# Type I or II Categorical Exclusion Action Classification Form

STIP Project No.	B-5717
WBS Element	45673.1.2
Federal Project No.	N/A

#### A. Project Description:

The North Carolina Department of Transportation (NCDOT) proposes to replace Bridges 400109 and 400121 on East Gate City Boulevard/ E. Lee Street (SR 4240) over South Buffalo Creek in Guilford County. Refer to Figure 1, Project Vicinity Map.

Bridge Number 400109 is 200 feet long with a deck width of 32.25 feet. The structure is reinforced concrete deck girders with cast-in-place concrete substructure and steel piles. Bridge Number 400121 is 200 feet long with a deck width of 33.3 feet. The structure is steel beams with precast concrete piles and cast-in-place concrete substructure.

The NCDOT proposes to construct two 215-foot-long three span structures, each with a minimum roadway width of 33 feet. The new structures will include two lanes at 12 feet wide, as well as bike lanes and sidewalks, each at 5.5 feet wide. The bridges will be replaced-in-place sequentially while maintaining two-way traffic on one bridge during construction.

#### B. Description of Need and Purpose:

The purpose of the project is to replace Bridge 400109 (SR 4240 EB) and Bridge 400121 (SR 4240 WB). Bridge 400109 was built in 1957 and was previously structurally deficient. It has had maintenance performed and is now considered functionally obsolete. Bridge 400121 (SR 4240 WB) was built in 1964 and is structurally deficient due to a superstructure and substructure rating of 4 out of 9. The bridge replacements will improve active transportation system linkages.

C. Categorical Exclusion Action Classification:

#### Type I(A) - No Ground Disturbance or Limited Disturbance within the Operational ROW

#### D. <u>Proposed Improvements:</u>

Bridge rehabilitation, reconstruction or replacement or the construction of grade separation to replace existing at-grade railroad crossings, if the actions meet the constraints in 23 CFR 771.117(e)(1-6).

NOTE: The following Type I(C) Actions (NCDOT-FHWA 2019 CE Agreement, Appendix A) only require completion of Sections A through D to substantiate and document the CE classification: 1, 5, 8 (signs and pavement markings only), 11, 13, 14, 15, 16, 17, 19, and 20; or several other Type I Action subcategories identified in past NCDOT-FHWA CE Programmatic Agreements (see Appendix D). **Pre-approval as a CE does not exempt activities from compliance with other federal environmental laws.** 

#### Special Project Information:

Alternative Analysis: In addition to the No Build Alternative, two build alternatives were considered.

No Build Alternative: No changes to the existing bridges and the need would not be addressed.

**Alternative 1:** The proposed replacement bridges would include two lanes, a 12-foot inner lane and 14-foot outer lane. A five-foot wide sidewalk is proposed along the outer lane of Bridge 400109. The bridges would be replaced-in-place with median crossovers to maintain traffic on-site throughout construction.

**Alternative 2:** Alternative 2 would replace the bridges in-place with median crossovers to maintain traffic on-site throughout construction. To accommodate the proposed South Buffalo Greenway under the bridge, an increased grade is proposed. The City would be responsible for a cost-share that increases the cost of this alternative. The City indicated that they do not have funding for the cost-share at this time. The replacement bridges would include two 12-foot lanes with a five-foot bike lane and a five-foot sidewalk. The hydraulic analysis indicated the increased grade proposed in Alternative 2 may result in adverse flooding effects.

**Selected Preferred Hybrid Alternative:** The selected alternate provides two lanes, a five-foot bicycle lane, and five-foot sidewalks in each direction. It does not raise the roadway grade to accommodate future greenway trail access under the bridge.

The Selected Alternative was chosen because it best fulfills the purpose and need for the proposed project. The Selected Alternative minimizes environmental and property impacts by maintaining the existing vertical alignment.

#### **Estimated Costs:**

	Alternative 1	Alternative 2	Preferred Hybrid Alternative
Roadway Construction Cost <sub>1</sub>	\$6,400,000	\$7,400,000	\$7,100,000
ROW Cost <sub>2</sub>	\$99,736	\$99,961	\$99,961
Utility Relocation and Construction Cost <sub>1</sub>	\$344,768	\$344,768	\$344,768
Alternate Total	\$6,844,504	\$7,844,729	\$7,544,729

<sup>1</sup> Data is based on cost estimate completed February 2021. <sup>2</sup> Data is from July 2019.

# **Estimated Traffic:**

Current Year (2020):	18,184 vpd
Design Year (2040):	20,100 vpd
Duals:	(4,1)

Summary of Impacts				
	Preferred Hybrid Alternative			
Length (ft)	1,299	1,299	1,711	
Streams (If)	25.7	26.8	0.0	
Wetlands (ac)	0.70	0.75	0.52	
100-year, excluding floodway (ac)	2.04	2.14	1.87	
Floodway	0.40	0.45	0.35	
500-year	0.76	0.78	0.71	
Biotic Communities (Unclassified-existing road) (ac)	3.59	3.74	3.84	
Biotic Communities (Maintained Disturbed) (ac)	3.32	3.62	3.62	
Biotic Communities (Piedmont Levee Forest) (ac)	1.25	1.33	1.07	
Parcels	6	5	5	
Relocations	0	0	0	

#### Summary of Impacts:

**Detour Route:** Replace-in-place construction. Traffic will be maintained on site during construction.

#### **Route Information:**

	Federal	Road Characteristics	
Route	Functional Classification	Current - 2021	MTP Proposed – by 2040
Gate City Blvd	Other Principal Arterial	4-lane divided	4-lane divided
Cedar Park Rd	Local	2-lane undivided	2-lane undivided

**Public Involvement:** No public meetings were held. The property owner contact database on file for this project indicates the following individuals/organizations were each sent a design survey letter by Stantec who performed the surveys for NCDOT in mid-November 2016:

Contacts				
RICHARDGREENE	M M FOWLER INC	NORTH CAROLINA STUDENT HOUSING LLC		
BUILDING SOLUTIONS	NC DEPT OF	PENSKE TRUCK		
DEVELOPMENT INC	TRANSPORTATION	LEASING CO LP		
CITY OF GREENSBORO	NORTH CAROLINA A & T	STATE OF NORTH		
	STATE UNIVERSITY	CAROLINA		

**Other Agency Comments:** A start of study letter was sent to state and local agencies on February 28, 2019. The following comments were received:

Water Resources Department City of Greensboro (March 12, 2019): Permits for wetlands may need to be acquired. City-owned water and sanitary sewer utilities would need to be evaluated closer to the letting of the project in order to repair, replace, or relocate. *Response*: Comment has been noted.

North Carolina Department of Environment and Natural Resource (April 4, 2019): South Buffalo Creek is listed for impaired use for aquatic life so there is concern with sediment and erosion impacts that could result from the project. Road design plans must provide treatment of stormwater runoff through best management practices. The project falls within the Jordan Lake Basin. Riparian buffer impacts shall be avoided and minimized to the greatest extent possible pursuant to 15A NCAC 2B.0267. *Response*: Comment has been noted.

North Carolina Wildlife Resources Commission (April 3, 2019): Design considerations for a future greenway should be taken into consideration.

*Response*: The City confirmed that plans for a greenway are not being considered during this time. Therefore, the bridges will not be raised to accommodate the greenway; raising the bridge (increasing the approach grade) would also lead to adverse hydraulic effects.

North Carolina Wildlife Resources Commission (April 3, 2019): Mitigation site is missing from the environmental features map.

Response: Impacts to the mitigation site will be avoided.

United States Environmental Protection Agency (April 15, 2019): South Buffalo Creek is impaired, and wetlands are nearby.

Response: Comment has been noted.

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E. Project Impact Criteria Checklists:

F2. Ground Distu	rbing Actions – Typ	e I (Appendix A) &	Type II (Appendix B)
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Proposed improvement(s) that fit Type I Actions (NCDOT-FHWA CE Programmatic Agreement, Appendix A) including 2, 3, 6, 7, 9, 12, 18, 21, 22 (ground disturbing), 23, 24, 25, 26, 27, 28, &/or 30; &/or Type II Actions (NCDOT-FHWA CE Programmatic Agreement, Appendix B) answer the project impact threshold questions (below) and questions 8 – 31.

- If any question 1-7 is checked "Yes" then NCDOT certification for FHWA approval is required.
  - If any question 8-31 is checked "Yes" then additional information will be required for those questions in Section G.

PROJECT IMPACT THRESHOLDS (FHWA signature required if any of the questions 1-7 are marked "Yes".)		Yes	No
1	Does the project require formal consultation with U.S. Fish and Wildlife Service (USFWS) or National Marine Fisheries Service (NMFS)?		J
2	Does the project result in impacts subject to the conditions of the Bald and Golden Eagle Protection Act (BGEPA)?		V
3	Does the project generate substantial controversy or public opposition, for any reason, following appropriate public involvement?		
4	Does the project cause disproportionately high and adverse impacts relative to low- income and/or minority populations?		$\checkmark$
5	Does the project involve a residential or commercial displacement, or a substantial amount of right of way acquisition?		
6	Does the project require an Individual Section 4(f) approval?		$\mathbf{\nabla}$
7	Does the project include adverse effects that cannot be resolved with a Memorandum of Agreement (MOA) under Section 106 of the National Historic Preservation Act (NHPA) or have an adverse effect on a National Historic Landmark (NHL)?		V
If any question 8-31 is checked "Yes" then additional information will be required for those questions in Section F.			
Othe	er Considerations	Yes	No
8	Is an Endangered Species Act (ESA) determination unresolved or is the project covered by a Programmatic Agreement under Section 7?	A	
9	Is the project located in anadromous fish spawning waters?		$\mathbf{\nabla}$
10	Does the project impact waters classified as Outstanding Resource Water (ORW), High Quality Water (HQW), Water Supply Watershed Critical Areas, 303(d) listed impaired water bodies, buffer rules, or Submerged Aquatic Vegetation (SAV)?	$\checkmark$	
11	Does the project impact Waters of the United States in any of the designated mountain trout streams?		$\mathbf{N}$
12	Does the project require a U.S. Army Corps of Engineers (USACE) Individual Section 404 Permit?		$\mathbf{\overline{\mathbf{A}}}$
13	Will the project require an easement from a Federal Energy Regulatory Commission (FERC) licensed facility?		$\mathbf{\overline{\mathbf{A}}}$

Othe	er Considerations for Type I and II Ground Disturbing Actions (continued)	Yes	No
14	Does the project include a Section 106 of the National Historic Preservation Act (NHPA) effects determination other than a No Effect, including archaeological remains?		V
15	Does the project involve GeoEnvironmental Sites of Concerns such as gas stations, dry cleaners, landfills, etc.?		$\mathbf{V}$
16	Does the project require work encroaching and adversely affecting a regulatory floodway or work affecting the base floodplain (100-year flood) elevations of a water course or lake, pursuant to Executive Order 11988 and 23 CFR 650 subpart A?	V	
17	Is the project in a Coastal Area Management Act (CAMA) county and substantially affects the coastal zone and/or any Area of Environmental Concern (AEC)?		$\checkmark$
18	Does the project require a U.S. Coast Guard (USCG) permit?		$\checkmark$
19	Does the project involve construction activities in, across, or adjacent to a designated Wild and Scenic River present within the project area?		$\checkmark$
20	Does the project involve Coastal Barrier Resources Act (CBRA) resources?		$\checkmark$
21	Does the project impact federal lands (e.g. U.S. Forest Service (USFS), USFWS, etc.) or Tribal Lands?		$\checkmark$
22	Does the project involve any changes in access control or the modification or construction of an interchange on an interstate?		$\mathbf{V}$
23	Does the project have a permanent adverse effect on local traffic patterns or community cohesiveness?		$\checkmark$
24	Will maintenance of traffic cause substantial disruption?		$\mathbf{V}$
25	Is the project inconsistent with the STIP, and where applicable, the Metropolitan Planning Organization's (MPO's) Transportation Improvement Program (TIP)?		$\checkmark$
26	Does the project require the acquisition of lands under the protection of Section 6(f) of the Land and Water Conservation Act, the Federal Aid in Fish Restoration Act, the Federal Aid in Wildlife Restoration Act, Tennessee Valley Authority (TVA), Tribal Lands, or other unique areas or special lands that were acquired in fee or easement with public-use money and have deed restrictions or covenants on the property?		V
27	Does the project involve Federal Emergency Management Agency (FEMA) buyout properties under the Hazard Mitigation Grant Program (HMGP)?		$\checkmark$
28	Does the project include a <i>de minimis</i> or programmatic Section 4(f)?		$\checkmark$
29	Is the project considered a Type I under the NCDOT Noise Policy?		$\mathbf{\nabla}$
30	Is there prime or important farmland soil impacted by this project as defined by the Farmland Protection Policy Act (FPPA)?		$\checkmark$
31	Are there other issues that arose during the project development process that affected the project decision?		$\mathbf{\nabla}$

F. Additional Documentation as Required from Section E (ONLY for questions marked 'Yes'): Question 8: According to the NRTR, Schweinitz's sunflower has a Biological Conclusion of Unresolved. Habitat for Schweinitz's sunflower is present within the study area along the maintained road shoulders and utility corridors. No occurrences of Schweinitz's sunflower were found during surveys conducted outside of the recommended survey window. A review of NHP records on December 27, 2019, indicates no known occurrences within 1.0 mile of the study area. The Schweinitz's sunflower was added to the list of protected species after the completion of the original NRTR, and outside the survey window for the NRTR Addendum. Surveys for Schweinitz's sunflower will be conducted during the flowering season of 2021.

The US Fish and Wildlife Service has revised the previous 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. Although this programmatic covers Divisions 1-8, NLEBs are currently only known in 19 counties, but may potentially occur in 11 additional counties within Divisions 1-8. Since Guilford County is not included as one of these 30 counties, the Biological conclusion is May Affect, Not Likely to Adversely Affect, and the two conservation measures found in the PBO will not apply to this project. The PBO will ensure compliance with Section 7 of the Endangered Species Act for ten years (effective through December 31, 2030).

**Question 10:** South Buffalo Creek is class WS-V; NSW; waters of the State. South Buffalo Creek is on the North Carolina 2018 Final 303(d) list for impaired use for fish community and for benthos exceeding criteria. The project falls within the Jordan Lake Basin and the Jordan Lake Water Supply Watershed Riparian Buffer Rules apply. New development activities located in the protected 50-foot wide riparian areas within the basin shall be limited to "uses" identified within and constructed in accordance with 15A NCAC.02B.0295.

**Question 16:** 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).

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.

## G. Project Commitments (attach as Green Sheet to CE Form):

# NCDOT PROJECT COMMITMENTS

STIP Project No. **B-5717** Replace Bridges 400109 and 400121 on East Gate City Boulevard/ E. Lee Street (SR 4240) over South Buffalo Creek Guilford County Federal Aid Project No. N/A WBS Element 45673.1.2

# NCDOT Environmental Analysis Unit (EAU) / Biological Surveys Group -

#### Schweinitz's Sunflower

According to the NRTR, Schweinitz's sunflower (federally endangered) has a Biological Conclusion of Unresolved. Habitat for Schweinitz's sunflower is present within the study area along the maintained road shoulders and utility corridors. No occurrences of Schweinitz's sunflower were found during surveys conducted outside of the recommended survey window. A review of NHP records on December 27, 2019, indicates no known occurrences within 1.0 mile of the study area. The Schweinitz's sunflower was added to the list of protected species after the completion of the original NRTR, and outside the survey window for the NRTR Addendum. Surveys for Schweinitz's sunflower will be conducted during the flowering season of 2021.

#### NCDOT Division 7 – Continued Coordination with Local Officials

NCDOT should coordinate with City of Greensboro Emergency Services (Katie Buckner, GIS Analyst | 336-574-4089) at least one month prior to construction.

NCDOT should coordinate with City of Greensboro Public Schools (Beatrice Cheely, TMIS Coordinator, Guilford County Schools | 336-370-8920) at least one month prior to construction.

#### NCDOT Hydraulics – Buffer Rules

The Jordan Lake Water Supply Watershed Buffer Rule applies to this project.

#### NCDOT Hydraulics & Division 7 – FEMA Coordination

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).

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.

#### NCDOT Division 7 – Geodetic Markers

There is a Geodetic survey marker on the northeast corner of the existing bridge that will be impacted by this project. The NC Geodetic Survey will be contacted one month prior to the start of construction.

#### NCDOT Division 7 – Mitigation Site

On April 3, 2019, the North Carolina Wildlife Resources Commission provided a comment related to the absence of a mitigation site in the environmental features map. Impacts to the mitigation site will be avoided.

# H. Categorical Exclusion Approval:

STIP Project No.	B-5717
WBS Element	45673.1.2
Federal Project No.	N/A

#### Prepared By:

. ,	DocuSigned by:
5/18/2021	Kory A Wilmot
Date	Kory Wilmot, Senior Urban Planner AECOM
Prepared For:	NCDOT Structures Management Unit
<b>Reviewed By:</b> 5/17/2021	Phil Harris
Date	Phil Harris, Environmental Analysis Unit Head NCDOT
Approve	<ul> <li>If NO grey boxes are checked in Section F (pages 2 and 3), NCDOT approves the Type I or Type II Categorical Exclusion.</li> </ul>
Certifie	<ul> <li>If ANY grey boxes are checked in Section F (pages 2 and 3), NCDOT certifies the Type I or Type II Categorical Exclusion for FHWA approval.</li> <li>If classified as Type III Categorical Exclusion.</li> </ul>
5/17/2021	Evin Fischer
Date	Kevin Fischer, Assistant State Structures Engineer NCDOT

<u>FHWA Approved:</u> For Projects Certified by NCDOT (above), FHWA signature required.

	N/A	
Date	for John F. Sullivan, III, PE, Division Administrator	
	Federal Highway Administration	

Note: Prior to ROW or Construction authorization, a consultation may be required (please see Section VII of the NCDOT-FHWA CE Programmatic Agreement for more details).

# Appendix:

Vicinity Map





## Agency Comments

#### Water Resources Department City of Greensboro (March 12, 2019)

The environmental issues that we note include adhering to section 30-12-3.9 of the LDO regarding stream buffers for South Buffalo Creek, wetland mitigation as delineated in the attached project data sheet, floodplain development permits for any work in the designated floodplain, and a potential no-rise certification for any fill or structures installed in the designated floodway. Considering this is an NCDOT project, I believe these permits would need to be acquired from the State, but I am not fully certain on that. There is also city owned water and sanitary sewer utilities within the project limit that we would evaluate in order to repair/replace or relocate that would be handled closer to the letting of the project.



North Carolina Department of Environment and Natural Resources (April 4, 2019) Further investigations at a higher resolution should be undertaken to verify the presence of additional streams and/or jurisdictional wetlands in the area. If any jurisdictional areas are identified, the Division of Water Resources requests that the following environmental issues for the proposed project are considered:

#### **Project Specific Comments:**

1. South Buffalo Creek are class WS-V; NSW waters of the State. The NCDWR is very concerned with sediment and erosion impacts that could result from this project. The NCDWR recommends that highly protective sediment and erosion control BMPs be implemented to reduce the risk of nutrient runoff to South Buffalo Creek. Additionally, to meet the requirements of NCDOT's NPDES permit NCS0000250, the NCDWR requests that road design plans provide treatment of the stormwater runoff through best management practices as detailed in the most

recent version of the North Carolina Department of Transportation Stormwater Best Management Practices Toolbox manual.

2. South Buffalo Creek are class WS-V; NSW; 303(d) waters of the State. South Buffalo Creek is on the 303(d) list for impaired use for aquatic life. The NCDWR is very concerned with sediment and erosion impacts that could result from this project. The NCDWR recommends that the most protective sediment and erosion control BMPs be implemented in accordance with *Design Standards in Sensitive Watersheds* (15A NCAC 04B.0124) to reduce the risk of further impairment to South Buffalo Creek. Additionally, to meet the requirements of NCDOT's NPDES permit NCS0000250, the NCDWR requests that road design plans provide treatment of the storm water runoff through best management practices as detailed in the most recent version of the *North Carolina Department of Transportation Stormwater Best Management Practices Toolbox* manual.

3. This project is within the Jordan Lake Basin. Riparian buffer impacts shall be avoided and minimized to the greatest extent possible pursuant to 15A NCAC 2B.0267. New development activities located in the protected 50-foot wide riparian areas within the basin shall be limited to "uses" identified within and constructed in accordance with 15A NCAC.02B.0295. Buffer mitigation may be required for buffer impacts resulting from activities classified as "allowable with mitigation" within the "Table of Uses" section of the Buffer Rules or require a variance under the Buffer Rules. A buffer mitigation plan, including use of the North Carolina Division of Mitigation. Buffer mitigation may be required for buffer impacts resulting from activities classified as "allowable of Uses" section of the Suffer impacts resulting from activities classified as "allowable with mitigation" within the "Table of Uses" section of the Buffer Rules or require a variance under the Buffer mitigation plan, including use of the North Carolina Division of Mitigation Services, must be provided to the NCDWR prior to approval of the Water Quality Certification. Buffer mitigation" within the "Table of Uses" section of the Buffer Rules or require a variance under the Buffer Rules. A buffer mitigation plan, coordinated with the North Carolina Division of Mitigation Services, must be provided to the NCDWR prior to approval of the Water Quality Certification.

# **General Project Comments:**

- The environmental document should provide a detailed and itemized presentation of the proposed impacts to wetlands and streams with corresponding mapping. If mitigation is necessary as required by 15A NCAC 2H.0506(h), it is preferable to present a conceptual (if not finalized) mitigation plan with the environmental documentation. Appropriate mitigation plans will be required prior to issuance of a 401 Water Quality Certification.
- 2. Environmental impact statement alternatives shall consider design criteria that reduce the impacts to streams and wetlands from storm water runoff. These alternatives shall include road designs that allow for treatment of the storm water runoff through best management practices as detailed in the most recent version of the *North Carolina Department of Transportation Stormwater Best Management Practices Tool* box manual, such as grassed swales, buffer areas, preformed scour holes, retention basins, etc.
- 3. After the selection of the preferred alternative and prior to an issuance of the 401 Water Quality Certification, the NCDOT is respectfully reminded that they will need to demonstrate the avoidance and minimization of impacts to wetlands (and streams) to the maximum extent practical. In accordance with the Environmental Management Commission's Rules (15A NCAC 2H.0506[h]), mitigation will be required for impacts of greater than 1 acre to wetlands. If mitigation is required, the mitigation plan shall be designed to replace appropriate lost functions and values. North Carolina Division of Mitigation Services may be available for assistance with wetland mitigation.
- 4. In accordance with the Environmental Management Commission's Rules (15A NCAC 2H.0506[h]), mitigation will be required for impacts of greater than 300 linear feet to any perennial stream. If mitigation is required, the mitigation plan shall be designed to replace appropriate lost functions and values. The North Carolina Division of Mitigation Services may be available for assistance with stream mitigation.

- 5. Future documentation, including the 401 Water Quality Certification Application, shall continue to include an itemized listing of the proposed wetland and stream impacts with corresponding mapping.
- 6. The NCDWR is very concerned with sediment and erosion impacts that could result from this project. The 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.
- 7. An analysis of any anticipated cumulative and secondary impacts due to this project is required. The type and detail of analysis shall conform to the NC Division of Water Resource Policy on the assessment of secondary and cumulative impacts dated April 10, 2004.
- 8. The NCDOT is respectfully reminded that all impacts, including but not limited to, bridging, fill, excavation and clearing, and rip rap to jurisdictional wetlands, streams, and riparian buffers need to be included in the final impact calculations. These impacts, in addition to any construction impacts, temporary or otherwise, also need to be included as part of the 401 Water Quality Certification Application.
- 9. Where streams must be crossed, the NCDWR prefers that bridges are used in lieu of culverts. However, we realize that economic considerations often require the use of culverts. Please be advised that culverts should be countersunk to allow unimpeded passage by fish and other aquatic organisms. Moreover, in areas where high quality wetlands or streams are impacted, a bridge may prove to be preferable. When applicable, the NCDOT should not install the bridge bents in the creek, to the maximum extent practicable.
- 10. Whenever possible, the NCDWR 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.
- 11. 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, preformed scour holes, vegetated buffers, etc.) before entering the stream. To meet the requirements of NCDOT's NPDES permit NCS0000250, please refer to the most recent version of the *North Carolina Department of Transportation Stormwater Best Management Practices Toolbox* manual for approved measures.
- 12. Sediment and erosion control measures should not be placed in wetlands or streams.
- 13. Borrow/waste areas should avoid wetlands to the maximum extent practical. Impacts to wetlands in borrow/waste areas will need to be presented in the 401 Water Quality Certification and could precipitate compensatory mitigation.
- 14. The 401 Water Quality Certification application will need to specifically address the proposed methods for stormwater management. More specifically, stormwater shall not be permitted to discharge directly into streams or surface waters.
- 15. Based on the information presented in the document, the magnitude of impacts to wetlands and streams may require an application to the Corps of Engineers and corresponding 401 Water Quality Certification. Please be advised that a 401 Water Quality Certification requires satisfactory protection of water quality to ensure that water quality standards are met, and no wetland or stream uses are lost. Final permit authorization will require the submittal of a formal application by the NCDOT and written concurrence from the NCDWR. Please be aware that any approval will be contingent on appropriate avoidance and minimization of wetland and stream impacts to the maximum extent practical, the development of an acceptable stormwater management plan, and the inclusion of appropriate mitigation plans where appropriate.
- 16. 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.

- 17. 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.
- 18. Unless otherwise authorized, placement of culverts and other structures in waters and streams shall be placed below the elevation of the streambed by one foot for all culverts with a diameter greater than 48 inches, and 20 percent of the culvert diameter for culverts having a diameter less than 48 inches, to allow low flow passage of water and aquatic life. Design and placement of culverts and other structures including temporary erosion control measures shall not be conducted in a manner that may result in dis-equilibrium of wetlands or streambeds or banks, adjacent to or upstream and downstream of the above structures. The applicant is required to provide evidence that the equilibrium is being maintained if requested in writing by the NCDWR. If this condition is unable to be met due to bedrock or other limiting features encountered during construction, please contact the NCDWR for guidance on how to proceed and to determine whether a permit modification will be required.
- 19. If multiple pipes or barrels are required, they shall be designed to mimic natural stream cross section as closely as possible including pipes or barrels at flood plain elevation, floodplain benches, and/or sills may be required where appropriate. Widening the stream channel should be avoided. Stream channel widening at the inlet or outlet end of structures typically decreases water velocity causing sediment deposition that requires increased maintenance and disrupts aquatic life passage.
- 20. If foundation test borings are necessary; it shall be noted in the document. Geotechnical work is approved under General 401 Certification Number 3883/Nationwide Permit No. 6 for Survey Activities.
- 21. 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.
- 22. All work in or adjacent to stream waters shall be conducted in a dry work area. Approved BMP measures from the most current version of the 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.
- 23. While the use of National Wetland Inventory (NWI) maps, NC Coastal Region Evaluation of Wetland Significance (NC-CREWS) maps and soil survey maps are useful tools, their inherent inaccuracies require that qualified personnel perform onsite wetland delineations prior to permit approval.
- 24. Heavy equipment should be operated from the bank rather than in stream channels 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.
- 25. 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 should be properly designed, sized and installed.
- 26. Riparian vegetation (native trees and shrubs) shall be preserved to the maximum extent possible. Riparian vegetation must be reestablished within the construction limits of the project by the end of the growing season following completion of construction.

North Carolina Division of Parks and Recreation (March 7, 2019)

The North Carolina Division of Parks and Recreation (DPR) has no objections or comments. North Carolina Natural Heritage Program (March 5, 2019)

The NCNHP would like to provide what information we have on natural heritage resources in or near this project; however, as of October 2018, the NCNHP moved to a fee structure for this analysis and these are normally processed by the NCNHP at \$65/hour if the request is

submitted directly to the NCNHP. AECOM has a paid subscription to our Data Explorer (ncnhde.natureserve.org) which allows the subscribed user to perform proximity analysis at their convenience. The automated analysis functionality is included in AECOM's paid subscription and it appears Charles Benton in your office is the subscribed member and has access.

#### North Carolina Wildlife Resources Commission (April 3, 2019)

There is a mitigation site not identified in the Environmental features map. The site is located south of SR 4240 along South Buffalo Creek and an unnamed tributary. Impacts to this area should be avoided. Also, any design consideration for future greenway trails should also take into consideration the site boundary of the mitigation site as to not direct future greenway impacts into the mitigation site.

#### United States Environmental Protection Agency (April 15, 2019)

Waters of the United States: A review of the proposed project area shows the presence of one impaired waterbody, South Buffalo Creek. Based on GIS analysis of the National Wetlands Inventory, there are several acres of Freshwater Emergent wetlands located in the proposed project area as well. The EPA recommends that any contractor working on-site should use best management practices and should address any potential impacts to off-site streams and waterways. The EPA also recommends that site grading, excavation, and construction plans should include implementable measures to prevent erosion and sediment runoff from the project site during and after construction.

Consistent with Section 404 of the Clean Water Act, the project should avoid and minimize, to the maximum extent practicable, placement of fill into jurisdictional waters of the United States, which include wetlands and streams. Any fill material in waters of the United States will potentially require a permit authorization from the U.S. Army Corps of Engineers (COE). Any wetland or stream losses allowed under a COE Section 404 permit should be mitigated by the applicant. This mitigation can be designed and implemented by the applicant or procured by the purchase of wetland and/or stream mitigation credits from a commercial wetland mitigation bank. Wetland and stream mitigation can add considerable expense to any project, which is a good reason to avoid and minimize those impacts during the project planning phase.

#### North Carolina Department of Transportation (2019 and 2021)

NCDOT sent a tribal coordination letter to the Catawba Indian Nation concerning this project on December 20, 2019.

A tribal letter was sent to the Occaneechi Band of the Saponi Nation tribe on April 28, 2021.





**NO ARCHAEOLOGICAL SURVEY REQUIRED FORM** This form only pertains to ARCHAEOLOGICAL RESOURCES for this project. It is not

valid for Historic Architecture and Landscapes. You must consult separately with the Historic Architecture and Landscapes Group.



#### **PROJECT INFORMATION**

Project No:	B-5717 (UPDAT	Έ)	County	<i>v:</i>	Guilf	ord	
WBS No:	45673.1.2		Docun	ient:	MCC		
F.A. No:	N/A		Fundir	ıg:	🖂 St	ate	Federal
Federal Permit Requ	uired?	Yes	🗌 No	Permit Ty	vpe:	USACE	E (not specified)

**Project Description:** The NCDOT proposes to replace Bridge No. 121 on SR 4240 (Westbound Lane) (E. Lee Street) over South Buffalo Creek in the City of Greensboro, Guilford County. Bridge No. 121 was built in 1964 and is considered to be structurally deficient and functionally obsolete. <u>This project now includes the replacement of Bridge No. 109 on SR 4240 (Eastbound Lane) (E. Lee Street) over South Buffalo Creek.</u> The Proposed Study Area for the project will be centered on both bridges and now measures about 1,938 feet in length and about 250 feet in width with a bump-out along SR 3140 (Cedar Park Road). Overall, the new Study Area will encompass about 12.06 acres, inclusive of the existing roadways and structures to be replaced. <u>An updated Study Area has been submitted for review. This PA form shall serve as an addendum to the original PA forms completed in February 2016 and August 2016.</u>

#### SUMMARY OF CULTURAL RESOURCES REVIEW

#### Brief description of review activities, results of review, and conclusions:

A map review and site file search were originally conducted at the Office of State Archaeology (OSA) on Tuesday, February 2, 2016. Based on the information compiled at that time, an additional review and file search at OSA was not necessary. As a result of the original review, an archaeological survey was recommended and conducted for this project. Although one (1) unassessed archaeological site (31GF24) had been recorded in the Northwest Quadrant of the proposed project, no evidence of that particular site was recorded during the course of the archaeological survey. No additional archaeological sites have been recorded within one (1) mile of the proposed project since the initial review and survey. Digital copies of HPO's maps (McLeansville Quadrangle) as well as the HPOWEB GIS Service (http://gis.ncdcr.gov/hpoweb/) were reviewed once more on Monday, April 8, 2019. There are no known historic architectural resources located within the expanded Study Area for which intact archaeological deposits would be anticipated within the footprint of the proposed project. In addition, topographic maps, historic maps (NCMaps website), USDA soil survey maps, and aerial photographs were utilized and inspected to gauge environmental factors that may have contributed to historic or prehistoric settlement within the project limits, and to assess the level of modern, slope, agricultural, hydrological, and other erosive-type disturbances within and surrounding the new Study Area.

# Brief Explanation of why the available information provides a reliable basis for reasonably predicting that there are no unidentified historic properties in the APE:

This is now a State-funded project that will require a Federal permit; it was initially a federally-funded project. Temporary and/or permanent easements should not be needed, but the need for additional ROW was not conveyed as part of the new request for review. However, the dimensions of the new Study Area

Project Tracking No.:



will capture any ground-disturbing activities beyond NCDOT's existing ROW. At this time, we are in compliance with NC GS 121-12a, since there are no eligible (i.e. National Register-listed) archaeological resources located within the project's new Study Area that would require our attention. From an environmental perspective, the new Study Area is still located in an industrial section of Greensboro off of I-85 Business, straddles the floodplain of South Buffalo Creek, and is composed of Wehadkee silt loam (Wh) and Pits (Pt), a classification for areas where the original soil material has been removed or altered beyond recognition. In addition to the highly disturbed quality of the Pits (Pt) soil type, the poorly drained conditions of Wehadkee silt loam (Wh) would not be considered favorable for containing intact archaeological materials. A portion of the expanded Study Area now consists of Enon fine sandy loam, 6-10% slopes (EnC); however, a reconnaissance of the project area during the survey two years revealed a significant amount of disturbance and erosion within this area, as a result of the construction of Gateway Research Park. The entire Study Area still consists of poorly drained and highly disturbed soils. Preservation of archaeological materials within such soil types is likely to be poor. As noted in the August 2016 PA form, no artifactual evidence or stratigraphic evidence of Site 31GF24 was recovered or observed in the field. The Office of State Archaeology (OSA) has reviewed several projects within the vicinity of new Study Area for environmental compliance, including cell tower locations (CTs 01-0599 and 01-0600), residential development (ER 02-11141), improvements at the NC A&T State Farm (ER 02-9014), and transportation improvements (ER 03-2900). Citing a low probability for intact archaeological resources to be impacted by the proposed projects, OSA did not recommend an archaeological survey for any of these projects. Within five (5) miles of the Study Area, NCDOT's Archaeology Group has reviewed at least twenty (20) transportation-related projects for environmental compliance under the Programmatic Agreement (PA) with the State Historic Preservation Office (NC-HPO), including this very project. An archaeological survey was recommended and conducted for only one (1) of these projects, based on the presence of favorable topography and soil conditions crossed by various new location corridors. Only one (1) historic cemetery was documented as a result of that survey. Based on the nature of the proposed project, current soil conditions, and previous survey and review work, it is believed that the newly expanded Study Area, as depicted, is unlikely to contain intact and significant archaeological resources. No archaeological survey is required for this project. If design plans change or are made available prior to construction, then additional consultation regarding archaeology will be required. At this time, no further archaeological work is recommended. If archaeological materials are uncovered during project activities, then such resources will be dealt with according to the procedures set forth for "unanticipated discoveries," to include notification of NCDOT's Archaeology Group.

\*\*This project falls within a North Carolina County in which the following federally recognized Tribe(s) has expressed an interest: <u>Catawba Indian Nation</u>. It is recommended that you contact each federal agency involved with your project to determine their Section 106 Tribal consultation requirements. Please know that the <u>Occaneechi Band of the Saponi Nation</u>, a State-recognized tribe, has also expressed interest in activities within this county.

#### SUPPORT DOCUMENTATION

See attached:

Map(s) Previous Survey Info Photocopy of County Survey Notes Photos Other:

Correspondence

Project Tracking No.:



#### FINDING BY NCDOT ARCHAEOLOGIST

NO ARCHAEOLOGY SURVEY REQUIRED

Mohler NCDOT ARCHAEOLOGIST

April 8, 2019





Figure 1: McLeansville, NC (USGS 1952 [PR68]).



Project Tracking No. (Internal Use)

16-01-0126 Revised



# HISTORIC ARCHITECTURE AND LANDSCAPES **NO SURVEY REQUIRED FORM**

This form supercedes that dated 24 February 2016

This form only pertains to Historic Architecture and Landscapes for this project. It is not valid for Archaeological Resources. You must consult separately with the Archaeology Group.

**PROJECT INFORMATION** 

Project No:	B-5717	County:	Guilford
WBS No.:	45673.1.2	Document Type:	
Fed. Aid No:		Funding:	X State Federal
Federal Permit(s):	X Yes No	Permit Type(s):	USACE

Project Description: Replace Bridge Nos. 109 and 121 on SR 4240 (E. Gate City Boulevard) over South Buffalo Creek (no off-site detour specified in review request). Expanded study area received March 2019.

SUMMARY OF HISTORIC ARCHITECTURE AND LANDSCAPES REVIEW

DESCRIPTION OF REVIEW ACTIVITIES, RESULTS, AND CONCLUSIONS: HPOWeb reviewed on 23 February 2016/8 April 2019 and yielded no NR, SL, LD, DE, or SS properties in the Area of Potential Effects (APE). Guilford County current GIS mapping, aerial photography, and tax information indicated a partly developed, partly wooded APE with residential and commercial resources dating from the 1930s to the 2010s (viewed 23 February 2016/8 April 2019). The three, mid-twentieth-century resources are unexceptional examples of their types. Bridge No. 109, built in 1957, and Bridge No. 121, built in 1964, are not eligible for the National Register according to the NCDOT Historic Bridge Survey as they are neither aesthetically nor technologically significant. Google Maps "Street View" confirmed the absence of critical architectural and landscape resources in the APE (viewed 23 February 2016/8 April 2019). The project is reviewed under both GS 121-12(a) and Section 106.

No architectural survey is required for the project as currently defined. WHY THE AVAILABLE INFORMATION PROVIDES A RELIABLE BASIS FOR REASONABLY PREDICTING THAT THERE ARE NO UNIDENTIFIED SIGNIFICANT HISTORIC ARCHITECTURAL OR LANDSCAPE RESOURCES IN THE PROJECT AREA: APE equates with the study area received in March 2019 (see attached map). Comprehensive historic architectural survey of Guilford County (1995-6), later architectural studies, and county GIS/tax materials and other visuals illustrate the absence of significant architectural and landscape resources in the APE. No National Register-listed properties are located within the APE.

Should the design of the project change, please notify NCDOT Historic Architecture as additional review may be necessary.

SUPPORT DOCUMENTATION								
X Map(s)	Previous Survey Info.	Photos	Correspondence	Design Plans				
1								
<b>FINDING BY NCDOT ARCHITECTURAL HISTORIAN</b>								
Historic Architecture and Langecapes - NO SURVEY REQUIRED								
Variess	a atrick		8 April 20	19				
10.00				•/				
NCDOT Arc	hitectural Historian		Date					

NCDOT Architectural Historian







Figure 1 Study Area Map February 2019

# Legend







# STATE OF NORTH CAROLINA DEPARTMENT OF TRANSPORTATION

ROY COOPER GOVERNOR JAMES H. TROGDON, III Secretary

December 20, 2019

Dr. Wenonah Haire Catawba Indian Nation, Tribal Historic Preservation Office 1536 Tom Steven Road Rock Hill, SC 29730

Dear Dr. Haire,

The North Carolina Department of Transportation has started the project development, environmental, and engineering work for the replacement of Bridge Nos. 109 and 121 on S.R. 4240 (East Lee Street) over South Buffalo Creek in Guilford County as project B-5717.

The Federal Highway Administration (FHWA) is the lead federal agency and a permit is anticipated under the Section 404 process with the FHWA.

A project vicinity map is attached. The coordinates of this project are approximately 36.053280, -79.739123.

This project was reviewed/surveyed for cultural resources by NCDOT under the terms of the 2015 Amended Programmatic Agreement Among the Federal Highway Administration, the Advisory Council on Historic Preservation and the North Carolina State Historic Preservation Office for Minor Transportation Projects in North Carolina (PA). The results of that review/survey are attached.

Please find attached Archaeology Survey Reports. No Archaeological Survey was required for this project.

Please respond by January 20, 2020 so that your comments can be used in the scoping of this project. If you have any questions concerning this project, or would like any additional information, please contact me at dstutts@ncdot.gov or (919) 707-6442.

Thank you,

-DocuSigned by: avid Strolls

David Stutts, P.E. NCDOT Project Engineer – PEF/Program Management

cc: Matt Wilkerson, NCDOT Archaeology Team Leader Joe Geigle, PE, Div 5, 7 & 9 - FHWA

Telephone: (919) 707-6400 Customer Service: 1-877-368-4968 Website: www.ncdot.gov Location: 1000 Birch Ridge Drive Raleigh NC 27610

