

CATEGORICAL EXCLUSION ACTION CLASSIFICATION FORM

TIP Project No.	<u>B-5243</u>
W.B.S. No.	<u>42845.1.1</u>
Federal Project No.	<u>BRSTP-1008(23)</u>

A. Project Description:

The purpose of this project is to replace Union County Bridge No. 258 located on SR 1008 (Indian Trail Road) over South Fork Crooked Creek (see Figure 1). Bridge No. 258 will be replaced on the existing location while traffic is detoured offsite during construction. In order to handle the additional traffic, the intersection of Old Monroe Road and Southfork Road must be improved as part of the project (see Figure 1).

Replacement of Bridge

The replacement structure will consist of a two barrel, 12-foot wide by 7-foot high reinforced concrete box culvert. The culvert size 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 grade.

The approach roadway will extend approximately 580 feet from the southwest end of the new culvert and 380 feet from the northeast end of the new culvert. There is an existing left turn lane onto Coventry Drive that will be extended to the northeast into a center turn lane creating more storage and allowing service to Keowee Circle as well. The cross section will include a 12-foot center turn lane, 14-foot outside lanes to provide sufficient width for bicycles, curb and gutter and a 10 foot berm on both sides with a sidewalk on the northwest side. The existing pedestrian bridge will be removed and the new sidewalk carried across the box culvert. The roadway will be designed using Sub Regional Tier Guidelines with a 40 mile per hour design speed.

Offsite Detour and Intersection Improvement

Traffic currently using the bridge will be detoured off-site (see Figure 1) during construction utilizing Southfork Rd. (SR 1371) and Old Monroe Road (SR 1009). Because of the detouring an additional 15,000 vehicles per day, the intersection of Southfork Road and Old Monroe Road will need to be improved to handle the additional volumes. A temporary three phase turn signal and opposing left hand turn lanes will be added on Old Monroe Road. (see Figure 3). The total length of improvements as shown in Figure 3 is 660 feet along Old Monroe Road. The intersection improvements are to be complete before road closure begins. All other aspects of the detour are acceptable as they are.

B. Purpose and Need:

NCDOT Bridge Management Unit records indicate Bridge No. 258 has a sufficiency rating of 6.13 out of a possible 100 for a new structure.

The bridge is considered structurally deficient due to superstructure condition appraisal of 3 out of 9 according to Federal Highway Administration (FHWA) standards. The bridge also meets the criteria for functionally obsolete due to deck geometry rating of 2 out of 9.

The superstructure and substructure of Bridge No. 258 have timber elements that are fifty-one 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. 258 are experiencing an increasing degree of deterioration that can no longer be addressed by reasonable maintenance activities; therefore the bridge is approaching the end of its useful life.

Bridge No. 258 carries 15,000 vehicles per day with 19,000 vehicles per day projected for the year 2035. The increasing traffic, the substandard deck and deteriorating timber components warrant the replacement of the bridge.

C. Proposed Improvements:

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
 - l. 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
 - c. 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.
 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.
 10. 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.
 11. 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.

12. Acquisition and construction of wetland, stream and endangered species mitigation sites.
13. 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 2013 prices, are as follows:

Replacement of Bridge with Box Culvert

Structure – RCBC	\$ 168,000
Removal of Bridge No. 258	23,000
Removal of Pedestrian Bridge	6,000
Roadway & Approaches	353,000
Misc. & Mob.	147,000
Eng. & Contingencies	103,000
Total Construction Cost	\$ 800,000
Right-of-way Costs	233,000
Right-of-way Utility Costs	401,000
Total	\$ 1,434,000

Modification of Intersection

Roadway Approaches	\$ 341,000
Three Phase Traffic Signal	90,000
Misc. & Mob.	126,000
Eng. & Contingencies	93,000
Total Construction Cost	\$ 650,000
Right-of-way Costs	96,000
Right-of-way Utility Costs	20,000
Total	\$ 766,000

Total Project Cost	\$ 2,200,000
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Estimated Traffic:

Current	-	15,000 vpd
Year 2030	-	19,000 vpd
TTST	-	1%
Dual	-	4%

Accidents: Traffic Engineering has evaluated a recent three year period and found 42 accidents occurring in the vicinity of the project. Four were directly on the bridge but none appear to be associated with the geometry of the bridge or its approach roadways.

Design Exceptions

There are no anticipated design exceptions for this project.

Comprehensive Transportation Plan

The CTP for this area is not complete but the old thoroughfare plans suggests widening in the future. After coordination with the Town Shallotte, Division and Roadway Design it was agreed that only two lanes with provision for bicycles and for future pedestrian accommodations is appropriate for now.

Pedestrian and Bicycle Accommodations

The Town of Indian Trail has identified this portion of Indian Trail Road (SR 1008) as appropriate for both bicycle and pedestrian facilities. There is an existing pedestrian bridge parallel on the northwestern side of the vehicular bridge. The Town also proposes a greenway along South Fork Crooked Creek. The Town has indicated that there is very little current usage by pedestrians of the sidewalk and that accommodations during construction are not required. The vehicular offsite detour will work for bicycles as well during construction.

Greenway Considered

The town has a proposed greenway but it is not funded. In more detailed discussion with the town, the clearance under the bridge is currently six feet above the water. Typically, if a graded shelf is viable it will be several feet above the water surface and then a minimum of eight feet is desired between the greenway surface and the low steel of the new structure. The Town was not interested in the resulting impacts and has indicated that an at-grade crossing in the future will be acceptable.

Bridge Demolition

Bridge No. 258 is constructed entirely of timber 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 of this section of the road which is unacceptable given the volume of traffic served by SR 1008.

Rehabilitation – The bridge was constructed in 1963 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. 258 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 Old Monroe Road (SR 1009) and Southfork Road (SR 1371). The majority of traffic on the road is through traffic. The detour for the average road user would result in approximately five minutes additional travel time (.63 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. Union County Schools has expressed a major concern regarding an offsite detour. In response, NCDOT will set the closure period for 120 days to begin in April and to be completed by the end of August to minimize impacts to the schools and take advantage of school being out during the summer. Union County Emergency Services has indicated that the detour is acceptable. With the proposed improvement to the intersection of Old Monroe Road and Southfork Road NCDOT Division 10 has indicated the condition of all other roads, bridges and intersections on the offsite detour are acceptable without improvement and concurs with the use of the detour.

Onsite Detour – An alternative was studied for an onsite detour to the southeast side. The cost of the onsite detour alignment with construction, right of way and utilities combined is \$653,000.

New Alignment – Given that the alignment for SR 1008 is acceptable and the right of way and utility impacts would have been very high, a new alignment was not considered as an alternative.

Alternate Selection

Both alternates propose to replace the bridge with a culvert on the existing location. They differ in what must be done to maintain traffic. The Offsite Detour Alternate requires improvement of an intersection at a cost of \$653,000. The onsite detour requires the construction of a temporary alignment and bridge at a cost of \$766,000. Although it costs \$113,000 more, the Offsite Detour with improvement of the intersection was selected because it represents a permanent improvement whereas the \$653,000 for the onsite detour bridge would be for temporary use only with no permanent utility.

Study to Extend Project

At the request of the town, NCDOT studied extending the new alignment to Indian Trail Elementary School. The resulting cost estimate was \$590,000. Based on the cost, the town has decided they do not want to pursue the extension any further.

Structure Type

The current structure is a timber deck bridge built in 1963 and has a drainage area of 1.3 square miles. The stream carries a best usage classification of "C". Based on the drainage area and design discharges, a 2 @ 12 foot wide by 7 foot high reinforced concrete box culvert was determined to be adequate from a hydraulics standpoint. The culvert will be buried below the streambed. In accordance with the Culvert Avoidance and Minimization Design Guidance, the culvert will be designed such that the slope, low flow velocities and low flow channel designs are consistent with the existing stream. During the final design, the use of sills and baffles will be evaluated for use in maintaining flow dimensions and streambed material. Because of the required structures size, stream classification, construction and maintenance costs as well as life expectancy, a culvert is the preferred structure type.

Agency Comments:

The **N.C. Wildlife Resource Commission (NCWRC)** and **U.S. Fish & Wildlife Service** in standardized letters provided a request that they prefer any replacement structure to be a spanning structure. **Response:** See discussion of Structure Type in previous section

In 2011 scoping comments the **N.C. Division of Water Quality** indicated these waters are listed on the Final 2012 303(d) List for turbidity and therefore Design Standards for Sensitive Watersheds (DSSW) should apply. It was later clarified that while the waters are on the 303(d) list, it is for aquatic life, not turbidity. Therefore DSSW do not apply to this project.

The **Army Corps of Engineers** and the Environmental Protection Agency had no special concerns for this project.

The **Town of Indian Trail** has been involved with the development of the project from the outset. Coordination has taken place regarding the cross section, school concerns, traffic control and public involvement. They support the project as proposed.

Public Involvement:

A letter notifying property holders was sent in March 2011 to those having properties affected by the bridge replacement on Indian Trail Road. No comments have been received to date.

With the addition of the improvement to the intersection, NCDOT in coordination with the Division and Town sent newsletters to property holders affected by the proposed improvements in November 2013. To date no comments have been received.

Based on lack of responses from the letters to property holders, both the Town and Division agreed that a Citizen's Informational Workshop was not necessary.

E. Threshold Criteria

The following evaluation of threshold criteria must be completed for Type II actions

<u>ECOLOGICAL</u>	<u>YES</u>	<u>NO</u>
(1) Will the project have a substantial impact on any unique or important natural resource?	<input type="checkbox"/>	<u>X</u>
(2) Does the project involve habitat where federally listed endangered or threatened species may occur?	<input checked="" type="checkbox"/>	<u> </u>
(3) Will the project affect anadromous fish?	<input type="checkbox"/>	<u>X</u>
(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?	<u>X</u>	<input type="checkbox"/>
(5) Will the project require the use of U. S. Forest Service lands?	<input type="checkbox"/>	<u>X</u>
(6) Will the quality of adjacent water resources be adversely impacted by proposed construction activities?	<input type="checkbox"/>	<u>X</u>
(7) Does the project involve waters classified as Outstanding Resources Waters (ORW) and/or High Quality Waters (HQW)?	<input type="checkbox"/>	<u>X</u>
(8) Will the project require fill in waters of the United States in any of the designated mountain trout counties?	<input type="checkbox"/>	<u>X</u>
(9) Does the project involve any known underground storage tanks (UST's) or hazardous materials sites?	<input type="checkbox"/>	<u>X*</u>
 <u>PERMITS AND COORDINATION</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)?	<input type="checkbox"/>	<u>N/A</u>

- | | | | |
|------|---|-------------------------------------|---------------------|
| (11) | Does the project involve Coastal Barrier Resources Act resources? | <input type="checkbox"/> | <u> X </u> |
| (12) | Will a U. S. Coast Guard permit be required? | <input type="checkbox"/> | <u> X </u> |
| (13) | Could the project result in the modification of any existing regulatory floodway? | <input checked="" type="checkbox"/> | <u> </u> |
| (14) | Will the project require any stream relocations or channel changes? | <input type="checkbox"/> | <u> X </u> |

SOCIAL, ECONOMIC, AND CULTURAL RESOURCES

 YES **NO**

- | | | | |
|------|---|--------------------------|-------------------------------------|
| (15) | Will the project induce substantial impacts to planned growth or land use for the area? | <input type="checkbox"/> | <u> X </u> |
| (16) | Will the project require the relocation of any family or business? | <input type="checkbox"/> | <u> X </u> |
| (17) | Will the project have a disproportionately high and adverse human health and environmental effect on any minority or low-income population? | <input type="checkbox"/> | <u> X </u> |
| (18) | If the project involves the acquisition of right of way, is the amount of right of way acquisition considered minor? | <u> </u> | <input checked="" type="checkbox"/> |
| (19) | Will the project involve any changes in access control? | <input type="checkbox"/> | <u> X </u> |
| (20) | Will the project substantially alter the usefulness and/or land use of adjacent property? | <input type="checkbox"/> | <u> X </u> |
| (21) | Will the project have an adverse effect on permanent local traffic patterns or community cohesiveness? | <input type="checkbox"/> | <u> X </u> |
| (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)? | <u> X </u> | <input type="checkbox"/> |
| (23) | Is the project anticipated to cause an increase in traffic volumes? | <input type="checkbox"/> | <u> X </u> |
| (24) | Will traffic be maintained during construction using existing roads, staged construction, or on-site detours? | <u> X </u> | <input type="checkbox"/> |
| (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? | <u> X </u> | <input type="checkbox"/> |

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|------|---|--------------------------|--------------------------|
| (26) | Is there substantial controversy on social, economic, or environmental grounds concerning the project? | <input type="checkbox"/> | <u> X </u> |
| (27) | Is the project consistent with all Federal, State, and local laws relating to the environmental aspects of the project? | <u> X </u> | <input type="checkbox"/> |
| (28) | Will the project have an "effect" on structures/properties eligible for or listed on the National Register of Historic Places? | <input type="checkbox"/> | <u> X </u> |
| (29) | Will the project affect any archaeological remains which are important to history or pre-history? | <input type="checkbox"/> | <u> X </u> |
| (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)? | <input type="checkbox"/> | <u> X </u> |
| (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? | <input type="checkbox"/> | <u> X </u> |
| (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? | <input type="checkbox"/> | <u> X </u> |

F. Additional Documentation Required for Unfavorable Responses in Part E

Response to Question 2

Habitat for the Michaux's sumac and Schweinitz's sunflower are present on both project areas. A walking survey of the study area around the bridge was conducted on September 13, 2011 by NCDOT biologists. On October 3, 2013 another walking survey was conducted within the original project area around the bridge as well as the new area at the intersection of Old Monroe Road and Southfork Road. Neither species was found during the survey. The biological conclusion is No Effect, but Habitat Present.

Response to Question 9

At an intersection several hundred feet away from the project limits there is a dry cleaning business along with a gas station; both with underground storage tanks. It is not anticipated that the project limits will extend any further in that direction and therefore there will be no impact on the UST's from the project.

Response to Question 13

Union County is a participant in the National Flood Insurance Regular Program. South Fork Crooked Creek is included in a detailed flood study, having a regulated 100-year floodway. The Hydraulic Unit will coordinate with the Federal Emergency Management Agency (FEMA) to determine if a Conditional Letter of Map Revision (CLOMR) and a subsequent final Letter of Map Revision (LOMR) are required for the project. If required, the Division will submit sealed as-built construction plans to the Hydraulics Unit upon project completion certifying the project was built as shown on construction plans.

G. CE Approval

TIP Project No.	<u>B-5243</u>
W.B.S. No.	<u>42845.1.1</u>
Federal Project No.	<u>BRSTP-1008(23)</u>

Project Description:

The purpose of this project is to replace Union County Bridge No. 258 located on SR 1008 (Indian Trail Road) over South Fork Crooked Creek (see Figure 1). Bridge 258 will be replaced on the existing location while traffic is detoured offsite during construction. In order to handle the additional traffic, the intersection of Old Monroe Road and Southfork Road must be improved as part of the project (see Figure 1).

Categorical Exclusion Action Classification:

 TYPE II(A)
 X TYPE II(B)

Approved:

<u>2-28-14</u> Date	<u>John L. Williams</u> Project Engineer Project Development & Environmental Analysis Unit
<u>2/28/14</u> Date	<u>William T. Gordon</u> Project Planning Engineer Project Development & Environmental Analysis Unit

For Type II(B) projects only:

<u>3-5-14</u> Date	<u>Michael V. Gatzert</u> for John F. Sullivan, III, PE, Division Administrator Federal Highway Administration
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PROJECT COMMITMENTS:

**Union County
Bridge No. 258 on SR 1008
Over South Fork Crooked Creek
Federal Aid Project No. BRSTP-1008(23)
W.B.S. No. 42845.1.1
T.I.P. No. B-5243**

Division Ten Construction, Resident Engineer's Office – Offsite Detour

In order to have time to adequately reroute school busses, Union County Schools will be contacted at (704) 296-3015 at least one month prior to road closure.

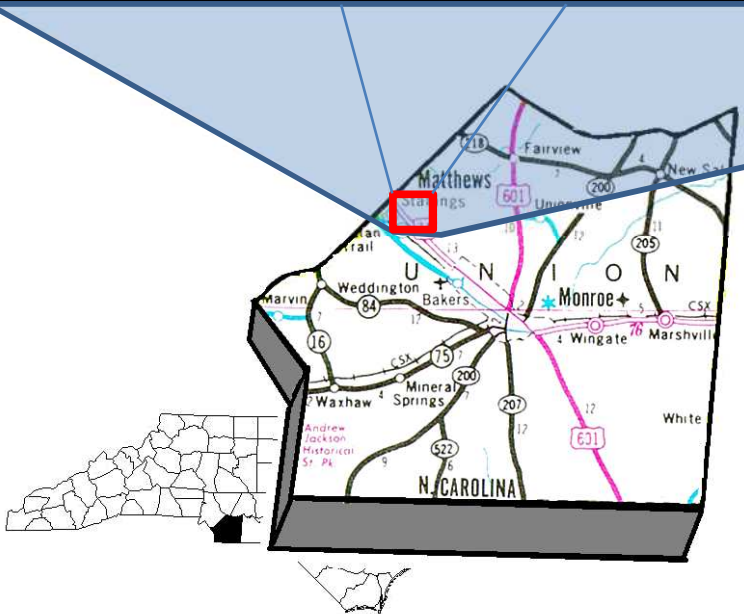
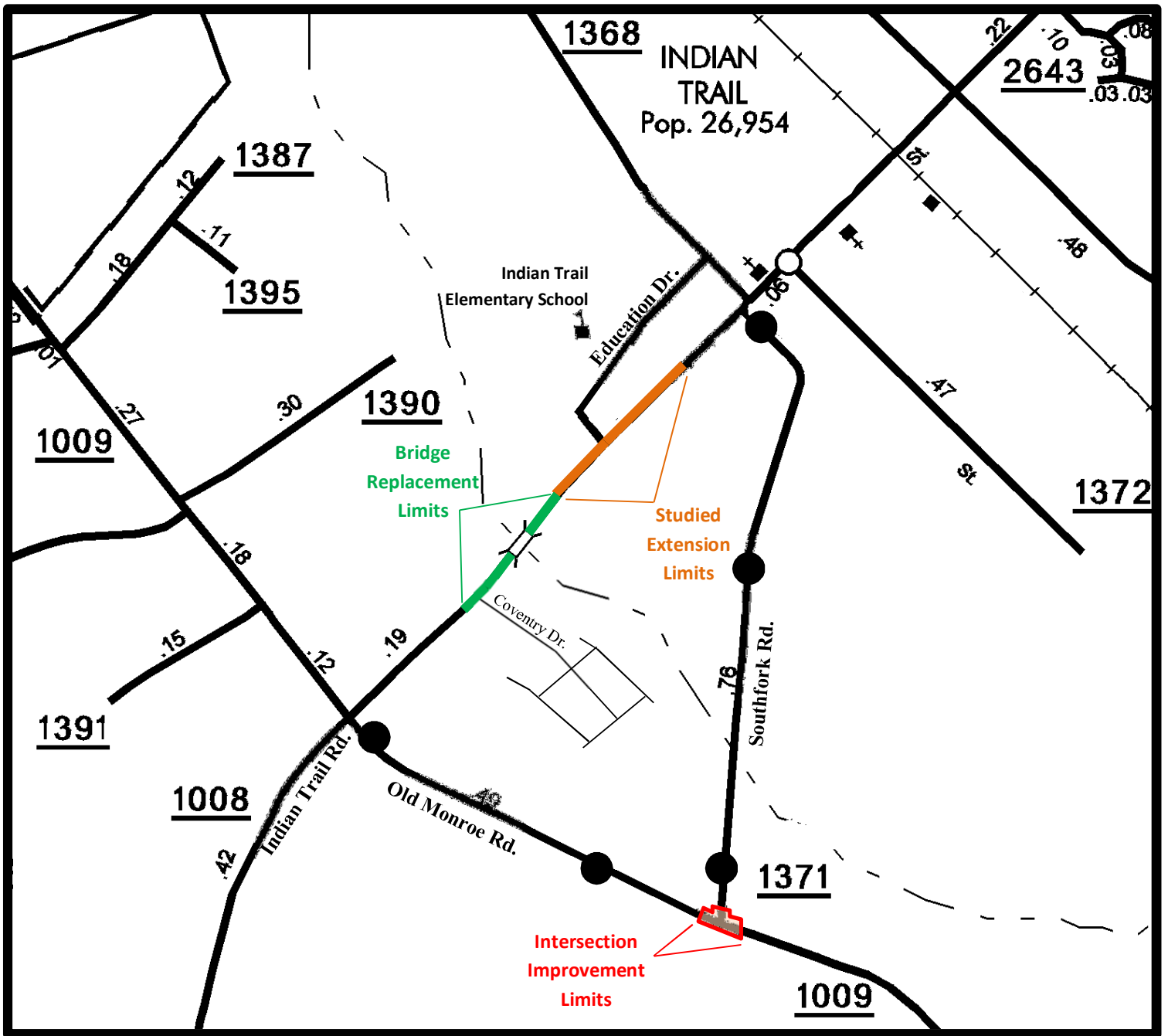
Union County Emergency Services will be contacted at (704) 283-3575 at least one month prior to road closure to make the necessary temporary reassignments to primary response units.

Hydraulic Unit – FEMA Coordination


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

Division Construction-FEMA

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.

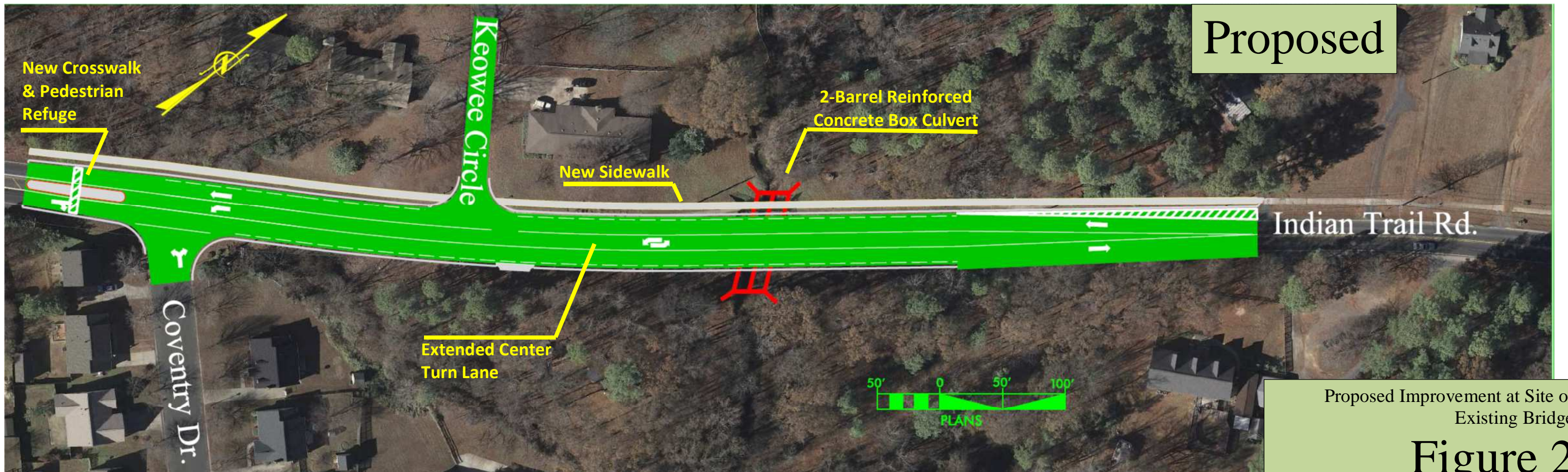


Studied Detour Route

 NORTH CAROLINA DEPARTMENT OF TRANSPORTATION
DIVISION OF HIGHWAYS
PROJECT DEVELOPMENT & ENVIRONMENTAL ANALYSIS BRANCH

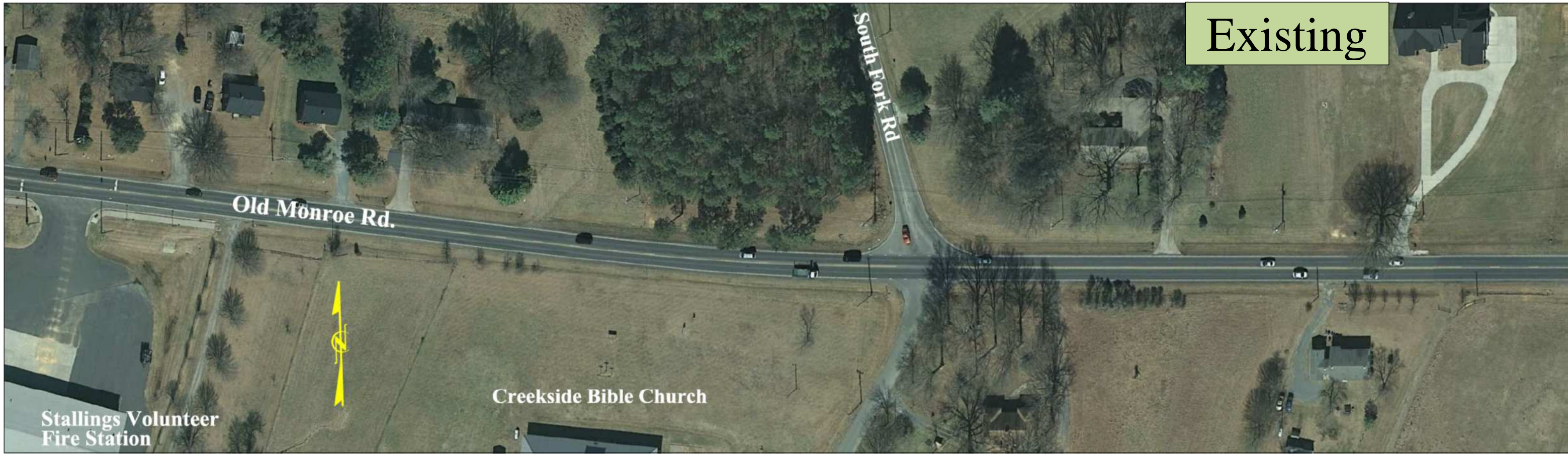
UNION COUNTY
REPLACE BRIDGE NO. 258 ON SR 1008
OVER SOUTH FORK CROOKED CREEK
B-5243

FIGURE 1



Proposed Improvement at Site of Existing Bridge

Figure 2



10-12-0009

NO SURVEY REQUIRED FORM**PROJECT INFORMATION**

Project No: B-5243 County: Union
 WBS No: 42845.1.1 Document: PCE or CE
 F.A. No: BRSTP-1008(23) Funding: State Federal

Federal (USACE) Permit Required? Yes No Permit Type:

Project Description: Replacement of Bridge No. 258 on SR 1008 (Indian Trail Road) over South Fork Crooked Creek in Union County.

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

Review of HPO quad maps, historic designations roster, and indexes was undertaken on 28 January 2011. Based on this review, there are no existing NR, SL, LD, DE, or SS properties in the Area of Potential Effects (APE). Google Maps "Street View" and current Union County GIS Mapping and tax information indicate that there are several structures present within the APE. Several houses constructed in the 1940s are located east of the bridge within the APE (Parcel ID# 07114067, 07114066, 07114068) and after viewing the properties on "Street View" it was concluded that they not meet the criteria for listing on the National Register. Parcel ID# 07114064A, constructed in 1958, also does not meet the criteria for listing on the National Register based on viewing the property on "Street View." Other properties within the APE are less than fifty years old and do not meet Criteria Consideration G for listing on the National Register. In addition, Bridge No. 258 is less than fifty years of age and is not eligible. No survey is required.

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

HPO quad maps recording NR, SL, LD, DE, and SS properties for the Union County survey, Union County GIS information, Union County Tax Information, and Google Maps "Street View" are considered valid for the purposes of determining the likelihood of historic resources being present. There are no historic resources present and no survey is required.

SUPPORT DOCUMENTATION

See attached: Maps, Tax Parcel Information

FINDING BY NCDOT CULTURAL RESOURCES PROFESSIONAL NO SURVEY REQUIRED

ARCHAEOLOGY

HISTORIC ARCHITECTURE

(CIRCLE ONE)

Katherine L. Husband
 NCDOT Cultural Resources Specialist

28 January 2011
 Date

10-12-0009
UPDATE

HISTORIC ARCHITECTURE AND LANDSCAPES NO SURVEY REQUIRED FORM

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

PROJECT INFORMATION

Project No:	B-5243	County:	Union
WBS No.:	42845.1.1	Document Type:	PCE or CE
Fed. Aid No:	BRSTP-1008(23)	Funding:	<input type="checkbox"/> State <input checked="" type="checkbox"/> Federal
Federal Permit(s):	<input checked="" type="checkbox"/> Yes <input type="checkbox"/> No	Permit Type(s):	
<u>Project Description:</u> Supplemental request to replacement of Bridge No. 258 to study associated offsite detour improvement at the intersection of Old Monroe Road and South Fork Road.			

SUMMARY OF HISTORIC ARCHITECTURE AND LANDSCAPES REVIEW

<p><u>Description of review activities, results, and conclusions:</u> Review of HPO quad maps, HPO GIS information, historic designations roster, and indexes was undertaken on January 2, 2014. Based on this review, there are no existing NR, SL, LD, DE, or SS properties in the Area of Potential Effects, which is approximately 1400 feet of the intersection. There are one-story ranch houses built c. 1960s in the APE based on Union County GIS/Tax information. Google maps Street View shows that the houses within the APE are unremarkable, common brick ranch houses that are not eligible for National Register listing. There are no National Register listed or eligible properties within the APE and no survey is required. If design plans change, additional review will be required.</p> <p><u>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:</u> HPO quad maps and GIS information recording NR, SL, LD, DE, and SS properties for the Union County survey and Google Maps are considered valid for the purposes of determining the likelihood of historic resources being present. There are no National Register listed or eligible properties within the APE and no survey is required.</p>
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SUPPORT DOCUMENTATION

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

FINDING BY NCDOT ARCHITECTURAL HISTORIAN

Historic Architecture and Landscapes -- NO SURVEY REQUIRED

1/7/2014

NCDOT Architectural Historian

Date

10-12-0009

NO SURVEY REQUIRED FORM

PROJECT INFORMATION

Project No: B-5243 County: Union
 WBS No: 42845.1.1 Document: PCE or CE
 F.A. No: BRSTP-1008(23) Funding: State Federal

Federal (USA CE) Permit Required? Yes No Permit Type: Unknown

Project Description: NCDOT intends to replace the structurally deficient Bridge No. 258 over South Fork Crooked Creek on SR 1008. No preliminary plans were available at the time of the review; nevertheless, for the purposes of review, the study corridor was considered the project APE (720-x-210 feet; 3,471 acres).

SUMMARY OF CULTURAL RESOURCES REVIEW

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

A review of the site maps and files at the North Carolina Office of State Archaeology was conducted on January 27, 2011. No previously recorded archaeological sites are located within the current study area. However, an archaeological survey was conducted along Crooked Creek in 1978 by Peter P. Cooper that passed through the area. No further archaeological investigation is recommended for this bridge replacement as currently proposed. This project should be considered Section 106 and NCGS 121-12(a) compliant. Should the proposed bridge replacement change in scope, further review should be conducted.

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 1978 Catawba College survey for 201 Wastewater Facilities along Crooked Creek and Dry Fork involved surface examinations and "scratch squares" in a 30-meter wide area parallel to the creeks. Additionally, pump stations and adjacent pipeline locations, away from the creeks were surveyed. Sixteen archaeological sites were identified by Cooper's crew (though none in the current study area), most of which appeared to be mixed lithic scatters, that Cooper believed to be archaeologically insignificant. As can be seen in the aerial photograph of the project area and the soil map for Union County, portions of the APE located further from the South Fork of Crooked Creek have been severely disturbed by development and subsequent erosion. The chance for NRHP-eligible archaeological resources to have survived in the project area is considered to be extremely (prohibitively) remote.

SUPPORT DOCUMENTATION

See attached: Project location map; aerial photograph of the B-5243 project area; detail of the Matthews, NC (1971) 7.5-minute topographic map; detail of the Union County soil map (from [HTTP://WEBSOILSURVEY.NRCS.USDA.GOV/APP/](http://websoilsurvey.nrcs.usda.gov/app/)).

FINDING BY NCDOT CULTURAL RESOURCES PROFESSIONAL NO SURVEY REQUIRED

ARCHAEOLOGY

HISTORIC ARCHITECTURE

(CIRCLE ONE)


 NCDOT Cultural Resources Specialist

01-31-11
 Date

11-12-0009



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-5243 (update)** County: **Union**
 WBS No: **42845.1.1** Document: **CE or PCE**
 F.A. No: **BRSTP-1008(23)** Funding: State Federal
 Federal Permit Required? Yes No Permit Type: **?**

Project Description: NCDOT intends to replace the structurally deficient Bridge No. 258 over South Fork Crooked Creek on SR 1008. While this project is underway, traffic will be detoured along SR 1371, Southfork Road, and SR 1009, Old Monroe Road. As a result of this detour, improvements to the intersection of SR 1371 and SR 1009 are required. According to the preliminary plan sheets provided, these improvements appear to consist of added turn-lanes on SR 1009, which will necessitate a slight widening of the road and right-of-way (ROW).

SUMMARY OF CULTURAL RESOURCES REVIEW

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

The original archaeological review for the replacement of Bridge No. 258 was completed on January 31, 2011. At that time, no further archaeological review was recommended for the nearly 3.5-acre APE because it had been surveyed in 1978 as part of the archaeological investigations for the 201 Wastewater Facilities along Crooked Creek and Dry Fork. No archaeological resources had been identified at that time. Additionally, much of the vicinity was mapped (on the Union County soil maps) as areas that have been disturbed by urban development and erosion.

A review of the site files and maps archived at the North Carolina Office of State Archaeology was conducted on January 13, 2014 by NCDOT staff archaeologist, Brian Overton. No previously identified archaeological sites are recorded in the proposed APE. No further archaeological investigations are recommended for the project as currently proposed. Should the footprint of the proposed intersection improvements expand further outside existing ROW, additional archaeological review will be required.

This area of the intersection improvements does fall within the study area for the proposed widening of SR 1009 for a 6.5-miles stretch from SR 3448/SR 3474 in Matthews (Mecklenburg County) to SR 1337 in Indian Trail (U-4714). That project proposes to upgrade the highway facility to a four-lane divided highway (effectively doubling the width of the existing facility). At the time of this review, the SR 1009 widening project is awaiting preliminary designs before determining the nature of any further archaeological investigations. The recommendations for the proposed improvements to the SR 1371/SR 1009 intersection should not be considered to apply directly to the unrefined proposal (as no preliminary designs yet exist) to widen SR 1009 through this area.

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

The current area under consideration, an area roughly 1400 feet (nearly 427 meters) long that encompasses a ROW expansion from 60 to 75 feet (roughly 18 to 23 meters), falls within areas mapped as eroded soils. As is the case with upland areas overlooking the South Fork of Crooked Creek, the area surrounding the intersection of SR 1009 and SR 1371 is mapped as "Badin channery silt clay loam, 2 to 8 percent slopes, moderately eroded". Aerial photographs of the APE suggest a significant degree of landscape development

in the vicinity of the intersection. Additionally, areas of exposed subsoil can be seen along the existing ROW. It is very likely that these areas have been subjected to a significant amount of landscape disturbances. Intact National Register-eligible archaeological resources are considered to be unlikely to be encountered in the proposed APE.

SUPPORT DOCUMENTATION

See attached: Map(s) Previous Survey Info Photos Correspondence
 Other: NRCS web soil survey information (<http://websoilsurvey.nrcs.usda.gov/app/>); preliminary plans.

FINDING BY NCDOT ARCHAEOLOGIST

NO ARCHAEOLOGY SURVEY REQUIRED

Shane C. Petersen

January 30, 2014

NCDOT ARCHAEOLOGIST II

Date