Monitoring Data Record

Project Title: R-2248D – Charlotte Outer Loop COE Action ID: 200131321
Stream Name: Trib. to Dixon Branch (Site 19) DWQ Number: 011231
City, County and other Location Information: Mecklenburg County, Charlotte Outer Loop, R-2248D Left of Project Station 10+00 Y-7
Date Construction Completed: May 2008 Monitoring Year: (4) of 5
Ecoregion: 8 digit HUC unit 03050103
USGS Quad Name and Coordinates:
Rosgen Classification: Proposed C4 stream type classification
Length of Project: 400 ft. Urban or Rural: Urban Watershed Size:
Monitoring DATA collected by: M. Green and J. Young Date: 9/20/12
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**

The permittee shall perform the following components of Level I monitoring each year for the 5-year monitoring period or through two documented bankfull flow events: Reference photos; plant survival (i.e. identify specific problem areas (missing, stressed, damaged or dead plantings), estimated causes, and proposed/required remedial action);visual inspection of channel stability. Physical measurements of channel stability/morphology will not be required. The permittee shall submit the monitoring reports to the USACE, Raleigh Regulatory Field Office Project Manager, within sixty days after completing the monitoring. If less than two bankfull events occur during the first 5 years, the permittee shall continue monitoring until the second bankfull event is documented. The bankfull events must occur during separate monitoring years. In the event that the required bankfull events do not occur during the five-year monitoring period, the USACE, in consultation with the resource agencies, may determine that further monitoring is not required. It is suggested that all bankfull occurrences be monitored and reported through the required monitoring period. The permittee shall perform and submit photo documentation twice each year (summer and winter) for the 5-year monitoring period, and for any subsequently required monitoring period.

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

Total number of reference photo locations at this site: 8 photos were taken from 4 photo point locations

Dates reference photos have been taken at this site: 2/23/09, 9/1/09, 3/16/10, 9/28/10, 3/2/11, 9/12/11, 1/25/12, 9/20/12

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

Other Information relative to site photo reference: A site map with photo point locations is attached to 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):
The buffer is lacking planted vegetation due to dense areas of lespedeza.

Estimated causes, and proposed/required remedial action: An onsite meeting was held on June 5, 2012, between regulatory agencies and NCDOT. Regulatory agencies stated that additional planted species were needed within the buffer. NCDOT plans to complete multiple herbicide applications on the lespedeza in the summer of 2013 and replant the buffer in the 2013/2014 planting window.

ADDITIONAL COMMENTS: NCDOT replanted Type I and II plantings on March 2, 2011. The site was replanted with sycamore, river birch, and willow oak bareroot seedlings and black willow and silky dogwood live stakes. Planted vegetation was sparse, but noted surviving included silky dogwood, black willow, sycamore, willow oak, and yellow poplar. Other vegetation noted included alder, briars, jewelweed, cottonwood, sweetgum, lespedeza, and various grasses. NCDOT will continue to monitor plant survival

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.

UT to Dixon Branch (Site 19) stream relocation is stable for the Year 4 Summer evaluation. Some areas of bank scouring still exist upstream of the pipe crossing at Sta. 10+80 Y-7 and Sta. 10+40 Y-7. NCDOT has installed live stakes along the streambank to help stabilize these areas of scouring behind these J-hooks. The areas of bank scouring show little or no changes since the last evaluation and remain stable at this time. The area downstream of the pipe that had extensive erosion was repaired during May 2010 and is highly stable. NCDOT will continue to monitor channel stability at this stream relocation.

Date 9/20/12	Station 10+80 Y-7 (additional photo)	Station 10+40 Y-7	Station	Station Number	Station Number
Structure Type					
Is water piping through or around structure?					
Head cut or down cut present?					
Bank or scour erosion present?	Bank scouring on left bank behind J-hook	Bank scouring on left bank behind J-hook			
Other problems noted?					

Section 4. DEBIT LEDGER

The entire UT to Dixon Branch (Site 19) stream mitigation site was used for the R-2248D project to compensate for unavoidable stream impacts.

UT to Dixon Branch

Site 19

Photo Point #1 (Upstream)

Photo Point #1 (Downstream)

Photo Point #2 (Upstream)

Photo Point #2 (Downstream)

Photo Point #3 (Upstream)

Photo Point #3 (Downstream)

Year 4 Summer – September 2012

UT to Dixon Branch

Site 19

Photo Point #4 (Upstream)

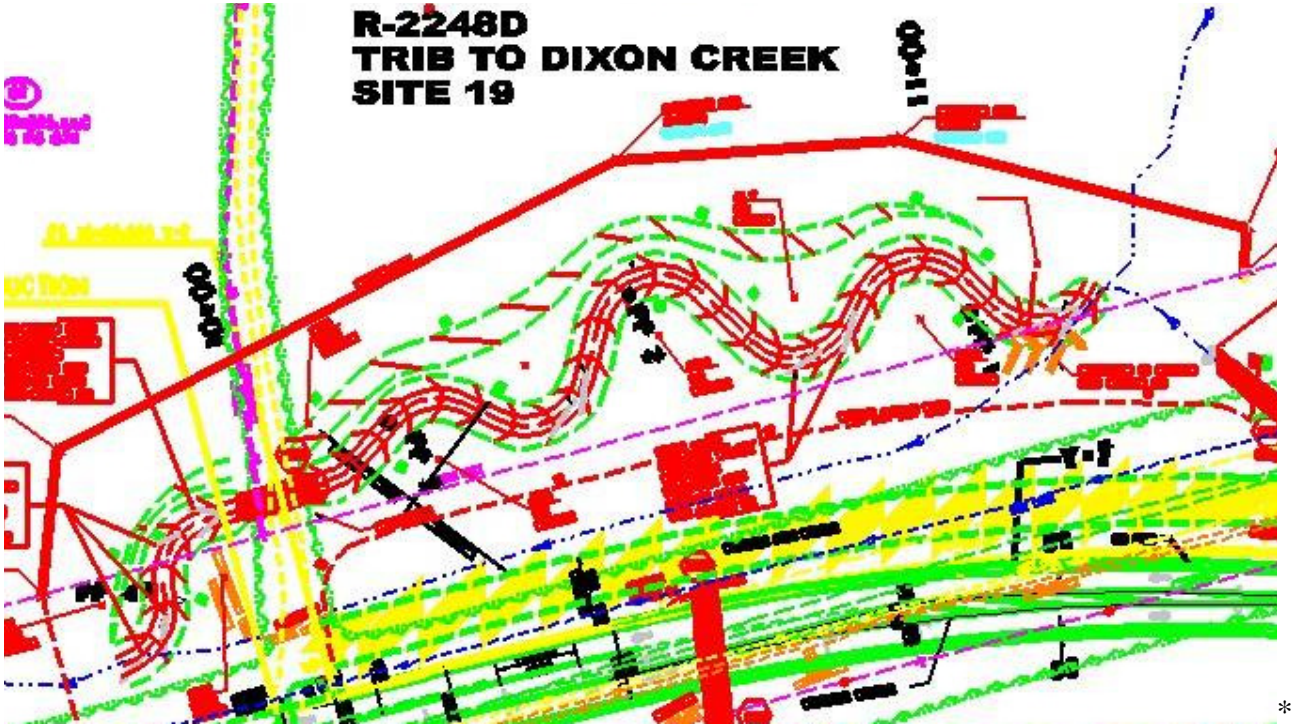
Photo Point #4 (Downstream)

Left bank scouring at end of J-Hook @ Sta. 10+80 Y-7

Overview looking upstream from pipe crossing

Overview looking downstream from pipe crossing

Year 4 Summer – September 2012


R-2248D
TRIB TO DIXON CREEK
SITE 19

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