

### Type III Categorical Exclusion Action Classification Form

STIP Project No.	<b>B-6051 &amp; U-6143</b>
WBS Element	48708.1.1 & 48326.1.1
Federal Project No.	0029074

A. Project Description:

Replace Bridge 91 over Catawba River (Lake Wylie) on US 29/74 (Wilkinson Boulevard) on the border of Gaston and Mecklenburg Counties (B-6051) and improve intersection (U-6143) of US 74 (Wilkinson Boulevard) and NC 7 (Catawba Street) in Belmont, NC.

B. Description of Need and Purpose:

Needs:

U-6143 – Currently the intersection of US 74 and NC 7 is operating at Level of Service F for A.M. right turn movements from northbound NC 7 to eastbound US 74 and also, for P.M. left turn movements from westbound US 74 to southbound NC 7. During the evening peak hour, traffic currently backs up onto the bridge from the intersection.

B-6051 - Gaston County Bridge No. 91 carries US 74/US 29 over the Catawba River between Gaston and Mecklenburg Counties. US 74 is the emergency route during closures on section of I-85 north of US 74. There are six lanes just east of the bridge and five lanes just west of the bridge while the bridge only carries four lanes creating a bottleneck when I-85 is detoured to US 74. The structure is rated as functionally obsolete with a deck geometry rating of 2 out of 9.

Additionally, there is only 8' of navigational clearance between full pond elevation and the low steel of the bridge. Based on coordination with Charlotte Fire Department, emergency response boats require 16' of clearance full pond elevation. Duke Energy requires 12' of clearance above full pond elevation over the middle third of the bridge.

Purpose:

B-6051/U-6143 – The purpose of this project is to address geometric deficiencies of the bridge and its approaches on US 74, the emergency detour needs of I-85, the navigational clearance requirements over Lake Wylie and to improve the intersection of US 74 and NC 7 to address deficient turning movements.

C. Categorical Exclusion Action Classification:

**Type III**

D. Proposed Improvements:

Replace Bridge No. 91 carrying US 74 to build a new bridge with six 12' lanes, a 4' concrete median, 5' offsets between the outside travel lanes and concrete barriers separating the travel lanes from 10' wide multi use paths on either side of the bridge. The approaches will connect to the existing six lane geometry on the western terminus (just west of NC 7) and to the existing five lane geometry on the eastern terminus (just east of ISWA Nature Preserve entrance). Typical sections illustrating the details of the new bridge, Wilkinson Blvd. and NC 7 are included in Figure 2 (Public Meeting Map).

The middle third of the bridge will be 12' above full pond elevation and 17' above full pond elevation over the navigational channel.

Four lanes of traffic will be maintained on US 74 during peak hours throughout project construction. The first phase would maintain 4 lanes of traffic on the existing Bridge 91 while constructing approximately half of the new bridge (enough to temporarily allow four lanes of traffic) to the north of Bridge 91. Traffic will then be shifted to the new structure while demolishing the old bridge. The new bridge will then be completed by building the southern half for a total width of 109.5 feet.

The intersection of US 74 and NC 7 will be modified to an offset reduced conflict intersection design as shown in Figure 2. Two left hand turn lanes will be included for traffic from westbound Wilkinson Blvd. to Catawba St. and two right turn lanes will be included for northbound NC 7 traffic to US 74. Work will extend approximately 670' along NC 7.

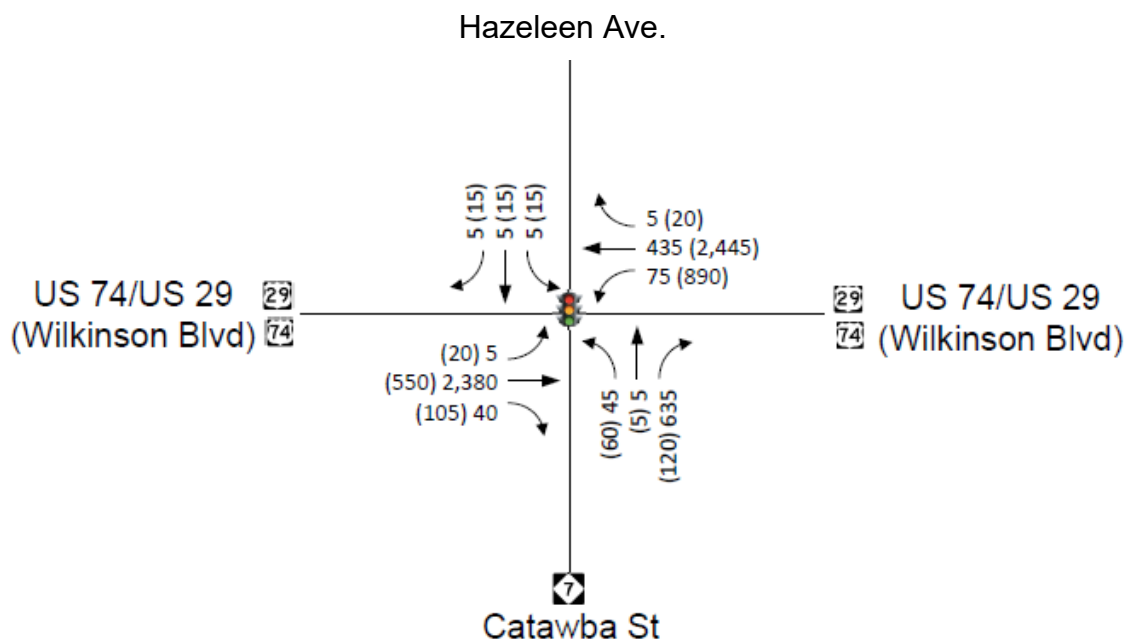
Ten-foot-wide multi use paths (MUP) will be included on both sides of NC 7 and US 74 throughout the project along with appropriate pedestrian crossing facilities as shown in Figure 2. On the bridge, traffic will be separated from the MUP's by means of solid barrier rails. Hazeleen Avenue carries less than 100 vehicles per day and therefore sidewalks, not MUP's, will be included on both sides. On the west end of Moores Chapel Loop, an MUP will extend along the east side of the road to the terminus of the work on the road. The west end of Moores Chapel Loop where it intersects with Wilkinson Boulevard will have improved turning radii to meet current standards and will include a crosswalk. The east end of Moores Chapel Loop currently intersects Wilkinson Boulevard at a severe skew. The skew cannot be corrected because it is in a Duke Energy transmission corridor, and Duke does not allow intersection modifications in their corridor. Because the west end will remain open, the east end will be closed and roadway removed from the intersection to the old weigh station.

E. Special Project Information:

**Traffic**

Currently, US 74 carries 25,000 vehicles per day which is projected at 31,000 for 2045. As noted earlier, the concern with the existing geometry is primarily for the intersection of US 74 and NC 7. Multiple intersection types were considered but only two were carried forward from the initial screening. A conventional intersection and a reduced conflict intersection.

The following 2045 peak hour volumes were analyzed for both intersections:



The **conventional intersection analysis** as follows has two movements failing in the design year: NC 7 Northbound and Hazeleen Southbound.

Intersection	Approach	Lane Group	Synchro Results			
			Delay (s/veh)		LOS	
			AM	PM	AM	PM
US 74/US 29 at NC 7/ Hazeleen Ave (Signalized)	Hazeline Ave, SB	LTR	70.2	86.1	E	F
	US 74/US 29, WB	L	72.1	44.9	E	D
		TR	10.8	16.6	B	B
	NC 7, NB	LT	50.8	85.3	D	F
		R	58.9	17.2	E	B
	US 74/US 29, EB	L	9.6	22.6	A	C
		TR	34.7	40.1	C	D
	Overall		37.1	28.0	D	C

The reduced conflict intersection analysis works through the design year with capacity to spare.

Intersection	Approach	Lane Group	Synchro Results			
			Delay (s/veh)		LOS	
			AM	PM	AM	PM
US 74/US 29 at NC 7/ Hazeleen Ave (RCI Central Intersection-Signalized)	NC 7, SB	R	37.9	43.2	D	D
	US 74/US 29, WB	L	34.7	12.3	C	B
		TR	0.7	0.6	A	A
	NC 7, NB	R	57.4	8.5	E	A
	US 74/US 29, EB	L	36.6	38.8	D	D
		TR	27.3	16.5	C	B
	Overall		34.0	13.5	C	B
U-Turn West of NC 7/Hazeline Ave at US 74/US 29 (Unsignalized)	US 74/US 29, WB	U	18.4	10.3	C	B
	US 74/US 29, EB	T	0.0	0.0	A	A
U-Turn East of NC 7/Hazeline Ave at US 74/US 29 (Signalized)	US 74/US 29, WB	T	3.1	13.9	A	B
	US 74/US 29, EB	U	33.2	39.2	C	D
	Overall		5.8	14.4	A	B

All other intersections with US 74 serve less than 100 vehicles per day and were not considered in traffic analysis.

### US 74/ NC 7 Preferred Intersection

The two intersections described in the Traffic Section above were evaluated for multiple factors. The RCI intersection was carried forward as the preferred intersection for the following reasons:

- **Lower Cost** (\$0.5 million less for bridge plus reduced footprint/utilities/right of way)
- A **Reduced Footprint** translates to lower impacts on human and natural environment including a smaller footprint on Kevin Loftin Park
- **Better Traffic Performance** through design year (level of service C for RCI compared to level of service D for All Movement)
- Better traffic performance translates to **lower congestion and emissions** (Environmentally Greener) and available capacity for future development that is likely to occur in the City (i.e. around the future Capital Area Transit System (CATS) Light Rail - Silver Line)
- **Capacity to carry higher volumes** beyond the design year
- **Improved safety** with reduced left turns
- Given the focus on pedestrian accommodations throughout this project, based on a national research project (20-points analysis), RCI's vs. All-Movement perform better with **higher safety for pedestrians**.

The City of Belmont expressed strong concerns for the pedestrian aspect of the intersection and in particular, did not like the way pedestrians would be zig-zagged through the median at the center of the intersection strongly preferring the way conventional intersections handle pedestrians. Because of the lack of development around the north leg of the intersection, the Department proposed offsetting



the Hazeleen leg of the intersection to the west 150 feet which resulted in a crosswalk that followed a conventional approach. The City agreed to the approach and the result is illustrated as follows:



## Project Costs

	<b>B-6051</b>	<b>U-6143</b>
Construction	52,000,000	2,700,000
Right of Way	5,010,000	624,000
<b>TOTAL</b>	<b>57,010,000</b>	<b>3,324,000</b>

Combined Total Cost - \$60,334,000

**Local Officials Involvement** - Since 2018 NCDOT has coordinated throughout project planning beginning with scoping, working with the aesthetics committee on the bridge design and appearance, working with local government on the inclusion of bicycle and pedestrian facilities throughout the project limits, working with City of Belmont on the design of the improved intersection at US 74 and NC 7, coordinating with Charlotte Area Transit Systems (CATS ) on their future light rail plans, coordinating with Mecklenburg County on impacts to the ISWA Nature Preserve and with the City of Belmont on impacts to Kevin Loftin Park.

**Public Involvement** – In August 2022, over 1000 post cards were sent to residents and landowners inside the project vicinity advertising the project and inviting them to comment on the project from August 12 to 26, 2022. At the same time, a geo-targeting advertisement was also employed inviting recipients to visit the website. One hundred and eight comments were received in that period via e-mails, voice mails and responses on the website. Eleven of the comments received were supportive of the overall project, and one of the comments opposed the project. The majority of commenters had questions or suggestions on topics like bicycle and pedestrian accommodations, CATS Light Rail, maintenance of traffic, aesthetics and others. All public meeting materials including the Public Involvement Summary are posted on ConnectNCDOT:

<https://connect.ncdot.gov/site/Preconstruction/division/div12/BR-0020%20Gaston%2091/Human%20Environment/Public%20Meeting%20Materials?Web=1>

**CATS Light Rail** - CATS is planning the Silver Line Light Rail which would travel from Charlotte to Gaston County along US 74. At the project location, the Silver Line is planned for the north side of US 74. The project is currently unfunded and preliminary planning and design are very limited but coordination has taken place to share the design for B-6051/U-6143 with CATS. While CATS preferred that NCDOT not include a turnaround on the City of Belmont side, they have confirmed that their horizontal alignment can work with that design. They also preferred that NCDOT relocate the existing east end of Moores Chapel Loop further east, but this is not within the scope of the project. It would need to be done under the scope of their project. NCDOT has coordinated with CATS to ensure the proposed bent spacing on the NCDOT bridge is compatible with the future Silver Line bridge.

**Project Square Grooves** – This is a proposed private development effort to realign and extend Moores Chapel Road (not Moores Chapel Loop) to connect with Old Dowd Road. If the project is constructed prior the completion of the work for B-6051 on Moores Chapel Loop, Mecklenburg County requested that this end of Moores Chapel Loop be closed and pavement removed to allow two parcels owned by the county separated by the road to be joined. The City of Charlotte opposes closing the road on the basis of connectivity. This issue will be re-considered if the project advances.

**Aesthetic Enhancements** – The outer bridge rail type is to be Texas Classic Rail. This is mitigation for removing the historic bridge. Beyond that, local government representatives from the City of Belmont, City of Charlotte, Gaston County, Mecklenburg County and the MPO's representing both counties formed an aesthetics committee lead by Gaston-Cleveland-Lincoln Municipal Planning Organization (GCL-MPO) for this project because of their desire to enhance the aesthetics of the bridge. The project commitments list the aesthetics to be included. Figure 3 illustrates a few representative visualizations. NCDOT will be contributing 1% of overall project costs towards aesthetics and local government will pay for the remainder of the enhancements.

F. Project Impact Criteria Checklists:

<b>F3. Type III Actions</b>			
Proposed improvement(s) that fit Type III Actions (NCDOT-FHWA CE Programmatic Agreement, Appendix C) answer questions below.			
		Yes	No
1	Does the project involve potential effects to Threatened or Endangered species listed by the US Fish and Wildlife Service (USFWS) or National Marine Fisheries Service (NMFS)? <i>Field Screenings completed Spring '22 and Fall '22.</i>	<input type="checkbox"/>	<input checked="" type="checkbox"/>
2	Does the project result in impacts subject to the conditions of the Bald and Golden Eagle Protection Act (BGEPA)? <i>Field screening complete Spring '22</i>	<input type="checkbox"/>	<input checked="" type="checkbox"/>
3	Does the project generate substantial controversy or public opposition, for any reason, following appropriate public involvement? <i>Post Cards and PI website Aug '22.</i>	<input type="checkbox"/>	<input checked="" type="checkbox"/>
4	Does the project cause disproportionately high and adverse impacts relative to low-income and/or minority populations? <i>No minority or low-income populations are located within the DCIA and the project will enhance, not diminish, connectivity.</i>	<input type="checkbox"/>	<input checked="" type="checkbox"/>
5	Does the project involve substantial residential or commercial displacements or right of way acquisition? <i>Two businesses will be relocated but not substantial when compared with many businesses along US 74 in this area.</i>	<input type="checkbox"/>	<input checked="" type="checkbox"/>
6	Does the project include a determination under Section 4(f)?	<input checked="" type="checkbox"/>	<input type="checkbox"/>
7	Is a project-level analysis for direct, indirect, or cumulative effects required based on the NCDOT community studies screening tool? <i>The project will not alter travel patterns or notably reduce travel time. The project will minimally modify access to properties in the area and will not open areas for development or redevelopment. Due to its minimal transportation impact-causing activities, this project will neither influence nearby land uses nor stimulate growth. (from Short Form CIA, Sept '22)</i>	<input type="checkbox"/>	<input checked="" type="checkbox"/>
8	Does the project impact anadromous fish spawning waters? <i>Anadromous fish are present in the Eastern part of NC, not in Gaston Mecklenburg Co.'s area.</i>	<input type="checkbox"/>	<input checked="" type="checkbox"/>
9	Does the project impact waters classified as Outstanding Resource Waters (ORW), High Quality Waters (HQW), Water Supply Watershed Critical Areas, 303(d)-listed impaired water bodies, buffer rules, or submerged aquatic vegetation (SAV)?	<input checked="" type="checkbox"/>	<input type="checkbox"/>
10	Does the project impact Waters of the United States in any of the designated mountain trout streams? <i>Trout counties are further west than the location of this project.</i>	<input type="checkbox"/>	<input checked="" type="checkbox"/>
11	Does the project require a US Army Corps of Engineers (USACE) Individual Section 404 Permit? <i>Based on preliminary coordination with USACE, the project will likely qualify for a GP 50.</i>	<input type="checkbox"/>	<input checked="" type="checkbox"/>
12	Will the project require an easement from a Federal Energy Regulatory Commission (FERC) licensed facility?	<input checked="" type="checkbox"/>	<input type="checkbox"/>
13	Does the project include Section 106 of the National Historic Preservation Act (NHPA) effects determination other than a No Effect, including archaeological remains?	<input checked="" type="checkbox"/>	<input type="checkbox"/>
14	Does the project involve GeoEnvironmental Sites of Concerns such as gas stations, dry cleaners, landfills, etc.?	<input checked="" type="checkbox"/>	<input type="checkbox"/>

15	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? <a href="#">The Detailed Study will require the MOA submittal to have no rise in 100-year water surface elevation for the Revised conditions.</a>	<input type="checkbox"/>	<input checked="" type="checkbox"/>
16	Is the project in a Coastal Area Management Act (CAMA) county and substantially affects the coastal zone and/or any Areas of Environmental Concern (AEC)? <a href="#">Gaston and Mecklenburg Counties are not in the eastern part of the state and therefore not a CAMA counties.</a>	<input type="checkbox"/>	<input checked="" type="checkbox"/>
<u>Type III Actions (continued)</u>		Yes	No
17	Does the project require a US Coast Guard (USCG) permit? <a href="#">USCG has indicated in writing that the project does not require a USCG permit or navigational lighting (see Attachment 8)</a>	<input type="checkbox"/>	<input checked="" type="checkbox"/>
18	Does the project involve construction activities in, across, or adjacent to a designated Wild and Scenic River present within the project area? <a href="#">There are no Wild and Scenic Rivers within Gaston or Mecklenburg Counties.</a>	<input type="checkbox"/>	<input checked="" type="checkbox"/>
19	Does the project involve Coastal Barrier Resource Act (CBRA) resources? <a href="#">CBRA resources are only found on the coastline of NC.</a>	<input type="checkbox"/>	<input checked="" type="checkbox"/>
20	Does the project impact federal lands (e.g. US Forest Service (USFS), US Fish and Wildlife Service (USFWS), etc.) or Tribal (Trust) Lands? <a href="#">Source: GIS Search and Final Survey parcel data, and Tribal Coordination (see Attachment 9). NCDOT reached out to the Catawba Indian Nation, The Cherokee Nation, the Eastern Band of Cherokee Indians and to the United Keetoowah Band of Cherokee Indians. Of the four, only the Catawba replied, and indicated no concerns but to contact them if any resources were discovered during construction.</a>	<input type="checkbox"/>	<input checked="" type="checkbox"/>
21	Does the project involve any changes in access control or the modification or construction of an interchange on an interstate? <a href="#">No control of access is proposed with this project.</a>	<input type="checkbox"/>	<input checked="" type="checkbox"/>
22	Does the project have a permanent adverse effect on local traffic patterns or community cohesiveness? <a href="#">Traffic patterns will be modified with the reduced conflict intersection but the effect will not be adverse. The result will reduce accidents and improve efficiency of traffic at the intersection. Community cohesiveness will potentially be enhanced by the inclusion of bicycle and pedestrian facilities.</a>	<input type="checkbox"/>	<input checked="" type="checkbox"/>
23	Will maintenance of traffic cause substantial disruption? <a href="#">Four lanes of traffic will be maintained during peak hours throughout the project which will keep disruption to a minimum.</a>	<input type="checkbox"/>	<input checked="" type="checkbox"/>
24	Is the project inconsistent with the STIP, and where applicable, the Metropolitan Planning Organization's (MPO's) Transportation Improvement Program (TIP)?	<input type="checkbox"/>	<input checked="" type="checkbox"/>
25	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, 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? <a href="#">The project was screened via GIS, scoping letters and inquiries with local government and is clear of the concerns listed in this item.</a>	<input type="checkbox"/>	<input checked="" type="checkbox"/>
26	Does the project involve Federal Emergency Management Act (FEMA) buyout properties under the Hazard Mitigation Grant Program (HMGP)? <a href="#">The project was screened via GIS data and via Final Surveys Parcel Data which did not identify any properties of concern.</a>	<input type="checkbox"/>	<input checked="" type="checkbox"/>
27	Is the project considered a Type I under the NCDOT's Noise Policy?	<input checked="" type="checkbox"/>	<input type="checkbox"/>

28	Is there prime or important farmland soil impacted by this project as defined by the Farmland Protection Policy Act (FPPA)? <a href="#">The FPPA does not apply to urban areas such as this study area for this project.</a>	<input type="checkbox"/>	<input checked="" type="checkbox"/>
29	Is the project in an Air Quality non-attainment or maintenance area for a National Ambient Air Quality Standard (NAAQS)? <a href="#">Both Gaston and Mecklenburg Counties are in Maintenance Areas. See response in Section G.</a>	<input checked="" type="checkbox"/>	<input type="checkbox"/>
30	Are there other issues that arose during the project development process that affected the project decision?	<input type="checkbox"/>	<input checked="" type="checkbox"/>

G. Additional Documentation as Required from Section F (ONLY for questions marked 'Yes'):

Q 6 & Q 13 – **Section 4(f) and Section 106**

The project will impact two historic resources (Section 106) and two parks. There are no archaeological resources of concern within the Project Study Area (see Attachment 1A, B & C)

- **Gaston College** - The western portion of Gaston College parcel (see Figure 2) is eligible for the National Register of Historic Places. The impact is limited to the need to include an additional guy wire on a power pole within an existing utility easement. The Historic Preservation Office has determined that there is “No Adverse Effect” (see Attachment 2). Because there is no new right of way needed, there is no 4(f) impact.
- **Bridge No. 91** – The bridge is eligible for the National Register of Historic Places. Because of the navigational aspect of purpose and need, there is no option for avoidance or preservation in place of the existing bridge, therefore, there is an adverse effect (see Attachment 2). Attachment 4 is the Section 106 MOA detailing the conditions associated with the Adverse Effect. The conditions of the MOA are also included in the Project Commitments. A Programmatic 4(f) Bridge Form addressing the adverse effect is the Attachment 5 to this document. Commitments from the Memorandum of Agreement between SHPO, NCDOT and FHWA are included in the project commitments section.
- **Kevin Loftin Riverfront Park** - There are minor impacts to the park, partially resulting from the City’s request for MUPs along the road. A portion of the park will also be used for drainage treatment. These impacts were presented during public involvement meetings and there was no opposition to the work. The City of Belmont Parks and Recreation Department concurs that the work will not adversely affect the activities, features or attributes of the park (see Attachment 6). Federal Highways Administration has made a finding of de minimis impact by the signing of this document.
- **ISWA Nature Preserve** – There are minor impacts on ISWA Nature Preserve resulting primarily from shifting the entrance and driveway to allow for a turn lane requested by the park staff. The addition of a MUP connecting ISWA Nature Preserve to Gaston County would also result in a minor impact on the park. There are also minor drainage impacts where drainage features are tied back into the drainage ditch in the park. There are also minor drainage impacts where drainage features are tied back into the drainage ditch in the park. These were presented as part of public involvement and there was no opposition to the work. Mecklenburg County has stated in writing (see Attachment 7) that there are no adverse effects to the activities, features or attributes of the park. Federal Highways Administration has made a finding of de minimis impact by the signing of this document.
- **Project Footprint Expansion** – Expansions of the project footprint have been reviewed for archaeology and architectural history ( see Attachments 1 and 3) with a determination that no additional survey is needed. Regarding Historic Architecture, there is a weigh station on the north side of Moores Chapel Loop that is outside of the study area but may be eligible. If the study area is expanded, a detailed review of the property will be required.
- Mecklenburg County has recently purchased two parcels on either side of Moores Chapel Loop with plans to convert it to a future park. The park falls under “joint development” provision of 4(f) and is therefore not a 4(f) resource.

**Q 9 – 303(d) listed waters /Buffer Rules** – 303(d) listed waters are present in the Catawba River as an impaired water due to Polychlorinated biphenyl (PCB) in fish tissue within the additional study area. Since the issue is not turbidity, no actions are required on the part of NCDOT as it relates to this project.

Catawba River Buffer Rules are applicable for this river. The project commitments address this with the appropriately sized sediment control basin.

**Q 12 – FERC** – Lake Wylie is licensed under a Federal Energy Regulatory Commission (FERC) license. NCDOT is processing a conveyance application with Duke Energy. This will include processing a boater safety plan and affects the design of the bridge to accommodate required navigational clearance.

Based on coordination with Lake Wylie Marine Commission, Duke Energy, Local Emergency Services and the NC Wildlife Resources Commission (who has navigational authority over inland waters) the project will include 17' of clearance over full pond elevation in the navigational channel and 12' of clearance over full pond elevation in the middle third of the bridge.

**Q 14 – GeoEnvironmental** – The GeoEnvironmental Phase I Report identifies two sites of concern that will be affected by the footprint of this project. Both are located on a property at the corner of NC 7 and US 74. One is currently operating as a gas station and the other was formerly a gas station. Once the right of way impact is established, a Phase II GeoEnvironmental Screening will be requested. This is included as a project commitment.

#### **Q 27 – Noise Type I**

The source of this traffic noise information is the B-6051 Traffic Noise Report, by RK&K, accepted by NCDOT on March 10, 2023.

#### **Traffic Noise Impacts**

The maximum number of receptors in each project alternative predicted to become impacted by future traffic noise is shown in the table below. The table includes those receptors expected to experience traffic noise impacts by either approaching or exceeding the FHWA Noise Abatement Criteria or by a substantial increase in exterior noise levels as defined in the NCDOT Traffic Noise Policy.

#### *Predicted Traffic Noise Impacts by Alternative\**

<b>Traffic Noise Impacts</b>				
<b>Alternative</b>	<b>Residential (NAC B)</b>	<b>Places of Worship/Schools, Parks, etc. (NAC C &amp; D)</b>	<b>Businesses (NAC E)</b>	<b>Total</b>
<b>Build</b>	<b>2</b>	<b>6</b>	<b>0</b>	<b>8</b>

\*Per TNM 2.5 and in accordance with 23 CFR Part 772

#### **Traffic Noise Abatement Measures**

Measures for reducing or eliminating the traffic noise impacts, including noise barriers, were considered for all impacted receptors in each alternative. Noise barriers include two basic types: earthen berms and noise walls. These structures act to diffract, absorb, and reflect highway traffic noise.



## Noise Barriers

A noise barrier evaluation was conducted for this project utilizing the Traffic Noise Model (TNM 2.5) software developed by the FHWA. The following table summarizes the results of the evaluation.

**Preliminary Noise Barrier Evaluation Results**

Alternative / NSA	Noise Barrier Location	Length / Height <sup>1</sup> (feet)	Square Footage	Number of Benefited Receptors	Square Feet per Benefited Receptor / Allowable Square Feet per Benefited Receptor	Preliminarily Feasible and Reasonable ("Likely") for Construction <sup>2</sup>
Build / NSA 1	-Y3- RT / NC 7 (Catawba Street) NB	652 / 9	6,079	2	3,040 / 1,500	NO <sup>3</sup>
Build / NSA 2	-L- LT / US 29/74 WB, East of Hazeleen Avenue	804 / 30	24,132	1	24,132 / 1,500	NO <sup>3,4</sup>

<sup>1</sup>Average wall height. Actual wall height at any given location may be higher or lower.

<sup>2</sup>The likelihood of a barrier's construction is preliminary and subject to change, pending completion of final design and the public involvement process.

<sup>3</sup>Barrier is not reasonable due to the quantity per benefited receptor exceeding the allowable quantity per benefited receptor OR Barrier is not reasonable due to an inability to achieve at least 7-dBA noise reduction for at least one benefited receptor.

<sup>4</sup>Barrier is not feasible due to an inability to achieve a minimum of 5 dB(A) of noise reduction for at least two impacted receptors.

Based on this preliminary study, traffic noise abatement is not recommended, and no noise abatement measures are proposed. This evaluation completes the highway traffic noise requirements of Title 23 CFR Part 772. No additional noise analysis will be performed for this project unless warranted by a substantial change in the project's design concept or scope.

In accordance with NCDOT Traffic Noise 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). NCDOT strongly advocates the planning, design and construction of noise-compatible development and encourages its practice among planners, building officials, developers and others.

## Q 29 – Air Quality

### **Gaston County (Prior 1997 & 2008 8-Hour Ozone Maintenance Area):**

*The project is in Gaston County, which is within the Charlotte maintenance area for the prior 1997 ozone National Ambient Air Quality Standard (NAAQS) as defined by the EPA. This area was designated moderate nonattainment under the 1997 ozone NAAQS on June 15, 2004 and due to improved air quality in the region was re-designated maintenance on January 2, 2014. The Charlotte area was designated for the 2008 ozone NAAQS resulting in the 1997 ozone NAAQS*

*being revoked on April 6, 2015. On February 16, 2018, the United States Court of Appeals for the District of Columbia Circuit in South Coast Air Quality Mgmt. District v. EPA ("South Coast II," 882 F.3d 1138) held that transportation conformity applies for the revoked 1997 ozone NAAQS areas. Transportation conformity for plans and TIPs for the 1997 Ozone NAAQS can be demonstrated without a regional emissions analysis pursuant to 40 CFR 93.109(c).*

*The project is in Gaston County, which is within the Charlotte maintenance area for the 2008 ozone NAAQS as defined by the EPA. The Charlotte area was designated marginal nonattainment under the 2008 ozone NAAQS on July 20, 2012 and due to improved air quality in the region was re-designated maintenance on August 27, 2015. Section 176(c) of the CAAA requires that transportation plans, programs, and projects conform to the intent of the state air quality implementation plan (SIP). The current SIP does not contain any transportation control measures for Gaston County. The Gaston Cleveland Lincoln Metropolitan Planning Organization 2050 Metropolitan Transportation Plan (MTP) and the 2020-2029 Transportation Improvement Program (TIP) conform to the intent of the SIP. The USDOT made a conformity determination on the MTP and the TIP on April 5, 2022. The current conformity determination is consistent with the final conformity rule found in 40 CFR Parts 51 and 93. There are no significant changes in the project's design concept or scope, as used in the conformity analyses.*

**Mecklenburg County (Prior 1997 & 2008 8-Hour Ozone Maintenance Area):**

*The project is in Mecklenburg County, which is within the Charlotte maintenance area for the prior 1997 ozone National Ambient Air Quality Standard (NAAQS) as defined by the EPA. This area was designated moderate nonattainment under the 1997 ozone NAAQS on June 15, 2004 and due to improved air quality in the region was re-designated maintenance on January 2, 2014. The Charlotte area was designated for the 2008 ozone NAAQS resulting in the 1997 ozone NAAQS being revoked on April 6, 2015. On February 16, 2018, the United States Court of Appeals for the District of Columbia Circuit in South Coast Air Quality Mgmt. District v. EPA ("South Coast II," 882 F.3d 1138) held that transportation conformity applies for the revoked 1997 ozone NAAQS areas. Transportation conformity for plans and TIPs for the 1997 Ozone NAAQS can be demonstrated without a regional emissions analysis pursuant to 40 CFR 93.109(c).*

*The project is in Mecklenburg County, which is within the Charlotte maintenance area for the 2008 ozone NAAQS as defined by the EPA. The Charlotte area was designated marginal nonattainment under the 2008 ozone NAAQS on July 20, 2012 and due to improved air quality in the region was re-designated maintenance on August 27, 2015. Section 176(c) of the CAAA requires that transportation plans, programs, and projects conform to the intent of the state air quality implementation plan (SIP). The current SIP does not contain any transportation control measures for Mecklenburg County. The Charlotte Regional Transportation Planning Organization 2050 Metropolitan Transportation Plan (MTP) and the 2020-2029 Transportation Improvement Program (TIP) conform to the intent of the SIP. The USDOT made a conformity determination on the MTP and the TIP on April 5, 2022. The current conformity determination is consistent with the final conformity rule found in 40 CFR Parts 51 and 93. There are no significant changes in the project's design concept or scope, as used in the conformity analyses.*

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

**NCDOT PROJECT COMMITMENTS**

STIP Project No. **B-6051 & U-6143**  
Replace Bridge 91 over the Catawba River and Improve Intersection of US 74 & NC 7  
Gaston & Mecklenburg Counties  
Federal Aid Project No. 0029074  
WBS Element 48708.1.1 & 48326.1.1

**Structure Management Unit and Division 12 Construction- Bicycle and Pedestrian Accommodations**

MUP's will be included:

- along north side of US 74 beginning at Gaston College terminating at Moores Chapel Road
- along south side of US 74 beginning at Gaston College and terminating at ISWA Nature Preserve.
- along both sides of NC 7
- along east side of Moores Chapel Loop beginning at US 74 and terminating at the end of the proposed roadway work on the road.

Sidewalk will be included:

- along Hazeleen Avenue.

**Structure Management Unit- Aesthetics for Bridge**

- Based on participation by local government, the rails, caps, and round columns on the new bridge will be stained beige-white and trimmed with a stamped brick pattern and stained three colors.
- The bridge will also include pedestals with conduit and mounting plates. The Structure Management Unit and NCDOT Lighting Group are currently coordinating with Duke Energy regarding the specifications these lights will require for the bridge.
- The bridge will also include 7'x14' scenic overlooks on both sides near the apex of the bridge.

**Structures Management Unit / Division 12 – Kevin Loftin Park Sidewalk**

The project plans and construction will include a proposed sidewalk extending from and existing sidewalk within Kevin Loftin Park near the boat ramp and connecting to the crosswalk on US 74. The cost of the sidewalk will be reimbursed by the City of Belmont as part of the Municipal Agreement.

**Structures Management Unit / Division 12 – Municipal Agreement**

A municipal agreement will be required for reimbursement of the aesthetic enhancements proposed for the Local Government Aesthetics Committee. The GCL-MPO representative, Randi Gates will coordinate the percent of cost share between the various representatives to be included in the agreement. The agreement will also cover a requested sidewalk in Kevin Loftin Park to be constructed with B-6051/U-6143.

**Structures Management Unit– Plantable Medians on City of Belmont Side of Project**

The medians will include curb and gutter perimeters leaving soil in the median in the center which the City of Belmont will use at the completion of the project for plantings and natural area.

**Division 10 & 12 Traffic Engineers – Posted Speed Limits**

The posted speed limit ordinances through the project limits will be adjusted to 45 mph prior to the Let of this project.

**Structures Management Unit- Section 4(f) / Section 106 - Historic Bridge No. 91**

- Bridge No. 91 will be photo documented prior to let of the project.
- Historic Bridge Plans will be provided to HPO
- The replacement bridge will:

- include church rail
- include end rails that emulate the curved end rail on the existing bridge including replica plaques

### **Structures Management Unit / Division 10 and 12 – Weigh Station**

The abandoned weigh station on the north side of Moores Chapel Loop is outside the current study area but potentially historic. Division 10 has agreed that the property will not be touched as part of this project including for the purposes of a staging area during construction. If this changes, the property will have to be evaluated and if determined historic, have to go through Section 106 and Section 4(f).

### **Structures Management Unit - Navigational Clearance on Bridge 91**

Based on coordination with Lake Wylie Marine Commission, Duke Energy, Local Emergency Services and the NC Wildlife Resources Commission (which has navigational authority over inland waters) the project will include 17' of clearance over full pond elevation in the navigational channel and 12' of clearance over full pond elevation in the middle third of the bridge.

### **Structures Management Unit /GeoEnvironmental Section – Phase II Study**

The GeoEnvironmental Phase I Report identified two sites of concern that will be affected by the footprint of this project. Both are located on a property at the corner of NC 7 and US 74. One is currently operating as a gas station and the other was formerly a gas station. Once the right of way impact is established, a Phase II GeoEnvironmental Screening will be requested.

Categorical Exclusion Approval:

STIP Project No.	<b>B-6051 &amp; U-6143</b>
WBS Element	48708.1.1 & 48326.1.1
Federal Project No.	0029074

**Prepared By:**

5/3/2023

Date

DocuSigned by:

*John Williams*

John L. Williams, Project Manager  
RK&K

**Prepared For:**

David Stutts, NCDOT Structures Management Unit

**Reviewed By:**

5/3/2023

Date

DocuSigned by:

*John Jamison*

John Jamison, Unit Head  
NCDOT, Environmental Policy Unit



**Approved**



**Certified**

- If classified as Type III Categorical Exclusion.

5/3/2023

Date

DocuSigned by:

*David Stutts*

David Stutts, Project Engineer, PEF Program Management  
North Carolina Department of Transportation

FHWA Approved: For Projects Certified by NCDOT (above), FHWA signature required.

5/8/2023

Date

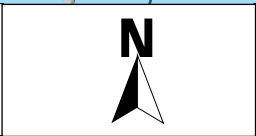
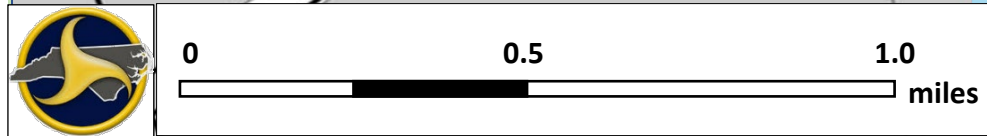
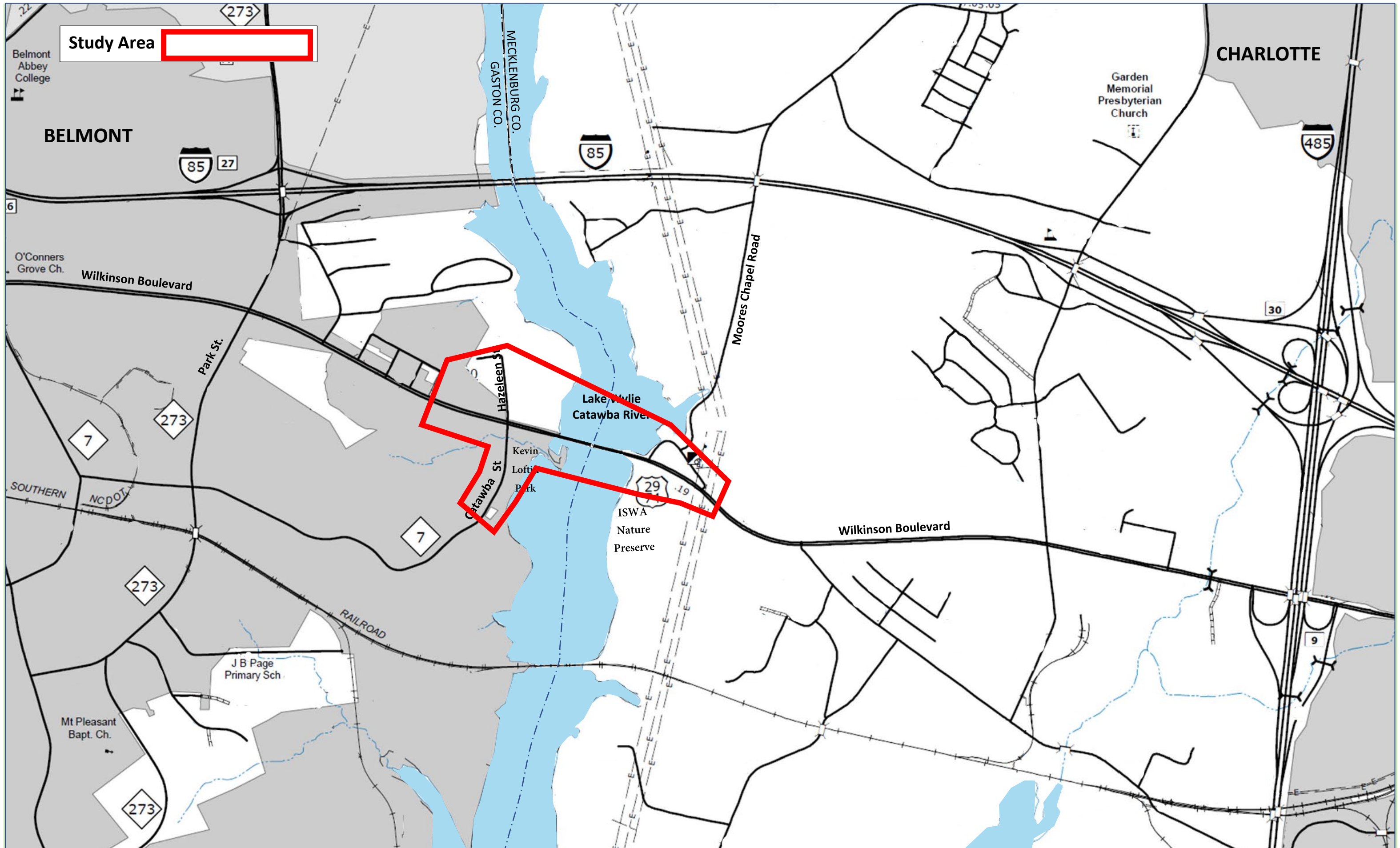
DocuSigned by:

*Loretta Barron*

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).*





**B-6051 - Replace Wilkinson Blvd. Bridge over Lake Wylie  
& U-6143 - Improve Intersection of Wilkinson Blvd. and Catawba Street**

**FIGURE 1**



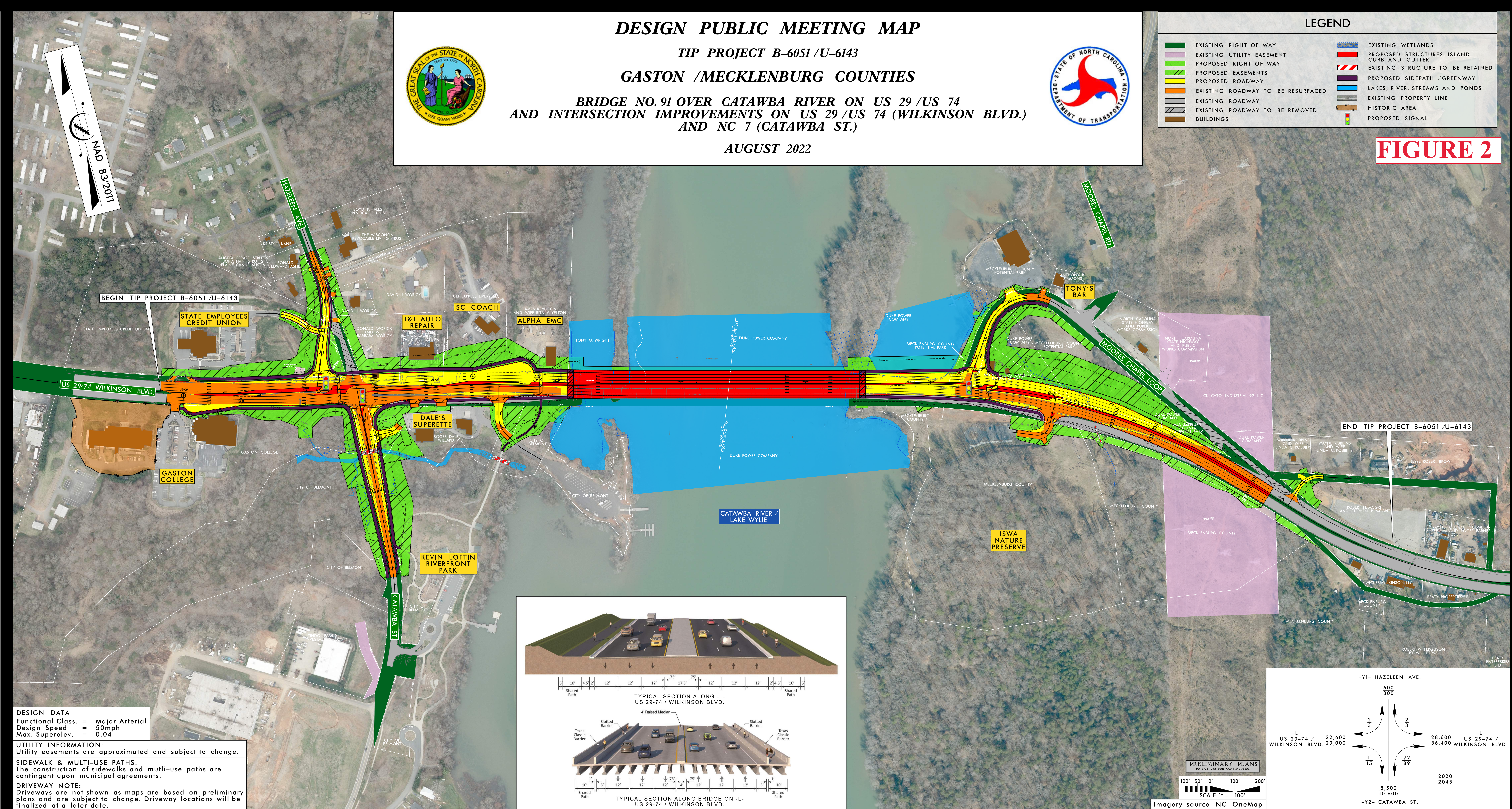


**DESIGN PUBLIC MEETING MAP**  
**TIP PROJECT B-6051 /U-6143**  
**GASTON /MECKLENBURG COUNTIES**  
**BRIDGE NO. 91 OVER CATAWBA RIVER ON US 29 /US 74**  
**AND INTERSECTION IMPROVEMENTS ON US 29 /US 74 (WILKINSON BLVD.)**  
**AND NC 7 (CATAWBA ST.)**  
**AUGUST 2022**

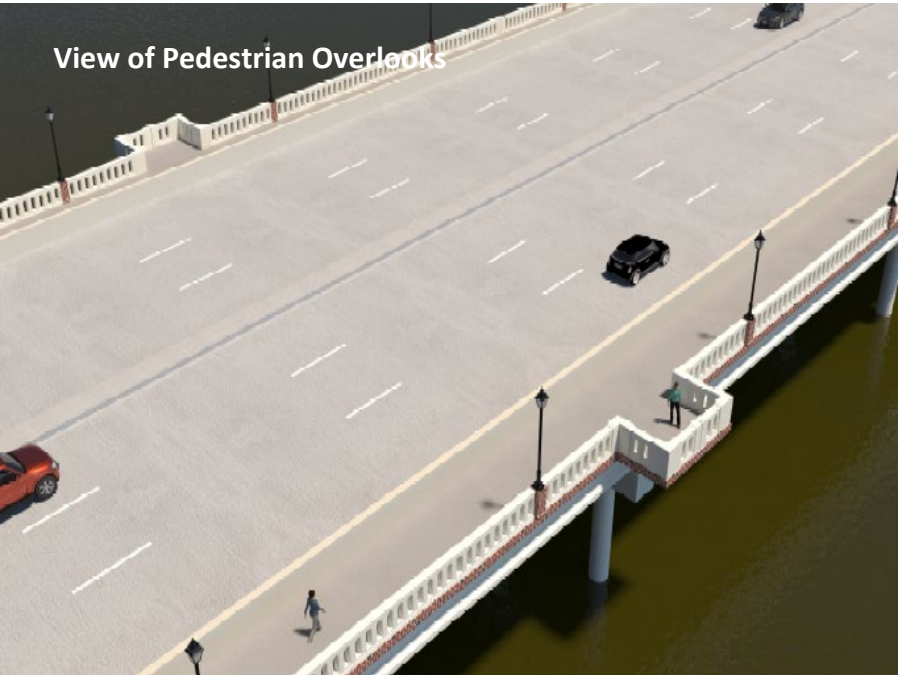


LEGEND			
	EXISTING RIGHT OF WAY		EXISTING WETLANDS
	EXISTING UTILITY EASEMENT		PROPOSED STRUCTURES, ISLAND, CURB AND GUTTER
	PROPOSED RIGHT OF WAY		EXISTING STRUCTURE TO BE RETAINED
	PROPOSED EASEMENTS		PROPOSED SIDEPATH / GREENWAY
	PROPOSED ROADWAY		LAKES, RIVER, STREAMS AND PONDS
	EXISTING ROADWAY TO BE RESURFACED		EXISTING PROPERTY LINE
	EXISTING ROADWAY		HISTORIC AREA
	EXISTING ROADWAY TO BE REMOVED		PROPOSED SIGNAL
	BUILDINGS		

**FIGURE 2**







**FIGURE 3**



## **ATTACHMENTS**

17-12-0050

**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: **Structure 350091 (BR-0020)** County: **Gaston**  
 WBS No: **67020.1.1** Document: **State MCC**  
 F.A. No: **N/A** Funding: ☒ State ☐ Federal

Federal Permit Required? ☒ Yes ☐ No Permit Type: **USACE (not specified)**

**Project Description:** NCDOT's Division 12 proposes to replace Bridge No. 91 on US 29/US 74 (Wilkinson Boulevard) over the Catawba River in Gaston and Mecklenburg counties. Bridge No. 91 was constructed in 1933 and is considered to be functionally obsolete; therefore, it is scheduled to be replaced. Since Preliminary Design Plans have not been developed yet, a Study Area for the project has been generated in order to facilitate environmental planning purposes at this stage. The Study Area will be centered on the bridge measure about 500 feet wide and about 2,000 feet from either end of the bridge along US 29/US 74. Overall, the Study Area will encompass about 60 acres, inclusive of the existing roadway, structure to be replaced, and any modern development.

**SUMMARY OF CULTURAL RESOURCES REVIEW*****Brief description of review activities, results of review, and conclusions:***

This project was accepted on Friday, January 19, 2018. A map review and site file search was conducted at the Office of State Archaeology (OSA) on Thursday, January 25, 2018. An archaeological survey has never been conducted at this bridge location, although several of the nearby islands within the Catawba River have been surveyed. Only one (1) archaeological site has been recorded within one (1) mile of the project area, that being within a powerline easement southeast of the Study Area. Digital copies of HPO's maps (Belmont Quadrangle) as well as the HPOWEB GIS Service (<http://gis.ncdcr.gov/hpoweb/>) were last reviewed on Tuesday, January 30, 2018. There is one (1) known historic architectural resource that is eligible for the National Register of Historic Places (i.e. the bridge itself [Sloans Ferry Bridge, a 1933 steel stringer/multi-beam bridge]) located within or adjacent to the Study Area; however, intact archaeological deposits associated with this resource would not 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 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:***

Although this is a State-funded project, a Federal permit is necessary. A permanent/temporary drainage or utility easement will also be necessary; however, the need for additional ROW was not conveyed. The size and shape of the Study Area have been drawn in a way to capture any possible impacts beyond the NCDOT's existing 100-foot ROW along US 29/US 74. At this time, we are in compliance with NC GS



**17-12-0050**

121-12a, since there are no eligible (i.e. National Register-listed) archaeological resources located within the project's Study Area that would require our attention. Based on the description of the proposed project, activities may take place beyond the NCDOT's existing ROW; however, the exact location cannot be determined at this time. From an environmental perspective, the Study Area falls within a commercial setting along the banks of the Catawba River in the south-central Piedmont physiographic region of North Carolina, and consists of various soil types. On the Gaston County side, the Study Area consists of soils that have been heavily disturbed or have succumbed to varying degrees of erosion (e.g. Urban land [Ur] and Gaston sandy clay loam, 2-8% slopes, eroded [GaB2]). On the Mecklenburg County side, most if not all of the soils are considered to be steeply sloped and eroded as well (e.g. Cecil sandy clay loam, 8-15% slopes, eroded [CeD2] and Pacolet sandy loam, 15-25% slopes [PaE]). Based on the poor soil conditions and the level of commercial development, the preservation of intact archaeological resources would not be anticipated. The Office of State Archaeology (OSA) has reviewed several projects within the vicinity of the Study Area for environmental compliance, including utility upgrades/improvements (ERs 96-9138, 00-9210, 13-2894), residential development (ER 89-0201), transportation improvements (ER 08-2567 [TIP# B-4752]), and a hazardous waste site (ER 10-0924). Stating a low probability for intact and significant archaeological sites to be present, OSA did not require an archaeological survey for any of these projects. More importantly, a cultural resource survey for the Catawba-Wateree Hydroelectric Relicensing Project (Millis 2005 [OSA Biblio# 5430]) included several islands in the vicinity of the Study Area as well as the riverbanks to either side of the Catawba. Although numerous resources were identified and/or revisited, none was located within or adjacent to the Study Area. Within five (5) miles of the Study Area, NCDOT's Archaeology Group has reviewed five (5) transportation-related projects for environmental compliance under the Programmatic Agreement (PA) with the State Historic Preservation Office (NC-HPO), one of which is located within one (1) mile of the Study Area. An archaeological survey was not recommended for most of these projects, based on the presence of heavily modified soils and/or poorly drained or eroded soil conditions. However, an archaeological survey was recommended and conducted for the widening of I-85 (PA 16-01-0004 [TIP# I-5719 and C-5600G]) and for the replacement of Bridge No. 82 on US 29/US 74 over the South Fork of the Catawba River (PA 16-01-0110). Four (4) archaeological sites were documented as a result of the widening project; however, none of the sites was determined eligible for the NRHP. Three of the four sites documented were cemeteries and, thus, are afforded some protection based on the nature of the resource. Nevertheless, given the poor soil conditions and developed nature within the Study Area and the results of previously reviewed and surveyed projects in the vicinity, there is a low probability for significant prehistoric and/or historic archaeological materials to be present. Therefore, it is believed that the current 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.

## SUPPORT DOCUMENTATION

See attached: ☒ Map(s) ☒ Previous Survey Info ☐ Photos ☐ Correspondence  
☐ Photocopy of County Survey Notes Other:

## FINDING BY NCDOT ARCHAEOLOGIST

### NO ARCHAEOLOGY SURVEY REQUIRED

*Paul J. Mohler*  
 NCDOT ARCHAEOLOGIST

January 30, 2018

Date

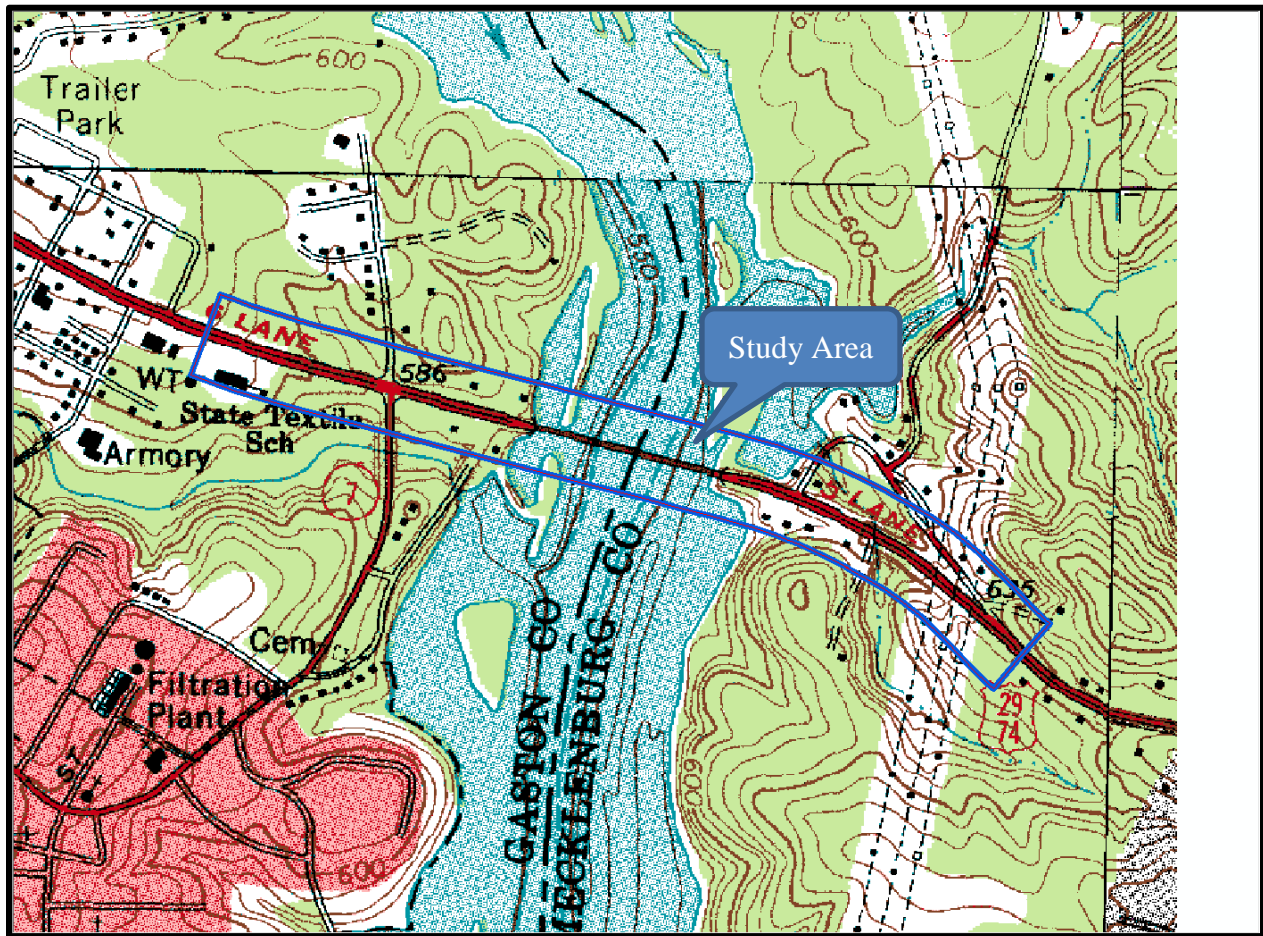
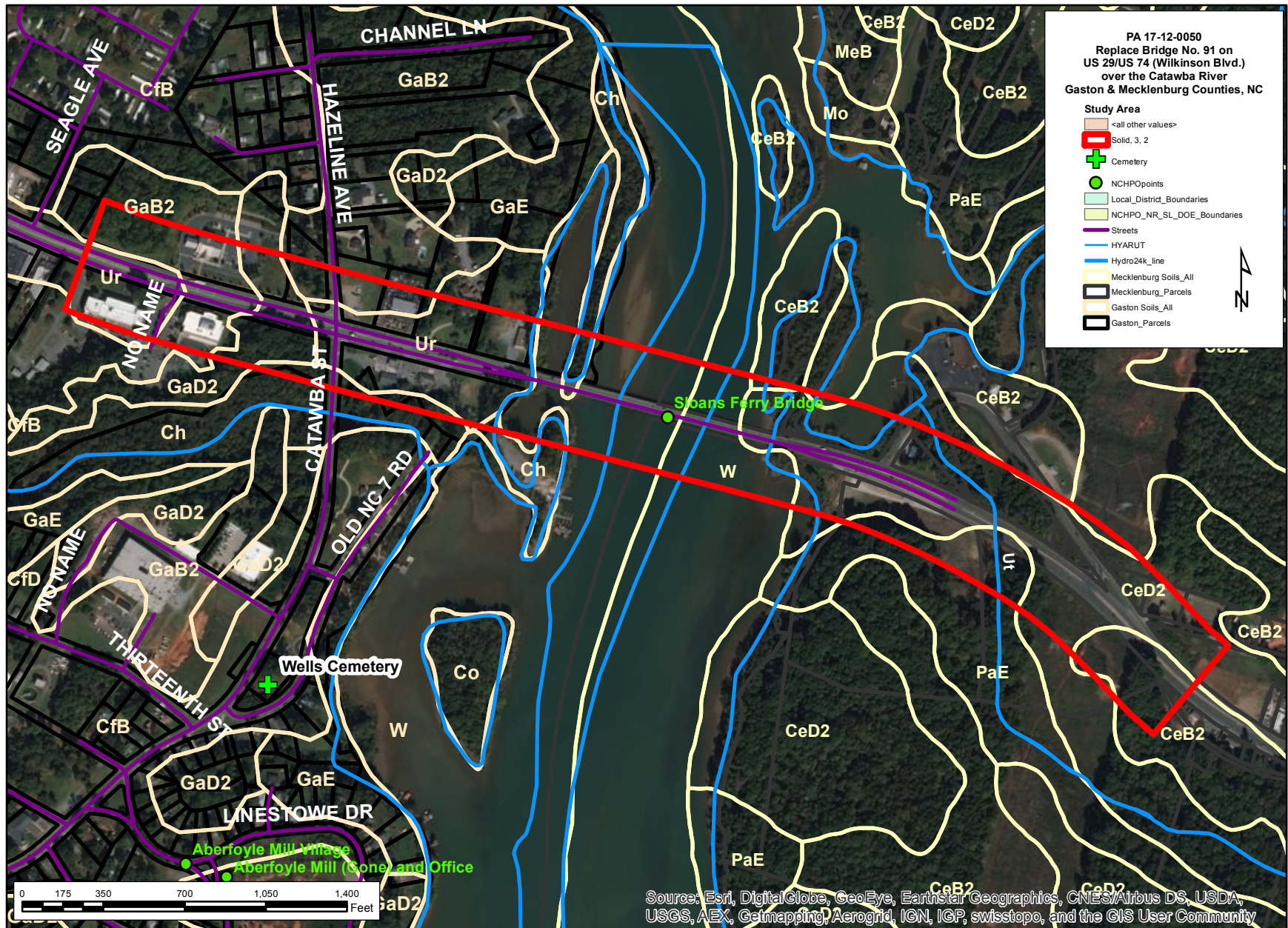


Figure 1: Belmont, NC (USGS 1973).





**17-12-0050****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**

**Structure 350091 (BR-0020)**

*Project No:* **RESUBMITTED** *County:* **Gaston**

*WBS No:* **67020.1.1** *Document:* **State MCC**

*F.A. No:* **N/A** *Funding:* ☒ State ☐ Federal

*Federal Permit Required?* ☒ Yes ☐ No *Permit Type:* **USACE (not specified)**

***Project Description:*** NCDOT's Division 12 proposes to replace Bridge No. 91 on US 29/US 74 (Wilkinson Boulevard) over the Catawba River in Gaston and Mecklenburg counties. Bridge No. 91 was constructed in 1933 and is considered to be functionally obsolete; therefore, it is scheduled to be replaced. Since Preliminary Design Plans have not been developed yet, a Study Area for the project has been generated in order to facilitate environmental planning purposes at this stage. The Study Area will be centered on the bridge measure about 500 feet wide and about 2,000 feet from either end of the bridge along US 29/US 74. Overall, the Study Area will encompass about 60 acres, inclusive of the existing roadway, structure to be replaced, and any modern development. **The Study Area has since expanded to include an additional 17.7 acres. This PA form only covers the expanded Study Area.**

**SUMMARY OF CULTURAL RESOURCES REVIEW*****Brief description of review activities, results of review, and conclusions:***

Because of an expansion to the original Study Area, this project was resubmitted and accepted on Tuesday, September 18, 2018. A map review and site file search at the Office of State Archaeology (OSA) was not deemed necessary. An archaeological survey has never been conducted at this bridge location, although several of the nearby islands within the Catawba River have been surveyed. Only one (1) archaeological site has been recorded within one (1) mile of the project area, that being within a powerline easement southeast of the Study Area. Digital copies of HPO's maps (Belmont and Charlotte West Quadrangles) as well as the HPOWEB GIS Service (<http://gis.ncdcr.gov/hpoweb/>) were last reviewed on Tuesday, September 18, 2018. There are no known historic architectural resources located within or adjacent to 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 expanded 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 still a State-funded project for which a Federal permit is necessary. A permanent/temporary drainage or utility easement will also be necessary; however, the need for additional ROW was not conveyed. The size and shape of the expanded Study Area have been drawn in a way to capture any



**17-12-0050**

possible impacts beyond the NCDOT's existing 100-foot ROW along US 29/US 74. At this time, we are still in compliance with NC GS 121-12a, since there are no eligible (i.e. National Register-listed) archaeological resources located within the project's expanded Study Area that would require our attention. Based on the description of the proposed project, activities may take place beyond the NCDOT's existing ROW; however, the exact location cannot be determined at this time. From an environmental perspective, the expanded Study Area falls within a commercial/residential area along the eastern bank of the Catawba River in the south-central Piedmont physiographic region of North Carolina, and consists of three (3) soil types, all of which are considered to be eroded and severely disturbed by modern development (Cecil sandy clay loam, 8-15% slopes, eroded [CeD2], Cecil sandy clay loam, 2-8% slopes, eroded [CeB2], and Udorthents, loamy [U1]). Based on the poor soil conditions and the level of development, the preservation of intact archaeological resources would not be anticipated. As before, the Office of State Archaeology (OSA) has reviewed several projects within the vicinity of the expanded Study Area for environmental compliance, including utility upgrades/improvements (ERs 96-9138, 00-9210, 13-2894), residential development (ER 89-0201), transportation improvements (ER 08-2567 [TIP# B-4752]), and a hazardous waste site (ER 10-0924). Stating a low probability for intact and significant archaeological sites to be present, OSA did not require an archaeological survey for any of these projects. More importantly, a cultural resource survey for the Catawba-Wateree Hydroelectric Relicensing Project (Millis 2005 [OSA Biblio# 5430]) included several islands in the vicinity of the expanded Study Area as well as the riverbanks to either side of the Catawba. Although numerous resources were identified and/or revisited, none was located within or adjacent to the expanded Study Area. Within five (5) miles of the Study Area, NCDOT's Archaeology Group has reviewed at least five (5) transportation-related projects for environmental compliance under the Programmatic Agreement (PA) with the State Historic Preservation Office (NC-HPO), one of which is located within one (1) mile of the expanded Study Area. An archaeological survey was not recommended for most of these projects, based on the presence of heavily modified soils and/or poorly drained or eroded soil conditions. However, an archaeological survey was recommended and conducted for the widening of I-85 (PA 16-01-0004 [TIP# I-5719 and C-5600G]) and for the replacement of Bridge No. 82 on US 29/US 74 over the South Fork of the Catawba River (PA 16-01-0110). Four (4) archaeological sites were documented as a result of the widening project; however, none of the sites was determined eligible for the NRHP. Three of the four sites documented were cemeteries and, thus, are afforded some level of protection based on the nature of the resource. Nevertheless, given the poor soil conditions and developed nature within the expanded Study Area and the results of previously reviewed and surveyed projects in the vicinity, there is a low probability for significant prehistoric and/or historic archaeological materials to be present. Therefore, it is believed that the 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.

## SUPPORT DOCUMENTATION

See attached: ☒ Map(s) ☒ Previous Survey Info ☐ Photos ☐ Correspondence  
☐ Photocopy of County Survey Notes ☐ Other:

17-12-0050

**FINDING BY NCDOT ARCHAEOLOGIST**

NO ARCHAEOLOGY SURVEY REQUIRED

*Paul J Mohler*  
NCDOT ARCHAEOLOGIST

September 18, 2018

Date

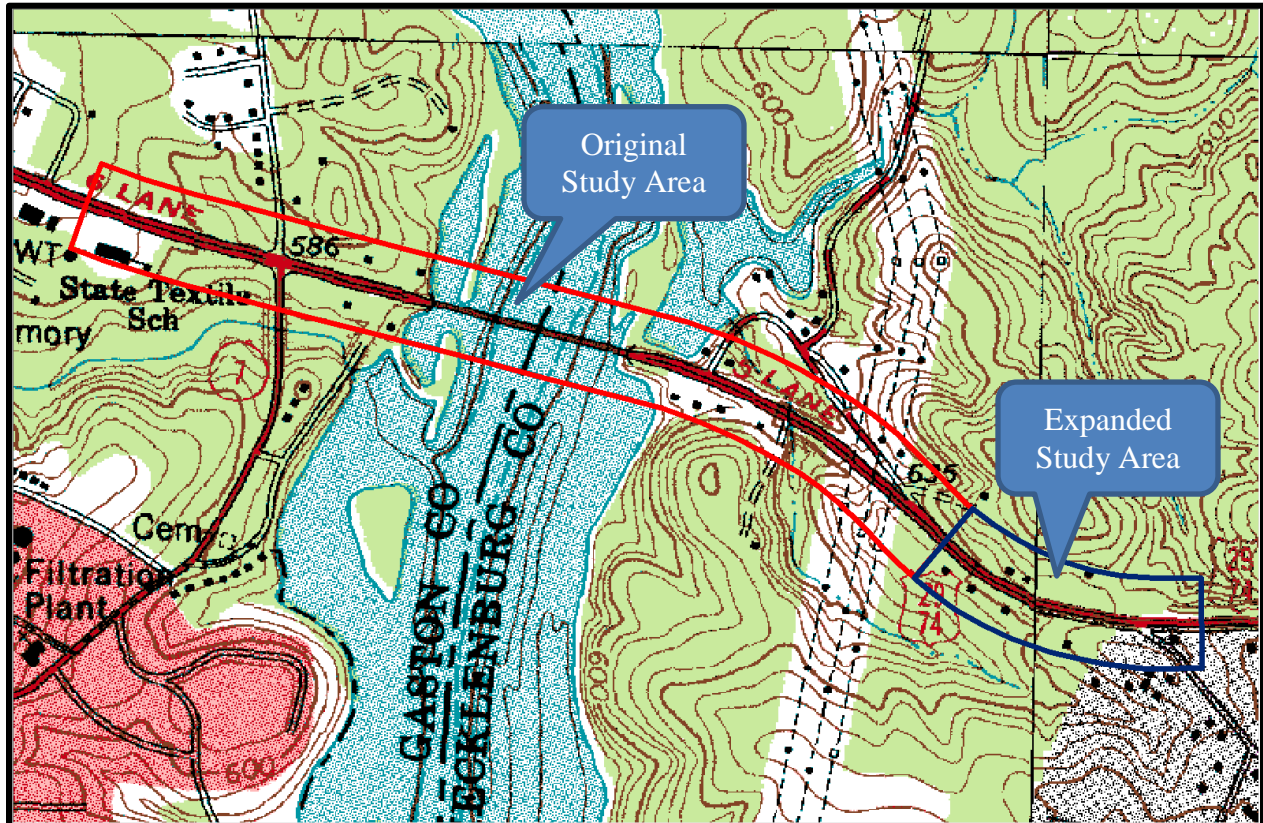


Figure 1: Belmont, NC (USGS 1973) and Charlotte West, NC (USGS 1968 [PR80]).







**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 Team.

**PROJECT INFORMATION**

Project No: **B-6051 (aka BR-0020)** County: **Gaston/Mecklenburg**  
 WBS No: **48708.1.1** Document: **State MCC**  
 Federal Aid No: **N/A** Funding: ☒ State ☐ Federal  
 Federal Permit Required? ☒ Yes ☐ No Permit Type: **USACE, FERC**

**Project Description:** NCDOT's Divisions 10 and 12 propose to replace Bridge No. 91 on US 29/US 74 (Wilkinson Boulevard) over the Catawba River in Gaston and Mecklenburg counties. Bridge No. 91 was constructed in 1933 and is considered to be functionally obsolete; therefore, it is scheduled to be replaced. Since Preliminary Design Plans have now been developed, the original Study Area for the project (which has been reviewed twice now) has been expanded once more and submitted for additional environmental review. The Study Area measures about 500 feet wide and about 2,000 feet from the west end of the bridge and roughly 3,650 feet from the east end of the bridge. Overall, the Study Area now encompasses about 91.15 acres, inclusive of the existing roadway, structure to be replaced, Y-line extensions, the Catawba River itself, and any modern development. Since my last review, the Study Area has been expanded along the Y-lines and now includes an additional 13.75 acres that were not considered as part of any previous environmental review. This PA form only covers the expanded sections of the Study Area.

**SUMMARY OF CULTURAL RESOURCES REVIEW*****Brief description of review activities, results of review, and conclusions:***

The resubmittal for this project was accepted for review on Wednesday, October 5, 2022. A review of the databases maintained by the Office of State Archaeology (OSA) was deemed not necessary based on the information compiled during the first two reviews for this project. As stated before, an archaeological survey has never been conducted at this bridge location, although several of the nearby islands within the Catawba River have been surveyed. Only three (3) archaeological sites have been recorded within one (1) mile of the project area, the closest being within a powerline easement southeast of the Study Area. Digital copies of HPO's maps (Belmont and Charlotte West Quadrangles) as well as the HPOWEB GIS Service (<http://gis.ncdcr.gov/hpoweb/>) were last reviewed on Wednesday, October 5, 2022. There are two (2) known historic architectural resources (North Carolina Vocational Textile School [GS3287] and the Sloans Ferry Bridge [GS3298]) located within or adjacent to the overall Study Area; however, intact archaeological deposits would not be anticipated for such resources 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 precontact settlement within the project limits, and to assess the level of slope as well as modern, agricultural, hydrological, and other erosive-type disturbances within and surrounding the expanded Study Area.

*(This project falls within a North Carolina County in which the following federally recognized tribes have expressed an interest: Catawba Indian Nation, Cherokee Nation, Eastern Band of Cherokee Indians, and the United Keetoowah Band of Cherokee Indians. We recommend that you ensure that this documentation is*

*forwarded to these tribes using the process described in the current NCDOT Tribal Protocol and PA Procedures Manual.)*

***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 still a State-funded project for which a Federal permit is anticipated. As part of the project's resubmittal, permanent/temporary easements will not be necessary; however, additional ROW will be required. The overall Study Area has been drawn in a way to capture any possible ground-disturbing activities beyond NCDOT's existing ROW, including along the Y-line extensions. At this time, we are still in compliance with NC GS 121-12a, since there are no eligible (i.e., National Register-listed) archaeological resources located within the project's expanded sections of the Study Area that would require our attention (i.e., along Hazeline Avenue and Catawba Street in Gaston County, and along Moores Chapel Loop in Mecklenburg County).

From an environmental perspective, the expanded Study Area locations along the Y-lines fall within residential (Gaston side) and commercial (Mecklenburg side) areas along the banks of the Catawba River, additionally located in the south-central Piedmont physiographic region of the state. Within Gaston County, the Y-line extensions consist of four (4) soil types, all of which are considered to be eroded, severely disturbed by modern development, or frequently flooded (Gaston sandy clay loam, 2-8% slopes, eroded [GaB2], Gaston sandy clay loam, 8-15% slopes, eroded [GaD2], Cecil-Urban land complex, 2-8% slopes [CfB], and Chewacla loam, frequently flooded [Ch]). Within Mecklenburg County, the Y-line extension consists of two (2) soil types, both of which are considered to be eroded (Cecil sandy clay loam, 8-15% slopes, eroded [CeD2] and Cecil sandy clay loam, 2-8% slopes, eroded [CeB2]). Based on the poor soil conditions and the level of development, the preservation of intact archaeological resources would not be anticipated within the Y-line extension areas of the Study Area.

As before, the Office of State Archaeology (OSA) has reviewed numerous projects within the vicinity of the overall Study Area for environmental compliance, including utility upgrades/improvements (ERs 92-7435, 96-9138, 00-9210, 13-2894, and 21-0583, and GS 21-2294), residential development (ERs 89-0201, 16-1492, 17-0557, and 20-1700), transportation improvements (ERs 08-2567 [TIP# B-4752], 18-1641, 19-2816, 19-2937 [as well as the Charlotte Outer Loop project]), commercial development (ERs 18-3032, 21-1953, 21-2259, and 22-1552), a new hospital (ER 21-0014), a borrow pit (ER 18-0611), and a hazardous waste site (ER 10-0924). Stating a low probability for intact and significant archaeological resources to be present, OSA did not require an archaeological survey for most of these projects. However, archaeological surveys were recommended and conducted for large-scale projects like the Catawba-Wateree Hydroelectric Relicensing Project (Millis 2005 [OSA Biblio# 5430]), which included several islands and the riverbanks to either side of the Catawba River in the vicinity of the overall Study Area. In addition, one of the proposed corridors for the Charlotte Outer Loop intersects/overlaps with the Mecklenburg portion of the Study Area. Although numerous resources were identified and/or revisited as part of these two large surveys, none was located within or adjacent to the overall Study Area as currently designed.

Within five (5) miles of the overall Study Area, NCDOT's Archaeology Team has reviewed at least thirty (30) transportation-related projects for environmental compliance under the Programmatic Agreement (PA) with the State Historic Preservation Office (NC-HPO), including this very project twice. An archaeological survey was not recommended for most of these projects (28/30), based on the presence of heavily modified soils and/or poorly drained or eroded soil conditions. Archaeological surveys were recommended and conducted for the widening of I-85 (PA 16-01-0004 [TIP# I-5719 and C-5600G]) and for the replacement of Bridge No. 82 on US 29/US 74 over the South Fork of the Catawba River (PA 16-01-0110). Four (4) archaeological sites were documented as a result of the widening project; however, none of the sites was determined eligible for the NRHP. Three of the four sites documented were cemeteries and, thus, are afforded an additional level of protection based on the nature of the resource. No archaeological resources were recorded at all from the survey for the bridge replacement project.

Based on the information above and given the small size of the areas that have been added to the overall Study Area, there is still a low probability for significant prehistoric and/or historic archaeological materials to be present. Therefore, it is believed that the 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 Team.

## SUPPORT DOCUMENTATION

See attached: ☒ Map(s) ☒ Previous Survey Info ☐ Photos ☐ Correspondence  
Other:

**FINDING BY NCDOT ARCHAEOLOGIST: NO ARCHAEOLOGY SURVEY REQUIRED**

*Paul J Mohler*  
NCDOT ARCHAEOLOGIST II

October 5, 2022

Date

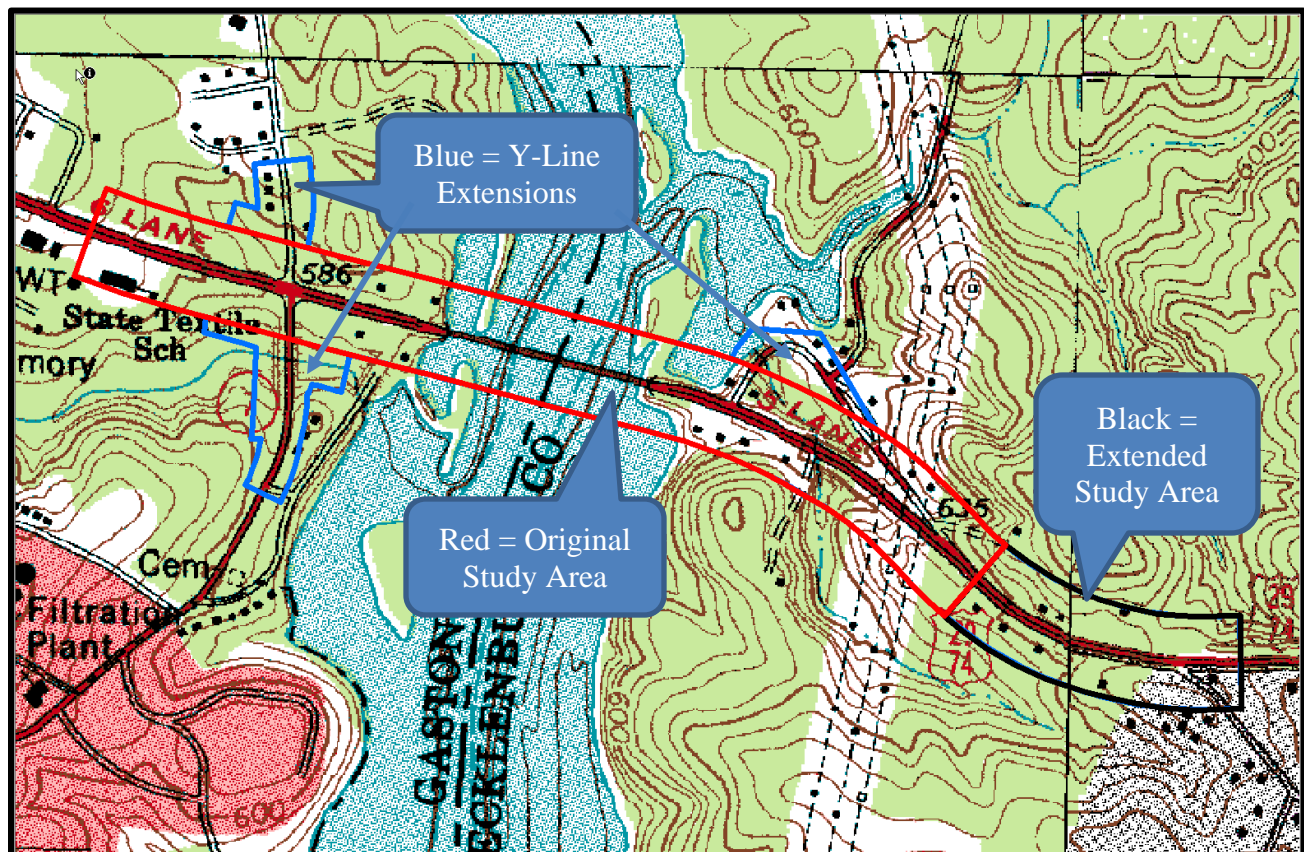
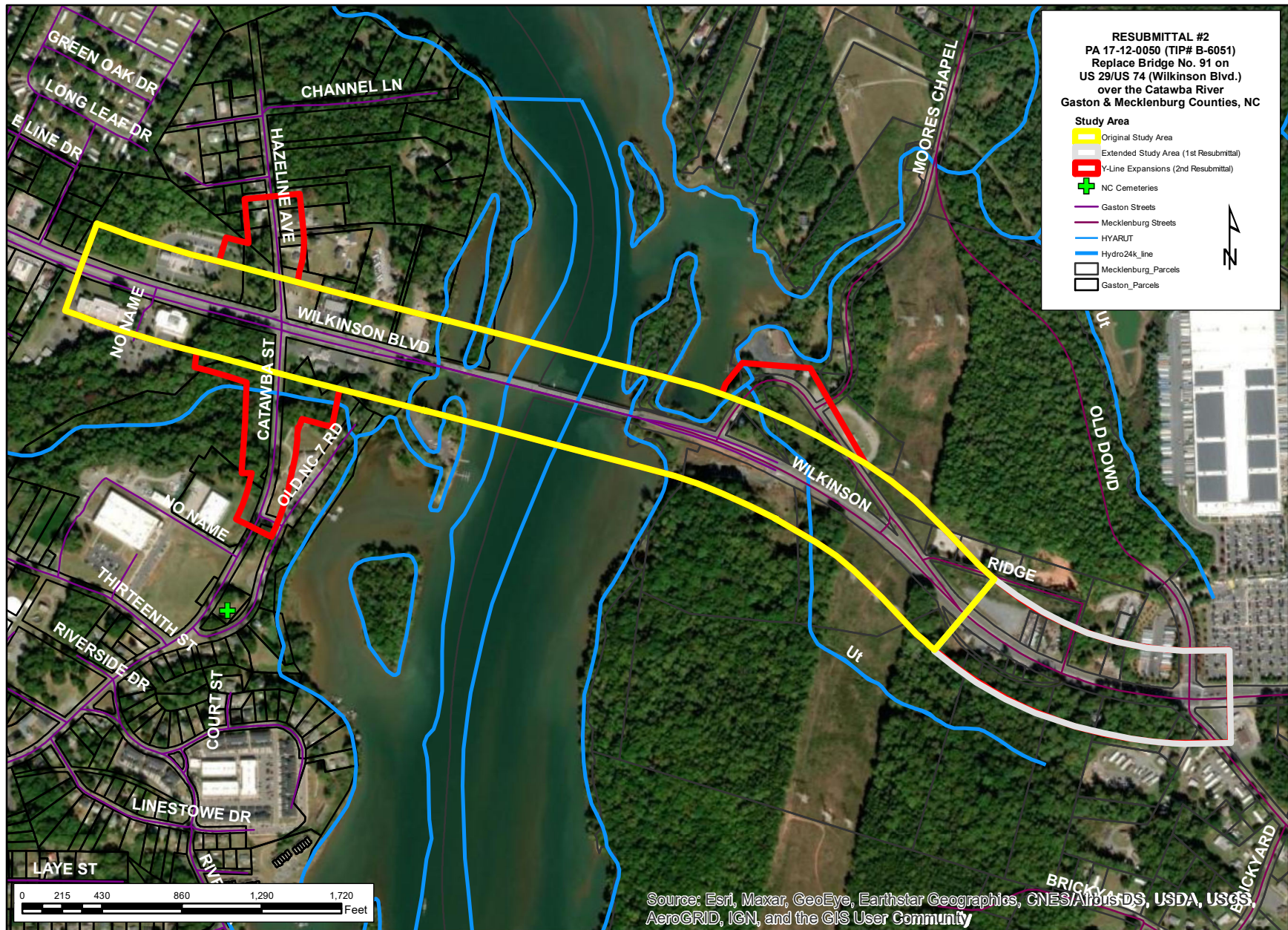


Figure 1: Belmont, NC (USGS 1973) and Charlotte West, NC (USGS 1968 [PR80]).





17-12-0050



## HISTORIC ARCHITECTURE AND LANDSCAPES ASSESSMENT OF EFFECTS FORM

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

<b>Project No:</b>	B-6051/U-6143 Formerly BR-0020	<b>County:</b>	Gaston/Mecklenburg
<b>WBS No.:</b>		<b>Document Type:</b>	
<b>Fed. Aid No:</b>	Not assigned	<b>Funding:</b>	<input type="checkbox"/> State <input checked="" type="checkbox"/> Federal
<b>Federal Permit(s):</b>	<input checked="" type="checkbox"/> Yes <input type="checkbox"/> No	<b>Permit Type(s):</b>	USACE 404 FERC Conveyance of Easement Permit
<b><u>Project Description:</u></b> [B-6051] Replace Bridge 91 over Catawba River (Lake Wylie) on US 74 (Wilkinson Boulevard) between Belmont and Charlotte (Gaston/Cleveland Counties) and [U-6143] Improvements to the intersection of Catawba Street and US 74 (Wilkinson Boulevard) in Belmont, NC.			

### SUMMARY OF HISTORIC ARCHITECTURE AND LANDSCAPES REVIEW

<b><u>Description of review activities, results, and conclusion</u></b> On January 16, 2019 a search of NC HPOWEB GIS Service map revealed that in addition to the National Register-eligible Bridge No. 91, the North Carolina Vocation Textile School is in the Area of Potential Effects for this project. In a letter dated October 8, 2019, HPO concurred in the recommendation that the school is eligible for National Register Listing. An Effects meeting was held on June 28, 2022.
--

### ASSESSMENT OF EFFECTS

<b>Property Name:</b>	North Carolina Vocation Textile School	<b>Status:</b>	DE
<b>Survey Site No.:</b>	GS3287	<b>PIN:</b>	
<b>Effects</b> <input type="checkbox"/> No Effect <input checked="" type="checkbox"/> No Adverse Effect <input type="checkbox"/> Adverse Effect			
<b><u>Explanation of Effects Determination:</u></b> The project stops at the existing curb in front of the school. There is an existing PUE that will not change for the project. A guy wire will be placed within the existing PUE.			
<b><u>List of Environmental Commitments:</u></b>			

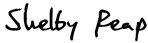

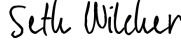
<b>Property Name:</b>	Bridge No. 91	<b>Status:</b>	DE
<b>Survey Site No.:</b>	GS3298	<b>PIN:</b>	
<b>Effects</b> <input type="checkbox"/> No Effect <input type="checkbox"/> No Adverse Effect <input checked="" type="checkbox"/> Adverse Effect			
<b><u>Explanation of Effects Determination:</u></b> The bridge will be removed and replaced.			
<b><u>List of Environmental Commitments:</u></b> A Memorandum of Agreement will be developed between FHWA, HPO, and NCDOT. FHWA intends to apply its Programmatic Section 4(f) Evaluation and Approval for FHWA Projects that Necessitate the Use of Historic Bridges.			

### SUPPORT DOCUMENTATION

☐ Map(s)
 ☐ Previous Survey Info.
 ☒ Photos
 ☐ Correspondence
 ☒ Design Plans

### FINDING BY NCDOT AND STATE HISTORIC PRESERVATION OFFICE

#### Historic Architecture and Landscapes – ASSESSMENT OF EFFECTS

DocuSigned by:	
	06/29/2022
<small>8C8B6DCCF4304AA...</small>	
NCDOT Architectural Historian	Date
DocuSigned by:	
	07/05/2022
<small>C26A1556A275464...</small>	
State Historic Preservation Office Representative	Date
DocuSigned by:	
	06/29/2022
<small>9067A500F8714F0...</small>	
Federal Agency Representative	Date





17-12-0050

Update

## HISTORIC ARCHITECTURE AND LANDSCAPES NO SURVEY REQUIRED FORM

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

<b>Project No:</b>	B-6051/U-6143 Formerly BR-0020	<b>County:</b>	Gaston/Mecklenburg
<b>WBS No.:</b>	BP2,R015.1	<b>Document Type:</b>	FCE
<b>Fed. Aid No:</b>		<b>Funding:</b>	<input type="checkbox"/> State <input checked="" type="checkbox"/> Federal
<b>Federal Permit(s):</b>	<input checked="" type="checkbox"/> Yes <input type="checkbox"/> No	<b>Permit Type(s):</b>	USACE 404 FERC Conveyance of Easement Permit
<b><u>Project Description:</u></b> [B-6051] Replace Bridge 91 over Catawba River (Lake Wylie) on US 74 (Wilkinson Boulevard) between Belmont and Charlotte (Gaston/Cleveland Counties) and [U-6143] Improvements to the intersection of Catawba Street and US 74 (Wilkinson Boulevard) in Belmont, NC.			

### SUMMARY OF HISTORIC ARCHITECTURE AND LANDSCAPES REVIEW

#### **Description of review activities, results, and conclusions:**

In June of 2022, an Effects form was signed by NCDOT, SHPO, and FHWA. Since that time new study area was added to the project. A review of the additional study area was completed on October 11, 2022. There is one potential historic site, a 1954 Weigh Station located on Mecklenburg County PIN 05323102. Current plans propose to repave Moores Chapel Loop and create a cul-de-sac beyond the parcel on which the Weigh Station sits. No survey is required at this time. If designs change and the project encroaches on the parcel, an Eligibility Evaluation will be required.

#### **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:**

Using HPO GIS website and county tax data provides reliable information regarding the structures in the APE. These combined utilities are considered valid for the purposes of determining the likelihood of historic resources being present.

### SUPPORT DOCUMENTATION

☒ Map(s) ☐ Previous Survey Info. ☒ Photos ☐ Correspondence ☐ Design Plans

### FINDING BY NCDOT ARCHITECTURAL HISTORIAN

Historic Architecture and Landscapes -- NO SURVEY REQUIRED

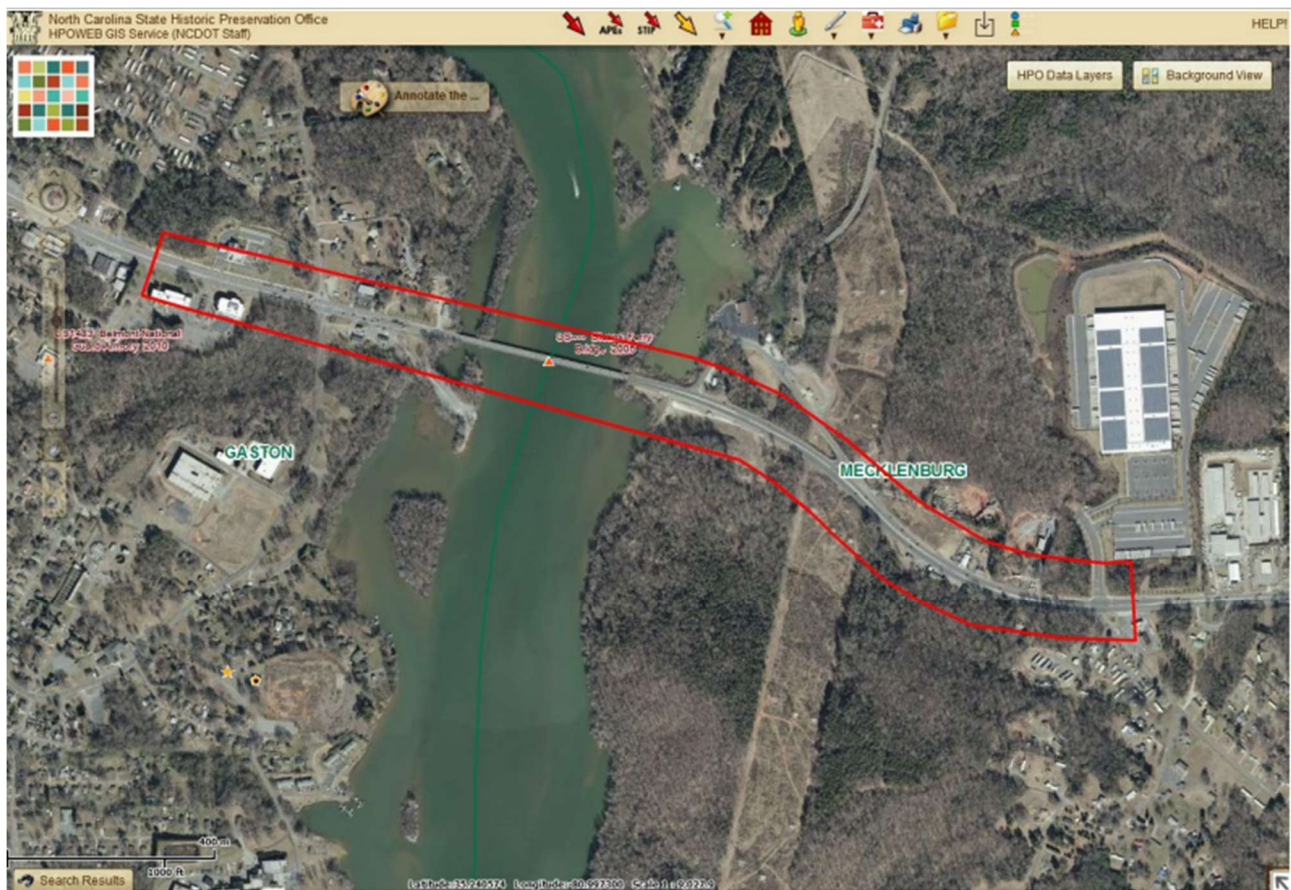
Shelby Reap

October 11, 2022

NCDOT Architectural Historian

Date





Original APE



Additional Study Area



1954 Weigh Station



**MEMORANDUM OF AGREEMENT  
AMONG THE FEDERAL HIGHWAY ADMINISTRATION,  
NORTH CAROLINA DEPARTMENT OF TRANSPORTATION,  
AND  
NORTH CAROLINA STATE HISTORIC PRESERVATION OFFICER  
FOR  
REPLACEMENT OF GASTON COUNTY BRIDGE NO. 91 ON US 74  
OVER THE CATAWBA RIVER IN GASTON COUNTY  
NORTH CAROLINA  
NCDOT TIP B-6051**

**WHEREAS**, the Federal Highway Administration (FHWA) has determined that Transportation Improvement Project B-6051 – the replacement of the structurally deficient, four-lane Gaston County Bridge No. 91 on US 74 over the Catawba River in Gaston County (the Undertaking) – will have an adverse effect upon Bridge No. 91, a steel stringer bridge determined eligible for listing in the National Register of Historic Places (NRHP) (historic property); and

**WHEREAS**, the FHWA has consulted with the North Carolina State Historic Preservation Officer (SHPO) pursuant to Section 106 of the National Historic Preservation Act (16 U.S.C. 470f), as amended by 54 USC §§ 300101, et seq., and its implementing regulations, 36 CFR Part 800; and

**WHEREAS**, NCDOT has participated in the consultation and has been invited by the FHWA and the SHPO to be a signatory to this MOA; and

**WHEREAS**, the FHWA has notified the Advisory Council on Historic Preservation (Council) of the adverse effect, and the Council has declined to comment or participate in the consultation,

**NOW, THEREFORE**, the FHWA, NCDOT, and the North Carolina SHPO agree that the Undertaking shall be implemented in accordance with the following stipulations to take into account the effects of the Undertaking on the historic property.

**STIPULATIONS**

The FHWA and NCDOT will ensure that the following measures are carried out:

**I. Photographic Recordation**

Prior to the initiation of construction, NCDOT will record the existing conditions of the Gaston County Bridge No. 91 in accordance with the attached Historic Structures and Landscape Recordation Plan (**Appendix A**). Copies of the documentation will be deposited in the files of the North Carolina Historic Preservation Office (NC HPO) and NCDOT's Historic Architecture Group.

## **II. Design Replacement Structure**

NCDOT will ensure the following elements are incorporated into the design and construction of the new bridge:

- A. Church Rail
- B. New End Rails will emulate the curve of existing end rails and include replica plaques

## **III. Unanticipated Discoveries**

- A. In accordance with 36 CFR 800.13(a), if NCDOT identifies any one or more additional cultural resources during construction and determines them to be eligible for the NRHP, all work shall halt within the limits of the NRHP-eligible resource(s), and the FHWA and North Carolina SHPO will be contacted. If, after consultation with the Signatories additional mitigation is determined necessary, the NCDOT, in consultation with the Signatories, will develop and implement appropriate protection and/or mitigation measures for the resource(s).
- B. Inadvertent or accidental discovery of human remains will be handled in accordance with North Carolina General Statute Chapters 65 and 70.

## **IV. Dispute Resolution**

Should any of the Parties to this Agreement object within thirty (30) days to any plans or documentation provided for review pursuant to this MOA, the FHWA shall consult with the objecting Party(ies) to resolve the objection. If the FHWA or the objecting Party(ies) determines that the objection cannot be resolved, the FHWA will forward all documentation relevant to the dispute to the Council. Within thirty (30) days after receipt of all pertinent documentation, the Council will either:

- A. Provide the FHWA with recommendations, which the FHWA will take into account in reaching a final decision regarding the dispute; or
- B. Notify the FHWA that it will comment pursuant to 36 CFR Section 800.7(c) and proceed to comment. Any Council comment provided in response to such a request will be taken into account by the FHWA in accordance with 36 CFR Section 800.7(c)(4), with reference to the subject of the dispute.

Any recommendations or comments provided by the Council will be understood to pertain only to the subject of the dispute; the FHWA's responsibility to carry out all the actions under this Agreement that are not the subject of the dispute will remain unchanged.

## **V. Amendments**

Should any of the Signatories to this MOA believe that its terms cannot be carried out or that an amendment to the terms must be made, the Party(ies) shall immediately consult with the other Party(ies) to develop amendments in accordance with 36 CFR 800.6(c)(7). If an amendment cannot be agreed upon, the dispute resolution process set forth in Stipulation III will be followed.

## **VI. Termination**

Any of the Signatories may terminate this MOA by providing notice to the other Parties, provided that the Parties consult during the period prior to termination to make a good faith effort to seek agreement on amendments or other actions that would avoid termination. Termination of this MOA will require compliance with 36 CFR 800. This MOA may also be terminated by the execution of a subsequent MOA that explicitly terminates or supersedes its terms.


## **VII. Duration**

Unless terminated pursuant to Stipulation III above, this MOA will be in effect until the FHWA, in consultation with the other Signatories, determines that all its terms have satisfactorily been fulfilled or if NCDOT is unable or decides not to construct the Undertaking.

Execution of this MOA by the FHWA, NCDOT, and the North Carolina SHPO, its subsequent filing with the Council, and implementation of its terms is evidence that the FHWA has afforded the Council an opportunity to comment on the Undertaking, and that the FHWA has taken into account the effects of the Undertaking on the historic property.


**AGREE:**

**Federal Highway Administration**

By:   
John F. Sullivan III, P.E.  
Division Administrator


Date: 1/23/2023

**North Carolina State Historic Preservation Officer**

By:   
Dr. Darin J. Waters  
State Historic Preservation Officer

Date: 12/19/2022

**North Carolina Department of Transportation**

By:   
Jamie J. Lancaster, P.E.  
Environment Analysis Unit Head

Date: 12/22/2022

**FILED:**

By: \_\_\_\_\_  
[Name]  
[Title]  
Advisory Council on Historic Preservation

Date: \_\_\_\_\_

## **APPENDIX A**

### **Historic Structures and Landscape Recordation Plan for the Replacement of Gaston County Bridge No. 91**

**Gaston County  
North Carolina  
NCDOT TIP B-6051**

#### **Photographic Requirements**

- Representative pictures of the Gaston County Bridge No. 91, including elevation and oblique views of the bridge and its setting.

#### **Photographic Format**

- Color digital images (all views) shot with an SLR digital camera with a minimum resolution of 6 megabyte pixels, at a high quality (preferably RAW) setting, to be saved in TIF format as the archival masters and labeled according to NC HPO standards.
- Drone photographic standards if different from above
- File names for each image should follow the format:  
**SS#\_ResourceName\_DateofPhoto\_InitialsofPhotog-FrameNo.tif.**
- Printed inventory (photolog) of the images should be provided as a table with the file name and description for each image – including subject, location, date, and photographer information for each image.
- Contact sheets should be printed on premium quality, bright white paper (24lb) or photo paper with a maximum of nine images per sheet. The back of the contact sheet should have the following information written in archival black ink.

**NCDOT TIP#**

**NCHPO ER#**

**NCDOT Photorecordation for MOA**

**Survey Site Number and Name of Property**

**Road Name**

**Vicinity or Town**

**County**

**Photographer's Name and Date of Photography**

- A labeled map with a key to the shots and photographs should be included in the documentation.
- The individual images, photolog, and map should be saved electronically on a compact disc labeled similar to the contact sheets.

#### **Copies and Curation**

- One (1) set of all above mentioned photographic documentation, including the compact disc of labeled images, will be deposited with the North Carolina Office of Archives and History/NC HPO to be made a permanent part of the statewide survey and iconographic collection.
- One (1) set of contact sheets shall be deposited in the files of the NCDOT's Historic Architecture Group.



NORTH CAROLINA DIVISION  
FINAL NATIONWIDE SECTION 4(f) EVALUATION AND APPROVAL  
FOR FEDERALLY AIDED HIGHWAY PROJECTS  
THAT NECESSITATE THE USE OF HISTORIC BRIDGES

F. A. Project	To be determined prior to let
W.B.S. No.	48708.1.1 & 48326.1.1
TIP No.	B-6051 & U-6143

**PROJECT DESCRIPTION**

B-6051/U-6143 – The purpose of this project is to address geometric deficiencies of the bridge and its approaches on Wilkinson Boulevard, the emergency detour needs of I-85, the navigational clearance requirements over Lake Wylie and to improve the intersection of Wilkinson Boulevard and Catawba Street to address deficient turning movements.

The project proposes to replace Bridge No. 91 carrying Wilkinson Boulevard to build a new bridge with six 12' lanes, a 4' concrete median, 5' offsets between the outside travel lane and a concrete barriers separating the travel lanes from and two 10' wide multi use paths on either side of the bridge. The approaches will connect to the existing six lane geometry on the western terminus (just west of Catawba St.) and to the existing five lane geometry on the eastern terminus (just east of ISWA Nature Preserve entrance). Typical sections illustrating the details of the new bridge, Wilkinson and Catawba Street are included in Figure 2 (Public Meeting Map).

The intersection of Wilkinson Boulevard and Catawba Streets will be modified into an offset reduced conflict intersection design as shown in Figure 2. Two left hand turn lanes will be included for traffic from WB Wilkinson to Catawba and two right hand turn lanes will be included for NB Catawba Street traffic to Wilkinson Boulevard. Work will extend approximately 670' down NC 7.

- |   | Yes                                 | No                                  |
|---|-------------------------------------|-------------------------------------|
| 1. Is the bridge to be replaced or rehabilitated with Federal funds?  | <input checked="" type="checkbox"/> | <input type="checkbox"/>            |
| 2. Does the project require the use of a historic bridge structure which is on or eligible for the National Register of Historic Places?  | <input checked="" type="checkbox"/> | <input type="checkbox"/>            |
| 3. Is the bridge a National Historic Landmark?  | <input type="checkbox"/>            | <input checked="" type="checkbox"/> |
| 4. Has agreement been reached among the FHWA, State Historic Preservation Officer (SHPO), and the Advisory Council on Historic Preservation (ACHP) though procedures pursuant to Section 106 of the National Historic Preservation Act? | <input checked="" type="checkbox"/> | <input type="checkbox"/>            |

## ALTERNATIVES CONSIDERED AND FOUND NOT TO BE FEASIBLE AND PRUDENT

The following alternatives were evaluated and found not to be feasible and prudent:

- |   | Yes                                 | No                       |
|---|-------------------------------------|--------------------------|
| 1. <u>Do Nothing</u><br>Does the "do nothing" alternative:  |                                     |                          |
| a) correct the problem situation that caused the bridge to be considered deficient?   | <input checked="" type="checkbox"/> | <input type="checkbox"/> |
| b) pose serious and unacceptable safety hazards?  | <input checked="" type="checkbox"/> | <input type="checkbox"/> |
| 2. <u>Build a new structure at a different location without affecting the historic integrity of the structure.</u>  |                                     |                          |
| (a) The following reasons were reviewed:<br>(Circle, as appropriate)  |                                     |                          |
| (i) The present bridge has already been located at the only feasible and prudent site   |                                     |                          |
| and/or   (ii) Adverse social, environmental, or economic impacts were noted   |                                     |                          |
| and/or   (iii) Cost and engineering difficulties reach extraordinary magnitude  |                                     |                          |
| and/or   (iv) The existing bridge cannot be preserved due to the extent of rehabilitation, because no responsible party will maintain and preserve the historic bridge, or the permitting authority requires removal or demolition. |                                     |                          |

Part of the Purpose and Need of the project is addressing navigational clearance requirements of both the Duke Energy FERC License and of Charlotte Fire Department who operate rescue boats that cannot pass underneath the existing bridge. The existing bridge does not have sufficient navigational clearance to meet either need. The structure must therefore be replaced to meet the purpose of the project.

3. Rehabilitate the historic bridge without affecting the historic integrity of the structure.

(a) The following reasons were reviewed:  
(circle, as appropriate)

(i) The bridge is so structurally deficient that it cannot be rehabilitated to meet the acceptable load requirements and meet National Register criteria

and/or (ii) The bridge is seriously deficient geometrically and cannot be widened to meet the required capacity and meet National Register criteria

The bridge cannot be rehabilitated or widened without compromising the historic aspects of the bridge. Building a parallel bridge would not meet the navigational clearance issue with the existing bridge as described in Item 2 above.

MINIMIZATION OF HARM

1. The project includes all possible planning to minimize harm.

2. Measures to minimize harm include the following: (circle, as appropriate)

a. For bridges that are to be rehabilitated, the historic integrity of the bridge is preserved to the greatest extent possible, consistent with unavoidable transportation needs, safety, and load requirements.

b. For bridges that are to be rehabilitated to the point that the historic integrity is affected or that are to be removed or demolished, the FHWA ensures that, in accordance with the Historic American Engineering Record (HAER) standards, or other suitable means developed through consultation, fully adequate records are made of the bridge.

c. For bridges that are to be replaced, the existing bridge is made available for an alternative use, provided a responsible party agrees to maintain and preserve the bridge.

d. For bridges that are adversely affected, agreement among the SHPO, ACHP, and FHWA is reached through the Section 106 process of the NHPA on measures to minimize harm and those measures are incorporated into the project.

3. Specific measures to minimize harm are discussed below:
- Photo Recordation of the Bridge and Preservation
  - Providing Digital As-Built Plans
  - Include Church Rail as part of the new bridge and details simulating the shape of the existing end rail with replica plaques.

Note: Any response in a box requires additional information prior to approval. Consult Nationwide 4(f) evaluation.

#### COORDINATION

The proposed project has been coordinated with the following (attach correspondence):

- |   |                                     |
|---|-------------------------------------|
| a. State Historic Preservation Officer                      | <input checked="" type="checkbox"/> |
| b. Advisory Council on Historic Preservation                | <input checked="" type="checkbox"/> |
| c. Local State and Federal Agencies                         | <input checked="" type="checkbox"/> |
| d. U.S. Coast Guard<br>for bridges requiring bridge permits | N/A                                 |

#### SUMMARY AND APPROVAL


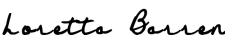
The project meets all criteria included in the programmatic 4(f) evaluation approved on July 5, 1983.

All required alternatives have been evaluated and the findings made are clearly applicable to this project.

There are no feasible and prudent alternatives to the use of the historic bridge. The project includes all possible planning to minimize harm, and there are assurances that the measures to minimize harm will be incorporated in the project.

All appropriate coordination has been successfully completed.

Approved:

5/3/2023	<div>DocuSigned by: </div>
Date	David Stutts, Project Engineer, PEF Program Management North Carolina Department of Transportation
5/8/2023	<div>DocuSigned by: </div>
Date	for John Sullivan, III, PE, Division Administrator Division Administrator, FHWA



To: John Williams  
From: Zip Stowe  
Date: 12/13/2022

Hello John,

This is Zip Stowe, Recreation Director for the City of Belmont. I reviewed the maps that your company provided for the Wilkinson Bridge & Catawba/Wilkinson intersection replacement on Kevin Loftin Park. The Assistant City Manager, Kevin Krouse, and the Senior Planner, Tiffany Faro, reviewed the maps also, and we all produced the same consensus. The project does not adversely affect the activities, features, or attributes that qualify the sources for protection under section 4 (f).

The features qualifying the resources as 4 (f) include open space, access area, walking trails, etc. The improvements shown on the map to the entrance off Wilkinson to Kevin Loftin Park Boat Access area are very much needed. If more information is needed, please feel free to email me. My email address is [zstowe@cityofbelmont.org](mailto:zstowe@cityofbelmont.org)

Yours Truly,

A handwritten signature in black ink that reads "Zip Stowe". The signature is written in a cursive, flowing style.

Zip Stowe  
Recreation Director  
City of Belmont



## MECKLENBURG COUNTY

### Office of the County Manager

April 26, 2023  
 David S. Stutts, P.E.  
 Project Engineer-PEF/ Program Management  
 NCDOT Structures Management Unit  
 12033-C East Independence Blvd  
 Matthews, NC 28105

Subject: Section 4(f) *de minimis* determination for NCDOT Project B-6051 - Wilkinson Blvd at Catawba River Bridge Replacement

Dear Mr. Stutts,

This letter is a follow-up to a request from the North Carolina Department of Transportation ("NCDOT") to review and concur with a Section 4(f) *de minimis* impact determination for the proposed Wilkinson Blvd at Catawba River Bridge Replacement B-6051 Project. The project consists of the replacement of Gaston County Bridge No. 91, which carries US 74/US 29 over the Catawba River, between Gaston and Mecklenburg Counties. The project will address geometric deficiencies in the US 74 approaches to the bridge as well as navigational requirements for boating traffic under the bridge.


Within the boundaries of the project is Mecklenburg County owned and operated ISWA Nature Preserve. The features qualifying the nature preserve as a 4(f) resource include publicly accessible open space and walking trails. Mecklenburg County Park and Recreation Department has reviewed the impact to the nature preserve resulting from the bridge replacement. Based on the small amount of County property to be impacted by the project listed below, the County has determined that the project does not adversely affect the activities, features, or attributes that qualify the ISWA Nature Preserve for protection under section 4(f).

B-6051 Right of Way Impacts						
Parcel #	Parcel Owner	PIN # / (PARCEL ID)	Total Parcel Area (Acres)	ROW Take (Acres)	Permanent Easement Take (Acres)	Temporary Easement Take (Acres)
22	MECKLENBURG COUNTY	(11334107)	0.75	0.000	0.032	0.142
23	MECKLENBURG COUNTY	(11334106)	14.182	0.000	0.192	0.196
24	MECKLENBURG COUNTY	(11334105)	8.037	0.113	0.343	0.413
						7.924

Thank you for allowing Mecklenburg County to weigh-in on project B-6051. If you have any questions related to the comments above, please contact Jacqueline McNeil at 980-314-2511.



Sincerely,

DocuSigned by:  
  
5D875F12592042B...  
Dena R. Diorio,  
County Manager  
Mecklenburg County

C: Leslie Johnson, Deputy County Manager  
Lee Jones, Park and Recreation Director  
Bert Lynn, Capital Planning Director

U.S. Department of  
Homeland Security

United States  
Coast Guard



Commander  
United States Coast Guard  
Fifth Coast Guard District

431 Crawford Street  
Portsmouth, Va. 23704-5004  
Staff Symbol: (dpb)  
Phone: (757) 398-6222  
Fax: (757) 398-6334  
Email: [Mickey.D.Sanders2@uscg.mil](mailto:Mickey.D.Sanders2@uscg.mil)  
Or [CGDFiveBridges@uscg.mil](mailto:CGDFiveBridges@uscg.mil)

16590  
01 NOV 2018

Mr. David Stutts  
Transportation Engineer Supervisor  
NCDOT Structures Management Unit  
1581 Mail Service Center  
Raleigh, NC 27699-1581

Dear Mr. Stutts:

Coast Guard review of your proposed project as provided in an email dated October 31, 2018, from Ms. Maggie Weiner with RK&K Engineers, on behalf of the North Carolina Department of Transportation, is complete.

Based on the documentation provided and our research, it is determined that a Coast Guard bridge permit will not be required for the proposed US 29/74 Bridge across Catawba River, at position (35.245750N, -81.008935W), at Gaston County, NC.

In addition, navigational lighting at the aforementioned bridge is not required, as per Title 33 Code of Federal Regulations, Part 118.40 (b).

The fact that a Coast Guard bridge permit is not required does not relieve you of the responsibility for compliance with the requirements of any other Federal, State, or local agency who may have jurisdiction over any aspect of the project.

If you have any further questions, please contact Mr. Mickey Sanders at the above listed address or telephone number.

Sincerely,

A handwritten signature in dark ink, appearing to read "Hal R. Pitts", written over a horizontal line.

HAL R. PITTS  
Bridge Program Manager  
By direction

Copy: Ms. Maggie Weiner, RK&K Engineers  
CG Sector North Carolina, Waterways Management  
U. S. Army Corps of Engineers, Norfolk District

Catawba Indian Nation  
Tribal Historic Preservation Office  
1536 Tom Steven Road  
Rock Hill, South Carolina 29730

Office 803-328-2427  
Fax 803-328-5791



September 20, 2019

Attention: David Stutts  
NC Department of Transportation  
1581 Mail Service Center  
Raleigh, NC 27699

Re. THPO #	TCNS #	Project Description
2019-193-31		Replacement of Bridge No. 91 on US 29/74 over Catawba River in Gaston & Mecklenburg

Dear Mr. Stutts,

The Catawba have no immediate concerns with regard to traditional cultural properties, sacred sites or Native American archaeological sites within the boundaries of the proposed project areas. **However, the Catawba are to be notified if Native American artifacts and / or human remains are located during the ground disturbance phase of this project.**

If you have questions please contact Caitlin Rogers at 803-328-2427 ext. 226, or e-mail [caitlinh@ccppcrafts.com](mailto:caitlinh@ccppcrafts.com).

Sincerely,

Wenonah G. Haire  
Tribal Historic Preservation Officer