

PHASE II

ARCHAEOLOGICAL  
TESTING OF SITE 15ME98,  
MERCER COUNTY,  
KENTUCKY

KYTC ITEM # 7-1128.00

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**Kentucky Office of State  
Archaeology Project**

**Number:**

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**CDM  
Smith**



**Phase II Archaeological Testing of Site 15Me98, Mercer County, Kentucky**

KYTC Item Number # 7-1128.00

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# Abstract

At the request of the Kentucky Transportation Cabinet (KYTC), archaeologists from CDM Smith conducted a Phase II archaeological testing of site 15Me98 for a bridge replacement with approaches on US-68 in Mercer County, Kentucky (Item Number 7-1128.00). The area of potential effect (APE) consisted of 1.25 acres (0.5 ha) along US-68's easternmost crossing of the REDACTED intersection with the KY-127 Bypass. Field work was conducted between July 22, 2014 and October 8, 2014.

Site 15Me98 is a multi-component site located during Phase I investigations (McBride and Wilkerson 2014). The prehistoric assemblage was produced from fifteen of the twenty-one shovel probes that tested positive for cultural materials, and includes diagnostic ceramic sherds indicative of the Middle to late Woodland period and a non-diagnostic lithic scatter. The historic component includes historic documents indicating a residence/farmstead at the location as early as 1876 (Beers 1876), and an artifact assemblage that represents a mid-nineteenth to late twentieth century occupation produced from 17 of the 21 positive shovel probes. Two historic features were identified in three separate shovel probes. One was a thick overburden of burned material at the surface with structural debris and gravel, and is associated with the house's demolition in the 1980s, visible in STPs 7, 43, and 44. The other feature was a six cm-thick brick layer found 30 cm below the surface in STP 14, with no other artifacts directly associated.

The field methods implemented for the Phase II investigations included remote sensing, unit excavation and mechanical excavation. Unit excavation consisted of 1 x 1 meter sized units which were excavated in natural zones and arbitrary zones within them. The units were placed in areas with high artifact densities and possible features based on information from the remote sensing and the Phase I survey results.

Site 15Me98 consists of a prehistoric component and a historic component. The prehistoric component consists of 102 artifacts from the Phase II investigations and 25 artifacts from the Phase I investigations. Four ceramic sherds were recovered from a single probe (STP 1) during the Phase I associated with modern bottle glass. The Phase II prehistoric assemblage consisted of 102 lithic artifacts including three biface fragments which were recovered from the surface. No features or intact midden were identified from the Phase I STPs or the Phase II test unit. The historic component is associated with a house (ME46) which was occupied between the 1850s and the 1980s. The house was demolished in the 1980s and the debris was buried on the site. Test Unit 1 was located within the debris pit. Test Units 2 and 4 on the side of the house and near an outbuilding. An intact layer, probably an old A horizon and sheet midden, was located in these two units. Test Units 1 and 5 indicated that the site was significantly disturbed. The site is located along and the bedrock is only about two feet deep. The soil is often wet near the bedrock and is not appropriate for cellars or storage pits. The house foundation was located by backhoe stripping. No subsurface features were located with the house or chimney foundation.

The portion of the site within this project's APE has limited integrity and limited research potential. Therefore, Site 15Me98 is not considered potentially eligible for listing on the NRHP under Criteria A, B, C, or D. No further archaeological work is recommended for Site 15Me98.



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## Acknowledgements

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The Principal Investigator for the archaeological survey was Mr. J. David McBride, RPA. The field crew consisted of Caroline Paulus, Arlis Johnson, Bethany Gabbard, Adam Newell, Chris Rankin, and J. David McBride. Laboratory analysis was coordinated by Dona Daugherty and supervised by J. David McBride. Bruce L. Manzano conducted the faunal analysis. Phil Mink conducted the remote sensing and analysis. Howard Beverly generated maps and formatted the report. Robert Ball provided support in Lexington. KYTC provided the backhoe.



# Section 1 -

## Introduction

This report describes the field and laboratory method and the results of a Phase II archaeological testing on Site 15Me98 conducted at the request of the Kentucky Transportation Cabinet (KYTC) by archaeologists from CDM Smith for replacement of the bridge and its approaches on US-68 over in Mercer County, Kentucky (Item Number 7-1128.00). Field work was conducted between July 22, 2014 and October 8, 2014.

### 1.1 Project Sponsor and Regulatory Authority

The state agency sponsoring this survey is the KYTC; the lead federal agency is the Federal Highway Administration. The survey was conducted in compliance with the guidelines established by the Kentucky Heritage Council Guidelines (Sanders 2006) and the National Historic Preservation Act of 1966 (P.L. 89-655; 80 Stat. 915, 16 U.S.C. 470 et seq), the National Environmental Policy Act of 1969 (P.L. 910190; 83 Stat. 852, 42 U.S.C. 4321 et seq), Procedures of the Advisory Council on Historic Preservation (36CFR800), Executive Order 11593, and the Protection and Enhancement of the Cultural Environment (16 U.S.C. 470; supp. 1, 1971).

### 1.2 Purpose and Scope of Work

A Phase II archaeological testing of Site 15Me98 was conducted for the proposed replacement of the bridge and its approaches on US-68 over in Mercer County, Kentucky (Item Number 7-1128.00.)

The Phase II testing was to determine if Site 15ME98 was eligible for listing on the National Register of Historic Places. The archaeological field work involved the excavation 1 x 1 test units and the mechanical stripping of up to 500 square meters.

### 1.3 Project Location and Description

This project is located along 350 m (0.2 mi) of US-68 in Mercer County.

### 1.4 Area of Potential Effect (APE)

The area of potential effect (APE) is defined as the limits of Site 19Me98. The total site area is 1.1 acres (0.4 ha).

### 1.5 OSA Records Research

On July 25, 2013, the site files and survey records at the Office of State Archaeology (OSA) were accessed.

### 1.6 Principal Investigator

The principal investigator for the project was J. David McBride, MA, RPA.

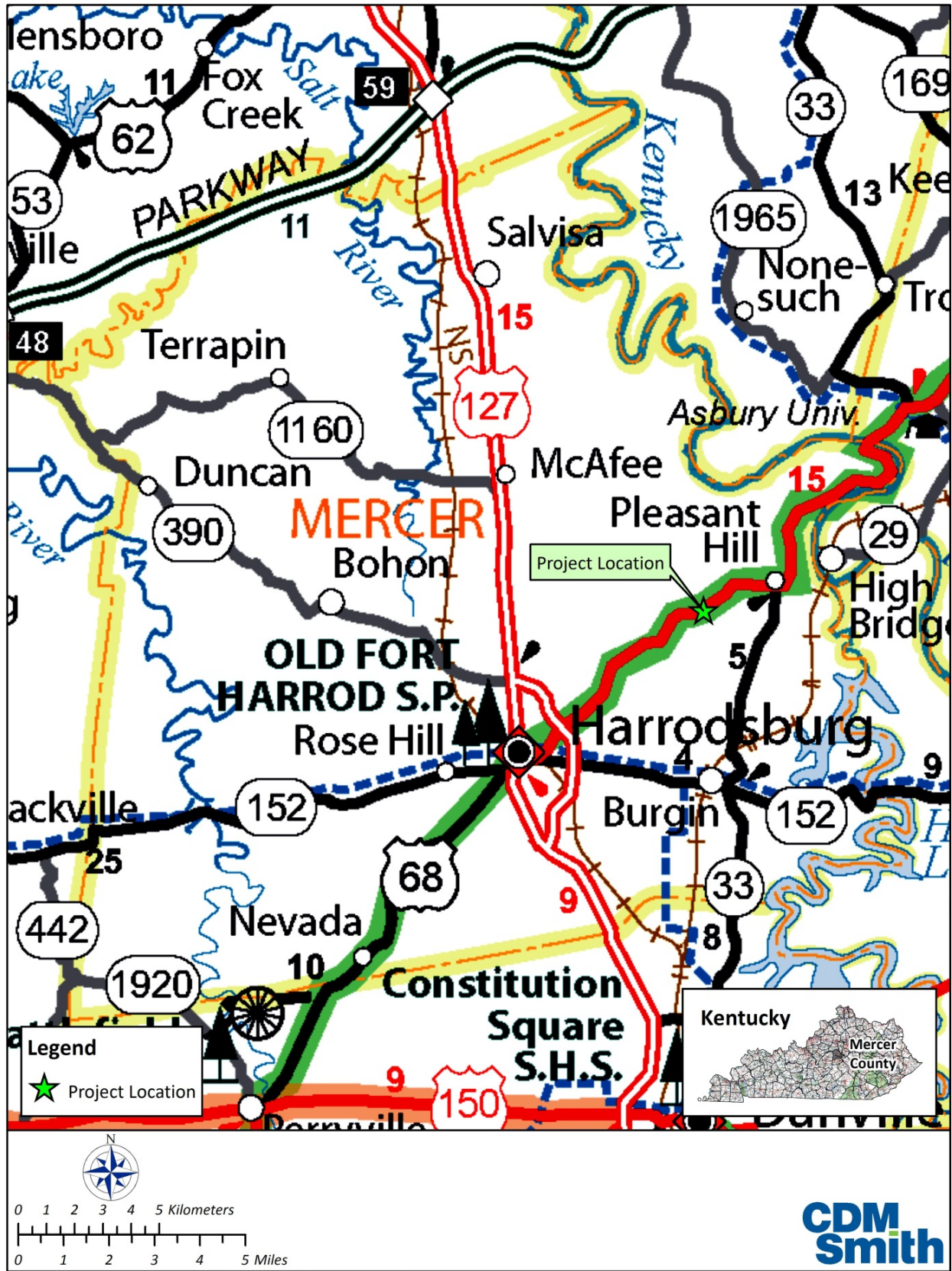


Figure 1-1. Project Location within Mercer County.

**Figure 1-2. USGS Topographical Map showing Project Location.**

**Figure 1-3. Aerial Map showing Project Location.**

## 1.7 Field and Laboratory Crew

The field crew consisted of Caroline Paulus, Arlis Johnson, Bethany Gabbard, Adam Newell, Chris Rankin, and J. David McBride. Mr. McBride served as the field director and planned, coordinated, and supervised all field activities. J. Howard Beverly, Jr., J. David McBride, and Ann Wilkinson prepared the final report, and J. Howard Beverly, Jr., prepared the maps and formatted the report. Laboratory analysis was coordinated by Dona Daugherty. Prehistoric and historic artifact analysis was supervised by J. David McBride. Bruce L. Manzano conducted the faunal analysis. Phil Mink conducted the remote sensing and analysis.

## 1.8 Maps and Figures

Maps and figures for this report were prepared using a combination of Microstation design files, GIS data overlays, and databases gathered from a number of different resources. Existing site information was provided by the Office of State Archaeology. Soil mapping was provided by United States Department of Agriculture online and printed resources. Landowner data and vegetation coverage were obtained from aerial photographs and field reconnaissance. All GIS work was conducted by J. Howard Beverly, MA, RPA.

## 1.9 Curation

All field notes, maps, forms, and artifacts will be curated at the University of Kentucky's curation facility, the William S. Webb Museum of Anthropology.

## 1.10 Summary of Investigations

A Phase II archaeological testing was conducted by archaeologists from CDM Smith at the request of the KYTC ahead of the proposed replacement of the easternmost bridge and its approaches over REDACTED on US-68, in Mercer County, Kentucky. The total APE for Site 15Me98 measures 1.1 acres (0.4 ha). The archaeological testing determined that Site 15Me98 was ineligible for recommendation to the National Register of Historical Places (NRHP) under Criteria A, B, C and D. No further archaeological work is necessary within the APE.



## Section 2 -

# Environmental

Aspects of the natural environment often influence the development of prehistoric and historic communities. In this section, the environmental background of Mercer County and the surrounding region is reviewed. Environmental data includes physiography, geology, hydrology, soils, climate, flora, and fauna.

## 2.1 Physiography and Topography

Kentucky can be divided into five primary regions: the Cumberland Plateau (Eastern Coalfields) in the east, the north-central Bluegrass Region, the south-central and western Pennyroyal Plateau, the Western Coal Fields and the far-west Jackson Purchase. The Bluegrass Region is divided further into two regions - the Inner Bluegrass and the Outer Bluegrass.

Mercer County lies within two physiographic areas of Kentucky (Figure 2-1), the Outer and Inner Bluegrass Physiographic Regions of north-central Kentucky. Most of Mercer County lies within the Outer Bluegrass Physiographic Region and a part of the eastern part of the county is within the Inner Bluegrass Physiographic Region. The topography of the county area is hilly with steep hillsides and undulating to rolling ridgetops. The flood plains are narrower in the south and widen as the river flows northward (Craddock 1983:1).

## 2.2 Geology

The geology underlying the project area consists of strata deriving from the Middle and Upper Ordovician and the Pleistocene and Holocene (Figure 2-2 and Figure 2-3).

The Inner Bluegrass Physiographic Region is underlain by Middle Ordovician rocks. It consists primarily of Lexington Limestone, a very fossiliferous limestone and fossil-fragmental calcarenite (McDowell 1984). The Outer Bluegrass Physiographic Region is underlain by Upper Ordovician rocks. This layer consists of interbedded fossiliferous limestone or dolomite and shale. The shale dominates some parts of the section, and limestone or dolomite in other parts (McDowell 1984). Rocks of both the Middle and Upper Ordovician were deposited in tropical latitudes in shallow marine water on a shelf that sloped gently northward (McDowell 1984). The project area is underlain by Lexington Limestone (Allingham 1972).

There are Silurian age formations in southern Mercer County. These consist of Brassfield Dolomite which rests on the Drakes Formation (Craddock 1983:88).

In Boyle County to the south of the project area in the Highland Rim there are Devonian and Mississippian age formations. The Boyle Formation rests on the Ashlock Formation on level areas near Junction City. The Mississippian Formations include Salem, Harrodsburg, and St. Louis Limestones (Craddock 1983:88).

The Pleistocene and Holocene rocks consist of Alluvium. Most Alluvium is Holocene, but some is late Pleistocene in origin (McDowell 1984).

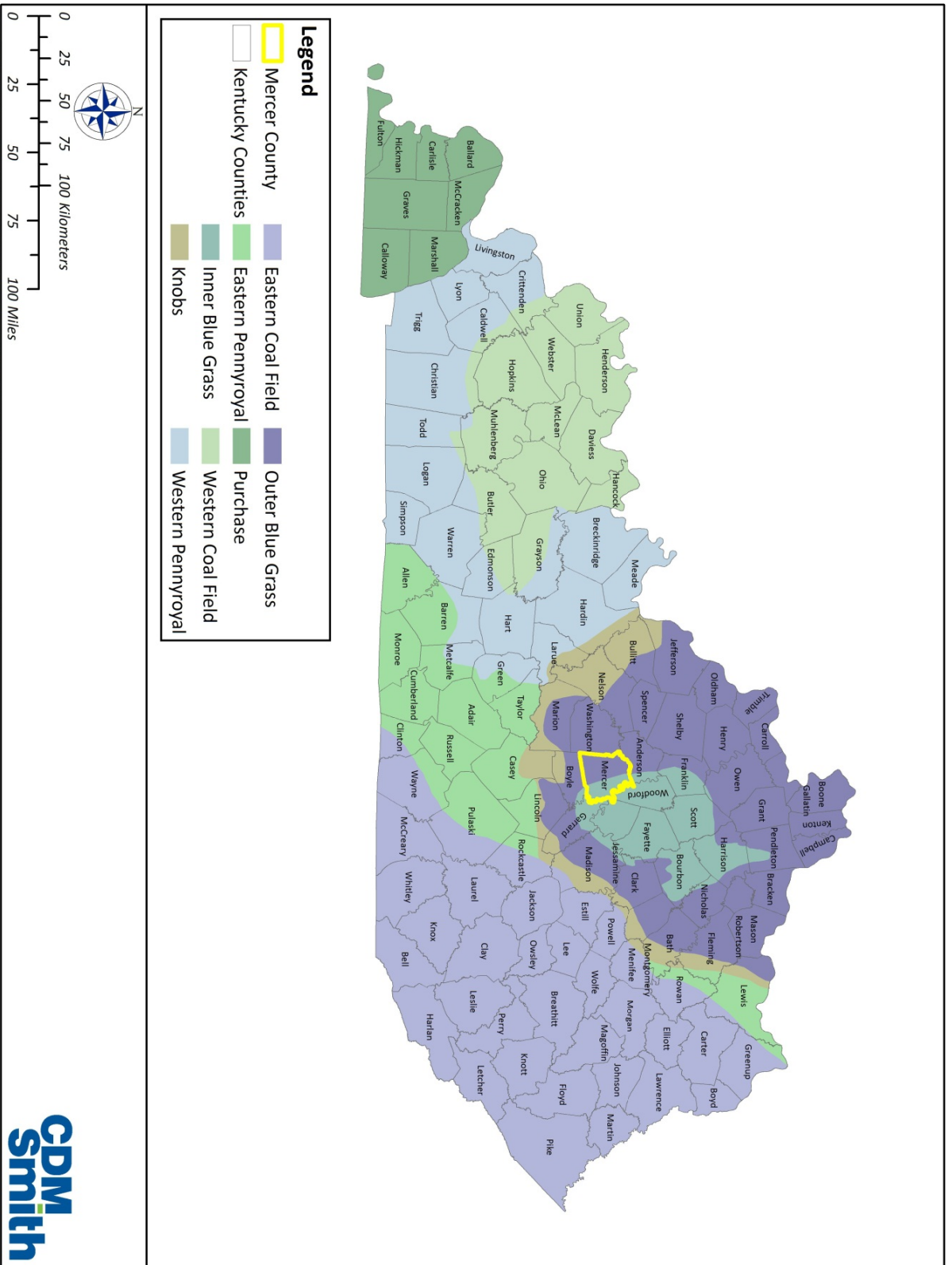


Figure 2-1. Physiographic Map of Kentucky.

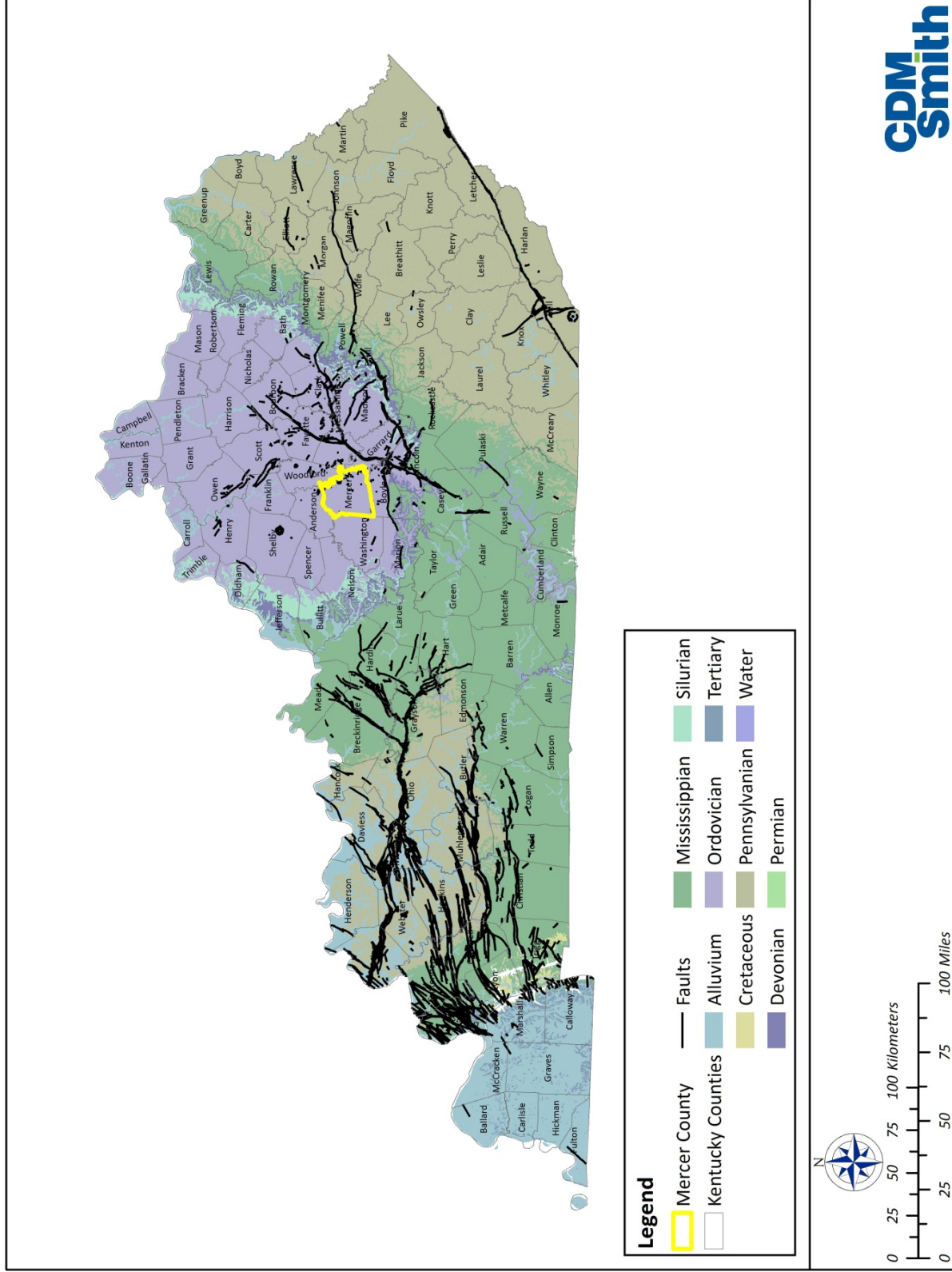


Figure 2-2. Geologic Map of Kentucky.

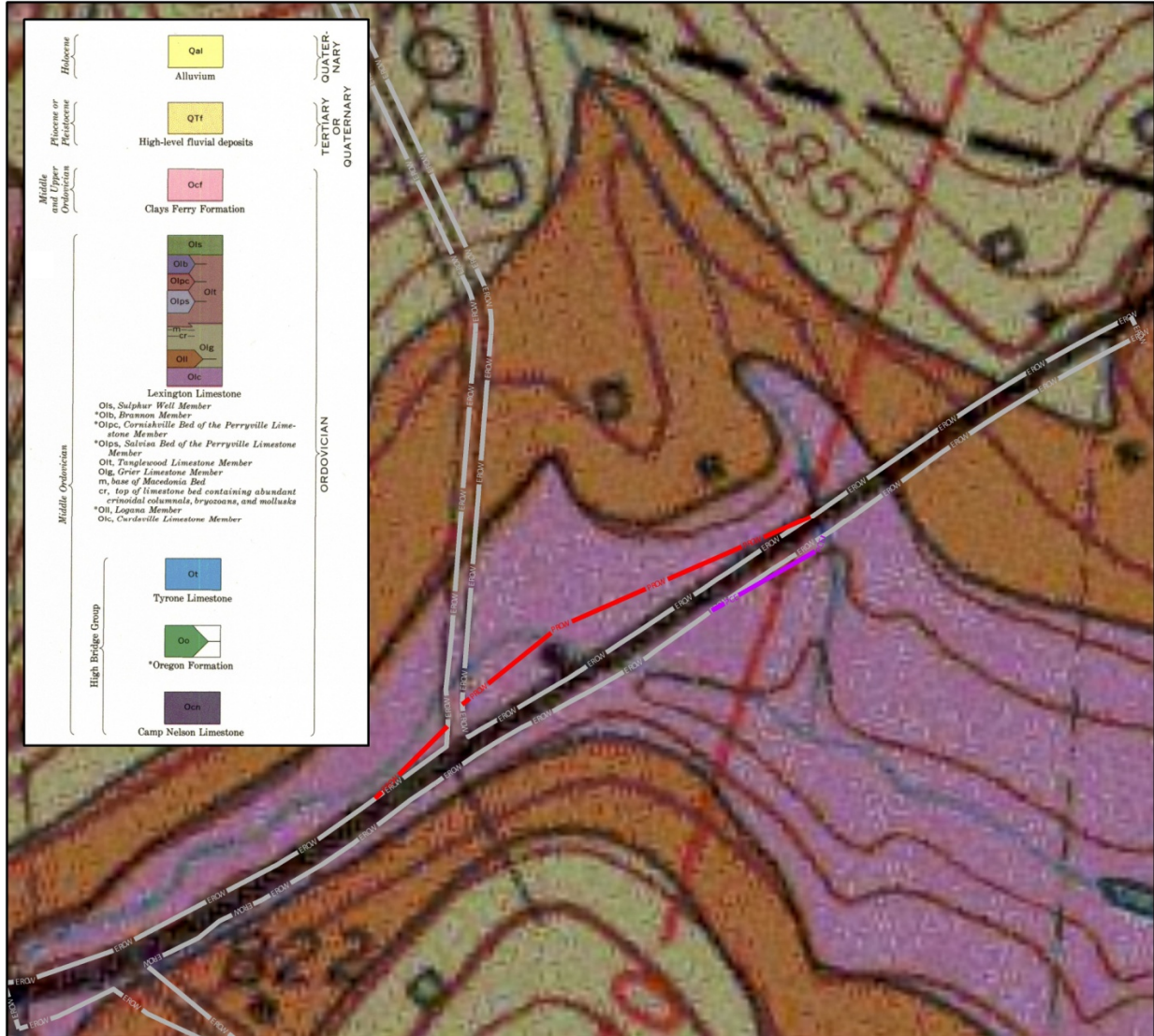


Figure 2-3. Geological Quadrangle.

## 2.3 Hydrology

Mercer County is drained by the Kentucky River and the Dix River in the east while the central portion of the county is drained by the Salt River. The Project Area is located within the Kentucky River watershed. The project area is drained by the Kentucky River (Figure 2-4).

## 2.4 Soils

Most of the soils found in Kentucky developed under the same formation processes and climate conditions. The differences in soils from one area to another are chiefly dependent on three factors: parent material, the topography where the soils are found, and the amount of time exposed to erosional forces.

There is one soil type found within the project area (Figure 2-5). It is described below.

Dunning Silty Clay Loam is deep, very poorly drained, nearly level soil on flood plains, narrow valleys and on upland depressions. Slope for this soil ranges from 0 to 2 percent. The surface layer consists of a very dark gray silty clay loam which extends from the surface to 18 cm below surface. The subsurface layer consists of a very dark gray silty clay loam and extends from 18 cm below surface to 36 cm below surface. The subsoil consists of dark gray silty clay mottled with shades of brown that extends from 36 cm below surface to 107 cm below surface. The substratum consists of gray clay mottled with shades of brown which extends from 107 cm below surface to 152 cm below surface (Craddock 1983:28).

Dunning soil is commonly used for row crops, hay, and pasture. The soil is suited for woodland use, but not extensively used for woodland production. The soil is poorly suited for urban uses (Craddock 1983:29).

## 2.5 Cherts

Chert is found in the alluvium, the Tyrone Limestone, and the Curdsville Limestone within the Harrodsburg quad (Allingham 1972). Chert gravels are located in the alluvial deposits along the Salt River and its tributaries, to the west of the study area and along the Kentucky and Dix Rivers (Outerbridge 1970). Cherty dolomite is present in the Brassfield Formation within the Silurian strata in the Knobs further to the south of the study area. Mississippian Limestones are also present in the Knobs to the south of the study area (Craddock 1983:88).

## 2.6 Prehistoric Climate Conditions

The beginning of the Holocene Age, dating between 12,700 and 11,300 B.P., is believed to be associated with major and rapid warming temperatures, decreases in cloud cover, and generalized landscape instability (Delcourt 1979:270). Estimated temperature increases during this period are three times greater than later Holocene fluctuations. During the early Holocene, rapid increases in boreal plant species occurred on the Allegheny Plateau in response to the retreat of the Laurentide ice sheet from the continental United States (Maxwell and Davis 1972:517-519; Whitehead 1973:624). At lower elevations, deciduous species were returning after having migrated to the southern Mississippi Valley refugia during the Wisconsin advances (Delcourt and Delcourt 1981:147). The climate during the early Holocene seems considerably cooler than the modern climate, and extant species in upper altitude zones of the Allegheny Plateau reflect conditions most similar to the Canadian boreal forest region (Maxwell and Davis 1972:515-516).

**Figure 2-4. Hydrology.**

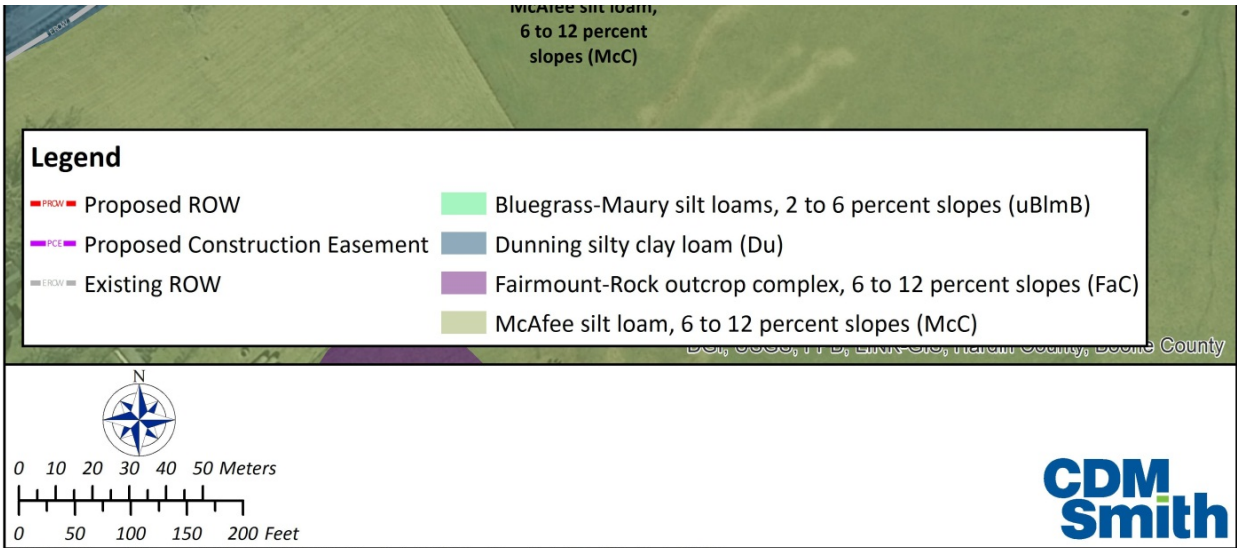


Figure 2-5. Soils in the Project Area.

Conditions at lower elevations were probably less severe and favored the transition from boreal to mixed mesophytic species. Middle Holocene (8,000 to 4,000 B.P.) climate conditions appear to have been consistently drier and warmer than twentieth century conditions (Delcourt 1979: 271; Wright 1968). The influx of westerly winds during this Hypsithermal climatic episode contributed to periods of severe moisture stress in the Prairie Peninsula and to an eastward advance of prairie vegetation (Wright 1968). Delcourt has identified Middle Holocene moisture stress along the Cumberland Plateau in Tennessee, but indicated that upland barrens did not expand appreciably as did the Midwestern prairies (Delcourt 1979:274). Changes in Archaic settlement patterns in both central and northern Missouri have been associated with possible decreases in upland resource availability during the Hypsithermal.

The earliest distinguishable Late Holocene climatic episode began circa 5,000 to 4,000 B.P. and ended around 2,800 B.P. This episode is associated with the establishment of modern deciduous forest communities in the southern highlands and increased precipitation across most of the mid-continental United States (Delcourt 1979:270; Maxwell and Davis 1972:517-519). Beginning around 2,800 B.P., warm conditions similar to the modern climate prevailed until the onset of the Neo-Boreal episode around 700 B.P. Fluctuations in this Late Holocene Pacific episode appear to have varied locally, with either increased or decreased temperatures and precipitation (Delcourt 2002). Certain fluctuations have been associated with adaptive shifts in midwestern prehistoric subsistence and settlement systems. An example is Struever and Vickery's (1973) suggestion of a possible correlation between the onset of a cooler and moister period circa 1,600 B.P. and increased use of polygonum species (smartweed) by Late Woodland groups in the Midwest (Struever and Vickery 1973:1215-1216). Researchers have inferred warmer temperatures for the Great Plains and drier conditions for the Upper Great Lakes during this same period (1,600-1,300 B.P.) (Delcourt 2002). Other fluctuations during the Pacific episode are similarly non-uniform across the mid-continental United States; however, the interfaces of all fluctuations are generally consistent.

Local paleoecological evidence is required to determine the kinds of climatic fluctuations Woodland populations experienced during the Pacific episode. Given evidence of fluctuations elsewhere, it is most likely that changes occurred circa 1,700 B.P., 1,300 B.P., and 900 B.P., with a possible fourth change around 2,300 B.P.

Studies of historic weather patterns and tree ring data by Fritts (1971) have indicated that climatological averages are "unusually mild" when compared with seventeenth and nineteenth century trends. His study suggests that winters were generally colder, weather anomalies were more common, and severe winters were more frequent between A.D. 1602 and 1899 than after 1900. These cooler, moister conditions are associated with the Neo-Boreal episode, or Little Ice Age, which began around 700 B.P. and coincided with minor glacial advances in the northwest and Europe.

The effects of the Neo-Boreal episode, which ended during the mid- to late nineteenth century, have not been studied in detail for this region. Despite this, it appears that the area experienced less radical temperature decreases during the late Neo-Boreal than did the upper Midwest and northern Plains (Fritts 1971). Related changes in extant vegetation should therefore be more difficult to detect. It is probably safe to assume, however, that average temperatures were at least a few degrees cooler during the late Prehistoric and early Historic periods. The frequency of severe winters and average winter precipitation were probably greater as well.

## 2.7 Current Climate Conditions

Mercer County has hot summers and moderately cold winters. The average summer temperature is 74<sup>o</sup> F and the average winter temperature is 35<sup>o</sup> F. On average, thunderstorms occur on about 50 days each year. Just over half of the annual precipitation falls between April and September. During winter, at least 10 days have at least one inch of snow on the ground, and the average snow fall accumulation is 19 inches (Craddock 1983:3-4).

## 2.8 Prehistoric and Present Flora and Fauna

The project area is included in the Western Mesophytic Forest Region, which is transitional between the extremely diverse Mixed Mesophytic Forest of the Appalachian Mountains and the Tall-Grass Prairies of the Midwest. The Western Mesophytic Forest contains a wide variety of vegetation climaxes and subclimaxes throughout its range, with oak and hickory as the dominant species. Trees commonly occurring in the project area include chinquapin, red oak, water maple, honey locust, elm, black cherry, hackberry, Kentucky coffeetree, walnut, shagbark and butternut hickory, basswood, sycamore, box elder, willow, and cedar. Common shrubs include sumac, blackberry, poison ivy, Virginia creeper, pawpaw, spicebush, plum, hornbean, redbud, wild grape, and buckberry. Some of the common native herbaceous plants are ironwood, milkweed, cane, nettle, white snakeroot, bloodroot, spring beauty, trillium, violets, cardinal flower, wild strawberry, goldenrod, and May apple.

These forest communities have produced and supported a wide variety of animals, such as white-tailed deer, red fox, raccoon, squirrel, rabbit, groundhog, other mammal species, birds, reptiles, amphibians, fish, and mollusks (Barbour and Davis 1974; Esarey et al. 1992:4). During prehistoric times white-tailed deer was by far and away the most important animal resource. Other species were also exploited, including turkey, fish, waterfowl, and mollusks (Fenton et al. 1996).

## 2.9 Current Land Use

Present land use for the Archaeological APE was derived from the National Land Cover Database compiled in 2006 and based on the classification scheme developed by Homer et al. (2004), combined with reconnaissance, in-situ observations. The combined results are presented in Table 2-1, and described below.

**Table 2-1. Land Use Classification for the Archaeological APE.**

Land Classification	Acres	Hectares	Percentage
Developed, Open Space	1	0.4	80%
Pasture/Hay	0.2	0.08	16%
Cultivated Crops	0.05	0.02	4%
<b>Total</b>	<b>1.25</b>	<b>0.5</b>	<b>100%</b>

The land cover classification data was created by a combination of Landsat imagery and ancillary data. The combined image data is then generalized to a 1 acre minimum mapping unit. An algorithm is then used to compare the pixel data against known values resulting in a product that identifies land cover type for the pixel. One type of land cover, Open Space, was thus identified within the Archaeological APE and is shown in Figure 2-6 and Figure 2-7. The classification is described as follows:

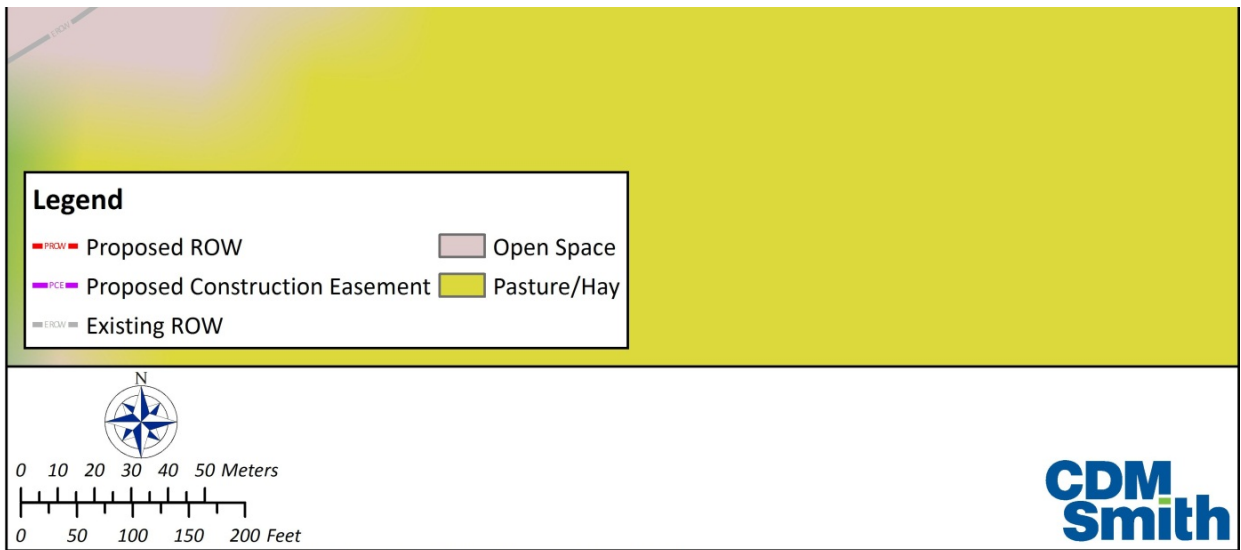
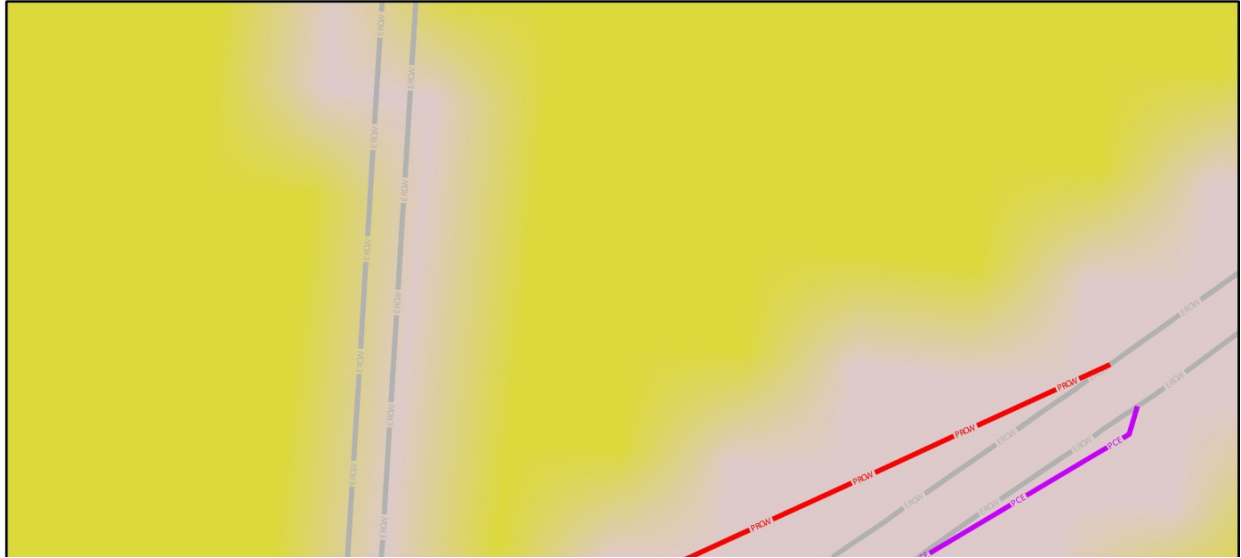


Figure 2-6. Existing Land Use, 2006.



**Figure 2-7. Developed, Open Space inside the Project Area.**

*“Developed, Open Space includes areas with a mixture of some constructed materials, but mostly vegetation in the form of lawn grasses. Impervious surfaces account for less than 20 percent of total cover. These areas most commonly include large-lot single-family housing units, parks, golf courses, and vegetation planted in developed settings for recreation, erosion control, or aesthetic purposes.” (Homer et al. 2004).*

Field observations identified two other land use classifications within the APE in August of 2013. Using the same classification scheme, the following were identified:

*“Pasture/Hay includes areas of grasses, legumes, or grass-legume mixtures planted for livestock grazing or the production of seed or hay crops, typically on a perennial cycle. Pasture/hay vegetation accounts for greater than 20 percent of total vegetation.” (Homer et al. 2004) (Figure 2-8).*

*“Cultivated Crops includes areas used for the production of annual crops, such as corn, soybeans, vegetables, tobacco, and cotton, and also perennial woody crops such as orchards and vineyards. Crop vegetation accounts for greater than 20 percent of total vegetation. This class also includes all land being actively tilled.” (Homer et al. 2004) (Figure 2-9).*



**Figure 2-8. Pasture/Hay use area inside the Project Area.**



**Figure 2-9. Cultivated Crops and Developed, Open Space use areas inside the Project Area.**

## Section 3 -

# Cultural Context, Previous Investigation, and Summary of Known Sites

In this chapter, the culture history of Mercer County and this region of Kentucky are reviewed. The research methodology used to develop this background and context involved archival research at the Office of State Archaeology, and research at the University of Kentucky's various libraries. Included within the culture history section are reviews of the known prehistory from the State Plan for this part of the Commonwealth (Applegate 2008; Jefferies 2008; Maggard and Stackelbeck 2008; and Pollack 2008) followed by a consideration of the major historic time periods and subperiods (McBride and McBride 2008). This general review of the culture history of the region is followed by a synopsis of the cultural resource management recommendations for sites already documented within the archaeological APE and within two km of it. These recommendations are in accordance with the Kentucky Heritage Council specifications (Sanders 2006).

The prehistoric cultural chronology of Kentucky is divided into a series of periods that generally correspond to major shifts in subsistence procurement strategies, social organization, technology, and settlement patterning. They are also linked to distinct material cultural styles, particularly in projectile point shapes and (in later times) ceramic vessel form and decoration. These periods form a convenient framework for the discussion of human societies in eastern North America.

Since the Late Pleistocene, humans have occupied all areas of the continental U.S., adapting to the regionally diverse ecosystems and the long-term changes brought about by human occupation. Only the past 500 years is historically documented in any fashion; most of the past 15,000 years can be documented only by the study of prehistoric sites. This period of prehistory is commonly divided into four major chronological periods, which are discussed below.

## 3.1 Prehistoric Period

This section examines general prehistory of the archaeological APE area. The prehistory of the archaeological APE area can be usefully divided into four major periods – Paleo-Indian, Archaic, Woodland, and Late Prehistoric. Each of these periods is discussed below.

### 3.1.1 Paleoindian Period

The Paleoindian period begins around 13,000 B.C. and continues to circa 8,000 B.C., coinciding with the end of the Pleistocene and the beginning of the Holocene. The earliest documented inhabitants of the continental U.S. crossed from Asia sometime before 13,000 B.C. and rapidly colonized all of North and South America. The arrival of humans in the region was probably linked to the movements of the Pleistocene glaciers. During the Paleoindian period, the last of these glacial advances and retreats, called Great Lakes Stadial (after 9,900 B.C.), occurred. Although the glaciers never actually extended south of the Ohio River, the climatic effects were felt. A cooler, moister climate affected the composition and distribution of floral and faunal communities (Delcourt and Delcourt 1982; Klippel and Parmalee 1982).

Clovis projectile points are the hallmarks of the early part of the Paleoindian period. The hafted bifaces are distinctively lanceolate-shaped and often fluted. In addition to the Clovis point, unifacially and

bifacially chipped tools such as knives, scrapers, spokeshaves, end scrapers with spurs, drills, and graters have also been recovered. Archaeologists infer that artifacts and tools of wood, bone, and shell were used, although rarely preserved in the archaeological record. A number of these tools were manufactured for the killing and butchering of extinct fauna, including megafauna. For instance, at the Adams Mastodon site in Harrison County, Kentucky, the remains of a single mastodon were found in association with large limestone slabs and cut marks on the bones. The configuration of the skeletal remains, in addition to the above evidence, has been interpreted as possible human butchering (Duffield and Boisvert 1983; Walters 1988).

The Paleoindian period is poorly understood in Kentucky and in the Southeast as a whole. Much of the information concerning Paleoindian subsistence, settlement patterns, and chronology comes from information outside of Kentucky because dated Paleoindian material in the Bluegrass is limited. Seventy-one Paleoindian sites have been recorded for the Bluegrass Management Area. Eleven sites have been recorded in the Northern Bluegrass Section and none in Trimble County (Maggard and Stackelbeck 2008).

For example, archaeological research in various parts of the U.S. has documented large numbers of surface finds of fluted points diagnostic of this period. Far fewer Paleoindian sites with subsurface cultural materials have been documented. In a recent survey of Paleoindian sites in the U.S., Anderson (1990) reports very few sites in the Southeast. Of these, slightly more than 50 sites are known to retain more than surface scatters of lithic materials. Although few sites have been thoroughly excavated and reported, some information on Paleoindian lifeways is available. Recent analysis of Paleoindian tool assemblages has established chronologically significant tool types to identify three temporal subdivisions of the Paleoindian time period (Anderson 1990; Sanders 1983, 1988; Tankersley and Isaac 1990).

Despite a refinement of the chronology, the temporal range and spatial distribution of these point types is poorly understood. Some inferences may be drawn, however, from the frequent isolated finds and paucity of large Paleoindian sites in the Southeast. Meltzer (1988, cited in Anderson 1990) has suggested two models of Paleoindian settlement patterns, one appropriate to the Northern Tundra-Spruce Parkland zone, and one to the Southern Boreal-Deciduous Forest zone. Meltzer's model of Southeastern Paleoindians, cited in Anderson (1990), suggests they were generalized foragers, exploiting the diverse plant and animal resources of the Boreal-Deciduous forests. As a result of this foraging strategy, the dense accumulation of animal bone and lithic materials that characterize sites in the Western plains (e.g., Olson-Chubbuck, Colby), and some of the Northeastern sites (e.g., Delbert, Vail, Bull Brook), is absent. According to Anderson, under Meltzer's model, southeastern Paleoindian occupations are characterized by light lithic scatters, with some functional diversity in the tool assemblage. Although Meltzer's model of Paleoindian period settlement is reasonable, several large Paleoindian sites or site clusters have been documented in the Southeast (e.g., Adams site, Big Bone Lick, Pine Tree, Quad, Thunderbird, Well Creek Crater), although none has yet been intensively excavated (Anderson 1990; Sanders 1983, 1988; Tankersley and Isaac 1990). Current excavation at the Thunderbird site in Virginia may provide more detailed information on Paleoindian lifeways in the Boreal-Deciduous Forest zone.

### 3.1.2 Archaic Period

The Archaic period includes a long span of time during which important cultural changes took place. Because of the growing evidence for the existence of transitional cultural manifestations, it is agreed generally that Archaic cultures evolved from late Paleoindian expressions of the Southeast and Midwest

(Funk 1978:19). These manifestations probably occurred in response to environmental changes that took place at the close of the Pleistocene. The Archaic period is customarily divided into three sub-periods: Early (8,000-6,000 B.C.); Middle (6,000-4,000 B.C.); and Late (4,000-1,000 B.C.). As of 2008, 923 Archaic period sites had been identified in the Bluegrass Management Area (Jefferies 2008:214).

### **3.1.2.1 The Early Archaic Period**

During the Early Archaic, the last glaciers retreated, and the arctic-like boreal forest began developing into the eastern deciduous forest. By the Middle Archaic, the environment was warmer and drier than it is today. In response to the changing environment, with its associated changes in plant and animal life, Late Archaic peoples developed a more diversified subsistence strategy based on local choices from a variety of subsistence options including hunting, plant food gathering, fishing, and in some areas, the beginnings of plant domestication in a planned seasonal round exploitation strategy. Caldwell (1958:6-18) has called this Archaic subsistence approach “primary forest efficiency.” This strategy appears to have continued well into the Woodland period.

The limited amount of Early Archaic material found at most sites and the general absence of middens, features, and burials, suggests that most occupations were of short duration. Early Archaic social units were small, probably consisting of bands comprised of related individuals. The relatively high percentage of projectile points in Early Archaic assemblages made from non-local cherts suggests that social groups were highly mobile. Items manufactured from non-local chert would have been incorporated into tool kits when groups traveled near the source areas. Some tools manufactured from certain kinds of high quality chert were used and curated for an extended period of time and later discarded far from the source area (Binford 1979; Jefferies 1990:151).

Except for the adoption of new projectile point styles, Early Archaic tool kits are nearly identical to those of the Paleoindians. The fact that projectile point styles are found over a very large area suggests that little regional subsistence diversity occurred during the Early Archaic. Rather, subsistence strategies are believed to have been similar to those employed by Paleoindian peoples, although a greater variety of game was hunted. The scarcity of tools associated with the preparation of plant foods and fishing in the early part of the Archaic indicates that hunting was probably still the major subsistence activity (Dragoo 1976: II). Archaeological investigations at a number of deeply buried sites in the Southeast like the Longworth-Gick Site near Louisville, Kentucky (Collins 1979) have provided important information on Archaic lifeways and their changes through time.

### **3.1.2.2 The Middle Archaic Period**

The environment during the Middle Archaic sub-period was dryer and warmer than modern conditions. By the beginning of the Middle Archaic period, environmental remnants of the Pleistocene had disappeared and animal and plant communities more closely resembled those present at the time of European-American contact. Pollen records from some parts of the region indicate that drier climatic conditions associated with the Hypsithermal interval reached their maximum around 6,500 B.P. (King and Allen 1977). The subsequent reduction of arboreal communities and the influx of grass and herb communities appear to have affected Middle Archaic settlement and population distributions (Conaty 1985; Janzen 1977; Jefferies 1983; Nance 1985).

Increasing regionalization of artifact inventories and the addition of new artifact classes and projectile point styles implies the development of extensive exploitation strategies. The Middle Archaic is marked by the introduction of groundstone artifacts manufactured through pecking, grinding, and polishing. A number of these groundstone tools, such as manos, mortars and pestles, and nutting stones, are

interpreted as plant food processing artifacts, indicating an increasing utilization of plant food resources during the Middle Archaic.

New projectile point styles appeared during this sub-period. Stemmed and corner notched points appear. A variety of bone tools, including antler projectile points, fishhooks, and gouges, suggests an improved efficiency in exploiting local resources. Middle Archaic sites tend to contain larger accumulations of materials than those of earlier periods, suggesting an increased group size and/or longer periods of occupation (Cohen 1977:191). Chapman (1975) has suggested that projectile points were probably used in conjunction with the atlatl, a device that increases the distance and accuracy of a thrown spear. The recovery of bone and groundstone objects (banner-stones) in Middle Archaic contexts that are interpreted as atlatl weights tends to support his suggestion (cf. Neuman 1967:36-53). Certain classes of chipped stone tool artifacts, such as scrapers, unifaces, drills, and gouges, indicate a continuation of their importance from the Paleoindian period.

In the middle Ohio Valley there appears to be at least two Middle Archaic horizons, although the second is not particularly well documented. The first is the North Carolina sequence, first defined by Coe (1964). The second Middle Archaic manifestation is represented by corner-notched and side-notched Brewerton-like points, which are typically thought of as Late Archaic points, but they may well have first appeared during the Middle Archaic (Hemmings 1977, 1985; Wilkins 1978).

### 3.1.2.3 The Late Archaic Period

The Late Archaic was a time of continued cultural expansion and growing complexity. Dragoo (1976:12-15) has discussed several Late Archaic traditions for the Eastern Woodlands. Their distinctiveness stems from varied regional responses reflected in material culture. Straight-stemmed, basal-notched, or contracted-base projectile point types characterize the Late Archaic. Judging from the greater number of sites that have been recorded, an increase in population can be postulated. Evidence of longer and more intensive site occupation suggests, in some cases, extended habitation within an area.

Aside from hickory nuts, a variety of other nuts, fruits, and seeds were exploited. The increased dietary significance of certain starchy seeds, such as goosefoot, marshelder, and knotweed, has been noted in the Eastern Woodlands (Cowan 1985:229-230). These seasonally available food resources were exploited at appropriate times during the social group's annual settlement/subsistence cycle. Group organization and movement were structured to efficiently accomplish these tasks. The occasional presence of native and tropical cultigens at some sites suggests that some Late Archaic groups were experimenting with horticulture (Chomko and Crawford 1978; Cowan et al. 1981; Watson 1985).

A series of related Late Archaic sites that serve to define the Skidmore phase in eastern Kentucky have been investigated in Rowan and Powell counties, adjacent to the Bluegrass. These include the Bluestone site complex (15R035-36) (Brooks et al. 1979), and the Skidmore (15P017) and Zilpo sites (Rolingson and Rodeffer 1968). Diagnostic projectile points of the phase have been referred to in a variety of ways, but these are generally broad-bladed with stubby, contracting stems. Turnbow and Jobe (1981) suggest a maximum age range of 2,400 to 1,650 B.C. for the Skidmore phase.

The Grayson site covered about 6 hectares (15 acres) of a broad second terrace overlooking the Little Sandy River near Grayson, Kentucky. Machine stripping and block excavation revealed a relatively discrete Maple Creek base camp that was occupied during the fall and winter. The site was far less substantial than the Maple Creek site described by Vickery (1976) for the Ohio River near Cincinnati. Diagnostic artifacts recovered included small Merom-Trimble points and absolute dates spanning the period from 1,700 to 1,250 B.P. Two rectangular pit houses with rounded corners were excavated.

These ranged from six meters x seven meters to 10 meters x 11 meters (20 feet x 23 feet to 33 feet x 36 feet) in size, and were constructed with unevenly spaced posts around an open area. A single large pit containing a small central hearth was found in each structure. The houses were surrounded by medium – to large – sized pits. Similar structures occur at Late Archaic sites (9WR4 and 9WR11) in Warren County, Georgia (Ledbetter 1991).

Population increase and, in some parts of Kentucky, an inferred increase in mortuary ceremonialism, have led some to suggest that a more complex social organization was developing in some areas of the eastern United States. Along the Green River in west-central Kentucky, large shell mound sites such as Chiggerville (Webb and Haag 1939), Indian Knoll (Webb 1946), and Carlson Annis (Webb 1950) contain hundreds of human burials and evidence of complex mortuary practices and rich ceremonial life. The development of inter-regional trading networks is indicated by the recovery of copper, marine shell, and other non-local artifacts from Late Archaic burials (Winters 1968) which testify to the growing complexity of burial ritual and the interaction of many groups (Dragoo 1976:17).

The appearance of cultigens in Late Archaic contexts has been interpreted as evidence of early plant domestication and use of these plants as subsistence resources. Evidence of early cultigens has been documented at such sites as Koster in central Illinois (Brown 1977:168), at the Carlson Annis and Bowles sites along the Green River in west-central Kentucky (Marquardt and Watson 1976:17), and at Cloudsplitter shelter in Menifee County (Cowan et al. 1981).

Struever and Vickery (1973) have defined two plant complexes domesticated at the close of the Archaic, which continued in use into the Woodland period. One consisted of non-native plants such as gourd and squash, occurring sporadically but early, and corn, which did not become important in the Ohio Valley until circa A.D. 1000. The other was a group of native plants, such as Chenopodium, marsh elder, and sunflower. Recent research in Missouri, Kentucky, and Tennessee suggests that squash was under cultivation in the mid-south by the late third millennium B.C. (Adovasio and Johnson 1981:74), and that by the second half of the second millennium B.C., evidence from Illinois, Kentucky, and Tennessee demonstrates that squash, gourd, and sunflower were well established (Adovasio and Johnson 1981:74), although some view these plants as two different groups of cultigens: the East Mexican Agricultural complex and the Eastern United States Agricultural complex. The latter includes sunflower (*Helianthus annuus*), sumpweed (*Iva annua*), chenopod (*Chenopodium* sp.), may grass (*Phalaris* sp.), and knotweed (*Polygonum* sp.). The East Mexican Agricultural complex includes squash (*Curcubita pepo*), bottle gourd (*Lagenaria siceraria*), and maize (*Zea mays*). Watson (1976), like Struever and Vickery (1973), suggests that corn, squash, and bottle gourd were domesticated in Mexico and imported into the eastern United States by way of the Gulf of Mexico and then up the Mississippi River and its tributaries. The native cultigens consist of local species whose seeds recovered from archaeological contexts are much larger than those which grow in a natural state; hence, cultivation is inferred.

Plant domestication was an important factor in Late Archaic cultural development. Recent research at Cloudsplitter shelter has documented early plant domestication. Desiccated squash rind was found in a Late Archaic deposit associated with a radiocarbon date of 3728 +/- 80 B.P. (1778 +/- 80 B.C.) (UCA 2313- K) (Cowan et al. 1981:71). Seeds of the Eastern Agricultural complex (sunflower, sumpweed, may grass, and erect knotweed) are sparse in the Late Archaic levels in the site, but after 3000 B.P. (1050 B.C.), all members of the Eastern Agricultural complex underwent a sudden and dramatic increase in the rate at which they were being deposited in the site, perhaps indicative of a wholesale introduction of the complex into the region at this time. The Late Archaic and Early Woodland inhabitants of Cloudsplitter

seem to have followed a similar trajectory in cultivated plant usage experienced in several other river drainages in the East (Cowan et al. 1981:71).

The data from Cloudsplitter suggest that squash may not have diffused into the East or Southwest from Mexico as previously postulated by Struever and Vickery (1973), but that it may have evolved in situ from North American stock (Cowan et al. 1981:71). This interpretation seems to be substantiated by more recent investigations conducted throughout the southeastern and Midwestern United States.

There are a number of projectile point styles, considered to be terminal Late Archaic, that extend into the Early Woodland period, i.e., from about 2000-1500 B.C. to about 500 B.C. (see below). On the whole, they have been found in contexts without Woodland pottery, a situation that leads archaeologists to place them in the Late Archaic rather than Early Woodland. This may not be the case.

### 3.1.3 Woodland Period

Although initially there was very little difference between Late Archaic and Woodland period settlement, over the two millennia of the period, Woodland cultures in the Ohio Valley diverged sharply from their Archaic beginning. The Kentucky Bluegrass and the adjacent Knobs region shared in this development that produced burial mounds and earthwork enclosures, some of the more notable prehistoric monuments in the Ohio Valley of Kentucky. These went along with intensification in the earlier efforts at plant domestication present in the Archaic period, the development of fired clay ceramic containers (first used as ceremonial containers, later used more widely), and the intensification of trade with distant regions of the Midwest in materials used specifically as burial offerings.

The Woodland period is customarily divided into Early (1000 B.C. – 300 B.C.), Middle (300 B.C. – A.D. 400), and Late (A.D. 400 – A.D. 1000) sub-periods. Of these, the Early Woodland is the least known, but reflects its Archaic origins. During the Middle Woodland, the Bluegrass was characterized by large burial mounds and earthwork complexes that are termed “Adena” and have counterparts north of the Ohio River.

Towards the end of this sub-period, a few sites reflect the Hopewellian cultural florescence, best known again from Ohio in the major earthworks of the Scioto valley. During the Late Woodland, a distinctive cultural adaptation developed with similar variants throughout the Middle Ohio River valley. As of 2008, 659 Woodland period sites had been recorded for the Bluegrass Management Area (Applegate 2008:453).

#### 3.1.3.1 Early Woodland

Some of the earliest known Early Woodland sites in the Bluegrass and in the adjoining Ohio Valley to the north include Peter Village in Fayette County (Clay 1984, 1985, 1987) and the West Runway site in Boone County (Duerksen et al. 1995). Quite different sites, Peter Village was an enclosure first surrounded by a post stockade, later by a ditch and internal bank, while the West Runway site was a campsite with multiple hearths, suggesting a series of short-term occupations. Radiocarbon dates place the occupation of West Runway possibly as early as 600 B.C. and Peter Village at about 350-400 B.C. While West Runway, in the types of features and their clustering in this upland location, is not that different from a Late Archaic site, the Peter Village enclosure marks a sharp break with Archaic settlement systems.

At both sites, that hallmark of the Woodland period occurs: thick and relatively crude ceramics representing quite large containers. First called Fayette Thick pottery from its occurrence at the Peter Village site (Griffin 1943), the pottery occurs widely, though sparsely, across the Bluegrass (cf. Clay

1980) with some variation suggesting different pottery – making groups. The type even occurs in small and early burial mounds, for example the Hartman mound in Boone County (Webb 1943) where it may date around 400 B.C. At the Peter Village enclosure, it is hypothesized by Clay (1987) that groups gathered to mine a source of barite and galena that was then fashioned into pigments and objects for personal use and for trading with other groups. The large ceramic vessels represented at the site may have been “feast containers” made to serve large work crews on the spot. The occurrence of thick pottery at the Hartman burial mound suggests also that the pots may have been made to serve funeral parties during the course of burial ceremonies, the first indication of customs that would become common in the Middle Woodland.

Outside of the few sites that have been excavated, artifacts belonging to the Early Woodland occur widely in the Bluegrass. Chipped chert bifaces are large and of a type known as Adena Stemmed. Polished, ungrooved stone axes were widely used. Finally, the existence of worked weights made from barite/galena suggests atlatl or throwing stick weights.

### **3.1.3.2 Middle Woodland**

The Middle Woodland in the Bluegrass is marked notably by the construction of burial mounds that have been called Adena after a site in southern Ohio (Webb and Snow 1945; Webb and Baby 1957). Major mound excavations in the region of Fischer, Drake, Mt. Horeb, Morgan Stone, Wright, Ricketts, Camargo, and many others, have given archaeologists a detailed picture of burial customs during this time period (Clay 1986). Excavations at the small Auvergne mound in Bourbon County (Clay 1983) suggest that Native Americans from a larger area came together at the time of a death to feast at graveside.

Some of the large mounds, containing multiple burials, suggest that these groups often returned to the same mound to add more burials to the structure. At times the burial mound could, like the Wright mound in Montgomery County (Webb 1940), grow to imposing size.

Although we have considerable excavated evidence for burial customs, the total settlement system is not well understood (Clay 1998:13-19). Those responsible for the burial mounds may have lived widely dispersed throughout the Bluegrass in relatively small groups. Seen in this light, the elaborate burial sites (mounds) offered essential foci for scattered groups where they could meet and interact. There were also small, circular enclosures called ceremonial circles of which the Mount Horeb site in Fayette County (Webb 1941) is an excavated example. Late in the Middle Woodland, hilltop enclosures were constructed, such as Indian Fort Hill near Berea, Madison County, Kentucky. Still, daily domestic sites are very poorly understood, although examples dating to the time period have been found to the south on the Cumberland Plateau (Kerr and Creasman 1995). While hunting was always important, during the Middle Woodland, finds from rockshelters in the Knobs region adjoining the Bluegrass suggest the manipulation of native plants. Despite this, the additional food supply did not make significant changes in the way people lived.

### **3.1.3.3 Late Woodland**

Defining the temporal parameters of the Late Woodland has not been an easy task, since clear boundaries have not been identified in the archaeological record, and diagnostic ceramic and lithic attributes, although widespread, show little temporal variability within this period. As a result, the transition from Middle to Late Woodland traditions was a gradual process and not an abrupt one, since no dramatic shifts in cultural practice or in styles of tools or ceramics occurs (Pollack and Henderson 2000). Changes that occurred between the Middle and Late Woodland are probably linked to changes in

plant subsistence strategies, hunting technologies, long-distance trade networks, and the degree of ritual expression (Pollack and Henderson 2000:615).

While Pollack and Henderson's study demonstrates continuity in material culture, analysis of some site data suggests that population increase or at least localized aggregation occurred, which over time may have led to a smaller number of larger settlements, or increased inter-community violence. In other words, population cycles may have impacted lifeways and contributed to some changes in subsistence, settlement organization, and the duration of a particular settlement. A recent survey of available radiocarbon-dated sites in Kentucky and adjacent parts of West Virginia reveals some trends during the Middle and Late Woodland that support (in part) a population increase, and possibly some subsequent population declines.

The above discussion has highlighted the fact that a large number of sites are assigned to the Late Woodland period, and that many have been dated. These dated sites suggest that the Late Woodland period, as Pollack and Henderson (2000) among others have suggested, can be subdivided into at least two sub-periods. This apparent division may reflect some cyclicity in population expansion, changes in subsistence, settlement re-organization, or the introduction or incorporation of new technologies such as corn agricultural and the bow and arrow into pre-existing cultural complexes. While these data provide a substantive framework that identifies some temporal parameters, recent syntheses, along with earlier studies of the Late Woodland period, suggest that within the region of southern Ohio, northern and central Kentucky, and extreme southern Indiana, a single cultural complex or phase was present: the Newtown tradition. In the following paragraphs, the culture history of this region between about A.D. 400 and A.D. 800 is examined to build a case for the interpretation of the cultural complex at Dreaming Creek as an early Late Woodland Newtown component. Griffin (1956:187), working on artifacts from the Turpin site in Ohio, recognized a previously undocumented cultural complex which he named "Newtown," and which he considered to post-date the Middle Woodland Hopewell tradition and to pre-date the Fort Ancient tradition in the Middle Ohio Valley. Although he could not discern the length of the period during which this Late Woodland culture flourished, he did suggest that little cultural progress was made during this period (Griffin 1952). Owing to the paucity of Late Woodland archaeological data, Griffin was unable to characterize the Newtown culture or ascertain if distinctive regional variations existed (1952, 1956).

More archaeological data has been gathered since Griffin's groundbreaking research, but considerable debate on the temporal and geographic extent of Newtown and other Late Woodland cultures still exists (e.g., Clay and Creasman 1999; Davis et al. 1997). Site assemblages throughout the region are linked by the occurrence of the ceramic complex known as Newtown Cordmarked, a type described by McMichael (1968) in the 1960s and characterized by large jars with thickened, angular shoulders. More recent research (e.g., Pollack and Henderson 2000; Seeman and Dancy 2000) indicates that while a thickened, angular shoulder may be a characteristic of some Newtown vessels, some site assemblages are considered Newtown even though they lack ceramic vessels with this particular characteristic.

Recent archaeological investigations at several sites in the region have revealed additional traits about Newtown phase assemblages (e.g., Ahler 1988; Dancy 1988, 1991, 1992; Henderson and Pollack 1985; Kreinbrink 1992; Railey 1984, 1990). Typically, Newtown lithic assemblages are characterized by Steuben, Lowe, or Chesser notched variety projectile points (see Justice 1987), thick stone bifaces, and small, triangular, shaped celts. The ceramic assemblage includes ceramic jars with incurvate to direct rims, flattened lips, and vertical cordmarking on their outer surfaces. Personal adornment, highly developed in the preceding Middle Woodland period, was apparently limited in the Late Woodland, as

Newtown assemblages are distinguished by a lack of decorative and personal ornaments. Seeman and Dancey report “...Late Woodland societies created virtually nothing that can be considered artistic...” (2000:598). The few documented artifacts showing artistic style include some stone and bone gorgets, bone pins, small mica sheets, limestone elbow pipes, and stone and shell beads.

Pollack and Henderson’s recent review of the Late Woodland period in Kentucky offers current data on what the term “the Newtown phase/complex/tradition” (2000:625) means in Kentucky, while Seeman and Dancey’s review of southern Ohio Late Woodland traditions incorporates discussion of some northern Kentucky sites (2000:595). Pollack and Henderson focus their study on either side of the Falls of the Ohio, which serves to demarcate two regions of Kentucky that appear to differ culturally, and which may have maintained distinct cultural traditions for a long period of time. Seeman and Dancey use the Ohio River and its tributaries as an organizing principal. In this review, Pollack and Henderson’s geographic model is used, although mention is also made of Seeman and Dancey’s findings where appropriate.

One of Pollack and Henderson’s sub-regions is downstream of the Falls of the Ohio, and occupies the western portion of the state; the second sub-region, and the one which is more the focus of this review, is upstream of the Falls and is in the eastern portion of the state. This eastern region encompasses the Middle Ohio River valley, the Central and Inner Bluegrass region, and the Knobs and mountains of Eastern Kentucky. Major rivers in the region include the Ohio, as well as its Kentucky tributaries (Kentucky, Licking, and Big Sandy), all of which are deeply entrenched with narrow flood plains. Within this region, only one cultural complex is well documented for the early Late Woodland subperiod: the “Newtown phase/complex/tradition” (Pollack and Henderson 2000:625). Components associated with this phase are noted at several important Kentucky sites such as the Dreaming Creek site in Madison County, Hansen and Bentley sites in Greenup County, and the Pyles site in Mason County, as well as numerous smaller sites in the Bluegrass (e.g., Shelby Lake, Froman, and sites in the Cumberland Plateau such as Rock Bridge and Haystack rock shelters). Other Late Woodland cultural traditions (e.g., Beal’s Run) in this region are only now being examined, since this period has typically been understudied (e.g., Pollack and Henderson 2000), so additional variation may be present that is only recently being documented.

### 3.1.4 Late Prehistoric Period

The Late Prehistoric archaeological complex of the middle Ohio Valley is Fort Ancient, which spans the time period from approximately A.D. 1000 to about A.D. 1700. Geographically, Fort Ancient extends from western West Virginia to southeastern Indiana and from south-central Ohio to north-central and northeastern Kentucky (Griffin 1978:551). In the Bluegrass, Fort Ancient is divided into the early Osborne Phase (circa A.D. 950 – A.D. 1200), Middle Fort Ancient (A.D. 1200 – A.D. 1400) and Madisonville Horizon (A.D. 1400 – A.D. 1700). The Osborne Phase is known in the Bluegrass from the Muir and Dry Run sites (Sharp 1984) in Jessamine and Scott counties. Middle Fort Ancient sites include Buckner, Gilfoil, and Florence (Fassler 1987).

The development of Fort Ancient and its relationship to Late Woodland cultures has been a debated issue. Two hypotheses have been offered in explanation for the relationship between Fort Ancient and Late Woodland cultures. One hypothesis suggests that Fort Ancient represents the florescence of an indigenous Late Woodland culture (Graybill 1980:55-56; Rafferty 1974). Others (e.g., Essenpreis 1978:154-155) suggest that Fort Ancient represents an influx of Mississippian peoples from the lower Ohio River Valley. Although the question has yet to be resolved, it is entirely possible that each of these hypotheses may be correct, depending upon the data set and region employed to address the problem.

Essenpreis (1978), for example, has suggested that these two hypotheses are appropriate for explaining Fort Ancient manifestations at different times during the Late Prehistoric. In this scenario, Fort Ancient is viewed as a florescence of Mississippian-influenced Late Woodland culture during the early phases (Baum, Anderson, and Feurt) and as an influx of Mississippian peoples during the later Madisonville phase (Essenpreis 1978:164).

Fort Ancient reflects an elaboration of Late Woodland subsistence activities and social organization. Settlements were much more nucleated, as evidenced by large village sites (Mayer-Oakes 1955). Village sites tend to be situated in valley bottoms along the main stems of the region's larger drainage (Graybill 1978, 1979). On the other hand, smaller sites tend to be located throughout tributary drainage and are thought to represent seasonal camps and resource procurement activity stations. A number of sites along the Ohio River, or close to it, were fortified; and many have central courtyards or plaza areas (Griffin 1978:552).

Fort Ancient subsistence is characterized for the first time by a reliance on the cultivation of maize, coupled with beans and squash. Despite the increased importance of horticulture, hunting provided an important source of food. Deer was the main meat source; at some sites it made up to 80 percent of the game consumed (Griffin 1978:552). The cultural material assemblage included elaborate ceramic styles (usually tempered with crushed mussel shell, although limestone and grit-tempered ceramics also occurred), triangular arrow points, mussel shell tools (e.g., knives, scrapers, and hoes), and bone tools (e.g., bone reamers), which also serve to distinguish Fort Ancient cultures from Late Woodland occupations.

Although Fort Ancient subsistence, like that of Mississippian populations, was based on the cultivation of corn and other cultigens, other aspects of Fort Ancient clearly distinguish it from the contemporary Mississippian occupations: Fort Ancient sites lack large ceremonial centers and earthworks, although Early and Middle Fort Ancient sites (through circa A.D. 1250) exhibited burial mounds. For example the Rowena Site, flooded by Lake Cumberland, was described as a small Mississippian regional center, possibly occupied from A.D. 1300-1400 (Weinland 1980: 133). The artifact assemblage indicated the site was influenced strongly by eastern Tennessee cultures throughout most of its history, especially the Dallas cultures (Weinland 1980:131). Other Mississippian sites along the Cumberland, like Crowley-Evans (Jefferies 1995; Jefferies and Flood 1996), were built around low platform mounds on which the house of a local chief was constructed. However, the complex settlement hierarchy found in the Mississippian, some sites having mounds, others with none, does not occur in Fort Ancient. Villages and hunting camps have been the only Fort Ancient site types defined thus far.

There were 523 Fort Ancient site in the Bluegrass Management Area. Ninety-one percent of the sites are open habitations without mounds. Ninety-two Fort Ancient sites were recorded in the Northern Bluegrass Area (Henderson 2008:808).

## 3.2 Historic Period

### 3.2.1 Exploration and Early Settlement (ca. 17th Century-1820)

It is not exactly known when the first Europeans entered Kentucky, but early explorers like Marquette and Jolliet certainly witnessed the western portion of Kentucky as they traveled the Mississippi and it's possible that La Salle may have visited the Ohio Valley. British exploration of the New and Holston rivers and stories from Native Americans led them across the mountains (Alvord 1920). What is known is that the Native American tribe that was first contacted by Europeans in Kentucky was probably the Shawnee. It has been traditionally and historically maintained that the earliest routes into Kentucky followed buffalo and game trails frequented by Native Americans (Boisvert 1984:46-49, Brown 1929:4). It was quickly discovered by European Americans that these early trails were easy to follow and that they invariably led to salt and water.

The region in which the study area lays, the Outer Bluegrass, is a large and diverse cultural landscape, encompassing varying soil types, minerals, navigable rivers, and overall terrain. The land was suitable for homesteaders and farmers eager to start a new life in the trans-Appalachian West. The Native Americans of Kentucky and Tennessee were important to Europeans mainly because of Europe's insatiable desire for animal skins and furs. White traders became a common sight along Kentucky and Tennessee's Indian trails after 1673 (Bergeron 1999). French traders operated from posts along the Mississippi and may have ventured into the Ohio Valley, although no posts or forts are documented during this early period. The Ohio Valley during the time of the French in the Mississippi Valley was mostly abandoned of large Native American settlements. The first English traders were from the Virginia colonies, but overall, Kentucky and Tennessee were explored by traders, surveyors, and explorers from both Virginia and North Carolina (Bergeron 1999). By the late 1720s, groups like the Shawnee and Delaware returned to the valley and traded fur with the British and Iroquois. By the mid-eighteenth century, British traders were located at Lower Shawneetown and Pennsylvanian traders and trading houses were present in the larger Indian villages. Traders George Croghan and William Trent established one trading house on the Kentucky side of the Ohio River (McBride and McBride 2008:906-907).

The exploration of Kentucky began in 1750 when Dr. Thomas Walker explored some of eastern Kentucky. His party reached the confluence of the Red and Kentucky rivers. He was followed in rapid succession by a number of other Englishmen: Christopher Gist in 1751 and John Finley in 1752. Walker was a surveyor and employed by the Loyal Company to locate tracts of land for settlement in eastern Kentucky, as well as southwestern Virginia. Working for the Ohio Company, Gist journeyed down the Ohio River as far as the Kentucky River where he was warned about proceeding further on to the Falls of the Ohio because of the threat of the Indians who grew increasingly allied with the French (Rice 1975:9-11).

With the conflict between France and Britain leading to the French and Indian War, the Shawnee and most other Indians in the valley sided with the French. The Pennsylvania traders were forced to abandon the valley as the French entered into the Forks of the Ohio area and in 1757 established a fort (Fort Ascension, later Massac) in Illinois on the north side of the river. Although there was little conflict in Kentucky during this war, the French controlled all trade in the Ohio Valley at this time. However, this was short lived when the fall of a strategic fort (Fort Duquesne), located in western Pennsylvania, greatly lessened French dominance in the upper valley. Before the Treaty of Paris in 1763, most of the French abandoned the upper and much of the central valley (McBride and McBride 2008:908-909).

With the French gone, exploration of Kentucky by the British began in earnest. Land speculators and settlers wasted no time in moving into the area, but were temporarily halted by the Proclamation of 1763 and Pontiac's Uprising of 1763-1765. This did not stop the "Long Hunters", however, who had already entered into Kentucky during the mid-eighteenth century. These hunters came from the eastern United States via the Cumberland Gap and traveled in hunting groups of three to four, collecting elk and buffalo hides (Rice 1975:21-22). In 1769, the most famous Long Hunter, Daniel Boone, first entered Kentucky (Rice 1975:24).

With pressure on British and Colonial officials to shift the Proclamation line further west, a new treaty (Treaty of Lochaber in 1770) and acceptance of an error which shifted the Donelson Line further west in 1771, the new western boundary limiting settlement became the Kentucky River. Surveyor John Donelson had originally thought he had marked the new line on the Big Sandy, but the error was obscured by the inaccurate maps of the day. When the error was eventually revealed, it was too late because of the overwhelming pressure of the speculators and settlers (Rice 1975:34). In 1772, all of Kentucky and the parts of Virginia south of the New and Kanawha rivers became part of a new county, Fincastle. The formation of Fincastle County foreshadowed the inevitable advance into Kentucky (Rice 1975:47).

Both the overland and water routes were considered dangerous during the eighteenth century due to intermittent Indian attacks. Daniel Boone, negotiating with the Cherokee, built the Wilderness Road, which became the primary overland route through Kentucky from 1775 to 1818 (Ison et al. 1991:11). Settlers from North Carolina and southwestern Virginia generally chose this route. Those entering Kentucky via the Ohio River were from Pennsylvania, Maryland, and western Virginia. Travelers' accounts of seeing Kentucky for the first time spoke of great canebrakes with stalks often twelve feet high on the Kentucky side of the river. Further west was vast grassland, mostly cleared by the Indians, and referred to as the "Barrens." It was more expensive to travel by river and few people could afford the price; however, river travel was faster (Rice 1975:19; McBride and McBride 2008:911). Most of these early settlers were heading for the Bluegrass of Kentucky.

The first permanent settlements in Kentucky were in central Kentucky and included Harrodstown (now Harrodsburg, county seat of Mercer County) and Boonesborough. Boone established Boonesborough in what is now Madison County, and most of its settlers came through the Cumberland Gap. Harrodstown was settled by people who came down the Ohio River, however. It predates Boonesborough by one month, having been established by James Harrod on June 16, 1774 (McBride and McBride 2008:911). The McAfee brothers along with James McCoun and Samuel Adams in 1773 explored along the Salt River in present day Mercer County, and returned with their families to the area in 1779 to build McAfee Station. Robert McAfee was a pioneer of flatboat operation who navigated the Salt River to the Ohio River and there down to New Orleans until his death in 1795 (Kleber 1992).

By 1780, there were three clusters of settlements in Kentucky. These included one at the Falls of the Ohio and Beargrass Creek where George Rogers Clark established Fort Nelson, one northeast of the Kentucky River including Lexington and Bryan's Station, and a third located south of the Kentucky River which included the areas of Harrodstown, Danville, and Logan's Fort. This rapid growth of population combined with threat of Indian attacks led the settlers to demand more county division. Virginia granted their request and Kentucky was divided into three counties: Fayette, Jefferson, and Lincoln. All of these settlements were located around forts and stations which varied from a single fortified cabin or blockhouse to what was almost a fortified town with numerous cabins surrounded by stockade (i.e. Bryan, Ruddles, or Strode stations) (McBride and McBride 2008:911).

Unfortunately for the first settlers, the Revolutionary War was beginning and most of the Ohio Valley Indians were allied with the British. The Shawnee in particular were given incentive to attack any new American settlement. The result for many of these new settlements was their abandonment temporarily and settlement only progressed slowly throughout the war until its end in 1783. After 1783, however, this changed and the rush for new lands, particularly of central Kentucky, once again commenced (McBride and McBride 2008:911-12). Most of these settlers came from the piedmont and valley of Virginia, but some also from Maryland and North Carolina. They were not restricted to the lower or middle classes, as some gentry were settlers too. These gentry brought with them their slaves, establishing large plantations in the Bluegrass with slave labor and ideas of social hierarchies practiced back in Virginia where they were considered the social elite.

In 1792 Kentucky finally became a state. Statehood brought state-funded transportation improvements. Besides road developments, improvements and regulation in river transportation included the first passenger boats in 1799 and ferry crossings on rivers or larger creeks.

Mercer County was formed in 1785 from a portion of Lincoln County. The soils in the county are good for raising tobacco, corn, and hay. It is also good for raising livestock. One of the earliest settlements in the county was McAfee Station, which was established in 1779. Pleasant Hill was a large and prosperous community built by the Shakers in 1808 in Mercer County and it lasted until 1910 (Matarese and Thomas in Kleber 1992:812-813). The Pleasant Hill shakers were some of the earliest entrepreneurs to use the Kentucky River as primary means of getting products to out-of-state markets, especially New Orleans, and their community prospered for it during the first half of the nineteenth century (Ellis in Kleber 1992:510).

Hemp, tobacco, grains, and livestock were the main produce on both the small and large farms, the reason being that these goods preserved well and had a favorable relationship between bulk and value (Cotterill 1917:235; Earle and Hoffman 1976). The Shakers constructed water-powered mills along Shawnee Run, which by 1817 included two dams, a sawmill, a gristmill, and a fulling mill (Janzen 1981).

### **3.2.2 Antebellum (1820-1861)**

From the 1780s and into the early nineteenth century, an agricultural surplus of tobacco, corn, and whiskey in Kentucky served as important commercial commodities. Shipment of these products was tied to the rivers of Kentucky.

Connecting to these waterways, several networks of state turnpikes and county roads linked the communities of central and northern Kentucky with the international market in New Orleans (Dunaway 1996). The Ohio River was the main corridor of trade in the early settlement period, linking settlements on both sides of the river, and carrying livestock droves and trade goods to distant markets.

The first two decades of the nineteenth century in Kentucky underwent significant changes in settlements, agriculture, social and economic structure, and political organization. Growth and speculation occurred and an economic boom in the 1810s led to an increase in commercialization of farming and growth in slave plantations. An increase in industrialization led to river improvements and the arrival of the steamboat in 1815 opened the Ohio River on a new level and led to a dramatic increase in the already thriving river trade (McBride and McBride 2008:918). Shipments of goods in and out of the area of Mercer County also increased with the construction of a series of five locks on the Kentucky River from 1836 to 1842, making the river more consistently passable for steamboats and creating a reliable route to markets and for passenger transport (Ellis in Kleber 1992:510).

By the mid-1820s, Kentucky and most of the country was recovering from the depression. River steamboat traffic was increasing on the Ohio River and cultural and economic ties between Kentucky and the rest of the country were greatly improved. According to McBride and McBride (2008:922), this time was “truly the age of the river town, or city, in Kentucky.

During the Antebellum period the industries associated with small towns were agriculturally based and included flour and grist mills, tobacco factories, hemp factories, leather shops, woolen mills and distilleries (McBride and McBride 2008:927). Harrodsburg was a tourist destination during this time as it had mineral springs, and Harrodsburg Springs and Greenville Springs were two of the finest spas in the nation (Bryant in Kleber 1992). Mercer County had modest industrial development with the products of the Shakers (Bryant in Kleber 1992:627).

Major crops and livestock during this period were similar to the earlier period of settlement, but variation in the major crops grown increased and types of livestock raised changed between the different cultural landscapes in the state. The Pleasant Hill Shakers grew hemp as a cash crop; wheat, rye, corn, flax, and tobacco were important crops as well. The orchard at Pleasant Hill and their abundant vegetable gardens supplied produce for canning as well as the dinner table, thus income and self-sufficiency were well- achieved. Seed production was also an industry at Pleasant Hill. They had a beef cattle herd and milk cow herd, and many other types of livestock on their 4,000-plus acres of land.

The architecture of Pleasant Hill is its most widely admired legacy, and accredited to the design work of resident architect Micajah Burnett and Shaker ingenuity. The community was at its largest in 1830, with a population of 500 brothers and sisters. The major structures of Shakertown had all been built by 1860, and contributed a unique local aesthetic to region (Kleber 1992).

### **3.2.3 Civil War (1861-1865)**

Kentucky’s status as a border state not fully joining the Confederacy but yet still allowing slavery brought division within the population. The Union Army headquarters for Kentucky were at Louisville and Camp Nelson in Jessamine County which was a large quartermaster depot and African-American recruitment center that operated from 1863 to 1865. The fort employed over 2,000 civilian employees, and housed between 900 and 5,000 troops at any time (McBride et al. 2003). This large and significant regional operation was located only twelve miles upstream from Pleasant Hill.

The Battle of Perryville, the largest Civil War battle to occur in Kentucky, was fought just south of the Mercer County line, near Perryville in Boyle County. On October 8, 1862, the battle ensued, involving 16,000 Confederate troops and 58,000 Union troops. The Confederate force was defeated and they retreated to Tennessee, and the three-month long Confederate effort to secure Kentucky was halted. Before and after the battle, soldiers from both sides advanced and retreated through the community of Pleasant Hill. Meals were fed to thousands of these men daily, but significant robbing of the Shakers occurred, as well (Kleber 1992).

The economic effects of the Civil War were probably more significant to people in Kentucky than the physical devastation. Many farmers and merchants were hurt by the curtailment of trade with the south (McBride and McBride 1990:609). The hemp industry, which was already declining in the 1850’s, lost its most significant domestic market, the southern cotton producers (Hopkins 1998:68). There were also transportation system disruptions due to war damage or to Union control.

The three largest factors in the deterioration of Kentucky’s agriculture and industry during this time were the loss of the labor force, the loss of the market at New Orleans, and the major drought across the

region that lasted from 1860 to 1863. About 100,000 Kentucky men entered the Union Army and up to 40,000 entered the Confederate Army (McBride and McBride 1990:610). Almost one third of those enlisted died. With the help of individuals like Delia Webster, slaves escaped across the Ohio River in the early years of the war. In 1864 the U.S. Government granted freedom to any slave that enlisted in the U.S. Army. The male slaves also brought their families to the encampments (McBride et al. 2003).

### **3.2.4 Postbellum Industrialization (1865-1914)**

There were changes in social and economic systems that greatly affected Kentucky during the Postbellum period (McBride and McBride 1990:615). During this period the state began to deal with the emancipation of African-Americans and their role in the society. The agricultural system began to change with the introduction of white burley tobacco (McBride and McBride 1990:615). There were significant developments in communication and transportation, growth in industry and commerce and increased urbanization (McBride and McBride 1990:615). In Mercer County, the completion of High Bridge in 1877 was an important transportation factor as well as a local landmark, as it was the highest railroad bridge in the world at that time. It was a popular tourist destination.

After the war, agriculture and manufacturing recovered and expanded. Former slaves took agricultural or industrial jobs for pay. Many hamlets grew up around farms and also in urban areas that were populated by the recently freed African-Americans. Markets in the south opened up again. The hemp industry revived after the war and again became a major crop and industry (Hopkins 1998). However, the production of tobacco gradually increased and would eventually overtake hemp as the most important cash crop in Kentucky.

Despite all these hardships, by 1870, Kentucky was first in hemp production, third in the production of mules, fifth in the production of swine, and eight in the production of corn, wheat, and flax (Axton 1975; Tapp and Klotter 1977). Tobacco production increased more than 70% from 1870 to 1900 in Kentucky (Tapp and Klotter 1977). Kentucky benefited from the fact that less damage occurred within the state in comparison to other states during the Civil War.

In Mercer County, the economy after the Civil War continued to focus on agriculture. Livestock and grain-production were important and other crops included hay, corn, tobacco, and strawberries. Industrial development began, at a small scale, with the Shakers. Other industrial activities in Mercer County included distilleries, a coal oil refinery, and a calcite mine (Kleber 1992:627).

Mass production and a growing desire for consumer goods stimulated retail trade and the growth of most cities and towns throughout Kentucky during this period. The availability of mass-produced goods led to a general decline in local manufacturing and the consolidation of small manufacturing operations. The decline in local industries also may have resulted in the rural to urban migration (McBride and McBride 2008:948). Pleasant Hill had been depleted during the Civil War and never recovered morale or numbers of members. Families seceded from the community, leaving fewer than 60 members by 1896. The property was sold in 1910.

### **3.2.5 Twentieth Century**

The beginning of this period was very similar to the previous period. Kentucky was still a leader among the southern states in agricultural products and a continued production pattern in industrialization and manufacturing also occurred.

The Great Depression and World War II were two of the most important events of the Twentieth Century. For many, the onslaught of the Depression was not apparent until the stock market crashed in

October 1929. For farmers, however, hard times began much earlier. Agricultural prices had been depressed for nearly a decade before the crash and remained so until World War II.

The Great Depression affected every facet of American life, sapping energy from the economy and draining the citizenry's ability to build. Although no unemployment figures were kept, it is generally thought that the jobless rate hovered around 12 percent in Kentucky.

New Deal programs put together by the Roosevelt administration in the 1930s changed the face of Kentucky. Born of economic desperation of the Great Depression, the New Deal implemented work programs that provided paying jobs for the unemployed. The Civilian Conservation Corps (CCC), Works Progress Administration (WPA), Public Works Administration (PWA), Civil Works Administration (CWA), and Resettlement Administration put to work many of the Kentucky unemployed.

Mechanization of agriculture and the general decline in farming as a way of life, continued urbanization, major improvements in roads, and a decline in river traffic all occurred at this time. There were also increases in stores and access to consumer goods (McBride and McBride 2008:967). Kentucky's population increased during the period, but at a slower rate than the rest of the Southeast (McBride and McBride 2008:967). The population in Mercer County has increased from 7,091 in 1790 to 21,331 in 2010 (Table 3-1).

**Table 3-1. Population changes for Mercer County, Kentucky.**

Census Year	Total Population
1790	7,091
1800	9,646
1810	12,630
1840	18,720
1900	14,426
1970	15,960
1980	19,011
2010	21,331

The industrial base in Mercer County expanded during the twentieth century. Production includes clothing, metal, glass, and heating and refrigeration items. In 1925, the Dix River Dam was completed. The project provided an electric generating plant and Herrington Lake (Kleber 1992:627).

### 3.3 Historic Map and Aerial Photography Research

USGS maps available were the 1905, 1952, 1959, 1967, 1967 (revised 1978), and 1967 (revised 1987) 7.5 minute topographic maps for the Harrodsburg, KY quadrangle. Also available were a 1941 and 1952 *Highway and Transportation Map of Mercer County, Kentucky* (Kentucky Transportation Cabinet 1941, 1952), and the 1950, 1958, 1960, and 1974 aerial photos used by the United States Department of Agriculture. The 1876 D. G. Beers & Co. *Map of Boyle and Mercer Counties, Kentucky*, and the 1972 U.S.G.S. Harrodsburg Quad Geologic Map were also used.

### 3.4 Previous Archaeological Research

The survey report files at the Office of State Archaeology (OSA) were consulted on July 25th, 2013. There were two prior archaeological surveys recorded within a 2 km radius of the archaeological APE (Figure 3-1).

In August and October of 1977, archaeologists from the Kentucky Department of Transportation's Division of Environmental Analysis conducted an archaeological survey of a proposed US-68 replacement bridge and approaches in Mercer County, Kentucky (Hovarth 1978). The new bridge was to replace the then-existing "Kissing Bridge" over Shaker Creek. The primary survey methods were visual inspection and surface collection. Alternate 1 of the proposed bridge and approaches was examined in the August field foray. There were no cultural resources identified within the project area, though a flood dike was identified 500 feet from the project area and out of the area of potential impact. There were no visible remains of an associated millhouse. Also outside of the project area but within view 1600 feet west of the US-68 and KY-33 intersection was an historic dry-laid stone fence in poor condition. During the December survey of the Alternate 2 project area (located approximately 900 feet west of the US-68 and KY-33 intersection) one single archaeological site was recorded, Site 15Me41 – a lithic scatter described in greater detail in Section 3.5 below.

A Phase I archaeological survey was conducted along a 1,356 m (4,450 ft.) long, upland corridor of US-68 in Mercer County in July of 2002. The work was completed by Cultural Resource Analysts, Inc., (CRAI) as contracted through Palmer Engineering for the Kentucky Transportation Cabinet ahead of the road realignment between Chinn Lane and Chatham Road (Kompanek et al. 2002). Shovel probing and visual inspection were the survey methods employed which resulted in the identification of one previously unrecorded site, 15Me76, described in greater detail in Section 3.5 below.

### 3.5 Known Archaeological Sites

The site files at the OSA were consulted on July 25th, 2013. There were not any previously recorded archaeological sites documented within the project area, but six sites had previously been recorded within a two-kilometer radius of the APE. These sites – 15Me6, 41, 55, 56, 57, and 76 – are described below.

Site number 15Me6 was assigned to a mound on the property of one J. B. Hoeing. The site record states only that the mound was located 1.25 mi (2 km) from the mound assigned state site number 15Me5. The map location of the site locates the mound on the southwestern edge of a large upland hilltop, at approximately 920 ft. AMSL, some 1,500 meters (0.9 mi) north by east of the current APE. This is the highest elevation between Shawnee Creek and Shaker Creek.

Site 15Me41, a prehistoric camp site/lithic scatter unassigned to any cultural or temporal association, was identified during a 1977 KYTC archaeological survey led by Gary Hovarth. The site was located on a hillside between 850 and 870 ft. AMSL, approximately 150 meters (0.1 mi) west of the left fork of Shaker Creek and adjacent to US-68 approximately 150 meters (0.1 mi) east of the intersection with Phillips Lane. Site 15Me41 consists of two concentrations: a 76 x 30.5 meter (250 x 100 foot) area that was a cleared cornfield at the time of survey, and a three square meter (10 x 10 foot) cow path area 30 meters (100 feet) to the east. A total of 118 lithic artifacts were recovered from the larger concentration, those being: debitage (n=86), utilized flake scrapers (n=19), utilized flakes (n=4), spokeshaves (n=2), graver (n=1), utilized biface fragments (n=3), biface tip fragment (n=1), projectile point (n=1), shaped

**Figure 3-1. Locations of Previous Archaeological Investigations.**

limestone (n=1). The smaller concentration produced debitage (n=8), a spokeshave (n=1), and a utilized scraper (n=1). Additional fieldwork was recommended for the site.

Three of the sites located within two kilometers of the current project area were identified first by Donald Janzen and recorded in his book for Pleasant Hill Shaker Village entitled “The Shaker Mills on Shawnee Run.” The sites were revisited by Kim McBride (with the University of Kentucky’s Program for Cultural Resource Assessment) in 1990 and 1991, and the following information was gathered from the site forms produced by McBride’s excavations.

Site number 15Me55 was assigned to the Grist Mill Complex on the grounds of Pleasant Hill Shaker Village. The main feature of the site is the gristmill stone foundations and the partial remains of the stone-lined mill race. Additionally were located the location of one domestic structure, a cistern with dry laid stone foundation, a mid-19<sup>th</sup> century smokehouse location, and a dry laid stone dam located 91 m (300 feet) southwest of the site.

Site number 15Me56 refers to the Sawmill Complex at Pleasant Hill. The site was the location of a sawmill dam, but more importantly was also the location of the Elisha Thomas house, built in 1806, that was home to Shaker convert Mr. Thomas where many travelers and new converts were welcomed. The house became a main residence at Pleasant Hill in the mid-19<sup>th</sup> century. Archaeologically the residence was represented by a concentration of mid-19<sup>th</sup> century domestic artifacts found 45 m (150 ft.) from the dam.

Site number 15Me57 refers to the West Lot Complex at Shaker Village. This site consists of the West Lot dwelling house – a large two-story stone building dating to the 1820’s, a two-story stone and brick wash house dating to the 1830’s and a stone spring house from 1918-1920.

Present on a 1905 and a 1929 map, site 15Me76 was labeled as “Coleman School” on the latter reference. During a 2002 Phase I survey that included the site area, both a chain of title was created from deed research and school districting documents were referenced to determine that Mercer County School District 51 was created in 1892 when a local resident donated 0.75 acre (0.3 hectare) for the purpose. Schoolhouse construction was begun that same year. Mercer County sold the property in 1941, and there were no structural remains on the surface when the property was surveyed in 2002 by archaeologists from CRAI (Kompanek et al. 2002). In fact the stratigraphic integrity of the site was severely compromised by various disturbances which prevented the site from being recommended for nomination to the NRHP. The 140 x 40 meter (459 x 131 foot) site did produce 213 historic artifacts dating to the late 19<sup>th</sup> century. A small prehistoric component was present as well, represented by 5 non-diagnostic lithics.

### 3.6 Phase I Archaeological Investigations at 15Me98

A Phase I archaeological survey was conducted for the proposed replacement of the bridge and its approaches on US-68 in Mercer County, Kentucky (Item Number 7-1128.00.). Field work was conducted on August 20<sup>th</sup> and 21<sup>st</sup>, and on December 4<sup>th</sup>, 2013. A total of forty-four (44) STPs were excavated, of which four (4) were augered. During the December re-visit to the project area, the portion of the APE that had been in tobacco was methodically surface inspected as well as subjected to shovel probing. The location of all the shovel probes on USGS quadrangle maps are shown in Figure 3-2, and on an aerial photograph in Figure 3-3.

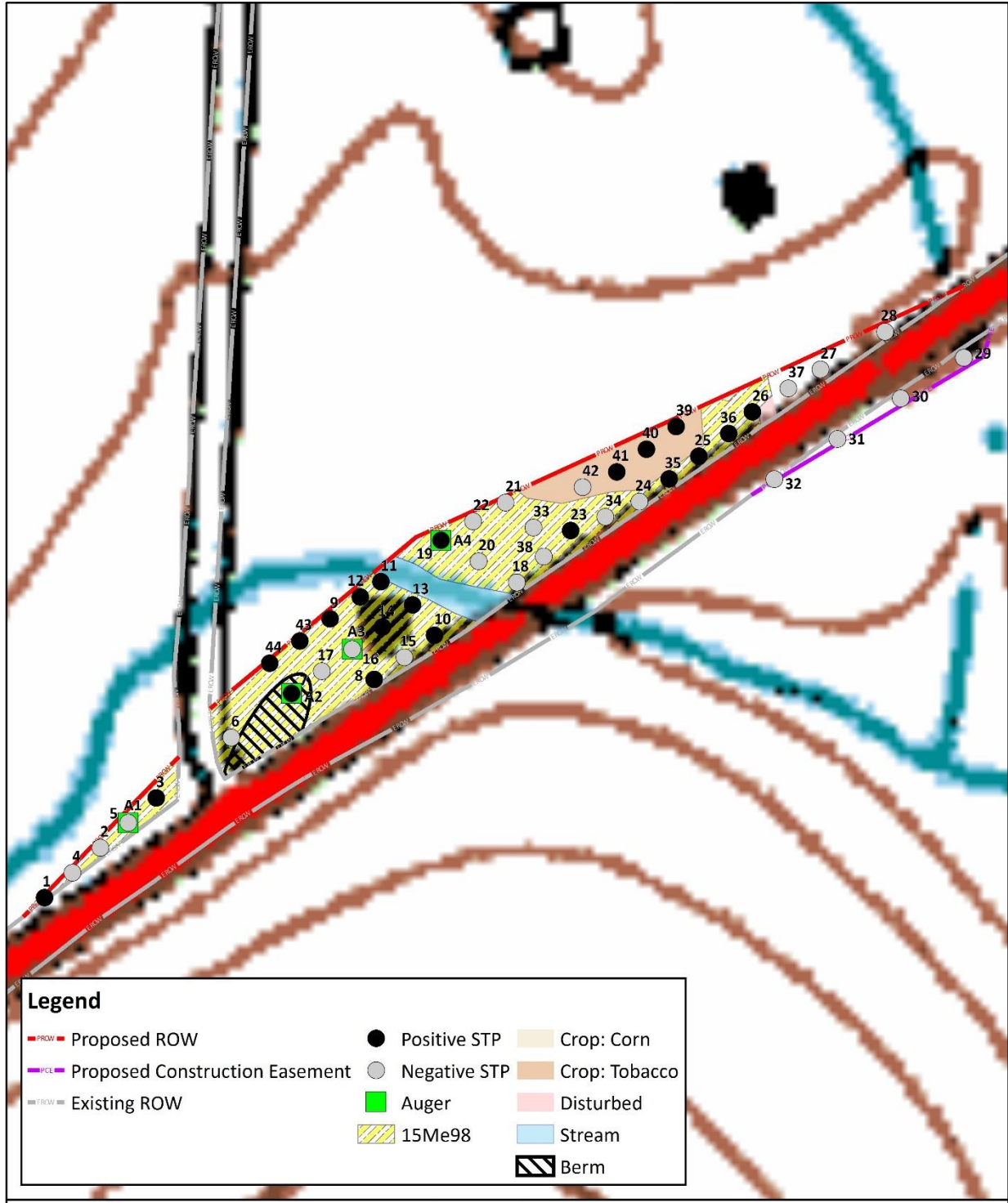


Figure 3-2. Location of Archaeological site 15Me98 USGS Topography Map.

**Figure 3-3. Location of Archaeological site 15Me98 on Aerial Photograph.**

The site extends practically the entire length of the APE on the north side of US 68, and is not present in the small portion of the APE along the south side of that road. The site includes a prehistoric component and a historic component. The prehistoric component extends from the southwest end of the project area at STP 1 to the northeastern site extent at STP 26 (Figure 3-2 and Figure 3-3). The historic component extends from STP 3 in the southwest portion of the site to STP 26 in the northeast (Figure 3-2 and Figure 3-3). The historic artifacts northeast of the creek and in the tobacco field may be related to a house outside the project area and visible in Figure 6-1 in the northeast corner. The central and southwestern portion of the site is on floodplain of the left fork of REDACTED and the northeastern portion of the site is floodplain and slope.

A total of 273 artifacts were recovered from 21 positive shovel test probes. Two hundred and forty-eight historic artifacts were recovered. Most of these artifacts were recovered near where the historic farmstead stood. Twenty-five prehistoric artifacts were recovered from across the project area.

### 3.6.1 Prehistoric Interpretation

The prehistoric component consists of three analyzible ceramic sherds which date to between the Middle to Late Woodland period (Table 3-2), one charcoal piece (Table 3-3) and 14 non-diagnostic lithic artifacts (Table 3-4). All of the ceramics were recovered from a single shovel probe (STP 1) and may have been broken into the four pieces during excavation, based on the presence of recent breaks. The lithic assemblage consists of one tool, a drill tip fragment, a utilized limestone chunk, and 19 pieces of debitage.

The limited number of artifacts and tools suggests the site was occupied for a limited period and there were a limited variety of activities which occurred there. The lack of midden and other features also suggests a limited duration and activity occupation. The presence of historic artifacts in association with the prehistoric artifacts and the alluvial activity suggests a lack of integrity. Based on the limited data, the prehistoric component of site 15Me98 is a limited activity, short term occupation which dates to sometime between the Middle to Late Woodland period.

### 3.6.2 Historic Interpretation

A farmhouse once occupied part of site 15Me98. It was documented in a Kentucky Historic Resources Inventory in 1981 and given the historic structure site number Me46. The house was described as being built in the 1850s with a two-story frame, double-cell with a central brick chimney (Figure 3-4). There was a shed addition to the north and a one story addition to the east. The second story windows in the front and rear were original 6/6 sash. The porch was Italianate with Greek mantles and a double panel door. There was no mention on the form about extant outbuilding or related structures. A note to the form stated the house burned in 1986.

A structure is shown in the vicinity of 15Me98 (Me 46) on a map from 1876. According to the map, there appears to be a house and outbuildings attributed to J. L. Burke (Figure 3-5). The general location of the house is shown on several USGS maps, beginning with a USGS 15' map from 1905 (Figure 3-6) and on several USGS 7.5' from 1952 to 1987 (Figure 3-6). However, no outbuildings are shown on these maps.

The farmhouse and its outbuildings are shown on several aerial photographs from 1950 to 1974 (Figure 3-6). The house appears in these photographs to be located in the northern part of the property along the right-of-way line. Several outbuildings are also visible in the aerial photographs. One outbuilding is located at the south end of the property along US 68; it is most visible in the 1950 photograph (Figure 3-6). The other outbuildings to the southwest of the house appear to be outside the right-of-way. Based

**Table 3-2. Prehistoric Ceramic Sherds from 15Me98 by Excavation Unit.**

Interior Color	Exterior Color	Temper Type	Visible Inclusions	Surface Treatment	body thick	Weight	STP 1
gray brown	brown	limestone	mica	smoothed	5.94	0.8	1
gray brown	brown	limestone	mica	smoothed	6.19	1.5	1
gray brown	brown	limestone	mica	smoothed	6.15	2.5	1
<b>Grand Total</b>							<b>3</b>

**Table 3-3. "Other" Category Prehistoric Artifacts from 15Me98 by Excavation Unit.**

Functional Group	Material Class	Type	Sub Type 1	Sub Type 2	STP 1
Fuel	Biological	Charcoal			1
<b>Grand Total</b>					<b>236</b>

**Table 3-4. Lithic Material from 15Me98 by Excavation Unit.**

Tool Type	Sub Type	Sub Type 2	Debitage Type	Raw Material	Cortex	HT	Weight	3	7	8	13	14	19	23	25	26	39	40	41	43	44								
Chipped	Debitage	Utilized	Chunk/shatter	limestone	2	N	184.6														1								
			Chunk/shatter	Local	N	N	1.9																	1					
		Secondary Decorridation	limestone	2	N	22.5	1																						
			Brassfield	N	N	0.6														1									
		Secondary Flake	Local	N	N	3.5	1																						
			Boyle	N	N	0.4								1															
		Tertiary Flake	Brassfield	N	N	0.1															1								
			Brassfield	N	N	0.2	1																						
		Chipped	Debitage		Undetermined Flake	St. Louis	N	N	0.5									1											
						Boyle	N	N	0.8										1										
						Local	N	N	0.2		1																		
									0.3															1					
									0.4																				1
						1			2																				
0.3													1																
0.4																													
0.7																													
Unifacial		Drill	Undetermined Flake	Local	N	N	0.3																						
				Brassfield	N	N	0.7	1																					
<b>Grand Total</b>								<b>1</b>	<b>3</b>	<b>3</b>	<b>1</b>	<b>1</b>	<b>1</b>	<b>1</b>	<b>1</b>	<b>2</b>	<b>3</b>	<b>1</b>	<b>1</b>	<b>1</b>	<b>1</b>								

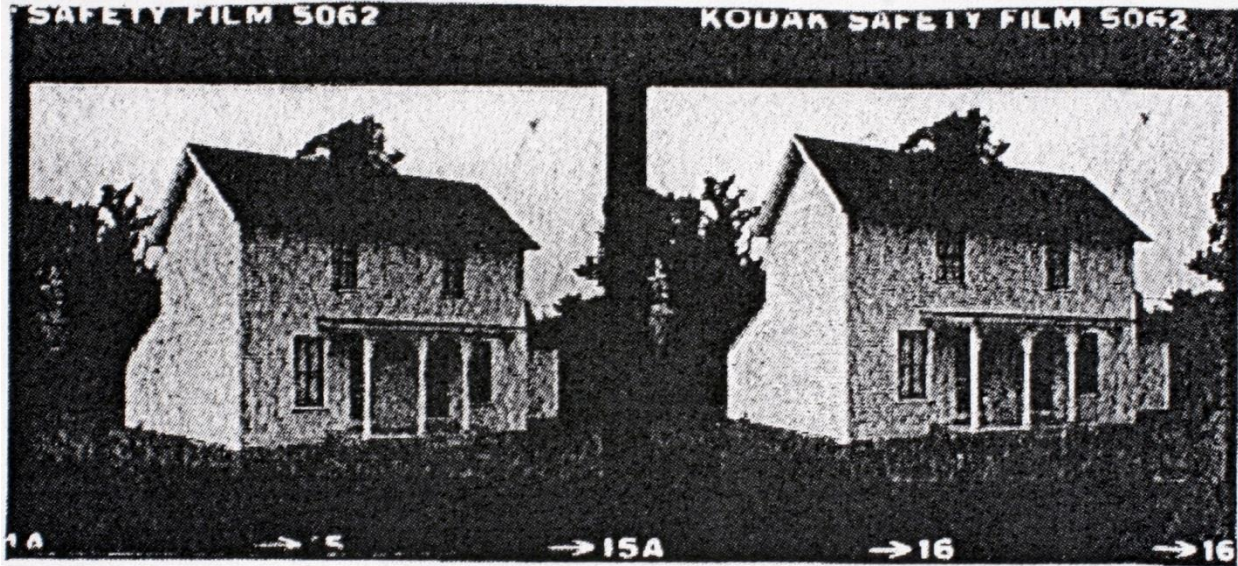


Figure 3-4. Burk House, Kentucky Historic Resources Inventory (ME 46).

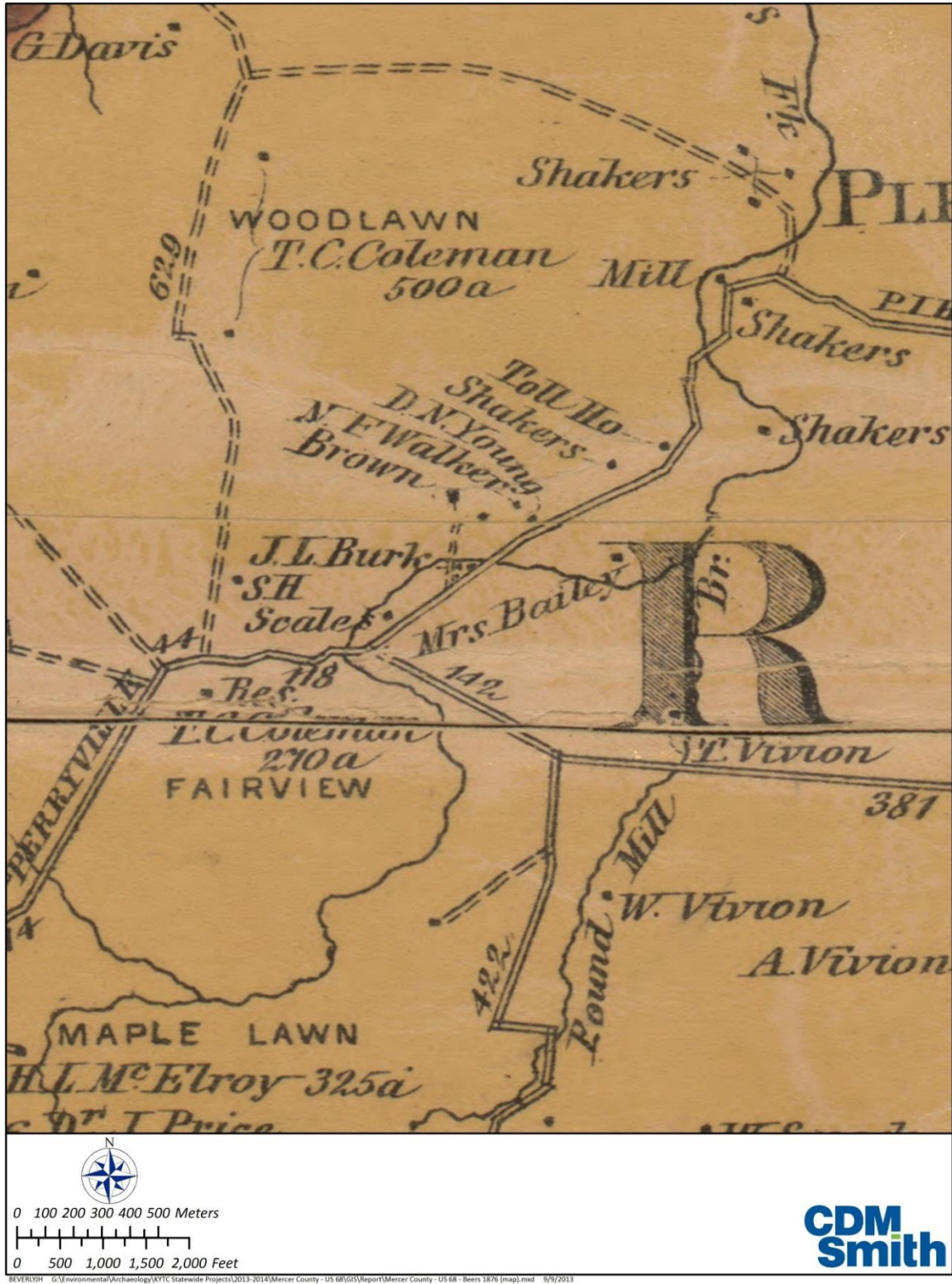


Figure 3-5. 1876 Beers Map, showing J.L. Burk farm (15Me98).

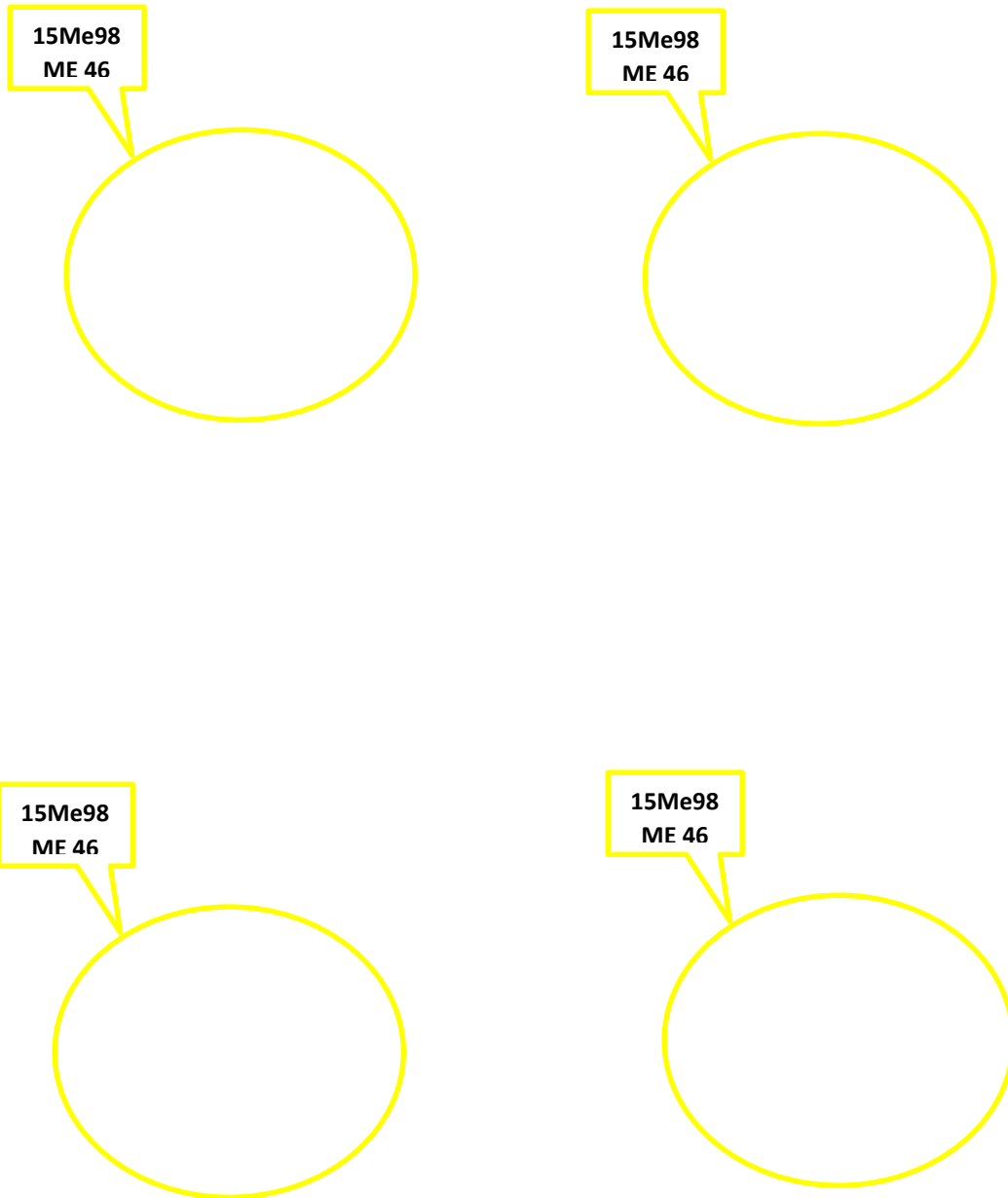


Figure 3-6. Historic Aerials from 1950, 1958, 1960, and 1974, Showing 15Me98 (ME 46).

on the condition of the farm in the aerial photographs, the farm appears to have been occupied until the late twentieth century.

The historic components at site 15Me98 are in two areas that may represent different occupations. Area A is near the farmhouse (Me46) (see Figure 3-2 and Figure 3-3, above). Area B is across the creek to the northeast and may be related to the Brown House in Figure 3-5 (see Figure 3-2 and Figure 3-3, above). A single artifact was recovered from STP 3, across the creek to the southwest.

Two hundred and thirty-five historic artifacts were recovered from 14 STPs at site 15Me98 Area A (Table 3-5). The artifacts suggest a mid-nineteenth to late twentieth century occupation. The most temporally diagnostic aspect of the artifact assemblage is the small window glass sample which dates to the mid-nineteenth century, based on the Moir formula (1982).

One hundred and twenty-nine of the 235 artifacts (55%) were recovered from STP 43 Feature 1. Feature 1 was the fill zone, which is probably debris from the house demolition following the destruction of the house by fire. All of the window glass and all of the complete nails were recovered from this zone.

Shovel test probes were also located near possible structures. STP 9 was located near the house and contained whiteware (n=1), bottle/jar glass (n=2) and a nail. STP 12 was also near the house and had a bone fragment. STP 10 was near an outbuilding closet to US 68 and contained bottle glass (n=3), nails (n=5), brick (n=1), and coal (n=2). STP 14 was between the house and outbuilding and contained Feature 2, which contained 13 brick fragments. Forty-four brick fragments were recovered from STP 43. The lack of burning in STPs 9 and 12 suggests that material was removed from the area after the house burned.

Twelve artifacts were recovered from Area B. A single creamware sherd was recovered from STP 39 in the tobacco field area. There is no house in the immediate area, suggesting this may be a secondary deposit or the result of colluvial activity. Based on surface indications, historic artifacts continue to the north outside the project area. The closest house was the Brown house on the Beer's map (Figure 3-5).

Based on the Phase I results the Kentucky Transportation Cabinet requested Phase II Testing of Site 15Me98 to determine if the site was eligible for listing on the National Register of Historic Places.

### 3.7 Chain of Title for 15Me98

The chain of title began with the current owners, REDACTED and with the transfer from REDACTED. The last deed was dated November 21, 1868. No index was available for deeds earlier than 1868 and the earlier owners or deeds were not mentioned. We were not able to locate earlier deeds. No ownership or interaction with the Shakers was documented for site 15Me98. The deed books were located in the Mercer County Clerk's Office in Harrodsburg, Kentucky.

three Parcels including Parcel 2 Burks Farm, 22 A, "Being the same conveyed to Earl Smith by deed of Anna F. Burks (his Aunt).





DB 140:348, May 15, 1958

Anna F. Burks, grantor, to Earl Smith, grantee: 22A; North side of turnpike; and being the same property acquired by the grantor through and by the will of W.P. Burks, which is recorded in WB 21, p.177 (that reference dated Sept 24, 1920 had no leads or reference to other DB or WB entries).

DB 89:616, October 18, 1915

Alice and Zack Dickinson to W.P. Burks; 20A; "...being land upon which John Bryant lived and died..."; confirmed with 1876 map surrounding property owners Coleman and Brown with directions and lanes and such. "...the same land conveyed to John H. Burks and W.P. Burks jointly by the livered parties heirs to same and recorded in the DB 38, p.371 and 358; DB 40, p. 533 and 530; DB 41, p. 496; DB 46, p. 4, 30, 52, and 535; DB 48, p. p125.

DB 50:334, March 24, 1883

John T. and Samuel C. Woods to W.P. and John Burks; 16A; "on northside of turnpike"; "being the same tract of land allotted Sarah Bryant out of the lands of John Bryant dec'd and the same now occupied by W.P. Burks the said interest herein conveyed being 1/6 of 1/8 of said 16 A which said interest hereby conveyed passed to said first parties on the death of Lucinda Woods who was a daughter of Nancy Davis by the death of her father John Bryant. The said John T Woods of first part being the husband of said Lucinda Woods Dec'd... and said Saul/Samuel C. Wood being the child and only heir of Lucinda Wood Dec'd..."

DB 48:125, August 27, 1880

Ella and CS Lirik/Link/Luek to John Burks and W.P. Burks; "their interest in the John Bryant Dec'd tract of land situated on the Lexington-Harrodsburg-Perryville Turnpike in the waters of Shawne Run ([?] parties of first part being heirs of Sarah Bryant Dec'd)."

DB 46: 535, 1879

(same described property)

DB 46:52

18 A; northside of turnpike

DB 46:30, December 2, 1877

Samuel, Benjamin, Henry, Sarah, John and wife Georgia Davis to J.H. and W.P. Burks; 16A; northside of turnpike; once Sarah Bryant wife of John Bryant and occupied by W.P. Burks; 4/6 of 1/8 of tract; since Nancy Davis deceased.

DB 46: 4, November 15, 1877

Mary A. Curd [?] and husband Sewtire [?] to J.H. and W.P. Burks; 16A; North side of turnpike; "and the same once owned and occupied by J Bryany Dec'd which interest from him to Nancy Davis subject to the life estate of Sarah Bryant who died and thereupon her 1/8 share to her children, Mary Curd being one."

DB 41:496

wrong entry

DB 40: 533, March 20, 1871

CG and Mary Brown and JW and Jane Brown to William and John Burks; 18A; 2 miles from Pleasant Hill;  
“ same upon which Mrs. Sarah Bryant recently lived and died”

DB 38: 371, November 21, 1868

Julie and David (hus) Burchill to William and John Burks; 18A; “same tract upon which J. Bryant lived  
and died”

## Section 4 -

# Methodology

In this chapter, the methods employed during the course of this study are described. These methods include the fieldwork activities, their application in different portions of the archaeological APE reflecting conditions encountered, and an evaluation of their effectiveness in conducting initial National Register evaluation of the archaeological site. Laboratory methods are discussed in the following section (Section Five) along with the site assemblage and a discussion of the associated contexts of recovery and interpretation. This section also presents an overview of the requirement for nomination to the National Register of Historical Places and concludes.

## 4.1 Implemented Field Methods

The field methods implemented for the Phase II investigations conform to the Kentucky Heritage Council's specifications for conducting a Phase II testing (Sanders 2006). The field methods included remote sensing, unit excavation and mechanical excavation. Unit excavation consisted of 1 x 1 meter sized units which were excavated in natural zones and arbitrary zones within them. The units were placed in areas with high artifact densities and possible features based on information from the remote sensing and the Phase I survey results. All soil excavated from the units was screened through ¼ inch mesh screens with the intention that any and all artifacts retained in the screen would be collected and bagged according to provenience. Unit profiles were drawn and photographed.

Features identified during unit excavation and mechanical excavations were mapped and photographed.

A total of five 1 x 1 meter test units, one .5 x .5 meter test unit four STPs were excavated. Mechanical excavation consisted of a 5 x 1 meter trench and a 12 x 8 meter area for a total of 101 square meters. The location of all the test units, shovel probes, and mechanical excavation on USGS quadrangle maps are shown in Figure 4-1, and on an aerial photograph in Figure 4-2 through Figure 4-4.

## 4.2 National Register Evaluation of Archaeological Sites

Section 106 of the National Historic Preservation Act of 1966 requires federal agencies to take into account the effects of their undertakings on properties listed or eligible for listing in the National Register and to give the Advisory Council on Historic Preservation a reasonable opportunity to comment. While it does not require the preservation of such properties, it does require that their historic or prehistoric values be considered in weighing the benefits and costs of federal undertakings to determine what is in the public interest. Section 106 is invoked when "any project, activity, or program that can result in changes in the character or use of historic properties" (36 CFR Part 800) whether federal agency jurisdiction is direct or indirect.

Pursuant to the October 1992 Amendments to the National Historic Preservation Act (Section 110 of NHPA 1980, amended 1992) an "undertaking" means a project, activity, or program funded in whole or in part under the direct or indirect jurisdiction of a federal agency, including (A) those carried out by or on behalf of the agency; (B) those carried out with federal financial assistance; (C) those requiring a federal permit, license, or approval; and (D) those subject to state or local regulation administered pursuant to a delegation or approval by a federal agency.

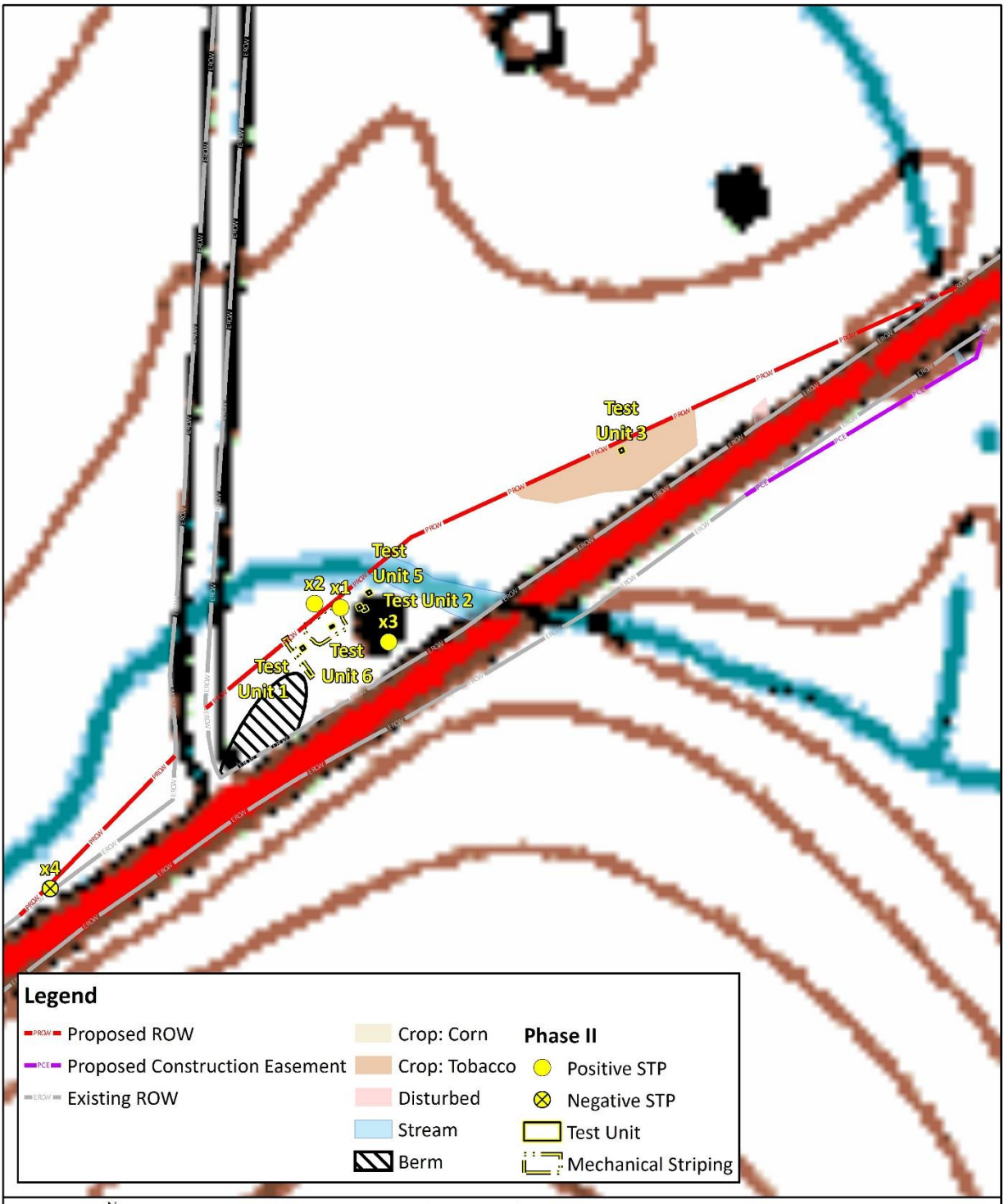
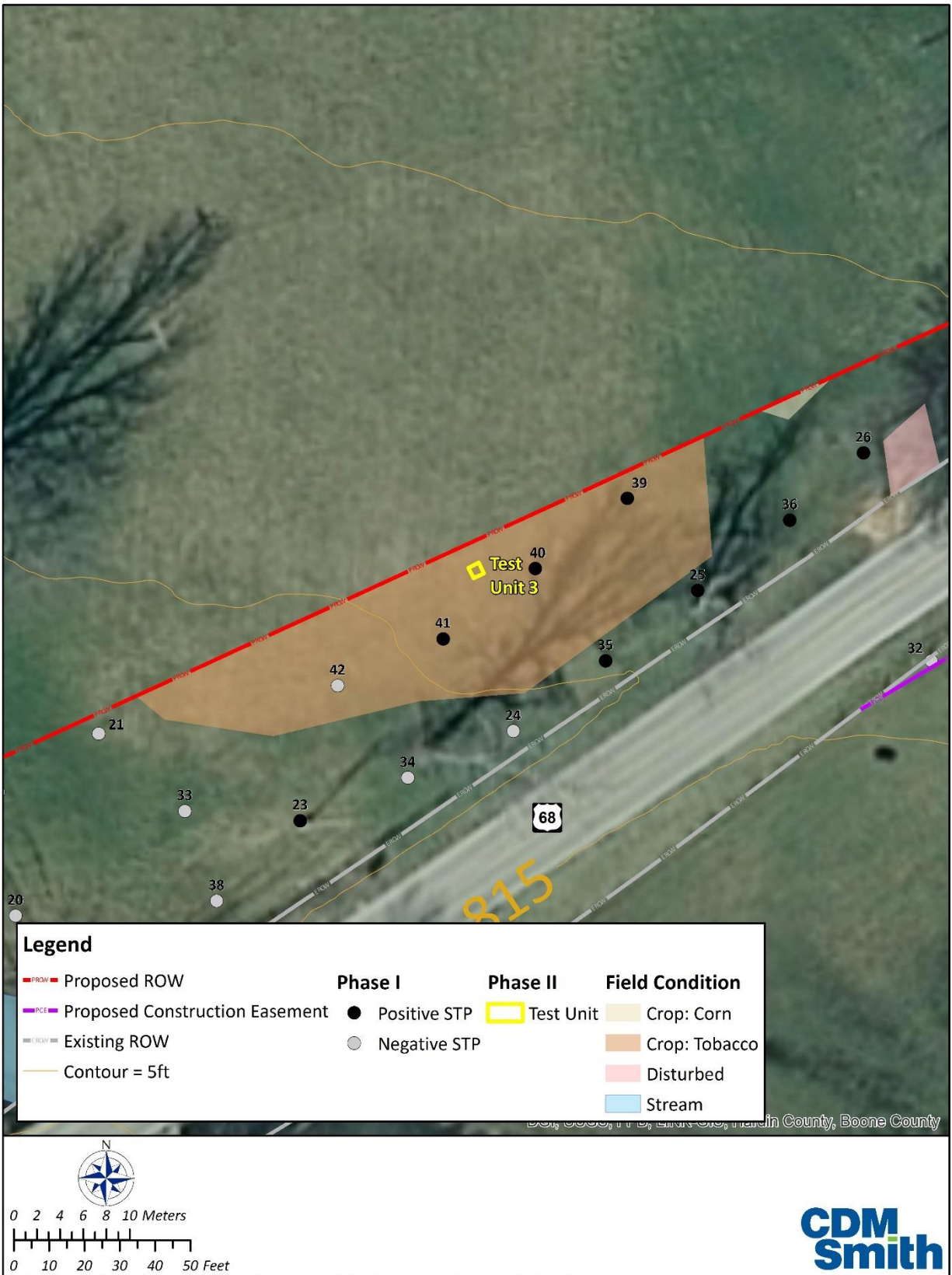


Figure 4-1. Location of Phase II Test Units, STPs, and Mechanical Striping Areas on USGS Topographical Map.

**Figure 4-2. Location of Phase II Test Units, STPs, and Mechanical Striping Areas on an Aerial Photograph, Area A.**



**Figure 4-3. Location of Phase II Test Units, STPs, and Mechanical Striping Areas on an Aerial Photograph, Area B.**

**Figure 4-4. Location of Phase II Test Units, STPs, and Mechanical Striping Areas on an Aerial Photograph, Area C.**



**Figure 4-5. Remote Sensing of Site 15ME98.**



**Figure 4-6. Area east of Sexton Road, looking east with tobacco fields at upper left.**



Figure 4-7. Excavations at house site, looking southwest.



Figure 4-8. Stripped area at house site, looking east.

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

- that are associated with events that have made a significant contribution to the broad patterns of our history; or
- that are associated with the lives of persons significant in our past; or
- that embody the distinctive characteristics of a type, period, or method of construction, or that represent the work of a master, or that possess high artistic value, or that represent a significant and distinguishable entity whose components may lack individual distinction; or
- that have yielded, or may be likely to yield, information important in prehistory or history.

Mere association with historic events or trends is not enough, in and of itself, to qualify under Criterion A—the property’s specific association must be considered important as well. Often, a comparative framework is necessary to determine if a site is considered an important example of an event or pattern of events.

In order to qualify under Criterion B, the persons associated with the property must be individually significant within a historic context. As with all Criterion B properties, the individual associated with the property must have made some specific important contribution to history.

To be eligible under Criterion C, a property must meet at least one of the following requirements: the property must embody distinctive characteristics of a type, period, or method of construction, represent the work of a master, possess high artistic value, or represent a significant and distinguishable entity whose components may lack individual distinction.

Criterion D requires that a property “has yielded, or may be likely to yield, information important in prehistory or history.” Most properties listed under Criterion D are archaeological sites and districts, although extant structures and buildings may be significant for their information potential under this criterion. To qualify under Criterion D, a property must meet two basic requirements:

- The property must have, or have had, information that can contribute to our understanding of human history of any time period;
- The information must be considered important.

The use of Criteria A, B, and C for archaeological sites are appropriate in limited circumstances and have never been supported as a universal application of the criteria. However, it is important to consider the applicability of criteria other than D when evaluating archaeological properties. It is important to note that under Criteria A, B, and C the archaeological property must have demonstrated its ability to convey its significance, as opposed to sites eligible under Criterion D, where only the potential to yield information is required.

## 4.3 Methods for 15ME98 Faunal Remains Identified by Bruce L. Manzano

The sampled faunal remains were identified to their lowest possible taxonomic level based on direct comparison to study specimens housed at the University of Kentucky's William S. Webb Museum of Anthropology. Additional aid came from diagnostic information available within the relevant zooarchaeological literature (e.g., Beisaw 2013, Chaplin 1971; Olsen 1964; Reitz and Wing 2010; Schmid 1972; Serjeantson 2009). Taxon quantification is based on Number of Identified Specimens (NISP) and weights for recognizable species or animal size class (e.g., large, medium, and small mammal), element, side, and portion plus, if possible, the age and sex of the specimen.

In this study, large mammals consist of cattle to pig-sized remains, dog to rabbit-sized bones represents medium mammals, and squirrel to rodent-sized remains includes small mammals. For birds, large birds were classified as chicken or larger species while small birds refer to perching birds. The fragmentation of some specimens often inhibited species classification because they were sub adult bones or lacked diagnostic characteristics. These specimens were grouped into a taxonomic category, such as unidentifiable (UID) large mammal or UID mammal, with specimens not assignable to animal class grouped as UID Vertebrate.

For some specimen identifications, however, the taxon recorded was assigned with "cf." (from the Latin *confere*) to indicate the designation of a species is not completely secure, but [rather] is close to or compares with a particular species" (Reitz and Wing 2010:36). Calculation for the Minimum Number of Individuals (MNI) was based on the largest number of individual diagnostic bone elements by side and portion recovered, age and sex, for a species recognized at the site (Reitz and Wing 2010:206). The MNI was also calculated for a unique genus and for cf. cardinal. Additionally, the animal type (Reitz and Wing 2010:137-138) consisting of domestic, wild, and commensal was also recorded for MNI.

All specimens were examined for cultural and natural modifications. Cultural modifications consist of marks on the bone attributed to skinning, butchering and consumption activities commonly identified in this assemblage as knife, chop, and saw cuts. Knife marks on bone generally are small "V" incisions (Reitz and Wing 2010:128). In contrast, chop marks on bone exhibit a deep nonsymmetrical "V" shape cut lacking striations while marks recorded as saw exhibit striations that may vary based on the type of tool used (hand-held, band, or circular) producing coarse crisscross, parallel, and circular marks on the cut surface (Beisaw 2013:106, Reitz and Wing 2010:127, 130). Saw cut bone in this assemblage is represented by one saw cut at one end or two parallel and separate with a space saw cuts on a bone.

No burned bone modifications occurred on the assemblage remains and none were recorded. Gnawed bones in this assemblage are those primarily made by carnivore namely domestic dogs or cats along with one possibly made from human gnawing. Collectively, the gnawed bone frequencies measure if gnawing animals had access to the bone deposits. The frequency of carnivore gnawed bone, in particular, is a relative measure of bone preservation at a site (Binford 1981; Hudson 1993). Specifically, sites with low gnawed frequencies suggest an assemblage that was not likely to have been greatly exposed to the destructive characteristics of these species and potentially represents the original assemblage deposited by the site inhabitants. Scat bones or specimens with pitting, polished edges, and eroded surfaces, which are characteristics typical of corrosion from digestion likely by dogs (Binford 1981:55; Schmitt and Lupo 1995:499) were also searched for but none were recorded.

Also recorded for this assemblage was the condition of the recovered bone in regards to weathering from exposure to the elements (Behrensmeyer 1978, Lyman 1994:360) as well as recent bone damage which generally results from the archaeological recovery of the remains.

## Section 5 -

# Materials Recovered

In this section the laboratory procedures and analytic methods are discussed and the materials recovered are presented. The analytic methods involve the use of an artifact classification scheme that creates useful analytic categories for evaluating National Register eligibility. The artifact assemblages are also discussed with the site descriptions and results in Section Six.

## 5.1 Laboratory Methods

Artifacts recovered during field investigations were brought to the CDM Smith archaeology laboratory in Lexington, Kentucky, for washing, cataloging, and initial analysis. Materials were washed and sorted by general material type (e.g., historic vs. prehistoric). All prehistoric specimens are classifiable into one class based on stage of reduction, tool form, and portion represented. A series of attributes and metric data were then collected for specific prehistoric artifact classes including size of debitage, cortex presence and absence, thermal alteration, and raw material type. Prehistoric lithic specimens were identified by J. David McBride. Historic artifacts were washed and sorted into major material categories. These were then cataloged according to the system of artifact-function association modified from South (1977). All artifacts were assigned to the functional groups (kitchen, architecture), then to a material class (e.g., ceramic, glass, metal), to a type (e.g., base of bottle, jar lip), and to a subtype (e.g., color, decoration type). Historic specimens were identified by J. David McBride.

In the following discussion, each of the major categories of artifacts is defined. Prehistoric artifact types are discussed first, followed by the standard classifications of historic artifacts developed by South (1977).

### 5.1.1 Prehistoric Artifact Assemblages

This section presents the analysis of the prehistoric artifact assemblage.

#### 5.1.1.1 Prehistoric Lithics

The analyses included tool analysis, raw material analysis, and mass analysis. These different techniques provide complementary data and permit the extrapolation of stronger inferences about the organization of lithic technology at the four sites. One hundred percent of all surface-collected and excavated materials were subjected to these, except where noted below.

All debitage was macroscopically examined for evidence of retouch and/or utilization. Those artifacts displaying retouch and/or utilization were then separated from non-utilized debitage. Additionally, all chipped stone artifacts were analyzed for presence of primary geologic or secondary incipient cone cortex and macroscopic evidence of thermal alteration. A typology of specimens was developed using standard techniques and definitions employed throughout eastern North America (e.g., Callahan 1979; Crabtree 1982; and Odell 1996).

##### 5.1.1.1.1 Bifacial Tools

Bifaces are generalized bifacially flaked artifacts which may be blanks or preforms for morphologically distinct bifacial tools, or finished tools in their own right. Types of bifaces are based on technological attributes including flake scar patterns, edge sinuosity, width/thickness ratio, and edge angles. Callahan's biface production stages (1 through 5) are followed in this analysis (1979). Nondiagnostic

bifacial tools were measured and described in as much detail as possible. Lacking chronological attributes, these specimens can only be assigned to function, and where possible by association with datable strata.

Projectile points are pointed bifaces with a haft element. A projectile point displays specific morphological characteristics to which a general temporal designation can be assigned. The attributes of each point were described and a regional term for that type was identified following Justice (1987) and Railey (1992).

#### 5.1.1.1.2 Unifacial Tools

Unifacially flaked stone tools are made on flakes and retain the unmodified smooth ventral flake surface. Flakes these tools may be either debitage from bifacial reduction or may have been struck from cores with the intention of further modification. Blade cores, blades, multifacial flake cores, and the resultant unifacial tools are direct evidences of a unifacial tool manufacturing industry. Tools in this category include unifacial scrapers, burins, denticulates, drills, and gravers. Also included is debitage that has been utilized and/or minimally retouched for use on an expedient basis and then discarded.

#### 5.1.1.1.3 Lithic Debitage

One of the most ubiquitous artifact categories on prehistoric sites is lithic debitage, which is considered to include all the material produced from the initial reduction stage to the use/reworking stage. Debitage is produced during all stages of reduction, but the representation of each class as compared to the other classes provides insight into the types of lithic use that occurred at a specific location. All flakes, blades, chunks/shatter were analyzed according to platform facet and dorsal scar counts, presence of cortex, and macroscopic evidence of thermal alteration and/or utilization.

*Flakes* are pieces of debitage with two faces, a dorsal and a ventral. The dorsal surface can be partly or totally covered by cortex, but normally shows the scars from removals that were made before the flake was removed from the core. The ventral surface contains only the features related to the detachment of the particular flake.

Flake debitage produced in bifacial and unifacial technologies is divided into three major categories including primary flakes, secondary flakes, and tertiary flakes, and several subcategories based on specific morphological attributes. These lithic reduction categories follow classification stages proposed by Collins (1974), Flenniken (1978), Boisvert et al. (1979), Magne and Pokotylo (1981), Magne (1985), Ebright (1987), and Bradbury and Carr (1995) with some modifications. A brief description of each debitage category is provided.

*Primary flakes* (primary and secondary decortication flakes) are those produced during the earliest stages of lithic reduction and result from the removal of cortex from the raw material. *Primary decortication flakes* are usually large and cortex is present on over 50 percent of the dorsal surface. *Secondary decortication flakes* contain cortex on less than 50 percent of the dorsal surface.

*Secondary flakes* (interior and thinning flakes) result from the reduction and shaping of the initial biface. Secondary flakes characteristically display a well-developed bulb of percussion, one or more flake scars on the dorsal surface, and may exhibit platform preparation. *Interior flakes* generally have large, double faceted platforms perpendicular to the orientation of the flake. *Thinning flakes* may have multi-faceted platforms at an acute or obtuse angle to the flake's

orientation and may show signs of crushing or battering in preparation for flake removal from the parent material.

*Tertiary flakes* (late stage percussion and pressure flakes) result from the sharpening and/or reworking of tools or points. These flakes are generally very small with small striking platforms, often multifaceted and steeply angled. Tertiary flakes are usually underrepresented in artifact assemblages recovered with standard ¼ inch hardware mesh screens, as these flakes are frequently smaller than ¼ inch and pass through the screens.

Flakes struck from flake cores for further unifacial modification are generally indistinguishable from those produced in bifacial reduction. However, a formal, specialized unifacial technology is blade manufacture, which produces morphologically distinct artifacts.

*Blades* are specialized flakes with more or less parallel or sub-parallel lateral edges which, when complete, are at least twice as long as wide (Owen 1982: 2). Blades contain at least one dorsal crest but may contain two or more dorsal crests. Blades are associated with prepared cores and blade technique and are not produced randomly (Crabtree 1982: 16).

Debitage displaying some flake characteristics are classified as *undetermined flakes* if they are too fragmentary to determine flaking stage.

*Chunks/shatter* are pieces of usable raw material with at least one freshly broken surface. Blocky and angular fragments are usually produced in the initial stages of flintknapping as a result of removing unstable areas of material from the core or blank. Chunks/shatter are distinguished from cores by the absence of negative flake scars and striking platforms. Natural processes may produce a small proportion of chunk/shatter.

#### 5.1.1.1.4 Raw Material Analysis

The determination of raw material type was accomplished with the aid of written descriptions (DeRegnaucourt and Georgiady 1998, Gatus 1980, 1982). Alldebitage and tools in the assemblage were macroscopically inspected to determine raw material type and compared with existing descriptions. Examining raw material procurement trends can yield data on settlement patterns, resource procurement strategies, and trade and exchange networks.

#### 5.1.1.1.5 Mass Analysis

Mass analysis focuses on the variables of size, shape, and presence of cortex on aggregate batches ofdebitage as a means of distinguishing various forms and characteristics of reduction within a lithic artifact assemblage. Because there are several disadvantages in using reduction stage classification exclusively to analyze flaking debris, data obtained from mass analysis can be used to compare with those gained from reduction stage classification to provide more solid interpretations of the lithic artifact assemblage (Ahler and Christensen 1983, Ahler 1989, Bradbury and Franklin 2000). Two general theoretical observations regarding flintknapping underlie mass analysis and are relevant to the current study:

Flintknapping is fundamentally a reductive technology, and the nature of this technology places predictable and repetitive size constraints on the byproducts (and products) produced. Most flakes produced early in reduction should be larger, and most flakes produced late in reduction should be smaller. Similarly, the frequency of flakes with cortex should be highest in early reduction and lowest in late reduction.

Variation in load application in the flintknapping procedure produces corresponding variations in both size and flake shape. Experimental data shows that percussion flaking, on the whole, is capable of producing flakes much larger in size than any produced by pressure flaking. Size grade distribution data provides a fairly direct measure of load application variation (Ahler 1989: 89-91).

For this project, all non-utilized debitage (flakes, flake fragments) were passed through a series of nested laboratory hardware cloth screens to sort by size. Size grades follow Stahle and Dunn (1982, 1984). The size grades are as follows:

Grade 0 includes specimens smaller than  $\frac{1}{4}$  inch

Grade 1 includes specimens smaller than  $\frac{1}{2}$  inch but larger than  $\frac{1}{4}$  inch

Grade 2 includes specimens smaller than 1 inch but larger than  $\frac{1}{2}$  inch

Grade 3 includes specimens smaller than 2 inches but larger than 1 inch

Grade 4 includes specimens larger than 2 inches

Flake debris from each provenience in each grade was weighed as an aggregate to the nearest tenth of a gram and then counted. One attribute, thermal alteration, was also recorded for the reduction debris. Thermal alteration is often intentional within the culture in order to change the properties of the chert in order to make the raw material more adept to tool production.

The presence of primary geologic cortex may indicate that the raw material was procured from outcrops, whereas secondary incipient cone cortex on the core surface suggests that raw material was procured from a stream context. Research has shown that reduction analysis insufficiently provides data on the stage during which a flake was removed. However, by comparing frequency of occurrence of cortex on flakes, research indicates that a higher percentage of flakes during the initial stages of lithic reduction will have cortex and a lower percentage will have cortex during the final stages of lithic reduction. In addition, the amount of the flake covered in cortex is also an indicator of the stage during which the flake was removed, again more coverage indicates removal during the initial stages, and less coverage indicates later removal. Thus flakes with cortex were evaluated according to the following criteria:

Grade 1 includes specimens with primary geologic cortex over greater than 50% surface

Grade 2 includes specimens with primary geologic cortex over less than 50% surface

Grade 3 includes specimens with secondary conical cortex over greater than 50% surface

Grade 4 includes specimens with secondary conical cortex over less than 50% surface

All of these methods compose mass analysis. When taken together, they can provide extensive data on the methods of tool production.

#### *5.1.1.1.6 Materials Recovered*

One hundred and two pieces lithic debitage (Table 5-1 through Table 5-3) and one unifacial drill (Figure 5-1) were recovered from 15Me98. The debitage consisted of eleven undetermined flakes, four tertiary flakes, two secondary flakes, one secondary decordication flake, and two pieces of chunk/shatter. One piece of chunk/shatter was utilized (Figure 5-2). The debitage was made from Boyle (n=2), St. Louis

**Table 5-1. Prehistoric Lithic Debitage Recovered from 15Me98.**

Flake Type		Size Grade					Total
		0	1	2	3	4	
Retouched	Secondary Decordication Flake				1		1
	Secondary Flake			2			2
Utilized	Chunk/Shatter					1	1
	Secondary Decordication Flake			1	1		2
	Secondary Flake		2	2	1		5
Debitage	Chunk/Shatter	1	17	11	3		32
	Secondary Decordication				1		1
	Secondary Decordication Flake			1			1
	Secondary Flake	2	38	2			42
	Tertiary Flake		4				4
	Undetermined Flake		9				9
	Undetermined Flake		2				2
<b>Total</b>		<b>3</b>	<b>72</b>	<b>19</b>	<b>7</b>	<b>1</b>	<b>102</b>

**Table 5-2. Tool Raw Material.**

Subtype 2	Local	St. Genevieve	St. Louis	Unidentified	Total
Biface, Distal		1			1
Biface, Distal and MidSection		1			1
Biface, Proximal		1			1
Drill		1			1
Retouched	1	1	1	1	4
Utilized		2	5		7
<b>Total</b>	<b>1</b>	<b>7</b>	<b>6</b>	<b>1</b>	<b>15</b>

**Table 5-3. Debitage Raw Material and Size Grade.**

Raw Material	Size Grade					Total
	0	1	2	3	4	
Boyle		8	3			11
Brassfield		3				3
Gray-white banded		1	1			2
Limestone				1	1	2
Local		10	4			14
St. Genevieve	1	18	5	2		26
St. Louis	1	31	5	3		40
Unidentified	1	1	1	1		4
<b>Total</b>	<b>3</b>	<b>72</b>	<b>19</b>	<b>7</b>	<b>1</b>	<b>102</b>



Figure 5-1. Bifaces.



Figure 5-2. Utilized Flakes.

(n=4), Brassfield (n=3), limestone (n=2), and local chert (n=9) (Table 5-2). The local chert may be from local river gravels or from limestone formations (Wigley 1978). One tool, a unifacial drill, was made from Brassfield chert (Figure 5-1).

## 5.1.2 Historic Artifact Assemblages

In accordance with South (1977), artifacts are ascribed to functional groups reflecting their association with the dwelling (architecture); food preparation, serving, and preserving (kitchen); personal items; clothing items; furnishing; jobs/activities; arms; transportation; and finally fuel and miscellaneous categories.

Three thousand six hundred and six historic artifacts were recovered from 15Me98. Table 5-4 shows the various groups or artifact classes recovered from Site 15Me98.

**Table 5-4. Historic Artifacts Recovered from Site 15Me98.**

Functional Group	Quantity
Activities	15
Architecture	1378
Arms	2
Clothing	6
Fuel	1527
Kitchen	364
Furniture	44
Personal	26
Other	244
<b>Total</b>	<b>3606</b>

### 5.1.2.1 Kitchen Group

This group consists of artifacts used in the preparation, consumption, and/or storage of foods and beverages. For the most part, this group comprises container glass and ceramics. As most of these are manufactured, there is significant variation in decorative style and manufacturing techniques over time. This chronological variation forms the basis for the assignment of individual sites to historic time periods.

15Me98 contained 364 Kitchen Group related artifacts (Table 5-5).

#### 5.1.2.1.1 Container Glass

Container glass, like ceramic sherds, constitutes one of the most important components of a historic assemblage. Like domestic ceramics, these artifacts convey significant chronological, functional, and social information. Analysis offers an important source of data about the period of occupation of the site, the kinds of activities undertaken there, and potentially the social or ethnic status of the occupants. Studies of bottle glass have isolated the significant chronological characteristics of these vessels. Jars and other glass containers are discussed in a separate section.

#### 5.1.2.1.2 Bottle Glass

European and American bottles were free blown and shaped to the vessel form, or were blown into simple dip molds. Dip molds are single component iron or wooden molds that give the body of the vessel its shape. These molds can only be square or cylindrical with the basal area being smaller or the same width as the shoulder area. Dip molds continued to be used as late as 1860 (Deiss 1981:12-18). Multipart molds having dip molded bodies (Rickett's molds) were produced into the 1920s (Jones and

**Table 5-5. Kitchen Artifacts.**

Material	Type	Total
Biological	Faunal	95
Ceramic	Porcelain	3
	Redware	1
	Refined Earthenware	6
	Stoneware	5
	Whiteware	37
	Yellowware	5
	Ironstone	7
Glass	Bottle/Jar	166
	Table Glass	20
	Unidentified	2
Metal	Bottle Cap	4
	Can	1
	Jar Lid	1
	Pull Tab	11
<b>Total</b>		<b>364</b>

Sullivan 1985). To finish the neck of these early bottles, a glass-tipped rod (pontil) was attached to the bottle base to provide a means of holding it. Early types of finishing included fire-polished, flanged, folded, and applied string. All of these finishes persisted until the 1840s-1870s, when they were replaced by improved methods (Deiss 1981:18-24; Jones and Sullivan 1985; Jones 1971).

English bottle manufacturers used simple two-piece molds to make proprietary medicine bottles since the mid-1700s, and by 1800, American bottle makers were also using two-piece molds. These molds were hinged at the base or shoulder and may be referred to as open and shut molds. Bottles could be shaped in any form, such as square, round, or multi-sided. Consequently, polygonal bottle forms were very popular in the mid-nineteenth century (Deiss 1981:62). These molds enabled embossed lettering to be put on the fronts, backs, sides, and shoulders of the bottles (Jones and Sullivan 1985) and Gothic-style lettering was the most common style used until circa 1850 (Deiss 1981:48-49). Liquor flasks made in two-piece molds were introduced circa 1810 and were very popular by 1830. Embellished with a wide variety of molded or pictorial images, flasks remained popular until after the mid-1800s (Deiss 1981:62-65). Removable plates or panels that could be inserted into the mold were patented in 1867 (Jones and Sullivan 1985). These panels or plates were often embossed with the manufacturer name, product name, and city of manufacture, and could be used to personalize large shipments of bottles. This became popularly used on pharmaceutical and bitters bottles.

Two-piece molds were eventually eclipsed by multipart open and shut molds by 1850. These molds are similar to two-piece molds, but have a separate base plate. During the period 1840 to 1860, the two-piece and multi-part open and shut molds were the most popular mold types (Jones and Sullivan 1985). Vessel finishes (lip and necks) could still be hand formed by applying additional glass to the vessel and hand shaping a lip. By the 1820s, lipping shears were being used to shape the inside of the bottle,

producing a standardized form known as an applied-tooled finish, which was most common from about 1840 to 1870.

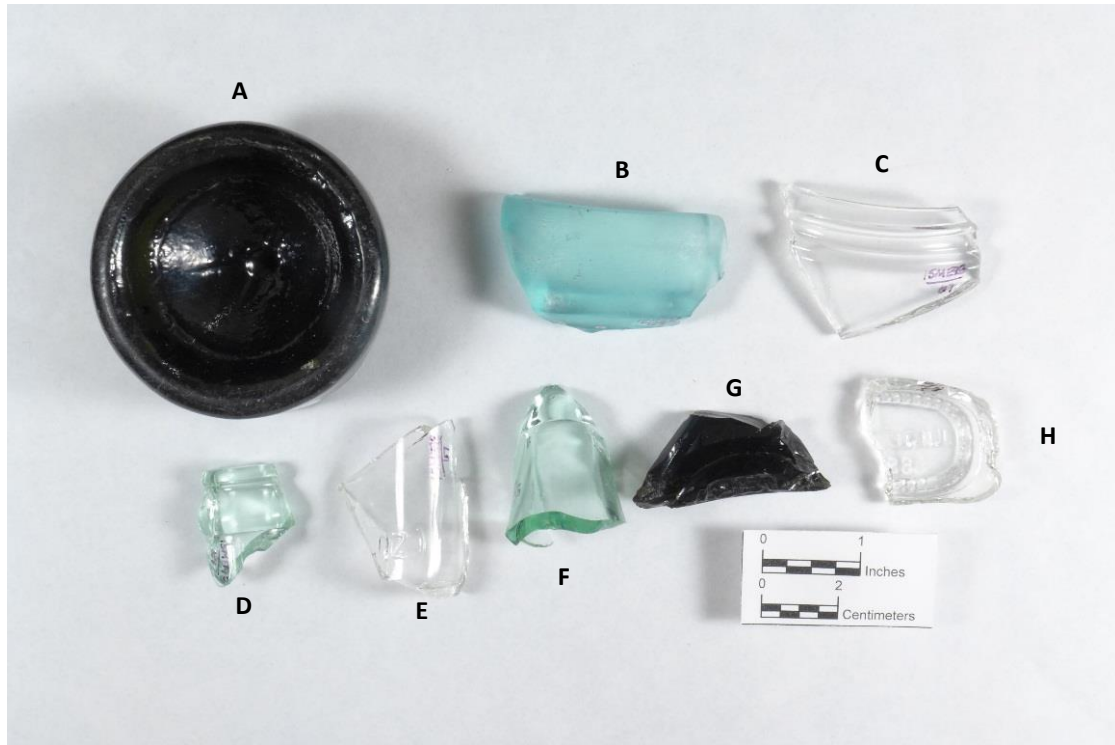
Open and shut molds, dip molds, and multipart dip molds were all popularly used molds during the nineteenth century. Another mold, the turn-mold or turn-paste mold was developed and used in France on wine bottles as early as 1860 (Jones and Sullivan 1985). This mold type leaves no mold seams. In America, this mold type was most frequently used for wine and other beverages from 1870 to the 1920s (Jones and Sullivan 1985).

Even though molds are the most often used method to establish the manufacturing date of glass vessels, changes in the glass formula and innovations in overall glass vessel manufacture can aid in establishing chronology. For example, although the soda-lime formula was in use to make moderately clear glass for many centuries, a modified form of the soda-lime formula was developed in 1864 that revolutionized the glass industry in that it was less brittle and could be molded, cut, and engraved easily (Jones and Sullivan 1985). Because of this new formula, decorated and highly colored glass became cheaper and easier to produce, allowing it to be affordable and subsequently popular after the 1870s (Jones and Sullivan 1985; Innes 1976). By 1880, manganese oxide was used in molten glass as a decolorizer. Glass containers made with manganese oxide turn purple or amethyst when exposed to sunlight. Selenium began replacing manganese oxide as a decolorizer by 1915, and the replacement was complete by 1918 (Deiss 1981:78-83). Selenium glass when exposed to ultraviolet rays becomes a straw yellow color.

Another turning point in the glass industry occurred between 1850 and 1860, with the development of a device called the snap case. This implement held the vessel while the neck and lip were finished. No longer was a pontil rod attached to the base of a glass vessel. Other innovations occurred to revolutionize glass production. By the 1870s, finishes incorporated in the mold had become common. This type, involving the reheating and tooling of the finish to eradicate mold seams on the lip, is referred to as the improved-tooled finish. Improvements in annealing ovens also helped to totally fuse the lip to the neck. Bottle lips were no longer distinctly separate bits of glass. Molds with incorporated finishes predominated until the early twentieth century, when automated glass vessel manufacture replaced less efficient processes (Deiss 1981:54-59).

By circa 1884 to 1892, semi-automatic manufacture of wide and small mouth containers was possible. The only difference between semi-automatic manufacture and automatic manufacture is the way that the melted glass is passed to the machine. In semi-automatic manufacture, the glass is introduced by laborers and in automatic manufacture; the glass is introduced mechanically to the machine. It was not until the perfection of the Owen's machine in 1903 that fully automatic bottle manufacture was possible. This machine leaves a distinct mark on the base of the vessel. By 1917, 50 percent of glass containers were made using this machine (Miller and Sullivan 1984). Vessels made using the Owen's machine are not found in archaeological contexts after 1970 (Miller and Sullivan 1984). Also, during the late nineteenth and early twentieth centuries, semi-automatic machines continued to be used and modified for automatic manufacture through the development of glass feeding devices like the Peeler Paddle Gob Feeder (Miller and Sullivan 1984). Vessels made by semi-automatic machines are indistinguishable from vessels made on other machines (except the Owen's machine). The precision of automatic manufacturing enabled the standardization of continuous thread finishes, and screw caps replaced other forms of nonpressurized sealing. In 1892 crown bottle caps were developed (Lief 1965:17).

One hundred and sixty-six bottle/jar fragments were recovered from 15ME98 (Figure 5-3 C – F)). Twelve fragments were machine made and the remainder was of unidentified manufacture. The machine made glass fragments included clear (n=4) and blue (n=2) base fragments, clear (n=4) and



**Figure 5-3. Kitchen Bottle/Jar Glass: A) Olive Base; B) Aqua Rim; C-D) Clear Rims; E) Clear Body; F) Clear Rim-Neck; G) Olive Base; and H) Clear Base.**

aqua (n=1) lip fragments, and one aqua (n=1) rim fragments. Two olive green base fragments were recovered (Figure 5-3). One olive green base has a molded push up and may be a modern reproduction or possibly manufactured with a snap case. One bottle cap lip fragment was recovered. It is probably from a mid to late twentieth century soda pop bottle.

Most of the bottle/jar specimens recovered were non-diagnostic body fragments. The machine made specimens date to the late nineteenth and twentieth centuries. The olive green base and body fragments are typical of mid-nineteenth century assemblages.

#### 5.1.2.1.3 Tableware

The manufacture of glass tableware is a somewhat problematic process. In many cases, discerning the manufacture type is not helpful in answering questions concerning chronology. Processes used to make tableware were used over long periods of time. These processes include free blowing, press molding, optic molding, and pattern molding. Most of these methods are still used to lesser degrees today.

Free blowing is still used today to make tableware. Eighteenth and nineteenth century glass was also formed by hand. Usually these pieces are distinctive to specific glass houses and their age can be determined if the manufacturing house can be ascertained. For instance, table glass produced at the Stiegle glass house had a distinctive smoky color and specific stylistic motifs were patented and developed by glass houses for their use.

Although the process of press molding glass had been used to make door knobs and stemware feet, by the late 1820s, press molding hollowware became possible. Pressed glass made in the first few decades of the nineteenth century was often decorated with relief motifs, including classical busts, and a finely stippled or matte background that hid defects in the glass and mold seams. These highly decorated

pieces, usually made using leaded glass, reflected light and were aptly referred to as “lacy glass”. By the 1850s, improvements in manufacturing eliminated the need to hide defects. By the 1870s, the popularity of pressed glass increased as white, multi-colored, and other new shades of glass became affordable due to improvements in the glass formula (Deiss 1981:71-76; Davis 1949; Innes 1976; McKearin and McKearin 1948). The new glass formula resembled leaded formulas and was used extensively in press-molding after the 1870s. Consequently, press molded, leaded tableware is uncommon on American sites after 1870 (McKearin and McKearin 1948:395).

More elaborate combinations of decoration types and color became popular in press molded table glass after 1870 (Innes 1976). Carnival glass, for example, often given away as prizes at carnivals and fairs, was made by coating pressed glass with metallic paint to simulate more-expensive wares. Carnival glass was produced from the late 1890s to the 1930s (Deiss 1981:86).

Optic molding was used to make tableware during the eighteenth century. Optic molding, never a popular form of manufacture, was eclipsed by press molding early in the nineteenth century. By the late nineteenth century, optic molding had a resurgence in popularity. This molding type was used predominantly for tableware, specifically tumblers. It is a distinctive molding style involving a two-stage process. The vessel is formed by blowing glass into a part-size mold. This gives the vessel a rudimentary shape and decoration on the interior of the vessel. The vessel is then placed in another mold that provides the final shape to the vessel. This type of molding is easy to identify as the interior of the vessel will often have a totally different decoration than the exterior of the vessel.

The process of pattern molding has been used for several centuries but was most popular in the late eighteenth and early to mid-nineteenth centuries (Jones and Sullivan 1985). This method involves two stages. Glass is blown into a mold that imparts the rudimentary shape and decoration to the vessel. Usually the decorations are simple ribs, panels, and stars. The partially blown vessel is then removed from the parison and its final shape is free blown. The enlargement of the vessel causes the decorations to become very diffuse.

Although these methods of manufacture alone are not useful in determining chronology, decorative style can be used to temporally place a vessel. Decorative styles changed over time in table glass. For example, after 1870 naturalistic designs featuring animals and flowers became popular, eclipsing the geometric motifs of the earlier part of the nineteenth century (Innes 1976).

Twenty table glass fragments were recovered from 15Me98.

#### 5.1.2.1.4 Ceramics

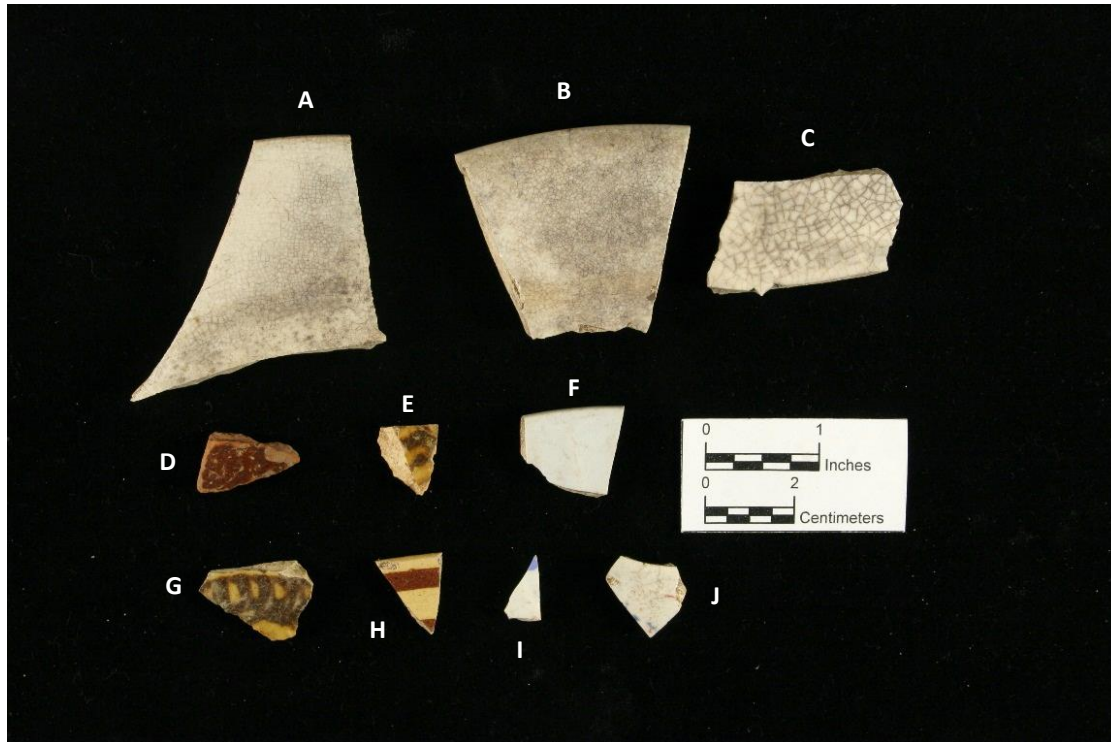
Domestic ceramics are one of the most important chronologically diagnostic artifact categories from archaeological sites. In addition, these materials offer important clues to functional and social status variation among sites and cultural or ethnic components. For this reason, the ceramics are described in detail in the following chapter. Typically, ceramics are divided into two major groups: refined and unrefined earthenware. Refined earthenware was primarily used as serving vessels, such as dinner and tea services, or toiletry items. Refined wares treated here included delft or Tin-enameled ware, porcelain, creamware, pearlware, whiteware, and ironstone. Unrefined earthenware was used for storage and food preparation, such as mixing bowls, churns, and milk pans.

##### 5.1.2.1.4.1 Whiteware

Whitewares are non-vitreous and semi-vitreous, white-paste earthenwares usually having a clear, colorless glaze. Whitewares were first manufactured in England circa 1800, had become popular by

1820, remained common throughout the 1800s, and are still being manufactured today. The period of greatest popularity of whiteware was 1830 to 1890 (Majewski and O'Brien 1987:119-125; Miller 1980:16-17; Noel-Hume 1969:130-131; Price 1982). Whiteware occurs in virtually every decorative type that was available in the nineteenth century, and decoration type and style can be used as relative temporal indicators.

Whiteware ceramics recovered from Site 15Me98 consisted of thirty-seven fragments (Figure 5-4 (B)). Six of the sherds were decorated; one had a gold decal decoration. Thirty-one sherds were undecorated and these included 10 body sherds and 14 rim sherds.



**Figure 5-4. Kitchen Ceramics: A-C) Whiteware; D) Redware; E) Yellowware; F) Ironstone; G-H) Yellowware; I-J) Whiteware.**

#### 5.1.2.1.4.2 Ironstone

Ironstone is a term used to refer to a semivitreous ware intermediate in hardness between earthenware and porcelain, a hardness caused by the addition of china stone or petunse in the paste (Majewski and O'Brien 1987). Ironstone is often grouped together with whiteware in many analyses, since technological improvements in white ceramic bodies began about 1800 (Majewski and O'Brien 1987; South 1974). As a result of these improvements, many variants of nonvitreous- and semivitreous-bodied earthenwares coexisted throughout the rest of the nineteenth century and into the twentieth century (Majewski and O'Brien 1987:120). Josiah Spode made a commercial success, circa 1805, of marketing fine-grained, high-fired earthenware called "Stone China," which approximated porcelain in terms of hardness. Eight years later, Charles Mason began producing "Mason's Ironstone China" in England in 1813. Mason claimed his ware contained iron slag. John and William Turner had patented a similar ceramic body in 1800 and undoubtedly influenced both Spode's and Mason's inventions (Collard 1967:125-126). These early high-quality ironstones are usually not identified on early nineteenth

century sites in the United States, however, and may be being missed by archaeologists (Majewski and O'Brien 1987).

Two varieties of ironstone are now recognized: blue-bodied and white-bodied. Blue-bodied ironstone was manufactured by British, and perhaps, by American firms. White-bodied ironstone was made by both British and American firms, but primarily by British ones. English heavy-bodied ironstones began appearing on American sites by 1840 to 1885. After 1850, heavy-bodied ironstone predominantly was undecorated, or was decorated with molded geometric, floral, or foliate motifs. There is a problem with dating ironstone because white-bodied ironstone had a long temporal span from 1800 into the twentieth century. At first, ironstone was almost exclusively produced by British firms. By the end of the nineteenth century, however, both British and American potteries were producing large quantities of lighter-weight, variably decorated white-bodied ceramics (Majewski and O'Brien 1987). Majewski and O'Brien (1987) suggest that the period of greatest popularity of embossed ironstone was 1840 to 1907, which is the date range currently used by many archaeologists for analysis. But ironstones were produced much earlier, and discerning the difference between early or late British ironstones and those produced by American potteries continues to be a problem in actually dating the occurrence of heavy- or lighter-bodied ironstones on archaeological sites (see Majewski and O'Brien 1987). As ironstone can be semi-vitreous and was produced in all the decorative types used on whiteware, discerning ironstone from whiteware can be difficult. In fact, South (1974) groups ironstone and whiteware together in many analyses.

Seven ironstone sherds were recovered. Two of the sherds were molded and five were undecorated.

#### 5.1.2.1.4.3 Porcelain

Porcelains are vitreous, white-paste, usually glazed wares of a variety of compositions. Porcelain was a very expensive ware until the late twentieth century, and therefore is typically rare on sites. Moreover, porcelain on twentieth century sites can include pieces made in North America, Great Britain, continental Europe, China, and Japan. Porcelains are divided into two basic types, hard paste and soft paste, with several varieties of each paste type. The difference between these is body composition and firing temperature. Hard paste porcelains are composed of kaolin and feldspathic clays and are fired at a high temperature. Chinese export porcelain is a hard paste variety that can be readily distinguished from other European and Japanese hard pastes. The major period of Chinese export trade to America was circa 1784 - 1820 and declined sharply after 1830 (Palmer 1983:25). Painted underglaze wares were exported to England until 1840, and painted overglaze enamels were exported into the 1820s (Palmer 1983:16). Bone china is a type of soft paste porcelain that has been continuously produced since 1794. This ware is composed of feldspathic clays and calcined cattle bone fired at a lower temperature than hard paste porcelains. It appears with many decorative preparations including underglaze blue painted, overglaze polychrome painted, gilding, transfer printing, luster, and decals. Because of porcelain's long history of manufacture, it has limited potential as a temporal indicator (Majewski and O'Brien 1987:124-127) but is a good indicator of economic status or wealth. Small quantities of English bone china and French porcelains were imported to the United States throughout the late eighteenth and nineteenth centuries (Miller et al. 1994). According to Miller et al. (1994), these wares represent the upper range of expensive ceramics available at the time. In fact, gold banded French porcelain of the 1830s was fifteen times more expensive than creamware (Miller et al. 1994:228), and Chinese export porcelain was three times more expensive (Wall 1994).

Three undecorated porcelain sherds were recovered.

#### 5.1.2.1.4.4 Stoneware

Stonewares are semi-vitreous wares, usually glazed, which were made in a great variety of thick, utilitarian forms. Stoneware paste ranges in color from red to buff to brown, and can turn grey during firing. Stoneware is primarily categorized by exterior surface treatment, the most common category of which is salt glazed. Stonewares were made in Europe by the seventeenth century, in England by the eighteenth century, and were in abundance in the United States, including Kentucky, by the mid-nineteenth century. Although salt-glazing was the most common form of glazing, natural clay glazes, known as slip-glazes, were used in America by 1800. A clay would have water added to it to create a fluid suspension into which a vessel would be dipped. The most famous of the slip glazes was Albany slip produced from superior clays in the New York area during the last quarter of the nineteenth century. Albany slip ranges in color from light brown to black, and was ubiquitous in the Midwest from 1830 to 1900 (Phillipe 1990:80). But other clays were used to produce slips almost identical to Albany slip by 1800 (Zug 1986). In the Deep South, salt-glazing and cobalt (blue) decoration was uncommon. Salt was often too expensive and scarce for utilitarian wares in rural areas of the South, making brown slip glazed vessels the most common and economical stoneware (Zug 1986). By the 1820s, southern potters were developing a form of alkaline glazing that used readily available ingredients which were inexpensive and abundant (Burrison 1983; Zug 1986). The alkaline glazes used an alkaline substance like wood-ash or lime in combination with a silica-bearing material like sand. When a clay is added to this substance to bond the suspension and contribute color, the result is a translucent, runny glaze which dripped down the ware in a wide variation of brown and green shades of color (Zug 1986). By the late nineteenth century, another glaze came to be used, often in combination with true Albany slip. Bristol glaze or slip is white and was introduced into the United States from Britain by circa 1884 (Greer 1981). Bristol slip was used in combination with Albany slip by 1920 (Lebo 1987). After 1920, Bristol slip generally occurred alone (Lebo 1987:132).

Five stoneware sherds were recovered. Three of the sherds were salt-glazed and two were undecorated.

#### 5.1.2.1.4.5 Redware

Redwares are non-vitreous wares with red, buff, or brown paste. Although redwares can occur unglazed (such as flower pots), the vessels may have a clear or mottled lead glaze or a black or brown glaze resulting from iron additions to the lead glaze. Redware was manufactured in Kentucky during the early 1800s and continued to be commonly used until about the mid-1800s, when it was largely replaced by stoneware. Due to the abundance of redware makers and the lack of distinguishing characteristics that would identify the maker, redware is a poor temporal indicator.

One clear glazed redware sherd was recovered.

#### 5.1.2.1.4.6 Yellowware

Yellow wares are semi-vitreous or non-vitreous wares of yellow- or cream-colored paste, which usually have a clear or mottled (Rockingham) lead glaze. The Ohio River Valley is well known for its yellow ware potteries (Gates and Omerod 1982). Yellow ware vessels include utilitarian forms similar to stonewares and redwares, as well as specialty items such as inkwells, footwarmers, etc. Yellow wares were popular from about 1830 until the 1920s (Herskovitz 1978:97).

Five pieces of yellowware were recovered. Three of the yellowware sherds were decorated and two were undecorated.

#### 5.1.2.1.5 Faunal

This category includes faunal material recovered from the archaeological investigations. The assemblage consists of 95 specimens from the mechanical excavation. Faunal material recovered from the unit excavation was analyzed by a faunal specialist. Material consists primarily of rodent species. There was also cut pig specimens. Additional material was analyzed by the University of Kentucky.

#### 5.1.2.1.6 Other Kitchen

Other kitchen material includes metal and bone artifacts such as forks and kettles. Two table forks, four table knives, and two table spoons were recovered. One kettle fragment, two pot fragments, one skillet fragment, and three hollowware fragments were recovered. Seven tin can fragments and 24 unidentified kitchen metal were also recovered. One bone handle and one metal utensil handle were recovered.

Also included in this section are pull tabs and bottle caps. Pull tabs were initially manufactured for soda pop and beer cans in 1962 (Keen 1982). Bottle caps, or crown caps were developed in 1892 (Lief 1965).

Eleven pull tabs and four bottle caps were recovered.

### 5.1.2.2 Architecture Group

Artifacts assigned to this group include all items associated with construction and hardware furnishings. Specimens include bricks, mortar, cement, window glass, doorknobs, faucet parts, and various nails. The major categories of this group are described below.

A total of 1,378 architectural artifacts were recovered during this survey from site 15Me98. Table 5-6 shows all architectural artifacts recovered.

**Table 5-6. Architectural Artifacts.**

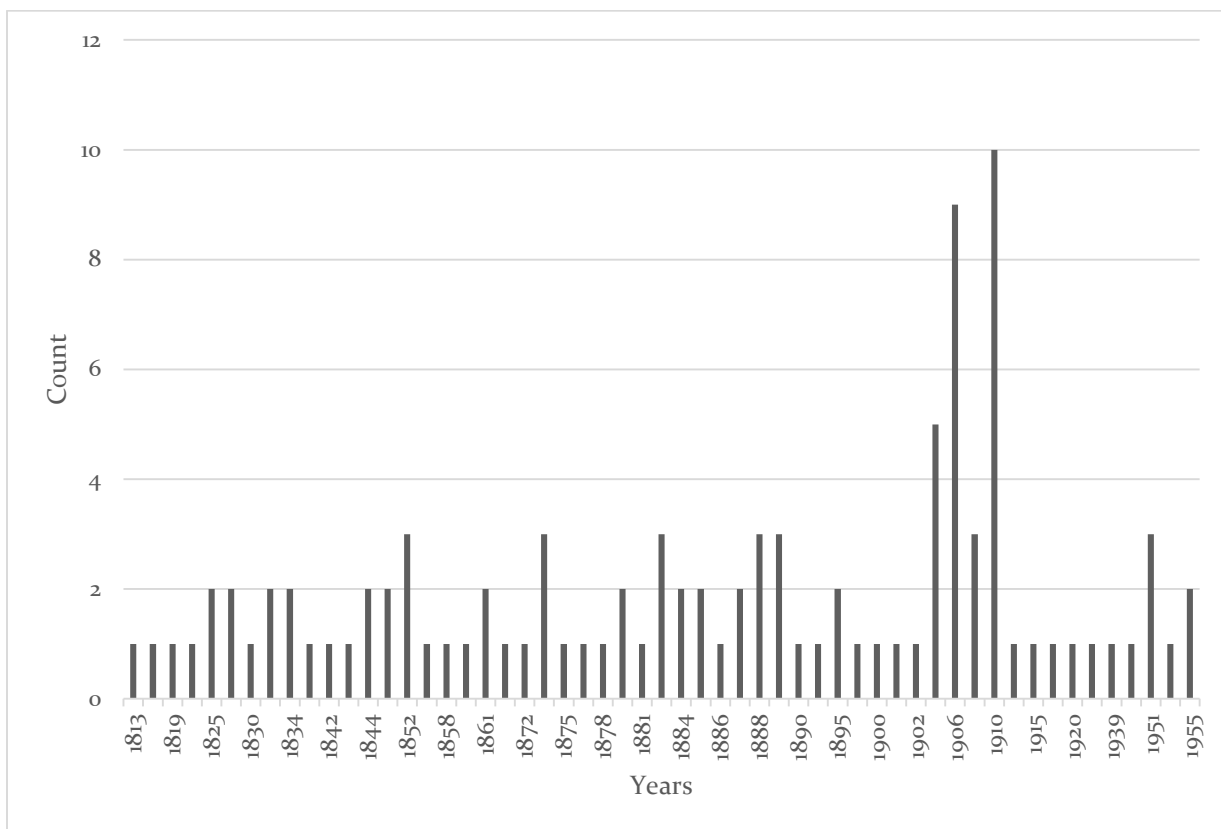
Material	Type	Total
Ceramic	Brick	479
	Tile	6
Glass	Window	103
Metal	Barbed Wire	5
	Nails	553
	Roofing	104
	Spike	2
	Wire	4
Stone	Concrete	3
	Mortar	92
	Stone	25
	Asphalt Roofing	2
<b>Total</b>		<b>1378</b>

#### 5.1.2.2.1 Flat Glass

Flat glass fragments are presumed to have been used in window panes if no other function can be determined, such as for mirrors, table tops, picture frames, etc. Given a large assemblage from a site, flat

glass has the potential to comprise an important, chronologically sensitive artifact. During the eighteenth century, flat glass appropriate for windows was cut from a large disk of glass which was then cut into panes. By the early nineteenth century, glass manufacturers produced broad glass, which may be distinguished by a slight thickening toward the plate margin, one surface slightly more opaque than the other, and bubbles in the glass usually distorted in straight lines. In the late nineteenth century, machine-made glass, characterized by a uniform thickness, with occasional wavy lines of bubbles, was widely produced. In the early twentieth century, production of sheet pane glass eclipsed other manufacturing processes.

One hundred and three window glass fragments were recovered from excavations at 15Me98. Although there was a small sample of window glass, the Moir (1987) formula ( $\text{Date} = 84.22 (\text{Thickness}) + 1712.7$ ) was used to determine construction dates. According to Moir's formula, the site dates from 1813 to 1955 with an average date of 1879 (Figure 5-5).



**Figure 5-5. Window Glass Dating.**

#### 5.1.2.2.2 Nails

Nails form one of the most widespread categories of artifacts recovered from historic sites. As with many other materials, increasing industrialization has had a major impact on the manufacturing of nails and associated hardware. Archaeologists have devoted considerable attention to nails in order to identify their chronologically significant characteristics (Nelson 1968). These are identified by manufacturing process (wrought, cut, wire) and, when possible, by size.

Wrought nails are the earliest form of iron nails, and were made by hand, usually in a local smithy or forge. Typically these nails are square or rectangular in cross section, and taper on all four sides towards the point. Wrought nails were in common use until approximately the 1830s and 1840s.

Cut nails are stamped from a sheet of steel, and consequently taper on two sides only. The artifacts show some variation between early and late forms. Early cut nails have a constricted shank just below the head, and were first produced in the late 1790s. Later cut nails are not constricted below the head, and were in general use by the late 1830s. Cut nails are still made and used today for special purposes.

Five hundred and fifty-three nails were recovered from Site 15Me98 (Table 5-6, above, and Figure 5-6). Eighty-eight unidentified cut nail fragments were recovered. Late cut nail consisted of 302 specimens. One hundred and sixty-three wire nails were recovered.

**Table 5-7. Whole Nail Type and Size from 15Me98.**

Nail Type	Condition	Penny Weight									Total
		2d	3d	40d	4d	5d	6d	7d	8d	9d	
Late Cut	Clinched				1	1					2
	Pulled	4	18		12	14	3	3	10	10	74
	Unaltered	3	19		10	18	5	2	5	6	68
	<i>Cut Total</i>	7	37		23	33	8	5	15	16	144
Wire	Clinched			1			1		2		4
	Pulled	4	3	1	5	3	5	2	10		33
	Unaltered	2	10		7	17		2	2		40
	<i>Wire Total</i>	6	13	2	12	20	6	4	14		77
<b>Grand Total</b>		<b>13</b>	<b>50</b>	<b>2</b>	<b>35</b>	<b>53</b>	<b>14</b>	<b>9</b>	<b>29</b>	<b>16</b>	<b>221</b>

#### 5.1.2.2.3 Brick

Four hundred and seventy-nine brick fragments were recovered from the excavations at 15Me98 (Table 5-6, above, and Figure 5-7). The manufacturing of bricks changed from locally crafted, handmade varieties to machine-produced during the nineteenth century. With this chronological information in mind, bricks are classified according to method of manufacture (Gurke 1987). The nature of most brick fragments often precludes an accurate assessment of age. Most of the bricks were too fragmentary to determine the method of manufacture.

#### 5.1.2.2.4 Mortar

Ninety-two pieces of mortar were recovered from the excavations at 15Me98. The combined weight of the mortar fragments was 641.7 grams.

#### 5.1.2.2.5 Other Architecture

This category includes other architectural material. It includes barbed wire (n=5), spike (n=2), building stone (n=25), concrete (n=2), wire (n=4), Asphalt roofing (n=2), barbed wire (n=5), and metal roofing (n=104).

### 5.1.2.3 Fuel Group

This category includes items such as coal, coal cinders, ash, slag, and charcoal. Coal was adopted as a primary fuel in the middle to late nineteenth century, prior to which firewood and charcoal were used both domestically and commercially as an energy sources.

Fifteen hundred and twenty-seven fuel artifacts were recovered from 15Me98. There were 667 coal fragments, 792 cinder fragments, 33 charcoal fragments, three wood fragments and 32 slag fragments recovered (Figure 5-8).

### 5.1.2.4 Arms Group

This category includes firearm parts, lead balls or bullets, cartridge casings, percussion caps, bullet molds, lead sprue, powder horn parts, and gunflints (Brussard 1993). Two arms related artifact were recovered from site15Me98. The artifacts were parts of a shotgun cartridge (Figure 5-9). The headstamp was illegible.

### 5.1.2.5 Activities Group

This category includes items associated with any type of job or activity that occurs on a site, such as tools associated with agricultural activities, woodworking, iron smithing, and general farm maintenance. Three activities artifacts were recovered from site 15Me98 (Figure 5-10). Fifteen machinery part fragments were recovered. One machinery part was a gear and the others were unidentified.

### 5.1.2.6 Furniture Group

A variety of artifacts associated with furnishings and household fixtures are often recovered in small numbers from historic sites. Examples of these include lamp globe or chimney parts, mirror glass, faucet parts, fireplace equipment, clock parts, draw pulls, flower pots and similar items (Thuro 1976).

Forty-four Furniture Group artifacts were recovered. Thirty-two glass chimney fragments and twelve terra cotta flower pot fragments were recovered from 15Me98.



Figure 5-6. Architecture Nails: A-D) Cut Nails; E-G) Wire Nails.

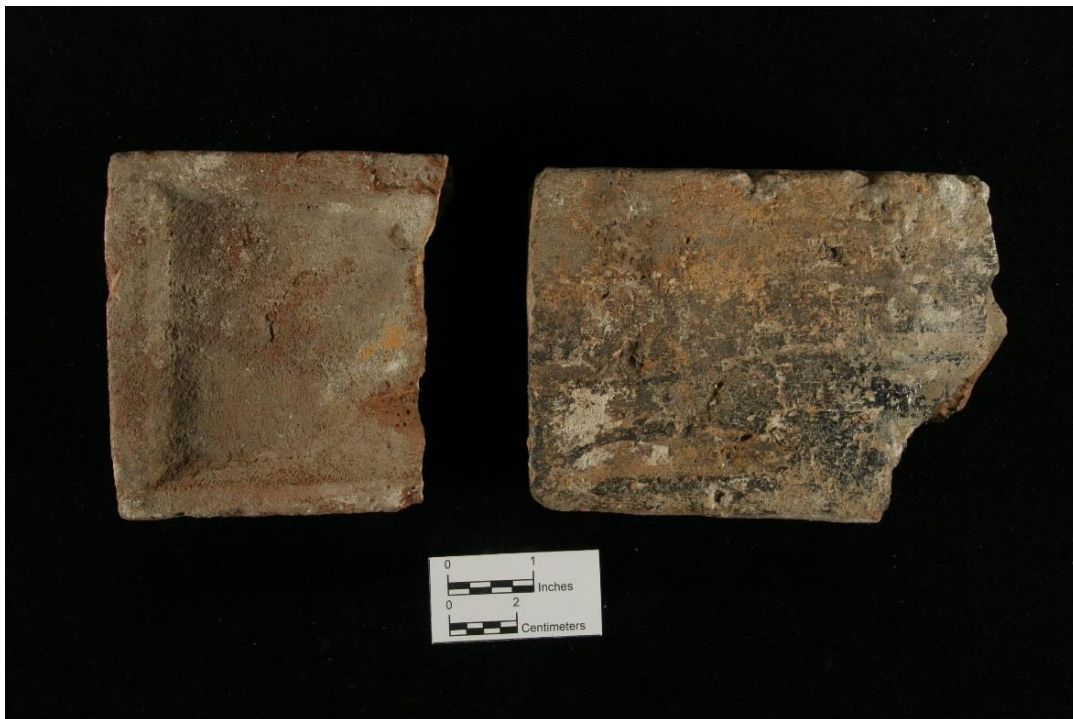


Figure 5-7. Architecture Bricks: Brick Fragments.

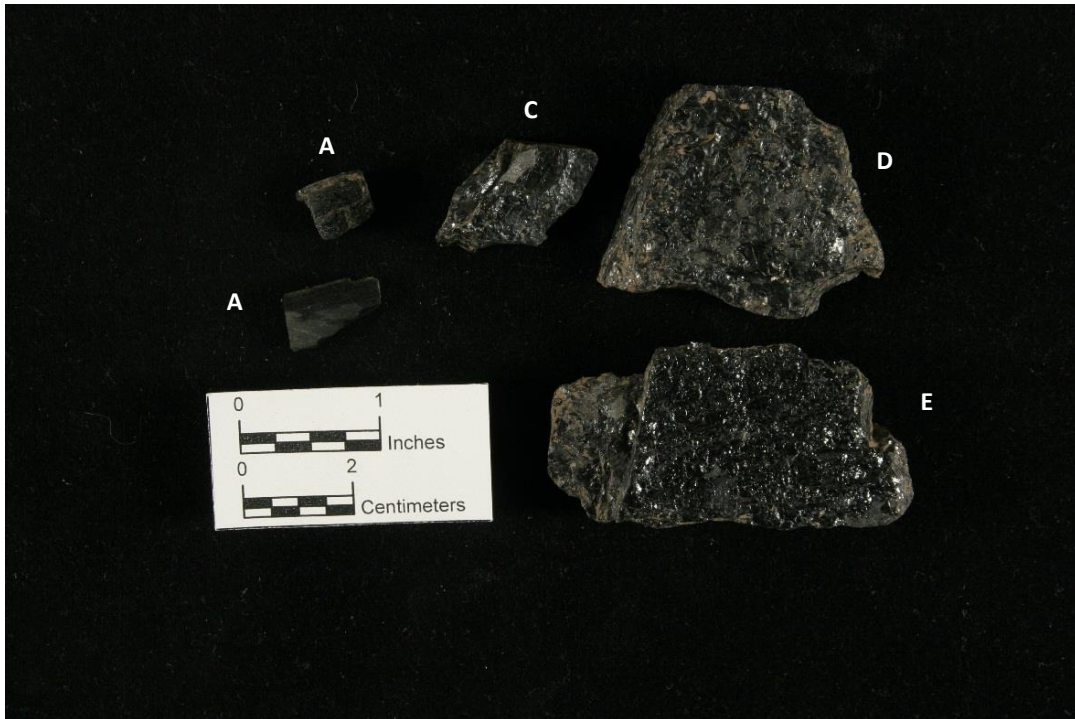


Figure 5-8. Fuel Group Artifacts: A-B) Charcoal; E-G) Coal.

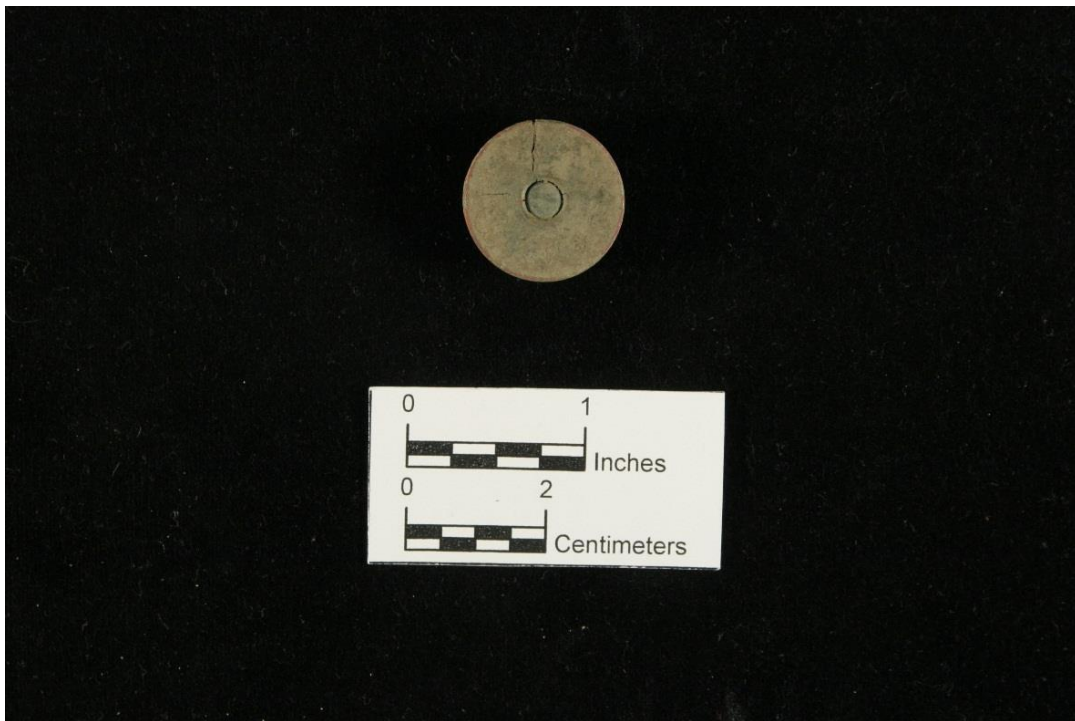


Figure 5-9. Arms Group Artifact: Shotgun Cartridge Fragment.



**Figure 5-10. Activities Group Artifact: Machinery Part Fragment.**

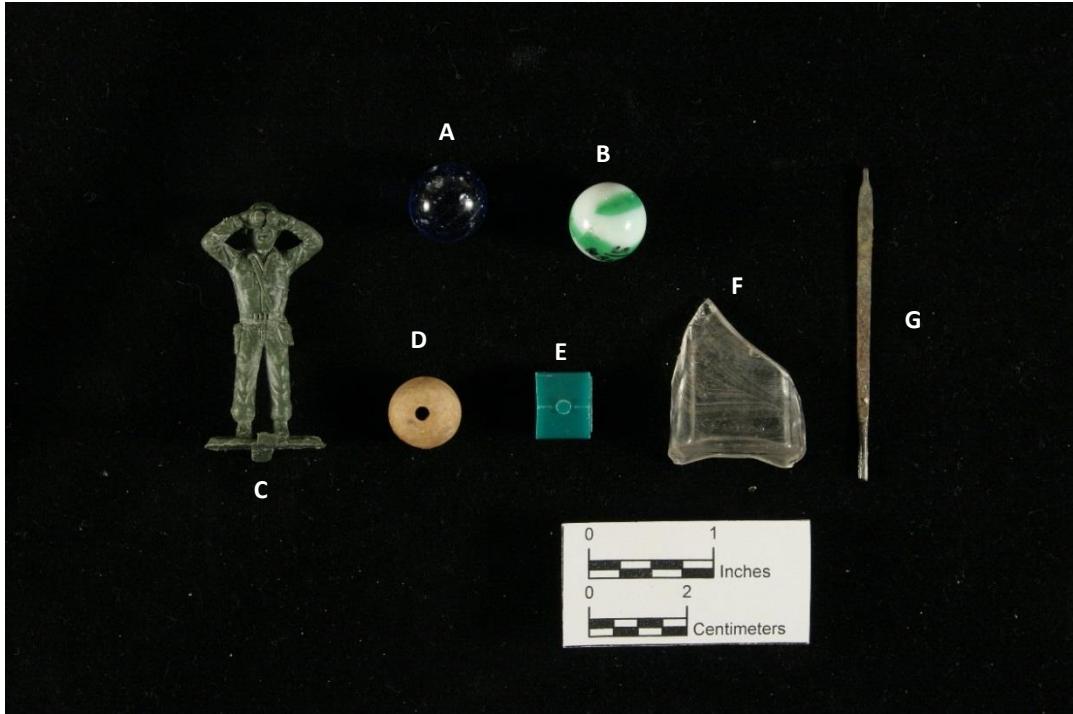
#### **5.1.2.7 Other Group**

This category includes all materials that are not readily assignable to a major group or that are unidentifiable. Items in this category include, for example, unidentified rusted metal artifacts and fragments of synthetic materials such as plastic, etc. Two hundred forty-four Other Group artifacts were recovered from site 15Me98. One hundred and fifty-seven of the artifacts were unidentified metal fragments, 21 artifacts were modern plastic, and the 31 artifacts were burned/melted glass.

#### **5.1.2.8 Personal Group**

This category includes objects typically reserved for one person's exclusive use, which often could be carried in a pocket or purse, such as smoking pipes, watches, clasp knives, gaming pieces, toys, jewelry, combs and brushes, coins, etc. (Bradley 2000). Twenty-six personal artifacts from Site 15ME98 were recovered. The artifacts included a wooden bead, four glass marbles, 15 toiletry bottle glass fragments, an eyeglass arm, a watch band link fragment, and three toys. Examples are shown in Figure 5-11.

A plastic toy soldier appears to be based on a World War II era soldier, which would date to after 1945. A plastic Monopoly gaming piece (a green house) dates to after 1935 and is still made today (Monopoly 2015).



**Figure 5-11. Personal Group Artifacts: A-B) Marbles, C) Toy Soldier, D) Wooden Bead, E) Plastic Monopoly House, F) Toiletry Bottle, G) Eye Glass Arm.**

## Section 6 -

### Results

Phase II investigations at 15Me98 consisted remote sensing, excavation of hand units, and mechanical excavation. The results of the excavations are discussed below.

#### 6.1 Site 15Me98

Site 15Me98 consists of a prehistoric component and a historic component which dates from the 1850s to the 1980s based on artifacts and archival data. The APE is a relatively small area that does not cover the entire historic component based on aerial photographs. The limits of the prehistoric component outside the APE are unknown

##### 6.1.1 Location

Site 15Me98 can be found on the USGS Harrodsburg, Kentucky, 7.5' quadrangle map (Figure 6-1). (Figure 6-2). The site measures 1.1 acres (0.4 hectares).

##### 6.1.2 Site Description

The site extends practically the entire length of the APE on the north side of US 68, and is not present in the small portion of the APE along the south side of that road. The site includes a prehistoric component and a historic component. The prehistoric component extends from the southwest end of the project area to the northeastern site extent. Two historic components are present within the APE. The Area A from the Phase I investigations is related to ME46 while the historic material in Area B is related to ME47. ME46 was a two story frame double-cell house with a central brick chimney and was built in the 1850s. ME47 is located to the northeast of ME46 and is also a two story frame double-cell central brick chimney. It also dates to the 1850s. ME47 burned around 1986. ME46 was demolished in the 1980s. In 1981 when the Kentucky Historic Resources Inventory was completed both houses were owned by Earl Smith. The prehistoric component is concentrated in Area B. The historic material recovered in Area B is from ME47. No material was recovered from Area C during Phase II investigations.

##### 6.1.3 Stratigraphy

Shovel test probes from the Phase I investigations and test units from the Phase II investigations provide information on the stratigraphy of the APE. The soils in Area A and the area to the southwest appear to be Udorthents which are drastically disturbed. The shovel probes at the northeast end of the project area are away from the creek and have a different profile.

Four 1 x 1 meter test units and a .5 x .5 meter test unit were excavated in the Area A near ME 46. One 1 x 1 meter test unit was excavated near the prehistoric component and ME 47 in Area B. The Stratigraphy of the Area A is shown in the photographs of the test units (Figure 6-3 and Figure 6-4). Test Unit 1 consisted of fill from the demolition of the house in the early 1980s. A pit was excavated and debris from the house was bulldozed in according to informants. The dirt from the excavation was then spread over the site. Test Units 2 and 4 were excavated east of the house and south of an outbuilding. The first zone of the units is the fill from the house demolition. Under that is either the original Ap zone or a

**Figure 6-1. Harrodsburg Quadrangle Showing Study Area.**

Figure 6-2. Aerial Photograph Showing 15Me98.



Figure 6-3. Test Unit 1.



Figure 6-4. Test Unit 4.

midden from the house or outbuilding. Animal bones, including pig, were recovered and is discussed in the faunal section. Artifacts recovered included undecorated whiteware. The zones beneath this appear to be natural and the unit ends at bedrock. A more detailed description of test units is below with the field results.

Test Unit 3 was located in the tobacco field in Area B (Figure 6-5). The profile for T.U. 3 consisted of two zones. Zone 1 was the plow zone and extended from the surface to between 30 and 35 cm below surface. The soil was a 10YR3/4 dark yellowish brown silty clay loam. Zone 2 was the subsoil and extended to 40 cm below surface, where the excavation stopped. The zone 2 soil was a 10YR4/2 dark grayish brown silty clay. Non-diagnostic prehistoric lithic flakes and shatter were recovered along with historic material.



Figure 6-5. Test Unit 3.

## 6.1.4 Field Results

Five 1 x 1 meter test units, one .5 x .5 test unit, four shovel test probes were excavated, and backhoe stripping were undertaken during the Phase II archaeological investigations at 15Me98. Remote sensing was undertaken before the field work.

### 6.1.4.1 Remote Sensing

#### 6.1.4.1.1 Introduction

The remote sensing consisted of electrical resistance and ground penetrating radar. The remote sensing was conducted by Philip Mink of the University of Kentucky. The results of the remote sensing were used in the placement of two test units, TU 1 and TU 3. TU 1 contained debris from the house, which was bulldozed into a pit. Test Unit 3 was in a plowed field and contained no features.

The anomaly in the north central part of Area is probably the debris located in Test Unit 1.

#### 6.1.4.1.2 Ground Penetrating Radar

GPR was collected in three grids (Figure 6-6, Appendix F). Grid 1 located in Area A is a 20m x 40m grid on the western most section of the site. Two anomalies possibly associated with the historic structures at the site have been noted in many of the amplitude slices at a variety of depths (Figure 6-7, Appendix F). Grid 2 is located in Area B and is a 20m x 40m grid. Two possible prehistoric anomaly clusters have been noted for further investigation (Figure 6-8, Appendix F). Finally, Grid 3 is also located in Area B and is located on the eastern most edge of the site and is a roughly 18.5 m by 37m grid created adjacent to Grid 2. The anomaly in the eastern most part of the site is associated with a modern water spigot but two other anomalies hold potential for being prehistoric anomalies (Figure 6-8, Appendix F).

In Figure 6-7, Test Unit 1 was located in an area which corresponds to the debris pit area. Test Unit 5 had a sewer pipe which ran grid east-west. It does not correspond to anomalies in the GPR, although the pipe could turn to the south and go toward the road (Figure 6-7). Test Unit 3 was placed near positive probes from the Phase I investigations and the anomalies in Figure 6-8. No subsurface features or material were located in Test Unit 3.

#### 6.1.4.1.3 Electrical Resistance

Area A was covered by two 20m x 20m grids that were processed together as one 20m x 40 m grid with north being at the top of the images (Figure 6-9). Area A contains 3 areas of possible interest two along the southern boundary near the road (possible modern disturbances) and one anomaly near the north-central portion of the grid, possibly something associated with the demolished houses (Figure 6-10). The other high (white) and low (dark) resistance areas are potential testing locations (Figure 6-10).

Area B is made up of the two 20m x 20m grids established by CDM Smith and an additional 20m x 20m grid established to the east of the original two grids (Figure 6-9). A large area of this grid (displayed as purple) was not collected as readings were unable to be recorded with the instrument, so false data was collected. Three interesting anomalies were selected as areas of interest (Figure 6-11). The south-central anomaly seems to correspond with a GPR anomaly in that location even before it was cut off by poor recording conditions. It is possible that the poor reading in this area were being caused by historic brick or tile debris as this area seemed to have red-orange smears in the soil. The other two anomalies are possible features but again some of the other high and low areas should be probed as modern disturbances in the area have diminished the potential of these techniques (Figure 6-11).

No units were placed on any anomalies from the electrical resistance. In Figure 6-10 there are dark areas near the house location and Test Units 2 and 4. The dark areas in the southern part of the grid are probably modern utility lines. In Figure 6-11 the locations from Figure 6-9 were not tested due to scope limitations.

#### 6.1.4.2 Area A, Historic Site

The excavation of the house site (Me46) consisted of test units, shovel probes and mechanical excavation (Figure 6-12). Test Unit 1 was located near a possible anomaly from the remote sensing. Test Units 2, 4, and 5 were located at the west side of the house near an outbuilding. Phase I excavations indicated a berm which was formed by house demolition fill and gravel driveway. A backhoe trench was excavated to determine the nature of the debris pit. The house area was stripped by the backhoe to locate any surviving foundations.

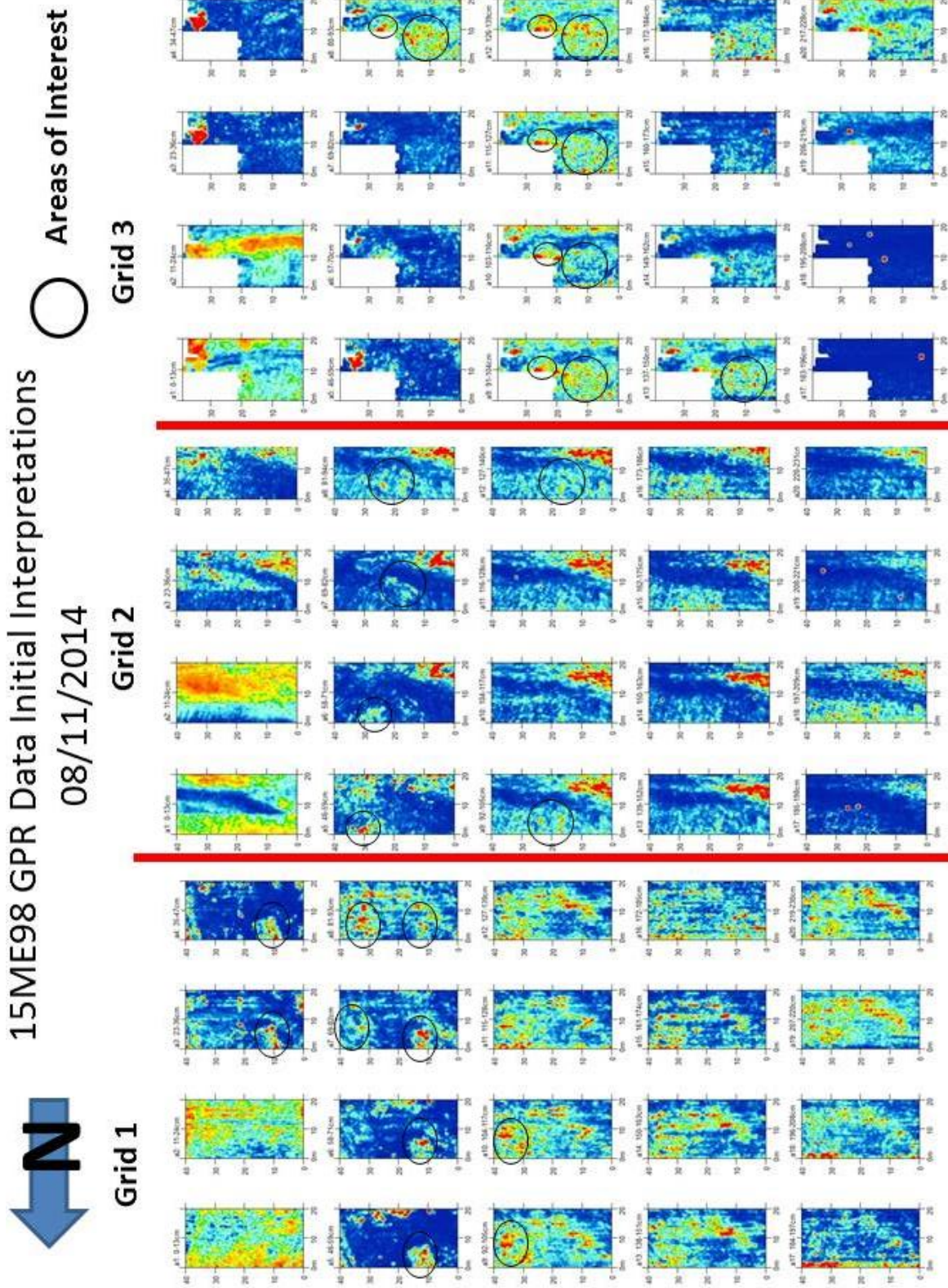


Figure 6-6. GPR Grid Initial Interpretations.

**Figure 6-7. Site Map Area A, GPR.**

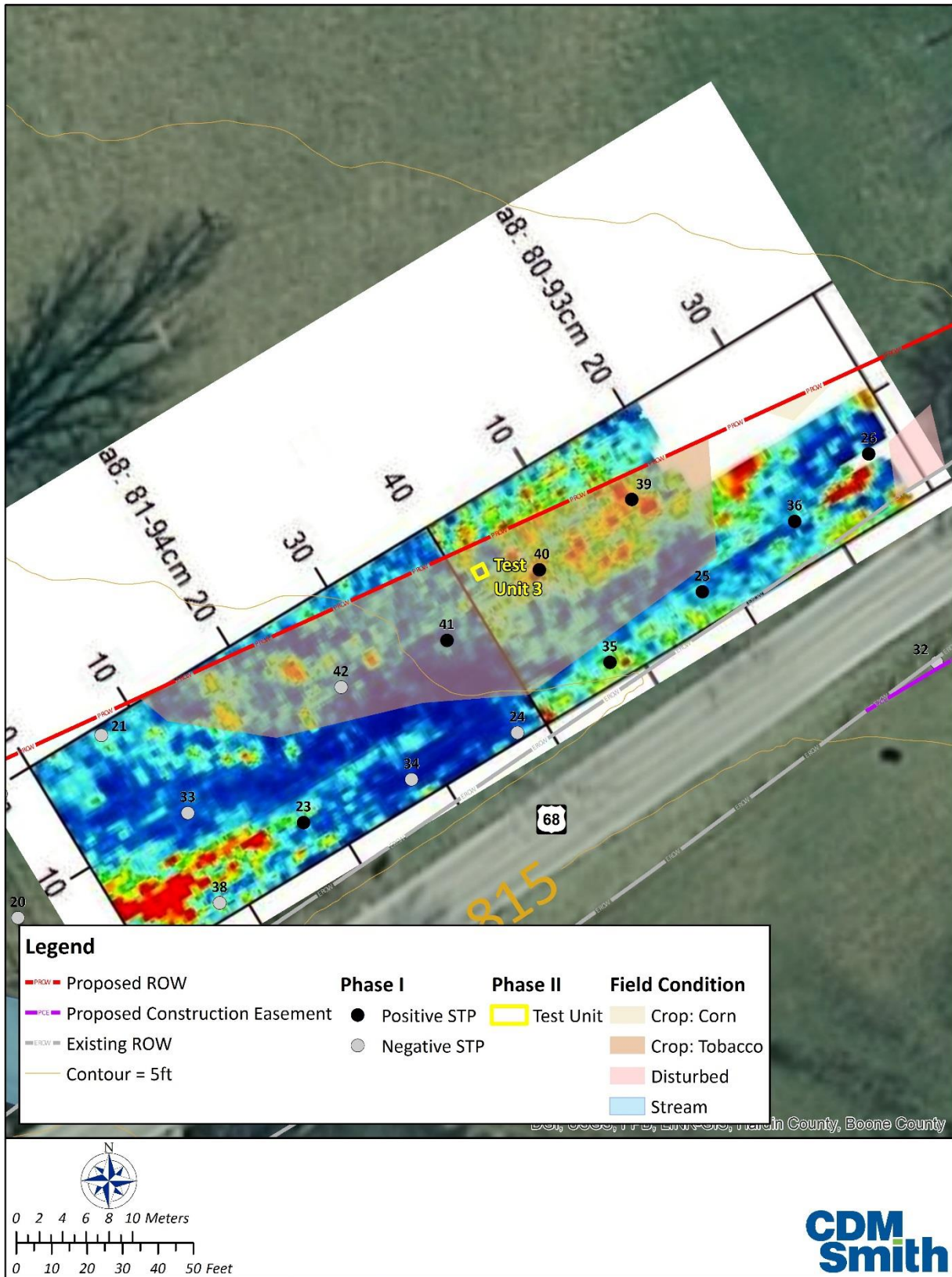


Figure 6-8. Site Map Area B, GPR.

# 15ME98 Resistance Data Initial Interpretations 08/11/2014

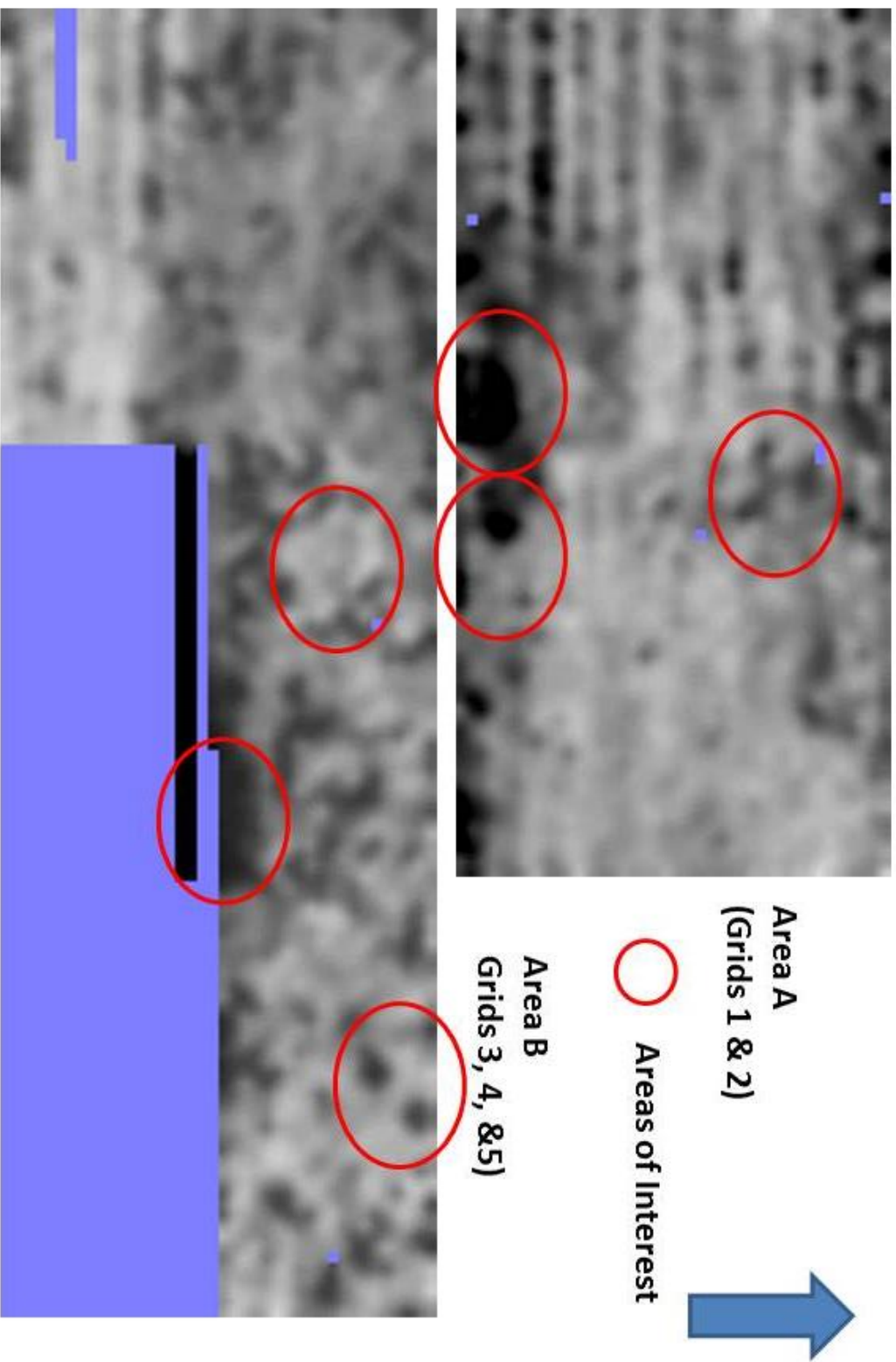


Figure 6-9. 15ME198 Resistance Data Initial Interpretations.

**Figure 6-10. Site Map Area A, 15ME198 Resistance Data.**



**Figure 6-12. Site Map Area A, Historic Site.**

#### 6.1.4.2.1 Test Units

##### 6.1.4.2.1.1 Test Unit 1

Test Unit 1 was located near an anomaly located during the remote sensing and Feature 1, which was located during the Phase I investigations. The Test Unit 1 stratigraphy consisted of three zones (Figure 6-13 and Figure 6-14). Zone I was a 10YR3/2 dark brown silty clay loam. It extended from the surface to 39 cm below surface. This is believed to be a fill layer placed over the site by mechanical excavation after the demolition of the house in the 1980s. Zone II consisted of bricks, mortar, rocks, metal, and other cultural material mixed with 10YR3/2 dark brown silty clay loam. Zone II extended from 39 cmbs to 60 cmbs. Zone II was the debris from the house demolition. Zone III consisted of a 10YR3/2 dark brown sandy clay, which was very wet during excavation. Zone III extended from 60 cmbs to 67 cmbs and bedrock.

Twelve hundred and fifty-nine artifacts were recovered from Test Unit 1 (Table 6-1). The architecture group artifacts consisted of 78.2 percent of the Test Unit 1 total. The artifacts included bricks (n=427), mortar (n=70), Nails (n=332), and window glass (n=9). The nails consisted of cut (n=170), wire (n=95), and unidentified (n=67). The fuel group consisted of charcoal (n=18), cinder (n=6), coal (n=193), slag (n=1), and wood (n=3). The kitchen group consisted of bottle/jar fragments (n=28), porcelain (n=1), pull tab (n=1), unidentified refined earthenware (n=1), and stoneware (n=2). The personal group artifacts consisted of glass marbles (n=2), glass toiletry bottle fragments (n=6), and a glass decorative fragment (n=1).

##### 6.1.4.2.1.2 Test Unit 2

Test Unit 2 was located east of the house and south of an outbuilding. The Test Unit 2 stratigraphy consisted of five zones (Figure 6-15 and Figure 6-16). Zone I extended from the surface to 27 cmbs and consisted of a 10YR3/2 very dark grayish brown sandy clay loam. This zone was deposited after the demolition of the house. Zone II extended from 27 cmbs to 37 cmbs and consisted of a 10YR5/3 brown clay loam. There was a disturbed area in Zone II and Zone III which was similar to Zone III in color and soil. Zone II appeared to be a midden or the A horizon before the house was demolished. Zone III extended from 37 cmbs to 42 cmbs and consisted of a 10YR4/2 dark grayish brown sandy clay loam. Zone IV extended from 42 cmbs to 50 cmbs and consisted of a 10YR4/3 brown gravelly sandy clay. Zone V extended from 50 cmbs to 55 cmbs and consisted of a 10YR4/3 brown sandy clay and ended at bedrock.

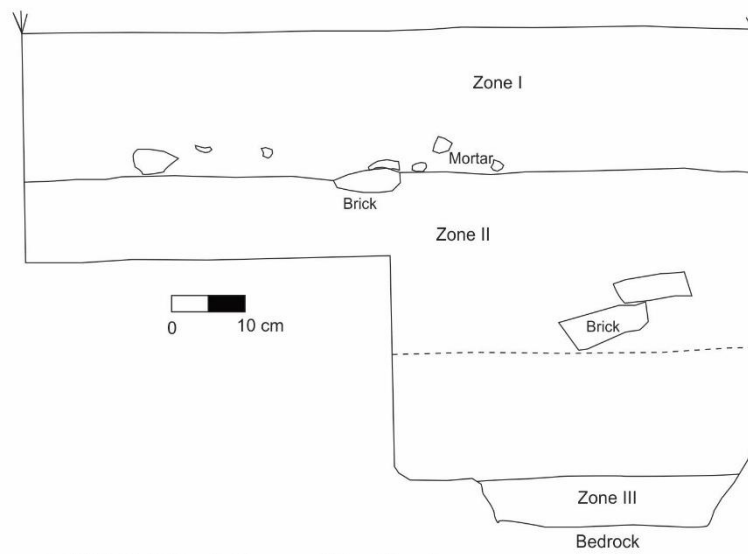
One hundred and twenty-two artifacts were recovered from Test Unit 2 (Table 6-2). Eighty-eight artifacts were recovered from Zone I, twenty-six from Zone II, and eight from Zone III (Table 6-3). Artifacts recovered from Zone II included two pieces of undecorated whiteware, piece of yellowware, and five cut nails. A cut nail, two pieces of ironstone, and a piece of redware were recovered from Zone III (Figure 6-17). Wire nails and cut nails were recovered from Zone I.

The zones from Test Unit 2 are both cultural and natural. Zone I appears to be the result of landscaping over the entire site after the demolition of the house in the 1980s. The artifacts recovered from the zone come from all periods of occupation. Zone II appears to be an intact midden or buried A horizon. The artifacts from the zone include whiteware, ironstone, and cut nails and dates to the second half of the nineteenth century. Zone III contained artifacts but is otherwise similar to the natural soil zones. It is possible that the zone was disturbed by natural or cultural activities. Zones IV and V are the natural subsoil. No artifacts were recovered from Zones IV and V.



**Figure 6-13. Test Unit 1 North Wall Profile.**

Test Unit 1 North Wall Profile



Zone I 10YR3/2 Dark Brown Silty Clay Loam

Zone II 10YR3/2 Dak Brown Silty Clay with Brick, Mortar, Rock  
(wetter below dotted line)

Zone III 10YR3/2 Wet Sandy Clay

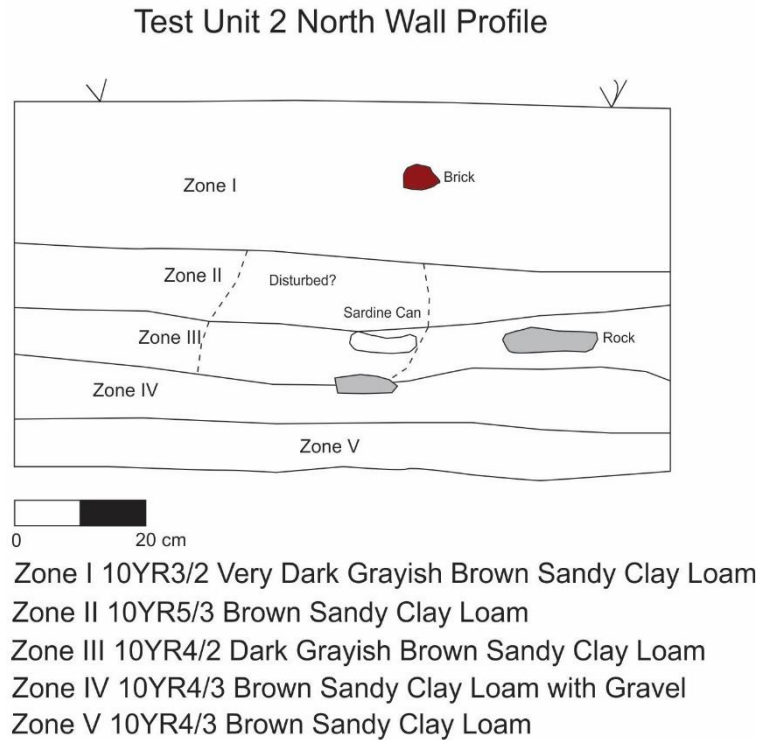
**Figure 6-14. Test Unit 1 North Wall Profile.**

**Table 6-1. Test Unit 1 Artifacts.**

Functional Group	Count	Percent
Activities	2	0.2
Architecture	985	78.2
Fuel	221	17.6
Furniture	3	0.2
Kitchen	34	2.7
Other	5	0.4
Personal	9	0.7
<b>Total</b>	<b>1259</b>	<b>100.0</b>



**Figure 6-15. Test Unit 2 North Wall Profile.**



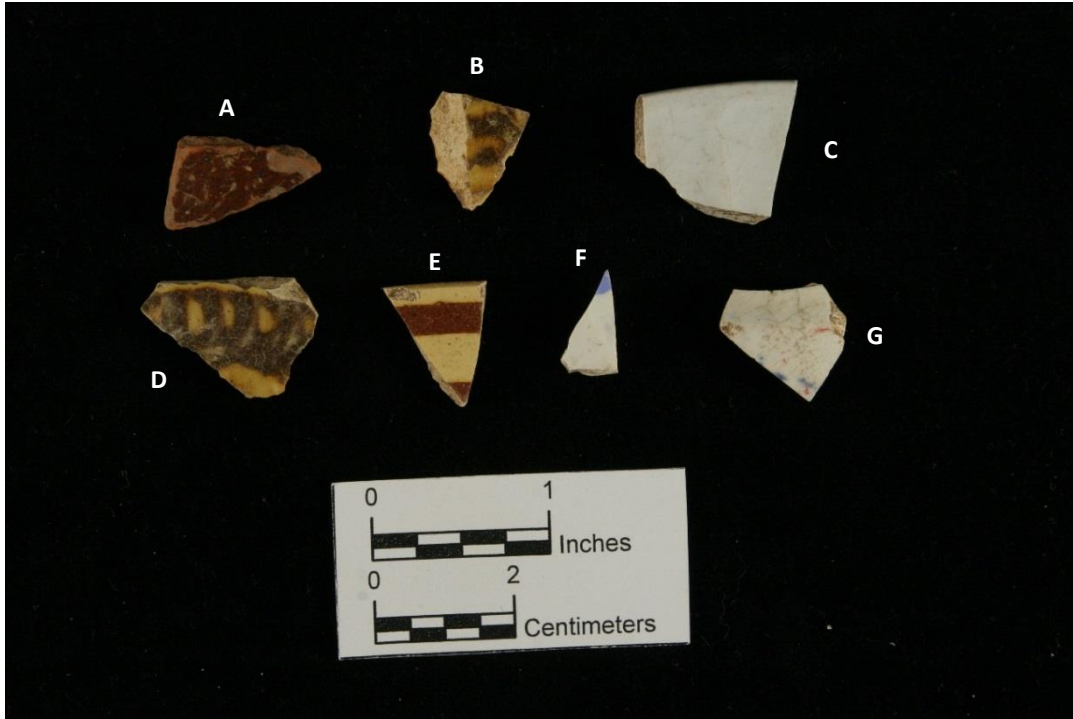
**Figure 6-16. Test Unit 2 North Wall Profile.**

**Table 6-2. Test Unit 2 Functional Group Artifacts.**

Functional Group	Count
Activities	10
Architecture	38
Arms	1
Fuel	47
Furniture	2
Kitchen	16
Other	8
<b>Total</b>	<b>122</b>

**Table 6-3. Test Unit 2 Artifacts by Level.**

Types	Zone/Level					Total
	Z1L1	Z1L2	Z2L3	Z2L4	Z3L5	
Bottle/Jar	2	2		2		6
Brick	2	2		7		11
Can				1		1
Cartridge			1			1
Cinder	6					6
Coal	27	10	2			39
Ironstone					4	4
Lamp Glass				2		2
Linked Chain		1				1
Machinery Part		9		1		10
Nail	3	7	3	5	1	19
Redware					1	1
Slag		2				2
Unidentified		3			1	4
Whiteware	1			2		3
Window		2		5	1	8
Wood		3				3
Yellow ware				1		1
<b>Total</b>	<b>41</b>	<b>41</b>	<b>6</b>	<b>26</b>	<b>8</b>	<b>122</b>



**Figure 6-17. Ceramics from units: TU 2 A) Redware; B) Yellowware; C) Molded Ironstone; TU 5 D) Yellowware; TU 4 E) Yellowware; F-G) Whiteware.**

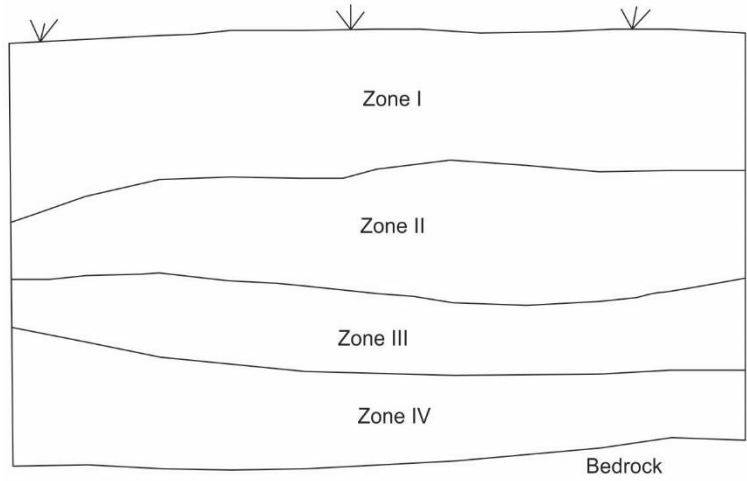
#### 6.1.4.2.1.3 Test Unit 4

Test Unit 4 was located east of the house and south of an outbuilding near Test Unit 2. The first zone of the units is the fill from the house demolition. Under that is either the original Ap zone or a midden from the house or outbuilding. Artifacts recovered included undecorated whiteware. The zones beneath this appear to be natural and the unit ends at bedrock.

Test Unit 4 consisted of four zones (Figure 6-18). Zone I extended from surface to 20 cmbs. It consisted of 10YR2/3 very dark grayish brown silty clay loam. Zone II extended from 20 cmbs to 33 cmbs and consisted of 10YR4/4 dark yellowish brown silty clay loam. Zone III extended from 33 cmbs to 49 cmbs and consisted of 10YR3/2 very dark grayish brown silty clay loam. Zone IV extended from 49 cmbs to 55 cmbs and consisted of 10YR3/2 very dark grayish brown clay loam with gravel.

One hundred and twenty-one artifacts were recovered from Test Unit 4 (Table 6-4). Eighty artifacts were recovered from Zone I and forty were recovered from Zone II (Table 6-5). One artifact was recovered from the east wall. In Table 6-5 levels 1 through 3 are in Zone I and level 4 and 5 are in Zone II. No artifacts were recovered from Zones III and IV. Zone I artifacts included 21 cut nails, 24 wire nails, eight bottle/jar fragments, one battery and one belt buckle. Zone II artifacts included eight cut nails and one wire nail, two pieces of decorated whiteware, three pieces of transfer printed earthenware, and one piece of decorated yellow ware.

### Test Unit 4 West Wall Profile



Zone I 10YR2/3 Very Dark Grayish Brown Silty Clay Loam  
 Zone II 10YR4/4 Dark Yellowish Brown Silty Clay Loam  
 Zone III 10YR3/2 Very Dark Brown Silty Clay Loam  
 Zone IV 10YR3/2 Very Dark Brown Silty Clay Loam with Gravel



**Figure 6-18. Test Unit 4 West Wall Profile.**

**Table 6-4. Test Unit 4 Artifacts.**

Functional Group	Count	Percent
Activities	1	0.8
Architecture	73	60.3
Clothing	1	0.8
Fuel	6	5.0
Furniture	4	3.3
Kitchen	25	20.7
Other	11	9.1
<b>Total</b>	<b>121</b>	<b>100.0</b>

**Table 6-5. Test Unit 4 Artifacts by Level.**

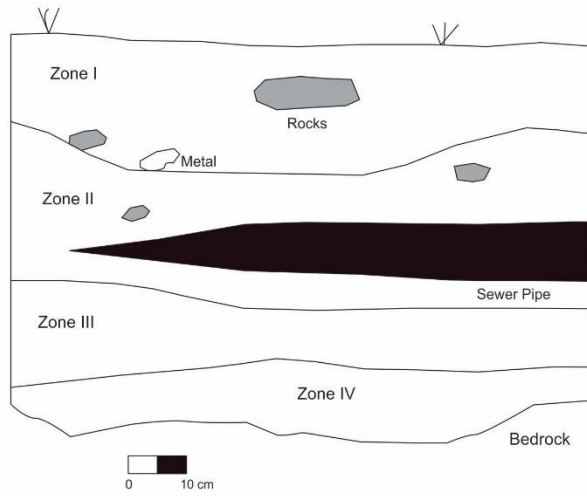
Types	Zone/Level					East Wall	Total
	Z1L1	Z1L2	Z1L3	Z2L4	Z2L5		
Battery		1					1
Belt buckle		1					1
Bottle/Jar	5	3		3			11
Brick	4	1		2			7
Charcoal				1			1
Cinder			1		3		4
Concrete	1						1
Copper				5			5
Lighting/Electrical	1						1
Machinery Part						1	1
Nail	40	2	3	7	2		54
Refined Earthenware				3			3
Slag	1						1
Stoneware			1				1
Table Glass	1						1
Terra Cotta		1	2				3
Unidentified	2	1	1	1			5
Whiteware				5	3		8
Window	6			2	2		10
Wire		1					1
Yellow ware					1		1
<b>Total</b>	<b>61</b>	<b>11</b>	<b>8</b>	<b>29</b>	<b>11</b>	<b>1</b>	<b>121</b>

#### 6.1.4.2.1.4 Test Unit 5

Test Unit 5 consisted of the fill zone and then a utility pipe (Figure 6-19 and Figure 6-20). Most of the soil was disturbed below the pipe. Test Unit 5 consisted of four zones. Zone I extended from the surface to about 20 cmbs and consisted of a 10YR3/2 very dark grayish brown silty clay loam with gravel. Zone I was the house demolition fill. Zone II extends from 20 cmbs to 42 cmbs and consists of a 10YR4/3 brown silty clay loam. Zone II contained a sewer pipe and is a relatively modern disturbance. Zone III extends from 42 cmbs to 52 cmbs and consists of 10YR3/3 dark brown silty clay with gravel. Zone IV extends from 52 cmbs to 57 cmbs and bedrock and consists of 10YR3/3 dark brown silty clay with gravel. Zones III and IV contained artifacts and may have been disturbed by the sewer pipe construction.

Thirteen hundred and seventy-four historic artifacts and seven prehistoric artifacts were recovered from Test Unit 5 (Table 6-6 and Table 6-7). Most of the artifacts were from the Fuel Group (Table 6-6). Cinder (n=775) and coal (n=183) were the most numerous types followed by nails (n=67), and Bottle glass (n=56) (Table 6-6). Twenty-nine nails were recovered from Zone IV (Table 6-7) and consisted of 20 cut nails three unidentified nails and six wire nails. The prehistoric assemblage consisted of four size grade 1 secondary flakes, two size grade 2 chunk/shatter, and one size grade 0 chunk/shatter. Three

### Test Unit 5 North Wall Profile



- Zone I 10YR3/2 Very Dark Grayish Brown Silty Clay Loam with Gravel
- Zone II 10YR4/3 Brown Silty Clay Loam
- Zone III 10YR3/3 Dark Brown Silty Clay with Gravel
- Zone IV 10YR3/3 Dark Brown Silty Clay with Gravel

**Figure 6-19. Test Unit 5 North Wall Profile.**



**Figure 6-20. Test Unit 5 North Profile.**

**Table 6-6. Test Unit 5 Functional Group Artifacts.**

Functional Group	Count	Percent
Activities	2	0.14
Architecture	114	8.3
Arms	1	0.07
Clothing	2	0.14
Fuel	987	71.8
Furniture	22	1.6
Kitchen	85	6.2
Other	159	11.6
Personal	2	0.14
<b>Total</b>	<b>1374</b>	<b>100.0</b>

**Table 6-7. Test Unit 5 Artifact Types by Level.**

Types	Zones/Levels						East Wall	Count
	Z1L1	Z1L2	Z2L3	Z2L4	Z3L20	Z4L21		
Barbed Wire	1						4	5
Bottle Cap		1						1
Bottle/Jar	4	39	7		1	5		56
Brick	3	6	1		1	2		13
Burned/Melted	8	22	1					31
Buttons		2						2
Cartridge				1				1
Charcoal					1			1
Cinder	54	271	316	100	34			775
Coal	133	6	28	10	1	5		183
Faunal					6	1		7
Fossil Conglomerates						4		4
Lighting/Electrical	1	8	4					13
Machinery Part		2						2
Mortar					1			1
Nail	1	10	11	5	11	29		67
Pull Tab	1	1	1					3
Refined Earthenware						2		2
Shell		1						1
Slag	8	15			3	2		28
Table Glass	1	5	2					8
Terra Cotta			5	1		3		9
Toys		2						2

Types	Zones/Levels						East Wall	Count
	Z1L1	Z1L2	Z2L3	Z2L4	Z3L20	Z4L21		
Unidentified	4	25	19	3	17	55		123
Whiteware	2	1		1		1		5
Window	4		2	1	6	12		25
Wire		3						3
Yellow ware					1	2		3
<b>Total</b>	<b>225</b>	<b>420</b>	<b>397</b>	<b>122</b>	<b>83</b>	<b>123</b>	<b>4</b>	<b>1374</b>

pieces of debitage were recovered from Zone I, and one each from Zone II, Zone III, and Zone IV. Pull tabs were recovered from Zones I and II.

#### 6.1.4.2.1.5 Test Unit 6

The Test Unit 6 (.5 x .5 m) was located within the house. The profile consisted of three zones (Figure 6-21 and Figure 6-22). Zone I extended from the surface to 17 cmbs and consisted of a 10YR3/2 very dark grayish brown silty clay loam. Artifacts were recovered from this zone. Zone I is the disturbed or fill zone, which is present over the entire site. Zone II extended from 17 cmbs to 25 cmbs and consisted of a 10YR3/3 dark brown silty clay. Architectural debris (mortar, brick, rock, nails) was in the top of the zone. Zone II may be a truncated intact midden zone from the house area or it may be a disturbed zone from the house demolition. Zone III extended from 25 cmbs to 48 cmbs and consisted of 10YR3/2 very dark grayish brown silty clay, which was wetter at the base. Bedrock was 48 cm below surface. Zone III is sterile subsoil.

Forty-five artifacts were recovered from Test Unit 6 (Table 6-8). The most numerous artifacts were from the fuel group (n=23) followed by the architecture group (n=17). The nails, which were recovered from Zone 2, consisted of four cut nails and four wire nails.

#### 6.1.4.2.2 Shovel Test Probes

Three shovel probes were excavated to locate evidence of intact subsurface features. No evidence of intact subsurface features were located. Zone I from the probes is the disturbed or fill zone.

##### 6.1.4.2.2.1 STP x1

STP x1 consisted of two zones (Figure 6-23). Zone I extended from surface to 37 cmbs and consisted of 10YR3/2 dark grayish brown silty clay loam. Zone I was the house demolition fill. Zone II extended from 37 cmbs to 50 cmbs and consisted of 10YR2/2 very dark brown silty clay loam. The STP was cored to 66 cmbs, when bedrock was encountered. Zone II was very wet from 50 to 66 cmbs. Zone II was a sterile natural zone.

Twenty-seven historic artifacts were recovered from STP x1 and all were from Zone I (Table 6-9). The assemblage included 17 coal fragments, one bottle/jar body fragment, one cut nail, and one aqua glass bottle fragment from a toiletry related item.

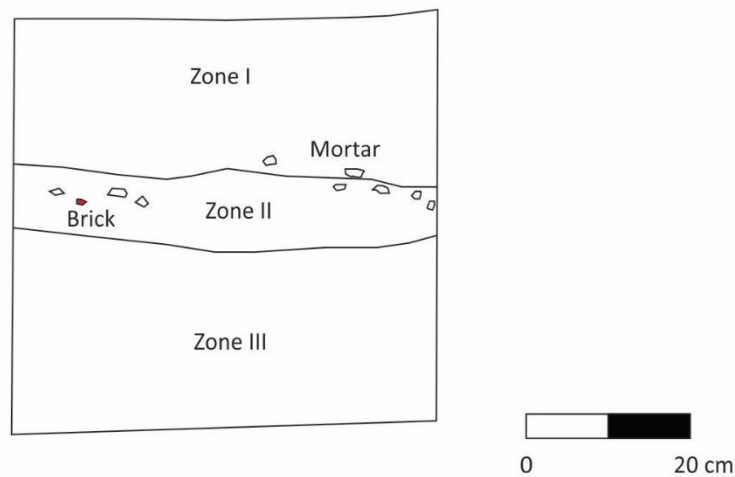
##### 6.1.4.2.2.2 STP x2

STP x2 consisted of four zones (Figure 6-23). Zone I extended from surface to 23 cmbs and consisted of 10YR3/2 very dark grayish brown silty clay loam. Zone I was the house demolition fill. Zone II extended from 23 cmbs to 42 cmbs and consisted of 10YR2/2 very dark brown silty clay loam. Zone II appears to



Figure 6-21. Test Unit 6 North Wall.

### Test Unit 6 North Wall Profile

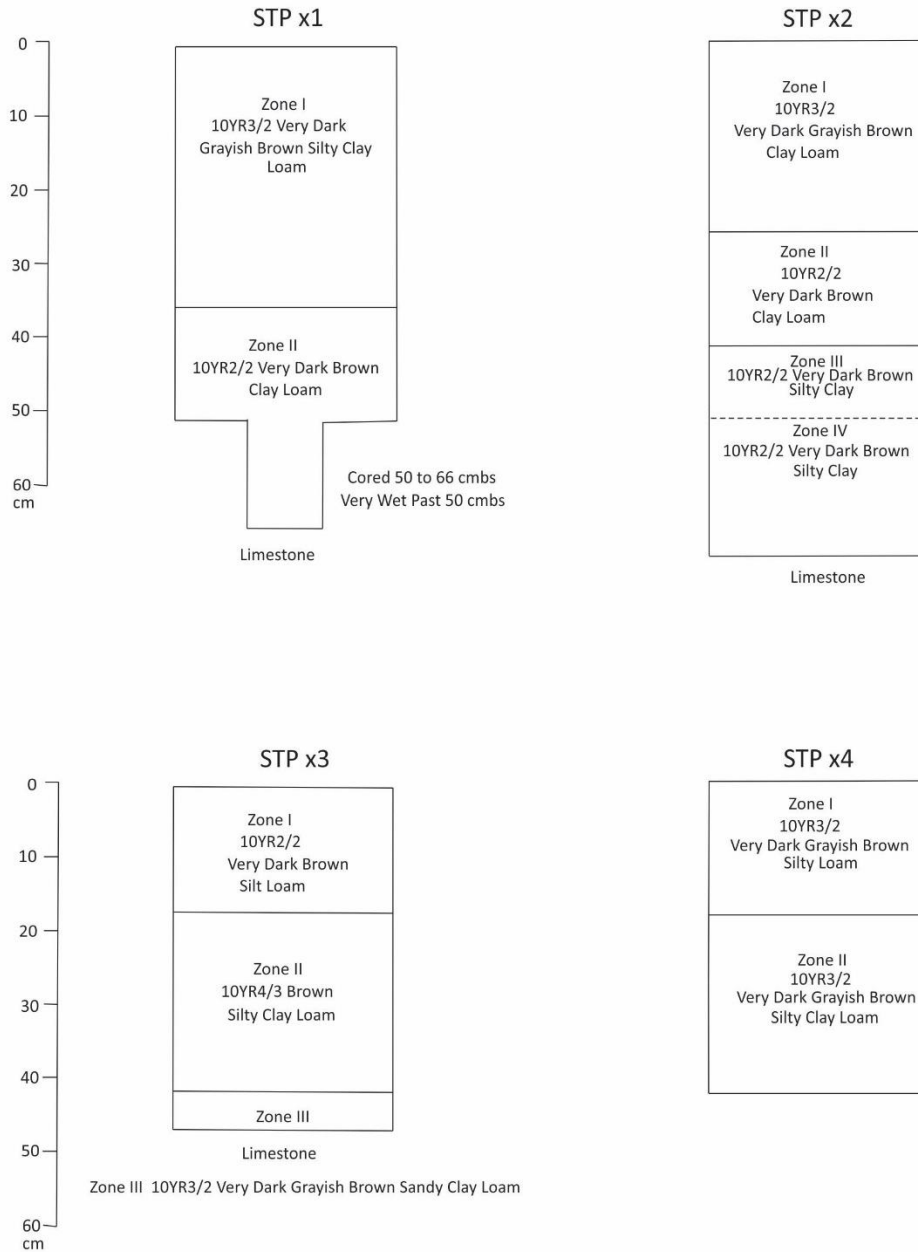


- Zone I 10YR3/2 Very Dark Grayish Brown Silty Clay Loam
- Zone II 10YR3/3 Dark Brown Silty Clay
- Zone III 10 YR #/2 Very Dark Grayish Brown Silty Clay

Figure 6-22. Test Unit 6 north Wall Profile.

**Table 6-8. Test Unit 6 Artifacts by Zone.**

Types	Zones		Count
	1	2	
Brick	1	8	9
Charcoal		4	4
Cinder	1		1
Coal	3	15	18
Ironstone		1	1
Nail		8	8
Pull Tab	1		1
Toys	1		1
Tube	1		1
Window		1	1
<b>Total</b>	<b>8</b>	<b>37</b>	<b>45</b>



**Figure 6-23. Phase II STP Profiles.**

**Table 6-9. Shovel Test Probe Artifacts.**

Unit	Types	Count
STP 1	Bottle/Jar	1
	Brick	1
	Charcoal	2
	Coal	17
	Nail	1
	Shell	3
	Toiletries	1
	Unidentified	1
STP 2	Bottle/Jar	4
	Coal	9
	Nail	1
	Whiteware	1
STP 3	Coal	17
	Lighting/Electrical	1
	Table Glass	1
<b>Total</b>		<b>61</b>

be a remnant of the original Ap zone. Zone III extended from 42 to 49 cmbs and consisted of a 10YR2/2 very dark brown silty clay loam. The break between Zone III and Zone IV was not distinct. Zone IV extended from 49 cmbs to 68 cmbs and consisted of a 10YR2/2 very dark brown silty clay loam. Zones III and IV appear to be sterile natural zones. Bedrock was at 68 cmbs.

Fifteen artifacts were recovered from STPx2 (Table 6-9, above). The artifacts included nine coal fragments, four bottle/jar body fragments of unidentified manufacture, one wire nail, and one piece of undecorated whiteware. Artifacts were recovered from Zones I and II. No artifacts from Zones III and IV.

#### 6.1.4.2.2.3 STP x3

STP x3 consisted of three zones (Figure 6-23, above). Zone I extended from surface to 17 cmbs and consisted of 10YR3/2 very dark grayish brown silty loam. Zone I is the house demolition fill. Zone II extended from 17 to 38 cmbs and consisted of a 10YR4/3 brown silty clay loam. Zone III extended from 38 to 45 cmbs and consisted of a 10YR3/2 very dark grayish brown sandy clay loam and was very wet. Zones II and III appear to be sterile natural zones.

Nineteen artifacts were recovered from STP x3 (Table 6-9, above). The assemblage consisted of 17 coal fragments, one glass lamp chimney fragment, and one table glass fragment of undetermined manufacture. All of the artifacts were recovered from Zone I.

#### 6.1.4.2.3 Summary

Four 1 x 1 meter test units, one .5 x .5 meter test unit and three shovel test probes were excavated on the historic component of site 15Me98. Most of the site was disturbed by the destruction of the house in the early 1980s. The only intact deposit was located in the adjacent units TU 2 and TU 4. Test units 1 and 5 were disturbed by either house demolition or utility line construction. Modern artifacts, such as pull

tabs, plastic soldiers, and gaming pieces, were recovered from Zone I, Test Unit I, and the surface of the backhoes house area. This indicates that these areas and zones were disturbed, or at least mixed. The excavations determined that the soil was shallow and often wet and not ideal conditions for cellars or pits.

### **6.1.4.3 Area B, Prehistoric Site**

The prehistoric component in Area B consists primarily of lithic debitage recovered from Test Unit 3 and from surface collection (Figure 6-24). Three biface fragments were recovered from the surface collection (Figure 6-25). No diagnostic material was recovered from Test Unit 3. No evidence of intact subsurface features was recovered. The site continues to the north. There is a slight knoll where the historic house (Me47) was located and prehistoric and historic artifacts densities increase towards the knoll.

#### *6.1.4.3.1 Test Units*

One test unit was excavated in Area B.

##### **6.1.4.3.1.1 Test Unit 3**

Test Unit 3 was located in the tobacco field in Area B (Figure 6-26). The profile for TU 3 consisted of two zones (Figure 6-27). Zone 1 was the plow zone and extended from the surface to between 30 and 35 cm below surface. The soil was a 10YR3/4 dark yellowish brown silty clay loam. Zone 2 was the subsoil and extended to 40 cm below surface, where the excavation stopped. The Zone 2 soil was a 10YR4/2 dark grayish brown silty clay. Forty-six prehistoric lithics were recovered from Test Unit 3 (Table 6-10 to 6-12). Forty-one were debitage, two were retouched unifaces, two were utilized unifaces and one was a retouched biface. Ten historic artifacts were recovered from TU 3. The historic assemblage consisted of charcoal (n=7), nail (n=1), stoneware (n=1), and whiteware (n=1). All of the artifacts were from Zone 1.

#### *6.1.4.3.2 Surface Collection*

A surface collection of the tobacco field yielded 19 lithics (Table 6-10, Table 6-11, Table 6-12). The artifacts consisted of three projectile point fragments, one drill fragment, 11 pieces of debitage, and four expedient unifacial tools. The prehistoric component extended outside the APE to the northwest. No prehistoric ceramics were observed nor collected. The point fragments are difficult to date but may be Late Woodland or Fort Ancient.

#### *6.1.4.3.3 Summary*

Phase II investigations resulted in the recovery of bifaces and numerous pieces of lithic debitage from Area B. The bifaces were recovered from the surface (Figure 6-25). No diagnostic material was recovered from the test unit or earlier Phase I shovel probes. The prehistoric ceramics recovered in Area C during the Phase I investigation appear to have been recovered from a disturbed context. No evidence of midden or other features was recovered from Test Unit 3. St. Genevieve and St. Louis Chert accounted for 81.2 percent of the raw material for debitage and 84.6 percent for the tools.

### **6.1.4.4 Area C, Prehistoric Site**

Three prehistoric sherds (which mended together) were recovered from STP 1, along with a container glass fragment, in Area C (Figure 6-28). The soil profiles from the area suggest that the soil is disturbed, perhaps by earlier road construction.

#### *6.1.4.4.1 Shovel Test Probes*

##### **6.1.4.4.1.1 Shovel Test Probe x4**

Shovel Test Probe x4 was located in the southwest part of the site in Area C. The STP is near STP 1 from the Phase I investigations. The profile of the probe consisted of two zones. Zone 1 was a 10YR3/2 dark brown silty loam and extended from the surface to 17 cm below surface. Zone 2 was a 10YR3/2 dark brown silty clay loam and extended from 17 to 40 cm below surface. No artifacts were recovered. The soil and profile were similar to the Udorthents soil in Area A.

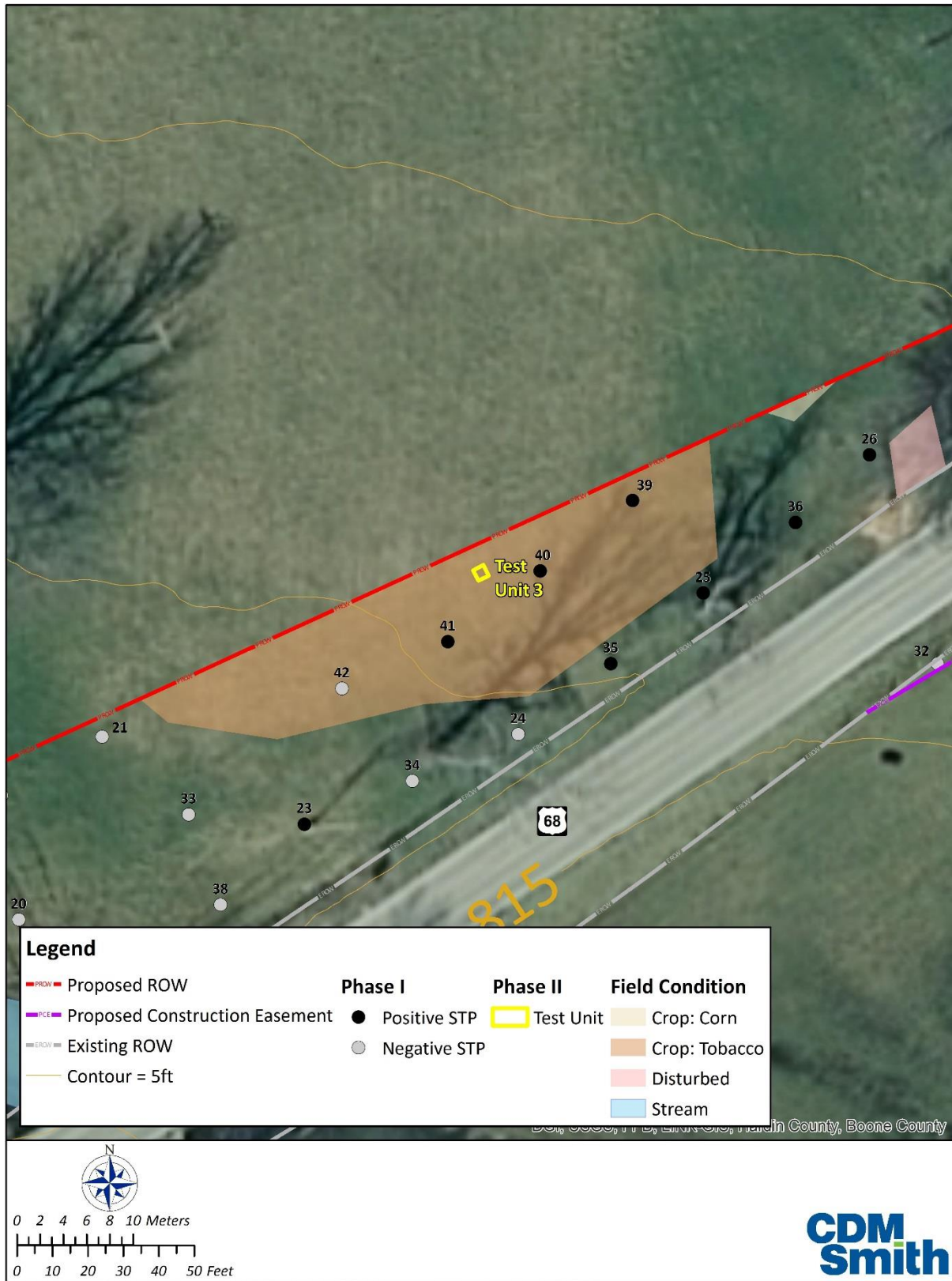


Figure 6-24. Site Map Area B, Prehistoric Site.

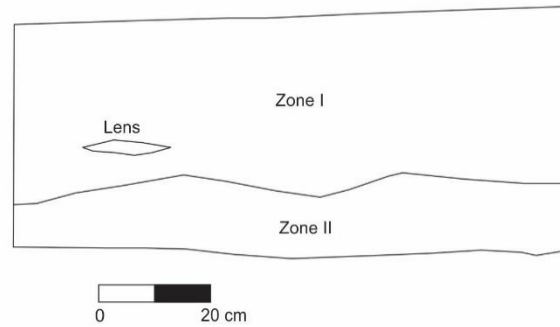


Figure 6-25. Bifaces from Surface Collection Area B.



Figure 6-26. Test Unit 3 East Wall Profile.

## Test Unit 3 East Wall Profile



Zone I 10YR3/4 Dark Yellowish Brown Sandy Clay Loam

Zone II 10YR4/4 Dark Yellowish Brown Sandy Clay

Lens 10YR4/2 Dark Grayish Brown Sandy Clay Loam

**Figure 6-27. Test Unit 3 East Wall Profile.**

**Table 6-10. Area B Lithics.**

Unit	Subtype	Subtype 2	TU 3			Surface Collection	Total
			Level 1, Zone I	Level 2, Zone I	Level 3, Zone I		
Tobacco Field	Bifacial	Biface, Distal				1	1
		Biface, Distal and MidSection				1	1
		Biface, Proximal				1	1
		Drill				1	1
	Debitage	(blank)				11	11
	Uniface	Retouched				1	1
		Utilized				3	3
TU 3	Bifacial	Retouched	1				1
	Debitage	(blank)	12	23	6		41
	Uniface	Retouched		1	1		2
		Utilized	1	1			2
<b>Total</b>			<b>14</b>	<b>25</b>	<b>7</b>	<b>19</b>	<b>65</b>

**Table 6-11. Area B Lithics by Size Grade and Raw Material.**

Unit	Subtype	Raw Material	Deb SG				Total
			0	1	2	3	
Tobacco Field	Debitage	gray-white banded		1	1		2
		St. Genevieve		2		1	3
		St. Louis		3	2		5
		Unidentified				1	1
	Uniface	St. Genevieve			1		1
		St. Louis			1	2	3
TU 3	Debitage	Boyle		3			3
		Local		2	1		3
		St. Genevieve		12	2	1	15
		St. Louis	1	18	1		20
	Uniface	Local			1		1
		St. Louis		2			2
		Unidentified			1		1
<b>Total</b>			<b>1</b>	<b>43</b>	<b>11</b>	<b>5</b>	<b>60</b>

**Table 6-12. Area B Tool Raw Material.**

Unit	Subtype 2	Raw Material				Total
		Local	St. Genevieve	St. Louis	Unidentified	
Tobacco Field	Biface, Distal		1			1
	Biface, Distal and MidSection		1			1
	Biface, Proximal		1			1
	Drill		1			1
	Retouched				1	1
	Utilized			1	2	
<i>Tobacco Field Total</i>			5	3		8
TU 3	Retouched	1	1		1	3
	Utilized			2		2
<i>TU 3 Total</i>		1	1	2	1	5
<b>Total</b>		<b>1</b>	<b>6</b>	<b>5</b>	<b>1</b>	<b>13</b>

Figure 6-28. Site Map Area C, Prehistoric Site.

### 6.1.4.5 Mechanical Excavations

The mechanical excavations at Site 15Me98 consisted the excavation of a 4.7 meter trench and the stripping of an area at the house location to uncover house and chimney foundations. The excavations were carried out by the KYTC with a backhoe with a 3 foot wide smooth bucket.

#### 6.1.4.5.1 Trench A

The house at Site 15Me98 was demolished and buried in an area approximately 10 square meters. The depth of the pit in the trench was 52 cm, which was to bedrock. Trench A was excavated to locate the edge of the debris pit and to see the natural stratigraphy. The Fill area in the Trench A profile (Figure 6-29 and Figure 6-30) has a distinct break. The area in the center of the profile with the ash and charcoal may be the result of backfilling the pit. No artifacts were removed from the trench.

#### 6.1.4.5.2 Stripping House Area

The second area that was mechanically excavated was where the house stood. The area stripped was 88 square meters and the depth to the foundation stones was about 20 cm. The area was excavated with shovels and trowels to subsoil. No evidence of subsurface features was located. The foundations consisted of one or two courses (Figure 6-31 and Figure 6-32). The chimney had two or more courses in places, but no evidence of other features or ash. The western house foundation may have been destroyed by the house demolition and the excavation of the debris pit. Part of the debris pit was uncovered in the northwest part of the stripped area (Figure 6-33).

Six hundred and ten artifacts were recovered from the backhoe area (Table 6-13 and Table 6-14). The assemblage included architecture group (n=146), fuel group (n=190), kitchen group (n=190), and personal; (n=13). The assemblage was mixed temporally with cut nails, plastic toy soldiers, and pull tabs (Figure 6-34).

The foundation remains shows a central chimney which matched with the photographs from the National Register form (Figure 6-35). The house foundation to the west appears to have been destroyed during the house demolition. The foundation to the north was outside the Right-of-Way and APE.

Faunal material recovered from backhoe excavations was recovered from disturbed context and was not included in the faunal analysis.



Figure 6-29. Trench A West Profile.

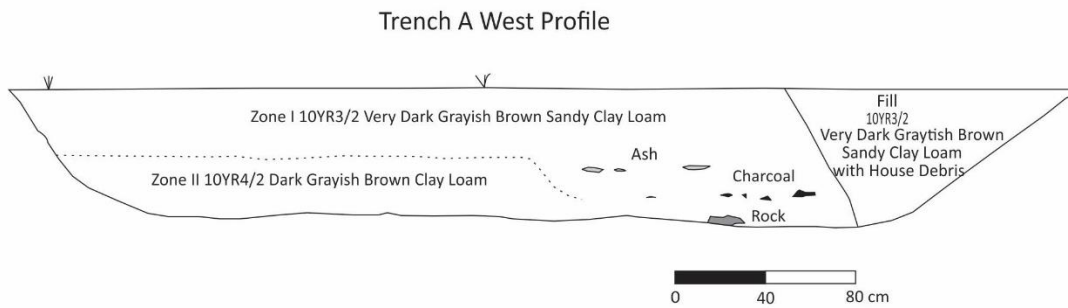


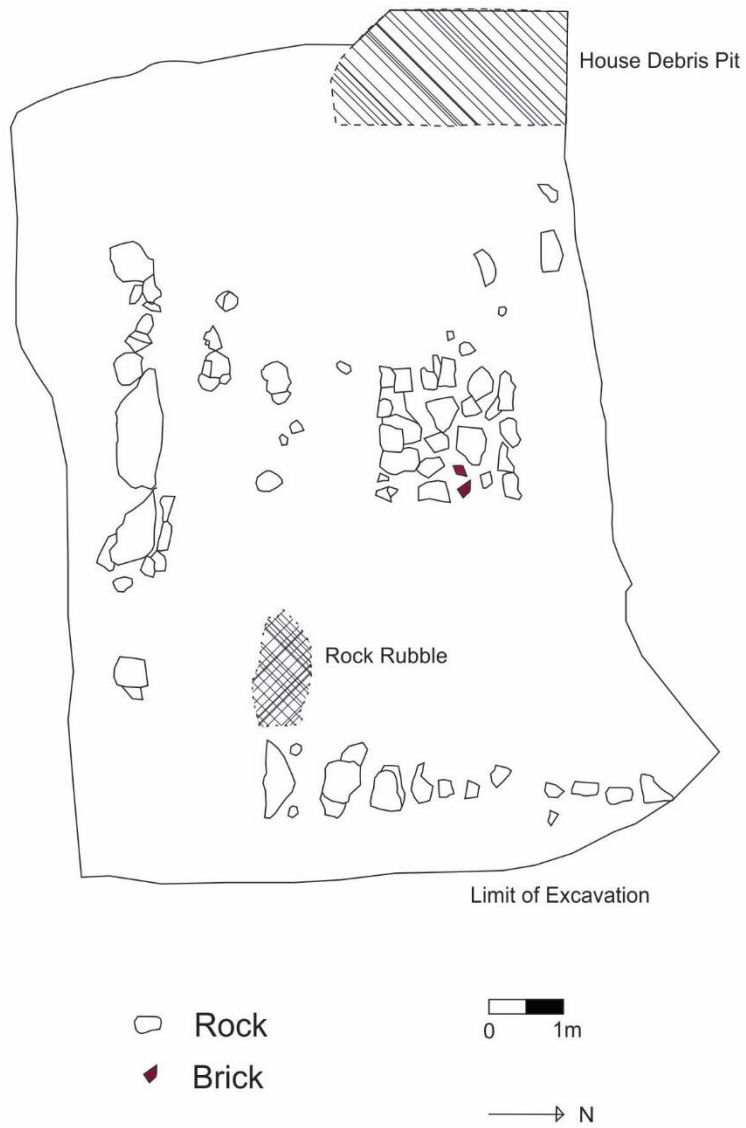
Figure 6-30. Trench A West Profile.



Figure 6-31. House Foundation.



Figure 6-32. Chimney Foundation.



**Figure 6-33. House Foundation Plan.**

**Table 6-13. Functional Group Artifacts from Backhoe Area.**

<b>Functional Group</b>	<b>Count</b>
Architecture	<b>146</b>
Clothing	<b>3</b>
Fuel	<b>190</b>
Furniture	<b>12</b>
Kitchen	<b>190</b>
Other	<b>56</b>
Personal	<b>13</b>
<b>Total</b>	<b>610</b>

**Table 6-14. Artifacts from Backhoe Area.**

<b>Artifact Type</b>	<b>Count</b>
Bead	<b>1</b>
Bottle Cap	<b>3</b>
Bottle/Jar	<b>59</b>
Brick	<b>7</b>
Buttons	<b>3</b>
Coal	<b>190</b>
Eyeglass arm	<b>1</b>
Faunal	<b>94</b>
Fossils	<b>2</b>
Ironstone	<b>2</b>
Jar Lid	<b>1</b>
Lighting/Electrical	<b>12</b>
Marble	<b>2</b>
Modern	<b>20</b>
Mortar	<b>20</b>
Nail	<b>65</b>
Pipe	<b>1</b>
Porcelain	<b>2</b>
Pull Tab	<b>5</b>
Roofing	<b>2</b>
Spike	<b>1</b>
Stoneware	<b>1</b>
Table Glass	<b>10</b>
Tile	<b>1</b>
Toiletries	<b>8</b>
Unidentified	<b>27</b>

Artifact Type	Count
Watch links	1
Whiteware	17
Window	50
Wire	2
<b>Total</b>	<b>610</b>

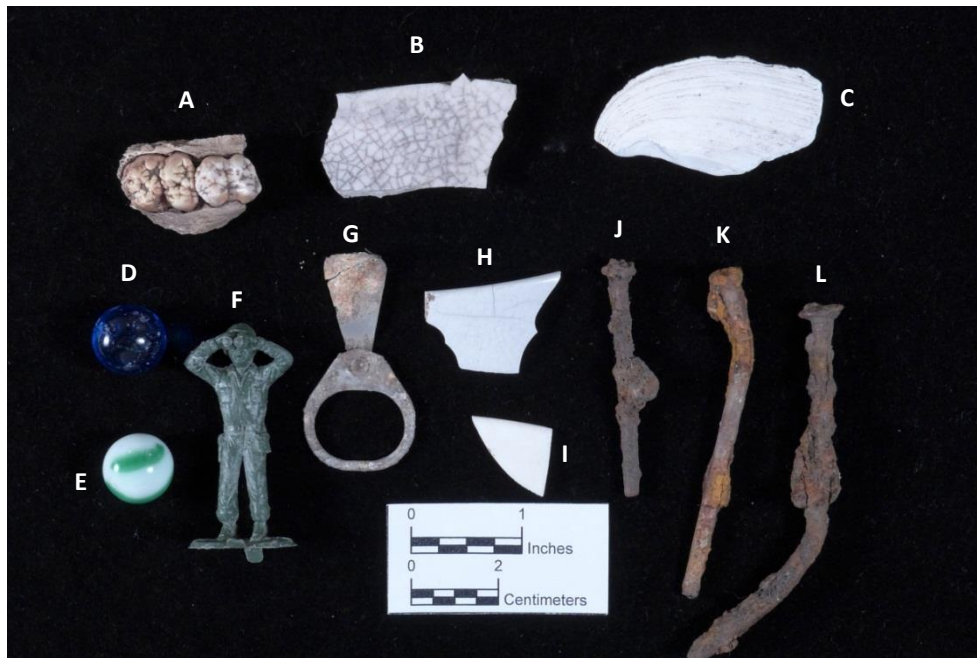


Figure 6-34. Sample of Artifacts from House Foundation. A) Pig Tooth; B) Whiteware; C) Shell; D-E) Marbles; F) Toy Soldier; G) Pull Tab; H-I) Whiteware; J-K) Cut Nails; L) Wire Nail.

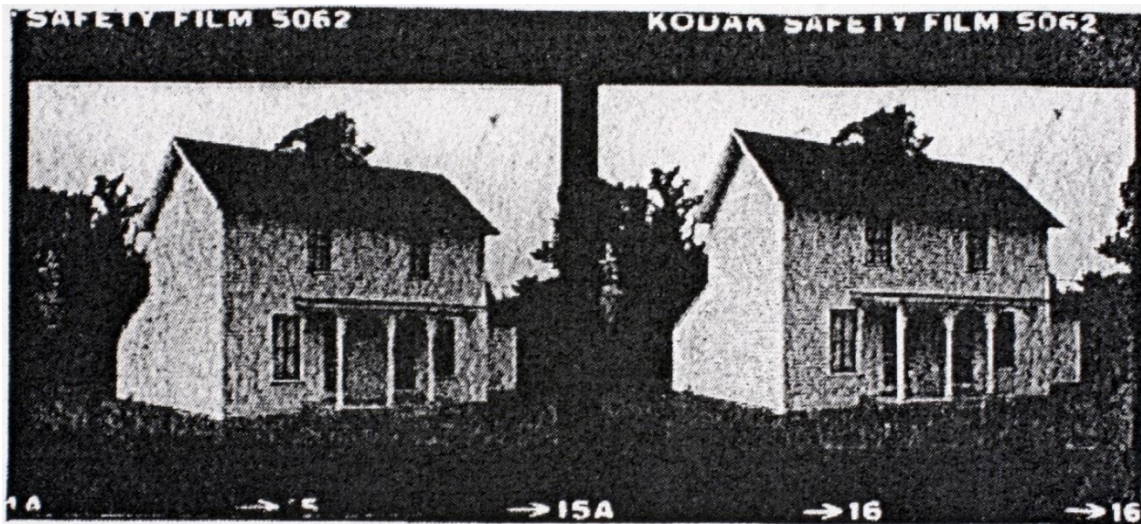


Figure 6-35. Photograph of ME46, 15Me98.

### 6.1.5 Faunal Material

By Bruce L. Manzano, University of Kentucky Program for Archaeological Research

Two hundred and seventy-seven faunal specimens were recovered from 15Me98 (Table 6-15). Large mammals was the largest category with 140 specimens and pigs had the highest number of specimens for individual species. There were 16 chicken specimens, four cow specimens and two turkey specimens. No fish was recovered from the site. One hundred and fourteen specimens were recovered from Test Unit 2 and 148 were recovered from Test Unit 4.

The amount of pig specimens indicates (Table 6-16) that it was a major food source which is common in the region (Hilliard 1972). The number of pig elements indicates that the animals were butchered on site. The variability in elements suggests that most of the available pig meat was consumed.

The presence of gnawing (Table 6-17) and weathering (Table 6-18) on some of the specimens indicates that some of the specimens were deposited on the surface rather than buried. Nine of the 10 weathered specimens and 59 of the 61 gnawed specimens were from test units 2 and 4.

**Table 6-15. Faunal Material.**

Species	Total
cf. Cardinal	1
cf. Chicken	3
cf. Pig	3
cf. Turkey	2
cf. White-tailed deer	2
Chicken	16
Cow	4
Duck	1
Large Bird	8
Large Mammal	140
Pig	59
Rabbit	2
Rat, old world	3
Sheep	2
Sheep/goat	1
Turkey	2
UID Bird	10
UID Mammal	13
UID Vertebrate	4
White-tailed deer	1
<b>Total</b>	<b>277</b>

**Table 6-16. Pig Elements.**

<b>Element</b>	<b>Total</b>
canine, lower	2
canine, upper	1
femur	7
fibula	1
humerus	2
incisor, 1st lower	1
incisor, 1st or 2nd upper	1
incisor, 1st upper	1
incisor, 2nd lower	1
incisor, 2nd upper	1
incisor, lower	1
mandible	1
mandible	1
maxilla	1
metacarpal, 4th	3
metapodal	1
metatarsal, 3rd	7
metatarsal, 4th	1
molar	1
molar, 1st lower permanent	1
molar, 1st or 2nd upper permanent	1
molar, 3rd lower	1
phalange, 1st	1
phalange, 2nd	3
premolar, 4th lower deciduous	1
radius	1
scapula	1
skull	4
skull	3
tibia	4
ulna	2
vertebra, thoracic	1
<b>Total</b>	<b>59</b>

**Table 6-17. Gnawed Faunal Remains.**

Species	Gnawed		Total
	Canid	Human?	
cf. Pig	1		<b>1</b>
cf. White-tailed deer	2		<b>2</b>
Chicken	1		<b>1</b>
Large Mammal	38		<b>38</b>
Pig	18		<b>18</b>
Rabbit		1	<b>1</b>
Sheep	1		<b>1</b>
<b>Total</b>	<b>61</b>	<b>1</b>	<b>62</b>

**Table 6-18. Weathered Faunal Remains**

Species	Weathered		Total
	mw	w	
Cow		1	<b>1</b>
Large Mammal		3	<b>3</b>
Pig	1	5	<b>6</b>
<b>Total</b>	<b>1</b>	<b>9</b>	<b>10</b>

### 6.1.6 Prehistoric Interpretation

Prehistoric material was recovered from all three areas (A, B, and C). Area A was the historic house site and all of the prehistoric material was recovered from historic contexts. Area B consisted primarily of four prehistoric sherds recovered during the Phase I investigations. All of the sherds were recovered from STP 1 and all refit together. Three of the sherds were large enough to be analyzed. They were recovered with historic bottle glass. The proximity of the road and creek suggests the sherds were deposited by either alluvial activity, colluvial activity, or from road construction. Based on surface collection Area C extends to the north and perhaps northwest of the APE. Biface fragments were recovered from the surface, but no diagnostic material was recovered from Test Unit 3. The portion of the prehistoric site within the APE contained a limited amount of cultural material. Historic material was also recovered. A historic house (Me47) was located at the prehistoric site outside of the APE. No evidence of intact prehistoric midden or features was recovered from the test unit or STPs. Based on the biface fragments recovered from the surface the prehistoric component may date to the Woodland period. No prehistoric ceramics were recovered from the surface collection or the test unit excavation.

### 6.1.7 Historic Interpretation

A farmhouse once occupied part of site 15Me98. It was documented in a Kentucky Historic Resources Inventory in 1981 and given the historic structure site number ME46. The house was described as being built in the 1850s with a two-story frame, double-cell with a central brick chimney. There was a shed addition to the north and a one story addition to the east. The second story windows in the front and rear were original 6/6 sash. The porch was Italianate with Greek mantles and a double panel door. There was no mention on the form about extant outbuilding or related structures. A note to the form

stated the house burned in 1986, but this actually referred to ME47. ME47 is located to the northeast of ME46 and is also a two story frame double-cell central brick chimney. It also dates to the 1850s. ME47 burned around 1986. According to informants, the house ME46 was destroyed during the early 1980s.

A structure is shown in the vicinity of 15Me98 (ME 46) on a map from 1876 (Figure 6-36). According to the map, there appears to be a house and outbuildings attributed to J. L. Burke. The general location of the house is shown on several USGS maps, beginning with a USGS 15' map from 1905 (Figure 6-37) and on several USGS 7.5' from 1952 to 1987 (Figure 6-38). However, no outbuildings are shown on these maps.

The farmhouse and its outbuildings are shown on several aerial photographs from 1950 to 1974 (Figure 6-39). The house appears in these photographs to be located in the northern part of the property along the right-of-way line. Several outbuildings are also visible in the aerial photographs. One outbuilding is located at the south end of the property along US 68; it is most visible in the 1950 photograph. The other outbuildings to the southwest of the house appear to be outside the right-of-way. Based on the condition of the farm in the aerial photographs, the farm appears to have been occupied until the late twentieth century.

The Phase II investigations revealed that the site was disturbed by the house demolition. A large pit was dug to bedrock and the house debris was dozed in. The excavated material was then spread around the site. The only intact deposits were located in Test Units 2 and 4. Zone I from units 2 and 4 consisted of house demolition fill. The material recovered from Zone I was mixed chronologically with cut nails, wire nails ironstone, redware, undecorated whiteware, plastic game pieces and pull tabs. Pull tabs were also recovered from the base of Test Unit I and from the backhoes house area. A plastic toy soldier was also recovered from the house area.

Zones II and III in Test Unit 2 and Zone II in Test Unit 4 were intact midden. Thirty-two artifacts were recovered from Zone II in TU 2 and eight artifacts from Zone III. There is a possibility of a natural or cultural disturbance noted in the profile which could suggest that the material from Zone III originated in Zone II. The artifacts from Zone II included cut nails, yellow ware and undecorated whiteware. This suggests that the midden was formed during the second half of the nineteenth century. Zone II in Test Unit 4 was similar to the zone in Test unit 2. Zone II contained a total of 40 artifacts. It contained eight cut nails and a wire nail. The zone also included decorated and undecorated whiteware and yellow ware. Units 2 and 4 are adjacent and the Zone II midden is the same feature. Based on the faunal analysis, the Zone II feature was a sheet midden. The material was thrown out on the surface, possibly from the outbuilding, which may have been a detached kitchen.

Zone II in the other units are quite different. Zone II in Test Unit 6 contained four cut nails, four wire nails and a molded ironstone sherd. Test Unit 6 was located within the house. The zone may have been formed as midden accumulation during the house occupation or formed during the house demolition. In either case, the zone appeared to be mixed. All of the zones below Zone I in Test Unit 5 appear to be disturbed by utility line construction. Test Unit I consisted of house debris, which was covered by Zone I.

The stratigraphy at the house site was unusual. The bedrock was between 50 and 70 cmbs. During excavations the soil became very wet at between 40 and 50 cmbs. During at least one occasion the elderly resident had to be rescued by tractor during high water according to informants. It would not have been possible to dig cellars or storage pita in these conditions.

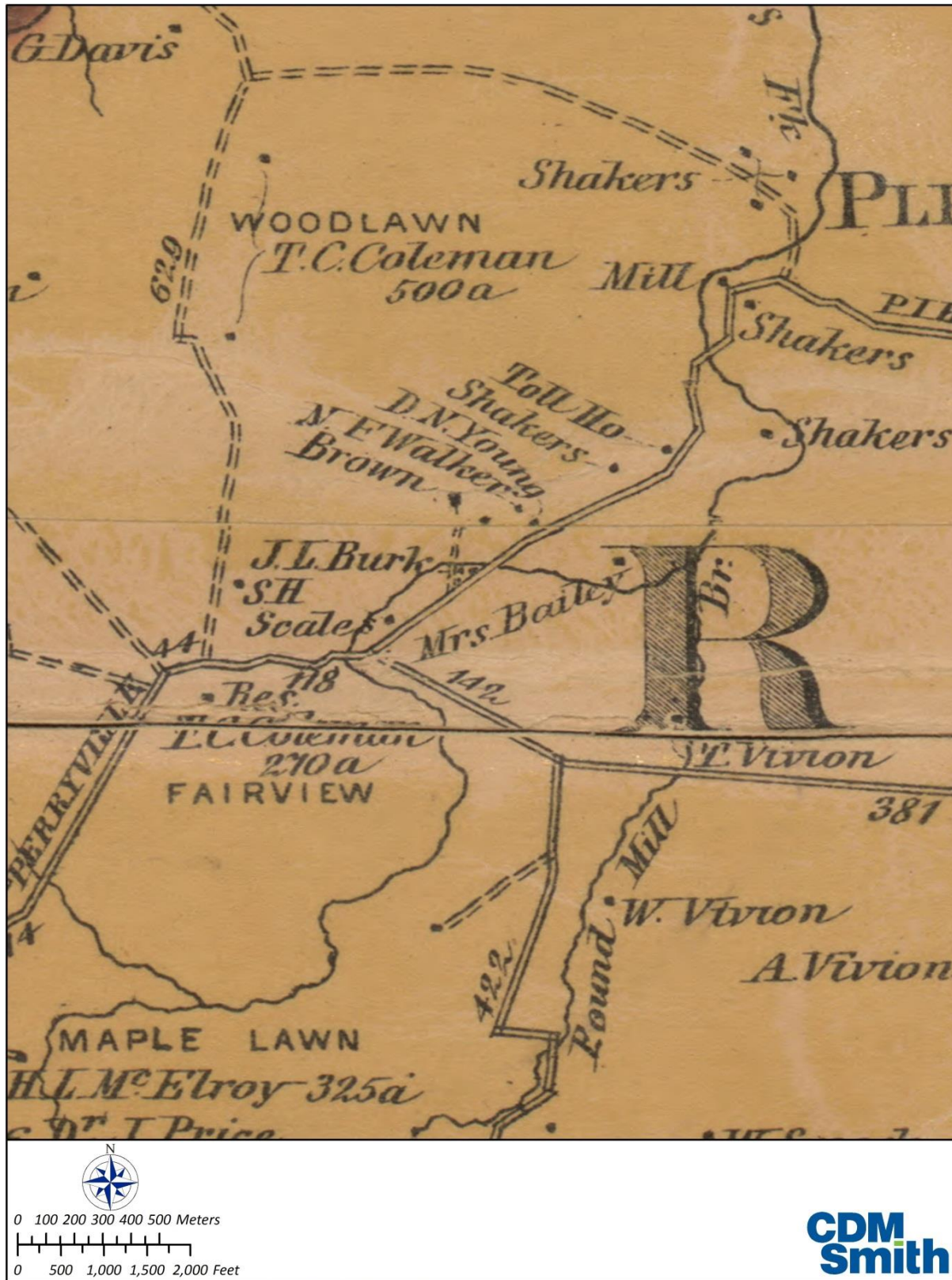


Figure 6-36. 1876 Beers Map, showing J.L. Burk farm (15Me98).

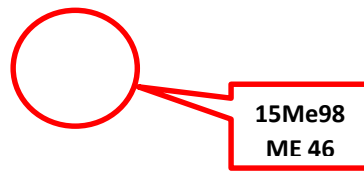


Figure 6-37. Historic USGS 15' Harrodsburg Quadrangle from 1905 showing 15Me98 (ME 46).

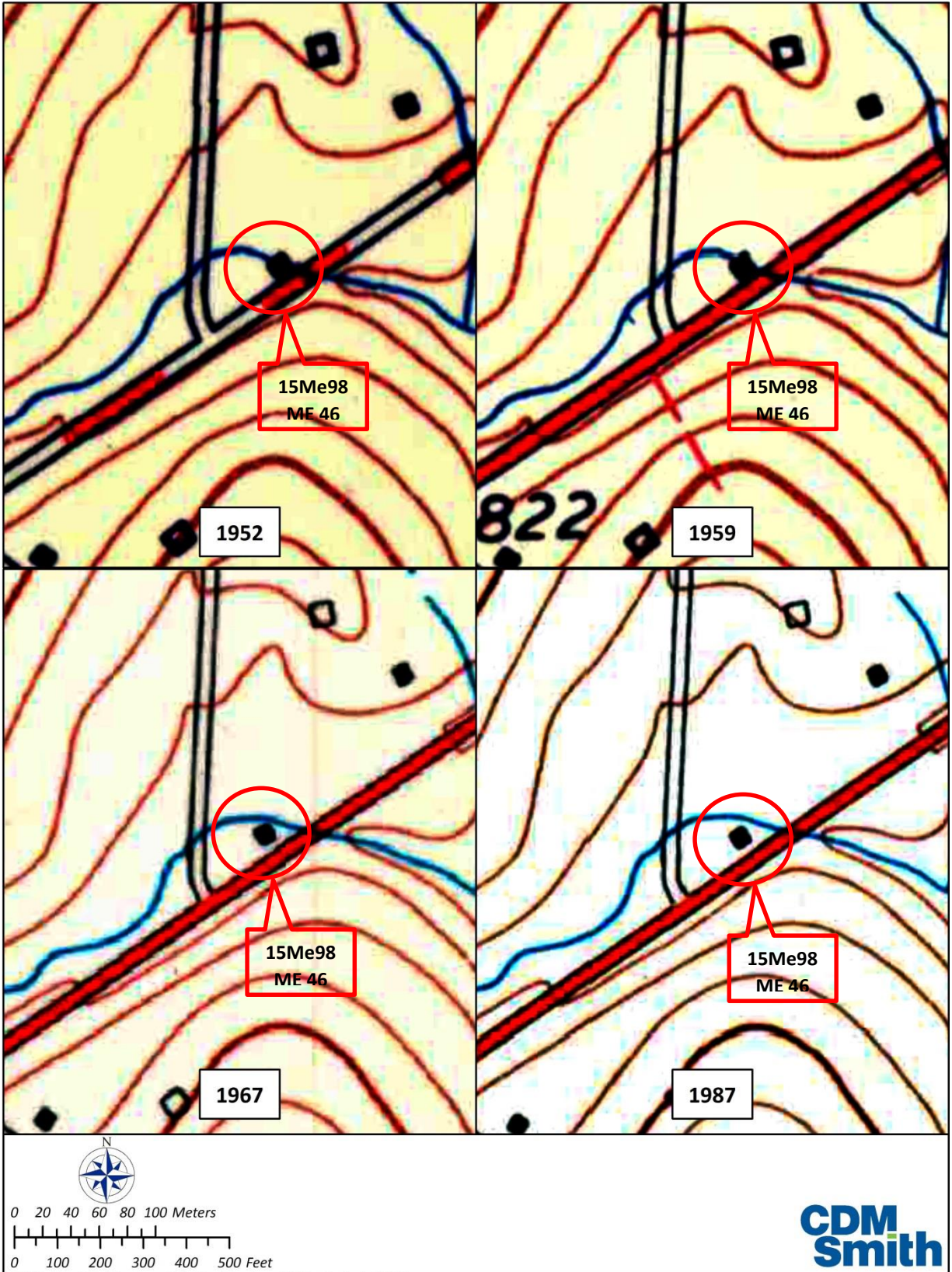


Figure 6-38. Historic USGS Harrodsburg 7.5' Quadrangles from 1952, 1959, 1967, and 1987 showing 15Me98 (ME 46).

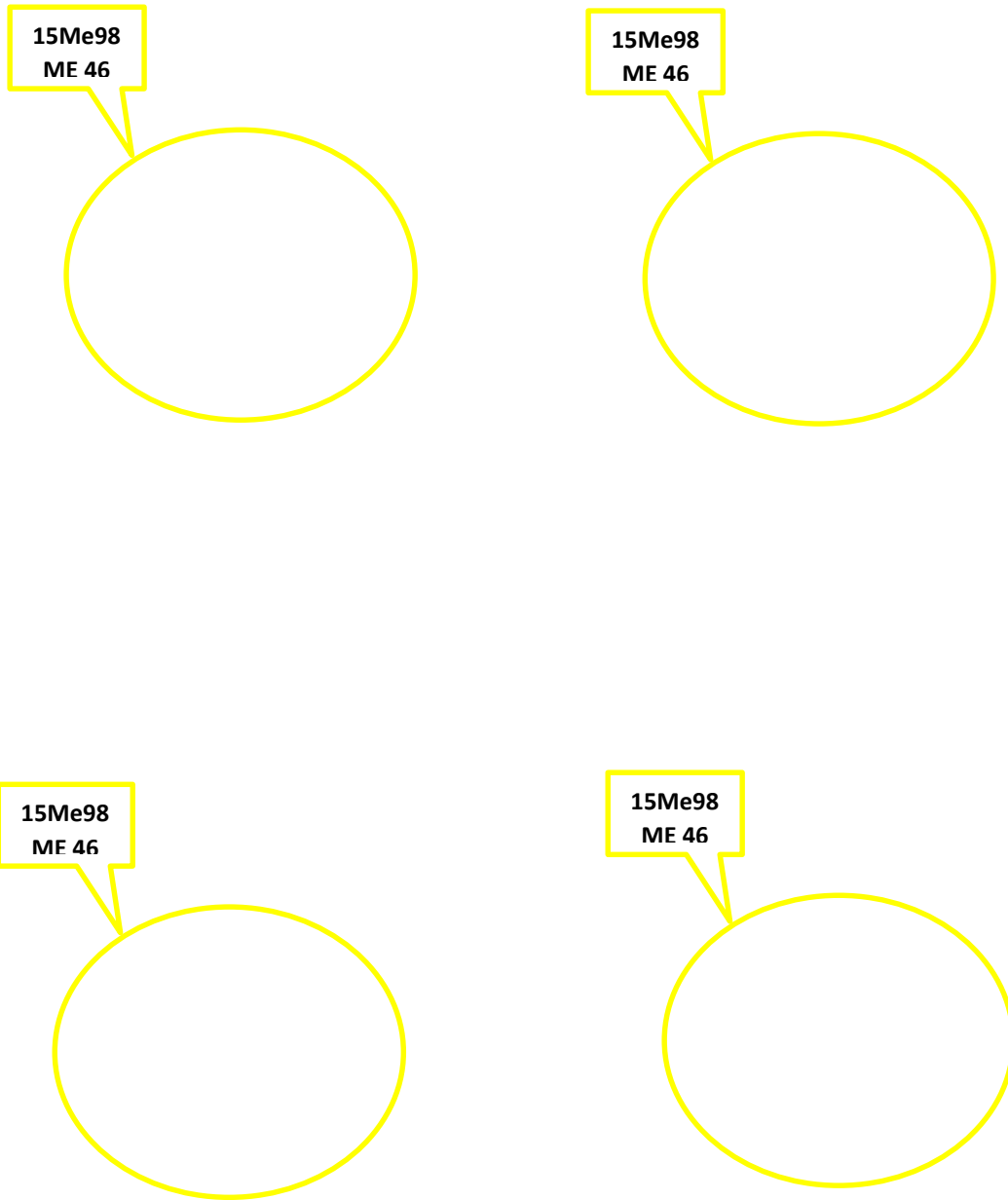


Figure 6-39. Historic Aerials from 1950, 1958, 1960, and 1974, Showing 15Me98 (ME 46).

### 6.1.7.1 Discussion

The historic component represents a historic farmstead that dates to between the 1850s and 1986. Historic artifacts and architectural analysis suggests the construction of the house to be in the 1850s. Most of the ceramics recovered were undecorated whiteware and ironstone which were more popular after the 1860s. Cut nails were recovered and are dated to the nineteenth century. Wire nails were also recovered and they date to the twentieth century. The house was occupied at least to the 1970s by renters. The aerial photographs indicate that the backyard and side yards were outside of the right-of-way. The aerial photographs also suggest that the farm was occupied into at least the 1970s.

Based on archaeological evidence and information of local informants, the house (Me46) was demolished by a bulldozer in the early 1980s. Investigations from the Phase I and Phase II located a large debris pit that contained material from the house. A large pit was dug to bedrock and the house debris was dozed in. The excavated material was then spread around the site. The only intact deposits were located in Test Units 2 and 4. It is unlikely that additional excavation of the deposits would provide additional information.

The prehistoric component consisted of a limited amount of cultural material and no evidence of intact midden or features. The site extended outside the APE and we were not able to evaluate the remainder of it.

Based on the significant disturbance of the historic component and limited intact deposits and the mixed nature of the assemblage and the lack of intact deposits and limited research potential of the prehistoric component, Site 15Me98 is determined to not be eligible for listing on the National Register of Historic Places. No further work is recommended.

### 6.1.8 National Register Eligibility

Site 15Me98 consists of a prehistoric and a historic component. The prehistoric component is a short term limited activity occupation dating to the between the Middle and Late Woodland. The limited artifact assemblage and lack of intact subsurface features indicates that the site has limited research potential. The association of prehistoric and historic artifacts indicates a lack of integrity for the prehistoric component. The historic component consists of a farmstead dating to between the 1850s and 1980s. Based on aerial photographs portions of the site to the rear of the house are outside the right-of-way. The area behind the house is usually where trash pits and privies are located. The depth of the bedrock and water table may have prevented the construction of such features. The house was bulldozed in the 1980s. The house debris was bulldozed into a pit and the site was covered with fill. The portion of the site within this project's APE has limited integrity and limited research potential. Therefore, Site 15Me98 has limited research potential and is not considered potentially eligible for listing on the NRHP under Criterion D.

### 6.1.9 Recommendations

No further archaeological work is recommended for site 15Me98.

## Section 7 -

# Recommendations and Summary

## Recommendations

### 7.1 Site 15Me98

Site 15Me98 consists of a prehistoric component and a historic component. The prehistoric component consists of 102 artifacts from the Phase II investigations and 25 artifacts from the Phase I investigations. Four ceramic sherds, three of which were analyzed, were recovered from a single probe (STP 1) during the Phase I investigations and associated with modern bottle glass. The Phase II prehistoric assemblage consisted of 102 lithic artifacts including three biface fragments which were recovered from the surface. No features or intact midden were identified from the Phase I STPs or the Phase II test unit. The historic component is associated with a house (ME46) which was occupied between the 1850s and the 1980s. The house was demolished in the 1980s and the debris was buried on the site. Test Unit 1 was located within the debris pit. Test Units 2 and 4 on the side of the house and near an outbuilding. An intact layer, probably an old A horizon and sheet midden, was located in these two units. Test Units 1 and 5 indicated that the site was significantly disturbed. The site is located along XXXXXXXX and the bedrock is only about two feet deep. The soil is often wet near the bedrock and is not appropriate for cellars or storage pits. The house foundation was located by backhoe stripping. No subsurface features were located with the house or chimney foundation.

#### 7.1.1 National Register Eligibility

Site 15Me98 consists of a prehistoric and a historic component. The prehistoric component is a short term limited activity occupation dating to the between the Middle and Late Woodland or later. The limited artifact assemblage and lack of intact subsurface features indicates that the site within the APE has limited research potential. The association of prehistoric and historic artifacts indicates a lack of integrity for the prehistoric component. The historic component consists of a farmstead dating to between the 1850s and 1980s. Based on aerial photographs portions of the site to the rear of the house are outside the right-of-way. The area behind the house is usually where trash pits and privies are located. The depth of the bedrock and water table may have prevented the construction of such features. The house was bulldozed in the 1980s. The house debris was bulldozed into a pit and the site was covered with fill. The portion of the site within this project's APE has limited integrity and limited research potential. Therefore, Site 15Me98 has limited research potential and is not considered potentially eligible for listing on the NRHP under Criteria A, B, C, or D.

#### 7.1.2 Recommendations

No further archaeological work is recommended for Site 15Me98.



## Section 8 -

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Appendix A -

Artifact Inventory



Table A-1. 15Me98 Prehistoric Artifact Catalog.

Cat No.	Unit	Depth	Tool Type	Subtype	Subtype 2	Deb SG	Deb Type	Raw Material	Cortex	HT	Weight	Number	Comment
22	Tobacco Field	Surface Collection	Chipped	Debitage		3	Chunk/Shatter		2		55.6	1	
22	Tobacco Field	Surface Collection	Chipped	Debitage	Retouched	3	Secondary Decordication Flake	St. Louis	2		31.2	1	
22	Tobacco Field	Surface Collection	Chipped	Debitage		3	Chunk/Shatter	St. Genevieve	N		19.3	1	
22	Tobacco Field	Surface Collection	Chipped	Debitage		2	Chunk/Shatter	gray-white banded	2		2.2	1	
22	Tobacco Field	Surface Collection	Chipped	Debitage		1	Chunk/Shatter	gray-white banded	2		1.1	1	heat treated
22	Tobacco Field	Surface Collection	Chipped	Debitage		2	Chunk/Shatter	St. Louis	N		1.1	1	
22	Tobacco Field	Surface Collection	Chipped	Debitage		1	Chunk/Shatter	St. Louis	N		0.7	1	
22	Tobacco Field	Surface Collection	Chipped	Debitage	Utilized	2	Secondary Flake	St. Genevieve	N		2.7	1	
22	Tobacco Field	Surface Collection	Chipped	Debitage		2	Secondary Flake	St. Louis	N		3.6	1	
22	Tobacco Field	Surface Collection	Chipped	Debitage		1	Secondary Flake	St. Genevieve	N		0.4	1	
22	Tobacco Field	Surface Collection	Chipped	Debitage		1	Secondary Flake	St. Genevieve	N		0.1	1	
22	Tobacco Field	Surface Collection	Chipped	Debitage		1	Secondary Flake	St. Louis	N		0.4	1	heat treated
22	Tobacco Field	Surface Collection	Chipped	Debitage		1	Secondary Flake	St. Louis	N		0.3	1	heat treated
22	Tobacco Field	Surface Collection	Chipped	Debitage	Utilized	3	Secondary Decordication Flake	St. Louis	2		13.5	1	
22	Tobacco Field	Surface Collection	Chipped	Debitage	Utilized	2	Secondary Decordication Flake	St. Louis	N		10.6	1	
22	Tobacco Field	Surface Collection	Chipped	Bifacial	Drill	1		St. Genevieve	N	15.68	0.6	1	fragment; w-8.15; t-3.32
22	Tobacco Field	Surface Collection	Chipped	Bifacial	Biface, Proximal	2		St. Genevieve	N	24.26	1.6	1	fragment; w-14.21; t-3.85
22	Tobacco Field	Surface Collection	Chipped	Bifacial	Biface, Distal and MidSection	2		St. Genevieve	N	31.75	3.6	1	missing tip; w-20.34; t-5.06
22	Tobacco Field	Surface Collection	Chipped	Bifacial	Biface, Distal	2		St. Genevieve	N	23.05	2.1	1	fragment;heat treated; w-21.55; t-4.5
28	TU 2	Level 2, Zone I (10-20 cmbs)	Chipped	Debitage		1	Secondary Flake	St. Louis	4		0.1	1	
32	TU 2	Level 4, Zone II (27-37 cmbs)	Chipped	Debitage	Utilized	2	Secondary Flake	St. Genevieve	2		1.7	1	
33	TU 2	Level 5, Zone II (37-47 cmbs)	Chipped	Debitage		2	Chunk/Shatter	St. Genevieve	N		3.6	1	
35	TU 3	Level 1, Zone I	Chipped	Debitage		1	Chunk/Shatter	St. Louis	N		0.7	1	
35	TU 3	Level 1, Zone I	Chipped	Debitage		2	Chunk/Shatter	St. Genevieve	N		1.2	1	
35	TU 3	Level 1, Zone I	Chipped	Debitage		1	Chunk/Shatter	Local	2		0.9	1	
35	TU 3	Level 1, Zone I	Chipped	Debitage		1	Chunk/Shatter	St. Genevieve	N		1.5	1	heat treated
35	TU 3	Level 1, Zone I	Chipped	Debitage		1	Chunk/Shatter	St. Genevieve	N		0.6	1	
35	TU 3	Level 1, Zone I	Chipped	Debitage		1	Chunk/Shatter	Boyle	2		0.8	1	
35	TU 3	Level 1, Zone I	Chipped	Debitage		2	Chunk/Shatter	Local	2		2.2	1	
35	TU 3	Level 1, Zone I	Chipped	Bifacial	Retouched	2		St. Genevieve	2		19.6	1	
35	TU 3	Level 1, Zone I	Chipped	Debitage	Utilized	1	Secondary Flake	St. Louis	N		1.2	1	
35	TU 3	Level 1, Zone I	Chipped	Debitage		1	Secondary Flake	St. Louis	N		0.3	1	
35	TU 3	Level 1, Zone I	Chipped	Debitage		1	Secondary Flake	St. Louis	N		0.3	1	
35	TU 3	Level 1, Zone I	Chipped	Debitage		1	Secondary Flake	St. Louis	N		0.2	1	
35	TU 3	Level 1, Zone I	Chipped	Debitage		1	Secondary Flake	St. Genevieve	N		0.2	1	heat treated
35	TU 3	Level 1, Zone I	Chipped	Debitage		1	Secondary Flake	St. Louis	N		0.3	1	
36	TU 3	Level 2, Zone I	Chipped	Debitage		1	Chunk/Shatter	St. Genevieve	N		1.2	1	

Cat No.	Unit	Depth	Tool Type	Subtype	Subtype 2	Deb SG	Deb Type	Raw Material	Cortex	HT	Weight	Number	Comment
36	TU 3	Level 2, Zone I	Chipped	Debitage		1	Chunk/Shatter	St. Genevieve	N		1.2	1	
36	TU 3	Level 2, Zone I	Chipped	Debitage		1	Chunk/Shatter	St. Genevieve	N		0.6	1	
36	TU 3	Level 2, Zone I	Chipped	Debitage		1	Chunk/Shatter	Boyle	N		0.5	1	heat treated
36	TU 3	Level 2, Zone I	Chipped	Debitage		1	Chunk/Shatter	St. Genevieve	N		0.3	1	heat treated
36	TU 3	Level 2, Zone I	Chipped	Debitage	Utilized	1	Secondary Flake	St. Louis	N		2.1	1	
36	TU 3	Level 2, Zone I	Chipped	Debitage	Retouched	2	Secondary Flake	Local	4		4.5	1	
36	TU 3	Level 2, Zone I	Chipped	Debitage		1	Secondary Flake	Boyle	N		0.3	1	
36	TU 3	Level 2, Zone I	Chipped	Debitage		1	Secondary Flake	St. Genevieve	N		0.2	1	
36	TU 3	Level 2, Zone I	Chipped	Debitage		1	Secondary Flake	St. Louis	N		0.5	1	
36	TU 3	Level 2, Zone I	Chipped	Debitage		1	Secondary Flake	St. Louis	N		0.1	1	
36	TU 3	Level 2, Zone I	Chipped	Debitage		0	Secondary Flake	St. Louis	N		0.1	1	
36	TU 3	Level 2, Zone I	Chipped	Debitage		1	Secondary Flake	St. Genevieve	N		0.3	1	
36	TU 3	Level 2, Zone I	Chipped	Debitage		1	Secondary Flake	St. Genevieve	N		0.2	1	heat treated
36	TU 3	Level 2, Zone I	Chipped	Debitage		1	Secondary Flake	St. Genevieve	N		0.1	1	heat treated
36	TU 3	Level 2, Zone I	Chipped	Debitage		1	Secondary Flake	St. Louis	N		0.4	1	
36	TU 3	Level 2, Zone I	Chipped	Debitage		1	Secondary Flake	St. Louis	N		0.2	1	
36	TU 3	Level 2, Zone I	Chipped	Debitage		1	Secondary Flake	St. Louis	N		0.6	1	
36	TU 3	Level 2, Zone I	Chipped	Debitage		1	Secondary Flake	St. Louis	N		0.1	1	
36	TU 3	Level 2, Zone I	Chipped	Debitage		1	Secondary Flake	St. Louis	N		0.3	1	
36	TU 3	Level 2, Zone I	Chipped	Debitage		1	Secondary Flake	St. Louis	N		0.3	1	heat treated
36	TU 3	Level 2, Zone I	Chipped	Debitage		1	Secondary Flake	Local	2		0.8	1	
36	TU 3	Level 2, Zone I	Chipped	Debitage		1	Chunk/Shatter	St. Genevieve	2		1.3	1	
36	TU 3	Level 2, Zone I	Chipped	Debitage		2	Chunk/Shatter	St. Genevieve	2		8.1	1	
36	TU 3	Level 2, Zone I	Chipped	Debitage		3	Chunk/Shatter	St. Genevieve	1		49	1	
38	TU 4	Level 2, Zone I (10-20 cmbs)	Chipped	Debitage		1	Secondary Flake	St. Genevieve	N		1.1	1	
42	TU 4	Level 4, Zone II	Chipped	Debitage		1	Secondary Flake	St. Louis	N		0.2	1	
42	TU 4	Level 4, Zone II	Chipped	Debitage		1	Secondary Flake	St. Louis	N		0.2	1	
47	TU 5	Level 1, Zone I (0-10)	Chipped	Debitage		1	Secondary Flake	St. Genevieve	N		0.5	1	
48	TU 5	Level 2, Zone I (10-20 cmbs)	Chipped	Debitage		1	Secondary Flake	St. Genevieve	N		0.4	1	
48	TU 5	Level 2, Zone I (10-20 cmbs)	Chipped	Debitage		1	Secondary Flake	Local	N		0.4	1	heat treated
52	TU 5	Level 3, Zone I (20-30 cmbs)	Chipped	Debitage		2	Chunk/Shatter	Boyle	N		5.7	1	
56	TU 6	Level 1, Zone II	Chipped	Debitage		0	Secondary Flake	St. Genevieve	N		0.1	1	
57	TU 3	Level 3, Zone I	Chipped	Debitage		2	Chunk/Shatter	St. Louis	N		1.1	1	
57	TU 3	Level 3, Zone I	Chipped	Debitage		1	Secondary Flake	St. Louis	N		0.1	1	
57	TU 3	Level 3, Zone I	Chipped	Debitage		1	Secondary Flake	St. Louis	N		0.5	1	
57	TU 3	Level 3, Zone I	Chipped	Debitage		1	Secondary Flake	St. Louis	N		0.4	1	
57	TU 3	Level 3, Zone I	Chipped	Debitage		1	Secondary Flake	St. Louis	N		0.5	1	
57	TU 3	Level 3, Zone I	Chipped	Debitage		1	Secondary Flake	St. Louis	N		0.8	1	

Cat No.	Unit	Depth	Tool Type	Subtype	Subtype 2	Deb SG	Deb Type	Raw Material	Cortex	HT	Weight	Number	Comment
57	TU 3	Level 3, Zone I	Chipped	Debitage	retouched	2	Secondary Flake	Unidentified	N		2.3	1	
59			Chipped	Debitage		1	Secondary Flake	St. Genevieve	N		0.2	1	
60			Chipped	Debitage		2	Chunk/Shatter	Boyle	N		3.9	1	
60			Chipped	Debitage		0	Chunk/Shatter	Unidentified	N		0.1	1	
61			Chipped	Debitage		1	Secondary Flake	St. Louis	N		0.2	1	
61			Chipped	Debitage		2	Secondary Decordication Flake	St. Louis	2		3.3	1	
61			Chipped	Debitage	Utilized	3	Secondary Flake	St. Louis	N		19.4	1	
61			Chipped	Debitage		1	Chunk/Shatter	Boyle			0.3	1	
61			Chipped	Debitage		1	Chunk/Shatter	Unidentified	N		0.9	1	
61			Chipped	Debitage		2	Chunk/Shatter	Boyle	N		3.1	1	
61			Chipped	Debitage		1	Chunk/Shatter	Boyle	N		0.8	1	
61			Chipped	Debitage		1	Chunk/Shatter	Boyle	N		0.9	1	

Table A-2. 15Me98 Historic Artifact Catalog.

Cat #	STP/Unit	Level	Functional Group	Material	Type	Subtype 1	Subtype 2	Subtype 3	#	Thickness (mm)	Weight (g)	Comments
22	Surface		Kitchen	Ceramic	Whiteware	Decorated	Base		1			Unicorn Maker's Mark
22	Surface		Kitchen	Ceramic	Whiteware	Decorated	Rim		1			Molded Edge
22	Surface		Fuel	Biological	Coal	Fragment			1		7.4	
22	Surface		Kitchen	Glass	Bottle/Jar	Body	Unidentified	Green	1			
23	STP 1	0-32 cm	Architecture	Ceramic	Brick	Fragment			1		37.7	
23	STP 1	0-32 cm	Architecture	Metal	Nail	Cut	3d	Unaltered	1			Metal Conglomerate on Distal End
23	STP 1	0-32 cm	Fuel	Biological	Charcoal	Fragment			2		1	
23	STP 1	0-32 cm	Fuel	Biological	Coal	Fragment			17		12.4	
23	STP 1	0-32 cm	Other	Metal	Unidentified				1		1.6	
23	STP 1	0-32 cm	Personal	Glass	Toiletries	Body		Aqua	1			
23	STP 1	0-32 cm	Kitchen	Glass	Bottle/Jar	Body		Clear	1			
24	STP 1	37-50 cm	Other	Biological	Shell	Fragment			3			
25	TU 1	1	Kitchen	Ceramic	Porcelain	Undecorated	Rim		1			
25	TU 1	1	Kitchen	Ceramic	Refined Earthenware	Painted	Footring		1			Brown Glaze
25	TU 1	1	Architecture	Ceramic	Brick	Fragment			4		6.7	
25	TU 1	1	Architecture	Metal	Nail	Unidentified	Unidentified	Pulled	1			
25	TU 1	1	Architecture	Glass	Window	Fragment		Clear	1	2.25		
25	TU 1	1	Fuel	Biological	Cinder	Fragment			4		4	
25	TU 1	1	Fuel	Biological	Coal	Fragment			37		96.1	
25	TU 1	1	Personal	Glass	Toiletries	Bottle Base	Fragment	Clear	1			Raised Swirled Texture, Possible Perfume/Medicine Bottle
25	TU 1	1	Personal	Glass	Toiletries	Bottle Body	Fragment	Clear	5			Raised Swirled Texture, Possible Perfume/Medicine Bottle
25	TU 1	1	Kitchen	Glass	Bottle/Jar	Body	Unidentified	Clear	2			
25	TU 1	1	Kitchen	Glass	Bottle/Jar	Body	Unidentified	Clear	1			Very Small
25	TU 1	1	Kitchen	Glass	Bottle/Jar	Body	Unidentified	Aqua	1			
25	TU 1	1	Kitchen	Glass	Bottle/Jar	Body	Unidentified	Amber	1			
25	TU 1	1	Kitchen	Glass	Bottle/Jar	Lip	Machine Made	Clear	2			Treads
25	TU 1	1	Kitchen	Glass	Bottle/Jar	Lip	Machine Made	Clear	1			
25	TU 1	1	Kitchen	Metal	Pull Tab				1			
26	TU 1	2	Activities	Metal	Machinery Part	Gear			1			
26	TU 1	2	Architecture	Ceramic	Brick	Fragment			169		3741.9	
26	TU 1	2	Architecture	Stone	Mortar	Fragment			63		251.3	
26	TU 1	2	Architecture	Metal	Nail	Cut	2d	Pulled	1			
26	TU 1	2	Architecture	Metal	Nail	Cut	3d	Pulled	2			
26	TU 1	2	Architecture	Metal	Nail	Cut	3d	Unaltered	2			
26	TU 1	2	Architecture	Metal	Nail	Cut	4d	Unaltered	1			
26	TU 1	2	Architecture	Metal	Nail	Cut	5d	Pulled	1			

Cat #	STP/Unit	Level	Functional Group	Material	Type	Subtype 1	Subtype 2	Subtype 3	#	Thickness (mm)	Weight (g)	Comments
26	TU 1	2	Architecture	Metal	Nail	Cut	5d	Unaltered	2			
26	TU 1	2	Architecture	Metal	Nail	Cut	12d	Pulled	1			
26	TU 1	2	Architecture	Metal	Nail	Cut	Unidentified	Pulled	8			
26	TU 1	2	Architecture	Metal	Nail	Cut	Unidentified	Unaltered	4			
26	TU 1	2	Architecture	Metal	Nail	Cut	Proximal	Unidentified	1			
26	TU 1	2	Architecture	Metal	Nail	Cut	Medial	Unidentified	1			
26	TU 1	2	Architecture	Metal	Nail	Cut	Distal	Unidentified	1			
26	TU 1	2	Architecture	Metal	Nail	Unidentified	Unidentified	Pulled	6			
26	TU 1	2	Architecture	Metal	Nail	Wire	3d	Unaltered	1			
26	TU 1	2	Architecture	Metal	Nail	Wire	4d	Unaltered	1			
26	TU 1	2	Architecture	Metal	Nail	Wire	5d	Unaltered	3			
26	TU 1	2	Architecture	Metal	Nail	Wire	5d	Pulled	1			
26	TU 1	2	Architecture	Metal	Nail	Wire	10d	Pulled	1			
26	TU 1	2	Architecture	Metal	Nail	Wire	Unidentified	Unaltered	2			
26	TU 1	2	Architecture	Metal	Nail	Wire	Unidentified	Pulled	3			
26	TU 1	2	Architecture	Metal	Nail	Wire	Distal	Unidentified	2			
26	TU 1	2	Architecture	Metal	Nail	Wire	Proximal	Unidentified	2			
26	TU 1	2	Architecture	Metal	Roofing	Unidentified	Fragment		45		460.2	
26	TU 1	2	Architecture	Glass	Window	Fragment		Clear	1	1.44		
26	TU 1	2	Fuel	Biological	Charcoal	Fragment			5		1.9	
26	TU 1	2	Fuel	Biological	Cinder	Fragment			2		7.4	
26	TU 1	2	Fuel	Biological	Coal	Fragment			151		840.3	
26	TU 1	2	Fuel	Other	Slag	Fragment			1		13.4	
26	TU 1	2	Furniture	Glass	Lighting/Electrical	Lamp/Chimney	Fragment	Clear	2			
26	TU 1	2	Other	Stone	Cement				1			Large/pipelike
26	TU 1	2	Other	Metal	Spike				1			Poss part of a lighting rod, wrapped in barbed wire
26	TU 1	2	Personal	Glass	Decorative	Fragment			1			Possibly part of a figurine?
26	TU 1	2	Kitchen	Glass	Bottle/Jar	Body	Unidentified	Aqua	2			
26	TU 1	2	Kitchen	Glass	Bottle/Jar	Body	Unidentified	Clear	1			
27	TU 2	1	Kitchen	Ceramic	Whiteware	Decal-Gold	Rim		1			Gold Floral Design, Possible Teacup
27	TU 2	1	Architecture	Ceramic	Brick	Fragment			2		0.8	
27	TU 2	3	Architecture	Metal	Nail	Wire	4d	Pulled	1			
27	TU 2	3	Architecture	Metal	Nail	Wire	8d	Pulled	1			
27	TU 2	1	Architecture	Metal	Nail	Wire	5d	Unaltered	1			
27	TU 2	1	Architecture	Metal	Nail	Wire	Proximal	Unidentified	1			
27	TU 2	1	Architecture	Metal	Nail	Wire	Distal	Unidentified	1			
27	TU 2	1	Fuel	Biological	Cinder	Fragment			6		14.1	

Cat #	STP/Unit	Level	Functional Group	Material	Type	Subtype 1	Subtype 2	Subtype 3	#	Thickness (mm)	Weight (g)	Comments
27	TU 2	1	Fuel	Biological	Coal	Fragment			27		57.2	
27	TU 2	1	Kitchen	Glass	Bottle/Jar	Body	Unidentified	Clear	1			
27	TU 2	1	Kitchen	Glass	Bottle/Jar	Body	Unidentified	Yellowed	1			
28	TU 2	2	Activities	Metal	Machinery Part	Fragment			8			
28	TU 2	2	Activities	Metal	Machinery Part	Fragment			1			Screw and Nut Through Metal
28	TU 2	2	Architecture	Ceramic	Brick	Fragment			2		14.1	
28	TU 2	2	Architecture	Metal	Nail	Cut	4d	Unaltered	1			
28	TU 2	2	Architecture	Metal	Nail	Cut	Unidentified	Unaltered	1			
28	TU 2	2	Architecture	Metal	Nail	Cut	Distal	Unidentified	2			
28	TU 2	2	Architecture	Metal	Nail	Cut	Proximal	Unidentified	1			Very short, possible tack
28	TU 2	2	Architecture	Metal	Nail	Cut	5d	Unaltered	1			
28	TU 2	2	Architecture	Metal	Nail	Wire	Distal	Unidentified	1			
28	TU 2	2	Architecture	Glass	Window	Fragment		Clear	1	2.11		
28	TU 2	2	Architecture	Glass	Window	Fragment		Clear	1	2.17		
28	TU 2	2	Fuel	Biological	Coal	Fragment			10		28.6	
28	TU 2	2	Fuel	Other	Slag	Fragment			2		26.9	
28	TU 2	2	Other	Metal	Unidentified	Fragment			3		2.2	
28	TU 2	2	Other	Biological	Wood	Fragment			3		6.2	Painted White
28	TU 2	2	Kitchen	Glass	Bottle/Jar	Body	Unidentified	Clear	1			
28	TU 2	2	Kitchen	Glass	Bottle/Jar	Body	Unidentified	Pale Aqua	1			
29	TU 1	3	Kitchen	Ceramic	Stoneware	Undecorated	Rim		1			Burned
29	TU 1	3	Kitchen	Ceramic	Stoneware	Undecorated	Handle		1			Burned
29	TU 1	3	Activities	Metal	Machinery Part				1		99.3	
29	TU 1	3	Architecture	Ceramic	Brick	Fragment			34		6295.1	
29	TU 1	3	Architecture	Stone	Mortar	Fragment			5		249.8	
29	TU 1	3	Architecture	Metal	Nail	Cut	2d	Unaltered	1			
29	TU 1	3	Architecture	Metal	Nail	Cut	2d	Pulled	1			
29	TU 1	3	Architecture	Metal	Nail	Cut	3d	Pulled	13			
29	TU 1	3	Architecture	Metal	Nail	Cut	3d	Unaltered	9			
29	TU 1	3	Architecture	Metal	Nail	Cut	4d	Clinched	1			
29	TU 1	3	Architecture	Metal	Nail	Cut	4d	Pulled	6			
29	TU 1	3	Architecture	Metal	Nail	Cut	4d	Unaltered	4			
29	TU 1	3	Architecture	Metal	Nail	Cut	5d	Clinched	1			
29	TU 1	3	Architecture	Metal	Nail	Cut	5d	Pulled	6			
29	TU 1	3	Architecture	Metal	Nail	Cut	5d	Unaltered	3			
29	TU 1	3	Architecture	Metal	Nail	Cut	6d	Pulled	1			
29	TU 1	3	Architecture	Metal	Nail	Cut	6d	Unaltered	1			

Cat #	STP/Unit	Level	Functional Group	Material	Type	Subtype 1	Subtype 2	Subtype 3	#	Thickness (mm)	Weight (g)	Comments
29	TU 1	3	Architecture	Metal	Nail	Cut	7d	Pulled	1			
29	TU 1	3	Architecture	Metal	Nail	Cut	8d	Pulled	5			
29	TU 1	3	Architecture	Metal	Nail	Cut	8d	Unaltered	2			
29	TU 1	3	Architecture	Metal	Nail	Cut	9d	Pulled	7			
29	TU 1	3	Architecture	Metal	Nail	Cut	9d	Unaltered	1			
29	TU 1	3	Architecture	Metal	Nail	Cut	10d	Pulled	1			
29	TU 1	3	Architecture	Metal	Nail	Cut	12d	Pulled	3			
29	TU 1	3	Architecture	Metal	Nail	Cut	20d	Pulled	3			
29	TU 1	3	Architecture	Metal	Nail	Cut	Unidentified	Pulled	5			
29	TU 1	3	Architecture	Metal	Nail	Cut	Distal	Unidentified	13			
29	TU 1	3	Architecture	Metal	Nail	Cut	20d	Unaltered	1			
29	TU 1	3	Architecture	Metal	Nail	Cut	Unidentified	Unaltered	16			
29	TU 1	3	Architecture	Metal	Nail	Unidentified	Unidentified	Unidentified	7			
29	TU 1	3	Architecture	Metal	Nail	Unidentified	Proximal	Unidentified	4			
29	TU 1	3	Architecture	Metal	Nail	Unidentified	Distal	Unidentified	2			
29	TU 1	3	Architecture	Metal	Nail	Unidentified	Unidentified	Unaltered	11			
29	TU 1	3	Architecture	Metal	Nail	Unidentified	Unidentified	Pulled	3			
29	TU 1	3	Architecture	Metal	Nail	Unidentified	Unidentified	Unaltered	1			Conglomerate of Nail, Brick, and Charcoal
29	TU 1	3	Architecture	Metal	Nail	Wire	2d	Unaltered	1			
29	TU 1	3	Architecture	Metal	Nail	Wire	3d	Pulled	2			
29	TU 1	3	Architecture	Metal	Nail	Wire	3d	Unaltered	8			
29	TU 1	3	Architecture	Metal	Nail	Wire	4d	Unaltered	4			
29	TU 1	3	Architecture	Metal	Nail	Wire	4d	Pulled	1			
29	TU 1	3	Architecture	Metal	Nail	Wire	5d	Pulled	1			
29	TU 1	3	Architecture	Metal	Nail	Wire	5d	Unaltered	8			
29	TU 1	3	Architecture	Metal	Nail	Wire	6d	Clinched	1			
29	TU 1	3	Architecture	Metal	Nail	Wire	6d	Pulled	1			
29	TU 1	3	Architecture	Metal	Nail	Wire	7d	Pulled	1			
29	TU 1	3	Architecture	Metal	Nail	Wire	7d	Unaltered	1			
29	TU 1	3	Architecture	Metal	Nail	Wire	8d	Pulled	2			
29	TU 1	3	Architecture	Metal	Nail	Wire	40d	Pulled	1			
29	TU 1	3	Architecture	Metal	Nail	Wire	Unidentified	Pulled	1			
29	TU 1	3	Architecture	Metal	Nail	Wire	Distal	Unidentified	2			
29	TU 1	3	Architecture	Metal	Nail	Wire	Unidentified	Unaltered	5			
29	TU 1	3	Architecture	Metal	Nail	Wire	Medial	Unidentified	1			
29	TU 1	3	Architecture	Metal	Spike	Wrought	Proximal	Unidentified	1			
29	TU 1	3	Architecture	Ceramic	Tile	Fragment			5			Thin, With Backing Still Attached

Cat #	STP/Unit	Level	Functional Group	Material	Type	Subtype 1	Subtype 2	Subtype 3	#	Thickness (mm)	Weight (g)	Comments
29	TU 1	3	Architecture	Glass	Window	Fragment		Clear	1	2.84		
29	TU 1	3	Architecture	Glass	Window	Fragment		Clear	1	1.73		
29	TU 1	3	Architecture	Glass	Window	Fragment		Clear	3	1.91		
29	TU 1	3	Fuel	Biological	Charcoal	Fragment			8		4.4	
29	TU 1	3	Fuel	Biological	Coal	Fragment			5		31.3	
29	TU 1	3	Fuel	Biological	Wood	Fragment			3		3.4	
29	TU 1	3	Other	Ceramic	Unidentified				1			Rounded, Possibly Plumbing
29	TU 1	3	Other	Metal	Unidentified				1			
29	TU 1	3	Personal	Glass	Marble	Toy			2			
29	TU 1	3	Kitchen	Glass	Bottle/Jar	Body	Unidentified	Clear	6			
29	TU 1	3	Kitchen	Glass	Bottle/Jar	Lip	Unidentified	Green	1			
30	TU 2	3	Architecture	Metal	Nail	Unidentified	Proximal	Unidentified	1			
30	TU 2	3	Arms	Biological	Cartridge	Fragment			1			Shotgun Shell Fragment
30	TU 2	3	Fuel	Biological	Coal	Fragment			2		6.8	
31	TU 1	4	Architecture	Ceramic	Brick	Fragment			3		21.1	
31	TU 1	4	Architecture	Stone	Mortar	Fragment			2		1.6	
31	TU 1	4	Architecture	Metal	Nail	Cut	3d	Unaltered	2			
31	TU 1	4	Architecture	Metal	Nail	Cut	3d	Pulled	1			
31	TU 1	4	Architecture	Metal	Nail	Cut	4d	Pulled	4			
31	TU 1	4	Architecture	Metal	Nail	Cut	5d	Pulled	3			
31	TU 1	4	Architecture	Metal	Nail	Cut	5d	Unaltered	4			
31	TU 1	4	Architecture	Metal	Nail	Cut	6d	Unaltered	1			
31	TU 1	4	Architecture	Metal	Nail	Cut	8d	Pulled	1			
31	TU 1	4	Architecture	Metal	Nail	Cut	9d	Pulled	1			
31	TU 1	4	Architecture	Metal	Nail	Cut	10d	Unaltered	1			
31	TU 1	4	Architecture	Metal	Nail	Cut	12d	Pulled	3			
31	TU 1	4	Architecture	Metal	Nail	Cut	12d	Unaltered	1			
31	TU 1	4	Architecture	Metal	Nail	Cut	20d	Unaltered	1			
31	TU 1	4	Architecture	Metal	Nail	Cut	30d	Pulled	1			
31	TU 1	4	Architecture	Metal	Nail	Cut	Unidentified	Unaltered	9			
31	TU 1	4	Architecture	Metal	Nail	Cut	Unidentified	Pulled	2			
31	TU 1	4	Architecture	Metal	Nail	Cut	Distal	Unidentified	5			
31	TU 1	4	Architecture	Metal	Nail	Unidentified	Unidentified	Unaltered	9			
31	TU 1	4	Architecture	Metal	Nail	Unidentified	Unidentified	Pulled	16			
31	TU 1	4	Architecture	Metal	Nail	Unidentified	Distal	Unidentified	2			
31	TU 1	4	Architecture	Metal	Nail	Unidentified	Medial	Unidentified	1			
31	TU 1	4	Architecture	Metal	Nail	Unidentified	Proximal	Unidentified	4			

Cat #	STP/Unit	Level	Functional Group	Material	Type	Subtype 1	Subtype 2	Subtype 3	#	Thickness (mm)	Weight (g)	Comments
31	TU 1	4	Architecture	Metal	Nail	Wire	2d	Pulled	3			
31	TU 1	4	Architecture	Metal	Nail	Wire	3d	Pulled	1			
31	TU 1	4	Architecture	Metal	Nail	Wire	3d	Unaltered	1			
31	TU 1	4	Architecture	Metal	Nail	Wire	4d	Unaltered	1			
31	TU 1	4	Architecture	Metal	Nail	Wire	4d	Pulled	2			
31	TU 1	4	Architecture	Metal	Nail	Wire	5d	Unaltered	4			
31	TU 1	4	Architecture	Metal	Nail	Wire	6d	Pulled	1			
31	TU 1	4	Architecture	Metal	Nail	Wire	8d	Pulled	1			
31	TU 1	4	Architecture	Metal	Nail	Wire	Proximal	Unidentified	6			
31	TU 1	4	Architecture	Metal	Nail	Wire	Distal	Unidentified	4			
31	TU 1	4	Architecture	Metal	Nail	Wire	Unidentified	Pulled	10			
31	TU 1	4	Architecture	Metal	Nail	Wire	Unidentified	Clinched	2			
31	TU 1	4	Architecture	Metal	Nail	Wire	Unidentified	Unaltered	2			
31	TU 1	4	Architecture	Metal	Roofing	Fragment			23		147.7	
31	TU 1	4	Architecture	Glass	Window	Fragment		Clear	2	2.83		
31	TU 1	4	Fuel	Biological	Charcoal	Fragment			5		23.3	
31	TU 1	4	Furniture	Glass	Lighting/Electrical	Lamp/Chimney	Fragment	Clear	1			
31	TU 1	4	Other	Ceramic	Unidentified				1			Rounded, Possibly Plumbing
31	TU 1	4	Kitchen	Glass	Bottle/Jar	Body	Unidentified	Clear	10			
32	TU 2	4	Kitchen	Ceramic	Whiteware	Undecorated	Rim		1			Teacup
32	TU 2	4	Kitchen	Ceramic	Whiteware	Undecorated	Body		1			
32	TU 2	4	Kitchen	Ceramic	Yellow ware	Decorated	Body		1			Brown paint
32	TU 2	4	Activities	Metal	Machinery Part	Unidentified			1			Flat Metal Ring
32	TU 2	4	Architecture	Ceramic	Brick	Glazed			2		37.2	
32	TU 2	4	Architecture	Ceramic	Brick	Unglazed			5		21.4	
32	TU 2	4	Architecture	Metal	Nail	Cut	9d	Pulled	1			
32	TU 2	4	Architecture	Metal	Nail	Cut	8d	Unaltered	1			
32	TU 2	4	Architecture	Metal	Nail	Cut	5d	Unaltered	1			
32	TU 2	4	Architecture	Metal	Nail	Cut	Distal	Unidentified	1			
32	TU 2	4	Architecture	Metal	Nail	Cut	Proximal	Unidentified	1			
32	TU 2	4	Architecture	Glass	Window	Fragment		Clear	1	2.07		
32	TU 2	4	Architecture	Glass	Window	Fragment		Clear	2	2.88		
32	TU 2	4	Architecture	Glass	Window	Fragment		Clear	2	1.33		
32	TU 2	4	Furniture	Glass	Lighting/Electrical	Lamp/Chimney	Fragment	Clear	2			
32	TU 2	4	Kitchen	Glass	Bottle/Jar	Body	Unidentified	Green	1			
32	TU 2	4	Kitchen	Glass	Bottle/Jar	Body	Unidentified	Amber	1			
32	TU 2	4	Kitchen	Metal	Can				1			Flat Rectangular

Cat #	STP/Unit	Level	Functional Group	Material	Type	Subtype 1	Subtype 2	Subtype 3	#	Thickness (mm)	Weight (g)	Comments
33	TU 2	5	Kitchen	Ceramic	Ironstone	Molded	Rim		1			
33	TU 2	5	Kitchen	Ceramic	Ironstone	Undecorated	Body		3			
33	TU 2	5	Kitchen	Ceramic	Redware	Clear Glaze	Body		1			
33	TU 2	5	Architecture	Metal	Nail	Cut	3d	Unaltered	1			
33	TU 2	5	Architecture	Glass	Window	Fragment		Clear	1	1.56		
33	TU 2	5	Other	Metal	Unidentified				1			
34	TU 1	Zone 2	Architecture	Ceramic	Brick	Fragment	Machine Made		4		3,100	
34	TU 1	Zone 2	Architecture	Stone	Concrete	Fragment			2		1325	
34	TU 1	Zone 2	Architecture	Stone	Mortar	Fragment			1		123	
34	TU 1	Zone 2	Architecture	Metal	Nail	Cut	8d	Unaltered	1			
34	TU 1	Zone 2	Architecture	Metal	Nail	Cut	16d	Unaltered	1			
34	TU 1	Zone 2	Architecture	Metal	Nail	Cut	5d	Unaltered	1			
34	TU 1	Zone 2	Architecture	Metal	Nail	Cut	9d	Unaltered	1			
34	TU 1	Zone 2	Architecture	Metal	Nail	Cut	Proximal	Pulled	1			
34	TU 1	Zone 2	Architecture	Metal	Roofing	Fragment			36		539	
34	TU 1	Zone 2	Kitchen	Metal	Pull Tab				1			
35	TU 3	1	Kitchen	Ceramic	Stoneware	Salt Glazed	Rim		1			
35	TU 3	1	Fuel	Biological	Charcoal	Fragment			2		0.8	
36	TU 3	2	Kitchen	Ceramic	Whiteware	Undecorated	Footring		1			
36	TU 3	2	Architecture	Metal	Nail	Cut	Proximal	Unidentified	1			
36	TU 3	2	Fuel	Biological	Charcoal	Fragment			4		0.6	
37	TU 4	1	Architecture	Ceramic	Brick	Fragment			4		107.3	
37	TU 4	1	Architecture	Stone	Concrete	Fragment			1		113.6	
37	TU 4	1	Architecture	Metal	Nail	Cut	2d	Pulled	1			
37	TU 4	1	Architecture	Metal	Nail	Cut	2d	Unaltered	1			
37	TU 4	1	Architecture	Metal	Nail	Cut	3d	Pulled	1			
37	TU 4	1	Architecture	Metal	Nail	Cut	4d	Unaltered	2			
37	TU 4	1	Architecture	Metal	Nail	Cut	5d	Unaltered	1			
37	TU 4	1	Architecture	Metal	Nail	Cut	5d	Pulled	1			
37	TU 4	1	Architecture	Metal	Nail	Cut	6d	Pulled	1			
37	TU 4	1	Architecture	Metal	Nail	Cut	7d	Pulled	1			
37	TU 4	1	Architecture	Metal	Nail	Cut	9d	Unaltered	1			
37	TU 4	1	Architecture	Metal	Nail	Cut	Unidentified	Pulled	1			
37	TU 4	1	Architecture	Metal	Nail	Cut	Proximal	Unidentified	2			
37	TU 4	1	Architecture	Metal	Nail	Cut	Distal	Unidentified	2			
37	TU 4	1	Architecture	Metal	Nail	Cut	Unidentified	Pulled	1			
37	TU 4	1	Architecture	Metal	Nail	Cut	Unidentified	Unaltered	1			

Cat #	STP/Unit	Level	Functional Group	Material	Type	Subtype 1	Subtype 2	Subtype 3	#	Thickness (mm)	Weight (g)	Comments
37	TU 4	1	Architecture	Metal	Nail	Wire	10d	Pulled	1			
37	TU 4	1	Architecture	Metal	Nail	Wire	8d	Pulled	5			
37	TU 4	1	Architecture	Metal	Nail	Wire	8d	Clinched	2			
37	TU 4	1	Architecture	Metal	Nail	Wire	2d	Unaltered	1			
37	TU 4	1	Architecture	Metal	Nail	Wire	8d	Unaltered	1			
37	TU 4	1	Architecture	Metal	Nail	Wire	6d	Pulled	1			
37	TU 4	1	Architecture	Metal	Nail	Wire	Distal	Unidentified	7			
37	TU 4	1	Architecture	Metal	Nail	Wire	Proximal	Unidentified	4			
37	TU 4	1	Architecture	Metal	Nail	Wire	Proximal	Clinched	1			Curved
37	TU 4	1	Architecture	Glass	Window	Fragment		Clear	1	1.3		
37	TU 4	1	Architecture	Glass	Window	Fragment		Clear	2	1.65		
37	TU 4	1	Architecture	Glass	Window	Fragment		Clear	2	2.04		
37	TU 4	1	Architecture	Glass	Window	Fragment		Clear	1	2.83		
37	TU 4	1	Fuel	Other	Slag	Fragment			1		2.6	
37	TU 4	1	Furniture	Glass	Lighting/Electrical	Lamp/Chimney	Fragment	Clear	1			
37	TU 4	1	Kitchen	Glass	Bottle/Jar	Body	Unidentified	Aqua	1			Burned/Melted
37	TU 4	1	Kitchen	Glass	Bottle/Jar	Body	Unidentified	Clear	2			
37	TU 4	1	Kitchen	Glass	Bottle/Jar	Body	Unidentified	Aqua	2			Burned/Melted
37	TU 4	1	Other	Metal	Unidentified				2			
37	TU 4	1	Kitchen	Glass	Table Glass	Rim	Unidentified	Clear	1			
38	TU 4	2	Architecture	Ceramic	Brick	Fragment			1		10.9	
38	TU 4	2	Architecture	Metal	Nail	Cut	Distal	Unidentified	1			
38	TU 4	2	Architecture	Metal	Nail	Wire	8d	Pulled	1			
38	TU 4	2	Architecture	Metal	Wire	Barbed	Fragment		1			
38	TU 4	2	Clothing	Metal	Belt buckle	Copper			1			Floral Face Design
38	TU 4	2	Furniture	Ceramic	Terra Cotta	Unglazed	Body	Flower Pot	1			
38	TU 4	2	Kitchen	Glass	Bottle/Jar	Body	Unidentified	Amber	1			
38	TU 4	2	Kitchen	Glass	Bottle/Jar	Body	Unidentified	Clear	1			
38	TU 4	2	Kitchen	Glass	Bottle/Jar	Rim	Machine Made	Aqua	1			
38	TU 4	2	Other	Metal	Battery				1			Corroded
38	TU 4	2	Other	Metal	Unidentified				1			
41	TU 4	3	Kitchen	Ceramic	Stoneware	Salt Glazed	Body		1			Thick, Gray, Rounded Sherd
41	TU 4	3	Architecture	Metal	Nail	Cut	5d	Pulled	3			
41	TU 4	3	Fuel	Biological	Cinder	Fragment			1		3.1	
41	TU 4	3	Furniture	Ceramic	Terra Cotta	Unglazed	Body	Flower Pot	2			
41	TU 4	3	Other	Metal	Unidentified				1			Triangular Flat Sheet
42	TU 4	4	Kitchen	Ceramic	Refined Earthenware	Transfer Printed	Base	Transfer Printed	2			Burned, Blue Pattern

Cat #	STP/Unit	Level	Functional Group	Material	Type	Subtype 1	Subtype 2	Subtype 3	#	Thickness (mm)	Weight (g)	Comments
42	TU 4	4	Kitchen	Ceramic	Refined Earthenware	Transfer Printed	Body	Transfer Printed	1			Burned, Blue Pattern
42	TU 4	4	Kitchen	Ceramic	Whiteware	Undecorated	Rim		3			Teacup?
42	TU 4	4	Kitchen	Ceramic	Whiteware	Undecorated	Body		2			Teacup?
42	TU 4	4	Architecture	Ceramic	Brick	Fragment			2		8.3	
42	TU 4	4	Architecture	Metal	Nail	Cut	Unidentified	Pulled	2			
42	TU 4	4	Architecture	Metal	Nail	Cut	Unidentified	Unaltered	2			
42	TU 4	4	Architecture	Metal	Nail	Cut	Proximal	Unidentified	2			
42	TU 4	4	Architecture	Metal	Nail	Wire	Unidentified	Pulled	1			
42	TU 4	4	Architecture	Glass	Window	Fragment		Clear	1	1.55		
42	TU 4	4	Architecture	Glass	Window	Fragment		Clear	1	1.88		
42	TU 4	4	Fuel	Biological	Charcoal	Fragment			1		1	
42	TU 4	4	Kitchen	Glass	Bottle/Jar	Body	Unidentified	Green	1			
42	TU 4	4	Kitchen	Glass	Bottle/Jar	Body	Unidentified	Amber	1			Gold Striations
42	TU 4	4	Other	Metal	Copper	Unidentified			5			
42	TU 4	4	Other	Metal	Unidentified				1			
42	TU 4	4	Kitchen	Glass	Bottle/Jar	Body	Unidentified	Aqua	1			
43	TU 4	5	Kitchen	Ceramic	Whiteware	Decorated	Shoulder	Red/Blue Flecking	1			
43	TU 4	5	Kitchen	Ceramic	Whiteware	Decorated	Shoulder	Blue Paint	1			
43	TU 4	5	Kitchen	Ceramic	Whiteware	Undecorated	Rim		1			
43	TU 4	5	Kitchen	Ceramic	Yellow ware	Decorated	Rim	Brown Paint	1			
43	TU 4	5	Architecture	Metal	Nail	Cut	4d	Pulled	1			
43	TU 4	5	Architecture	Metal	Nail	Cut	Unidentified	Unaltered	1			
43	TU 4	5	Architecture	Glass	Window	Fragment		Pale Aqua	1	1.39		
43	TU 4	5	Architecture	Glass	Window	Fragment		Pale Aqua	1	1.43		
43	TU 4	5	Fuel	Biological	Cinder	Fragment			3		0.5	
44	TU 2	2	Other	Metal	Linked Chain				1			
45	TU 3	3	Fuel	Biological	Charcoal	Fragment			1		1.5	
47	TU 5	1	Kitchen	Ceramic	Whiteware	Undecorated	Base		2			
47	TU 5	1	Architecture	Metal	Barbed Wire	Fragment			1			
47	TU 5	1	Architecture	Ceramic	Brick	Fragment			3		7.3	
47	TU 5	1	Architecture	Metal	Nail	Cut	7d	Pulled	1			
47	TU 5	1	Architecture	Glass	Window	Fragment		Aqua	1	2.28		
47	TU 5	1	Architecture	Glass	Window	Fragment		Pale Aqua	2	2.16		
47	TU 5	1	Architecture	Glass	Window	Fragment		Pale Aqua	1	1.94		
47	TU 5	1	Fuel	Biological	Cinder	Fragment			54	70.7		
47	TU 5	1	Fuel	Biological	Coal	Fragment			133	200.1		
47	TU 5	1	Fuel	Other	Slag	Fragment			8	62.6		

Cat #	STP/Unit	Level	Functional Group	Material	Type	Subtype 1	Subtype 2	Subtype 3	#	Thickness (mm)	Weight (g)	Comments
47	TU 5	1	Furniture	Glass	Lighting/Electrical	Lamp/Chimney	Fragment	Clear	1			
47	TU 5	1	Kitchen	Glass	Bottle/Jar	Body	Unidentified	Amber	2			
47	TU 5	1	Kitchen	Glass	Bottle/Jar	Body	Unidentified	Clear	2			
47	TU 5	1	Kitchen	Glass	Table Glass	Body	Unidentified	Etched	1			
47	TU 5	1	Kitchen	Metal	Pull Tab				1			
47	TU 5	1	Other	Glass	Burned/Melted	Fragment	Unidentified		8			
47	TU 5	1	Other	Metal	Unidentified	Fragment			3		3.2	
47	TU 5	1	Other	Rubber	Unidentified	Fragment	Hardened		1		0.9	
48	TU 5	2	Kitchen	Ceramic	Whiteware	Undecorated	Footring		1			
48	TU 5	2	Activities	Metal	Machinery Part	Fragment			2			
48	TU 5	2	Architecture	Ceramic	Brick	Fragment			6		439.4	
48	TU 5	2	Architecture	Metal	Nail	Cut	Unidentified	Pulled	1			
48	TU 5	2	Architecture	Metal	Nail	Unidentified	Unidentified	Pulled	2			
48	TU 5	2	Architecture	Metal	Nail	Unidentified	Unidentified	Unaltered	2			
48	TU 5	2	Architecture	Metal	Nail	Unidentified	Distal	Unidentified	1			
48	TU 5	2	Architecture	Metal	Nail	Wire	Unidentified	Pulled	1			
48	TU 5	2	Architecture	Metal	Nail	Wire	Unidentified	Unidentified	1			
48	TU 5	2	Architecture	Metal	Nail	Wire	Distal	Unidentified	1			
48	TU 5	2	Architecture	Metal	Nail	Wire	Proximal	Unidentified	1			
48	TU 5	2	Architecture	Metal	Wire	Barbed	Fragment		2			
48	TU 5	2	Architecture	Metal	Wire		Fragment		1			
48	TU 5	2	Clothing	Plastic	Buttons	Buttons		Blue Paint	2			Toy Tool Chest Fragments
48	TU 5	2	Fuel	Biological	Cinder	Fragment			271		459.3	
48	TU 5	2	Fuel	Biological	Coal	Fragment			6		453.5	
48	TU 5	2	Fuel	Other	Slag	Fragment			15		131.3	
48	TU 5	2	Furniture	Glass	Lighting/Electrical	Lamp/Chimney	Fragment	Clear	8			
48	TU 5	2	Kitchen	Glass	Bottle/Jar	Base	Unidentified	Olive Green	1			reproduction?
48	TU 5	2	Kitchen	Glass	Bottle/Jar	Body	Unidentified	Amber	8			
48	TU 5	2	Kitchen	Glass	Bottle/Jar	Body	Unidentified	Olive Green	8			
48	TU 5	2	Kitchen	Glass	Bottle/Jar	Body	Unidentified	Clear	18			
48	TU 5	2	Kitchen	Glass	Bottle/Jar	Body	Unidentified	Clear	1			Burned
48	TU 5	2	Kitchen	Glass	Bottle/Jar	Body	Unidentified	Aqua	1			
48	TU 5	2	Kitchen	Glass	Bottle/Jar	Neck	Unidentified	Green	2			
48	TU 5	2	Kitchen	Glass	Table Glass	Base	Machine Made	Clear	1			
48	TU 5	2	Kitchen	Glass	Table Glass	Body	Unidentified	Ridged	1			
48	TU 5	2	Kitchen	Glass	Table Glass	Rim	Unidentified	Clear	1			
48	TU 5	2	Kitchen	Glass	Table Glass	Rim	Machine Made	Clear	1			

Cat #	STP/Unit	Level	Functional Group	Material	Type	Subtype 1	Subtype 2	Subtype 3	#	Thickness (mm)	Weight (g)	Comments
48	TU 5	2	Kitchen	Glass	Table Glass	Rim	Unidentified	Clear	1			
48	TU 5	2	Kitchen	Metal	Bottle Cap				1			
48	TU 5	2	Kitchen	Metal	Pull Tab				1			
48	TU 5	2	Other	Glass	Burned/Melted	Fragment	Unidentified		22		97.8	
48	TU 5	2	Other	Biological	Shell				1			
48	TU 5	2	Other	Metal	Unidentified	Fragment			25		92.2	
48	TU 5	2	Personal	Plastic	Toys	Fragment			2			
49	TU 4	East Wall	Activities	Metal	Machinery Part				1			Long Metal Rod w/Squarish Piece on end
49	TU 5	East Wall	Architecture	Metal	Barbed Wire	Barbed Wire	Fragment		4			
50	STP 3	0-40 cm	Fuel	Biological	Coal	Fragment			17		30.2	
50	STP 3	0-40 cm	Furniture	Glass	Lighting/Electrical	Lamp/Chimney	Fragment	Clear	1			
50	STP 3	0-40 cm	Kitchen	Glass	Table Glass	Body	Unidentified	Clear	1			
51	STP 2	1	Kitchen	Ceramic	Whiteware	Undecorated	Body		1			
51	STP 2	1	Architecture	Metal	Nail	Wire	6d	Pulled	1			
51	STP 2	1	Fuel	Biological	Coal	Fragment			9		23	
51	STP 2	1	Kitchen	Glass	Bottle/Jar	Body	Unidentified	Clear	2			
51	STP 2	1	Kitchen	Glass	Bottle/Jar	Body	Unidentified	Amber	1			
51	STP 2	1	Kitchen	Glass	Bottle/Jar	Body	Unidentified	Yellowed	1			
52	TU 5	3	Architecture	Ceramic	Brick	Fragment			1		96.3	
52	TU 5	3	Architecture	Metal	Nail	Cut	2d	Pulled	1			
52	TU 5	3	Architecture	Metal	Nail	Cut	9d	Unaltered	1			
52	TU 5	3	Architecture	Metal	Nail	Cut	Proximal	Unidentified	2			
52	TU 5	3	Architecture	Metal	Nail	Unidentified	Proximal	Unidentified	4			
52	TU 5	3	Architecture	Metal	Nail	Unidentified	Distal	Unidentified	3			
52	TU 5	3	Architecture	Glass	Window	Fragment		Clear	1	2.4		
52	TU 5	3	Architecture	Glass	Window	Fragment		Clear	1	2		
52	TU 5	3	Fuel	Biological	Cinder	Fragment			316		446.6	
52	TU 5	3	Fuel	Biological	Coal	Fragment			28		57.2	
52	TU 5	3	Furniture	Glass	Lighting/Electrical	Lamp/Chimney	Fragment	Clear	4			
52	TU 5	3	Furniture	Ceramic	Terra Cotta	Unglazed	Body	Flower Pot	5			
52	TU 5	3	Kitchen	Glass	Bottle/Jar	Body	Unidentified	Green	2			Coca Cola Bottle, 1915
52	TU 5	3	Kitchen	Glass	Bottle/Jar	Body	Unidentified	Olive Green	1			
52	TU 5	3	Kitchen	Glass	Bottle/Jar	Body	Unidentified	Clear	4			
52	TU 5	3	Kitchen	Glass	Table Glass	Body	Unidentified	Amythest	1			
52	TU 5	3	Kitchen	Glass	Table Glass	Body	Unidentified	Clear	1			
52	TU 5	3	Other	Glass	Burned/Melted	Fragment	Unidentified		1			
52	TU 5	3	Other	Metal	Unidentified	Fragment			19			

Cat #	STP/Unit	Level	Functional Group	Material	Type	Subtype 1	Subtype 2	Subtype 3	#	Thickness (mm)	Weight (g)	Comments
52	TU 5	3	Kitchen	Metal	Pull Tab		Fragment		1			
53	TU 5	4	Kitchen	Ceramic	Whiteware	Decorated	Rim		1			Gold Paint
53	TU 5	4	Architecture	Metal	Nail	Unidentified	Unidentified	Unidentified	2			
53	TU 5	4	Architecture	Metal	Nail	Wire	Distal	Unidentified	2			
53	TU 5	4	Architecture	Metal	Nail	Wire	Proximal	Unidentified	1			
53	TU 5	4	Architecture	Glass	Window	Fragment		Clear	1	2.7		
53	TU 5	4	Arms	Biological	Cartridge	Fragment			1			Shotgun Shell
53	TU 5	4	Fuel	Biological	Cinder	Fragment			100		99.7	
53	TU 5	4	Fuel	Biological	Coal	Fragment			10		13.8	
53	TU 5	4	Furniture	Ceramic	Terra Cotta	Unglazed	Body	Flower Pot	1			
53	TU 5	4	Other	Metal	Unidentified	Fragment			3			
54	TU 6	1	Architecture	Ceramic	Brick	Fragment			1		6.4	
54	TU 6	1	Fuel	Biological	Cinder	Fragment			1		2.7	
54	TU 6	1	Fuel	Biological	Coal	Fragment			3		15	
54	TU 6	1	Kitchen	Metal	Pull Tab	Fragment			1			
54	TU 6	1	Other	Ceramic	Tube	Fragment			1			
54	TU 6	1	Personal	Plastic	Toys	Game Piece			1			Monopoly House
55	TU 6	2	Kitchen	Ceramic	Ironstone	Molded	Shoulder		1			
55	TU 6	2	Architecture	Ceramic	Brick	Fragment			1		5.5	
55	TU 6	2	Architecture	Metal	Nail	Cut	8d	Unaltered	1			
55	TU 6	2	Architecture	Metal	Nail	Cut	Unidentified	Unaltered	1			
55	TU 6	2	Architecture	Metal	Nail	Wire	4d	Pulled	1			
55	TU 6	2	Architecture	Metal	Nail	Wire	Distal	Unidentified	1			
55	TU 6	2	Fuel	Biological	Charcoal	Fragment			4		55	
55	TU 6	2	Fuel	Biological	Coal	Fragment			15		84.9	
56	TU 6	2	Architecture	Ceramic	Brick	Fragment			7		17.9	
56	TU 6	2	Architecture	Metal	Nail	Cut	5d	Unaltered	1			
56	TU 6	2	Architecture	Metal	Nail	Cut	Distal	Unidentified	1			
56	TU 6	2	Architecture	Metal	Nail	Wire	6d	Pulled	1			
56	TU 6	2	Architecture	Metal	Nail	Wire	Proximal	Unidentified	1			
56	TU 6	2	Architecture	Glass	Window	Fragment			1	1.19		
58	Backhoe	TR 1, AC	Architecture	Metal	Nail	Cut	3d	Unaltered	1			
58	Backhoe	TR 1, AC	Architecture	Metal	Nail	Wire	16d	Pulled	1			
58	Backhoe	TR 1, AC	Kitchen	Biological	Faunal	Bone			1			Long Bone
58	Backhoe	TR 1, AC	Other	Metal	Unidentified	Fragment			1			
58	Backhoe	TR 1, AC	Other	Plastic	Unidentified	Fragment			1			Black with Green Paint
58	Backhoe	TR 1, AC	Kitchen	Metal	Pull Tab	Fragment			1			

Cat #	STP/Unit	Level	Functional Group	Material	Type	Subtype 1	Subtype 2	Subtype 3	#	Thickness (mm)	Weight (g)	Comments
59	TU 5	20	Kitchen	Biological	Faunal	Bone			5			Porcine Teeth and Jaw
60	TU 5	21	Kitchen	Biological	Faunal	Bone			1			
60	TU 5	21	Kitchen	Ceramic	Refined Earthenware	Glazed	Body		1			
60	TU 5	21	Kitchen	Ceramic	Refined Earthenware	Transfer Printed	Body	Transfer Printed	1			
60	TU 5	21	Kitchen	Ceramic	Whiteware	Undecorated	Body		1			
60	TU 5	21	Kitchen	Ceramic	Yellow ware	Undecorated	Body		2			
60	TU 5	21	Architecture	Ceramic	Brick	Fragment			2		7.2	
60	TU 5	21	Architecture	Metal	Nail	Cut	9d	Unaltered	1			
60	TU 5	21	Architecture	Metal	Nail	Cut	5d	Unaltered	1			
60	TU 5	21	Architecture	Metal	Nail	Cut	7d	Unaltered	1			
60	TU 5	21	Architecture	Metal	Nail	Cut	3d	Pulled	1			
60	TU 5	21	Architecture	Metal	Nail	Cut	4d	Pulled	1			
60	TU 5	21	Architecture	Metal	Nail	Cut	Distal	Unidentified	7			
60	TU 5	21	Architecture	Metal	Nail	Cut	Medial	Unidentified	2			
60	TU 5	21	Architecture	Metal	Nail	Cut	Proximal	Unidentified	5			
60	TU 5	21	Architecture	Metal	Nail	Cut	Unidentified	Pulled	1			
60	TU 5	21	Architecture	Metal	Nail	Unidentified	Proximal	Unidentified	1			
60	TU 5	21	Architecture	Metal	Nail	Unidentified	Unidentified	Pulled	2			
60	TU 5	21	Architecture	Metal	Nail	Wire	Distal	Unidentified	1			
60	TU 5	21	Architecture	Metal	Nail	Wire	Medial	Unidentified	3			
60	TU 5	21	Architecture	Metal	Nail	Wire	Proximal	Unidentified	2			
60	TU 5	21	Architecture	Glass	Window	Fragment		Clear	1	2.01		
60	TU 5	21	Architecture	Glass	Window	Fragment		Clear	1	1.96		
60	TU 5	21	Architecture	Glass	Window	Fragment		Clear	1	1.93		
60	TU 5	21	Architecture	Glass	Window	Fragment		Clear	1	2.13		
60	TU 5	21	Architecture	Glass	Window	Fragment		Clear	1	2.06		
60	TU 5	21	Architecture	Glass	Window	Fragment		Clear	3	2.09		
60	TU 5	21	Architecture	Glass	Window	Fragment		Aqua	1	1.72		
60	TU 5	21	Architecture	Glass	Window	Fragment		Aqua	1	1.2		
60	TU 5	21	Architecture	Glass	Window	Fragment		Aqua	1	1.52		
60	TU 5	21	Architecture	Glass	Window	Fragment		Aqua	1	1.65		
60	TU 5	21	Fuel	Biological	Coal	Fragment			5		23.5	
60	TU 5	21	Fuel	Other	Slag	Fragment			2		27.3	
60	TU 5	21	Furniture	Ceramic	Terra Cotta	Unglazed	Body	Flower Pot	3			
60	TU 5	21	Kitchen	Glass	Bottle/Jar	Body	Unidentified	Aqua	4			
60	TU 5	21	Kitchen	Glass	Bottle/Jar	Body	Unidentified	Clear	1			
60	TU 5	21	Other	Metal	Fossil Conglomerates				4			

Cat #	STP/Unit	Level	Functional Group	Material	Type	Subtype 1	Subtype 2	Subtype 3	#	Thickness (mm)	Weight (g)	Comments
60	TU 5	21	Other	Metal	Unidentified	Fragment			55			
61	Backhoe	TR 1, AC	Architecture	Ceramic	Brick	Fragment			6		6.2	
61	Backhoe	TR 1, AC	Architecture	Stone	Mortar	Fragment			20		15.5	
61	Backhoe	TR 1, AC	Architecture	Metal	Nail	Cut	6d	Unaltered	1			
61	Backhoe	TR 1, AC	Architecture	Metal	Nail	Cut	3d	Unaltered	1			
61	Backhoe	TR 1, AC	Architecture	Metal	Nail	Cut	Distal	Unidentified	2			
61	Backhoe	TR 1, AC	Architecture	Metal	Nail	Cut	Medial	Unidentified	3			
61	Backhoe	TR 1, AC	Architecture	Metal	Nail	Cut	Proximal	Unidentified	3			
61	Backhoe	TR 1, AC	Architecture	Metal	Nail	Cut	Unidentified	Unaltered	3			
61	Backhoe	TR 1, AC	Architecture	Metal	Nail	Cut	Unidentified	Pulled	2			
61	Backhoe	TR 1, AC	Architecture	Metal	Nail	Wire	4d	Unaltered	1			
61	Backhoe	TR 1, AC	Architecture	Metal	Nail	Wire	5d	Unaltered	1			
61	Backhoe	TR 1, AC	Architecture	Metal	Nail	Wire	7d	Pulled	1			
61	Backhoe	TR 1, AC	Architecture	Metal	Nail	Wire	Unidentified	Unaltered	1			
61	Backhoe	TR 1, AC	Architecture	Metal	Nail	Wire	Distal	Unidentified	1			
61	Backhoe	TR 1, AC	Architecture	Asphalt	Roofing	Fragment			2			
61	Backhoe	TR 1, AC	Architecture	Ceramic	Tile	Fragment		White	1			Backing Still Attached
61	Backhoe	TR 1, AC	Architecture	Glass	Window	Fragment		Aqua	4	2.28		
61	Backhoe	TR 1, AC	Architecture	Glass	Window	Fragment		Aqua	2	2.01		
61	Backhoe	TR 1, AC	Architecture	Glass	Window	Fragment		Aqua	1	2.69		
61	Backhoe	TR 1, AC	Architecture	Glass	Window	Fragment		Aqua	2	1.76		
61	Backhoe	TR 1, AC	Architecture	Glass	Window	Fragment		Aqua	1	2.22		
61	Backhoe	TR 1, AC	Architecture	Glass	Window	Fragment		Clear	2	1.37		
61	Backhoe	TR 1, AC	Clothing	Plastic	Buttons	Buttons			1			Burned
61	Backhoe	TR 1, AC	Fuel	Biological	Coal	Fragment			178		269.7	
61	Backhoe	TR 1, AC	Furniture	Glass	Lighting/Electrical	Lamp/Chimney	Fragment	Clear	10			
61	Backhoe	TR 1, AC	Kitchen	Biological	Faunal	Bone	Fragment		62			
61	Backhoe	TR 1, AC	Kitchen	Biological	Faunal	Eggshell	Fragment		2			
61	Backhoe	TR 1, AC	Kitchen	Ceramic	Whiteware	Undecorated	Rim		4			
61	Backhoe	TR 1, AC	Kitchen	Ceramic	Whiteware	Undecorated	Body		4			
61	Backhoe	TR 1, AC	Kitchen	Ceramic	Whiteware	Undecorated	Footring		2			
61	Backhoe	TR 1, AC	Other	Biological	Faunal	Shells			4			
61	Backhoe	TR 1, AC	Other	Biological	Fossils	Shells			2			
61	Backhoe	TR 1, AC	Other	Metal	Unidentified	Fragment			20			
61	Backhoe	TR 1, AC	Personal	Biological	Bead	Wood			1			Spherical
61	Backhoe	TR 1, AC	Personal	Glass	Toiletries	Perfume Bottle	Body	Clear	8			Embossed Swirls
61	Backhoe	TR 1, AC	Kitchen	Glass	Bottle/Jar	Body	Unidentified	Clear	14			

Cat #	STP/Unit	Level	Functional Group	Material	Type	Subtype 1	Subtype 2	Subtype 3	#	Thickness (mm)	Weight (g)	Comments
61	Backhoe	TR 1, AC	Kitchen	Glass	Bottle/Jar	Body	Unidentified	Amber	1			
61	Backhoe	TR 1, AC	Kitchen	Glass	Bottle/Jar	Body	Unidentified	Aqua	6			
61	Backhoe	TR 1, AC	Kitchen	Glass	Table Glass	Body	Unidentified	Clear	2			
61	Backhoe	TR 1, AC	Kitchen	Glass	Table Glass	Rim	Unidentified	Aqua	1			
61	Backhoe	TR 1, AC	Kitchen	Glass	Table Glass	Rim	Unidentified	Clear	1			
61	Backhoe	TR 1, AC	Kitchen	Glass	Unidentified	Body	Unidentified	Clear with white inclusions	2			
62	Backhoe	TR 1	Architecture	Metal	Nail	Cut	5d	Unaltered	1			
62	Backhoe	TR 1	Architecture	Metal	Nail	Cut	12d	Unaltered	1			
62	Backhoe	TR 1	Architecture	Metal	Nail	Cut	Medial	Unidentified	1			
62	Backhoe	TR 1	Architecture	Metal	Nail	Wire	8d	Unaltered	1			
62	Backhoe	TR 1	Clothing	Plastic	Buttons	Buttons			1			
62	Backhoe	TR 1	Kitchen	Biological	Faunal	Bone	Ham Bone		1			
62	Backhoe	TR 1	Kitchen	Biological	Faunal	Teeth	Incisor		1			
62	Backhoe	TR 1	Kitchen	Glass	Table Glass	Base	Unidentified	Clear	1			
62	Backhoe	TR 1	Kitchen	Glass	Table Glass	Body	Unidentified	Clear	1			
62	Backhoe	TR 1	Kitchen	Glass	Table Glass	Rim	Unidentified	Clear	1			
62	Backhoe	TR 1	Kitchen	Metal	Bottle Cap	Fragment			1			
63	TU 5	20	Kitchen	Biological	Faunal	Bone			1			
63	TU 5	20	Kitchen	Ceramic	Yellow ware	Decorated	Body	Brown Paint	1			
63	TU 5	20	Architecture	Ceramic	Brick	Fragment			1		5.1	
63	TU 5	20	Architecture	Stone	Mortar	Fragment			1		0.5	
63	TU 5	20	Architecture	Metal	Nail	Cut	2d	Unaltered	1			
63	TU 5	20	Architecture	Metal	Nail	Cut	4d	Unaltered	1			
63	TU 5	20	Architecture	Metal	Nail	Cut	6d	Unaltered	1			
63	TU 5	20	Architecture	Metal	Nail	Cut	Distal	Unidentified	1			
63	TU 5	20	Architecture	Metal	Nail	Cut	Medial	Unidentified	1			
63	TU 5	20	Architecture	Metal	Nail	Cut	Proximal	Unidentified	2			
63	TU 5	20	Architecture	Metal	Nail	Cut	Unidentified	Unidentified	1			
63	TU 5	20	Architecture	Metal	Nail	Wire	Medial	Unidentified	2			
63	TU 5	20	Architecture	Metal	Nail	Wire	Proximal	Unidentified	1			
63	TU 5	20	Architecture	Glass	Window	Fragment		Clear	3	2.08		
63	TU 5	20	Architecture	Glass	Window	Fragment		Clear	2	2.03		
63	TU 5	20	Architecture	Glass	Window	Fragment		Aqua	1	1.54		
63	TU 5	20	Fuel	Biological	Charcoal	Fragment			1		0.1	
63	TU 5	20	Fuel	Biological	Cinder	Fragment			34		30.1	
63	TU 5	20	Fuel	Biological	Coal	Fragment			1		5.6	
63	TU 5	20	Fuel	Other	Slag	Fragment			3		7.4	

Cat #	STP/Unit	Level	Functional Group	Material	Type	Subtype 1	Subtype 2	Subtype 3	#	Thickness (mm)	Weight (g)	Comments
63	TU 5	20	Kitchen	Glass	Bottle/Jar	Body	Unidentified	Clear	1			Letter "P" partially visible
63	TU 5	20	Other	Metal	Unidentified	Fragment			17			
64	Backhoe	Area 2	Architecture	Metal	Nail	Cut	Unidentified	Pulled	1			
64	Backhoe	Area 2	Architecture	Glass	Window	Fragment		Clear	1	1.43		
65	Backhoe	Chimney	Architecture	Metal	Nail	Cut	3d	Unaltered	2			
65	Backhoe	Chimney	Architecture	Metal	Nail	Cut	4d	Unaltered	1			
65	Backhoe	Chimney	Architecture	Metal	Nail	Cut	8d	Pulled	4			
65	Backhoe	Chimney	Architecture	Metal	Nail	Cut	9d	Unaltered	1			
65	Backhoe	Chimney	Architecture	Metal	Nail	Cut	Medial	Unidentified	1			
65	Backhoe	Chimney	Architecture	Metal	Nail	Wire	40d	Clinched	1			
65	Backhoe	Chimney	Architecture	Metal	Nail	Wire	Unidentified	Unaltered	1			
65	Backhoe	Chimney	Architecture	Glass	Window	Fragment		Clear	1	1.44		
65	Backhoe	Chimney	Fuel	Biological	Coal	Fragment			1		1	
65	Backhoe	Chimney	Kitchen	Biological	Faunal	Bone	Utensil Handle		1			
65	Backhoe	Chimney	Kitchen	Biological	Faunal	Bone	Fragment		16			
65	Backhoe	Chimney	Kitchen	Glass	Bottle/Jar	Body	Unidentified	Aqua	2			
65	Backhoe	Chimney	Kitchen	Glass	Bottle/Jar	Body	Unidentified	Clear	2			Burned/Melted
65	Backhoe	Chimney	Kitchen	Glass	Bottle/Jar	Body	Unidentified	Clear	1			
65	Backhoe	Chimney	Kitchen	Glass	Table Glass	Body	Unidentified	Aqua	1			
66	Backhoe	AC	Architecture	Metal	Nail	Cut	5d	Unaltered	1			
66	Backhoe	AC	Architecture	Metal	Nail	Cut	10d	Pulled	2			
66	Backhoe	AC	Architecture	Metal	Nail	Cut	Unidentified	Unaltered	4			
66	Backhoe	AC	Architecture	Metal	Nail	Wire	2d	Pulled	1			
66	Backhoe	AC	Architecture	Metal	Nail	Wire	7d	Unaltered	1			
66	Backhoe	AC	Architecture	Glass	Window	Fragment		Clear	2	1.62		
67	Backhoe	Surface	Architecture	Ceramic	Brick	Fragment			1		2.3	
67	Backhoe	Surface	Architecture	Metal	Nail	Cut	5d	Unaltered	1			
67	Backhoe	Surface	Architecture	Metal	Nail	Cut	6d	Pulled	1			
67	Backhoe	Surface	Architecture	Metal	Nail	Cut	6d	Unaltered	1			
67	Backhoe	Surface	Architecture	Metal	Nail	Cut	7d	Unaltered	1			
67	Backhoe	Surface	Architecture	Metal	Nail	Cut	9d	Pulled	1			
67	Backhoe	Surface	Architecture	Metal	Nail	Cut	20d	Unaltered	1			
67	Backhoe	Surface	Architecture	Metal	Nail	Cut	Unidentified	Pulled	3			
67	Backhoe	Surface	Architecture	Metal	Nail	Cut	Unidentified	Unaltered	1			
67	Backhoe	Surface	Architecture	Metal	Nail	Unidentified	Unidentified	Pulled	1			
67	Backhoe	Surface	Architecture	Metal	Nail	Unidentified	Unidentified	Unaltered	2			
67	Backhoe	Surface	Architecture	Metal	Nail	Wire	5d	Pulled	1			

Cat #	STP/Unit	Level	Functional Group	Material	Type	Subtype 1	Subtype 2	Subtype 3	#	Thickness (mm)	Weight (g)	Comments
67	Backhoe	Surface	Architecture	Metal	Nail	Wire	12d	Pulled	1			
67	Backhoe	Surface	Architecture	Metal	Nail	Wire	16d	Pulled	1			
67	Backhoe	Surface	Architecture	Metal	Nail	Wire	Unidentified	Pulled	1			
67	Backhoe	Surface	Architecture	Metal	Nail	Wire	Unidentified	Unaltered	1			
67	Backhoe	Surface	Architecture	Metal	Spike	Wrought		Unaltered	1			
67	Backhoe	Surface	Architecture	Glass	Window	Fragment		Clear	10	2.34		
67	Backhoe	Surface	Architecture	Glass	Window	Fragment		Clear	9	2.29		
67	Backhoe	Surface	Architecture	Glass	Window	Fragment		Clear	1	2.46		
67	Backhoe	Surface	Architecture	Glass	Window	Fragment		Clear	1	2.42		
67	Backhoe	Surface	Architecture	Glass	Window	Fragment		Clear	3	2.31		
67	Backhoe	Surface	Architecture	Glass	Window	Fragment		Clear	2	1.97		
67	Backhoe	Surface	Architecture	Glass	Window	Fragment		Aqua	1	2.07		
67	Backhoe	Surface	Architecture	Glass	Window	Fragment		Aqua	1	2.65		
67	Backhoe	Surface	Architecture	Glass	Window	Fragment		Aqua	1	1.89		
67	Backhoe	Surface	Architecture	Glass	Window	Fragment		Aqua	1	2.35		
67	Backhoe	Surface	Architecture	Glass	Window	Fragment		Aqua	1	1.26		
67	Backhoe	Surface	Architecture	Glass	Window	Fragment		Aqua	1	1.66		
67	Backhoe	Surface	Architecture	Glass	Window	Fragment		Aqua	1	2.24		
67	Backhoe	Surface	Architecture	Glass	Window	Fragment		Aqua	1	1.56		
67	Backhoe	Surface	Clothing	Plastic	Buttons	Buttons			1			
67	Backhoe	Surface	Fuel	Biological	Coal	Fragment			11		72.5	
67	Backhoe	Surface	Furniture	Glass	Lighting/Electrical	Lamp/Chimney	Fragment	Clear	2			
67	Backhoe	Surface	Kitchen	Biological	Faunal	Bone			2			
67	Backhoe	Surface	Kitchen	Biological	Faunal	Teeth			2			Porcine Teeth
67	Backhoe	Surface	Kitchen	Ceramic	Ironstone	Undecorated	Body	Fragment	1			
67	Backhoe	Surface	Kitchen	Ceramic	Ironstone	Undecorated	Rim	Fragment	1			Teacup
67	Backhoe	Surface	Kitchen	Ceramic	Porcelain	Undecorated	Rim	Fragment	1			Teacup
67	Backhoe	Surface	Kitchen	Ceramic	Porcelain	Undecorated	Body	Fragment	1			Very small with handle attachment, possibly from a toy
67	Backhoe	Surface	Kitchen	Ceramic	Stoneware	Salt Glazed	Body	Fragment	1			Blue design, from large domestic pot
67	Backhoe	Surface	Kitchen	Ceramic	Whiteware	Undecorated	Rim	Fragment	3			Thin, possibly teacup rim, slightly cream, in three sherds
67	Backhoe	Surface	Kitchen	Ceramic	Whiteware	Undecorated	Rim	Fragment	2			Plate, burned
67	Backhoe	Surface	Kitchen	Ceramic	Whiteware	Undecorated	Base	Fragment	1			Plate, burned (possibly same as above)
67	Backhoe	Surface	Kitchen	Ceramic	Whiteware	Undecorated	Body	Fragment	1			
67	Backhoe	Surface	Other	Biological	Faunal	Shells	Bivalve	Fragment	2			
67	Backhoe	Surface	Other	Plastic	Modern	Unidentified			20			
67	Backhoe	Surface	Other	Metal	Unidentified			Fragment	3			
67	Backhoe	Surface	Other	Metal	Wire	Unidentified			2			

Cat #	STP/Unit	Level	Functional Group	Material	Type	Subtype 1	Subtype 2	Subtype 3	#	Thickness (mm)	Weight (g)	Comments
67	Backhoe	Surface	Personal	Metal	Eyeglass arm	Eyeglass Arm		Fragment	1			
67	Backhoe	Surface	Personal	Glass	Marble	toy			2			
67	Backhoe	Surface	Personal	Metal	Watch links	Watch Links		Fragment	1			
67	Backhoe	Surface	Kitchen	Glass	Bottle/Jar	Base	Unidentified	Olive Green	1			Letters "TSBU" visible inside footing
67	Backhoe	Surface	Kitchen	Glass	Bottle/Jar	Base	Machine Made	Clear	2			"Liquor" and "55" on bottom, "OZ" on side
67	Backhoe	Surface	Kitchen	Glass	Bottle/Jar	Base	Machine Made	Blue	2			Flattish
67	Backhoe	Surface	Kitchen	Glass	Bottle/Jar	Base	Machine Made	Clear	2			
67	Backhoe	Surface	Kitchen	Glass	Bottle/Jar	Body	Unidentified	Green	4			
67	Backhoe	Surface	Kitchen	Glass	Bottle/Jar	Body	Unidentified	Clear	4			At least 4, possibly more from same small liquor bottle
67	Backhoe	Surface	Kitchen	Glass	Bottle/Jar	Body	Unidentified	Frosted Blue	1			
67	Backhoe	Surface	Kitchen	Glass	Bottle/Jar	Body	Unidentified	Clear	12			
67	Backhoe	Surface	Kitchen	Glass	Bottle/Jar	Lip	Machine Made	Aqua	1			Coca Cola Bottle
67	Backhoe	Surface	Kitchen	Glass	Bottle/Jar	Lip	Machine Made	Clear	1			Mason type jar
67	Backhoe	Surface	Kitchen	Glass	Bottle/Jar	Lip	Unidentified	Frosted Aqua	1			Very thick, partial shoulder, jar?
67	Backhoe	Surface	Kitchen	Glass	Bottle/Jar	Neck	Unidentified	Aqua	1			Coca Cola Bottle
67	Backhoe	Surface	Kitchen	Glass	Bottle/Jar	Shoulder	Unidentified	Clear	1			
67	Backhoe	Surface	Kitchen	Glass	Table Glass	Body	Unidentified	Milk Glass	2			
67	Backhoe	Surface	Kitchen	Metal	Bottle Cap				1			Mountain Dew
67	Backhoe	Surface	Kitchen	Metal	Bottle Cap				1			Zooper Dooper Punch
67	Backhoe	Surface	Kitchen	Metal	Jar Lid			Fragment	1			
67	Backhoe	Surface	Kitchen	Metal	Pull Tab				4			
68	Backhoe	Surface	Other	Metal	Pipe	Unidentified			1			Large/Heavy
69	TU 1		Architecture	Ceramic	Brick	Fragment			217		38,101.76	weighted and counted in field and discarded
69	TU 1		Architecture	Stone	Stone				25		21,772.43	weighted and counted in field and discarded



Appendix B -

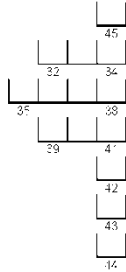
Archaeological Site Form





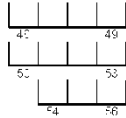
**TEMPORAL - CULTURAL AFFILIATIONS**

1. Cultural Periods Represented



- Unassigned
- Paleo-Indian, undefined  Early  Late
- Archaic, undefined  Early  Middle  Late
- Woodland, undefined  Early  Middle
- Late Woodland/Mississippian
- Historic Indian
- Historic Non-Indian

2. Archaeological Cultures Represented



- Adena  Hopewell  Ft. Ancient  Stone Grave
- Mississippian  Cherokee  Pisgah  Lost River
- Caborn-Welborn  Yankeetown  Angel
- OTHER (describe) \_\_\_\_\_

3. How were cultural affiliation and age determined (describe diagnostic artifacts, type names, and attach outline drawings)?

Prehistoric ceramics were undecorated limestone temper-eroded.  
 \_\_\_\_\_  
 \_\_\_\_\_  
 \_\_\_\_\_

Prehistoric materials collected: 19 total number of items

Type	Number		
ceramics	<u>5</u>	other scrapers	_____
projectile points/fragments	_____	flakes/cores/chunks	<u>13</u>
hafted scrapers/drills	_____	ground/pecked/battered	_____
other drills	_____	stone	_____
Bifaces/fragments	<u>1</u>	worked bone/shell	_____
unifaces	_____	human bone/burials	_____
perforators/gravers	_____	faunal materials	_____
spokeshaves	_____		_____

Prehistoric materials observed but not collected (describe)

A projectile point was observed when archaeologists from KYTC visited the site area in the spring of 2013. There was no photograph taken or description made of the point.  
 \_\_\_\_\_  
 \_\_\_\_\_

8	9
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4. Approximate Historic Site Date Range

- |                                      |  |  |
|--------------------------------------|--|--|
| 1 <input type="checkbox"/> pre 1600  | 6 <input type="checkbox"/> 1701-1750             | 11 <input type="checkbox"/> 1900-2000            |
| 2 <input type="checkbox"/> 1600-1700 | 7 <input type="checkbox"/> 1751-1800             | 12 <input checked="" type="checkbox"/> 1901-1950 |
| 3 <input type="checkbox"/> 1601-1650 | 8 <input type="checkbox"/> 1801-1900             | 13 <input checked="" type="checkbox"/> 1951-2000 |
| 4 <input type="checkbox"/> 1651-1700 | 9 <input type="checkbox"/> 1801-1950             | 14 <input type="checkbox"/> 1851-1950            |
| 5 <input type="checkbox"/> 1701-1800 | 10 <input checked="" type="checkbox"/> 1851-1900 | 15 <input type="checkbox"/> 1801-1950            |

Historic materials collected Coal and slag samples, brick, scrap metal, linoleum, wire nails, cut nails, window (flat) glass, shotgun shell, ox shoe, bottle glass, painted plaster

Historic materials observed but not collected Coal and slag from STP 7

**PHYSICAL DESCRIPTION**

10	11
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1. Site Type

- |  |  |
|--|--|
| 0 <input type="checkbox"/> undetermined                            | 10 <input type="checkbox"/> non-mound earthwork                |
| 1 <input checked="" type="checkbox"/> open habitation w / o mounds | 11 <input type="checkbox"/> workshop                           |
| 2 <input type="checkbox"/> isolated find                           | 12 <input type="checkbox"/> isolated burials                   |
| 3 <input type="checkbox"/> rockshelter                             | 13 <input type="checkbox"/> cemetery                           |
| 4 <input type="checkbox"/> cave                                    | 14 <input type="checkbox"/> other special activity area        |
| 5 <input type="checkbox"/> quarry                                  | 15 <input type="checkbox"/> open habitation w/ mounds          |
| 6 <input type="checkbox"/> stone mound                             | 16 <input checked="" type="checkbox"/> historic farm/residence |
| 7 <input type="checkbox"/> earth mound                             | 17 <input type="checkbox"/> industrial                         |
| 8 <input type="checkbox"/> mound complex                           | 18 <input type="checkbox"/> military                           |
| 9 <input type="checkbox"/> petroglyph/pictograph                   | OTHER: _____   |

12
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2. Midden

- 0  unknown    1  earth    2  shell    3  absent

13
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3. Evidence of recent vandalism (*within the last month*)

- 1  no    2  yes

14
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4. Site Condition

- |   |   |
|---|---|
| 1 <input type="checkbox"/> apparently undisturbed             | 5 <input type="checkbox"/> 76-99% disturbed     |
| 2 <input checked="" type="checkbox"/> less than 25% disturbed | 6 <input type="checkbox"/> totally destroyed    |
| 3 <input type="checkbox"/> 26-50% disturbed                   | 7 <input type="checkbox"/> disturbed, % unknown |
| 4 <input type="checkbox"/> 51-75% disturbed                   |   |

17	18
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5. Major Land Use

- |   |  |  |
|---|--|--|
| 1 <input checked="" type="checkbox"/> cultivated  | 8 <input type="checkbox"/> modern cemetery | 16 <input type="checkbox"/> 14+15                    |
| 2 <input checked="" type="checkbox"/> pasture     | 9 <input type="checkbox"/> mining          | 17 <input type="checkbox"/> commercial               |
| 3 <input type="checkbox"/> woods/forest           | 10 <input type="checkbox"/> inundated      | 18 <input type="checkbox"/> military                 |
| 4 <input type="checkbox"/> road/trail             | 11 <input type="checkbox"/> industrial     | 19 <input type="checkbox"/> logging/ logging related |
| 5 <input type="checkbox"/> ditch/dike/ borrow pit | 12 <input type="checkbox"/> residential    | 20 <input type="checkbox"/> scrub/secondary growth   |
| 6 <input type="checkbox"/> landfill               | 13 <input type="checkbox"/> recreational   |  |
| 7 <input type="checkbox"/> modern                 | 14 <input type="checkbox"/> 1+2+3          | Other _____  |
|   | 15 <input type="checkbox"/> 11+12+13       |  |

19

6. Amount of ground surface visible (*typically*)

- |   |                                      |
|---|--------------------------------------|
| 1 <input checked="" type="checkbox"/> less than 10% | 5 <input type="checkbox"/> poor      |
| 2 <input type="checkbox"/> 11-50%                   | 6 <input type="checkbox"/> fair      |
| 3 <input type="checkbox"/> 51-91%                   | 7 <input type="checkbox"/> good      |
| 4 <input type="checkbox"/> 91-100%                  | 8 <input type="checkbox"/> excellent |

Describe visibility The entire site area was grown over in sod/pasture grass

20

7. Physiographic Division

- |   |  |
|---|--|
| 1 <input type="checkbox"/> Inner Bluegrass            | 5 <input type="checkbox"/> Mississippi Plateau |
| 2 <input checked="" type="checkbox"/> Outer Bluegrass | 6 <input type="checkbox"/> Western Coalfields  |
| 3 <input type="checkbox"/> Knobs                      | 7 <input type="checkbox"/> Jackson Purchase    |
| 4 <input type="checkbox"/> Cumberland Plateau         |  |

Landform Type

- |  |  |
|--|--|
| 1 <input checked="" type="checkbox"/> floodplain | 4 <input type="checkbox"/> dissected uplands   |
| 2 <input type="checkbox"/> terrace               | 5 <input type="checkbox"/> undissected uplands |
| 3 <input type="checkbox"/> hillside              | OTHER <input type="checkbox"/>                 |

Locality Type

- |   |                                       |
|---|---------------------------------------|
| 1 <input checked="" type="checkbox"/> level | 5 <input type="checkbox"/> bluff base |
| 2 <input type="checkbox"/> knoll            | 6 <input type="checkbox"/> ridge      |
| 3 <input type="checkbox"/> closed           | 7 <input type="checkbox"/> slope      |
| 4 <input type="checkbox"/> bluff crest      | OTHER <input type="checkbox"/>        |

21

22

23 24  
25 26 27 28  
29 30

8. Soil Association \_\_\_\_\_

Soil Series \_\_\_\_\_

Soil Type Dunning Silty Clay Loam

Vegetation (*describe*) Sod grass

31 32 33 34 35  
36 37

9. Elevation 820 AMSL

Slope of Locality

- |  |   |
|--|---|
| 1 <input checked="" type="checkbox"/> less than 5°, flat | 4 <input type="checkbox"/> 26-50°                               |
| 2 <input type="checkbox"/> 6-10°                         | 5 <input type="checkbox"/> greater than 51° bluff (rockshelter) |
| 3 <input type="checkbox"/> 11-25°                        |   |

Slope Direction (*Aspect*)

- |  |                               |                               |
|--|-------------------------------|-------------------------------|
| 1 <input checked="" type="checkbox"/> Flat | 4 <input type="checkbox"/> E  | 7 <input type="checkbox"/> SW |
| 2 <input type="checkbox"/> N               | 5 <input type="checkbox"/> SE | 8 <input type="checkbox"/> W  |
| 3 <input type="checkbox"/> NE              | 6 <input type="checkbox"/> S  | 9 <input type="checkbox"/> NW |

37

38 39 40 41 42 43 44 45

46 47

10. Site Area (m<sup>2</sup>) 4,000

Basis for site area estimate

- |                                  |                                    |   |
|----------------------------------|------------------------------------|---|
| 1 <input type="checkbox"/> taped | 3 <input type="checkbox"/> guessed | 5 <input checked="" type="checkbox"/> transit/alidade |
| 2 <input type="checkbox"/> paced | 4 <input type="checkbox"/> range   | 6 <input type="checkbox"/>                            |

Confident of site boundaries:

- |  |                                |
|--|--------------------------------|
| 1 <input checked="" type="checkbox"/> no | 2 <input type="checkbox"/> yes |
|--|--------------------------------|

48

49 50

51

52 53

54 55

56

57

58 59

60 62

66 67

11. Drainage

- |   |   |   |
|---|---|---|
| 1 <input type="checkbox"/> Mississippi      | 6 <input type="checkbox"/> Green        | 11 <input checked="" type="checkbox"/> Kentucky |
| 2 <input type="checkbox"/> Tennessee        | 7 <input type="checkbox"/> Western Ohio | 12 <input type="checkbox"/> Licking             |
| 3 <input type="checkbox"/> Lower Cumberland | 8 <input type="checkbox"/> Central Ohio | 13 <input type="checkbox"/> Little Sandy        |
| 4 <input type="checkbox"/> Upper Cumberland | 9 <input type="checkbox"/> Eastern Ohio | 14 <input type="checkbox"/> Big Sandy           |
| 5 <input type="checkbox"/> Tradewater       | 10 <input type="checkbox"/> Salt        | 15 <input type="checkbox"/> Tygarts             |

Closest Water Source (name) Left Fork of Shaker Creek (?)

- |  |  |
|--|--|
| 1 <input checked="" type="checkbox"/> permanent stream | 4 <input type="checkbox"/> intermittent spring             |
| 2 <input type="checkbox"/> intermittent stream         | 5 <input type="checkbox"/> lake/pond (historic sites only) |
| 3 <input type="checkbox"/> permanent spring            | 6 <input type="checkbox"/> slough/oxbow lake               |
|  | 7 <input type="checkbox"/> well (historic sites only)      |

Rank order of stream nearest site 2

Distance to water from site Along north side of site

**REPORTING INFORMATION**

1. Site reported by

- 1  professional/student
- 2  amateur
- 3  other informant

2. Investigation type

- 1  reconnaissance (surface survey, may include shovel tests)
- 2  intensive (surface survey and testing)
- 3  excavated
- 4  volunteered

3. Institution/person filing report CDM Smith

Site surveyed by Howard Beverly

Date recorded August 20-21, 2013

Time of day AM-PM Time spent at site 8 hours

4. Artifact Repository (name and address where artifacts are curated)

William S. Webb Museum of the University of Kentucky

Name of curator at repository

Nancy O'Malley

5. Photos

- black/white  no. of pictures
- Color, digital 25 no. of pictures

Name and address of institution where photos are filed

same

6. Name and address of local informants

none

7. Name and address of owners of other collections from site (*attach inventories of private collections*)

none

8. Significance Status

- 1  National Register property
- 2  Eligible for National Register
- 3  Nominated to National Register by SHPO
- 4  Considered eligible but not nominated by SHPO
- 5  Inventory site (does not presently meet National Register criteria)
- 6  National Register status not assessed

Discuss the potential significance of the site (*does it meet National Register criteria in your opinion? why or why not? upon what evidence have you based your decision?*)

The Fort Ancient/prehistoric component of 15Me98 does not meet NRHP criteria because of the absence of features; it appears to be a scatter of artifacts with no associated midden or other features. The location of the artifacts in a floodplain that is regularly flooded, and at the base of two hills of sufficient elevation to be in view of a nearby recorded mound (15Me6), indicate the possibility that this site could be a flood depositional or erosional context. Thus Criterion D is not met since the site did not yield and is unlikely to yield information important in prehistory. This component is not subject to Criteria A, B, or C.

The early to mid-twentieth century historic farm/residence component of 15Me98 does not meet Criteria A or B for the lack of association with events that or persons who contributed significantly to the broad patterns of our history. Because there are no structural remains at the site, Criterion C is not met. Criterion D, indicating the site's potential to yield information important in history, is not met for several reasons. For such a concentrated occupation (several small outbuildings in addition to the residence are visible on aerial maps from the 1950s) the site offered a very low-density scatter of artifacts, and very few domestic-related artifacts. There were two features encountered in shovel probes. Feature 1 was the top 27 cm of STP 7 and associated with structure demolition or demolition clean-up; it was a thick burn layer with a lot of slag and the majority of the domestic-related artifacts from the site (window glass and linoleum). Feature 2 was found in STP 14, at 30-36 cm below surface. It was a layer of brick with no other associated artifacts, and no associated soil feature or discoloration. It is our determination that Criterion D is not met because of the low-density of artifacts at the site and the lack of a midden area, and though one possible structural feature was encountered it was likely only a pathway and did not offer any analytical information. The floodplain location of 15Me98 might partially explain the low density of artifacts.

9. References **Beverly and Wilkinson 2013 Phase I Archaeological Survey Replacement Bridge & Approaches on US 68 in Mercer County KYTC Item #71128.00. CDM Smith, Lexington.**

10. Ownership

- 1  federal
- 2  state
- 3  local government
- 4  government
- 5  private
- 6  joint state/federal

11. Special status (*federal, state, county, etc.*)

- 1  forest
- 2  park
- 3  wilderness
- 4  wild river
- 5  wildlife preserve
- 6  nature preserve
- 7  military preserve
- 8 \_\_\_\_\_

## DESCRIPTION OF SITE

Give a physical description of the site and its settings, including dimensions, features (with measurements), nature and location of artifacts and concentrations, extent and location of disturbances, etc.

The site was identified by 16 positive shovel probes out of 36 total probes excavated within the project bounds of a bridge-and-approaches road project between US-68 and the floodplain of the Left Fork of Shaker Creek. The entire site was grown over in sod/pasture grass making surface inspection impossible, thus shovel probing was the survey method used to determine site presence and its extent. The prehistoric as well as the historic aspects of the site were identified within one acre of the project area--bound on the southeast by the US-68 road and project boundary, to the northwest by the Left Fork of Shaker Creek and the project boundary, to the northeast by negative shovel probes, and to the southwest by the project boundary. The domestic aspect of the historic component is possibly contained within the project bounds, according to historic maps, but the agricultural aspect of the historic component and the prehistoric component likely beyond the project bounds.

The prehistoric assemblage collected from the site offered diagnostics in the form of very burnt Fort Ancient ceramic sherds. The remainder of the prehistoric assemblage consists of 13 chert flakes and one biface fragment, produced from eleven of the sixteen positive shovel probes. A projectile point was observed within the project boundaries by KYTC archaeologists prior to the survey, but no description of the point was recorded.

The historic artifact assemblage produced from the fourteen of the sixteen positive shovel probes includes brick, window glass, coal, slag, bottle glass, painted plaster, wire nails, cut nails, linoleum, a shotgun shell percussion cap, and scrap metal. There was a graveled area near the center of the project area, partially overlaying the burnt layer. Beyond that there were no disturbances encountered besides regular flooding. Historic artifact density was very light across the entire site, and only a few cut nails possibly could date to the earliest record of occupation of the location- an 1870 D.G. Beers map indicating a farm/residence belonging to J.L. Burk. The house is known to have stood into the 1970s. One 30-cm diameter shovel probe produced evidence of building destruction with 27 cm thick burnt layer at the surface. It is not clear if this was a burn pile or overburden from a burn pile. Another 30-cm diameter shovel probe produced a single layer of brick 30 cm below surface, possibly remains of a pathway.

Discuss the relationship between this site and other known sites in the area in terms of location, physical characteristics, size, etc.

Site 15Me6, a mound, is located within a 2 km radius of this survey, on a hill top north of the site at an elevation similar to that of the hills on either side of this current site. Another mound, 15Me7, is located near to 15Me6 and so there was likely a significant occupation associated with these mounds. The historic aspect of this site could overlap with the Shaker residences and industries located within a two-kilometer radius of the site. Two of the Shaker sites, Me56 and 57, included mills on Shaker Creek, and though this site is located on the creek, it does not seem likely that a mill could have operated at the current site because of the small flow and depth of the creek here.

## D A T E S

Absolute dates \_\_\_\_\_

Dating methods \_\_\_\_\_

\_\_\_\_\_ Laboratory \_\_\_\_\_

Relative dates \_\_\_\_\_

References \_\_\_\_\_

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**S K E T C H   M A P   O F   S I T E**

Include north arrow and scale. Also attach section of U.S.G.S. quad map with site location.



Directions to Site

	Terrain feature	Distance (km)	Direction/bearing
1.	_____	_____	_____
2.	_____	_____	_____
3.	_____	_____	_____

Appendix C -



# Historic Resource Inventory Form

Burned in 1986

demolished

KENTUCKY HISTORIC RESOURCES INVENTORY

Site No. ME-47

1. Historic Name(s) Original Owner		22. ADD/County PC/MERED	
2. Present Name		23. U.S.G.S. Quadrant (15'/75') HBM	
3. Location NORTHSIDE U.S. 60 EAST OF SEXTON RD.		24. UTM Reference Zone Easting Northing	
4. Owner's Name EARL SMITH		25. Coordinate Accuracy	
5. Owner's Address HARRODSBORN		26. Prehistoric Site Historic Site <u>Building</u>	
6. Open to Public Yes <input type="checkbox"/> No <input checked="" type="checkbox"/>	7. Visible from road Yes <input checked="" type="checkbox"/> No <input type="checkbox"/>	8. Ownership Private <input checked="" type="checkbox"/> Local <input type="checkbox"/> State <input type="checkbox"/> Federal <input type="checkbox"/>	
9. Local Contact/Organization		27. National Register District Name:	
10. Site Plan with North Arrow 		11. Architect	
12. Builder		13. Date 1925 A. <input checked="" type="checkbox"/> B. <input checked="" type="checkbox"/>	
14. Style A. VERNACULAR <input checked="" type="checkbox"/> B. <input type="checkbox"/>		15. Original Use SFR <input checked="" type="checkbox"/>	
16. Present use SFR		17. Condition EXCELLENT <input checked="" type="checkbox"/>	
18. Description TWO-STORY, FRAME DOUBLE-CELL HOUSE. CENTRAL BRICK CHIMNEY. SHED ADDITION TO NORTH & ONE STORY ADDITION TO EAST. ORIGINAL 6/6 SASH IN SECOND STORY OF FRONT & REAR OF MAIN BLOCK RE-USED IN REAR SHED ADDITION ITALIANATE PORCH, GREEN MANTLES & DOUBLE PANEL DOOR. SEE ME-47. (Continue on Back)		19. History	
20. Significance VERY GOOD EXAMPLE OF DOUBLE CELL FORM w/ MID-CENTURY FEATURES.		21. Source of Information	
22. ADD/County		23. U.S.G.S. Quadrant (15'/75')	
24. UTM Reference		25. Coordinate Accuracy	
26. Prehistoric Site		27. National Register District Name:	
28. Significance Evaluation S		29. Status National Landmark <input type="checkbox"/> Date National Register <input type="checkbox"/> Landmark Certificate <input type="checkbox"/> Kentucky Survey <input type="checkbox"/> Local Landmark <input type="checkbox"/> HABS/HAER <input type="checkbox"/>	
30. Historic Theme Primary <u>ARCA</u> <input checked="" type="checkbox"/> Secondary <input type="checkbox"/> Other <input type="checkbox"/>		31. Endangered Yes <input type="checkbox"/> No <input checked="" type="checkbox"/>	
32. Preservation Project Status		Actual Cost in \$,000s	
33. ATTACH PHOTO 		Roll No. <u>10</u> Picture No. <u>15-16</u> Direction	
34. Prepared by: C.S.		35. Organization KHC	
36. Date SUMMER 1981		37. Revision Dates 38. Staff Review	

Appendix D -

Faunal Remains



Table D-1. Faunal Remains from 15Me98.

FS #	Bag #	TU	STP	Feat	Zone	Level	Qty	Species	Class	Side	Elem	Port	Wt	Gnawed	Cut	Sex	Age	Photo	weathered	Comments
26	5	2			1	1	1	Pig	Mammal	right	canine, lower	enamel	1.00							
29	16	1			1	3	1	Rabbit	Mammal	left	femur	distal and shaft	1.00	h?	k					diagonal knife cut on lateral and medial just above distal condyle, possible human gnawed on anterior distal
42	39	4			2	4	1	Pig	Mammal	right	canine, lower	enamel and root	1.05							moderate occlusal wear, possible female
32	41	2			2	4	1	Pig	Mammal	left	canine, upper	enamel	1.10							slight occlusal wear, possible erupting permanent canine
30	21	2			1	3	1	Turkey	Bird	left	humerus	lateral distal end	1.50							
42	39	4			2	4	1	Chicken	Bird	left	coracoid	nearly complete	1.49		k					knife cut at proximal end, arthritic bone growth around scapular facet
30	21	2			1	3	1	cf. Chicken	Bird	left	femur	anterior shaft fragment	0.70							
32	25	2			2	4	1	Pig	Mammal	right	femur	distal shaft	29.50		k, s				mw	transverse saw cut at mid shaft, moderately weathered
28	13	2			1	2	1	Pig	Mammal	left	femur	distal shaft, supracondular fossa	6.40		k					transverse knife cuts above supracondular fossa
28	13	2			1	2	1	Pig	Mammal	right	femur	distal shaft, supracondular fossa	2.30							
26	5	2			1	1	1	Pig	Mammal	right	femur	proximal epiphysis	4.40							< 3.5 yrs old
32	25	2			2	4	1	Rat, old world	Mammal	left	pelvis	ilium	0.20							
37	34	4			1	1	1	White-tailed deer	Mammal	left	pelvis	pubis	5.60		k					
38	45	4			1 & 2 Trans	ca. 25 cmbs	1	Sheep	Mammal	left	radius	proximal and shaft	25.30	ca						> 3 yrs old
32	25	2			2	4	1	Pig	Mammal	left	femur	shaft	23.30		k					transverse knife cut on posterior and upper anterior side
38	45	4			1 & 2 Trans	ca. 25 cmbs	1	cf. White-tailed deer	Mammal	left	rib	shaft	4.90	ca	k, s					slight canid gnawed, knife cut on ventral side, transverse saw cut at mid shaft
42	39	4			2	4	1	Pig	Mammal	left	femur	shaft	22.41	ca	ch, k				w	moderate canid gnawed, anterior with transverse knife cut, medial with diagonal chop cut, weather cracked
30	21	2			1	3	1	Pig	Mammal	right	femur	shaft, posterior	3.30	ca						canid gnawed
38	35	4			1	2	1	Pig	Mammal	left	fibula	shaft	2.80							in two mended pieces
42	39	4			2	4	1	Pig	Mammal	right	humerus	distal and shaft	66.54	ca	k				w	distal and proximal shaft slight to moderate canid gnawed, knife cut on lateral distal side, slight weathered
43	40	4			2	5	1	Pig	Mammal	right	humerus	distal and shaft	46.45	ca	k				w	moderate canid gnawed, transverse knife cut on posterior and lateral side, slight weathered
41	38	4			1	3	1	Large Mammal	Mammal	left	pelvis	ischium, acetabulum	3.00	ca						not cow, slight canid gnawed, recent damage
42	39	4			2	4	1	Chicken	Bird	right	coracoid	mid section	0.70			female				with medullary bone
42	39	4			2	4	1	Pig	Mammal	right	incisor, 1st lower	nearly complete	3.46							moderate occlusal wear
32	41	2			2	4	1	Pig	Mammal	right	incisor, 1st or 2nd upper	nearly complete	1.80							moderate occlusal wear
42	39	4			2	4	1	Sheep	Mammal	left	radius	distal and shaft	11.33							> 3 yrs old
43	40	4			2	5	1	Pig	Mammal	right	incisor, 1st upper	nearly complete	1.35							slight occlusal wear
30	23	2			1	3	1	Pig	Mammal		incisor, 2nd lower	nearly complete	1.20							deciduous, moderate occlusal wear
43	40	4			2	5	1	Pig	Mammal	right	incisor, 2nd upper	nearly complete	1.08							slight occlusal wear

FS #	Bag #	TU	STP	Feat	Zone	Level	Qty	Species	Class	Side	Elem	Port	Wt	Gnawed	Cut	Sex	Age	Photo	weathered	Comments
49	49	5			0	East Wall	1	cf. White-tailed deer	Mammal	left	tibia	shaft	15.70	ca	k					moderate canid gnawed at distal end of shaft, transverse knife cut on distal anterior side
53	55	5			2	4	1	Cow	Mammal	left	femur	shaft	26.90		k, s					parallel saw cut 23.0 mm, transverse knife cut, bone edge chipped
28	13	2			1	2	1	Chicken	Bird	left	coracoid	posterior and shaft	0.50		ch					transverse chop cut removed head portion
30	21	2			1	3	1	Chicken	Bird	right	femur	distal and shaft	3.80	ca		female				in two mended pieces, slight canid gnawed, inter cavity nearly filled with medullary bone
42	39	4			2	4	1	cf. Chicken	Bird	left	ulna	shaft	0.51				sub adult			sub adult
42	39	4			2	4	1	cf. Chicken	Bird	left	tibiotarsus	distal and shaft	0.57				sub adult			sub adult
38	35	4			1	2	1	Chicken	Bird	left	humerus	proximal	1.40							recent damage
38	35	4			1	2	1	Chicken	Bird	left	humerus	distal and shaft	0.90							recent damage
23	1		1				1	cf. Cardinal	Bird	right	humerus	nearly complete	0.10							
26	7	1			1	2	1	Rat, old world	Mammal	right	femur	nearly complete	0.40							proximal and distal epiphysis unfused, missing
26	7	1			1	2	1	Chicken	Bird	right	humerus	shaft	0.60							
30	21	2			1	3	1	Pig	Mammal	right	incisor, lower	half fragment	1.00		k					permanent, unerupted, diagonal knife cut on
30	21	2			1	3	1	Pig	Mammal	left	mandible	horizontal ramus	77.10	ca						canine to 3rd molar (nearly erupted), missing 1st & 2nd premolar, slight canid gnawed, possibly male
43	40	4			2	5	1	Pig	Mammal	right	mandible	ascending and horizontal ramus	188.01	ca	ch			w		slight canid gnawed, transverse chop on medial side of ascending ramus and lateral side of horizontal ramus, weathered cracked, 3rd and 4th premolar, 1st and 2nd molar moderate to heavy occlusal wear, 3rd molar little to no occlusal wear still at gum line
32	41	2			2	4	1	Pig	Mammal	left	maxilla	premolar 3rd and 4th, molar 1st	9.60							little to moderate occlusal wear
41	38	4			1	3	3	Pig	Mammal		metacarpal, 4th	proximal and shaft	2.60							recent damage
28	13	2			1	2	1	Cow	Mammal	right	cervical	anterior articular process	6.60		s					transversed saw cut posterior to articular process
30	21	2			1	3	1	Chicken	Bird	left	pelvis	ischium, acetabulum	0.40			female				inter cavity moderate with medullary bone
38	35	4			1	2	1	Chicken	Bird	right	pelvis	ischium, acetabulum	0.40			female				medullary bone, egg laying female, in two mended pieces
29	16	1			1	3	1	Rabbit	Mammal	right	tibia	distal shaft	0.60							
30	21	2			1	3	1	Pig	Mammal		metapodal	proximal and shaft	1.05							
30	21	2			1	3	1	Pig	Mammal	left	metatarsal, 3rd	proximal and shaft	3.41							recent damage
41	38	4			1	3	3	Pig	Mammal	left	metatarsal, 3rd	proximal and shaft	5.95							bigger than metatarsal, 3rd (wt.=4.24 gm), recent damage
41	38	4			1	3	3	Pig	Mammal	right	metatarsal, 3rd	proximal and shaft	4.24							recent damage, in two mended pieces
42	39	4			2	4	1	Chicken	Bird	left	scapula	proximal and shaft	0.94							
52	53	5			1	3	1	Pig	Mammal	right	metatarsal, 4th	proximal and shaft	1.60							
28	12	2			1	2	1	Pig	Mammal		molar	enamel	2.40							unerupted upper or lower molar
32	25	2			2	4	1	Rat, old world	Mammal	right	tibia	proximal and shaft	0.20							proximal epiphysis unfused, missing
28	12	2			1	2	1	Pig	Mammal	right	molar, 1st lower permanent		3.60							slight occlusal wear, matches with deciduous 4th lower premolar
41	38	4			1	3	1	Large Bird	Bird	right	humerus	distal anterior fragment	0.60							goose and turkey size
28	12	2			1	2	1	Pig	Mammal		molar, 1st or 2nd upper permanent	nearly complete	3.80							slight occlusal wear and fragment
30	23	2			1	3	1	Pig	Mammal	right	molar, 3rd lower	enamel	8.00							permanent, no occlusal wear

FS #	Bag #	TU	STP	Feat	Zone	Level	Qty	Species	Class	Side	Elem	Port	Wt	Gnawed	Cut	Sex	Age	Photo	weathered	Comments
43	40	4			2	5	1	Duck	Bird	right	tarsometatarsus	distal and shaft	0.36							mallard size
42	39	4			2	4	1	Turkey	Bird	right	tarsometatarsus	spur	2.53			male				
37	34	4			1	1	1	Sheep/goat	Mammal	right	radius	shaft	7.70							
42	39	4			2	4	1	Pig	Mammal		phalange, 1st	complete	1.94							
38	35	4			1	2	1	UID Bird	Bird	right	pelvis	ischium, acetabulum	0.43							
42	39	4			2	4	1	Chicken	Bird	right	scapula	proximal and shaft	0.48							possible human incisor gnawed
41	38	4			1	3	1	cf. Pig	Mammal	right	rib	shaft	2.10	ca	k					transverse knife cut on dorsal, proximal end moderate canid gnawed, distal end recent damage
30	21	2			1	3	1	Pig	Mammal		phalange, 2nd	nearly complete	3.30		k					slight knife cut
38	35	4			1	2	1	Pig	Mammal		phalange, 2nd	distal and shaft	1.60							in three mended pieces, recent damage
41	38	4			1	3	1	Pig	Mammal		phalange, 2nd	distal and shaft	1.00							
28	12	2			1	2	1	Pig	Mammal	right	premolar, 4th lower deciduous	complete	3.60	ca						moderate occlusal wear, mandible present is moderately canid gnawed
38	35	4			1	2	1	Pig	Mammal	right	radius	distal epiphysis	5.60	ca			< 3.5 yrs old			unfused epiphysis, moderate canid gnawed, < 3.5 yrs old
43	40	4			2	5	1	Pig	Mammal	left	scapula	glenoid cavity and blade	195.00	ca	k, s			p		moderate canid gnawed, transverse knife cut cranial boarder, transverse saw cut caudal boarder
41	38	4			1	3	1	Pig	Mammal	left	skull	auditory bulla	4.10	ca						possibly chopped off skull
39	36	2			2	West Wall	1	Pig	Mammal	right	skull	auditory bulla and glenoid fossa	12.50	ca	ch					slight canid gnawed, slight chop cut
41	38	4			1	3	1	Pig	Mammal	left	skull	auditory bulla and glenoid fossa	30.40	ca	k					slight canid gnawed, knife cut dorsal side of glenoid fossa
38	35	4			1	2	1	Chicken	Bird		sternum	anterior carinal margin	0.40							
37	34	4			1	1	1	Chicken	Bird		sternum	costal margin	0.60							right portion
23	1		1				1	Large Mammal	Mammal		rib	shaft	4.20	ca	s				w	possible pig, transverse saw cut at one end, moderately canid gnawed and weathered
23	1		1				3	Large Mammal	Mammal		UID Bone	UID fragment	1.00							
26	7	1			1	2	1	Large Mammal	Mammal		UID Bone	UID fragment	0.60							possible scat bone
26	5	2			1	1	1	UID Vertebrate	UID Vertebrate		long bone	shaft	0.30							
27		2			1	1	1	Large Mammal	Mammal		long bone	shaft	1.10	ca					w	possible metapodal, heavily canid gnawed, moderate weathered
38	35	4			1	2	1	Pig	Mammal	left	skull	auditory bulla	3.50							fragment, recent damage, does not mend with other auditory bulla (4.10 gm)
42	39	4			2	4	1	Pig	Mammal		skull	frontal	0.91							in two mended pieces, UID side
28	13	2			1	2	1	Large Mammal	Mammal		maxilla/mandible	alveolar fragment	1.40							
28	13	2			1	2	2	Large Mammal	Mammal		long bone	shaft	4.70							
28	13	2			1	2	2	Large Mammal	Mammal		long bone	shaft	3.80	ca						slight canid gnawed
28	13	2			1	2	18	Large Mammal	Mammal		UID bone	UID fragment	9.70							
28	13	2			1	2	3	Large Mammal	Mammal		UID bone	UID fragment	1.80		k					transverse and diagonal knife cut
41	38	4			1	3	1	Chicken	Bird	left	tibiotarsus	proximal shaft	2.30							
28	13	2			1	2	3	UID Bird	Bird		long bone	shaft	0.50							possibly chicken

FS #	Bag #	TU	STP	Feat	Zone	Level	Qty	Species	Class	Side	Elem	Port	Wt	Gnawed	Cut	Sex	Age	Photo	weathered	Comments
41	38	4			1	3	1	Pig	Mammal	left	skull	frontal	8.40	ca						moderately canid gnawed
30	21	2			1	3	4	Large Mammal	Mammal		long bone	shaft	6.00		k					transverse knife cut
30	21	2			1	3	11	Large Mammal	Mammal		long bone	shaft	20.90							
30	21	2			1	3	11	Large Mammal	Mammal		long bone	shaft	18.40	ca						canid gnawed
30	21	2			1	3	2	Large Mammal	Mammal		maxilla/mandible	alveolar fragment	1.60							
42	39	4			2	4	1	Pig	Mammal	right	skull	occipital	3.41							condyle fragment, recent damage
30	21	2			1	3	1	Pig	Mammal	left	tibia	shaft, lateral	7.20	ca						moderate canid gnawed, excavation damaged
41	38	4			1	3	1	Pig	Mammal	left	tibia	anterior fragment	4.30	ca	k					slight canid gnawed, transverse knife cut, one recent damage in two pieces
32	25	2			2	4	1	cf. Pig	Mammal		vertebra, thoracic	centrum	6.40							does not mend with spinous process, epiphysis unfused, missing
32	25	2			2	4	1	cf. Pig	Mammal		vertebra, lumbar	anterior articular process	2.00							
32	25	2			2	4	1	Large Mammal	Mammal		skull	cranium	0.70							possible nasal bone
32	25	2			2	4	1	UID Vertebrate	UID Vertebrate		UID bone	UID fragment	2.60							
32	25	2			2	4	13	Large Mammal	Mammal		UID bone	UID fragment	3.00							likely large mammal vertebra fragment
32	25	2			2	4	1	Large Bird	Bird		long bone	shaft	1.00							turkey, goose size bird
37	34	4			1	1	1	Cow	Mammal		rib	shaft	8.10		s			w		transverse saw cut 5.18 cm, moderately weathered
37	34	4			1	1	3	Large Mammal	Mammal		long bone	shaft	9.70							transverse knife cut, one with recent damage
37	34	4			1	1	2	Large Mammal	Mammal		UID bone	UID fragment	2.80							
28	13	2			1	2	1	Chicken	Bird	right	ulna	shaft	0.30			female				slight medullary bone, may mend with proximal and shaft (0.40 gm), possibly batum size bird
38	45	4			1 & 2 Trans	ca. 25 cmbs	1	Large Mammal	Mammal		long bone	shaft	3.10					w		in two mended pieces, slight weathered
42	39	4			2	4	1	Pig	Mammal	left	tibia	posterior lateral	5.64					w		slight weathered, cracked
38	35	4			1	2	1	Cow	Mammal		femur	shaft	18.60		s		sub adult			parallel saw cut 14.4 mm, in three mended pieces, recent damage, sub adult, UID side
38	35	4			1	2	1	Large Mammal	Mammal		long bone	shaft	3.40	ca	s					slight canid gnawed, transverse saw cut
38	35	4			1	2	1	Large Mammal	Mammal		long bone	shaft	2.30	ca						slight canid gnawed
38	35	4			1	2	2	Large Mammal	Mammal		rib	shaft	2.10							
38	35	4			1	2	2	Large Mammal	Mammal		long bone	shaft	4.50	ca	k					slight canid gnawed, transverse knife cut
38	35	4			1	2	2	Large Mammal	Mammal		long bone	shaft	4.97							
38	35	4			1	2	3	Large Mammal	Mammal		long bone	shaft	2.40	ca						moderate canid gnawed
38	35	4			1	2	2	Large Mammal	Mammal		UID bone	UID fragment	2.00							possibly rib and skull fragment
38	35	4			1	2	7	UID Mammal	Mammal		UID bone	UID fragment	2.10							one recent damage

FS #	Bag #	TU	STP	Feat	Zone	Level	Qty	Species	Class	Side	Elem	Port	Wt	Gnawed	Cut	Sex	Age	Photo	weathered	Comments
28	13	2			1	2	1	Chicken	Bird	right	ulna	proximal and shaft	0.40			female				slight medullary bone, possibly batum size bird
38	35	4			1	2	1	UID Bird	Bird		humerus	shaft	0.33							UID side
38	35	4			1	2	1	UID Bird	Bird		ulna	shaft	0.20							UID side
38	35	4			1	2	4	UID Bird	Bird		long bone	shaft	0.90							
39	36	2			2	West Wall	2	Large Mammal	Mammal		long bone	shaft	3.70	ca						moderately canid gnawed
30	21	2			1	3	1	Pig	Mammal	right	tibia	shaft, nutrient foramen to just above epiphysis	14.40	ca						both ends moderate canid gnawed
41	38	4			1	3	1	Large Mammal	Mammal		femur	distal eispiphysis condyle	5.80							unfused, not cow
41	38	4			1	3	1	Large Mammal	Mammal		UID bone	UID fragment	2.30	ca						moderate canid gnawed
41	38	4			1	3	1	Large Mammal	Mammal		scapula	blade	3.20		s					parallel saw cut 16.5 mm
41	38	4			1	3	11	Large Mammal	Mammal		long bone	shaft	13.60							one recent damage
41	38	4			1	3	2	Large Mammal	Mammal		long bone	shaft	4.90		s					one end diagonal saw cut
41	38	4			1	3	4	Large Mammal	Mammal		long bone	shaft	6.80	ca						moderate canid gnawed, one recent damage
41	38	4			1	3	1	Large Bird	Bird		long bone	shaft	1.50							
41	38	4			1	3	4	Large Mammal	Mammal		long bone	shaft	6.90	ca	k					slight canid gnawed, knife cut
41	38	4			1	3	5	UID Mammal	Mammal		UID bone	UID fragment	1.00							one recent damage
42	39	4			2	4	1	Pig	Mammal	left	ulna	shaft	5.08	ca						slight canid gnawed, recent damage
42	39	4			2	4	1	Pig	Mammal	right	ulna	proximal and shaft	18.69	ca						moderate canid gnawed on olecranon process, shaft cracked, possible wea
32	25	2			2	4	1	Pig	Mammal		vertebra, thoracic	spinous process and arch	10.30							
42	39	4			2	4	1	Large Mammal	Mammal		vertebra	centrum epiphysis	0.98							
42	39	4			2	4	1	Large Mammal	Mammal		femur	supracondular fossa	3.29							
42	39	4			2	4	6	Large Mammal	Mammal		UID bone	UID fragment	7.48							two recent damage
42	39	4			2	4	2	Large Mammal	Mammal		UID bone	UID fragment	0.97	ca						slight canid gnawed
43	40	4			2	5	3	Large Mammal	Mammal		UID bone	UID fragment	1.27							
43	40	4			2	5	2	Large Mammal	Mammal		UID bone	UID fragment	1.93	ca						moderate canid gnawed, one recent damage
43	40	4			2	5	1	Large Mammal	Mammal		long bone	shaft	0.74							possible scat bone, some surface and edges smooth
43	40	4			2	5	1	UID Mammal	Mammal		UID bone	UID fragment	0.26							
43	40	4			2	5	2	UID Vertebrate	UID Vertebrate		UID bone	UID fragment	0.18							
46	44	4			1	East Wall	2	Large Mammal	Mammal		UID bone	UID fragment	2.40							one recent damage
48	52	5			1	2	1	Large Mammal	Mammal		UID bone	UID fragment	0.80							recent damage

FS #	Bag #	TU	STP	Feat	Zone	Level	Qty	Species	Class	Side	Elem	Port	Wt	Gnawed	Cut	Sex	Age	Photo	weathered	Comments
52	54	5			1	3	1	Large Mammal	Mammal		long bone	shaft	6.80		k, s					transverse knife cut, one end diagonal saw cut
42	39	4			2	4	1	cf. Turkey	Bird		vertebra, thoracic	centrum	2.09		k					transverse knife cut on anterior surface
42	39	4			2	4	1	cf. Turkey	Bird		vertebra, thoracic, fused	centrum	1.95							
42	39	4			2	4	3	Large Bird	Bird		UID bone	UID fragment	1.11							
42	39	4			2	4	1	Large Bird	Bird		long bone	shaft	0.58		k					diagonal knife cut
42	39	4			2	4	1	Large Bird	Bird		long bone	shaft	1.27							

Appendix E -

SHPO Correspondence





STEVEN L. BESHEAR  
GOVERNOR

**TOURISM, ARTS AND HERITAGE CABINET  
KENTUCKY HERITAGE COUNCIL**

BOB STEWART  
SECRETARY

THE STATE HISTORIC PRESERVATION OFFICE  
300 WASHINGTON STREET  
FRANKFORT, KENTUCKY 40601  
PHONE (502) 564-7005  
FAX (502) 564-5820  
[www.heritage.ky.gov](http://www.heritage.ky.gov)

CRAIG A. POTTS  
EXECUTIVE DIRECTOR AND  
STATE HISTORIC PRESERVATION OFFICER

November 6, 2014

Mr. David Waldner, P. E., Director  
Division of Environmental Analysis  
Kentucky Transportation Cabinet  
200 Mero Street  
Frankfort, KY 40622

**Re: Request for Early Conditional Concurrence on a Finding of No Historic Properties Affected for a Phase II Archaeological Evaluation of Site 15Me98 Mercer County, Kentucky by J. David McBride, CDM Smith KYTC Item Number 7-1128**

Dear Mr. Waldner:

Thank you for the letter regarding the above referenced management summary. This project entailed Phase II archaeological investigations of Site 15Me98 a multicomponent site that included Late Woodland and 19<sup>th</sup> to mid-20<sup>th</sup> century components. The author found that the research potential of this site has been exhausted by the current excavations. The KYTC concurred with this recommendation and found No Historic Properties Affected for this project.

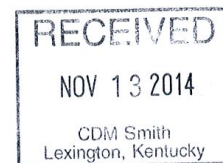
We conditionally concur with the finding of **No Historic Properties Affected** contingent on receiving a final report detailing the above referenced excavations within 60 days.

Should the project plans change, or should additional information become available regarding cultural resources or citizens' concerns regarding impacts to cultural resources, please submit that information to our office as additional consultation may be warranted. Should you have any questions, feel free to contact Nick Laracuente of my staff at 502.564.7005, extension 151.

Sincerely,

Craig A. Potts,  
Executive Director and  
State Historic Preservation Officer

CP:nrl KHC # 42838  
Cc: Dan Davis (KYTC); J. David McBride (CDM Smith)





# Appendix F -

## GPR Grid Initial Interpretations



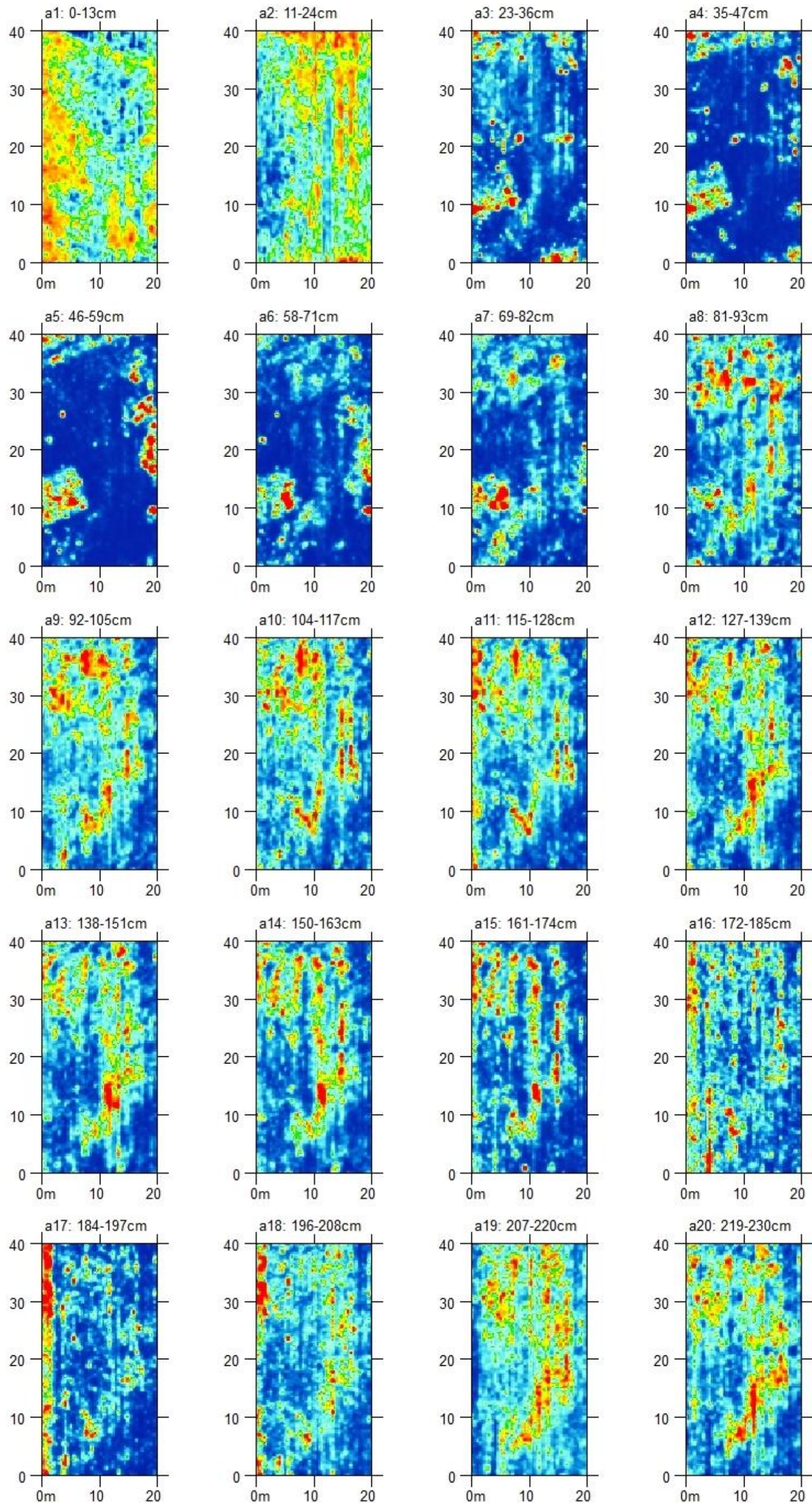


Figure F-1. GPR Grid 1.

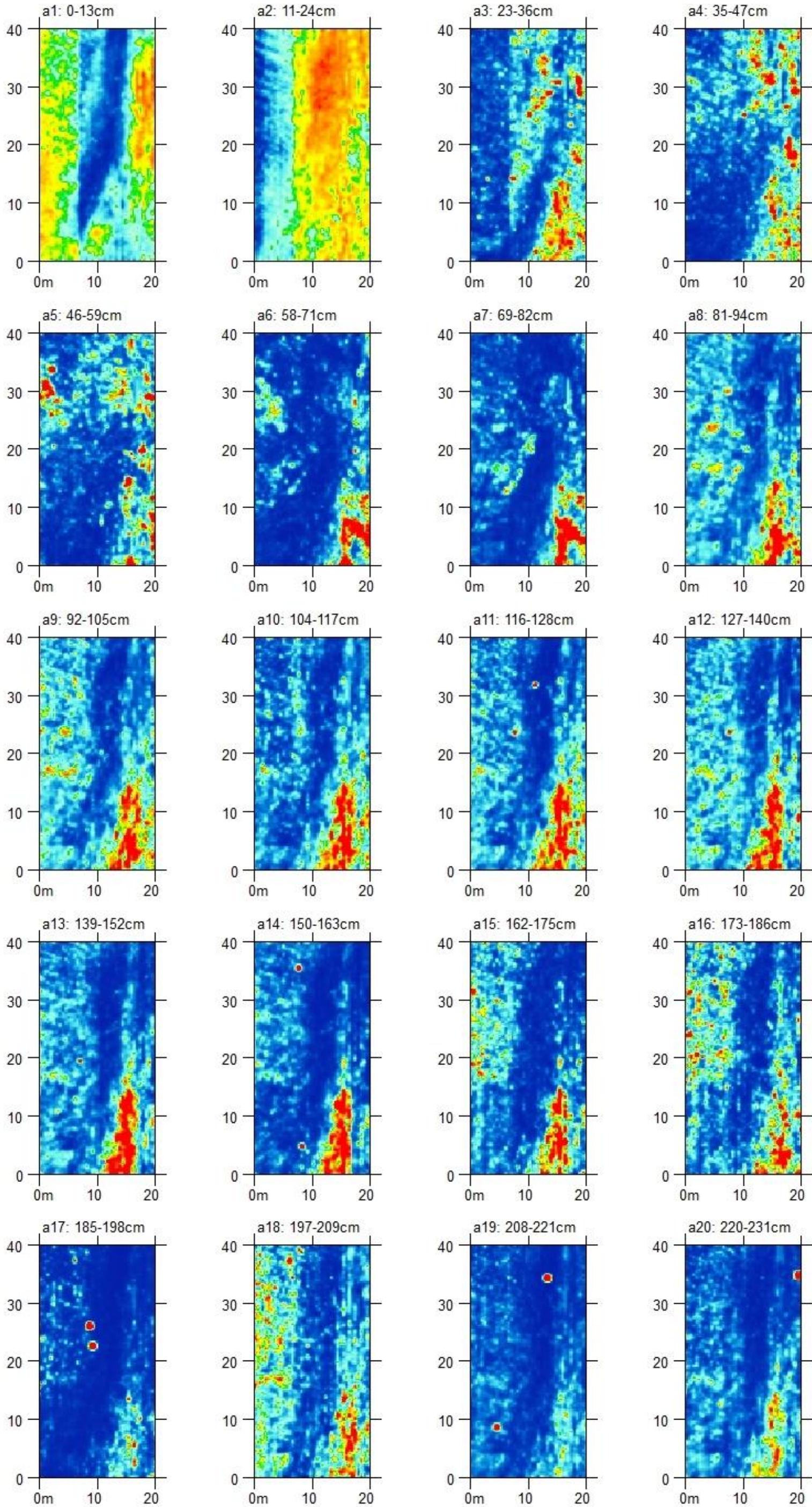


Figure F-2. GPR Grid 2.

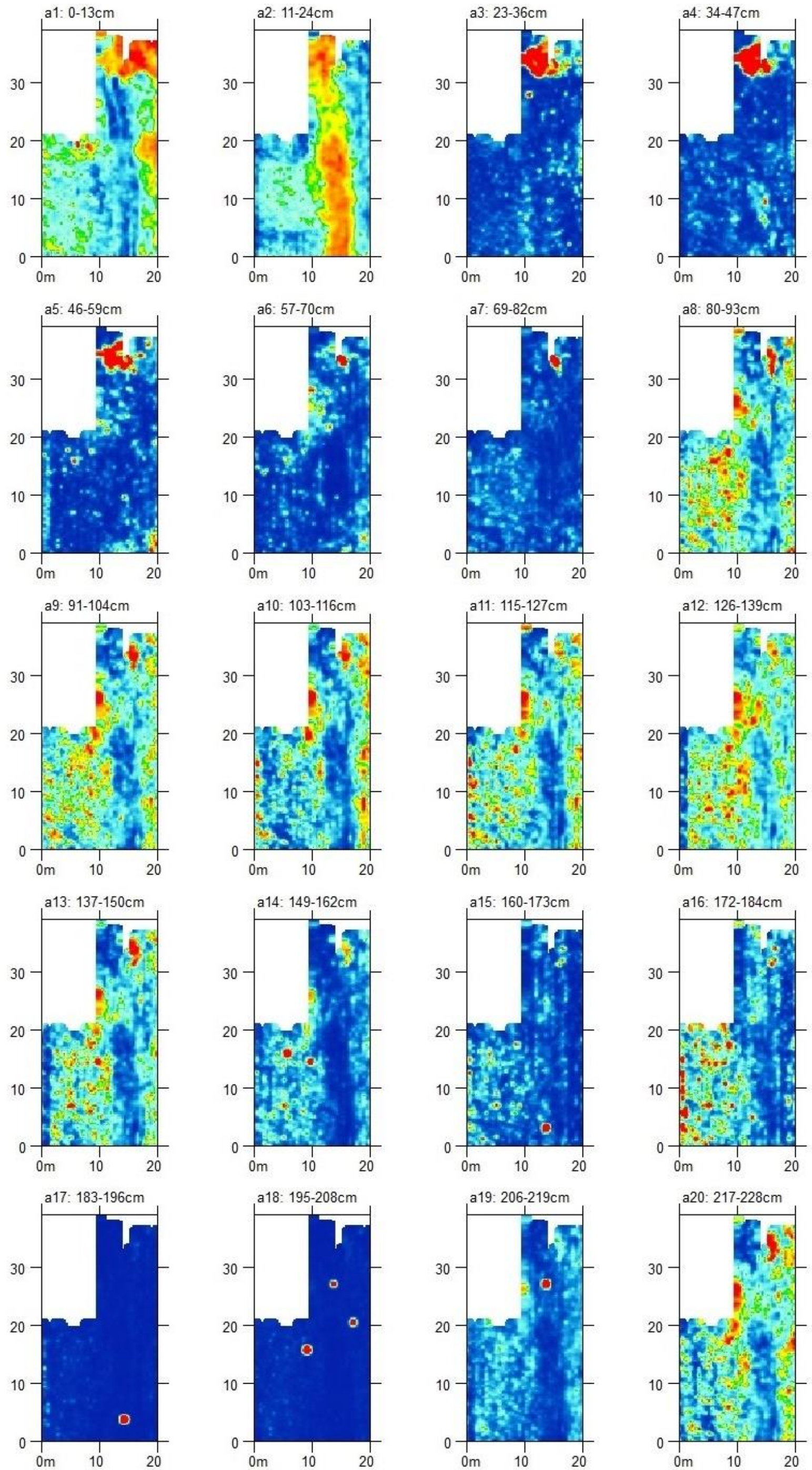


Figure F-3. GPR Grid 3.