CATEGORICAL EXCLUSION ACTION CLASSIFICATION FORM

 STIP Project No.
 B-4802

 W.B.S. No.
 38572.1.1

 Federal Project No.
 BRZ-1002(024)

A. **Project Description:**

The purpose of this project is to replace Rockingham County Bridge No. 18 on SR 1002 (Scalesville Road) over Haw River. Bridge No. 18 is 76 feet long. The replacement structure will be a bridge approximately 100 feet long providing a minimum 27-feet 10-inches clear deck width. The bridge will include two 11-foot lanes and 2-foot 11-inch offsets. The bridge length is based on preliminary design information and is set by hydraulic requirements. The roadway grade of the new structure will be approximately the same as the existing structure.

The approach roadway will extend approximately 140 feet from the southwest end of the new bridge and 150 feet from the northeast end of the new bridge. The approaches will be widened to include a 26- feet of full depth pavement width, providing two 11-foot lanes and 4-foot shoulders (including 2-foot paved) on each side (7-foot shoulders where guardrail is included). The roadway is classified as Rural Local and will be designed using Sub Regional Tier Guidelines with a 60 mile per hour design speed.

Traffic will be detoured off-site during construction (see Figure 1).

B. Purpose and Need:

This project was started, based on the 2013 NCDOT Bridge Management Unit records indicating Bridge No. 18 has a sufficiency rating of 19.63 out of a possible 100 for a new structure, and only minor repairs were made to the bridge. The current NCDOT Bridge Management Unit records indicating Bridge No. 18 has a sufficiency rating of 64.68 out of a possible 100 for a new structure. A change in record keeping accounts for most of the increase in scores.

The bridge has a fifty-nine-year-old timber substructure and needs to be replaced.

The bridge was considered structurally deficient due to a substructure condition appraisal of 3 out of 9 according to Federal Highway Administration (FHWA) standards. The bridge met the criteria for functionally obsolete due to structural appraisal of 3 out of 9 and a deck geometry appraisal of 3 out of 9. Temporary repairs were made in 2015 consisting of placing timber piles beside decayed timber piles and concrete encasements. Temporary repairs were not performed on wingwall which has decayed piles and missing and decayed boards along length exposing fill.

The superstructure and substructure of Bridge No. 18 have timber elements that are fifty-nine years old. Timber components have a typical life expectancy

between 40 to 50 years due to the natural deterioration rate of wood. Rehabilitation of a timber structure is generally practical only when a few elements are damaged or prematurely deteriorated. However, past a certain degree of deterioration, most timber elements become impractical to maintain and upon eligibility are programmed for replacement. Timber components of Bridge No. 18 are experiencing an increasing degree of deterioration that can no longer be addressed by reasonable maintenance activities, therefore the bridge has reached the end of its useful life and will need to be replaced.

C. <u>Proposed Improvements</u>:

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

- 1. Modernization of a highway by resurfacing, restoration, rehabilitation, reconstruction, adding shoulders, or adding auxiliary lanes (e.g., parking, weaving, turning, climbing).
 - a. Restoring, Resurfacing, Rehabilitating, and Reconstructing pavement (3R and 4R improvements)
 - b. Widening roadway and shoulders without adding through lanes
 - c. Modernizing gore treatments
 - d. Constructing lane improvements (merge, auxiliary, and turn lanes)
 - e. Adding shoulder drains
 - f. Replacing and rehabilitating culverts, inlets, and drainage pipes, including safety treatments
 - g. Providing driveway pipes
 - h. Performing minor bridge widening (less than one through lane)
 - i. Slide Stabilization
 - j. Structural BMP's for water quality improvement
- 2. Highway safety or traffic operations improvement projects including the installation of ramp metering control devices and lighting.
 - a. Installing ramp metering devices
 - b. Installing lights
 - c. Adding or upgrading guardrail
 - d. Installing safety barriers including Jersey type barriers and pier protection
 - e. Installing or replacing impact attenuators
 - f. Upgrading medians including adding or upgrading median barriers
 - g. Improving intersections including relocation and/or realignment
 - h. Making minor roadway realignment
 - i. Channelizing traffic
 - j. Performing clear zone safety improvements including removing hazards and flattening slopes
 - k. Implementing traffic aid systems, signals, and motorist aid
 - I. Installing bridge safety hardware including bridge rail retrofit
- 3. Bridge rehabilitation, reconstruction, or replacement or the construction of grade separation to replace existing at-grade railroad crossings.

- a. Rehabilitating, reconstructing, or replacing bridge approach slabs
- b. Rehabilitating or replacing bridge decks
 - Rehabilitating bridges including painting (no red lead paint), scour repair, fender systems, and minor structural improvements
- d. Replacing a bridge (structure and/or fill)
- 4. Transportation corridor fringe parking facilities.

C.

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

D. **Special Project Information:**

The estimated costs, based on 2015 prices, are as follows:

Structure	\$ 380,000
Roadway Approaches	233,000
Structure Removal	34,000
Misc. & Mob.	117,000
Eng. & Contingencies	111,000
Total Construction Cost	\$ 875,000
Right-of-way Costs	21,000
Utility Costs	33,000
Total Project Cost	\$ 929,000

Estimated Traffic:

Current	-	1300 vpd
Year 2040	-	1500 vpd
TTST	-	3%
Dual	-	4%

Accidents: Traffic Engineering evaluated a ten-year period (January 2002 to November 2012) and found five accidents occurring in the vicinity of the project. Two accidents occurred in the evening were weather related and the other three occurred during dry conditions involved driver impairment, rollover and left turn movements. None of the accidents were associated with the geometry of the bridge or its approach roadways.

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

Pedestrian and Bicycle Accommodations: This portion of SR 1002 (Scalesville Road) is not a part of a designated bicycle route **nor** is it listed in the State Transportation Improvement Program (STIP) as a bicycle project. Neither permanent nor temporary bicycle or pedestrian accommodations are required for this project.

Bridge Demolition: Bridge No. 18 is constructed entirely of timber, concrete and steel and should be possible to remove with no resulting debris in the water based on standard demolition practices.

Alternatives Discussion:

No Build – The no build alternative would result in eventually closing the road which is unacceptable given the volume of traffic served by SR 1002 (Scalesville Road).

Rehabilitation – The bridge was constructed in 1957 and the timber materials within the bridge are reaching the end of their useful life. Rehabilitation would

require replacing the timber components which would constitute effectively replacing the bridge.

Offsite Detour – Bridge No. 18 will be replaced on the existing alignment. Traffic will be detoured offsite (see Figure 1) during the construction period. NCDOT Guidelines for Evaluation of Offsite Detours for Bridge Replacement Projects considers multiple project variables beginning with the additional time traveled by the average road user resulting from the offsite detour. The offsite detour for this project would include SR 2305/2351 and US 158. The majority of traffic on the road is through traffic. The detour for the average road user would result in 10-minutes additional travel time (8.1 miles additional travel). Up to a 6-month duration of construction is expected on this project.

Based on the Guidelines, the criteria above indicate that on the basis of delay alone, the detour is acceptable. Rockingham and Guildford County Emergency Services along with Rockingham and Guildford County Schools Transportation have indicated that the detour is acceptable. NCDOT Division 7 has indicated the condition of all roads, bridges and intersections on the offsite detour are acceptable without improvement and concurs with the use of the detour.

Onsite Detour – An onsite detour was not evaluated due to the presence of an acceptable offsite detour.

Staged Construction – Staged construction was not considered because of the availability of an acceptable offsite detour.

New Alignment — Given that the alignment for SR 1002 is acceptable, a new alignment was not considered as an alternative.

Other Agency Comments:

The N.C. Wildlife Resource Commission and U.S. Fish & Wildlife Service in standardized letters provided a request that they prefer any replacement structure to be a spanning structure.

Response: NCDOT will be replacing the existing bridge with a new bridge.

Public Involvement: A letter was sent in February 2013 by the Project Development and Environmental Analysis Unit to all property owners affected directly by this project. Property owners were invited to comment. No comments have been received to date.

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

(14)	Will the project require any stream relocations or channel changes?		X
SOCIAL	_, ECONOMIC, AND CULTURAL RESOURCES	YES	NO
(15)	Will the project induce substantial impacts to planned growth or land use for the area?		X
(16)	Will the project require the relocation of any family or business?		х
(17)	Will the project have a disproportionately high and adverse human health and environmental effect on any minority or low-income population?		X
(18)	If the project involves the acquisition of right of way, is the amount of right of way acquisition considered minor?	X	
(19)	Will the project involve any changes in access control?		X
(20)	Will the project substantially alter the usefulness and/or land use of adjacent property?		Х
(21)	Will the project have an adverse effect on permanent local traffic patterns or community cohesiveness?		X
(22)	Is the project included in an approved thoroughfare plan and/or Transportation Improvement Program (and is, therefore, in conformance with the Clean Air Act of 1990)?	X	,
(23)	Is the project anticipated to cause an increase in traffic volumes?		X
(24)	Will traffic be maintained during construction using existing roads, staged construction, or on-site detours?	X	
(25)	If the project is a bridge replacement project, will the bridge be replaced at its existing location (along the existing facility) and will all construction proposed in association with the bridge replacement project be contained on the existing facility?	X	
(26)	Is there substantial controversy on social, economic, or environmental grounds concerning the project?		X
(27)	Is the project consistent with all Federal, State, and local laws relating to the environmental aspects of the project?	X	
(28)	Will the project have an "effect" on structures/properties eligible for or listed on the National Register of Historic Places?		X

(29)	Will the project affect any archaeological remains which are important to history or pre-history?		Х
(30)	Will the project require the use of Section 4(f) resources (public parks, recreation lands, wildlife and waterfowl refuges, historic sites, or historic bridges, as defined in Section 4(f) of the U. S. Department of Transportation Act of 1966)?	,	Х
(31)	Will the project result in any conversion of assisted public recreation sites or facilities to non-recreation uses, as defined by Section 6(f) of the Land and Water Conservation Act of 1965, as amended?		Х
(32)	Will the project involve construction in, across, or adjacent to a river designated as a component of or proposed for inclusion in the National System of Wild and Scenic Rivers?		Х

F. <u>Additional Documentation Required for Unfavorable Responses in Part E</u>

Response to Question 2:

A review of the North Carolina Natural Heritage Program database indicated that that there are no known occurrences of the Roanoke logperch or James spinymussel within the project area. There are no known occurrences of either specie within the Cape Fear River Basin. A biological conclusion of 'No Effect' was rendered for both species.

A plant-by-plant survey was conducted on May 21, 2013 and October 15, 2015 for the Smooth Coneflower. Habitat was present; however, no individuals were identified during the survey. Due to the lack of individuals and occurrences within 1.0 mile, a biological conclusion of 'No Effect, but Habitat Present' was rendered for this species.

Response to Question 13:

Rockingham County is a participant in the National Flood Insurance Program, administered by the Federal Emergency Management Agency (FEMA). The project is within a Flood Hazard Zone, designated as Zone AE, for which the 100-year base flood elevations and corresponding regulatory floodway have been established. The Hydraulics Unit will coordinate with the NC Floodplain Mapping Program (FMP), to determine status of project with regard to applicability of NCDOT'S Memorandum of Agreement, or approval of a Conditional Letter of Map Revision (CLOMR) and subsequent final Letter of Map Revision (LOMR). This project involves construction activities on or adjacent to FEMA-regulated stream(s). Therefore, the Division shall submit sealed as-built construction plans to the Hydraulics Unit upon completion of project construction, certifying that the drainage structure(s) and roadway embankment that are located within the 100-year floodplain were built as shown in the construction plans, both horizontally and vertically.

G. **CE Approval:**

STIP Project No.

B-4802

W.B.S. No.

38572.1.1

Federal Project No. BRZ-1002(024)

Project Description:

Date

The purpose of this project is to replace Rockingham County Bridge No. 18 on SR 1002 (Scalesville Road) over Haw River. Bridge No. 18 is 76 feet long. The replacement structure will be a bridge approximately 100 feet long providing a minimum 27-feet 10-inches clear deck width. The bridge will include two 11-foot lanes and 2-foot 11-inch offsets. The bridge length is based on preliminary design information and is set by hydraulic requirements. The roadway grade of the new structure will be approximately the same as the existing structure.

The approach roadway will extend approximately 140 feet from the southwest end of the new bridge and 150 feet from the northeast end of the new bridge. The approaches will be widened to include a 26- feet of full depth pavement width, providing two 11-foot lanes and 4-foot shoulders (including 2-foot paved) on each side (7-foot shoulders where guardrail is included). The roadway is classified as Rural Local and will be designed using Sub Regional Tier Guidelines with a 60 mile per hour design speed.

Traffic will be detoured off-site during construction (see Figure 1).

Categorical Exclusion Action Classification:	
TYPE II(A)	
X TYPE II(B)	
Approved:	
2/8/17 Beverly D. Robinson	
Date Beverly G. Robinson, Project Engineer	
Project Development & Environmental Analysis Uni	t
2/8/17 Klipper 13/3n	
Date Theresa Ellerby, Project Planning Engineer	
Date Project Development & Environmental Analysis Uni	t CAP
2-7-2017 Olifo Thegis	SEAL T
Date Clifton T. Register, PE, Project Manager	028392
TGS Engineers	=0 A Q 0
	GINEE
For Type II(B) projects only:	TOW T REGISTER

Federal Highway Administration

John F. Sullivan, III, PE, Division Administrator

PROJECT COMMITMENTS

Rockingham County
Bridge No. 18 on SR 1002 (Scalesville Road)
Over Haw River
Federal Aid Project No. BRZ-1002(0245)
WBS No. 38572.1.1
STIP No. B-4802

Division Construction, Resident Engineer's Office - Offsite Detour

In order to have time to adequately reroute school busses, Rockingham (336-634-3275) and Guildford (336-370-8920) County Schools will be contacted at least one month prior to road closure.

Rockingham (336-641-4180) and Guildford (336-634-3017) County Emergency Services will be contacted at least one month prior to road closure to make the necessary temporary reassignments to primary response units.

Division Construction - FEMA

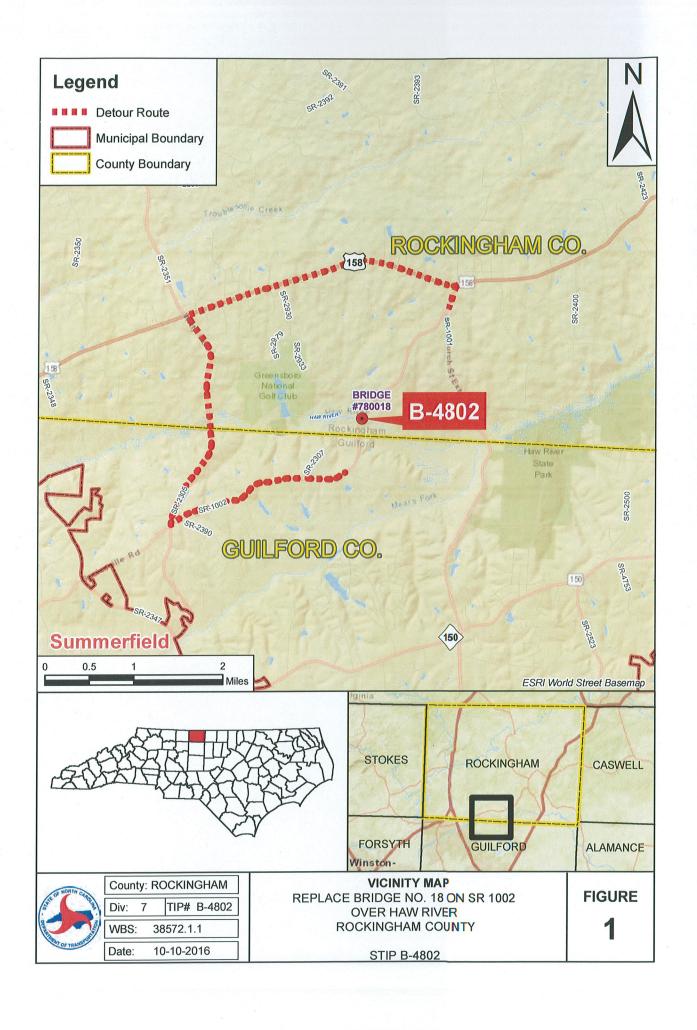
This project involves construction activities on or adjacent to a FEMA-regulated stream. Therefore, the Division shall submit sealed as-built construction plan to the Hydraulics Unit upon completion of project construction, certifying that the drainage structures and roadway embankment that are located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

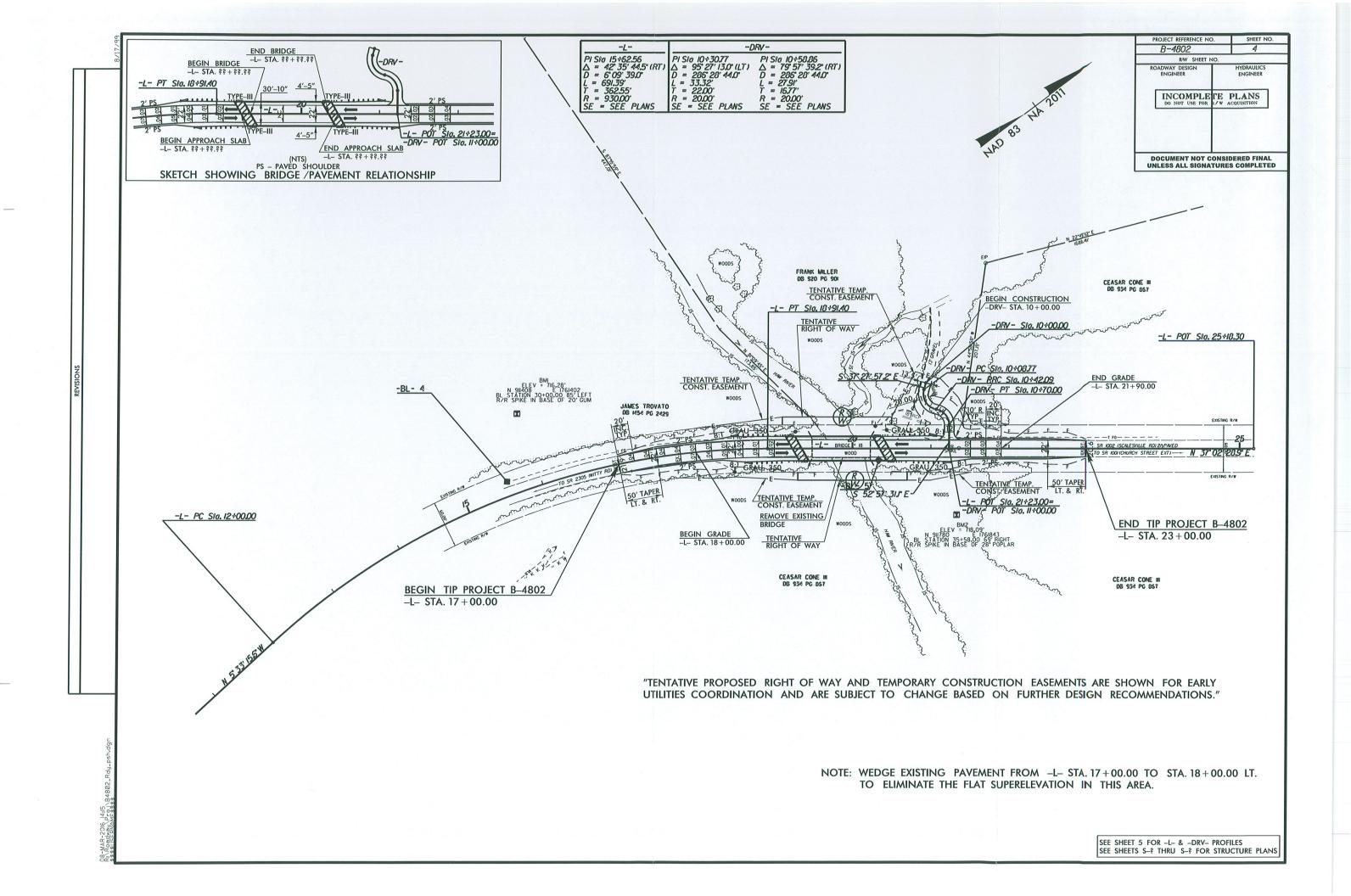
Hydraulics Unit – FEMA Coordination

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

Hydraulics Unit, Division Office – Buffer Rules

The project is located within Jordan Lake Supply Watershed; therefore, NCDWQ enforced buffer rules apply.





16-11-0023



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.

	PROJE	CT INFORMATION	ON
Project No:	B-4802	County:	Rockingham
WBS No.:	38572.1.1.4	Document Type:	PCE
Fed. Aid No:	BRZ-1001(024)	Funding:	☐ State ☐ Federal
Federal Permit(s):	⊠ Yes □ No	Permit Type(s):	NWP
	tion: Replace Bridge No. 18		er on SR 1002 (Scalesville Road).]
			ND LANDSCAPES REVIEW
	eview activities, results, an		TE LINE TE
			signations roster, and indexes was
			e are no existing NR, SL, LD, DE,
			' from each end of the bridge and
			thin the APE based on aerial and
			for National Register listing based
on the NCDOI	Historic Bridge Inventory	. There are no N	ational Register listed or eligible
			ditional review will be required.
			reasonably predicting that there
	<u>fied significant historic a</u>	<u>rchitectural or lai</u>	ndscape resources in the project
area:	1 GIG ! C!	!: NID GI II	DE 1 99
			D, DE, and SS properties for the
			nformation, and Google Maps are
			hood of historic resources being
		listed or eligible p	roperties within the APE and no
survey is required	d,		
		DOCUMENTAT	The state of the s
Map(s)	Previous Survey Info.	Photos 0	Correspondence Design Plans
	FINDING BY NCDOT	ARCHITECTUR	AL HISTORIAN
Historic Architec	ture and Landscapes NO	SURVEY REQUII	RED
Viate	Hull		11116/2016
NCDOT Architec	ctural Historian		Date

16-11-0023



NO NATIONAL REGISTER OF HISTORIC PLACES ELIGIBLE OR LISTED ARCHAEOLOGICAL SITES PRESENT 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-4802	County:	ROCKINGHAM
WBS No:	38572.1.1.4	Document:	PCE
F.A. No:	BRZ-1001(024)	Funding:	State Federal
Federal Permit R	Required? 🛛 Y	es 🗌 No Permit	t Type: NW 3 OR NW 4

Project Description:

NCDOT proposes to replace Bridge No. 0018 over the Haw River on SR 1002 (Scalesville Road) in kind on the same alignment in Rockingham County. This is a federally funded project and USACE permitting is required the project. Therefore the bridge replacement is a federal undertaking and subject to Section 106 of the National Historic Preservation Act.

Detailed designs were available for the project at the time of the review. This is a replace-in-place project with an offsite detour. Additional Right of Way (ROW) will be required adjacent to the bridge and approach for fill, drainage and guardrail replacement. Access to the existing driveway on the northwest quadrant, now close to the bridge to be replaced, will be shifted away from the Haw River for the first 35-45 feet, requiring slope stake lines up to about 60 feet from SR 1002. Overall, the project is about 600 feet in length along SR 1002, centered on the bridge. The width will expand to a maximum width of about 80 feet from the original ROW of 60 feet. The realigned driveway is an area of about 0.10 acres total, a portion of which has been modified for the construction of the current driveway access.

An intensive archeological survey of the project APE was recommended on December 7, 2016 due to the new impacts on a landform with likely little modification which has an elevated probability for archaeological sites due to the River and adjacent tributary, drained and level terrain, and the presence of known archaeological sites in similar settings along the Haw River. Field work was conducted on December 12, 2016 and included a complete visual inspection of the APE and surroundings and limited subsurface testing.

SUMMARY OF ARCHAEOLOGICAL FINDINGS

An intensive archaeological survey was conducted of the APE on December 12, 2016 by NCDOT archaeologists Brian Overton and Caleb H. G. Smith. The archaeologists visually inspected the bridge, the floodplain, Haw River, roadway approaches and adjacent plowed field for any suggestion of above ground historic features such as building foundations, wells, cemeteries or previous crossings and roads, or exposed surface artifacts. No artifacts were noted in the APE. Generally, No such surface features were noted, nor were there flora that suggests that a domestic site or cemetery had been situated here. As noted on the "archaeological survey required form," we observe on historic maps that Scaleville Road (SR 1002) crossed the Haw River to the west of the current bridge. That crossing was relocated, represented by a built-up roadbed and launches for an earlier bridge. Wood bridge posts remain on the southwest bank of the Haw

16-11-0023

River. The older road and related transportation features are outside of the current project APE and will not be affected by the undertaking.

A single shovel test pit was excavated where the APE and ROW expands out on the north west bridge quadrant where the driveway will be shifted. Dug to a depth of about 45 cmbs, the sandy loam soils became stiffer towards the STP bottom. No cultural materials, artifacts, features or cultural horizons were noted or recovered when excavated and the soil was screened using ¼ inch hardware cloth. No further testing was conducted because of the limited scale of the driveway location and the surrounding modified terrascaping associated with drainage and the current driveway construction disturbances.

No archaeological sites were identified as a result of this investigation and archaeological survey. No further archaeological effort is recommended for this project as it is currently proposed. If alternatives are developed at a later date that were not considered during this evaluation, please offer an opportunity for our comments. Should any cultural features or artifacts be discovered during the construction, please inform our office for additional consultation.

The North Carolina Department of Transportation (NCDO) project and determined:	T) Archaeology (Froup reviewed the subject
There are no National Register listed or eligible A within the project's area of potential effects. (Att No subsurface archaeological investigations were Subsurface investigations did not reveal the prese considered eligible for the National Register. All identified archaeological sites located within compliance for archaeological resources with Sec Preservation Act and GS 121-12(a) has been compliance.	tach any notes of required for the ence of any archence of any archethe APE have bettion 106 of the	or documents as needed) is project. aeological resources. aeological resources een considered and all National Historic
Brief description of review activities, results of review, and	conclusions:	
SUPPORT DOCUMENTATION		
See attached: Map(s) Previous Survey Info Signed:	Notos Photos	Correspondence
Bura P. Onto		12/14/2016
NCDOT ARCHAEOLOGIST		Date