



**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-5700 County: Cumberland
WBS No: 45654.1.1 Document: Minimum Criteria Checklist
F.A. No: Funding: ☒ State ☐ Federal

Federal Permit Required? ☒ Yes ☐ No Permit Type: NWP 3 / NWP 14

Project Description: Replace Bridge 45 on SR 2030 (Hollow Bridge Rd.) over the South River in Cumberland and Sampson Counties. The Area of Potential Effects (A.P.E.) is approximately 183 meters (600 ft.) long and 46 meters (150 ft.) wide. This A.P.E. includes the area within 92 meters (300 ft.) from each end of the bridge and 23 meters (75 ft.) from centerline on each side of the road. No design plans were provided.

SUMMARY OF ARCHAEOLOGICAL FINDINGS

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

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

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

See attached report

SUPPORT DOCUMENTATION

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

Other: Survey report

Signed:

CALEB SMITH

10/18/2016

NCDOT ARCHAEOLOGIST

Date

Archaeological Survey for the Proposed Replacement of Bridge No. 45 on SR 2030 (Hollow Bridge Road) over the South River, Cumberland County, North Carolina

By Terri Russ, Environmental Services, Inc.
September 2016

Introduction

Bridge No. 45 is located on SR 2030 (Hollow Bridge Road) over the South River in Cumberland and Sampson counties in the town of Autryville (**Figure 1**). The bridge's Area of Potential Effects (APE) is located in a wide river valley with floodplain and low terraces on each side (**Figure 2**). The bridge is oriented approximately north-south. The northern bridge quadrants are located in Sampson County; the southern bridge quadrants are located in Cumberland County. The APE for this project is approximately 150 feet (45.7 meters) wide (centered on the existing bridge) and will extend 300 feet (91.4 meters) from each end of the existing bridge (**Figure 3**).

The initial review of this project was conducted by North Carolina Department of Transportation (NCDOT) archaeologist Caleb Smith. The review included an examination of a topographic map, the Cumberland and Sampson counties soil surveys, an aerial photograph, and listings of previously recorded sites, previous archaeological surveys, and previous environmental reviews at the Office of State Archaeology (OSA). The review recommended an archaeological survey of the level, well-drained landforms in the southwest and southeast quadrants (the northwest and northeast quadrants of the APE are mapped as poorly drained).

The archaeological survey and evaluation of the proposed replacement of Bridge No. 45 was conducted on September 3, 2016, by Terri Russ of Environmental Services, Inc. (ESI). The following summary was submitted to NCDOT by ESI in September 2016.

Background Research

A map review and site file search conducted at the OSA revealed that no comprehensive archaeological survey of this bridge has been conducted, and no previously recorded archaeological sites have been documented within the project's APE. A search of the North Carolina State Historic Preservation Office online database (HPOWEB GIS Service) revealed no previously recorded historic architectural resources within the APE that have the potential to yield intact archaeological deposits.

Topographic maps, aerial photography, United States Department of Agriculture (USDA) soil survey maps, and historic maps were examined for information on natural or cultural factors that might have affected site locations or preservation. Historic maps reviewed included the 1922 Cumberland County and 1926 Sampson County Soil Surveys, both of which show a road crossing the South River in the general vicinity of the current project area (**Figures 4** and **5**). The 1959 topographic quadrangle shows a road and bridge alignment similar to the current road and bridge alignment (**Figure 6**). No structures are shown within the APE on any of these maps.

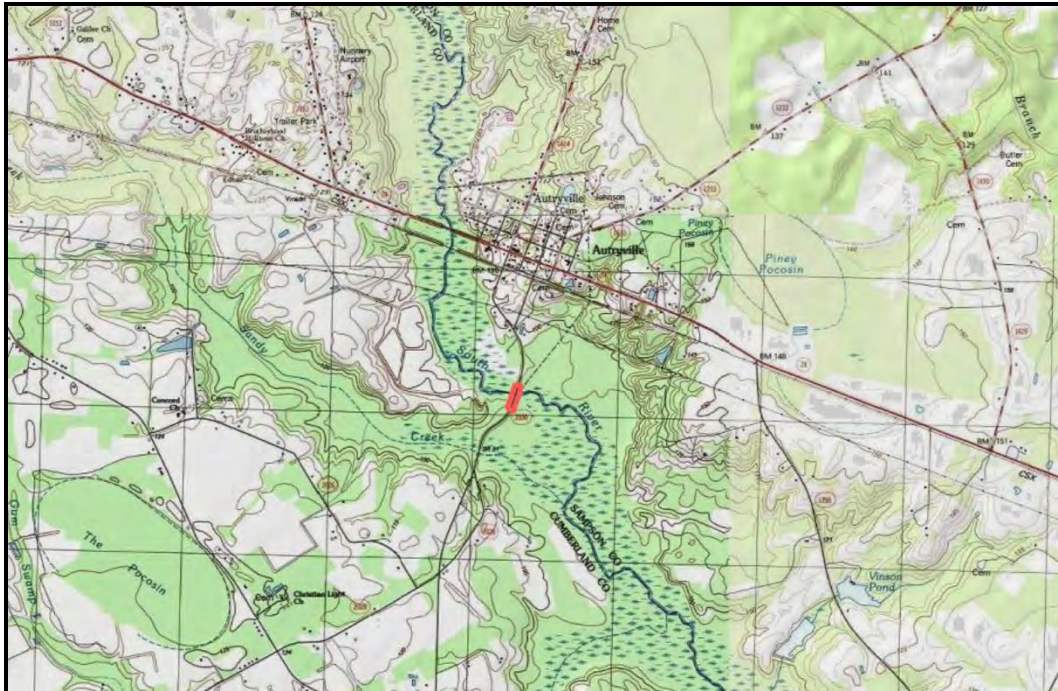


Figure 1: Bridge 45 Location (Autryville, N.C. Topographic Quadrangle).



Figure 2: Bridge 45 APE (Autryville, N.C. Topographic Quadrangle).

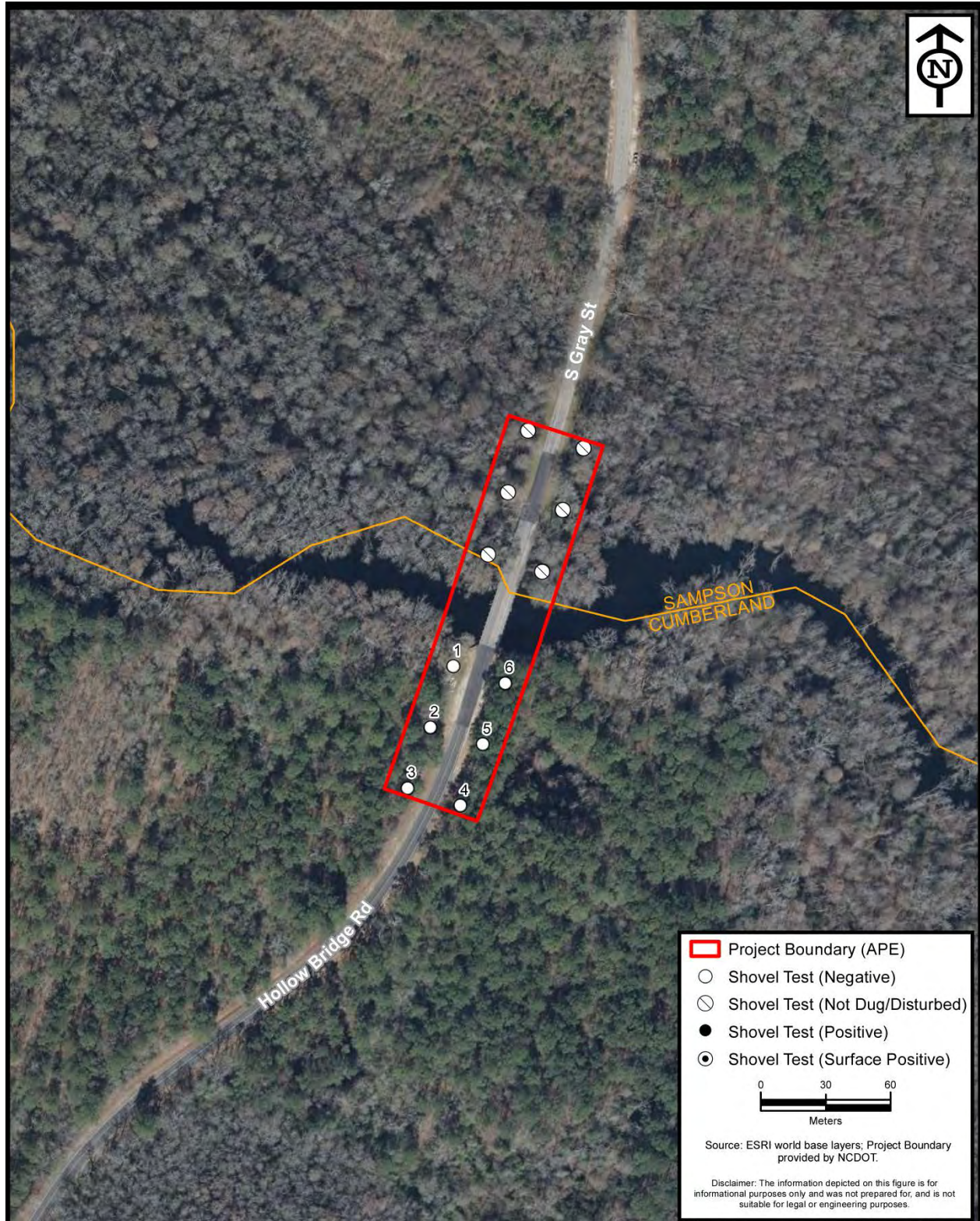


Figure 3: Bridge 45 Shovel Test Locations.

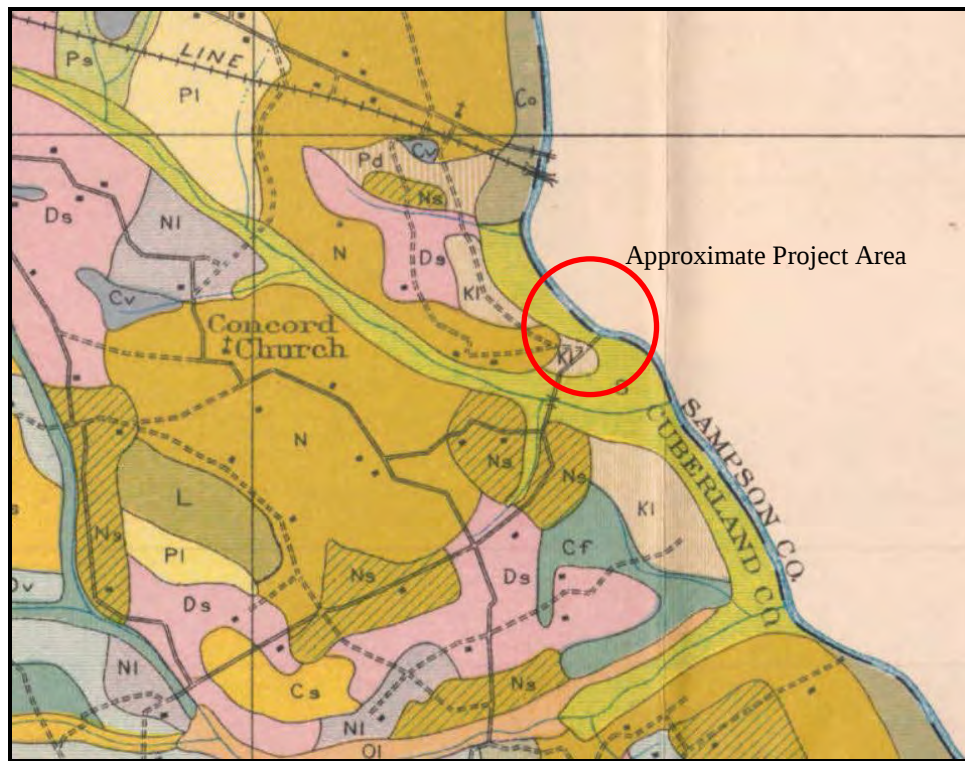


Figure 4: 1922 Cumberland County Soil Survey.

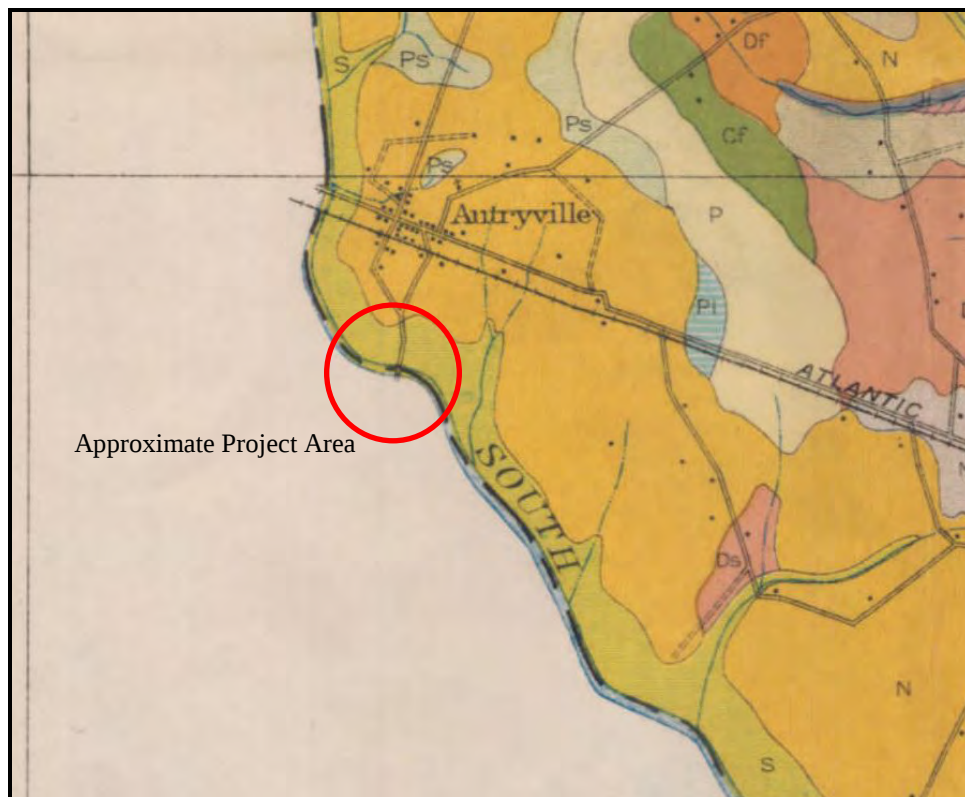


Figure 5: 1926 Sampson County Soil Survey.

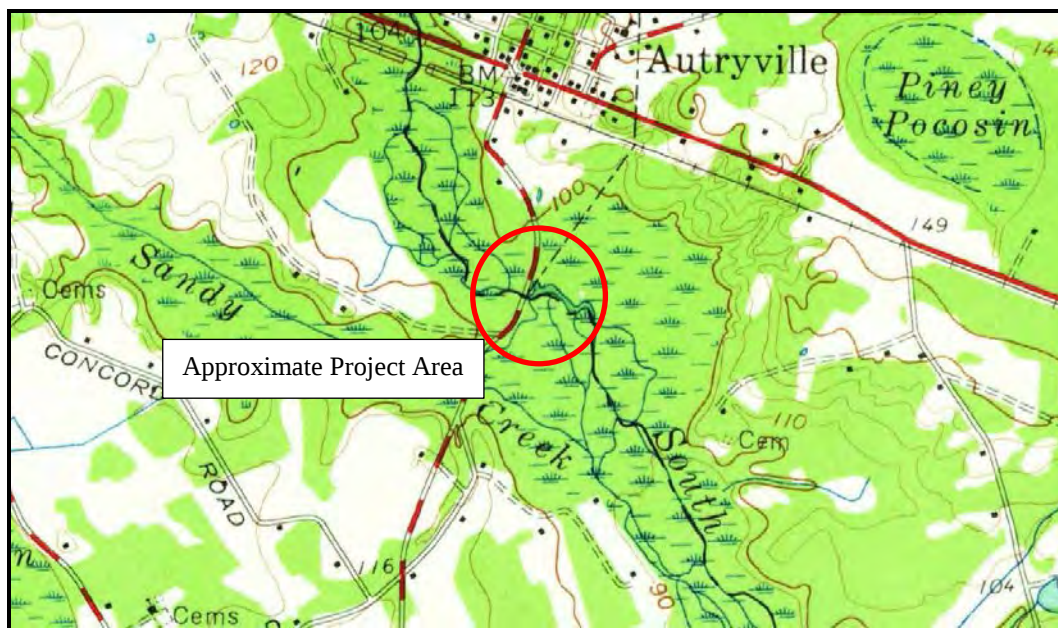


Figure 6: 1959 Roseboro, N.C. 7.5-minute Topographic Quadrangle.

The APE is located within the Coastal Plains physiographic region and consists of the floodplain and adjacent terraces of the South River within the Cape Fear River Basin. The South River drains southeast into the Black River, which joins the Cape Fear River northwest of Wilmington.

Map units (soil series) are named for the major soil or soils within the unit, but may have minor inclusions of other soils (NRCS 2015). Four soil units compose the APE and are described in **Table 1**.

Table 1: Project Area Soils.

Soil Name	Code	Slope	Drainage	Landform
Bibb and Johnston soils (freq. flooded)	BH	0–2%	Poorly	Floodplains
Goldsboro loamy sand (Southern Coastal Plain)	GoA	0–2%	Moderately Well	Flats, Broad Interstream Divides on Marine Terraces
Johnston loam	JT	0–2%	Very Poorly	Floodplains

Archaeological Investigation

The current archaeological investigation included pedestrian (visual) inspection and shovel testing within the APE. Photographs of the project area are shown as **Figures 7–16**. The APE was divided into four quadrants (e.g., northeast, southeast) based roughly on their locations relative to the bridge. Each quadrant of the APE is described below. A systematic visual inspection of each quadrant of the APE was undertaken to search for surface artifacts, above-ground resources, or other signs of cultural activity.

Shovel tests were excavated at 30-meter intervals along a single transect within each quadrant of the APE, except where noted. A total of six shovel tests were excavated during the current investigation (see **Figure 3** for shovel test locations). **Table 2** describes each shovel test. Excavated shovel tests measured 30 centimeters (12 inches) in diameter and were excavated to sterile subsoil, hydric/saturated soils, or the water table (whichever was encountered first). Shovel tests were not excavated in locations with slope greater than 15 percent, standing water, previous subsurface disturbance, or poorly drained soils. All soils

were excavated by natural levels (soil strata) and screened through a 0.64 centimeter (0.25 inch) wire mesh.

Table 2: Shovel Test Log

Shovel Test	Quad	Depth (cm)	Soils	Comments
1	SW	35	loamy sand over sandy clay loam	negative; modern trash on surface
2	SW	25	sandy loam over sandy clay loam	negative; modern trash on surface
3	SW	30	sandy loam over sandy clay loam	negative
4	SE	20	sandy loam over sandy clay loam	negative
5	SE	20	sandy loam over sandy clay loam	negative
6	SE	20	sandy loam over sandy clay loam	negative; modern trash on surface



Figure 7: Bridge 45, facing North.

Southwest Quadrant

The southwest quadrant of the APE was wooded (mixed pine and hardwood), with evidence of modern surface disturbance from roadside trash dumping (see **Figure 9**). Surface visibility in this portion of the APE was poor due to groundcover; a general visual inspection of this portion of the APE revealed no surface artifacts or evidence of historic or prehistoric cultural activity. Three shovel tests (see **Figure 3**) were excavated in this portion of the APE (Shovel tests [STs] 1–3).

Soils in the shovel tests generally consisted of 25 to 35 centimeters of dark gray or dark grayish brown sandy loam or loamy sand over olive brown sandy clay loam subsoil. No artifacts were recovered from any of the excavated shovel tests.



Figure 8: Bridge 45, facing Northeast from the Southwest Quadrant of the APE.



Figure 9: Southwest Quadrant of APE, facing South.

Southeast Quadrant

The majority of the southeast quadrant of the APE was wooded. Surface visibility in this quadrant was poor due to ground cover; however, a general visual inspection of this portion of the APE was undertaken to look for above ground structural remains, surface artifacts, or other evidence of past cultural activity. No surface artifacts or other signs of historic cultural activity were noted; however, modern trash piles (primarily aluminum cans and plastic bottles) littered the side of the paved road (see **Figures 10 and 11**). Although the soils in this portion of the APE are mapped as moderately well drained, several areas of standing water were observed just outside of the APE boundaries (**Figure 12**).

Three shovel tests (see **Figure 3**) were excavated in this portion of the APE (STs 4–6). Soils in the shovel tests consisted of 20 centimeters of dark gray or dark grayish brown sandy loam or loamy sand over dark yellowish brown wet sandy clay loam subsoil. No artifacts were recovered from any of the excavated shovel tests.



Figure 10: Bridge 45, facing Northwest from the Southeast Quadrant of the APE.



Figure 11: Modern Trash Dumping within the Southeast Quadrant of the APE, facing East.



Figure 12: Standing Water Adjacent to the Southeast Quadrant of the APE, facing East.

Northeast Quadrant

The northeast quadrant of the APE was very poorly drained, with standing water observed during the investigation (**Figures 13 and 14**). Surface visibility in this portion of the APE was poor due to standing water, vegetation, or flood-deposited organic debris; however, a general visual inspection of this portion of the APE revealed no surface artifacts or evidence of historic or prehistoric cultural activity. No shovel tests were excavated in this portion of the APE.

Northwest Quadrant

Like the northeast quadrant of the APE, the northwest quadrant was very poorly drained, with standing water observed across the majority of the APE during the investigation (**Figure 15**). Surface visibility in this portion of the APE was poor due to standing water, vegetation, or flood-deposited organic debris; however, a general visual inspection of this portion of the APE revealed no surface artifacts or evidence of historic or prehistoric cultural activity. No shovel tests were excavated in this portion of the APE.



Figure 13: Northeast Quadrant of the APE, facing South.



Figure 14: Standing Water in the Northeast Quadrant of the APE, facing Southeast.



Figure 15: Standing Water in the Northwest Quadrant of the APE, facing West.



Figure 16: Bridge 45, facing South.

In summary, the northern half of the APE for Bridge 45 consists of poorly drained floodplain/swamp. The southern half of the APE is located within a slightly elevated, moderately well drained terrace. Visual inspection and excavation of six shovel tests within the APE recovered no cultural materials. As no NRHP-eligible archaeological resources are located within the APE for Bridge No. 45 in Cumberland and Sampson Counties, it is recommended that this project be allowed to proceed without concern for impacts to significant cultural resources. Should the boundary of the proposed APE be expanded or moved, additional archaeological investigations may be necessary, as determined in consultation with the NCDOT and/or State Historic Preservation Office (SHPO) per the Programmatic Agreement.

REFERENCES CITED

National Geographic Society/ESRI

- 2013 *Autryville, North Carolina*. I-cubed Seamless USGS Quadrangle.

Natural Resources Conservation Service (NRCS)

- 2015 *Cumberland County, North Carolina Soil Survey*. Natural Resources Conservation Service, United States Department of Agriculture Web Soil Survey. <http://websoilsurvey.nrcs.usda.gov/> accessed 19 August 2016.
- 2015 *Sampson County, North Carolina Soil Survey*. Natural Resources Conservation Service, United States Department of Agriculture Web Soil Survey. <http://websoilsurvey.nrcs.usda.gov/> accessed 19 August 2016.

North Carolina Department of Agriculture

- 1922 *Soil Map, North Carolina, Cumberland County Sheet*. United States Department of Agriculture/North Carolina Department of Agriculture. On file, North Carolina State Archives, Raleigh. <http://dc.lib.unc.edu/cdm/singleitem/collection/ncmaps/id/1142/rec/18> accessed 19 August 2016.
- 1926 *Soil Map, North Carolina, Sampson County Sheet*. U United States Department of Agriculture/North Carolina Department of Agriculture. On file, North Carolina State Archives, Raleigh. <http://dc.lib.unc.edu/cdm/singleitem/collection/ncmaps/id/1155/rec/6> accessed 19 August 2016.

United States Geological Survey (USGS)

- 1959 *Roseboro, N.C.*, 15-minute topographic quadrangle map. Historical Topographic Map Collection. <http://historicalmaps.arcgis.com/usgs/> accessed 19 August 2016.
- 2002 *Autryville, N.C.*, 7.5-minute topographic quadrangle map. Historical Topographic Map Collection. <http://historicalmaps.arcgis.com/usgs/> accessed 19 August 2016.