

TENNESSEE HISTORICAL COMMISSION DEPARTMENT OF ENVIRONMENT AND CONSERVATION 2941 LEBANON ROAD NASHVILLE. TN 37243-0442 (615) 532-1550

July 9, 1997

Mr. Gerald W. Kline Tennessee Department of Transportation Environmental Planning Office Suite 900, James K. Polk Building 505 Deaderick Street Nashville, Tennessee 37243-0334

## RE: FHWA, ARCHAEOLOGICAL ASSESSMENT, SR-28 AND SR-392 EXTENSIONS, CROSSVILLE, CUMBERLAND COUNTY, TN

Dear Mr. Kline:

At your request, our office has reviewed the above-referenced archaeological survey report in accordance with regulations codified at 36 CFR 800 (51 FR 31115, September 2, 1986). Based on the information provided, we find that the project area contains no archaeological resources eligible for listing in the National Register of Historic Places.

Therefore, this office has no objection to the implementation of this project. If project plans are changed or archaeological remains are discovered during construction, please contact this office to determine what further action, if any, will be necessary to comply with Section 106 of the National Historic Preservation Act.

Your cooperation is appreciated.

Sincerely, Herbert I. Hura

Herbert L. Harper Executive Director and Deputy State Historic Preservation Officer

HLH/jmb

# FINAL REPORT

PHASE I ARCHAEOLOGICAL SURVEY OF PROPOSED STATE ROUTE 28 (US-127) FROM 0.16± KM SOUTH OF SAW MILL ROAD TO CLEVELAND STREET IN CROSSVILLE, AND THE PROPOSED STATE ROUTE 392 EXTENSION, FROM STATE ROUTE 28 SOUTH OF CROSSVILLE TO STATE ROUTE 1 (US-70) EAST OF CROSSVILLE, CUMBERLAND COUNTY, TENNESSEE

TDOA Permit Numbers 000268 & 000348

Submitted by:

Alexander Archaeological Consultants P.O. Box 62 Wildwood, Georgia 30757

Frepared by:

Lawrence S. Alexander H. Russell Campbell Daniel J. Minnich

Under contract with:

Tennessee Department of Transportation Planning Division Suite 900, James K. Polk State Office Building 505 Deaderick Street Nashville, Tennessee 37243-0334

February 2000

# FINAL REPORT

PHASE I ARCHAEOLOGICAL SURVEY OF PROPOSED STATE ROUTE 28 (US-127) FROM 0.16± KM SOUTH OF SAW MILL ROAD TO CLEVELAND STREET IN CROSSVILLE, AND THE PROPOSED STATE ROUTE 392 EXTENSION, FROM STATE ROUTE 28 SOUTH OF CROSSVILLE TO STATE ROUTE 1 (US-70) EAST OF CROSSVILLE, CUMBERLAND COUNTY, TENNESSEE

TDOA Permit Numbers 000268 & 000349

Submitted by:

Alexander Archaeological Consultants P.O. Box 62 Wildwood, Georgia 30757

Prepared by:

Lawrence S. Alexander H. Russell Campbell Daniel J. Minnich

Under contract with:

Tennessee Department of Transportation Planning Division Suite 900, James K. Polk State Office Building 505 Deaderick Street Nashville, Tennessee 37243-0334

February 2000

## MANAGEMENT SUMMARY

During May 1997, Alexander Archaeological Consultants conducted a Phase I archaeological survey for the proposed improvements to State Route 28 (US-127), from  $0.16\pm$  km south of Saw Mill Road to Cleveland Street in Crossville, and the proposed State Route 392 extension, from SR-28 south of Crossville to SR-1 (US-70) east of Crossville, in Cumberland County, Tennessee. The project was conducted for James + Associates, Inc., Consulting Engineers and for the Tennessee Department of Transportation, Planning Division under the Tennessee Division of Archaeology Permit No. 000268. The later project, conducted January 2000, was an additional survey of the SR-392 extension from SR-28 south of Crossville to SR-1 (US-70) east of Crossville. The original alignment had been redesigned and an archaeological survey was conducted to identify cultural resources within the area of potential impact. This second project was conducted by Alexander Archaeological Consultants directly for the Tennessee Department of Transportation, under the Tennessee Department of Transportation for the Tennessee Department had been redesigned and an archaeological survey was conducted to identify cultural resources within the area of potential impact. This second project was conducted by Alexander Archaeological Consultants directly for the Tennessee Department of Transportation, under the Tennessee Division of Archaeology Permit No. 000349.

The project area of potential effect consists of two intersecting project corridors in Cumberland County, Tennessee. The proposed State Route 28 improvements follow the existing alignment from 0.16 km south of Saw Mill Road to Cleveland Street in Crossville. The proposed State Route 392 extension is on new alignment that begins at a new intersection with State Route 28, south of Crossville, and ends at a new intersection with State Route 1 (US-70) east of Crossville. The project area of potential effect to be investigated is 11.6 km long and encompasses approximately 28 ha of new right-of-way. The proposed State Route 28 improvements consist of symmetrical widening along approximately 7.6 km of existing alignment, requiring 5.0 ha of new right-of-way. The proposed State Route 392 Extension consists of approximately 4.0 km of new alignment requiring 23 ha of new right-of-way.

The project area is located on the Cumberland Plateau within an area of rolling uplands and deeply dissected drainage channels. The upland topography is based on shallow sandy soils developed from Pennsylvanian sandstone. The drainage channels have little or no flood plain development. Four isolated finds were recorded within the project area. Three of the isolated finds were late nineteenth to twentieth century artifact scatters. One isolated find consisted of two prehistoric flakes.

Archival research at the Tennessee Historical Commission located documentation concerning the Cumberland Homesteads Historic District. The Cumberland Homesteads community was founded in 1934 as part of F.D. Roosevelt's New Deal. The original area incorporated 27,802 acres located on both sides of the State Route 28 project area. The public and community buildings of the project are nominated to the National Register of Historic Places. Several of these structures are located adjacent to the project area. Cumberland Mountain State Park is also located adjacent to the project area. Neither the Cumberland Homesteads nor Cumberland Mountain State Park will be impacted by the proposed construction.

No further investigation is recommended for archaeological resources within the project area.

## FOREWORD AND ACKNOWLEDGMENTS

The following report is the result of a Phase I archaeological survey of State Route 28 (US-127) and the proposed State Route 392 extension, south and east of Crossville, in Cumberland County, Tennessee. Alexander Archaeological Consultants (AAC) conducted the initial survey for James + Associates, Inc., Consulting Engineers, under contract with the Tennessee Department of Transportation, Tennessee Division of Archaeology permit number 000268. A resurvey of the initial project was conducted directly for the Tennessee Department of Transportation, Tennessee Division of Archaeology permit number 000268. A resurvey of the initial project was conducted directly for the Tennessee Department of Transportation, Tennessee Division of Archaeology permit number 000349.

This project is the result of the combined effort of several people working toward the goal of investigating the impact of the proposed State Route 28 (US-127) corridor and the proposed State Route 392 extension upon the cultural resources present. Lawrence S. Alexander, principal investigator, conducted the field work and prepared the report of investigation. The field crew consisted of Russell Campbell, Tim Elmore, Dan Minnich, and Stewart Ledford. The first project was administered by James Gillespie, James + Associates, and James M. Moore, Archaeologist for the Tennessee Department of Transportation. The second project was administered by Gerald L. Kline, Tennessee Department of Transportation and James M. Moore, Archaeologist for the Tennessee Department of Transportation.

fameen S. Alyundu

Lawrence S. Alexander Principal Investigator Alexander Archaeological Consultants.

# TABLE OF CONTENTS

Page

MANAGEMENT SUM	IMARY						44		559	• • • •	. i
FOREWORD AND AC	CKNOWLEDG	MENTS				• • •	• • •	, , , ,	• • •		. ii
TABLE OF CONTENT	rs		••••	· · · ·		• • •		• • • •	• • •		. iii
LIST OF FIGURES			eer								. iv
BACKGROUND TO T Introduction The Project Literature Searc Paleoenvironme Botanical and Fa Climate Geological Back Soils Background for Regional Cultur Previous Resear Cumberland Cou	h and Records I nt	Review	udies								. 1 . 1 . 5 . 5 . 6 . 6 . 7 . 7 . 8 . 12 . 13
FIELD AND LABORA Field Methods Laboratory Ana Curation	lysis	· · · · · · · · · · · · · · · · · · ·	 	 	· · · · · · · ·	 		  	  	•••• ••••	16 18 18
GEOMORPHOLOGY Introduction Three Mile Creek One Mile Creek Summary			  	  	  				 		21 21 21 21 21
SUMMARY AND REC Results of Inves Emergency Disc	tigation										23 23 23
REFERENCES CITED											24

1

ī

F

Γ

1

1

Π

Γ

# LIST OF FIGURES

Figure 1. Project Area Map 2	1
Figure 2. Topographic Map of Project Area 3	
Figure 3. Topographic Map of Project Area, Survey Procedures, and Field Conditions. 4	į
Figure 4. Profile of Shovel Test at One Mile Creek 22	

Ī

Ĩ

Π

Π

1

1

1

1

1

Π

## CHAPTER I

#### BACKGROUND TO THE PROJECT

## Introduction

At the request of James + Associates, Inc., agents for the Tennessee Department of Transportation (TDOT), Alexander Archaeological Consultants (AAC) conducted a Phase I archaeological survey of proposed improvements to State Route 28 (US-127) from  $0.16\pm$  km south of Saw Mill Road to Cleveland Street in Crossville, and the State Route 392 extension from SR-28 south of Crossville to SR-1 (US-70) east of Crossville, in Cumberland County, Tennessee. AAC completed the project from May 21-23, 1997. The Tennessee Division of Archaeology (TDOA) Permit Number was 000268. The SR-392 extension was redesigned and an additional survey was conducted directly for the TDOT. This project was completed January 3-4, 2000 and the TDOA Permit Number was 000349.

The purpose of this investigation was to identify archaeological resources within the proposed right-of-way impact zone listed on, eligible for, or potentially eligible for the National Register of Historic Places pursuant to Criterion D set forth in 36CFR60.4.

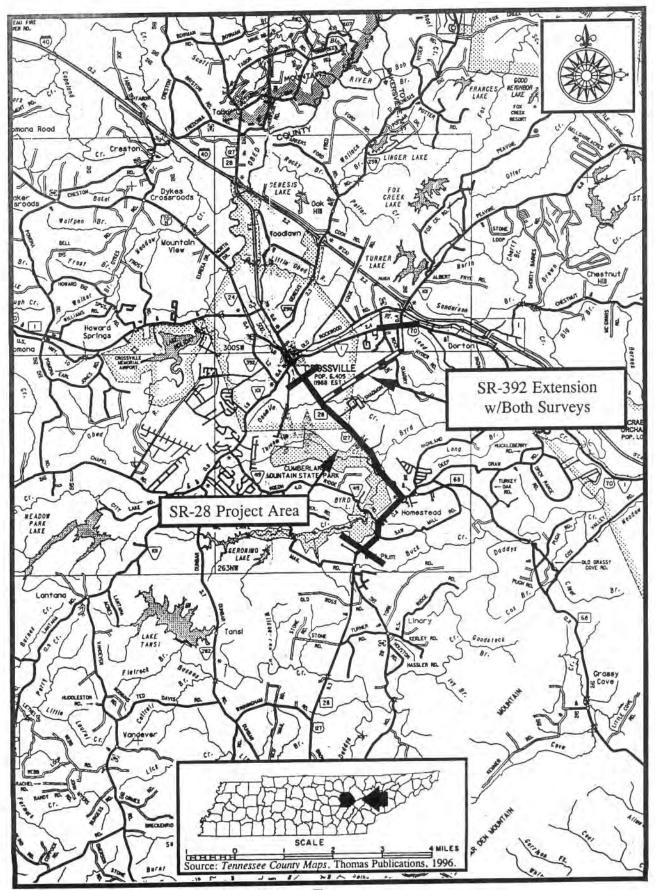
The project area investigated consists of an area 11.6 km long covering approximately 28 ha of additional right-of-way which includes both the SR-28 improvements and the SR-392 extension (Figures 1-3). According to the Scope-of-Work (Moore 1997), AAC investigated all lands that will be directly impacted by proposed construction (i.e. all land within the proposed right-of-way, including land needed for temporary construction easements). The State Route 28 improvements consist of an approximate 7.6 km right-of-way along the existing alignment and 5.0 ha of new right-of-way. The State Route 392 Extension consists of approximately 4.0 km of new alignment, requiring 23 ha of new right-of-way.

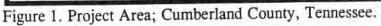
## The Project

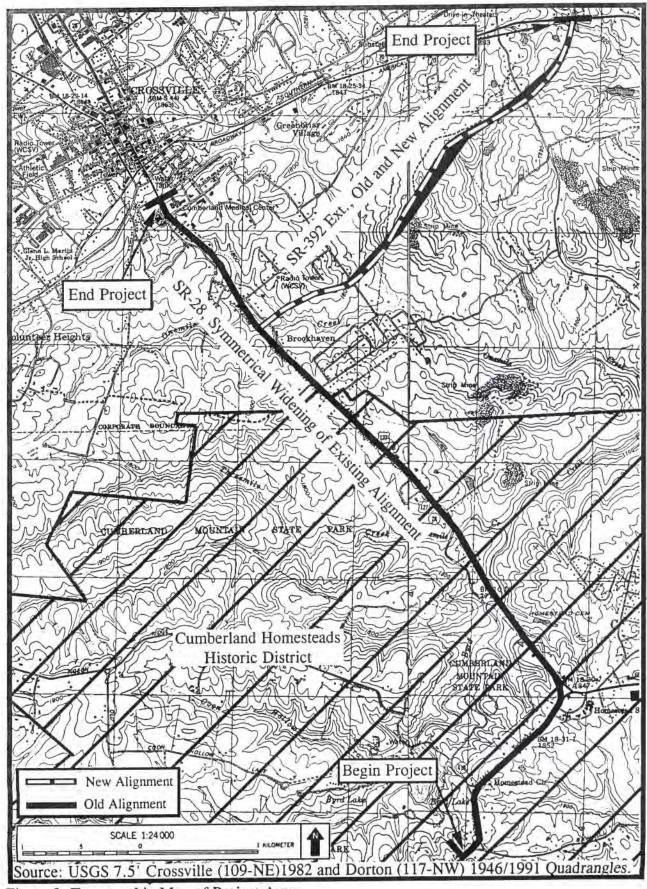
Specific tasks conducted during this project included (1) review and search of the archaeological records and literature available for the project area; (2) a Phase I survey including pedestrian inspection and shovel testing of the proposed impact corridor; (3) evaluation and deep testing of the right-of-way by a geomorphologist to determine the potential for alluviated cultural deposits; (4) laboratory analysis and summary of the cultural material recovered by the investigations; (5) evaluation of the cultural resources located within the project area by the criteria established in the NRHP; and (6) preparation of the report of investigations detailing the potential impact by the proposed project on the identified cultural resources.

#### Literature Search and Records Review

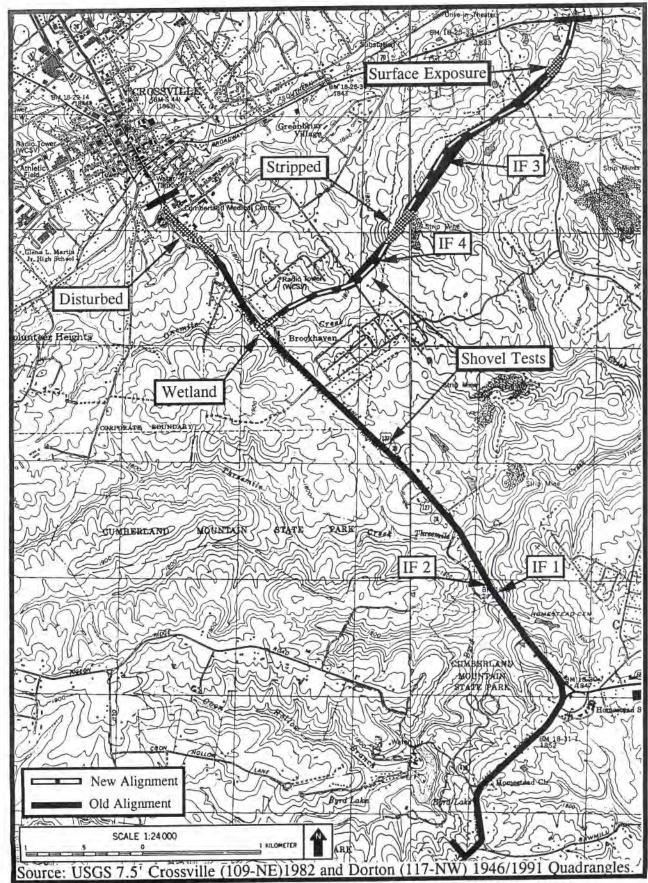
The literature search and records review began upon receipt of the notice to proceed. Archaeological and environmental records from archival sources, including the TDOA, the TDOT, the Tennessee Historical Commission, Tennessee State Library and Archives, and the Cumberland County Library were examined. The TDOA was contacted to identify any previously recorded sites within or immediately adjacent to the project corridor.

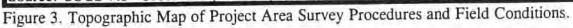












## Paleoenvironment

During the late Pleistocene and Holocene periods, a series of forests and climates alternated in the upland southeast (Delcourt 1979, and Delcourt 1980). The Wisconsin glacial advance began at approximately 20,000 B.P. and terminated approximately 12,500 B.P. A major warming period was also noted between 16,300-12,500 B.P. During the late Wisconsin period, the continental glaciers maximum advance, forests of spruce, fir, and jack pine were dominate in the area. During the climatic amelioration by 12,000 B.P., the deciduous forest replaced the more cold hardy spruce-fir species. Ash, hickory, birch, butternut, beech and maple became the dominate tree species. The spruce-fir forests gradually retreated north to the Canadian border states. During the subsequent early Holocene period, from 12,500 to 8000 B.P., the mixed mesophytic forest existed in a cool-temperate environment in the middle Tennessee area.

The Hypsithermal Interval or Middle Holocene can be dated to 6000-2500 B.P. The climate became warmer and drier. There were local extinctions of the mesic forest and a shift to a more xeric oak-chestnut forest (Delcourt 1979, Watts 1975). At the conclusion of the Hypsithermal, the climate stabilized, and mixed species forest continued until the late 1700s.

#### **Botanical and Faunal Resources**

The modern plant community of the Cumberland Plateau has been defined by Shelford (1963) as a mixed oak-hickory forest. This includes the earlier designation of mixed mesic and western mesic forests that Braum (1950) defined for the area. In the deep moist hollows, stands of hemlock and mountain laurel are common species. The botanic community has been modified over the preceding 200 years by Euro-American settlement. The forests have been cut an average of every 50-75 years, and pine has integrated the oak-hickory community. Early settlers began clearing the forests and introducing diseases to the North American botanical community. The chestnut blight of the 1930s has been the most devastating effect of this disease introduction to date.

The terrestrial and aquatic resources of the region which were important to the prehistoric and early historic inhabitants of the region are described in Kellogg (1939). White-tailed deer (Odocoileus virginianus), black bear (Ursus americanus), rabbit (Sylvilagus floridanus), squirrel (Sciurus sp.), and raccoon (Procyon lotor) are the primary land mammals. Turkey (Meleagris gallapavo) and ruffed grouse (Bonasa umbellas) are also encountered in the upland environments (Schultz et al. 1954). The Cumberland River is a minor fly-way for migrating fowl. Fishes of the Tennessee and Cumberland Rivers which are economically important include large-mouth bass (Huro salmoides), white bass (Lepibema chrysops), small-mouth bass (Micropterus dolomieu), sunfish (Lepominae sp.), black crappie (Pomoxis sparoides) and channel catfish (Ictalurus lacustris) (Kuhne 1939).

#### Climate

The climate of Cumberland County is humid, subtropical and mesothermal. Winters are mild with occasional harsh periods of cold weather with a maximum low temperature of -20 F degrees. Minor snowfalls during the winter months last only a few days. The average winter temperature ranges from 30 to 45 F degrees. Summer rainfall often occurs in heavy downpours

The spring and fall climates are clearly marked transitions between the seasonal rhythm of precipitation and temperature. Springs are often excessively wet. Precipitation during the fall is the lowest of the annual cycle. The frost-free growing season extends from middle April to October and lasts an average of 170 days (Dickson 1960).

#### **Geological Background**

The project area is located on the Cumberland Plateau which geographers have grouped as part of the Appalachian Plateau Physiographic Province (Fenneman 1938, Thornbury 1965, and Wilson and Sterns 1958). This plateau stretches from western Pennsylvania to northwestern Alabama. In Tennessee, the plateau ranges from 30 to 50 miles wide with dramatic *cuestas* on both the eastern and western edges. The plateau, considered a peneplain, is the result of erosion resistant Pennsylvanian Age sandstone and conglomerate bedrock that erodes more slowly than underlying limestone (Swingle 1961). On the plateau, the underlying bedrock is Pennsylvanian age Rockcastle Conglomerate, and Fentress Formation (Hardeman 1966). These formations consist of interbedded shale, siltstone, and sandstone. Shallow coal beds appear throughout the area, and strip mines are readily apparent. The coals and shales were interbedded with the sands formed in lagoons, swamps and tidal flats. The sandstones and conglomerates were formed where the advancing shore lines along the beach and islands existed with lagoons or coastal swamps. Coal formed as the peat dried and compacted with pressure from overlying deposits.

Structurally, the Cumberland Plateau is a syncline with several structural folds and fault systems that have affected the local topography. This structural folding has resulted in the western edge of the plateau being elevated, with erosion isolated outlying mesas of sandstone. The sandstone bedrock rapidly decomposes into a sandy loam soil that readily erodes. The plateau has a broad rolling surface with submature dissected valleys that increase in depth toward the edges. Within the drainage channels which crosscut the Cumberland Plateau, two distinct topographic environments occur. In the uplands, the creeks are typically shallow with small meandering channels and undeveloped flood plains. Erosion of the upper soil facies and profile truncation is most commonly encountered. Few occurrences of alluviated archaeological sites are recorded. The drainage channels continue to meander and incise into the sandstone bedrock until an erosion resistant stratum of sandstone is encountered. A series of waterfalls occurs at this region of the drainage profile. Upland rockshelters are located below the sandstone caprock throughout the perimeter of the Cumberland Plateau. The drainage channels then enter deeply incised gorges with a dramatic drop of 800-1,000 feet in elevation. The gorges have narrow undefined flood plains, and sinking creeks. This karst topography is typical of the Mississippian age limestones of Tennessee.

#### Soils

The soils of Cumberland County have recently been defined by Campbell and Newton (1995), and Springer and Elder (1980) on the basis of the bedrock formation parent material. The Pennsylvanian age sandstones of the Cumberland Plateau are associated with the Clarkrange and Lily soil series. The Clarkrange soils were formed from weathered shales, siltstone, and sandstones. Typically these soils are well drained with a brown silty loam surface layer up to 6 inches thick which overlays a yellowish brown silt loam ranging up to 45 inches deep. Bedrock typically occurs at 65 inches below the surface. The Lily series soils are typically well drained, and formed from sandstone. The subsoil is a yellowish brown loam changing to a yellowish brown gravelly loam from 8 to 22 inches below the surface. Sandstone bedrock typically appears at a depth of 34 inches below the surface.

The upper Mississippian limestone encountered at the lower slopes of the Cumberland Plateau and its outlier has been mapped by Campbell and Newton (1995) as Waynesboro-Etowah-Christian soils. These soils are formed over limestone in rolling hills and shallow karst depressions. The soils are residual silt and clay loams with chert fragments in the Waynesboro soils. To a large extent, these soils have been truncated through continuous cultivation and erosion.

## Background for the Geomorphological Studies

Chorley (1971), Schumm (1977), Schumm and Brackenridge (1987), Schumm and Parker (1973), and others have proposed that changes in regional climate can be identified in the depositional features within a drainage system. Variations within precipitation, temperature, and wind patterns result in corresponding changes observed in vegetation growth, runoff, and sedimentation rates. The relative height of mean sea level and local base levels within drainage basins also affect the cycles of deposition, erosion, and meandering within a drainage profile. An interpretation of regionally significant environmental fluctuation within the preceding 10,000 years is critical for the interpretation of the Tennessee and Cumberland Rivers fluvial development. The archaeological record within the flood plain helps date the geological deposits. Understanding the Holocene depositional sequence helps predict the location of alluviated archaeological sites.

Investigations by Brackenridge (1984) in the middle Duck River drainage upstream from Columbia, Tennessee, have provided a regionally significant model for discussing Holocene fluvial developments. The distinctive features developed by Brackenridge (1981, 1984) for describing the flood plain features include relative position and elevation of terraces above the current channel, lithostratigraphic characteristics of soil particle size and soil color, profile illuviation, oxidation, and precipitation of manganese (Mn) and iron (Fe) nodules.

Radiocarbon samples and archaeological materials within the soil profiles have dated the lithostratigraphic units. Brackenridge (1984) and Mahaffy (1982, 1984) have described the following informal system: the active flood plain closest to the present river channel is designated as the T-0, the first alluvial terrace or first bottoms as T-1, and the second terrace as T-2. Hack (1965) has developed another model of terrace development in drainages where bedrock outcrops constrict the drainage channel. These alluvial deposits are altered by colluvial material which has been washed in from the slopes adjacent to the drainage. The lithostratigraphic units are mapped and described following the standards established by the Soil Survey Staff (1951), and Birkeland (1974). Soil color descriptions are based on the Munsell Soil Color Charts (1973).

## **Regional Cultural Prehistory**

Within the archaeological reconstruction of prehistoric cultures of the Cumberland Plateau, the area can be interpreted as a transition zone between the Ridge and Valley cultures of East Tennessee and the Western Highland Rim cultures of Central Tennessee. The cultural sequence in both areas exhibits dissimilarities in culture types and development that are apparent in the archaeology, despite the geographic proximity of these regions. Archaeological synthesis of the Upper Cumberland Plateau has been greatly enhanced by researchers in the Big South Fork National River and Recreation Area. Work by Benthall (1991a, 1991b, and 1991c), Benthall and Manning (1988), Des Jean (1990, 1994), Des Jean and Benthall (1994), and Sussenbach (1990) has made quantum leaps in our knowledge of upland archaeology.

*Paleo-Indian*. The earliest known aboriginal occupation in Tennessee was during the Paleo-Indian stage, estimated to date between 14,000 B.C. and 8000 B.C. This occupation has been tentatively described in three consecutive horizons: The Clovis horizon, 14,000-12,000 B.C.; the Cumberland-Redstone horizon, 12,000-10,000 B.C.; and a third horizon, designated as the "Quad," 10,000-8000 B.C. A distinctive series of projectile point/knife types characterizes each horizon. The Clovis and Cumberland-Redstone projectile point types are characterized by large flakes which have been removed from the center of both the dorsal and ventral surfaces. The third Paleo-Indian horizon is characterized by the Beaver Lake, Quad and other related projectile point/knife types. These lanceolate projectile points, similar to those of the earlier phases, are generally not fluted, but usually basally ground.

The lithic technology associated with the Paleo-Indian period is characterized by large flake-blade tools struck from prepared cores. With this distinctive stone working technology, a series of uniface blades (used as scrapers and knives), steep angle scrapers, and compound scraper-graver tools were manufactured.

In the Tennessee and Cumberland River drainages, Gatus and Maynard (1978) and Hubbert (1989) have discussed Paleo-Indian sites in three topographic situations: (1) low river levees at the intersection of the Pleistocene and Holocene terraces, (2) high terrace remnants (T-2 and T-3) or knolls at the edge of drainage flood plains; and (3) upland karst topography. Paleo-Indian sites located on terrace remnants and upland karst topography have been continually eroded.

As a result, very few Paleo-Indian sites have been excavated in this region of the eastern United States. Discoveries by Norton and Broster (1993) and Broster and Norton (1990) in the low river levees promise to increase our understanding of Paleo-Indian occupation of Middle Tennessee.

*Archaic*. The Archaic stage in the Middle South has been divided into Early, Middle and Late Archaic periods. A time range from 8000 B.C. to 700 B.C. has been estimated for the Archaic. Phases within the Archaic period are based upon changes in the distinctive attributes of projectile point types as well as lithic technology and distinctive trade artifacts. The Early Archaic in the Nashville Basin has been dated from 8000 B.C. to 6000 B.C. The Early Archaic in the Southeast can be discussed in terms of four horizons, each of which has a specialized temporal and regional development. The Dalton horizon is earliest and follows the Paleo-Indian tradition.

The Dalton horizon is followed by the Big Sandy, and later, the Kirk horizon. The final horizon in the Early Archaic is the Bifurcate Base horizon. Each horizon has been named for its characteristic distinctive projectile point/knife series. Each can be arbitrarily assigned a 1000 to 500 year time span until more definitive work can be completed. On the Little Tennessee River, the Early Archaic dates from 7200 B.C. to 6200 B.C. (Chapman 1977, Foley and Chapman 1977). Early Archaic materials have also been found in the basal levels at the St. Albans site in West Virginia (Broyles 1966, 1971).

The lithic technology associated with this period represents a significant change from the preceding Paleo-Indian stage. This technology demonstrates the beginning of an adaptation to regional lithic resources and regional stylistic point type variants. The lithic reduction sequence changed from the large blade tools to a less complex core reduction and flake tool technology.

The Middle Archaic dates from approximately 5500 B.C. to 3000 B.C. During this period, a significant population increase has been noted throughout the Middle South. The projectile points/knives characteristic of this period include the Eva-Morrow Mountain cluster, the Sykes-White Springs cluster, and the Benton cluster. The stylistic development of projectile points has been tenuously equated with a series of horizons which include Eva-Morrow Mountain and Sykes-White Springs. The Eva-Morrow Mountain point types are widely distributed throughout the Middle South. The individual types may have somewhat different distributions, and they may be portions of two distinct cultural assemblages. The Eva projectile points are found throughout the lower Tennessee Valley and become increasingly less frequent throughout East Tennessee. The Morrow Mountain points, however, are common throughout Middle and East Tennessee and reflect a very significant occupation in the North Carolina Piedmont (Coe 1964). Hoffman (1984) has completed an intensive analysis of the material from 40MU141, and has concluded that the Eva biface reduction system is distinct from the Morrow Mountain biface reduction system of the southern Appalachian region. Two distinct archaeological cultures can be defined. Benton cluster projectile points have been recovered from archaeological deposits throughout the Nashville basin, northern Alabama and northeast Mississippi (Alexander 1993, Alexander et al. 1983, Bense 1982, Futato 1983, Johnson 1989). Benton points are characterized by a distinctive lithic technology associated with Fort Payne chert and large biface knives.

The Late Archaic period in the Middle South is marked by a return to climates similar to that of the present day, a significant increase in population and the settlement or exploitation of new environments. Archaeologists date the Late Archaic from 3000 B.C. to 700 B.C. Late Archaic projectile point type chronology includes the following projectile point clusters: Ledbetter, Little Bear Creek, and Wade, followed by Flint Creek. These are interpreted as style horizons during the period from 3000 B.C. to 700 B.C. The Ledbetter projectile point cluster includes the Ledbetter, Pickwick and, possibly, the Maples type. These can be reliably dated to the period 3000 B.C. to 2000 B.C. The Little Bear Creek projectile point cluster follows, dating from approximately 2000 B.C. to 1500 B.C. This cluster includes the Little Bear Creek, Mulberry Creek, and Perry projectile point types. It is followed by the Wade cluster, including the Wade, McIntire, Cotaco Creek, Motley and Limestone projectile point types. During the Wade horizon, steatite and sandstone vessels were traded throughout the Southeast. Steatite does not occur in the earlier Ledbetter-Little Bear Creek horizons or in later contexts. The Archaic Wade phase has been defined in the Normandy Reservoir area by Faulkner and McCollough (1973, 1974, 1977, 1978) and dated to 1100 B.C. to 700 B.C. In the western Highland Rim, Amick et al. (1985) have described the Late Archaic phase as dating between 1200 B.C. and 700 B.C.

*Woodland*. The Woodland period in the Tennessee Valley can be arbitrarily divided into Early Woodland, 700 B.C. to 200 B.C.; Middle Woodland, 200 B.C. to A.D. 600; and Late Woodland, 600 B.C. to A.D. 1,000. The transition from Late Archaic to the Early Woodland is characterized by the addition of ceramics to the Late Archaic assemblage and a change toward increased flood plain horticulture.

In Middle Tennessee, few changes in lithic technology, settlement, or subsistence have been identified during the Late Archaic through early Woodland period. Culturally diagnostic artifacts from this period include the aforementioned Wade and Rounded Base clusters of projectile points. The Flint Creek cluster includes the Flint Creek projectile point/knife type, which also extends into the Middle Woodland period. Limestone tempered ceramics were likely to have been introduced into Middle Tennessee; however, an Early Woodland ceramic assemblage in Central Tennessee has never been clearly identified. In East Tennessee, quartzite and sand tempered ceramics with plain and fabric marked surface treatments may represent the Early Woodland ceramic assemblage. Limestone tempered ceramics with fabric marked surface are characteristic of Early Woodland horizon in Middle Tennessee.

The Middle Woodland period in the Tennessee Valley can be discussed in terms of two horizons. The Early Middle Woodland period dates from 200 B.C. to A.D. 200 and is characterized by limestone tempered ceramics exhibiting plain, fabric marked, check stamped, and simple stamped surface treatments, although stamped sherds constitute a minority ceramic type (Kimball and Baden 1985, Cole 1982). The projectile point types associated with Early Middle Woodland include Copena Triangular, Camp Creek, Greenville, and McFarland, as well as possibly some Flint Creek and other stemmed projectile points.

The Late Middle Woodland period dates from A.D. 200-700. It is distinguished by the addition of curvilinear paddle stamped ceramics to the preceding ceramic inventory. The relative percentage of limestone tempered fabric marked ceramics decreases, while cord marked ceramics increase correspondingly. Projectile point types associated with this period include Lanceolate Expanding Stemmed points, e.g., the Bakers Creek, Coosa, Coosa Notched, Mud Creek, and Swan Lake types. The Lanceolate Spike cluster is also associated with the Middle Woodland and includes the Flint River Spike, Ebenezer, and Bradley Spike projectile points.

The Late Woodland can be dated from approximately A.D. 700 to 1100. The Late Woodland existed 100 to 200 years later than the initiation of Mississippian culture elsewhere in central areas of the southeastern United States. Geographic isolation and a successful adaptation to the complex environment perhaps created a culture which was slower to adopt intensive horticulture, shell tempered ceramics, and complex chiefdom political hierarchies. Woodland burial mounds of the Hamilton culture are known throughout Southeast Tennessee (Cole 1975). Information regarding Late Woodland settlement-subsistence systems is largely lacking in the Tennessee and Cumberland River basins. There has been some suggestion that the small "shell midden rings" encountered along the flood plain in Nickajack and Chickamauga Reservoirs may be part of the late Woodland settlement.

The ceramic assemblage for the Late Woodland in Middle Tennessee consists of limestone tempered plain, limestone tempered brushed, and distinctive chert tempered ceramics (Faulkner and McCollough 1977, and Cobb and Faulkner 1978). Incurvate base Hamilton projectile points, Jacks Reef Corner Notched, Jacks Reef Pentagonal projectile points, and possibly microliths are the primary diagnostic lithic artifacts of this period.

*Mississippian*. The Mississippian period began at circa A.D. 1100 and continued until 1630 or later. The Mississippian culture has been divided by archaeologists into Early Mississippian (A.D. 1100 to 1250), Middle Mississippian (A.D. 1250 to 1500), and Late Mississippian (A.D. 1500 to 1630). During the Mississippian period, aboriginal culture reached fluorescence with multiple-mound towns, intensive maize horticulture, and a stratified, hereditary political structure.

Archaeologically, the Mississippian culture is represented by shell tempered ceramics, rectangular domestic structures, and triangular projectile points. Mortuary practices include flexed and extended interments and earthen tumuli constructions at primary mound centers. Mississippian economy is a continued adaptation to native resources, with the addition of a horticultural trinity of maize, beans, and squash. Deer, turkey, bear, small mammals, as well as fish, were consumed by the Mississippian population.

11

The Nashville basin was abandoned by Mississippian populations by 1450-1500 A.D., or later. There have been no significant contact period archaeological components discovered in Middle Tennessee, Central Kentucky or Northwest Alabama. In East Tennessee (Polhemus 1982, 1987, and Webb 1938) Mississippian groups are known to have occupied the area into the Historic period, 1650-1700. During this period the Muskogean speakers moved southward to join with other refugee groups in East Central Alabama (Smith 1987). This later became the seat of the Creek Confederacy, where it remained until the Removal to Oklahoma in 1836. The Cherokee have not been a significant culture in the history of Middle Tennessee.

#### **Previous Research**

Archaeological research on the Cumberland Plateau of Middle Tennessee has been intensively developed in the area of the Big South Fork National River and Recreation Area. Mandated coal mining and gas line archaeological projects are the second largest contributors to archaeological investigations on the Cumberland Plateau. Archaeological research in the upper Cumberland River has focused on the impoundment of Cordell Hull Reservoir and several Tennessee Department of Transportation (TDOT) construction projects.

From the Cumberland Plateau of north Central Tennessee, Ahler (1967), Benthall and Manning (1988), Childress and Buchner (1992), Des Jean (1983, 1990), Ferguson and Pace (1981), Ferguson, et al (1986), Fiegel (1979), Jolly (1979), Pace, Hoffman and Gardner (1986), Pace and Hayes (1988), Wilson and Finch (1976), and others have reported on surveys and excavations on small upland settlements. Elsewhere on the Cumberland Plateau, extensive archaeological survey and testing projects have been conducted by Alexander (1984), Coverdale (1977), Fiegel (1979), Hartney (1962), McCollough (1974, 1977), Pace and Kline (1976) and others. This sample of archaeological survey and excavation programs underrepresents a group of neglected archaeological sites. This is due to the low density of archaeological deposits and lack of extensive Federally funded development in the upland environments.

Few occurrences of alluviated archaeological sites are recorded in the eroded upland environment. Open sites on the Cumberland Plateau are generally small with multiple components represented. These sites are commonly located on Pleistocene terraces adjacent to drainage channels. In this topographic situation there is little potential for alluvial stratification to develop. Repeated plowing and erosion of these terraces has resulted in continued deflation and homogenization of the cultural deposits. However, truncated structures, burials, and extensive feature complexes intrusive into the subsoil may be encountered on these sites.

Where drainage channels pass over waterfalls and enter deep incised gorges, a series of intermittent prehistoric settlements occur. Archaeological sites are common in upland rockshelters located below the sandstone caprock throughout the perimeter of the Cumberland Plateau. Rockshelter excavations typically yield evidence of a multiple component occupation with little horizontal or vertical separation (Hartney 1962, Pace, Gardner, and Hoffman 1986). Extensive bluff shelter sites have been recorded east of the study corridor, in the Big South Fork drainage,

by Des Jean (1983, 1990). However, none were located within the right-of-way.

These settlements appear to have been employed as intermittent camps whose occupants focused on specialized seasonal activities. During the 20th century, the rockshelters have served coonhunters, moonshiners, and weekend campers.

Upper Cumberland River Archaeological research has focused on the impoundment of Cordell Hull Reservoir and several TDOT construction projects. Morse (1963) and Polhemus (1963) conducted archaeological surveys and tested numerous sites within the Cordell Hull impoundment area. The Robinson Site, investigated by Morse (1967), contained an extensive shell midden with evidence of permanent structures, burials and feature complexes. Cridlebaugh (1983) investigated the Penitentiary Branch Site which also had evidence of a Late Archaic Shell midden with structures and burials. In Jackson County, Butler (1975) located stratified cultural deposits on the Cumberland River flood plain and Walling (1988) investigated two lithic scatters overlooking the Roaring River. Bentz (1986) excavated the Chapman Site and documented a unique Terminal Archaic component radiocarbon dated to B.C. 800-700. This is 500 years later than other previously known Wade horizon material. The Middle Woodland deposits at the Hurricane Branch Site were investigated by Dillehay et al. (1982). Amick (1978) investigated site 40JK34. Ball (1979) also investigated a Middle Woodland settlement at the Salt Lick Recreation Area. The Austin Peay bridge across the Cumberland River has been investigated by Kim and Bentz (1992).

In Cumberland County, relatively few archaeological resources have been identified. The University of Tennessee performed the largest archaeological survey in the county for the General Development Corporation in 1973. Dickson recorded three surface indications and one rockshelter (40CU5). This reconnaissance also included parts of surrounding Putnam and White Counties (Dickson 1973). Research conducted for the Soil Conservation Service at the Crossville Fairground Park recovered no archaeological resources (Peterson 1976). Surveys of the Crossville Sewer Facilities Planning Area (Hood 1977), the Crossville VF Corporation site in the Crossville-Cumberland County Industrial Park (DuVall 1988), the Coal Energy Permit Area #6 (DuVall 1984), and Cumberland Mountain State Park (TDOA 1985) recorded similar negative results. TDOT research for the statewide bridge replacement project and the I-40 Interchange at State Route-299 and State Route-101 also failed to identify any archaeological sites (TDOT 1982, 1985, 1987). However, DuVall (1989) recorded two undetermined prehistoric sites (40CU9 and 40CU10), and one Early Archaic site (40CU11).

## **Cumberland County History**

Before Tennessee achieved statehood in 1796, the area that now comprises Cumberland County existed as a frontier wilderness to European Americans and an infrequently used hunting ground to Native Americans. The Cumberland Plateau, the Cumberland Gap, the Cumberland River, and later, Cumberland County, derive their name from the Duke of Cumberland, prime minister of England during the 1748 exploration of the area by Englishman Dr. Thomas Walker.

Early travellers established trails to cross the Cumberland mountains. One such trail, the "Cumberland Trace" later became the "Walton Road" and served as a protected thoroughfare for settlers crossing the area (Wells 1990). Like much of early Tennessee, the Cumberland Plateau area was uninhabited, although claimed, by regional tribes like the Chickasaw, the Choctaw, and, most prominently, by the Creek and Cherokee. Native American claims to the area were dispelled on 25 October 1805 by the signing of the Tellico Treaty which stipulated the sale of Cherokee land entitlements to the United States (Bullard and Krechniak 1986).

Regional historians refer to the area that now includes Cumberland County as "The Road to Somewhere Else" due to the thousands of settlers who crossed the area as they migrated from Virginia, Maryland, North and South Carolina, and New York to the western frontiers of the expanding country (Bullard and Krechniak 1986). Economic development in the area occurred slowly, but the many crossroads that traversed the land resulted in permanent settlement by the early pioneers. As the population continued to increase, the 1856 Tennessee Legislature established by law the formation of Cumberland County, with Crossville as the County seat, from the surrounding counties of Bledsoe, Roane, Morgan, Fentress, Rhea, Putnam, Overton, and White (Brookhart 1996).

The Civil War halted development of the still lightly populated area. Those who did live here were evenly divided as men from the area fought each other from different sides of the battle line. The Confederate and Union forces fought no major battles in Cumberland County, but the area still suffered from pillaging and encountered frequent troop movement (Brookhart 1996).

After the Civil War, investment by land-owners from the Northeast and the construction of the Tennessee Central Railroad created relatively rapid development of Cumberland County. Development continued after World War I and through the Depression years due to massive road-building programs and the formation of Cumberland Mountain State Park and the Catoosa Wildlife Area (Bullard and Krechniak 1986).

The "New Deal" Administration of President Franklin D. Roosevelt created the Cumberland Homesteads Project, one of the nation's subsistence programs during the Depression. Bob Lyons, the county's farm agent, garnered approval for the 27,802-acre, 251 homesteads project which employed hundreds and attracted industry into the area (Prosser 1996). Some of the Homesteads Project's stone homes and cottages still line Highways 68 and 127.

## **Cumberland Homesteads Historic District**

The Cumberland Homesteads Historic District was nominated to the National Register of Historic Places for its significance in community planning and social history. Developed by the federal government to alleviate the economically challenging era of the Depression, the Cumberland Homesteads still retains its historic identity. The Historic District is located on approximately 10,250 acres southeast of Crossville, Cumberland County, Tennessee (Figure 3).

The New Deal administration of F.D. Roosevelt established the Cumberland Homesteads as a Subsistence Farm Community in 1934. According to the Subsistence Homestead Program, the Cumberland Homesteads provided housing for the unemployed willing to form a cooperative community. The original area consisted of 27,802 acres of land with 251 Farm Homesteads constructed with indigenous Crab Orchard Sandstone on an average 16 acre lot. A typical Farm Homestead included a residence with a combination of outbuildings designed for the resettlement of families onto subsistence farms. Some homesteads still retain their outbuildings, but in some cases, residence buildings and outbuildings exist independently. Community designer William Macy Stanton used 15 different house designs, only 11 of which were repeated (Tennessee Historical Commission 1988).

The original Homesteads community included several public buildings in addition to the Farm Homesteads. The most notable of these buildings, the Cumberland Homesteads Tower, housed administrative offices and the community water tank, and today serves as a local museum. Behind the Tower stands the Homesteads Schools including elementary and high school buildings, a Home Economics Lab, and a Craft Building (Prosser 1996).

Also included in the Historic District, and built contemporaneously with the Homesteads, is the Cumberland Mountain State Park. Constructed by the Civilian Conservation Corp (CCC), the 1300 acre park still serves its original function as a recreational facility to the community. An accompanying mill, dam, and other structures associated with the park were also built using native materials from the area (Tennessee Historical Commission 1988). New construction in the area has yet to severely detract from the historical significance of the district. The NRHP nomination forms on file at the Tennessee Historical Commission are included in the appendix of this report.

## CHAPTER II

## FIELD AND LABORATORY METHODS

#### Field Methods

The field survey included systematic pedestrian visual inspection of the entire project area. Areas of fair to good ground surface visibility, such as cultivated cropland and eroded road beds, were comprehensively investigated. Shovel tests were conducted in areas of poor surface visibility. Shovel tests were excavated at 30 m intervals across the project area. The survey transects were spaced at 15 m intervals parallel to the right-of-way. Perennially inundated areas and areas with a slope of over 12<sup>o</sup> were considered to have low potential for site location, and were sampled at a lower density. Exposed bank profiles along the drainage channels and ditches adjacent to the highway right-of-way were also examined. Higher density shovel testing was performed on landforms exhibiting a greater potential for site discovery. Seasonally flooded areas were shovel tested at a lower frequency. Shovel tests were also excavated to confirm the disturbed nature of portions of the proposed right-of-way. The areas not shovel tested are indicated in Figure 3.

Shovel tests were 30 cm<sup>2</sup> and were excavated 5 cm into sterile subsoil. Shovel tests located on a flood plain were excavated to subsoil or a maximum depth of effective shovel testing, 75-100 cm below the surface. If the soil stratigraphy warranted deeper testing, a soil auger was used to sample deeper levels of a flood plain. Fill from these shovel tests was screened through 1/4" mesh hardware cloth. Records of individual shovel tests were maintained. The records included the location, depth, stratigraphy, and recovered artifacts for each shovel test. The locations of shovel tests were indicated on plan sheets provided by the TDOT. Disturbed areas were restored as nearly as possible to their original condition.

All resident landowners whose property was investigated by the field crew were contacted. Access permission was obtained in all situations. The landowner contact also provided valuable information regarding the location of former domestic structures, and prehistoric site locations within the general area.

Site investigation and evaluation included a sufficient number of shovel tests to determine the horizontal and vertical site limits, the basic site type, and the potential significance of the site. Site perimeters outside of the right-of-way were evaluated to the extent that the boundaries could be estimated. Surface collections were also made from sites encountered during the survey. The collection of culturally and temporally diagnostic artifacts was emphasized, but a sample of all artifact classes observed was collected.

The field procedures employed were adapted to the specific surface conditions encountered during the fieldwork. Generally, three types of field conditions were encountered: (1) eroded areas where logging or cultivation exposed the ground surface; (2) areas of dense brush or timberland; and (3) pasture. In areas where the ground surfaces were readily observable, pedestrian transects for surface observation were spaced at 20 m intervals. Any cultural material observed was collected and notes made on the specific locations. Woodlots, areas of dense brush, and pastured fields where the ground surface could not be observed were shovel tested.

After the location of a find, the boundaries of each cultural deposit were determined within the project right-of-way. Where appropriate, the shovel testing interval was reduced to 10 m and the shovel testing transects were placed in a cruciform pattern. The screened shovel tests were expanded to define the site boundaries. A surface collection was obtained, if possible. A sketch map showing site limits, shovel test placement, and other pertinent information was made. This sketch map will be transferred to the right-of-way plans supplied by TDOT. These plans are the reference for the sketch maps showing the location of cultural deposits. Field observations were recorded on standardized forms including field notes and shovel test forms. A photographic record of the archaeological properties identified during the survey was also maintained. All cultural materials, project records, and photographs will be transferred to the TDOA as outlined in the Tennessee Archaeological Permit application.

The field techniques resulted in optimal coverage of the project area. Criteria for describing a site were obtained by field observations regarding the quantity, the vertical and horizontal distribution of the artifacts recovered, and observation of any features present. The cultural deposits recovered in this project have been described by four site classes. An isolated find is an artifact recovered in isolation or with no observable context relative to any other artifacts. An isolated find may, for example, be a projectile point in a field or a flake recovered in a screened shovel test. Historic isolated finds recovered consist of a scatter of 19th or 20th century debris. These isolated finds are generally associated with a domestic structure that was adjacent to the right-of-way, or possibly a trash dump adjacent to the road. Isolated finds are not given TDOA site numbers, and this group of sites is not considered as eligible for the NRHP.

Minimal lithic scatters are one of the most common sites in the Tennessee Valley Uplands. These sites may be under represented in this survey. However, this class of sites is not commonly eligible for inclusion in the NRHP. A lithic scatter is the second class of site recorded during the field investigations. A lithic scatter consists of one or more chert artifacts recovered during shovel testing of a site. There is no organic staining in the soil on the lithic scatter type of sites. While these sites may contain intact subsoil features or burials, these features are not certain. A midden is the most dense archaeological deposit encountered. This type of site contains an intensive deposit of chert debris, firecracked rock and, likely, ceramic artifacts. The soil is typically dark brown to black with intense organic deposits. This type of site typically contains intact subplowzone features; human graves are likely present in the subsoil, and the sites are generally eligible for inclusion in the NRHP. All sites containing midden or moderate artifact density are likely to be located through the field methods described above.

Historic domestic archaeological finds were also recorded during the field survey. These types of finds and sites are generally late 19th through middle 20th century domestic residences or activity areas. The Tennessee Historical Commission (THC) has completed an inventory of all the standing structures in Cumberland County. The THC files were consulted during the background research, and the structure numbers and a brief summary recorded. Standing structures were not considered as part of this survey.

During the fieldwork, a geomorphological analysis of the flood plains crossed by the project rightof-way was conducted. This was done to identify locations where buried cultural deposits may be located, and to project models of topography where prehistoric settlements may be located. Shovel testing and deep posthole excavation were used for soil profile evaluation.

## Laboratory Analysis

Laboratory analysis of artifacts recovered was conducted at AAC's laboratory. Collected material was washed, categorized, and counted. Standardized analysis forms were used to record data from the cultural materials. Collected material was sorted into morphological categories appropriate for Southeastern prehistoric and historic studies.

## Curation

Recovered artifacts were labeled to maintain provenience control. All recovered cultural material has been cleaned and packaged for curation according to the standards and guidelines specified by the TDOA.

#### **CHAPTER III**

#### ISOLATED FINDS

Four isolated finds were recovered within the proposed right-of-way. The artifacts are described below and a potential context for the origination of the material described.

Isolated Find 1

UTM: Zone 16; Easting 681170; Northing: 3975900. Figure: 3.

Elevation: 521-527 m (AMSL). Center Line Designation: N/A

Surface Collection: 1-Primary Flake.

1-Bifacial Thinning Flake

Cultural Affiliation: Undetermined Prehistoric.

**Isolated Find 2** 

UTM: Zone 16; Easting 681120; Northing: 3975930. Figure: 3.

Elevation: 524-530 m (AMSL). Center Line Designation: N/A

Surface Collection: 1-Glass, Blue, Blown, Container 2-Mason Jar Lid Fragment 1-White ware, Body, Undecorated 1-White ware, Rim: Gold Painted 1-Yellow ware, Rim, Black Hand-Painted

Cultural Affiliation: Late 19th to 20th Century.

**Isolated Find 3** 

UTM: Zone 16; Easting 680640; Northing: 3979700. Figure 3.

Elevation: 567-570 m (AMSL), Center Line Designation: N/A

Surface Collection: 1-White ware, Body, Undecorated

Cultural Affiliation: Late 19th to 20th Century.

## **Isolated Find 4**

UTM: Zone 16; Easting 680180; Northing 3978700. Figure 3.

## Elevation: 1760 ft. Center Line Designation: N/A

Shovel Tests (n=13, 5 positive): Shovel Test 1 1-White ware, Plain 1-Unidentified Iron Fragment Shovel Test 3 1-Light Blue Container Glass with Bead Decoration Shovel Test 4 1-White ware, Plain 1-Aqua Container Glass, Mold Blown Shovel Test 9 1-Light Blue Container Glass with Bead Decoration Shovel Test 10 1-Unidentified Iron Fragment, Engraved "4", Plate-like

Cultural Affiliation: Late 19th to 20th Century.

## CHAPTER IV

#### GEOMORPHOLOGY

#### Introduction

Models of the regional geomorphology and settlement patterns from the upland southeast have been reviewed in the previous section. The fieldwork identified the Three Mile Creek and One Mile Creek channels as areas where potential alluviated archaeological deposits may have been present. Both areas were investigated; however, no areas with potential intact archaeological deposits were identified during the fieldwork.

#### Three Mile Creek

The Three Mile Creek channel is located on State Route 28, approximately 4 km southeast of Crossville. At this location, the drainage channel has incised below the surrounding topography approximately 4-6 m. The bottom and sides of Three Mile Creek contained exposed sandstone outcrops. Seasonal flooding would scour any potential archaeological sites in the creek channel. No intact soil profiles were identified.

#### **One Mile Creek**

The flood plain of One Mile Creek was also crossed by the proposed right-of-way of the State Route 392 extension, approximately 1.7 km southeast of Crossville. The present One Mile Creek channel meanders across the sandy loam soil of recent flood plain alluvium. The valley floor is symmetrical in the cross-valley profile. Approximately 1.25 km downstream, the channel of One Mile Creek changes its gradient at the kickpoint. Here the drainage enters an incised channel approximately 3-4 m deep.

The terraces north and south of One Mile Creek appear to have been farmed in the past. The first stratum encountered was a stratum of yellowish brown A-horizon/plowzone extending to 15-22 cm below the surface. Below this is a yellow brown sandy clay with Mn nodules extending to 30 cm below the surface (Figure 4). The study area investigated possible early Holocene or late Pleistocene deposits. The area has been cultivated and the profile truncated by erosion in the past. This location had the highest potential for the discovery of stratified subsurface cultural deposits. However, none were located during this testing.

The flood plain of One Mile Creek was also investigated during the shovel testing program. Shovel testing indicated recent coarse sand and sandy loam soils crossbedded with organic mats. This deposit may be part of the T-O deposits which have occurred since the early historic settlement in the region. A series of A-horizon soils have developed over the poorly sorted sand and fine gravel deposits.

The investigation indicated that there was little potential for the discovery of cultural deposits. Within the project area, Three Mile Creek is a shallow meandering stream that has incised 10-15 m into the underlying sandstone. Bedrock outcrops of sandstone were evident on the bank and bottom of the creek channel.

## Summary

The two Holocene drainage channels investigated during this project were scoured and underdeveloped Holocene features. The deposition and chronology of this flood plain scouring and fill episodes have not been investigated by researchers in the upland southeast to date. The Three Mile Creek channel has incised into the sandstone bedrock and the bedrock restricts the lateral meandering of the channel. The One Mile Creek terrace and flood plain has been flushed by erosion and the flood plain is currently refilling with modern alluvial material.

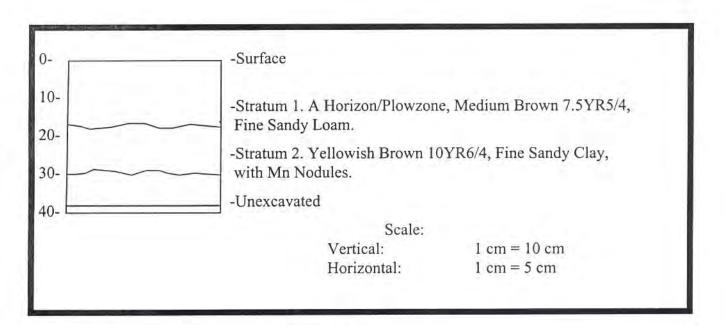


Figure 4. Profile of Shovel Test at One Mile Creek.

#### CHAPTER V

## SUMMARY AND RECOMMENDATIONS

## **Results of Investigation**

At the request of James + Associates, Inc., consultants to the Tennessee Department of Transportation (Moore 1997), a Phase I archaeological survey and geomorphological survey of State Route 28 and proposed State Route 392 extension was conducted by Alexander Archaeological Consultants during May 1997 and January 2000. Four isolated finds were located and evaluated during the survey. However, the investigation recovered insufficient evidence to warrant any recommendations regarding the need for further archaeological investigation.

Archival research at the Tennessee Historical Commission located documentation concerning the Cumberland Homesteads Historic District. The Cumberland Homesteads community was founded in 1934 as part of F.D. Roosevelt's New Deal. The original area incorporated 27,802 acres located on both sides of the State Route 28 project area. The public and community buildings of the project are nominated to the National Register of Historic Places. Several of these structures are located adjacent to the project area. Cumberland Mountain State Park is also located adjacent to the project area. Neither the Cumberland Homesteads nor Cumberland Mountain State Park will be impacted by the proposed construction. No further investigation is recommended for the archaeological resources within the project area.

#### **Emergency Discoveries**

No Phase I archaeological survey, despite an intense effort, and excellent research sampling strategy, precludes the possibility that an important archaeological site may be discovered during the subsequent construction activities. Federal cultural resource preservation statutes mandate that should such materials become apparent during construction, such materials should be identified and evaluated for eligibility for inclusion in the National Register. Should human remains be encountered during the construction, the Tennessee Legal Code specifies that work should cease immediately and the proper authorities be notified.

#### **REFERENCES CITED**

#### Ahler, S.A.

1967 The Faust Shelter (40MO8). Manuscript on file, McClung Museum. University of Tennessee, Knoxville.

#### Alexander, L.S.

- 1984 Archaeological Reconnaissance of Chandler and Blount Mountains Pump Storage Sites St. Clair, Blount, and Etowah Counties, Alabama. University of Alabama, Office of Archaeological Research, Report of Investigations 41. Moundville.
- 1993 Lithic Analysis. In: Archaeological Data Recovery, Jefferson Street (FAU-3285) Bridge: The East Nashville Mounds (40DV4) and French Lick/Sulphur Dell (40DV5) Sites, Nashville, Davidson County, Tennessee. By Richard L. Walling, Lawrence S. Alexander, and Evan Peacock. Tennessee Department of Transportation, Environmental Planning Office, Nashville. Panamerican Consultants, Inc., Report of Investigations 36. Tuscaloosa, Alabama. Submitted to Tennessee Department of Transportation, Environmental Planning Office, Nashville.

Alexander, L.S., C. Gyllenhaal, D.R. Lenhardt, and D. Zeanah

1983 The Archaeology of the Emmett O'Neal Site (22Ts954) in the Bay Springs Segment of the Tennessee-Tombigbee Waterway, Tishomingo County, Mississippi. University of Alabama. Office of Archaeological Research Report of Investigations 31. Moundville Alabama. Report Submitted to U.S. Corps of Engineers, Nashville.

#### Amick, D.S.

1978 Archaeological Investigations At 40JK34 Cordell Hull Reservoir, Jackson County, Tennessee. U. S. Army Corps of Engineers, Nashville District.

#### Ball, D.B.

1979 Archaeological Reconnaissance Survey and Salvage Excavations In the Salt Lick Recreation Area, Jackson County, Tennessee. Anthropology Department, University of Tennessee, Knoxville.

## Benthall, J.L.

- 1991a Study Unit No. 8A. The Archaeology of the Early Archaic Period of the Cumberland Plateau, Tennessee. Report on file at the Tennessee Division of Archaeology, Nashville.
- 1991b Study Unit No. 8C. The Archaeology of the Late Terminal Archaic Period of the Cumberland Plateau, Tennessee. Report on file at the Tennessee Division of Archaeology, Nashville.

1991c Study Unit No. 14. The Archaeology of the Early Woodland Period of the Cumberland Plateau, Tennessee. Report on file at the Tennessee Division of Archaeology, Nashville.

#### Benthall, J.L., and M.K. Manning

1988 Archaeological Excavations at High Knob (40MO82), An Early Archaic Site in Morgan County, Tennessee. *Tennessee Anthropologist* 13(2):124-148.

## Bense, J.A. (Assembler)

1982 Archaeological Investigations at Eleven Sites in Itawamba and Monroe Counties, Mississippi, Tombigbee River Multi-Resource District. University of West Florida, Office of Cultural and Archaeological Research, Report of Investigations 3. Pensacola.

## Bentz, C., Jr., Editor.

1986 The Chapman Site: A Terminal Archaic Settlement in the Middle Cumberland River Drainage of Tennessee. *Tennessee Anthropological Association Miscellaneous Paper No.* 11. University of Tennessee, Knoxville.

## Birkeland, P.W.

1974 Pedology, Weathering and Geomorphological Research. Oxford University Press: New York.

## Brackenridge, R.G.

- 1981 Late Quaternary Floodplain Sedimentation Along the Pomme de Terre River, Southern Missouri. *Quaternary Research*, v 15, p 62-76.
- 1984 Alluvial Stratigraphy and Radiocarbon Dating Along the Duck River, Tennessee: Implications Regarding Flood Plain Origin. *Geological Society of America Bulletin* 95:9-15.

#### Braum, L.E.

1950 The Deciduous Forests of Eastern North America. Blakinston Company, Inc. Philadelphia.

#### Brookhart, G.D.

1996 "Cumberland County Short History." In A Tapestry of Cumberland County, Tennessee: Woven in Words and Pictures. Edited by Helen Derrick and Carolyn Hamby Hedgecoth. Windmill Publications, Inc.: Mt. Vernon, IN.

#### Broster, J.B., and M.R. Norton

1990 Lithic Analysis and Paleo-Indian Utilization of the Twelkemier Site (40HS173). Tennessee Anthropologist 15 (4):115-131. Broyles, B.

- 1966 Preliminary Report: The St. Albans Site, Kanawha County, West Virginia. West Virginia Archaeologist. 19:1-43.
- 1971 Second Preliminary Report: The St. Albans Site, Kanawha County, West Virginia. West Virginia Geological and Economic Survey, Report of Archaeological Investigation 3. Morgantown.

Bullard, H., and J.M. Krechniak.

1986 Cumberland County's First Hundred Years, Third Printing. Williams Printing Company: Nashville, TN.

Butler, B.M.

1975 Archaeological Survey of the Proposed Gainesboro Port Authority Land. Unpublished Manuscript Tennessee Division of Archaeology, Nashville.

## Campbell, J.R., and D.L. Newton

1995 Soil Survey of Fentress and Pickett Counties, Tennessee. U.S. Department of Agriculture, Soil Conservation Service, U.S. Government Printing Office, Washington, D.C.

#### Childress, M.R., and C. A. Buchner

1992 Prehistoric Archaeology of the Atkins (40PM85), Bilbrel (40PM89), and Wiley (40PM90) Sites: A Report of Phase III Data Recovery Along Upper Spring Creek, Putnam County, Tennessee. Garrow and Associates, Inc.

## Chorley, R.J.

1971 Physical Geography, A Systems Approach. Prentice Hall. London.

#### Chapman, J.

1977 Archaic Period Research in the Lower Little Tennessee River Valley-1975: Icehouse Bottom, Harrison Branch, Thirty Acre Island, Calloway Island. University of Tennessee, Department of Anthropology, Report of Investigations 18. Knoxville.

#### Cobb, J.E., and C.H. Faulkner

1978 The Owl Hollow Project: Middle Woodland Settlement and Subsistence Patterns in the Eastern Highland Rim of Tennessee. Final Technical Report submitted to the National Science Foundation. Manuscript on file at the University of Tennessee, Department of Anthropology, Knoxville.

#### Coe, J.L.

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

## Cole, G.G.

1982 The Murphy Hill Site (1Ms300): The Structural Study of a Copena Mound and Comparative Review of the Copena Mortuary Complex. University of Alabama, Office of Archaeological Research, Research Series 3. University. Report submitted to Tennessee Valley Authority, Chattanooga.

## Cole, P.E.

1975 A Synthesis and Interpretation of the Hamilton Mortuary Pattern in East Tennessee. Masters Thesis. University of Tennessee, Department of Anthropology, Knoxville.

#### Coverdale, J.C. Jr.

1977 An Archaeological Reconnaissance of the Proposed Laurel Branch Pumped Storage Project. Report on file at TVA Natural Resources Division. Chattanooga, Tennessee.

#### Cridlebaugh, P.A.

1983 Penitentiary Branch: A Late Archaic Cumberland River Shell Midden in Middle Tennessee. Tennessee Division of Archaeology, Nashville.

#### Delcourt, H.R.

1979 Late Quaternary Vegetation History of the Eastern Highland Rim and Adjacent Cumberland Plateau of Tennessee. *Ecological Monographs* 49 (3):255-280.

## Delcourt, P.A.

1980 Quaternary Alluvial Terraces of the Little Tennessee River Valley, East Tennessee. In: The 1979 Archaeological Investigations in the Tellico Reservoir. Edited by Jefferson Chapman. Tennessee Valley Authority Publications in Anthropology Number 24. Norris, Tennessee

## Des Jean, T.

- 1983 An Archaeological Survey and Testing of Proposed Construction Areas and Road Rightof-Ways in the Blue Heron Development Sites and Blue Heron, Devils Jump, and Leatherwood Ford Overlooks of the Big South Fork National River and Recreation Area. 2nd Interim Report of the University of Tennessee Big South Fork Archaeological Project. Submitted to U.S. Army Engineer District, Nashville.
- 1990 The Summer Public Archaeology Program at the Big South Fork National River and Recreation Area: Site Reports. National Park Service, Big South Fork National River and Recreation Area, Oneida, Tennessee. Submitted to U.S. Army Engineer District, Nashville.
- 1994 Oil Well Branch Road: A Transitional Archaic-Woodland Period Site at Big South Fork National River and Recreation Area: Report of Excavations 1993. National Park Service, Big South Fork National River and Recreation Area, Oneida, Tennessee.

#### Des Jean, T., and J.L. Benthall

1994 A Lithic Based prehistoric Cultural Chronology of the Upper Cumberland Plateau. Tennessee Anthropologist 19 (2):91-115.

#### Dickson, B.D.

1973 Final Report on the Archaeological Site Survey Sponsored by General Development Corporation During May of 1973 on the Cumberland Plateau Near Mayland, Tennessee. Department of Anthropology, University of Tennessee, Knoxville.

## Dickson, R.R.

1960 The Climate of Tennessee. In: *Eastern States, Climates of the United States*. Vol. 1 by the National Oceanic and Atmospheric Administration. U.S. Department of Commerce. Water Information Center, Port Washington, N.Y.

#### Dillehay, T., T. Gatus, N. Malley

1982 Archaeological Investigations into the Prehistory of the Middle Cumberland Valley: The Hurricane Branch Site (40JK27), Jackson County, Tennessee. Archaeological Report 68. University of Kentucky, Department of Anthropology, Lexington.

## DuVall, G.D.

- 1984 An Archaeological and Historical Assessment of the Coal Energy, Inc., Permit Area #6, Cumberland County, Tennessee. Prepared for Kenwill, Inc.
- 1988 Records Search and Field Assessment of the Proposed VF Corporation Outlet Locations for Archaeological and Historical Sites, Crossville, Cumberland County, Tennessee. No publication information listed.
- 1989 An Archaeological Reconnaissance of the Proposed City of Crossville Industrial Park, Crossville, Cumberland County, Tennessee. Development and Environmental Planning Associates, Inc. Submitted to City of Crossville. Crossville, Tennessee.

#### Faulkner, C.H. and Major C.R. McCollough

- 1973 Introductory Report of the Normandy Reservoir Salvage Project; Environmental Setting, Typology, and Survey. Department of Anthropology, University of Tennessee, Report of Investigations No 11. Knoxville.
- 1974 Excavations and Testing, Normandy Reservoir Salvage Project: 1972 Season (Normandy Project Volume 2). University of Tennessee, Department of Anthropology, Report of Investigations No. 12. Knoxville.

Faulkner, C.H. and Major C.R. McCollough (editors)

- 1977 Fourth Report of the Normandy Archaeological Project: 1973 Excavations of the Hicks I (49CF62), Eoff I (49CF32) and Eoff III (49CF107) Sites. University of Tennessee, Department of Anthropology, Report of Investigations No. 19. Knoxville.
- 1978 Fifth Report of the Normandy Archaeological Project: 1973 Excavations at the Banks V site (49CF111). University of Tennessee, Department of Anthropology, Report of Investigations No. 20. Knoxville.

Fenneman, N.W.

1938 Physiography of the Eastern United States. McGraw Hill, New York.

Ferguson, T.A., and R.A. Pace

1981 Toward the Effective Management of Cultural Resources on the Cumberland Plateau of Tennessee: The Distribution of Prehistoric Cultural Resources. Report submitted to the Tennessee Historical Commission, Nashville.

Ferguson, T.A., R.A. Pace, J.W. Gardner and R.W. Hoffman

1986 An Archaeological Reconnaissance and Testing of Indirect Impact Areas Within Selected Development Sites of the Big South Fork National River and Recreation Area. Final Report of the University of Tennessee Big South Fork Archaeological Project. Submitted to U.S. Army Engineer District, Nashville.

## Fiegel, K.

1979 An Archaeological Survey of the Leatherwood Ford Road within the Big South Fork National River and Recreation Area: Fentress and Scott Counties, Tennessee. Submitted to the National Park Service. Southeastern Archaeological Center, Tallahassee, Florida.

Foley, L. and J. Chapman

1977 Stratigraphy and Geomorphology of the Icehouse Bottom, Harrison Branch, and Patrick sites. Appendix to: Archaic Period Research in the Lower Little Tennessee River Valley-1975: by Jefferson Chapman, pp. 179-206. University of Tennessee, Department of Anthropology, Report of Investigations 18. Knoxville.

#### Futato, E.M.

1983 Archaeological Investigations in the Cedar Creek and Upper Bear Creek Reservoirs. University of Alabama, Office of Archaeological Research, Report of Investigations 29. Moundville.

Gatus, T.W. and D.R. Maynard

1978 Karst Topography: A Factor Associated with Paleo-Indian Settlement in Certain Areas of Kentucky. *Tennessee Anthropologist 3* (2):203-210.

#### Hack, J. T.

1965 Geomorphology of the Shenandoah Valley, Virginia and West Virginia, and the Origins of Residual Ore Deposits. U.S. Geological Survey Professional Paper 484.

#### Hardeman, W.D.

1966 Geologic Map of Tennessee, East-Central sheet. (Scale 1:250,000) Tennessee Department of Conservation, Division of Geology. Nashville.

#### Hartney, P.C.

1962 Peter Cave, Tennessee. Tennessee Archaeologist. 18(1):23-45.

#### Hofman, J.L.

1984 Contextual Studies of the Middle Archaic Component at Cave Spring in Middle Tennessee. Masters Thesis. Department of Anthropology, University of Tennessee, Knoxville.

#### Hood, V.P.

1977 An Archaeological Survey of the Crossville 201 (Sewer) Facilities Planning Area, Cumberland County, Tennessee. Prepared for Wayne L. Smith and Assoc.

#### Hubbert, C.M.

1989 Paleo-Indian Settlement in the Middle Tennessee Valley: Ruminations from the Quad Paleo-Indian Locale. *Tennessee Anthropologist 14:148-164*.

#### Johnson, J.K. and S.O. Brooks

1989 Benton Points, Turkey Tails, and Cache Blades: Middle Archaic Exchange in Midsouth. Southeastern Archaeology Volume 8 Number 2.

#### Jolly, R.

1979 Archaeological Reconnaissance in the Headwaters of the Caney Fork River in Middle Tennessee, *Tennessee Anthropologist* 4(1):32-62.

#### Kim, Y., and C. Bentz

1992 Phase I Archaeological Investigation of Wetland Mitigation Basin, Austin Peay Bridge Replacement Over the Cumberland River, State Route 56, Jackson County, Tennessee. Tennessee Department of Transportation, Environmental Planning, Nashville.

#### Kimball, L.R. and W. Baden

1985 Qualitative Model of Woodland and Mississippian Ceramic Assemblages for the Identification of Surface Collections. In: *The 1977 Archaeological Survey: An Overall Assessment of the Archaeological Resources of Tellico Reservoir*. Edited by Larry R. Kimball. The University of Tennessee, Department of Anthropology, Knoxville.



STATE OF TENNESSEE DEPARTMENT OF TRANSPORTATION ENVIRONMENTAL PLANNING OFFICE SUITE 900, JAMES K. POLK BUILDING 505 DEADERICK STREET NASHVILLE, TENNESSEE 37243-0334 (615) 741-3653

June 3, 1996

Mr. Herbert Harper Deputy State Historic Preservation Officer Tennessee Historical Commission Clover Bottom Mansion 2941 Lebanon Road Nashville, TN 37243-0442

SUBJECT: Architectural Assessment for Proposed Improvements to State Route 28 (U.S. 127) from 0.16± km(0.1± mile) South of Saw Mill Road to Cleveland Street in Crossville, Cumberland County.

Dear Mr. Harper:

Enclosed is an architectural report concerning the above referenced project. It is the opinion of TN-DOT that the proposed project would have an adverse effect to the National Register listed Cumberland Homesteads Historic District. TN-DOT requests your review of this report pursuant to regulations contained within Public Law 699.

We look forward to your comments. Thank you for your help in this matter.

Sincerely,

madhe Carre

Martha Carver Historic Preservation Supervisor

Enclosure

cc: Mr. Tom Love Mr. Ray Brisson Mr. Gerald Kline



Tennessee Department of Transportation (TN-DOT) CULTURAL RESOURCE ASSESSMENT Architectural/Historical

# PROPOSED UNDERTAKING

LIT/RECORDS SEARCH:	9 November 1994
FIELD STUDY:	19 September 1994
SURVEY PARTY:	Martha Carver and Missy McLeod Brown, TN-DOT; Claudette
Stager, Elizabeth Straw, and Joe	Garrison, TN-SHPO
U.S.G.S. QUAD:	Crossville, 109 NE
COUNTY:	Cumberland (Location Map, Attachment One)
ROUTE AND TERMINI: to Cleveland Street in Crossville	State Route 28 from 0.16±km(0.1± mile) South of Saw Mill Road
PRO JECT DESCRIPTION.	The proposed project would improve the existing two lane route to us turning lane. The first section is from $0.16\pm km(0.1\pm mile)$ south of

four traffic lanes with a continuous turning lane. The first section is from  $0.16\pm km(0.1\pm mile)$  south of Saw Mill Road to  $0.32\pm km(0.2\pm mile)$  north of the State Route 28-68 intersection. The second section is from  $0.32\pm km(0.2\pm mile)$  north of the State Route 68-28 intersection to Cleveland Street in Crossville. Both of these proposed sections will consist of four traffic lanes, a continuous turning lane, shoulders with curbs and gutters and utility strips within a 32m (104 ft) right-of-way. Both sections are proposed but only section two is funded at the present time. Attachment Two contains a detailed project description.

## SURVEY RESULTS

Pursuant to regulations set forth in Public Law 699, staff historians surveyed the area of potential environmental impact for this project. The purpose of this survey was to identify any resources either included in or potentially eligible for inclusion in the National Register of Historic Places (eligibility criteria are set forth in 36 CFR 60.4). The area surveyed included land needed for additional right-of-way as well as areas which might possibly be affected by changes in air quality, noise levels, setting, and land use.

The project lies within the National Register listed Cumberland Homesteads Historic District. The field survey mentioned above did not identify any previously unrecorded properties which TN-DOT historians feel meet the eligibility criteria for inclusion to the National Register. It is the opinion of TN-DOT that the project, as presently designed, will have an adverse effect to the Cumberland Homesteads Historic District which is listed in the National Register of Historic Places. The district and effects to it are discussed in Attachment Three.

Principal Investigator: MARTHA CARVER, TN-DOT Metha Carre 6/3/96 File: \region 2\18sr28ar.doc TN-DOT Photos Roll # 759 Exposures 2-19A

900 j.k. polk bldg ' nashville, tennessee 37242-0334 ' (615) 741-3653 fax (615) 532-8451

# ATTACHMENT TWO: PROPOSED IMPROVEMENT

<u>Section I:</u> Length:  $2.6\pm$  km ( $1.6\pm$  miles) From  $0.16\pm$  km ( $0.1\pm$  mile) south of Saw Mill Road to  $0.32\pm$  km ( $0.2\pm$  mile) north of the State Route 28-68 intersection. The proposed typical section for this part of the project will consist of four traffic lanes, a continuous turning lane, shoulders with curbs and gutters and utility strips within a 32m (104 ft) rightof-way. A 75 kmh (45 mph) design speed is proposed. State Route 68 will be improved to the same typical section through the Deep Draw Road intersection. The intersection at State Route 28 and 68 will be modified and a signal installed.

Section II Length:  $5.0\pm$  km ( $3.1\pm$  miles) From  $0.32\pm$  km ( $0.2\pm$  mile) north of the State Route 68-28 intersection to Cleveland Street in Crossville. The proposed typical section will consist of four traffic lanes, continuous turn lane, shoulders with curbs and gutters and utility strips within a 32m (104 ft) right-of-way. A 75 kmh (45 mph) design speed is proposed. From Wells Road to Cleveland Street in Crossville it is proposed to drop the shoulders, thus requiring 26m (84 ft) of right-of-way. Due to the beginning of the commercial development south of Crossville, it was determined that the additional width required for shoulders would be detrimental to the adjacent properties. A 65 kmh (40 mph) design speed is proposed at the State Route 392 intersection, however, signal warrants will need to be determined after design traffic is available. It is proposed to use the existing vertical and horizontal alignments. The proposal typical section will follow the existing alignment with mostly a symmetrical widening.

### ATTACHMENT THREE: CUMBERLAND HOMESTEADS HISTORIC DISTRICT

SURVEY METHODOLOGY: Historic preservation specialists from TN-DOT surveyed the area of potential environmental impact on September 19, 1994. The purpose of this survey was to determine if any properties in the project impact area were either eligible for inclusion or included in the National Register of Historic Places. The area surveyed included land needed for additional right-of-way as well as areas which might be affected by changes in air quality, noise levels, setting, and land use. The Department's historians also consulted the survey files and the National Register of Historic Places files of the Tennessee State Preservation Office (TN-SHPO) in Nashville to identify any National Register-included properties in the general project area. One property in the area of the project, the Cumberland Homesteads Historic District, is listed in the National Register of Historic Places.

TN-DOT historians field reviewed the project with the staff of the TN-SHPO on September 19, 1994 to discuss effects and eligibility. The following attended this field review: Mr. Joe Garrison, Ms. Liz Straw and Ms. Claudette Stager of the State Historical Preservation Office, Mr. Pat Alexander, Mr. Jerry Moorhead, Mr. Charles Graves, Ms. Martha Carver and Ms. Missy McLeod of the Tennessee Department of Transportation.

INVENTORIED PROPERTIES: One property in the area of the project, the Cumberland Homesteads Historic District, is listed in the National Register of Historic Places in 1988. The Cumberland Homesteads Historic District contains approximately 11,400 acres and is located on the plateau of the Cumberland Mountains at the rear of Cumberland County seat of Crossville.

In an effort to offset the devastating effects of the Great Depressions on the country, President Franklin Delano Roosevelt initiated the New Deal programs to aid the nation's economy. The Cumberland Homesteads project started in 1933 as a part of this program under the Division of Subsistence Homesteads, a section of the Department of Interior. The government selected a site that was primarily undeveloped land largely acquired from timber companies. The government intended for the program to give low income/out-of-work farmers and industrial workers jobs, the opportunity to own homes, and to grow their own food and to farm on a relatively small scale in a "back-to-the-land"

movement. Although over 2,000 families applied to the Cumberland Homesteads, the government selected only 250 families. Communal programs for the participants included a non-profit medical association, a cannery, a general merchandise store, an interdenominational church, and women's club.

The Subsistence Homesteading program was based heavily on agrarian reverence for the land, the "back-to-the-land" philosophy and the premise that rural living was healthier than city living for the country's poor. The Subsistence Homestead program was meant to serve as a temporary relief measure and to represent a return to the "simpler and healthier" agrarian past the country once knew. The premise behind the homestead villages was to provide families with the means to raise their own vegetables, chickens, cows, or hogs to supplement their income. In addition to the subsistence farming, emphasis was placed on community cooperation and socialization. The goal was to reeducate the stranded families to a better and healthier way of life. In addition to developing homemaking skills, the women were strongly encouraged to work with crafts, especially weaving, as a method of providing additional support for their families.

The government developed a park as an integral component of the Homesteads project. The park was located adjacent to the Homesteads on approximately 1,500 acres of land perceived to be poor farm land and was first called the Cumberland Homesteads Park. When the State of Tennessee acquired the park in 1938, it changed the name to the Cumberland Mountain State Park. The Works Progress Administration (WPA) and the Civilian Conservation Corps (CCC) as well as the Homesteaders themselves cleared the land and performed the actual labor.

Architect William Macy Stanton designed the buildings and the layout of the colony. This design laid out a cohesively planned community containing farmsteads of a Macy-designed house and outbuildings distributed throughout the countryside around a central core which contained schools, offices, and other cooperative buildings. All of the houses and most major structures, such as the bridges, were built of indigenous Crab Orchard sandstone. The area originally contained 251 homesteads on lots averaging from four to thirty-five acres with the average homestead consisting of sixteen acres. The National Register nomination contains the following information about the farmsteads.

The most prevalent and recognizable property type associated with Cumberland Homesteads is the Farm Homestead. The Farm Homesteads include a collection of buildings and structures designed for the resettlement of needy families onto small subsistence farms. A Farm Homestead consisted of a residence and a combination of outbuildings that can include barns, chicken house, smokehouse, and privy. Several Farm Homesteads still retain most of their original outbuildings, however, there are some Farm Homesteads that have no extant historic outbuildings and some outbuildings with no extant historic residence. The residences of the Cumberland Homesteads are generally one or one-and-one-half story houses with indigenous Crab Orchard sandstone walls and gable roofs. All houses originally had open entrance porches, the vast majority with shed roofs. The Crab Orchard sandstone walls were constructed with either quarried stone or field stone. Approximately fifteen different house designs were used throughout the community, but only eleven of the plans were repeated. Homeowners were allowed to make minor changes to the stock plans and several houses were built with reversed plans, different orientation to the road and variations to interior room design. A few oneof-a-kind houses were constructed....

The Cumberland Homesteads provided work for its occupants as long as it was under construction. But the period of steady income ended with the completion of the farm homesteads in 1938. Homesteaders employed with the construction of the community were left without work and without a means to pay their rent on their new houses. In an effort to increase employment in the homesteads, the Resettlement Administration loaned \$55,000 to the Cumberland Homesteads Cooperative Association in December 1936. The loan helped to establish a sorghum plant, a cannery, and to operate a project coal mine. All of the projects failed for a variety of reasons; inexperience, crop failure, union troubles, lack of market for the finished project, and discovery of a pocket of coal instead of the expected vein. However, a lasting testament to this social experiment is the remaining collection of houses, farm support buildings, cooperative buildings, and other structures such as the bridges.

The Cumberland Homestead Historic District is an excellent example of a subsistence farm community built during the New Deal. The district is important for its role in community planning and development; social movements of the thirties involving cooperatives, community living and self-help movements; and as an important example of small worker's houses. The district retains its identity as a farm community and its integrity of plan. New construction in the community does not detract from the district's overall plan and feeling.

Located along the project corridor are approximately eleven contributing farmsteads and one public building, the park, and approximately four non-contributing residences and one public building.

**DISCUSSION OF EFFECTS**: Public Law 699 requires TN-DOT to consult with the Tennessee Historical Commission prior to demolishing, altering, or transferring any historic properties. This legislation requires TN-DOT to identify any properties (either above-ground buildings, structures, objects, or historic sites or below ground archaeological sites) of historic significance. For the purposes of this legislation, historic significance is defined as those properties which are included in the National Register of Historic Places or which are eligible for inclusion in the National Register. Although Public Law 699 requires TN-DOT to assess only direct impacts (demolition, alteration, or transfer of ownership), in an effort to more fully assess impacts, historians from TN-DOT also apply the Criteria of Effect, as defined in 36 CFR 800.9, to any historic resource. The existence of the Cumberland Homesteads Historic District has been noted from the earliest planning stages of this project and the design has been done in a manner to minimize harm as much as possible to the district. TN-DOT considered more minimal improvements than a four-lane with a continuous turning lane, such as an improved two lane but the existing facility is an improved two-lane roadway. Neither the existing facility nor a facility such as an improved two-lane with improvements such as a continuous turn lane meet the traffic needs of the area. TN-DOT also considered a divided boulevard type facility to lessen the visual impacts to the district, but the TN-SHPO preferred the present design which minimized the right-of-way take.

There was a field study on 19 September 1994 to review the proposed improvements to the surrounding historical area. The participants of this review were: Mr. Joe Garrison, Ms. Liz Straw and Ms. Claudette Stager of the State Historical Preservation Office, Mr. Pat Alexander, Mr. Jerry Moored, Mr. Charles Graves, Ms. Martha Carver and Ms. Missy McLeod of the Department of Transportation. TN-SHPO had three areas of concern: a horizontal curve encroached onto historical land and homestead house on Site 1, that the two separate entrances of access to State Route 28 (U.S.127) be maintained on Site 2 and the installation of a traffic light at the intersection of State Route 28 (U.S. 127) and State Route 68 on Site 3 in an effort to minimize harm to the district, TN-DOT has incorporated the TN-SHPO's design requests into the final design (refer to appendix one). Also, it is TN-DOT's policy to perpendicularly tee up side road intersections but due to the significance of road patterns. TN-DOT will leave the park entrance in its angled historic configuration. A map of the project with the boundaries of the historic district and a historic map of the Homesteads project with the road project highlighted as well as photographs of typical streetscapes in the district follow this section.

The Department in consultation with the TN-SHPO applied the Criteria of Effect as found in 36 CFR 800.9 to the Cumberland Homesteads Historic District:

800.9 Criteria of Effect and Adverse Effect

(a) An undertaking has an effect on a historic property when the undertaking may alter characteristics of the property that may qualify the property for inclusion in the National Register. For the purpose of determining effect, alteration to features of the property's location, setting or use may be relevant depending on a property's significant characteristics and should be considered.

(b) An undertaking is considered to have an adverse effect when the effect on a historic property may diminish the integrity of the property's location, design, setting, materials, workmanship, feeling, or association. Adverse effects on historic properties include, but are not limited to:

# (1) Physical destruction, damage, or alteration of all or part of the property;

The proposed project will widen the existing two lane route to four traffic lanes with a continuous turn lane. The project is divided into two sections for funding and study purposes. According to the functionals, most of the project will be built within the existing right-of-way. However, according to the Advance Planning Report, Section 1 will require a physical take from the district of 5.4 acres and Section 2 will require a physical take from the district of about 1.8 ha (4.5 acres). However, calculations on the functionals indicate the take on both sections together would be about 1.62 ha (4 acres). In addition, other land occupancy may be necessary for slope and construction easements. The project will be built on the existing alignment and will maintain historic road patterns, a component of the district's National Register eligibility. (A map at the end of this section shows the historic plan of the area with the proposed road project highlighted.) Due to the right-of-way take, the project will have an adverse effect under this criterion.

#### (2) Isolation of the property from or alteration of the character of the property's setting when that character contributes to the property's qualification for the National Register;

The rural farm land setting of the area contributes to its National Register of Historic Places qualification. The project will alter the character of this setting through the introduction of a large scale, modern transportation facility and adversely affect it under this criterion.

# (3) Introduction of visual, audible, or atmospheric elements that are out of character with the property or alter its setting;

The modern four-lane facility is out of character with the historic setting of the project and will have an adverse visual effect to the property.

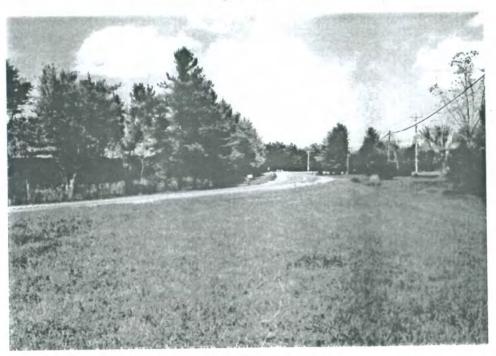
# (4) Neglect of a property resulting in its deterioration or destruction; and

The Cumberland Homesteads Historic District, with the exception of State Route 28 itself, is not owned by TN-DOT and would not come under the jurisdiction of TN-DOT as a result of this project at any time. Therefore, this Criterion would not apply.

#### (5) Transfer, lease, or sale of the property.

The Cumberland Homesteads Historic District, with the exception of State Route 28 itself, is not owned by TN-DOT and would not come under the jurisdiction of TN-DOT as a result of this project at any time. Therefore, this Criterion would not apply. MEASURES TO MINIMIZE HARM: TN-DOT has known about the existence of the historic district from the earliest planning stages but could not improve the corridor without impacting the district. It has maintained the historic alignment of the roadway, a feature of the district's significance. It has addressed the three specific areas of concern expressed by the TN-SHPO, and it has maintained the angled park entrance rather than teeing the intersection as is typical. While TN-DOT could not avoid impacting the district, it has attempted to design the project in a manner that would minimize harm to the district. Figure One

· · r.



Typical view of district

Figure Two



Typical view of district

Figure Three

1170

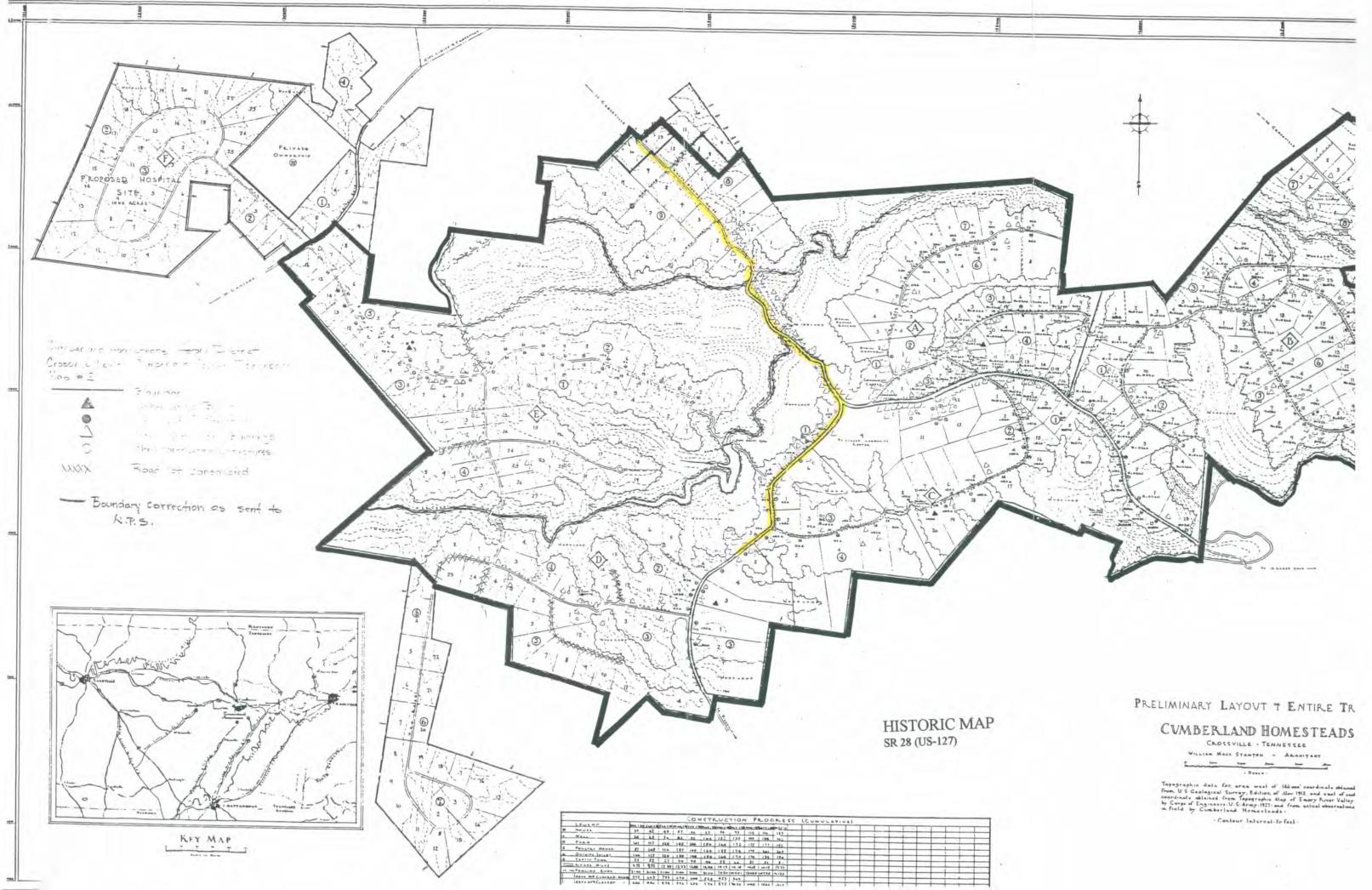


Typical view of district

Figure Four



Northwest view of Y-intersection at School





#### STATE OF TENNESSEE DEPARTMENT OF TRANSPORTATION NASHVILLE, TENNESSEE 37243-0350

#### MEMORANDUM

TO: Mr. Raymond Brisson, Envir. Prg. Manager 1 Environmental Planning Office

FROM: Mr. Harris N. Scott III, Civil Engineering Manager 2 Special Design and Estimates Office

DATE: September 27, 1994

SUBJECT: Advance Planning Report State Route 28 (US-127) from Saw Mill Road to East Cleveland Street in Crossville Cumberland County

On September 19, 1994, a field review was made on the subject project to access the relationship of the proposed improvements to the surrounding historical area. Those in attendance were: Mr. Joe Garrison, Ms. Liz Straw and Ms. Claudette Stager of the State Historical Preservation Office, Mr. Pat Alexander, Mr. Jerry Moorhead, Mr. Charles Graves, Ms. Martha Carver and Ms. Missy McLeod of the Tennessee Department of Transportation.

The historical office was interested in the historical district designated as The Homestead Community. The proposed project is within the district from the beginning of the project to near the Crossville south city limits. We propose to widen the existing route to a four lane facility with continuous turn lane, shoulders including curbs and gutters and utility strips. A 45 mph design speed is proposed throughout the project limits. As revised, the proposed typical section will follow the existing alignment with mostly a symmetrical widening. The existing grades are to be maintained.

The State Historical Office had three (3) areas of concern. We have attempted to mitigate these areas and make the proposed highway work as compatible to the historical district as possible. Our mitigation efforts at each site are as follows: Mr. Raymond Brisson September 27, 1994 Page Two

Site 1: The horizontal curve as proposed on the reviewed plan, encroached onto historical land and homestead house. We revised this curve by using a sharper curve and were able to provide a symmetrical widening about the existing center line. By using a sharper curve, it is possible to reduce the take from the property in question by 15,000 square feet. Mr. Alexander said that by use of a 0.08 super elevation rate, we would still be able to maintain a 45 mph design speed through the curve. This will necessitate a design exception during the design phase of the project.

Site 2: The entrance to Cumberland Mountain State Park was modified as requested. The plan reviewed showed one entrance to the park from State Route 28 (U.S. 127). The personnel from the State Historical Preservation Office asked that the existing separate entrances (two points of access to State Route 28) be maintained. This will leave the access to the park as it has been since its opening.

Site 3: The intersection of State Route 28 (U.S. 127) and State Route 68 is proposed to be modified and a traffic signal installed as part of the proposed project. The northbound State Route 28 traffic movement to eastbound State Route 68 movement will be tightened in order to provide for a more controlled intersection. This will allow for some existing right-of-way to be available up for other use. The historical people would like to utilize the excess right-of-way for additional parking spaces for the Homestead Museum and landscaped buffer area between the ramp and museum. Mr. Alexander indicated that this would be no problem, but the details of the access ramps to the parking area would need to be reviewed in the design phase of the project.

We are providing you with two (2) copies of the revised functional plans with the three (3) site changes as described above. If you have any questions or require additional information, please feel free to call on us.

12.000

HNS:CTG:mg Attachments cc: Mr. Bill Wallace Mr. Clellon Loveall Mr. Paul Morrison Mr. Glenn Beckwith Mr. Jerry Moorhead Mr. Howard Wilson Mr. Charles Graves FILE

#### APPENDIX TWO

#### PUBLIC PARTICIPATION LIST FOR CUMBERLAND COUNTY

#### PUBLIC PARTICIPATION

In the fall of 1986, the Environmental Planning Office of the Tennessee Department of Transportation prepared a list by counties of historic groups and other such organizations which might be interested in proposed projects. This list was compiled using the following sources: the State Historic Preservation Office's list of current county historians, the State Historic Preservation Office's list of Historic Sites and Museums, the State Preservation Office's list of Historical Societies, the National Trust for Historic Preservation's list of member organizations in Tennessee, the American Association for State and Local History *Directory of Historical Societies and Agencies in the United States and Canada* (Twelfth Edition, 1982), interested State Review Board members, and a questionnaire mailed to each of Tennessee's ninety-five County Executives. This list is regularly updated and refined.

From this list, TN-DOT identified two historical groups in Cumberland County. A copy of this report will be sent to them as well as to the county executive. A list of these groups is below and a copy of the cover letter is on the following page.

Cumberland Heritage, Inc. 914 West Fourth Street Crossville, TN 38555 Joseph E. Hooges, President (615) 484-6635

Cumberland County Historian Donald Brookhart P. O. Box 11045 Crossville, TN 38555

Cumberland County Executive Cumberland County Courthouse Crossville, TN 38555



#### STATE OF TENNESSEE DEPARTMENT OF TRANSPORTATION ENVIRONMENTAL PLANNING OFFICE SUITE 900, JAMES K. POLK BUILDING 505 DEADERICK STREET NASHVILLE, TENNESSEE 37243-0334 (615) 741-3653

June 3, 1996

SUBJECT: Architectural Assessment for Proposal Improvements to State Route 28 (U.S.127) from 0.16 km (0.1±mile) south of Saw Mill Road to Cleveland Street in Crossville, Cumberland County.

Dear

The Tennessee Department of Transportation with state funding is proposing to widen State Route 28 from 0.16 km (0.1±mile) south of Saw Mill Road to Cleveland Street in Crossville, Cumberland County.

The proposed project lies within the National Register listed Cumberland Homesteads Historic District. Historians from the Department applied the Criteria of Effect as found in 36 CFR 800.9 to the historic property. It is the Department's opinion that the project would have an adverse effect to the district.

Enclosed is a report discussing the eligibility and effect findings. You are receiving this report because you have been identified by the Department as a Cumberland County party or individual with historic preservation interests. As such, the Department would like to give you the opportunity to comments on effects to historic resources. If you feel that commenting on such projects is outside the interests of your organization, please notify me and I will remove your name from our list.

If you have any comments on the Department's eligibility or effect assessments to historic resources, please write me. I look forward to hearing from you. To facilitate our planning process, please try to respond by 1 July 1996.

Sincerely,

Martha Carver Historic Preservation Specialist

Enclosure

cc: Mr. Herbert Harper, TN-SHPO



#### STATE OF TENNESSEE DEPARTMENT OF TRANSPORTATION ENVIRONMENTAL DIVISION

505 DEADERICK STREET SUITE 900, JAMES K. POLK BUILDING NASHVILLE, TENNESSEE 37243-0349 615-741-3653

July 10, 2006

Mr. Herbert Harper State Historic Preservation Office **Clover Bottom Mansion** 2941 Lebanon Road Nashville, TN 37243-0442

SUBJECT: Architectural Assessment and Documentation of Effect for the proposed improvements to State Route 28 (U.S. 127) from State Route 68 to Cleveland Street in Crossville, Cumberland County, Tennessee Project #: 18006-1209-04 PIN #: 101044.00

Dear Mr. Harper:

My staff has prepared an Architectural Assessment and Documentation of Effect report, a copy of which is enclosed, for the above referenced project. One property within the general project area is listed in the National Register of Historic Places: Cumberland Homesteads Historic District. It is the opinion of TDOT that the project as presently proposed would adversely impact the historic district. We request your review of this report pursuant to regulations contained within 36 CFR 800.

We look forward to your comments. Thank you for you help in this matter.

Sincerely,

Martha Caurer

Martha Carver Historic Preservation Manager

Enclosure cc: Mr. Betty Parnell



STATE OF TENNESSEE DEPARTMENT OF TRANSPORTATION ENVIRONMENTAL DIVISION 505 DEADERICK STREET SUITE 900, JAMES K. POLK BUILDING NASHVILLE, TENNESSEE 37243-0349 615-741-3653

July 10, 2006

SUBJECT: Architectural Assessment and Documentation of Effect for the proposed improvements to State Route 28 (U.S. 127) from State Route 68 to Cleveland Street, Crossville, Cumberland County, Tennessee

To Whom it May Concern:

The Tennessee Department of Transportation (TDOT) is proposing to improve State Route 28 (U.S. 127) from State Route 68 to Cleveland Street.

Pursuant to regulations set forth in "36 CFR 800: Protection of Historic Properties" cultural resource staff from TDOT surveyed the general project area in an attempt to identify National Register-included or eligible properties which could be impacted by the proposed project.

The enclosed report discusses TDOT's survey findings. You are receiving this report because TDOT has identified you as a Cumberland County party or individual with historic preservation interests. The Advisory Council on Historic Preservation Regulations specify that members of the public with interests in an undertaking and its effects on historic properties should be given reasonable opportunity to have an active role in the Section 106 process. As such, TDOT would like to give you the opportunity to participate in that process. If you feel that commenting on such projects is outside the interests of your organization, please notify me and I will remove your name from our list.

If you have any comments on historic issues related to this project, please write me. Federal regulations provide that you have thirty days to respond from the receipt of this letter.

Sincerely,

Tammy Allison Sellers, Historic Preservation Supervisor

Enclosure cc: Mr. Herbert Harper, TN-SHPO

#### **TENNESSEE DEPARTMENT OF TRANSPORTATION**

#### HISTORICAL/ARCHITECTURAL ASSESSMENT AND DOCUMENTATION OF EFFECT REPORT PURSUANT TO 36 CFR 800

#### FOR PROPOSED IMPROVEMENTS TO STATE ROUTE 28 (U.S. 127) FROM STATE ROUTE 68 TO CLEVELAND STREET IN CROSSVILLE

#### **CUMBERLAND COUNTY**



November 2005

Prepared by Tammy Allison Sellers Tennessee Department of Transportation Environmental Division Suite 900 James K. Polk Building Nashville, TN 37243-0334 Phone: (615) 741-3653

#### HISTORICAL/ARCHITECTURAL ASSESSMENT AND DOCUMENTATION OF EFFECT REPORT PURSUANT TO 36 CFR 800

#### PROPOSED IMPROVEMENTS TO STATE ROUTE 28 (U.S. 127) FROM STATE ROUTE 68 TO CLEVELAND STREET IN CROSSVILLE

#### CUMBERLAND COUNTY

#### MANAGEMENT SUMMARY

The Tennessee Department of Transportation (TDOT) is proposing to improve State Route 28 (U.S. 127) from State Route 68 to Cleveland Street in Crossville in Cumberland County, Tennessee. The proposed project begins north of State Route 68 and State Route 28 intersection to Cleveland Street in Crossville. The proposed typical section will consist of four traffic lanes, a continuous turn lane, shoulders with curb-and-gutter and utility strips within a 104-foot right-of-way.

Historians from the Tennessee Department of Transportation (TDOT) identified one property within the area of potential effect (APE) that is listed in the National Register of Historic Places: Cumberland Homesteads Historic District.

#### **TABLE OF CONTENTS**

	PAGE
Statement of Determination	1
Project Description	3
Project History	6
Public Participation	27

Public Participation	27
Environment and Land Use Historical Overview of the Project Area	
Survey Methodology	30

Properties Listed in the National Register

Cumberland Homesteads	35
Documentation of Effect	40
Resolution of Adverse Effect	45
Alternatives Considered	46

Conclusions	
Bibliography	

### FIGURES

1.	Project Location Map	2
2.	Signature Sheet with CRT Recommendations	
3.	1930s Photographs of Cumberland Homesteads	30
4.	TN-SHPO Survey Map	33
5.	Inventoried Properties	34
6.	Example of Homestead House	37
7.	Example of Homestead Outbuildings	37
8.	Homestead Tower Museum	38

Cumberland County, State Route 28, Page ii

9.	Historic Triangle at SR 28 and SR 68	38
10.	National Register Boundary for Historic District	39
11.	Map of re-evaluated historic district	43
12.	Historic rendering of Triangle Intersection	46
13.	Plans showing the preferred alternative	48
14.	Detail of re-positioned triangle intersection	49
15.	Plans showing Alternative A	52
16.	Plans showing Alternative B	53
17.	Plans showing Alternative C	54
18.	Plans showing Alternative D	55
19.	Plans showing Alternative E	56
20.	Plans showing Alternative F	57
21.	Plans showing Alternative G	58

#### APPENDICES

- A. Fact Sheet on Section 106
- B. National Register Criteria, 36 CFR 60.4
- C. Criteria of Effect, 36 CFR 800.5
- D. Public Participation
- E. Reconnaissance Survey Cumberland Homesteads Historic District

### HISTORICAL/ARCHITECTURAL ASSESSMENT AND DOCUMENTATION OF EFFECT REPORT PURSUANT TO 36 CFR 800

#### PROPOSED IMPROVEMENTS TO STATE ROUTE 28 (U.S. 127) FROM STATE ROUTE 68 TO CLEVELAND STREET IN CROSSVILLE

#### **CUMBERLAND COUNTY**

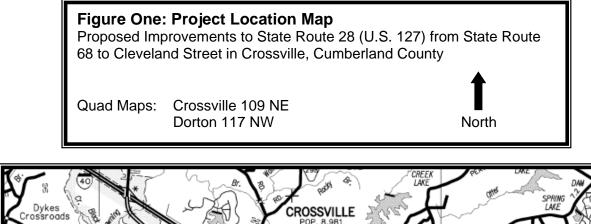
#### STATEMENT OF DETERMINATION

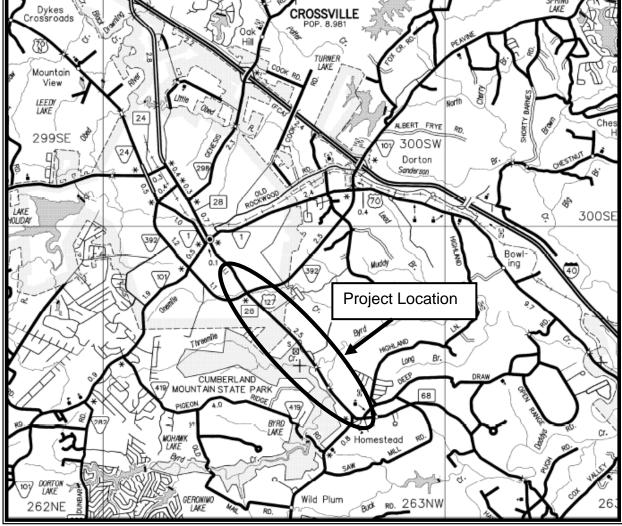
The Tennessee Department of Transportation (TDOT) with state funding is proposing improvements to State Route 28 (U.S. 127) from State Route 68 to Cleveland Street in Crossville.

Federal laws require TDOT and federal permitting agencies to comply with Section 106 of the National Historic Preservation Act of 1966, as amended. Appendix A contains a fact sheet about Section 106. Regulations detailing the implementation of this act are codified at 36 CFR 800. This legislation requires TDOT and federal agencies identify any properties (either above-ground buildings, structures, objects, or historic sites or below ground archaeological sites) of historic significance. For the purposes of this legislation, historic significance is defined as those properties which are included in the National Register of Historic Places or which are eligible for inclusion in the National Register. Appendix B contains a copy of the National Register criteria, which are codified at 36 CFR 60.4. Once historic resources are identified, legislation requires these agencies to determine if the proposed project would affect the historic resource. Appendix C contains a copy of the Criteria of Effect as defined in 36 CFR 800.5. If the proposed project would have an adverse effect to a historic property, the legislation requires the lead federal permitting agency to provide the Advisory Council on Historic Preservation (an independent federal agency) an opportunity to comment on the effect.

Pursuant to 36 CFR 800.4 which requires TDOT and federal permitting agencies to identify historic resources near its proposed projects, architectural historians from TDOT surveyed the area of potential environmental impact for the proposed project in an effort to identify any National Register included or eligible properties. TDOT historians identified one property that was listed in the National Register of Historic Places: Cumberland Homesteads Historic District.

The archaeological assessment is contained in a separate document. This document has been prepared in consultation with the TN-SHPO and will be circulated to the TN-SHPO and local historians.





#### **PROJECT DESCRIPTION**

The Tennessee Department of Transportation (TDOT) is proposing to improve State Route 28 (U.S. 127) from State Route 68 to East Cleveland Street in Crossville.

The proposed project begins near the State Route 68 and State Route 28 intersection and extends to Cleveland Street in Crossville. The proposed typical section will consist of four traffic lanes, a continuous turn lane, shoulders with curb-and-gutter and utility strips within a 104-foot right-of-way. A 45 mph design speed is proposed. From Wells Road to Cleveland Street in Crossville it is proposed to drop the shoulders, thus requiring 84-feet of right-of-way. Due to the beginning of the commercial development south of Crossville, it was determined that the additional width required for shoulders would be detrimental to the adjacent properties. A 40 mph design speed is proposed at the State Route 392 intersection, however, signal warrants will need to be determined after design traffic is available. It is proposed to use the existing vertical and horizontal alignments. The proposed typical section will follow the existing alignment with mostly a symmetrical widening.

This project was part of the 1986 Better Roads Program and originally included widening from the State Route 28/State Route 68 intersection to Saw Mill Road. In 2002, this project became one of the 15 projects that the University of Tennessee Center for Transportation Research studied to determine if these projects as proposed were necessary. Due to the findings of the UT study, the proposed project was modified to better reflect the needs of local residents and the motoring public. The section of the roadway from the State Route 28/State Route 68 intersection to Saw Mill Road was eliminated, leaving the project to end near the State Route 28/State Route 68 intersection. Also as a result of the UT study, it was determined that the need and purpose for the project from Cleveland Street to State Route 68 was warranted; however, Commissioner Nicely implemented a new program where the local officials and citizens would be consulted about design modifications.

The design modification TDOT focused on was the layout of the intersection at State Route 28 and State Route 68. The triangle intersection was designed in the 1930s when Cumberland Homesteads was first created and, according to TDOT information, no longer functions safely or efficiently. In conjunction with a Citizens Resource Team (CRT), TDOT worked to develop an alternative intersection layout that would be safe for the motoring public while better fitting into the Cumberland Homesteads Historic District. The CRT began meeting in 2004 with the goal of recommending "an alternative to the U.S. 127 (SR28)-SR68 intersection design that is safe, efficient, more compatible with the Cumberland Homesteads Historic District to the existing natural and man made environment." Nineteen elected officials and local residents represented different interests that would be affected by the proposed intersection

improvements. After careful review and several alternatives, the CRT recommended Alternative D-modified (the other alternatives will be described in the Discussion of Effects Section of this Document) which included the following modifications.

- State Route 68 intersects with State Route 28 (U.S. 127) at 90 degrees to tangent of the curve on State Route 28
- State Route 68 westbound will be free flowing and will become a second lane to State Route 28 northbound
- State Route 28 southbound will have one left turn lane to State Route 68 eastbound
- State Route 28 northbound right lane will become a right turn lane to eastbound State Route 68 and the lane will drop at the intersection
- The triangle will be rehabilitated to approximately the current condition with landscaping typical of the 1930s Cumberland Plateau
- Shoulder paving will be reduced to minimize the apparent footprint
- Continue to preserve the triangle and minimize the pavement footprint wherever possible

In addition to the design modifications, the CRT recommended that TDOT work with a local bank that was building a branch office within the Cumberland Homesteads Historic District which would result in the demolition of one of the Homestead Houses. TDOT agreed to work with citizens and bank officials to relocate the house, however, the bank's construction schedule did not coincide with TDOT's relocation schedule and resulted in the demolition of the house before TDOT could relocate it. The CRT also recommended that an "Enhancement Committee" be established to "coordinate historic, aesthetic, and landscape treatments for the project." As of March 2006, the project manager is working with CRT members and local officials to form a smaller committee than the original CRT to address these issues.

Of the 19 members of the CRT, 12 members (six either refused to sign or had stopped attending meetings and one member passed away) signed the CRT recommendations which were given to Commissioner Nicely for a final decision in the summer of 2005.

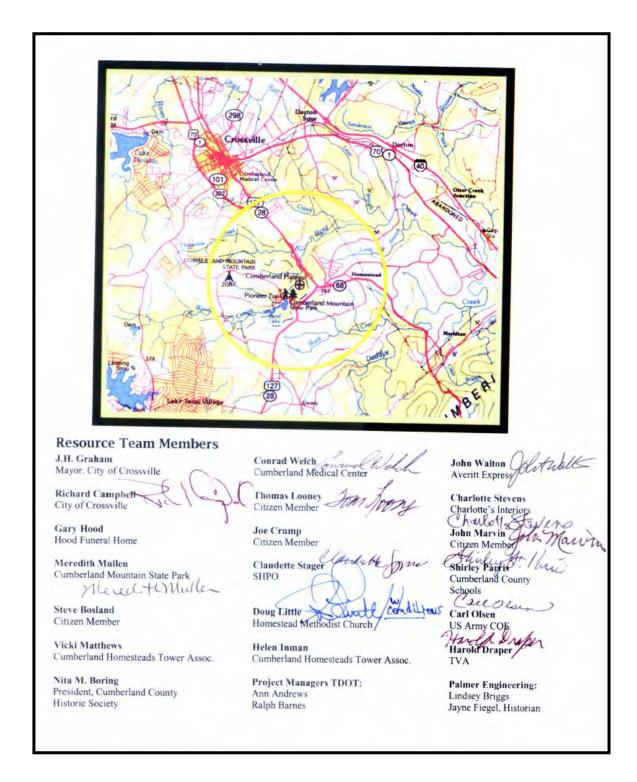


Figure Two: Signature Sheet from the CRT Recommendations. Out of 19 citizen members, 12 (six either refused to sign or had stopped attending meetings and one member passed away signed the document recommending Alternative D-modified as the preferred alternative for the State Route 28/State Route 68 intersection in the Cumberland Homestead Historic District.

#### Project History

The proposed project was part of the 1986 Better Roads Program initiated by the Tennessee Legislature that used funds from the state gas tax to implement road improvements.

#### <u>1994</u>

In September 1994, TDOT staff field reviewed this project with staff from the Tennessee State Historic Preservation Office (TN-SHPO). At that time, the TN-SHPO was comfortable with the proposed five-lane, as opposed to a divided four-lane, because it took substantially less right-of-way. However, there were three key issues that were discussed:

- TN-SHPO requested that TDOT modify a specific curve to minimize harm to a house. TDOT did.
- Dual, triangular entrance to state park: TDOT agreed to keep this.
- Modifying the design at the Cumberland Homesteads Tower to maintain parking and minimize impacts: TDOT implemented the design changes that the TN-SHPO requested.

TDOT historians worked with the Design Division to ensure that the TN-SHPO's concerns were addressed. In a memo dated 27 September 1994, Mr. Harris Scott III informed Raymond Brisson, Director of the Environmental Planning and Permitting Division, that TDOT had worked to mitigate the most damaging impacts concerning the TN-SHPO.

- The original design encroached on one of the Homestead Houses. The new design revised by sharpening a curve to provide a symmetrical widening, reducing the right-of-way take from a contributing feature of the district by 15,000 square feet.
- The design was modified to preserve the historic triangle entrance to Cumberland Mountain State Park.
- The reconfiguration of the intersection at the Cumberland Homesteads Tower did provide the museum with additional parking spaces. In addition, a landscaped buffer between the ramp and museum would be incorporated into the plans.

In a letter dated 5 October 1994, the TN-SHPO issued a preliminary statement that concurred with TDOT's findings that the proposed project would adversely impact the National Register listed Cumberland Homesteads Historic District. The letter stated, "Based on available information, we find that the project as currently proposed will adversely affect the. . .property. . . . In rendering this finding, this office is aware of the changes to the proposed project which your

agency has already made to lessen substantially the impact of this project upon cultural resources."

#### <u>1996</u>

On 3 June 1996, according to regulations set forth in Public Law 699, a statelevel report was prepared by TDOT historians, identifying one National Register listed historic district: the Cumberland Homesteads Historic District. The report was circulated to the Tennessee Historical Commission and the public. In a letter dated, 6 June 1996, the TN-SHPO concurred with TDOT's opinion that the proposed road project in its entirety would have an adverse effect to the historic district. The letter stated, *"We concur that your agency has designed the project in such a manner as to minimize this adverse effect."* 

In a letter dated 10 June 1996, Mr. Brock Hill, Cumberland County Mayor and consulting party in the historic review process, agreed with TDOT's findings and supported TDOT's design modification to retain the Y-intersection at the state park and said that TDOT's "care taken to preserve" the intersection was "appreciated." Mr. Hill's comments were generally favorable, stating concern for the setting was minimal due to existing high traffic levels and that no historic buildings would be demolished, noting *"Care is being taken by TN-DOT to minimize impact on the district."* However, he did request that TDOT consider retaining the Y-intersection at Saw Mill Road as it had at the park. In the same letter, Mr. Hill also requested a bike trail along the road.

On 17 June 1996, Martha Carver sent a memorandum to Paul Morrison, TDOT Survey and Design, requesting that TDOT evaluate Mayor Hill's requests.

In a letter dated 20 August 1996, G. Donald Brookhart, the county historian, reiterated the county mayor's request for a bike trail but added a request for a tunnel under SR28.

On 23 August 1996, Martha Carver, TDOT's Historic Preservation Supervisor, forwarded Paul Morrison in Survey and Design the county historian's request for a bike path and a tunnel under State Route 28.

#### <u>1997</u>

In a letter dated 9 July 1997, the TN-SHPO agreed with TDOT's findings that there are no archaeological resources being affected by the proposed project.

#### <u>1999</u>

In October 1999 the Board of the Cumberland Homesteads Tower Association, Inc. mailed a letter to Ralph Comer, Director of TDOT's Planning Division. The letter stated their general displeasure with the proposed project visually impacting *"our rural, historic farm community."* Their letter included several suggestions.

- "Extension of the current right hand lane on Hwy. 127S (approaching Hwy 68 junction), past it's present merge to become a Hwy. 127S Right Turn Only Lane (left lane would continue ahead to Hwy. 68S)"
- "Add center turn lane on Hwy. 68 from the junction of Hwy. 127 to the entrance of Deep Draw Rd."
- "Add Traffic Signal Light at the intersection of Hwy 127 and Hwy 68 as current plan provides"
- "Match construction to existing roadways (no curbs, gutters, or sidewalks)"
- "Reduce speed limit (45 mph) throughout the entire Historic District except in school zone where appropriate limits already exist."
- "Add limited center turn lanes at congested areas such as the Homestead Elementary School, Cumberland Mountain State Park Entrance, entrances to sub-divisions, etc...This effective system was used this past year at strategic locations between Crossville and Homesteads Tower on Hwy 127 and has worked great! Construction of these turn lanes was done in a matter of days with very minimum disruption and surely much less cost to the taxpayers."

On 27 October 1999, Ralph Comer responded to the Cumberland Homesteads Tower Museum Board and forwarded their suggestions and concerns to the Bureau of Planning & Development, the Environmental Planning and Permitting Division, the Design Division, the Transportation Planning Office, and the Historic Preservation Office.

In a letter dated 21 December 1999, Mr. Clyde Pedigo wrote to Martha Carver and enclosed a previous letter he mailed to John Reinbold, a TDOT attorney. He stated his displeasure for the proposed project and that it would harm the intersection near the Homestead Tower. In addition he stated that *"There is just not enough traffic to require that much highway!!!"* 

#### <u>2000</u>

On 25 January 2000, Martha Carver responded to Mr. Pedigo's letter and explained that a five-lane urban roadway rather than a four-lane divided highway would take substantially less right-of-way from the historic district and that TDOT's twenty-year traffic projections indicated a need for the proposed project.

Throughout 2000, TDOT historians worked with the Design Division to modify the design to lessen the adverse impacts to the historic district. One of the design

enhancements being discussed was the use of unobtrusive sidewalks that would blend with the historic district including depressed sidewalks with natural coloring.

#### <u>2002</u>

On 27 March 2002, Martha Carver received a phone call from Vicki Matthews requesting a copy of the 1996 Historic Report. A copy of the report was mailed to Ms. Matthews.

On 3 May 2002, Mary Mastin, an attorney for the Cumberland Homesteads Tower Association, called Martha Carver with questions about the project. She asked why the project was state-funded rather than federally funded and stated that she was thinking about taking TDOT to court over the project. Ms. Carver asked Ms. Mastin what her clients wanted from this process since they had requested many things over the years. Ms. Mastin said that she believed that the intersection at the Tower was their main objection; however, she could not give specific design issues about the tower or suggest specific mitigation measures.

On 26 October 2002, Mary Mastin, an attorney for the Cumberland Homesteads Tower Association, wrote a letter to TDOT Commissioner Bruce Saltsman informing him that proceeding with the project given the adverse impacts to the district, could result in federal court action. Ms. Mastin also requested that TDOT stop purchasing right-of-way from property owners and further stated that they *"can be successful in obtaining preliminary injunctive relief in federal court to stop this project."* Ms. Mastin asked for a schedule of work for the project and requested a meeting with the project manager before any work continued.

On 31 October 2002, Commissioner Saltsman responded to Ms. Mastin's letter stating that the project was part of the 1986 Better Roads Program and that TDOT intended to proceed with right-of-way acquisition.

In a letter dated 14 December 2002, Vicki Matthews, a representative of the Cumberland Homesteads Tower Association, wrote a letter to then governorelect Phil Bredesen requesting that he stop the proposed State Route 28 project due to the impacts to the historic district. Their concerns included

- Destruction of key historic elements of the district including the redesign of two triangles that were part of the original design for the Homestead.
- Introduction of "Historically Incorrect" roadway elements like the five-lane curb and gutter design.
- Highway plans that exceed current and future traffic needs
- Lack of public support for the proposed plans

#### <u>2003</u>

On 10 January 2003, Mary Mastin sent a letter similar to the one she sent to Commissioner Saltsman in October 2002 requesting that all work on the proposed project be stopped. She again asked to have a meeting with Commissioner Nicely and the project manager to discuss their issues.

In a 20 January 2003 letter, Patrick McIntyre, Executive Director of the Tennessee Preservation Trust, requested that TDOT re-examine the proposed project to minimize effects to the historic district.

On 25 January 2003, Mary Mastin again requested a meeting with Commissioner Nicely to discuss the historic impacts of the project and that all work on the project should stop until after a meeting had been held.

On 2 February 2003, Commissioner Nicely agreed that a meeting to discuss the project should take place. He advised that they set up the meeting with Jeff Jones, Director of the Design Division, and include Martha Carver, TDOT historian, to discuss design issues.

In a 6 February 2003 letter, the National Trust for Historic Preservation stated that they did not think that TDOT had thoroughly studied all prudent and feasible alternatives that are required under Section 4(f) of the U.S. DOT Act of 1966. The letter also stated that the size of the roadway exceeded present and future traffic needs and introduced a roadway incompatible with the historic district. In addition, the National Trust requested that they be considered an official consulting party in the Section 106 process.

On 18 February 2003, Martha Carver responded to the National Trust's letter by describing in detail TDOT's efforts to design the project to comply with the TN-SHPO's requests and to minimize harm to the historic district. In addition, Ms. Carver pointed out that the proposed project was part of the 1986 Better Roads Act paid for with only state funds. She pointed out that Section 4(f) of the U.S. DOT Act of 1966 hinges on federal funding or permitting through the U.S. Department of Transportation which would not be applicable to this project due to its funding sources.

On 21 February 2003, a meeting was held in the Polk Building in Nashville with representatives from TDOT and the Cumberland Homestead Tower Association in attendance. Participants included from TDOT, Jeff Jones, Jim Bryson, Dave Davis, Martha Carver, and Tammy Allison and from the Homesteads Mary Mastin, Nancy Tinker, Vicki Matthews, Emma Vaden, Helen Inman, and Greg Ingram. Jeff Jones summarized the project and the public meeting comments from previous years. Mary Mastin requested that the right-of-way process be stopped and that if it was not stopped she would inform Commissioner Nicely. Jeff Jones responded that he would check with the Right-of-way Division about

the project. Mary Mastin asked about the UT Study and questioned the need for this project citing the State Route 101 project as sufficient since both roads go to the same place. Mastin asked about the triangle at the Tower Museum. Dave Davis asked what she wanted. She replied that the triangle should be preserved as it is and just add a lane to the west. TDOT designers stated that the triangle was unsafe and that the addition of lanes would add to the problems. Vicki Matthews stated that there were no accidents on the triangle (possibly one in the last five years). The Cumberland Homesteads representatives continued to state that the project was introducing an urban road in a rural area and that they did not see a need for the project. TDOT representatives agreed to check on ten items that the group had questions about.

- 1. Basic need for the project.
- 2. Accident rates at the triangle
- 3. Were Right-of-way Acquisitions already underway
- 4. Termini that is inconsistent with the 1986 project
- 5. Changes in the parking area of the Tower Museum
- 6. The possibility of building a roundabout in place of the triangle
- 7. UT Assessment process
- 8. Requested signs at the interstate
- 9. Likelihood of funding
- 10. Possibility of doing press releases about the project

On 25 February 2003, Mary Mastin wrote a follow-up letter to Commissioner Nicely regarding the 21 February meeting. She summarized the three main questions the group left the meeting with. They were

- 1. Would TDOT consider changing the funding on the project in order to accommodate the governor's request for departmental cuts?
- 2. How do factors like the UT study and the budget situation affect the project letting?
- 3. How could her group have input into the UT study?

Also on 25 February 2003, Mary Mastin sent a follow-up letter to Jeff Jones, Director of the Design Division, asking him to clarify several basic issues. These issues were the same as the ten issues TDOT staff agreed to verify during the meeting.

On 28 February 2003, TDOT historians mailed a packet of information to the U.S. Army Corps of Engineers requesting that they define the Area of Potential Effect for the proposed project under Section 106 since their agency was required to issue permits for TDOT to replace two bridges and infill one wetland on State Route 28. The letter also requested that the Corps, as the lead federal agency for the proposed project, formally initiate the Section 106 process.

In a letter dated 11 March 2003, TDOT historians sent a packet of information to the Tennessee Valley Authority asking them to define the Area of Potential Effect for their permitting areas.

On 21 March 2003 TDOT hosted a meeting for interested parties to follow-up on the issues representatives from the Cumberland Homesteads Tower Association raised at the 21 February 2003 meeting. In addition to Homesteads representatives, Patrick McIntyre from the Tennessee Preservation Trust and Autumn Rierson, an attorney for the National Trust for Historic Preservation, attended. Ralph Comer, Director of the Planning Division, explained the UT study process and how they as interested citizens could participate. Jeff Jones, Director of the Design Division, told them that that earliest possible letting date would be July 2004 which would depend upon approval from the legislature. Jerry Moorehead from the Planning Division explained the chosen termini, latest traffic projections, and the lack of viability of improving State Route 101 only. Jeff Hogue from the Right-of-Way Division explained where they were in the right-ofway process. Dave Davis from the Design Division gave accident and traffic figures that indicated that the triangle intersection had a 1.09% accident rate over a three-year period which was substantially higher than the 0.17% statewide average. Figures also indicated that the critical accident rate was at 0.48% which meant that there were six times more accidents at the triangle intersection than at comparable intersections. In addition, Mr. Davis provided everyone with preliminary plans showing a raised median. Mary Mastin, attorney for the Tower Association, reiterated that their key issue is the large scale of the five-lane road. She also indicated that the group was actively pursuing the idea of a round-about in place of the historic triangle. TDOT representatives stated that a roundabout was not historically appropriate and that it would have to be huge in order to allow trucks to use it. Autumn Rierson, attorney with the National Trust, stated that she realized that the road needed to be improved but wanted it done in a context sensitive manner that would save the triangle.

After the March 21 meeting, Martha Carver emailed photographs of aesthetically treated sidewalks built in other areas. On 24 March 2003, Vicki Matthews acknowledged receipt of those photographs and said she would present them to the committee she was forming.

In a letter dated 27 May 2003 the U.S. Army Corps of Engineers responded to TDOT's February 28<sup>th</sup> letter requesting that they define the Area of Potential Effect (APE) as the lead federal agency. The letter stated that their "preliminary determination is that the 'permit area' would include the three crossing areas (provided each involves a discharge of dredged or fill material into waters of the U.S.) and the immediate area on each side of the streams or wetland that affects the location of the crossings." The letter further stated that their APE could be expanded if they are informed that the project will affect a nearby resource outside the APE.

On 19 June 2003, a copy of the Corps letter was faxed to Danny Olinger, a Cultural Resources Specialist with the Tennessee Valley Authority.

On 29 August 2003, TDOT representatives re-evaluated the proposed project and provided comments to the UT Study team. They noted that the lower grade affecting sight distance at the triangle was dangerous. They recommended that the project limits be re-evaluated especially near the state park to reduce impacts to the more intact area of the historic district, the design be re-evaluated to shift traffic on State Route 68 to the west (noting that existing conditions merit improvements), keep the roadway context sensitive by eliminating sidewalks and curb-and-gutters with shoulders, and having a public hearing.

At a press conference at Cumberland Mountain State Park on 24 October 2003, Commissioner Gerald Nicely announced that the need for the project had been firmly established by the UT study. However, he did say that *"more should be done to mitigate the potential negative impact on the historical district environment."* He further stated that *"we [TDOT] plan to design an alternative intersection layout for the historic district."* The UT Study recommended that that *"the community and public should be re-engaged in a proactive way to effectively address the concerns over the proposed design and potential negative impacts on the historic district environment."* TDOT's next steps were to develop a new alternative for the State Route 28/State Route 68 intersection and that would be presented to interested parties within six months, eliminate Section I widening (at the state park), and schedule a public meeting within three months of the revised plan.

On 21 November 2003, staff from TDOT met to discuss beginning the Context Sensitive Solutions (CSS) process for the proposed project. In order to have a cross-section of the public involved in the CSS process, a variety of stakeholders were identified including government, special interest groups, businesses, residents, trucking companies, schools, and churches. From this list, the project manager, Ann Andrews, contacted local groups who would then recommend names of people who might be willing to participate. The TDOT group also brainstormed ideas to re-design and mitigate the project. They also had recommendations for the next steps in the process including hiring a facilitator and identifying a citizens advisory committee and meet with this group before redesigning the intersection.

In a letter dated 10 December 2003, Elizabeth Merritt, Deputy General Counsel for the National Trust for Historic Preservation, wrote to Ed Cole, Chief of Environment and Planning at TDOT, and Bobby Blackmon, FHWA Division Administrator, reiterating their desire to be a consulting party in the Section 106 process and provided names and addresses where information should be mailed. On 15 December 2003, Ann Andrews mailed letters to Cumberland County Mayor, Brock Hill, Crossville Mayor J.H. Graham, Ms. Wendy Askins, Executive Director of the Upper Cumberland Development District, and Ms. Vicki Matthews, Chairperson of the Cumberland Homesteads Tower Association. The letters asked for recommendations for possible resource team members.

On 18 December 2003, Ann Andrews sent letters identical to the December 15<sup>th</sup> letters to State Senator Charlotte Burks, State Representative Raymond Walters, and U.S. Representative Lincoln Davis asking for resource team member recommendations.

In a letter dated 23 December 2003, Ed Cole responded to Elizabeth Merritt's December 10<sup>th</sup> letter and informed her about the beginning of the CSS process that will include Vicki Matthews as a representative of the Tower Association.

# <u>2004</u>

In January 2004, TDOT staff had a series of discussions with Palmer Engineering to discuss the kick-off meeting with the Citizen's Review Team (CRT) for the project. The consultant was charged with interviewing potential members of the CRT that represented a cross-section of interested parties near the triangle intersection. Palmer Engineering created a draft Scope of Services for the US 127 and SR68 Intersection that included developing a public involvement plan, creating a project mailing list, coordinating with TDOT, conducting meetings, facilitating discussions with the CRT, recording the proceedings as a public participation record and providing information to the public about the project.

On 3 February 2004, TDOT team members met to discuss Palmer's draft Scope of Work and the preliminary timetable for the project. The TDOT team approved Palmer's Scope of Work and agreed that the CRT would only deal with the triangle intersection. The desired ending date was 30 June 2004. However, the team determined that the desired meeting dates outlined in the Scope of Work should be flexible and only be a guide to work from depending on the issues raised at the CRT meetings. TDOT also agreed to supply the consultant with preliminary names of interested parties that might be able to recommend people to be members of the CRT.

In a letter dated 9 February 2004, Ed Wasserman, Director of TDOT Structures Division, provided Jim Johnston, Region 2 Survey and Design with cost information for replacing two bridges on the State Route 28 project.

On 11 February 2004, the TDOT team field reviewed the project along with the consultant. The consultant provided a brief PowerPoint presentation about the CSS process and provided a general timeline for the project. TDOT Region 2 design presented existing proposals and visited the project area. The group

discussed proposed CRT members. The consultant presented the draft interview questionnaire, and revisions were recommended. The first CRT meeting was tentatively scheduled for the first week in March.

On 17 February 2004, Martha Carver was made aware by local residents that a CCC camp was located near the triangle. She checked with the National Register coordinator at the TN-SHPO about Criterion D significance. The TN-SHPO was unaware of a CCC camp and doubted if there would be any Criterion D significance even if a camp was located near the triangle. Phil Hodge, TDOT Archaeologist for Region II agreed to visit the site and test for a possible archaeological site.

On 18 February 2004, Martha Carver, TDOT Historic Preservation Manager, contacted Danny Olinger and Eric Howard, TVA archaeologists, about identifying the Area of Potential Effect for the three areas on the U.S. 127S project that might need a federal permit. Mr. Howard responded that TVA has not received a permit application for those areas and could not identify the APE until an application had been received.

On 18 February 2004, Ed Cole, with TDOT, provided the Commissioner information on the team selection process and criteria and the stakeholders involved. The Commissioner approved the list of recommended CRT members.

The first CRT meeting was held on 24 March 2004 at Cumberland Mountain State Park. The CRT members in attendance:

Thomas Looney—citizen

Charlotte Stevens—owner of Charlottes Interiors Gary Hood—Representative for Hood Funeral Home Meredith Mullen—Representative for Cumberland Mountain State Park Claudette Stager—National Register Coordinator for the TN-SHPO Shirley Parris—Representative for the Cumberland County School Board Steve Bosland—citizen Doug Little--citizen Carl Olsen—Representative for the U.S. Army Corps of Engineers Vickie Matthews—Representative for the Cumberland Homesteads Tower Assoc. Helen Inman—Representative for the Cumberland Homesteads Tower Assoc. Ellis Kirby—Representative for the Cumberland Medical Center Joe Miller—Representative for the City of Crossville Helen Rucker—Representative for the Tennessee Valley Authority Nita Boring—President of the Cumberland Co. Historical & Genealogical Society The meeting began with opening remarks from Ann Andrews and a PowerPoint presentation by the consultant on the CSS process and how the CRT would fit into that process. A state trooper with the TN Highway Patrol spoke and described the accidents that have occurred at the intersection. The CRT learned about the history of the project and was told their only charge was to study alternatives at the triangle not review the entire 127S project. Palmer Engineering presented traffic simulations showing the breakdown in current traffic patterns and with future traffic. The CRT participated in a workshop to develop project issues that needed to be addressed. The issues the group defined included limited visibility, intersection alignment, parking, the school, traffic enforcement, historic significance, traffic flow, and alternative modes of transportation. The CRT broke into small groups to sketch possible design solutions that would solve the issues they outlined earlier. There were 15 sketched solutions and each group or team member explained their solution. Several were similar so the consultant narrowed them down to 8 different alternates that TDOT and Palmer agreed to evaluate. Palmer requested that all CRT members discuss the CSS process with others in the community and gather information from the community about the proposed alternatives.

On 6 April 2004, Ann Andrews received a copy of a letter Vickie Matthews, a member of the CRT, sent to concerned citizens about the CSS process. She acknowledged that the CSS process would be tailored to fit different projects and that TDOT appeared to be flexible in their responses to local issues. She was positive about the CSS process but admitted that she had hoped the resource team would be able to deal with the entire 127S project rather than only the triangle.

On 26 April 2004, Ann Andrews received a letter from Helen Inman, President of the Cumberland Homesteads Tower Association and CRT member, requesting that the CSS study be extended beyond the triangle into the entire 127S project. In a response letter dated 7 May 2004, Ann Andrews responded to Ms. Inman stating Commissioner Nicely's announcement that CSS would only be applied to the triangle area not the entire project and that the department had no plans at that time to extend the CSS project.

On 5 May 2004, the second CRT meeting was held at Cumberland Mountain State Park. CRT members in attendance included:

Conrad Welch (new hospital rep) Charlotte Stevens Meredith Mullen Shirley Parris Steve Bosland Doug Little Carl Olsen Vickie Matthews Harold Draper John Walton John Marvin Nita Boring

The second CRT meeting revisited issues brought up at the previous meeting including limited visibility, intersection alignment, parking, the school, traffic

enforcement, history, traffic flow, alternative modes. The CRT also raised new issues that included residential relocations, commercial relocations, project cost, economic development, and compatibility with local planning. After identifying these issues, Palmer facilitated a CRT workshop that required members to rank the issues according to importance. Each team member was asked to pick out their two highest priorities, two lowest priorities, and then rank the remaining priorities as high, medium, or low. The following table indicates the ranking given to each issue by the CRT.

Issue	High Priority	Medium Priority	Low Priority
Limited	11	2	
Visibility			
Intersection	7	2	1
Alignment			
Parking (@	2	8	4
Tower)			
School	9	5	1
Traffic	2	7	2
Enforcement			
History	6	3	
Traffic Flow	8	4	
Alternative		7	6
Modes			
Construction			
Costs			
Relocations	1	6	
Residential			
Relocations	3	6	
Commercial			
Right-of-Way			
Costs			
Utility Costs		5	
Economic	2	6	1
Development			
Compatible	3	3	1
w/ Local			
Planning			

As noted on the table above, the following rankings indicate the issues that received the most "high priority" rankings by the CRT

- 1. limited visibility
- 2. school
- 3. traffic flow
- 4. intersection alignment

- 5. history
- 6. commercial relocations and compatibility with local planning
- 7. traffic enforcement, parking, and economic development
- 8. residential relocations

CRT members also evaluated the alternatives by determining if the proposed alternatives alleviated the high priority issues they indicated. The results were scheduled to be announced at the third team meeting. After evaluating the issues, the CRT chose to drop the issue of Compatibility with Local Planning from further study.

On 18 May 2004, Martha Carver, Tammy Allison, Ann Andrews from TDOT, Claudette Stager and Joe Garrison from the TN-SHPO met to discuss each of the seven alternatives proposed by the team members and their relationship to historic issues for the Section 106 process. Each of the seven alternatives were broken down with positive and negative aspects of each discussed. The following table indicates the TN-SHPO's response to each of the alternatives.

Alternative	Positive	Negative
A	Majority of the work is within row Retains access to the triangle Takes non-contributing buildings Stays close to historic road patterns	The primary road no longer utilizes the triangle
В		Takes a lot of right-of-way Moves further away from the historic road pattern
С	Better than Alt. B because takes less right-of-way but worse than A	Takes more right-of-way
D	Keeps historic road pattern but nothing else	Reduces/destroys the triangle
E	Keeps historic triangle	Takes a lot of land from the historic district Does not retain the historic road pattern Cutting a new road on new location
F		within a historic district is bad Roundabout is awful Destroys the triangle
G	Keeps the historic road pattern Takes little right-of-way	Destroys historic landscape including the triangle

The third meeting of the CRT took place on 26 May 2004 at Cumberland Mountain State Park. Attendees at the meeting included:

J.H. Graham Helen Inman Claudette Stager Gary Hood Conrad Welch Charlotte Stevens Meredith Mullen Shirley Parris Steve Bosland Doug Little Carl Olsen Vicki Matthews Harold Draper John Walton John Marvin Nita Boring

The seven alternatives that the CRT drew in Meeting One and were presented after TDOT designers did a preliminary design in Meeting Two were evaluated by the CRT based on the ranking of issues identified at Meeting Two. The CRT reviewed the issues defined in the previous meeting and no one objected to the previous Palmer engineering presented each of the seven design determinations. alternatives to the CRT and discussed the rating of priorities in comparison to these The CRT was charged with determining which of the seven alternatives. alternatives should be presented to the public at a public meeting. The CRT chose to present Alternatives A, B, C, and D at the public meeting. A preliminary date and time was established for a public meeting to present these alternatives. Since the CRT had selected these alternatives, each CRT member was asked to attend to help the public understand the alternatives and the role of the CRT. The public meeting was to include a formal presentation along with exhibits including visualizations, simulations, and plan views along with providing comment cards for the public to express their opinions.

On 24 June 2004, a public meeting was held at the Cumberland Mountain State Park Recreation Lodge from 6:00-8:00pm. Eighteen staff members attended including both TDOT and Palmer Engineering staff and ninety-six people attended. The objective of the meeting was to get public input on the four alternatives that the CRT had chosen to move forward with in three previous meetings. The public was asked to complete a questionnaire at computer stations, fill out a questionnaire, or speak with a court reporter. The results are included in the following table:

	Computer Responses	Questionnaires Returned	Letters	Total
Oppose All	4	30	7	41
Oppose All— requests 3 lanes			8	8
Support A			1	1
B C	1	1		1 1
D	5	8	1	14
Can Accept A B C D ALL	1 2 1	7 13		8 15 1

Ten resource team members attended the public meeting including Mayor J.H. Graham, Doug Little, Helen Rucker from TVA, Steve Bosland, Vicki Matthews, Nita Boring, Meredith Mullen, Claudette Stager, Helen Inman, and Conrad Welch. Members of the Cumberland Homesteads Tower Association, including CRT member Vicki Matthews, set up tables outside the meeting and distributed incorrect information to the public regarding the four alternatives, distributed black arm bands and black ribbons with "Endangered Historic District". The meeting's goal was to focus on the triangle intersection only (which the CRT had been charged with); however, the majority of people in attendance opposed the entire 127S project, making no distinction between the intersection and the roadway.

On 6 July 2004, Tammy Allison, a historian at TDOT, mailed a packet of information that included the original historic report, wetland sites along the project corridor, and additional correspondence to Harold Draper, a member of the CRT and NEPA Team Leader at TVA. This information was originally mailed to Danny Olinger at TVA in March 2003.

On 15 July 2004, Mary Mastin, an attorney working with the Cumberland Homesteads Tower Association, wrote a letter to Ed Cole, Chief of Environment and Planning at TDOT. The letter indicated her dissatisfaction with the widening of 127S and the CSS process in general. She noted her "dismay" at the lack of interest the 127S CRT appeared to have for environmental issues including historic preservation and the appearance that the CRT did not have enough members holding the same environmental beliefs that she does. Ms. Mastin also mentioned the public meeting and the public's focus on the entire road project rather than the

triangle intersection. The letter concluded by questioning the need for a larger roadway south of Crossville and TDOT's environmental policies in general.

On 16 July 2004, TDOT team members met to discuss the June 24<sup>th</sup> public meeting and the projected finishing date for the CRT. Since several people questioned the need for improving the intersection, it was agreed that Steve Allen would attend the next CRT meeting to discuss traffic forecasting studies. In order to alleviate the public's worry that environmental documents had not been prepared, it was agreed to have one copy of the Technical Studies Report (including ecology, archaeology, and historic) available for viewing at the next CRT meeting.

In a letter dated 20 July 2004, Ed Cole responded to Ms. Mastin's letter explaining the process for picking the CRT which included receiving recommendations from local government officials, state officials representing the area, special interest groups, resource agencies, and volunteer citizens. He ensured her that historic interests were represented on the CRT and that the need for an improved roadway south of Crossville had been well established by TDOT.

Meeting IV for the CRT was held on 28 July 2004 at Cumberland Mountain State Park. CRT members in attendance were:

Helen Inman	Doug Little
Claudette Stager	Vicki Matthews
Conrad Welch	Harold Draper
Charlotte Stevens	John Walton
Meredith Mullen	John Marvin
Steve Bosland	Nita Boring

Dennis Cook, with TDOT Environmental, reviewed the CSS process and the project history, and the environmental process for state-funded projects. He reiterated that the CRT was charged with making a recommendation to the commissioner who will make the final decision on the project. Steve Allen provided the CRT with information on the traffic counts and traffic forecasting studies. Palmer Engineering went over the steps the CRT had taken thus far to determine the four alternatives that were presented to the public, discussed enhancements and amenities that could be used on any of the alternatives, and presented traffic simulations developed after Meeting 3. Palmer also introduced Alternative D-2. The CRT voted to drop all of the alternatives and go forward with Alternative D-2.

On 16 August 2004, TDOT team members met to discuss the design of Alternative D-2 before presenting the design plans to the CRT. Several issues with D-2 were addressed including access to remaining stores at the intersection, access to parking at the Tower Museum, intrusion in the historic district, maintenance of the triangle configuration, coordination with Charlotte Stevens, a CRT member and owner of Charlotte's Interiors, and further design tweaks.

In a series of emails on 16 August 2004, Tammy Allison asked Claudette Stager, the National Register Coordinator at the TN-SHPO and a CRT member, several questions regarding historic issues raised by Alternative D-2.

- The current configuration of tower parking will be obliterated with this alternative. TDOT proposed moving the parking to the rear of the tower and build them a new parking lot and sidewalks to the front of the building. The TN-SHPO agreed that the current parking configuration wasn't historic and that removing it to the rear of the building would be more aesthetically pleasing by giving an unobstructed view of the tower.
- 2. With D-2, in order to keep the triangle configuration, a retaining wall was proposed that would have new landscaping inside it. The TN-SHPO agreed that the wall would be acceptable as long as there were aesthetic treatments and plantings that fit with the historic character of the area. This would include a treatment such as crab orchard stone and plantings that were weedier and wilder than the boxwoods currently in front of the tower.
- 3. D-2 would move the parking from the front of the Cumberland General Store to a proposed access road near the buildings.
- 4. D-2 would remove the modern fire hall located on SR127. Research indicated that the building is not historic. The design of all previous alternatives had resulted in its demolition.

On 6 December 2004, the TDOT team met to discuss Alternatives D and D2, strategies for presenting these options to the CRT, and adjustments on the schedule for completion. Both alternatives were reviewed and staff agreed to make specific adjustments to each. The meeting with the CRT was tentatively scheduled for mid-January 2005 so TDOT could continue to analyze each option and provide further recommendations for the design of the intersection.

# <u>2005</u>

On 20 January 2005, the CRT met at the Crossville Community Complex. CRT members attending included:

Helen Inman Claudette Stager Conrad Welch Charlotte Stevens Meredith Mullen Doug Little Vicki Matthews Harold Draper John Walton Nita Boring Richard Campbell Shirley Parris Carl Olsen

The meeting started with a brief history of the public meeting held the previous year and the four alternatives that were presented to the public and the addition of the Alternative D revisions suggested at Meeting IV. With the design changes required for Alt. D—D-Modified had evolved into three alternatives D-75, D-80, and D-90. The differences in the D alternatives are:

- D-75—the State Route 68 approach was skewed 15 degrees left of the US 127 tangent at the point of intersection
- D-80—the State Route 68 approach was skewed 10 degrees left of the US 127 tangent at the point of intersection
- D-90—the State Route 68 approach tangent is perpendicular to the US 127 tangent at the point of intersection.

Steve Allen presented the changes in the traffic forecast that indicated an error in previous forecasts. The correct traffic forecasting data showed a 25% reduction in current traffic counts which reduced traffic forecasts for 2025 by 39%. The new traffic forecasts were input into each of the traffic simulations the consultant had been working with. Palmer Engineering presented traffic simulations using the three D alternatives and a PowerPoint on the possible enhancements and amenities that could be used as mitigation measures on any of the proposed alternatives. The CRT discussed possible mitigation measures, including:

- Parking for the Tower Museum
- Preparing a driving tour
- Photo documentation of the existing community

Relocating the historic Eldridge House within the district was discussed as a possible enhancement. Due to the issues associated with relocating a historic building, TDOT did not consider this proposal as mitigation but instead as an effort to work with the locals to preserve a historic structure and enhance the outcome of TDOT's proposed project.

The CRT was then asked to provide advantages and disadvantages to either Alternative D or one of the Alternative D Modified options. The results are in the table below:

	ADVANTAGES	DISADVANTAGES
ALTERNATIVE D	<ul> <li>Tower Parking remains in front</li> <li>Project Cost</li> <li>Retains Business Sites</li> <li>Fewer Conflict Sites</li> <li>Handicap Access</li> <li>Project Schedule</li> <li>Traffic Flow</li> </ul>	<ul> <li>Less Distinct Triangle</li> <li>Possibly, No Eldridge House Relocation</li> <li>Less Free Flow of Traffic</li> <li>Tower View Shed</li> </ul>
ALTERNATIVE D MODIFIED	<ul> <li>Maintains Historic Character</li> <li>Free Flow Right Turn (SR68)</li> <li>Removes Non-Contributing Structures from HD</li> <li>Possible use of Development Easements</li> </ul>	<ul> <li>Parking on School Side of Tower</li> <li>Project Cost</li> <li>More Conflict Sites</li> <li>Tower Access</li> </ul>

A consensus was reached among the CRT that the only D-Modified concept to be further explored would be Alternative D-90. The next CRT meeting was tentatively set for March.

In February 2005, the consultant checked on the cost of moving the Eldridge House as part of potential enhancement for the project. Ann Andrews, the project manager, briefed the commissioner and provided him with a very tentative timeline for completing the project after the CRT had made their recommendation.

In a letter dated 15 March 2005, Trip Pollard, a lawyer for the Southern Environmental Law Center, wrote to Ann Andrews expressing his concerns with the proposed alternatives. He reiterated the historic issues with either of the alternatives and pointed out the problems with expanding the 127S corridor to five lanes. He urged TDOT to reconsider the entire project and continue to consider changes to the triangle intersection requested by CRT members.

On 17 March 2005, the CRT met at Cumberland Mountain State Park. The CRT members in attendance were

Helen Inman	Harold Draper
Claudette Stager	Richard Campbell
Conrad Welch	Shirley Parris
Charlotte Stevens	Carl Ölsen
Doug Little	Thomas Looney
Vicki Matthews	- -

The CRT discussed Alternatives D and D-Modified with a question and answer session about various design aspects. Ann Andrews explained that the Eldridge House could be moved as part of either alternative or completely separately. An acceptance poll was taken with Alternative D-Modified being acceptable to 7 members and unacceptable to 3 members. After it was determined that the majority of the CRT accepted D-Modified, the CRT prepared an Executive Summary to be given to Commissioner Nicely for his review. Nine of the eleven team members present signed the Executive Summary. Ann Andrews then asked for volunteers and additional names for an Enhancement Committee that will help with the aesthetic enhancements included in the project.

In an email dated 28 March 2005, Vicki Matthews, a member of the CRT, forwarded survey results performed at a meeting of the Cumberland Homesteads Tower Association regarding the alternatives discussed at the 17 March 2005 meeting. This unscientific survey showed that IF the intersection was modified the majority felt that Alternative D-Modified should be chosen. However, most felt that the alternative still needed improvement.

On 15 April 2005, Stephen L. Rains with Progressive Savings Bank sent a letter to Herbert Harper, the Deputy TN-SHPO that the bank's expansion did not fall under

Section 106 and therefore did not have to deal with the historic issues associated with building a bank in the historic district. He stated that the groundbreaking would take place approximately six weeks from the date of the letter.

In a 17 April 2005 email, Nita Boring, CRT member representing the Cumberland County Historic Society, emailed Ann Andrews her opinion that Alternative D would be the better choice for the intersection. She stated that even though the triangle would be lost, a historic marker identifying its location would be sufficient for "most older Homestead residents." Ann Andrews included her opinion in the CRT's Recommendation Book.

On 25 April 2005, Bethany Hawkins, a concerned descendent of an original Homestead owner, expressed her concerns about the project via email. She pointed out that the triangle is the centerpiece of the historic district and could be used to promote heritage tourism. Ann Andrews responded on 26 April 2005 explaining the CSS process and the role the CRT played in developing the alternative recommended to the commissioner.

On 26 April 2005, Commissioner Nicely received an email letter from David Deere, a Cumberland County resident who had read an article in the *Tennessean* and spoke with someone from the Cumberland Homesteads Tower Association. He questioned TDOT's handling of the project and expressed concern about building the project within a historic district. On 27 April 2005, Ann Andrews responded to Mr. Deere's email explaining the CSS process and how the CRT played a role in the recommendations being reviewed by Commissioner Nicely. Mr. Deere responded by asking about the historic review process. Ms. Andrews responded that federal permits are required on the project; therefore it will fall under Section 106 of the National Historic Preservation Act. She also stated that TDOT has known about the historic district.

In a 17 May 2005 email letter, Attorney Mary Mastin pointed out that the CRTapproved D-Modified still did not save the existing triangle and this proposal was contrary to the statement Commissioner Nicely made at Cumberland Mountain State Park. She urged TDOT to have another public meeting to discuss the alternative that the CRT recommended. She noted that Vicki Matthews was optimistic throughout the CSS process and asked that TDOT move forward quickly to move the Eldridge House before the Progressive Savings Bank demolished it.

On 17 May 2005, Ed Cole responded to Ms. Mastin via email saying that the CRT recommendation was under review by the commissioner and that a public meeting would be scheduled. Mr. Cole also noted that when moving the Eldridge House was proposed, there was no sense of urgency and that this possible enhancement could be a part of TDOT's normal evaluation process.

On 18 May 2005, Martha Carver emailed Joe Garrison, Section 106 Review and Compliance Coordinator at the TN-SHPO, about Section 106 requirements for the Progressive Savings Bank. Mr. Garrison responded that since the bank is actually a savings and loan no federal permits are required so they do not have to comply with Section 106 regulations.

**Note**: On 19 July 2005 the Progressive Savings Bank razed the Eldridge House eliminating any possibility of TDOT moving it as an enhancement for the project. TDOT historians first learned the house was razed from a newspaper article in the Crossville Chronicle.

On 15 August 2005, Nancy Tinker, Program Officer with the National Trust for Historic Preservation, wrote to the Cumberland County Mayor, Brock Hill, reminding him of the importance of the Cumberland Homesteads. She stated that they understood that the selection of the Modified D plan by the CRT hinged on moving the Eldridge House and requested that since the house was demolished the plan should be revisited that would "reduce negative impacts to historic structure and landscape located within the design's footprint." In a letter dated 1 September 2005, Commissioner Nicely, who was copied on the original letter, responded to Ms. Tinker, explaining the role of the CRT to the process. Commissioner Nicely also informed her that an enhancement committee was being formed to study aesthetic treatments for the project.

On 18 August 2005, E. Patrick McIntyre, Jr., Executive Director of the Tennessee Preservation Trust, wrote to Commissioner Gerald Nicely regarding the State Route 28 project. Mr. McIntyre agreed with the resolution passed by Cumberland County Commissioners and requested that TDOT continue to work with local citizens to find a way to preserve the historic triangle. He also mentioned his shocked sadness at the loss of the Eldridge House after it was razed by Progressive Savings Bank. On 1 September 2005, Commissioner Nicely responded to Mr. McIntyre's letter and explained the CSS process and the efforts TDOT has made at designing an intersection that takes into account both roadway standards and the historic landscape at the triangle intersection. He further stated that the CSS process would continue for this project by forming an enhancement committee that would help decide on aesthetic enhancements for the project.

On 22 August 2005, Mary M. Mastin, an attorney with Paddock & Mastin, wrote to Commissioner Gerald Nicely regarding the proposed State Route 28 project. Ms. Mastin commended TDOT for going through the CSS process. She attended the Cumberland County Commission meeting on 15 August 2005 and agreed with their resolution. However, she requested that TDOT continue to re-design the intersection to find ways to shift the alignment away from the Homesteads Tower while not taking any buildings from the intersection. She requested that TDOT save the current triangle, shift the alignment away from the Homestead Tower, leave the Cumberland General store intact, and construct a visitor's center near the general store site. She also enclosed a drawing (not to scale) indicating how each of her

requests could be successfully implemented. On 1 September 2005, Commissioner Nicely wrote to Ms. Mastin explaining that the CSS process worked with the public and local officials to design an intersection that both adheres to roadway standards while considering the historic character of the area. Commissioner Nicely further stated that the CSS process would continue through the work of an Enhancement Committee that was formed to recommend aesthetic features of the intersection. He also stated that he was disappointed that the Eldridge House was demolished while TDOT was pursuing options for relocation. He provided Ms. Mastin with Ann Andrew's phone number if she had additional questions or comments about the project.

On 13 September 2005, members of the TDOT team met to discuss the standing of the project. It was determined that a public information meeting would be held to present the public with the CRT's recommendation. The Enhancement Meetings would be set up after the consultant had put together an Enhancement Committee based on the recommendations of local officials and local experts in landscape design, and an interested CRT member. The committee would most likely consist of five or six members that would brainstorm ideas, prioritize those ideas, and choose the enhancements they want based on overall enhancement cost. TDOT designers began working on tweaking the alignment the CRT recommended in order to address the concerns the Cumberland County Commissioners and others have stated. They will present this information to TDOT upper management for a decision on how to proceed. Ann Andrews would continue to be the contact person and would keep team members informed as the process moved along.

On 21 November 2005, Ann Andrews provided TDOT team members with the Enhancement Committee list. Committee members include

Mayor Brock Hill—Cumberland County Mayor Conrad Welch—U.S. 127South CRT Member Claudette Stager—National Register Coordinator at the TN-SHPO Randall Williams—Historic Preservation Planner for the Upper Cumberland Development District Rhonda McCuiston—Homestead Tower Association Sandra Purcell—Homestead Tower Association

The Enhancement Committee is scheduled to begin meeting in May of 2006.

# **PUBLIC PARTICIPATION**

On March 15, 2006, TDOT mailed letters to the Cumberland County Mayor, Mr. Brock Hill and Crossville Mayor, Mr. J.H. Graham, asking them to be participants in the historic review process as consulting parties. Appendix F contains copies of this correspondence.

On March 15, 2006 TDOT mailed letters to eight groups or tribes representing Native American interests and asked them if they wished to participate in the historic review process as consulting parties (list below). To date, TDOT has not received any responses related to architectural resources. Appendix E contains a copy of the letter.

Augustine Asbury	Gary Bucktrot
Alabama-Quassarte Tribal Town	Kialegee Tribal Town
Dr. Richard Allen	Joyce Bear
The Cherokee Nation	Muscogee (Creek) Nation
Tyler Howe	Rebecca Hawkins
Eastern Band of Cherokee Indians	Shawnee Tribe
Charles D. Enyart Eastern Shawnee Tribe of Oklahoma	Lisa Stopp United Keetoowah Band of Cherokee Indians

In the fall of 1986, the Environmental Planning Office of the Tennessee Department of Transportation prepared a list by counties of historic groups and other such organizations which might be interested in proposed projects. This list was compiled using the following sources:

- the State Historic Preservation Office's list of current county historians,
- the State Historic Preservation Office's list of Historic Sites and Museums,
- the State Preservation Office's list of Historical Societies,
- the National Trust for Historic Preservation's list of member organizations in Tennessee, the American Association for State and Local History Directory of Historical Societies and Agencies in the United States and Canada (Twelfth Edition, 1982),
- interested State Review Board members, and
- a questionnaire mailed to each of Tennessee's ninety-five County Mayors.

This list is regularly updated and refined.

From this list, TDOT identified a number of historical groups and individuals in the county in which the project is located. TDOT will mail a copy of this report to them. Appendix F contains a copy of related correspondence.

Mr. Brock Hill Cumberland County Mayor Cumberland County Courthouse Crossville, TN 38555 W. Walter Hall Pleasant Hill Historical Society of the Cumberlands P. O. Box 264 Pleasant Hill, TN 38578 Randal Williams Historic Preservation Specialist/Planner Upper Cumberland Development District 1225 South Willow Avenue Cookeville, TN 38506

Gordon Kokes, President Cumberland County Historical and Genealogical Society 20 South Main Street Crossville, TN 38555

Mrs. Barbara Parsons P.O. Box 1001 Crossville, TN 38557-1001 Mr. Danny Olinger Tennessee Valley Authority Cultural Resources 400 West Summit Hill Drive Knoxville, TN 37902

Cumberland Homesteads Tower Association 371 Hwy. 68 Crossville, TN 38555

John B. Hildreth National Trust for Historic Preservation Southern Office 456 King Street Charleston, SC 29403

#### ENVIRONMENT AND LAND USE

The proposed project is located in Cumberland County, in the eastern section of middle Tennessee, in the physiographic region known as the Cumberland Plateau. Characterized by a mixture of mountainous areas and valleys, the Cumberland Plateau was once known as "The Wilderness" because of its rugged terrain.<sup>1</sup> Although the project is generally located in a rural area, surrounding land use contains substantial residential and commercial use.

It is expected that the proposed project would stimulate current developmental patterns of land along or adjacent to the project corridor. It is expected that this development would occur regardless of implementation of the proposed improvement, but probably at a more gradual pace. The project, as proposed, is not in conflict with the long range planning activities of any local or regional planning authority. Any growth resulting from implementation of the proposed project should be adequately controlled by local government agencies.

#### Historical Overview of the Project Area

Cumberland County was created in 1856 by the General Assembly taking land from surrounding counties. The area had been used extensively since the first settlers moved into the Tennessee area in the late 1700s as a transportation route to other locations. The rugged terrain of Cumberland County kept settlement to a minimum

<sup>&</sup>lt;sup>1</sup> Stanley J. Folmsbee, Robert E. Corlew, and Enoch L. Mitchell. Tennessee: *A Short History* (Knoxville: University of Tennessee Press, 1969), 8 and 9.

until the early twentieth century. The Tennessee Central Railroad came to the county in 1900, spurring settlement throughout the area.

During the Great Depression, a New Deal Program created Cumberland Homesteads, a program that provided housing to needy deserving families. The project failed to accomplish its goals of self-sufficient farming and cooperative business. However, it left a lasting impact on the town of Crossville. Cumberland Homesteads is listed in the National Register of Historic Places. The county has grown rapidly in the last decades of the twentieth century, becoming an ideal location for older people retiring to a semi-mountainous area.<sup>2</sup>



Figure Three: 1930s photographs of houses in Cumberland Homesteads. Available at the Library of Congress website at <u>www.memory.loc.gov</u>.

# SURVEY METHODOLOGY

Pursuant to regulations set forth in 36 CFR 800 guidelines, TDOT historians field reviewed the project several times between 1996 and 2005. The purpose of this survey was to determine if any properties in the project impact area were either eligible for inclusion or are included in the National Register of Historic Places. A project's area of potential effects (APE) is defined in 36 CFR 800.16 (d) as

the geographic area or areas within which an undertaking may directly or indirectly cause changes in the character or use of historic properties, if any such properties exist. The area of potential effects is influenced by the scale and nature of an undertaking and may be different for different kinds of effects caused by the undertaking.

<sup>&</sup>lt;sup>2</sup> G. Donald Brookhart, "Cumberland County." *Tennessee Encyclopedia of History and Culture*. Edited by Carroll Van West. (Nashville: Tennessee Historical Society, 1998), 223.

The APE for the proposed project was defined by the Tennessee Valley Authority (TVA) in conjunction with the United States Army Corps of Engineers (USACE) since TVA serves as the lead federal agency that is issuing permits for stream crossings and wetlands along the project corridor. TVA determined that the Area of Potential Effect for the proposed project would be the entire length of the project.

The proposed improvements will widen State Route 28 (U.S. 127) from State Route 68 to Cleveland Street on largely the existing location. The project area is located within the Cumberland Homesteads Historic District that contains over 10,000 acres in Cumberland County. The majority of the proposed project is located within a section of the historic district that has been privately developed including the construction of a bank branch office at the site of a Homestead House, a private, upscale subdivision on a Homestead site, and numerous modern commercial buildings and private residences.

The area of potential effect for this project includes the following:

- A corridor approximately 1,500 feet from the proposed roadway improvements that require additional right-of-way and subsequent transition work that would require additional right-of-way;
- Areas within the nearby viewshed of the proposed project;
- Areas within the potential noise impact area (up to 500 feet from the proposed improvements); and

TDOT checked the survey records of the Tennessee State Historic Preservation Office (TN-SHPO) to determine if previous surveys had identified any historic properties in the area. A survey of Cumberland County has been performed by the Tennessee Historic Commission (THC). Survey records indicated that one large National Register historic district is located in the general area; the Cumberland Homesteads Historic District.

When possible, TDOT historians interviewed property owners and local historians. They also checked the repositories of the Tennessee State Library and Archives and the Tennessee Department of Transportation.

A Documentation of Effect report to assess the impacts of the proposed improvements upon the historic properties required by 36 CFR 800.5 (in compliance with Section 106 of the National Historic Preservation Act of 1966) is included in this document. Because this project is state-funded, Section 4(f) of the U.S. Department of Transportation Act of 1966 does not apply.

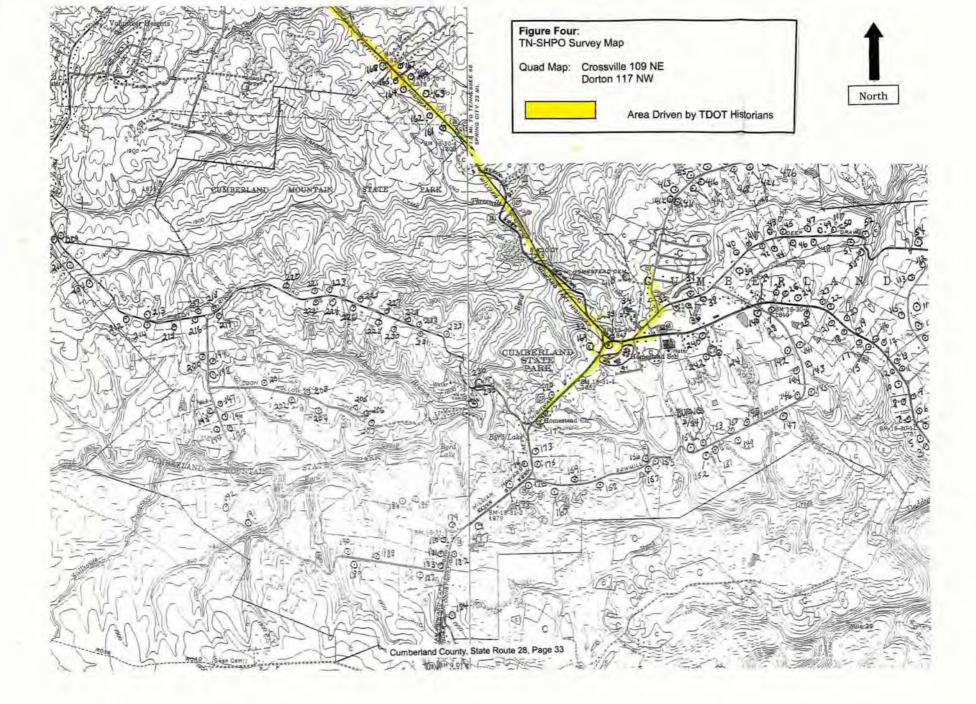
TDOT historians applied the Criteria of Effect as found in 36 CFR 800.5 (in compliance with Section 106 of the National Historic Preservation Act of 1966) to assess the impacts of the proposed improvements upon the historic properties. It is

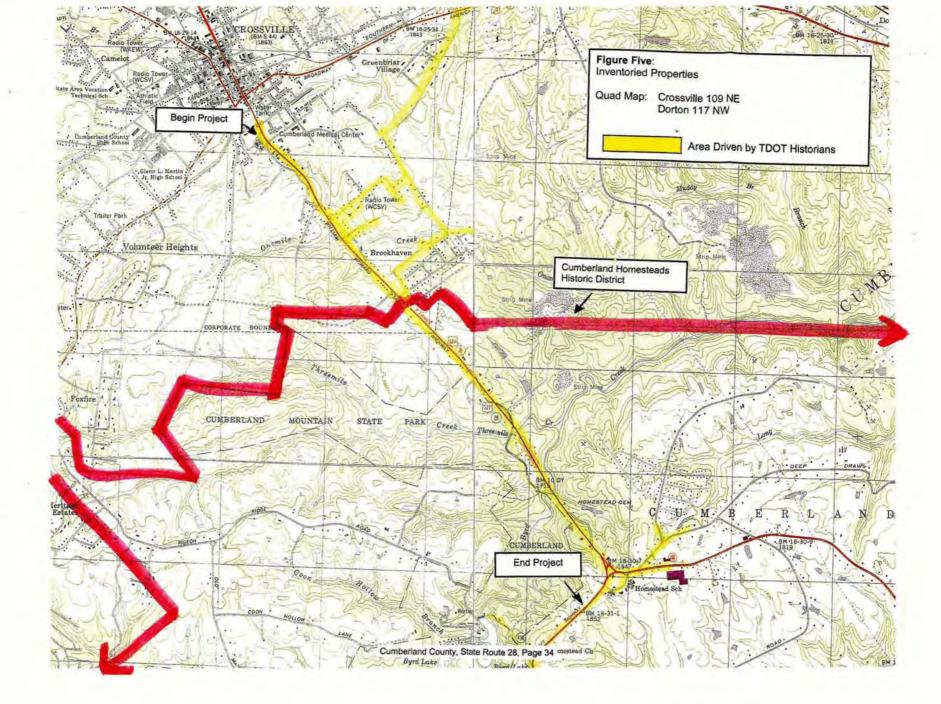
the opinion of TDOT that the proposed project would have an adverse effect to the historic district.

#### SURVEYED PROPERTIES

One property was studied in the Area of Potential Effect for the proposed property. The National Register listed Cumberland Homesteads Historic District consists of over 10,000 acres of land south of the city of Crossville. The proposed State Route 28 improvements run through the historic district and terminate near the triangle intersection at State Route 68 near the Cumberland Homesteads Tower Museum.

Figure 4 shows the TN-SHPO survey map and the area surveyed by TDOT historians. Figure 5 shows the properties inventoried and surveyed by TDOT historians.





-

×.,

#### Properties Listed in the National Register of Historic Places

Cumberland Homesteads Historic District

National Register Listed: 1988

In 1994, TDOT historians and TN-SHPO field reviewed the proposed project. According to the 1994 survey report:

One property in the area of the project, the Cumberland Homesteads Historic District, is listed in the National Register of Historic Places in 1988. The Cumberland Homesteads Historic District contains 11,400 acres and is located on the plateau of the Cumberland Mountains at the rear of Cumberland County seat of Crossville.

In an effort to offset the devastating effects of the Great Depression on the country, President Franklin Delano Roosevelt initiated the New Deal programs to aid the nation's economy. The Cumberland Homesteads project started in 1933 as a part of this program under the Division of Subsistence Homesteads, as section of the Department of Interior. The government selected a site that was primarily undeveloped land largely acquired from timber companies. The government intended for the program to give low income/out-of-work farmers and industrial workers jobs, the opportunity to own homes, and to grow their own food and to farm on a relatively small scale in a "back-to-the-land" movement. Although over 2,000 families applied to the Cumberland Homesteads, the government selected only 250 families. Communal programs for the participants included a non-profit medical association, a cannery, a general merchandise store, an interdenominational church, and women's club.

The Subsistence Homesteading program was based heavily on agrarian reverence for the land, the "back-to-the-land" philosophy and the premise that rural living was healthier than city living for the country's poor. The Subsistence Homestead program was meant to serve as a temporary relief measure and to represent a return to the "simpler and healthier" agrarian past the country once knew. The premise behind the homestead villages was to provide families with the means to raise their own vegetables, chickens, cows, or hogs to supplement their income. In addition to the subsistence farming, emphasis was placed on community cooperation and socialization. The goal was to reeducate the stranded families to a better and healthier way of life. In addition to developing homemaking skills, the women were strongly encouraged to work with crafts, especially weaving, as a method of providing additional support for their families.

The government developed a park as an integral component of the Homesteads project. The park was located adjacent to the Homesteads on

approximately 1,500 acres of land perceived to be poor farm land and was first called the Cumberland Homesteads Park. When the State of Tennessee acquired the park in 1938, it changed the name to the Cumberland Mountain State Park. The Works Progress Administration (WPA) and the Civilian Conservation Corps (CCC) as well as the Homesteaders themselves cleared the land and performed the actual labor.

Architect William Macy Stanton designed the buildings and the layout of the colony. This design laid out a cohesively planned community containing farmsteads of a Macy-designed house and outbuildings, distributed throughout the countryside around a central core which contained schools, offices, and other cooperative buildings. All of the houses and most of the major structures, such as the bridges, were built of indigenous Crab Orchard sandstone. The area originally contained 251 homesteads on lots averaging from four to thirty-five acres with the average homestead consisting of sixteen acres. The National Register nomination contains the following information about the farmsteads.

The most prevalent and recognizable property type associated with Cumberland Homesteads is the Farm Homestead. The Farm Homesteads include a collection of buildings and structures designed for the resettlement of needy families onto small subsistence farms. A Farm Homestead consisted of a residence and a combination of outbuildings that can include barns, chicken house, smokehouse, and privy. Several Farm Homesteads still retain most of their original outbuildings, however, there are some Farm Homesteads that have no extant historic outbuildings and some outbuildings with no extant historic residence. The residences of the Cumberland Homesteads are generally one or one-and-one-half story houses with indigenous Crab Orchard sandstone walls and gable roofs. All houses originally had open entrance porches, the vast majority with shed roofs. The Crab Orchard sandstone walls were constructed with wither guarried stone or field stone. Approximately fifteen different house designs were used throughout the community, but only eleven of the plans were repeated. Homeowners were allowed to make minor changes to the stock plans and several houses were built with reversed plans, different orientation to the road and variations to interior room design. A few one-of-a-kind houses were constructed. . . .

The Cumberland Homesteads provided work for its occupants as long it was under construction. But the period of steady income ended with the completion of the farm homesteads in 1938. Homeasteaders employed with the construction of the community were left without work and without a means to pay their rent on their new houses. In an effort to increase employment in the homesteads, the Resettlement Administration loaned \$55,000 to the Cumberland Homesteads Cooperative Association in December 1936. The loan helped to establish a sorghum plant, a cannery, and to operate a project coal mine. All of the projects failed for a variety of reason; inexperience, crop failure, union troubles, lack of market for finished project, and discovery of a pocket of coal instead of the expected vein. However, a lasting testament to this social experiment is the remaining collection of houses, farm support buildings, cooperative buildings, and other structures such as the bridges.

The Cumberland Homesteads Historic District was listed in the National Register of Historic Places in 1988 under Criterion A and Criterion C for its significance in social history, community planning and development, and for agriculture and architecture.



Figure 6: Example of a Homestead House, located within the historic district, that has not had extensive exterior alterations.

Figure 7: Example of outbuildings that date to the original Homestead These buildings period. were part of the Eldridge Farm that was а contributing farmstead in the historic district. The buildings on the property were razed when a bank branch was built within the historic district in 2005.

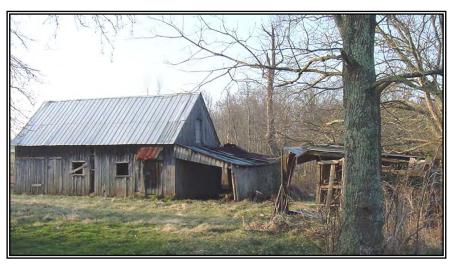


Figure 8: Homestead Tower Museum is located at the triangle intersection of State Route 28 and State Route 68 which has been the focus of the CRT. Note the modern landscaping surrounding the building that would not have fit with the rural development during the New Deal.





Figure 9: View of the historic triangle at State Route 28 and State Route 68 from the Tower Museum. In TDOT's proposed intersection improvements, a new triangle will be formed to the right of the photograph that will have the capacity to carry more vehicular traffic. Note the modern buildings located within the historic district. The building on the far right of the photograph is original to the historic district but has been too altered to be considered a contributing structure.

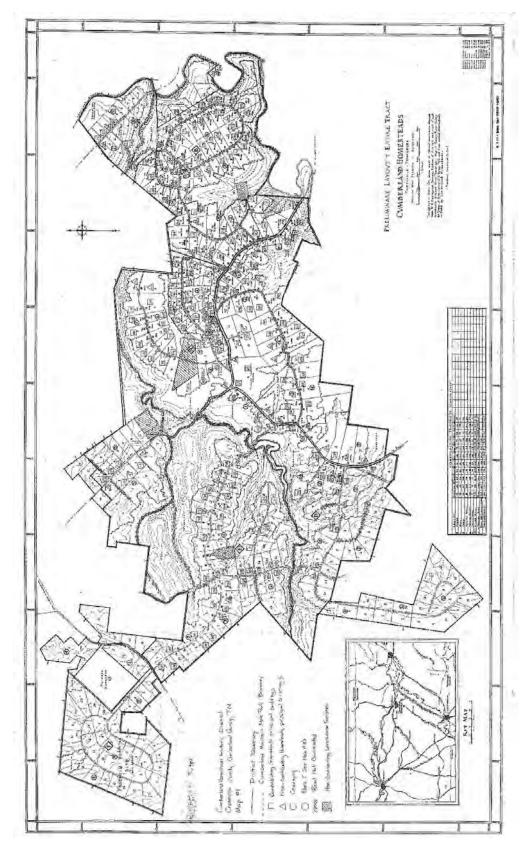


Figure 10: National Register Boundary for the Historic District as outlined in the 1988 nomination.

# Effects to Cumberland Homesteads Historic District

The proposed project begins north of State Route 68 and State Route 28 intersection to Cleveland Street in Crossville. The proposed typical section will consist of four traffic lanes, a continuous turn lane, shoulders with curb-and-gutter and utility strips within a 104-foot right-of-way. As part of a re-evaluation of the proposed project, TDOT focused on design modifications of the triangle intersection at State Route 28 and State Route 68 within the Cumberland Homesteads Historic District.

Figure 11 indicates the areas in the historic district that retain little or no integrity. Figure 12 indicates the proposed project in relation to the National Register listed Cumberland Homesteads Historic District. Figure 13 contains preliminary plans for the CRT's preferred alternative. Figure 14 is an artist's rendering of the preferred alternative in relation to the buildings located near the triangle intersection. Figures 15-21 show preliminary sketches for the triangle intersection proposed by the CRT. These alternatives were studied but not recommended.

#### Documentation of Effect

Pursuant to 36 CFR 800.5, TDOT applied the Criteria of Effect as found in 36 CFR 800.9 to the proposed interchange improvement. It is the opinion of TDOT that the proposed project will have an adverse effect the Cumberland Homesteads Historic District. The proposed project is state-funded with only federal permits required; therefore, Section 4(f) of the U.S. Department of Transportation Act of 1966 does not apply.

#### Section 106:

36CFR 800.5 (a) Apply Criteria of Adverse Effect

In consultation with the SHPO/THPO and any Indian tribe or Native Hawaiian organization that attaches religious and cultural significance to identified historic properties, the Agency Official shall apply the criteria of adverse effect to historic properties within the area of potential effect. The Agency Official shall consider any views concerning such effects, which have been provided by consulting parties and the public.

# (a) (1) Criteria of Adverse Effect

An adverse effect is found when an undertaking may alter, directly or indirectly, any of the characteristics of a historic property that qualify the property for inclusion in the National Register in a manner that would diminish the integrity of the property's location, design, setting, materials, workmanship, feeling, or association. Consideration shall be given to all qualifying characteristics of a historic property, including those that may have been identified subsequent to the original evaluation of the property's eligibility for the National Register. Adverse effects may include reasonably foreseeable effects caused by the undertaking that may occur later in time, be farther removed in distance or be cumulative.

(b) (2) Examples of Adverse Effects

An undertaking is considered to have an Adverse Effect when the effect on a historic property may diminish the integrity of the property's location, design, setting, materials, workmanship, feeling, or association. Adverse effects on historic properties include, but are not limited to:

(i). Physical destruction of or damage to all or part of the property;

TDOT's proposed project would widen the existing State Route 28 (U.S. 127) corridor south of Crossville to (and including) the intersection of State Route 28 and State Route 68. The proposed typical section will consist of four traffic lanes, a continuous turn lane, shoulders with curb-and-gutter and utility strips within a 104-foot right-of-way. The current roadway is a two-lane roadway within a 100 to 120 foot right-of-way. The Cumberland Homesteads Historic District contains over 10,000 acres of land south of Crossville. The National Register boundary begins just south of Crossville near the corporate boundary for the city. State Route 28 (U.S. 127) extends southward through the historic district. Although the project will be built on the existing alignment, will maintain historic road patterns, and will not result in the loss of any contributing buildings, it will require right-of-way to be taken from within the historic district boundaries.

In addition, the proposed project would result in the alteration of the triangle intersection where State Route 28 and State Route 68 meet. TDOT re-evaluated the proposed project after the University of Tennessee Transportation Center and public comment recommended changes to the proposed project. As a result, a CRT (CRT) was established to help find an intersection alternative that best meets the needs of local residents, historic interests, and the motoring public. Although the triangle intersections do not appear in the inventory of contributing design elements of the historic district within the National Register nomination, the physical destruction of the current triangle intersection and the resulting replacement of the intersection with a new triangle meeting current design standards on a different alignment adversely affects the historic district. Therefore, it is the opinion of TDOT that there will be an adverse effect to the historic district under this criterion.

(ii) Removal of the property from its historic location

The proposed project would not result in the removal of a contributing property from its historic location. However, the proposed project would result in the alteration of the triangle intersection where State Route 28 and State Route 68 meet. TDOT reevaluated the proposed project after the University of Tennessee Transportation Center and public comment recommended changes to the proposed project. As a result, a CRT (CRT) was established to help find an intersection alternative that best meets the needs of local residents, historic interests, and the motoring public. Although the triangle intersections do not appear in the inventory of contributing design elements of the historic district within the National Register nomination, the removal of the current triangle intersection and the replacement of the intersection with a new triangle that will meet current design standards constitutes an adverse effect to the historic district.

(iii) Change of the character of the property's use or physical features within the property's setting that contribute to its historic significance;

Cumberland Homesteads Historic District was listed in the National Register of Historic Places in 1988 under Criterion A for its significance in social history, community planning and development and agriculture and under Criterion C for its architectural significance. The historic district encompasses over 10,000 acres of land south of Crossville in a rapidly developing rural area that is characterized by modern residential housing and subdivisions and commercial buildings. The State Route 28 (U.S. 127) corridor contains the majority of this urban/suburban growth within the historic district. As a result, original homestead properties located along the State Route 28 (U.S. 127) corridor are sparsely situated and have often been removed, subdivided, or incorporated into new development. In many instances, the original homestead houses have been severely altered through efforts to modernize the modest dwellings with large additions and interior alterations that make them more livable by late-twentieth-century standards. In addition, most original homestead properties along this corridor no longer support agricultural endeavors as originally envisioned by community planners which has also led to the alteration of the rural historic landscape through the removal of farm outbuildings that served the property during its period of significance.

As part of a wide-ranging study performed by a TDOT consultant in consultation with the TN-SHPO, guidelines were developed to aid TDOT historians and their consultants in re-evaluating properties that have been altered severely since listing in the National Register of Historic Places. As part of this documentation, the consultant completed a case study using the guidelines laid out by the re-evaluation document. The Cumberland Homesteads Historic District was chosen as the case study due to its large size and the rapid changes that have occurred within the rural district since it was listed in the National Register. The consultant's purpose for studying the historic district "was to identify and map the location of the Homestead houses and to locate modern subdivision development and infill housing within the historic district." The consultant conducted a windshield survey to accomplish the overall goal of the project. Given the large-scale changes that have occurred within the historic district, the consultant tried six different methods to map and identify Homestead Houses. (A copy of the detailed study can be found in Appendix E).

The consultant identified approximately 210 structures that were recognizable Homestead Houses out of the 251 inventoried in the National Register nomination. The consultant did not study each individual Homestead property to determine if they were intact. The consultant stated "many of the Homestead houses did retain farm buildings that appear to date to the time of the period of significance of the Homestead community. Some had what appears to be their original, intact parcels of land. However, the district provides little indication of its subsistence farming history, primarily because of the extensive subdividing of the Homestead parcels and because of the changing use of the area to a vacation/retirement destination and the fact that the newcomers generally do not farm." The consultant also identified community planning features that were indicative of the Homestead including roadway features, woodlands, and other Homestead properties. The consultant concluded that the historic district retains many intact Homestead properties and design features that characterize the rural farming community. Pockets that best depict the historic character of the historic district include

- State Route 68 (historically Grassy Cove Road) from just north of Turkey Oak Road to south of Buck Creek Road
- Open Range Road
- Huckleberry Lane
- State Route 419/Pigeon Ridge Road
- Deep Draw Road between Byrd Branch and about ½ mile east of Sawmill Road
- South Main Street/U.S. 127

The consultant also found that subdivisions, commercial and industrial development, and modern churches have encroached into the historic district and compromised the integrity of the State Route 28 (U.S. 127) corridor "north of its intersection with State Route 68, State Route 68 from US 127 east to the vicinity of its intersection with Deep Draw Road, Deep Draw Road between US 127 and



Highland Lane, and Highland Lane north to the north end of the Highland View Subdivision." See Figure 11 for locations.

Figure 11: Map taken from the consultant's reevaluation of the historic district indicating the area that retains no integrity. The rapid growth within the historic district in the proposed project area detracts from the community plan created by William Macy Stanton during the New Deal era. The Homesteads was designed to be a self-sufficient rural farming community characterized by small farms, collective industrial enterprises, and a well-planned roadway system. With the introduction of urban/suburban development and the alterations to original Homestead Houses along the State Route 28 (U.S. 127) corridor, the setting no longer contributes to the National Register significance of the historic district. Therefore in the opinion of TDOT, the proposed project would not adversely impact the historic district under this criterion.

(iv) Introduction of visual, atmospheric, or audible elements that diminish the integrity of the property's significant historic features;

Cumberland Homesteads Historic District was listed in the National Register of Historic Places in 1988 under Criterion A for its significance in social history, community planning and development and agriculture and under Criterion C for its architectural significance. The historic district encompasses over 10,000 acres of land south of Crossville in a rapidly developing rural area that is characterized by modern residential housing and subdivisions and commercial buildings. The State Route 28 (U.S. 127) corridor contains the majority of this urban/suburban growth within the historic district. As a result, original homestead properties located along the State Route 28 (U.S. 127) corridor are sparsely situated and have often been removed, subdivided, or incorporated into new development. In many instances, the original homestead houses have been severely altered through efforts to modernize the modest dwellings with large additions and interior alterations that make them more livable by late-twentieth-century standards. In addition, most original homestead properties along this corridor no longer support agricultural endeavors as originally envisioned by community planners which has also led to the alteration of the rural historic landscape through the removal of farm outbuildings that served the property during its period of significance.

The State Route 28 (U.S. 127) corridor is located in an essentially urban/suburban area of the Cumberland Homesteads Historic District that no longer retains its integrity under the National Register Criteria for which the district was listed. Although there are pockets within the over 10,000 acre historic district that retain their integrity they are not located along the project corridor.

In 1997, a State Environmental and Location Study report was prepared by the Environmental Planning Office. A section of that report was devoted to the air and noise study performed on most road projects. The report stated:

# Air and Noise Impacts

No substantial increase in air quality or noise level impacts to sensitive receptors is anticipated as a result of this project.

Noise abatement measures such as noise barriers, traffic management measures, and alteration of horizontal or vertical alignment were considered for this project. These measures were found to be unreasonable and infeasible because of the scattered number of residences and because the roadway is access uncontrolled. For these reasons, it is unlikely that any form of noise abatement will be incorporated into the design of this project.

Therefore, it is the opinion of TDOT that the proposed project would not adversely impact the historic district relating to the introduction of audible or atmospheric effects that are out of character with the property's current setting.

(v) Neglect of a property which causes its deterioration, except where such neglect or deterioration are recognized qualities or a property of religious and cultural significance to an Indian tribe or Native Hawaiian organization; and

The property would not come under the jurisdiction of TDOT or other federal permitting agencies during the course of the project and thus this does not apply.

Therefore, in the opinion of TDOT the proposed improvements will have an adverse effect to the National Register listed Cumberland Homesteads Historic District.

#### **Resolution of Adverse Effects**

Pursuant to 36 CFR 800.6, TDOT has consulted with the TN-SHPO and other interested parties to resolve the adverse effect caused by the proposed project. This consultation process began in the 1990s with TDOT historians and TN-SHPO staff field reviewing the project to determine the least harmful alternatives and continues to the present time with the CRT using Context Sensitive Design principles to help determine the alignment of the triangle intersection where State Route 28 (U.S. 127) and State Route 68 intersect. In addition, after choosing the alignment for the triangle intersection, an enhancements committee will be formed in order to determine the type of aesthetic treatments used to mitigate the adverse effect to the historic district.



Figure 12: Historic rendering of the Triangle Intersection from the Library of Congress Website. The triangle itself and the area surrounding it have been altered since the 1930s including the addition of trees and wooden highway markers to the grassy triangle, and modern buildings have sprung up adjacent to the triangle.

As noted previously in the Project History section of this report, the CRT included local officials, residents, roadway users, and representative from the TN-SHPO and federal permitting agencies. A wide variety of interests were represented and the preferred alternative was chosen from those studied and reviewed by the CRT. Given that the need for the roadway widening project was already firmly established, the CRT was charged with finding alternatives at the triangle intersection of State Route 28 (U.S. 127) and State Route 68 near the historic water tower and Homesteads school. The CRT evaluated a variety of alternatives in an effort to retain as much of the triangle intersection as possible while keeping as many of the historic buildings as possible.

# Alternatives Considered

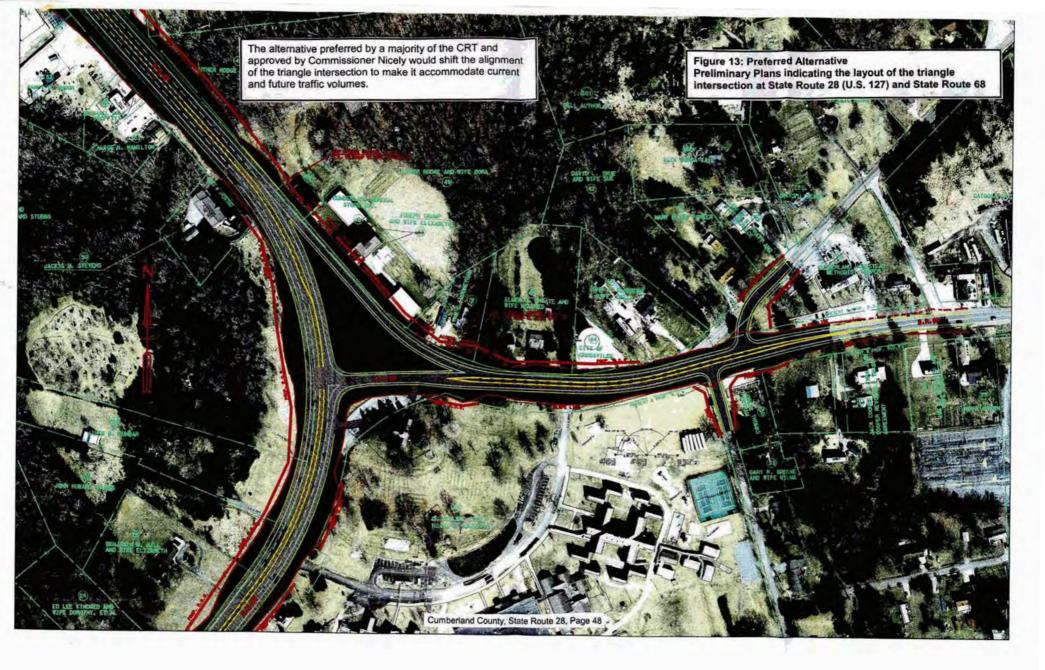
#### Preferred Alternative

The preferred alternative, designated "D-modified," has the following features:

- State Route 68 intersects with State Route 28 (U.S. 127) at 90 degrees to tangent of the curve on State Route 28 (U.S. 127)
- State Route 68 westbound will be free flow and become a second lane to State Route 28 (U.S. 127) northbound

- State Route 28 (U.S. 127) southbound will have one left turn lane to State Route 68 eastbound
- State Route 28 (U.S. 127) northbound right lane will become a right turn lane to eastbound State Route 68 and the lane will drop at the intersection
- The triangle will be rehabilitated to approximately the current condition with landscaping typical of the 1930s Cumberland Plateau
- Shoulder paving will be minimized to minimize the apparent footprint
- Continue to preserve the triangle and minimize the footprint wherever possible

The CRT also recommended that a smaller "Enhancement Committee" should be formed in order to coordinate historic, aesthetic, and landscape treatments for the project. At the present time, the consultant is working with TDOT, local officials, and the CRT to build a membership that includes community leaders, citizens, a landscape architect, and TDOT and TN-SHPO representatives. This enhancement committee will focus solely on the triangle intersection area and will provide TDOT's commissioner with their recommendations that both blend with the historic context of the Homestead and enhance the area surrounding the intersection of State Route 28 (U.S. 127) and State Route 68. Enhancement committee members have been selected and approved by TDOT and the first meeting has been scheduled for May 2006.





# Alternatives Considered but Not Recommended

<u>Alternative A</u>: This alternative provides the through movement fro U.S. 127 (SR 28). State Route 68 intersects U.S. 127 north of the Tower Triangle. State Route 68 circles north of the Tower Triangle and reconnects with existing State Route 68 near Deep Draw Road. Access to the Tower and School from relocated U.S. 127 is by the proposed new drive to the west of existing U.S. 127School entrance. Access to the Tower and School from relocated S.R. 68 is by the proposed new drive north of the east corner of the existing triangle. This alternative was presented at a public meeting on June 24, 2004. Figure 15 indicates the layout of this alternative.

<u>Alternative B</u>: This alternative is similar to Alternative A except the intersection moves closer to Crossville, S.R. 68 moves farther away from the Tower Triangle and S.R. 68 reconnects with the existing S.R. 68 approximately 1000-feet east of Deep Draw Road. Access to the Tower and School from relocated U.S. 127 is by the proposed new drive to the west of existing U.S. 127School entrance. Access to the Tower and School from relocated S.R. 68 is by Deep Draw Road to existing S.R. 68. This alternative was presented at a public meeting on June 24, 2004. Figure 16 indicates the layout of this alternative.

<u>Alternative C</u>: "C" provides the through movement of S.R. 68. U.S. 127 (S.R. 28) intersects S.R. 68 just northwest of the Tower Triangle and curves into existing U.S. 127 (S.R. 28) approximately 1000-feet south of the Homestead Elementary School Entrance. Access to the Tower and School from relocated U.S. 127 is by the proposed new drive to the west of existing U.S. 127School entrance. School exit to S.R. 68 is at the existing location. This alternative was also presented to the public at a meeting held on June 24, 2004. Figure 17 indicates the layout of this alternative.

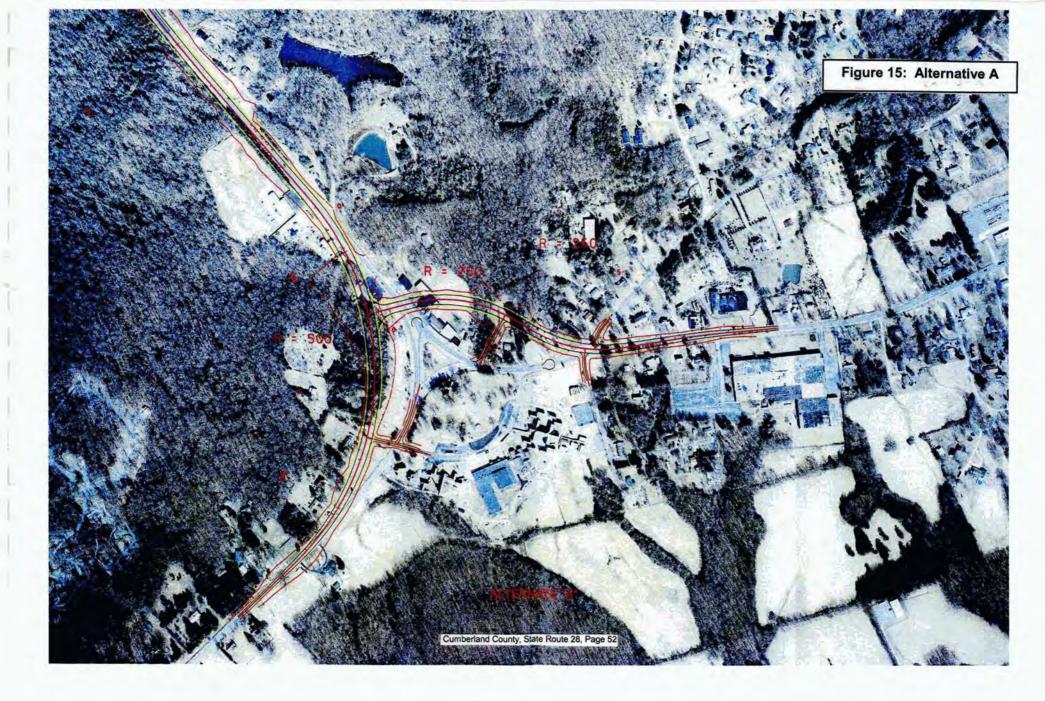
<u>Alternative D</u>: This alternative provides for the through movement of U.S. 127 (S.R. 28). State Route 68 intersects U.S. 127 in the middle of the Tower Triangle and immediately reconnects with Existing S.R. 68 just east of the Tower Triangle. Access to the School is at the existing location. Access to the Tower is from the proposed new driveways from relocated U.S. 127 and relocated S.R. 68. The School exit to S.R. 68 is at the existing location. This alternative was also presented at the June 24, 2004 public meeting. Figure 18 indicates the layout of this alternative.

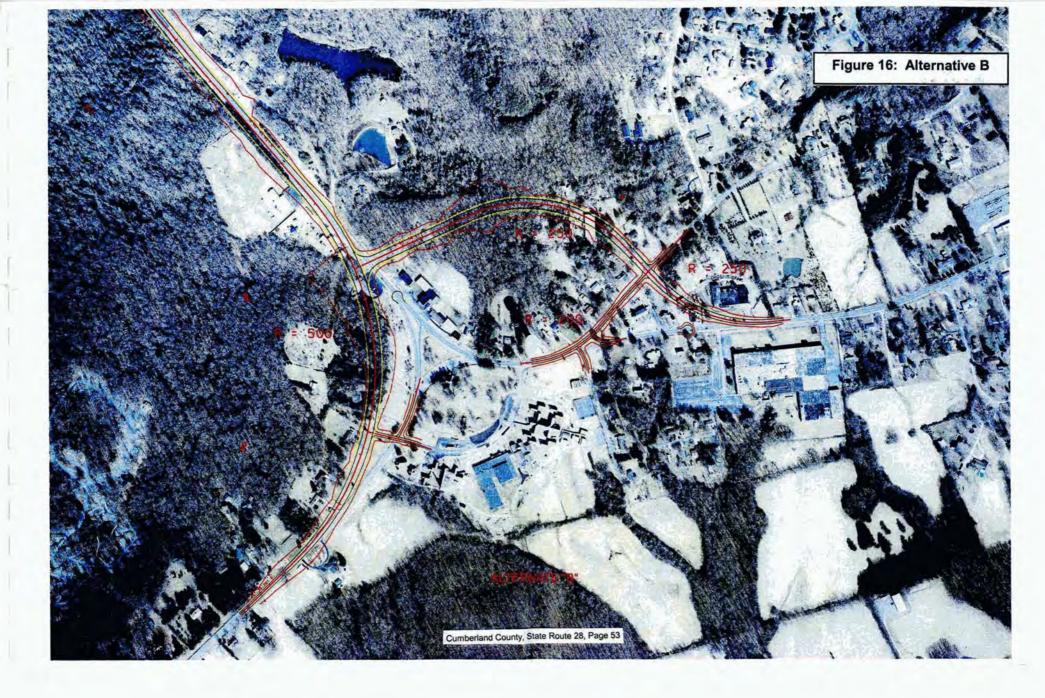
<u>Alternative E</u>: Alternative E would bypass the existing triangle intersection by shifting the alignment of State Route 68 south of the current alignment. The bypass would intersect with State Route 28 southwest of the School and the alignment would continue on new location to the northwest and would reconnect with the existing State Route 28 (U.S. 127) north of the existing triangle. Access to the Tower and School would continue to be from the

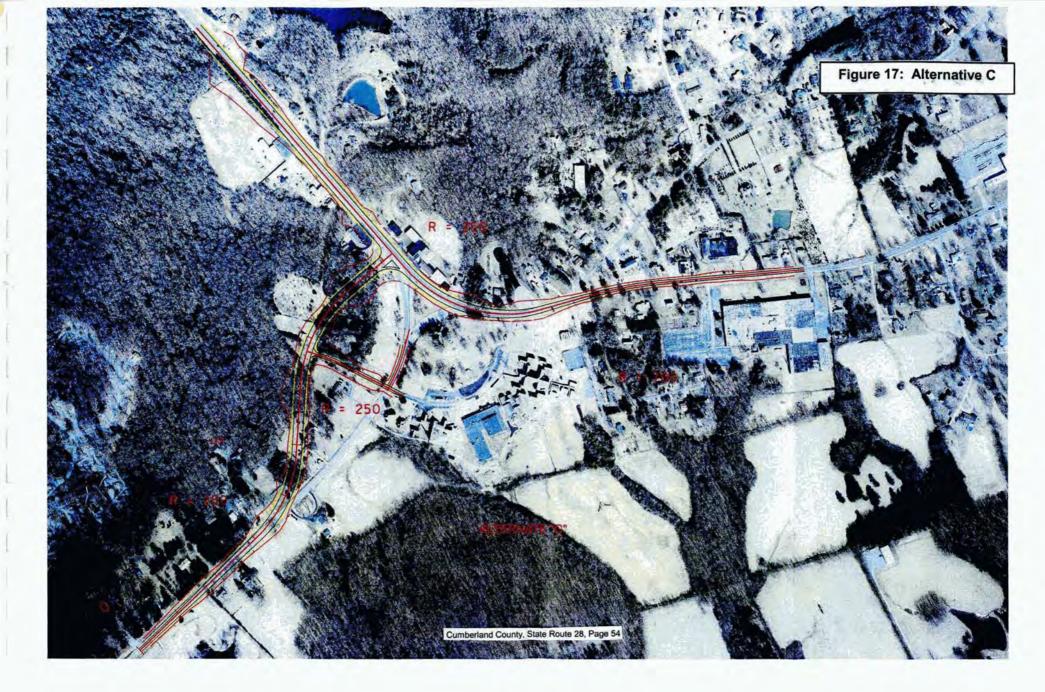
existing State Route 28 and State Route 68. Figure 19 indicates the layout of this alternative.

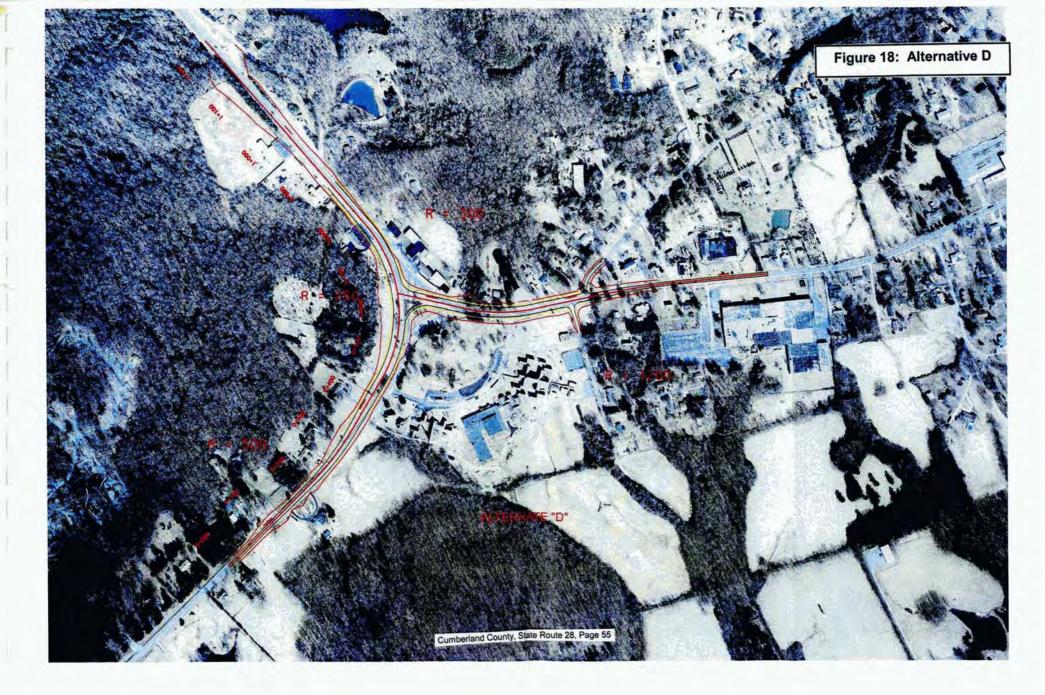
<u>Alternative F</u>: This alternative would replace the existing triangle with a roundabout. Traffic would flow around the circle with State Route 68 and State Route 28 (U.S. 127) located on essentially the same alignment. Access to the School would remain from State Route 28 and State Route 68; however the would be no access and no parking at the Homestead Tower. Figure 20 indicates the layout of this alternative.

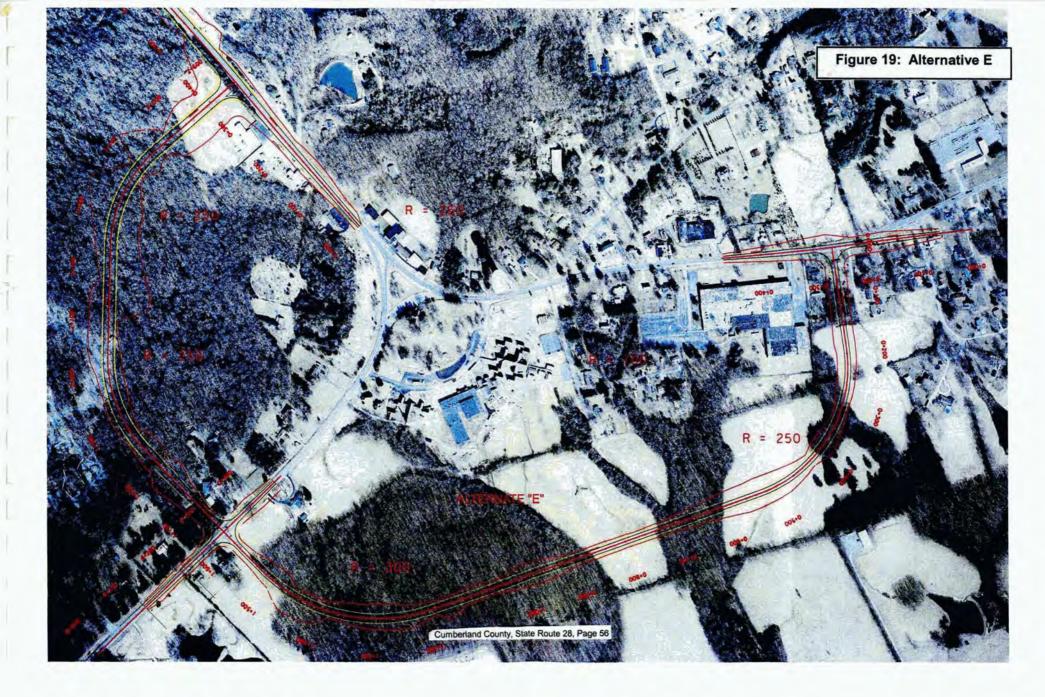
<u>Alternative G</u>: "G" would provide a T-intersection through the existing triangle just west of the Homestead Tower. The alignment of State Route 68 and State Route 28 would remain on essentially the same alignment. Access to the School would remain from State Route 28 and State Route 68; however there would be no access or parking at the Homestead Tower. Figure 21 indicates the layout of this alternative.

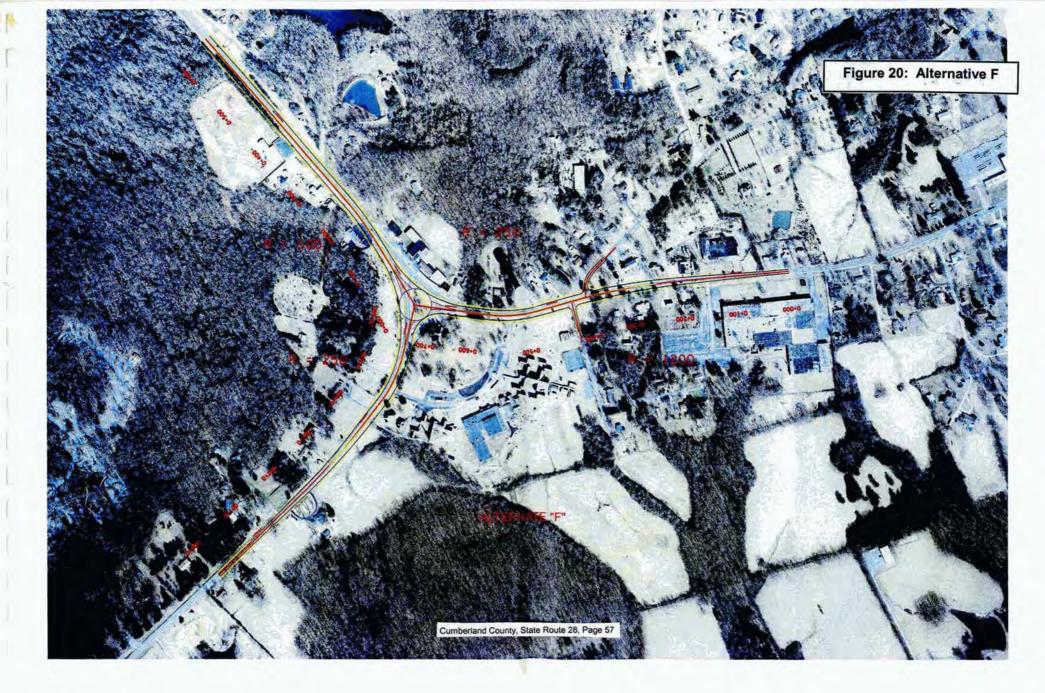














# **Conclusions**

The Tennessee Department of Transportation (TDOT) is proposing to improve State Route 28 (U.S. 127) from State Route 68 to Cleveland Street in Crossville in Cumberland County, Tennessee. The proposed project begins north of State Route 68 and State Route 28 intersection to Cleveland Street in Crossville. The proposed typical section will consist of four traffic lanes, a continuous turn lane, shoulders with curb-and-gutter and utility strips within a 104-foot right-of-way.

TDOT historians identified one National Register listed historic district, Cumberland Homesteads Historic District. Under Section 106, as defined in 36 CFR 800.5, the proposed project would adversely effect to the National Register listed historic district.

Since this project is state funded, Section 4(f) of the U.S. Department of Transportation Act of 1966 does not apply.

# **Bibliography**

Brookhart, G. Donald. "Cumberland County." *Tennessee Encyclopedia of History and Culture*. Edited by Carroll Van West. Nashville: Tennessee Historical Society, 1998.

Cumberland Homesteads Historic District National Register Nomination, 1988. On file with the Tennessee Historical Commission, Nashville, Tennessee.

Folmsbee, Stanley J., Robert E. Corlew, and Enoch L. Mitchell. Tennessee: A Short History. Knoxville: University of Tennessee Press, 1969.

# SECTION 106 REVIEW, NATIONAL HISTORIC PRESERVATION ACT OF 1966

Section 106 of the National Historic Preservation Act requires that Federal agencies consider what effects their actions and/or actions they may assist, permit, or license, may have on historic properties, and that they give the Advisory Council on Historic Preservation (Council) a "reasonable opportunity to comment" on such actions. The Council is an independent Federal agency. Its role in the review of actions under Section 106 is to encourage agencies to consider, and where feasible, adopt measures that will preserve historic properties that would otherwise be damaged or destroyed. The Council's regulations, entitled "Protection of Historic Properties" (36 CFR Part 800) govern the Section 106 process. The Council does not have the authority to require agencies to halt or abandon projects that will affect historic properties.

Section 106 applies to properties that have been listed in the *National Register of Historic Places (NRHP)*, properties that have been determined to be eligible for inclusion in the NRHP, and properties that may be eligible but have not yet been evaluated. If a property has not yet been nominated to the NRHP or determined eligible for inclusion, it is the responsibility of the Federal agency involved to ascertain its eligibility.

The Council's regulations are set forth in a process consisting of four basic steps which are as follows:

- Initiate Section 106 Process: The Federal agency responsible for the action establishes the undertaking, determines whether the undertaking has the potential to affect historic properties (i.e., properties listed in or eligible for listing in the National Register of Historic Places), and identifies the appropriate State Historic Preservation Officer (SHPO) or Tribal Historic Preservation Officer (THPO). At this time, the agency plans to involve the public and identify other consulting parties.
- 2. <u>Identify Historic Properties</u>: If the agency's undertaking has the potential to affect historic properties, the agency determines the scope of appropriate identification efforts and proceeds to identify historic properties within the area of potential effects. Identification involves assessing the adequacy of existing survey data, inventories, and other information on the area's historic properties. This process may also include conducting further studies as necessary and consulting with the SHPO/THPO, consulting parties, local governments, and other interested parties. If properties are discovered that may be eligible for the National Register, but have not been listed or determined eligible for listing, the agency consults with the SHPO/THPO and, if needed, the Keeper of the National Register to determine the eligibility status of the property.
- <u>Assess Adverse Effects:</u> The agency, in consultation with the SHPO/THPO, assesses the potential effects to historic properties affected by the undertaking. The agency at this time will determine that the action will have "no adverse effect" or an "adverse effect" on historic properties. Consulting parties and interested members of the public are informed of these findings.

The regulations provide specific criteria for determining whether an action will have an effect, and whether that effect will be adverse. Generally, if the action may alter the characteristics that make a property eligible for the National Register, it is recognized that the undertaking will have an effect. If those alterations may be detrimental to the property's characteristics, including relevant qualities of the property's environment or use, the effects are recognized as "adverse."

4. <u>Resolve Adverse Effects:</u> The agency consults with the SHPO/THPO and others, including consulting parties and members of the public. The Council may choose to participate in consultation, particularly under circumstances where there are substantial impacts to historic properties, when a case presents important questions about interpretation, or if there is the potential for procedural problems. Consultation usually results in a Memorandum of Agreement (MOA).

If agreement cannot be reached, the agency, SHPO/THPO, or Council may terminate consultation. If the SHPO/THPO terminates consultation, the agency and the Council may conclude the MOA without SHPO/THPO involvement. If the SHPO/THPO terminates consultation and the undertaking is on or affecting historic properties on tribal lands, the Council must provide formal comments. The agency must request Council comments if no agreement can be reached.

# ELIGIBILITY CRITERIA OF THE NATIONAL REGISTER OF HISTORIC PLACES AS SET FORTH AT 36 CFR 60.4

The quality of significance in American history, architecture, archaeology, and culture is present in districts, sites, buildings, structures, and objects that possess integrity of location, design, setting, materials, workmanship, feeling, and association, and:

- CRITERION A. that are associated with events that have made a significant contribution to the broad patterns of our history (history); or
- CRITERION B. that are associated with the lives of persons significant in our past (person); or
- CRITERION C. that embody the distinctive characteristic of a type, period, or method of construction or that represent the work of a master, or that possess high artistic values, or that components may lack individual distinction (architecture); or
- CRITERION D. that have yielded, or may be likely to yield, information important in prehistory or history (archaeology).

Ordinarily, cemeteries; birthplaces or graves of historical figures; properties owned by religious institutions or used for religious purposes; structures that have been moved from their original locations; reconstructed historic buildings; properties primarily commemorative in nature; and properties that have achieved significance within the past 50 years are not considered eligible for the National Register of Historic Places; however, such properties will qualify if they are integral parts of historic districts that do meet the criteria or if they fall within the following categories:

- EXCEPTION A. a religious property deriving primary significance from architectural or artistic distinction or historical importance; or
- EXCEPTION B. a building or structure removed from its original location but which is significant primarily for architectural value, or which is the surviving structure most importantly associated with a historic person or event; or
- EXCEPTION C. a birthplace or grave of a historical figure of outstanding importance if there is no other appropriate site or building directly associated with his productive life; or
- EXCEPTION D. a cemetery which derives its primary significance from graves or persons of transcendent importance, from age, from distinctive design features, or from association with historic events; or
- EXCEPTION E. a reconstructed building when accurately executed in a suitable environment and presented in a dignified manner as part of a restoration master plan, and when no other building or structure with the same association has survived; or
- EXCEPTION F. a property primarily commemorative in intent if design, age, tradition, or symbolic value has invested it with its own historical significance; or
- EXCEPTION G. a property achieving significance within the past 50 years if it is of exceptional importance.

# NATIONAL REGISTER OF HISTORIC PLACES

# Summary Sheet Prepared by TDOT

*What is the National Register of Historic Places?* The National Register, maintained by the Keeper of the Register within the National Park Service, Department of Interior, is the nation's official list of districts, buildings, sites, structures, and objects significant in American history, architecture, archeology, engineering, and culture.

*What are the benefits and restrictions of listing?* In addition to honorific recognition, listing in the National Register results in the following benefits for historic properties:

- Section 106 provides for consideration of National Register listed or eligible properties in planning for Federal, federally licensed, and federally assisted projects;
- Eligibility for certain tax provisions for the certified rehabilitation of incomeproducing National Register structures such as commercial, industrial, or rental residential buildings;
- Consideration of historic values in the decision to issue a surface mining permit where coal is located in accordance with the Surface Mining Control Act of 1977; and
- Qualification of Federal grants for historic preservation, when funds are available.

*Does National Register designation place any additional burdens or obligations on the property owner?* Owners of private property listed in the National Register are free to maintain, manage, or dispose of their property as they choose, provided that no Federal moneys are involved.

*How is a property nominated to the National Register?* The first step is for the owner to contact the Tennessee State Historic Preservation Office (TN-SHPO), Clover Bottom Mansion, 2941 Lebanon Road, Nashville, TN 37243-0442; 615-532-1558. Ordinarily, private individuals (or paid consultants) prepare nomination forms. The TN-SHPO submits these nominations to a State Review Board, which meets three times a year. This body reviews the nominations and votes to recommend or deny National Register listing. If approved, the TN-SHPO submits the nomination to the Keeper of the Register in Washington, D.C. for consideration for listing. The Keeper's Office has 45 days to review the nomination, and its decision regarding National Register listing is final.

*How long does the nomination process take?* The process varies but typically takes between eight and twelve months.

# CRITERIA OF ADVERSE EFFECT

Regulations codified at 36 CFR 800 require Federal agencies to assess their impacts to historic resources. The regulations provide specific criteria for determining whether an action will have an effect, and whether that effect will be adverse. These criteria are given below.

# 36 CFR 800.5 Assessment of Adverse Effects

(a) *Apply Criteria of Adverse Effect.* In consultation with the SHPO/THPO and any Indian tribe or Native Hawaiian organization that attaches religious and cultural significance to identified historic properties, the Agency Official shall apply the criteria of adverse effect to historic properties within the area of potential effects. The Agency Official shall consider any views concerning such effects which have been provided by consulting parties and the public.

(1) Criteria of adverse effect. An adverse effect is found when an undertaking may alter, directly or indirectly, any of the characteristics of a historic property that qualify the property for inclusion in the National Register in a manner that would diminish the integrity of the property's location, design, setting, materials, workmanship, feeling, or association. Consideration shall be given to all qualifying characteristics of a historic property, including those that may have been identified subsequent to the original evaluation of the property's eligibility for the National Register. Adverse effects may include reasonably foreseeable effects caused by the undertaking that may occur later in time, be farther removed in distance or be cumulative.

(2) *Examples of adverse effects.* Adverse effects on historic properties include, but are not limited to:

(i) Physical destruction of or damage to all or part of the property;

(ii) Alteration of a property, including restoration, rehabilitation, repair, maintenance, stabilization, hazardous material remediation and provision of handicapped access that is not consistent with the Secretary's Standards for the Treatment of Historic Properties and applicable guidelines;

(iii) Removal of the property from its historic location;

(iv) Change of the character of the property's use or of physical features within the property's setting that contribute to its historic significance;

(v) Introduction of visual, atmospheric or audible elements that diminish the integrity of the property's significant historic features;

(vi) Neglect of a property which causes its deterioration, except where such neglect and deterioration are recognized qualities of a property of religious and cultural significance to an Indian tribe or Native Hawaiian organization; and

(vii) Transfer, lease or sale of property out of Federal ownership or control without adequate and legally enforceable restrictions or conditions to ensure long-term preservation of the property's historic significance.

# APPENDIX D

**PUBLIC PARTICIPATION** 

Sample Letter to Public



STATE OF TENNESSEE DEPARTMENT OF TRANSPORTATION ENVIRONMENTAL DIVISION 505 DEADERICK STREET SUITE 900, JAMES K. POLK BUILDING NASHVILLE, TENNESSEE 37243-0349 615-741-3653

March 10, 2005

SUBJECT: Architectural Assessment and Documentation of Effect for the proposed improvements to State Route 28 (U.S. 127) from State Route 68 to Cleveland Street, Crossville, Cumberland County, Tennessee

To Whom it May Concern:

The Tennessee Department of Transportation (TDOT) is proposing to improve State Route 28 (U.S. 127) from State Route 68 to Cleveland Street.

Pursuant to regulations set forth in "36 CFR 800: Protection of Historic Properties" cultural resource staff from TDOT surveyed the general project area in an attempt to identify National Register-included or eligible properties which could be impacted by the proposed project.

The enclosed report discusses TDOT's survey findings. You are receiving this report because TDOT has identified you as a Cumberland County party or individual with historic preservation interests. The Advisory Council on Historic Preservation Regulations specify that members of the public with interests in an undertaking and its effects on historic properties should be given reasonable opportunity to have an active role in the Section 106 process. As such, TDOT would like to give you the opportunity to participate in that process. If you feel that commenting on such projects is outside the interests of your organization, please notify me and I will remove your name from our list.

If you have any comments on historic issues related to this project, please write me. Federal regulations provide that you have thirty days to respond from the receipt of this letter.

Sincerely,

Tammy Allison Sellers, Historic Preservation Supervisor

Enclosure cc: Mr. Herbert Harper, TN-SHPO

#### Page 1

#### Letter to Local Government Official



March 15, 2006

Brock Hill Cumberland County Mayor 2 North Main Street, Suite 203 Crossville, TN 38555

RE:

Section 106 Initial Coordination for Proposed Improvements to State Route 28 (U.S. 127) from State Route 686 to Cleveland Road in Crossville, Cumberland County, Tennessee

Dear Mr. Hill:

The Tennessee Department of Transportation (TDOT) in cooperation with the Federal Highway Administration is proposing to improve the above referenced project. Its location is shown on the enclosed map.

The 2001 Advisory Council on Historic Preservation regulations stipulate that TDOT invite local government representatives to participate in the historic review process as a consulting party. TDOT would like to invite you, as the local government official, to participate as a consulting party for the proposed project.

If you choose to participate as a consulting party, you will receive copies of TDOT's environmental reports and will be invited to attend project-related meetings between TDOT and the Tennessee State Historic Preservation Office (TN-SHPO), if any are held. As a consulting party, you should be prepared to attend any such meetings between TDOT and the TN-SHPO and provide a response to TDOT's reports in written form within 30 days upon receipt of the report. TDOT also wishes to seek your comments on the identification and evaluation of historic properties that the proposed project might impact.

If you would like to participate as a consulting party, please write to me at the above address. To facilitate our planning process, please respond within 30 days of receipt of this letter. Thank you for your assistance.

Sincerely,

Masser Carrier

Martha Carver Historic Preservation Program Manager

Enclosure cc: Mr. Herbert Harper, TN-SHPO

#### Page 1

# Letter to Local Government Official



March 15, 2006

J. H. Graham, Mayor City of Crossville 99 Municipal Avenue Crossville, TN 38555

RE:

Section 106 Initial Coordination for Proposed Improvements to State Route 28 (U.S. 127) from State Route 686 to Cleveland Road in Crossville, Cumberland County, Tennessee

Dear Mr. Graham:

The Tennessee Department of Transportation (TDOT) in cooperation with the Federal Highway Administration is proposing to improve the above referenced project. Its location is shown on the enclosed map.

The 2001 Advisory Council on Historic Preservation regulations stipulate that TDOT invite local government representatives to participate in the historic review process as a consulting party. TDOT would like to invite you, as the local government official, to participate as a consulting party for the proposed project.

If you choose to participate as a consulting party, you will receive copies of TDOT's environmental reports and will be invited to attend project-related meetings between TDOT and the Tennessee State Historic Preservation Office (TN-SHPO), if any are held. As a consulting party, you should be prepared to attend any such meetings between TDOT and the TN-SHPO and provide a response to TDOT's reports in written form within 30 days upon receipt of the report. TDOT also wishes to seek your comments on the identification and evaluation of historic properties that the proposed project might impact.

If you would like to participate as a consulting party, please write to me at the above address. To facilitate our planning process, please respond within 30 days of receipt of this letter. Thank you for your assistance.

Sincerely,

Masser Carrier

Martha Carver Historic Preservation Program Manager

Enclosure cc: Mr. Herbert Harper, TN-SHPO

#### Sample Letter to Native Americans



STATE OF TENNESSEE DEPARTMENT OF TRANSPORTATION THE ENVIRONMENTAL DIVISION SUITE 900, JAMES K. POLK BUILDING 505 Deaderick Street NASHVILLE, TENNESSEE 37243-0334 (615) 741-12257 Fax (615) 741-1098

March 15, 2006

SUBJECT: Section 106 Initial Coordination for Proposed Improvements to State Route 28 (U.S. 127) from State Route 68 to Cleveland Street in Crossville, Cumberland County, Tennessee

To Whom It May Concern:

The Tennessee Department of Transportation (TDOT) in cooperation with the Federal Highway Administration is in the planning stages of evaluating the above-referenced project for possible implementation. The location of the proposed project is shown on the enclosed map.

The 2001 Advisory Council on Historic Preservation regulations, 36 CFR 800, stipulate that Indian tribes that attach religious and cultural significance to properties that may be affected by an undertaking be invited to participate in the project review process as consulting parties. TDOT would like to invite you to participate as a consulting party for the proposed project. This letter is also TDOT's request for comments on the identification of properties in the project's area of potential effect that may be of religious and cultural significance to your tribe.

If you choose to participate as a consulting party on the above-referenced project, you will receive copies of cultural assessment reports that identify Native American related properties. You will also be invited to attend project-related meetings with FHWA, TDOT and the Tennessee State Historic Preservation Office (TN-SHPO), if any are held. We respectfully request written responses to project reports and other materials within thirty (30) days of receipt.

If you would like to participate as a consulting party, please respond to me via letter, telephone (615-741-5257), fax (615-741-1098) or E-mail (Gerald.Kline@state.tn.us). To facilitate our planning process, please respond within 30 days of receipt of this letter. If you do not respond, you will not receive reports related to this project unless you specifically request them at a later date. Thank you for your assistance.

Sincerely,

Anald Kline

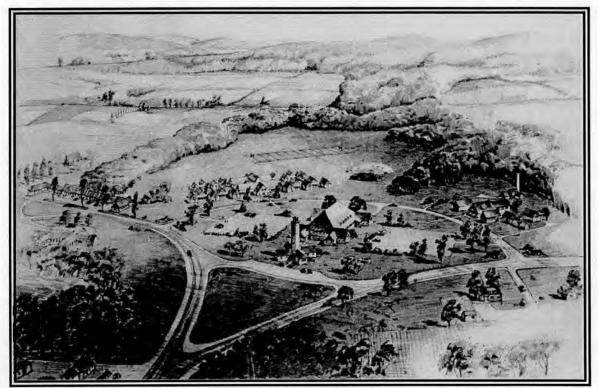
Gerald Kline Transportation Specialist I Archaeology Program Manager

Enclosure

cc. Augustine Asbury, Alabama-Quassarte Tribal Town Dr. Richard Allen, The Cherokee Nation Tyler Howe, Eastern Band of Cherokee Indians Charles D. Enyart, Eastern Shawnee Tribe of Oklahoma Gary Bucktrot, Kialegee Tribal Town Joyce Bear, Muscogee (Creek) Nation Rebecca Hawkins, Shawnee Tribe Lisa Stopp, United Keetoowah Band of Cherokee Indians

APPENDIX E RECONNAISSANCE SURVEY CUMBERLAND HOMESTEADS HSITORIC DISTRICT

# RECONAISSANCE SURVEY CUMBERLAND HOMESTEADS HISTORIC DISTRICT CROSSVILLE, CUMBERLAND COUNTY, TENNESSEE



"Community Center, Cumberland Homesteads, Crossville, Tennessee, Special Plans Division, Resettlement Administration" (Current Intersection of US 127 and State Route 68) From Library of Congress

COMPLETED AS A CASE STUDY FOR THE PROJECT TO DEVELOP TDOT GUIDELINES FOR RE-EVALUATING NATIONAL REGISTER-LISTED RESOURCES ENCOUTERED IN THE SECTION 106 PROCESS

<u>Prepared for:</u> Tennessee Department of Transportation Environmental Division

<u>Prepared by</u>: Margaret Slater, AICP Senior Professional Associate in Cultural Resources Parsons Brinckerhoff Nashville, Tennessee

December 2004

# TABLE OF CONTENTS

1.0	INTRODUCTION
	1.1       Background
2.0	METHODOLOGY
3.0	FINDINGS
	3.1       Historic Homestead Resources
	3.2       Non-Homestead Development
	3.3 Summary of Findings
FIGU	ES
1. 2. 3.	General Location Map, Cumberland Homesteads Historic District
4. 5. 6. 7.	Drawing of Typical Homestead House. From notecard by Doyle Vaden
APPE	NDICES
	December 2004 Windshield Survey Roster Tax Assessor's Records
ATTA	CHMENTS
1.	Historic District Map from National Register Nomination, Map 1

- 2. Aerial Photographs of Cumberland Homesteads Historic District (8-map set plus key map)
- 3. Property Maps showing location of Homestead and Non-Homestead Resources

i

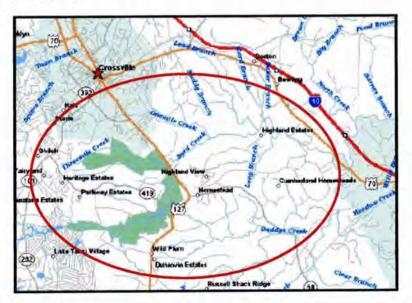
#### 1.0 INTRODUCTION

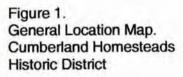
#### 1.1 Background

The Tennessee Department of Transportation (TDOT) has contracted with Parsons Brinckerhoff (PB) to develop guidance for re-evaluating properties that are listed in the National Register of Historic Places (NRHP) and that are encountered in their surveys conducted pursuant to Section 106 of the National Historic Preservation Act (NHPA). The guidelines were developed by TDOT in consultation with the State Historic Preservation Office (SHPO). In addition to producing a document that contained the guidelines, PB's scope of work for this project specified that a case study be completed.

The case study selected for this study involved the re-evaluation of the NRHP-listed Cumberland Homesteads Historic District, located in Cumberland County, Tennessee, just south of Crossville. The 10,250-acre district was listed in the NRHP in 1988 under NRHP Criteria A and C for its significance in Social History, Community Planning and Development, Agriculture and Architecture. According to the NRHP nomination, "Cumberland Homesteads is a planned New Deal community built by the Division of Subsistence Homesteads between 1934 and 1938. . . [it is] of national significance as an intact planned community representative of an important New Deal movement to aid destitute families." Its period of significance is from 1934 – 1941. The area originally encompassed 27,802 acres and had 251 farm homesteads that were built on lots ranging from 10 to 160 acres. Both the community plan and the houses were designed by William Macy Stanton. The farmstead houses, community buildings and bridges in the district were built of local, Crab Orchard stone.

The Cumberland Homesteads Historic District is on Tennessee's Cumberland Plateau in an area of rolling hills, hollows and deep ravines. The area has a view of the mountains to the south and east. Creeks that bisect the district include Daddys Creek, Three-Mile Creek, Byrd Creek and Long Hollow Branch. In the middle of the district is the Cumberland Mountain State Park, a Civilian Conservation Corps' project, built in conjunction with the Cumberland Homesteads. Figure 1 shows the general location of the district.





#### 1.2 Purpose of the Re-Evaluation

Since the district was listed in the NRHP in 1988, the Crossville area and its environs have undergone a transformation. The area is rapidly developing as a year-round retirement and seasonal vacation destination. The increase in the area's desirability for these purposes is continuing to change Crossville and surrounding areas, including the area south of Crossville encompassed by the Cumberland Homesteads Historic District. The purpose of this re-evaluation of the district is to identify any major changes that have occurred since 1988 and to provide this information to:

- 1. TDOT: for use in current or future roadway planning; and
- <u>Historians</u>: for the development of a driving tour of the district or for other historic purposes.

#### 2.0 METHODOLOGY

The scope of work for PB's re-evaluation of the Cumberland Homesteads Historic District involved the conduct of a windshield survey, i.e., an overview survey of the district, not an in-depth evaluation. The main purpose of this study is to identify and map the locations of the Homestead houses, to point out concentrations of Homestead homes (i.e., areas of the district that are the most intact) and to locate modern subdivision development and infill housing within the district boundaries. This task was accomplished through a windshield survey, comprised of several drive-throughs of the district. During the drive-throughs, original Homestead buildings were located on aerial photographs and a roster was completed that recorded addresses and whether there was a Homestead building or modern building at each address. Outbuildings were not included in the re-survey. The buildings in the Cumberland Mountain State Park were also not included in the re-survey.

Below is a summary of the successful and not-so-successful attempts to gather the desired data:

 <u>Utilize NRHP Nomination Maps</u>: We began the windshield survey using Map 1 from the NRHP nomination for our field recordation, the old Homestead Plan with the original Homestead buildings that were extant in 1988 marked on it. We had planned on locating Homestead buildings and modern buildings on this map. This map, however, was not usable for field work as only the Homestead buildings are shown on it and the lots have been subdivided many times. It was near impossible to figure out locations of both old and new buildings. A copy of Map 1 from the NRHP nomination, showing the NRHP boundaries and general location of Homestead houses surveyed in 1988, is shown in Figure 2. A fullsized version of this map is included as Attachment 1.

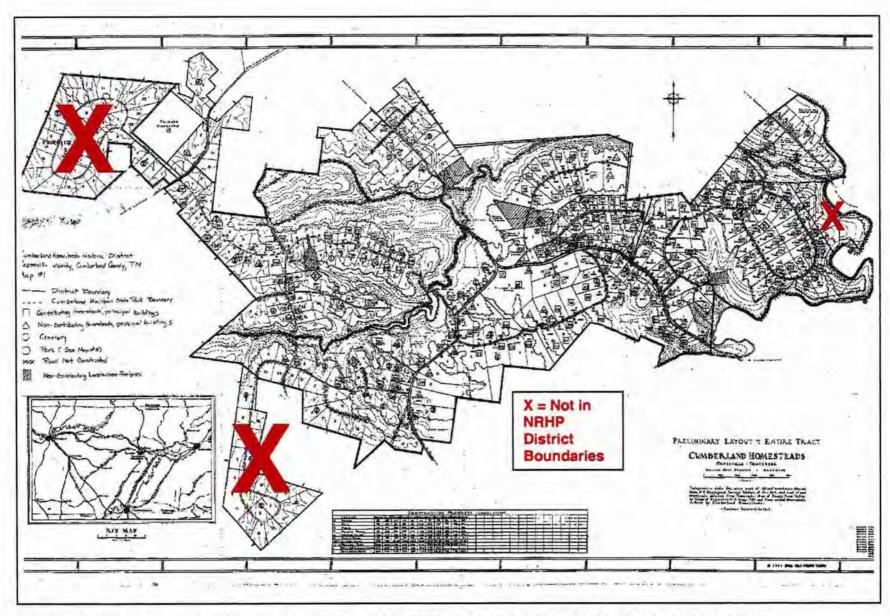


Figure 2. Map 1 from NRHP Nomination, showing NRHP boundaries and general location of Homestead houses.

- <u>Property Maps</u>: We then obtained property maps from the Tax Assessor's Office in Crossville, taped them together and attempted to conduct the windshield survey using those maps This method was also not successful, as these maps did not indicate the location of buildings on the lots and the subdivision pattern is very irregular. That made figuring out which lot buildings stood on very difficult. We put a halt to this because it was not working.
- 3. <u>Roster of Addresses:</u> The inventory in the NRHP nomination was done at a time when the properties in the district had no street addresses, so we could not tie the description in the inventory to the mapped property. In addition, only Homestead properties were included in the NRHP inventory, so we could not tell which non-historic houses were there when the nomination was completed and which had been built since then.

We decided to undertake a roster of addresses. This roster is in Appendix A to this report. On the roster, we recorded whether the primary building on each street-facing lot was a Homestead building or a modern building (Homestead houses that were not recognizable at all are included in the latter category). We hoped to use this data later to tie the addresses to parcels on property maps. Basically, if a building was recognizable as a Homestead building, we noted it as such. Our definition of "recognizable" was if we could tell from the road that a building was a Homestead house, irrespective of alterations and additions. A number of these houses have been altered and/or substantially expanded and likely were originally (in the 1988 nomination) or would now be considered as non-contributing under NRHP criteria. The NRHP nomination stated that if a Homestead house had an "obscured main façade" or was "dwarfed by additions," it would be considered non-contributing in the NRHP district.

We did an inventory of addresses on the district's *historic* roads, with the exception of Highway US 127 and the roadways in park. We also drove all of the non-historic roads and noted that the buildings on these roads were all non-contributing. The following historic roads were driven in the survey:

- Pigeon Ridge Road (State Route 419)
- S. Old Mail Road
- Coon Hollow Road
- Wild Plum Lane
- Valley Road (US 127 south of State Route 68/127 intersection
- Sawmill Road
- County Seat Road (US 127 north of State Route 68/US 127 intersection)
- Grassy Cove Road (State Route 68)
- Highland Lane
- Deep Draw Road
- Turkey Oak Road
- Open Range Road
- Chestnut Lane
- Huckleberry Road
- Crab Orchard Road (US 70)
- Crab Apple Lane

A few problems that we encountered in developing the roster were:

- Some mail boxes had no numbers;
- Some properties had no visible mailbox;
- Some roads had all of the mailboxes on the same side of the road and often they were grouped—3 or 4 mailboxes in a group. It was hard to discern at times which address went with which property, particularly when some of the mailboxes had no addresses;
- The traffic was bad on Highway 127 so we only recorded the contributing buildings; most of these had no mailbox. Traffic was also bad on State Route 68, but we think we got the addresses that were available.
- 4. Mark-up aerials with buildings that were discernable as homestead buildings. We had a master aerial and set of eight sheets at a larger scale. We used these aerials and drove the roads in the district that were historic and non-historic. We noted the locations of buildings on these aerials that were recognizable as Homestead houses. We visually and mentally noted the locations of the non-contributing buildings and we were later able to use this information, in conjunction with the roster, to map these buildings on property maps. On the aerials, we marked the locations of extant primary Homestead buildings that were recognizable as such. (See discussion in Roster of Addresses/no. 3 above regarding how we defined "recognizable."). A copy of these aerials showing the locations of the Homestead houses is in Attachment 2.
- 5. Reconcile/Gather Additional Data: Upon completion of the field work, we continued work at the Art Circle Public Library in Crossville. There, we attempted to look up addresses of businesses for which we were unable to obtain an address in the field. We also compared the number/location of Homestead homes in the roster to those mapped on the aerials and were able to reconcile this data.
- 6. Mapping buildings on Tax Assessor's maps: Using the State of Tennessee Comptroller of the Treasury's Real Estate Assessment database that is available on line, we printed out the map and parcel numbers for properties on all of the historic streets in the district. I was able to print out this data either by road name and/or road name and map sheet number. A copy of this print-out is in Appendix B to this report.

I attempted then to tie the street addresses to a map and parcel number so that I could locate the Homestead houses and the non-Homestead houses (or homes that had been altered so much you could not tell that they were Homestead homes) as recorded in the roster. I mapped the properties that I could obtain a map and parcel number for and used the parcel numbers and roster to color code the tax assessor's maps. A copy of the Tax Assessor's map showing the location of the Homestead and non-Homestead houses and other primary buildings on lots within the district is in Attachment 3.

Problems encountered were:

 In the map and parcel list, many parcels were listed with no address. Consequently, for a number of addresses we recorded, we were unable to tie them to a parcel. Sometimes, I could make a logical assumption, but I cannot guarantee its accuracy 100%. I focused on trying to get all of the Homestead properties mapped in the right location. Several of the non-Homestead properties are not recorded on the property maps, as I could not tie them to a parcel with any accuracy.

- Some lots were large or U-shaped and may/or may not have had both a Homestead building and a non-Homestead building on them.
- Because of the complications encountered in mapping some of the addresses, and the guesses made as to location of a few of them, the marked up property maps in Attachment 3 are primarily useful for their depiction of concentrations of Homestead houses and Non-Contributing/Non-Homestead properties, and for their depiction of subdivisions that were there in 1988 when the nomination was prepared and newer subdivisions. They are not all inclusive and are not 100 percent accurate.

#### 3.0 FINDINGS

The conclusions derived from the field review and mapping of the field data are described below.

#### 3.1 Historic Homestead Resources

#### 3.1.1 Homestead Houses/Farmsteads

The NRHP nomination states that the Homestead "area originally consisted of 251 Farm Homesteads built in lots averaging from 10 to 160 acres with the average homestead consisting of 16 acres." Figure 3 is a list of the homesteaders on each road at Cumberland Homestead around 1937.

The windshield survey identified around 210 houses<sup>1</sup> that were recognizable as Homestead houses. A typical Homestead house is shown in Figure 4, a notecard drawing by Doyle Vaden. The original houses were small, so many of them have been expanded, some minimally and some substantially. Many have small additions and/or enclosed porches, but many also have large additions that obscure most of their character-defining features. At times, the only feature that identified a house as a Homestead House was the stone chimney. In addition, as this area is changing from a quiet, sparsely populated rural area to an area that is a vacation and retirement destination, more and more houses are being enlarged and renovated. We were told that a very small number of original Homestead residents still reside in the district.

There is a difference of about 20 houses between the 1988 survey and this windshield survey. These 20 houses may have been razed or radically altered to a point that they were unrecognizable as Homestead houses in the windshield survey. Only a very cursory look was given to the intactness of the farmsteads. Many of the Homestead houses did retain farm buildings that appear to date to the time of the period of

<sup>&</sup>lt;sup>1</sup> This number is approximate. The surveyors had questions of whether some buildings identified in the roster were Homestead homes. In addition, radically altered Homestead homes that lack character-defining features may not have been counted as a Homestead house in the roster.

	ANE: ANE: and and and and and and and and
*	<ul> <li>Joe Bailey</li> <li>Joe Bailey</li> <li>CRAB APPLE LANE:</li> <li>Tead Bervi Jernigan</li> <li>James H. Elmore</li> <li>WILD PLUM LANE:</li> <li>James H. Elmore</li> <li>WILD PLUM LANE:</li> <li>Tered Brown</li> <li>Fred Brown</li> <li>C. H. Stewarn</li> <li>CRAB ORCHARD ROAD:</li> <li>Homer L. Jestics</li> <li>Ira Rymer</li> <li>W. A. Maynard</li> <li>W. A. Maynard</li> <li>Bescher Porteet</li> <li>Walter G. Elmore</li> <li>Walter G. Elmore</li> <li>Walter G. Elmore</li> <li>Malcoim Denton</li> <li>W. Strader</li> <li>Howard Vaden</li> <li>Bescher Porteet</li> <li>Malcoim Denton</li> <li>Floyd J. Norrod</li> <li>Ross Ryant- 15 D.D.</li> <li>Fenest Rameey - 5 G.C.</li> <li>Henty Garrett</li> <li>Cunst project)</li> <li>"First 25 homestaaders chosen</li> <li>1:30:34.</li> </ul>
	<ol> <li>Charles Beasley</li> <li>L. R. Mayton</li> <li>Fate King</li> <li>King Fate King</li> <li>Wm. M. Beasley</li> <li>Fate King</li> <li>Wm. M. Beasley</li> <li>Wm. Beasley</li> <li>Wm. Beasley</li> <li>Wm. Beasley</li> <li>Wm. Beasley</li> <li>Wm. Bassley</li> <li>Mayton</li> <li>Barton</li> <li>Mathewy</li> <li>J. Janow</li> <li>J. J. Janow</li> <li></li></ol>
rom a list compiled as Project Manager	<ul> <li>Marvin Goodwin Frank Saylors</li> <li>Alex P. Witt Alex P. Witt</li> <li>Kark Saylors</li> <li>Kark Saylor</li> <li></li></ul>
937 fr	алаа 23333333333333333333333333333333333
romesteaders about 1937 from a list compiled during Major Oliver's tenure as Project Manager	<ul> <li>Willie Evans</li> <li>Mark Henry, Lawrence H. Smith</li> <li>Mark Henry, Lawrence H. Smith</li> <li>Mark Henry, Lawrence H. Smith</li> <li>Mark Henry, Lawrence H. Smith</li> <li>Arthur Eutra</li> <li>Arthur Sutiz</li> <li>OPEN RANGE:</li> <li>Carlos Jaynes</li> <li>Milliam Wilbanks</li> <li>Garlos Garrett</li> <li>J. H. Phillips</li> <li>J. M. Watev</li> <li>J. M. Natev</li> <li>J. M. Natev</li> <li>Millor Forma A. Elmore</li> <li>Manarfield*</li> <li>Tommy Callahan</li> <li>Manarfield*</li> <li>Becher Wilbanks</li> <li>Becher Wilbanks</li> <li>Becher Wilbanks</li> <li>Becher Wilbanks</li> <li>Esv Bumbelough</li> </ul>
	25 Ed Harmons 28 Taylor Worfey 29 Avery York 20 Avery York 20 Avery York 20 Avery York 21 Ed Maren Davis 22 DEEP DRAW ROAD: 4 Carson Pharris <sup>*</sup> 6 Everett Pippin <sup>*</sup> 7 Kenneth McBride 12 Willard Bary 23 Um. H. Fowle, Jr. 20 Ille Kidwell <sup>*</sup> 20 Nm. H. Fowle, Jr. 20 Nm. H. Fowle, Jr. 20 Nm. H. Fowle, Jr. 20 Sillis Allord <sup>*</sup> 20 Chester Parker <sup>*</sup> 21 Roboris 22 D. Podigo <sup>*</sup> 23 Jary A. Wellons 23 Jary A. Wellons 23 Jary Burden 23 Jary Burden 24 Clirthos Parker 25 Comnourl 26 C. Haun 27 Com Hall 28 Loom Building 28 Lucher Hodge 29 Luther Revens 20 Contos Kidwell 20 Luther Revens 20 Contos Kidwell 20 Luther Revens 20 Luther Revens 20 Luther Revens 20 Luther Loop 20 Luther Revens 20 Luther Revens 20 Luther Revens 20 Luther Loop 20 Luther Revens 20 Luther Reven
	2 1 2 2 2 2 2 2 2 2 2 2 2 2 2 2 2 2 2 2
GRASSY COVE ROAD:	H. E. Johnston Jesse Ernest Ervin Peavhouse W. Y. Keising W. Y. Keising Ervin Peavhouse William Pruitt Leston Hyder Roy L. Gossige Rufus F. Gossige Rufus F. Gossige Rufus F. Gossige Bulty Breeding H. C. England Billy Breeding H. C. England Cyde Hegecoth Frank Johnson J. T. Vaden P. A. Ervin Mist Leta Smith J. T. Vaden P. A. Ervin Mist Leta Smith J. T. Vaden Mist Leta Smith Floyd Johnson Farley E. Hood Gilbert Dahon Castor H. Bryant Will Johnson Farley E. Hood Gilbert Dahon Castor H. Bryant Will Johnson Mist Leta Smith Find Johnson Farley E. Hood Gilbert Dahon Castor H. Bryant Will Johnson Farley E. Lood Gilbert Dahon Castor H. Bryant Will Johnson Mist Leta John Schatzer Jan Ayers
ISY CON	2228363675515598864433258823882588238238238258644398755555585823823823823825882444864 24445755555555555555555555555555555555

Figure 3. Ca. 1937 List of Homesteaders (purchased from museum at Cumberland Homestead Tower.)

significance of the Homestead community. Some had what appears to be their original, intact parcels of land. However, the district provides little indication of its subsistence farming history, primarily because of the extensive subdividing of the Homestead parcels and because of the changing use of the area to a vacation/retirement destination and the fact that the newcomers generally do not farm. The NRHP nomination discussed the existence of fence rows and a fruit orchard, but these features were not looked for in the windshield survey and may or may not be extant.



Figure 4. Drawing of Typical Homestead House. From notecard by Doyle Vaden.

### 3.1.2 Historic Roadway Features

The district has two very interesting planned roadway features that are not commonly found in rural areas: cul de sacs and "Y" intersections. The cul de sacs are found at several locations in the district. Instead of being a dirt turn-around at a dead end road as one would expect to find in a rural area, they are large, circular drives with a grassy area filling the center of the circle. These cul de sacs are found at:

- Coon Hollow Road
- Wild Plum Lane
- Crab Apple Lane (Entrance to Bear Trace Golf Course off cul de sac)
- Chestnut Lane (Chestnut Court, a modern street, now branches off the historic cul de sac)

All of the cul de sacs have one or more Homestead houses on them.

While "Y" intersections are found sporadically in rural areas elsewhere, the "Y" intersections at Cumberland Homesteads are different. They were part of the original community plan and are found throughout the district. Like the cul de sacs, the land

within the "Y" area is grassed. Each intersection is different in size and layout. Recognizable "Y" intersections are found at:

- S. Old Mail Road at Pigeon Ridge (State Route 419)
- US 127 at State Route 419 (Cumberland Mountain Park Entrance)
- US 127 at Sawmill Road
- State Route 68 at Turkey Oak
- State Route 68 at Sawmill Road
- Turkey Oak at Deep Draw
- Open Range Road at Deep Draw (two intersections)
- Deep Draw at US 70

Figure 5 is a historic drawing of the 'Y" intersection at today's US 127 and State Route 68 intersection.

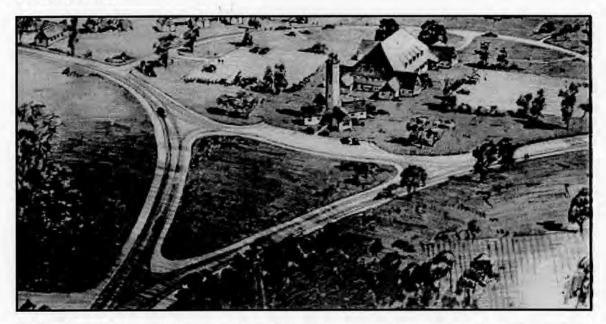


Figure 5. Historic Drawing of "Y" intersection at US 127 and State Route 68 (from Library of Congress website). The Homestead Tower is in the upper center of the photograph.

Cumberland Mountain State Park has intact three stone bridges. One is a multiple arched bridge on State Route 411 and another is a charmingly rustic structure on S. Old Mail Road. Outside the park, a stone arched bridge is on Deep Draw Road, west of its intersection with US 70. The bridges are beautiful structures, built of Crab Orchard stone and well-preserved.

# 3.1.3 Woodlands

Homesteaders cleared land in the Cumberland Homesteads development for farming and construction of farmsteads. In the original Homestead plan, several areas were designated as "Woodlands." A large area of the Woodland-designated land around Byrd Creek and Three Mile Creek was developed into the Cumberland Mountain State Park. The park was built by the Civilian Conservation Corps for the Homestead community. The park area has many older buildings and some newer buildings, such as the restaurant on Byrd Lake. The park remains primarily wooded. In recent years, however, the Jack Nicholas Bear Trace Golf Course has been developed in the south part of the park; it is accessed at the end of Wild Plum Lane, where there is a modern clubhouse. Other areas designated in the original plan as "woodlands" and their status today are as follows:

- Area Old Highway 28 at south edge of district: subdivision development at far south end;
- Area along US 127 and Sawmill Road remains undeveloped;
- Area along State Route 68 at south edge of district near Daddys Creek remains undeveloped;
- Area between Open Ridge and Turkey Creek has a large-lot new subdivision under development;
- Area along Byrd Creek, west of US 70 at northeast corner of district, remains undeveloped;
- Area between Open Range Road and US 70 has a number of small-lot subdivisions;
- Area of US 127 between the State Route 68 intersection and Crossville, on the east side along Byrd Creek remains largely undeveloped; and
- Area along Deep Draw west of Turkey Oak remains undeveloped.

#### 3.1.4 Other Homestead Properties

A concentration of non-residential Homestead buildings remains at the intersection of US 68 and US 127. This focal point of the intersection is the Homesteads Tower, which is considered a local landmark and the heart of the Cumberland Homesteads community. Also at this location are two Homestead Schools. Non-contributing buildings are a government garage, a 1950 gym and a 1970 library/cafeteria building, and a new fire station on US 127. This area also contains the old co-op hosiery mill, which has been radically altered, and a water tower associated with the mill. On Deep Draw Road near this intersection is the old water tower that was associated with the cannery. East of Turkey Oak on Deep Draw Road, the old loom house is obscured by a large addition built when the building was converted for use as a church.

A cemetery, according to the NRHP nomination was "not included in the original plan [but] was hastily laid out upon the death of an original homesteader's young daughter. The cemetery appears to have been used for only a short period of time and is now overgrown and inaccessible." The cemetery is on the west side of Highland Lane, north of Deep Draw Road. The preliminary layout of Cumberland Homesteads shows two lots in this area as "Burial Ground" and "Burial Ground Reserve," and the Dorton TN USGS quadrangle map labels the area as "Homestead Cem." No investigations have been done in this overgrown area and it is unknown if there are any burials there.

#### 3.1.5 Concentrations/Pockets of Homestead Properties

A review of the color-coded property map (Attachment 2) and the marked up aerial photographs (Attachment 3) provides a "bird's eye view" of the locations of the concentrations of Homestead houses. The topography of the area and viewsheds,

which are not evident on these two maps, also should be considered in the evaluation of which areas best depict the essence of the Cumberland Homesteads community.

The areas that best depict the Homestead Community are:

- State Route 68 (historically Grassy Cove Road), from just north of Turkey Oak Road to south of Buck Creek Road. While a concentration of homestead houses exists, the highway through this area has been improved through the addition of shoulders and wider travel lanes than are found on many other locations in the district.
- Open Range Road. This area has the highest concentration of homestead houses and intact farmsteads and the fewest intrusions. However, the subdivisions east of the east side of the Open Range Road loop detract somewhat from the setting on the southeast portion of this loop road.
- Huckleberry Lane. This short road has six homestead houses and three modern houses, but retains some integrity of setting.
- 4. <u>State Route 419/Pigeon Ridge Road</u>. There is a concentration of homestead houses near the intersection of State Route 419 and Davidson Road and west from the intersection. This concentration, although there are some modern intrusions, exists in a setting that gives a feeling of what it must have been like in the community in the 1930s. The road is at a high elevation and offers great distant views of mountains to the south and the forested park to the north. This area contains a museum and a B&B, both in Cumberland Homestead houses.
- Deep Draw Road, Between Byrd Branch and about ½ mile east of Sawmill Road. This area has a concentration of Homestead houses, but the physical setting is not as nice as it is at some of the above-discussed areas. The three houses near Byrd Branch at the major curve in Deep Draw Road, however, are particularly nice.
- 6. <u>South Main Street/US 127</u>. At the very northern end of the district is a grouping of five Homestead houses on South Main/US 127. Subdivision development, however, is rapidly encroaching upon the settings and land of these properties. In addition, the roadway in the vicinity of these houses is much wider than it was historically and it detracts from the setting of the houses. One of the houses (on the east side of the highway) is currently serving as the office for a new subdivision development.

#### 3.2 Non-Homestead Development

#### 3.2.1 Infill Housing

<u>All</u> areas of the district have experienced the subdivision of original parcels and development of single-family houses on subdivided parcels, outside subdivision developments. In some areas this subdivision has left fair-sized lots, while in others lots are smaller, around one acre or less. At some locations in the district, modern housing has most assuredly replaced Cumberland Homestead houses

#### 3.2.2 Subdivisions

Residential subdivisions have also been developed in and partially within the historic district boundaries. On the east side of the district, small subdivisions have been developed between Open Range Road and Daddy's Creek (Sunny Acres/Long Drive, Thomas Street, and Backwoods Way) and are partially within the district. These subdivisions were extant when the district was listed in the NRHP. The original recommended NRHP boundary was re-drawn in this location to exclude most of the subdivisions, but portions along Open Range are within the district boundaries.

The Highland View East and West Subdivisions were also extant at the time the district was listed. Located north of the Deep Draw and Highland Lane intersection on both sides of Highland Lane and containing about 100 houses, this subdivision was listed in the nomination as a non-contributing landscape feature. Subdivisions are also found at the end of Chestnut Lane (Chestnut Court), all along the south side of State Route 68 between Rector Lane and Carl Nail, along Parkview Place, on Pigeon Ridge Road (State Route 419) at its intersection with State Route 101, along Old State Coach Road and on US 127, north of its intersection with State Route 68, a subdivision is on East Lake Road. Another subdivision is on Southgate off South Main (US 127), and a new subdivision is under development off South Main, south of Malver. A Cumberland Homestead house serves as the office for the development. One new, large-lot subdivision has been laid out off Open Range (Keating Hollow Estates) and several houses have been built there.

#### 3.2.3 Highway-Related, Commercial and Industrial Development

Some industries and commercial establishments are along State Route 68, east of its intersection with US 127. In this area are a factory, commercial strips, a gas station/convenience mart and a TVA office. A 1950s hotel is on US 70, just north of its intersection with Deep Draw Road. A gas station and some commercial uses are found on US 127 south of its intersection with State Route 68. The majority of the commercial development and the least intact area of the district is on US 127, north of its intersection with State Route 68. The subject area, between the Cumberland Homesteads Tower and the Crossville corporate limits was designated as "woodlands" in the Homestead plan. Although the Cumberland Mountain State Park boundaries abut the west side of US 127 in two places through this area, this area has primarily been developed with small-scale commercial uses. For a distance of one and one-half miles through this area, there never were any Homestead buildings and modern buildings line the roadway through this area today. (As previously stated, at the very northern end of the district is a grouping of five Homestead houses on South Main/US127, but subdivision development is rapidly encroaching upon the settings and land of these properties.) With the exception of the US 127 corridor north of the Tower and the segment of State Route 68, just southeast of the Tower, very little commercial development has occurred within the district.

### 3.2.4 Churches

No historic churches are extant within the district. Several modern churches have been built at various locations in the district. On the more major arteries (US 127, State Route 68), the churches are relatively large, modern structures with large parking lots. Examples include the Church on the west side of South Main near the northern

boundary of the district, the church at the intersection of State Route 68 and Deep Draw Road, and a church on the east side of US 127 at its intersection with State Route 419 across from the Cumberland Mountain State Park entrance. Off the main roads (on Deep Draw Road east of Turkey Oak), a modern church has been built onto the front of the old Homestead loom house.

### 3.3 Summary of Findings

While the district has experienced subdivision of many of its parcels for single-family or subdivision development, the district retains many of its original Homestead houses, farmstead outbuildings and areas designated as "woodlands" on the original Homestead community plans. The complex containing the tower at the intersection of US 127 and State Route 68 still serves as the center of the community.

One large area that does not retain integrity is the US 127 corridor north of its intersection with State Route 68, State Route 68 from US 127 east to the vicinity of its intersection with Deep Draw Road, Deep Draw Road between US 127 and Highland Lane and, Highland Lane north to the north end of the Highland View Subdivision. Figure 6 depicts this area.

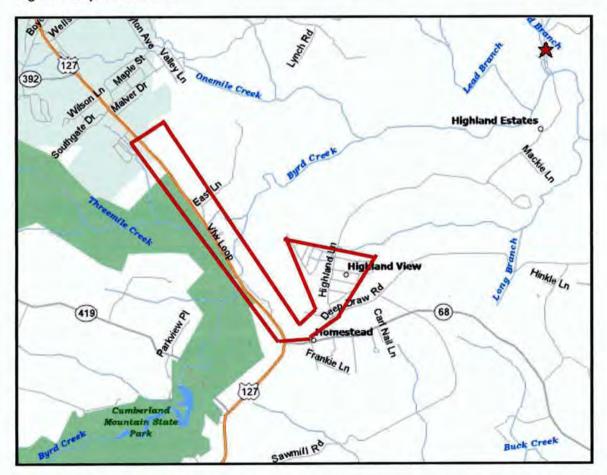


Figure 6. Area of Cumberland Homesteads Historic District that retains no integrity.

13

Figure 7 on the following page shows the general locations of areas of the district that retain nice clusters of Homestead houses. These clusters are discussed in more detail in Section 3.1.6. Full size graphics in Attachments 2 and 3 provide a more detailed location of these concentrations.

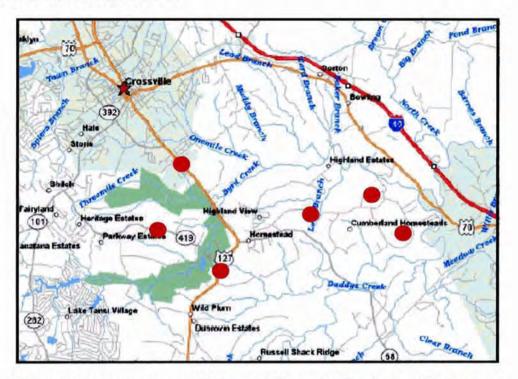


Figure 7. Concentrations of Homestead Homes in Cumberland Homesteads Historic District.

14

# **Tennessee Department of Transportation 15 Project Case Study**

# Project Assessment Final Report U.S. 127 (State Route 28) South of Crossville

Prepared for the Commissioner Tennessee Department of Transportation

by

Center for Transportation Research University of Tennessee Knoxville, Tennessee

Dr. Stephen Richards, Team Leader Dr. David Middendorf Dr. Fred Wegmann Dr. Gregory Reed Dr. Tom Urbanik Dr. Mary English Dr. Arun Chatterjee Dr. John Tidwell

August 2003

# **Table of Contents**

	Page
1. Introduction	
Background	
Report Overview	2
2. Case Study Description	
Study Objectives	3
Study Scope	3
Study Methodology Overview	
3. Information/Input Reviewed	8
Documents and Correspondence	
Meetings	8
Public Listening Session	
4. Project Information Summary	9
Project Description	
Project History	
Project Status	
5. Process-Related Issues and Concerns	12
Project Justification	
Relationship to Local/Regional Planning Efforts	12
Environmental, Social and Economic Impacts	12
Public Input	12
6. Assessment Results and Findings	13
7. Recommendations	16

# 1. Introduction

#### Background

This report presents the findings and recommendations resulting from an independent assessment of the proposed US 127 South (State Route 28) project in the Cookeville area. This assessment was conducted by The University of Tennessee Center for Transportation Research at the special request of Tennessee Department of Transportation (TDOT) Commissioner Gerald Nicely. This assessment was part of a Case Study of 15 proposed or pending highway projects located across the state. In requesting the Case Study, Commissioner Nicely and TDOT leaders acknowledged the changing nature of transportation project planning and management in the state, and also the Department's goal to enhance some of its planning and business practices in response to these changes.

As noted in the Proposal/Statement of Work document for the 15 Project Case Study, the planning, design and construction of major highway projects are accomplished in a long-term and comprehensive process in Tennessee and elsewhere. Typically, a major highway project undertaken by TDOT will require eight to 10 years from the initial planning phase though the final construction. At the beginning of project development, critical decisions are made that set the direction and scope for the project. In the past, when Tennessee's population was not booming, industries had not yet realized the strategic location of the state, personal technology was for the select few, and government was held in high esteem, decisions made early in project development tended to hold true throughout the process.

The decision process for highway projects must be approached in a different fashion in today's world. Citizens want a bottom-line look at what government is producing and why. They want to understand government's decision-making process and be invited to participate. The growth and diversification of Tennessee's population has also resulted in new and greater needs. The state's rural areas and cities are facing mobility and quality of life issues that require a range of transportation solutions and frequent public involvement in the decision-making process.

In today's fast-moving environment, community growth patterns are shifting, citizens' expectations are changing and residents' transportation needs are diverse. TDOT's highway projects, however, still require years to complete. The Department realizes that to keep pace with the 21<sup>st</sup> century society, TDOT needs to change and update some of its planning and business practices. The Case Study described and documented herein is intended as an initial step for TDOT in this change process. Through the review of the 15 major highway projects, including the US 127 South (State Route 28) project, the Case Study will provide critical input for TDOT to begin to identify areas for improvement and ways to better serve Tennessee's citizens.

### **Report Overview**

This Project Assessment Final Report summarizes the work performed to evaluate the US 127 South (State Route 28) project, as well as the results and conclusions of this work. Following the Introduction, Section 2 of the report summarizes the objectives of the Case Study and presents a description of the study scope and methodology used to evaluate the US 127 South (State Route 28) project, as well as the other 14 projects included in the Case Study. Next, there is a general description and discussion of the information gathering activities which were undertaken specifically for US 127 South (State Route 28) project (Section 3), followed by a summary of project information resulting from these data collection activities (Section 4). The project information summary includes a project description, a history of the project and project planning activities undertaken to date, and the current status of the project.

The remaining sections of the report present the findings and conclusions reached by the evaluation team. Section 5 documents the key "process-related" issues and concerns for the project that were reported to and/or identified by the evaluation team. Section 6 presents the team's assessment conclusions, and Section 7 presents the team's recommendations for needed actions by TDOT and/or others.

It should be noted that this is the only report and the Final Report for the subject project that was generated by the Case Study effort. In keeping with the objectives of the Case Study and the utility of this document, this report is concise and direct to the point. It should also be noted that this report does not address legal requirements or obligations of TDOT or any other entity, and should not be construed to do so. Rather, it is the intent of this report to identify remaining project issues and suggest improved practices, both to be considered by the Department.

# 2. Case Study Description

### **Study Objectives**

As noted previously, a primary objective of the 15 Project Case Study was to provide input for TDOT to identify areas for improvement of its highway project planning and business practices so that the Department can better serve Tennessee's citizens. This objective was effectively addressed by identifying problem areas that were common to at least some or many of the projects evaluated, and suggesting corrective actions to be considered. (These "over-arching" areas for improvement are identified and discussed in a separate report that is being prepared for submission in the latter part of August.)

With specific regard to the US 127 South (State Route 28) project and the other selected projects, the Case Study was also intended to provide TDOT with impartial recommendations on whether the selected highway projects should continue as presently scheduled or whether additional action(s) should be undertaken. This objective of the Case Study, as it relates to the US 127 South (SR 28) project, is addressed in this Project Assessment Final Report.

## **Study Scope**

It is important to note that the US 127 South (State Route 28) project was one of 15 major highway projects selected for inclusion in the Case Study, and that each of the projects received the same level, detail and type of assessment. The projects selected for the Case Study are enumerated below, including the US 127 South (State Route 28) project:

- 1. State Route 840 South
- 2. Wolf River Parkway in Memphis
- 3. State Route 451 Cookeville area
- 4. US 127S Crossville
- 5. US 64 Polk and Bradley Counties
- 6. State Route 475 Knoxville Beltway (orange route)
- 7. James White Parkway Extension Knoxville
- 8. Pellissippi Parkway Extension Knoxville
- 9. US 321 (State Route 35) Greenville
- 10. State Route 840 North
- 11. Walnut Grove Relocation Project in Memphis
- 12. Jackson Bypass
- 13. US 127N Crossville
- 14. US 321 between Gatlinburg and Cosby
- 15. State Route 357 Extension Blountville

As defined in the Proposal/Statement of Work document, the Case Study had a focused scope, which directed the evaluation team to address the following areas of concern for each of the 15 projects (expressed as questions to be answered):

- What were the reasons for starting the project and should the reasons be reevaluated?
- What are the economic, environmental and social affects of the project?
- What is the project's relationship to the local and/or regional comprehensive plans, and if appropriate, the plans of the Metropolitan Planning Organization (MPO)?
- What was the extent of public involvement in the project development, and was it appropriate for the decision-making process?
- Should the department consider additional actions before continuing with the project as currently scheduled?

The Case Study had a restricted budget and an aggressive time schedule of four months for completion. It was not the intent of the Case Study, or individual project assessments, to re-do the planning and decision-making for any one or all of the included projects. Rather, it was the goal of the Case Study and individual project assessments to evaluate the overall planning and decision-making "process(es)" undertaken to date, and to determine if deficiencies or omissions existed in these "process(es)."

Based on these "process" assessments, the two objectives of the Case Study were accomplished. That is: (1) to provide TDOT with impartial recommendations on whether selected highway projects should continue as presently scheduled or whether additional action(s) should be undertaken; and (2) to provide input for TDOT to identify areas for improvement of its highway project planning and business practices. Finally, it should also be emphasized that it was **not** the intent of the Case Studies to recommend to TDOT specific actions to take regarding any of the selected projects, but rather to identify areas that need some action by the Department and/or others.

#### **Study Methodology Overview**

An evaluation team comprised of eight distinguished faculty and staff from The University of Tennessee was assembled to assess and develop conclusions and recommendations on the 15 projects under review. The members of this evaluation team are identified below. Resumes for each of these individuals are contained in the Proposal/Statement of Work document for the Case Study, available from The University of Tennessee Center for Transportation Research.

The team members were:

- Dr. Stephen Richards, Team Leader
- Dr. David Middendorf
- Dr. Gregory Reed
- Dr. Tom Urbanik
- Dr. Mary English
- Dr. Arun Chatterjee
- Dr. Fred Wegmann
- Dr. John Tidwell

All of the team members have extensive experience in the transportation field, and collectively they brought diverse backgrounds and balance to the assessment process in the key areas of: transportation and land use planning, highway location and design, environmental assessment, and transportation/traffic impact assessment.

Figure 1 presents a summary of the activities (work tasks) that were undertaken to complete the Case Study. A detailed description of each of these activities is contained in the Proposal/Statement of Work document. It is significant to note at this point that a tremendous effort was made to gather any and all pertinent project-related information that could be useful to the evaluation team. Also, public listening sessions were held for each project, and members of the evaluation team met with and/or interviewed countless interest groups, officials, and concerned individuals to gather input and identify areas of concerns. It should be emphasized that the information gathering activities focused on the intended "process" assessment.

Section 3 of this report presents additional detail on the information and input gathered specifically for the US 127 South (State Route 28) project. All of the information received and gathered for the project is being retained on-site at The University of Tennessee Center for Transportation Research, and is available for inspection and duplication by appointment or advance notice. In addition, as a disclaimer, Section 3 does not attempt to itemize every individual document, e-mail, phone call, meeting, etc. that was reviewed by team members; however, all such records are available for inspection.

After extensive review, discussion and assessment of each of the projects under study, the evaluation team reached consensus concerning answers to the questions posed in the Proposal/Statement of Work document (see Study Scope of this report). The evaluation team ultimately chose to present its conclusions by indicating whether the project planning and decision-making processes were **satisfactory or unsatisfactory** with regard to the following issue areas:

- Project need adequately established?
- Planning process appropriate for need?
- Alternatives appropriate?
- Design process appropriate for need?
- Local planning involvement?
- Public involvement appropriate for decision-making?
- Adequate environmental, economic and social assessment?

The conclusions reached by the evaluation team regarding the above issue areas were used by the team as a basis for recommendations on needed actions. Sections 6 and 7 of this report present the evaluation team assessments and recommendations, respectively.

# Figure 1. Summary of Case Study Activities

## Task 1 – Gather Comprehensive Background Information

Task 1.1 - Solicit/Receive Pertinent Project Documents and Related Materials

- Task 1.2 Interview State and Local Officials
- Task 1.3 Review Pertinent Planning and Research Documents

## Task 2 – Finalize Case Study Methodology

- Task 2.1 Determine Project Issues
- Task 2.2 Refine Project Assessment Criteria and Procedures

## Task 3 – Provide Information Clearinghouse

- Task 3.1 Establish Case Study Point-of-Contact
- Task 3.2 Prepare/Distribute Daily Project Updates
- Task 3.3 Provide Media and Public Information (as appropriate)

## Task 4 – Solicit Interest Group and Public Input

- Task 4.1 Solicit/Receive Pertinent Project Issue-related Materials
- Task 4.2 Conduct Public Input Sessions
- Task 4.3 Attend Interest Group Briefings

## Task 5 – Conduct In-depth Project (Issues) Reviews

- Task 5.1 Establish Work Teams
- Task 5.2 Compile and Analyze Project Information/Input
- Task 5.3 Refine/Clarify Project Issues
- Task 5.4 Develop Draft Project Critiques

## Task 6 – Conduct/Complete Project (Issues) Evaluations

- Task 6.1 Establish Senior Review Team
- Task 6.2 Review/Finalize Project Critiques
- Task 6.3 Develop/Document Findings and Recommendations

## Task 7 – Document Case Study Findings

- Task 7.1 Prepare/Submit Project Reports
- Task 7.2 Prepare/Submit Case Study Overview Report

# 3. Information/Input Reviewed

#### **Documents and Correspondence**

The review of the US 127 widening project south of Crossville was based in part on an examination of existing documents and other materials pertaining to the project. These documents and materials included the Advance Planning Report (APR) for the project, environmental and cultural impact assessment studies, newspaper articles, and various materials submitted by local interest groups. These materials were obtained from or submitted by the Tennessee Department of Transportation and the Cumberland Homesteads Tower Association.

Another important source of information was correspondence received from concerned citizens and elected officials. A total of 29 individual pieces of correspondence, including letters and e-mail messages, were received. This correspondence provided valuable information and insight into the various issues surrounding the US 127 South project.

#### Meetings

Members of the evaluation team met with individuals representing various groups and agencies with an interest in the US 127 South project, often at the request of these groups or agencies. These meetings were held for various purposes. They provided an opportunity to exchange information, identify or clarify issues concerning the US 127 South project, and determine the existence and availability of other documents and materials that might assist the evaluation team in reviewing the project.

### **Public Listening Session**

A Public Listening Session was conducted to give individual citizens, elected officials, property owners, and organized groups affected by or interested in the US 127 South project an opportunity to share their ideas, opinions, and concerns regarding the project as well as provide information to the evaluation team on the relevant issues. The session was held at the Crossville Community Complex in Crossville, Tennessee, on Tuesday, May 27, 2003. Approximately 48 people attended the session, and 14 people spoke at the microphone. A total of three people who attended the session submitted comments on the "comment cards" that were handed out at the registration desk. Some attendees also provided prepared statements and various other documents and written materials for the evaluation team to review.

# 4. Project Information Summary

#### **Project Description**

This project involves the widening of existing US Highway 127 (State Route 28) to five lanes south of Crossville, Tennessee. The northern terminus of the project is Cleveland Street, which is south of downtown Crossville, and the southern terminus is approximately 0.1 mile south of Sawmill Road. The length of US 127 to be widened within these limits is approximately 4.7 miles. State Route 68 (SR 68) intersects with US 127 within the project area. Consequently, the scope of the project also involves a major redesign of the intersection of these two roadways.

The project is divided into two sections. Section I extends from the southern terminus of the project to a location approximately 0.2 mile north of the intersection of US 127 and SR 68. In addition to widening approximately 1.6 miles of US 127, Section I also involves widening a short section of SR 68 and extensive modification of the intersection of the two highways. Section II extends from the northern end of Section I to the northern terminus of the project, a distance of approximately 3.1 miles along US 127.

The proposed cross-section of US 127 in Section I consists of two 12-ft traffic lanes in each direction separated by a continuous 12-ft left turn lane. Both shoulders would be 12-ft wide with curbs and gutters and utility strips. The minimum right-of-way width is 104 ft. The proposed design speed is 45 mph. SR 68 would also be widened to this same cross-section from its intersection with US 127 to Deep Draw Road.

As mentioned, Section I of the project also involves a major modification of the intersection of US 127 and SR 68. This intersection lies within the Cumberland Homesteads Historic District, which is listed on the National Register of Historical Places. As part of the historic design of the Cumberland Homesteads, the current geometric configuration of the intersection is Y-shaped which results in a large grassy, triangular area in the middle of the junction. The project would replace this triangular junction with a T-intersection. The proposed plan shows that US 127 would have six lanes through the intersection, including two left turn lanes for vehicles traveling south on US 127 to turn onto SR 68. The plan specifies a channelized right-turn lane from US 127 on the southern approach. SR 68 would have five lanes at the intersection, including two lanes for vehicles to turn right onto US 127 and one lane for left-turning vehicles. Traffic signals would be installed.

In Section II of the project, US 127 would be widened to five lanes with two 12-ft traffic lanes in each direction and a continuous 12-ft left turn lane in the center. Shoulders would be 12-ft wide with curbs and gutters and utility strips, except for the section between Wells Road and Cleveland Street where the shoulders would be dropped. The minimum right-of-way width is 104 ft from the southern end of Section II to Wells Road and 84 ft from Wells Road to Cleveland Street. The proposed design speed is 45 mph between the southern end of this project section and Wells Road and 40 mph between Wells Road and Cleveland Street.

In both sections, no changes are proposed in the existing vertical and horizontal alignment of US 127. The project would follow the existing alignment with mostly a symmetrical widening of the existing roadway.

The project is to be financed entirely by State funds.

### **Project History**

Section II of this project is one of the hundreds of highway projects listed in the Accelerated Primary Highway Plan, a component of the 1986 Better Roads Program created by the 94<sup>th</sup> Tennessee General Assembly. The Plan describes the project as a reconstruction of 3.1 miles of SR 28 (US 127) to four lanes from north of SR 68 to Hayes Street in Crossville. Thus, it appears that Section I, the portion of the project involving the Y-intersection with SR 68, was not part of the original project as described in the Accelerated Primary Highway Plan. No documentation indicating when or why Section I was added to the project has been found or made available.

On September 19, 1994, a survey team consisting of staff persons from TDOT and the Tennessee State Historic Preservation Office (TN-SHPO) conducted a field review to assess the relationship of the project to the surrounding historical area. TN-SHPO requested three project modifications: (1) redesign a particular horizontal curve to reduce the amount of encroachment on the Cumberland Homesteads property, (2) retain the existing dual triangular entrance to the Cumberland Mountain State Park, and (3) modify the channelized right-turn lane from northbound US 127 to SR 28 to reduce the amount of property taken from the area near the Cumberland Homesteads Tower. TDOT subsequently incorporated these requested modifications into the project design.

TDOT's Bureau of Planning and Development prepared an Advance Planning Report (APR), which was approved on November 9, 1994.

On June 3, 1996, TDOT released a cultural resource assessment report pursuant to regulations contained in Public Law 699. The report presented the findings of the field survey conducted on September 19, 1994. It concluded that "the project, as presently designed, will have an adverse effect to the Cumberland Homesteads Historic District."

Other environmental impact studies were performed in 1996-1997. In June 1996, the TDOT Environmental Planning Office prepared an assessment of the project's impact on air quality and noise. TDOT biologists conducted an ecological assessment in August and September 1996. In May 1997, Alexander Archaeological Consultants performed a Phase I archaeological survey. These impact studies were incorporated into the <u>Environmental and Location Study Report</u> prepared by TDOT's Environmental Planning Office and released on July 31, 1997.

Other more recent TDOT actions that have occurred for this project include the following:

- A public design hearing was held on October 14, 1999;
- Preparation of right-of-way plans was completed on November 22, 1999;
- A right-of-way field review was conducted on November 30, 2000;
- Acquisition of property was begun on August 5, 2002.

# **Project Status**

At the time TDOT put this US 127 widening project south of Crossville on hold for review, acquisition of property on the right-of-way was still in progress. Preparation of construction plans was about to get underway, and the project was scheduled for contract letting on July 25, 2003, at the earliest.

# 5. Process-Related Issues and Concerns

# **Project Justification**

The proposed project (Section II) was identified in the 1986 Tennessee Better Roads Program, adopted by the General Assembly. The need to improve the existing highway is established, but the main concerns are on design considerations, namely the adverse perceptions or opinions:

- The adverse impact of proposed design features on Cumberland Homesteads National Historic District.
- The incompatible nature of a five-lane cross-section with the environment of the historic district, and the need for five-lane capacity.
- The effect of the design of the intersection with SR 68 on the wooded triangular area with historic value.

# **Relationship to Local/Regional Planning Efforts**

The project has received the approval of the Crossville Regional Planning Commission.

## **Environmental, Social and Economic Impacts**

Concern has been expressed that federal laws were not used as guidelines to address the environmental and historic preservation issues. State funded projects are not required to follow stricter federal laws.

# **Public Input**

The following pertinent comments were received during the listening Session:

- "The process of notifying the public of the road project, and its progress, are not known to many citizens."
- "There was insufficient community involvement in discussing the merits of design alternatives."
- "The public hearing process was "after the fact" and did not consider public opinion and input in the design decisions."
- "There was no response by TDOT to what is done with public input."

# 6. Assessment Results and Findings

Table 1 presents a summary of the project assessment results and conclusions as determined by the evaluation team. As noted in the Study Methodology Overview (see Section 2 of this report), the team chose to present its conclusions by indicating whether the project planning and decision-making processes were **satisfactory** (S) or **unsatisfactory** (U) with regard to 7 issue areas. These issue areas are identified again below and described in more detail:

- 1. Project need adequately established? The team considered what the reasons were for starting the project and assessed whether or not these reasons were adequately supported and are still valid.
- 2. Planning process appropriate for need? The team assessed the overall planning process for the project to determine if it was appropriate in scale and scope, and also complete, given the nature of the project and project need.
- 3. Alternatives appropriate? The team considered whether adequate identification and assessments of alternatives and options were performed during the planning and decision-making processes.
- 4. Design process appropriate for need? The team assessed the overall design process for the project to determine if it was appropriate in scale and scope and complete given the nature of the project and project need.
- 5. Local planning involvement? The team determined and assessed the project's relationship and compatibility to the local and/or regional comprehensive planning efforts, MPO activities and other local transportation planning.
- 6. Public involvement appropriate for decision-making? The team considered the extent of public involvement in project planning and development, and assessed whether this involvement was appropriate and timely relative to decision-making.
- 7. Adequate environmental, economic and social assessment? The team assessed whether required or warranted assessments of environmental, economic and social impacts of the project were performed, and whether these assessments were adequate for the particular project circumstances.

A satisfactory (S) assessment in an issue area indicates that the evaluation team reached a consensus conclusion that the actions taken to date by TDOT have been at least adequate and no corrective actions are suggested. On the other hand, an unsatisfactory (U) assessment in an area indicates that the evaluation team reached a consensus conclusion that the actions taken to date by TDOT have not been totally adequate and some corrective actions are suggested. For some issue areas, the evaluation team concluded that, given the current status of the project, the issue area is simply not

applicable for a meaningful assessment and/or any actions which have been taken to date are incomplete but not yet deficient as to warrant an unsatisfactory assessment. In these cases, an N.A./I assessment is reported in Table 1. (Note: the N.A./I assessment was not used on all projects.)

Issue Area	Assessment	Comments
Project need adequately established?	S	This 4.7 miles long project received the approval of Crossville Regional Planning Commission. Section II (3.1 miles) of the project was included in the 1986 Better Roads Program passed by Tennessee General Assembly. The need to improve this segment of road has been established but the appropriateness of the design is in question.
Planning process appropriate for need?	S	The planning process has addressed the perceived project needs, and is given a satisfactory assessment; however, the resulting plan has raised issues that are addressed in the appropriate issue areas of this table.
Alternatives appropriate?	U	The project design is viewed as too large a road for the need. Alternatives that are more sensitive to the historic district environment are needed.
Design process appropriate for need?	U	A design public meeting was held in October 1999. However, the active participation of citizens in the design process was not effectively utilized, despite the presence of sensitive areas of importance.
Local planning involvement?	S	Crossville Regional Planning Commission was involved in the local transportation planning process for this project. This is an entirely state funded project, and therefore no federal requirements are applicable. (TDOT organized a public meeting on the design of the improvements that are proposed.)
Public involvement appropriate for decision making?	U	A public meeting on the proposed design was held, but it appears that public concerns were not taken into account adequately.
Adequate environmental, economic, and social assessment?	U	The unsatisfactory assessment is a by- product of the failure of the proposed project design and planning process to adequately accommodate the historical district environment

# Table 1. Summary of Project Assessment Results

# 7. Recommendations

If the decision is made to move forward with this project in some fashion, it is the recommendation of the evaluation team to re-engage the community and public in a proactive way to effectively address the concerns over the proposed design and potential negative impacts on the historic district environment.

It is the opinion of the evaluation team that, should this project proceed, it would be good candidate for application of a 'Context Sensitive Design' process to reconsider the cross-section design and treatment of the SR 68, and to minimize impacts on the historic district.