

MINIMUM CRITERIA DETERMINATION CHECKLIST

TIP Project No.: B-5612

State Project No.: 45567.1.1

Project Location: Bridge No. 24 on NC 222 over Tar River in Pitt County

Project Description: The North Carolina Department of Transportation (NCDOT) proposes to replace Bridge No. 24 on NC 222 over Tar River in Pitt County. The purpose of the proposed project is to replace a previously (2013) structurally deficient bridge.

Bridge No. 24 was constructed in 1956. The bridge is 963 feet long with a clear roadway width of 26.083 feet. The structure type is stringer multi-beam on girder. NCDOT Bridge Management Unit records indicate Bridge No. 24 had a sufficiency rating of 65.83 as of July 17, 2017. NCDOT Bridge Management Unit records from August 2013 indicated that Bridge No. 24 had a sufficiency rating of 7 out of a possible 100 for a new structure. Since then, bridge maintenance has been performed to provide an acceptable sufficiency rating. However, these repairs are temporary in nature and the bridge is still in need of replacement.

Bridge No. 24 will be replaced in-place with an off-site detour. The proposed structure will be an approximately 975-foot long pre-stressed concrete girder. The bridge typical section is two 12-foot lanes with 5-foot offsets. The proposed design speed is 60 mph. The project length is approximately 1,900 feet. Preliminary plans are included in Appendix A.

Anticipated Permit or Consultation Requirements: US Army Corps of Engineer (USACE) Section 404 Nationwide Permit 23 and 33 (NWP 23 and NWP 33), NC Department of Water Resources (NCDWR) Section 401 Water Quality Certification (WQC) 4140 for NWP 23 and WQC 4141 for NWP 33 projects, NCDWR Buffer Authorization, Federal Emergency Management Act (FEMA) Permit, Section 10 Rivers and Harbors Appropriate Act Permit, US Coast Guard (USCG) Bridge Permit/Advance Approval, and Critical Habitat consultation with the National Marine Fisheries Service (NMFS) for Atlantic Sturgeon

Special Project Information:

Detour – Traffic will be managed with an off-site detour. The off-site detour would begin from NC 222, to NC 43, to I-587 (US 264), to NC 33, and end on NC 222; approximately 18.2 miles. The Pitt County Emergency Services agreed to establish internal staging (during the Field Scoping Meeting August 23, 2018) to allow better access and service with the proposed detour and length of detour.

Construction Moratoria – Tar River is an Inland Primary Nursery Area (IPNA), therefore a construction moratorium will be in effect from February 15 to September 30.

NC River Basin Buffer Rules – Streamside riparian zones within the study area are protected under provisions of the Tar-Pamlico River Buffer Rules administered by the NCDWR. Potential impacts to protected stream buffers will be determined once final alignment and design are determined.

Navigable Waters – The Tar River has been designated by the USACE as Navigable Water under Section 10 of the Rivers and Harbors Act. A USCG Bridge Permit/Advance Approval and Section 10 of the Rivers and Harbors Act Permit will be required.

Threatened & Endangered Species – The programmatic determination of biological conclusion for the Northern long-eared bat (NLEB) is May Affect, Likely to Adversely Affect (MALAA). The US Fish and Wildlife Service (USFWS) developed a Programmatic Biological Opinion for NLEB (PBO-NLEB) in eastern North Carolina. The PBO-NLEB will provide incidental take coverage for the NLEB and will ensure compliance with Section 7 of the Endangered Species Act for five years for all NCDOT projects with a federal nexus in Divisions 1-8, which includes Pitt County, where Bridge No. 24 is located.

The Atlantic Sturgeon is known to occur in Tar River where Bridge No. 24 is located. The NOAA-Fisheries has issued a PBO for the Atlantic Sturgeon. NCDOT will initiate consultation with NMFS for the Atlantic Sturgeon to determine if the PBO is applicable for this project.

A biological conclusion of May Affect, Not Likely to Adversely Affect (MANLAA) was provided for the West Indian manatee. Biological conclusions of Unresolved were provided for the Tar River spiny mussel and Atlantic Sturgeon. The mussel survey completed in October 2017 indicated biological conclusions of MANLAA for the Tar River spiny mussel, Atlantic pigtoe, Green floater, and Carolina Madtom; and a biological conclusion of MALAA for the Neuse River waterdog.

Use of Programmatic Biological Opinion for Bridge and Culvert Replacements/Repairs/Rehabilitations (PBO-Bridge) in Eastern North Carolina, NCDOT Division 1-8 (June 13, 2018) provides for incidental take coverage for projects which may have adverse effects to three species of mussels (Dwarf wedgemussel, Tar River spiny mussel, and Yellow lance). The use of the PBO-Bridge indicates biological conclusion of MANLAA for Tar River spiny mussel. The NCDOT will make appropriate payment for the Tar River spiny mussel to the North Carolina Non-Game Aquatic Species Fund following guidance in the PBO-Bridge. The Atlantic pigtoe is not covered in the PBO-Bridge.

Cultural Resources - A No Survey Required form was provided for Historic Architecture. An Archaeological Survey Required form was provided January 27, 2016. A No National Register of Historic Places Eligible or Listed Archaeological Sites Affected form was provided December 13, 2017. A portion of Site 31PT630 (at the easternmost part of the project) is eligible for the National Register of Historic Places

(NRHP) per Criterion D (confirmed by NC Department of Natural and Cultural Resources February 15, 2018). The form included conditions to avoid and minimize potential adverse effects by revising the proposed right-of-way. The roadway design limits and proposed right-of-way are not anticipated to reach area of Site 31PT630.

Conditions include:

- Installation of temporary construction fencing along the edge of the revised proposed right-of-way in the area of Site 31PT6030 to avoid any unintended impacts
- Temporary staging areas should be placed outside site boundary

If underwater archaeological sites (e.g. abandoned or wrecked watercraft) are encountered during bridge construction, then such resources will be dealt with according to the procedures set forth for unanticipated discoveries, to include notification of NCDOT’s Archaeology Group.

Archaeological decision documents are included in Appendix B.

Publicly Owned Lands – The NC Wildlife Resource Commission (NCWRC) owns game land and a boat ramp (Falkland Boating Access Area) south of NC 222 and west of the Tar River. The project will acquire right-of-way from the NCWRC property.

Two paddle trails, The Tar River Trail and Conetoe Creek Trail, are within the study area. Navigation will be addressed as part of Section 10 permitting. There are no riverside trails or greenways associated with the paddle trails.

Public Involvement – Landowner notification letters, in both English and Spanish versions, were sent to property owners in February 2016. To date, there are no responses from property owners to request information or provide comments on the project.

PART A: MINIMUM CRITERIA

	YES	NO
1. Is the proposed project listed as a type and class of activity allowed under the Minimum Criteria Rule in which environmental documentation is <u>not</u> required?	<input checked="" type="checkbox"/>	<input type="checkbox"/>

If the answer to number 1 is “no”, then the project does not qualify as a minimum criteria project. A state environmental assessment is required.

If yes, under which category? Category #9 – Reconstruction of existing crossroad or railroad separations and existing stream crossings, including, but not limited to, pipes, culverts, and bridges

If either category #8, #12(i) or #15 is used complete Part D of this checklist.

PART B: MINIMUM CRITERIA EXCEPTIONS

	YES	NO
2. Could the proposed activity cause significant changes in land use concentrations that would be expected to create adverse air quality impacts?	<input type="checkbox"/>	<input checked="" type="checkbox"/>
3. Will the proposed activity have secondary impacts or cumulative impacts that may result in a significant adverse impact to human health or the environment?	<input type="checkbox"/>	<input checked="" type="checkbox"/>
4. Is the proposed activity of such an unusual nature or does the proposed activity have such widespread implications, that an uncommon concern for its environmental effects has been expressed to the Department?	<input type="checkbox"/>	<input checked="" type="checkbox"/>
5. Does the proposed activity have a significant adverse effect on wetlands; surface waters such as rivers, streams, and estuaries; parklands; prime or unique agricultural lands; or areas of recognized scenic, recreational, archaeological, or historical value?	<input type="checkbox"/>	<input checked="" type="checkbox"/>
6. Will the proposed activity endanger the existence of a species on the Department of Interior's threatened and endangered species list?	<input type="checkbox"/>	<input checked="" type="checkbox"/>
7. Could the proposed activity cause significant changes in land use concentrations that would be expected to create adverse water quality or ground water impacts?	<input type="checkbox"/>	<input checked="" type="checkbox"/>
8. Is the proposed activity expected to have a significant adverse effect on long-term recreational benefits or shellfish, finfish, wildlife, or their natural habitats	<input type="checkbox"/>	<input checked="" type="checkbox"/>

PART C: COMPLIANCE WITH STATE AND FEDERAL REGULATIONS

	YES	NO
9. Is a federally protected threatened or endangered species, or its habitat, likely to be impacted by the proposed action?	<input checked="" type="checkbox"/>	<input type="checkbox"/>
10. Does the action require the placement of temporary or permanent fill in waters of the United States?	<input checked="" type="checkbox"/>	<input type="checkbox"/>
11. Does the project require the placement of a significant amount of fill in high quality or relatively rare wetland ecosystems, such as mountain bogs or pine savannahs?	<input type="checkbox"/>	<input checked="" type="checkbox"/>
12. Is the proposed action located in an Area of Environmental	<input type="checkbox"/>	<input checked="" type="checkbox"/>

Concern, as defined in the coastal Area Management Act?

13. Does the project require stream relocation or channel changes?

Cultural Resources

14. Will the project have an “effect” on a property or site listed on the National Register of Historic Places?
15. Will the proposed action require acquisition of additional right of way from publicly owned parkland or recreational areas?

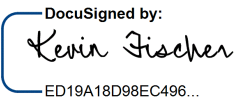
Response to Question No. 9 – Habitats for the NLEB, Atlantic Sturgeon, West Indian manatee, Atlantic pigtoe, Green floater, Carolina Madtom, and Neuse River waterdog exist within the study area (see Special Project Information section).

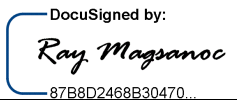
Response to Question No. 10 – Approximately 740 linear feet of jurisdictional water resources and 5.3 acres of jurisdictional wetlands were identified within the study area.

Response to Question No. 15 – The project will acquire right-of-way from a NCWRC property (see Special Projects Information section).

PART D:(To be completed when either category #8, 12(i) or #15 of the rules are used.)

16. Project length: N/A
17. Right of Way width: N/A
18. Project completion date: N/A
19. Total acres of newly disturbed ground surface: N/A
20. Total acres of wetland impacts: N/A
21. Total linear feet of stream impacts: N/A
22. Project purpose: N/A

Reviewed by:  Date: 4/5/2019
ED19A18D98EC496...
Kevin Fischer, PE
Assistant State Structures Engineer –
Program Management and Field
Operations
NCDOT Structures Management Unit

Prepared by:  Date: 4/1/2019
87B8D2468B30470...
Ray Magsanoc
Transportation Planner
STEWART

Project Commitments
Pitt County
Replace Bridge No. 24 on NC 222 over Tar River
TIP Project No. B-5612
WBS No. 45567.1.1

All commitments developed during the project development and design phase for the project are listed below.

NCDOT Hydraulics Unit:

NC River Basin Buffer Rules

NCDOT will identify impacts to protected stream buffers once final alignment and design are determined.

FEMA

The project may encroach but will not adversely affect the FEMA-regulated stream. The Hydraulics Unit will coordinate with FEMA to determine if a Conditional Letter of Map Revision (CLOMR) and subsequent final Letter of Map Revision (LOMR) are required for the project.

NCDOT Environmental Analysis Unit:

Federally Threatened Species

NCDOT will initiate Critical Habitat consultation with the NMFS for the Atlantic Sturgeon.

NCDOT will initiate consultation with the USFWS to confirm biological conclusions for the Atlantic pigtoe, Green floater, and Carolina Madtom; and biological conclusion and mitigation for the Neuse River waterdog.

Navigable Waters

NCDOT will prepare the U.S. Coast Guard Bridge Permit/Advance Approval and Section 10 of the Rivers and Harbors Act Permit.

NCDOT Division 2:

Archaeological Resources

NCDOT will avoid and minimize potential adverse effects at Site 31PT630 (eligible for the NRHP) by revising the proposed right-of-way once hydraulic designs are approved and prior to final design.

Project Commitments
Pitt County
Replace Bridge No. 24 on NC 222 over Tar River
TIP Project No. B-5612
WBS No. 45567.1.1

Publicly Owned Land

NCDOT will coordinate with the NC Division of Parks and Recreation and NC Division of Mitigation Services and obtain all necessary documentation and approval to acquire right-of-way from the NCWRC property.

NCDOT Division 2 Construction:

Construction Moratoria

NCDOT will follow the IPNA Moratoria for the Tar River in effect from February 15 to September 30.

Roadway Lane Reductions and Closures

NCDOT will contact the Pitt County Emergency Management/Emergency Medical Services at 252-902-3950 at least one month prior to lane reduction and/or roadway closure to allow first responders to prepare for the anticipated action.

NCDOT will contact the Pitt County Schools Director of Transportation at 252-756-1424 at least one month prior to lane reduction and/or roadway closure to allow schools to prepare for the anticipated action.

FEMA

If a CLOMR and subsequent final LOMR are required for the project, NCDOT will submit sealed as-built construction plans to the Hydraulics Unit upon project completion certifying the project was built as shown on construction plans.

West Indian Manatee

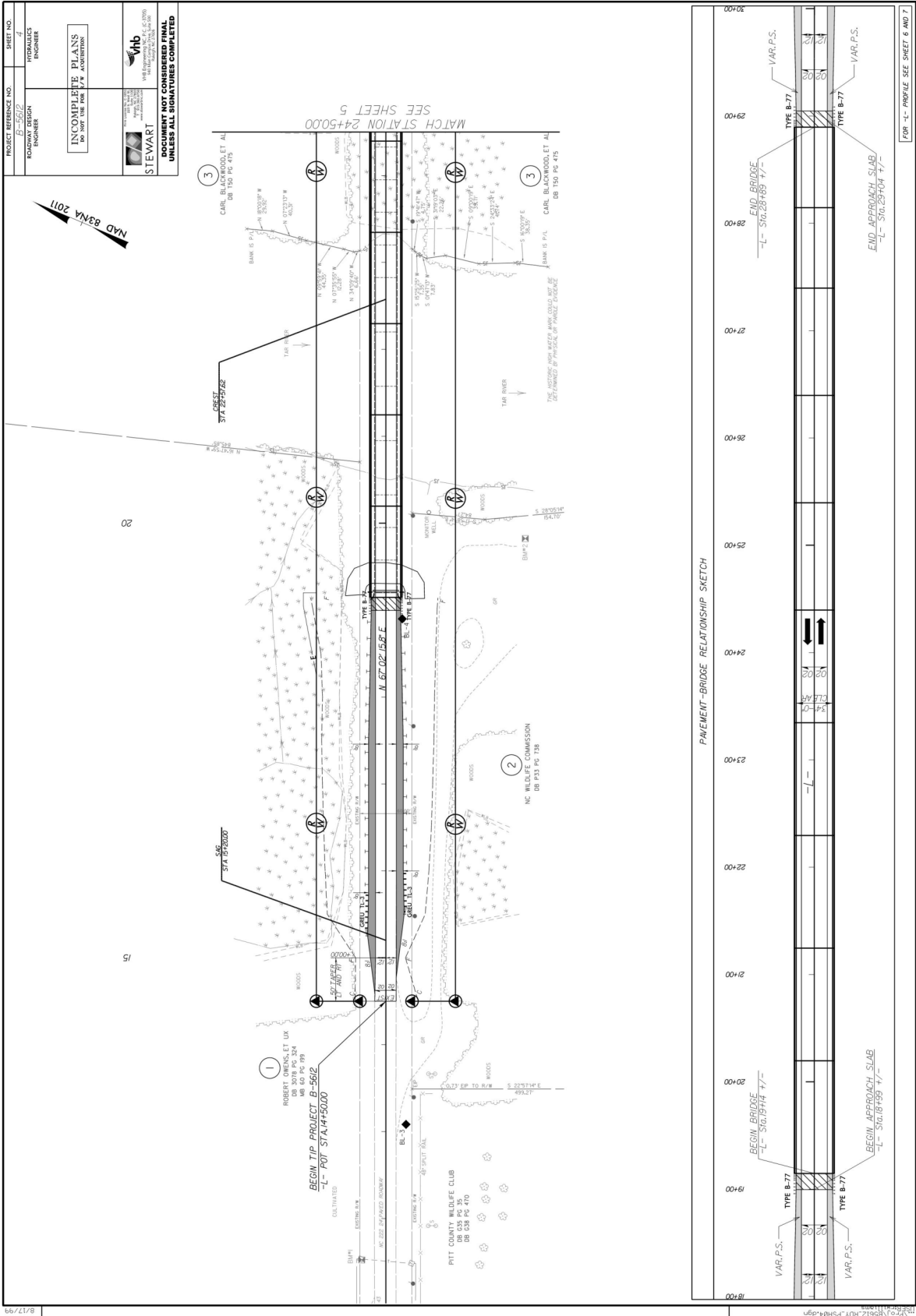
NCDOT will provide conditions to contractors to adhere to guidelines outlined in GUIDELINES FOR AVOIDING IMPACTS TO THE WEST INDIAN MANATEE Precautionary Measures for Construction Activities in North Carolina Waters (2003 USFWS).

Archaeological Resources

NCDOT will incorporate in design plans and provide the following conditions to contractors:


- Installation of temporary construction fencing along the edge of the revised proposed right-of-way in the area of Site 31PT6030 to avoid any unintended impacts
- Temporary staging areas should be placed outside site boundary
- Avoid the area and contact the NCDOT Archaeology Group if submerged archaeological sites (wrecked or abandoned watercraft) are encountered during bridge construction

APPENDIX A



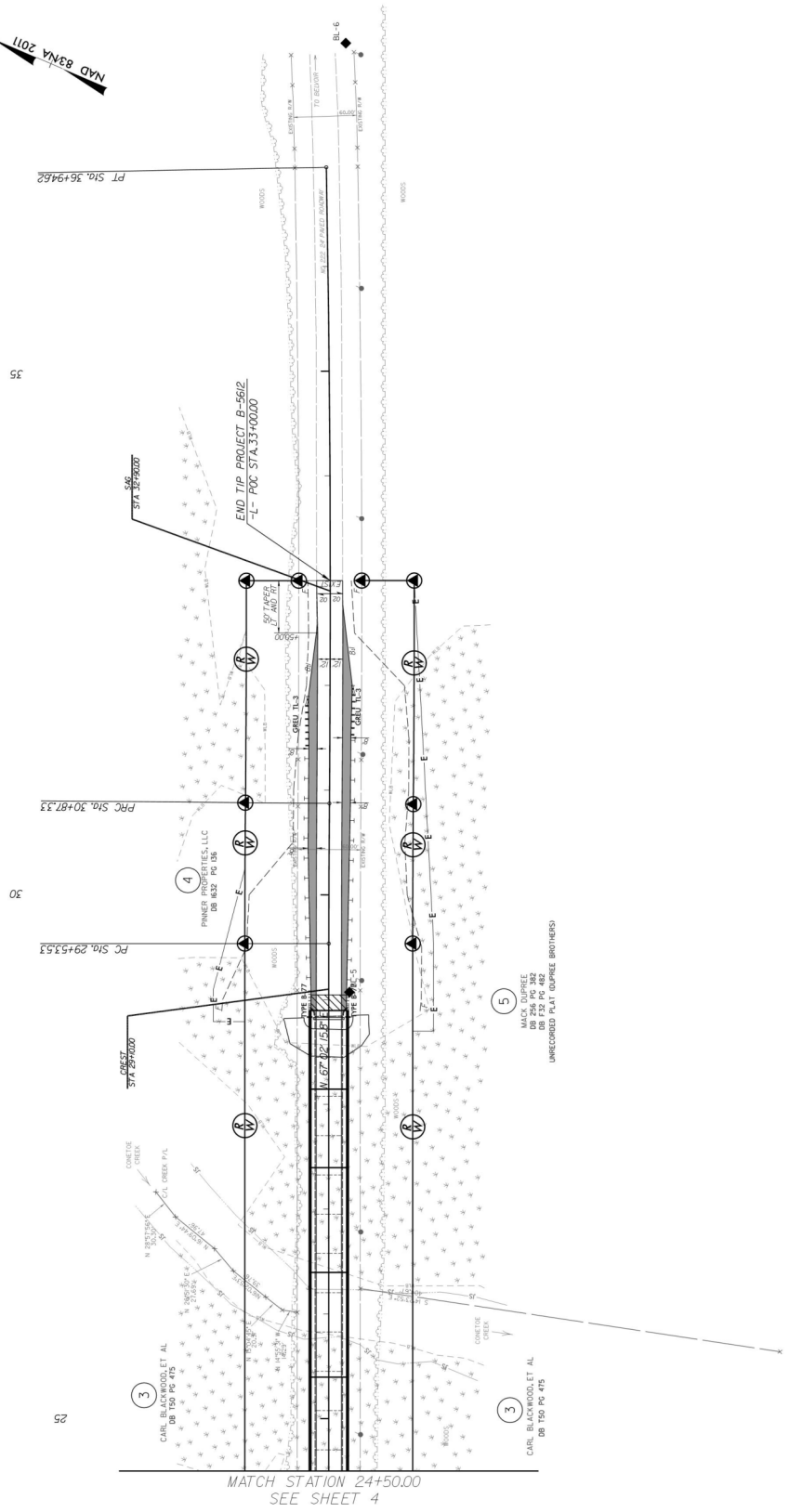
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1/10/2018
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PROJECT REFERENCE NO.	PROJECT NO.
ROADWAY DESIGN ENGINEER	HYDRAULICS ENGINEER
INCOMPLETE PLANS DO NOT USE FOR 1/4 ACQUISITION	
 STEWART 10000 W. CENTRAL EXPRESSWAY, SUITE 100 DENVER, CO 80231 TEL: 303.733.8800 FAX: 303.733.8801 WWW.STEWARTENGINEERS.COM	
DOCUMENT NOT CONSIDERED FINAL UNLESS ALL SIGNATURES COMPLETED	

-L-
 PT STA. 30+20.43
 $\Delta = 0.22$ (RT)
 $\Delta = 0.22$ (LT)
 $L = 133.60'$
 $R = 607.29'$
 $S_c = 66.90'$
 $S_b = 100.00'$
 $S_a = MC$

-L-
 PT STA. 33+90.99
 $\Delta = 0.22$ (RT)
 $\Delta = 0.22$ (LT)
 $L = 133.60'$
 $R = 607.29'$
 $S_c = 66.90'$
 $S_b = 100.00'$
 $S_a = MC$



FOR -L- PROFILE SEE SHEET 8 AND 7

APPENDIX B

Project Tracking No.:

10-07-0004



ARCHAEOLOGICAL SURVEY REQUIRED FORM

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



PROJECT INFORMATION

Project No: **B-5612** County: **Pitt**
WBS No: **45567.1.1** Document: **SMC**
F.A. No: **N/A** Funding: State Federal
Federal Permit Required? Yes No Permit Type: **NWP**

Project Description: The NCDOT is proposing to replace Bridge No. 24 on NC 222 over the Tar River in Pitt County. Bridge No. 24 was constructed in 1956 and is now considered to be structurally deficient and functionally obsolete. The Proposed Study Area for the project will be centered on the bridge and measure about 300 feet wide by 2,900 feet long. Existing ROW along NC 222 is currently set at 60 feet. Based on these dimensions, the Proposed Study Area encompasses about 19.7 acres (861,454 square feet) inclusive of the existing roadway and structure to be replaced.

SUMMARY OF ARCHAEOLOGICAL RESOURCES REVIEW: *SURVEY REQUIRED*

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

A map review and site file search was conducted at the Office of State Archaeology (OSA) on Monday, January 11, 2016. A comprehensive archaeological survey has never been conducted along this stretch of NC 222; however, two (2) unassessed archaeological sites have been recorded within one-half (1/2) mile of the proposed project. One of those sites (31PT345) falls within the Study Area of the proposed project. Digital copies of HPO's maps (Greenville NW Quadrangle) as well as the HPOWEB GIS Service (<http://gis.ncdcr.gov/hpweb/>) were reviewed on Wednesday, January 27, 2016. There are no known historic architectural resources located within or adjacent to the Study Area for which intact archaeological deposits would be anticipated. In addition, topographic maps, historic maps (NCMaps website), USDA soil survey maps, and historic orthophotography 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 archaeological APE.

This is a State-funded project for which a Federal permit will be required. The need for temporary and/or permanent easements has not been determined; however, the overall dimensions of the Study Area will capture any necessary easements. At this time, we are in compliance with NC GS 121-12a since there are no eligible (i.e. National Register-listed) archaeological resources located within the project's Study Area that would require our attention. One (1) parcel within the Study Area is owned by the State of North Carolina so a State Archaeological Resources Protection Act (ARPA) permit will be required. According to the North Carolina Department of Administration's State Property Office Facilities Information System (<http://www.ncspo.com/FIS/dbRealEstateSearch.aspx>), that particular parcel was acquired by the North Carolina Wildlife Resources Commission in 1963 as a boat access area (Contact Person: Erik D. Christofferson, erik.christofferson@ncwildlife.org, 919-707-0153). From an environmental perspective, the Study Area straddles the floodplain of the Tar River reaching the broad second-order terraces to either side of the river. The Study Area is composed of six (6) soil types: Lakeland sand, 0-6% slopes (LaB),


10-07-0004

Wagram loamy sand, 0-6% slopes (WaB), Bibb complex (Bb), Altavista sandy loam, 0-4% slopes (AIB), Portsmouth loam (Po), and Pactolus loamy sand (Pa). The poorly drained soil conditions within the Study Area are not favorable for containing intact archaeological sites/resources. Preservation of archaeological materials within such soil types is likely to be poor. However, the well-drained and excessively well-drained conditions on the second-order stream terraces are extremely favorable for containing intact archaeological resources, thus the presence of Site 31PT345. Both second-order stream terraces on either side of the Tar River hold a moderate to high probability for containing intact archaeological resources. Site 31PT345 was recorded in 1989 and contained an assemblage of lithics and ceramics representative of a Middle to Late Woodland period short-term habitation. Site 31PT345 remains unassessed for the National Register of Historic Places (NRHP). The presence of a potentially eligible archaeological site within the immediate vicinity of Bridge No. 24 would suggest that specific sections of the Study Area should be the focus of any formal archaeological investigations. Based on the information provided, an archaeological survey is, therefore, recommended for the proposed project. A visual inspection of the entire Study Area should be conducted, followed then by systematic archaeological excavations within areas of moderate to high archaeological probability (i.e. well-drained to moderately well-drained soils). Should the description of this project change or design plans be made available prior to construction, additional consultation regarding archaeology will be required.

SUPPORT DOCUMENTATION

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

FINDING BY NCDOT ARCHAEOLOGIST – SURVEY REQUIRED

 <hr style="border: 0.5px solid black;"/>	January 27, 2016
NCDOT ARCHAEOLOGIST	Date

PROPOSED FIELDWORK COMPLETION DATE	July 27, 2016
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**NO NATIONAL REGISTER OF HISTORIC PLACES
ELIGIBLE OR LISTED ARCHAEOLOGICAL SITES
AFFECTED 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

<i>Project No:</i>	B-5612	<i>County:</i>	Pitt
<i>WBS No:</i>	45567.1.1	<i>Document:</i>	State Minimum Criteria
<i>F.A. No:</i>	N/A	<i>Funding:</i>	<input checked="" type="checkbox"/> State <input type="checkbox"/> Federal

Federal Permit Required? Yes No *Permit Type:* **NWP**

Project Description: The NCDOT is proposing to replace Bridge No. 24 on NC 222 over the Tar River in Pitt County. Bridge No. 24 was constructed in 1956 and is now considered to be structurally deficient and functionally obsolete. The Proposed Study Area for the project will be centered on the bridge and measure about 300 feet wide by 2,900 feet long. Existing ROW along NC 222 is currently set at 60 feet. Based on these dimensions, the Proposed Study Area encompasses about 19.7 acres (861,454 square feet) inclusive of the existing roadway and structure to be replaced. The Area of Potential Effects (APE) will be defined as the limits of construction based on preliminary design plans.

SUMMARY OF ARCHAEOLOGICAL FINDINGS

An archaeological survey and evaluation of the proposed replacement of Bridge No. 24 on NC 222 in Pitt County was conducted on April 26–27, May 3–4, and June 8, 2016, by Reese Adams, Will Vaughn, and Terri Russ of Environmental Services, Inc. (ESI). As a result of the investigations, two archaeological sites (31PT345 and 31PT630) were recorded within the project's Study Area. The portion of Site 31PT345 located within the Study Area does not have the potential to yield significant information regarding the prehistory of the region and is recommended not eligible for the National Register of Historic Places (NRHP). Site 31PT630 spans portions of both the northeast and southeast quadrants of the Study Area. This site is recommended eligible for the NRHP and should be avoided by the proposed bridge replacement. If impacts to this archaeological site are unavoidable, the portion(s) of the site to be impacted should be subjected to data recovery excavations.

As defined by the NCDOT, the Study Area for archaeology measures 2,900 feet (883.92 meters) long, centered on the mid-point of the existing bridge (**Figures 1 and 2**). The study corridor is approximately 300 feet (91.44 meters) wide, extending 150 feet (45.72 meters) on each side of the centerline of the roadway/bridge. The Study Area encompasses approximately 19.7 acres (861,454 square feet) total, inclusive of the existing roadway and bridge. A portion of the Study Area is located on State-owned property (Falkland Boating Access Area, managed by the North Carolina Wildlife Resources Commission). As such, a State Archaeological Resources Protection Act (ARPA) permit was obtained prior to initiation of fieldwork in that portion of the project area (ARPA Permit #121).

A map review and site file search conducted by NCDOT at the Office of State Archaeology (OSA) on January 11, 2016, revealed that no comprehensive archaeological survey at this bridge location has been conducted; however, two previously recorded archaeological sites (Sites 31PT345 and 31PT346) are

located within a one-half mile radius of the project area. A portion of one of these sites (Site 31PT345) is located within the Study Area (**Figure 2a**).

Site 31PT345 was recorded in 1989 as a scatter of lithic and ceramic artifacts associated with the Middle and Late Woodland periods. Although the site was not recorded as a result of a compliance project, the property was (at the time) part of a planned residential and recreational development. The site was recorded as a fairly large (25,000–50,000 square meters) and dense surface scatter of artifacts. No subsurface testing was conducted at the time the site was originally recorded.

A search of the North Carolina State Historic Preservation Office online database (HPOWEB GIS Service) revealed no previously recorded historic architectural resources within the Study Area that have the potential to yield intact archaeological deposits.

Topographic maps, aerial photography, United States Department of Agriculture (USDA) soil survey maps, and historic maps were examined for information on natural or cultural factors that might have affected site locations or preservation. The 1903 topographic quadrangle shows no road or bridge crossing in the vicinity of the current project area (**Figure 3**). Instead, the road crosses south of the confluence of Conetoe Creek and the Tar River at Pillsboro Landing. The 1909 Soils Map and a map of Pitt County produced between 1906 and 1924 show a similar alignment (**Figures 4 and 5**). The 1936 Highway map shows a draw bridge in the area of Pillsboro Landing (**Figure 6**). The 1962 road map shows the current road alignment and bridge, which was constructed in 1952; **Figure 7**). No structures are shown within the Study Area on any of these maps.

Environmental Setting

The Study Area is located within the Coastal Plain physiographic region and consists of the floodplain and adjacent terraces of the Tar River and Conetoe Creek. NC 222 crosses the Tar River and Conetoe Creek roughly east to west.

Map units (soil series) are named for the major soil(s) within the unit, but may have minor inclusions of other soils (NRCS 2015). The Study Area comprises six soil series (**Table 1**). The floodplains and depressions adjacent to the Tar River and Conetoe Creek within the Study Area are mapped as poorly drained Bibb complex soils (Bb) or very poorly drained Portsmouth loam (Po). The upper terraces and sand ridges are composed of excessively drained to moderately well drained soils, predominantly Lakeland sand (LaB) and Altavista sandy loam (AIB) to the west and Pactolus loamy sand (Pa) to the east.

Table 1: Project Area Soils.

Soil Name	Code	Slope	Drainage	Landform
Altavista sandy loam	AIB	0–4%	Moderately Well	Stream terraces
Bibb complex	Bb	0–1%	Poorly	Floodplains
Lakeland sand	LaB	0–6%	Excessively	Ridges on stream terraces
Pactolus loamy sand	Pa	0–2%	Moderately Well	Ridges on stream terraces
Portsmouth loam	Po	0–2%	Very Poorly	Depressions on stream terraces
Wagram loamy sand	WaB	0–6%	Well	Broad interstream divides, ridges on marine terraces

The North Carolina Department of Transportation (NCDOT) Archaeology Group reviewed the subject project and determined:

- There are no National Register listed ARCHAEOLOGICAL SITES within the project's area of potential effects. (Attach any notes or documents as needed)
- There are National Register listed ARCHAEOLOGICAL SITES within the project's area of potential effects. (Attach any notes or documents as needed).
- Subsurface investigations did not reveal the presence of any archaeological resources.
- Subsurface investigations did not reveal the presence of any archaeological resources considered eligible for the National Register.
- All identified archaeological sites located within the APE have been considered and all compliance for archaeological resources with Section 106 of the National Historic Preservation Act and GS 121-12(a) has been completed for this project.

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

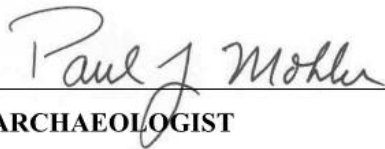
Environmental Services, Inc. (ESI) conducted an archaeological survey and evaluation for the proposed replacement of Bridge No. 24 on NC 222 over the Tar River in Pitt County from April-June 2016. During the course of the survey, two (2) archaeological sites (31PT345 and 31PT630) were documented within the project's Study Area. In order to determine potential impacts, the Area of Potential Effects (APE) was defined as the limits of construction based on functional design plans. Although beyond the APE, the portion of Site 31PT345 within the Study Area is recommended as not eligible for the National Register of Historic Places (NRHP), whereas the portion of Site 31PT630 within the Study Area as well as the APE is recommended as eligible for the NRHP per Criterion D.

Measures to avoid and minimize potential adverse effects will be implemented by the design engineers. The functional design as of December 2017 depicts an expansion of the ROW from 60 feet to 160 feet (on center) to accommodate a 50-foot taper toward the bridge, which begins approximately 37 feet from the edge of Site 31PT630 in the southeast quadrant and about 27 feet from the site's edge in the northeast quadrant. There is currently a slight overlap of the proposed ROW and site limit in the northeast quadrant (approx. 96 sq. ft.); at this time, there are no construction-related activities proposed within this overlap. The ROW limits will be revised (i.e. pulled in) prior to Final Design and LET (**see Figure 27**), eliminating any overlap with Site 31PT630. Any temporary staging areas should be placed outside the site boundary and temporary construction fencing should be placed along the edge of the revised proposed ROW in the area of Site 31PT630 to avoid any unintended impacts. Provided these measures are implemented, the proposed project should have no effect to Site 31PT630.

No further archaeological investigations are needed for this project. I concur with the recommendations put forth by our consultant. If the project expands and impacts subsurface areas beyond the Study Area or if design plans change prior to construction, further archaeological consultations will be necessary.

SUPPORT DOCUMENTATION

See attached: Map(s) Previous Survey Info Photos Correspondence
Signed:



December 13, 2017

NCDOT ARCHAEOLOGIST

Date



**North Carolina Department of Natural and Cultural Resources
State Historic Preservation Office**

Ramona M. Bartos, Administrator

Governor Roy Cooper
Secretary Susi H. Hamilton

Office of Archives and History
Deputy Secretary Kevin Cherry

February 15, 2018

MEMORANDUM

TO: Matt Wilkerson
Office of Human Environment
NCDOT Division of Highways

FROM: Ramona M. Bartos *RMB for Ramona M. Bartos*

SUBJECT: No National Register of Historic Places Eligible or Listed Properties Form, Bridge Replacement over Tar River and Conetoe Creek, B-5612, Pitt County, ER 18-0082

We have reviewed the above referenced archaeological report submitted by the NC Department of Transportation Archaeology Group. During the investigation, portions of two prehistoric archaeological sites within the area of potential effect (APE), were tested using shovel tests and 1-meter test units.

That portion of site 31PT345 within the APE was found to be not eligible for listing on the National Register of Historic Places (NRHP) and no further work is recommended at this location. That portion of site 31PT630 within the APE was determined eligible for listing on the NRHP under Criterion D. Preservation by avoidance is recommended for that site. If this is not possible, mitigation through additional data recovery is recommended. We concur with this recommendation and look forward to reviewing the final plans for the bridge replacement.

While no submerged archaeological sites have been reported within this APE, the nearby proximity of a historical ferry and landing suggests the possibility that significant wrecked or abandoned watercraft may be encountered during the bridge construction or removal. If watercraft remains are encountered, workers should avoid the area and the Office of State Archaeology's Underwater Branch should be immediately consulted.

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

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