



PUBLIC NOTICE

**US Army Corps
Of Engineers**
Wilmington District

Issue Date: July 13, 2017
Comment Deadline: August 14, 2017
Corps Action ID #: SAW-2012-01414
STIP Project Number U-2719

The Wilmington District, Corps of Engineers (Corps) has received an application from the North Carolina Department of Transportation (NCDOT) regarding a potential future requirement for Department of the Army (DA) authorization to discharge dredged or fill material into waters of the United States associated with the proposed I-440 Improvements (STIP Project Number U-2719) in Wake County, North Carolina.

Specific design alternatives and location information are described below and shown on the attached maps. This Public Notice and attachments are also available on the Wilmington District Web Site at <http://www.saw.usace.army.mil/Missions/RegulatoryPermitProgram.aspx>

The Federal Highway Administration's (FHWA) Environmental Assessment (EA) and related maps for this project are available on the NCDOT website at <http://www.ncdot.gov/projects/I-440improvements/>.

Applicant North Carolina Department of Transportation (NCDOT)
Project Development Group
Attn: Beverly Robinson, CPM
Project Development Group Supervisor
1548 Mail Service Center
Raleigh, North Carolina 27699-1548

Authority

The Corps will evaluate this application to compare alternatives that have been carried forward for detailed study pursuant to applicable procedures of Section 404 of the Clean Water Act (33 U.S.C. 1344).

In order to more fully integrate Section 404 permit requirements with the National Environmental Policy Act of 1969, and to give careful consideration to our required public interest review and 404(b)(1) compliance determination, the Corps is soliciting public comment on the merits of this proposal and on the alternatives evaluated in the I-440 Improvement Project FHWA EA (<http://www.ncdot.gov/projects/I-440improvements/>). At the close of this comment period, the District Commander will evaluate and consider the comments received, as well as the expected adverse and beneficial effects of the proposed road construction, to select the least environmentally damaging practicable alternative (LEDPA). The District Commander is not authorizing construction of the proposed project at this time. A final DA permit may be issued only after our review process is complete, impacts to the aquatic environment have been minimized to the maximum extent practicable, and a compensatory mitigation plan for unavoidable impacts has been approved.

Location

The proposed project corridor includes approximately 6 miles of the I-440/US 1-64 freeway from south of Walnut Street (SR 1313) in the Town of Cary to east of Wade Avenue (SR 1728) in the City of Raleigh, all in Wake County, North Carolina, and is referred to as the I-440 Improvement Project (see attached drawings). I-440 (known as the Raleigh Beltline) travels around the west, north, and east sides of downtown Raleigh, and this project segment of I-440 is west of downtown Raleigh. Note that I-440 is signed eastbound and westbound, even though in the project area I-440 runs more north/south. US 1-64 is signed northbound and southbound, and this is how it is oriented in the project area. The project is included as Project U-2719 in NCDOT's adopted 2016-2025 State Transportation Improvement Program (STIP) and draft 2017-2027 STIP, and is planned to be constructed as a design-build project. Being a design-build project means the construction contractor will be responsible for the final design plans, right of way acquisition, and construction.

Existing Site Conditions

Wake County is located within the piedmont region of central North Carolina. The Raleigh-Durham-Chapel Hill metropolitan area is one of the fastest growing regions in the country. The project is located in an established mixed-use urban area approximately 3 miles west of downtown Raleigh. There are several residential neighborhoods, parks, and commercial areas along the corridor. I-440 provides a route to several major destinations located in and around the project study area, including the North Carolina State Fairgrounds, Carter-Finley Stadium, PNC Arena, the North Carolina Museum of Art, Rex Hospital, North Carolina State University (NCSU), Meredith College, and Crossroads Mall. I-440/US 1-64 has the following interchanges in the project study area, listed from west to east:

- Walnut Street
- Crossroads Boulevard (partial interchange)
- Hillsborough Street (NC 54)
- Western Boulevard
- Melbourne Road (partial interchange)
- Jones Franklin Road
- I-40
- Wade Avenue
- Lake Boone Trail

There are three additional roadway crossings of I-440 that do not have interchanges:

- Beryl Road crosses under the I-440 bridge that also spans the railroad tracks and Hillsborough Street
- Ligon Street crosses through a one-lane tunnel under I-440
- Athens Drive is on a bridge over I-440

Although some of the interchanges are proposed to be re-designed, none of the interchanges are proposed to be removed, and no new interchanges will be added.

The project study area is contained within the Neuse River Basin. Water resources in the study area are part of the U.S. Geological Survey (USGS) Hydrologic Unit 03020201). Named streams in the corridor include Walnut Creek, Simmons Branch, Bushy Creek, and House Creek. There are also numerous unnamed tributaries to these streams in the project corridor. Permanent impacts to streams for any combination of Detailed Study Alternatives end-to-end range from 1,826 to 2,145 linear feet. Temporary impacts to streams range from 821 to 973 linear feet. Wetland impact areas occur only in two general locations, near Lake Johnson at the Jones Franklin Road interchange and near White Oak Lake between Athens Drive and Melbourne Road. Total wetland impacts for any combination of Detailed Study Alternatives end-to-end would be approximately 0.09 acre of permanent impact and 0.01 acre of temporary impact.

Streams west of the I-440/Walnut Street interchange in the project study area are in the Swift Creek watershed and are classified as Water Supply WS-III, which is defined as waters (or tributaries of waters) used as sources of water supply for drinking or food processing. The project corridor is approximately 2 miles from Swift Creek and outside the critical area for the Swift Creek water supply watershed. All streams east of the I-440/Walnut Street interchange in the project study area are classified by the NC DEQ Division of Water Resources as Class C and Nutrient Sensitive Waters. Class C Waters are protected for uses such as secondary recreation (boating and other activities with incidental water contact), fishing, wildlife, fish consumption, aquatic life including propagation, survival and maintenance of biological integrity, and agriculture. The Nutrient Sensitive Waters classification indicates the stream needs additional nutrient management (e.g., fertilizers) because there is excessive vegetative growth downstream in the Neuse River estuary.

Applicant's Stated Purpose

The primary purposes of the proposed project are to: improve traffic flow, make the roadway operate more efficiently, and enhance mobility on this segment of I-440.

The project will address the need to increase capacity, improve the layout of the roadway and interchanges, and fix poor conditions along this segment of I-440.

Project Description

NCDOT proposes to proposes to widen approximately 6 miles of I-440/US 1-64 from south of Walnut Street in Cary to east of Wade Avenue in Raleigh from four lanes to six lanes and to eliminate bottlenecks at both ends of the project, a distance of approximately 6 miles. An additional through lane in each direction of I-440 is proposed. There would be a total of three through lanes in each direction with a grass or hard median in the center, depending on available space. This would match the three lanes in each direction that exist along the remainder of I-440 and would eliminate the bottlenecks located at either end of the project area. The project would also reconstruct interchanges, replace structures, and repair pavement conditions. The project study area is entirely within Wake County.

Detailed Study Alternatives

Alternatives were developed for the mainline widening and for each interchange and grade separation and narrowed down to those studied in detail. Each of the Detailed Study Alternatives (DSAs) for a project element (interchange or grade separation) can be combined with any of the others, along with the mainline widening, to create the improvements for the entire corridor. There are 36 different possible combinations of the Detailed Study Alternatives to get from the beginning of the project south of Walnut Street to the end of the project near Lake Boone Trail.

The Detailed Study Alternatives are listed below from west to east. In all instances, the mainline is widened to three through-lanes in each direction.

- South of Walnut St interchange through the I-40 interchange
 - Widen I-440 only (no interchange improvements)
- Jones Franklin Road interchange
 - Upgrade Existing Partial Clover
- Athens Drive grade separation
 - Replace Bridge in Place
 - Replace Bridge to North
- Melbourne Road interchange
 - Replace Bridge in Place
 - Replace Bridge to North
- Western Boulevard interchange
 - Double Crossover Diamond (also called a Diverging Diamond)
- Ligon Street grade separation
 - Replace Bridge to North
 - Replace Bridge to South
 - Extend Existing Traffic Culvert
- Hillsborough Street/Wade Avenue interchanges
 - One Flyover
 - Two Flyovers
 - Slight Detour

A No-Build Alternative was also retained as a baseline against which the benefits, costs and impacts of the build DSAs could be compared, in accordance with NEPA regulations and FHWA guidelines. The No-Build Alternative assumed that the transportation network in the study area will continue to develop as called for in the current Long Range Transportation Plans, but without the road improvements in the U-2719 project.

For construction, right of way, and utilities, the project is estimated to cost a total of \$450.4 million to \$475.3 million (2017 dollars). Depending on the DSA, construction costs range from \$228.9 million to \$239.2 million, right-of-way costs range from \$213.3 million to \$234.2 million, and utility relocation costs range from \$6.0 million to \$6.4 million.

Mapped impacts to Section 404 jurisdictional features are shown on Figure 1, attached.

Impacts to streams are shown in Table 1, below.

Table 1. Summary of Permanent and Temporary Stream Impacts

Interchange or Grade Separation Location Area (east to west)	Detailed Study Alternative XX / XX = Permanent Impacts / Temporary Impacts (linear feet)		
	Hillsborough St / Wade Ave interchanges ¹	One Flyover	Two Flyovers
540 / 328		625 / 416	541 / 329
Ligon St grade separation	Bridge North	Bridge South	Extend Culvert
	174 / 0	310 / 64	125 / 0
Western Blvd interchange	Double Crossover Diamond		
	376 / 125		
Melbourne Rd interchange	Bridge In Place	Bridge North	
	418 / 137	418 / 137	
Athens Dr grade separation	Bridge In Place	Bridge North	
	0 / 0	0 / 0	
Jones Franklin Rd interchange	Upgrade Existing Partial Clover		
	367 / 231		
I-40 interchange and west	Widen I-440 Only		
	0 / 0		
RANGE OF PERMANENT IMPACTS	1,826 – 2,145		
RANGE OF TEMPORARY IMPACTS	821-973		

1. Impacts based on construction limits plus a 25-foot buffer

Wetland Impacts: Total wetland impacts would be the same for any end-to-end alternative. Total wetland impacts would be approximately 3,877 square feet (0.09 acre) of permanent impact and 261 square feet (0.01 acre) of temporary impact.

Pond Impacts: Impacts to ponds would be the same for any end-to-end alternatives, since these impacts occur where there is only one option currently under consideration. Total pond impacts would be approximately 31,842 square feet (0.73 acre) of permanent impact and 9,801 square feet (0.23 acre) of temporary impact. It should be noted that the City of Raleigh has a project to relocate the White Oak Lake dam outside the U-2719 proposed right of way, which is a separate project and will be permitted separately.

Cultural Resources

The FHWA is the lead federal agency for this project and, in accordance with Section 106 of the National Historic Preservation Act (NHPA), has made determinations and requested concurrence with these determinations from the North Carolina State Historic Preservation Office (NCSHPO). Five resources within the project study area were found to be either listed on the National Register of Historic Places (NRHP) or were considered eligible for listing. NCSHPO has concurred with the FHWA effect determination as follows:

- Oak Grove Cemetery - No Adverse Effect or Adverse Effect - Depending on Alternative. The Build Bridge to South Alternative would adversely affect the cemetery due to proximity of proposed earthwork needed for the roadway approach to the Ligon Street Bridge. If this alternative is selected, additional coordination and consultation between NCDOT, FHWA, NCHPO, and property owners must occur to explore ways to avoid and minimize impacts and include measures to mitigate adverse effects. Measures needed to resolve adverse effects would be documented in a Memorandum of Agreement.
- Berry O’Kelly School Historic District - No Adverse Effect.
- Capitol City Lumber Company (portion) - No Effect.
- Royal Baking Company - No Effect.
- Meredith College (portion) - No Effect.

Archaeological Resources

There are no archaeological resources in the project area that are on or eligible for listing on the National Register of Historic Places. The NC Historic Preservation Office (NCHPO) stated that based on their knowledge of the area, “We, therefore, recommend that no archaeological investigation be conducted in connection with this project.” (letter to NCDOT dated August 13, 2012, included in EA Appendix D2).

Section 4(f) of the Department of Transportation Act of 1966

Section 4(f) provides protection to historic properties, public parks, and recreation areas. The proposed project would result in a “use” of historic properties and park/recreation areas, depending on the selected alternative. Use of a Section 4(f) property occurs when land is permanently incorporated into a transportation facility; or when there is a temporary occupancy of land that is adverse in terms of the statute's preservation purpose; or when there is a constructive use (a project's proximity impacts are so severe that the protected activities, features, or attributes of a property are substantially impaired). None of the Detailed Study Alternatives would use lands within Method Community Park or House Creek Greenway. Some of the Detailed Study Alternatives for the proposed project would require use of Section 4(f)-protected property from Lake Johnson Park, Kaplan Park, Museum Park, and Reedy Creek Greenway. With publication of the EA, FHWA requested comments on the proposed findings of de minimis impact for those properties. FHWA’s final determinations on findings regarding these properties will consider this public input.

Endangered Species

The following table contains the federally listed threatened and endangered species for Wake County and determinations made by the FHWA, the lead federal agency for this project.

Table 3. Protected Species in Wake County

Common Name	Scientific Name	Status	Biological Conclusion
Michaux's sumac	<i>Rhus michauxii</i>	Endangered	No Effect
Dwarf wedgemussel	<i>Alasmidonta heterodon</i>	Endangered	No Effect
Red-cockaded woodpecker	<i>Picoides borealis</i>	Endangered	No Effect
Northern long-eared bat	<i>Myotis septentrionalis</i>	Endangered	May Affect, Likely to Adversely Affect

Northern Long-Eared Bat. The US Fish and Wildlife Service has developed a programmatic biological opinion (PBO) in conjunction with FHWA, USACE, and NCDOT for the northern long-eared bat in eastern North Carolina (which includes Wake County). The PBO went into effect in 2016 and covers all NCDOT projects and activities in NCDOT Divisions 1 to 8. The programmatic determination for the bat is "May Affect, Likely to Adversely Affect". The PBO involves a research and tracking program to establish conclusive information concerning the existence of the northern long-eared bat in the eastern part of North Carolina. The PBO also requires that upon completion of clearing activities for each project with federal funds, NCDOT will report on the estimated acres of clearing to the US Fish and Wildlife Service.

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.

Avoidance, Minimization and Compensatory Mitigation

Through development of the preliminary functional designs within the DSAs, NCDOT has attempted to avoid impacts to streams and wetlands to the greatest practicable extent. This included developing alignments and interchange configurations for the DSAs that avoided these resources as much as possible, while also minimizing impacts to other resources. For example, retaining walls are proposed where Walnut Creek crosses under I-440 to avoid impacting this creek. A retaining wall also is proposed to avoid a pond on the Meredith College campus. NCDOT will continue to seek ways to avoid and minimize impacts in further design efforts for the Preferred Alternatives.

The purpose of compensatory mitigation is to offset unavoidable functional losses to the aquatic environment resulting from project impacts to waters of the United States. NCDOT intends to coordinate with the NCDEQ Division of Mitigation Services to provide the required compensatory mitigation.

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 select the least environmentally damaging practicable alternative (LEDPA) 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 a Corps of Engineers 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.

NCDOT is holding a combined public meeting/public hearing for this project, as follows:

Tuesday, August 8, 2017
NC State University – McKimmon Center
1101 Gorman Street
Raleigh, NC 27606
Public Meeting: 4:00 to 6:30 pm, Formal Hearing: 7:00 pm

NCDOT representatives will be available between 4:00 p.m. and 6:30 p.m. to answer questions and receive comments concerning the proposed project. The opportunity to submit written comments or questions will also be provided. The public may attend at any time during the above mentioned hours.

A formal presentation and hearing will begin at 7:00 p.m. on Tuesday, August 8, 2017 NC State University – McKimmon Center. The presentation will consist of an explanation of the proposed project location, design, right-of-way, relocation requirements/procedures, and the state-federal relationship. The hearing will be open to those present for statements, questions, and comments. The presentation and comments will be recorded and a transcript will be prepared. A Corps representative will attend the formal hearing, and the Corps will receive a copy of the public comments.

Written comments pertinent to the proposed work, as outlined above, will be received by the Corps of Engineers, Wilmington District, until 5pm, August 14, 2017. Written comments should be submitted to Mr. Eric Alsmeyer, US Army Corps of Engineers, Regulatory Field Office, 3331 Heritage Trade Drive, Suite 105, Wake Forest, NC 27587, telephone (919) 554-4884, extension 23. Written comments can also be submitted by email to eric.c.alsmeyer@usace.army.mil.