

ARCHAEOLOGICAL SURVEY AND ASSESSMENT OF TWO
MICROWAVE TOWER LOCATIONS IN DAVIDSON
COUNTY, NORTH CAROLINA

By

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Management Summary

An archaeological survey and assessment were conducted at two microwave tower sites in Davidson County, North Carolina. (No Clearinghouse numbers were available.) The Cid Microwave Tower site is 3 acres in extent and located on the crest of the middle peak of Three Hat Mountain. The Greensboro Junction Microwave Tower site encompasses 5 acres and is located adjacent to S.R. 1733. These areas were assessed by pedestrian survey, and at the Cid site, some shovel and auger testing also was done to determine soil characteristics and depositional potential. A prehistoric archaeological site was recorded at each of the tower locations, but neither site meets minimum standards to be considered significant relative to National Register criteria. Given the presence of prehistoric archaeological remains along the southern peak of Three Hat Mountain, on-site monitoring is recommended at the Cid Microwave Tower site during the initial construction stage.

Introduction

On April 24, 1984, the authors conducted an archaeological survey of two microwave tower sites in Davidson County, North Carolina. The project was initiated at the request of the Eastern Regional Office of MCI Telecommunications Corporation, Douglasville, Georgia.

The proposed Cid Microwave Tower Site is located approximately 7 mi southeast of Lexington, atop the middle peak of Three Hat Mountain (Lat: 35°45'44.9"; Long: 80°08'18.1") (Figure 1). The project site consists of the tower area on Three Hat Mountain (3 acres in extent) and a 1 mi access road (with a 30 ft right-of-way) from SR 2260. Impact at the tower site will be confined to a 60 x 100 ft area which includes the construction of a small parking lot and two small outbuildings.

The Greensboro Junction Microwave Tower Site is located in northern Davidson County, approximately 0.15 mi south of the community of Georgetown on SR 1733 (Lat: 36°00'45.4"; Long: 80°05'58.4") (Figure 2). The project site comprises 5 acres although proposed construction will be limited to a 1 acre area. Proposed facilities include a microwave tower, parking lot and driveway, a small one-story masonry building, and a septic tank and drainfield. These units will be enclosed by a chain-link fence.

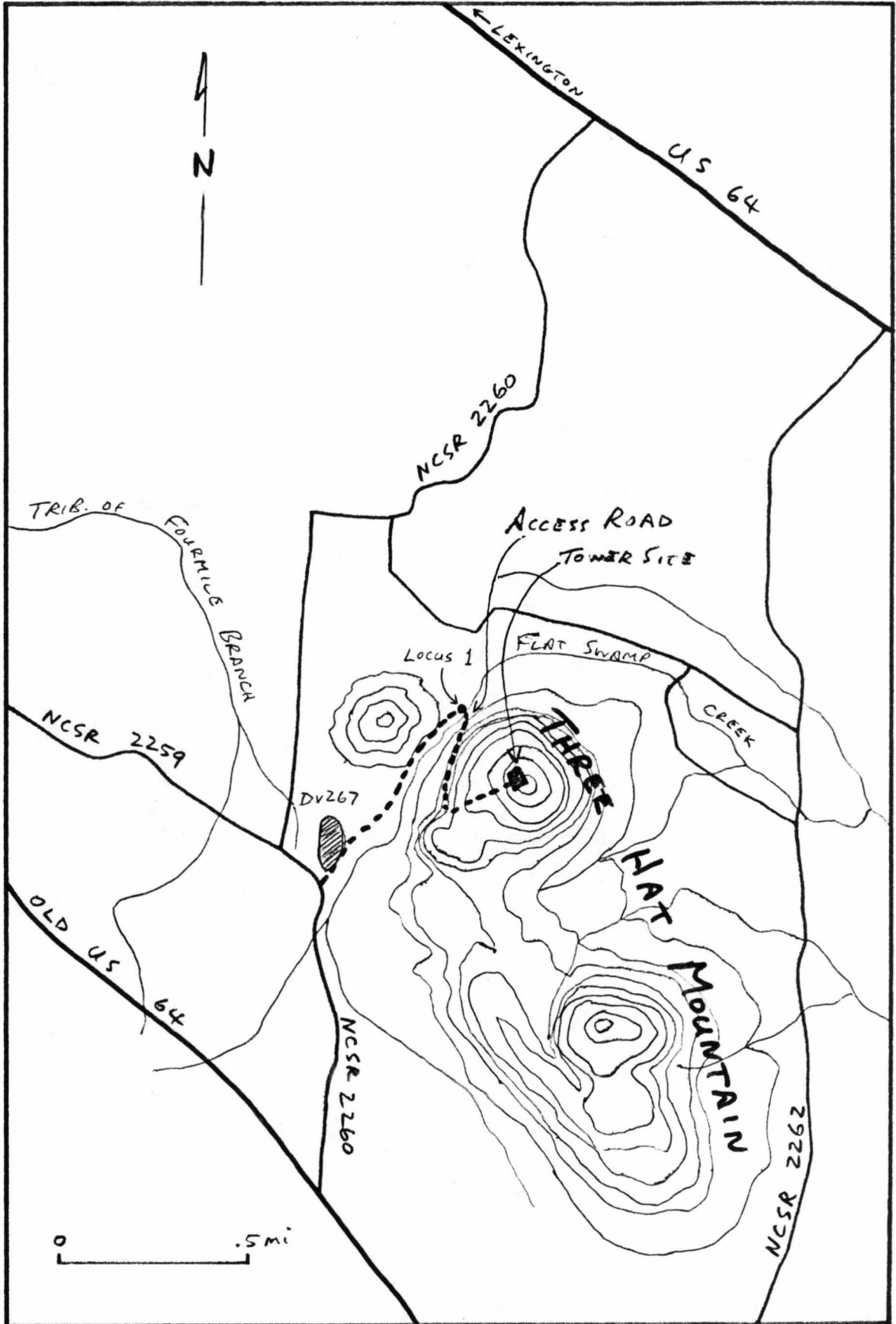


Figure 1. Map locating the proposed construction area for the Cid Microwave Tower.

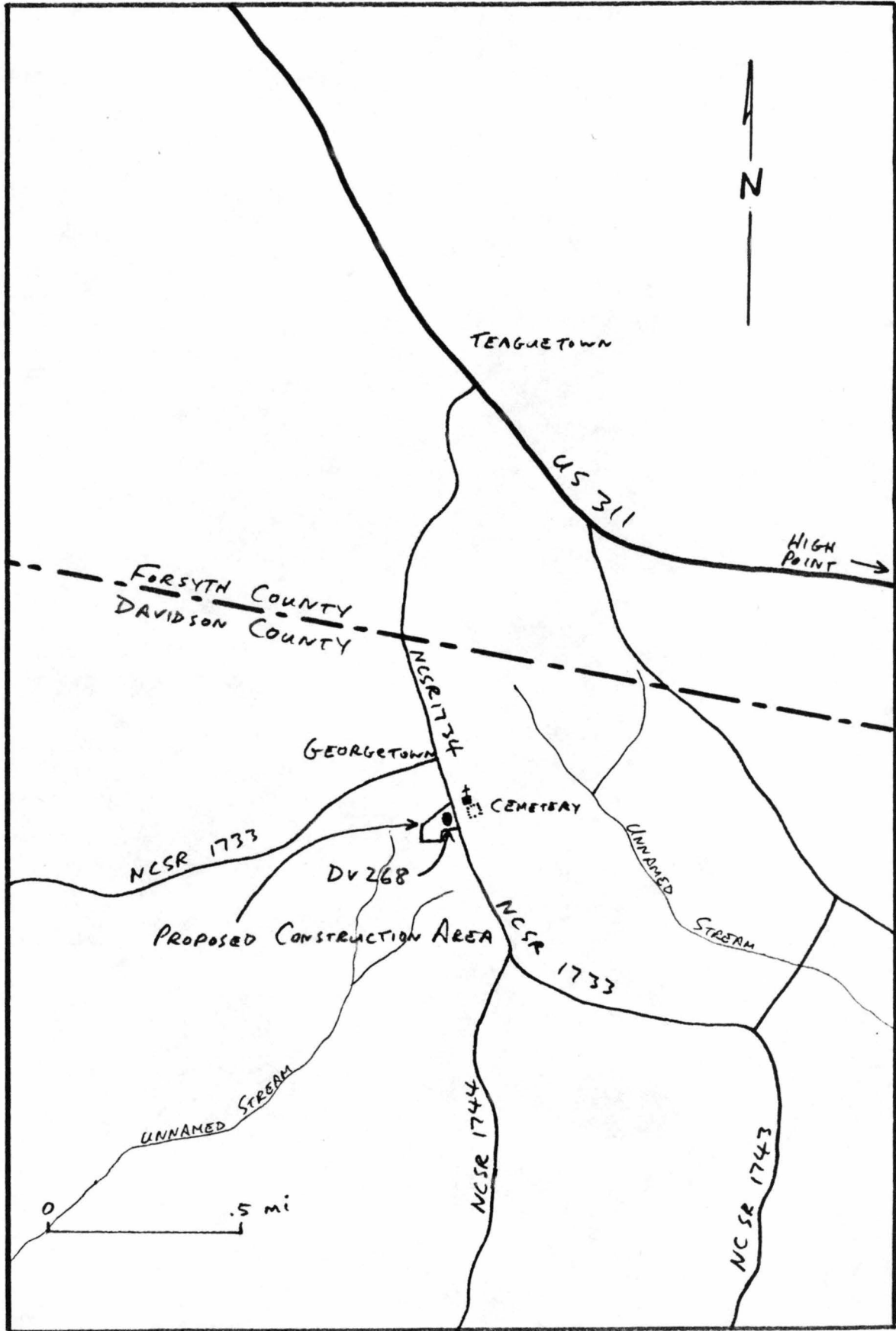


Figure 2. Map locating the proposed construction area for the Greensboro Junction Microwave Tower.

Environmental Factors

Davidson County is located in the west-central Piedmont where the terrain is characterized as rolling to steeply rolling. The strips of floodplain bordering the streams comprise the only flat surfaces. Abbotts Creek and Flat Swamp Creek, which feed into the Yadkin River, provide the major drainage networks within the project areas.

The Cid Microwave Tower Site is covered by a second or third growth stand of hickory, white oak, post oak, maple, and shortleaf pine. Undergrowth is sparse, and the entire area appears to have been logged within the past 75 years. The eastern peak of Three Hat Mountain is currently being logged extensively, and based on the current vegetation, the entire range appears to have been repeatedly subjected to timber harvesting over the years.

Geologically, Three Hat Mountain forms part of the Uwharrie Formation which consists of felsic volcanic rocks. Rhyolite is associated with volcanic breccia, which represents the remains of old lava flows. Breccia fragments gradually decrease in size and grade into the rhyolite (Pogue nd:226). The soil, Georgeville stony silt loam, defines a grey to red silt loam 4-8 in deep that grades into a red, brittle clay subsoil. It contains a large number of rhyolite fragments with some quartz (Hardison and Brinkley 1917:28).

The Greensboro Junction Microwave Tower site circumscribes a 1 acre garden plot and a stand of relatively young pine that borders a large ravine. Except for the ravine, the terrain is generally flat.

The soil, Georgeville silt loam, is a yellowish to pale red silt loam 6-10 in deep, overlying a yellowish-red silty clay. Some slate and quartz fragments occur in the matrix. This soil occupies large areas of Davidson County and is one of the most agriculturally productive (Hardison and Brinkley 1917:29-30).

Prehistoric and Historic Background

Almost 300 archaeological sites have been located and recorded in Davidson County. Most were discovered by amateur collectors, including H. M. Doerschuk, Dr. James Bingham, Jr., Tucker Littleton, and Steve Leonard (nd:Site Files, Research Laboratories of Anthropology). Several archaeological sites also have been recorded as a consequence of cultural resource management studies. The largest such study in the vicinity of the tower sites was carried out at three alternate areas proposed for the location of the Davidson County Airport (Sellon 1980).

During the airport investigation, 48 sites were inventoried. Most were represented by small, disturbed scatters of nondiagnostic specimens dating from the Early Archaic period (8000 B.C.) to the Late Woodland period (ca. A.D. 1000). The majority of the sites that could be chronologically placed fell within the Middle to Late Archaic periods (4000-1000 B.C.). Morrow Mountain, Guilford, and Savannah River projectile points were represented in the samples, but none occurred in large numbers (Sellon 1980). Although several large Late Woodland

(A.D. 1000-1500) villages also have been discovered in Davidson County; many of these, eg. 31Dv2, were inundated by High Rock Lake or have been damaged by relic collectors, eg. 31Dv25 (Site Files, Research Laboratories of Anthropology).

One previously recorded site, 31Dv51, must also be considered when assessing the archaeological potential of the Cid Tower project. This site is located on the southwestern flank of the eastern peak of Three Hat Mountain and has produced concentrations of lithic waste material and crude stone tools. These indicate the presence of a prehistoric quarry. In 1975, a 2 m square was excavated at the site of one of the lithic concentrations. Most of the artifacts and waste flakes were contained in the upper 50 cm of the excavation unit, and diagnostic specimens dated to the Late Archaic period (Mountjoy and Abbott 1982).

31Dv51 was visited by the authors and Mr. Lawrence E. Abbott, Jr., (anthropology graduate student at Wake Forest University) on May 9, 1984. Several areas of prehistoric lithic reduction were observed along the flanks of the peak adjacent to the Cid Tower site. The specimens observed, however, are grossly different in form and raw material from the lithic debris at the Cid Tower site. More will be said about these differences in the following section.

The first recorded visit of a white man in the Davidson County area took place in 1670 when John Lederer crossed the Yadkin River at the Trading Ford. Here he visited the Sara Indians who occupied a small village on the north bank of the Yadkin. In 1673, the scouting party of James Needham and Gabriel Arthur passed through southern

Davidson County on their way to establish trade relations with the Cherokee. Later that same year, James Needham was killed at the Trading Ford by his Indian guide, Occaneechi John. Traveling through the area in 1701, John Lawson found the Saponi living in the vicinity of the Trading Ford.

It was not until 1750 that permanent white settlements were established in Davidson County. At this time a group of Scotch-Irish immigrants from New Jersey moved into the Yadkin Valley. They were later joined by Germans moving from Pennsylvania. These early settlers were little more than subsistence farmers growing corn, wheat, oats, and flax (Sink and Mathews 1972:8-18). In 1937 a cotton mill was built at Salem and afterwards cotton became an important cash crop (Hardison and Brinkley 1917:9).

Around 1800, the mining industry was established in Davidson County. Gold, silver, lead, and copper were mined until the end of the 19th century. The Silver Hill and Silver Valley mines were two of the most successful operations and produced more silver than all other mines in North Carolina combined (Sink and Mathews 1972:313). Several mines, including Silver Hill and Silver Valley, are located in the vicinity of Three Hat Mountain on the 1917 Davidson County soil map (Hardison and Brinkley 1917).

Fieldwork and Results

Archaeological assessment at the proposed Cid Microwave Tower site was conducted for all land to be impacted by the project. The entire project area was either flagged or staked by land surveyors at the time of assessment. Archaeological survey methods consisted of pedestrian survey supplemented by limited shovel and auger testing to assess subsurface soil characteristics. Surface visibility was generally sufficient to permit the collection of artifacts when present. Inspection of the tower area failed to produce any clear evidence of prehistoric or historic cultural resources despite the presence of fractured rhyolite across most of the ground surface. Although superficially resembling a prehistoric workshop or quarry area, careful examination of the rhyolitic debris indicated that it was largely of natural origin, resulting from mechanical weathering processes. Exfoliated spalls were abundant; however, no specimens were observed which possessed a striking platform or any other clear evidence of human modification. Additionally, other kinds of lithic artifacts such as discarded bifaces which typically occur at aboriginal workshop and quarry sites were noticeably absent. Shovel testing at the tower site also failed to yield any artifacts. Extensive rhyolitic debris was also observed along the proposed access road from the tower site to Flat Swamp Creek at the base of the slope. Accumulations of this debris were particularly massive along the upslope sides of large trees, attesting to rapid and recent rock

creep at Three Hat Mountain. Again, none of the specimens observed in these accumulations showed clear evidence of human modification.

Survey of the remainder of the proposed access road produced one prehistoric archaeological site and a locus where lithic artifacts were observed in a redeposited context. Assessment of this portion of the access road (between NCSR 2260 and Flat Swamp Creek) was facilitated by the fact that it followed an abandoned logging road with occasional patches of exposed ground and flanked the edge of a pasture with extensive erosional areas.

Locus 1

Several lithic artifacts were collected where the proposed access road crosses Flat Swamp Creek (Figure 1). Since these materials appear to be restricted to the gravel bars along the stream margins, it is concluded that they are redeposited. Shovel and soil auger testing in the immediate vicinity of Locus 1 indicated little potential for buried archaeological deposits at this location. The thin topsoil here is immediately underlain by cobbles representing an earlier stream bed. Artifacts collected from Locus 1 include: 2 large bifacially-worked cobbles, 1 retouched water-worn cobble, and 6 flakes. Given the redeposited context of this material, no formal site designation was assigned.

Dv267

This site is located at the beginning of the proposed access road, approximately 600 ft east of the junction of NCSR 2259 and NCSR 2260, and

300 ft northwest of Flat Swamp Creek (UTM: 17/3957470/577140; Elev: 860 ft) (Figure 1). Lithic artifacts were observed over a 250 x 500 ft area along the southwestern edge of a low knoll which flanks the creek. The site is situated in a moderately eroded pasture. Approximately 40% of the ground surface was sufficiently visible for collecting artifacts. Given the relatively high artifact density at the site, only a small sample of artifacts (n=106) was obtained. Although surface collecting was primarily directed toward recovering temporally-diagnostic artifacts (i.e., projectile points), it is believed that the sample of artifacts collected is representative. This sample includes: 1 Guilford projectile point, 1 Stanly projectile point, 1 Morrow Mountain projectile point, 9 bifaces, 8 scrapers, 2 cores, 19 used flakes, and 65 flakes. The low number of projectile points collected (and observed) may be due to previous collecting of the site since it is located close to the road and is highly visible. The recovered artifacts represent less than 10% of those observed at the site and indicate that the site was used at least during the Middle Archaic period (ca. 6000-4000 BC). Major activities reflected by the kinds of artifacts recovered and the site's high artifact density include lithic tool manufacture and butchering.

Despite the site's high artifact density, its overall research value is extremely limited due to its deflated character and lack of appreciable soil depth (as indicated by soil auger testing). Its archaeological significance is, therefore, confined to potential

future research which can utilize mixed surface collections (i.e., low-level, regional settlement studies). Given these limitations, it is concluded that Dv267 is not eligible to the National Register of Historic Places. Since the proposed access road will impact only the extreme southeastern edge of the site and will produce only minimal site disturbance, no further archaeological assessment is recommended.

Due to the abundance of rhyolitic debris at the Cid Tower site and the fact that prehistoric quarrying activity had been previously documented along the nearby southern peak of Three Hat Mountain (Mountjoy and Abbott 1982), a second trip to the proposed project area was made on May 9, 1984, with Mr. Lawrence Abbott of Wake Forest University and Mr. Bill Oliver of the Archaeology Section, N.C. Department of Archives and History. In addition to re-visiting the proposed tower site, archaeological remains along the southern peak (designated 31Dv51) were also examined. These remains represent clear evidence of lithic reduction activities (including discarded bifaces, decortication flakes, and bifacial thinning flakes), and contrast sharply with the debris observed at the proposed tower site. As discussed above, such evidence was noticeably absent along the portion of the middle peak which will be impacted by microwave tower construction. Despite this observation, the possibility still exists that archaeological remains lay undetected within the tower site area. Therefore, it is our recommendation that initial construction-related excavation at the tower site be monitored by a qualified archaeologist

to insure that any such archaeological remains (if present) are identified and recorded. Any further recommendations, given the limited nature of proposed construction and the extent of previous impacts (i.e., logging) upon the project site, are unwarranted at this time.

Archaeological assessment of the proposed Greensboro Junction Microwave Tower Site consisted of pedestrian survey of the entire five acre area with intensive examination of the actual construction area. It appeared that this area had been recently plowed for a garden; thus, collecting conditions were excellent (100% visibility). One prehistoric archaeological site (Dv268) was located in this area. The remaining four acres were wooded. Since this area is mostly comprised of a large ravine, subsurface testing was considered unnecessary. Recently plowed fields situated west and northwest of the project site (adjacent to the wooded area) were also examined for archaeological remains with negative results.

Dv268

This site is defined by a light scatter of lithic artifacts over a 100 x 200 ft area within the one acre construction area. The site is located on a level upland surface between the Spurgeon Creek and Abbotts Creek drainages, approximately 850 ft east of the headwaters of an unnamed stream (UTM:17/3985510/581200; Elev: 910 ft). Soil at the site consists of red clay loam underlain by red clay (as indicated by soil auger testing). All visible artifacts were collected and

include: 2 probable Archaic projectile point fragments, 1 biface, 4 used flakes, and 63 flakes. These artifacts suggest only limited site activity during the Archaic period.

Given these findings and the deflated nature of Dv268, no further archaeological investigations are warranted. It is, therefore, concluded that the proposed Greensboro Junction Microwave Tower Site will not adversely affect any significant cultural resources.

Conclusions

At the request of MCI Telecommunication Corporation, an archaeological survey and assessment were conducted at the Cid and Greensboro Junction Microwave Tower sites in Davidson County, North Carolina. Prehistoric archaeological sites (designated Dv267 and Dv268, respectively) were recorded at each tower site; however, neither site meets the minimum standards to be considered significant relative to the National Register of Historic Places. Because archaeological resources may lie undetected within the immediate vicinity of the proposed Cid tower site, limited monitoring of initial construction is recommended. No further archaeological assessment is recommended for the Greensboro Junction site.

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