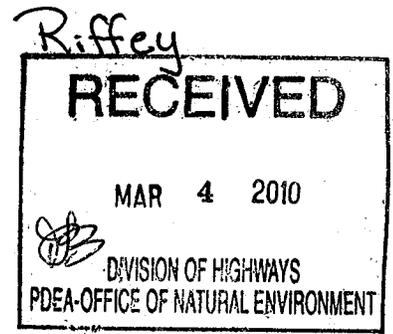




REPLY TO
ATTENTION OF:

DEPARTMENT OF THE ARMY
WILMINGTON DISTRICT, CORPS OF ENGINEERS
69 DARLINGTON AVENUE
WILMINGTON, NORTH CAROLINA 28403-1343



March 3, 2010

Regulatory Division

Action ID No. SAW-1993-00570

Gregory J. Thorpe, Ph.D.
Environmental Management Director, PDEA
N.C. Department of Transportation
1598 Mail Service Center
Raleigh, NC 27699-1548

Dear Dr. Thorpe:

Please reference our November 17, 2009 letter to you regarding the discharges of fill material and roadway upgrades on approximately 3 acres of the Salt Tract Mitigation Site, Moore County, North Carolina. The North Carolina Department of Transportation (NC DOT) developed the Salt Tract Mitigation Site to satisfy compensatory mitigation requirements of the Department of the Army (DA) authorization issued on October 4, 2002 (Action ID Number: SAW-1993-00570).

On February 4, 2010, Ms. Kimberly Garvey and Ms. Jennifer Frye of the U.S. Army Corps of Engineers Regulatory Division (Corps), met on-site with Ms. Candice Williams and Mr. Harry Hubert, both representing the Sandhills Area Land Trust, Mr. Art King, Mr. Rex Badgett, Ms. Sarah Foster and Mr. Chuck Dumas of NC DOT Division 6 and Mr. Randy Griffin, Mr. Phil Harris and Mr. Jason Elliot of your office to evaluate the recent land disturbing activities and discuss restoration options. On February 18, 2010, the Corps received your proposed remediation plan, entitled *Sand Hill Area Land Trust Mitigation Site Permit Violation Remediation Plan, TIP R-210, US 1 Relocation, ORM ID199300570, Moore County, February 2010* (attached). Upon review of this Remediation Plan and the ensuing administrative record, the Corps determines that this remediation proposal is satisfactory, provided you adhere to the following modifications and conditions:

1. Remediation work shall be completed within 90 days of the date of this letter. If the site remediation cannot be completed within 90 days, you must submit to the Corps a written explanation and a schedule of completion for our review.
2. No fill shall be added or re-deposited in the restoration area; nor shall the restoration area be re-graded with mechanized equipment once the fill is removed.
3. You must contact the Corps to schedule an on-site pre-construction meeting with the contractor, prior to commencing the restoration.

CERTIFIED MAIL
RETURN RECEIPT REQUESTED

4. You must relocate and stabilize the removed fill material to an appropriate upland disposal site.
5. You must install and maintain the proper sediment and erosion control measures on site until such time the Corps verifies restoration success. If, at any time, sediment erodes into the restored area, it must be immediately removed back to the original restored elevations and reported to our office.
6. You shall conduct monitoring of the restoration areas for the re-establishment of wetland criteria, pursuant to the 1987 Corps Wetland Delineation Manual and the Atlantic and Gulf Coastal Plan Regional Supplement, and sedimentation and erosion control for a minimum of five years or until deemed successful by the Corps. You shall provide annual monitoring reports to the Corps by January 1st of each year, with the first submittal by January 1, 2011. Monitoring reports shall include, at a minimum, a brief narrative, photographic documentation of restoration efforts, and vegetation success and/or failure. The decision to plant selected species or allow the site to revegetate naturally will be determined after the review of the first year monitoring report.
7. If, after five years, any portion of the restoration area fails to meet wetland criteria, you will be required to submit (for Corps approval) and execute a contingency plan.
8. During the monitoring period and until the restoration is deemed successful, no activity is permitted within the restoration area beyond what is necessary to maintain sedimentation and erosion control and the survival and health of the wetland vegetation, unless directed or approved by the Corps.
9. There shall be no temporary placement or double handling of excavated or fill material or construction equipment within waters or wetlands outside the remediation areas.
10. NCDOT should utilize the Best Management Practices for all work as described in the "*Best Management Practices for Construction and Maintenance Activities*", August 2003.
11. All mechanized equipment will be regularly inspected and maintained to prevent contamination of waters and wetlands from fuels, lubricants, hydraulic fluids, or other toxic materials. No equipment staging or storage of construction material will occur in wetlands. Hydro-seeding equipment will not be discharged or washed out into any surface waters or wetlands. In the event of a spill of petroleum products or any other hazardous waste, the permittee shall immediately report it to the N.C. Division of Water Quality at (919) 733-5083 or (800) 662-7956 and provisions of the North Carolina Oil Pollution and Hazardous Substances Control Act will be followed.
12. All discussions and decisions regarding the Conservation Easements on the property must be coordinated directly with the Corps to ensure that the proposed solution is compliant with the terms and conditions of the Department of the Army (DA) authorization issued to the North Carolina Department of Transportation (NC DOT) on October 4, 2002 (Action ID Number: SAW-1993-00570).

Thank you for your time and cooperation. Should you have questions, please contact Ms. Kimberly Garvey or Ms. Jennifer Frye, at the Wilmington Regulatory Field Office, telephone (910) 251-4482 and (910) 251-4923, respectively.

Sincerely,



FOR: Jefferson M. Ryscavage
Colonel, U. S. Army
District Commander

Enclosure

Copies furnished (with enclosure):

Mr. Randy Griffin
NC Department of Transportation
Natural Environment Unit
PDEA Environmental Resource Center
4701 Atlantic Ave, Ste 116
Raleigh, NC 27604

Mr. Art King
NC Department of Transportation
Division 8
PO Box 1067
Aberdeen, NC 28315

Mr. Brian Wrenn
NCDENR DWQ
1650 Mail Service Center
Raleigh, NC 27699-1650

Mr. J. J. Barnes, Jr.
115 Drake Street
PO Box 1741
Fayetteville, NC 28302

Ms. Candice Williams
Executive Director – SALT
140-A SW Broad Street
Southern Pines, NC 28388

**Sand Hill Area Land Trust Mitigation Site
Permit Violation Remediation Plan
TIP R-210, US 1 Relocation
ORM ID 199300570
Moore County
February, 2010**

RECEIVED
FEB 18 2010
REGULATORY
WILM.FLD.OFC.

The North Carolina Department of Transportation (NCDOT) has become aware of improvements to the old logging road that bisects the Sandhills Area Land Trust (SALT) mitigation site in Moore County. The property is located off Lakebay Road (SR 2023) southwest of Lobelia. This site was used as compensatory wetland mitigation to offset unavoidable wetland impacts associated with R-210, US 1 Relocation near Vass. The road improvements include the placement of earth fill material and/or aggregate, as well as culverts, in low lying areas of the road. The current actions were undertaken by the current property owner, with no prior knowledge by NCDOT, until the work was completed.

NCDOT holds a Conservation Easement, dated July, 1998, on this parcel, which specifically prohibits such activity. The purpose of this document is to provide detail to the actions proposed to bring the above mentioned compensatory wetland mitigation site into State and Federal Environmental Permit Compliance.

PROHIBITED ACTIVITY-ROAD IMPROVEMENTS

In December, 2009, NCDOT surveyed the extent of the fill material and culvert installation along the old logging road that bisects the project (see attached plan sheets). There were 5 distinct areas along the path where fill and/or aggregate were used to improve and armor the surface of the road. There were 5 plastic, circular culverts of various sizes that were installed in the washouts along the road, in order to pass surface water flow under the road. Also, fill material and/or aggregate was installed to a depth ranging from approximately 1"-2" in some areas, up to 12"-15" at the culvert locations. There were also 2 distinct rock stockpile locations immediately adjacent to the logging road in upland areas of the site.

PROPOSED REMEDIAL ACTION

Due to the saturation and standing surface water along a majority of the access road, NCDOT will take all precautions not to negatively impact the adjacent wetland areas. The current proposal is to remove the 5 new cross pipes (see attached plan sheets) that were installed along the access road, to prevent surface water from flowing under the road. In addition, unstable fill material, as well as fill material greater than 3 inches in depth will be removed, to the extent possible, and transported to an NCDOT approved stockpile area, approximately 2 miles from the mitigation property. All work proposed will be accomplished

utilizing excavation equipment and trucks operating from the high ground on the old logging road. The cross pipes will be removed in the dry, by utilizing impervious dikes (see Appendix A: Impervious Dike Provision) at the inlet of the culverts. All cross pipe removal will closely follow NCDOT's Best Management Practices for Construction and Maintenance Activities. The entire logging road will be scarified and stabilized with Seed, Mulch, and Matting, where appropriate. A native wetland seed mix will be utilized in wetland areas along the road. (See Appendix A: Native Grass Seeding and Mulching Provision)

Upon further review, it appears that several saplings are either recovering from the mowing operation or regenerating naturally, along the road. No initial tree planting is proposed immediately following grading operations. NCDOT will review the site in December, 2010 to determine if additional seedlings are needed to supplement volunteer saplings. Upon consultation with State and Federal Regulatory agencies, the Department will supplement tree planting, as needed, utilizing the following specifications.

Tree planting density will be 680 trees/acre (approx. 8 foot centers). The following bare root seedlings will be planted, as available: laurel oak, water oak, willow oak, swamp black gum, and bald cypress. These species are consistent with the planting plan for the restoration areas in the original mitigation plan, noting that the logging road was not originally planted. All tree planting will occur during the dormant season between the dates of January 1 and March 15.

In an effort to prevent future vehicular access along the old logging road following implementation of the remediation plan, NCDOT proposes to excavate a trench across the road in the upland section, as shown on the plan sheet and typical section. This area will also be stabilized with seed and mulch appropriately following construction.

Upon successful completion of the remedial work, the logging road will be monitored annually by visual observation for 5 years or until stabilized and approved by US Army Corps of Engineers. Each annual monitoring report will included a narrative, describing the condition of the logging road along with vegetation will be accompanied by photographs, including photographs of non-impacted sections of the road. The monitoring reports will be posted on the NCDOT website annually.

APPENDIX A

IMPERVIOUS DIKE:

Description

This work consists of furnishing, installing, maintaining, and removing an Impervious Dike for the purpose of diverting normal stream flow around the construction site. The Contractor shall construct an impervious dike in such a manner approved by the Engineer. The impervious dike shall not permit seepage of water into the construction site or contribute to siltation of the stream. The impervious dike shall be constructed of an acceptable material in the locations noted on the plans or as directed.

Materials

Acceptable materials shall include but not be limited to sheet piles, sandbags, and/or the placement of an acceptable size stone lined with polypropylene or other impervious fabric.

Earth material shall not be used to construct an impervious dike when it is in direct contact with the stream unless vegetation can be established before contact with the stream takes place.

Measurement and Payment

Impervious Dike will not be measured and paid for under this article. Diversion Pumping will be measured and paid for as provided elsewhere in this contract. This payment shall be considered full compensation for all work including but not limited to furnishing materials, construction, maintenance, and removal of the impervious dike.

NATIVE GRASS SEEDING AND MULCHING:

Bermuda

Native Grass Seeding and Mulching shall be performed on the disturbed areas of wetlands and riparian areas, and adjacent to Stream Relocation construction within a 50 foot zone on both sides of the stream or depression, measured from top of stream bank or center of depression. The stream bank of the stream relocation shall be seeded by a method that does not alter the typical cross section of the stream bank. Native Grass Seeding and Mulching shall also be performed in the permanent soil reinforcement mat section of performed scour holes, and in other areas as directed.

The kinds of seed and fertilizer, and the rates of application of seed, fertilizer, and limestone, shall be as stated below. During periods of overlapping dates, the kind of seed to be used shall be determined. All rates are in pounds per acre.

March 1 - August 31	September 1 - February 28
25# Bermudagrass (hulled)	35# Bermudagrass (unhulled)
6# Indiangrass	6# Indiangrass
8# Little Bluestem	8# Little Bluestem
4# Switchgrass	4# Switchgrass
25# Browntop Millet	35# Rye Grain
500# Fertilizer	500# Fertilizer
4000# Limestone	4000# Limestone

Fertilizer shall be 10-20-20 analysis. A different analysis of fertilizer may be used provided the 1-2-2 ratio is maintained and the rate of application adjusted to provide the same amount of plant food as a 10-20-20 analysis and as directed.

Native Grass Seeding and Mulching shall be performed in accordance with Section 1660 of the Standard Specifications and vegetative cover sufficient to restrain erosion shall be installed immediately following grade establishment.

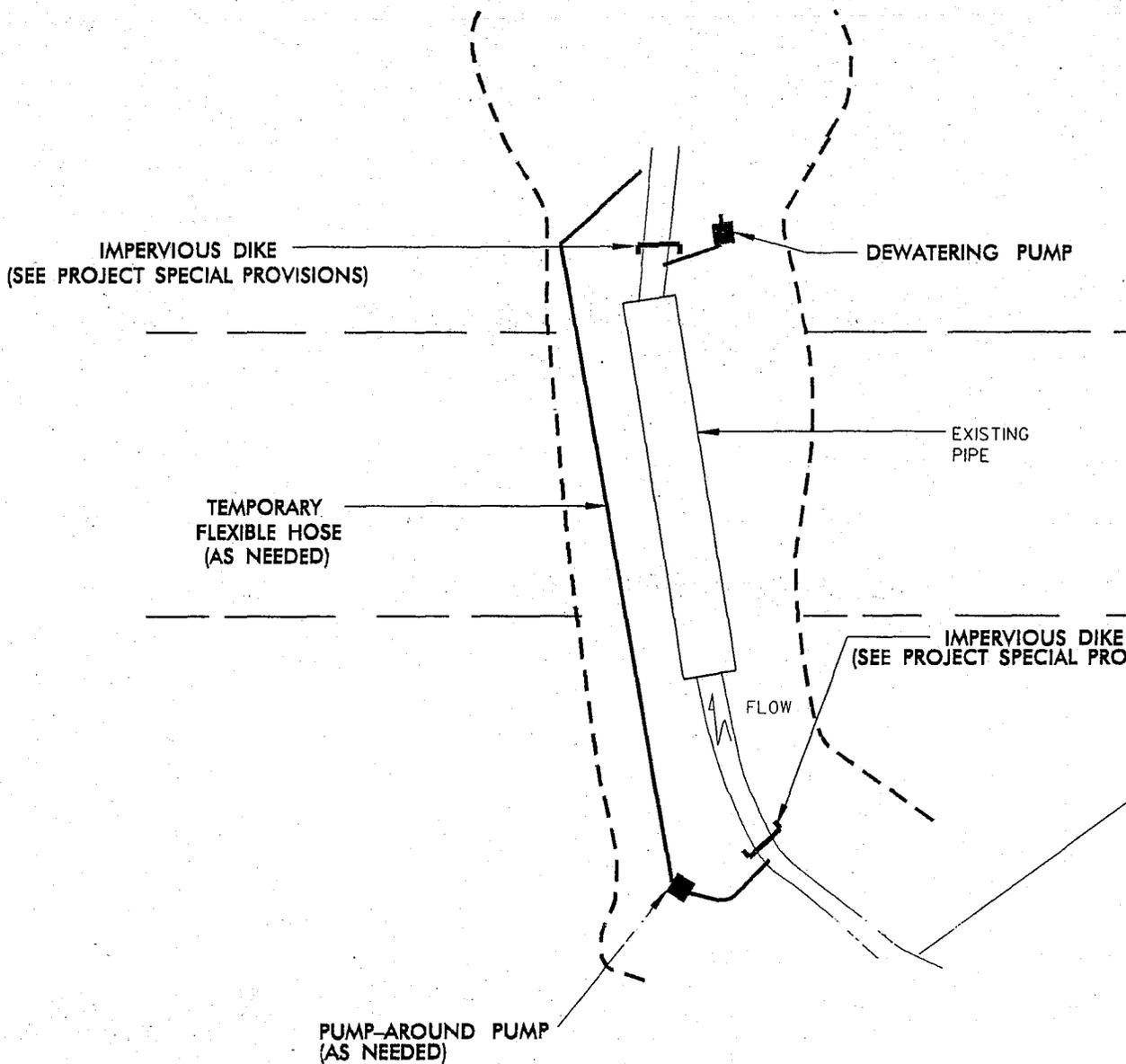
Temporary Seeding

Fertilizer shall be the same analysis as specified for Seeding and Mulching and applied at the rate of 400 pounds and seeded at the rate of 50 pounds per acre. German Millet or Brown-top Millet shall be used in summer months and rye grain during the remainder of the year. The Engineer will determine the exact dates for using each kind of seed.

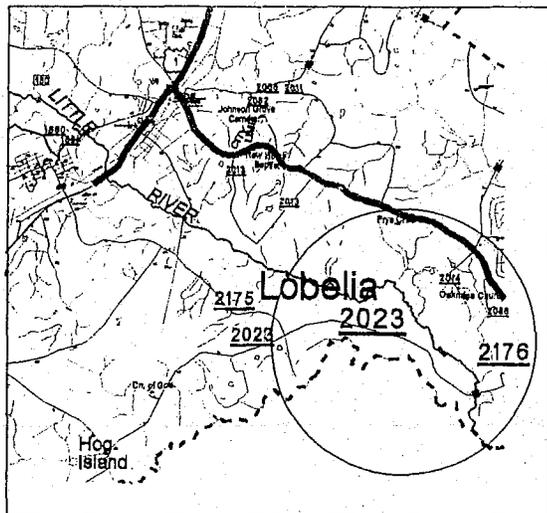
Fertilizer Topdressing

Fertilizer used for topdressing shall be 16-8-8 grade and shall be applied at the rate of 500 pounds per acre. A different analysis of fertilizer may be used provided the 2-1-1 ratio is maintained and the rate of application adjusted to provide the same amount of plant food as 16-8-8 analysis and as directed.

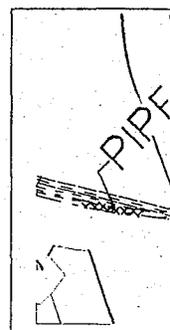
USACE PERMIT VIOLATION REMEDIA



**PUMP-AROUND OPERATION
FOR PIPE REMOVAL**



VICINITY MAP
NOT TO SCALE



ENLARGE VIEW AREA

DO NOT DISTURB WETLAND

DO NOT DISTURB WETLAND

LITTLE RIVER
LITTLE RIVER

SOIL LOADING ROAD

REMOVE
ROCK STOCKP
REMOVE
PIPE

DITCH PLUG

LITTLE RIVER

GENERAL LEGEND			
	APPROX. MITIGATION SITE BOUNDARY		
	EXISTING FENCE		
	EXISTING DITCH		
	MONITORING WELLS		
	REFERENCE WETLAND (4)		
	RESTORATION AREAS (8)		
		HECTARES	ACRES
	WETLAND ENHANCEMENT / PROTECTION	71*	176*
	UPLAND REFORESTATION / PROTECTION	41*	102*
	WETLAND RESTORATION	20*	49*
	TOTAL	132*	327*

PROJECT PLAN VIEW

STATE OF NORTH CAROLINA
DIVISION OF HIGHWAYS

SUMMARY OF QUANTITIES

SECT.	QUANTITY	UNIT	ITEM DESCRIPTION
800	1	LS	MOBILIZATION
1660	2.4	AC	SEEDING AND MULCHING
	1	LS	GRADING (REMOVAL OF ROAD/ROCK)
	2.4	AC	WETLAND REFORESTATION
	2.4	AC	RIPPING
	1	LS	EROSION CONTROL

NOTE: ALL QUANTITIES SHOWN ARE APPROXIMATE. CONTRACTOR MUST VERIFY ALL QUANTITIES TO HIS OWN SATISFACTION.
ESTIMATE LS, GRADING = 200 CY, GRADING (REMOVAL OF ROAD/ROCK) AND 100 LF PIPE REMOVAL (6 X-PIPES)

PIPE REMOVAL WILL BE ACCOMPLISHED UTILIZING NCDOT BEST MANAGEMENT PRACTICES FOR CONSTRUCTION & MAINTENANCE

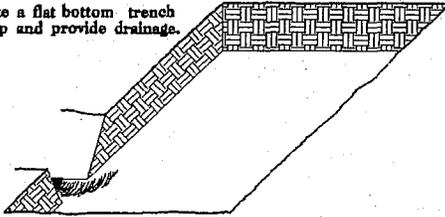
PLANTING DETAILS

SEEDLING / LINER BAREROOT PLANTING DETAIL

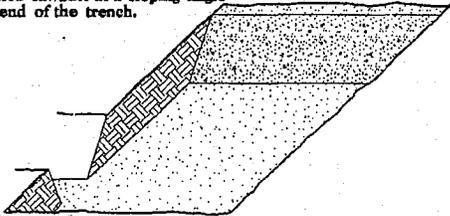
HEALING IN

1. Locate a healing-in site in a shady, well protected area.

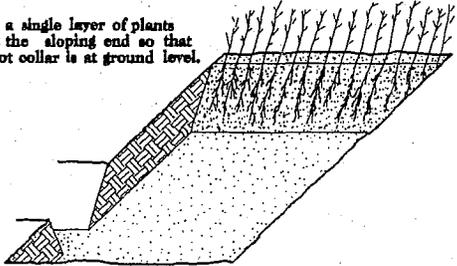
2. Excavate a flat bottom trench 12" deep and provide drainage.



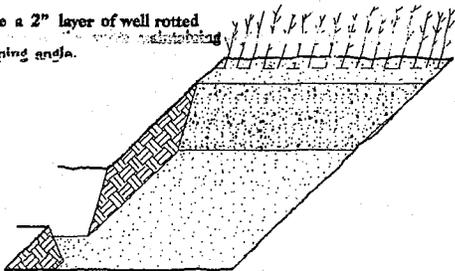
3. Backfill the trench with 2" well rotted sawdust. Place a 2" layer of well rotted sawdust at a sloping angle at one end of the trench.



4. Place a single layer of plants against the sloping end so that the root collar is at ground level.

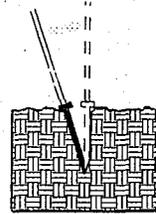


5. Place a 2" layer of well rotted sawdust at a sloping angle.

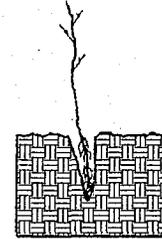


6. Repeat layers of plants and sawdust as necessary and water thoroughly.

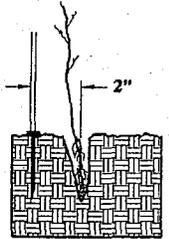
DIBBLE PLANTING METHOD USING THE KBC PLANTING BAR



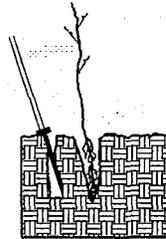
1. Insert planting bar as shown and pull handle toward planter.



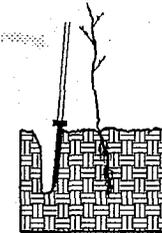
2. Remove planting bar and place seedling at correct depth.



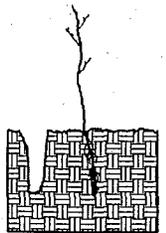
3. Insert planting bar 2" toward planter from seedling.



4. Pull handle of bar toward planter, firming soil at bottom.



5. Push handle forward firming soil at top.



6. Leave compaction hole open. Water thoroughly.

PLANTING NOTES:

PLANTING BAG
During planting, seedlings shall be kept in a moist canvas bag or similar container to prevent the root systems from drying.



KBC PLANTING BAR
Planting bar shall have a blade with a triangular cross section, and shall be 12" long, 4" wide and 1" thick at center.



ROOT PRUNING
All seedlings shall be root pruned, if necessary, so that no roots extend more than 10 inches (10") below the root collar.