



STATE OF NORTH CAROLINA  
DEPARTMENT OF TRANSPORTATION

MICHAEL F. EASLEY  
GOVERNOR

LYNDO TIPPETT  
SECRETARY

July 29, 2005

N.C. Division of Water Quality  
1650 Mail Service Center  
Raleigh NC 27699-1650

ATTN: Ms. Christina Breen  
NCDOT Coordinator

Dear Madam:

Subject: **Neuse River Buffer Authorization Modification Request** for US 70 (Clayton Bypass) from I-40 to US 70 Business in Wake and Johnston Counties, State Project No. 8.T311002, TIP No. R-2552, NCDOT Divisions 4 and 5, WBS Element 34459.1.1.

Reference: Neuse River Buffer Authorization dated January 14, 2005 (WQC Project No. 041760)

The NC Division of Water Quality issued a Neuse Buffer Authorization for the above-mentioned project dated January 14, 2005. NCDOT has recently realized that there was additional riparian buffer impacts inadvertently omitted from the Neuse River Buffer permit drawings on the R-2552AB project along Ramp C at the NC 42 interchange. Please find enclosed site maps, a revised plan sheet, and revised impact summary sheets.

Section AB

**Buffer Site AB5D:**

It appears that a site was inadvertently omitted from the Neuse River Buffer permit drawings on the R-2552AB project along Ramp C at the NC 42 interchange. The specific site is a continuation of Site AB5d.

There are two issues in particular at this site (see attached map). There are additional impacts to Buffer Zone (BZ) 1 and 2 that can easily be seen within the slope stake line when reviewing Roadway Plan Sheet # 10. Those impacts are a continuation off the end of Site AB5d. However, in reviewing the general area along Ramp C, the blue-line stream has apparently meandered closer to the proposed Ramp C in some locations thereby requiring additional impacts to BZ2. The attached drawing indicates the field located BZ1 and 2, and highlights the existing and proposed impacts at this location. These revisions account for a reduction of 129.50 square ft of riparian buffer impacts in Zone 1 and an increase of 1463.82 square ft of riparian buffer impacts in Zone 2. No additional mitigation is proposed since the impacts at each site are not equal to or exceed 0.3 ac or 150 linear ft.

NCDOT requests that the referenced Neuse River Buffer Authorization is modified to reflect the revisions outlined in this letter. We are providing seven copies of this application to the North Carolina Department of Environment and Natural Resources, Division of Water Quality, for review.

**MAILING ADDRESS:**  
NC DEPARTMENT OF TRANSPORTATION  
PROJECT DEVELOPMENT AND ENVIRONMENTAL ANALYSIS  
1598 MAIL SERVICE CENTER  
RALEIGH NC 27699-1598

TELEPHONE: 919-715-1500  
FAX: 919-715-1501  
WEBSITE: [WWW.NCDOT.ORG](http://WWW.NCDOT.ORG)

**LOCATION:**  
2728 CAPITAL BLVD.  
PARKER LINCOLN BUILDING, SUITE 168  
RALEIGH NC 27604

If you have any questions or need additional information please contact Tyler Stanton at (919) 715-1439 or tstanton@dot.state.nc.us.

Sincerely,



Gregory J. Thorpe, Ph.D.  
Environmental Management Director, PDEA

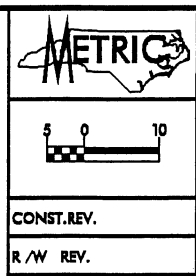
**Cc W/attachment:**

- Mr. John Hennessy, NCDWQ (7 Copies)
- Mr. Travis Wilson, NCWRC
- Ms. Becky Fox, USEPA – Whittier, NC
- Mr. Ronald Mikulak, USEPA – Atlanta, GA
- Mr. Clarence W. Coleman, P.E., FHWA
- Mr. Gary Jordan, USFWS
- Mr. Ron Sechler, NMFS
- Mr. Michael Street, NCDMF
- Dr. David Chang, P.E., Hydraulics
- Mr. Greg Perfetti, P.E., Structure Design
- Mr. Mark Staley, Roadside Environmental
- Mr. Jim Trogdon, PE, Division Engineer
- Mr. Jamie Shern, DEO

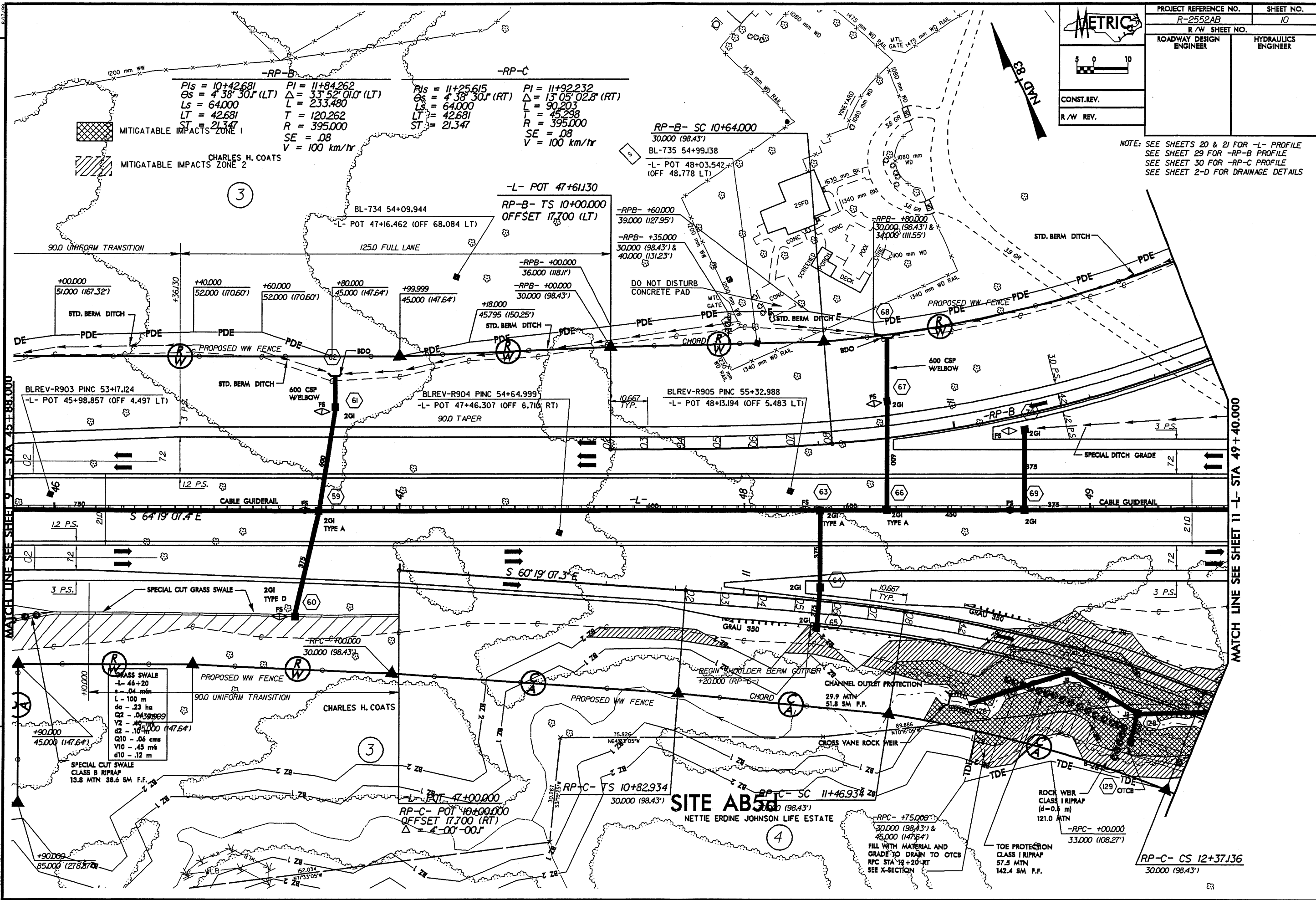
**W/o attachment:**

- Mr. David Franklin, USACE, Wilmington (Cover Letter Only)
- Mr. Jay Bennett, P.E., Roadway Design
- Mr. Omar Sultan, Programming and TIP
- Mr. Art McMillan, P.E., Highway Design
- Mr. Derrick Weaver, P.E., PDEA

PROJECT REFERENCE NO.		SHEET NO.	
R-2552AB		10	
R/W SHEET NO.			
ROADWAY DESIGN ENGINEER		HYDRAULICS ENGINEER	
CONST. REV.			
R/W REV.			



NOTE: SEE SHEETS 20 & 21 FOR -L- PROFILE  
SEE SHEET 29 FOR -RP-B PROFILE  
SEE SHEET 30 FOR -RP-C PROFILE  
SEE SHEET 2-D FOR DRAINAGE DETAILS



$PIs = 10+42.681$ $Os = 4\ 38\ 30.1\ (LT)$ $Ls = 64.000$ $LT = 42.681$ $ST = 21.347$	$PI = 11+84.262$ $\Delta = 33\ 52\ 01.0\ (LT)$ $L = 233.480$ $T = 120.262$ $R = 395.000$ $SE = .08$ $V = 100\ km/hr$	$PIs = 11+25.615$ $Os = 4\ 38\ 30.1\ (RT)$ $Ls = 64.000$ $LT = 42.681$ $ST = 21.347$	$PI = 11+92.232$ $\Delta = 13\ 05\ 02.8\ (RT)$ $L = 90.203$ $R = 45.298$ $R = 395.000$ $SE = .08$ $V = 100\ km/hr$
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GRASS SWALE  
 L - 46+20  
 da - 0.4 m  
 Q2 - 0.4399999  
 Y2 - 40  
 d2 - 10  
 Q10 - 0.06 cms  
 V10 - 45 m/s  
 d10 - 12 m

SPECIAL CUT SWALE  
 CLASS B RIPRAP  
 13.8 MTN 38.6 SM F.F.



**SITE AB58**  
 NETTIE ERDINE JOHNSON LIFE ESTATE

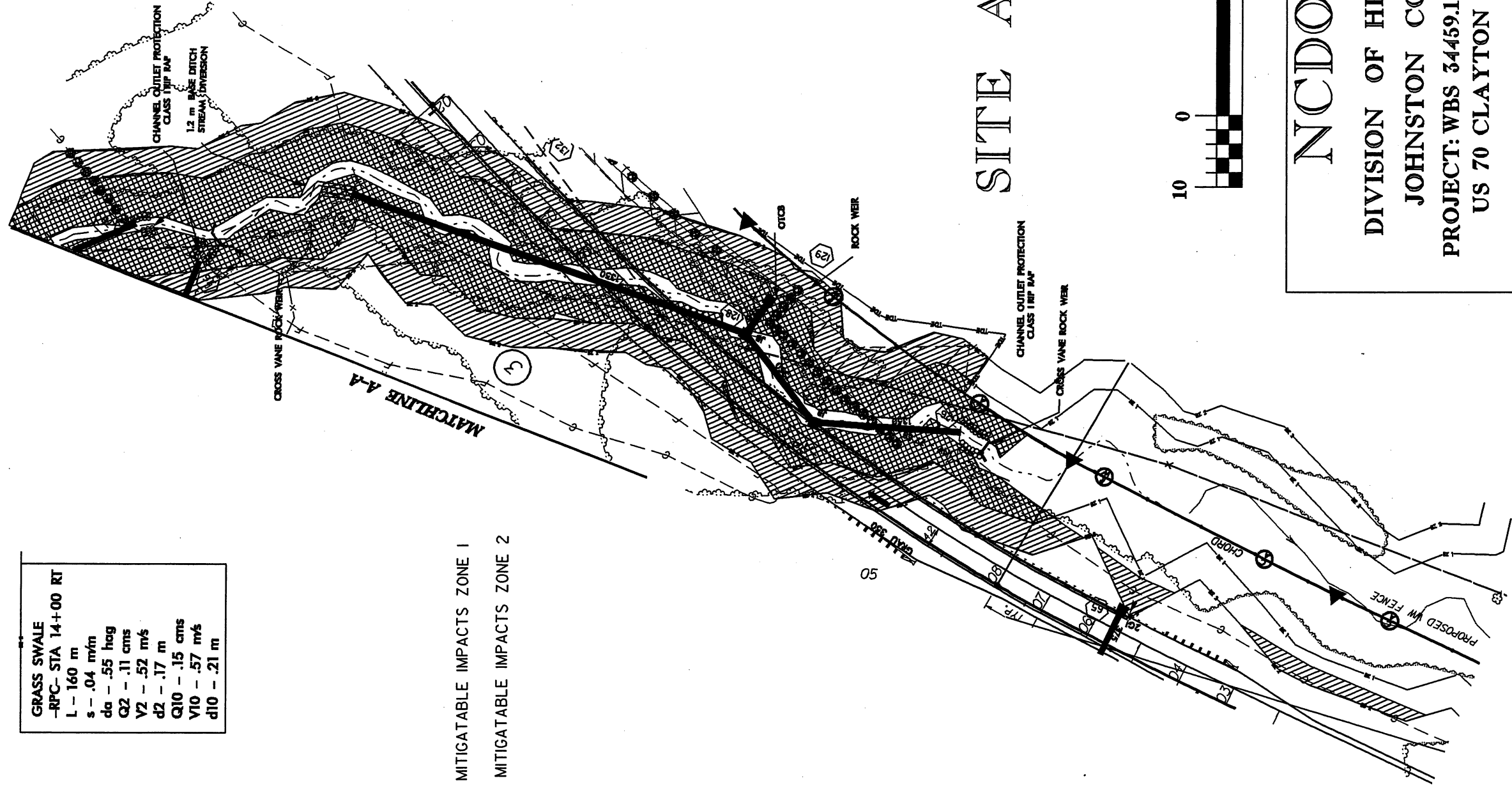
RP-C- CS 12+37.136  
 30.000 (98.43')

MATCH LINE SEE SHEET 9 - STA 45+88.000

MATCH LINE SEE SHEET 11 - STA 49+40.000

GRASS SWALE  
 -RPC- STA 14+00 RT  
 L - 160 m  
 s - .04 m/m  
 da - .55 hcg  
 Q2 - .11 cms  
 V2 - .52 m/s  
 d2 - .17 m  
 Q10 - .15 cms  
 V10 - .57 m/s  
 d10 - .21 m

 MITIGATABLE IMPACTS ZONE 1  
 MITIGATABLE IMPACTS ZONE 2



SITE AB5d



**NCDOT**  
 DIVISION OF HIGHWAYS  
 JOHNSTON COUNTY  
 PROJECT: WBS 34459.1.1 (R-2552AB)  
 US 70 CLAYTON BYPASS

## BUFFER IMPACTS SUMMARY

SITE NO.	STRUCTURE SIZE / TYPE	STATION (FROM/TO)	IMPACT				MITIGABLE				BUFFER REPLACEMENT				
			TYPE		ALLOWABLE		TOTAL (ft <sup>2</sup> )	ZONE 1 (ft <sup>2</sup> )	ZONE 2 (ft <sup>2</sup> )	TOTAL (ft <sup>2</sup> )	ZONE 1 (ft <sup>2</sup> )	ZONE 2 (ft <sup>2</sup> )			
			ROAD CROSSING	PARALLEL IMPACT	ZONE 1 (ft <sup>2</sup> )	ZONE 2 (ft <sup>2</sup> )									
AB2	RCBC	L 37+10	X				24211.05	15173.35	39384.39						
AB4	BRIDGE	L	X	18477.87	13015.94	31493.80									
AB5c	1050 RCP	I1Y1 13+70	X				58379.46	45693.48	104072.94						
AB5d	1350 CSP	I1Y1 13+70	X				SEE AB5c FOR SITE TOTAL								
AB8	1350 RCP	I1Y1 20+90	X	7294.38	4831.17	12125.54									
AB11	RCBC	FLYLEREV 29+50	X				20325.60	13774.79	34100.39						
<b>PROJECT TOTAL:</b>										25772.24	17847.10	43619.35	102916.11	74641.62	177299.72

NOTE : WETLAND IMPACT IN BUFFER ZONES 1 2

SITE AB4 (HAND CLEARING)	8179.27	ft <sup>2</sup>	0.00	ft <sup>2</sup>
SITE AB4 (PERM BRIDGE PIERS)	49.94	ft <sup>2</sup>	0.00	ft <sup>2</sup>
SITE AB7	9272.26	ft <sup>2</sup>	0.00	ft <sup>2</sup>
SITE AB11	14760.87	ft <sup>2</sup>	0.00	ft <sup>2</sup>

N.C. DEPT. OF TRANSPORTATION  
DIVISION OF HIGHWAYS

WAKE / JOHNSTON COUNTY  
PROJECT # - WBS 34459.1.1 (R2552AB)  
US 70 - CLAYTON BYPASS

7/20/2005  
SHEET **3** OF **3**