PROJECT COMMITMENTS

T.I.P. Project No. U-0071 East End Connector from NC 147 (Durham Freeway/Buck Dean Expressway) to north of NC 98 (Holloway Street) in Durham Durham County Federal Aid Project No. NHF-76-1(2) WBS Element 34745.1.1

COMMITMENTS FROM PROJECT DEVELOPMENT AND DESIGN

PDEA/Roadway Design

The NCDOT will coordinate with the City of Durham regarding providing destination signage along the East End Connector to attractions in east Durham.

The NCDOT will coordinate with the Durham Area Transit Authority (DATA) regarding delays and detours during construction, as well as potential relocations of bus stops on US 70 and Holloway Street.

NCDOT will attach conduit to the East End Connector bridges over Holloway Street and Angier Avenue.

<u>Right-of-Way Branch</u>

The NCDOT will mitigate the acquisition of 0.30 acres of parkland from C. R. Wood Park by acquiring land adjacent to the C. R. Wood Park and donating this land to the City of Durham Parks and Recreation Department in accordance with Section 6(f) of the Land and Water Conservation Fund Act. Prior to land donation, the NCDOT will remove the existing residence currently located on this property.

PDEA/Division 5

The NCDOT will also mitigate the acquisition of 0.30 acres of parkland from C. R. Wood Park by paving the C. R. Wood basketball courts or parking lot, in coordination with the City of Durham Parks and Recreation Department.

COMMITMENTS FROM PERMITTING

Division 5/ Hydraulics Unit

Any modifications to the 401 Water Quality Certification in the Jordan Basin portion that propose additional stream impacts or increased impervious surface requiring additional stormwater management may be subject the Jordan Water Supply Nutrient Strategy (15A NCAC02B .0267). The NCDOT shall coordinate with the NCDWR prior to submitting a modification request to determine the applicability of the Jordan Water Supply Nutrient Strategy.

U-0071 Permit Greensheet December 2015 Page 1 of 2 This condition does not apply to major modifications for additional sections of the project that were covered under the Finding of No Significant Impact or approved in the Avoidance and Minimization stage of the project.

Permit Modification No. 1

No additional commitments have been added as a result of either the USACE permit modification, dated May 7, 2015, or the NCDWR permit modification, dated April 15, 2015.

Permit Modification No. 2

No additional commitments have been added as a result of either the USACE permit modification, dated December 7, 2015, or the NCDWR permit modification, dated October 26, 2015.



DEPARTMENT OF THE ARMY WILMINGTON DISTRICT, CORPS OF ENGINEERS 69 DARLINGTON AVENUE WILMINGTON, NORTH CAROLINA 28403-1343

December 7, 2015

Regulatory Division/1200A

Action ID: SAW-2011-00796; TIP No. U-0071

Mr. Richard W. Hancock, PE NC Department of Transportation Project Development and Environmental Analysis Natural Environment Section 1598 Mail Service Center Raleigh, North Carolina 27699-1598

Dear Mr. Hancock:

Reference the Department of the Army permit issued to the North Carolina Department of Transportation (NCDOT) on March 24, 2014, to authorize the discharge of fill material into waters of the United States, for construction of TIP No. U-0071; East End Connector; from US 147 between Ellis Road and Briggs Avenue, to NC 98 at US 70, in Durham County, North Carolina. Also, please reference the May 7, 2015 modification of the permit, and your October 15, 2015 letter, requesting modification of the permit for a net increase of permanent riprap impacts to streams of 38 linear feet, a net decrease of temporary impacts to streams of 26 linear feet, and a net decrease of permanent impacts to streams of 10 linear feet. These changes in impacts result from revising the proposed work to provide for adequate stream stability, at Permit Sites 6 and 23. Additional mitigation is not proposed because the permanent stream loss impacts are decreasing.

We have reviewed the requested modification, and determined that it is appropriate and reasonable, and that no public notice is required for this modification. Therefore, the permit is hereby modified to authorize net increase of permanent riprap impacts to streams of 38 linear feet, and a net decrease of temporary impacts to streams of 28 linear feet, as shown on the enclosed Permit Drawings, Sheets 1A, 36, and 74, of 91, added and revised October 2015. In addition, the mitigation requirement for permanent warm water stream impacts is reduced to 1,414 linear feet.

All other conditions of the permit, including the expiration date of December 31, 2019, and the other mitigation requirements, remain applicable.

Should you have any questions, please call Mr. Eric Alsmeyer at (919) 554-4884, Ext. 23.

Sincerely,

Jan B. Hilly

Kevin P. Landers Sr. Colonel, U.S. Army District Commander

Enclosure

Copies Furnished (without enclosure):

Ms. Amy Chapman Division of Water Quality North Carolina Department of Environment and Natural Resources 1617 Mail Service Center Raleigh, NC 27699-1617

Mr. Clarence Coleman Federal Highway Administration 310 New Bern Ave., Rm 410 Raleigh, North Carolina 27601-1442

Mr. James Mason NC Department of Transportation Project Development and Environmental Analysis Natural Environment Section 1598 Mail Service Center Raleigh, North Carolina 27699-1598 North Carolina Department of Environmental Quality

Pat McCrory Governor Donald R. van der Vaart Secretary

October 26, 2015

Mr. Colin Mellor, Group Leader Project Development and Environmental Analysis North Carolina Department of Transportation 1598 Mail Service Center Raleigh, North Carolina, 27699-1598

Subject: Modification to the 401 Water Quality Certification Pursuant to Section 401 of the Federal Clean Water Act, NEUSE BUFFER RULES, and ISOLATED WETLANDS PERMIT Pursuant to IWGP100000 with ADDITIONAL CONDITIONS for Proposed East End Connector from US 70 to NC 147 in Durham County, Federal Aid Project No. NHF-76-1(2), State Project No.34745.1.1, TIP No U-0071. NCDWR Project No. 20131282 ver. 3.

Dear Mr. Mellor:

Attached hereto is a modification of Certification No. 3980 issued to The North Carolina Department of Transportation (NCDOT) originally dated January 28, 2014.

If we can be of further assistance, do not hesitate to contact us.

Sincerely,

S. Jay Zimmerman, Director Division of Water Resources

Attachments

Electronic copy only distribution: Eric Alsmeyer, US Army Corps of Engineers, Raleigh Field Office Chris Murray, Division 5 Environmental Officer James Mason, NCDOT NEU Beth Harmon, Division of Mitigation Services File Copy

> 1617 Mail Service Center, Raleigh, North Carolina 27699-1617 Phone: 919-807-6300 \ Internet: www.ncdenr.gov

North Carolina Department of Environmental Quality

Pat McCrory Governor Donald R. van der Vaart Secretary

Modification to 401 Water Quality Certification Pursuant to Section 401 of the Federal Clean Water Act and NEUSE BUFFER RULES, with ADDITIONAL CONDITIONS

THIS CERTIFICATION is issued in conformity with the requirements of Section 401 Public Laws 92-500 and 95-217 of the United States and subject to the North Carolina Division of Water Resources (NCDWR) Regulations in 15 NCAC 2H .0500 and 15A NCAC 2B.0233. This certification authorizes the NCDOT to impact additional jurisdictional streams in Durham County. The project shall be constructed pursuant to the modification dated October 15, 2015. The authorized additional impacts are as described below:

Site	Bank Stabilization to Intermittent Stream (linear ft)	Temporary Impact to Intermittent Stream (linear ft)	Bank Stabilization to Perennial Stream (linear ft)	Permanent Fill to Perennial Stream (linear ft)	Temporary Impact to Perennial Stream (linear ft)
6	25	- 15 (decrease)	0	0	0
23	0	0	13	- 10 (decrease)	- 11 (decrease)

Additional Stream Impacts in the Neuse River Basin

The application provides adequate assurance that the discharge of fill material into the waters of the Neuse River Basin in conjunction with the proposed development will not result in a violation of applicable Water Quality Standards and discharge guidelines. Therefore, the State of North Carolina certifies that this activity will not violate the applicable portions of Sections 301, 302, 303, 306, 307 of PL 92-500 and PL 95-217 if conducted in accordance with the application and conditions hereinafter set forth.

This approval is only valid for the purpose and design that you submitted in your application received December 12, 2013 and modification requests dated April 1, 2015 and October 15, 2015. Should your project change, you are required to notify the NCDWR and submit a new application. If the property is sold, the new owner must be given a copy of this Certification and approval letter, and is thereby responsible for complying with all the conditions. If any additional wetland impacts, or stream impacts, for this project (now or in the future) exceed one acre or 150 linear feet, respectively, additional compensatory mitigation may be required as described in 15A NCAC 2H .0506 (h) (6) and (7). Additional buffer impacts may require compensatory mitigation as described in 15A NCAC 2H .0506 (b) (and (7). For this approval to remain valid, you are required to comply with all the conditions listed below. In addition, you should obtain all other federal, state or local permits before proceeding with your project including (but not limited to) Sediment and Erosion control, Coastal Stormwater, Non-discharge and Water Supply watershed regulations. This Certification shall expire on the same day as the expiration date of the corresponding Corps of Engineers Permit.

Condition of Certification:

1. This modification is applicable only to the proposed modified activities. All of the authorized activities and conditions of certification associated with the original Water Quality Certification dated January 28. 2014 and modification dated April 15, 2015, still apply except where superseded by this certification.

1617 Mail Service Center, Raleigh, North Carolina 27699-1617 Phone: 919-807-6300 \ Internet: www.ncdenr.gov

North Carolina Department of Environmental Quality

Pat McCrory Governor

Donald R. van der Vaart Secretary

Violations of any condition herein set forth may result in revocation of this Certification and may result in criminal and/or civil penalties. This Certification shall become null and void unless the above conditions are made conditions of the Federal 404 and/or Coastal Area Management Act Permit. This Certification shall expire upon the expiration of the 404 or CAMA permit.

If you wish to contest any statement in the attached Certification you must file a petition for an administrative hearing. You may obtain the petition form from the office of Administrative hearings. You must file the petition with the office of Administrative Hearings within sixty (60) days of receipt of this notice. A petition is considered filed when it is received in the office of Administrative Hearings during normal office hours. The Office of Administrative Hearings accepts filings Monday through Friday between the hours of 8:00am and 5:00pm, except for official state holidays. The original and one (1) copy of the petition must be filed with the Office of Administrative Hearings.

The petition may be faxed-provided the original and one copy of the document is received by the Office of Administrative Hearings within five (5) business days following the faxed transmission. The mailing address for the Office of Administrative Hearings is:

Office of Administrative Hearings 6714 Mail Service Center Raleigh, NC 27699-6714 Telephone: (919) 431-3000, Facsimile: (919) 431-3100

A copy of the petition must also be served on DEQ as follows:

Mr. Sam M. Hayes, General Counsel Department of Environmental Quality 1601 Mail Service Center

This the 26th day of October 2015

DIVISION OF WATER RESOURCES

Chapm For

S. Jay Zimmerman, Director

WQC No. 3980

1617 Mail Service Center, Raleigh, North Carolina 27699-1617 Phone: 919-807-6300 \ Internet: www.ncdenr.gov



ELEVATION

* DIMENSION TO BE DETERMINED BY HYDRAULICS UNIT.





* DOWELS MAY BE PUSHED INTO GREEN CONCRETE AFTER SLAB HAS BEEN FLOAT FINISHED.

CULVERT SILL DETAILS

FIGURE 9 – 18





			WETLAND PERMIT IMPACT SUMMARY										
			WETLAND IMPACTS					SURFACE WATER IMPACTS					
Site No.	Station (From/To)	Structure Size / Type	Permanent Fill In Wetlands (ac)	Temp. Fill In Wetlands (ac)	Excavation in Wetlands (ac)	Mechanized Clearing in Wetlands (ac)	Hand Clearing in Wetlands (ac)	Permanent SW impacts (ac)	Temp. SW impacts (ac)	Existing Channel Impacts Permanent (ft)	Existing Channel Impacts Temp. (ft)	Natural Stream Design (ft)	
1	L 32+58 to 36+64	FILL						0.04		412			
	L 37+75 - SR1 34+84 Y17 11+14	66" RCP-IV, 48"RCP-III, 24"RCP-III BANK STABILIZATION	0.08					0.07	<0.01	673 20	14		
3	L 44+53	30" RCP-III	0.06					0.06		410			
v	SR2 36+89 Y7 17+24	48" RCP-III, 60" RCP-III	0.00					0.03	<0.01	349	15		
		BANK STABILIZATION								70			
* 5(T)	Y7LPA 13+98	60" RCP-III	0.06										
6	Y7RPA 21+78	BANK STABILIZATION						<0.01		25			
7	Y7RPA 20+75 to Y6 15+90	8'x9' RCBC						0.17	0.01	665	104		
		BANK STABILIZATION								305			
8	Y4 19+63 to 22+30 and Y4 23+04 to 25+59	30" RCP-III, FILL	0.04					0.07		443			
9	Y5 23+20 RT.	30" RCP-III						0.03	<0.01	29	0		
		BANK STABILIZATION								43			
10	Y5 26+62 RT.	FILL	0.01	0.01									
11	Y6 11+15 off 104 RT.	18" RCP-III				<0.01							
12	Y2 26+53 to 27+90 LT.	48" RCP-III & RECHANNELIZATION BANK STABILIZATION						0.11	0.03	705 42	132		
13(T)	Y4 35+48	36" RCP-IV						0.78		12			
	L 122+93	30" RCP-V	0.08										
()	L 132+13	FILL	0.03										
* 16(T)	L 132+33 RT.	FILL	0.05										
17	L 133+41	6'x7' RCBC						0.06	<0.01	479	28		
		BANK STABILIZATION								85			
17A	L 133+26 264' LT	FILL							<0.01		56		
OTAL	S:		0.46	0.01		<0.01		1.42	0.04	4755	349		

*Rounded totals are sum of actual impacts

NOTES:

* indicates isolated wetland

(T) Indicates Total Take

NC DEPARTMENT OF TRANSPORTATION DIVISION OF HIGHWAYS

DURHAM COUNTY WBS - 34745.1.1 (U-0071) Sheet 90 of 91

10/5/2015

			WETLAND PERMIT IMPACT SUMMARY									
									SURFACE WATER IMPACTS			
Site	Station	Structure	Permanent Fill In	Temp. Fill In	Excavation in	Mechanized Clearing	Hand Clearing in	Permanent SW	Temp. SW	Existing Channel Impacts	Existing Channel Impacts	Natural Stream
No.	(From/To)	Size / Type	Wetlands (ac)	Wetlands (ac)	Wetlands (ac)	in Wetlands (ac)	Wetlands (ac)	impacts (ac)	impacts (ac)	Permanent (ft)	Temp. (ft)	Design (ft)
17B L1	133+69 263' RT	FILL							<0.01		7	
18(T) L 1	134+53 LT.	FILL						0.19				
19 no	ot jurisdictional	0										
20 DF	FLW 27+34 to 38+06	42" RCP-III						0.02	<0.01	218	17	
21 DF	FLW 39+19	FILL						0.01		28		
22 DF	FLW 41+62	FILL						0.01		23		
23 Y3	3 34+45	8'x10' CULVERT						0.09	0.01	270	65	
		BANK STABILIZATION								140		
24 Y3	3 40+16.69 RT	30" RCP-III						0.04	0.01	104	23	
25 Y9	9 28+10 LT to 26+85 RT	66" RCP-III						0.01	<0.01	168	10	
		BANK STABILIZATION								35		
26 Y3	3 57+75 LT to RT	60" RCP-III						0.01	<0.01	50	23	
		BANK STABILIZATION								50		
27 L 1	129+77 414LT.	BANK STABILIZATION								10		
28 DF	FLW 52+08 LT & RT	36" RCP						0.02	0.01	121	20	
29 DF	FLW 72+35 LT	FILL						< 0.01		40		
30 DF	FLW 73+72 LT	FILL						< 0.01		10		
31 DF	FLW 78+76 LT& 81+14 RT	BANK STABILIZATION								61		
		Construction Activity							<0.01		22	
32 DF	FLW 78+79 LT	Construction Activity							<0.01		9	
TOTALS (page 2 of 2):			0.00	0.00		0.00		0.4	0.03	1328	196	
FOTALS (page 1 of 2):			0.46	0.01		<0.01		1.42	0.04	4755	349	
	FOTALS:		0.46	0.01		<.0.01		1.82	0.07	6083	545	

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10/5/2015

Revised October 2015