

US Army Corps  
Of Engineers  
Wilmington District

## PUBLIC NOTICE

Issue Date: July 10, 2008  
Comment Deadline: August 11, 2008  
Corps Action ID #: SAW-2007-01188-201

The Wilmington District, Corps of Engineers (Corps) has received a prospectus from Restoration Systems, LLC, describing the establishment of a stream and wetland compensatory mitigation bank, known as Cripple Creek Stream and Wetland Mitigation Bank for Federal and State permits as described below:

### Bank Sponsor

Restoration Systems, LLC

This public notice does not imply, on the parts of the Corps of Engineers or other agencies, either favorable or unfavorable opinion of the work to be performed, but it is issued to solicit comments regarding the factors on which final decisions will be based. Specific plans and location information are described below and shown on the attached plans. This Public Notice and all attached plans are also available on the Wilmington District Web Site at [www.saw.usace.army.mil/wetlands](http://www.saw.usace.army.mil/wetlands).

WATERWAYS AND LOCATION OF THE PROPOSED WORK: The proposed bank site is located east of Roney-Lineberry Road, north of Woodbrooke Drive, south of Deep Creek Church Road and west of North Fonville Road, in northeast Alamance County, North Carolina. The approximate geographic coordinates are 36.1383° north latitude and -79.3810° west longitude. It is located along and adjacent to four unnamed tributaries to Boyd's Creek on 19.6 acres within the Cape Fear River Basin, Hydrologic Unit Code (HUC) 03030002, as depicted on the attached maps.

PROPOSED WORK AND PURPOSE: The bank sponsor proposes to establish, design, construct, and operate a stream and wetland compensatory mitigation bank composed of 19.6 acres located northeast of Burlington, Alamance County, North Carolina.

As stated by the sponsor, the primary goals and objectives of this proposed mitigation bank are to improve water quality, enhance flood attenuation and restore aquatic and riparian habitat. Specifically, the sponsor plans to restore 6.9 acres of wetlands and 4,265 linear feet of stream channel and enhance 1.9 acres of wetlands and 633 linear feet of stream channel. The sponsor states the goals and objectives will be accomplished by: 1) removing non-point sources of pollution associated with agricultural activities, 2) reducing sedimentation within onsite and downstream receiving waters, 3) reestablishing stream stability and the capacity to transport watershed flows and sediment loads by restoring stable dimension, pattern and profile, 4) promoting floodwater attenuation by reconnecting bankfull flows to abandoned floodplains, restoring entrenched tributaries, restoring depressional floodplain wetlands, and revegetating

floodplains, 5) improving aquatic habitat by enhancing stream bed variability and the use of in-stream structures, and 6) providing wildlife habitat. The sponsor states that the proposed bank will be protected in perpetuity by a conservation easement. The applicant states that upon completion the proposed bank will offer 4,518 Stream Mitigation Units and 7.85 Wetland Mitigation Units.

The proposed 19.6 acre bank site is currently utilized for agricultural activities such as livestock grazing and hay production. Horses predominantly graze the northern portion of the proposed bank and the southern portion is characterized by hay pasture and mixed forest. The main hydrologic feature of the proposed Bank is an unnamed tributary to Boyd's Creek and associated secondary tributaries and floodplains. The unnamed tributary to Boyd's Creek is a second order, perennial stream that has been dredged and straightened. The tributaries are disturbed, first order streams. Much of the streamside areas are accessible to livestock and much of the riparian vegetation has been removed. Approximately 9 acres of the proposed Bank's land area are currently underlain by hydric soils that have been impacted by stream channel entrenchment, ditching, excavation and removal of vegetation. The enclosed map shows the approximate location of proposed restoration and enhancement sites.

The proposed geographic service area is the 8 digit HUC, 03030002 (Haw River), located within the Cape Fear River Basin.

This mitigation bank may be considered one of a number of practicable alternatives available to applicants to compensate for unavoidable stream and wetland impacts associated with permits issued under the authority of Sections 404 and 401 of the Clean Water Act for projects located within the prescribed geographic service area.

Oversight of this wetland and stream compensatory mitigation bank will be by a group of Federal and State agency representatives collectively referred to as the Interagency Review Team (IRT). The IRT shall be chaired by the Wilmington District, U.S. Army Corps of Engineers and is comprised of representatives from the U.S. Environmental Protection Agency, U.S. Fish and Wildlife Service, N.C. Division of Water Quality, and the N.C. Wildlife Resources Commission.

The actual approval of the use of this mitigation bank for a specific project is the decision of the Corps of Engineers pursuant to Section 10 of the Rivers and Harbors Act and Section 404 of the Clean Water Act. The Corps provides no guarantee that any particular individual or general permit will be granted authorization to use this wetland compensatory mitigation bank to compensate for unavoidable wetland impacts associated with a proposed permit, even though mitigation from this bank may be available.

AUTHORITY: A Public Notice regarding proposed mitigation banks is required pursuant to the rules published in the Code of Federal Regulations (CFR) for Compensatory Mitigation for Losses of Aquatic Resources (33 CFR 332.8(d)(4)).

FEDERAL EVALUATION OF PROPOSAL: 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 this proposed mitigation bank. Any

comments received will be considered by the Corps in evaluating this proposal. Comments are used to assess impacts on endangered species, historic properties, conservation, economics, aesthetics, general environmental concerns, wetlands, cultural values, fish and wildlife values, flood hazards and flood plain values (in accordance with Executive Order 11988), land use, navigation, shore erosion and accretion, recreation, water supply and conservation, water quality, energy needs, safety, food and fiber production, mineral needs, considerations of property ownership, and, in general, the needs and welfare of the people.

Preliminary review indicates that: 1) An environmental impact statement will not be required; 2) No species of fish, wildlife, or plant (or their critical habitat) listed as endangered or threatened under the Endangered Species Act of 1973 (PL 93-205) will be affected; and 3) No cultural or historic resources considered eligible or potentially eligible for listing on the National Register of Historic Places will be affected. Additional information may change any of these preliminary findings.

Written comments pertinent to the proposed work, as outlined above, will be received in this office, Attention: Andrew Williams, Raleigh Regulatory Field Office, 3331 Heritage Trade Drive, Suite 105, Wake Forest, North Carolina 27587, until 5:00 p.m., August 11, 2008.

JUN 20 2008

RALEIGH REGULATORY FIELD OFFICE

Directions to The Bank:

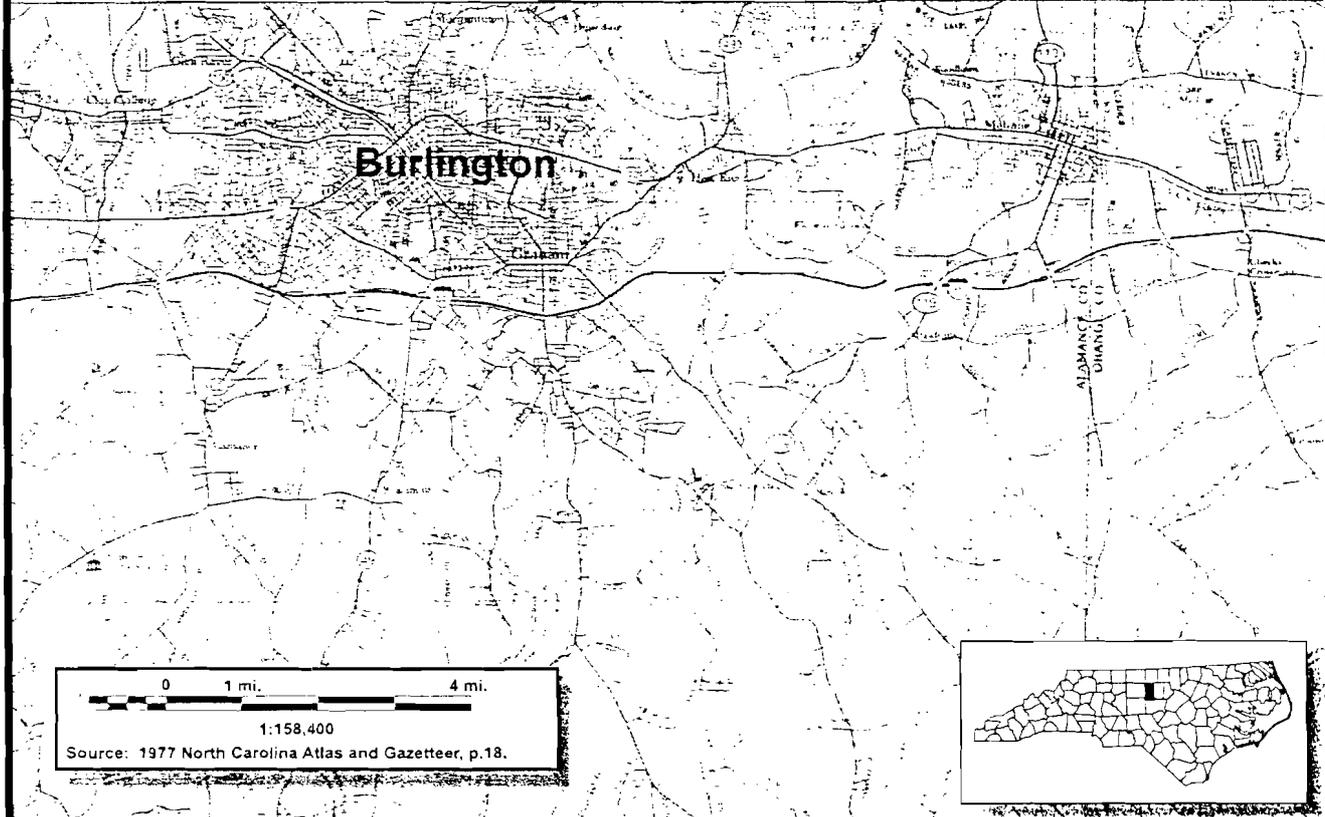
- Take exit 150 off Interstate 85-40 just east of Burlington
- Travel north towards Haw River Green Level for ~ 2.2 miles
- At the Highway 49 junction, turn right travel north on Highway 49 towards Green Level Roxboro for ~2.7 miles
- Turn left on Sandy Cross Road (at the Sandy Cross Mini Mart) for ~1.6 miles
- Turn right on Fonville Road for ~1.7 miles to a T-intersection
- Turn left on Deep Creek Road for ~0.9 mile
- Turn left on Roney-Lineberry Road just after Deep Creek Baptist Church for ~0.3 mile
- After passing through a trailer park, take a left at the stop sign into The Bank
- Point in center of road crossing at the upstream end of the Main Channel
- Latitude: 36.138332274 °N, Longitude: 79.380963290 °W



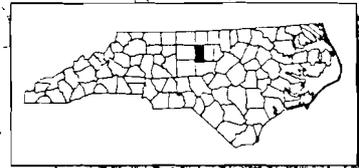
Reference Location

The Bank Location

NC Highway 49  
Sandy Cross



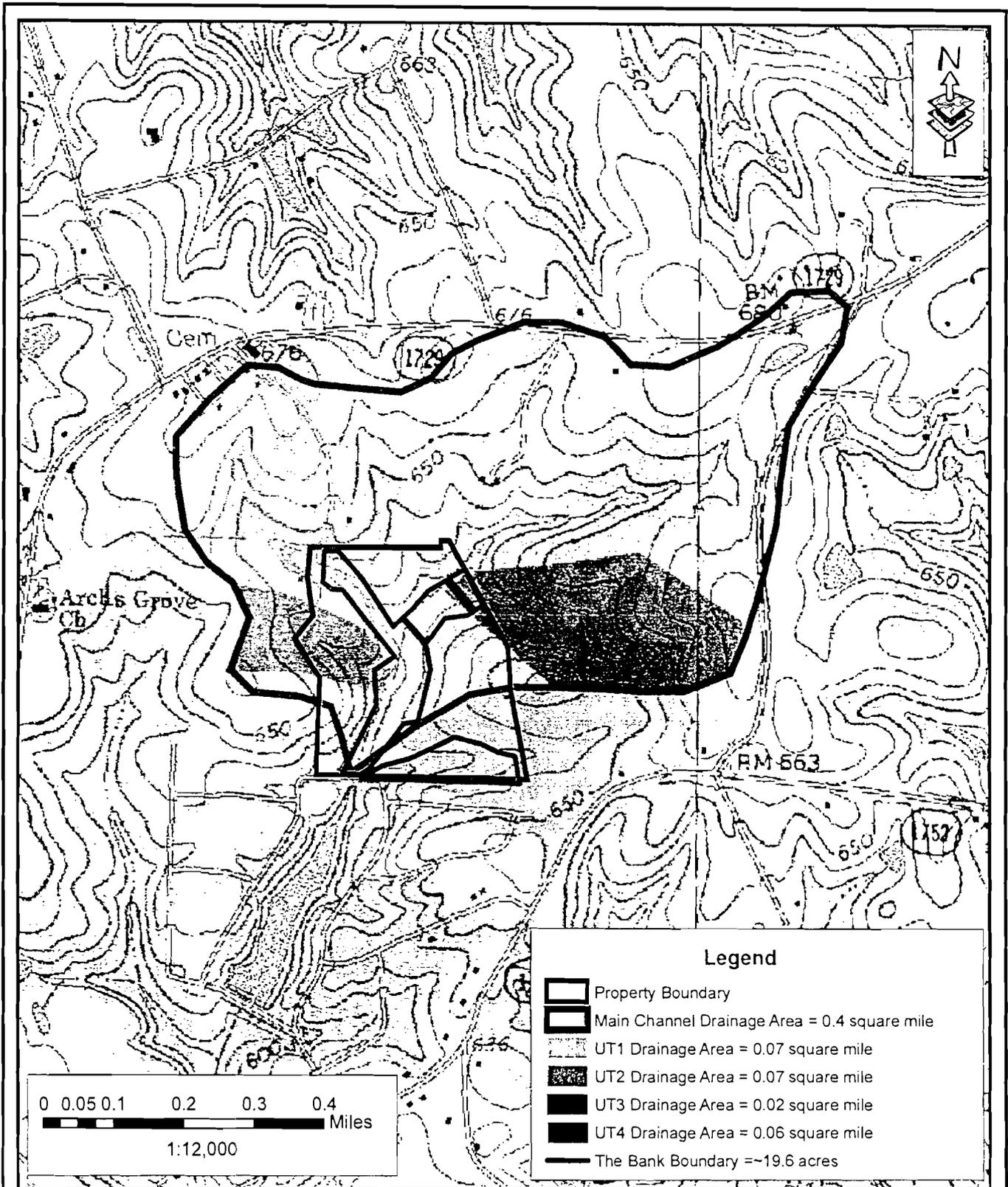
0 1 mi. 4 mi.  
1:158,400  
Source: 1977 North Carolina Atlas and Gazetteer, p.18.



2126 Rowland Pond Drive  
Willow Spring, NC 27592  
(919) 215-1693  
(919) 341-3839 fax

**THE BANK AND REFERENCE LOCATION**  
**CRIPPLE CREEK MITIGATION SITE**  
 Alamance County, North Carolina

Dwn. by:	CLF	FIGURE
Ckd by:	WGL	
Date:	April 2008	1
Project:	07-016	




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**TOPOGRAPHY AND DRAINAGE AREA**  
**CRIPPLE CREEK MITIGATION SITE**  
 Alamance County, North Carolina

CLF  
 Date April 2008  
 Project 07-016

FIGURE  
**3**



**Legend**

- The Bank Boundary = ~19.6 acres
- Existing Streams = 4139 linear feet
- Hydric Soils - Not Drained = 1.9 acres
- Drained Hydric Soils = 6.9 acres



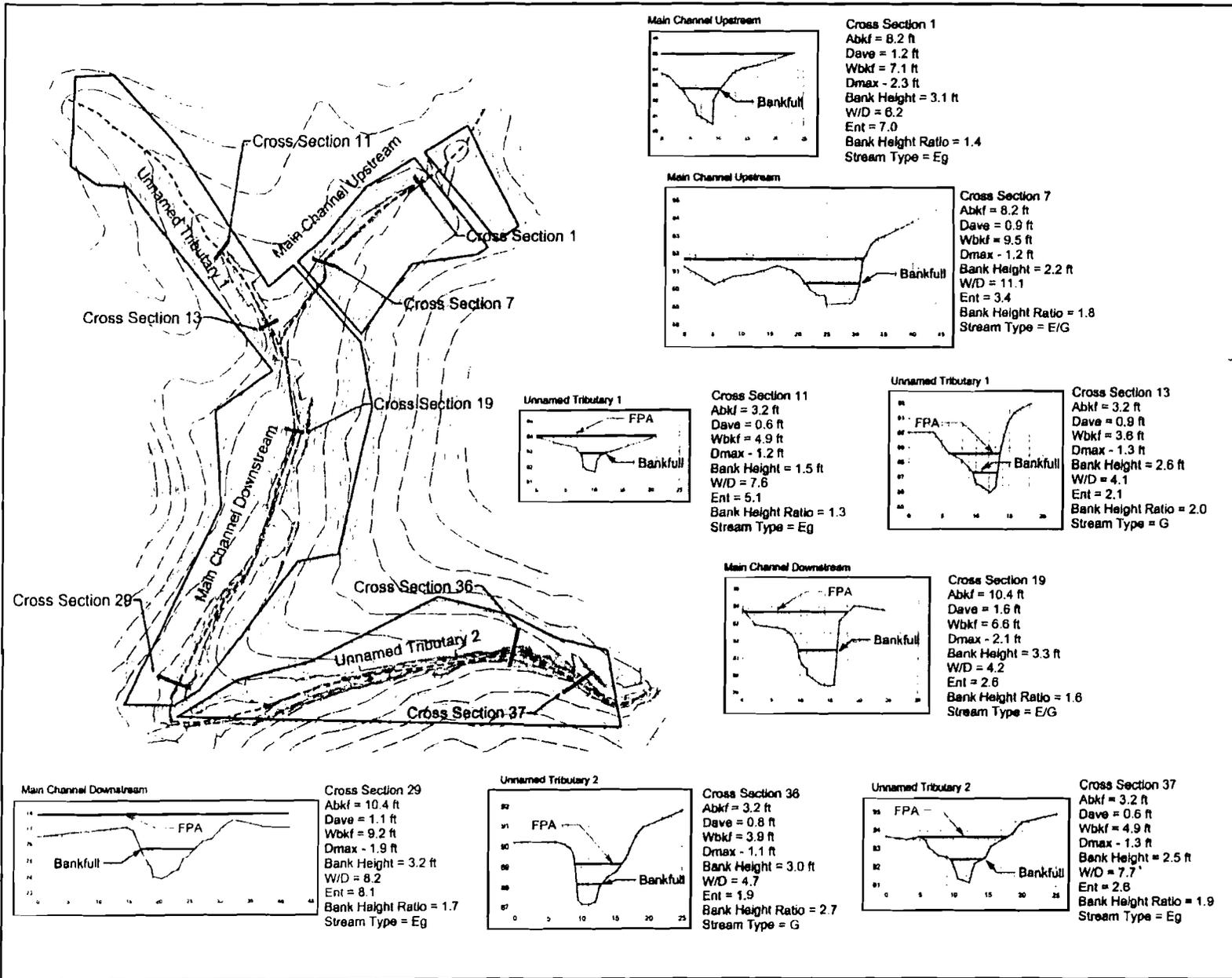

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**EXISTING CONDITIONS  
 CRIPPLE CREEK MITIGATION SITE  
 Alamance County, North Carolina**

CLF
Date May 2008
Project 07-016

FIGURE  
4

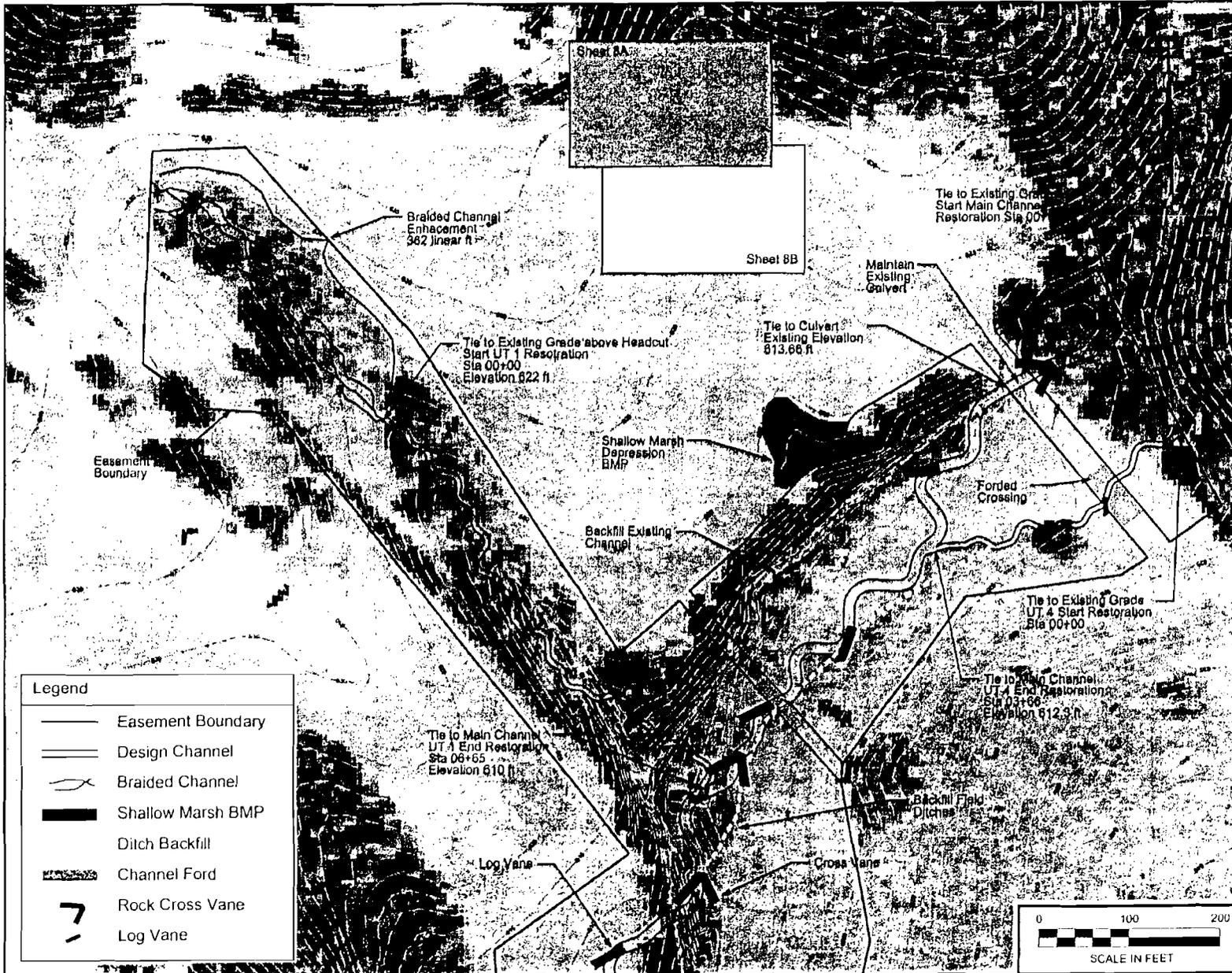


NOTES/REVISIONS

Project:  
**Cripple Creek Stream and Wetland Mitigation Bank**  
 Alamance County North Carolina

Title:  
**Existing Conditions Dimension**

Scale:	NA	FIGURE NO. <b>6</b>
Date:	May 2008	
Project No.:	07-016	



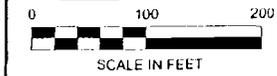
NOTES/REVISIONS

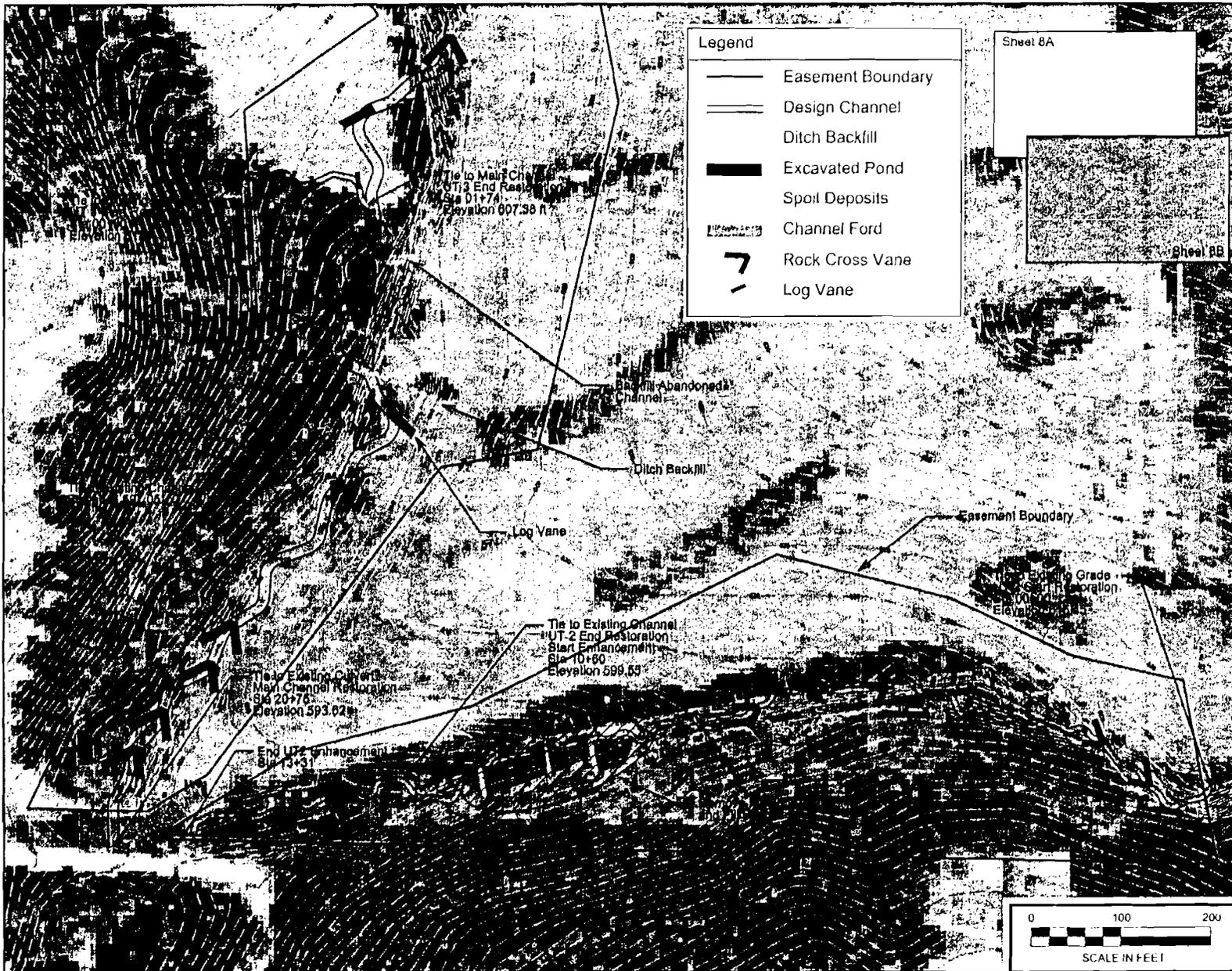
Project:  
 Cripple Creek  
 Stream and Wetland  
 Mitigation Bank  
 Alamance County  
 North Carolina

Title:  
 Restoration Plan

Scale:  
 1 inch = 105 feet  
 Date:  
 May 2008  
 Project No.:  
 07-016

FIGURE NO.  
 8A





**NOTES/REVISIONS**

**Project**

Cripple Creek Stream and Wetland Mitigation Bank

Alamance County North Carolina

**Title**

Restoration Plan

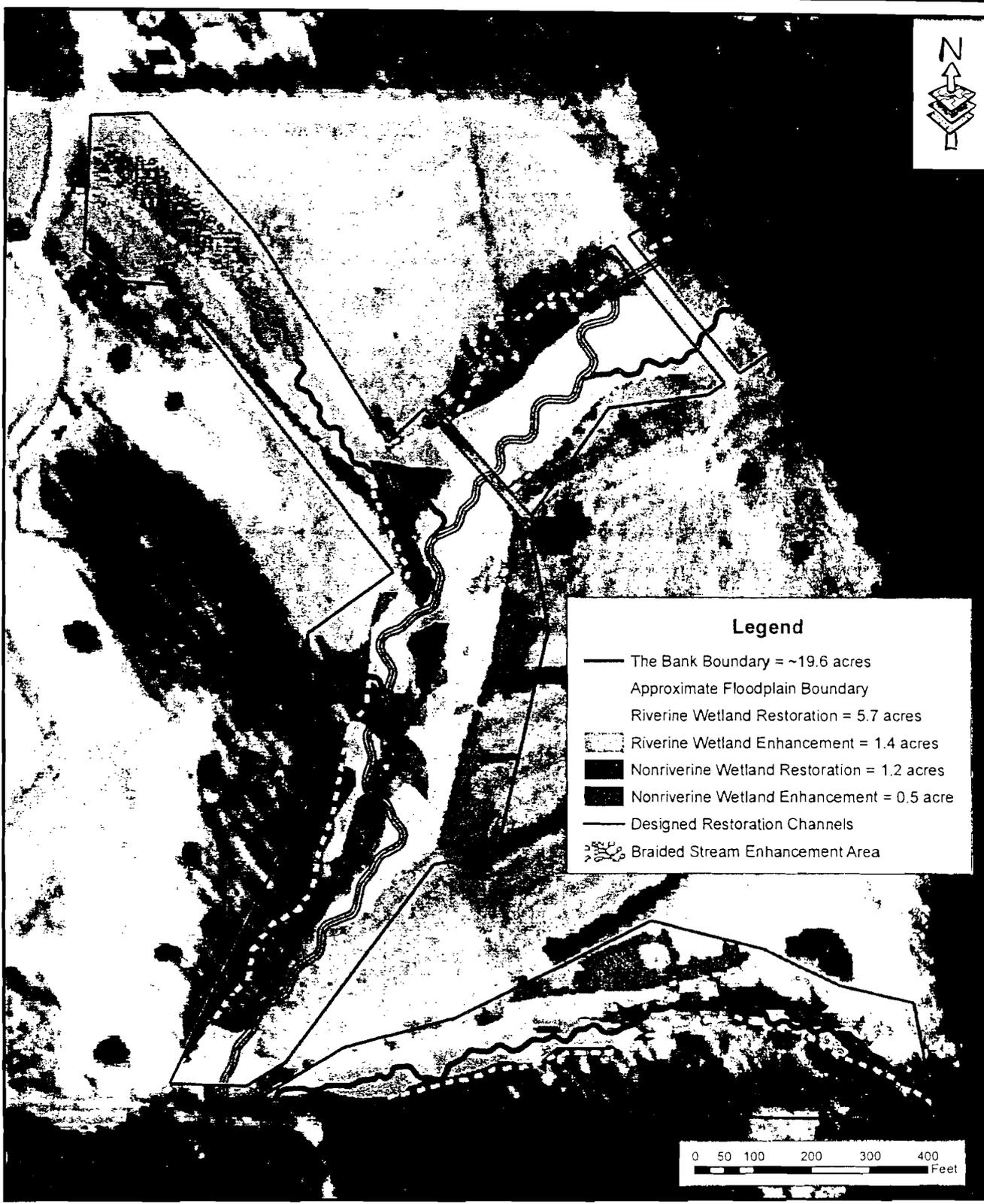
**Scale**  
1 inch = 105 feet

**Date**  
May 2008

**Project No**  
07-016

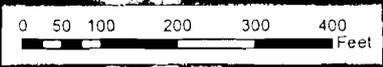
**FIGURE NO.**

8B



**Legend**

- The Bank Boundary = ~19.6 acres
- Approximate Floodplain Boundary
- Riverine Wetland Restoration = 5.7 acres
- ▨ Riverine Wetland Enhancement = 1.4 acres
- Nonriverine Wetland Restoration = 1.2 acres
- Nonriverine Wetland Enhancement = 0.5 acre
- Designed Restoration Channels
- ⊞ Braided Stream Enhancement Area




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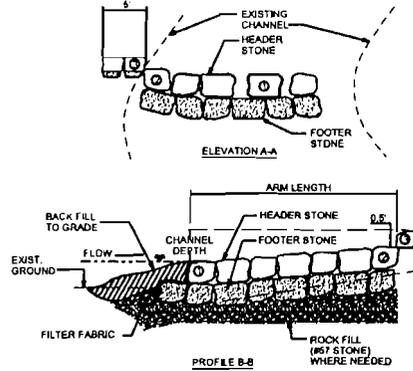
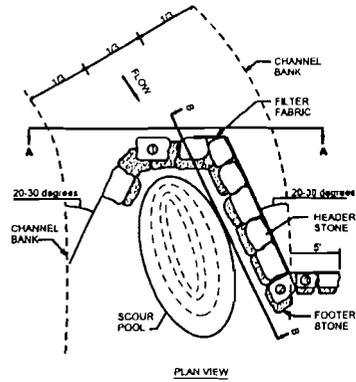
**RESTORATION PLAN-WETLANDS**  
**CRIPPLE CREEK MITIGATION SITE**  
Alamance County, North Carolina

CLF
Date April 2008
Project 07-016

FIGURE  
**8C**



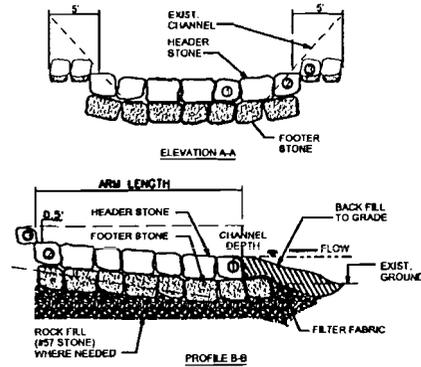
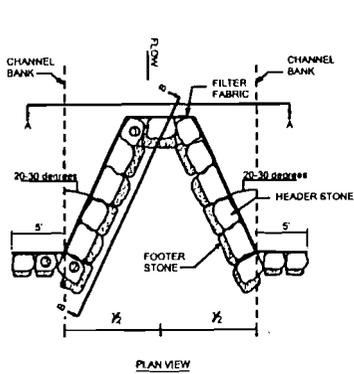
NOTE:  
HEADER AND FOOTER STONES ARE LARGE, ANGULAR BOULDERS  
MEASURING A MINIMUM OF 24" ALONG THE SHORTEST DIMENSION.



TYPICAL J-HOOK VANE

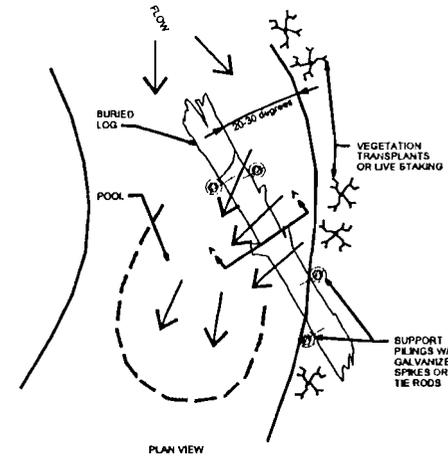
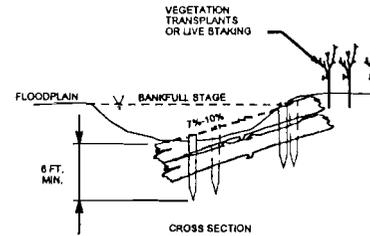
REACH	ARM LENGTH (FT.)	CHANNEL DEPTH (FT.)
Unnamed Tributaries	8	0.9
Main Channel	14-23	1.6

NOTE:  
HEADER AND FOOTER STONES ARE LARGE, ANGULAR BOULDERS  
MEASURING A MINIMUM OF 24" ALONG THE SHORTEST DIMENSION.

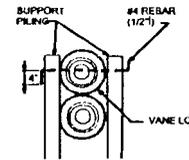
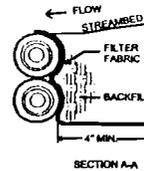


TYPICAL CROSS-VANE

- NOTES
- EXPOSED VANE OCCUPIES 1/3 OF THE BANKFULL WIDTH OF THE CHANNEL.
  - SUPPORT PILING SHALL BE PENOL SHARPENED, UNTREATED, PEELED, A MINIMUM OF 4 INCHES IN TOP DIAMETER, AND 8 FEET LONG.
  - LOGS SHALL CONSIST OF NATIVE HARDWOOD SPECIES, RELATIVELY STRAIGHT WITH A MINIMUM DIAMETER OF 16 INCHES AND APPROXIMATELY 35 FEET IN LENGTH.
  - USE FILTER FABRIC TO SEAL GAPS BETWEEN LOGS.



TYPICAL LOG VANE



CLOSE-UP OF SUPPORT PILING

- SUPPORT PILING SHOULD BE CUT SLIGHTLY BELOW THE TOP LOG.
- AFTER PLACING LOGS, DRIVE REBAR THROUGH LOGS AND BEND ENDS.
- REBAR MAY BE REPLACED WITH LAG BOLT WITH APPROVAL OF THE ENGINEER.



Axiom Environmental, Inc.

NOTES/REVISIONS

Project:

CRIPPLE CREEK  
MITIGATION BANK

Alamance County  
North Carolina

Title:

TYPICAL  
STRUCTURE  
DETAILS

Scale:

NO SCALE

Date:

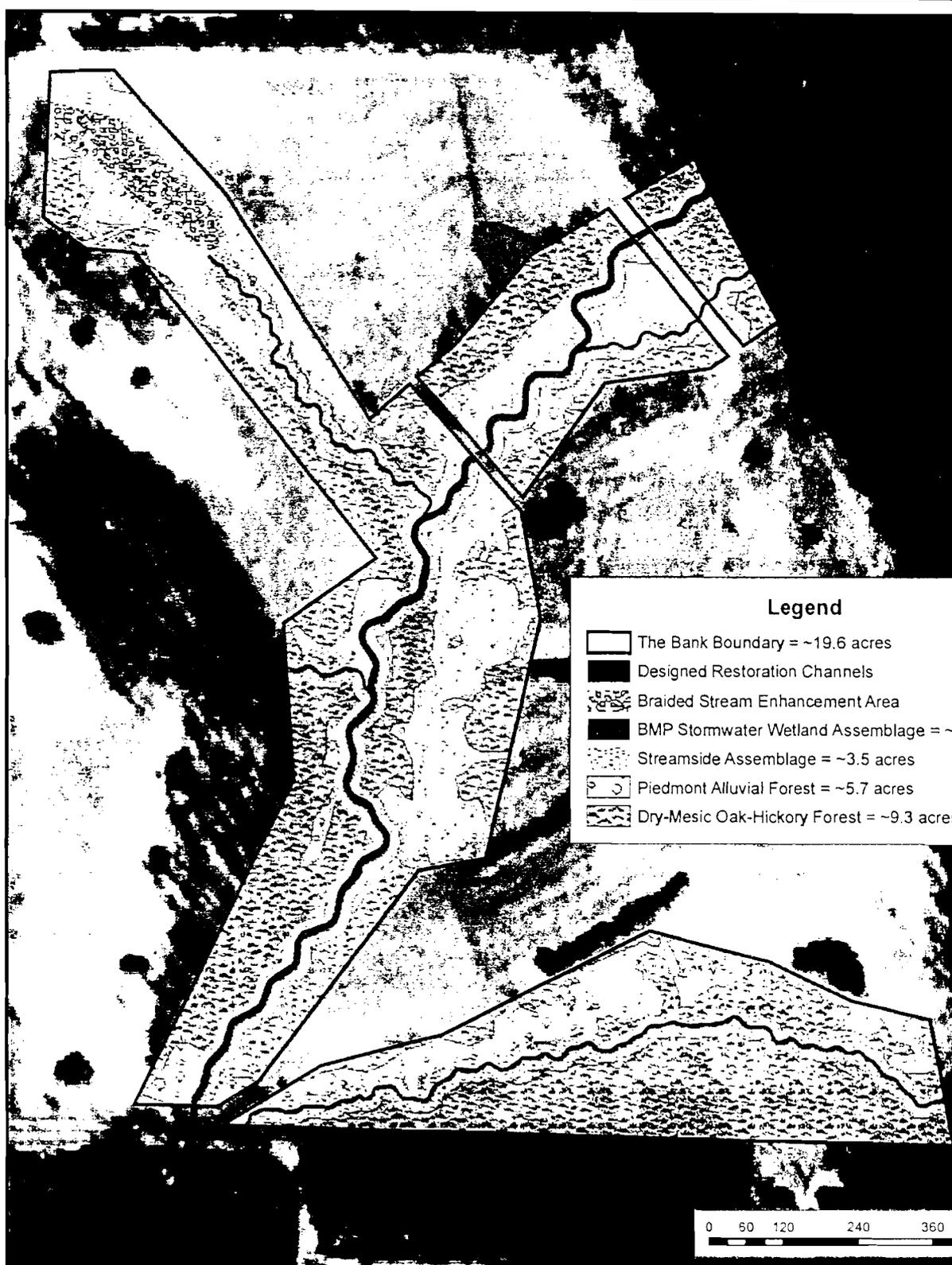
April 2008

Project No.:

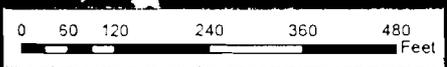
07-016

FIGURE NO.

10



Legend	
	The Bank Boundary = ~19.6 acres
	Designed Restoration Channels
	Braided Stream Enhancement Area
	BMP Stormwater Wetland Assemblage = ~0.17 acre
	Streamside Assemblage = ~3.5 acres
	Piedmont Alluvial Forest = ~5.7 acres
	Dry-Mesic Oak-Hickory Forest = ~9.3 acres



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PLANTING PLAN  
CRIPPLE CREEK MITIGATION SITE  
Alamance County, North Carolina

CLF		FIGURE <b>11</b>
Date	April 2008	
Project	07-016	