C02504

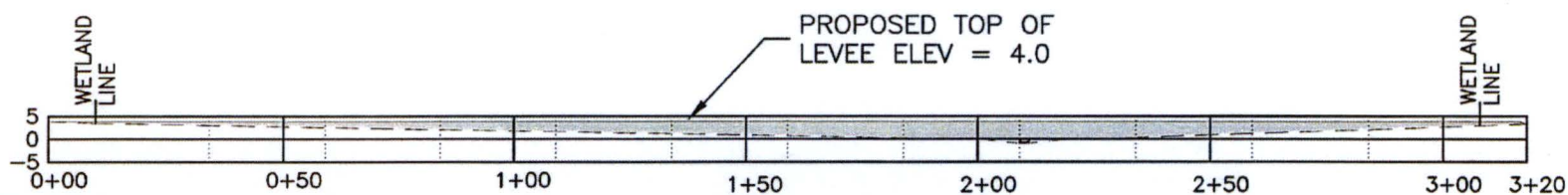
APPLICANT: SCDNR

PROJECT NO.:	DU-SC-20-3
PROJECT TITLE:	BEAR ISLAND WEST WMA
SHEET TITLE:	OVERALL PLAN
LATITUDE/LONGITUDE:	32.5806°/80.4758°
AGENT:	MALCOLM BALDWIN
	SHEET 4 OF 10



OCRM CRITICAL LINE AS APPROVED BY FRED MALLET ON 10/15/15.

PLAN VIEW
SCALE: 1"=60'

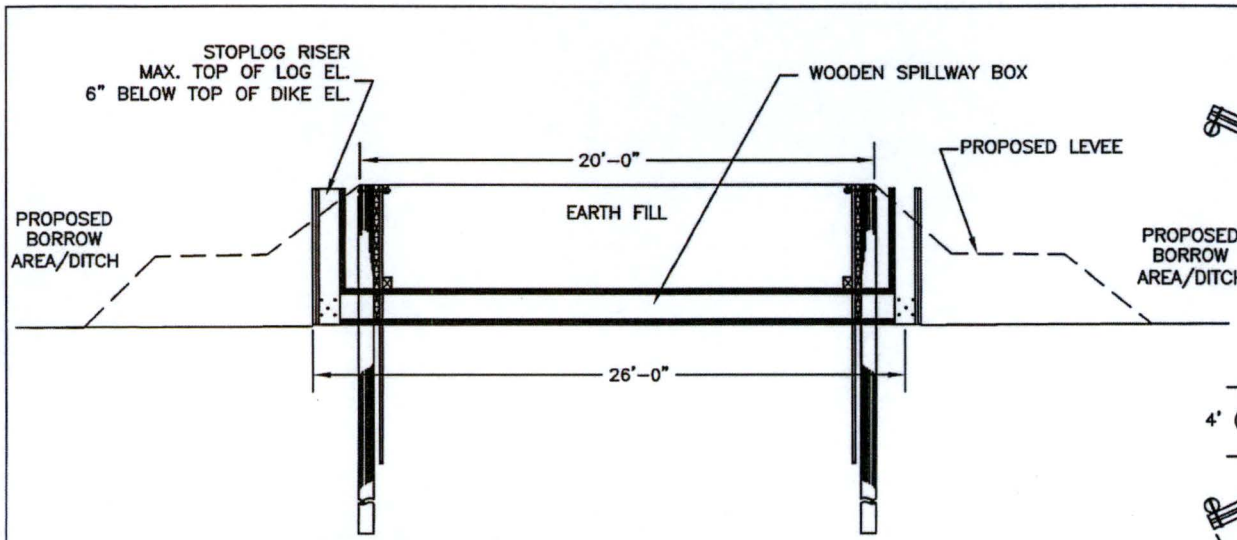


SECTION VIEW
SCALE: 1"=40'

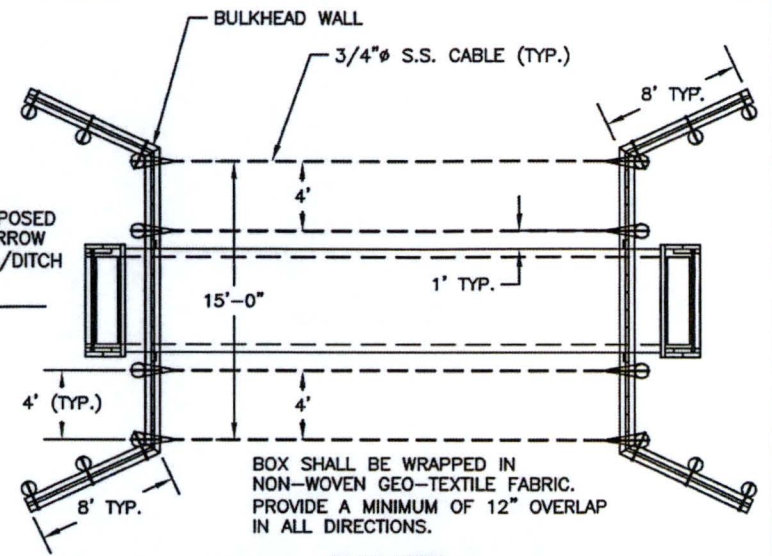


Handwritten signature and date: 12/12/16

APPLICATION NUMBER:	DUCKS UNLIMITED INC. 	PROJECT NO.:	DU-SC-20-3
PROPOSED ACTIVITY: INDIVIDUAL PERMIT FOR FILL FOR LEVEE AND WCS INSTALLATION.		PROJECT TITLE:	BEAR ISLAND WEST WMA
DATE: REV 12-12-16	SOUTHERN REGIONAL OFFICE 193 Business Park Drive; Suite E Ridgeland, MS 39157 Certificate Of Authorization No. C02504	SHEET TITLE:	LEVEE SITE PLAN
COUNTY: COLLETON	APPLICANT: SCDNR	LATITUDE/LONGITUDE:	32.5806°/80.4758°
		MALCOLM BALDWIN	SHEET 5 OF 10

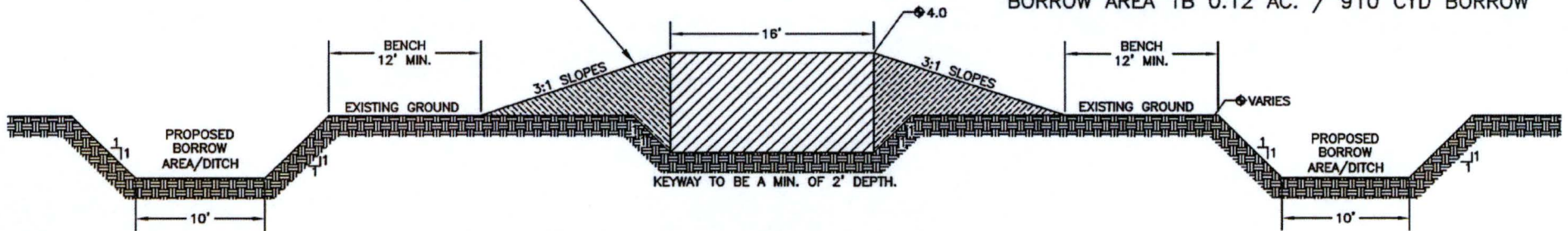


WATERCONTROL STRUCTURE SECTION
NOT TO SCALE



PLAN VIEW
WATERCONTROL STRUCTURE DETAIL
NOT TO SCALE

SIDE SLOPES MAY BE CONSTRUCTED WITH EITHER ON OR OFFSITE SOILS



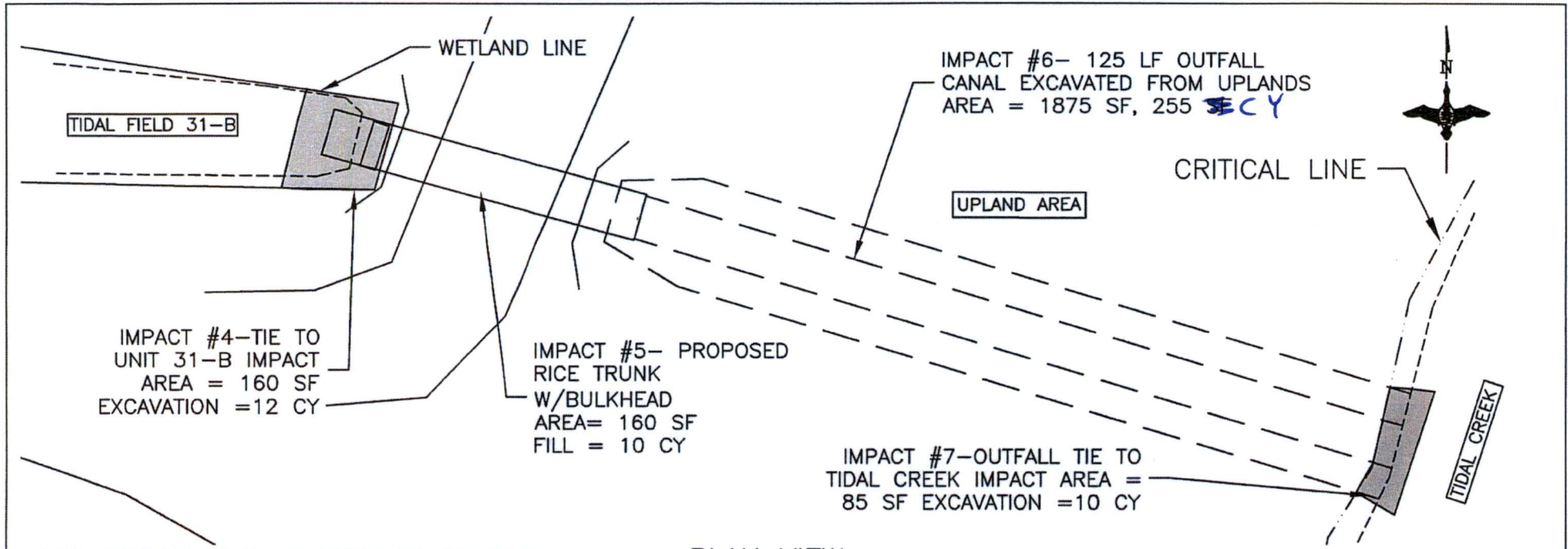
TYPICAL SECTION OF PROPOSED CROSS DIKE 1
NOT TO SCALE

CROSS DIKE NO. 1 IMPACTS
 FILL AREA LEEVE 0.34 AC./1,304 CYD FILL
 BORROW AREA 1A 0.11 AC. / 834 CYD BORROW
 BORROW AREA 1B 0.12 AC. / 910 CYD BORROW



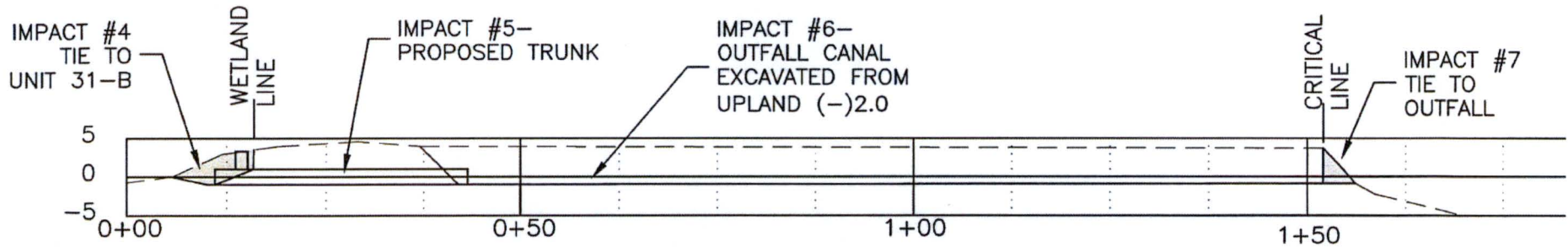
M. Baldwin
12/2/16

APPLICATION NUMBER:	DUCKS UNLIMITED INC. 	PROJECT NO.:	DU-SC-20-3
PROPOSED ACTIVITY: INDIVIDUAL PERMIT FOR FILL FOR LEEVE AND WCS INSTALLATION.		PROJECT TITLE:	BEAR ISLAND WEST
DATE: REV 12-12-16	SOUTHERN REGIONAL OFFICE 193 Business Park Drive; Suite E Ridgeland, MS 39157 Certificate Of Authorization No. C02504	SHEET TITLE:	LEEVE SECTION
COUNTY: COLLETON	APPLICANT: SCDNR	LATITUDE/LONGITUDE:	32.5806°/80.4758°
		MALCOLM BALDWIN	SHEET 6 OF 10



OCRM CRITICAL LINE AS APPROVED BY FRED MALLETT ON 10/15/15.

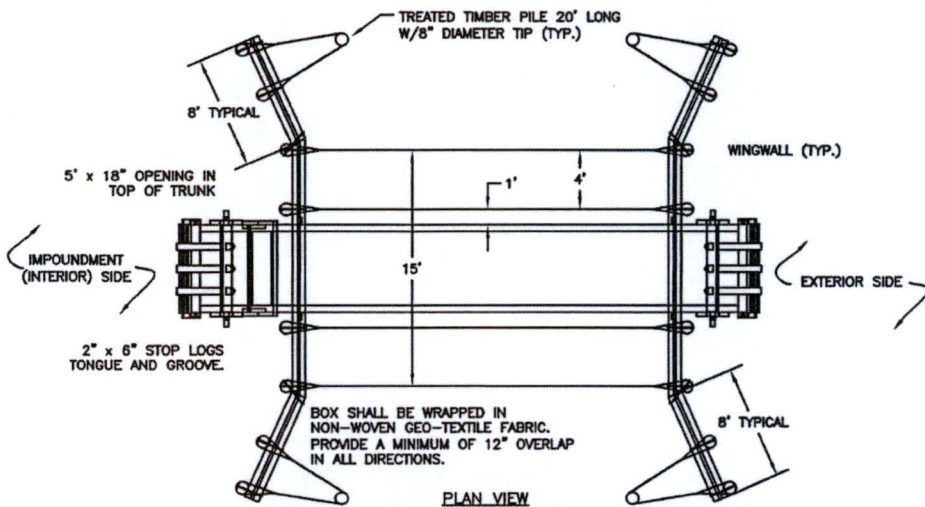
PLAN VIEW
SCALE: 1"=20'



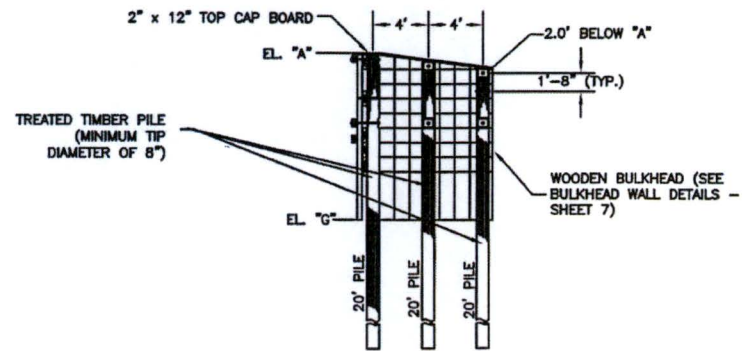
SECTION VIEW
SCALE: 1"=20'



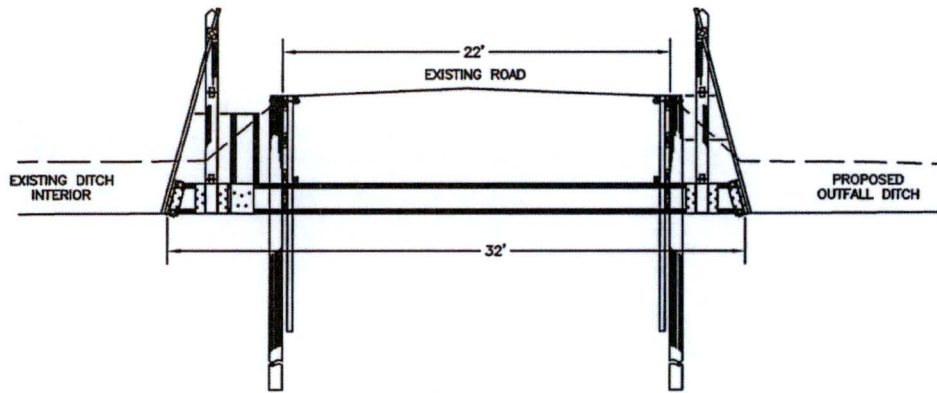
APPLICATION NUMBER:	DUCKS UNLIMITED INC. 	PROJECT NO.:	DU-SC-20-3
PROPOSED ACTIVITY: INDIVIDUAL PERMIT FOR FILL FOR LEVEE AND WCS INSTALLATION.		PROJECT TITLE:	BEAR ISLAND WEST WMA
DATE: REV 12-12-16	SOUTHERN REGIONAL OFFICE 193 Business Park Drive, Suite E Ridgeland, MS 39157 Certificate Of Authorization No. C02504	SHEET TITLE:	TRUNK SITE/SECTION
COUNTY: COLLETON	APPLICANT: SCDNR	LATITUDE/LONGITUDE:	32.5806°/80.4758°
		MALCOLM BALDWIN	SHEET 7 OF 10



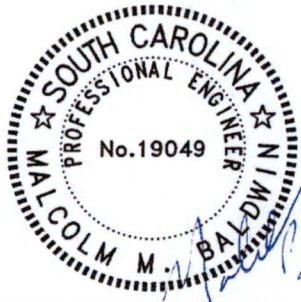
RICE TRUNK DETAILS
NOT TO SCALE



WINGWALL ELEVATION PLAN
NOT TO SCALE

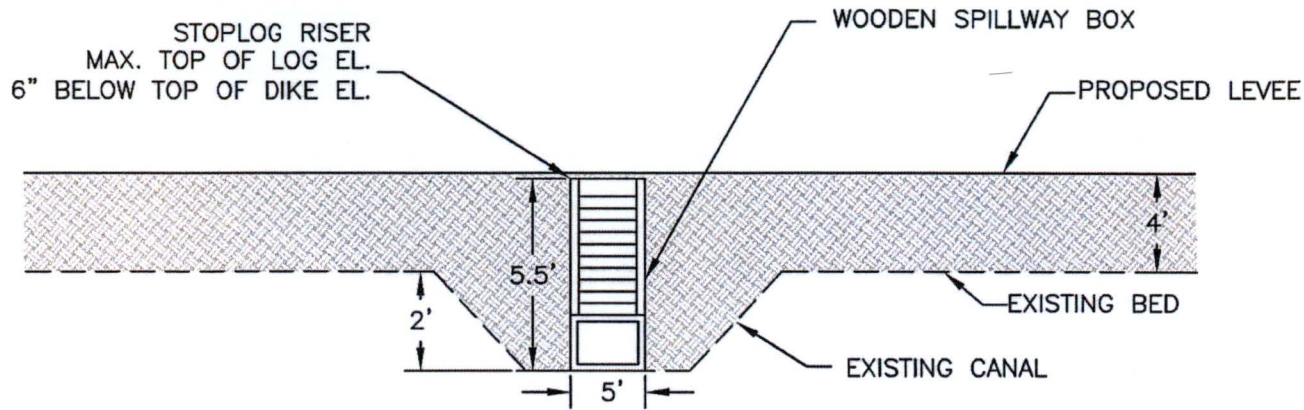


RICE TRUNK SECTION
NOT TO SCALE

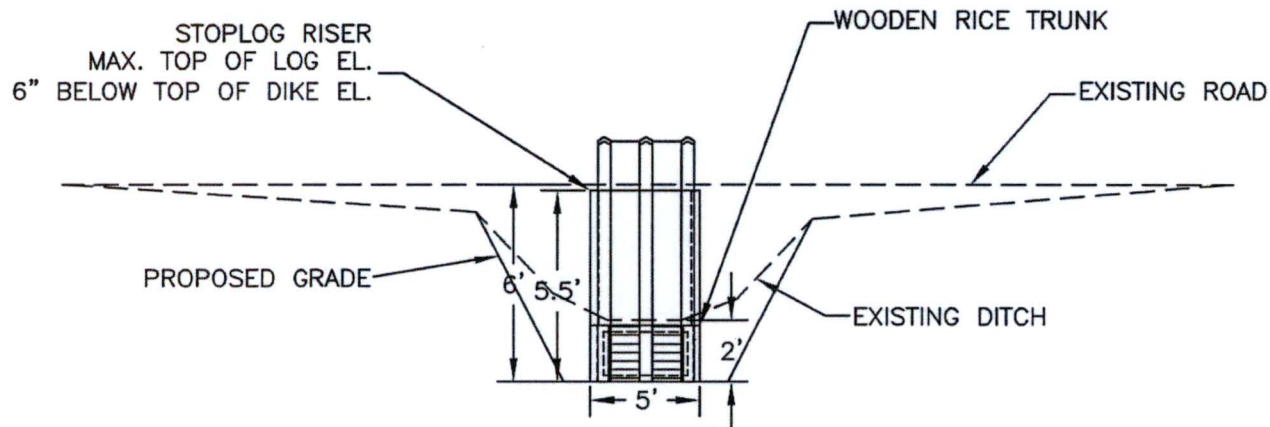


12/12/16

APPLICATION NUMBER:	DUCKS UNLIMITED INC.  SOUTHERN REGIONAL OFFICE 193 Business Park Drive; Suite E Ridgeland, MS 39157 Certificate Of Authorization No. C02504	PROJECT NO.:	DU-SC-20-3
PROPOSED ACTIVITY: INDIVIDUAL PERMIT FOR FILL FOR LEVEE AND WCS INSTALLATION.		PROJECT TITLE:	BEAR ISLAND WEST
DATE: REV 12-12-16		SHEET TITLE:	TRUNK DETAILS
COUNTY: COLLETON		LATITUDE/LONGITUDE:	32.5806°/80.4758°
APPLICANT: SCDNR		MALCOLM BALDWIN	SHEET 8 OF 10



WATERCONTROL STRUCTURE SECTION
NOT TO SCALE



WOODEN RICE TRUNK SECTION
NOT TO SCALE



M. Baldwin
12/12/16

APPLICATION NUMBER:	DUCKS UNLIMITED INC. 	PROJECT No.:	DU-SC-20-3
PROPOSED ACTIVITY: INDIVIDUAL PERMIT FOR FILL FOR LEVEE AND WCS INSTALLATION.	SOUTHERN REGIONAL OFFICE 193 Business Park Drive; Suite E Ridgeland, MS 39157 Certificate Of Authorization No. C02504	PROJECT TITLE:	BEAR ISLAND WEST
DATE: REV 12-12-16		SHEET TITLE:	TRUNK DETAILS
COUNTY: COLLETON	APPLICANT: SCDNR	LATITUDE/LONGITUDE:	32.5806°/80.4758°
		MALCOLM BALDWIN	SHEET 9 OF 10

IMPACT SUMMARY:

IMPACT ASSOCIATED WITH FILL = 14,895 SF, (0.342 AC), 1314 CY
 LEVEE (1): AREA = 14,735 SF, 0.338 AC, VOLUME = 1304 CY
 SPILLWAY: SPILLWAY TO BE INSTALLED IN FILL OF NEW LEVEE.
 NEW TRUNK (5): AREA = 160 SF, 0.004 AC, VOLUME = 10 CY

IMPACT ASSOCIATED WITH EXCAVATION = 12,459 SF, (0.286 AC), 2021 CY
 LEVEE BORROW (2): AREA = 4763 SF, 0.109 AC, VOLUME= 834 CY
 LEVEE BORROW (3): AREA = 5576 SF, 0.128 AC, VOLUME= 910 CY
 TRUNK TIE-IN (4): AREA = 160 SF, 0.004 AC, VOLUME= 12 CY
 OUTFALL DITCH (UPLAND) (6): AREA = 1875 SF, 0.043 AC, VOLUME= 255 CY
 OUTFALL TIE-IN (7): AREA = 85 SF, 0.002 AC, VOLUME= 10 CY

TOTAL AREA IMPACTED = 27,354 SF = 0.628 AC

NOTES:

Excess 717 CY of excavation material to be used for fill in the upland areas (see Begin Levee on sheet 5 of 10) for the purposes of creating road tie-ins.



*M. Baldwin
12/12/16*

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PROPOSED ACTIVITY: INDIVIDUAL PERMIT FOR FILL FOR LEVEE AND WCS INSTALLATION.	SOUTHERN REGIONAL OFFICE 193 Business Park Drive; Suite E Ridgeland, MS 39157 Certificate Of Authorization No. C02504	PROJECT TITLE:	BEAR ISLAND WEST
DATE: REV 12-12-16		SHEET TITLE:	IMPACT SUMMARY
COUNTY: COLLETON	APPLICANT: SCDNR	LATITUDE/LONGITUDE:	32.5806°/80.4758°
		AGENT:	MALCOLM BALDWIN SHEET 10 OF 10

36. Impact Table- Bear Island West wetland permit application

Impact No.	Wetland Type	Distance to Receiving Water body (LF)	Purpose of Impact	Impact Size (acres)
1	Tidal Impoundment	1800	Fill to create Impoundment levee	0.338
2	Tidal Impoundment	1800	Excavation of canal to create levee	0.109
3	Tidal Impoundment	1800	Excavation of canal to create levee	0.128
4	Tidal Impoundment	150	Excavation for trunk tie in	0.004
5	Tidal Impoundment	130	Fill to install trunk	0.004
6	Upland	10	Excavation for outfall ditch	0.043
7	Critical/Tidal	adjacent	Excavation for ditch tie in	0.002

Total Impact Area = 0.628 acres