

Monitoring Data Record

Project Title: R-977A US 64 COE Action ID: 2005301150
Stream Name: UT to Hiwassee River (Site 11) DWQ Number: 3487
City, County and other Location Information: Murphy, Cherokee County, US 64, from
US 19-74-129 in Murphy to East of NC 141 in Peachtree (Sta. 12+20 to 15+50)
Date Construction Completed: March 2007 Monitoring Year: (5) of 5
Ecoregion: _____ 8 digit HUC unit 06020002
USGS Quad Name and Coordinates: _____

Rosgen Classification: _____

Length of Project: 1285' (5/2/08 permit mod. added an additional 135 ft. to Site 11)
Urban or Rural: Rural Watershed Size: _____
Monitoring DATA collected by: M. Green and J. Young Date: 2/20/12

Applicant Information:

Name: NCDOT Roadside Environmental Unit
Address: 1425 Rock Quarry Rd, Raleigh, NC 27610
Telephone Number: (919) 861-3772 Email address: mlgreen@ncdot.gov

Consultant Information:

Name: _____
Address: _____
Telephone Number: _____ Email address: _____

Project Status: _____

Monitoring Level required by COE and DWQ (404 permit/ 401 Cert.): Level 1 2 3
The permittee shall monitor the completed stream relocation in accordance with Monitoring Level 2 of the US Army Corps of Engineers, Wilmington District, Stream Mitigation Guidelines of April 2003. The monitoring reports, including reference photographs, plant survival data and visual inspection notes identifying specific problem areas, will be submitted to the Corps of Engineers, Asheville Regulatory Field Office within 60 days of completion of the monitoring. The monitoring report will also include a discussion of any deviations to channel stability. The success of the stream relocation as project mitigation will be evaluated based on those success criteria listed in the reference Stream Mitigation Guidelines.

Section 1. PHOTO REFERENCE SITES
(Monitoring at all levels must complete this section)

Total number of reference photo locations at this site: 22 photos were taken from 11 photo point locations and 4 overview photos

Dates reference photos have been taken at this site: 2/11/08, 8/13/08, 3/4/09, 8/12/09, 1/25/10, 7/21/10, 2/8/11, 6/29/11, 2/20/12

Individual from whom additional photos can be obtained (name, address, phone): _____

Other Information relative to site photo reference: A site map with approximate photo point locations is included with this report.

If required to complete Level 3 monitoring only stop here; otherwise, complete section 2.

Section 2. PLANT SURVIVAL

Attach plan sheet indicating reference photos.

Identify specific problem areas (missing, stressed, damaged or dead plantings):

Estimated causes, and proposed/required remedial action: _____

ADDITIONAL COMMENTS: _____ The planted vegetation consisted of black willow, silky dogwood, sycamore, green ash, white oak, pussy willow, and redtip dogwood. Other vegetation noted onsite consisted of goldenrod, *Juncus* sp., jewelweed, tear-thumb, ragweed, mimosa, pokeberry, briars, cutgrass, lespedeza, briars, butterfly bush, and various grasses.

If required to complete Level 1 and Level 2 monitoring only stop here; otherwise, complete section 3.

Section 3. CHANNEL STABILITY

Visual Inspection: The entire stream project as well as each in-stream structure and bank stabilization/revetment structure must be evaluated and problems addressed.

Report on the visual inspection of channel stability. Physical measurements of channel stability/morphology will not be required. Include a discussion of any deviations from as-built and an evaluation of the significance of these deviations and whether they are indicative of a stabilizing or destabilizing situation.

This is the Year 5 Winter evaluation for the UT Hiwassee River stream relocation. The channel is stable at this time but water continues to piping underground around Photo Point #6 due to blasting to relocate the channel. Water was flowing under two crossvanes downstream of Photo Point #7. A permit modification was completed to relocate an additional 135 feet of stream at Site 11. Photo Point numbers 10 and 11 up and downstream, respectively shows this additional 135 feet. This section of stream relocation is mainly bedrock. NCDOT will continue to monitor this stream relocation.

Date Inspected 2/20/12	Up and Downstream of PP#6	Downstream of PP#7	Station Number	Station Number	Station Number
Structure Type		Crossvanes			
Is water piping through or around structure?	No flow in channel. Water is piping underground due to blasting to relocate the channel.	Water piping under two crossvanes			
Head cut or down cut present?					
Bank or scour erosion present?					
Other problems noted?					

Section 4. DEBIT LEDGER

The entire UT Hiwassee River stream relocation site was used for the R-0977A project to compensate for unavoidable stream impacts.

UT Hiwassee River



Photo Point #1 (Upstream)



Photo Point #1 (Downstream)



Photo Point #2 (Upstream)



Photo Point #2 (Downstream)



Photo Point #3 (Upstream)



Photo Point #3 (Downstream)

UT Hiwassee River



Photo Point #4 (Upstream)



Photo Point #4 (Downstream)



Photo Point #5 (Upstream)



Photo Point #5 (Downstream)



Photo Point #6 (Upstream)



Photo Point #6 (Downstream)

UT Hiwassee River



Photo Point #7 (Upstream)



Photo Point #7 (Downstream)



Photo Point #8 (Upstream)



Photo Point #8 (Downstream)



Photo Point #9 (Upstream)



Photo Point #9 (Downstream)

UT Hiwassee River



Photo Point #10 (Upstream)



Photo Point #10 (Downstream)



Photo Point #11 (Upstream)



Photo Point #11 (Downstream)



Overview looking upstream from church driveway



Overview looking downstream from church driveway

UT Hiwassee River



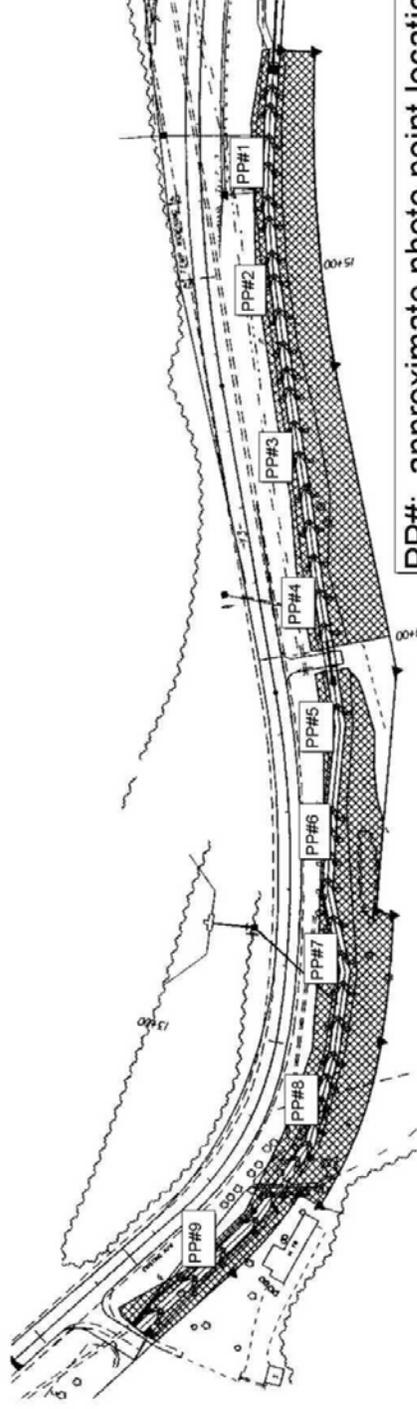
Overview looking upstream from Hampton Church Rd.

Year 5 Winter – February 2012



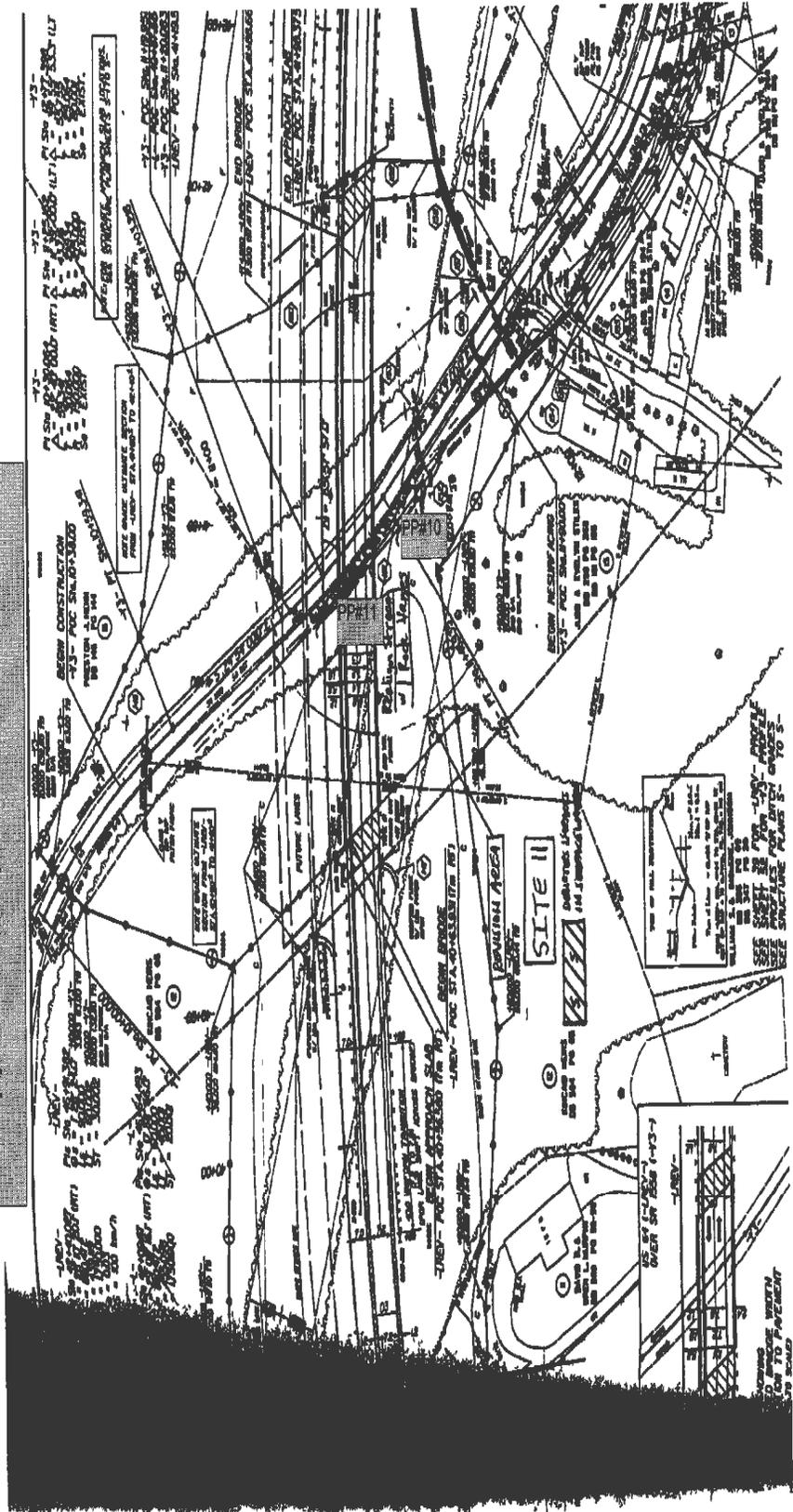
Overview looking downstream from Hampton Church Rd.

UT Hiwassee River
R-977A
Cherokee County



PP#: approximate photo point locations

UT Hiwassee River
PP: approximate photo point locations





STATE OF NORTH CAROLINA
DEPARTMENT OF TRANSPORTATION

BEVERLY EAVES PERDUE
GOVERNOR

EUGENE A. CONTI, JR.
SECRETARY

April 7, 2010

Providence Presbyterian Church
Attn: Mr. Tyler Jenkins
2252 Harshaw Road
Murphy, NC 28906

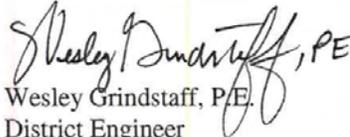
Dear Mr. Jenkins:

As you are certainly aware, the North Carolina Department of Transportation (NCDOT) has recently completed a new section of US 64 in Cherokee County. In projects of this magnitude, NCDOT is required to perform certain actions to offset or mitigate impacts made to environmentally sensitive areas during the construction process. One particular mitigation site is located along the stream between Providence Presbyterian Church and Harshaw Road. A new stream channel was designed and constructed in this location, and stream banks were planted with a variety of wetland tolerant trees and plants.

Recent compliance inspections conducted by both NCDOT and environmental agencies have shown that the vegetation along this particular section of stream has been mowed on multiple occasions. It is my understanding that this mowing was performed by Providence Presbyterian Church or someone acting on the church's behalf. NCDOT has been notified that unless the area is allowed to grow and canopy the stream as intended that the area will be disqualified as a mitigation site.

This letter is being written to officially request that mowing of any area beyond the power lines cease immediately. Signage will be installed at the site indicating these areas that should not be mowed. I appreciate your compliance with this request.

Sincerely,


Wesley Grindstaff, P.E.
District Engineer

WG/ae

Copy: Mark Davis, Environmental Supervisor
US 64, Cherokee County

Andrews District Office
191 Robbinsville Road, Andrews, N. C. 28901

Phone: (828) 321-4105

Fax: (828) 321-3228