

CATEGORICAL EXCLUSION ACTION CLASSIFICATION FORM

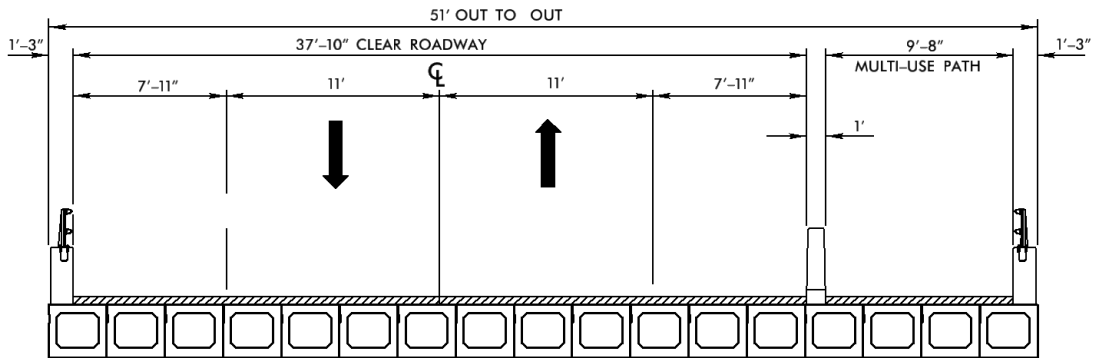
TIP Project No. **B-5130**
W.B.S. No. **42289.1.1**
Federal Project No. **BRZ-1321(4)**

A. Project Description:

The purpose of this project is to replace Wake County Bridge No. 318 on Avent Ferry Road (SR 1321) over Lake Johnson. Bridge No. 318 is 43 feet long.

In addition to accommodating vehicular traffic, the project will include accommodations for both bicycles and pedestrians. The roadway grade of the new structure will be approximately one foot higher than the existing. The project will be designed as an urban collector with a 40 mile per hour design speed. Traffic will be detoured offsite during construction (see Figure 1).

The replacement structure will be a bridge approximately 85 feet long. The length is based on preliminary design information and is set by hydraulic requirements. From left to right (east to west) the new bridge cross section will include:



The project length is approximately 1940 feet with 753 feet of approach work from the south, a new 85 foot long bridge and 1102 feet of approach work to the north. The approach cross section will transition from the existing approach to one that accommodates two 11-foot vehicular lanes, five-foot paved shoulders and a multi-use path on the east side.

B. Purpose and Need:

NCDOT Bridge Management Unit records indicate Bridge No. 318 has a sufficiency rating of 62.5 out of a possible 100 for a new structure. The bridge is considered functionally obsolete with a deck geometry appraisal of 2 out of 9 according to Federal Highway Administration (FHWA) standards.

Bridge No. 318 currently carries 7,300 vehicles per day with 11,000 vehicles per day projected for 2036. The substandard deck width is becoming increasingly unacceptable and replacement of the bridge will result in safer traffic operations.

C. Proposed Improvements:

Circle one or more of the following Type II improvements which apply to the project:

1. Modernization of a highway by resurfacing, restoration, rehabilitation, reconstruction, adding shoulders, or adding auxiliary lanes (e.g., parking, weaving, turning, climbing).
 - a. Restoring, Resurfacing, Rehabilitating, and Reconstructing pavement (3R and 4R improvements)
 - b. Widening roadway and shoulders without adding through lanes
 - c. Modernizing gore treatments
 - d. Constructing lane improvements (merge, auxiliary, and turn lanes)
 - e. Adding shoulder drains
 - f. Replacing and rehabilitating culverts, inlets, and drainage pipes, including safety treatments
 - g. Providing driveway pipes
 - h. Performing minor bridge widening (less than one through lane)
 - i. Slide Stabilization
 - j. Structural BMP's for water quality improvement
2. Highway safety or traffic operations improvement projects including the installation of ramp metering control devices and lighting.
 - a. Installing ramp metering devices
 - b. Installing lights
 - c. Adding or upgrading guardrail
 - d. Installing safety barriers including Jersey type barriers and pier protection
 - e. Installing or replacing impact attenuators
 - f. Upgrading medians including adding or upgrading median barriers
 - g. Improving intersections including relocation and/or realignment
 - h. Making minor roadway realignment
 - i. Channelizing traffic
 - j. Performing clear zone safety improvements including removing hazards and flattening slopes
 - k. Implementing traffic aid systems, signals, and motorist aid
 - l. Installing bridge safety hardware including bridge rail retrofit
3. Bridge rehabilitation, reconstruction, or replacement or the construction of grade separation to replace existing at-grade railroad crossings.
 - a. Rehabilitating, reconstructing, or replacing bridge approach slabs
 - b. Rehabilitating or replacing bridge decks
 - c. Rehabilitating bridges including painting (no red lead paint), scour repair, fender systems, and minor structural improvements
 - d. Replacing a bridge (structure and/or fill)
4. Transportation corridor fringe parking facilities.
5. Construction of new truck weigh stations or rest areas.

6. Approvals for disposal of excess right-of-way or for joint or limited use of right-of-way, where the proposed use does not have significant adverse impacts.
7. Approvals for changes in access control.
8. Construction of new bus storage and maintenance facilities in areas used predominantly for industrial or transportation purposes where such construction is not inconsistent with existing zoning and located on or near a street with adequate capacity to handle anticipated bus and support vehicle traffic.
9. Rehabilitation or reconstruction of existing rail and bus buildings and ancillary facilities where only minor amounts of additional land are required and there is not a substantial increase in the number of users.
10. Construction of bus transfer facilities (an open area consisting of passenger shelters, boarding areas, kiosks and related street improvements) when located in a commercial area or other high activity center in which there is adequate street capacity for projected bus traffic.
11. Construction of rail storage and maintenance facilities in areas used predominantly for industrial or transportation purposes where such construction is not inconsistent with existing zoning and where there is no significant noise impact on the surrounding community.
12. Acquisition of land for hardship or protective purposes, advance land acquisition loans under section 3(b) of the UMT Act. Hardship and protective buying will be permitted only for a particular parcel or a limited number of parcels. These types of land acquisition qualify for a CE only where the acquisition will not limit the evaluation of alternatives, including shifts in alignment for planned construction projects, which may be required in the NEPA process. No project development on such land may proceed until the NEPA process has been completed.
13. Acquisition and construction of wetland, stream and endangered species mitigation sites.
14. Remedial activities involving the removal, treatment or monitoring of soil or groundwater contamination pursuant to state or federal remediation guidelines.

D. Special Project Information:

The estimated costs, based on 2016 prices, are as follows:

Box Beam Bridge	\$499,000
Structure and Partial Abutment Removal	46,000
Retaining Walls	\$1,840,000
Roadway Approaches	773,000
Utility Construction	32,000
Misc. & Mob.	435,000
Eng. & Contingencies	575,000
Total Construction Cost	\$4,200,000
Right-of-way Costs	247,000
Right-of-way Utility Costs	137,000
Total Project Cost	\$ 4,584,000

Estimated Traffic:

Current	-	8000 vpd
Year 2035	-	11000 vpd
TTST	-	1%
Dual	-	2%

Accidents: Traffic Engineering has evaluated a recent three year period and found 14 accidents occurring in the vicinity of the project, eight of which were lane departure crashes.

Design Exceptions: There are no anticipated design exceptions for this project.

Pedestrian and Bicycle Accommodations: This bridge is located along Raleigh Bike Route #7, which runs from Lake Johnson Municipal Park and NC State University. There are also existing multi-use trails and bike/pedestrian accommodations in the vicinity along Avent Ferry Road. Because of both pedestrians and bicyclists in the area, NCDOT is willing to pay for side walk on one side and to include sufficient width for bicycles and pedestrians. The City of Raleigh originally requested sidewalks on both sides and this was presented at a public meeting. During design however two challenges arose that required a very slight shift in alignment and a change in the proposed two sidewalks.

The first challenge was poor soil conditions on the upstream side of the existing bridge and causeway. As presented in 2014 the design would have required the very expensive removal of that poor soil driving the costs beyond the budgeted amount. This was resolved by shifting the alignment a little bit downstream and by the use of retaining walls to stay on the existing causeway as much as possible.

The second challenge was treating storm water runoff from the roadway before it enters the lake. As presented in 2014 the design would have included sidewalks on either side of the bridge and causeway. This would mean curb and gutter on either side and the grades and length of roadway on the causeway would not allow for getting the water to a place to easily treat it. This was resolved by taking away

the sidewalks and instead including a multi-use trail on east side. By doing this, curb and gutter is not required which allows the water to be treated by going through a grass shoulder before entering the lake. A portion of the design that remains the same is that the lanes on the roadway will still be wide enough to accommodate bicycles as well as vehicles.

The existing multi-use bridge is only open during daylight hours. The choice of including a multi-use trail instead of just a sidewalk on the new structure allows for 24 hour passage for pedestrians across the lake as well as connection for future multi-use trail that the city may consider in the future for Avent Ferry Road. The City is willing to bear the difference in cost between the multi-use trail and the sidewalk.

Bridge Demolition: Bridge No. 318 is constructed of reinforced concrete floor on steel I-beams. The substructure is a pair of reinforced concrete abutments. Demolition of the bridge should result in little or no temporary fill in Lake Johnson.

Alternatives Discussion:

No Build or Rehabilitation – The no build alternative would result in eventually closing the road which is unacceptable given the volume of traffic served by SR 1321. The bridge was constructed in 1955 with only 22 feet of clear deck width. Given modern traffic and the vastly increased amounts of bicycle and pedestrian traffic the bridge is woefully narrow. Both the No Build and Rehabilitation options would leave this geometric deficiency.

New Alignment – A new alignment alternative was considered but eliminated due to costs, impacts to flood storage, 4(f) and 6(f) resources.

Replace on Existing Location –Detour Traffic Offsite Detour (Preferred)

Bridge No. 318 will be replaced on the existing alignment. Traffic will be detoured offsite (see Figure 1) during the construction period. NCDOT Guidelines for Evaluation of Offsite Detours for Bridge Replacement Projects considers multiple project variables beginning with the additional time traveled by the average road user resulting from the offsite detour. The offsite detour for this project would include Gorman Street and Tryon Road. The majority of traffic on the road is through traffic. The detour for the average road user would result in 8 minutes additional travel time (1.8 miles additional travel). Up to a 15-month duration of construction is expected on this project. Local traffic would experience a longer delay (12 minutes, 4 miles additional travel).

The 8 to 12 minute delay is high for the duration of construction but given the benefits of placing the bridge along the existing alignment, the acceptable situation from the schools and emergency services, and the support of Division 5 the proposed offsite detour is acceptable. All roads,

bridges and intersections on the offsite detour are acceptable without improvement and Division 5 concurs with the use of the detour.

Other Agency Comments:

In addition to the agencies referenced in other places in the document, the following agencies were alerted of the project at the onset but had no comments:

- N.C. Division of Parks and Recreation
- Capital Area MPO
- Wake County Manager

The following agencies replied with standardized comments that are addressed as a normal part of design, permitting and construction activities:

- Army Corps of Engineers
- U.S. Fish & Wildlife Service
- N.C. Wildlife Resources Commission
- U.S. Environmental Protection Agency

Public Involvement and De minimus:

A postcard was sent out to property holders and residents in the vicinity of the bridge in early April 2014 advertising a Public Meeting for April 24, 2014. The postcard also stated the following:

The project will require acquisition of park property protected by Section 4(f) of the Department of Transportation Act of 1966 as well as Section 6(f) of the Land and Water Conservation Fund Act of 1965, as amended. NCDOT is seeking a de minimis determination for the Section 4 (f) and Section 6(f) impacts.

Twenty four people attended the public meeting and were supportive of the project. At the meeting the cross section included sidewalks on both sides. Due to design challenges described earlier, the plan changed to including a multi-use trail on one side. The public was notified of this change via a post card sent in February 2016. There has been no response to the proposed change.

E. Threshold Criteria

The following evaluation of threshold criteria must be completed for Type II actions

<u>ECOLOGICAL</u>	<u>YES</u>	<u>NO</u>
(1) Will the project have a substantial impact on any unique or important natural resource?	<input type="checkbox"/>	<u> X </u>
(2) Does the project involve habitat where federally listed endangered or threatened species may occur?	<input checked="" type="checkbox"/>	<u> </u>
(3) Will the project affect anadromous fish?	<input type="checkbox"/>	<u> X </u>
(4) If the project involves wetlands, is the amount of permanent and/or temporary wetland taking less than one-tenth (1/10) of an acre and have all practicable measures to avoid and minimize wetland takings been evaluated?	<u> X </u>	<input type="checkbox"/>
(5) Will the project require the use of U. S. Forest Service lands?	<input type="checkbox"/>	<u> X </u>
(6) Will the quality of adjacent water resources be adversely impacted by proposed construction activities?	<input type="checkbox"/>	<u> X </u>
(7) Does the project involve waters classified as Outstanding Resources Waters (ORW) and/or High Quality Waters (HQW)?	<input type="checkbox"/>	<u> X </u>
(8) Will the project require fill in waters of the United States in any of the designated mountain trout counties?	<input type="checkbox"/>	<u> X </u>
(9) Does the project involve any known underground storage tanks (UST's) or hazardous materials sites?	<input type="checkbox"/>	<u> X </u>
 <u>PERMITS AND COORDINATION</u>		
(10) If the project is located within a CAMA county, will the project significantly affect the coastal zone and/or any "Area of Environmental Concern" (AEC)?	<input type="checkbox"/>	<u> X </u>
(11) Does the project involve Coastal Barrier Resources Act resources?	<input type="checkbox"/>	<u> X </u>
(12) Will a U. S. Coast Guard permit be required?	<input type="checkbox"/>	<u> X </u>
(13) Could the project result in the modification of any existing regulatory floodway?	<input type="checkbox"/>	<u> X </u>

(14)	Will the project require any stream relocations or channel changes?	<input type="checkbox"/>	<u> X </u>
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SOCIAL, ECONOMIC, AND CULTURAL RESOURCES

		<u> YES </u>	<u> NO </u>
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(15)	Will the project induce substantial impacts to planned growth or land use for the area?	<input type="checkbox"/>	<u> X </u>
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(16)	Will the project require the relocation of any family or business?	<input type="checkbox"/>	<u> X </u>
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(17)	Will the project have a disproportionately high and adverse human health and environmental effect on any minority or low-income population?	<input type="checkbox"/>	<u> X </u>
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(18)	If the project involves the acquisition of right of way, is the amount of right of way acquisition considered minor?	<u> X </u>	<input type="checkbox"/>
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(19)	Will the project involve any changes in access control?	<input type="checkbox"/>	<u> X </u>
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(20)	Will the project substantially alter the usefulness and/or land use of adjacent property?	<input type="checkbox"/>	<u> X </u>
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(21)	Will the project have an adverse effect on permanent local traffic patterns or community cohesiveness?	<input type="checkbox"/>	<u> X </u>
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(22)	Is the project included in an approved thoroughfare plan and/or Transportation Improvement Program (and is, therefore, in conformance with the Clean Air Act of 1990)?	<u> X </u>	<input type="checkbox"/>
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(23)	Is the project anticipated to cause an increase in traffic volumes?	<input type="checkbox"/>	<u> X </u>
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(24)	Will traffic be maintained during construction using existing roads, staged construction, or on-site detours?	<u> X </u>	<input type="checkbox"/>
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(25)	If the project is a bridge replacement project, will the bridge be replaced at its existing location (along the existing facility) and will all construction proposed in association with the bridge replacement project be contained on the existing facility?	<u> X </u>	<input type="checkbox"/>
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(26)	Is there substantial controversy on social, economic, or environmental grounds concerning the project?	<input type="checkbox"/>	<u> X </u>
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(27)	Is the project consistent with all Federal, State, and local laws relating to the environmental aspects of the project?	<u> X </u>	<input type="checkbox"/>
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- | | | | |
|------|---|-------------------------------------|-------------------|
| (28) | Will the project have an "effect" on structures/properties eligible for or listed on the National Register of Historic Places? | <input type="checkbox"/> | <u> X </u> |
| (29) | Will the project affect any archaeological remains which are important to history or pre-history? | <input type="checkbox"/> | <u> X </u> |
| (30) | Will the project require the use of Section 4(f) resources (public parks, recreation lands, wildlife and waterfowl refuges, historic sites, or historic bridges, as defined in Section 4(f) of the U. S. Department of Transportation Act of 1966)? | <input checked="" type="checkbox"/> | <u> </u> |
| (31) | Will the project result in any conversion of assisted public recreation sites or facilities to non-recreation uses, as defined by Section 6(f) of the Land and Water Conservation Act of 1965, as amended? | <input checked="" type="checkbox"/> | <u> </u> |
| (32) | Will the project involve construction in, across, or adjacent to a river designated as a component of or proposed for inclusion in the National System of Wild and Scenic Rivers? | <input type="checkbox"/> | <u> X </u> |

F. Additional Documentation Required for Unfavorable Responses in Part E

Response to Question 2, Endangered Species:

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 September 9, 2014. During the four man hour survey no individuals of Michaux’s sumac were observed. A review of NCNHP records, updated July 2009, indicates no known occurrences within 1.0 mile of the study area. **Biological Conclusion: No Effect**

Northern long eared bat - The US Fish and Wildlife Service has developed a programmatic biological opinion (PBO) in conjunction with the Federal Highway Administration (FHWA), the US Army Corps of Engineers (USACE), and NCDOT for the northern long-eared bat (NLEB) (*Myotis septentrionalis*) in eastern North Carolina. The PBO covers the entire NCDOT program in Divisions 1-8, including all NCDOT projects and activities. The programmatic determination for NLEB for the NCDOT program is “May Affect, Likely to Adversely Affect”. The PBO provides incidental take coverage for NLEB and will ensure compliance with Section 7 of the Endangered Species Act for five years for all NCDOT projects with a federal nexus in Divisions 1-8, which includes Wake County , where TIP B-5130 is located.

Response to Question 30, 4(f):

According to the City of Raleigh Lake Johnson Park is a function is primarily recreational and it is a significant part of the Raleigh Parks System and is publicly owned. These attributes qualify it as a 4(f) resource. Normally, the construction of the

new bridge would cause a temporary impact by limiting recreational activity around the construction. However, because the City has other improvements to the park and in the vicinity, they are planning to close the park to accomplish their projects at the same time the bridge is under construction. The City believes the bridge replacement will have no adverse impact on the 4(f) resource (see attached letter). The public has been alerted to FHWA's intent to use de minimus (see attached newsletter) and have expressed no concerns. Therefore, FHWA has determined that de minimus will be applied to this project.

Response to Question 31, 6(f):

Lake Johnson Park has participated in the Land Water Conservation Fund (LWCF) State Assistance Program and as such the park boundaries are protected by Section 6(f) of that program. At the City's request, the approach causeways are being widened to allow for bicycle and multi-use trail accommodations which will result in conversion of LWCF assisted land. The City believes that these accommodations are to the benefit of the park and has also agreed to pay for the mitigation required by Section 6(f). They are currently negotiating for a piece of property adjoining Lake Johnson Park which would meet the criteria for the 6(f) replacement property.

G. CE Approval

TIP Project No.	<u>B-5130</u>
W.B.S. No.	<u>42289.1.1</u>
Federal Project No.	<u>BRZ-1321(4)</u>

Project Description:

The purpose of this project is to replace Wake County Bridge No. 318 on Avent Ferry Road (SR 1321) over Lake Johnson. Bridge No. 318 is 43 feet long.

The project will include both bicycle and pedestrian accommodations. The roadway grade of the new structure will be approximately one foot higher than the existing structure. The project will be designed as an urban collector with a 40 mile per hour design speed. Traffic will be detoured offsite during construction (see Figure 1).

The replacement structure will be a bridge approximately 85 feet long and 51 feet wide accommodating two 11 foot lanes, two 8 ft. - 11in. offsets and a multi-use path on the east side. The length is based on preliminary design information and is set by hydraulic requirements. See page one for a detailed cross section.

The project length is approximately 1940 feet with 753 feet of approach work from the south, a new 85 foot long bridge and 1102 feet of approach work to the north. The approach cross section will transition from the existing approach to one that accommodates two 11' vehicular lanes, five paved shoulders and a multi-use path on the east side.

Categorical Exclusion Action Classification:

 TYPE II(A)
 X TYPE II(B)

Approved:

<u>7/15/16</u> Date	<u>[Signature]</u> Project Engineer Project Development & Environmental Analysis Unit
<u>7-15-16</u> Date	<u>[Signature]</u> Project Planning Engineer Project Development & Environmental Analysis Unit

For Type II(B) projects only:

<u>7-15-16</u> Date	<u>[Signature]</u> John F. Sullivan, III, PE, Division Administrator Federal Highway Administration
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PROJECT COMMITMENTS:

**Wake County
Bridge No. 318 on SR 1321
Over Lake Johnson
Federal Aid Project No. BRZ-1321(4)
W.B.S. No. 42289.1.1
T.I.P. No. B-5130**

Design, Construction Staff – Neuse River Buffer Rules

Neuse River Buffer Rules are applicable for this project.

Roadway and Structure Design Units – Bike and Pedestrian Accommodations

This project will include bicycle in the clear deck width and a multi-use trail along the eastern side of the project. The plans shall reflect the appropriate cross section and barrier and rail types.

Roadway Design Unit – Municipal Agreement – Raleigh to pay betterment cost

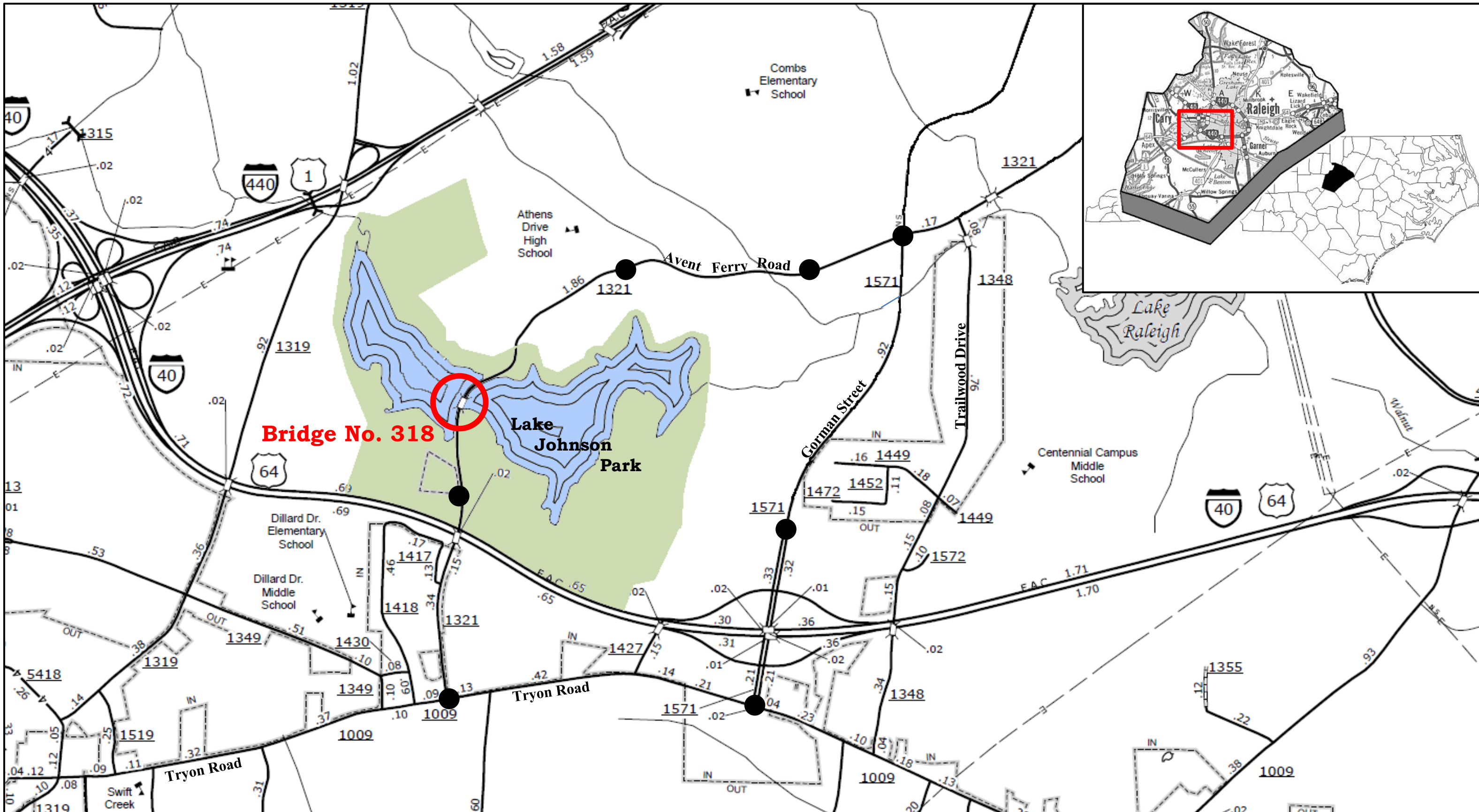
In addition to any normal costs addressed in the municipal agreement, the agreement shall reflect that the City of Raleigh has agreed to bear the cost to upgrade from a sidewalk to a multi-use trail. Based upon the preliminary design comparison, the amount to be borne by Raleigh would be \$400,000.

PDEA Natural Environment Section – Northern long eared bat


US Fish and Wildlife Service (USFWS) proposal for listing the northern long-eared bat (*Myotis septentrionalis*) as an endangered species was published in the Federal Register in October 2013. The listing will become effective on or before April 2015. Furthermore, this species is included in USFWS's current list of protected species for Wake County. NCDOT is working closely with the USFWS to understand how this proposed listing may impact NCDOT projects. NCDOT will continue to coordinate appropriately with USFWS to determine if this project will incur potential effects to the northern long-eared bat, and how to address these potential effects, if necessary.

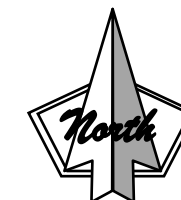
PDEA - Project Development – LWCF 6(f)

NCDOT is currently working with the City of Raleigh to develop 6(f) documentation and mitigation. Documentation that 6(f) has been satisfied will be provided in a construction consultation with FHWA prior to project let.



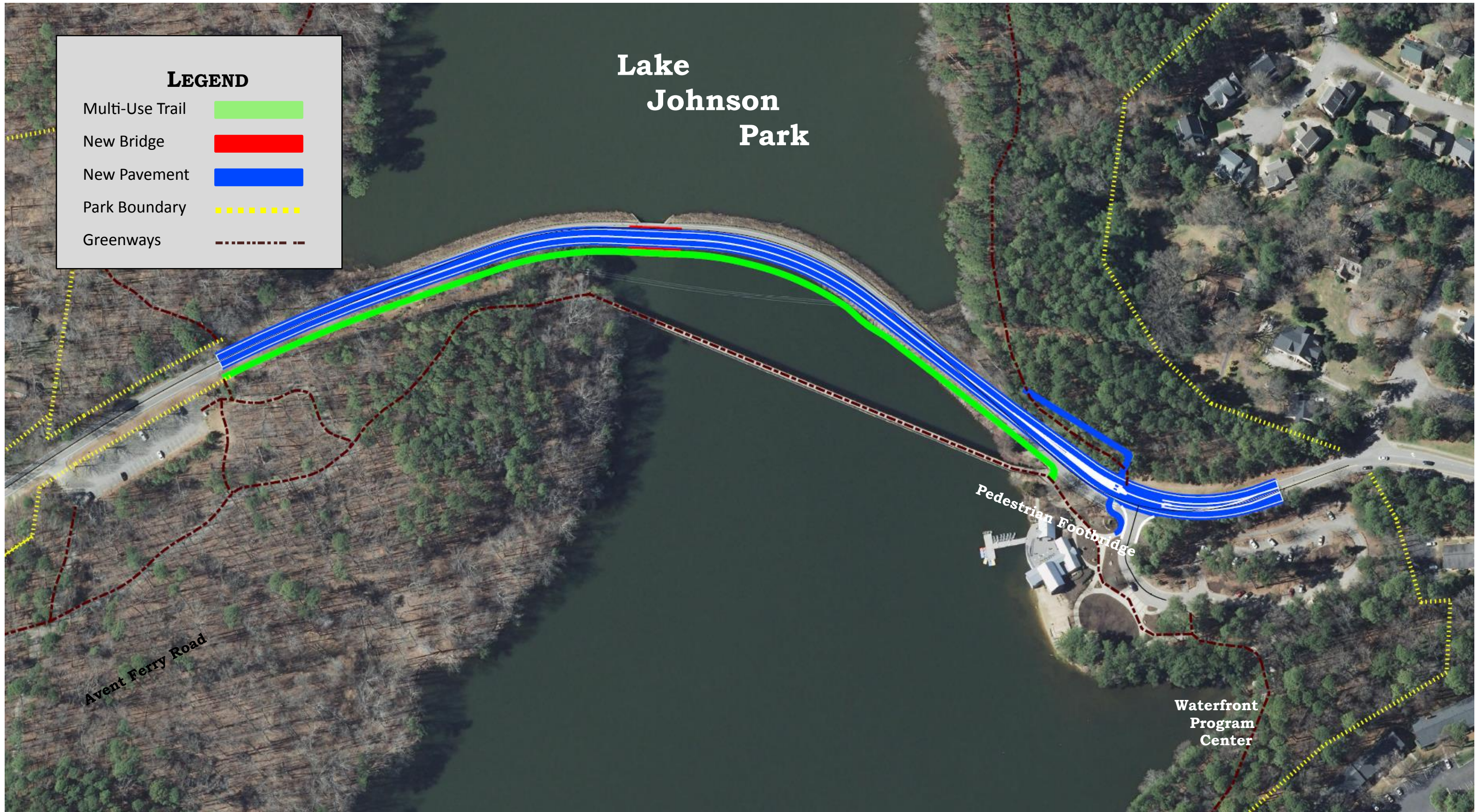
B-5130 - Replace Bridge No. 318 on Avent Ferry Road (SR 1321) over Lake Johnson in Wake County, North Carolina


Studied Detour Route



**Figure 1
Vicinity Map**





B-5130 - Replace Bridge No. 318 on the Existing Location

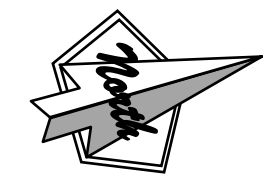
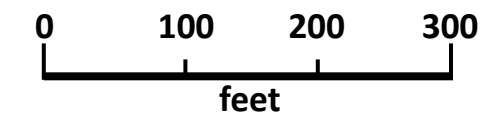


Figure 2
Preferred Alternative



RECEIVED
Division of Highways

JUN - 9 2009

Preconstruction
Project Development and
Environmental Analysis Branch

North Carolina Department of Cultural Resources
State Historic Preservation Office

Peter B. Sandbeck, Administrator

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

Office of Archives and History
Division of Historical Resources
David Brook, Director

June 5, 2009

MEMORANDUM

TO: Tracy Walter
Project Development and Environmental Analysis
NCDOT Bridge Unit

FROM: Peter Sandbeck *Dist for Peter Sandbeck*

SUBJECT: Bridge 318 on SR 1321 over Lake Johnson, B-5130, Wake County, ER 09-1270

Thank you for your letter of May 27, 2009, 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



City of Raleigh
Parks, Recreation and Cultural Resources

4/23/2015

John Williams
Project Development and Environmental Analysis
NC Department of Transportation
1548 Mail Service Center
Raleigh NC 27699-1548

Dear Mr. Williams,

After evaluation of the proposals for NCDOT's project to replace the Avent Ferry Road Bridge over Lake Johnson, the City of Raleigh Parks, Recreation and Cultural Resources Department find the impact from this proposed project will not negatively affect the features, attributes or functions of the park.

Sincerely,

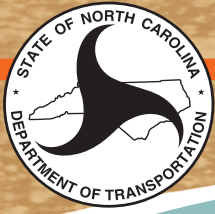
A handwritten signature in black ink, appearing to read "Diane Sauer".

Diane Sauer
Director
City of Raleigh
Parks, Recreation and Cultural Resources Department



Parks,
Recreation *and*
Cultural Resources
parks.raleighnc.gov

P.O. Box 590, Raleigh, NC 27602 | 919.996.3285 | parks.raleighnc.gov



Bridge Replacement Project

State Transportation Improvement Program Project No. B-5130

April 24, 2014 Public Meeting

ADVENTIST CHRISTIAN ACADEMY OF RALEIGH

4805 Dillard Drive, Raleigh NC 27606

4:00pm—7:00 pm

For additional information concerning this project, or provide comment concerning this project, please contact:

Mr. Tracy Walter
Project Planning Engineer
(919) 707-6177
twalter@ncdot.gov

1548 Mail Service Center
Raleigh, NC 27699-1548

Construction anticipated
to begin in 2016

NCDOT is in the planning stage for the replacement of Bridge No. 318 over Lake Johnston on Avent Ferry Road (SR 1321). The existing bridge is proposed to be replaced on an alignment which is shifted slightly to the southeast with a bridge of similar length. The proposed structure will consist of two lanes; one in each direction, as well as bicycle lanes and sidewalks. The proposed cross section will extend the length of the existing causeway which will allow for the sidewalks to terminate at existing trail crossings.

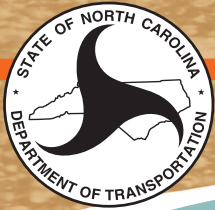
During construction Avent Ferry Road will be closed to pedestrian and vehicular traffic. Traffic will be maintained off-site during construction using Tryon Road and Gorman Street.

The project will require acquisition of park property protected by Section 4(f) of the Department of Transportation Act of 1966 as well as Section 6(f) of the Land and Water Conservation Fund Act of 1965, as amended. NCDOT is seeking a de minimis determination for the Section 4 (f) and Section 6(f) impacts.

NCDOT will provide auxiliary aids and services under the Americans with Disabilities Act for disabled persons who want to participate in this meeting. Anyone requiring special services should contact Mr. Walter as early as possible so that arrangements can be made.

Persons who speak Spanish and do not speak English, or have a limited ability to read, speak, or understand English, may receive interpretive services upon request prior to the meeting by calling (800) 481-6494.

Connecting people and places in North Carolina — safely and efficiently, with accountability and environmental sensitivity.



Bridge Replacement Project

State Transportation Improvement Program Project No. B-5130

April 24, 2014 Public Meeting

ADVENTIST CHRISTIAN ACADEMY OF RALEIGH

4805 Dillard Drive, Raleigh NC 27606

4:00pm—7:00 pm

For additional information concerning this project, or provide comment concerning this project, please contact:

Mr. Tracy Walter
Project Planning Engineer
(919) 707-6177
twalter@ncdot.gov

1548 Mail Service Center
Raleigh, NC 27699-1548

Construction anticipated
to begin in 2016

NCDOT is in the planning stage for the replacement of Bridge No. 318 over Lake Johnston on Avent Ferry Road (SR 1321). The existing bridge is proposed to be replaced on an alignment which is shifted slightly to the southeast with a bridge of similar length. The proposed structure will consist of two lanes; one in each direction, as well as bicycle lanes and sidewalks. The proposed cross section will extend the length of the existing causeway which will allow for the sidewalks to terminate at existing trail crossings.

During construction Avent Ferry Road will be closed to pedestrian and vehicular traffic. Traffic will be maintained off-site during construction using Tryon Road and Gorman Street.

The project will require acquisition of park property protected by Section 4(f) of the Department of Transportation Act of 1966 as well as Section 6(f) of the Land and Water Conservation Fund Act of 1965, as amended. NCDOT is seeking a de minimis determination for the Section 4 (f) and Section 6(f) impacts.

NCDOT will provide auxiliary aids and services under the Americans with Disabilities Act for disabled persons who want to participate in this meeting. Anyone requiring special services should contact Mr. Walter as early as possible so that arrangements can be made.

Persons who speak Spanish and do not speak English, or have a limited ability to read, speak, or understand English, may receive interpretive services upon request prior to the meeting by calling (800) 481-6494.

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Bridge Replacement Project

State Transportation Improvement Program Project No. B-5130

Minor Change in Design

For additional information concerning this project, or provide comment concerning this project, please contact:

Mr. John Williams
Project Planning Engineer
(919) 707-6178
jlwilliams@ncdot.gov

1548 Mail Service Center
Raleigh, NC 27699-1548

**Construction anticipated
to begin in
September 2017**

Since the public meeting in April of 2014 NCDOT has been developing and coordinating the designs with staff from the City of Raleigh. We've had two design challenges to work through which have required a minor modifications in the design. The first challenge was poor soil conditions on the upstream side of the existing bridge and causeway. As presented in 2014 the design would have required the very expensive removal of that poor soil driving the costs beyond the budgeted amount. This was resolved by shifting the alignment a little bit downstream and by the use of retaining walls to stay on the existing causeway as much as possible.

The second challenge was treating storm water runoff from the roadway before it enters the lake. As presented in 2014 the design would have included sidewalks on either side of the bridge and causeway. This would mean curb and gutter on either side and the grades and length of roadway on the causeway would not allow for getting the water to a place to easily treat it. This was resolved by taking away the sidewalks instead including a multi-use trail on east side. By doing this, curb and gutter is not required which allows the water to be treated by going through a grass shoulder before entering the lake. A portion of the design that remains the same is that the lanes on the roadway will still be wide enough to accommodate bicycles as well as vehicles.

Construction on this project is scheduled to begin September 2017. Unfortunately this will overlap with the replacement of the bridge on Lake Dam Road. It is however necessary so that both projects are complete before construction on the widening of the I-440 from Walnut St. to Wade Avenue begins mid-2018.

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