

Monitoring Data Record

Project Title: R-2408A COE Action ID: SAW-2009-00860  
Stream Name: UT to Little Tennessee River DWQ Number: 20090451  
City, County and other Location Information: Macon County, Intersection of Riverview St. and Woodland Hills Drive Sta. 28+00-L- RT.  
Date Construction Completed: Site planted on 2/10/12 & water turned into stream on 6/28/12  
Monitoring Year: ( 3 ) of 3  
Ecoregion: \_\_\_\_\_ 8 digit HUC unit 06010202  
USGS Quad Name and Coordinates: Franklin 35.194470, -83.386015  
**Rosgen Classification:** A Type channel transitioning into a B Type channel  
Length of Project: 190'  
Urban or Rural: Rural Watershed Size: \_\_\_\_\_  
Monitoring DATA collected by: M. Green and J. Young Date: 7/22/14  
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:** \_\_\_\_\_

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**Monitoring Level required by COE and DWQ (404 permit/ 401 Cert.):** Level 1 2 3  
**The permittee shall visually monitor the vegetative plantings to access and ensure complete stabilization of the mitigation stream segments. The monitoring shall be conducted annually for a minimum of 3 years after final planting. Photo documentation shall be utilized to document the success of the riparian vegetation and submitted to NCDWQ in a final report within sixty days after completing monitoring. After 3 years the NCDOT shall contact the NCDWQ to schedule a site visit to "close out" the mitigation site.**

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

**Total number of reference photo locations at this site:** 4 photos were taken from 2 photo point locations and 1 overview photo

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**Dates reference photos have been taken at this site:** 8/21/12, 8/20/13, 7/22/14

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**Individual from whom additional photos can be obtained (name, address, phone):** \_\_\_\_\_

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

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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):

A few small patches of Japanese knotweed were noted onsite.

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Estimated causes, and proposed/required remedial action: NCDOT sprayed the Japanese Knotweed noted onsite on 8/20/13 and 7/24/14. NCDOT has sprayed the Japanese knotweed throughout the monitoring period.

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**ADDITIONAL COMMENTS:** The planted vegetation is surviving and consisted of black willow and silky dogwood live stakes and tulip poplar, sycamore, black cherry, and river birch bareroot seedlings. Other vegetation noted included briars, sumac, *Juncus* sp., red maple, *Scirpus* sp., Japanese knotweed, jewelweed, and various grasses. A supplemental planting was completed on 1/8/13 due to missing planted vegetation noted the previous year. NCDOT proposes to discontinue monitoring plant survival at the UT to Little Tennessee River stream restoration site.

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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 3 evaluation for the UT to Little Tennessee River stream restoration site. The channel is stable at this time and water was flowing over top of all of the cross vanes at the time of monitoring. NCDOT proposes to discontinue monitoring channel stability at the UT to Little Tennessee River stream restoration site.

A meeting was held onsite with NCDOT and Regulatory Agencies in attendance on April 10, 2013. It was noted at this meeting that the area around the outlet of the culvert at the beginning of the channel change needed to be re-seeded and matted, the fabric in the old temporary bypass channel needed to be removed, seeded and mulched, and the silt fence along wetland boundary needed to be removed. All of these items have been completed as of September 5, 2013.

Date Inspected	Station Number				
Structure Type					
Is water piping through or around structure?					
Head cut or down cut present?					
Bank or scour erosion present?					
Other problems noted?					
Bankfull event dates and how it was noted					

**Section 4. DEBIT LEDGER**

The entire UT to Little Tennessee River stream mitigation site was used for the R-2408A project to compensate for unavoidable stream impacts.

# UT Little Tennessee River



Photo Point #1 (Upstream)



Photo Point #1 (Downstream)



Photo Point #2 (Upstream)

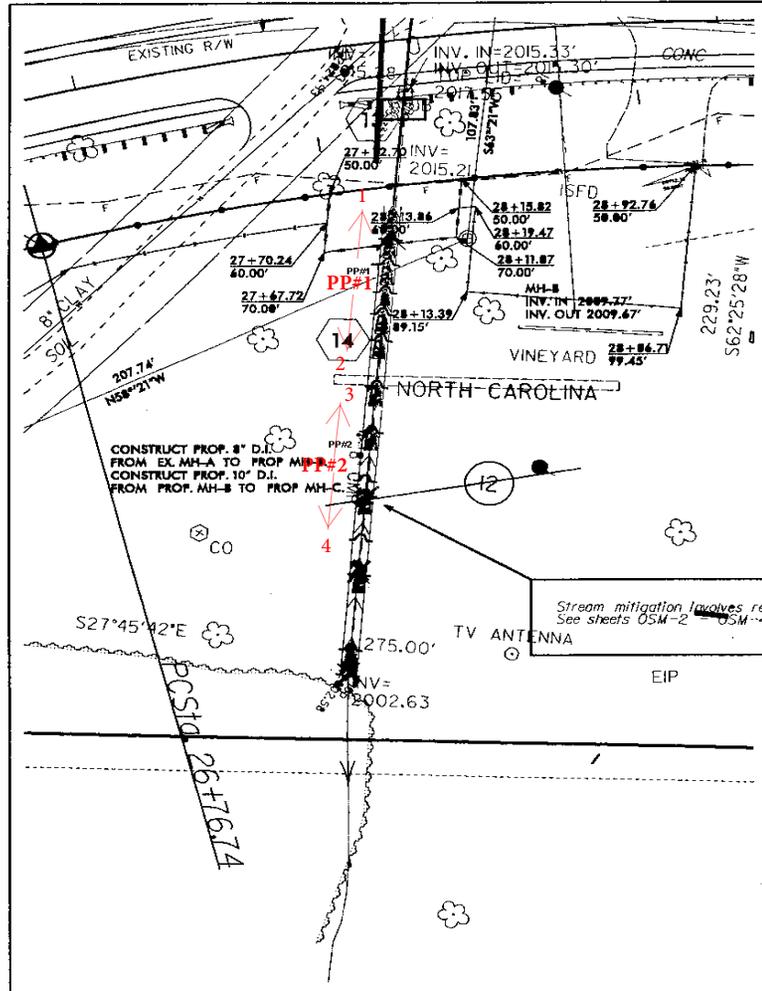


Photo Point #2 (Downstream)



Overview photo taken from Riverview St.  
Year 3 – July 2014

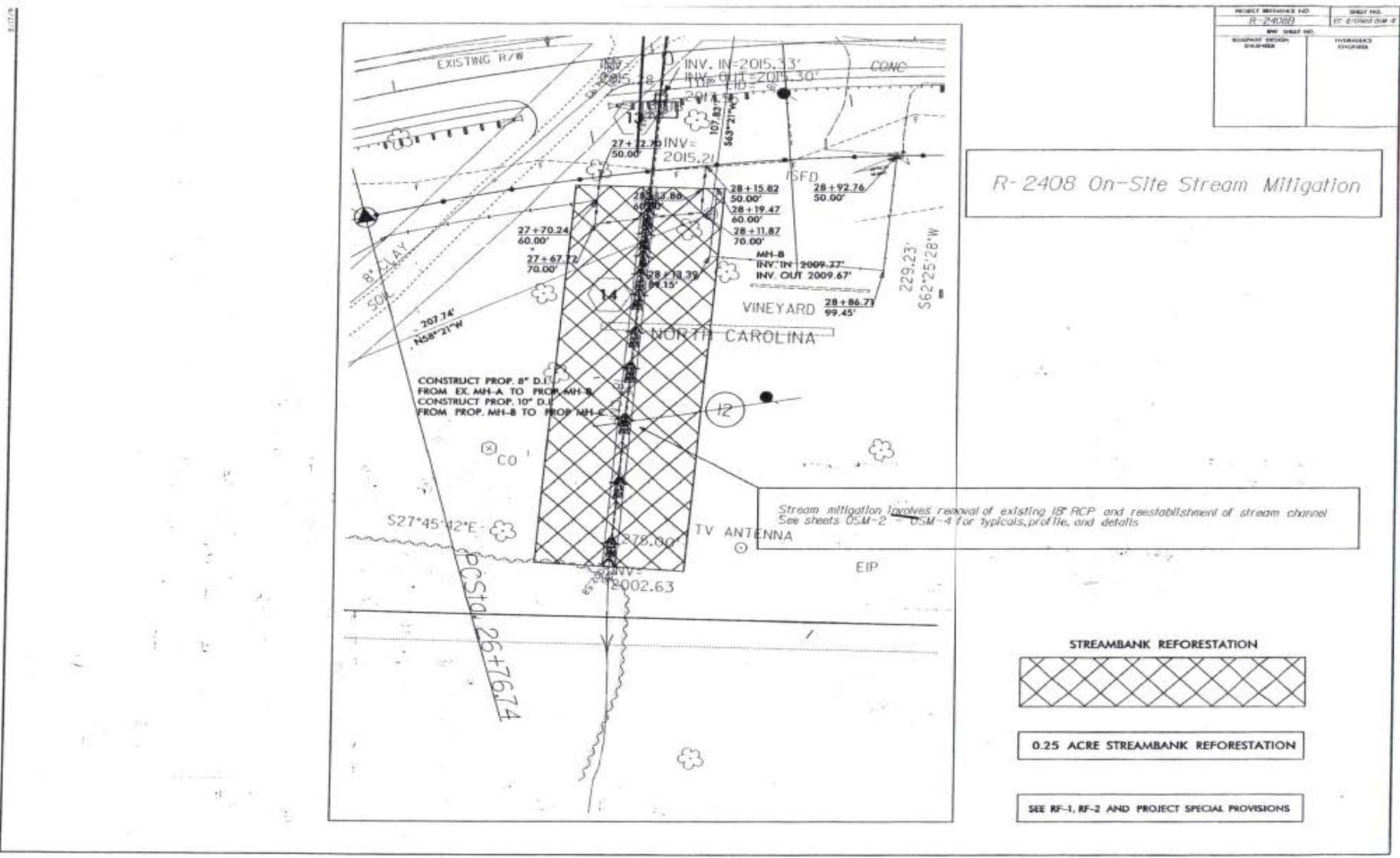
PROJECT NUMBER	DATE
R-2408	OSM-2
DWG. SHEET NO.	
REVISIONS	HYDRAULIC



R-2408 On-Site Stream Mitigation  
 As-Built Drawings  
 UT to Little Tennessee Site

Stream mitigation involves removal of existing 18" RCP and reestablishment of stream channel  
 See sheets OSM-2, OSM-3, OSM-4 for typicals, profile, and details

Photo Point Locations  
 R-2408A UT to Little Tennessee River  
 Macon County, North Carolina



Streambank Reforestation Plan  
 R-2408A UT to Little Tennessee River  
 Macon County, North Carolina



PROJECT VICINITY - R-2408A  
 UT Little Tennessee River Stream Relocation  
 Macon County, North Carolina

