Channel Mitigation Monitoring Sheets I, II, III, AND IV

Monitoring Data Record

Project Title: U-2524AC (Greensboro Western Urban Loop) COE Action ID: 200321137
Stream Name: Long Branch (Site 2BA) DWQ Number: 030909
City, County and other Location Information: Greensboro Western Loop, Guilford Co.
(Remediation Plans Sta. 10+00 to 29+86)
Date Construction Completed: 2-29-08 Monitoring Year: (3) of 5
Ecoregion: 8 digit HUC unit 03030002
USGS Quad Name and Coordinates:
Rosgen Classification: Proposed reach is a E5 stream type
Length of Project: 1,986' Urban or Rural: Urban Watershed Size:
Monitoring DATA collected by: M. Green & J. Young Date: 8/30/10
Applicant Information:
Name: NCDOT Roadside Environmental Unit
Address: 1425 Rock Quarry Road Raleigh, NC 27610
Telephone Number: (919) 861-3772 Email address: mlgreen@ncdot.gov
Consultant Information:
Name:
Address:
Telephone Number: Email address:
Project Status: Complete

Monitoring Level required by COE and DWQ (404 permit/ 401 Cert.): Level (1) ~~2~~ ~~3~~
Monitoring Level 1 requires completion of *Section 1, Section 2 and Section 3*

Permit States: NCDOT shall perform the following components of Level I monitoring twice each year for the 5 year monitoring period (summer and winter): Reference photos, plant survival, and visual inspection of channel stability. If less than two bankfull events occur during the first 5 years, NCDOT 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 5 year monitoring period, the USACE, in consultation with resource agencies, may determine that further monitoring is not required.

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

Total number of reference photo locations at this site: 10 reference points, 2 photos at each
Dates reference photos have been taken at this site: 3/12/08, 7/15/08, 2/9/09, 7/27/09, 2/17/10, 8/30/10

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

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

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):
DWQ requested that the kudzu be treated on site.

Estimated causes, and proposed/required remedial action: Div. 7 Roadside sprayed the kudzu located on site in October 2009. During the August 2010 evaluation there was minimal kudzu noted onsite. NCDOT will continue to monitor and treat the kudzu noted onsite throughout the monitoring period.

ADDITIONAL COMMENTS: Long Branch streambank reforestation was completed on 2-29-08. The planting consisted of black willow and silky dogwood live stakes and green ash, river birch, tulip poplar, water oak, and willow oak bareroot seedlings. Other vegetation noted: lespedeza, mimosa, pokeberry, goldenrod, sycamore, kudzu, cottonwood, pine, briars, red maple, sweetgum, jewelweed, and various grasses. The planted vegetation noted onsite is surviving.

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.

The Long Branch stream relocation is stabile for the Year 3 Summer evaluation, except for, some minor bank scouring that still exist with little or no change since the last evaluation at the station numbers noted below. A bankfull event had occurred onsite since the last monitoring evaluation. NCDOT will continue to monitor this stream relocation.

8/30/10	Sta. 11+50 PP#1 Downstream Photo	Sta. 17+50 Additional Photo	Sta. 20+00 PP#5 Downstream Photo	Sta. 23+00 Additional Photo	Sta. 27+00 PP#9 Upstream and Downstream Photo
Structure Type					
Is water piping through or around structure?					
Head cut or down cut present?					
Bank or scour erosion present?	Minor bank scouring on left bank downstream of boulder protection	Minor bank scouring on right bank	Minor bank scouring on left bank downstream of boulder protection	Minor bank scouring on left bank downstream of boulder protection	Minor bank scouring on right and left bank

Section 4. DEBIT LEDGER

The entire Long Branch (Site 2BA) stream relocation site was used for the U-2524BA project to compensate for unavoidable stream impacts.

Long Branch

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 3 Summer – August 2010

Long Branch

Photo Point #4 (Upstream)

Photo Point #4 (Downstream)

Photo Point #5 (Upstream)

Photo Point #5 (Downstream)

Photo Point #6 (Upstream)

Photo Point #6 (Downstream)

Year 3 Summer – August 2010

Long Branch

Photo Point #7 (Upstream)

Photo Point #7 (Downstream)

Photo Point #8 (Upstream)

Photo Point #8 (Downstream)

Photo Point #9 (Upstream)

Photo Point #9 (Downstream)

Year 3 Summer – August 2010

Long Branch

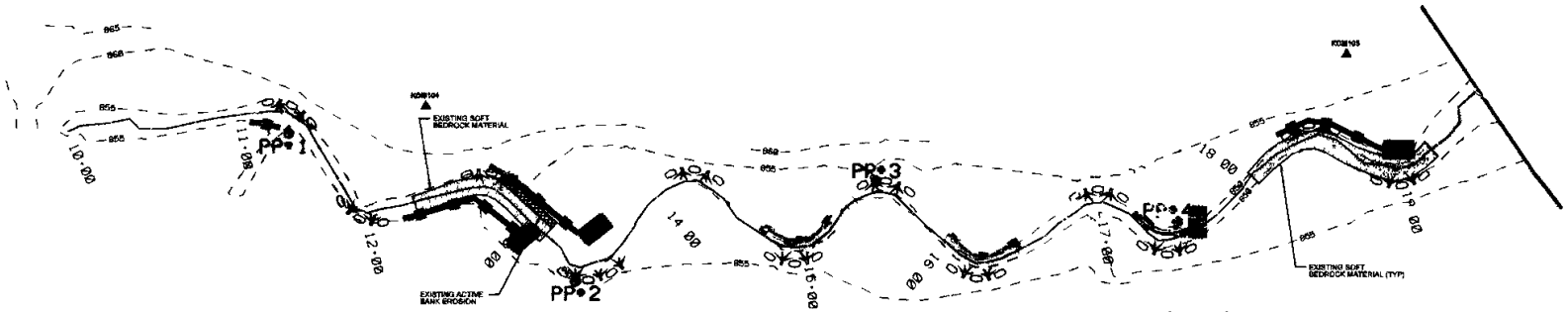
Photo Point #10 (Upstream)

Photo Point #10 (Downstream)

Bank Scouring @ Sta. 17+50

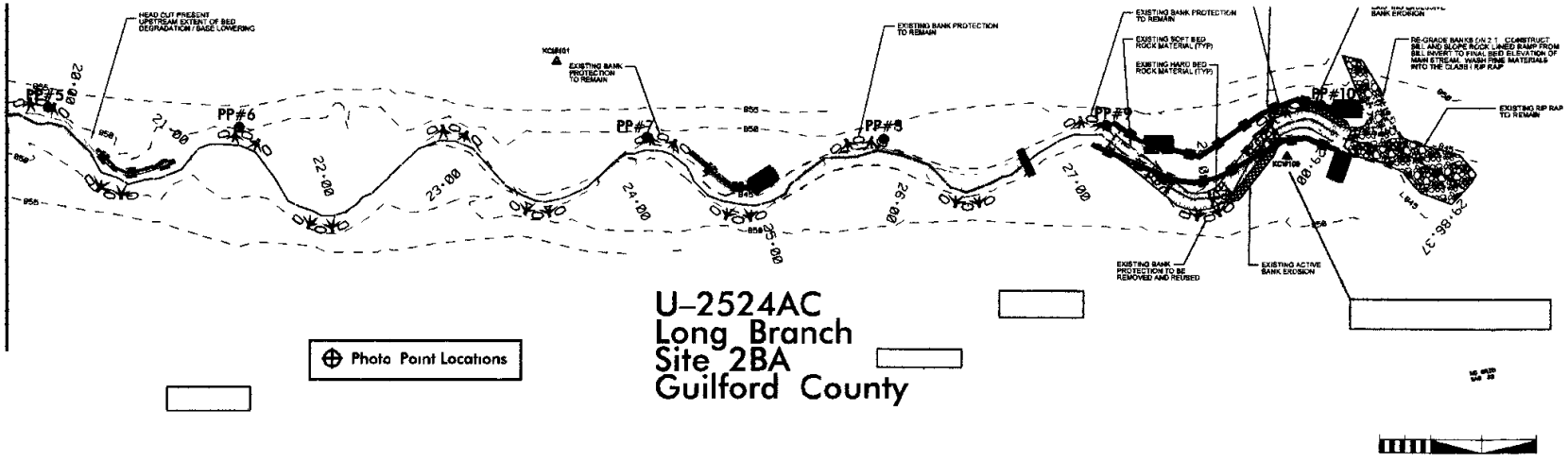
Bank Scouring @ Sta. 23+00 on Left Bank

Year 3 Summer – August 2010



⊕ PHOTO POINT LOCATIONS

U–2524AC
Long Branch
Site 2BA
Guilford County



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