# Type I and II Ground Disturbing Categorical Exclusion Action Classification Form

STIP Project No.	B-5869
WBS Element	48063.1.FR1
Federal Project No.	BRSTP-0064(180)

#### A. Project Description:

Replace Bridge 110099 over Southern Railroad on US 64/70 (Fleming Street), Morganton, Burke Co., NC.

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

NCDOT Bridge Management Unit records indicate Bridge No. 99 is in poor condition with a sufficiency rating of 44.69 out of a possible 100 for a new structure. The 5-span bridge was built in 1955 and is considered structurally deficient due to a superstructure condition appraisal of 4 out of 9 according to Federal Highway Administration (FHWA) standards.

The superstructure consists of steel beams carrying a reinforced concrete deck. The substructure is comprised of steel piles with reinforced concrete caps. Components of both concrete and steel superstructure and substructure have experienced an increase in deterioration that can no longer be addressed by maintenance activities.

The purpose of this project is to eliminate the deficient status of the bridge.

C.	Categorical	Exclusion	Action	Classification:

TYPE II B

#### D. Proposed Improvements:

Type II:

13. Actions described in paragraphs 26, 27, and 28 of Appendix A that do not meet the constraints in 23 CFR 771.117(e)(1-6).

#### E. Special Project Information:

The project is located within the city limits of Morganton in Burke County, on US 64/US 70 (Fleming Drive). The project area is shown in Figure 1.

US 64/US 70 is classified as "Other Principal Arterial" in the Statewide Functional Classification System and it is a National Highway System Route (MAP-21 NHS Principal Arterial). The 2015 Annual Average Daily Traffic (AADT) over the bridge is 19,800 vehicles. In the vicinity of the bridge, US 64/US 70 is a 5-lane section (12-foot lanes) with

curb and gutter (see Figures 3 and 4). East of the bridge, there is a sidewalk along a shopping center's frontage (south side of the roadway). The sidewalk is discontinuous and there are "walking trails" along US 64/US 70 connecting the various segments.

Bridge No. 99 carries US 64/US 70 over a segment of the Norfolk Southern Railroad (NSR) that runs from Salisbury to Asheville and is referenced as the S-line. The structure is located at approximately milepost S 80.1. There is currently only one track under Bridge No. 99 with the track located on the tangent and curves located east and west of the overpass. Railroad right-of-way width at this location is 200 feet (100 feet each side of centerline track). The vertical clearance over the railroad is 21.25 feet.

The Preferred Alternative will shift the alignment for the new Bridge No. 99 approximately 30 feet south of the existing structure's centerline. Removal of the existing bridge and construction of the new bridge will be phased to accommodate vehicle movements through the area. A temporary two lane onsite detour alignment to the north side of the existing bridge will also be utilized to maintain traffic. (Figure 2).

The permanent replacement structure will be approximately 235 feet long with four 12-foot travel lanes, two in each direction, and one additional 12-foot center turn lane. The structure will also have 2-foot gutters and a 5.5-foot sidewalk on each side. The bridge length was increased to allow for a minimum of 23 feet of vertical clearance over the NSR and to allow for the potential future construction of a second track underneath the bridge. The roadway grade of the new structure will be raised approximately 2 feet to accommodate the additional track clearance. The removal of the existing bridge will be performed in a manner that prevents debris from falling onto existing tracks.

The approach roadway improvements will extend approximately 950 feet from the northwest end of the new bridge and 1,250 feet from the southeast end of the new bridge. Ten-foot grass shoulders will be provided on each side with a sidewalk planned for the southern side. The roadway will be designed as an Arterial Route with a 50 mile per hour design speed.

The total length of the onsite detour alignment is approximately 1,000 feet. The detour alignment will utilize a temporary 235-foot long and 30-foot wide bridge carrying two 12-foot wide lanes of traffic. Although the cost and environmental impacts are higher than a replace in-place structure with offsite detour, concerns regarding public safety and management of traffic volumes warrant the maintenance of traffic onsite.

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

	Alternative 1 Preferred
Structure	\$1,848,000
Roadway Approaches	\$1,204500
Detour Structure and Approaches	\$1,196.960
Structure Removal	\$213,120
Misc. & Mob.	\$1,192,938
Eng. & Contingencies	\$1,212,000
Total Construction Cost	\$9,000,000
Right-of-way Costs	\$3,167,000
Right-of-way Utility Costs	\$1,325,951
Total Project Cost	\$13,492,951

#### Agency Coordination and Public Involvement

NCDOT sought input from the following agencies as part of the project development for B-5869: US Army Corps of Engineers, USFWS, FHWA, US Environmental Protection Agency, Eastern Band of Cherokee Indians, NC Department of Natural and Cultural Resources-Division of Parks and Recreation, NCDEQ-Division of Water Resources, Burke County Public Schools, and the City of Morganton.

A newsletter was sent on March 3, 2017 to 150 residences and/or businesses in the project vicinity. The newsletter summarized the project and announced a Project Public Meeting on March 21, 2017. The meeting was held at Forest Hills Elementary School in Morganton form 4:00 pm to 7:00 pm. Regardless of attendance at the meeting, the citizens were invited to comment or contact NCDOT with questions.

Fifteen people attended the meeting. Verbal comments and questions regarded construction timing, access to the shopping center, and functioning of the detour. One business owner called requesting information about continued access to the shopping center and relocations of the center's signs. Staff from the City of Morganton attended the meeting. They primarily discussed project aesthetics and the location of sidewalks. The City continued this coordination with a formal letter, dated April 19, 2017, to NCDOT requesting several improvements in the project area. NCDOT formally replied to this request with a letter on August 31, 2017. Coordination with the City regarding their requests is on-going. The inclusion of, design, and location for these items will be determined during the final roadway and bridge design phase and the decisions will be formalized with the City under a subsequent Municipal Agreement.

No additional comments have been received to date.

## F. Project Impact Criteria Checklists:

Type I &	II - Ground Disturbing Actions					
FHWA A	PPROVAL ACTIVITIES THRESHOLD CRITERIA					
If any of	questions 1-7 are marked "yes" then the CE will require FHWA approval.	Yes	No			
1	Does the project require formal consultation with U.S. Fish and Wildlife Service (USFWS) or National Marine Fisheries Service (NMFS)?		$\boxtimes$			
2	Does the project result in impacts subject to the conditions of the Bald and Golden Eagle Protection Act (BGPA)?		$\boxtimes$			
3	Does the project generate substantial controversy or public opposition, for any reason, following appropriate public involvement?		$\boxtimes$			
4	Does the project cause disproportionately high and adverse impacts relative to low-income and/or minority populations?		$\boxtimes$			
5	Does the project involve a residential or commercial displacement, or a substantial amount of right of way acquisition?	$\boxtimes$				
6	Does the project require an Individual Section 4(f) approval?		$\boxtimes$			
7	Does the project include adverse effects that cannot be resolved with a Memorandum of Agreement (MOA) under Section 106 of the National Historic Preservation Act (NHPA) or have an adverse effect on a National Historic Landmark (NHL)?					
If any of questions 8 through 31 are marked "yes" then additional information will be required for those questions in Section G.						
Other Co	<u>nsiderations</u>	Yes	No			
8	Does the project result in a finding of "may affect not likely to adversely affect" for listed species, or designated critical habitat under Section 7 of the Endangered Species Act (ESA)?		$\boxtimes$			
9	Is the project located in anadromous fish spawning waters?		$\boxtimes$			
10	Does the project impact waters classified as Outstanding Resource Water (ORW), High Quality Water (HQW), Water Supply Watershed Critical Areas, 303(d) listed impaired water bodies, buffer rules, or Submerged Aquatic Vegetation (SAV)?		$\boxtimes$			
11	Does the project impact waters of the United States in any of the designated mountain trout streams?		$\boxtimes$			
12	Does the project require a U.S. Army Corps of Engineers (USACE) Individual Section 404 Permit?		$\boxtimes$			
13	Will the project require an easement from a Federal Energy Regulatory Commission (FERC) licensed facility?		$\boxtimes$			
14	Does the project include a Section 106 of the NHPA effects determination other than a no effect, including archaeological remains?		$\boxtimes$			

Other Considerations (continued)			
15	Does the project involve hazardous materials and/or landfills?		$\boxtimes$
16	Does the project require work encroaching and adversely affecting a regulatory floodway or work affecting the base floodplain (100-year flood) elevations of a water course or lake, pursuant to Executive Order 11988 and 23 CFR 650 subpart A?		$\boxtimes$
17	Is the project in a Coastal Area Management Act (CAMA) county and substantially affects the coastal zone and/or any Area of Environmental Concern (AEC)?		$\boxtimes$
18	Does the project require a U.S. Coast Guard (USCG) permit?		$\boxtimes$
19	Does the project involve construction activities in, across, or adjacent to a designated Wild and Scenic River present within the project area?		$\boxtimes$
20	Does the project involve Coastal Barrier Resources Act (CBRA) resources?		$\boxtimes$
21	Does the project impact federal lands (e.g. U.S. Forest Service (USFS), USFWS, etc.) or Tribal Lands?		$\boxtimes$
22	Does the project involve any changes in access control?		$\boxtimes$
23	Does the project have a permanent adverse effect on local traffic patterns or community cohesiveness?		$\boxtimes$
24	Will maintenance of traffic cause substantial disruption?		$\boxtimes$
25	Is the project inconsistent with the STIP or the Metropolitan Planning Organization's (MPO's) Transportation Improvement Program (TIP) (where applicable)?		$\boxtimes$
26	Does the project require the acquisition of lands under the protection of Section 6(f) of the Land and Water Conservation Act, the Federal Aid in Fish Restoration Act, the Federal Aid in Wildlife Restoration Act, Tennessee Valley Authority (TVA), 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?		$\boxtimes$
27	Does the project involve Federal Emergency Management Agency (FEMA) buyout properties under the Hazard Mitigation Grant Program (HMGP)?		$\boxtimes$
28	Does the project include a <i>de minimis</i> or programmatic Section 4(f)?		$\boxtimes$
29	Is the project considered a Type I under the NCDOT's Noise Policy?		$\boxtimes$
30	Is there prime or important farmland soil impacted by this project as defined by the Farmland Protection Policy Act (FPPA)?		$\boxtimes$
31	Are there other issues that arose during the project development process that affected the project decision?		$\boxtimes$

#### G. Additional Documentation as Required from Section F

#### Relocations

This project will require narrow, linear strips of property along the south side of US 64/70 to accommodate realignment of the bridge to the south. Additional property, as temporary construction easement, will be needed along the north side of US 64/70 to allow for construction of the temporary detour bridge. No residences will be relocated as a result of

project construction. Two business, Bradford Ferree Laundry and Financial Partners Credit Union, which are immediately west of the bridge on the south side of the roadway will be relocated for project construction. NCDOT will coordinate with all affected property owners regarding compensation for their property as per the guidelines and policies of the NCDOT relocation assistance program and in accordance with the Federal Uniform Relocation Assistance and Real Property Acquisition Policies Act of 1970 (Public Law 91-646; as amended; regulations at 49 CFR 24). The relocation report and cost estimate is attached.

#### **Protected Species**

As of July 24, 2015 the US Fish and Wildlife Service lists nine federally protected species for Burke County, North Carolina. Habitat exist in the project area for three protected plant species. Surveys were conducted for each species during their designated survey window. No population of the protected plant were found. In addition, the bridge may be summer roasting habitat for the northern long-eared bat (NLEB). The NCDOT biological surveys group will conduct surveys for the bats prior to construction of the project and coordinate as necessary with the USFWS in the unlikely event that NLEB are found. Additional information regarding these protected species and the field surveys is included in the project Natural Resources Technical Report (June 2015).

#### **Cultural Resources**

Signed copies of the archeology and historic architecture 'No Survey Required' screening forms are attached.

#### **Recognized Environmental Concern**

An examination of local, state, and federal regulatory records by the GeoEnvironmental Section revealed no sites with a Recognized Environmental Concern (REC) within the project study area. However, there is one property, which is adjacent to and accessed from the Morganton Heights Shopping Center shopping center, which likely has contamination issues. The site is the former HDM Furniture Industries factory and its deed references a "Notice of Brownfields property." The property has been redeveloped as a Wal-Mart Supercenter and it is outside of the project footprint.

#### H. Project Commitments

# Burke County Replace Bridge No. 99 over Southern Railroad on US 64/70 (Fleming Street), Morganton Federal Project No. BRSTP-0064(180) WBS No. 48063.1.FR1 TIP No. B-5869

#### Project Development and Environmental Analysis Branch

#### Northern Long-eared bat

NCDOT will conduct surveys for the NLEB within the study area, and additional coordination with the USFWS if needed, prior to issuing construction authorization.

#### **Clean Water Act Permit**

NCDOT will coordinate with the USACE and obtain a permit for the extension of the culvert transporting the perennial stream near the western end of the project prior to project construction.

#### Work Zone and Traffic Control Unit

#### **Shopping Center Access**

NCDOT will coordinate with the Morganton Heights Shopping Center property owner to ensure maintenance of access to the shopping center during project construction.

#### Roadway Design, Utilities Coordination Unit and Division 13

#### **Pedestrian and Bicycle Facilities and Other Enhancements**

NCDOT and the City of Morganton are continuing discussions to determine responsibilities and cost-sharing burdens for a range of requested project enhancements, including architectural elements on the bridge, the width and location of pedestrian facilities, median design, bike lanes, decorative lighting and replacement of a water line. The City's letter to NCDOT requesting consideration of these items as well as NCDOT's initial response is attached. The inclusion of, design, and location for these items will be determined during the final roadway and bridge design phase in coordination with the City and the decisions will be formalized under a subsequent Municipal Agreement.

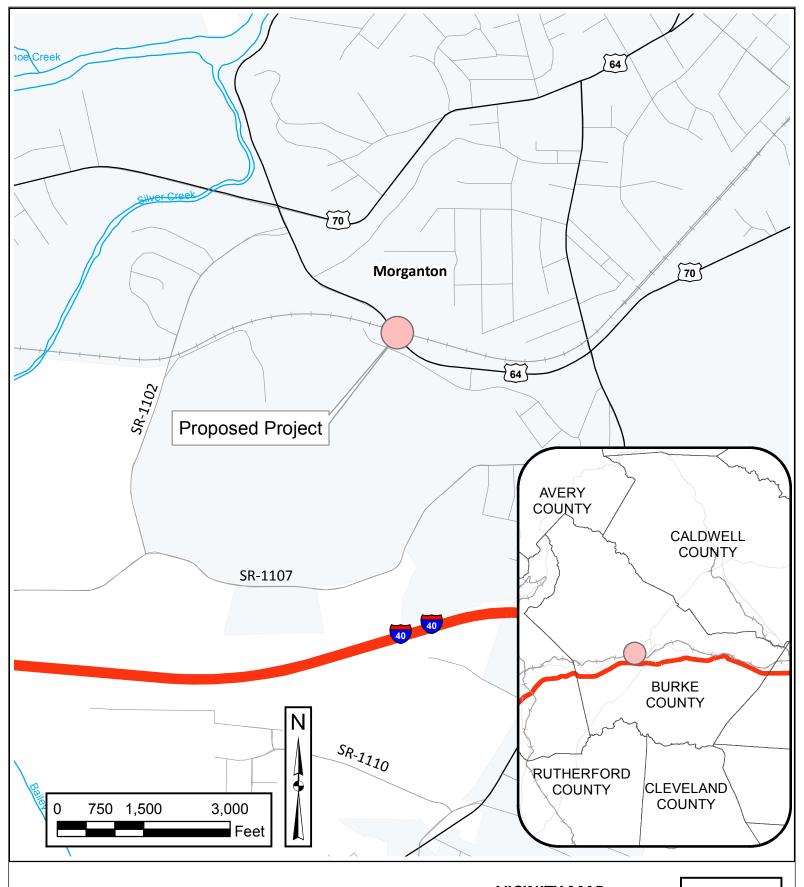
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Categorical Exclu	Categorical Exclusion Approval					
STIP Project No	B-5869					
WBS Element	48063.1.FR1					
Federal Project	No. BRSTP-0064(180)					
Prepared By:  3 9 18 Date	Martha M. Register, Project Planning Manger					
Prepared For:	Simpson Engineers & Associates  North Carolina Department of Transportation					
Reviewed By: 3/16/2018	DocuSigned by:  Kevin E. Moore  7E0B1CF9C15A4A7					
Date	Kevin Moore, PE Senior Project Manager North Carolina Department of Transportation					
☐ Approve	If all of the threshold questions (1 through 7) of Section F are answered "no," NCDOT approves this Categorical Exclusion.					
	If any of the threshold questions (1 through 7) of Section F are answered "yes," NCDOT certifies this Categorical Exclusion.					
3/16/2018  Date	Derrick Weaver, PE  047D90B49865400  Derrick Weaver, PE Team Lead, Division's 11-14					
	North Carolina Department of Transportation  For Projects Certified by NCDOT (above), FHWA signature equired.  Docusigned by:					

١.

For John F. Sullivan, III, PE, Division Administrator Federal Highway Administration

Date

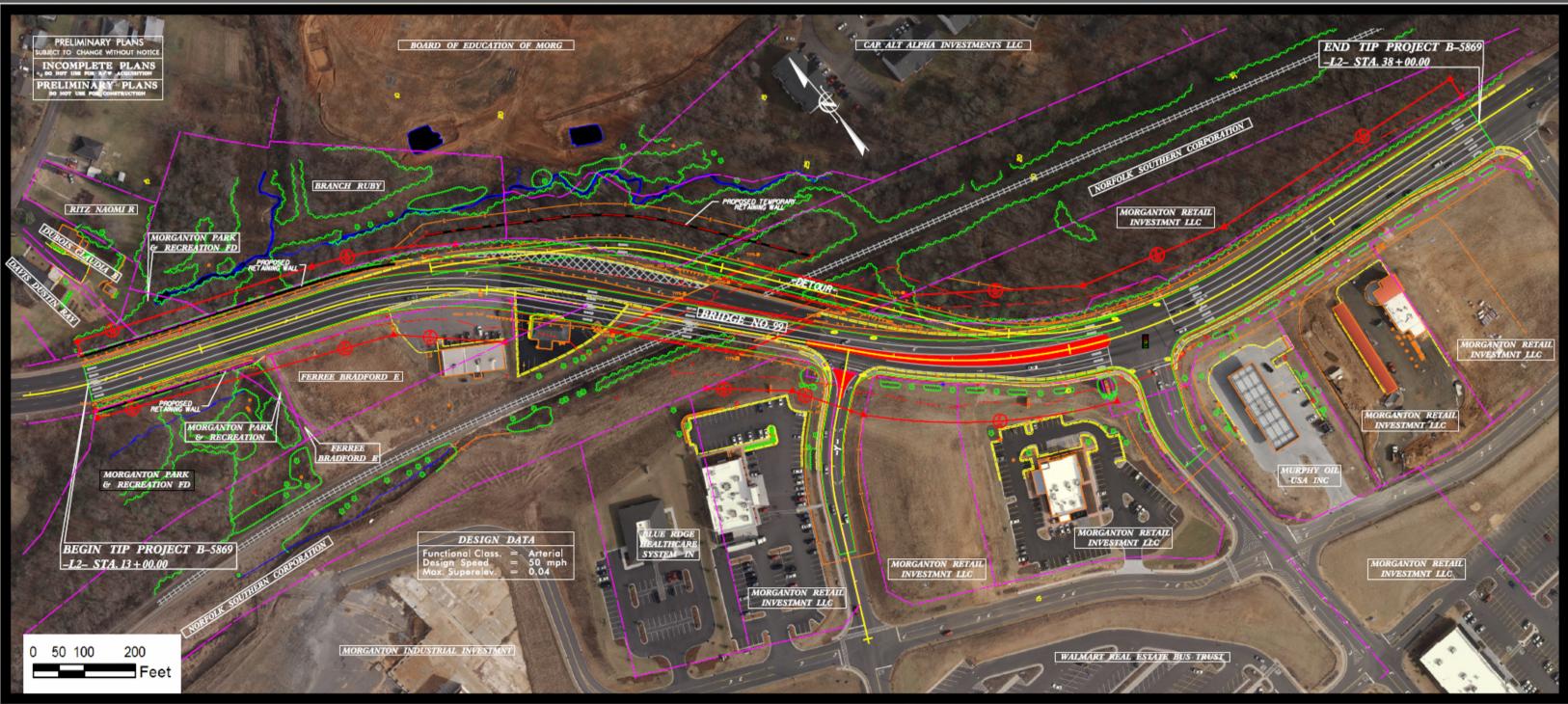




NORTH CAROLINA DEPARTMENT OF TRANSPORTATION DIVISION OF HIGHWAYS PROJECT DEVELOPMENT AND ENVIRONMENTAL ANALYSIS UNIT VICINITY MAP
BRIDGE REPLACEMENT
BRIDGE NO 99 OVER
SOUTHERN RAILROAD
BURKE COUNTY

TIP Project B-5869

Figure 1





NORTH CAROLINA DEPARTMENT
OF TRANSPORTATION
DIVISION OF HIGHWAYS
PROJECT DEVELOPMENT AND
ENVIRONMENTAL ANALYSIS UNIT



PROJECT MAP BRIDGE REPLACEMENT BRIDGE NO. 99 OVER NORFOLK SOUTHERN RAILROAD

BURKE COUNTY TIP Project B-5869 Figure

2

## **REQUEST FOR R/W COST ESTIMATE / RELOCATION EIS**

COST ESTIM	ATE REQU	JEST 🖂 REI	OCATIO	N EIS REPORT		
NEW REQUE	<u>ST:</u> 🖂	UPDATE REQUEST: Update to Estimate	Revi	SION REQUEST: sion to Estimate vision No.:		
DATE RECEIVED:	03/07/17	DATE ASSIGNED: <u>03/08/17</u>	# of Alter	nates Requested:		
	DAT	E DUE: <u>04/07/17 ext 0</u>	<u>5/24/17</u>			
TIP No.: B-5869	TIP No.: B-5869  DESCRIPTION: Replace bridge # 99 on US 64 / US 70 (Fleming Dr.) over Southern Railroad					
WBS ELEMENT: 480	063.1.FR1 COUN	TY: Burke	DIV: 13	APPRAISAL OFFICE: 5		
REQUESTOR: Tracy Walter / Martha Register DEPT: PDEA / Simpson Engineers & Assc.						
TYPE OF PLANS: H	EARING MAPS [	LOCATION MAP   AERIAL   VIC	INITY   PRELI	MINARY   CONCEPTUAL		
		ta, the land and damage figures r during settlement of all parcels		justed to include condemnation		

APPRAISER: Jim Gibbs, Norman Medford COMPLETED: 05/15/17 # of Alternates Completed: 1

	Alt 1		
TYPE OF ACCESS:	NONE:		LIMITED:
TIPE OF ACCESS.	PARTIAL:		FULL: 🛚
ESTIMATED NO. OF PARCELS:	15		
RESIDENTIAL RELOCATEES:	-	\$-	
BUSINESS RELOCATEES:	2 \$ 375,000		
GRAVES:	- \$-		
CHURCH / NON – PROFIT:	-	\$ -	
MISC:	3	\$ 1	120,000
SIGNS:	6	\$ 1	150,000
LAND, IMPROVEMENTS, & DAMAGES:	\$	2,43	32,000
ACQUISTION:		\$ 90	,000
TOTAL ESTIMATED R/W COST:	\$ 3	3,16	57,000

<sup>\*\*</sup> The estimated number of above relocatees includes those parcels where the proposed acquisition areas involve relocation of livable or business units only. \*\*

NOTES: Miscellaneous items include an on-site air/vacuum machine, Cash Points ATM, and a Utility Service Box. The estimate assumes all these improvements can be relocated. The acquisition costs of the three items include the individual foundation base and electrical hookups. Should the six on-premise signs, ATM, and vacuum not be able to be relocated, the acquisition costs could possibly increase by an additional \$70,000 to \$80,000. The two Business Relocatees are Bradford Ferree Laundry and Financial Partners Credit Union. The right of way passes through each building.



#### NO ARCHAEOLOGICAL SURVEY REQUIRED FORM

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



#### PROJECT INFORMATION

Project No:	B-5869		Count	v:	Burke	
WBS No:	48063.1.FR1		Docum	nent:	MCS	
F.A. No:	BRSTP-0064(18	0)	Fundi	ıg:	☐ State	
Federal Permit Requ	iired?	<b>⊠</b> Yes	□ No	Permit Ty	vpe: unspeci	ified
Project Description:	This project proper	sas to ranla	oo Bridge N	o 00 which	carries US6	A/IIS70 (Floming Dr)

Project Description: This project proposes to replace Bridge No. 99, which carries US64/US70 (Fleming Dr) over the Southern Railroad in Burke County, North Carolina. According to the environmental input request, the undertaking involves the in-place replacement of the structure along the existing alignment or a potential new alignment to the northeast. The archaeological Area of Potential Effects (APE) is centered upon Bridge 99 and measures 2,600ft in length (1,300ft from each bridge end-point) and 600ft in width (300ft from each side of the US64 center-line).

#### SUMMARY OF CULTURAL RESOURCES REVIEW

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

First, permitting and funding information was reviewed for determining the level of archaeological input required by state and federal laws. Section 106 of the National Historic Preservation Act will apply since this is a Federal Highway Administration (FHwA) project utilizing a United States Army Corp of Engineers (USACE) permit. Next, construction design and other data was examined (when applicable) to define the character and extent of potential impacts to the ground surfaces embracing the improvement work. Once an APE was outlined, a map review and site file search was conducted (3/6/2015) at the Office of State Archaeology (OSA). While several archaeological sites are situated to the north along the Catawba River, no previously documented archaeological sites are located within or directly adjacent to the project APE.

An inspection of National Register of Historic Places (NRHP), State Study Listed (SL), Locally Designated (LD), Determined Eligible (DE), and Surveyed Site (SS) properties employing resources available on the NCSHPO website confirmed an absence of historic sites with potential archaeological deposits in the project area. Numerous NRHP historic districts and properties are located to the northeast and southeast in the town of Morganton. Historic maps of Burke County were appraised for former/past structure locations, land use patterns, or other confirmation of historic occupation in the project vicinity and archaeological/historical reference materials were inspected as well. In general, the cultural portion of the review confirmed that no known cemeteries, significant historic structures, or documented archaeological sites are present in the APE.

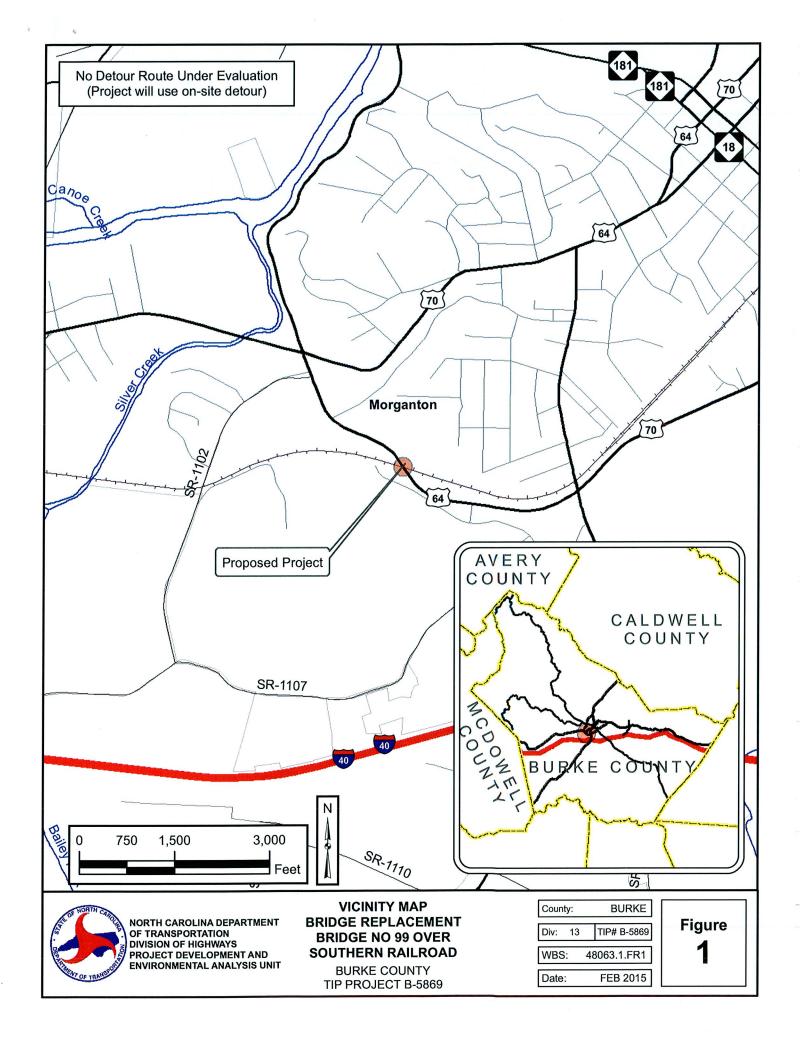
Further, topographic, geologic, and NRCS soil survey maps (Ud, RhE, FaC2, FaD2, CvA) were referenced to evaluate pedeological, geomorphological, hydrological, and other environmental determinants that may have resulted in past occupation within the project location. Aerial and on-ground photographs (NCDOT Spatial Data Viewer) and the Google Street View map application (when amenable) were also examined/utilized for the assessment of disturbances, both natural and human induced, which compromise the integrity of archaeological sites.

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

The APE contains no documented cultural resources. Examination of soil data, on-ground and aerial imagery confirm elevated levels of erosion and modern disturbances associated with the overall project location. The central portion of the APE, particularly on the western side of US64, is characterized by commercial/industrial

development underlain by (Ud) loamy and clayey human transported material derived from igneous, metamorphic, and sedimentary rock. In addition, the northern and southern portions of the APE are eroded, and the southeastern quadrant contains 25% to 45% slope. Because the potential impacts are relegated to an area typified by erosion and by numerous indications of previous disturbance, significant archaeological and cultural resources are unlikely to be affected. A finding of "no survey required" is deemed appropriate for the undertaking.

SUPPORT DOCUMENTATION							
See attached:	Map(s)     Photocopy	☑ Photos Other:	Correspondence				
FINDING BY NCDOT ARCHAEOLOGIST							
NO ARCHAEC	OLOGY SURVE	Y REQUIRED>					
Front F	wie / Su	u		3/10/2015			



15-03-0014



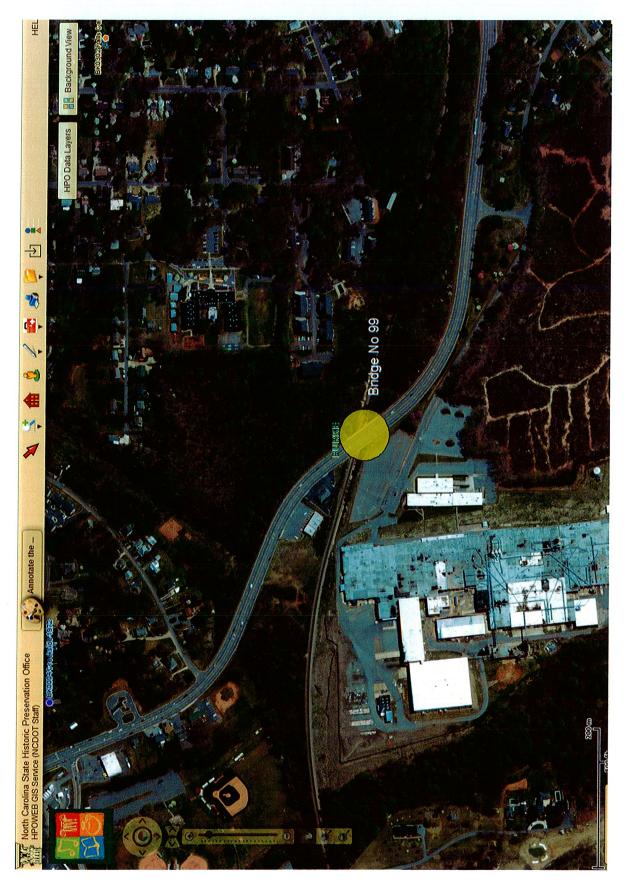
#### HISTORIC ARCHICTECTURE AND LANDSCAPES NO SURVEY REQUIRED FORM

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 Project No: B-5869 Burke County: WBS No.: **PCE** 48063.1.FR1 Document Type: **Federal** BRSTP-0064(180) State Fed. Aid No: Funding: **Federal** X Yes Permit unknown Permit(s): Type(s): Project Description: Replace Bridge No. 99 on US 64/US 70 (Flemming Dr) over Southern Railroad. SUMMARY OF HISTORIC ARCHICTECTURE AND LANDSCAPES REVIEW Description of review activities, results, and conclusions: Review of HPO quad maps, relevant background reports, historic designations roster, and indexes was undertaken on March 9, 2015. Based on this review there are no NR, DE, LL, SL, or SS in the project area. The only structures in the Area of Potential Effect (APE) of this project are modern commercial and industrial buildings. No survey is 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 Burke County ArcGIS website 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  $\bowtie$  Map(s) Previous Survey Info. Photos Correspondence Design Plans FINDING BY NCDOT ARCHITECTURAL HISTORIAN Historic Architecture and Landscapes -- NO SURVEY REQUIRED March 9,2015

NCDOT Architectural Historia

Date



 $Historic\ Architecture\ and\ Landscapes\ NO\ SURVEY\ REQUIRED\ form\ for\ Minor\ Transportation\ Projects\ as\ Qualified\ in\ the\ 2007\ Programmatic\ Agreement.$   $Page\ 2\ of\ 3$ 



April 19, 2017

Tracy Walter, P.E. NCDOT Project Development Engineer NCDOT – PDEA Unit 1548 Mail Service Center Raleigh, North Carolina 27699-1548

Re: Bridge No.99 – U.S. 64/U.S. 70 - STIP Project No. B-5869

Dear Mr. Walter,

In follow up to the Public Hearing held on Tuesday March 21, 2017 at Forest Hill Elementary School for the above-referenced project, the City offers its expectations and recommendations for the RR Bridge Replacement project. The City would like to see all of these items included in the final design, specifications and funding plan for the bridge and associated roadway.

The items that the City expects and recommends NCDOT to include in the project are:

- 1. Addition of architectural elements and texture treatment to the bridge structure on both the inside and outside of all bridge rail walls consistent with what has been done on the I-40/South Sterling Street Interchange Bridge and the I-40/ Enola Road Interchange Bridge. These, as with the following items are part and parcel with enhancement projects undertaken and funded by NCDOT throughout the state. Accordingly, to facilitate concurrence with an appropriate design concept, it is essential that the City have the opportunity to review the details of the proposed bridge.
- 2. A 5-ft. sidewalk on the north side of West Fleming Drive extending from the project limits on the west to the existing sidewalk at the intersection with Morganton Heights Boulevard including across the bridge structure. Of course, this would include appropriate handrail and screening on this side of the bridge separating the sidewalk from the railroad below. This sidewalk extension would create another crosswalk across West Fleming Drive at Morganton Heights Boulevard. In keeping with practices already in place within NCDOT, the City expects that the appropriate pedestrian signal heads and push buttons be installed for this new crosswalk with the pedestrian signal heads and poles as well as the push button poles Federal green in color to match the already existing traffic signal mast arms and poles and pedestrian signals and poles at this intersection as

- well as those elsewhere in the City. In addition, adjustments to the signal timing and phasing may be necessary for the functionality of this intersection.
- 3. Corresponding to the sidewalk on the south side of West Fleming Drive, the City requests a 10-ft. wide multi-purpose pathway ( greenway ) constructed from the project limits on the east through the entire project to the west project limits. Of course, this would include appropriate handrail and screening on this side of the bridge separating the greenway from the railroad below. The terminus of this pathway on the west end of the project would facilitate connection to a greenway constructed by the City tying into Shuey Park and the City property on the south side of West Fleming Drive. If necessary, the City requests that the retaining wall proposed at the southwest end of the project be designed such that the connection between City greenway and project pathway be accomplished and meet ADAAG requirements. The design of the retaining wall may need to be modified and may need to encroach on the City property to accomplish the dual role of structural stability and accommodation of the greenway connection.
- 4. At the western entrance to the Morganton Heights Retail Center, the RI / RO entrance in other words, the City requests that priority be given to the 10-ft. concrete pathway with appropriate warning signage to indicate to the right-turning vehicles that they must yield to pedestrians or cyclists using the crosswalk. Therefore this entrance to the Morganton Heights Retail Center should be designed such that the 10-ft. concrete pathway is continuous across the entrance as well as the pork-chop island. The pork-chop island should provide a safe refuge for pedestrians and cyclists. The City requests that the area of the island not occupied by the concrete pathway be planted in grass.
- 5. The City requests that the center left turn lane, or "suicide" lane depicted in the proposed drawing be eliminated and replaced by a planted median extending from the western project limits to the intersection of West Fleming Drive and Morganton Heights Boulevard, since there are no left turn movements possible along this stretch of the roadway. Our request is that this area be a planted median with grass, shrubs, and trees to match similar islands on South Sterling Street and Enola Road. At a minimum, this continuous median should be planted with grass. That portion of the median island on the bridge should be stamped concrete with a stone pattern.
- 6. The City requests that the thru lanes be reduced to 11-ft. lanes rather than the 12-ft. lanes called for. The balance of the width provided by this reduction of the inner thru lanes can then be allocated to the outside lanes thereby creating wider outside thru lanes approximately 14 feet in width for safer bicycle travel.
- 7. The City requests that decorative lighting be installed over the entire length of the project including on the bridge on both the vehicular scale and the pedestrian scale.

- 8. The City requests that all overhead utilities be relocated underground throughout the project limits. This item is part and parcel with highway projects undertaken and funded by NCDOT throughout the state.
- 9. The City requests that the existing 12-inch water line attached to the existing bridge be replaced with a 16-inch water line to be attached to the proposed bridge and then tied into the existing 12-inch water lines on either end of the bridge. The City has plans to upgrade its water distribution system in this area, including upgrading the existing 12-inch water line along West Fleming Drive in the near future and certainly early on during the lifespan of the new proposed bridge.

We look forward to working with Simpson Engineers & Associates and NCDOT for the successful completion of this project. Any questions with regards to our requests or any comments in response may be directed to me at (828) 438-5263.

Sincerely,

Mark A. Young, P.E.

Tack O. Joney

City Engineer

CC: Martha Register, NCDOT Consultant, Simpson Engineers & Associates

Leza Mundt, Simpson Engineers & Associates

Rick Tipton, PE, NCDOT Division 13 Construction Engineer

Chris Guffey, NCDOT District Engineer (District 1)

Nathan Moneyham, PE, NCDOT Resident Engineer (District 1)

Nathan N. Adima, PE, NCDOT Roadway Design Engineer

The Mayor and the Morganton City Council

Sally Sandy, City Manager, City of Morganton

Phillip Lookadoo, D & D Director, City of Morganton

Michael Berley, Project Designer, City of Morganton



# STATE OF NORTH CAROLINA DEPARTMENT OF TRANSPORTATION

ROY COOPER
GOVERNOR

JAMES H. TROGDON, III
SECRETARY

August 31, 2017

Mark A. Young, P.E. City Engineer 305 East Union Street, Suite A100 Morganton, NC 28655

RE: Replacement of Bridge No. 99 on US 64/70 (Fleming Drive) over the Southern Railroad, Morganton, NC; NCDOT STIP Project No. B-5869.

Dear Mr. Young,

This letter is in response to the City of Morganton's letter of April 19, 2017 which included the City's list of expectations and recommendations concerning the design of the replacement bridge and approaches associated with this subject project. Thank you for taking the time to fully compile a list of the City's desires for the project's final design. This letter will address the numerical items noted in your original letter in their originally presented order.

The following is NCDOT's responses to the City's list (all additional project costs would be addressed in a Municipal Agreement between NCDOT and the City):

- 1. <u>Architectural Elements on Bridges</u>: NCDOT will be happy to incorporate architectural elements and texture treatments onto the design of the bridge in a manner consistent with previously completed NCDOT project within the City; STIP Projects U-2550B and U-2551. NCDOT considers these items to be betterment so the City would be responsible for the additional project cost. Actual costs to be determined during final design.
- 2. Five-foot Sidewalk: NCDOT's policy is to replace the existing sidewalk on the approaches and on the bridge at our cost, and provide sidewalk along the remainder of the north and southwest side of the project within the project limits at a shared cost of 70% NCDOT / 30% City. The anticipated additional cost to the City for the addition of sidewalk is \$28,000. Handrail and screening on bridge are considered betterment and the City would be responsible for 100% of the cost. NCDOT will provide pedestrian signal heads where warranted within the project area, number and locations to be determined during final design.

- 3. Ten-foot Multi-Use Path on south side of project: NCDOT will replace sidewalk where existing along the south side within the project area as well as provide for sidewalk on the proposed bridge; NCDOT's standard sidewalk width is 5'. In areas where sidewalks do not already exist NCDOT will provide a 5' sidewalk at a cost share of 70% NCDOT and 30% City. The additional 5' width required to provide a 10' multi-use path is considered a betterment cost and the City will be responsible for 100% of cost. The anticipated additional cost for providing for a 10' multi-use path is \$520,000.
- 4. <u>Concrete Sidewalk and Pedestrian Treatment at "Pork Chop Island"</u>: NCDOT agrees with the City's request for creation of a concrete walkway and appropriate signage in the "pork-chop island" planned for the western entrance to Morganton Heights Retail Center. However, NCDOT does not believe that there will be sufficient remaining area to adequately include landscaping or grass within the island. NCDOT will investigate signage for yielding to pedestrians.
- 5. <u>Eliminate Continuous Center Turn Lane</u>: NCDOT will investigate utilizing a raised median rather than a painted island as requested. NCDOT prefers a concrete median but will consider a median with a 9' grass area if the City will agree to be responsible for maintenance of same area. NCDOT does not support a planted median in this area.
- 6. Wide Outside Travel Lanes: NCDOT prefers to utilize 12-foot lane widths to match the existing 12-foot lane widths; however, we are willing to utilize a 14-foot outside lane to provide for safer bicycle travel. NCDOT will provide at no additional cost 14-foot outside lanes which will taper to match with existing 12-foot lanes within the project area. Taper location will be determined during final design.
- 7. <u>Decorative Lighting</u>: NCDOT is willing to coordinate with the City to install decorative lighting fixtures. The City would be responsible for 100% of the additional cost. The City is requested to provide the specifications of the desired light fixtures to the NCDOT. Additional design and structure costs will be required if lighting is included or carried across the bridge.
- 8. <u>Relocate Utilities Underground</u>: NCDOT may not have control over the manner in which the overhead utilities are relocated to accommodate the bridge replacement project. NCDOT has generally determined, based on past project cost estimates, that burying of utilities is roughly 3-times the cost of hanging the wires overhead. If the City desires the utilities to be buried they will be responsible for 100% of the additional cost. Additional coordination with the NCDOT-Utilities Unit will be necessary to facilitate this request.
- 9. Water Line on Bridge: NCDOT's current policy is not to attach utility lines onto structures so the replacement of the existing water line will need to be relocated. Replacement of the existing 12" water line with a 12" water line would be considered a non-betterment cost and would be replaced in accordance to the cost sharing percentage designated in NCGS 136-27.1; "A municipality with a population of greater than 10,000, but less than 25,000, shall pay twenty-five percent (25%) of the cost." Replacement of the existing 12" water line with a 16" water line would be considered a betterment with the City being responsible for 100% of the additional cost. The railroad company will require the water line to be encased within a 30" pipe within the extent of their right of way as well as require a trenchless method of installation since they do not allow open cut installation. Additional cost for this betterment would be approximately \$300,000 for within the railroad right-of-way.

All costs provided are estimates only, final costs to be included in the Municipal Agreement would be determined once final plans are complete. The need for additional right-of-way is not included and would be determined during final design. Additional right-of-way would be considered betterment with the City being responsible for 100% of the additional cost.

We look forward to working with the City to resolve any outstanding items and negotiating the Municipal Agreement. Please feel free to contact me (phone at 919-707-6177 or email at <a href="twalter@ncdot.gov">twalter@ncdot.gov</a>) if you have questions or require additional information.

Sincerely,

Tracy A. Walter, P.E.

Project Manager

EC: Sally Sandy, City Manager, City of Morganton

Phillip Lookadoo, D & D Director, City of Morganton Ricky Tipton, PE, NCDOT Div. 13 Construction Engineer

Chris Guffey, NCDOT Div. 13 District Engineer

Nathan Moneyham, PE, NCDOT Div. 13 Resident Engineer

Kevin E. Moore, PE, NCDOT Central Project Delivery

Martha Register, Project Planning Manager, Simpson Engineers & Associates

David Stutts, NCDOT Structures Management