



US Army Corps
Of Engineers
Wilmington District

PUBLIC NOTICE

Issue Date: October 11, 2017
Comment Deadline: November 9, 2017
Corps Action ID Number: SAW-2017-02112

The Wilmington District, Corps of Engineers (Corps) received an application from the North Carolina Department of Transportation (NCDOT) seeking Department of the Army authorization to discharge dredged or fill material into waters and wetlands in Hydrologic Unit Code (HUC) 03040101 (Yadkin/Pee Dee River Basin) and 03010103 (Roanoke River basin), associated with the construction of I-74/Winston Salem Northern Beltway. This application includes the following sections of this proposal: (1) Transportation Improvement Project (TIP) No. R-2247 phase 2, CA, CB, CD, D, EA, EB, and EC (I-74/Winston Salem Northern Beltway from I-40 to US 52); (2) TIP No. U-2579C phase 2, D, E, and F (I-74/Winston Salem Northern Beltway from US 52 to US 311); and (3) TIP No. U-2579AA, and AB (I-74/Winston Salem Northern Beltway from I-40 Business to US 311 South) in Forsyth County, North Carolina.

Specific plans are shown at the following website:

<http://www.saw.usace.army.mil/Missions/Regulatory-Permit-Program/Public-Notices/>

Contact information can be found at the end of this notice if you would like to request a paper copy of the plans or project description.

Applicant: Mr. Phillip S. Harris III, P.E., C.P.M.
Natural Environment Section Head
North Carolina Department of Transportation Division of Highways
1598 Mail Service Center
Raleigh, North Carolina 27699-1598

Authority

The Corps evaluates this application and decides whether to issue, conditionally issue, or deny the proposed work pursuant to applicable procedures of the following Statutory Authorities:

- Section 404 of the Clean Water Act (33 U.S.C. 1344)
- Section 10 of the Rivers and Harbors Act of 1899 (33 U.S.C. 403)
- Section 103 of the Marine Protection, Research and Sanctuaries Act of 1972 (33 U.S.C. 1413)

Location

Directions to Site: The proposed site is a new alignment linear transportation corridor from I-40 near the Town of Clemmons to US 311 North near the town of Walkertown and from I-40 Business to US 311 South around Winston-Salem, Forsyth County, North Carolina.

Project Area (acres): 29 miles

Nearest Town: Winston-Salem

Nearest Waterway: varies

River Basin: Yadkin/Roanoke

Latitude and Longitude: 36.150030N, -80.169590W

Existing Site Conditions

The project corridor is located in the central portion of Forsyth County along the east, north, and west sides of Winston-Salem, within the Piedmont Physiographic Province of North Carolina. Topography in the project vicinity generally includes rolling hills, bisected by twelve named tributaries as well as several smaller tributaries. Elevations in the study area range from 857 to 972 feet above mean sea level. The proposed corridor contains primarily a combination of open, agricultural, and forested land use classifications, with commercial/industrial and single family residential land uses occurring adjacent to the southern portion of the project area.

This project lies within the Piedmont Physiographic Province in the Yadkin River Basin (HUC 03040101) and the Roanoke River basin (HUC 03010103). The sections of the project in the Roanoke River basin are U-2579 F and a portion of U-2579E. There are twelve named streams (see Project Area Streams Table below) and their associated unnamed tributaries within the project.

Stream Name	Stream Index Number	Best Usage Class	Description
Yadkin/Pee Dee River Subbasin 03-07-04			
Muddy Creek	12-94-(0.5)	C	From source to a point 0.8 mile upstream of mouth
Silas Creek	12-94-10	C	From source to Muddy Creek
Fiddlers Creek	12-94-13-3	C	From source to South Fork Muddy Creek
South Fork Muddy Creek	12-94-13	C	From source to Muddy Creek
Reynolds Creek	12-94-9	C	From source to Muddy Creek
Mill Creek No.	12-94-4	C	From source to Muddy Creek
Mill Creek	12-94-7	C	From source to Muddy Creek
Grassy Creek	12-94-7-3	C	From source to Muddy Creek
Swaim Creek	12-94-13-1	C	From source to South Fork Muddy Creek
Beaver Dam Creek	12-94-2	C	From source to Muddy Creek
Roanoke Subbasin 03-02-01			
Rough Fork	22-25-5-2	C	From source to Buffalo Creek
Trick-Um Creek	22-25-5-1	C	From Source to Buffalo Creek

There are no designated Outstanding Resource Waters (ORW), High Quality Waters (HQW), Water Supply I (WS-I), or Water Supply II (WS-11) waters within 1.0 mile of the project area. No waters within the project area and within a mile of the project area are listed on the 2012 303(d) Final List of Impaired Waters of North Carolina.

The jurisdictional boundaries of aquatic resources within the project study area were verified by the Corps, and a Jurisdictional Determination (JD) was approved on August 3, 2016 for U-2579 - Sections AA, AB, C Phase 2, D, E, and F, and for R-2247 – Sections CA (includes sub-section CD) and EB (includes subsection EC) of the Winston-Salem Northern Beltway. A final field re-verification of jurisdictional boundary delineations for the remaining funded portions of R-2247 – Sections EA and EB, along with un-funded portions of R-2247 - Sections B Phase 2, CA, CB and D was made by the Corps on August 18, 2017. Submittal of the final information for a jurisdictional determination for these sections is forthcoming.

Applicant's Stated Purpose

The Winston-Salem Beltway as a whole will provide benefits that will address various transportation needs. About 100,000 vehicles and trucks travel through the area every day, which is more traffic than the roadways in the area are designed to handle. The project will help alleviate congestion and enhance safety along heavily traveled routes in Forsyth County, including U.S. 421/Business 40 and U.S. 52. General transportation needs for the entire project, as identified in the 2007 *Supplemental Final Environmental Impact Statement* include the following:

- Poor roadway connectivity in eastern and western Forsyth County
- Capacity deficiencies
- Poor regional, intrastate, and interstate linkage
- Consistency with the state and local land use and transportation plans
- Consistency with the Highway Trust Fund Act
- Poor North/South roadway connectivity within and through western Forsyth County
- Above-average accident rates on area roadways in the eastern section
- Need for a new I-74 corridor, a congressionally designated High Priority Corridor on the National Highway System.

The primary purposes of the proposed action include the following:

- Improve roadway connectivity in eastern and western Forsyth County
- Provide congestion relief for area roadways
- Expand options for regional/intrastate/interstate travel
- Help meet the state and local land use and transportation plans
- Help fulfill the Highway Trust Fund Act
- Carry future traffic at a desirable level of service
- Enhance safety
- Provide a corridor for I-74.

Background

Merger Process

This project additionally has progressed through a collaborative process which includes multiple resource and other integral regulatory agencies known in the State of North Carolina as the Merger Process. This group of agencies reviewed key points in the project development and agreed to milestones relative to their agency responsibilities. The Merger Team agreed to the following milestones:

The NEPA/404 Merger project team (Merger team) for this project was assembled in Raleigh in July 19, 2000, and February 8, 2001, to discuss the purpose and need statement and study corridor, and team concurrence was confirmed by signature. The Merger team concurred on alternatives to be studied in detail in February 8 and April 18, 2001. The Corps has reviewed NCDOT's wetland and stream delineations for this project in the field, and verified the accuracy of the delineations. The Merger team concurred with the Least Environmentally Damaging Practicable Alternative in March 17, 2005, and avoidance and minimization measures on May 9, 2005, June 9, 2005, and July 13, 2005. January 2007, the Federal Highway Administration approved the Supplemental Final Environment Impact Statement Winston-Salem Northern Beltway. The Merger team met on November 19, 2008 (U-2579C phase 2), and May 17, 2017 (R-2247CD/EC) and concurrence was confirmed for the Merger Concurrence 4B Hydraulic Design Review. On February 8, 2017 (U-2579C phase 2) and September 20, 2017 (R-2247CD/EC), the interagency Merger team met and concurrence was confirmed for the Merger Concurrence 4C Permit Drawings Review. On October 2, 2017, NCDOT applied for a permit application to discharge fill material into waters of the United States for the proposed Winston Salem Northern Beltway.

Project Schedule

The Winston Salem Northern Beltway project consists of fourteen sections with various let dates as described in the table below. All fourteen sections were combined for planning and permitting purposes to facilitate the evaluation of a system-wide project. Permit drawings for the proposed R-2247EC, R-2247CD, and U-2579C phase 2 sections have been completed, whereas only preliminary slope stakes plus 25 feet have been calculated for the remaining eleven sections. The NCDOT would apply for any relevant permit modifications for the remaining eleven sections upon completion of final design including additional avoidance and minimization efforts. Construction would not commence on any of the preliminary design phases until permit modifications are received based on final design.

Section	Approximate Section Limits	Approximate Length (mi)	Construction Letting
R-2247EC	N.C. 65 Interchange, Reconstruct Interchange	1.0	January 2018
R-2247CD	Intersection of U.S. 421 and S. Peace Haven Rd	0.7	January 2018
U-2579C Phase 2	US 311 (New Walkertown Rd) to approx.. 500' east of Old Walkertown Road (SR 4556)	0.1	January 2018
U-2579AA	I-74/U.S. 311 to I-40	0.6	FY 2020
U-2579AB	I-40 to U.S. 421/Business 40	2.7	FY 2020
U-2579D	500 feet east of Old Walkertown Rd (SR 4556) to Baux Mountain Rd (SR211)	3.2	March 2018
U-2579E	Baux Mountain Road to N.C. 8	2.1	March 2018
U-2579F	N.C. 8 to U.S. 52	1.4	March 2018
R-2247EA	N.C. 67 to south of U.S. 52	3.0	FY 2021
R-2247EB	Interchange at U.S. 52 and the beltway	2.7	July 2018
R-2247B Phase 2	South of I-40 to south of U.S. 421 Interchange	2.0	Post Year
R-2247CA	Interchange of U. S. 421 with SR 1348 (Robinhood Road)	1.4	Post Year
R-2247CB	North of the U.S. 421 interchange to Robinhood Road	3.3	Post Year
R-2247D	North of Meadowlark Drive/Robinhood Road to N.C. 67	4.7	Post Year

Project Description

The North Carolina Department of Transportation, Division of Highways, proposes to construct the Winston-Salem Northern Beltway from I-40 near the town of Clemmons to US 311 North near the town of Walkertown and from I-40 Business to US 311 South in Forsyth County. The new road alignment will consist in each direction of 3, 12-foot lanes with a 12-foot paved shoulder and a 22-foot grassed median. The road alignment will be a control access freeway. The estimated length of the project is 29 miles. This project is included in the North Carolina Department of Transportation's Transportation Improvement Program (TIP).

Summary of Impacts:

The preliminary proposed impacts for the Winston Salem Northern Beltway project include permanent impacts to 59,395 linear feet of stream channel and 9.41 acres of wetlands. Proposed impacts for sections R-2247 CD, R-2247EC, and U-2579C phase 2 are based on final design. The proposed impacts for the remaining sections were determined by preliminary slope stakes plus 25 feet on both sides of the alignment. Proposed project impacts are listed per project section in the tables below:

Summary of Wetland Impacts

Section	Design Stage	Wetland Impact area (ac)
R-2247EC	Final	0.31
R-2247CD	Final	0.04
U-2579C Phase 2	Final	0.68
U-2579AA	Preliminary*	1.43
U-2579AB	Preliminary*	1.50
U-2579D	Preliminary*	0.08
U-2579E	Preliminary*	0.99
U-2579F	Preliminary*	0.24
R-2247EA	Preliminary*	0.57
R-2247EB	Preliminary*	0.09
R-2247B Phase 2	Preliminary*	0.27
R-2247CA	Preliminary*	0.71
R-2247CB	Preliminary*	1.98
R-2247D	Preliminary*	0.52
Totals		9.41

Summary of Stream Impacts

Section	Design Stage	Stream Impact (lf)
R-2247EC	Final	865
R-2247CD	Final	699
U-2579C Phase 2	Final	3,527
U-2579AA	Preliminary*	3,019
U-2579AB	Preliminary*	10,351
U-2579D	Preliminary*	5,043
U-2579E	Preliminary*	4,864
U-2579F	Preliminary*	2,544
R-2247EA	Preliminary*	6,536
R-2247EB	Preliminary*	6,593
R-2247B Phase 2	Preliminary*	862
R-2247CA	Preliminary*	3,056
R-2247CB	Preliminary*	5,674
R-2247D	Preliminary*	5,762
Totals		59,395

Activities resulting in permanent fill in streams include culvert installation, channel re-alignment, and stream channelization activities. Bank stabilization activities are a separate type of fill activity as these activities do not typically occur within the channel (thalweg) of the stream, but rather only on the stream banks. Activities resulting in permanent impacts in wetlands include roadway fill, excavation in association with a fill

activity, and mechanized clearing without a specified wetland restoration plan. Temporary impacts proposed are those associated with construction access and dewatering activities, as well as stormwater tie-ins where the impact areas would be returned to pre-construction grade and contour following construction.

Avoidance and Minimization

The applicant provided the following information in support of efforts to avoid and/or minimize impacts to the aquatic environment:

NCDOT has avoided impacting many wetlands and streams and reduced impacts to wetlands and streams to the greatest extent practicable. Wetland impacts have been kept to a minimum by avoiding ditching and channelization through wetlands. Existing drainage patterns to the wetlands have been kept to the extent practicable to maintain the hydrology feeding the wetlands. Other specific examples of avoidance and minimization measures include:

- Best Management Practices (BMPs) will be utilized during construction to attempt to reduce the stormwater impacts to receiving streams and wetlands due to erosion and runoff.
- Grassed swales will be utilized on R-2247CD where practicable (see SMP) to reduce water velocity, promote infiltration and provide treatment for discharge before runoff enters streams. These grassed swales have side slopes that are 3:1 or flatter, with many side slopes being 6:1 and 4:1, have a velocity during the 2-Year Storm of less than or equal to 2 feet per second and have a minimum ditch length equivalent to 100 feet per acre of impervious area.
- Riprap aprons/pads will be utilized at all pipe outlets to reduce velocity and erosion at pipe outlets.
- Multiple proposed culverts utilize junction boxes to dissipate energy, reduce the slope of the pipe and provide reduced outlet velocity to the stream bed and bank.
- Culverts will not be buried in areas discussed in the Concurrence Point 4B meeting to promote channel stability in the naturally steep stream channels.
- Additionally, rip rap channel stabilization has been provided at the outlets of large culverts where appropriate to reduce the threat of erosion.
- Rip rap bank stabilization has been provided where appropriate to promote bank stability.
- A dry detention basin has been included on section R-2247CD to treat stormwater runoff and reduce the peak discharge from the site.
- Roadway fill slopes were steepened to 2:1 at jurisdictional stream crossings as allowed by roadway design guidelines in order to reduce stream impact lengths.
- Storm drainage systems were discharged outside of jurisdictional features where practicable.
- Deck drains were not used on the Kester Mill Road bridge over Silas Creek on section R-2247CD.

Compensatory Mitigation

The applicant offered the following compensatory mitigation plan to offset unavoidable functional loss to the aquatic environment:

For final design phases U-2247EC, U-2247CD, and U-2579C phase 2, 5,091 linear feet of permanent warm water stream impacts are proposed. Of that total, NCDOT does not propose to provide compensatory mitigation for 257 linear feet of bank stabilization impacts. Of the remaining 4,834 linear feet of permanent stream impacts, NCDOT proposes to provide compensatory mitigation for 4,834 linear feet at a 2:1 ratio. Compensatory mitigation for the 1.03 acres of wetland impacts for final design phases U-2247EC, U-2247CD, and U-2579C phase 2 is proposed at a 2:1 ratio. NCDOT proposes to provide the above compensatory mitigation through the purchasing of stream and wetland credits from the NC Division of Mitigation Services (NCDMS).

For preliminary design sections U-2579AA, AB, D, E, F, R-2247EA, EB, 38,950 linear feet of permanent warm water stream impacts and 4.9 acres of riparian, non-riverine wetland impacts are proposed, although these figures are based on preliminary design. Currently, NCDOT proposes to provide compensatory mitigation for 38,950 linear feet and 4.9 acres at a 2:1 ratio through purchasing stream and wetland credits from NCDMS and approved mitigation banks within the HUC. Mitigation amounts will be further refined for all preliminary and post year section as each section enters final design and future permit modification requests.

Essential Fish Habitat

Pursuant to the Magnuson-Stevens Fishery Conservation and Management Act, this Public Notice initiates the Essential Fish Habitat (EFH) consultation requirements. The Corps' initial determination is that the proposed project would not effect EFH or associated fisheries managed by the South Atlantic or Mid Atlantic Fishery Management Councils or the National Marine Fisheries Service.

Cultural Resources

Pursuant to Section 106 of the National Historic Preservation Act of 1966, Appendix C of 33 CFR Part 325, and the 2005 Revised Interim Guidance for Implementing Appendix C, the District Engineer consulted district files and records and the latest published version of the National Register of Historic Places and initially determines that:

- Should historic properties, or properties eligible for inclusion in the National Register, be present within the Corps' permit area; the proposed activity requiring the DA permit (the undertaking) is a type of activity that will have no potential to cause an effect to an historic properties.
- No historic properties, nor properties eligible for inclusion in the National Register, are present within the Corps' permit area; therefore, there will be no

historic properties affected. The Corps subsequently requests concurrence from the SHPO (or THPO).

- Properties ineligible for inclusion in the National Register are present within the Corps' permit area; there will be no historic properties affected by the proposed work. The Corps subsequently requests concurrence from the SHPO (or THPO).
- Historic properties, or properties eligible for inclusion in the National Register, are present within the Corps' permit area; however, the undertaking will have no adverse effect on these historic properties. The Corps subsequently requests concurrence from the SHPO (or THPO).
- Historic properties, or properties eligible for inclusion in the National Register, are present within the Corps' permit area; moreover, the undertaking may have an adverse effect on these historic properties. The Corps subsequently initiates consultation with the SHPO (or THPO).

A result of early coordination with the SHPO, a Memorandum of Agreement has been signed by the NCDOT, FHWA, and SHPO stipulating steps to mitigate the adverse effects to known eligible sites for the National Register of Historic Places.

- The proposed work takes place in an area known to have the potential for the presence of prehistoric and historic cultural resources; however, the area has not been formally surveyed for the presence of cultural resources. No sites eligible for inclusion in the National Register of Historic Places are known to be present in the vicinity of the proposed work. Additional work may be necessary to identify and assess any historic or prehistoric resources that may be present.

The District Engineer's final eligibility and effect determination will be based upon coordination with the SHPO and/or THPO, as appropriate and required, and with full consideration given to the proposed undertaking's potential direct and indirect effects on historic properties within the Corps-identified permit area.

Endangered Species

Pursuant to the Endangered Species Act of 1973, the Corps reviewed the project area, examined all information provided by the applicant and consulted the latest North Carolina Natural Heritage Database. Based on available information:

- The Corps determines that the proposed project would not affect federally listed endangered or threatened species or their formally designated critical habitat.
- The Corps determines that the proposed project may affect, not likely to adversely affect federally listed endangered or threatened species or their formally designated critical habitat.

According to the North Carolina Natural Heritage Program (NHP) Biotics Database, most recently updated October 2015, the nearest NLEB hibernacula record is 80 miles west (EO ID 32171) and no known NLEB roost trees occur within 150 feet of the project area. EO 32171 represents Black Rock Cliffs Cave near Grandfather Mountain with multiple observations from 1986 to 2011.

NCDOT has also reviewed the USFWS Asheville Field office website for consistency with NHP records

(http://www.fws.gov/asheville/htmls/project_review/NLEB_in_WNC.html).

This project is located entirely outside of the red highlighted areas (12-digit HUC) that the USFWS Asheville Field Office has determined to be representative of an area that may require consultation.

NCDOT has determined that the proposed action does not require separate consultation on the grounds that the proposed action is consistent with the final Section 4(d) rule, codified at 50 C.F.R. § 17.40(o) and effective February 16, 2016. NCDOT may presume its determination is informed by best available information and consider Section 7 responsibilities fulfilled for NLEB. NCDOT made notification to USFWS on April 12, 2016.

- The Corps is not aware of the presence of species listed as threatened or endangered or their critical habitat formally designated pursuant to the Endangered Species Act of 1973 (ESA) within the project area. The Corps will make a final determination on the effects of the proposed project upon additional review of the project and completion of any necessary biological assessment and/or consultation with the U.S. Fish and Wildlife Service and/or National Marine Fisheries Service.

Other Required Authorizations

The Corps forwards this notice and all applicable application materials to the appropriate State agencies for review.

North Carolina Division of Water Resources (NCDWR): The Corps will generally not make a final permit decision until the NCDWR issues, denies, or waives the state Certification as required by Section 401 of the Clean Water Act (PL 92-500). The receipt of the application and this public notice, combined with the appropriate application fee, at the NCDWR Central Office in Raleigh constitutes initial receipt of an application for a 401 Certification. A waiver will be deemed to occur if the NCDWR fails to act on this request for certification within sixty days of receipt of a complete application. Additional information regarding the 401 Certification may be reviewed at the NCDWR Central Office, 401 and Buffer Permitting Unit, 512 North Salisbury Street, Raleigh, North Carolina 27604-2260. All persons desiring to make comments regarding the application for a 401 Certification should do so, in writing, by November 1, 2017 to:

NCDWR Central Office
Attention: Ms. Amy Chapman, Transportation Permitting Unit
(USPS mailing address): 1617 Mail Service Center, Raleigh, NC 27699-1617

Or,

(physical address): 512 North Salisbury Street, Raleigh, North Carolina 27604

North Carolina Division of Coastal Management (NCDCM):

- The application did not include a certification that the proposed work complies with and would be conducted in a manner that is consistent with the approved North Carolina Coastal Zone Management Program. Pursuant to 33 CFR 325.2 (b)(2) the Corps cannot issue a Department of Army (DA) permit for the proposed work until the applicant submits such a certification to the Corps and the NCDCM, and the NCDCM notifies the Corps that it concurs with the applicant's consistency certification. As the application did not include the consistency certification, the Corps will request, upon receipt, concurrence or objection from the NCDCM.
- Based upon all available information, the Corps determines that this application for a Department of Army (DA) permit does not involve an activity which would affect the coastal zone, which is defined by the Coastal Zone Management (CZM) Act (16 U.S.C. § 1453).

Evaluation

The decision whether to issue a permit will be based on an evaluation of the probable impacts including cumulative impacts of the proposed activity on the public interest. That decision will reflect the national concern for both protection and utilization of important resources. The benefit which reasonably may be expected to accrue from the proposal must be balanced against its reasonably foreseeable detriments. All factors which may be relevant to the proposal will be considered including the cumulative effects thereof; among those are conservation, economics, aesthetics, general environmental concerns, wetlands, historic properties, fish and wildlife values, flood hazards, flood plain values (in accordance with Executive Order 11988), land use, navigation, shoreline erosion and accretion, recreation, water supply and conservation, water quality, energy needs, safety, food and fiber production, mineral needs, considerations of property ownership, and, in general, the needs and welfare of the people. For activities involving the discharge of dredged or fill materials in waters of the United States, the evaluation of the impact of the activity on the public interest will include application of the Environmental Protection Agency's 404(b)(1) guidelines.

Commenting Information

The Corps of Engineers is soliciting comments from the public; Federal, State and local agencies and officials, including any consolidated State Viewpoint or written position of the Governor; Indian Tribes and other interested parties in order to consider and evaluate the impacts of this proposed activity. Any comments received will be considered by the Corps of Engineers to determine whether to issue, modify, condition or deny a permit for this proposal. To make this decision, comments are used to assess impacts on endangered species, historic properties, water quality, general environmental effects and the other public interest factors listed above. Comments are used in the preparation of an Environmental Assessment (EA) and/or an Environmental Impact Statement (EIS) pursuant to the National Environmental Policy Act (NEPA). Comments are also used to determine the need for a public hearing and to determine the overall public interest of the proposed activity.

Any person may request, in writing, within the comment period specified in this notice, that a public hearing be held to consider the application. Requests for public hearings shall state, with particularity, the reasons for holding a public hearing. Requests for a public hearing shall be granted, unless the District Engineer determines that the issues raised are insubstantial or there is otherwise no valid interest to be served by a hearing.

The Corps of Engineers, Wilmington District will receive written comments pertinent to the proposed work, as outlined above, until 5pm, November 9, 2017. Comments should be submitted to James Lastinger, Raleigh Regulatory Field Office, 3331 Heritage Trade Drive, Suite 105 , Wake Forest, North Carolina 27587, at (919) 554-4884 ext. 32. In addition, please contact Mr. Lastinger to request a paper copy of the plans or project description.