



**NO NATIONAL REGISTER OF HISTORIC PLACES
ELIGIBLE OR LISTED ARCHAEOLOGICAL SITES
PRESENT OR AFFECTED FORM**



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

PROJECT INFORMATION

Project No: _____ *County:* Yadkin
LIBR data sheet (PCE) or
WBS No: 17BP.11.R.80 *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 92 on SR 1599 (Mt. Carmel Church Rd.) over Little Forbush Creek. Area of Potential Effects (A.P.E.) is approximately 91 meters (300 ft.) from each end of the bridge and 23 meters (75 ft.) from the centerline on each side of the road. No design plans provided. This is a "design-build" project, and the bridge will be replaced in-place with an off-site detour. State-funded; federal permits required; temporary and permanent easements required.

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.
- ☐ No subsurface archaeological investigations are 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.
- ☒ There are no National Register Eligible or Listed ARCHAEOLOGICAL SITES present or affected by this project. (*Attach any notes or documents as needed*)

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

Bridge 92 is located in eastern Yadkin County, northeast of Yadkinville (Figure 1). The initial review included an examination of a topographic map, an aerial photograph, the Yadkin County soil survey, and the listings of previously recorded sites, previous archaeological surveys, and previous environmental reviews in the vicinity at the Office of State Archaeology (OSA) in Raleigh. A reconnaissance of the project area was conducted on 10/14/2013.

The topographic map (East Bend, N.C.) shows the landforms in the northwest, northeast, southeast and southwest quadrants are level floodplains (Figure 2). Floodplains (if well-drained) have a moderate to high potential for prehistoric archaeological sites. The soil survey describes the soil in all four quadrants as well-drained Congaree fine sandy loam. The aerial photograph shows the A.P.E. is mostly cleared (agricultural) land other than the southwest quadrant which is wooded (Figure 3). There are no previously recorded archaeological sites near the A.P.E., the A.P.E. has not been previously surveyed for archaeological sites, and the A.P.E. has not been included in any environmental reviews.

The visual reconnaissance was conducted by NCDOT archaeologists Matt Wilkerson and Caleb Smith on 10/14/2013. Figure 4 is a photograph of Bridge 92. The reconnaissance verified that the landforms in the northwest and southeast quadrants had potential for prehistoric archaeological sites (see description below).

The southwest quadrant is a narrow strip of land between SR 1599 and Forbush Creek that has a low potential for archaeological sites (Figure 5). We did note, however, what may be the remains of a stone structural feature or a natural outcrop on the south bank of Forbush Creek at the confluence with Little Forbush Creek approximately 30 meters (100 ft.) south of the bridge (Figure 6). It could be the remains of one end of a small dam, but this does not appear to be a good place for a dam because there is no natural landform (ridgetoe or rock outcrop) on which to anchor a dam. There is no valley in which the impounded water would form a pond, so a dam would have needed to be very long. If the feature is a remnant of a previous bridge, no other evidence of a bridge or roadbed was identified.

The landform in the northeast quadrant is a narrow floodplain located between Little Forbush Creek and a ridgetoe (Figure 7). The A.P.E. is floodplain from the bridge east for 30 meters (100 ft.), then a gravel access road, and then the sloped ridge toe. Much of the A.P.E. is disturbed by a drainage ditch along the north side of the road, and by the gravel road. The ground surface in the rest of the quadrant has very little vegetation. It appears to have been graded, or perhaps some of the topsoil has been removed.

(Note: Bridge 91 on SR 1599 over Forbush Creek is located approximately 122 meters (400 ft.) west of Bridge 92. It was also surveyed, the results of which are described in a separate form [PA # 13-09-0033].)

The archaeological survey was conducted on 11/5/2013 and 11/19/2013 by NCDOT archaeologists Caleb Smith and Dr. Gary Glover. Figure 8 shows the locations of the shovel tests in the northwest and southeast quadrants, and Table 1 describes each shovel test. No shovel tests were excavated in the southwest or northeast quadrants.

The northwest quadrant is a flat floodplain from the bridge west for approximately 60 meters (200 ft.), then it slopes up to a ridge toe. Old Ridge Road is located on the ridge toe approximately 75 meters (246 ft.) west of the bridge. The floodplain is currently used as an agricultural field (Figures 9 and 10). Two shovel tests (ST 1-2) were excavated in the quadrant, neither of which contained any artifacts (see Table below). ST 1 was placed approximately 15 meters (50 ft.) west of the bridge and 10 meters (33 ft.) north of the road. The soil consisted of approximately 75 centimeters (30 in.) of fine sandy loam. ST 2 was placed approximately 30

meters (100 ft.) west ST 1 and 10 meters (33 ft.) north of the road. The soil consisted of 30 centimeters (12 in.) of clay loam.

The southeast quadrant is a flat floodplain from the bridge east for 60 meters (197 ft.) , then a slope up to a ridge. There is a gravel road located at the base of the ridge, approximately 55 meters (180 ft.) east of the bridge. Shovel tests in this quadrant identified site 31YD214, a scatter of prehistoric artifacts. The site is recommended ineligible for the National Register of Historic Places (NRHP). No further work is recommended. See the attached description of 31YD214 below.

Note: If the design for this bridge replacement changes to include additional land in the southeast quadrant, the project's impacts to the untested part of 31YD214 should be evaluated.

SUPPORT DOCUMENTATION

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

Other:

Signed:

Caleb Smith

2/5/2014

NCDOT ARCHAEOLOGIST

Date

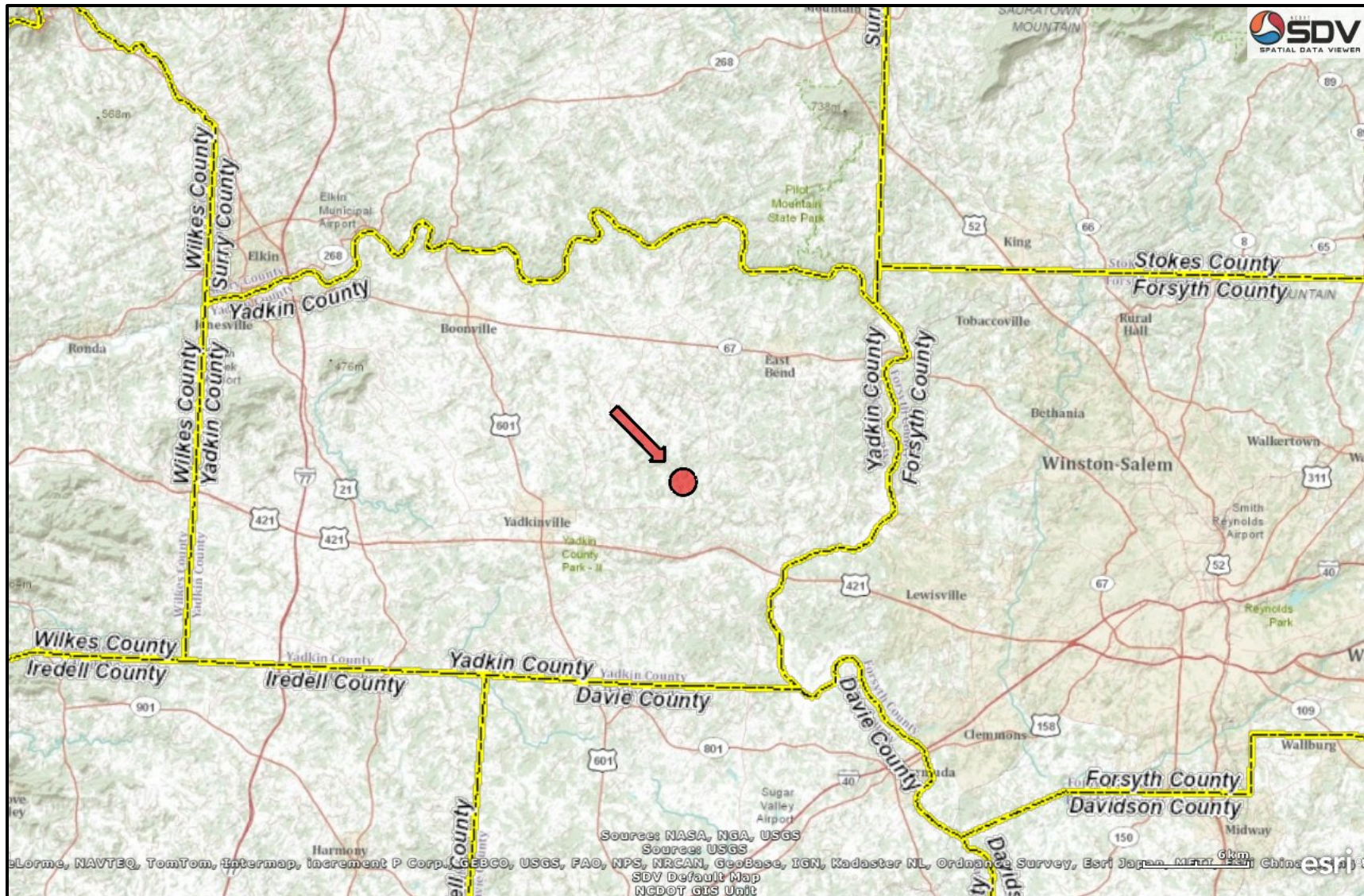


Figure 1: Location of Bridge 92.

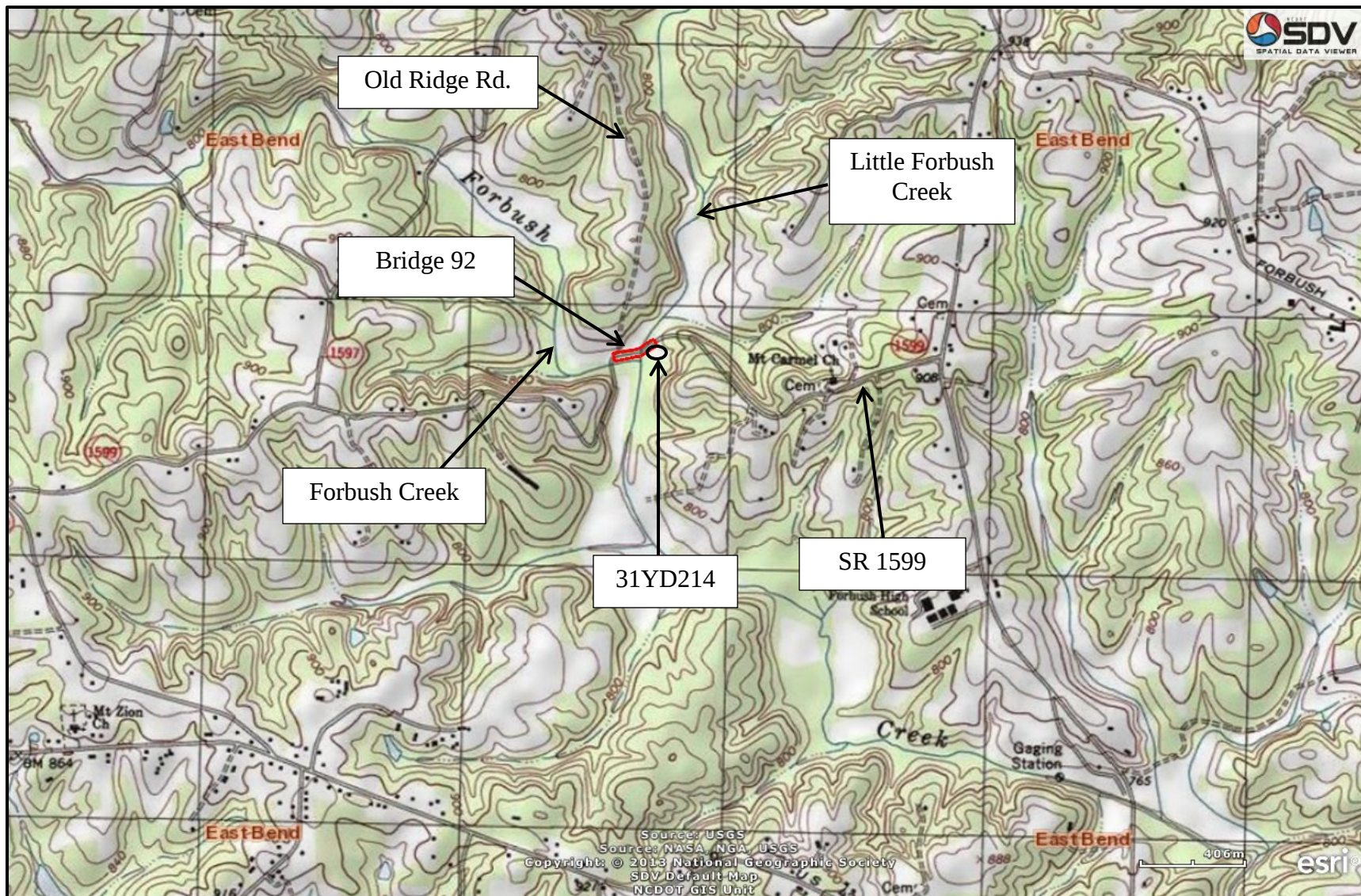


Figure 2: Topographic map of Bridge 92 (USGS East Bend, N.C. 1:24,000-scale topographic map).

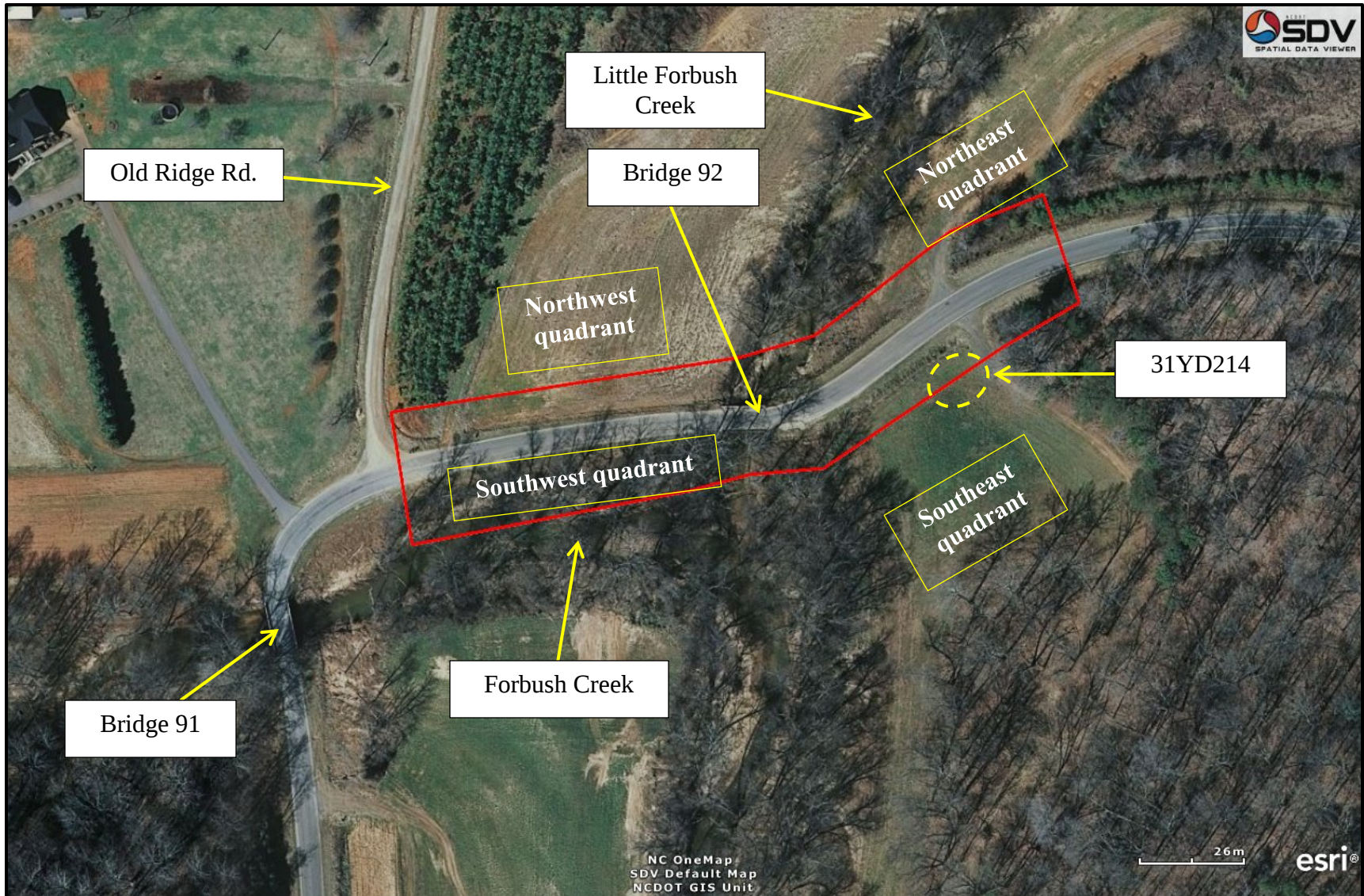


Figure 3: Aerial photograph of Bridge 92.



Figure 4: West view of Bridge 92.



Figure 5: West view of the southwest quadrant.



Figure 6: South view of the stone feature/outcrop in the south bank of Forbush Creek.



Figure 7: Northeast view of the northeast quadrant.

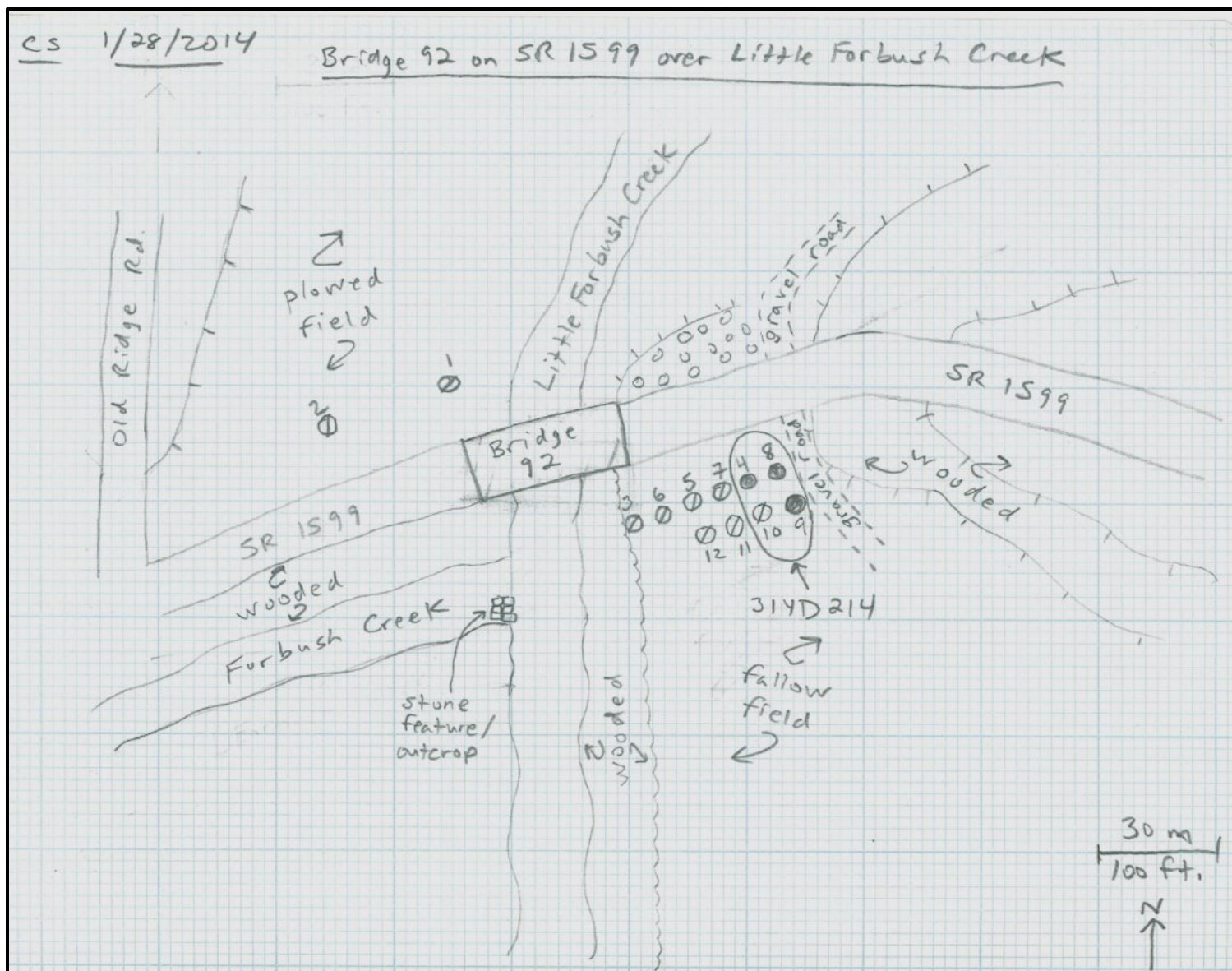


Figure 8: Plan drawing of the shovel tests at Bridge 92.

Table 1: Description of Shovel Tests at Bridge 92.

Quad	ST	Description	Artifacts
NW	1	0-46 cm (0-18 in.) 10YR 4/6 (dark yellowish brown) fine sandy loam; 46-75 cm (18-30 in.) 5YR 4/6 (yellowish red) fine sandy loam w/ bands of lighter sandy.	-
NW	2	0-30 cm (0-12 in.) 5YR 4/4 (reddish brown) clay loam	-
SE	3	0-35 cm (0-14 in.) 7.5YR 4/6 (strong brown) gravelly silt loam	-
SE	4	0-35 cm (0-14 in.) 7.5YR 4/4 (brown) silty loam; 35-45 cm (14-18 in.) 7.5YR 3/2 (dark brown) silty loam; 45-60 cm (18-24 in.) 7.5YR 4/6 (strong brown) silty clay. 31YD214	2 prehistoric ceramics with smoothed interiors, very fine sand temper, and net-impressed surface treatments
SE	5	0-47 cm (0-18 in.) 7.5YR 4/6 (strong brown) silty loam with dense gravel content at top (water-worn gravel/ pebbles/ cobbles); 47-57 cm (18-22 in.) 10YR 4/4 (dark yellowish brown) silty loam; 57-70 cm (22-28 in.) 7.5YR 4/6 (strong brown) silty loam	-
SE	6	0-70 cm (0-28 in.) 5YR 4/6 (yellowish red) silty loam; dense gravel from 0-25 cmbs (0-10 in.)	-
SE	7	0-37 cm (0-15 in.) 5YR 4/4 (reddish brown) silty loam; 37-47 cm (15-18 in.) 5YR 4/3 (reddish brown) silty loam; 47-60 cm (18-24 in.) 5YR 4/6 (yellowish red) silty clay	-
SE	8	0-40 cm (0-16 in.) 5YR 4/6 (yellowish red) silty loam with dense gravel; 40-48 cm (16-18 in.) 5YR 3/3 (dark reddish brown) silty loam; 48-73 cm (18-28 in.) 5YR 4/6 (yellowish red) silty clay. 31YD214	1 crystal quartz biface fragment
SE	9	0-37 cm (0-15 in.) 5YR 4/6 (yellowish red) silty loam with dense gravel; 37-48 cm (15-18 in.) 5YR 2.5/2 (dark reddish brown) silty loam; 48-63 cm (18-25 in.) 7.5YR 4/6 (strong brown) silty loam. 31YD214	1 crystal quartz flake fragment
SE	10	0-36 cm (0-14 in.) 5YR 4/6 (yellowish red) silty loam with dense gravel; 36-47 cm (14-18 in.) 5YR 3/3 (dark reddish brown) silty loam; 47-60 cm (18-24 in.) 7.5YR 4/6 (strong brown) silty clay	-
SE	11	0-36 cm (0-14 in.) 5YR 4/6 (yellowish red) silty loam; 36-47 cm (14-18 in.) 5YR 3/2 (dark reddish brown); 47-53 cm (18-21 in.) 5YR 4/4 (reddish brown) silty clay loam	-
SE	12	0-40 cm (0-16 in.) 5YR 4/4 (reddish brown) silty loam; 40-50 cm (16-20 in.) 7.5YR 4/4 brown) silty loam; 50-57 cm (20-22 in.) 7.5YR 4/6 (strong brown) silty clay	-

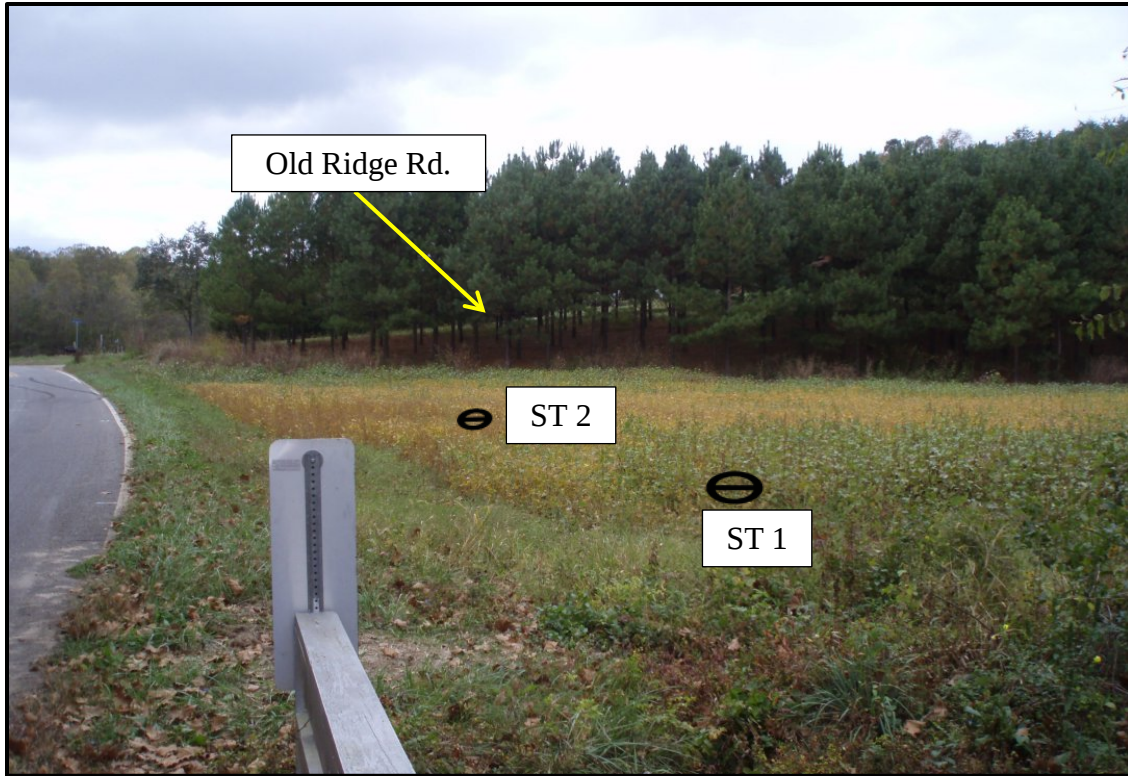


Figure 9: West view of the northwest quadrant.



Figure 10: East view of the northwest quadrant.

Site 31YD214

Site 31YD214 is a prehistoric artifact scatter located in the southeast quadrant approximately 45 meters (148 ft.) east of the creek and 15 meters (50 ft.) south of the road. The site is bounded on the north by SR 1599, on the east by a moderately-sloped ridge toe, and to the west by an absence of artifacts and Forbush Creek (Little Forbush Creek joins Forbush Creek approximately 30 meters [100 ft.] south of the bridge). The site extends at least 25 meters (82 ft.) south of SR 1599, but the south boundary was not delineated due to the small size of the A.P.E. The site is located on a narrow, flat floodplain between Forbush Creek and a ridge. The floodplain extends from the bridge east for 60 meters (197 ft.), and the land then slopes up to a ridge. There is a gravel road located at the base of the ridge, approximately 55 meters (180 ft.) east of the bridge.

A total of 10 shovel tests were excavated in and around the site (see Figure 4 and Table 1). Figures 11-14 are photographs of the site. ST 3 was placed approximately 15 meters (50 ft.) east of the bridge and 15 meters (50 ft.) south the road. It contained no artifacts, and the soil consisted of 35 centimeters (14 in.) of gravelly clay loam. ST 4 was placed approximately 30 meters (100 ft.) east of ST 3, 15 meters (50 ft.) south of the road, and 10 meters (33 ft.) west of a gravel access road and the base of a ridge toe. The soil consisted of approximately 60 centimeters (24 in.) of brown silty loam, with a layer of darker soil between 35-45 centimeters (14-18 in.) below surface. Two prehistoric ceramics (mend) were recovered from the top of the dark soil. The ceramics have smooth interiors, fine sand temper with some quartz, and net- or fabric-impressed surface treatments. The sherds are approximately 7.8 mm thick.

The presence of prehistoric ceramics at the interface of the topsoil with a dark soil layer raised the possibility of a cultural midden. Eight more shovel tests (STs 5-12) were excavated around ST 4 at a 7.5-meter (24-ft.) interval in order to recover additional artifacts, evaluate the soil conditions, and determine the extent of the dark soil. These demonstrated that the dark soil layer did not extend beyond ST 4. Six shovel tests were excavated to the west, and none contained artifacts or the dark soil. As shown in Table 1, most shovel tests did have a noticeable soil layer at approximately the same depths, but in none was the color as contrasted as in ST 4. Several shovel tests in that direction had dense gravel content, perhaps deposited there during creek flooding. One artifact each was recovered from the shovel tests to the east (ST 8) and southeast (ST 9) of ST 4. ST 8 contained one crystal quartz biface fragment, and ST 9 contained one crystal quartz flake fragment. (The dark soil layer was not present in either shovel test.) The site probably does not extend farther east because the landform is a ridge toe that slopes up to the east. . The site may extend under the road to the floodplain to the north (the northeast quadrant), but, as described above, that area appears disturbed by a drainage ditch, a gravel road, and possible grading. The site may extend into the floodplain to the south, but shovel tests only covered the area within 23 meters (75 ft.) of the pavement edge due to the small size of the A.P.E.

The topographic map shows the site is located near the mouth of a small drainage valley that runs along the south side of SR 1599. The drainage funnels surface water from the ridge west down the hill to the floodplain. It is possible that the topography of the floodplain as well as the soil in the shovel tests has been influenced by this colluvial deposition. Another factor is that this valley is a narrow one, with a narrow strip of flat floodplain between Forbush Creek and a ridge. There is no noticeable terrace between the creek bank and the ridge toe. Floodplain

landforms in narrow valleys often have been impacted by flooding since there is limited space for the flooded stream to meander. This raises the possibility that the artifacts were deposited here from an upstream location (or washed down from the ridge). It's also possible that archaeological deposits could have been mixed and sorted by high-energy flood events. The soil in some of the shovel tests did have a dense gravel content that may have come from floods. However, none exhibited the layers of coarse sand that are often a sign of past flood episodes.

It is difficult to confidently identify the cultural phase of the ceramics without a much larger sample. The established ceramic types for this region have been developed based on analysis of large ceramic collections from several sites and projects in the Piedmont of North Carolina. So, attempting to "date" a site based on the attributes from two (mend) ceramics is an educated guess at best. Site 31YD214 is located in the Forbush Creek valley, a small tributary of the Yadkin River, in the northwestern Piedmont. Coe (1964:29) describes a ceramic type called Badin Net-Impressed based on his work at the Doerschuk Site (31MG22) in Montgomery County. The Doerschuk Site is located on the banks of the Yadkin River far to the south of this project. Badin ceramics are believed to have been produced during the Early Woodland (Coe 1964:55). However, a large majority of those sherds were later re-classified as Dan River Net-Impressed, a late prehistoric ceramic type.

Based on the results of the survey of the "Great Bend" of the Yadkin River (a short distance north and east of 31YD214), "the dominant late Woodland vessel is a jar textured by net-impressions or brushing, often both" (Woodall 1990:75). Then again, Woodall (1990:78-79) attributes a smoothed interior, fabric-impressed surface, and sand temper to the earliest (200 BC-AD 500) ceramics in the Yadkin valley. But net-impressed surface treatment and tempering with fine sandy becomes more popular around 1000 A.D.

Ward and Davis (1993: 186-189) describe Dan River Net-Impressed ceramics recovered from the Lower Saratown site (31RK1). The site is located on the Dan River in Rockingham County, approximately 80 kilometers (50 miles) east of 31YD214. Dan River Net-Impressed was the second most common ceramic type recovered from the site. Radiocarbon dates place this ceramic tradition as being produced during the Late Prehistoric period, around AD 1200 (Ward and Davis 1993:195). The Dan River phase may have lasted from A.D. 1000-1450 (Ward and Davis 1993:418).

Site 31YD214 is recommended ineligible for the National Register of Historic Places (NRHP) because it has little potential to provide important information about the prehistory of this area. First, the artifact density appears to be very low at this site. Ten shovel tests excavated at a 7.5-meter (24-ft.) interval recovered four (two mend) prehistoric artifacts, suggesting that additional excavations would not produce enough artifacts to do any meaningful analyses. Second, although one shovel test identified a distinct soil layer that appeared to be a cultural feature (midden), additional shovel tests at a short-interval did not identify it anywhere else. The presence of or potential for preserved cultural features is a key indicator that a site might have information potential. Third, two (mend) prehistoric ceramics recovered from the site could possibly provide a date range of occupation. However, the site would need more "datable" artifacts if it were to be confidently placed within a prehistoric context. For these reasons the site is recommended ineligible for the NRHP and no further work is recommended. However, the testing of this site only included the area within 23 meters (75 ft.) of the SR 1599 pavement. If

the designs change to include more A.P.E. on the south side of the road then additional shovel tests should be excavated.

References Cited

Coe, Joffre Lanning

1964 *The Formative Cultures of the Carolina Piedmont*. Transactions of the American Philosophical Society 54(5). The American Philosophical Society, Philadelphia, Pennsylvania.

Ward, H. Trawick and R.P. Stephen Davis

1993 *Indian Communities on the North Carolina Piedmont, A.D. 1000 to 1700*. Monograph No. 2, Research Laboratories of Anthropology, University of North Carolina at Chapel Hill.

Woodall, J. Ned

1990 *Archaeological Investigations in the Yadkin River Valley, 1984-1987*. Wake Forest University Archaeology Laboratory. North Carolina Archaeological Council Publication No. 25. Raleigh, North Carolina.

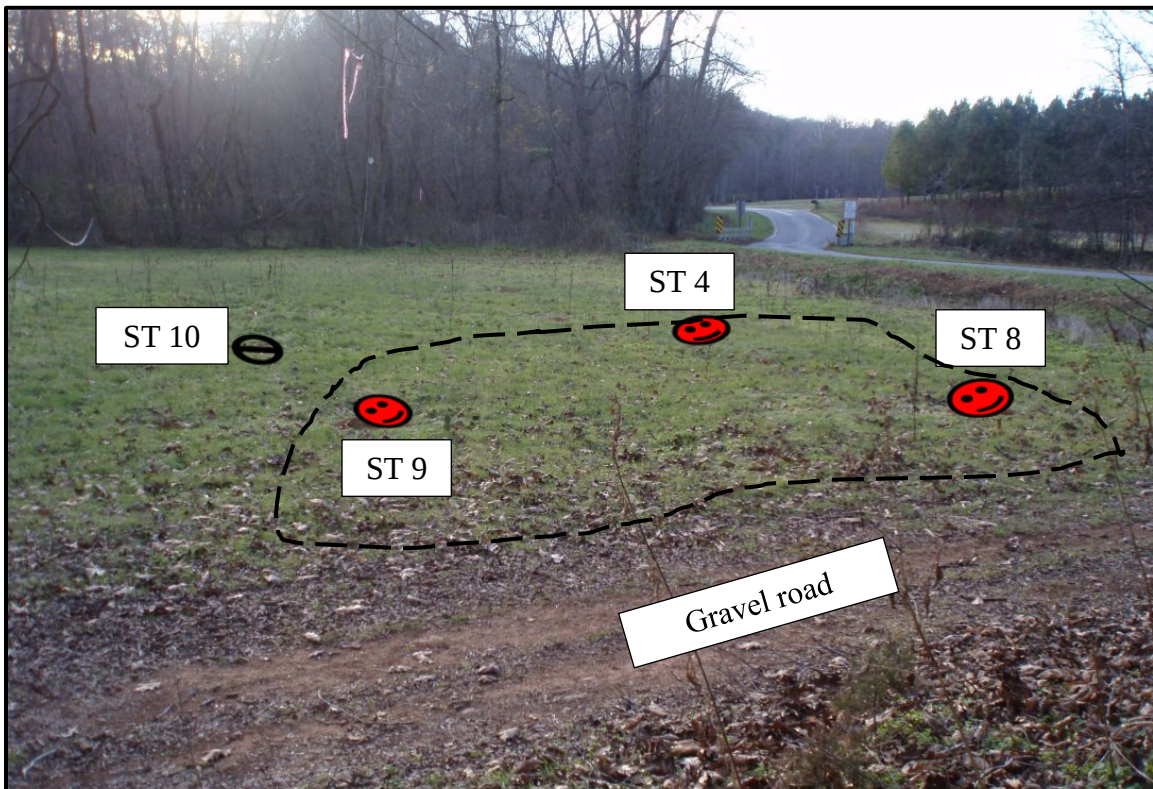


Figure 11: West view of site 31YD214 in the southeast quadrant.

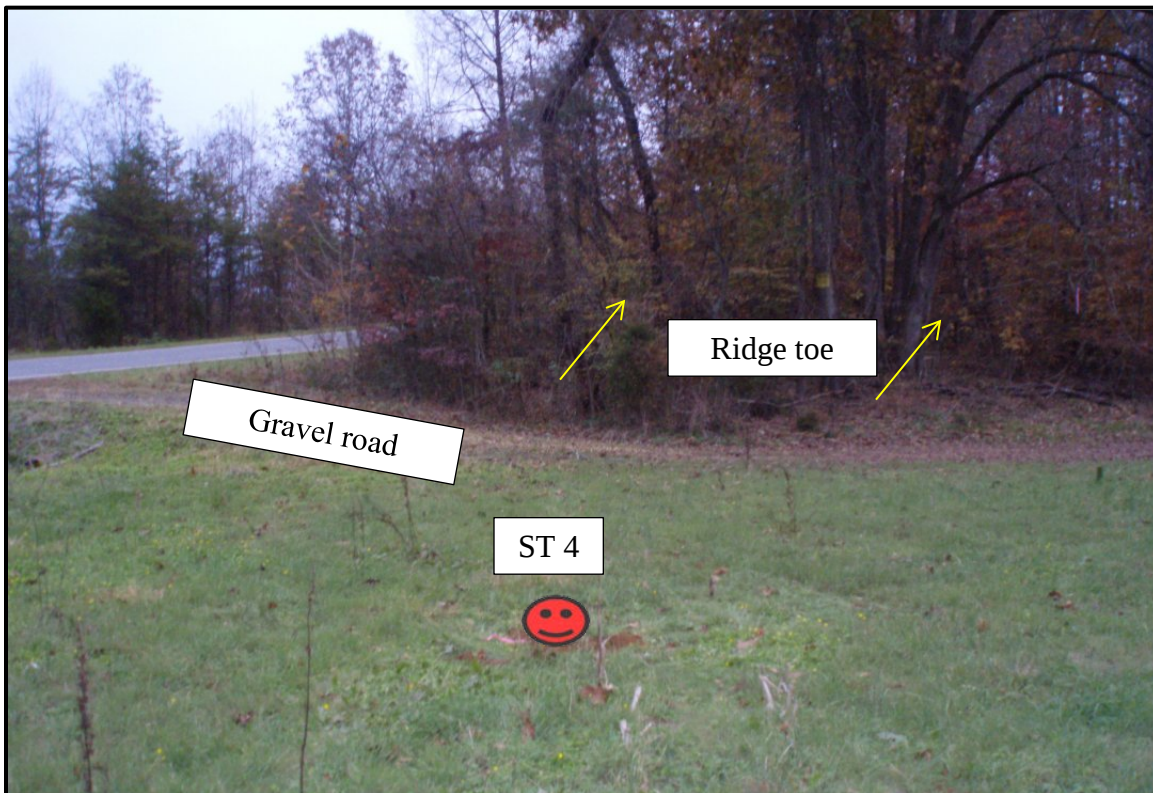


Figure 12: Northeast view of site 31YD214 in the southeast quadrant.

"NO NATIONAL REGISTER ELIGIBLE OR LISTED ARCHAEOLOGICAL SITES PRESENT OR AFFECTED
form for Minor Transportation Projects as Qualified in the 2007 Programmatic Agreement."

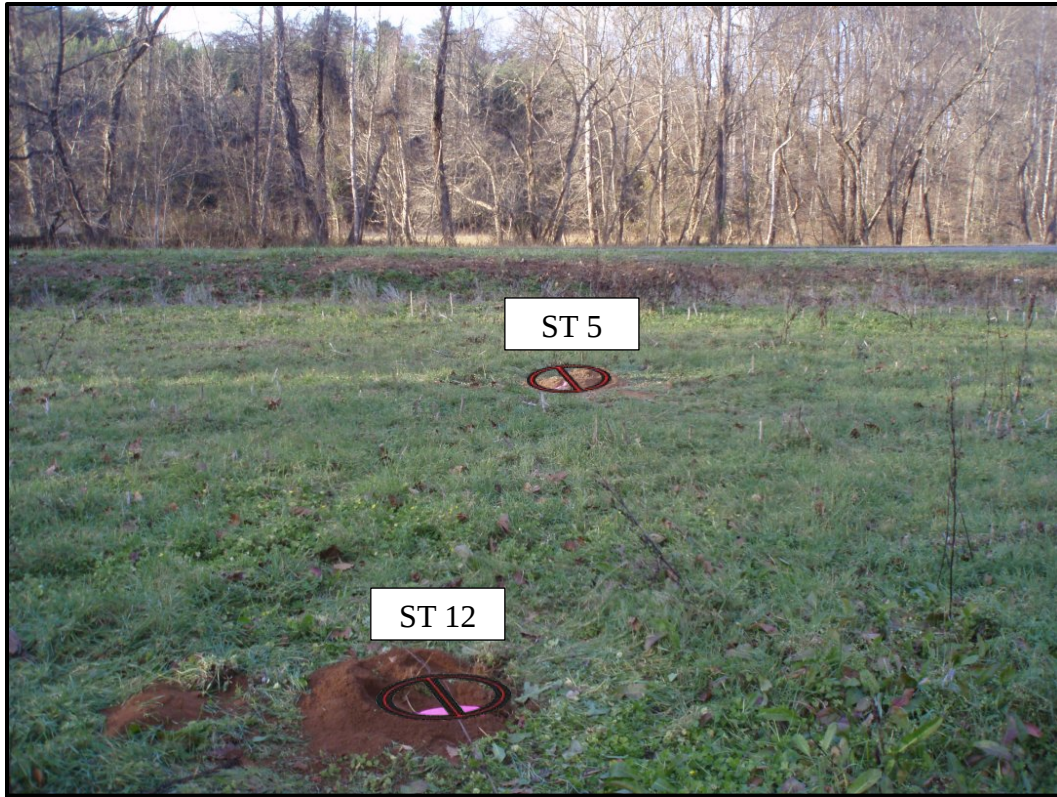


Figure 13: North view of shovel tests in the southeast quadrant.

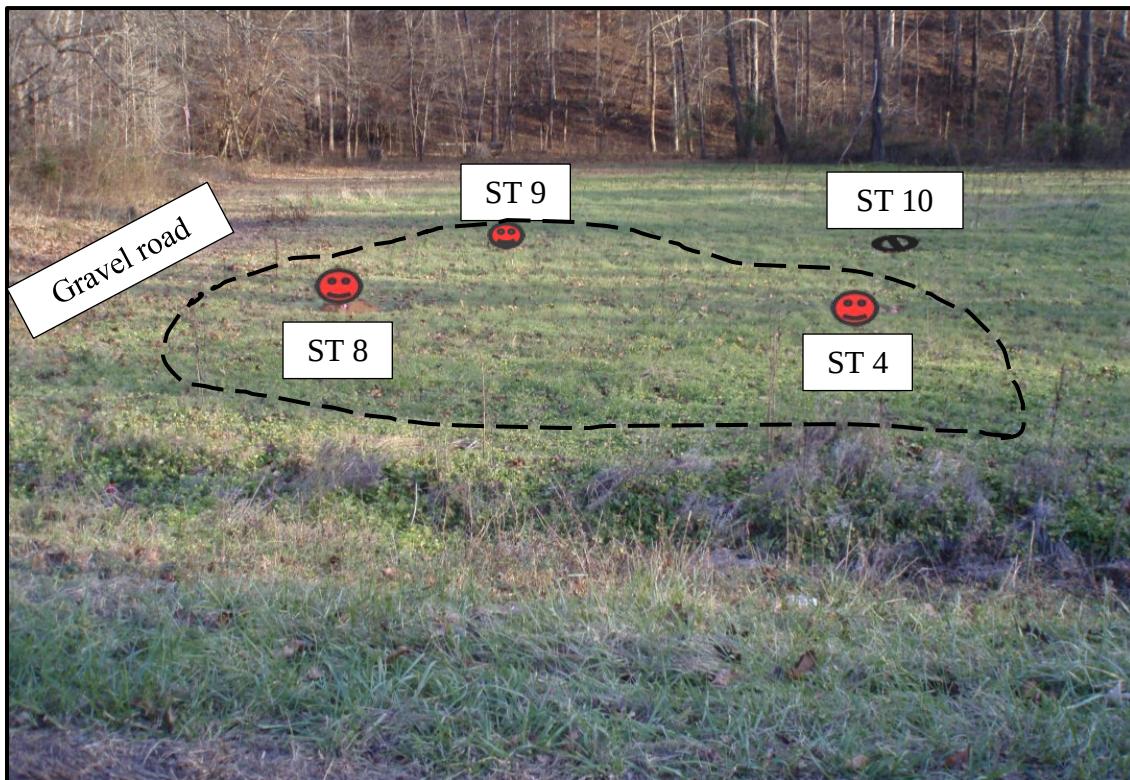


Figure 14: South view of site 31YD214 in the southeast quadrant.