

**Proposed Replacement and Widening of Bridge Nos. 114 and 116
On Interstate 95 (I-95) Over the Little River
Johnston County
Federal Aid Project IMS-095-2(119)105
WBS No. 34182.1.2
T.I.P. No. I-3318BB**

CATEGORICAL EXCLUSION

**U. S. DEPARTMENT OF TRANSPORTATION
FEDERAL HIGHWAY ADMINISTRATION
AND
N. C. DEPARTMENT OF TRANSPORTATION**

Submitted pursuant to 42 U.S.C. 4332(2) (c)



APPROVED:

3/14/13
Date for *Gregory J. Thorpe*
Gregory J. Thorpe, Ph.D., Manager
Project Development and Environmental Analysis Unit, NCDOT

3/14/13
Date for *John F. Sullivan III*
John F. Sullivan III, P.E., Division Administrator
Federal Highway Administration

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North Carolina Department of Transportation

March, 2013

Documentation Prepared in Project Development and Environmental Analysis Unit by:

03/14/13 Matthew W. Potter
Date Matthew W. Potter, P.E.
Project Development Engineer

3/14/13 Charles R. Cox
Date Charles R. Cox, P.E.
Project Engineer



PROJECT COMMITMENTS

Proposed Replacement and Widening of Bridge Nos. 114 and 116 On Interstate 95 (I-95) Over the Little River

Johnston County

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Project Development and Environmental Analysis Unit – Natural Environment Section

A Section 7 Consultation will be coordinated with the USFWS and the NCWRC in regards to impacts to the Dwarf-Wedge Mussel and the Tar River Spiny mussel. The Section 7 Consultation will be completed prior to final design and construction.

Structure Design

As requested by the United States Fish and Wildlife Service (USFWS), the new bridges will completely span the Little River.

Project Development and Environmental Analysis Unit, Division 4

The NCWRC has identified the Little River in the study area as anadromous fish habitat due to the removal of Lowell Dam, 0.36 miles downstream. Therefore, a construction moratorium, for in-water work, will be in effect from February 15 to June 15.

Roadway Design Unit, Division 4

Little River is in the Neuse River Basin and is subject to the NCDWQ riparian buffer rules. Therefore, Design Standards in Sensitive Watersheds will be implemented during project construction.

Hydraulics Unit

The Hydraulics Unit will coordinate with the NC Floodplain Mapping Program (FMP), to determine status of project with regard to applicability of NCDOT's Memorandum of Agreement, or approval of a Conditional Letter of Map Revision (CLOMR) and subsequent final Letter of Map Revision (LOMR).

Division 4

This project involves construction activities on or adjacent to FEMA-regulated stream(s). Therefore, the Division shall submit sealed as-built construction plans to the Hydraulics Unit upon completion of project construction, certifying that the drainage structure(s) and roadway embankment that are located within the 100-year floodplain were built as shown in the construction plans, both horizontally and vertically.

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**Proposed Replacement and Widening of Bridge Nos. 114 and 116
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SUMMARY

A. Type of Action

This Categorical Exclusion (CE) has been prepared to evaluate the potential impacts of this proposed transportation improvement project. From this evaluation, the North Carolina Department of Transportation (NCDOT) and Federal Highway Administration (FHWA) anticipate significant impacts to the environment will not occur due to this proposed project; therefore, the project is classified as a Federal “Categorical Exclusion”.

B. Description of Action

The NCDOT, in consultation with the FHWA, proposes to replace and widen Bridge Nos. 114 and 116 on Interstate 95 (I-95) over the Little River, in Johnston County (see Figure 1). Bridge No. 114 will be widened to five-lanes, one of which is a northbound acceleration lane. Bridge No. 116 will be widened to four-lanes. I-95 will remain a four-lane median divided facility (see Figure 2).

The total length of the project is 0.5 miles.

This project is included in the approved 2012-2020 North Carolina State Transportation Improvement Program (STIP). The total cost in the STIP is \$13,400,000, which includes \$500,000 for right of way and \$12,900,000 for construction. The current estimated total cost is \$13,101,000. Right of way acquisition is scheduled to begin in Federal Fiscal Year (FFY) 2014 and construction in FFY 2015.

C. Purpose of Project

The purpose of the proposed project is to improve bridge safety and functionality of the two deteriorating bridges over the Little River.

D. Alternatives Considered

The alternatives considered for the proposed project consists of the “no-build” alternative and a replace in place bridge widening alternative.

E. NCDOT Recommended Alternative

The replace in place bridge widening alternative is the NCDOT recommended alternative. This alternative best minimizes overall impacts to the human and natural environment, while still meeting the purpose and need of the proposed project.

F. Summary of Environmental Effects

No adverse effect on the air quality of the surrounding area is anticipated as a result of the project. The proposed project will not impact any properties on or eligible for the National Register of Historic Places. The project will not encroach upon any known archaeological site, eligible for listing in the National Register. Two possible petroleum Underground Storage Tank (UST) sites and a junk yard were identified within the project limits; these sites are anticipated to present low geoenvironmental impacts to the project. No Hazardous Waste Sites or landfills were identified within the project limits. No businesses or residential relocations are anticipated as a result of the proposed improvement. No additional noise receptors will be impacted. There will be no impact to public recreational areas.

Four federally protected species are listed for Johnston County; the biological conclusion for two of the species (Dwarf-wedge mussel & Tar River spinymussel) was “May affect, but not likely to adversely affect”. The biological conclusion for the remaining two species was “No Effect.”

Table S-1 gives a summary of the resources and impacts due to the recommended alternative. Figure 3 shows the recommended alternative.

Table S-1: Summary of Resources and Impacts

Resource	Replace in Place Bridge Widening Alternative
Length (miles)	0.45
Schools	0
Churches	0
Cemeteries	0
Residential Relocations	0
Business Relocations	0
Traffic Noise Impacts	0 (No analysis required)
Historic Properties (Listed on or Eligible for the National Register)	0
Section 4(f)/ 6(f) Properties (Historic)	0
Prime Farmland Impacts Rating	38 out of 160
Wetland Impacts (acres)	0.2
Stream Impacts (feet)	0
Water Supply Watershed Protected Areas	None
Federally Protected Species	2*MA,NLAA
Hazardous Material Site	3/ Low Impact
Environmental Justice Impacts (Adverse/ Disproportionate)	None
Air Quality	Minimal Impact
Right of Way Cost	\$ 177,000
Utility Relocation Cost	\$ 24,000
Construction Cost	\$ 12,900,000
Total Cost	\$ 13,101,000

*Dwarf-Wedge Mussel, Tar River Spiny mussel – May Affect, Not Likely to Adversely Affect.

G. Permits Required

A Nationwide Permit (NWP) 23 will likely be applicable for this project. Other permits that may apply include a NWP 33 for temporary construction activities such as stream dewatering, work bridges, or temporary causeways that are often used during bridge construction or rehabilitation. The USACE holds the final discretion regarding the permit required to authorize project construction.

In addition to the 404 permit, other required authorizations include the corresponding Section 401 Water Quality Certification (WQC) from the North Carolina Division of Water Quality (NCDWQ). A NCDWQ Section 401 Water Quality General certification for a Categorical Exclusion (GC 3701) may be required prior to the issuance of a Section 404 Permit. Other required 401 certifications may include a GC 3688 for temporary construction access and dewatering.

H. Coordination

Federal, state, and local agencies were consulted during the preparation of this Categorical Exclusion. Written comments were received and considered from agencies noted with an asterisk (*) during the preparation of this assessment.

- Federal Highway Administration
- * U.S. Army Corps of Engineers
- * U.S. Environmental Protection Agency
- * U.S. Fish and Wildlife Service
- National Marine Fisheries Service
- * N.C. Department of Cultural Resources
- N.C. Department of Environment and Natural Resources – Div. of Marine Fisheries
- * N.C. Department of Environment and Natural Resources – Natural Heritage Program
- * N.C. Department of Public Instruction
- N.C. Wildlife Resources Commission
- * N.C. Division of Water Quality
- N.C. Division of Parks and Recreation
- * Triangle J Council of Governments
- Johnston County Commissioners
- Upper Coastal Plain RPO

I. Contact Information

Additional information concerning the proposal and assessment can be obtained by contacting the following:

John F. Sullivan III, P.E., Division Administrator
Federal Highway Administration
310 New Bern Avenue, Suite 410
Raleigh, NC 27601
Telephone: (919) 747-7006

Gregory J. Thorpe, Ph.D., Manager
Project Development & Environmental Analysis Unit
North Carolina Department of Transportation
1548 Mail Service Center
Raleigh, NC 27699-1548
Telephone: (919) 707-6000

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I. DESCRIPTION OF PROPOSED ACTION

A. General Description

The North Carolina Department of Transportation (NCDOT), in consultation with the Federal Highway Administration (FHWA), proposes the replacement and widening of Bridge Nos. 114 and 116 on Interstate 95 (I-95) over the Little River, in Johnston County (see Figure 1). I-95 will remain a four-lane median divided facility (see Figure 2) but the bridge will be widened to accommodate future widening of I-95.

The proposed replacement for Bridge No. 114 will be widened to accommodate two current travel lanes, one acceleration lane, and two additional future travel lanes. Bridge No. 114 will have 12-foot travel lanes, 12-foot inside shoulder, and 15.5-foot outside shoulder. The proposed replacement for Bridge No. 116 will be widened to accommodate two current travel lanes and two additional future travel lanes. Bridge No. 116 will have 12-foot travel lanes, 12-foot inside shoulder, and 6-foot outside shoulder (see Figure 2).

The bridges will be widened to allow for the typical section proposed for the future widening of I-95; however, only a 4-lane median divided typical section will be utilized until the future widening of I-95 is complete.

The total length of the project is approximately 0.5 miles.

B. Schedule and Cost

This project is included in the approved 2012-2020 North Carolina State Transportation Improvement Program (STIP) and the 2012-2013 Draft STIP. The total cost in the STIP is \$13,400,000, which includes \$500,000 for right of way and \$12,900,000 for construction. The current estimated total cost is \$13,101,000. Right of way acquisition is scheduled to begin in Federal Fiscal Year (FFY) 2014 and construction in FFY 2015.

II. PURPOSE AND NEED FOR PROJECT

A. Purpose of Project

The purpose of the proposed project is to improve bridge safety and functionality of the two deteriorating bridges over the Little River.

B. Need for Project

The proposed bridge replacement and widening improvements are needed to replace the two deteriorating bridges over the Little River. Bridge No. 114 has a sufficiency rating of 4 out of 100 and is considered structurally deficient. Bridge No. 116 has a sufficiency rating of 60.8 out of 100. A bridge is considered structurally deficient if it is in relatively poor condition, or has insufficient load carrying capacity. Bridge Nos. 114 and 116 are functionally obsolete based on their inadequate lane and shoulder widths. Functionally obsolete bridges are those that do not have adequate lane widths, shoulder widths, or vertical clearances to serve current traffic demand.

C. Description of Existing Conditions

1. Functional Classification

I-95 is designated as an Interstate on the North Carolina Statewide Functional Classification System.

2. Physical Description of Existing Facility

a. Roadway Cross Section

I-95, in the project study area, currently exists as a 4-lane, median divided facility with 11-foot lanes, 2-feet of paved shoulders, and a 20-foot grass median.

b. Horizontal and Vertical Alignment

The horizontal and vertical alignment along existing I-95 is suitable for the posted speed limit.

c. Right of Way and Access Control

The existing right of way along this section of I-95 varies between 250 feet and 300 feet. There is currently full control of access along I-95.

d. Speed Limit

The posted speed limit on this section of I-95 is 65 miles per hour (mph).

e. Intersections/Interchanges

There are no intersections along I-95. One interchange, I-95 and SR 2339 (Bagley Road), falls within the project study area. The interchange is located just southwest of the Little River bridges.

f. Railroad Crossings

There are no railroad crossings within the project corridor; however, CSX Railroad is located just north of the project corridor, running parallel to US 301.

g. Hydraulic Structures

There are two existing hydraulic structures on this project. Bridge No. 114 is 238 feet long, has a structural sufficiency rating of 4, and is functionally obsolete and structurally deficient. Bridge No. 116 is 238 feet long, has a structural sufficiency rating of 60.8, and is functionally obsolete. Both bridges cross over the Little River.

h. Bicycle and Pedestrian Facilities/Greenways

No bicycle and pedestrian facilities or greenways exist along the project corridor.

i. Utilities

Overhead electricity and underground gas utilities are located within the study corridor.

j. School Bus Usage

No local school buses are routed on I-95.

3. Traffic Carrying Capacity

a. Existing Traffic Volumes

A Traffic Forecast was completed for this project in April 2012. According to the 2012 traffic counts, the existing Average Annual Daily Traffic (AADT) for I-95, within the study corridor, was between 33,700 and 34,400 vehicles per day (vpd) (see Figure 4).

b. Existing Levels of Service

Simulations were completed for both the Build and No-Build scenarios using the Base year (2012) and the Design year (2035) traffic forecasts. A mainline analysis of I-95 projected that under the existing geometry and with No-Build conditions, the mainline operates at LOS C during the Base year (2012). The interchange ramps from SR 2339 (Bagley Road) to I-95 were also evaluated for proposed improvements. The project proposes to extend the northbound on-ramp across Bridge 114. The I-95 northbound ramps currently operate at LOS C and are expected to continue to operate at LOS C in 2035 with and without the project in place. The I-95 southbound ramps currently operate at LOS C for all movements. The ramp movements are expected to continue to operate at LOS C in 2035 with and without the project in place.

c. Future Traffic Volumes

According to the Design year (2035) traffic forecasts, the estimated AADT for I-95, within the study corridor, will range from 40,900 vpd to 41,700 vpd (see Figure 4).

d. Future Levels of Service

The project does not propose any lane improvements to the mainline; therefore, the Build and No-Build mainline analysis scenarios are the same for the Design year (2035) traffic forecasts. A mainline analysis of I-95 projected that under the existing geometry the mainline will operate at LOS C during the Design year (2035) for both the Build and No-Build condition.

The on-ramp movement, from SR 2339 (Bagley Road) to northbound I-95, is expected to continue to operate at LOS C during the Design year (2035) for both the Build and No-Build condition.

Table 1: Level-of-Service Summary

	No-Build LOS		Build LOS
	2009 Traffic	2035 Traffic	2035 Traffic
I- 95 Mainline:			
I-95 (Mainline)	C	C	C
SR 2339 (Bagley Road) and I-95 Ramps:			
NB off I-95	C	C	C
NB on I-95	C	C	C
SB off I-95	C	C	C
SB on I-95	C	C	C

e. Accident Data

Bridge Nos. 114 and 116 have horizontal clearance of 28 feet, have acceptable alignments and meet the acceptable standards for bridge railing, approach railing and end treatments.

The crash analysis was performed along I-95 for 500 feet on each side of the existing structures. Seventeen crashes were reported at this location between December 1, 2005 and November 30, 2010. The 2007 AADT was 27,000 vehicles per day. There were 17 documented crashes within this time period. Lane departure type crashes, which generally include run-off-road, fixed object, head-on, sideswipe opposite direction and overturn crashes accounted for 65% (11) of all crashes along this corridor. The project may help to address lane-departure crashes with the proposed wider structure. Additional measures to consider may include widening the roadway and shoulder, installing/maintaining shoulder rumble strips and extending the clear zone widths.

In addition it should be noted that two fatalities occurred within the study limits. One was a pedestrian crossing the interstate and the other was a rear-end crash in which a car impacted a truck. These fatal crashes were random in nature and not necessarily due to a roadway deficiency.

f. Airports

There are no public airports within 5 miles of the project corridor.

g. Other Highway Projects in the Area

There are three TIP projects near the proposed project area. TIP Project I-5133 is the I-95, Phase 1, Corridor Planning and Finance Study, from South Carolina State Line to the Virginia State Line. Bridge Nos. 114 and 116 will be widened to match the proposed typical section for TIP project I-5133 to prevent additional impacts to the Little River in the future. TIP Project B-4562 proposes to replace Bridge No. 216 on SR 2143 (Beulah town Road) over Little Buffalo Creek. Bridge No. 216 is located approximately 1.8 miles north of the proposed project area. TIP Project B-4562 is currently funded for construction in FY 2018. TIP Project B-4937 proposes to replace I-95, Bridge Nos. 118 and 119 over CSX Railroad. Bridge Nos. 118 and 119 are located approximately 2 miles north of the proposed project area. TIP Project B-4937 is currently funded for construction in FY 2019.

4. Transportation and Land Use Plans

a. NC State Transportation Improvement Program (STIP)

This project is currently included in the approved 2012-2020 STIP and the 2013-2023 draft STIP. Right of way acquisition is scheduled to begin in Federal Fiscal Year (FFY) 2014 and construction in FFY 2015.

b. Local Thoroughfare Plans

The Johnston County Comprehensive Transportation Plan (CTP) was last updated in July 2011. The Johnston County CTP designates this section of I-95 as a Freeway that needs improvement.

c. Land Use Plans

Based on the Johnston County Comprehensive Plan (adopted March 2009), the project lies within a “Secondary Growth Area” indicating that the area “may be subject to urban-type growth...beyond the time horizon of this Comprehensive Plan”.

5. System Linkage/Travel Time/Access Need

There will be no changes in the system linkage, travel time, or access due to the proposed project.

D. Benefits of Proposed Project

The proposed replacement and widening of Bridge Nos. 114 and 116 will provide structurally sound bridges that meet current design standards. The proposed widening will also help alleviate safety concerns associated with the narrow shoulders and the short merge lane for the northbound on-ramp traffic. Maintenance costs associated with the existing structures will also be reduced.

III. ALTERNATIVES

A. Preliminary Study Alternatives

1. No-Build Alternative

The No-Build Alternative offers no improvements to the project area. This alternative assumes that all other projects currently planned or programmed in the TIP will be constructed in the area as proposed.

This alternative would not provide new structures or improvements. Without improvements the bridges will continue to deteriorate and will require significant maintenance and repair to remain in service.

Since the No-Build Alternative does not address the purpose and need of the proposed action, it is not recommended. However, it is used as a basis for comparison to other alternatives.

2. Replace in Place/ Bridge Widening Alternative

This Alternative will maintain the existing alignment of I-95 and replace Bridge Nos. 114 and 116 at their existing locations. Bridge Nos. 114 and 116 will also be widened to match the proposed typical section for TIP project I-5133, I-95 Corridor Planning and Finance Study, to prevent additional impacts to the Little River in the future. Bridge No. 114 will be widened from 2-lanes to 5-lanes and will extended the northbound acceleration lane, for traffic entering I-95 from SR 2339 (Bagley Road), across the Little River. Bridge No. 116 will be widened from 2-lanes to 4-lanes (Figure 2 shows proposal typical section for each bridge). Two lanes of each bridge will be unutilized until future widening of I-95 occurs.

B. Detailed Study Alternative

The Replace in Place/ Bridge Widening Alternative was the only alternative carried forward for detailed environmental studies. The impacts associated with this alternative are noted in Table 2.

Table 2: Summary of Resources and Impacts

Resource	Replace in Place Bridge Widening Alternative
Length (miles)	0.45
Schools	0
Churches	0
Cemeteries	0
Residential Relocations	0
Business Relocations	0
Traffic Noise Impacts	0 (No analysis required)
Historic Properties (Listed on or Eligible for the National Register)	0
Section 4(f)/ 6(f) Properties (Historic)	0
Prime Farmland Impacts Rating	38 out of 160
Wetland Impacts (acres)	0.2
Stream Impacts (feet)	0
Water Supply Watershed Protected Areas	None
Federally Protected Species	2*MA,NLAA
Hazardous Material Site	3/ Low Impact
Environmental Justice Impacts (Adverse/ Disproportionate)	None
Air Quality	Minimal Impact
Right of Way Cost	\$ 177,000
Utility Relocation Cost	\$ 24,000
Construction Cost	\$ 12,900,000
Total Cost	\$ 13,101,000

*Dwarf-Wedge Mussel, Tar River Spiny mussel – May Affect, Not Likely to Adversely Affect.

C. NCDOT Recommended Alternative

NCDOT recommends the Replace in Place, Bridge Widening Alternative as the preferred alternative. This alternative best meets the purpose of the project and minimizes impacts to both the human and natural environment.

IV. PROPOSED IMPROVEMENTS

A. Roadway Cross-Section and Alignment

The ultimate typical section for Bridge No. 114 includes 5-lanes (4 through lanes and 1 acceleration lane) with 12-foot travel lanes, 12-foot inside shoulder and 6-foot outside shoulder. The ultimate typical section for Bridge No. 116 includes 4-lanes with 12-foot travel lanes, 12-foot inside shoulder and 15.5-foot outside shoulder. The two bridges will be separated by 7-foot (see Figure 2). The bridge will be striped for 2 through lanes in each direction.

B. Right of Way and Access Control

No additional Right of Way is needed. I-95 will remain full control of access.

C. Speed Limit & Design Speed

The design speed for the proposed bridge replacement and widening is 70 mph. The anticipated posted speed limit will remain 65 mph.

D. Anticipated Design Exceptions

No design exceptions are anticipated on this project.

E. Intersections/Interchanges

The northbound on-ramp to I-95 from SR 2339 (Bagley Road) will be extended across Bridge No. 114 to allow safer merging conditions for entering traffic. No other intersection or interchange improvements are proposed.

F. Service Roads

No additional service roads are needed on this project.

G. Railroad Crossings

No railroad crossings will be impacted by this project.

H. Structures

Bridge Nos. 114 and 116 will be replaced with new structures. Bridge Nos. 114 and 116 will also be widened to match the proposed typical section for TIP project I-5133, I-95 Corridor Planning and Finance Study, to prevent additional impacts to the Little River in the future. Bridge 114 will be 248 feet long and widened to five-lanes for a total of 78 feet wide. Bridge 116 will be 248 feet long and widened to four-lanes for a total of 75.5 feet wide.

I. Bicycle and Pedestrian Facilities

No bicycle or pedestrian facilities are planned for I-95.

J. Utilities

The project does not propose improvements to existing utilities along I-95; however, utilities will be relocated as needed for construction.

K. Noise Barriers

No noise barriers are proposed as part of this project.

L. Work Zone, Traffic Control and Construction Phasing

Construction phasing will be utilized to maintain traffic along I-95 during construction. Three construction phases (Stage 1, 2, and 3) are likely to be utilized during construction (see Figure 3). All traffic control devices used during the construction of this project will conform to the most current FHWA Manual of Uniform Traffic Control Devices (MUTCD).

V. ENVIRONMENTAL EFFECTS OF PROPOSED ACTION

A. Natural Resources

1. Biotic Resources

a. Terrestrial Communities

Four terrestrial communities were identified within the project area: maintained/disturbed, bottom land hardwood forest, pine forest, and early successional. Figure 3 shows the location and extent of these terrestrial communities in the study area. A brief description of each community type follows.

1. Maintained/Disturbed

Maintained/disturbed areas are scattered throughout the study area in places where the vegetation is periodically mowed, such as roadside shoulders and residential lawns. The vegetation in this community is comprised of low growing grasses and herbs, including fescue, clover, wild onion, broomsedge, and henbit. There are also some loblolly pines and smaller trees from the other communities in this habitat as well as yellow jessamine. Included within this community is a wetland (WA) that occurs in the southeast quadrant and is adjacent to the bottomland hardwood community. Cattail, rush, woolgrass, sedge, and giant cane grass make up the majority of this community. There are also small black willows and smooth alder here. It is classified as a non-tidal freshwater marsh using the NCWAM classification.

2. Bottomland Hardwood Forest

The bottomland hardwood forest community occurs along the floodplain of Little River where periodic overbank flooding from the river occurs. Willow oak, river birch, sweetgum, yellow poplar, and red maple dominate the overstory, while southern arrowwood, sweetbay, giant cane grass, poison ivy, Chinese privet, Christmas fern, multiflora rose, laurel leaf greenbrier, wild grape, Japanese honeysuckle, and Japanese stilt grass occur in the understory. Included within this community are floodplain depressions, which are classified as bottomland hardwood forests using the NCWAM classification (wetlands WX, WY, & WZ).

3. Pine Forest

The pine forest community exists in the northwest quadrant of the study area, where the elevation is slightly higher. Dominant species in this community are loblolly pine in the overstory, and red maple, sweetgum, American holly and Japanese honeysuckle in the understory.

4. Early Successional

This community is a cutover of the bottomland hardwood community and it occurs in the southeast and southwest quadrants of the study area. This community is vegetated with loblolly pine and red maple saplings, blackberry, Chinese privet, goldenrod, broomsedge, Japanese honeysuckle, fescue, Timothy, and vetch.

b. Terrestrial Wildlife

Terrestrial communities in the study area are comprised of both natural and disturbed habitats that may support a diversity of wildlife species (those species actually observed are indicated with *). Mammal species that commonly exploit forested habitats and stream corridors found within the study area include species such as eastern cottontail, raccoon, Virginia opossum*, and white-tailed deer*. Birds that commonly use forest and forest edge habitats include the American crow*, blue jay, blue gray gnatcatcher*, Carolina chickadee*, rufous sided towhee*, tufted titmouse*, yellow-bellied sapsucker*, and red-bellied woodpecker*. Birds that may use the open habitat or water bodies within the study area include American kestrel, American robin*, belted kingfisher, common grackle*, eastern bluebird, eastern phoebe*, mourning dove*, osprey*, wood duck*, and turkey vulture*. Reptile and amphibian species that may use terrestrial communities located in the study area include the corn snake, eastern box turtle, eastern fence lizard, five-lined skink, and northern dusky salamander*.

c. Aquatic Communities

Aquatic communities in the study area consist of the Little River. Little River in the study area supports crayfish, grey tree frogs*, leopard frogs*, eastern mosquitofish, bull chub, northern hogsucker, dusky shiner, pinewoods shiner, white shiner, satinfin shiner, chainback darter, glassy darter, flat bullhead, pirate perch, green sunfish, and redbreast sunfish.

d. Invasive Species

Four species from the NCDOT Invasive Exotic Plant List for North Carolina were found to occur in the study area. The species identified were Chinese privet, Japanese stilt grass, multiflora rose, and Japanese honeysuckle. Invasive species are categorized into one of three threat levels, Level 1 (Severe Threat), Level 2 (Moderate Threat), and Level 3 (Watch List). Threat levels for the observed invasive species are shown in Table 3.

Table 3: Invasive Species within Project Area

Common Name	Scientific Name	Threat Level
Chinese privet	Ligustrum sinense	1
Japanese stilt grass	Microstegium vimineum	1
Multiflora rose	Rosa multiflora	1
Japanese honeysuckle	Lonicera japonica	2

NCDOT will follow the Department’s Best Management Practices (BMPs) for the management of invasive plant species.

e. Summary of Anticipated Effects

Table 4 describes the acreage of terrestrial communities within the project study area. Impacts to terrestrial communities associated with construction activities include the removal of vegetation, soil compaction, damaging and/or exposing root systems, as well as potential impacts associated with petroleum spills. The estimated impacts are based on the current design slope stake limits.

Table 4: Estimated Area of Terrestrial Communities (within the Project Study Area)

Community	Area (ac.)
Maintained/Disturbed	32.0
Bottomland Hardwood Forest	8.76
Pine Forest	0.43
Early Successional	1.08
Total Area:	42.27

Loss of wildlife is an unavoidable aspect of development. Temporary fluctuations in populations of animal species that utilize these communities are anticipated during the course of construction. Slow-moving, burrowing, and/or subterranean organisms will be directly impacted by construction activities, while mobile organisms will be displaced to adjacent communities.

2. Waters of the United States

a. Water Resources

Water resources in the study area are part of the Neuse River basin (U.S. Geological Survey [USGS] Hydrologic Unit 03030102). One stream was identified in the study area (see Table 5). The location of the water resource is shown in Figure 3. The physical characteristics of the stream are provided in Table 6.

Table 5: Water Resources (within the Project Study Area)

Stream Name	Map ID	NCDWQ Index Number	Best Usage Classification
Little River	Little River	27-57-(8.5)	WS-V;NSW

Table 6: Physical Characteristics of Water Resources (within the Project Study Area)

Map ID	Bank Height (ft)	Bankful Width (ft)	Water Depth (in)	Channel Substrate	Velocity	Clarity
Little River	6	80	6-24	Sand, Pebble	Medium	Clear

There are designated anadromous fish waters present in the study area. There are no designated Primary Nursery Areas (PNA) in the study area. There are no designated High Quality Waters (HQW), Outstanding Resource Waters (ORW), or water supply watersheds (WS-I or WS-II) within 1.0 mile downstream of the study area. The Little River is not on the North Carolina 2012 Final 303(d) list of impaired waters due to excessive sedimentation and turbidity.

Benthic samples have been taken on the Little River at SR 2130 (Main Street Micro) and given a rating of “Good” on July 28, 2005. Fish surveys have also been conducted on the Little River at SR 2130 (Main Street in Micro). This survey site was given a rating of “Excellent” in 1995 (NCIBI = 54). This site is approximately seven miles upstream from the study area.

b. Jurisdictional Issues (Stream/Wetlands)

Streams

As mentioned in the previous section; one jurisdictional stream was identified in the study area (see Table 5). The Little River has been designated as a warm water stream for the purposes of stream mitigation.

Wetlands

Four jurisdictional wetlands were identified within the study area (Figure 3). Wetland classification and quality rating data are presented in Table 8. All wetlands in the study area are within the Neuse River basin (USGS Hydrologic Unit 03020201). Descriptions of the terrestrial communities at each wetland site are presented in Section V.1.a. Wetland sites WX, WY, and WZ are included within the bottomland hardwood forest community, and site WA is described under the maintained/disturbed community.

c. Summary of Anticipated Effects

Stream and Wetland impacts have been calculated using preliminary design; therefore impacts are calculated from slope stake limit to slope stake limit plus an additional 25-foot buffer outside of each slope stake. Stream impacts are rounded up to the nearest foot; wetland impacts are rounded up to the nearest tenth of an acre. The anticipated impacts for streams and wetlands are given in Table 7 and Table 8 respectively.

Table 7: Jurisdictional Characteristics of Water Resources & Impacts

Map ID	Length (ft.)	Classification	Compensatory Mitigation Required	River Basin Buffer	Impacts (LF)
Little River	500	Perennial	Yes	Subject	0
Total					0

Table 8: Jurisdictional Characteristics of Wetlands & Impacts

Map ID	NCWAM Classification	Hydrologic Classification	DWQ Wetland Rating	Impacts (ac.)
WX	Bottomland Hardwood Forest	Riparian	55	0.1
WY	Bottomland Hardwood Forest	Riparian	55	0
WZ	Bottomland Hardwood Forest	Riparian	37	0
WA	Non-tidal Freshwater Marsh	Riparian	55	0.1
			Total	0.2

d. Avoidance, Minimization, and Mitigation

Little River is in the Neuse River Basin and is subject to the NCDWQ riparian buffer rules. Therefore, Design Standards in Sensitive Watersheds will be implemented during project construction.

The NCDOT has utilized a replace in place alignment which will attempt to avoid and minimize impacts to streams and wetlands to the greatest extent practicable.

The NCDOT will investigate potential on-site stream and wetland mitigation opportunities once a final decision has been rendered with regard to the location of the final alignment. If on-site mitigation is not feasible, mitigation will be provided by North Carolina Department of Environment and Natural Resources Ecosystem Enhancement Program (EEP).

As requested by the United States Fish and Wildlife Service (USFWS), in a letter dated November 9, 2010 (see Appendix B), the new bridges will span the Little River in an effort to minimize effects to federally listed mussels (Dwarf-wedge mussel and Tar River spiny mussel) found in its waterways.

e. Anticipated Permit Requirements

A Nationwide Permit (NWP) 23 will likely be applicable for this project. Other permits that may apply include a NWP 33 for temporary construction activities such as stream dewatering, work bridges, or temporary causeways that are often used during bridge construction or rehabilitation. The USACE holds the final discretion regarding the permit required to authorize project construction.

In addition to the 404 permit, other required authorizations include the corresponding Section 401 Water Quality Certification (WQC) from the North Carolina Division of Water Quality (NCDWQ). A NCDWQ Section 401 Water Quality General certification for a Categorical Exclusion (GC 3701) may be required prior to the issuance of a Section 404 Permit. Other required 401 certifications may include a GC 3688 for temporary construction access and dewatering.

f. Construction Moratoria

The NCWRC has identified the Little River in the study area as anadromous fish habitat due to the removal of Lowell Dam, 0.36 miles downstream. Therefore, a construction moratorium, for in-water work, will be in effect from February 15 to June 15.

g. N.C. River Buffer Rules

Streamside riparian zones within the study area are protected under provisions of the Neuse River Buffer Rules administered by NCDWQ. Table 7 indicates which streams are subject to buffer rule protection. Potential impacts to protected stream buffers will be determined once a final alignment and design have been determined.

3. Rare and Protected Species

a. Federally Protected Species

As of September 22, 2010 the United States Fish and Wildlife (USFWS) lists four federally protected species for Johnston County (Table 9). A brief description of each species' habitat requirements follows, along with the Biological Conclusion rendered based on survey results in the study area. Habitat requirements for each species are based on the current best available information from referenced literature and/or USFWS.

Table 9: Federal Protected Species Listed for Johnston County

Common Name	Scientific Name	Federal Status	Habitat Present	Biological Conclusion
Red-cockaded woodpecker	Picoides borealis	E	No	No Effect
Dwarf-wedge mussel	Alasmidonta heterodon	E	Yes	May Affect, but not likely to adversely affect
Tar River spiny mussel	Elliptio steinstansana	E	Yes	May Affect, but not likely to adversely affect
Michaux's sumac *	Rhus michauxii	E	Yes	No Effect

Key: E - Endangered

* - Historic record (the species was last observed in the county more than 50 years ago)

Red-cockaded Woodpecker

USFWS optimal survey window: year round; November-early March (optimal)

Habitat Description: The red-cockaded woodpecker (RCW) typically occupies open, mature stands of southern pines, particularly longleaf pine, for foraging and nesting/roosting habitat. The RCW excavates cavities for nesting and roosting in living pine trees, aged 60 years or older, and which are contiguous with pine stands at least 30 years of age to provide foraging habitat. The foraging range of the RCW is normally no more than 0.5 miles.

Biological Conclusion: No Effect

Suitable habitat for the red cockaded woodpecker does not exist in the study area. Forests in the study area are comprised of a closed hardwood canopy and subcanopy. Where pine trees occur in maintained or disturbed areas, they are not of sufficient age or density to provide suitable nesting or foraging habitat. A review of NCNHP records, updated November 1, 2011, indicates no known RCW occurrence within 1.0 mile of the study area.

Dwarf-Wedge Mussel

USFWS optimal survey window: year round

Habitat Description: In North Carolina, the dwarf-wedge mussel is known from the Neuse and Tar River drainages. The mussel inhabits creek and river areas with a slow to moderate current and sand, gravel, or firm silt bottoms. Water in these areas must be well oxygenated. Stream banks in these areas are generally stable with extensive root systems holding soils in place.

Biological Conclusion: May Affect, But Not Likely to Adversely Affect

Neither the Dwarf-wedge mussel or Tar Spinemussel were found during the surveys. All recent records of both of these species in the Little River occur upstream of the project area. However, the removal of the former barrier (Lowell Mill Dam) could facilitate a downstream expansion of both particularly as high quality habitat continues to develop throughout the former impoundment; thus there is the potential for these species to occur within the project area. Measures have been taken to avoid/minimize impacts to the mussel populations and habitats occurring in the Little River. These measures include a commitment to span the Little River with new structures and the implementation of Design Standards in Sensitive Watersheds during project construction. A Biological Assessment is currently being prepared for the replacement of Bridge No. 236 over the Little River on SR 1934, approximately three miles upstream of the I-95 crossing. Potential impacts to the two species, as well as habitat in the Little River will also need to be evaluated in similar detail for this project. Further discussions with the USFWS and the NCWRC will be conducted as part of the Section 7 Consultation process. Section 7 consultation will be concluded prior to construction.

Tar River Spinemussel

USFWS Recommended Survey Window: year round

Habitat Description: The Tar spinemussel is endemic to the Tar and Neuse River drainage basins in North Carolina. This mussel requires a stream with fast flowing, well-oxygenated, circumneutral pH water. The bottom should be composed of unconsolidated gravel and coarse sand. The water needs to be relatively silt-free, and stream banks should be stable, typically with many roots from adjacent riparian trees and shrubs.

Biological Conclusion: May Affect, But Not Likely to Adversely Affect

Neither the Dwarf-wedge mussel or Tar Spiny mussel were found during the surveys. All recent records of both of these species in the Little River occur upstream of the project area. However, the removal of the former barrier (Lowell Mill Dam) could facilitate a downstream expansion of both particularly as high quality habitat continues to develop throughout the former impoundment; thus there is the potential for these species to occur within the project area. Measures have been taken to avoid/minimize impacts to the mussel populations and habitats occurring in the Little River. These measures include a commitment to span the Little River with new structures and the implementation of Design Standards in Sensitive Watersheds during project construction. A Biological Assessment is currently being prepared for the replacement of Bridge No. 236 over the Little River on SR 1934, approximately three miles upstream of the I-95 crossing. Potential impacts to the two species, as well as habitat in the Little River will also need to be evaluated in similar detail for this project. Further discussions with the USFWS and the NCWRC will be conducted as part of the Section 7 Consultation process. Section 7 consultation will be concluded prior to construction.

Michaux's Sumac

USFWS optimal survey window: May-October

Habitat Description: Michaux's sumac, endemic to the inner Coastal Plain and lower Piedmont, grows in sandy or rocky, open, upland woods on acidic or circumneutral, well-drained sands or sandy loam soils with low cation exchange capacities. The species is also found on sandy or submesic loamy swales and depressions in the fall line Sandhills region as well as in openings along the rim of Carolina bays; maintained railroad, roadside, power line, and utility rights-of-way; areas where forest canopies have been opened up by blowdowns and/or storm damage; small wildlife food plots; abandoned building sites; under sparse to moderately dense pine or pine/hardwood canopies; and in and along edges of other artificially maintained clearings undergoing natural succession. In the central Piedmont, it occurs on clayey soils derived from mafic rocks. The plant is shade intolerant and, therefore, grows best where disturbance (e.g., mowing, clearing, grazing, periodic fire) maintains its open habitat.

Biological Conclusion: No Effect

Suitable habitat for Michaux's sumac is present in the study area along roadside shoulders and utility easements. Surveys were conducted by NCDOT biologists throughout areas of suitable habitat on August 10, 2011. No individuals of Michaux's sumac were observed. A review of NCNHP records, updated November 1, 2011, indicates no known occurrences within 1.0 mile of the study area.

b. Bald and Golden Eagle Protection Act

Habitat for the bald eagle primarily consists of mature forest in proximity to large bodies of open water for foraging. Large, dominant trees are utilized for nesting sites, typically within 1.0 mile of open water.

A desktop-GIS assessment of the project study area, as well as the area within a 1.13-mile radius (1.0 mile plus 660 feet) of the project limits, was performed on August 9, 2011 using 2010 color aerials. No water bodies large enough or sufficiently open to be considered potential feeding sources were identified. Since there was no foraging habitat within the review area, a survey of the project study area and the area within 660 feet of the project limits was not conducted. Additionally, a review of the NCNHP database on August 9, 2011 revealed no known occurrences of this species within 1.0 mile of the project study area. Due to the lack of habitat, known occurrences, and minimal impact anticipated for this project, it has been determined that this project will not affect this species.

c. Endangered Species Act Candidate Species

As of September 22, 2010 the USFWS lists no Candidate species for Johnston County.

d. Essential Fish Habitat

Little River has not been identified as an Essential Fish Habitat by the National Marine Fisheries Service (NMFS).

4. Soils

The Johnston County Soil Survey identifies eight soil types within the study area (Table 10).

Table 10: Soils (within the Project Study Area)

Soil Series	Mapping Unit	Drainage Class	Hydric
Altavista fine sandy loam	AaA	Moderately Well Drained	Yes*
Goldsboro sandy loam	GoA	Moderately Well Drained	Yes*
Nanson silt loam	NnE	Well Drained	No
Nofolk loamy sand	NoB	Well Drained	Yes
Tomotley loamy sand	To	Poorly Drained	Yes
Udorthents	Ud	Fill	N/A
Wagram loamy sand	WaB	Well Drained	Yes
Wehadkee loam	Wt	Poorly Drained	Yes

* - Non-hydric soils with hydric inclusions

B. Cultural Resources

This project is subject to compliance with Section 106 of the National Historic Preservation Act of 1966, as amended, and implemented by the Advisory Council on Historic Preservation's Regulations for Compliance with Section 106, codified as 36 CFR Part 800. Section 106 requires Federal agencies to take into account the effect of their undertakings (federally-funded, licensed, or permitted) on properties included in or eligible for inclusion in the National Register of Historic Places and to afford the Advisory Council a reasonable opportunity to comment on such undertakings.

Under a Programmatic Agreement, effective November 5, 2007, the authority for cultural resource reviews for minor transportation projects has been transferred from the North Carolina State Historic Preservation Office (HPO) to the North Carolina Department of Transportation's (NCDOT) cultural resource groups: Archaeology and Historic Architecture and Landscapes in the Human Environment Section (HES).

1. Historic Architectural Resources

As required in the Programmatic Agreement, a historic architectural resources review was completed on April 23, 2012. The finding of the review was that no survey would be required for historic architecture. A copy of the completed "No Survey Required" form is included in Appendix B.

2. Archaeological Resources

As required in the Programmatic Agreement, an archaeological resources review was completed on April 19, 2012. The finding of the review was no historic properties present or affected by this project. A copy of the completed "No Historic Properties Present" form is included in Appendix B.

3. Section 4(f)/6(f) Resources

Section 4(f) of the USDOT Act of 1966 protects the use of publicly owned parks, recreation areas, wildlife/waterfowl refuges, and historic properties. No Section 4(f) protected properties will be impacted by this project.

Section 6(f) of the Land and Water Conservation Act applies to the conversion of certain recreation lands to non-recreational purposes. The act applies to recreation lands that have received Land and Water Conservation Fund (LWCF) money. No Section 6(f) protected properties will be impacted by this project.

4. Farmland

There are both prime farmland and farmland of statewide importance soils located in the general project footprint area (i.e. adjacent to the bridges and shoulders), much of which is within the floodplain of the Little River. In accordance with the Federal Highway Administration's Guidelines for Implementing the Final Rule of the Farmland Protection

Policy Act for Highway Projects, NCDOT has completed an assessment of farmland in the project area and calculated the total number of points for the site per Part VI of the NRCS AD-1006 Farmland Conversion Impact Rating Form. The site totaled 38 out of 160 points, which does not meet the standard threshold for a potential Farmland Conversion Impact. A summation of the Farmland Conversion Impact Rating Form can be found in Appendix B.

Active agricultural operations were observed in the DCIA, including corn and soybean crops on parcels along the southern portion of the DCIA. However, neither direct nor operational impacts are anticipated. According to the Johnston County GIS website, the nearest Voluntary Agricultural District is located well north of the project outside of the DCIA near the intersection of Beulahtown Road and Old Route 22

5. Social Effects

a. Demographics

The Demographic Study Area is the smallest statistical area of the 2000 Census, at block group level, that includes and is derived from the Direct Community Impact Area (DCIA). The Demographic Study Area is used to provide approximate demographic characteristics for the community inside the DCIA. The Demographic Study Area for this project consists of Census Tract 401, Block Group 2 and Census Tract 401, Block Group 4. These study area boundaries are shown in the Community Impact Assessment (October, 2010).

b. Population

As shown in Table 11, the population in the Demographic Study Area grew by approximately 1.2% per year between 1990 and 2000, a slower pace than in the county or state.

Table 11: Population Growth Rates

Area	Population			
	1990	2000	Difference	% Change
Census Tract 401 Block Group 2	1,577	1,785	208	13.19
Census Tract 401 Block Group 4	960	1,050	90	9.38
Johnston County	81,306	121,965	40,659	50.01
North Carolina	6,628,637	8,049,313	1,420,676	21.43

c. Ethnicity

Race and ethnicity in the Demographic Study Area is consistent with Johnston County (See Table 12).

Table 12: Population by Race

Race and Ethnicity	Census Tract 401 Block Group 2		Census Tract 401 Block Group 4		Johnston County	
	Pop.	%	Pop.	%	Pop.	%
White	1,494	83.69	833	79.33	91,870	75.32
Black or African American	219	12.26	167	15.90	18,971	15.55
American Indian/ Alaska Native	1	0.06	1	0.10	417	0.34
Asian	0	0.00	1	0.10	355	0.29
Native Hawaiian/ Other Pacific Islander	0	0.00	0	0.00	27	0.02
Some other race	0	0.00	0	0.00	96	0.08
Two or more races	3	0.17	3	0.29	789	0.65
Hispanic or Latino	68	3.81	45	4.29	9,440	7.74
** Total Non-White	291	16.30	217	20.67	30,095	24.68
Total Population	1,785	100.00	1,050	100.00	121,965	100.00

d. Income

According to Census data, a low-income population that meets the criteria for Environmental Justice is located in the Demographic Study Area (see Table 13). However, minimal residential development was observed in the DCIA during the site visit. Disproportionately high and adverse impacts are not anticipated.

Table 13: Poverty Rates

Area	Below Poverty Level		Below 50% of Poverty Level	
	Number	Percentage	Number	Percentage
Census Tract 401 Block Group 2	300	17.08	177	10.08
Census Tract 401 Block Group 4	255	23.33	110	10.06
Johnston County	15,399	12.81	6,861	5.71
North Carolina	958,667	12.28	431,894	5.4

e. Limited English Proficiency

A Spanish-speaking population that meets the criteria for Limited English Proficiency is located in the Demographic Study Area. As shown in Table 14, the percentage of the population that speaks English less than “very well” living in Census Tract 401, Block Group 4 (9.37%) exceeds five percent. The exact location of this population within the block group is not known, but no visual observations of a potential LEP population within the DCIA were made during the field visit.

Table 14: LEP Populations

LEP	Total Adult Pop	Primary Language Group of Persons Who Speak English Less than Very Well								Total LEP	
		Spanish		Other Indo-Euro		Asian/Pacific		Other			
		#	%	#	%	#	%	#	%	#	%
Block Group 2	1,334	18	1.35	4	0.30	0	0.0	0	0.0	22	1.65
Block Group 4	811	76	9.37	0	0.0	0	0.0	2	0.25	78	9.62
Johnston County	89,957	4,641	5.16	215	0.24	100	0.11	72	0.08	5,028	5.59

6. Communities

TIP project I-3318BB is located on I-95 just southwest of Kenly and the Wilson County line. The SR 2339 (Bagley Road)/ I-95 interchange (southbound exit ramp and northbound entrance ramp) is located within 1,000 feet of the bridges to the south (Exit 105), and the SR 2399 (Truckstop Road)/ I-95 interchange is located within 4,000 feet to the north (Exit 106). Several industrial facilities are located between the two I-95 interchanges. Raleigh Precision Products, Daughters and Ryan Tobacco, and Conestoga Wood Products are all located on the northern side of I-95 and accessed by Johnston Parkway via Truckstop Road at the Exit 106 interchange. A Cummins Atlantic facility is located within the DCIA on the south side of I-95 and accessed by Cummins Drive, also via Truckstop Road/Princeton Kenly Road at the Exit 106 interchange. A large automobile auction facility and a private Waste Management facility are located at the Exit 105 interchange on Bagley Road.

In addition to the industrial facilities, there is also a cemetery located directly across from the Flying J Truck Stop on Truck Stop Road.

7. Community Impacts

Although both the Town Manager of Kenly and the Planning and Zoning Director of Johnston County anticipated that the project would have a “High Impact”, their concerns were related to bridge closure and the use of an off-site detour. However, only the I-95 northbound on-ramp from SR 2339 (Bagley Road) is anticipated to be closed during

construction. The interstate will remain open during construction of this project. All traffic will be maintained on site. Thus, high impacts are not anticipated.

Socio-economic impacts could occur, specifically with Big Boy's 66 Truck Stop located at the interchange of I-95 and SR 2339 (Bagley Road). The temporary closure of the northbound I-95 on-ramp from SR 2339 (Bagley Road) would require a 1.5 mile detour on US 301 for customers trying to return to I-95 North. Construction phasing will be utilized to minimize the duration of the on-ramp closures. Socio-economic impacts to other surrounding highway-oriented businesses and industrial facilities are not anticipated since construction phasing will be utilized to maintain I-95 traffic.

Industrial facilities located in the DCIA may experience temporary mobility impacts during construction activities. Other I-95 motorists traveling through the project area may also experience temporary impacts to mobility in the form of increased travel times during construction. Due to the existing road network and availability of alternate routes in the project area, any impacts to mobility as a result of the project are expected to be minimal.

8. Relocation of Residences and Businesses

No residential or business relocations are anticipated for this project.

9. Bicycle & Pedestrians Facilities

There are currently no bicycle or pedestrian facilities along I-95. No additional bicycle or pedestrian facilities are proposed.

10. Recreational Facilities

No recreational facilities are located along the project corridor; therefore, this project will not impact any recreational facilities.

11. Environmental Justice

A low-income population that meets the criteria for Environmental Justice is located in the Demographic Study Area. As shown in Table 13, the percentage of the population in Census Tract 401, Block Group 4 living below the poverty level (23.33%) is more than ten percentage points higher than the county average (12.81%). According to the Town Manager of Kenly, low-income housing exists in the vicinity of the project and there are many trade-based jobs associated with the truck stops at Exits 105 and 106 on I-95. Physical indicators of this population include manufactured home sites within the Direct Community Impact Area. However, Block Group 4 is geographically very large and the portion of it that lies within the DCIA for this project does not contain a notable amount of residential development. It is therefore likely that any low-income population resides outside of the DCIA. Disproportionately high and adverse effects are not anticipated for this project.

12. Land Use

a. Existing Land Use

While most of the DCIA consists of unincorporated land, several parcels are within Kenly town limits. The interchanges north and south of the bridges primarily serve highway-oriented uses, including truck stops, gas stations, hotels, and fast food restaurants. Land along I-95 between these two interchanges – within the DCIA – contains a mixture of industrial and commercial facilities, agricultural operations, and a few residences. The bridges carry a high volume of interstate traffic and the nature of development in the project area generates a substantial amount of truck and industrial-related traffic.

b. Future Land Use

Local plans regulating growth and development in the DCIA are limited at this time. The project lies within a “Secondary Growth Area” in the Johnston County Comprehensive Plan (adopted March 2009), indicating that the area “may be subject to urban-type growth...beyond the time horizon of this Comprehensive Plan” (page 29). The Johnston County Planning and Zoning Director noted no additional plans for future growth or development. Although the Town Manager of Kenly indicated that the Town had just initiated the process of revising zoning regulations and developing a comprehensive land use plan with the Division of Community Assistance, this process has not yet occurred. Similarly, while the Kenly representative noted an interest from the development community in the DCIA, no specific site plans have been approved. Thus, plans for growth and development are only tentative at this time.

c. Project Compatibility with Local Plans

The proposed project is consistent with local and regional development goals and plans.

C. Indirect and Cumulative Effects

The project will not alter traffic capacity or travel patterns, reduce travel time, affect access to, or exposure of adjacent parcels, or create new transportation or land use nodes. Due to its minimal transportation impact causing activities, this project will neither influence nearby land uses nor stimulate growth. Therefore, a detailed indirect and cumulative effects study will not be necessary.

D. Flood Hazard Evaluation

Johnston County is a participant in the National Flood Insurance Program, administered by the Federal Emergency Management Agency (FEMA). Based on the most current information available from the NC Floodplain Mapping Program (FMP), this stream crossing is in a designated flood hazard zone which is within a detailed flood study reach, having a regulated 100-year floodway. The proposed bridge replacement will provide

equivalent or greater conveyance than that of the existing bridge. The Hydraulics Unit will coordinate with the FMP, the delegated state agency for administering FEMA's National Flood Insurance Program, to determine the status of the project with regard to applicability of NCDOT'S Memorandum of Agreement with FMP, or approval of a Conditional Letter of Map Revision (CLOMR) and subsequent final Letter of Map Revision (LOMR). This project involves construction activities on or adjacent to a FEMA-regulated stream. Therefore, the Division shall submit sealed as-built construction plans to the Hydraulics Unit upon completion of project construction, certifying that the drainage structures and roadway embankment that are located within the 100-year floodplain were built as shown in the construction plans, both horizontally and vertically.

E. Traffic Noise Analysis

In accordance with Title 23 Code of Federal Regulations Part 772, *Procedures for Abatement of Highway Traffic Noise and Construction Noise* (Title 23 CFR 772) and the North Carolina Department of Transportation Traffic Noise Abatement Policy, each Type I highway project must be analyzed for predicted traffic noise impacts. In general, Type I projects are proposed Federal or Federal-aid highway projects for construction of a highway or interchange on new location, improvements of an existing highway which significantly changes the horizontal or vertical alignment or increases the vehicle capacity, or projects that involve new construction or substantial alteration of transportation facilities such as weigh stations, rest stops, ride-share lots or toll plazas.

The current I-95 bridge replacement project does not meet the criteria of a Type I project under Title 23 CFR 772 and the North Carolina Department of Transportation Traffic Noise Abatement Policy. No traffic noise analysis will be required unless warranted by a significant change in the project scope or alignment.

In accordance with NCDOT Traffic Noise Abatement Policy, the Federal/State governments are not responsible for providing noise abatement measures for new development for which building permits are issued after the Date of Public Knowledge. The Date of Public Knowledge of the proposed highway project will be the approval date of the Categorical Exclusion (CE). For development occurring after this date, local governing bodies are responsible to insure that noise compatible designs are utilized along the proposed facility.

F. Air Quality Analysis

This project is an air quality neutral project in accordance with 40 CFR 93.126. It is not required to be included in the regional emissions analysis (if applicable) and project level CO or PM2.5 analyses are not required. This project will not result in any meaningful changes in traffic volumes, vehicle mix, location of the existing facility, or any other factor that would cause an increase in emissions impacts relative to the no-build alternative. Therefore, FHWA has determined that this project will generate minimal air quality impacts for Clean Air Act criteria pollutants and has not been linked with any special MSAT concerns. Consequently, this effort is exempt from analysis for MSATs. Any burning of

vegetation shall be performed in accordance with applicable local laws and regulations of the North Carolina State Implementation Plan (SIP) for air quality compliance with 15 NCAC 2D.0520.

G. Hazardous Material

Two possible Underground Storage Tanks (UST) facilities were identified within the proposed project corridor. The sites are described in Table 15.

A junk yard was also identified within the project limits. The site is also described in Table 15.

Table 15: Known and Potential GeoEnvironmental Impact Sites

Property Location	Property Owner	UST Owner	Facility ID #
675 Cummins Drive Kenly, NC 27542	Crystal Toler	N/A	N/A
Currently this site has vacant mobile homes and a junk yard. The site is located on the south side of Cummins Drive approximately 400 feet southeast of Bridge No. 114. According to NCDENR’s UST Section Registry there are no known Facility ID’s or Groundwater Incidents associated with this site. This site is anticipated to present low geoenvironmental impacts to the project.			
Property Location	Property Owner	UST Owner	Facility ID #
375 Bagley Road Kenly, NC 27542	Kenneth Etheridge	Etheridge Oil Company, Inc	0-013316
Currently this site operates as a Waste Management maintenance facility and storage lot. The site is located on east side of Bagley Road approximately 600 feet north of I-95. Dispenser pumps and a UST were observed under the southern portion of the building. An AST was observed in the middle east side of the building. According to NCDENR’s UST Section Registry there is one (1) active UST on this site. This site is anticipated to present low geoenvironmental impacts to the project.			
Property Location	Property Owner	UST Owner	Facility ID #
595 Bagley Road Kenly, NC 27542	Walter Lee Powell	Big Boys Inc	0-034820
Currently this site is an active gas station. The site is located on the east side of Bagley Road approximately 650 feet south of I-95. According to NCDENR’s UST Section Registry there are five (5) active USTs located on this property. The USTs were observed in the northwest corner of the property. Groundwater Incident 16493 has been assigned to this site. This site is anticipated to present low geoenvironmental impacts to the project.			

VI. COMMENTS AND COORDINATION

A. Citizens Informational Workshop

On November 17, 2011, a Citizens' Informational Workshop was held by NCDOT representatives to present the proposed project to the public and obtain comments and suggestions about the improvements. The workshop was held at the Kenly American Legion Building located at 206 West Second St., Kenly, North Carolina. Approximately 26 people attended the workshop.

Several verbal comments were received at this meeting, the majority of which were concerned about the closure of the northbound on-ramp from SR 2339 (Bagley Road) to I-95 North, and the impact it would have of Big Boys Truck Stop. Other comments noted the length of the acceleration lane for the northbound on-ramp from SR 2339 (Bagley Road) to I-95 North and whether it is long enough to allow truck traffic to safely merge. There was no opposition to the project.

B. Other Agency Coordination

Federal, state, and local agencies were consulted during the preparation of this Categorical Exclusion. Written comments were received and considered from agencies noted with an asterisk (*) during the preparation of this assessment.

- Federal Highway Administration
- * U.S. Army Corps of Engineers
- * U.S. Environmental Protection Agency
- * U.S. Fish and Wildlife Service
- National Marine Fisheries Service
- * N.C. Department of Cultural Resources
- N.C. Department of Environment and Natural Resources – Div. of Marine Fisheries
- * N.C. Department of Environment and Natural Resources – Natural Heritage Program
- * N.C. Department of Public Instruction
- N.C. Wildlife Resources Commission
- * N.C. Division of Water Quality
- N.C. Division of Parks and Recreation
- * Triangle J Council of Governments
- Johnston County Commissioners
- Upper Coastal Plain RPO

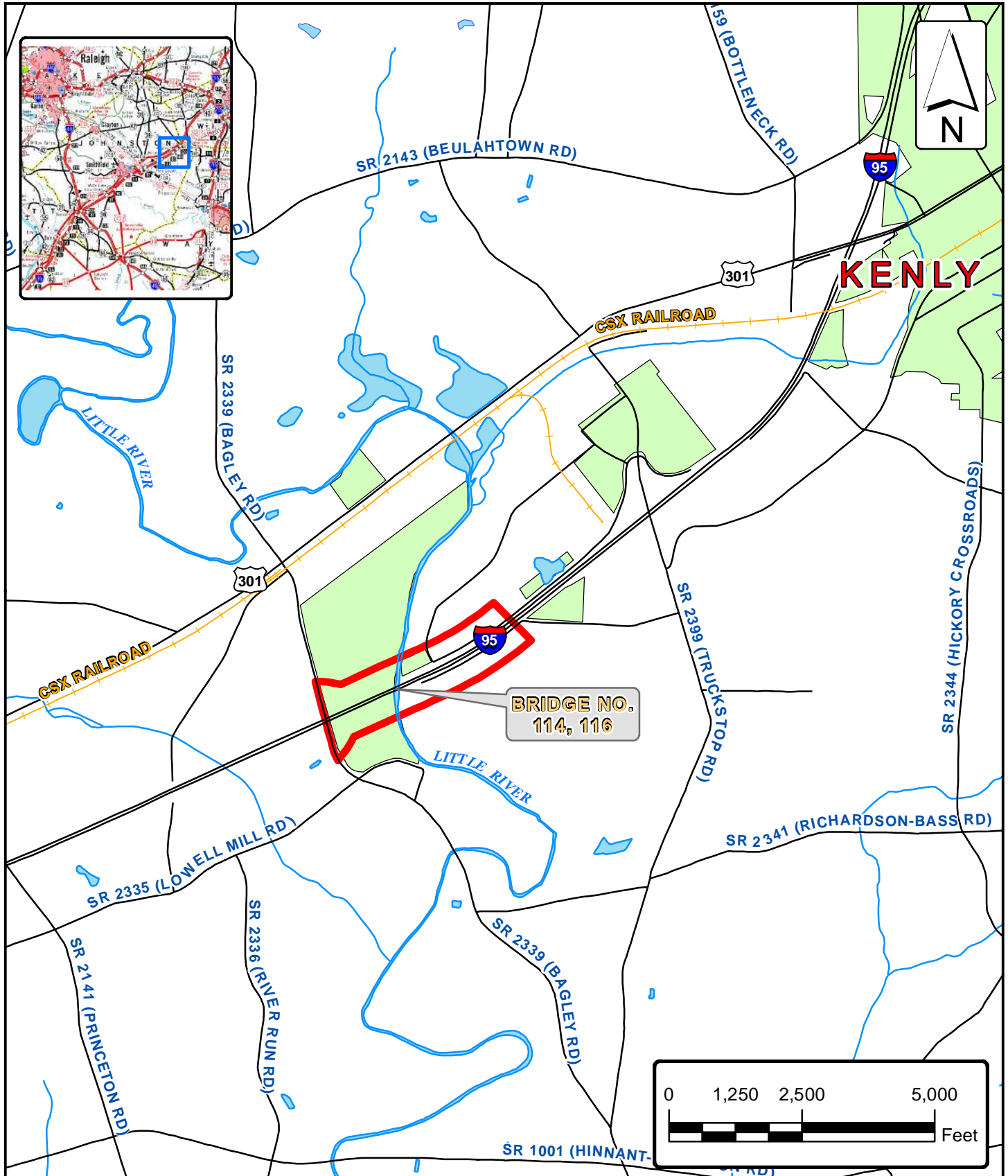
These comments and related issues, included in Appendix B, have been addressed in this document.

VII. CONCLUSION

On the basis of the above discussion, it is concluded that no substantial adverse environmental impacts will result from the implementation of the project. The project is therefore considered to be a Federal Categorical Exclusion due to its limited scope and lack of substantial environmental consequences.

APPENDIX A

Figures



VICINITY MAP

**REPLACEMENT AND WIDENING
OF BRIDGE NOS. 114 AND 116
ON I-95 OVER THE LITTLE RIVER**

JOHNSTON COUNTY
TIP PROJECT I-3318BB



NORTH CAROLINA DEPARTMENT
OF TRANSPORTATION
DIVISION OF HIGHWAYS
PROJECT DEVELOPMENT AND
ENVIRONMENTAL ANALYSIS UNIT

County: JOHNSTON

Div: 4 TIP# I-3318BB

WBS: 34182.1.2

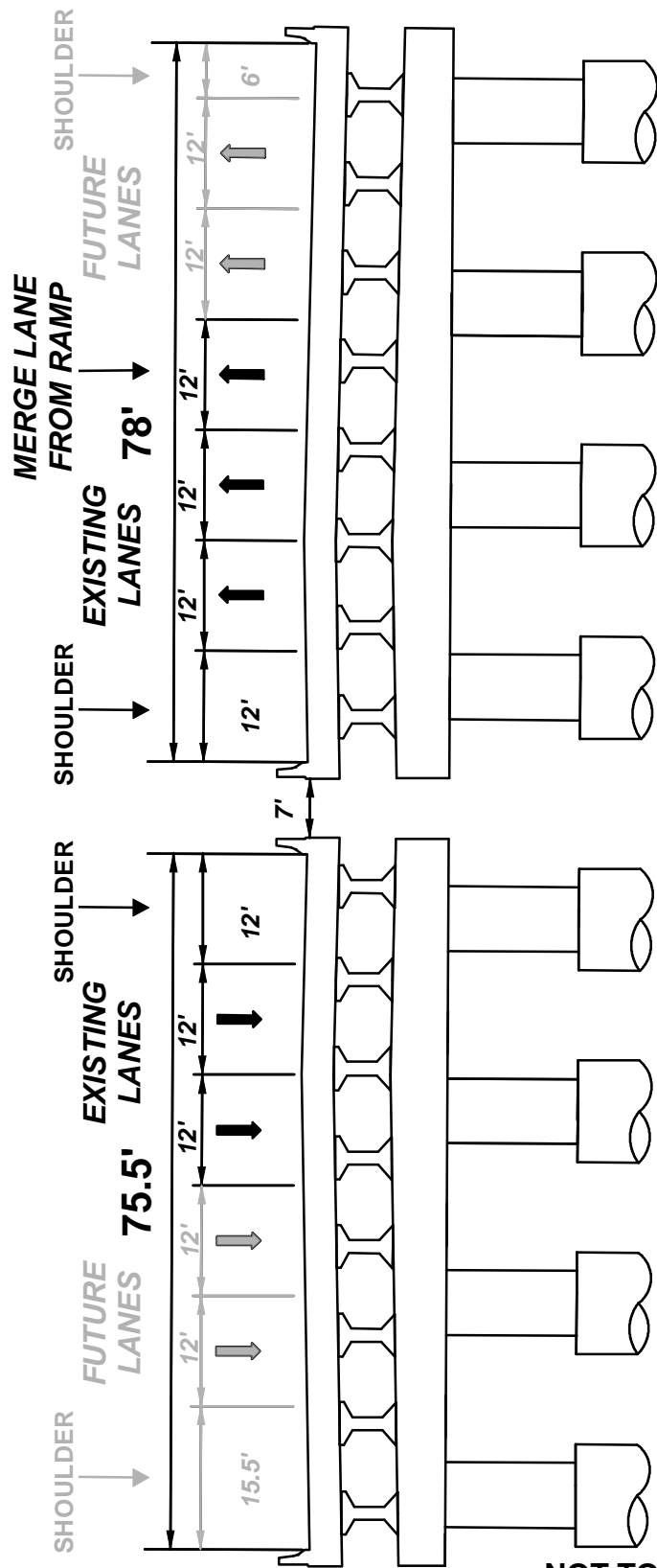
Date: OCTOBER 2012

**Figure
1**

PROPOSED BRIDGE REPLACEMENT AND WIDENING

BRIDGE NO. 114
I-95 NORTHBOUND LANES

BRIDGE NO. 116
I-95 SOUTHBOUND LANES



NOT TO SCALE



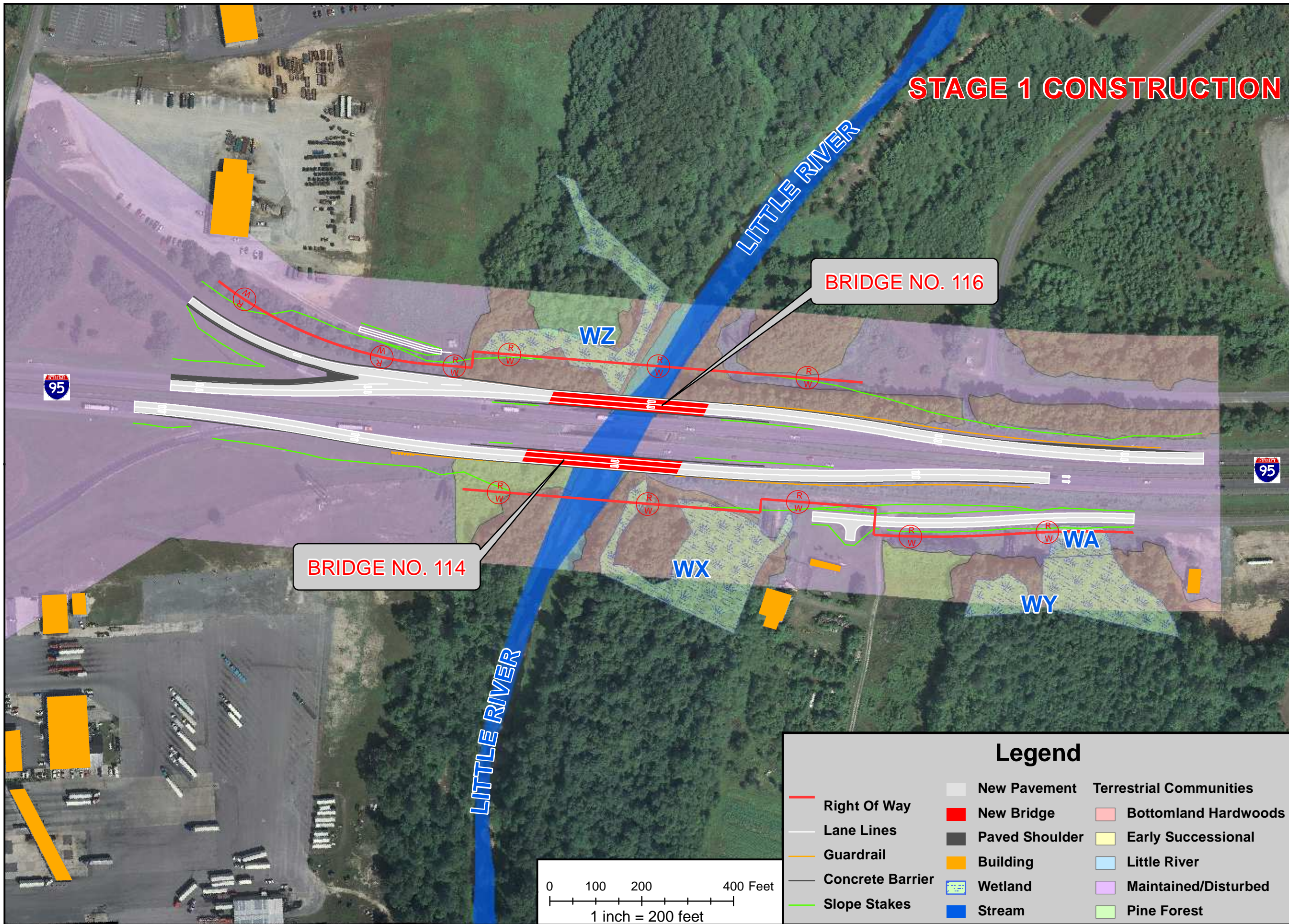
NORTH CAROLINA DEPARTMENT
OF TRANSPORTATION
DIVISION OF HIGHWAYS
PROJECT DEVELOPMENT AND
ENVIRONMENTAL ANALYSIS UNIT

PROPOSED TYPICAL SECTION
REPLACEMENT AND WIDENING
OF BRIDGE NOS. 114 & 116
ON I-95 OVER THE LITTLE RIVER

JOHNSTON COUNTY
TIP PROJECT I-3318BB

County:	JOHNSTON
Div:	4
TIP#:	I-3318BB
WBS:	34182.1.2
Date:	JANUARY 2013

Figure
2

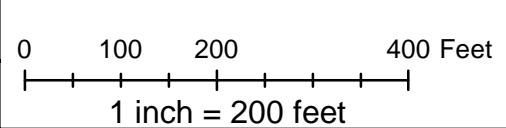


STAGE 1 CONSTRUCTION

BRIDGE NO. 116

BRIDGE NO. 114

Legend		
	Right Of Way	New Pavement
	Lane Lines	New Bridge
	Guardrail	Paved Shoulder
	Concrete Barrier	Building
	Slope Stakes	Wetland
		Stream
		Terrestrial Communities
		Bottomland Hardwoods
		Early Successional
		Little River
		Maintained/Disturbed
		Pine Forest



NORTH CAROLINA DEPARTMENT OF TRANSPORTATION
DIVISION OF HIGHWAYS
PROJECT DEVELOPMENT AND ENVIRONMENTAL ANALYSIS BRANCH

AERIAL MAP
REPLACEMENT AND WIDENING OF BRIDGE NOS. 114 AND 116 ON I-95 OVER THE LITTLE RIVER
JOHNSTON COUNTY
TIP PROJECT I-3318BB



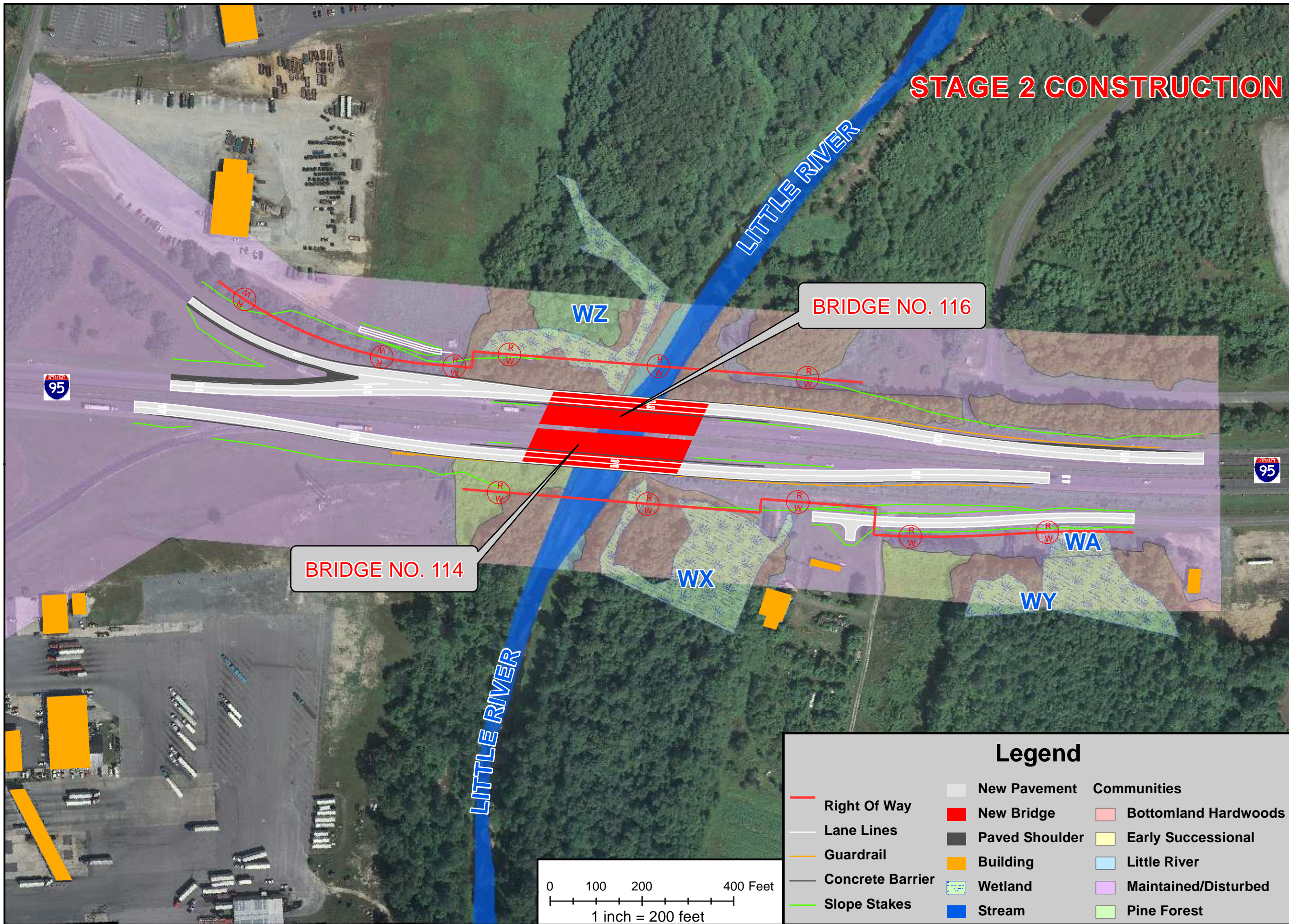
County: JOHNSTON

Div: 4 TIP#: I-3318BB

WBS: 34182.1.2

Date: OCTOBER 2012

Figure 3
Sheet 1 of 3



STAGE 2 CONSTRUCTION

BRIDGE NO. 116

BRIDGE NO. 114

WZ

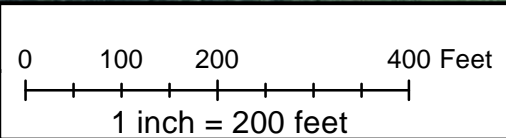
WX

WA

WY

Legend

Right Of Way	New Pavement	Communities
Lane Lines	New Bridge	Bottomland Hardwoods
Guardrail	Paved Shoulder	Early Successional
Concrete Barrier	Building	Little River
Slope Stakes	Wetland	Maintained/Disturbed
	Stream	Pine Forest



NORTH CAROLINA DEPARTMENT
OF TRANSPORTATION
DIVISION OF HIGHWAYS
PROJECT DEVELOPMENT AND
ENVIRONMENTAL ANALYSIS BRANCH

AERIAL MAP
REPLACEMENT AND WIDENING
OF BRIDGE NOS. 114 AND 116 ON
I-95 OVER THE LITTLE RIVER
JOHNSTON COUNTY
TIP PROJECT I-3318BB



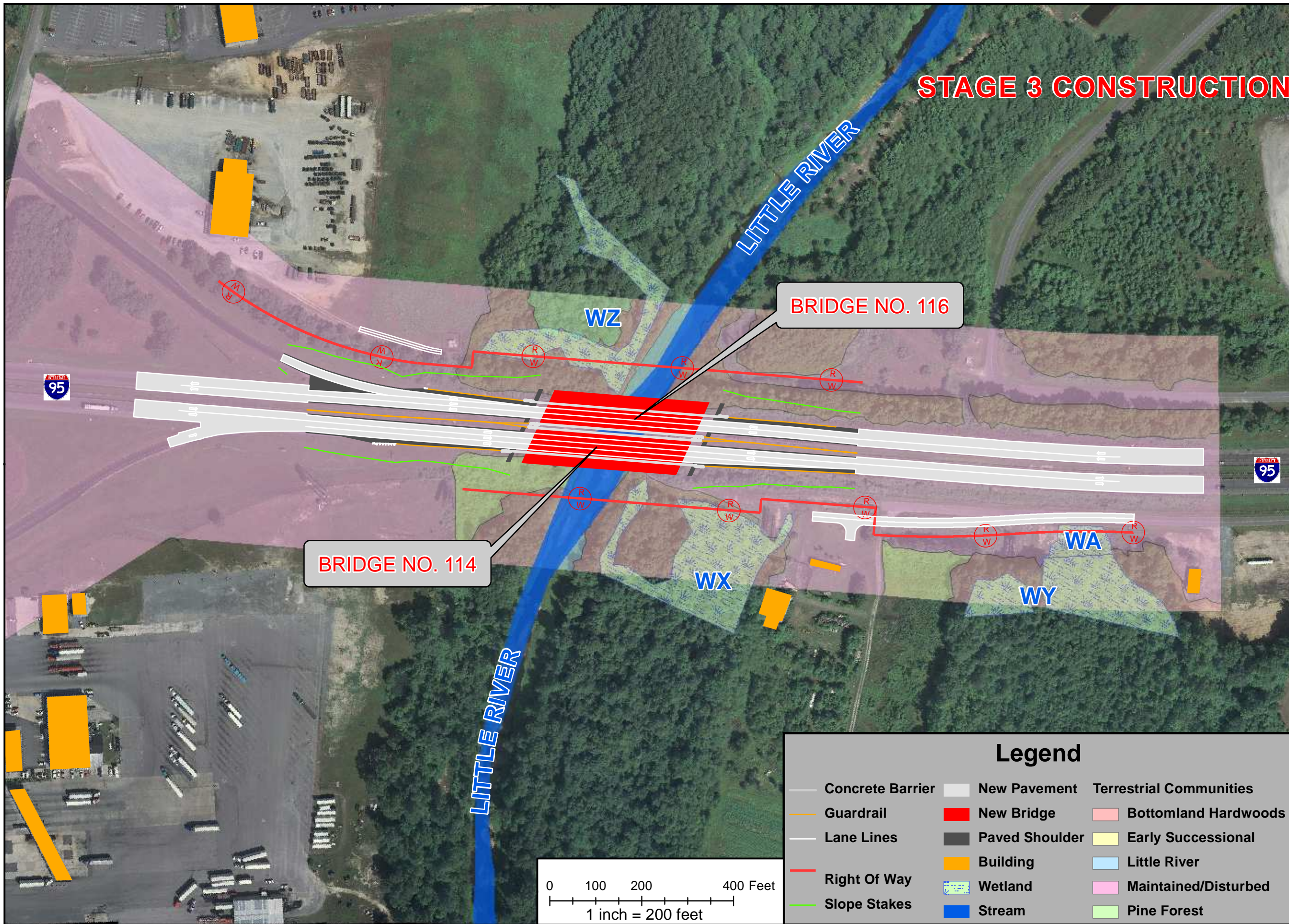
County:
JOHNSTON

Div: 4 TIP# I-3318BB

WBS:
34182.1.2

Date:
OCTOBER 2012

Figure
3
Sheet 2 of 3



STAGE 3 CONSTRUCTION

BRIDGE NO. 116

BRIDGE NO. 114

WZ

WX

WY

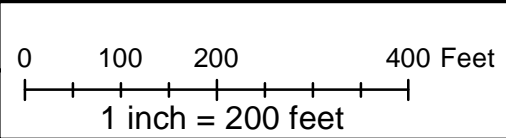
WA

LITTLE RIVER

LITTLE RIVER



Legend		
Concrete Barrier	New Pavement	Terrestrial Communities
Guardrail	New Bridge	Bottomland Hardwoods
Lane Lines	Paved Shoulder	Early Successional
Right Of Way	Building	Little River
Slope Stakes	Wetland	Maintained/Disturbed
	Stream	Pine Forest



NORTH CAROLINA DEPARTMENT
OF TRANSPORTATION
DIVISION OF HIGHWAYS
PROJECT DEVELOPMENT AND
ENVIRONMENTAL ANALYSIS BRANCH

AERIAL MAP
REPLACEMENT AND WIDENING
OF BRIDGE NOS. 114 AND 116 ON
I-95 OVER THE LITTLE RIVER
JOHNSTON COUNTY
TIP PROJECT I-3318BB



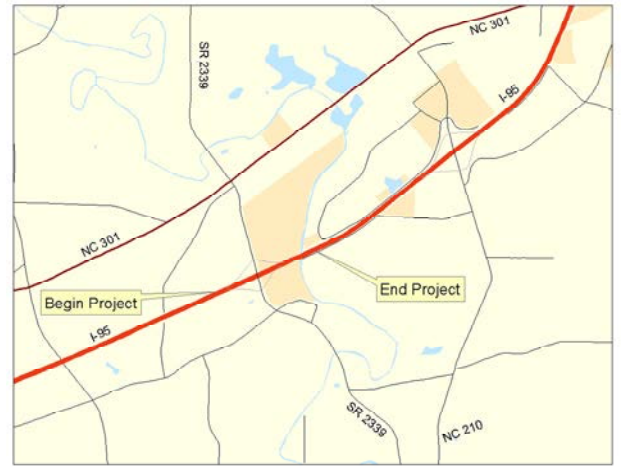
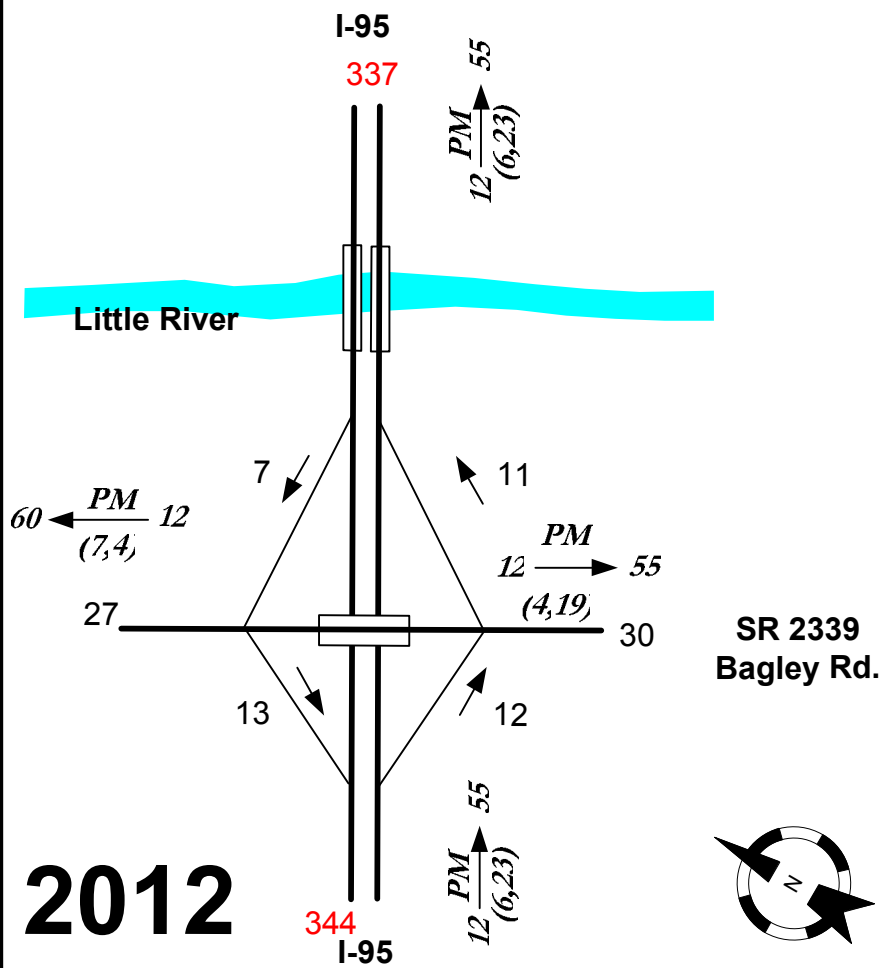
County:
JOHNSTON

Div: 4 TIP# I-3318BB

WBS:
34182.1.2

Date:
OCTOBER 2012

Figure
3
Sheet 3 of 3



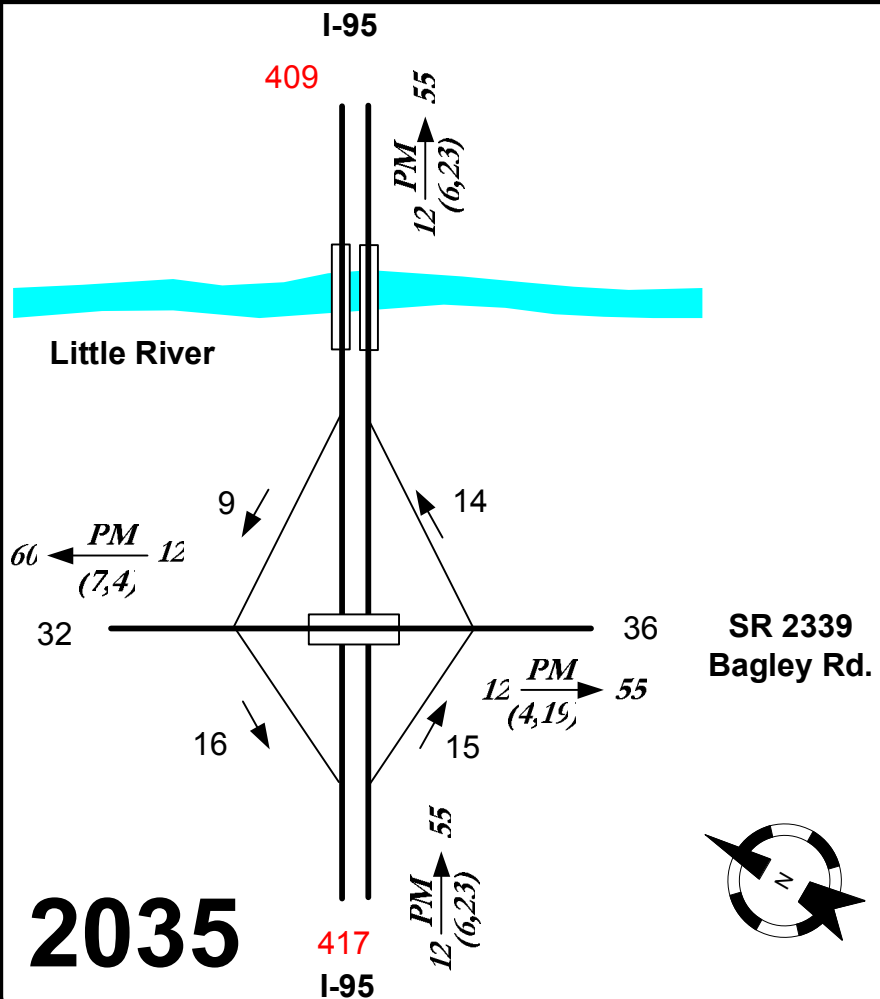
2012 / 2035

ANNUAL AVERAGE
DAILY TRAFFIC

SHEET 1 OF 1

LEGEND

- ### No. of Vehicles Per Day (VPD) in 100s
- 1- Less than 50 VPD
- X Movement Prohibited
- Roadway
- K $\frac{PM}{(d,t)} \rightarrow$ D
- K Design Hourly Factor (%)
- PM PM Peak Period
- D Peak Hour
- Indicates Direction of D
- (d,t) Duals, TT-STs (%)



TIP: I-3318BB	WBS: 34182.1.2.1
COUNTY: Johnston	DIVISION: 4
DATE: 04/17/2012	
PREPARED BY: Darryl Austin	
LOCATION: I-95	
PROJECT: Replace Bridges No. 114 and 116 on I-95 over the Little River	



NORTH CAROLINA DEPARTMENT OF TRANSPORTATION
DIVISION OF HIGHWAYS
PROJECT DEVELOPMENT AND ENVIRONMENTAL ANALYSIS UNIT

Traffic Forecast (2012/2035 Estimated AADT)
REPLACEMENT AND WIDENING OF BRIDGE NOS. 114 AND 116 ON I-95 OVER THE LITTLE RIVER

JOHNSTON COUNTY
TIP PROJECT I-3318BB

FIGURE 4

APPENDIX B

Comments from Federal, State, and Local Agencies



United States Department of the Interior

FISH AND WILDLIFE SERVICE
Raleigh Field Office
Post Office Box 33726
Raleigh, North Carolina 27636-3726

November 9, 2010

RECEIVED
Division of Highways

NOV 15 2010

Construction
Policy and
Environment

Gregory J. Thorpe, Ph.D.
North Carolina Department of Transportation
Project Development and Environmental Analysis
1548 Mail Service Center
Raleigh, North Carolina 27699-1548

Dear Dr. Thorpe:

This letter is in response to your request for comments from the U.S. Fish and Wildlife Service (Service) on the potential environmental effects of the proposed replacement of Bridge No. 114 and 116 on I-95 over Little River in Johnston County, North Carolina (TIP No. I-3318 BB). These comments provide information in accordance with provisions of the National Environmental Policy Act (42 U.S.C. 4332(2)(c)) and Section 7 of the Endangered Species Act of 1973, as amended (16 U.S.C. 1531-1543).

Section 7(a)(2) of the Endangered Species Act requires that all federal action agencies (or their designated non-federal representatives), in consultation with the Service, insure that any action federally authorized, funded, or carried out by such agencies is not likely to jeopardize the continued existence of any federally threatened or endangered species. The Little River is known to support populations of the federally endangered Tar River spiny mussel (*Elliptio steinstansana*) and dwarf wedgemussel (*Alasmidonta heterodon*). The Tar River spiny mussel has been observed in the Little River as recently as this year, approximately four miles upstream of the project area. It is unknown if the species occurs at or downstream of the project site. With the severe decline of the Tar River spiny mussel, and given its very limited geographical distribution, the Little River has become increasingly more important to this species survival.

The Service recommends that mussel surveys be conducted within the project vicinity. Depending upon survey results and an assessment of current habitat quality, a formal Section 7 consultation may be required for this project. A formal Section 7 consultation can require up to 135 days for completion once a complete initiation package is received from the Federal Highway Administration. This initiation package includes a biological assessment/evaluation prepared by the federal action agency. It is imperative that sufficient time be included in the project schedule to allow for the Section 7 consultation process to be completed. During project design, communication with the Service is vital in order to develop conservation measures which will minimize effects to federally listed mussels and expedite the Section 7 process. At a minimum, the new bridges should span the river, in-water work be minimized to the extent practical, and the most stringent erosion control measures be implemented.

In addition to the comments above, the Service recommends the following general conservation measures to avoid or minimize environmental impacts to fish and wildlife resources:

1. Wetland, forest and designated riparian buffer impacts should be avoided and minimized to the maximum extent practical;
2. If unavoidable wetland or stream impacts are proposed, a plan for compensatory mitigation to offset unavoidable impacts should be provided early in the planning process;
3. Off-site detours should be used rather than construction of temporary, on-site bridges. For projects requiring an on-site detour in wetlands or open water, such detours should be aligned along the side of the existing structure which has the least and/or least quality of fish and wildlife habitat. At the completion of construction, the detour area should be entirely removed and the impacted areas be planted with appropriate vegetation, including trees if necessary;
4. Wherever appropriate, construction in sensitive areas should occur outside fish spawning and migratory bird nesting seasons. In waterways that may serve as travel corridors for fish, in-water work should be avoided during moratorium periods associated with migration, spawning and sensitive pre-adult life stages. The general moratorium period for anadromous fish is February 15 - June 30;
5. New bridges should be long enough to allow for sufficient wildlife passage along stream corridors;
6. Best Management Practices (BMP) for Construction and Maintenance Activities should be implemented;
7. Bridge designs should include provisions for roadbed and deck drainage to flow through a vegetated buffer prior to reaching the affected stream. This buffer should be large enough to alleviate any potential effects from run-off of storm water and pollutants;
8. The bridge designs should not alter the natural stream and stream-bank morphology or impede fish passage. To the extent possible, piers and bents should be placed outside the bank-full width of the stream; and
9. Bridges and approaches should be designed to avoid any fill that will result in damming or constriction of the channel or flood plain. If spanning the flood plain is not feasible, culverts should be installed in the flood plain portion of the approach to restore some of the hydrological functions of the flood plain and reduce high velocities of flood waters within the affected area.

We reserve the right to review any federal permits that may be required for this project, at the public notice stage. Therefore, it is important that resource agency coordination occur early in the planning process in order to resolve any conflicts that may arise and minimize delays in project implementation. In addition to the above guidance, we recommend that the

environmental documentation for this project include the following in sufficient detail to facilitate a thorough review of the action:

1. A clearly defined and detailed purpose and need for the proposed project;
2. A description of the proposed action with an analysis of all alternatives being considered, including the "no action" alternative;
3. A description of the fish and wildlife resources, and their habitats, within the project impact area that may be directly or indirectly affected;
4. The extent and acreage of waters of the U.S., including wetlands, that are to be impacted by filling, dredging, clearing, ditching, or draining. Wetland boundaries should be determined by using the 1987 Corps of Engineers Wetlands Delineation Manual and verified by the U.S. Army Corps of Engineers;
5. The anticipated environmental impacts, both temporary and permanent, that would be likely to occur as a direct result of the proposed project. The assessment should also include the extent to which the proposed project would result in indirect and cumulative effects to natural resources;
6. Design features and construction techniques which would be employed to avoid or minimize impacts to fish and wildlife resources, both direct and indirect, and including fragmentation and loss of habitat;
7. If unavoidable wetland or stream impacts are proposed, project planning should include a compensatory mitigation plan for offsetting the unavoidable impacts.

The Service appreciates the opportunity to comment on this project. If you have any questions regarding our response, please contact Mr. Gary Jordan at (919) 856-4520, ext. 32.

Sincerely,


for Pete Benjamin
Field Supervisor

cc: Tom Steffens, USACE, Washington, NC
Travis Wilson, NCWRC, Creedmoor, NC
Chris Militscher, USEPA, Raleigh, NC
John Sullivan, FHWA, Raleigh, NC



North Carolina Department of Environment and Natural Resources
Office of Conservation, Planning, & Community Affairs

Beverly Eaves Perdue, Governor

Linda Pearsall, Director

Dee Freeman, Secretary

December 3, 2010

MEMORANDUM

TO: Gregory Thorpe, NC DOT Project Development and Environmental Analysis Branch

FROM: Harry LeGrand, Natural Heritage Program ^{NL}

SUBJECT: Start of Study - Proposed I-95, Little River Bridge Replacements, Bridge Numbers 114 and 116; Johnston County

REFERENCE: Federal-Aid Project IMS-095-2(19) 105, WBS No. 34182, TIP No. I-3318 BB

The Natural Heritage Program has a number of records of rare species within the project area. All of these are aquatic animals found in the Little River within a mile of the I-95 bridge crossing. These species are:

Neuse River waterdog (*Necturus lewisi*), State Special Concern;
Carolina madtom (*Noturus furiosus*), State Special Concern and Federal Species of Concern
yellow lance (*Elliptio lanceolata*), State Endangered and Federal Species of Concern
triangle floater (*Alasmidonta undulata*), State Threatened
Roanoke slabshell (*Elliptio roanokensis*), State Threatened
creeper (*Strophitus undulatus*), State Threatened

In addition, the Tar River Spiny mussel (*Elliptio steinstansana*) and the dwarf wedgemussel (*Alasmidonta heterodon*), both Federally and State Endangered, have been found in the Little River within the county in the last few years and may well be present in the project area.

Because of the number of rare aquatic species, we recommend a survey for such rare species be done in the project area before any construction begins. Also, consultation with the U.S. Fish and Wildlife Service will likely be needed because of the presence of Federally listed species in the river.

Please do not hesitate to contact me at 919-715-8697 if you have questions or need further information.



North Carolina Department of Environment and Natural Resources

Division of Water Quality
Coleen H. Sullins
Director

Dee Freeman
Secretary

Beverly Eaves Perdue
Governor

October 28, 2010

MEMORANDUM

TO: Gregory J. Thorpe, Ph.D., NCDOT PDEA

FROM: Rob Ridings, NCDWQ, Transportation Permitting Unit *RR*

SUBJECT: Scoping Review of NCDOT's Proposed Bridge Replacement Project: I-3318 BB, Bridges 114 & 116 on I-95, Johnston County.

In reply to your correspondence received October 22, 2010 in which you requested comments for the above referenced project, the NCDWQ offers the following comments:

Project-Specific Comments

1. Little River is class WS-V; NSW waters of the State. NCDWQ is very concerned with sediment and erosion impacts that could result from this project. NCDWQ recommends that highly protective sediment and erosion control BMPs be implemented to reduce the risk of nutrient runoff to Little River. NCDWQ requests that road design plans provide treatment of the storm water runoff through best management practices as detailed in the most recent version of NCDWQ's *Stormwater Best Management Practices*.
2. This project is within the Neuse River Basin. Riparian buffer impacts shall be avoided and minimized to the greatest extent possible pursuant to 15A NCAC 2B.0233.
3. Any anticipated dewatering or access structures necessary for construction of bridges should be addressed in the CE and/or permit applications. It is understood that final designs are not determined at the time the CE is developed. However, the CE should discuss the potential for dewatering and access measures necessary due to bridge construction.

General Comments Regarding Bridge Replacement Projects

1. NCDWQ is very concerned with sediment and erosion impacts that could result from this project. NCDOT shall address these concerns by describing the potential impacts that may occur to the aquatic environments and any mitigating factors that would reduce the impacts.
2. If foundation test borings are necessary; it shall be noted in the document. Geotechnical work is approved under General 401 Certification Number 3687/Nationwide Permit No. 6 for Survey Activities.
3. If the old bridge is removed, no discharge of bridge material into surface waters is allowed unless otherwise authorized by the US ACOE. Strict adherence to the Corps of Engineers guidelines for bridge demolition will be a condition of the 401 Water Quality Certification.
4. Whenever possible, NCDWQ prefers spanning structures. Spanning structures usually do not require work within the stream or grubbing of the streambanks and do not require stream channel realignment. The horizontal and vertical clearances provided by bridges shall allow for human and wildlife passage

beneath the structure. Fish passage and navigation by canoeists and boaters shall not be blocked. Bridge supports (bents) should not be placed in the stream when possible.

5. Bridge deck drains shall not discharge directly into the stream. Stormwater shall be directed across the bridge and pre-treated through site-appropriate means (grassed swales, pre-formed scour holes, vegetated buffers, etc.) before entering the stream. Please refer to the most current version of NCDWQ's *Stormwater Best Management Practices*.
6. If concrete is used during construction, a dry work area shall be maintained to prevent direct contact between curing concrete and stream water. Water that inadvertently contacts uncured concrete shall not be discharged to surface waters due to the potential for elevated pH and possible aquatic life and fish kills.
7. If temporary access roads or detours are constructed, the site shall be graded to its preconstruction contours and elevations. Disturbed areas shall be seeded or mulched to stabilize the soil and appropriate native woody species shall be planted. When using temporary structures the area shall be cleared but not grubbed. Clearing the area with chain saws, mowers, bush-hogs, or other mechanized equipment and leaving the stumps and root mat intact allows the area to re-vegetate naturally and minimizes soil disturbance.
8. Sediment and erosion control measures sufficient to protect water resources must be implemented and maintained in accordance with the most recent version of North Carolina Sediment and Erosion Control Planning and Design Manual and the most recent version of NCS000250.
9. All work in or adjacent to stream waters shall be conducted in a dry work area unless otherwise approved by NCDWQ. Approved BMP measures from the most current version of NCDOT Construction and Maintenance Activities manual such as sandbags, rock berms, cofferdams and other diversion structures shall be used to prevent excavation in flowing water.
10. Heavy equipment shall be operated from the bank rather than in stream channels in order to minimize sedimentation and reduce the likelihood of introducing other pollutants into streams. This equipment shall be inspected daily and maintained to prevent contamination of surface waters from leaking fuels, lubricants, hydraulic fluids, or other toxic materials.
11. In most cases, the NCDWQ prefers the replacement of the existing structure at the same location with road closure. If road closure is not feasible, a temporary detour shall be designed and located to avoid wetland impacts, minimize the need for clearing and to avoid destabilizing stream banks. If the structure will be on a new alignment, the old structure shall be removed and the approach fills removed from the 100-year floodplain. Approach fills shall be removed and restored to the natural ground elevation. The area shall be stabilized with grass and planted with native tree species. Tall fescue shall not be used in riparian areas.
12. Riprap shall not be placed in the active thalweg channel or placed in the streambed in a manner that precludes aquatic life passage. Bioengineering boulders or structures shall be properly designed, sized and installed.

Thank you for requesting our input at this time. NCDOT is reminded that issuance of a 401 Water Quality Certification requires that appropriate measures be instituted to ensure that water quality standards are met and designated uses are not degraded or lost. If you have any questions or require additional information, please contact Rob Ridings at 919-733-9817.

cc: Tom Steffens, US Army Corps of Engineers, Washington Field Office
Chad Coggins, Division 4 Environmental Officer
Matthew Potter, NCDOT
File Copy



IN REPLY REFER TO

**DEPARTMENT OF THE ARMY
WILMINGTON DISTRICT, CORPS OF ENGINEERS**

Washington Regulatory Field Office
Post Office Box 1000
Washington, North Carolina 27889-1000

November 19, 2010

Regulatory Division

Action ID No.: SAW-2010-01954

Mr. Matthew Potter
Project Planning Engineer
NC Department of Transportation
Project Development and Environmental Analysis Branch
1548 Mail Service Center
Raleigh, North Carolina 27699-1548

Dear Mr. Potter:

Reference your Start of Study letter of October 20, 2010, regarding the North Carolina Department of Transportation (NCDOT) proposal to replace Bridges 114 and 116, (TIP No. I-3318 BB; Federal-Aid Project IMS-095-2(119)105; WBS No. 34182), located on Interstate 95 (I-95), crossing the Little River, near Kenly, Johnson County, North Carolina. The letter requested an evaluation of potential environmental impacts including identifying any permits or approvals required by this agency.

We have reviewed the subject documents and determined that, based upon a review of the information provided and available maps, the construction of these projects are likely to impact streams and/or wetlands within the work corridor. Please be aware that impacts associated with the discharge of fill into jurisdictional waters of the United States are subject to our regulatory authority pursuant to Section 404 of the Clean Water Act. Any discharge of excavated or fill material into waters of the United States and/or any adjacent wetlands would require Department of the Army (DA) permit authorization. The type of DA authorization required (i.e., general or individual permit) will be determined by the location, type, and extent of jurisdictional area impacted by the project, and by the project design and construction limits.

Until additional data is furnished which details the extent of the construction limits of the proposed project, and an onsite inspection is completed with regard to determinations of the presence of jurisdictional waters on the project property; we are unable to verify that the project will or will not have jurisdictional impacts; or to provide specific comments concerning DA permit requirements. To assist you with determining permitting requirements, we recommend that you perform a detailed delineation of the streams and/or wetlands present on the project site.

When this information becomes available, it should be forwarded to this office for review and comment, as well as a determination of DA permit eligibility.

The US Army Corps of Engineers appreciates the opportunity to provide comments on your project. Should you have any further questions related to DA jurisdiction and /or permits for this project, please contact Tom Steffens at 910-251-4615.

Thank you,



Tom Steffens
Regulatory Project Manager
Washington Regulatory Field Office

Cc:

Mr. Rob Ridings
Water Quality Section
Division of Environmental Management
North Carolina Department of Environment
and Natural Resources
1650 Mail Service Center
Raleigh, North Carolina 27699-1650

Mr. Travis Wilson
Eastern Region Highway Project Coordinator
Habitat Conservation Program
1142 I-85 Service Road
Creedmoor, North Carolina 27522

Mr. Pete Benjamin
U.S. Fish and Wildlife Service
Fish and Wildlife Enhancement
Post Office Box 33726
Raleigh, North Carolina 27636-3726

Mr. Chris Militscher
C/O FHWA
U.S. Environmental Protection Agency
Raleigh Office
310 New Bern Avenue, Room 206
Raleigh, North Carolina 27601



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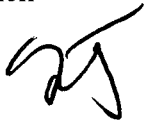
STATE BOARD OF EDUCATION William C. Harrison, Ed.D., *Chairman and Chief Executive Officer*
DEPARTMENT OF PUBLIC INSTRUCTION June St. Clair Atkinson, Ed.D., *State Superintendent*
WWW.NCPUBLICSCHOOLS.ORG

NOV 09 2010

November 4, 2010

MEMORANDUM

TO: Gregory J. Thorpe, Ph.D., Manager
NC Department of Transportation
Project Development and Environmental Analysis Branch

FROM: Steven M. Taynton, Section Chief, School Planning 

SUBJECT: Start of Study for the Proposed I-95, Little River Bridge Replacements, Bridge
Numbers 114 and 116, Johnston County, Federal-Aid Project IMS-095-2(119) 105,
WBS No. 34182, TIP No. I-3318 BB

Enclosed is a response from Johnston County Schools in regard to the above referenced inquiry.

ST/pr
Enclosure

cc: Dr. Edward Croom, Superintendent, Johnston County Schools

From: "Debra Bridges" <debrabridges@johnston.k12.nc.us>
To: <staynton@dpi.state.nc.us>
Date: 11/4/2010 1:29 PM
Subject: Bridge replacements 114 & 116 on I-95

Greetings Mr. Taynton,

We were asked to look at the location of Bridges 114 & 116 on I-95 and determine if their replacement work would affect Johnston County Schools.

This is to inform you that since bridges 114 & 116 are on I-95 and we do not have school buses routed on I-95, there will be no impact to us.

Thank you for forwarding this on to the Department of Transportation.

Regards,

Debra Bridges
Growth & Planning Supervisor
Johnston County Schools Transportation Department
Office: 919-934-8340 x130
Hours: 6:00 am-3:00 pm



RECEIVED
Division of Highways

NOV 15 2010

North Carolina Department of Cultural Resources
State Historic Preservation Office
Peter B. Sandbeck, Administrator

Preservation
Project Development and
Environmental Analysis Branch
Office of Archives and History
Division of Historical Resources
David Brook, Director

Beverly Eaves Perdue, Governor
Linda A. Carlisle, Secretary
Jeffrey J. Crow, Deputy Secretary

July 21, 2010

MEMORANDUM

TO: Greg Thorpe, Ph.D., Director
Project Development and Environmental Analysis Branch
NCDOT Division of Highways

FROM: Peter Sandbeck *Rise for Peter Sandbeck*

SUBJECT: Replace Bridges 114 and 116 on I-95 over the Little River, I-3318 BB, Johnston County,
ER 10-1994

Thank you for your letter of October 20, 2010, concerning the above project.

We have conducted a review of the proposed undertaking and are aware of no historic resources which would be affected by the project. Therefore, we have no comment on the undertaking as proposed.

The above comments are made pursuant to Section 106 of the National Historic Preservation Act and the Advisory Council on Historic Preservation's Regulations for Compliance with Section 106 codified at 36 CFR Part 800.

Thank you for your cooperation and consideration. If you have questions concerning the above comment, contact Renee Gledhill-Earley, environmental review coordinator, at 919-807-6579. In all future communication concerning this project, please cite the above referenced tracking number.

cc: Mary Pope Furr, NCDOT
Matt Wilkerson, NCDOT

Potter, Matthew W

From: Militscher.Chris@epamail.epa.gov
Sent: Wednesday, November 03, 2010 1:19 PM
To: Potter, Matthew W
Subject: Start of Study for I-3318BB

Matthew: I have reviewed the Start of Study package for the above referenced TIP project. Your cover letter describing the proposed project is confusing, as it is not a straight bridge replacement project as per the subject heading. NCDOT is proposing to widen I-95 for .52 miles from 4 lanes to 6 to 8 lanes + a Northbound acceleration lane (?). The Start of Study information does not address if you are proposing to widen to the interior or exterior. The AADT (2008) are also not believed to be correct (34,000?) on I-95.

EPA cannot tell you what the environmental impacts to the Little River are when the Start of Study does not provide sufficient details as to your proposed widening and bridge replacement plans. EPA is also confused as to how this proposed project relates to NCDOT/Kristine O'Connor's I-5133 Interstate 95 initiative.

I am interested in attending a Scoping meeting if one is scheduled.

We also request a copy of the CE for consistency review when it becomes available.

Thank you.

Christopher A. Militscher, REM, CHMM
USEPA Region 4 Raleigh Office
919-856-4206

Potter, Matthew W

From: Paul Black <pblack@tcog.org>
Sent: Monday, November 01, 2010 3:34 PM
To: Potter, Matthew W
Cc: Daniel Van Liere
Subject: I-3318 BB

Matthew,

Kirby Bowers forwarded the study start announcement for this project (I-3318 BB); Triangle J Council of Governments has no required permits or approvals. If we can assist with providing any demographic or environmental data, please let us know.

Paul Black
Principal Planner
Triangle J Council of Governements
919.558.9397
pblack@tcog.org