

ARCHAEOLOGICAL SURVEY AND ASSESSMENT OF THE
HARNETT-WAKE 500 kV TRANSMISSION
LINE CORRIDOR

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Management Summary

During August 1984, the Research Laboratories of Anthropology spent three man-days surveying 8.4 mi of the proposed Harnett-Wake 500 kV transmission line corridor between Coats and the Wake-Johnson county line (CHN unavailable). All cleared areas were subjected to pedestrian survey. The project was initiated at the request of Carolina Power and Light Company and resulted in the identification of 4 prehistoric archaeological sites. All are small, disturbed lithic scatters and not considered significant by National Register criteria. Therefore, clearance is recommended for the project.

Introduction

At the request of Carolina Power and Light Company, the Research Laboratories of Anthropology spent three man-days, between August 9 and 14, 1984, surveying 8.4 mi of the Harnett-Wake 500 kV transmission line corridor. The corridor will be 180 ft wide and extends from a point just southeast of Coats in Harnett County to SR 1548 in Johnston County. The 8.4 mi surveyed comprise roughly half the entire line. The Division of Archives and History considered the remainder to have low archaeological potential, and survey was not recommended.

The objectives of the survey were to locate and evaluate the research potential of as many archaeological sites as possible within the corridor. A "site", as defined here, refers to at least two spatially related artifacts or features that are indicative of prehistoric or historic activities. This definition only excludes the isolated "spot-find" which could result from a myriad of fortitious events.

Sites were located by carefully walking over all areas with surface visibility. The evaluation of a site's research potential or significance was guided by criteria of the National Register which state that archaeological resources are considered significant or potentially eligible for inclusion in the National Register of Historic Places if they have "yielded, or may be likely to yield, information important to prehistory or history" (36 CFR part 800.1). Although this guideline is vague, it

seems that, minimally, a site should have spatial and depositional context well enough preserved to permit behavioral analysis beyond simple chronological determination.

The survey resulted in the recording of 4 new sites. All are prehistoric with most of the specimens probably dating to the Archaic period. Although they add to our inventory of archaeological resources and perhaps ultimately to our understanding at a general level of the development of prehistoric cultures, none of the sites, individually, meets minimal standards for consideration for nomination to the National Register.

Prehistoric and Historic Overview

Archaeologists usually divide the prehistory of North Carolina into three periods: Paleo-Indian, Archaic, and Woodland. The Archaic is further broken down into three subperiods--Early, Middle, and Late--which are based on the forms and methods of manufacturing chipped-stone tools, especially projectile points. The Woodland period is divided into several phases. Along the northern Fall Line, the Vincent, Clements, and Gaston phases have been defined (Coe 1964). These phases are similar to the Deep Creek, Mt. Pleasant, and Cashie phases of the northeast Coastal Plain (Phelps 1983). Southwest of the project site, the Badin, Yadkin, Uwharrie, and Pee Dee phases have been identified. Styles of pottery, as well as other material culture traits, provide indices for differentiating these Woodland phases (Coe 1964).

The Paleo-Indian period is represented by the Hardaway complex, which is characterized in its earliest form by a lanceolate projectile point with a thin concave base. This early variety evolved into a Dalton-like point with broad, shallow side notches and serrated edges. Terminal Hardaway is represented by a projectile point with narrow side notches and a concave recurved base. Hardaway peoples occupied central North Carolina perhaps as early as 12,000 B.C.

The Late Paleo-Indian and Early Archaic periods are represented respectively by the Palmer and Kirk complexes, which are also distinguished by projectile point styles. Palmer points are rather small, averaging 35 mm long and 20 mm wide. These points typically have serrated triangular blades, notched corners, and a straight ground base. Kirk specimens are larger, with some varieties averaging 100 mm long and 35 mm wide. Blades are again triangular and serrated, whereas, the bases are straight to slightly rounded but never ground. Corner notching, characteristic of early Kirk specimens, is replaced by broad square stems in late varieties. Palmer may date as early as 10,000 B.C., while the Kirk complex appears to span the millennia between 6000 and 9000 B.C. (Coe, personal communications).

The beginning of the Middle Archaic is marked by the appearance of the Stanly complex, which displays the continued evolution of stemmed projectile points. During the Stanly phase, blades became wider and stems narrower, although the basic form still resembled the later Kirk types. The Stanly complex also contains the first evidence for extensive use of polished-stone implements. A continuity of

projectile point styles was interrupted at the end of the Stanly phase by the introduction of two new types, both of which appear stylistically to be unrelated to the previous sequence. The earliest type is represented by the Morrow Mountain point, which has a small blade and short tapering stem. Following the Morrow Mountain phase, a long thick lanceolate point, the Guilford, was introduced. This type is wide-spread over central North Carolina but not frequently found outside the area. Stanly dates from 5000 to 6000 B.C., Morrow Mountain from 5000 to 4500 B.C., and Guilford from 4500 to 4000 B.C. (Coe 1964: 122-125).

The late Archaic period began with a return to the manufacture of broad bladed, stemmed projectile points, characterized by the Savannah River complex. During this phase, full-grooved axes and soapstone bowls made their first appearance. The Savannah River complex, which began about 4000 B.C., persisted in some areas of North Carolina until about 500 B.C. (Coe 1964:123-124).

The Woodland period began with the introduction of pottery and agriculture and lasted in most areas of North Carolina until European contact. The earliest of these Woodland occupations are represented by the Badin and Vincent complexes, which include well-developed ceramic techniques and large triangular projectile points. The pottery is well made, with a fine sand or non-tempered paste, and typically has a cord- or fabric-impressed exterior surface (Coe 1964:28).

We know very little about these early Woodland cultures (ca. 500 B.C. to A.D. 500), but we can speculate that horticulture became more important and villages were developed during this period. Some of the nomadism of the Archaic gave way to at least semi-permanent settlements strategically located near fertile, friable soils.

Southwest of the survey area, the Middle and Late Woodland periods (ca. A.D. 500-1500) are defined by the Yadkin and Uwharrie phases (Coe 1964). The shift from Early to Middle and Late Woodland, though not abrupt, is apparent in the respective ceramic traditions. The fine sand-tempered early Woodland sherds were gradually replaced by crushed-quartz-tempered types of the Yadkin and Uwharrie phases. By Uwharrie times, check-stamped and net-impressed exteriors were added to the inventory of surface finished, and fabric impressing was abandoned.

By A.D. 1200, agriculture was firmly established (Coe 1964). Corn, beans, and squash were being grown to support larger populations that lived in permanent villages along the major rivers. Hunting, however, continued to be important and would remain so throughout the Historic period (Coe 1952). During the early Historic period, the area along the Fall Line may have served as a buffer between the Siouan groups of the Piedmont and the Tuscarora of the Coastal Plain.

There is very little written on the history of Harnett and Johnston counties. Like other counties in central North Carolina, they were first settled during the middle of the eighteenth century. The earliest settlers were scotch subsistence farmers, and it has been said that:

They have left undone the things that
could have been done and done the
dangdest things instead. There is
good blood in the worst of them and
bad blood in the best (Fowler 1955:54).

Cotton dominated the early agricultural scene, but today has been replaced by tobacco, corn, soybeans, and various truck crops.

Several archaeological surveys have been carried out in Harnett and Johnston counties. Most germane to the current project are surveys conducted by Woodall and Bleacher (1977), Wilson (1980), and Loftfield (1979). These surveys located sites representing all chronological periods. The majority of the sites, however, contained nondiagnostic lithic debris, eg. Ht26, 33, and 34 (Woodall and Bleacher 1977; Wilson 1980). A few sites, eg. Jt125 and 129, produced specimens dating from the Middle Archaic through Woodland times (Loftfield 1979). Most shared in common the fact that they were disturbed and lacked in situ cultural remains.

Environmental Conditions and Survey Methods

The project area is located along the transitional zone between the Piedmont and Coastal Plain physiographic provinces. Consequently, it has characteristics of both. In terms of slope and drainage, the terrain is much like that of the Piedmont. The soils, however, resemble those

found in the Coastal Plain. This combination of characteristics may explain the extensive erosion observed in many areas along the proposed corridor.

The major soil types intersected by the proposed corridor are Norfolk sandy loam, Norfolk coarse sandy loam, Norfolk sand, and swamp. Norfolk soils are derived from unconsolidated sands of sedimentary origin. The surface soils range in color from yellowish grey to white, whereas, a friable sandy clay or sand comprises the subsoil (Hearn and Brinkley 1911:15).

The southern section of the corridor lies in the Cape Fear drainage basin and is drained primarily by Black River. The northern sections are in the Neuse drainage system and are drained by Black and Swift creeks and their tributaries.

Vegetation varies throughout the project area. However, mixed hardwoods predominate, particularly in the lower elevations where gum and ash are prevalent. A detailed description of vegetation along the corridor is presented below along with a description of the survey methods.

Archaeological survey of the proposed Harnett-Wake 500 kV transmission line was limited to three non-contiguous sections totalling approximately 8.4 mi (Figure 1). Each section was subdivided further based upon topography, vegetation, and intensity of survey coverage (Figures 2, 3, 4). Detailed descriptions of the individual transmission line sections follow.

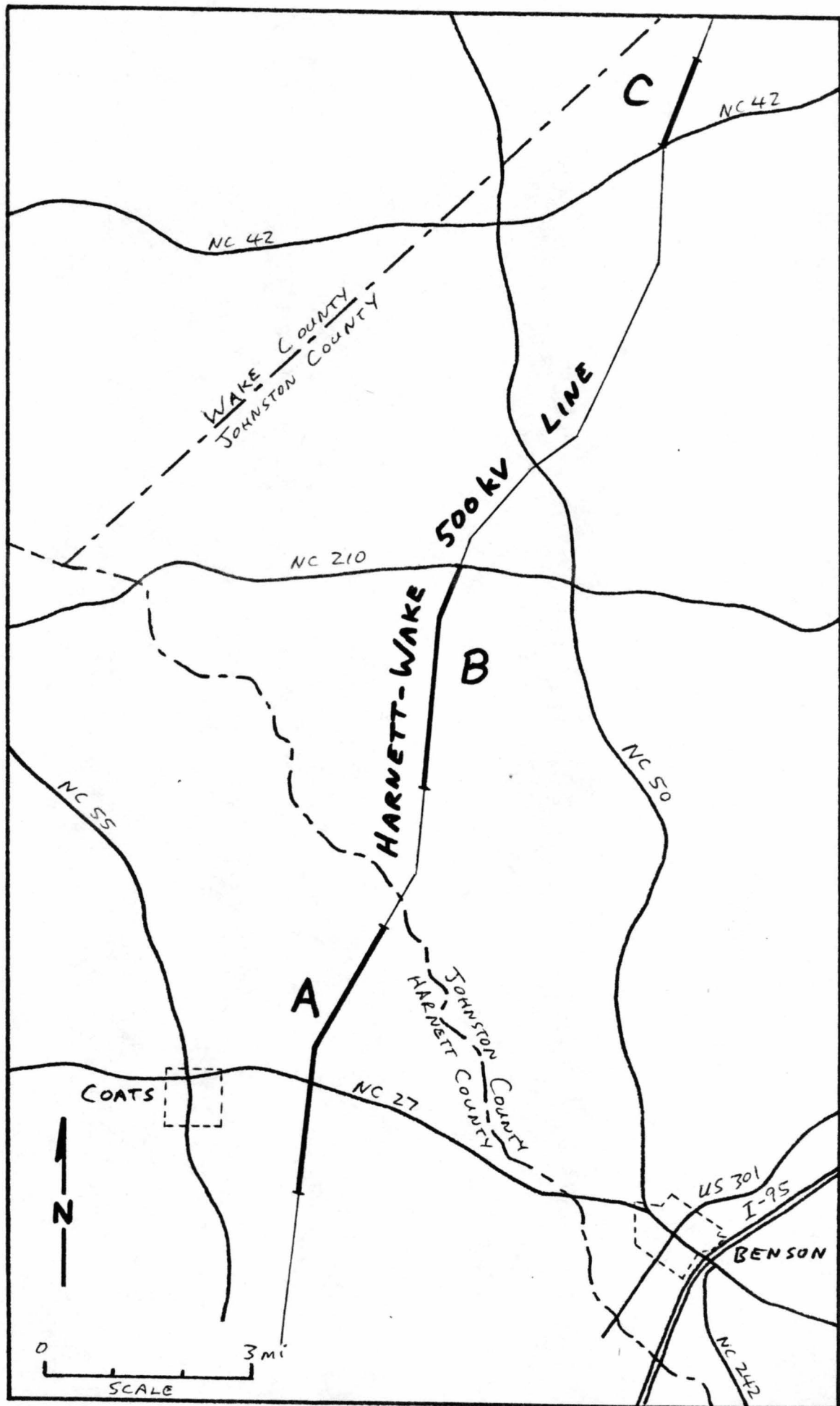


Figure 1. Map locating the proposed Harnett-Wake 500 kV Transmission Line.

Southern Section (Section A)

- A1 - Length: 1260 ft; Terrain: 8% upland hill slope;
Condition: Pasture with 0% surface visibility;
Survey Coverage: Determination of survey conditions only. Vegetation prevented inspection of ground surface.
- A2 - Length: 2230 ft; Terrain: 4-6% slopes flanking small stream; Condition: Wooded with dense brush within transmission corridor; Survey Coverage: Determination of survey conditions only. Vegetation prevented inspection of ground surface.
- A3 - Length: 5100 ft; Terrain: Low floodplain along Black River; Condition: Wooded and swampy; Survey Coverage: Determination of survey conditions only. Vegetation and surface water prevented inspection of ground surface.
- A4 - Length: 4400 ft; Terrain: 3-6% slope flanking Black River; Condition: Wooded with dense brush within transmission corridor; Survey Coverage: Determination of survey conditions only. Vegetation prevented inspection of ground surface.
- A5 - Length: 400 ft; Terrain: Very low stream valley with 0% slope; Condition: Planted in corn with thick Johnson grass growing in places; Survey Coverage: Inspected a portion of the field nearest to the road and where surface visibility was best. No archaeological remains were found.

- A6 - Length: 800 ft; Terrain: Low floodplain along small tributary of Black River; Condition: Wooded and swampy; Survey Coverage: Determination of survey conditions only. Vegetation prevented inspection of ground surface.
- A7 - Length: 1100 ft; Terrain: Elevated floodplain adjacent to a small tributary of Black River; Condition: Transmission corridor follows a dirt road (80% visibility) adjacent to a corn field; Survey Coverage: Pedestrian survey of dirt road and portions of adjacent corn field where Johnson grass was not too thick. Nothing was found within the transmission corridor; however, one prehistoric site (Ht 39) was discovered in corn field (see Site Descriptions).
- A8 - Length: 700 ft; Terrain: 6% hill slope adjacent to small stream; Condition: Wooded with dense brush within transmission corridor; Survey Coverage: Determination of survey conditions only. Vegetation prevented inspection of ground surface.
- A9 - Length: 3400 ft; Terrain: Rolling upland surface (less than 5% slope); Condition: Multiple fields planted in tobacco, beans and corn (40-90% visibility); Survey Coverage: Pedestrian survey. No archaeological remains were found.

- A10 - Length: 600 ft; Terrain: 7% slopes flanking a small stream; Condition: Wooded with dense brush within transmission corridor; Survey Coverage: Determination of survey conditions only. Vegetation prevented inspection of ground surface.
- A11 - Length: 600 ft; Terrain: Level upland surfaces adjacent to small intermittent stream; Condition: Old bean field with 25-40% surface visibility; Survey Coverage: Pedestrian survey. No archaeological remains were found.
- A12 - Length: 200 ft; Terrain: 10-20% hill slope; Condition: Wooded with dense brush within transmission corridor; Survey Coverage: Determination of survey conditions only. Vegetation prevented inspection of ground surface.

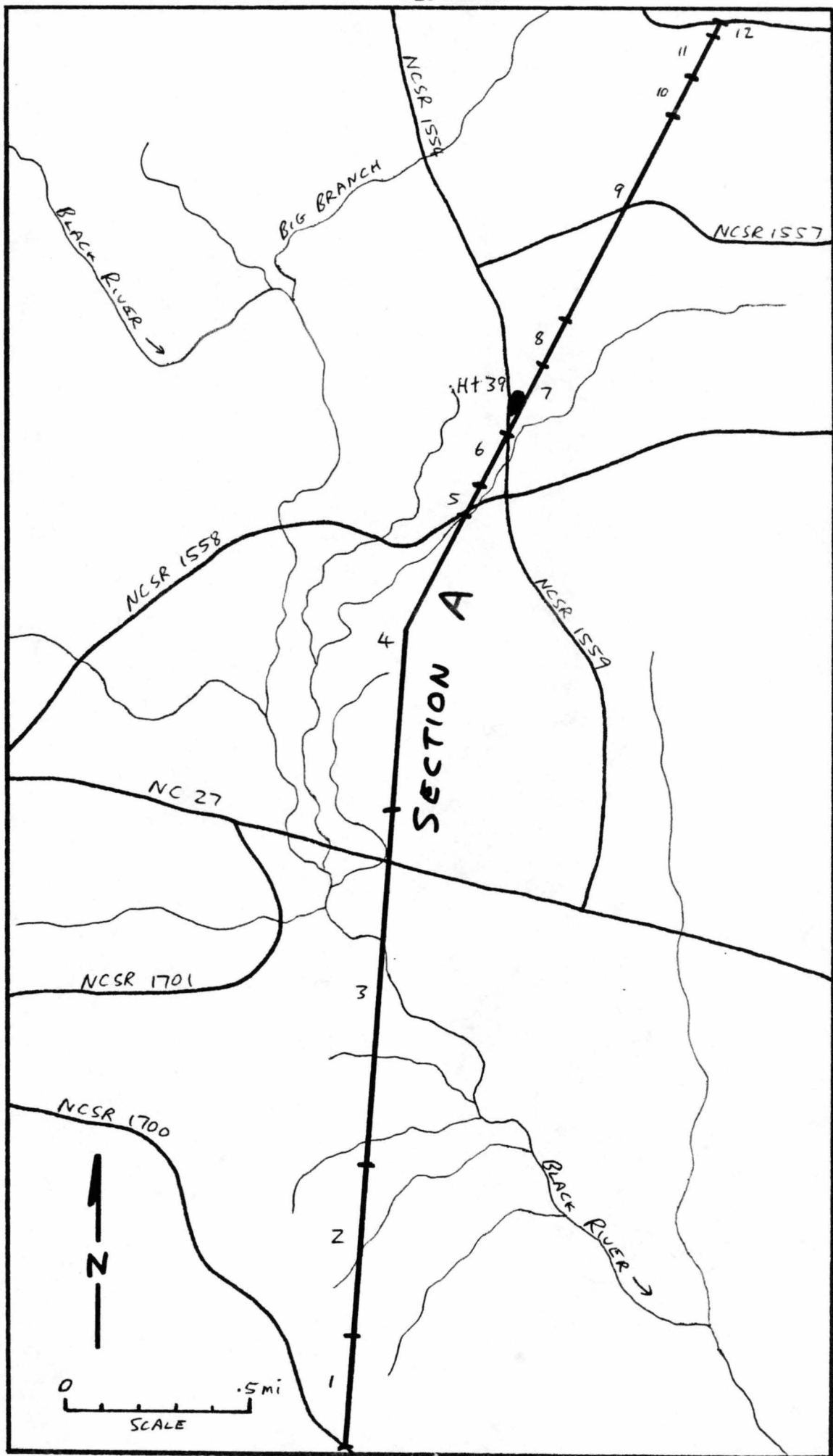


Figure 2. Map locating Survey Section A.

Middle Section (Section B)

- B1 - Length: 1000 ft; Terrain: Knoll and slopes (0-7% slope);
Condition: Planted in beans with 25-40% surface visibility;
Survey Coverage: Pedestrian survey. No archaeological
remains were found.
- B2 - Length: 1400 ft; Terrain: 3-5% sloping upland surface;
Condition: Planted in beans with thick weeds (0% visibility);
Survey Coverage: Determination of survey conditions only.
Vegetation prevented inspection of ground surface.
- B3 - Length: 800 ft; Terrain: Marsh and pond on McCullens
Branch; Condition: Covered in grass and water; Survey
Coverage: Determination of survey conditions only.
- B4 - Length: 500 ft; Terrain: Gradually sloping upland surface;
Condition: Panned for fill dirt; Survey Conditions:
Determination of survey conditions only.
- B5 - Length: 1500 ft; Terrain: Low ridge top and gradual
slopes (0-7%) flanking Black Creek; Conditions: Planted
in beans with 50-100% visibility; Survey Coverage:
Pedestrian survey. No archaeological remains were found.
- B6 - Length: 3000 ft; Terrain: Low floodplain along Black
Creek; Condition: Wooded and swampy; Survey Coverage:
Determination of survey conditions only. Vegetation and
surface water prevented inspection of ground surface.

- B7 - Length: 1300 ft; Terrain: Moderately steep creek valley slopes (10-12% slope); Conditions: Wooded with dense brush within transmission corridor; Survey Coverage: Determination of survey conditions only. Vegetation prevented inspection of ground surface.
- B8 - Length: 400 ft; Terrain: Low ridge top flanking Hooks Branch (0% slope); Conditions: Recently clear-cut with 100% visibility; Survey Coverage: Pedestrian survey. One prehistoric archaeological site (Jt 183) recorded (see Site Descriptions).
- B9 - Length: 1400 ft; Terrain: Creek valley slopes (5-10% slope); Conditions: Wooded with dense brush within transmission corridor; Survey Coverage: Determination of survey conditions only. Vegetation prevented inspection of ground surface.
- B10 - Length: 100 ft; Terrain: Low ridge top flanking Hooks Branch; Conditions: Planted in corn with 80-100% visibility; Survey Coverage: Pedestrian survey. One prehistoric archaeological site (Jt 184) recorded (see Site Descriptions).
- B11 - Length: 1800 ft; Terrain: Low ridge tops and 0-7% slopes; Condition: Pasture, hay field, and small man-made pond (0% surface visibility); Survey Coverage: Determination of survey conditions only. Vegetation prevented inspection of ground surface.

- B12 - Length: 600 ft; Terrain: 8-15% slopes flanking a small tributary stream of Hooks Branch; Condition: Wooded with dense brush within transmission corridor; Survey Conditions only. Vegetation prevented inspection of ground surface.
- B13 - Length: 1500 ft; Terrain: Rolling upland surface with 0-10% slope; Condition: Cultivated fields planted in beans and sweet potatoes. 100% surface visibility; however, northernmost 250 ft of corridor had not been rained on since last plowing; Survey Coverage: Pedestrian survey. One prehistoric archaeological site (Jt 185) was recorded just outside transmission line corridor (see Site Descriptions).
- B14 - Length: 1800 ft; Terrain: 3-10% sloping upland surface; Condition: Wooded with dense brush within transmission corridor; Survey Coverage: Determination of survey conditions only. Vegetation prevented inspection of ground surface.
- B15 - Length: 200 ft; Terrain: Level upland surface; Condition: Planted in corn with thick Johnson grass (0% visibility); Survey Coverage: Determination of survey conditions only. Vegetation prevented inspection of ground surface.

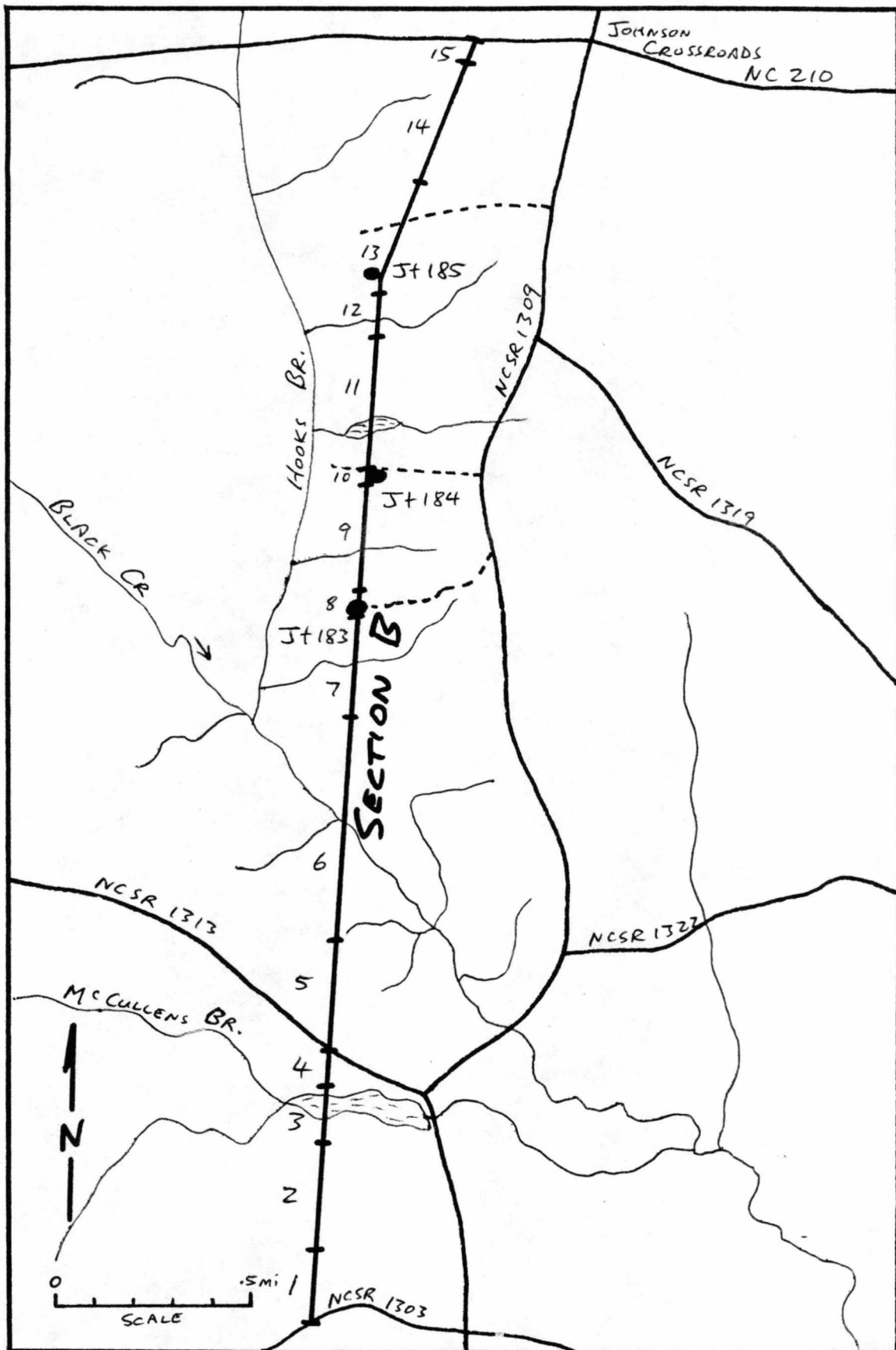


Figure 3. Map locating Survey Section B.

Northern Section (Section C)

- C1 - Length: 2200 ft; Terrain: 10-15% slopes flanking Swift Creek; Condition: Wooded with dense brush within transmission corridor; Survey Coverage: Determination of survey conditions only. Vegetation prevented inspection of ground surface.
- C2 - Length: 1200 ft; Terrain: Low floodplain along Swift Creek; Condition: Wooded and swampy; Survey Coverage: Determination of survey conditions only. Vegetation and surface water prevented inspection of ground surface.
- C3 - Length: 2000 ft; Terrain: Gradually sloping to level upland surface (0-5% slope); Condition: Covered in hardwoods and thick pines; Survey Coverage: Determination of survey conditions only. Vegetation prevented inspection of ground surface.
- C4 - Length: 700 ft; Terrain: Level upland surface; Condition: Area is used as a vineyard with 50-100% surface visibility beneath the grape vines; Survey Coverage: Pedestrian survey. No archaeological remains were found.

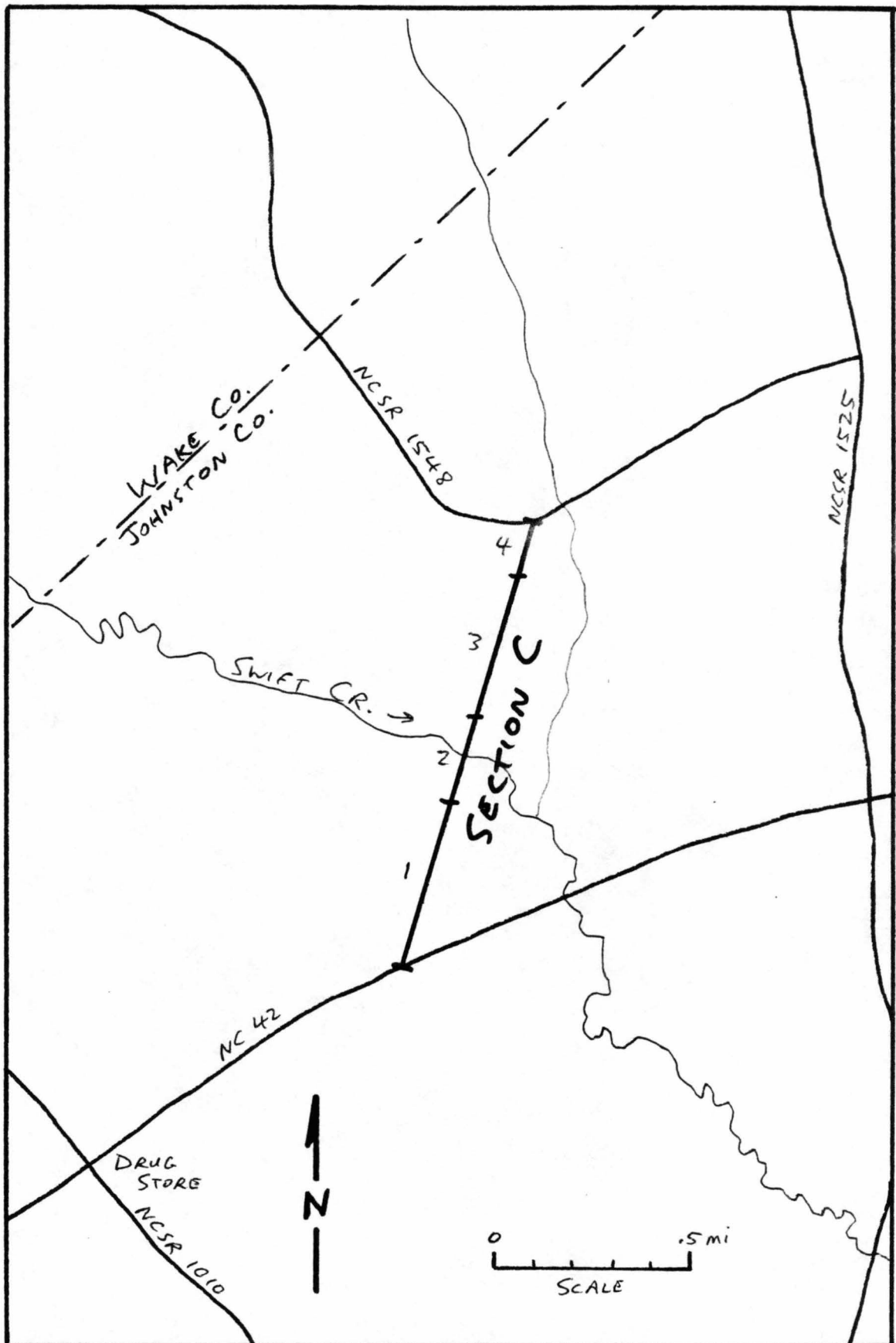


Figure 4. Map locating Survey Section C.

In summary, approximately 25% of the area investigated (ca. 2.1 mi) was suitable for intensive pedestrian survey. Conditions elsewhere along the proposed transmission line corridor were poor at best and, in most instances, actually inhibited any type of close visual inspection due to dense underbrush and swamp. Despite these limitations, it is felt that those areas which could be carefully examined are representative of the topographic variability present within the corridor (excepting swampy floodplain) and thus provide an adequate sample for assessing the project's overall impact. A summary of survey conditions is provided in Table 1.

Table 1. Summary of survey conditions encountered during the Harnett-Wake 500 kV transmission line survey.

Survey Section	Wooded Upland	Wooded Swamp	Cultivated (Poor Vis.)	Cultivated (Good Vis.)	Total
A	8130 ft (39%)	5900 ft (28%)	1260 ft (6%)	5500 ft (27%)	20,790 ft (100%)
B	5100 ft (29%)	3800 ft (22%)	3400 ft (20%)	5000 ft (29%)	17,300 ft (100%)
C	4200 ft (69%)	1200 ft (20%)	0 ft (0%)	700 ft (11%)	6,100 ft (100%)
Total	17,430 ft (39%)	10,900 ft (25%)	4660 ft (11%)	11,200 ft (25%)	44,190 ft (100%)
	3.3 mi	2.1 mi	0.9 mi	2.1 mi	8.4 mi

Site Descriptions

Four prehistoric archaeological sites were identified during survey of the proposed Harnett-Wake 500 kV Transmission Line and are described below. All represent only limited activity and are considered to have only minimal research potential.

Ht 39 (Figure 2)

Location: Site is situated on a low rise adjacent to an unnamed tributary of Black River, 1200 ft north of NCSR 1558 and immediately east of NCSR 1554 (Coats 7.5' Quadrangle; UTM: 17/3923040/714620; Elev: 210 ft). Ht 39 lies just west of the proposed CP & L transmission line corridor on the property of Bobby W. Pope.

Description: Identification of Ht 39 was based upon the recovery of 2 flakes (felsic material) and 1 quartz core within a 20 x 50 ft area (30% surface visibility). At time of survey, the site was covered with corn and dense Johnson grass; consequently, an adequate collection could not be made, nor was it possible to estimate site boundaries.

Comments: Because of site conditions at time of survey, the research potential of Ht 39 cannot be fully assessed. This site lies outside the transmission line corridor and will not be impacted by proposed construction.

Jt 183 (Figure 3)

Location: Site is situated along the top of a low ridge flanking Hooks Branch, 2000 ft west of NCSR 1309 at the end of a dirt road, 1.3 mi south of Johnson Crossroads (Edmondson 7.5' Quadrangle; UTM: 17/3930930/716490; Elev: 220 ft). Site lies within the proposed CP&L transmission line corridor on corridor owned by Jerry J. Lambert.

Description: Site is defined by the occurrence of 3 flakes, 1 used flake, and 1 side scraper (all quartz) within a 100 x 100 ft area which recently had been clear-cup (100% surface visibility). The entire site area has been heavily eroded. These materials suggest only limited site use.

Comments: Jt 183 is considered to have minimal research potential. No further evaluation is recommended. This site will probably be destroyed by tower construction.

Jt 184 (Figure 3)

Location: Site is situated along the edge of a low ridge flanking Hooks Branch, 1400 ft west of NCSR 1309 on the south side of a gravel road, approximately 1.1 mi south of Johnson Crossroads (Edmondson 7.5' Quadrangle; UTM: 17/3931550/716510; Elev: 210 ft). Site lies within the proposed transmission line corridor on property owned by R. Durwood Benson.

Description: Site is defined by the occurrence of 2 quartz flakes, 2 biface fragments (1 felsic, 1 quartz), and 1 quartz side scraper within a 50 x 50 ft area. The site is heavily eroded and, at time of survey, was planted in corn (80% surface visibility). Recovered artifacts indicate only limited site use.

Comments: Jt 184 is considered to have minimal research potential. No further evaluation is recommended. This site will probably be destroyed by tower construction.

Jt 185 (Figure 3)

Location: Site is situated along the slope of a low ridge flanking Hooks Branch, 2400 ft west of NCSR 1309 on a dirt road (and 500 ft south of road), approximately 0.4 mi south of Johnson Crossroads (Edmondson 7.5' Quadrangle; UTM: 17/3932280/716500; Elev: 240 ft). The site lies just west of the proposed CP&L transmission line corridor on the property of Tommie G. Beasley.

Description: Identification of Jt 185 was based upon the recovery of 1 Morrow Mountain II projectile point, 2 bifaces, 1 end scraper, 1 graver, 9 amorphous cores, and 45 flakes (all quartz) from a 100 x 150 ft area. The site has been heavily eroded and, at time of survey, was planted in sweet potatoes (almost 100% surface visibility). The artifact collection suggests that the site represents a Middle Archaic period (ca. 5500-5000 B.C.) campsite.

Comments: Despite the quantity of artifacts collected from Jt 185, its research potential is severely limited by extensive site deflation due to soil erosion and consequent low potential for intact archaeological deposits. No further evaluation is recommended. This site will not be impacted by proposed transmission line construction.

Conclusions and Recommendations

Although surface visibility was poor in some areas of the proposed transmission line corridor, we feel it was generally adequate for coverage by pedestrian survey. This assessment is based on the fact that most of the areas with high archaeological potential also exhibited good surface visibility. Since no significant sites, and very few sites in general, were located in these areas, we feel it extremely unlikely that significant sites were missed in areas with poor surface visibility.

Based on the survey results, it is concluded that the construction and maintenance of the 500 kV transmission line will not have a negative impact on cultural resources. Archaeological clearance is, therefore, recommended for the project.

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