ADDENDUM TO

PHASE I ARCHAEOLOGICAL SURVEY FOR THE INTERSECTION IMPROVEMENT PROJECT AT US 42 AND RICE PIKE/HICKS PIKE (US 42 MILE POST 8.4 TO MILE POST 8.6), BOONE COUNTY, KENTUCKY

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Kentucky Office of State Archaeology Project Number:

FY16-8705

CDM Smith

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Kentucky Office of State Archaeology
Archaeological Project Number: FY16-8705

Archaeology Report

March 2017

PRINTED ON ACID-FREE PAPER

Abstract

On January 23rd, 2017, archaeologists from CDM Smith conducted a Phase I archaeological survey for the remaining parcels and minor expansion to the original APE associated with the proposed intersection improvement project at US 42 and Rice Pike/Hicks Pike, between mile points 8.4 to 8.6, in Boone County, Kentucky (KYTC Item Number 6-412.00). These parcels were denied entry during the initial Phase I archaeological survey conducted on December 4th, 2015 and January 25th, 2016.

No new archaeological sites or isolated finds were identified during the survey.

No further archaeological work is recommended within the proposed area of potential effect (APE).

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Acknowledgements

The Principal Investigator for the archaeological survey addendum was Mr. David McBride, RPA. Mr. Reason Martin generated maps the report. Field crew consisted of Dona Daugherty and Ann Wilkinson. Robert Ball provided support in Lexington.

Section 1 - Introduction

This abbreviated technical report is being submitted as an addendum to the previous Phase I archaeological survey (Beverly and Wilkinson 2016) conducted at the request of the Kentucky Transportation Cabinet (KYTC) by archaeologists from CDM Smith (CDMS) ahead of the proposed intersection improvement project at US 42 and Rice Pike/Hicks Pike, between mile points 8.4 to 8.6, in Boone County, Kentucky (KYTC Item Number 6-412.00).

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 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

On January 23rd, 2017, archaeologists from CDMS conducted a Phase I archaeological survey for the remaining parcels associated with the proposed intersection improvement project at US 42 and Rice Pike/Hicks Pike, between mile points 8.4 to 8.6, in Boone County, Kentucky (KYTC Item Number 6-412.00) (Beverly and Wilkinson 2016) (Figure 1-1). These parcels were either denied entry or contact with the landowner was not made during the initial Phase I archaeological survey conducted on December 4th, 2015 and January 25th, 2016. One parcel (Parcel No. 10) was not surveyed because entry permission was denied, and four additional parcels (Parcels No. 15, 23, 29, and 40) were not surveyed because entry permission could not be gained. Table 1-1 lists these parcels and any changes that occurred through the design process since the original Phase I survey. In between the initial survey and the current survey, impacts were eliminated for Parcel No. 29, and therefore, this property was not surveyed. In addition, parcel numbering was adjusted, and Parcel No. 40 became 29 and Parcel No. 44 became 31. These properties are referred to as Parcel No. 40 (29) and Parcel No. 44 (31) throughout this report. Lastly, the APE within Parcel No. 44 (31) was slightly expanded.

The survey involved shovel probing areas of less than 15 percent slope that had not been disturbed and visual inspection of the entire area. The purpose of this work was to identify any archaeological and historical resources which might have existed within the project area and to record their extent, significance, and the potential impact of the proposed project on these cultural resources.

At the direction of DEA, archaeologist from CDMS revisited the project area to access the parcels that originally had access denied and the parcels where the ROW had a minor expansion (see Table 1-1). Figure 1-2 through Figure 1-5 illustrate the location of the original APE and the current APE on topographic and aerial maps. This report is being submitted as an addendum to the original report as provided for by the *Specifications for Conducting Fieldwork and Preparing Cultural Resource Assessment Reports* (Saunders 2006).

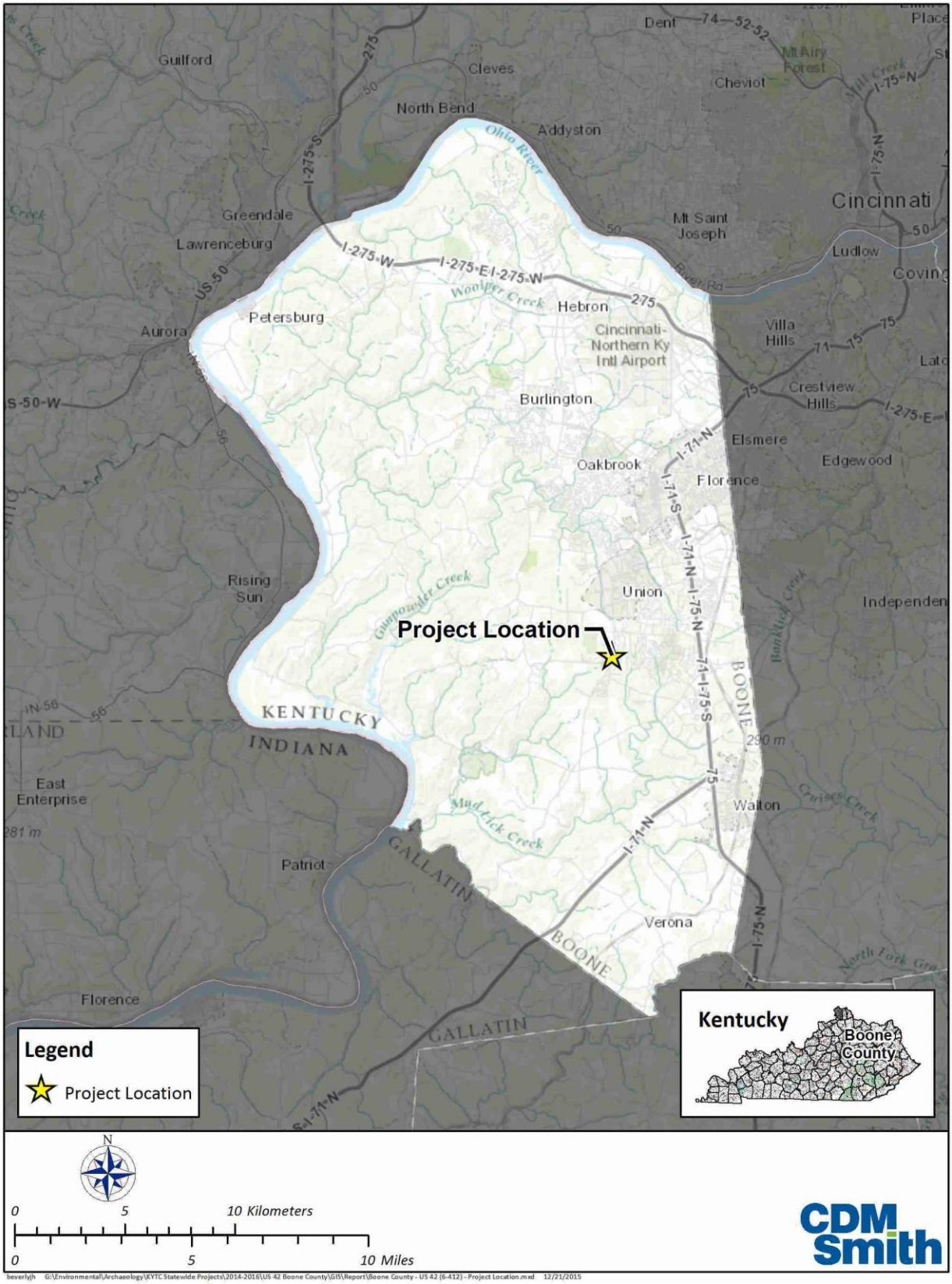

Figure 1-1. Project Location within Boone County.

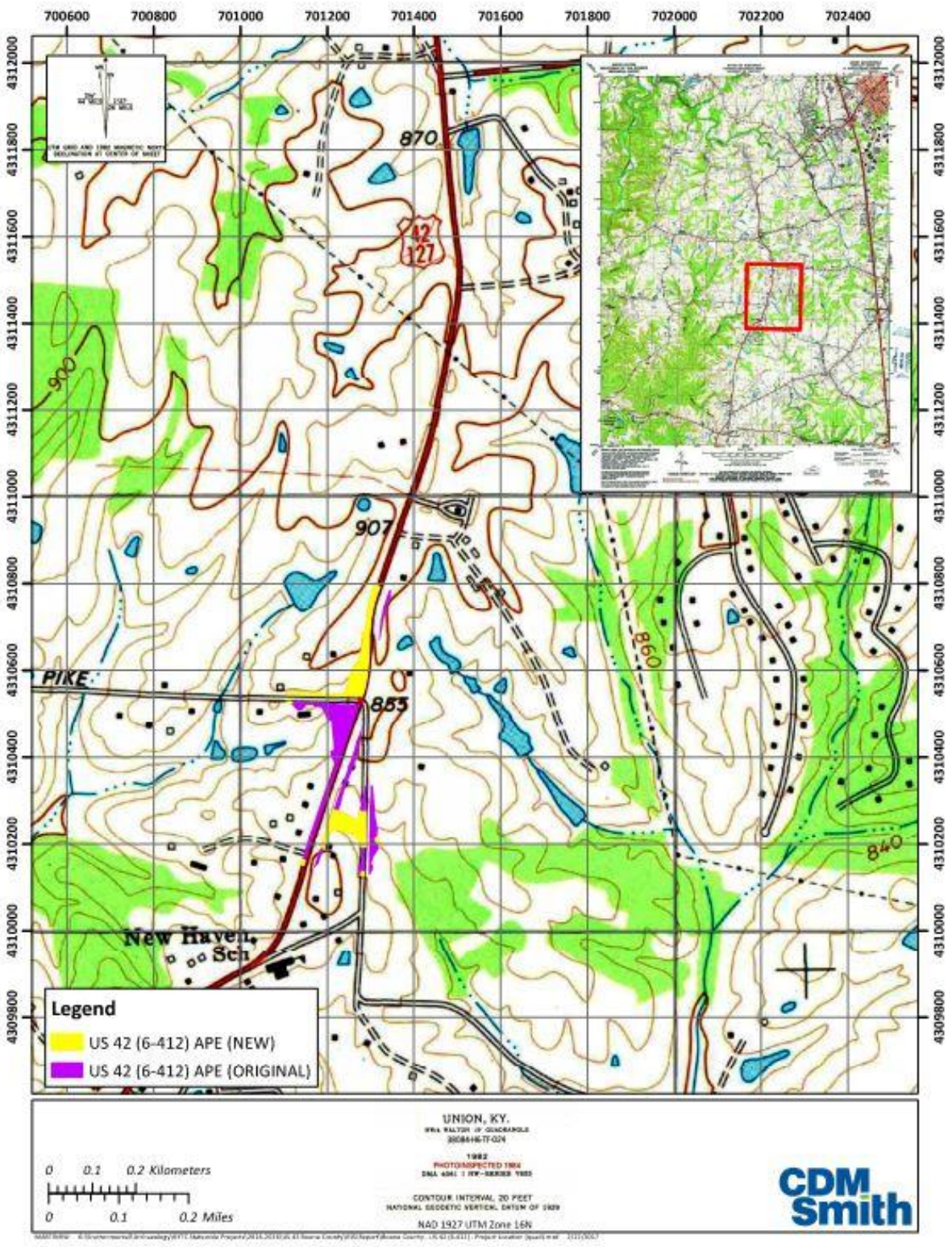

Figure 1-2. USGS Topographical Quadrangle Map Showing Project Location, Including Previously Surveyed Areas from Original APE and Newly Surveyed Areas from New APE.

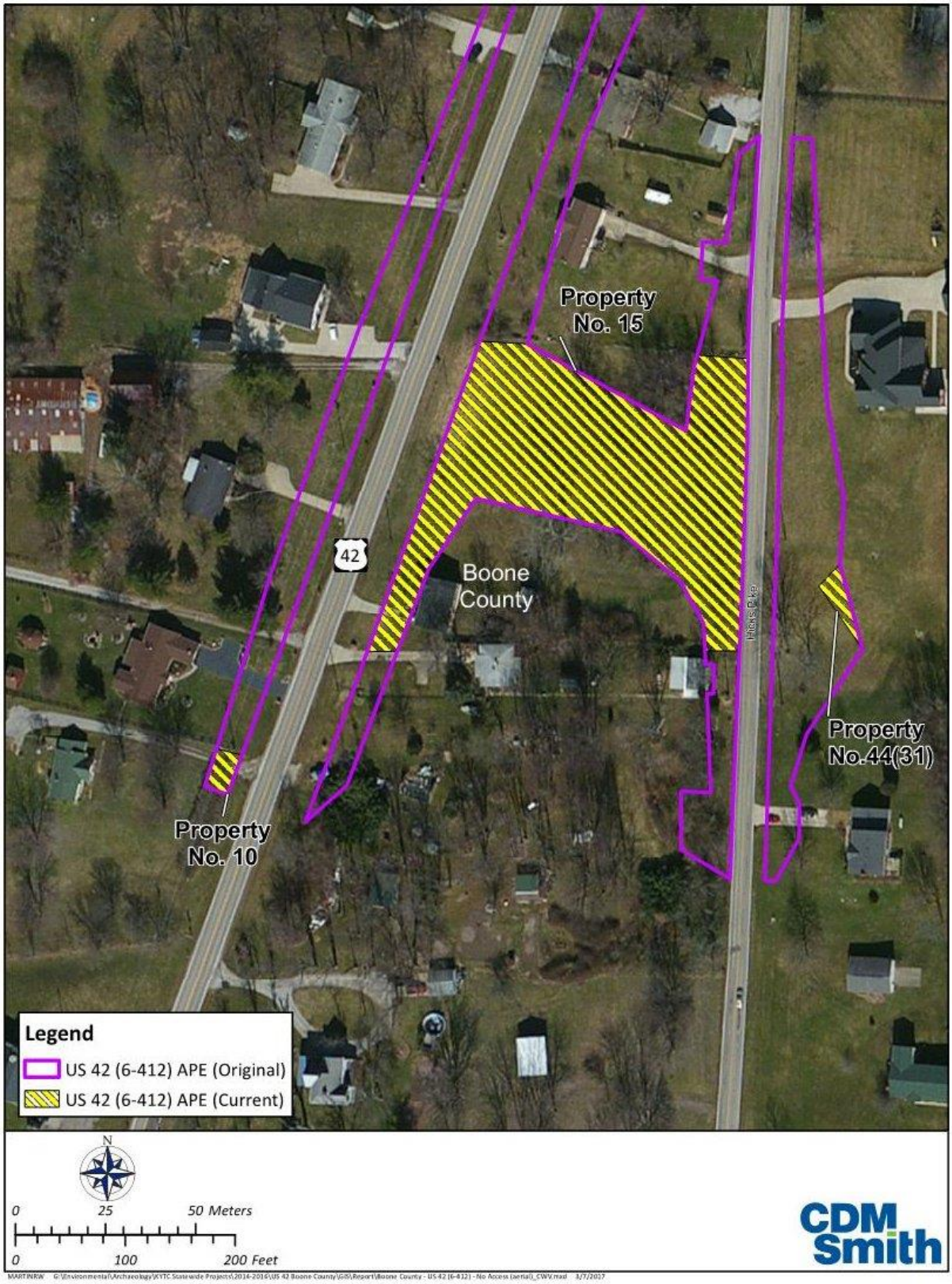

Figure 1-3. Location of Original and Current APE on an Aerial.

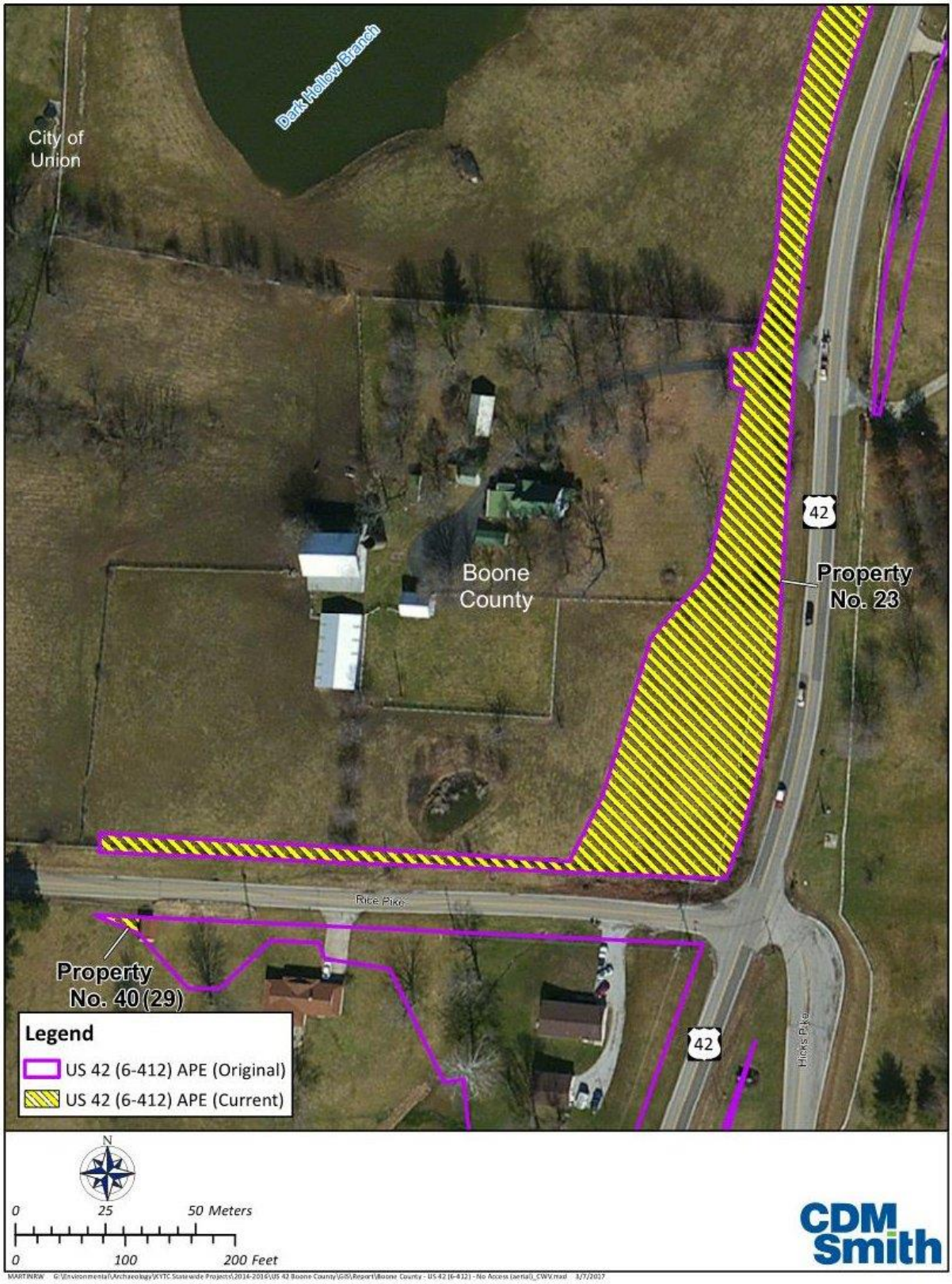

Figure 1-4. Location of Original and Current APE on an Aerial.

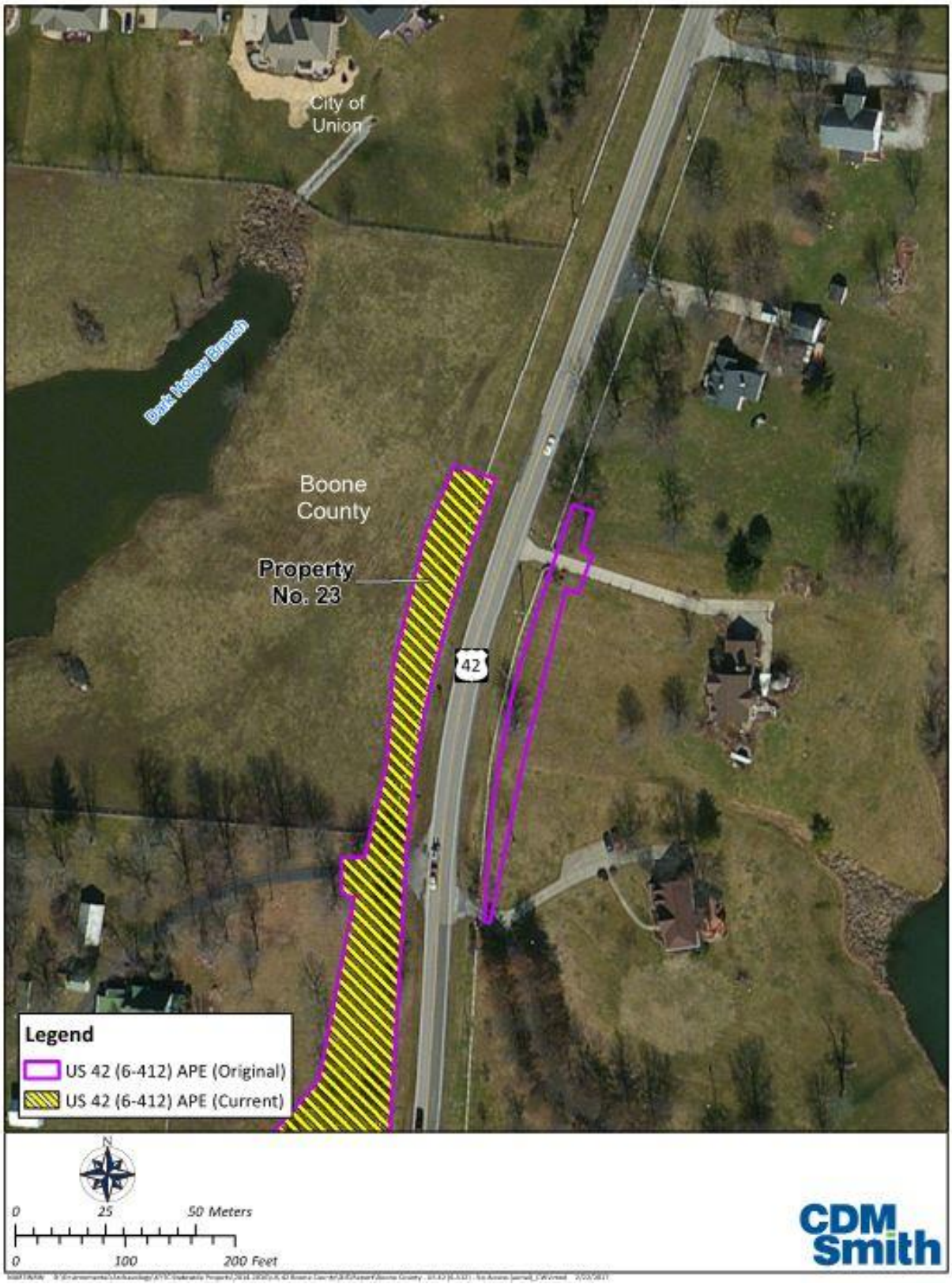

Figure 1-5. Location of Original and Current APE on an Aerial.

1.3 Principal Investigator

The principal investigator for the original project was J. Howard Beverly, Jr., MA, RPA. For the addendum, David McBride, RPA served as Principal Investigator.

1.4 Field and Laboratory Crew

The field crew consisted of Ann Wilkinson and Dona Daugherty. Ms. Daugherty served as the field director and planned, coordinated, and supervised field activities. The fieldwork took approximately 4 person hours to complete.

1.5 Curation

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

1.6 Summary of Investigations

The remaining parcels and expanded ROW area associated with the proposed intersection improvement project at US 42 and Rice Pike/Hicks Pike, between mile points 8.4 to 8.6, in Boone County were surveyed on January 23rd, 2017. No new archaeological sites or isolated finds were identified during the survey. No further archaeological work is recommended within the proposed area of potential effect (APE).

Section 2 -

Environmental Background & Previous Research

In this section, a brief overview of the environmental background and previous research related to the proposed survey are discussed. A thorough overview was compiled and presented in the original report (Beverly and Wilkinson 2016).

2.1 Environmental Background

Boone County lies within the Outer Bluegrass Physiographic Region of north-central Kentucky. The outer Bluegrass area is characterized by deeper valleys with little flat land than the Inner Bluegrass Physiographic Region. Most of the county is a moderately to deeply dissected upland (McGrain and Currens 1978:12). The project area is underlain by the Ordovician Bull Fork Formation. It is made up of interbedded shale and limestone (Peck 1966:7).

Boone County is drained by numerous small streams that flow west and north into the Ohio River from headwaters along Great Ridge. The Project Area is located within the Big Boone Creek watershed and is drained to the east by Dark Hollow Branch and to the west by an unnamed perennial stream.

Four soil types are found within the project area: Nicholson silt loam, 2-6 percent slope; Nicholson silt loam, 6-12 percent slope; Faywood silty clay loam, 12-20 percent slope; and Faywood silty clay loam, 6-12 percent slope. In this location, these soils are part of the Faywood - Nicholson Soil Association.

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. Originally, Boone County was covered with deciduous forests and subsequently cleared for farming and is now giving way to urban development (Weisenberger et al. 1973:33).

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).

2.2 Background Research and Literature Review

During the original survey, a summary of recorded archaeological surveys and sites within the APE and surrounding two-kilometer buffer was requested from the Office of State Archaeology (OSA) and was received on December 16, 2016. The OSA reported a total of six surveys previously recorded within the area. The physical site files at the OSA were consulted on January 4th, 2016. The six surveys

by Creasman (1993), Genheimer (1995), Walley and Hawkins (1999), Hand (2001), Kompanek and Creasman (2002), and Allgood (2003). A seventh survey was discovered to have taken place within the two-kilometer APE buffer that did not have a copy of the report on file. This survey was reported by Thomas Fugate of Gray and Pape, Inc. in 2005, and portions of the report as well as reference information were attached to the 15Be555 site survey form (KASSF 15Be555, Fugate 2005). In addition, six sites were previously recorded within the area. The six sites included 15Be399, 400, 439, 530, 531, and 555.

These surveys and sites were described in the original report (Beverly and Wilkinson 2016). Additional background research was done prior to the addendum survey. The OSA report was received on January 27th, 2017. The only additional survey noted was the previous survey done for this project area (Beverly and Wilkinson 2016), and the only additional site, Site 15Be680 was recorded during this same survey.

Section 3 -

Field Methods and Results

In this section, the field methods employed during this study is described along with the results of the investigations. 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). The field methods included systematic shovel probes and visual inspection. Systematic shovel test probes (STPs) were excavated where possible. All soil excavated from the STPs was screened through ¼ inch mesh screens with the intention that all artifacts retained in the screen would be collected and bagged according to provenience. Areas of 15 percent or greater slope were visually inspected for surface remains.

Areas that were under concrete or asphalt, such as buildings and parking lots, were not excavated, but were visually inspected. Several other areas were disturbed by construction or other activities such as land development and were not excavated.

Seventeen STPs were excavated. The location of all the shovel probes on an aerial photograph are shown in Figure 3-1. The entire APE was subjected to visual inspection. The majority of the APE was within mowed lawns and pasture grasses, which offered zero ground surface visibility. Figure 3-2 through Figure 3-4 illustrate the project area at the time of the survey.

3.2 Archaeological Laboratory

Any artifacts recovered during field investigations were brought to the CDM Smith archaeology laboratory in Lexington, Kentucky, for washing, cataloging, and initial analysis.

3.3 Evaluation of Field Methods

Shovel testing and visual inspection were used to identify and define approximate site limits within the survey area. The methods were successful in identifying site location, delineating site boundaries, and obtaining a sample of cultural materials from the site.

3.4 Results

On January 23rd, 2017, an archaeological survey was conducted within the remaining parcels and expanded ROW area associated with the proposed intersection improvement project at US 42 and Rice Pike/Hicks Pike, between mile points 8.4 to 8.6, in Boone County, Kentucky (KYTC Item Number 6-412.00) (Beverly and Wilkinson 2016). These parcels were denied entry during the initial Phase I archaeological survey conducted on December 4th, 2015 and January 25th, 2016, and are listed in Table 1-1 as discussed above. One parcel (Parcel No. 10) was not surveyed because entry permission was denied, and four additional parcels (Parcels No. 15, 23, 29, and 40) were not surveyed because entry permission could not be gained. In between the initial survey and the current survey, impacts were eliminated for Parcel No. 29, and therefore, this property was not surveyed. In addition, parcel numbering was adjusted, and Parcel No. 40 became 29 and Parcel No. 44 became 31. These properties

were referred to as Parcel No. 40 (29) and Parcel No. 44 (31) throughout this report. Lastly, the APE within Parcel No. 44 (31) was slightly expanded.

During the survey, seventeen STPs were excavated within the APE. Portions of the project area were 15 percent or greater slope while other areas were disturbed by land development and other activities. These areas were subjected to visual inspection, but were not tested through shovel probing (see Figure 3-1). Fourteen negative STPs were excavated within Property No. 23 while the remaining area was deemed 15 percent or greater slope. The small portion of Property No. 40 (29) was disturbed due to modern road, ditch, and outbuilding construction. One negative shovel probe was excavated within Property No. 10. One negative probe was excavated within the new section of Property No. 44 (31). One negative probe was excavated within the Property No. 15, but the remaining portion of Property No. 15 was found to be disturbed due to landscaping, road construction, and the construction of a pond that was later filled.

The representative STP profile (STP 103) consisted of two zones (Figure 3-5). Zone one extended from the surface to 20 centimeters below (cmbs) and consisted of 10YR4/3 brown silty clay loam. Zone II extended from 20 to 30 cmbs and consisted of 10YR5/6 yellowish brown loamy clay subsoil.

No artifacts or cultural features were observed in any of the STPs.

Figure 3-1. Aerial Showing STPs, Slope, and Disturbed Areas within the Current APE.

Figure 3-2. General View of APE Showing Pasture & Maintained Lawn, Looking North.

Figure 3-3. General View of APE Showing Sloped Area, Looking South.

Figure 3-4. General View of APE Showing Disturbed Area, Looking North.

Figure 3-5. Representative Profile: STP 103.

Section 4 -

Summary and Recommendations

4.1 Summary

On January 23rd, 2017, archaeologists from CDM Smith conducted a Phase I archaeological survey for the remaining parcels and expanded areas of the APE associated with the proposed intersection improvement project at US 42 and Rice Pike/Hicks Pike, between mile points 8.4 to 8.6, in Boone County, Kentucky (KYTC Item Number 6-412.00). These parcels were originally denied entry during the initial Phase I archaeological survey conducted on December 4th, 2015 and January 25th, 2016.

No new archaeological sites or isolated finds were identified during the survey.

4.2 Recommendation

No further archaeological work is recommended within the proposed APE.

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15Be530
15Be531

15Be555
15Be680

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