

PHASE I
ARCHAEOLOGICAL
SURVEY FOR THE US 60
OVER UPPER STINSON
CREEK BRIDGE
REPLACEMENT, CARTER
COUNTY, KENTUCKY.
KYTC ITEM # 9-1072.00

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Number:

FY14-7919

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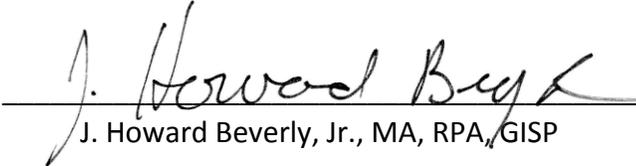
**Phase I Archaeological Survey for the US 60 over Upper Stinson Creek Bridge Replacement,
Carter County, Kentucky.**

KYTC Item # 9-1072.00

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Archaeology Report

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Abstract

In accordance with the Kentucky Heritage Council's *Specifications for Conducting Fieldwork and Preparing Cultural Resource Assessment* (Sanders 2006), this is an abbreviated technical report describing a no-find resulting from a Phase I archaeological survey conducted on January 14, 2014, and the results of that survey.

CDM Smith was asked by the Kentucky Transportation Cabinet to conduct a Phase I archaeological survey ahead of a proposed bridge replacement and road improvements along US 60 over Upper Stinson Creek in Carter County, Kentucky (Item Number 9-1072.00).

The area of potential effect (APE) consists of the temporary easement for construction, approximately 1.29 acres (0.5 ha) in area. The elevation of the APE ranges between 590 ft. above mean sea level (AMSL) to 600 ft. AMSL. The APE has been inundated with water on multiple occasions and modern debris was observed on the surface and buried along the creek. Portions of the APE were inundated at the time of the survey, but the rest of the APE was subjected to shovel probing, auger probing, and surface collection.

The archaeological survey involved a visual inspection of the entire APE and shovel probing in areas of less than 15 percent slope and those areas not inundated at the time of the survey. Visual inspection ruled out the existence of historic surface remains or rockshelters. Auger and shovel probing produced no subsurface artifacts or cultural features.

No further archaeological work is recommended.

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Acknowledgements

The Principal Investigator for the archaeological survey was Mr. J. Howard Beverly, Jr., RPA. Field crew consisted of Dona Daugherty. Howard Beverly generated maps and formatted the report. Robert Ball provided support in Lexington.

Section 1 -

Introduction

In accordance with the Kentucky Heritage Council's *Specifications for Conducting Fieldwork and Preparing Cultural Resource Assessment* (Sanders 2006), this is an abbreviated technical report describing a no-find Phase I archaeological survey conducted on January 14, 2014, and the results of that survey. CDM Smith was asked by the Kentucky Transportation Cabinet (KYTC) to conduct a Phase I archaeological survey ahead of a proposed bridge replacement and road improvements along US 60 over Upper Stinson Creek in Grayson, Carter County, Kentucky (Item Number 9-1072.00).

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 2001) 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, Protection and Enhancement of the Cultural Environment (16 U.S.C. 470; supp. 1, 1971).

1.2 Purpose and Scope of Work

A Phase I archaeological survey was conducted for the proposed US 60 bridge replacement and road improvements, KYTC Item # 9-1072.00. The APE is defined as the Proposed Construction Easement.

The archaeological surveyors were prepared to shovel probe areas of less than 15% slope and to visually inspect the entire area. The purpose of this work was to identify any archaeological resources which might have existed within the APE and to record their extent, significance, and the potential impact of the proposed project on these cultural resources.

1.3 Project Area Description

The project location is in the City of Grayson within Carter County, Kentucky, part of the Eastern Kentucky Coal Field physiographic region, and can be found on the U.S.G.S. 7.5' Grayson, KY, quadrangle map (Figure 1-1, Figure 1-2, and Figure 1-3). The APE consists of a proposed temporary easement for construction for the proposed bridge replacement along US 60 (Main Street). The APE begins approximately 3.4 km (2.1 mi) east of the intersection of S. Carol Malone Blvd. and US 60 (Main St.), totaling approximately 1.29 acres (0.5 ha). The APE ranges in elevation from around 590 to 600 feet above mean sea level (AMSL). The bend of Stinson Creek that US 60 crosses runs southeast to northwest from the Upper Stinson into the Lower Stinson, and eventually runs northwest into the Little Sandy River. Stinson Road intersects US 60 (Main Street) within the eastern portion of the APE. Vegetation within the APE consisted of sparse secondary growth trees and dense underbrush, mowed grass, a plowed field, inundated areas, and a recently tree- and underbrush-cleared area. The ground surface was not disturbed within the tree- and underbrush-cleared area. The field conditions of the APE at the time of survey are seen in Figure 1-4 through Figure 1-9.

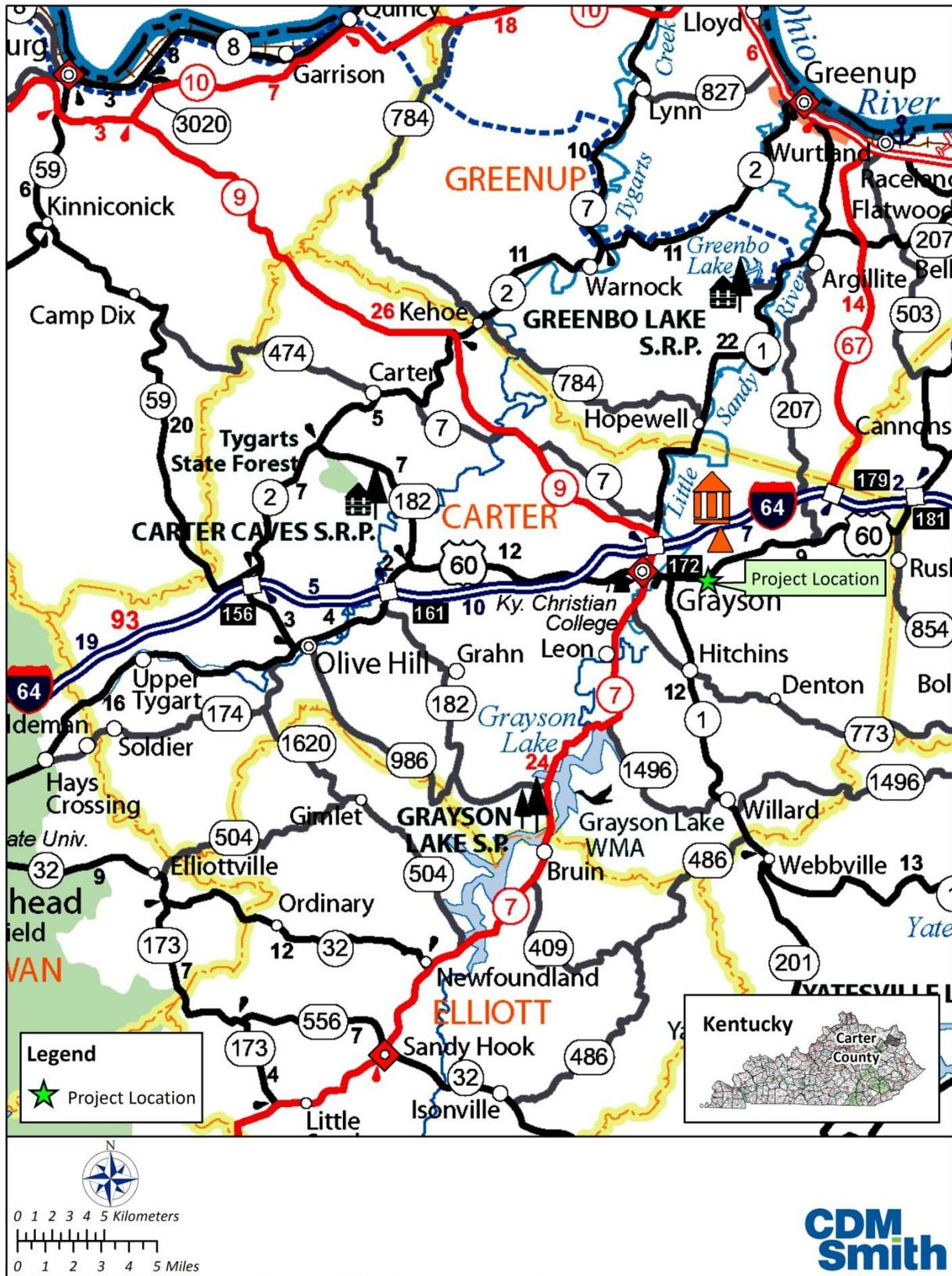


Figure 1-1. Project Location within Carter County.

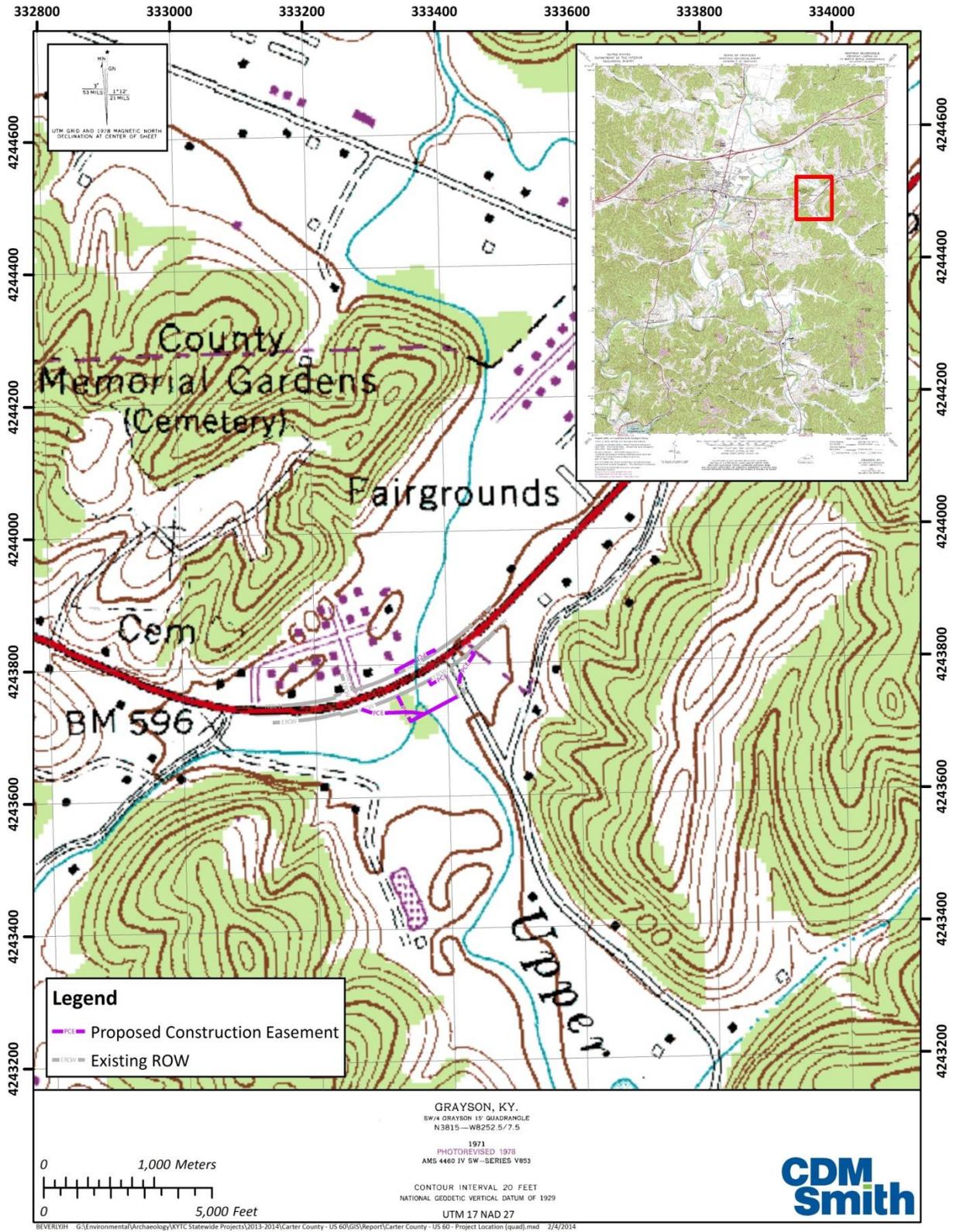


Figure 1-2. USGS Topographical Map showing Project Location.

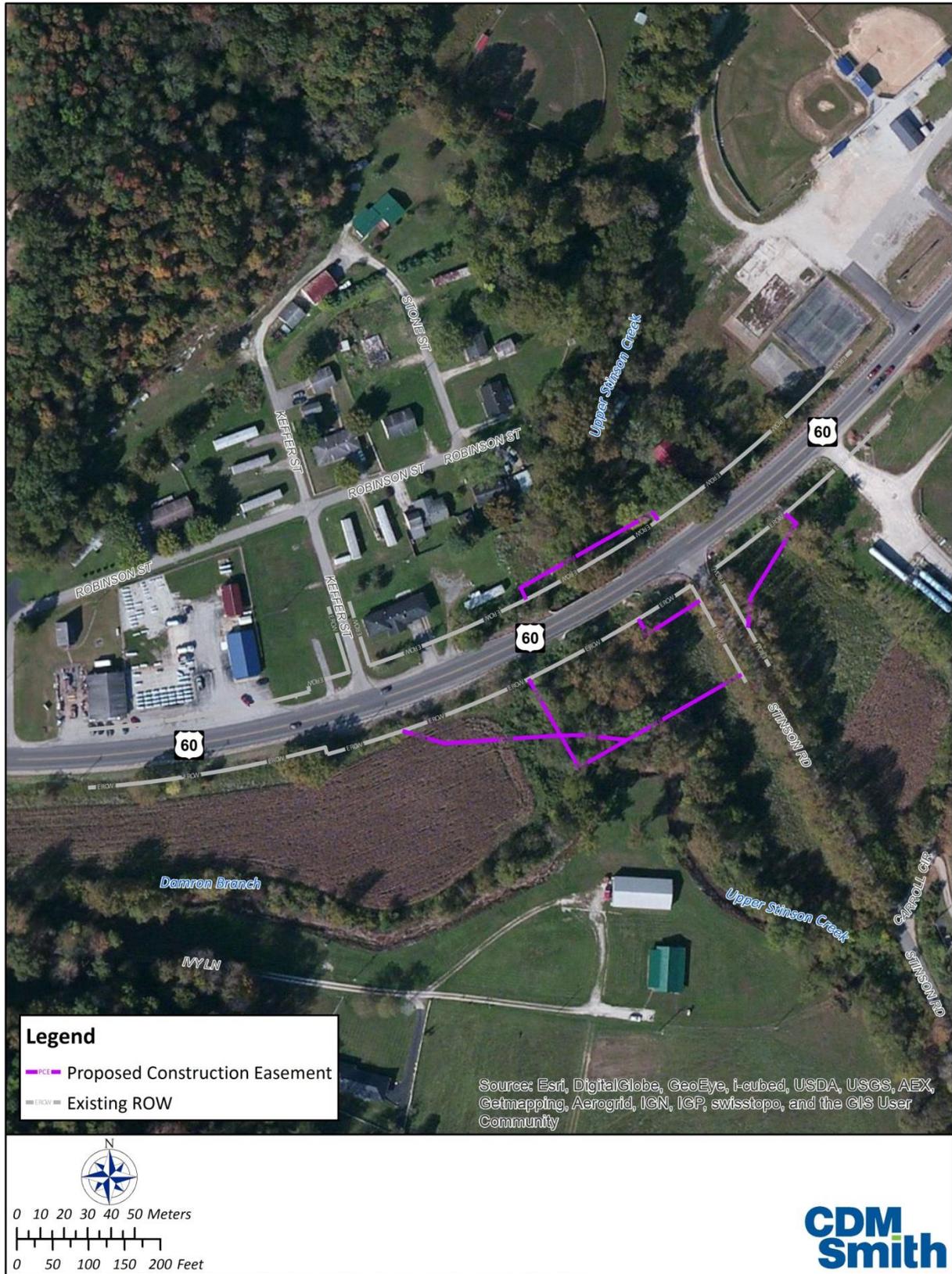


Figure 1-3. Aerial Map showing Project Location.



Figure 1-4. General Project Area, Looking West, Mowed Grass Area.



Figure 1-5. General Project Area, Looking West, Plowed Field Area.



Figure 1-6. General Project Area, Looking East, Inundated Area.



Figure 1-7. General Project Area, Looking West, Cleared Area.



Figure 1-8. General Project Area, Looking Northwest, Inundated Area.



Figure 1-9. General Project Area, Looking West, Secondary Growth and Underbrush Area.

1.4 OSA Records Research

On February 4, 2014, the site files and survey records at the Office of State Archaeology (OSA) were accessed and researched.

1.5 Principal Investigator

The principal investigator for the project was J. Howard Beverly, Jr., MA, RPA, GISP.

1.6 Field and Laboratory Crew

The field crew consisted of Dona Daugherty. Dona Daugherty served as the field director and planned, coordinated, and supervised all field activities. Dona Daugherty prepared the final report. Howard Beverly prepared the final maps and formatted the report. The fieldwork took approximately 8 person hours to complete.

1.7 Curation

A copy of this report will be curated at the William S. Webb Museum of Anthropology, University of Kentucky, in Lexington.

1.8 Summary of Investigations

A Phase I archaeological survey was conducted for the US 60 bridge replacement and approaches (KYTC Item # 9-1072.00) in Carter County, Kentucky, by archaeologists from CDM Smith at the request of the Kentucky Transportation Cabinet. Archaeological resources were absent from the APE. No further archaeological work is necessary within the APE.

Section 2 -

Previous Investigations and Summary of Known Sites

In this chapter a summary is provided of all previous archaeological investigations in the area and all previously recorded archaeological sites are described. The research methodology involved archival research at the Office of State Archaeology (OSA) and research of previous studies of archaeological sites.

2.1 Historical Documentation

A review of historic maps was conducted online and at the University of Kentucky's Geological Sciences Library and Map Collection. Available were the 1937 Highway and Transportation Map, Carter County, Kentucky; the 1954 Rural Highway Series, Carter County, Kentucky; the 1994 County Road Series Map, Carter County, Kentucky; and the 1953 and 1971 (photorevised 1978) 7.5-minute Grayson, KY, USGS quadrangle maps. No indication of historic property use – such as structures, industry, or roadway – within or adjacent to the APE was indicated by the highway maps or the 7.5-minute USGS quadrangle maps.

2.2 Previous Archaeological Investigations

The survey reports at the OSA were consulted on February 4, 2014. Within a two kilometer buffer of the current survey area, four previously conducted surveys were identified: Hand (1989), Shock (1990), Shock (1991), and Versluis (2003) (Figure 2-1).

In 1989, at the request of Mr. Arvil Dobson of Capital Properties, Inc., Cultural Resources Analysts, Inc., conducted an archaeological assessment of the proposed Logan Trace Apartments, Ltd., location in Carter County, Kentucky. The survey consisted of shovel probing and intensive pedestrian reconnaissance. The survey did not identify any cultural material and clearance was recommended for the project. It was concluded that the proposed construction would have no effect upon cultural or historic properties listed in or eligible for listing in the National Register of Historic Places (Hand 1989).

In 1990, at the request of Ms. Donna Creech of A. Myers Davis Development Company, Jack M. Shock of Arrow Enterprises conducted a cultural reconnaissance across approximately 3 acres for the proposed Poplar Plains Apartments at Grayson in Carter County, Kentucky. The survey did not identify any cultural material and clearance was recommended (Shock 1990).

In 1991, at the request of Ms. Donna Creech of A. Myers Davis Development Company, Jack M. Shock of Arrow Enterprises conducted a cultural reconnaissance across approximately 2.3 acres for the proposed Poplar Plains Apartments at Grayson in Carter County, Kentucky. The survey did not identify any cultural material and clearance was recommended for this project (Shock 1991).

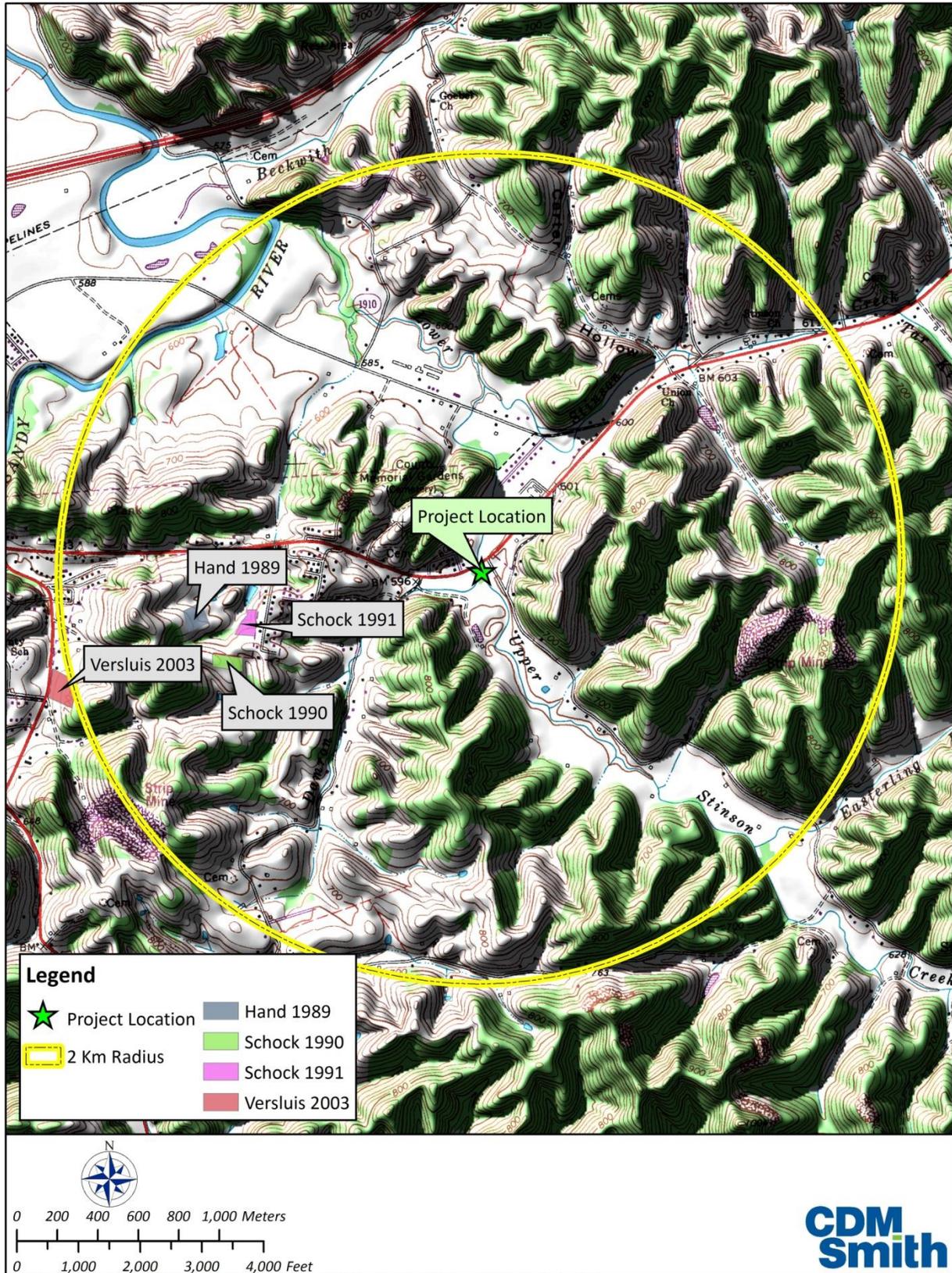


Figure 2-1. Previous Archaeological Surveys within 2km of Project Area.

In 2003, at the request of Mr. D. Mark Livingston of Woda Development, Vincent Versluis of Great Rivers Archaeological Services conducted a Phase I archaeological survey of five acres for a proposed low income family housing project (Sawgrass Greene) at Grayson in Carter County, Kentucky. The survey consisted of shovel probing and pedestrian reconnaissance. No cultural material or National Register Listed or Eligible properties were identified during the survey. An historic farm was identified just outside the project area but was not further investigated due to its location outside the project area (Versluis 2003).

2.3 Known Archaeological Sites

The site files at the OSA were consulted on February 4, 2014. One archaeological site, 15CR100, had been recorded within a two-kilometer radius of the APE previous to our investigations.

2.3.1 Site 15CR100

Site 15CR100 is a Fort Ancient, open habitation without mounds where surface collecting of the site had been going on for over 30 years by the time of the survey in 1992, according to local informants. The survey was conducted by Mathew P. Maley, MS, and he also has curated the site at his home. The site measures 11,628 m². The site is also referred to as "Horton Hollow." The site is oval with a dark outer area surrounding a light colored area. The dark area is 92 feet wide on the north side. The survey was conducted as ground was being broken for a new subdivision in the area. In June of 1992, a road was constructed through the site. Over one thousand flakes were recovered from the site along with over 500 ceramic fragments. In addition, over 30 lithic tools were recovered, and over 200 fragments of faunal material. National Register status was not assessed (Site Form for 15CR100).

Section 3 -

Field Methods

In this chapter, the field methods employed during the course of this study is described. These methods include the fieldwork activities, their application in different portions of the project area reflecting conditions encountered, and an evaluation of their effectiveness.

3.1 Implemented Field Methods

The field methods implemented for the Phase I investigations conform to the Kentucky Heritage Council's specifications for conducting a Phase I survey (Sanders 2006). Systematic shovel test probes (STPs) were excavated where possible at 20 meter intervals, while areas of 15 percent or greater slope and areas inundated with water were visually inspected for surface remains and potential rock shelters. The section of the project area east of Stinson Road and located along the southern side of US 60 (Main St.) was inundated at the time of the survey. Therefore, no shovel probes were excavated in this area. Surface collecting was utilized within areas of high visibility. A plowed field was located west of Stinson Creek on the southern portion of US 60 (Main St.). Auger probes were excavated to determine if there were any deeply buried deposits. All soil excavated from the shovel and auger probes 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.

The APE consists of the proposed temporary easement for construction for the proposed bridge replacement and approaches along US 60 (Main Street), totaling approximately 1.29 acres (0.5 ha) in size. The APE is located on a gently sloping floodplain of Stinson Creek with an elevation range between approximately 590 and 600 ft. AMSL (Figure 3-1). The physical setting of the APE is shown in Figure 3-2 through Figure 3-7.

3.2 Evaluation of Field Methods

Shovel probing, auger probing, and surface collection of the project area was effective in identifying the absence of subsurface cultural deposits within the APE. The entire APE was visually inspected. Visual inspection successfully ruled out the possibility of rockshelters or historic surface features and supported the shovel probe and auger probe findings.

Sixteen shovel probes and four auger probes were excavated within the APE. STP and auger locations were mapped and are shown on a topographic quadrangle in Figure 3-8 and on an aerial photograph in Figure 3-9. All STPs were negative for cultural remains. STP 3/Auger 1 and STP 6/Auger 3 are described below as representative of the project area (Figure 3-10 and Figure 3-11).

STP 3/Auger 1 consists of three zones. Zone I began at the surface and went to a depth of 4 cm below surface. It consisted of 10YR2/2 very dark brown humus layer. Zone II began at 4 cm below surface and continued to 24 cm below surface. This zone consisted of 10YR4/3 brown, sandy, silt loam. Zone III began at 24 cm below surface and continued to 91 cm below surface. This zone consisted of 10YR5/4 yellowish brown, sandy silt.

STP 6/Auger 3 consists of five zones. Zone I began at the surface and went to a depth of 24 cm below surface. It consisted of 10YR4/3 brown, silty clay. Zone II began at 24 cm below the surface and continued to 36 cm below surface. This zone consisted of 10YR4/3 brown, sandy, silty clay. Zone III

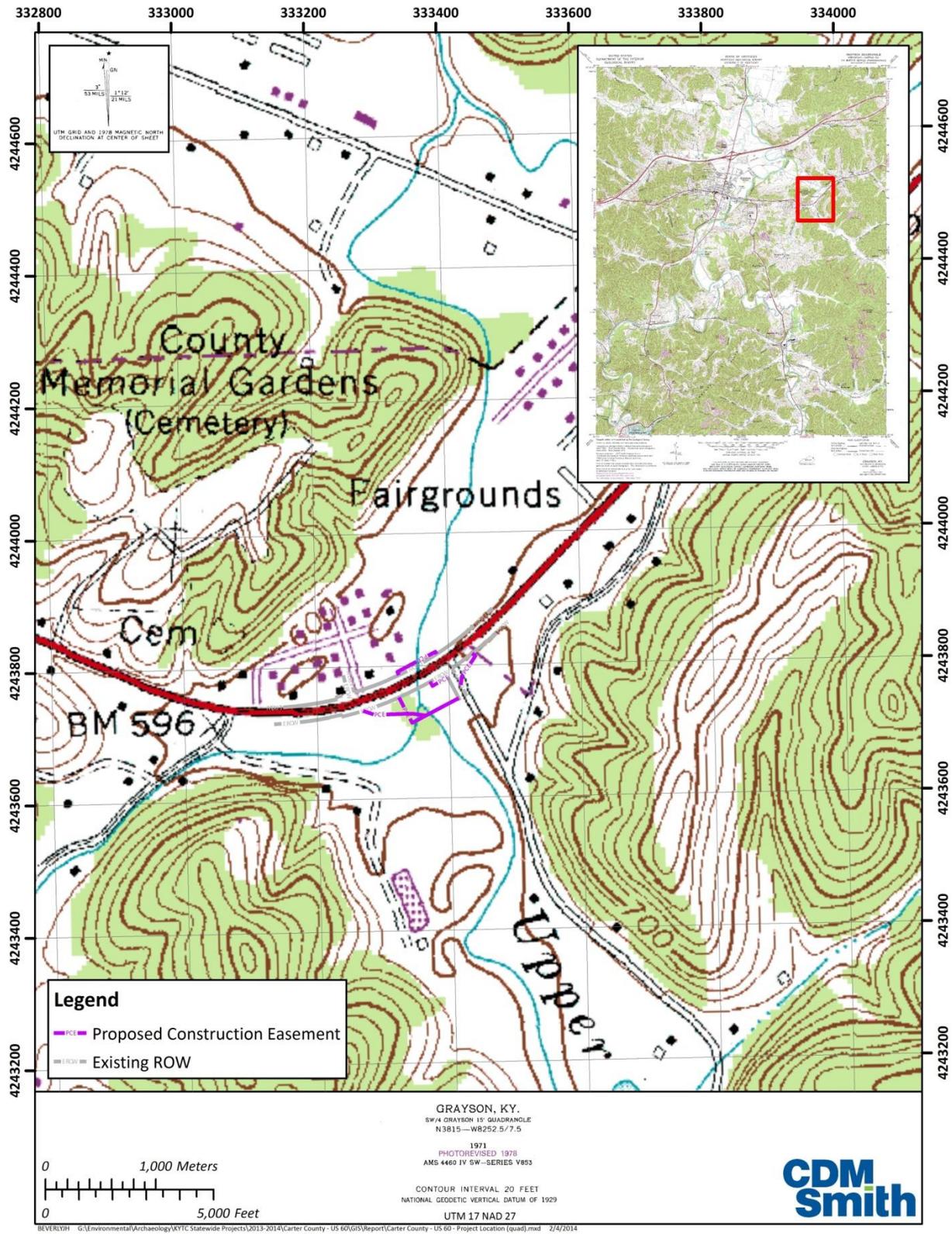


Figure 3-1. Topographic Map showing extent of APE.



Figure 3-2. View of APE, Looking Southwest, Surface Collected Area.



Figure 3-3. View of APE, Looking Southwest from near Auger 4, Shovel Probed Area.



Figure 3-4. View of APE, Looking Southwest, Inundated Area Northeast of Stinson Creek Rd.



Figure 3-5. View of APE, Looking Northeast, Shovel Probed Area.



Figure 3-6. View of APE, Looking Northeast across Upper Stinson Creek, from Auger 2.



Figure 3-7. View of APE, Looking Southwest, Thick Underbrush, Shovel Probed Area.

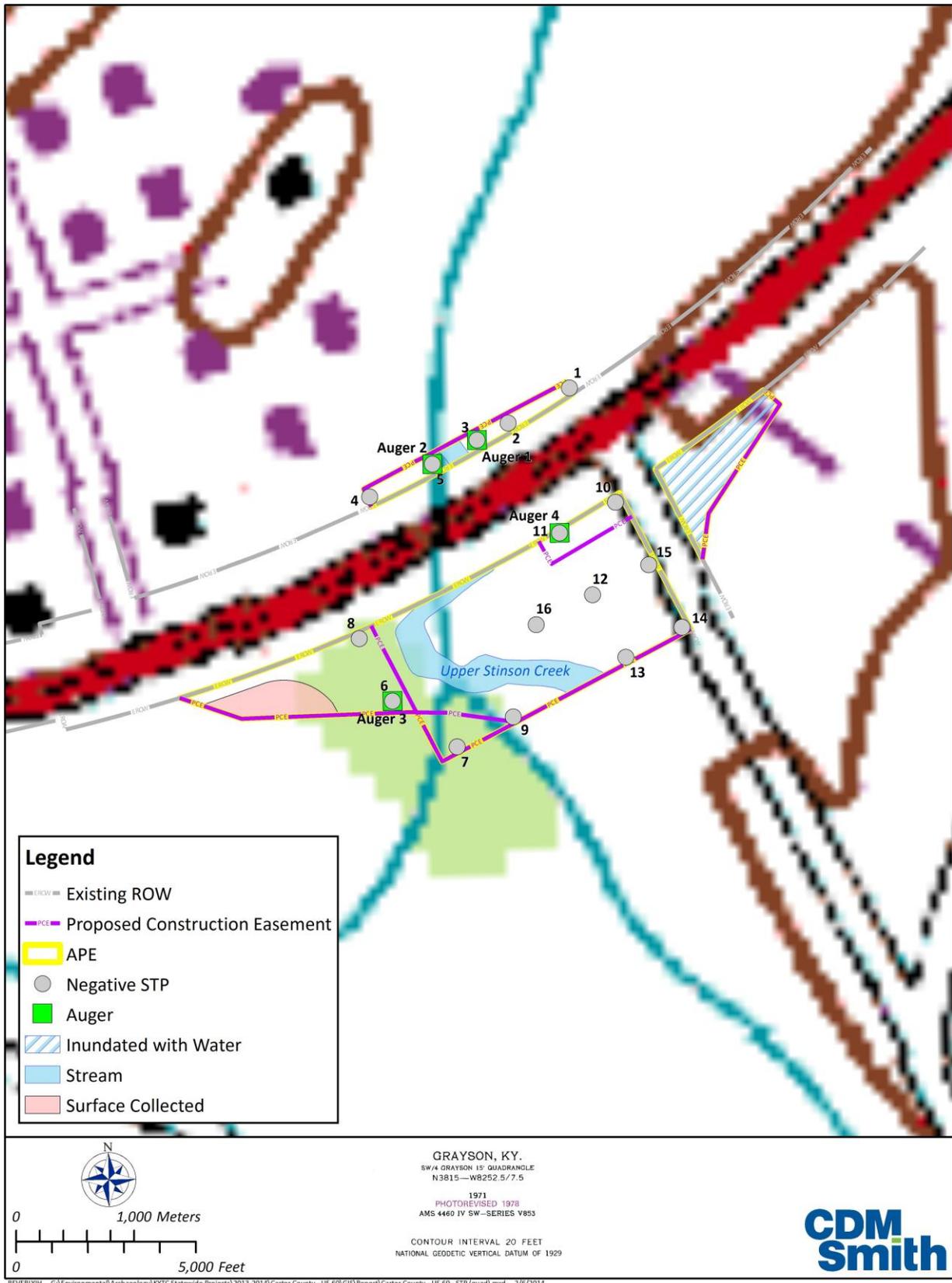


Figure 3-8. . Location of Shovel Probe 2 on USGS Map.

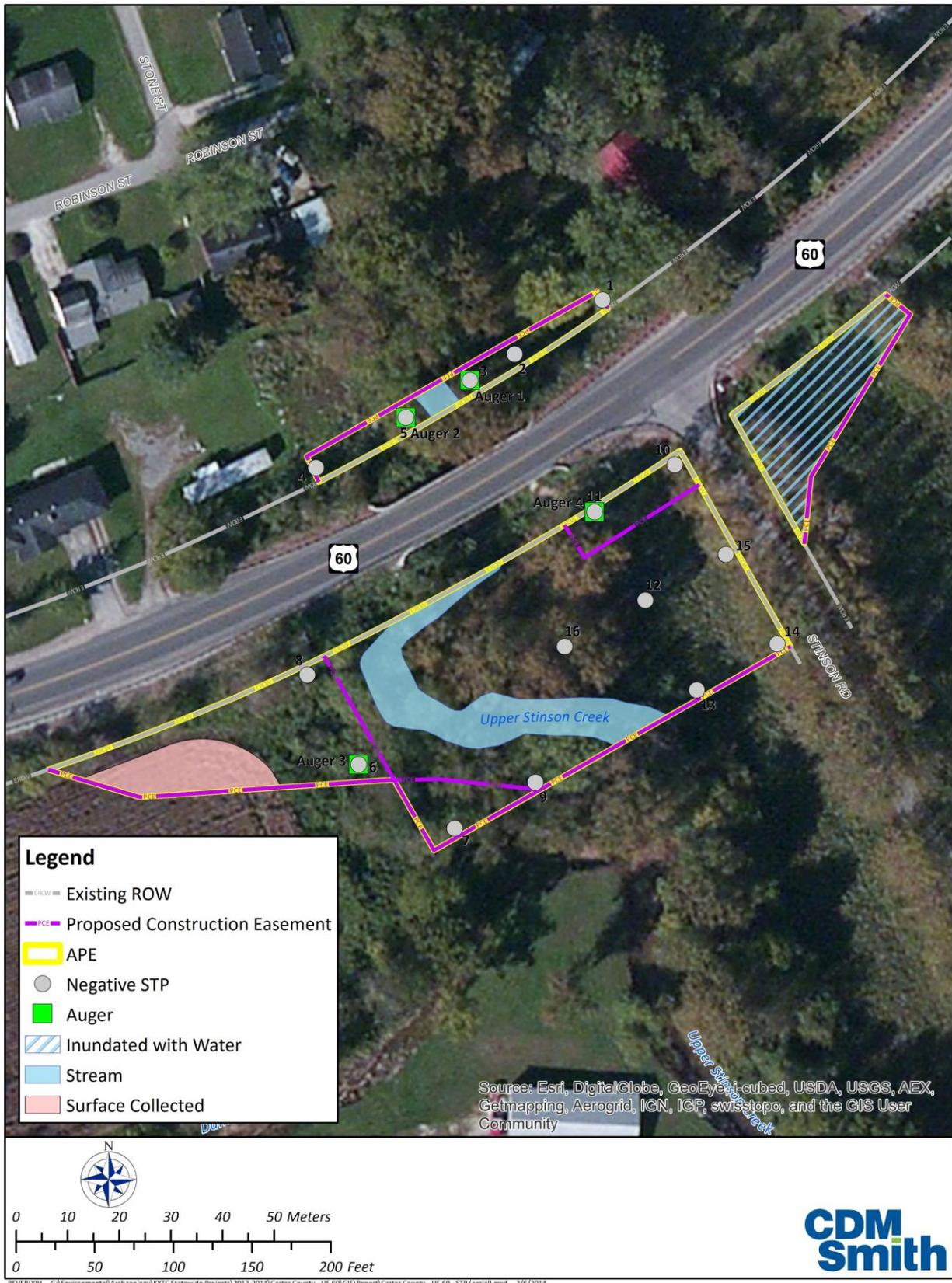


Figure 3-9. Location of Shovel Probe 2 on Aerial Photograph.

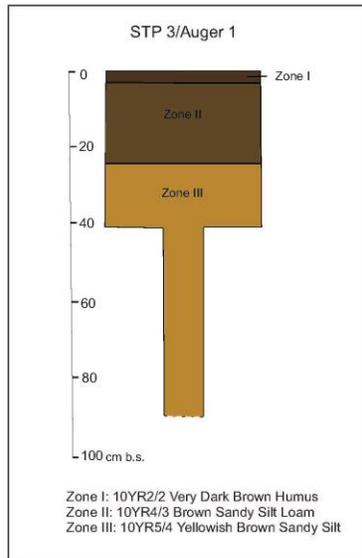


Figure 3-10. Representative Shovel and Auger Probe, STP 3/Auger 1.

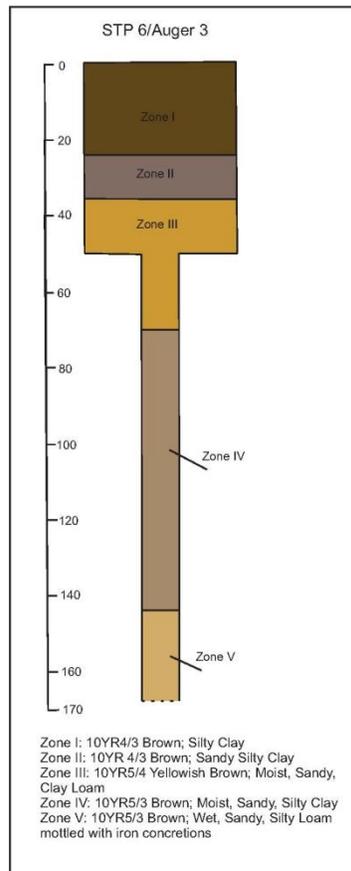


Figure 3-11. Representative Shovel and Auger Probe, STP 6/Auger 3.

began at 36 cm below surface and continued to 70 cm below surface. This zone consisted of moist, 10YR5/4 yellowish brown, sandy, clay loam. Zone IV began at 70 cm below surface and continued to 144 cm below the surface. This zone consisted of 10YR5/3 brown, moist, sandy, silty clay. Zone V began at 144 cm below the surface and continued to 167 cm below the surface where the auger hit the water table. This zone consisted of wet 10YR5/3 brown, sandy, silty loam mottled with iron concretions.

Section 4 -

Summary and Recommendations

4.1 Summary

Archaeologists from CDM Smith were contracted by the KYTC to conduct a Phase I archaeological survey ahead of a proposed bridge replacement and road improvements along approximately 189 meters (620 ft.) of US 60 (Main Street) over Stinson Creek in the City of Grayson, Carter County, KY.

The APE consists of the proposed easement for construction, approximately 1.29 acres (0.5 ha) in area. The elevation of the APE ranges from 590 ft. AMSL to 600 ft. AMSL. The APE consists of a floodplain area with areas inundated with water at the time of the survey.

The archaeological survey involved a visual inspection of the entire APE, shovel probing in areas of less than 15 percent slope and not inundated with water, and auger probing along the creek to identify any buried deposits. Visual inspection ruled out the existence of historic surface remains or rockshelters, shovel and auger probing produced no subsurface artifacts or cultural features, and surface inspection identified no cultural material.

4.2 Recommendation

No further archaeological work is recommended.

Section 5 -

References

Hand, Robert B.

1989 *An Archaeological Assessment of the Proposed Logan Trace Apartments, Ltd., Carter County, Kentucky*. Cultural Resource Analysts, Lexington, KY.

Kentucky Department of Highways

1937 Highway and Transportation Map, Carter County, Kentucky.

1954 Rural Highway Series, Carter County, Kentucky.

1994 County Road Series Map, Carter County, Kentucky.

Sanders, Thomas N.

2006 *Specifications for Conducting Fieldwork and Preparing Cultural Resource Assessment Reports*. Edition 2.5. Kentucky Heritage Council, Frankfort.

Shock, Jack M.

1990 *A Cultural Reconnaissance of Approximately Three Acres for the Proposed Plains Apartments at Grayson in Carter County, Kentucky*. Arrow Enterprises, Bowling Green, KY.

1991 *A Cultural Reconnaissance of Approximately 2.3 Acres for the Proposed Poplar Plains Apartments at Grayson in Carter County, Kentucky*. Arrow Enterprises, Bowling Green, KY.

Site Form

1992 15CR100

USGS (United States Geological Survey Quadrangle Maps)

1953 Grayson, KY 7.5 minute series topographic quadrangle map.

1972 Grayson, KY 7.5 minute series topographic quadrangle map (photorevised 1978).

Versluis, Vincent

2003 *A Phase I Archaeological Survey of 5 Acres for a Proposed Low Income Family Housing Project (Sawgrass Greene) in Grayson, Carter County, Kentucky*. Great Rivers Archaeological Services, Burlington, KY.