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

Monitoring Data Record

Project Title: R-3415 NC 67 Widening COE Action ID: 200520314
Stream Name: UT North Deep Creek (Site 6) DWQ Number: 05-0061
City, County and other Location Information: NC 67 2.0 miles west of Boonville and just east of Bryant Road (Sta. 209+25 –L- RT.); Yadkin county
Date Construction Completed: Streambank repairs completed in June 2010 and final planting completed in January 2011 Monitoring Year: (2) of 3
Ecoregion: 8 digit HUC unit 03040101
USGS Quad Name and Coordinates: N 36 14' 11" W 80 44' 34"
Rosgen Classification:
Length of Project: 77 feet Urban or Rural: Rural Watershed Size:
Monitoring DATA collected by: M. Green and J. Young Date: 7/24/12
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**

Permit states: The permittee shall visually monitor the vegetative plantings to assess 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 should be utilized to document the success of the riparian vegetation and submitted to DWQ in a final report. After 3 years a site visit shall be conducted by DWQ to "close out" the mitigation site.

Section 1. PHOTO REFERENCE SITES

(Monitoring at all levels must complete this section)

Total number of reference photo locations at this site: 2 photos were taken from 1 photo point location along the channel and 1 overview photo was taken

Dates reference photos have been taken at this site: 8/16/11, 7/24/12

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):

Estimated causes, and proposed/required remedial action:

ADDITIONAL COMMENTS: Planted vegetation noted onsite included black willow, silky dogwood, tulip poplar, sycamore, river birch, and green ash. Other vegetation noted included briars, lespedeza, fennel, cottonwood, 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.

UT North Deep Creek (Site 6) is stable for the Year 2 monitoring evaluation. NCDOT will continue to monitor this stream relocation.

Date Inspected	Station Number	Station Number	Station Number	Station Number	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?					

Section 4. DEBIT LEDGER

The entire UT to North Deep Creek (Site 6) stream mitigation site was used for the R-3415 project to compensate for unavoidable stream impacts.

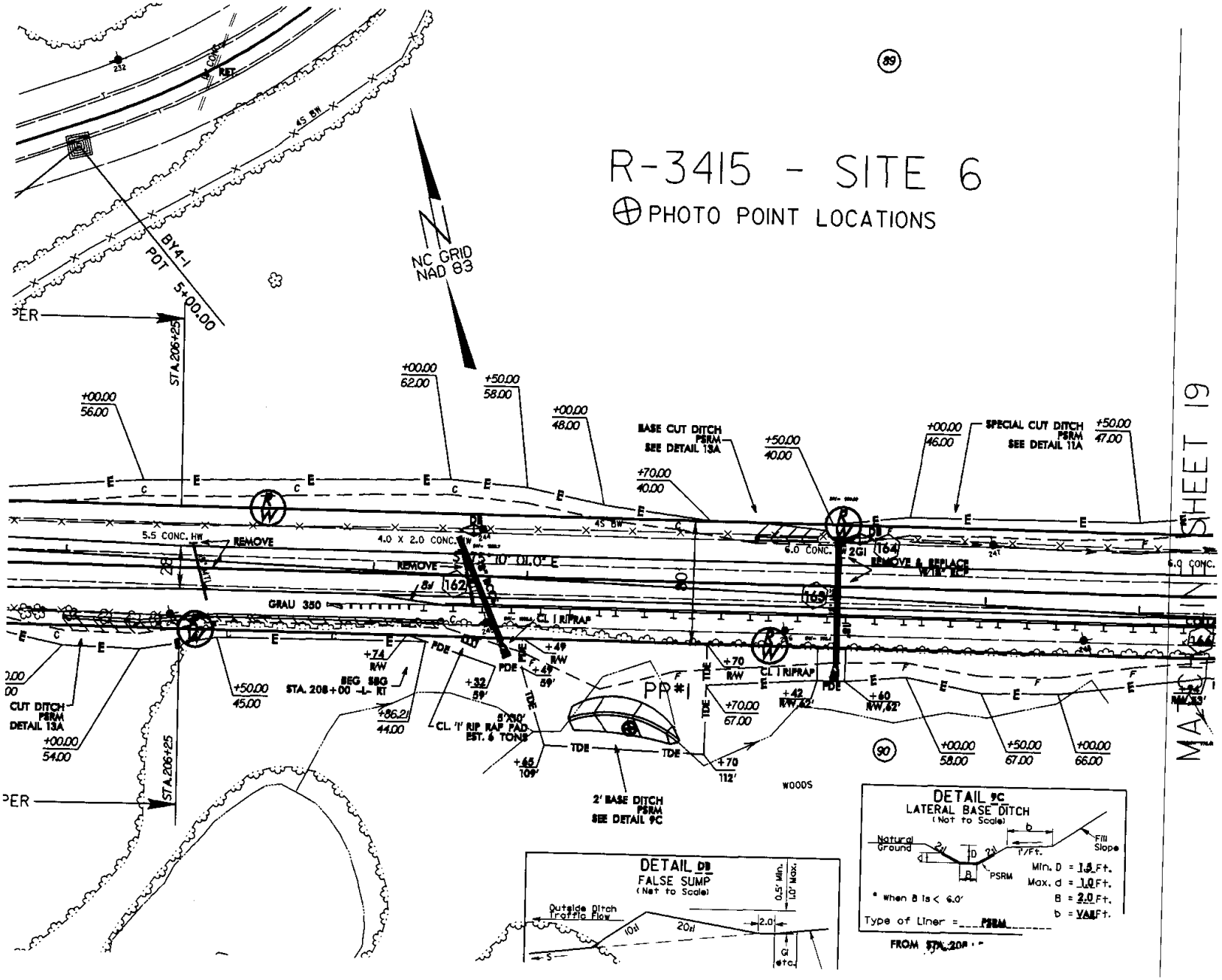
UT North Deep Creek (Site 6)

Photo Point #1 (Upstream)

Photo Point #1 (Downstream)

Overview photo of the site

July 2012


R-3415 - SITE 6
⊕ PHOTO POINT LOCATIONS
NC GRID NAD 83
89
90
BY4-1
POT
5+00.00
STA.206+25
STA.206+25
+00.00 56.00
+00.00 62.00
+50.00 58.00
+00.00 48.00
+50.00 40.00
+70.00 40.00
+00.00 46.00
+50.00 47.00
BASE CUT DITCH PSRM SEE DETAIL 13A
SPECIAL CUT DITCH PSRM SEE DETAIL 11A
5.5 CONC. HW
REMOVE
4.0 X 2.0 CONC. BOX
REMOVE
10' DI.0' E
6.0 CONC.
#2GI
REMOVE & REPLACE W/18" RCP
6.0 CONC.
GRAU 350
CL I RIPRAP
CL I RIPRAP
+74 R/W
+49 R/W
+49 89'
+32 89'
+86.21 44.00
+50.00 45.00
+00.00 54.00
CUT DITCH PSRM DETAIL 13A
SEG SBG STA. 208+00 -L- RT
CL 'I' RIP RAP PAD EST. 6 TONS
5'X10'
+46 109'
+70 R/W
+70 67.00
+42 R/W,62'
+60 R/W,62'
+70 112'
PR#1
TDE
PDE
2' BASE DITCH PSRM SEE DETAIL 9C
WOODS
+00.00 58.00
+50.00 67.00
+00.00 66.00
MATCH LINE SHEET 19
DETAIL DB
FALSE SUMP
(Not to Scale)
Outside Ditch Traffic Flow
10:1
20:1
2.0
0.5' Min. 1.0' Max.
S
DETAIL 9C
LATERAL BASE DITCH
(Not to Scale)
Natural Ground
2:1
d
D
2:1
B
PSRM
b
T/Ft.
Fill Slope
Min. D = 1.5 Ft.
Max. d = 1.0 Ft.
B = 2.0 Ft.
b = VAR Ft.
* When B is < 6.0'
Type of Liner = PSRM
FROM STA. 208+