



CAMPBELL COUNTY CONSERVATION DISTRICT

8350 East Main Street
Alexandria, Kentucky 41001-1214
(859) 635-9587 * FAX (859) 635-0496

www.campbellkyconservation.org * E-mail: campbellcd@fuse.net

Ron McCormick, Chairman
Dennis Walter, Vice Chairman
Ken McCormick, Secretary/Treasurer

Linda Bray-Schafer
Rick Simon
Pete Garrett
Debbie Buckley

Staff: Linda Grizzell
Amy Wing
John Stork

28 April 2016

Kentucky Heritage Land Conservation Fund Board
2 Hudson Hollow
Frankfort, Kentucky 40601

Dear Members of the Kentucky Heritage Land Conservation Fund Board,

The Campbell County Conservation District would like to respectfully submit the Final Resource Management Plan for Hawthorne Crossing Conservation Area. We would like to thank the Kentucky Heritage Land Conservation Fund Board for their patience during this transition period in our District. If we may provide more information, please contact me, or our District Coordinator, Amy Wing, at the office at 859-635-9587 or e-mail: BCKConservation@gmail.com or campbellcd@fuse.net.

Sincerely,

Ron McCormick, Chairman
Campbell County Conservation District

Enclosures – Hawthorne Crossing Conservation Area Final Resource Management Plan

RWM:amw

FINAL RESOURCE MANAGEMENT PLAN
Kentucky Heritage Land Conservation Fund Board (KHLCFB)

Table of Contents

1. General information
2. Purpose
3. Management Activities
 - 3.1. Natural Resource Protection:
 - 3.2. Resource Restoration and Enhancement:
 - 3.3. Archaeological and Historical Resource Protection:
 - 3.4. Staffing:
 - 3.5. Security and Safety:
 - 3.6. Maintenance:
 - 3.7. Coordination:
4. Improvements, Access, Agreements, Public Use, and Restrictions.
 - 4.1. Physical Improvements:
 - 4.2. Access:
 - 4.3. Agreements:
 - 4.4. Public Use:
 - 4.5. Restrictions:
5. Monitoring.
 - 5.1. Biological Monitoring
 - 5.2. Public Use Monitoring
6. Identification as KHLCF Site.
7. Cost Estimate and Funding Sources.
8. Priority Schedule.
9. Exhibits. Attach the following exhibits to the final RMP:
 - a) A location map;
 - b) A boundary map;
 - c) Appropriate photo documentation of the project site;
 - d) Biological inventory completed to KHLCF standards;
 - e) Archeological inventory completed to KHLCF standards;
 - f) Site plan document;
 - g) Site plan map;
 - h) Forestry Stewardship Plan
 - i) The memorandum of agreement for the project;
 - j) Any other agreements set forth in section 4.3 above;
 - k) The recorded deed(s) for the project site;
 - l) Any conservation easements which pertain to the project site; and
 - m) A copy of the preliminary RMP;
 - n) Copies of all annual management plans submitted to date.

1. **General Information**

- 1.1. Project name: Hawthorne Crossing Conservation Area
- 1.2. Site location: Campbell County
- 1.3. Applicant: Campbell County Conservation District
- 1.4. Contact name: Amy Wing
- 1.5. Address: 8350 E Main Street, Alexandria, KY 41001
- 1.6. Phone number: (859) 635-9587
- 1.7. E-mail address: BCKConservation@gmail.com
- 1.8. Website: www.campbellkyconservation.org
- 1.9. Brief description of natural resources:

Hawthorne Crossing Conservation Area is mainly surrounded by two waterways that border the property, the Licking River and Riffle Creek. There are also three small ponds on the property. The forest is in different stages of succession based on past uses, such as agriculture which Hawthorne Crossing was once a working farm. There are grassland communities, wetlands, old field succession, silver maple forest, large Red Cedar/Osage Orange forests, black locust forest, Hackberry/Buckeye Forest, Box Elder/Silver Maple Forest, and young Red Cedar/Osage Orange Forest. Some areas lack native tree seedlings. The prevalent invasive species are Bush Honeysuckle, Osage Orange, Japanese Stilt Grass, Garlic Mustard, Spotted Knapweed, reed Canary Grass, Multiflora Rose.

- 1.10. Brief historical information relevant to site management:

The name Hawthorne Crossing Conservation Area was chosen to honor the history of this land. In earlier days, the shallow riffle in the Licking River near the community of Hawthorne allowed travelers an easy crossing into present day Kenton County. The community of Hawthorne has since disappeared, although its name endures in people's memories and in print, on county maps. The earliest historic records indicate that temporary hunting parties of Native Americans first occupied Hawthorne. Remains of one of their campsites are still located on the property near the river. Hawthorne was named after Howard Hawthorne, who was a Second Lieutenant in the cavalry that fought in the battle at Wounded Knee. The 1883 Campbell County map indicates the land as belonging to the heirs of Howard Hawthorne.

The Trapp family emigrated by boat from Germany to Hawthorne Crossing in 1855. The Trapp family lived in the lower house at Hawthorne Crossing. The family kept dairy cows, pigs, and farmed crops on the property. The Trapp family also barged coal up the

Licking River using scales near the road to weigh the coal. After a tax was levied on scales, the scales were removed.

In the 1950s the Army Corps of Engineers surveyed the property and surrounding area, labeling it Hawthorne Crossing. The engineers determined the rise in water level prior to constructing the dams in the Ohio River. The dams raised the water level obliterating the riffle that had been the crossing. Richard "Ace" Doran, a wealthy man, bought the property in the 1950s. He owned Ace Doran Company, which was a hauling and rigging company. He used the property to house chickens, pigs, and ponies. Ace Doran died and his family inherited the land, which they sold off in sections. One of those sections was bought by the Seiler family, who later sold the property to the Campbell County Conservation District and The Campbell Conservancy, Inc.

2. **Purpose.**

The Campbell County Conservation District's goal is to protect and restore the land while providing for appropriate public use. This may include recreational uses such as a canoe and kayak launch site, hiking trails that offer both easy and challenging terrain, areas for bird watching, and other nature study activities. The District has plans to continue to implement restoration projects such as forest improvement, exotic species removal, and native plant establishment. Educational programs on land management, wildlife habitat management and restoration, as well as on the historical and cultural resources have been and will continue to be offered by the Conservation District and partners. The area has also been made available to small groups for environmental education studies, or for students from nearby universities and colleges to conduct research. We hope to continue efforts in research once opening the property to the public.

3. **Management Activities.**

3.1. **Natural Resource Protection:**

Protection and restoration of the land along the Licking River and protection of buffer lands around the property are primary concerns in this project.

Hawthorne Crossing includes over 3,000 feet of frontage along Grant's Bend on the Licking River. The property also encompasses over 2,000 feet of stream bank along Riffle Creek, including its junction with the Licking River. Seasonal flooding affects areas along the Licking River and there are several possible wetland areas around the confluence of Riffle Creek and the Licking River. Large canopy trees, predominately soft maple 20-30" in diameter, are found along the flood plain. Riffle Creek is an active, rock-strewn stream with a wide bed that is pleasing to the eye and pleasant to walk along.

There is a well-defined ridge that is topped with two knolls. Elevation runs from approximately 666 feet to 460 feet. There are two small ponds on the property, both under ¼ acre. One is located on the ridge between the two knolls and the other pond is near the old farmstead and barn. The upland area consists primarily of old fields and pasture that is reverting to woods. A little over 50 percent of the soils are Eden silty clay loam.

Animals were determined present on the property by observations and the presence of feathers, tracks and scat. Eight fish species were collected during the biological inventory. Macroinvertebrate sampling resulting in the findings of 28 taxa. Using these macroinvertebrates as biotic indicators, Riffle Creek scored a “fair” rating based on the finding of some pollutant intolerant species. These species are noted in the biological inventory.

3.2. Resource Restoration and Enhancement:

A detailed biological inventory was conducted according to the requirements of the Kentucky Heritage Land Conservation Fund Board.

The goal of the Conservation District is to continue to provide a variety of habitats for migratory birds, as well as plants and animals endemic to the area. Habitat improvement may also result in attraction of species that have been extirpated over the years, due to lack of appropriate food and cover. The District intends to continue to work with interested entities and individuals to survey the bird population on the property and to take appropriate measures to protect and enhance that population.

Northern Kentucky University (NKU) Center of Environmental Restoration has completed projects on the property. This includes enhancing the riparian forests around streams, reducing the invasive species population and replacing with a diversity of native species, enhancement of natural wetlands, and stabilization of stream bank erosion, stabilization and re-establishment of ephemeral tributaries needed for natural wetlands to function. NKU CER will maintained and monitored these projects for at least five years.

There are still approximately 40 acres of invasive Bush Honeysuckle removal that needs to be completed. A request for proposal has been drafted and the Conservation District hopes to initialize this project this summer. Conservation District staff constructed five monitoring plots in order to establish a baseline of the presence of invasive species in various areas of the property, and to monitor the effectiveness of removal efforts.

The pond on the north section of the property appears to be in good condition and provides quality habitat for wildlife. Upland ponds such as this one normally provide excellent habitat for amphibians such as salamanders. The pond that is located near the site where the “Old Farmhouse” and barn once stood had the spillway restored. NKU-CER also restored wetlands in the bottom area along the creek.

Refuse needs to be policed from the banks of both the Licking and Riffle Creek. Like many old farm sites, there are various small refuse piles and scattered debris throughout the property but no large dump sites. Our goal is to use the volunteer and community efforts to remove all refuse from the property. This will not only enhance the beauty of the property but will prevent these objects from being carried into the Licking River.

3.3. Archaeological and Historical Resource Protection:

An archeological survey of the property was conducted in accordance with the guidelines established by the Kentucky Heritage Land Conservation Fund Board.

Two home sites were known to exist on the property: the “Old Farmhouse” and the “Log Cabin.” The Old Farmhouse was torn down after the District acquired the property. As of now the Log Cabin is the only one that remains and is currently wrapped and sealed to preserve the history of the Log Cabin. The District has had discussion on rather or not they would like to tear down the cabin or continue to preserve it. This decision will be made before opening the property to the public. We see this cabin as being a possible safety concern. The Old Farmhouse and the barn were removed in 2013. The area was stabilized by reseeding with annual rye, winter wheat, and mulched.

3.4. Staffing:

Staff will continue to be provided by the Conservation District to oversee the project. Additional staff may be secured by an intern-relationship with Northern Kentucky University or Thomas More College or by volunteers if necessary.

3.5. Security and Safety:

Riffle Creek and the Licking River act as natural barriers that protect much of the property from encroachment by motorized vehicles. The north entrance road that leads to the top of the ridge can be easily secured with a gate and there is currently an old gate at this site. Topography will prevent bypassing the gate without extensive additional protective measures.

Two other gates were deemed necessary to protect the property. One was placed at the entrance of a small drive that once led to a bridge that has now been torn down. The other gate was used to secure an old entrance road or driveway that leads down to a small flat area on the east side of Riffle Creek, along Highway 915. This area is currently overgrown with scrub growth and an old cable secures the entrance. The north entrance, an old farm road, has provided access for work on the upper portion of the property.

The borders of the property have been marked with the appropriate signage and an additional sign regarding the rules for proper use of the property and we are continuing to mark trees as well. Once a true point of origin with a parking lot is established, there will be appropriate signage to indicate emergency contact information.

The Conservation District and the authorities have limited access to the property due to the lack of an established entrance to the property. The importance of a parking area is not only to open the area to the public, but also continue to maintain and secure the property.

3.6. Maintenance:

The District has been unsuccessful in finding an appropriate parking area for the property. We are currently pulling off the side of the road or utilizing the Licking Pike Baptist Church, which is located across Licking Pike from Hawthorne Crossing, parking lot if necessary. The Conservation

District is in the process of requesting funds from the Kentucky Heritage Land Conservation Fund in regards to an adjacent property off Licking Pike that will give access to Hawthorne Crossing. There is an area perfect for a parking lot and a great spot to launch canoes onto Riffle Creek when heading to the Licking River.

A simple kiosk with a map and information about the property, including project sponsors, will be constructed in the main entrance parking area. Additional signage and information will be posted at the canoe launch area, as we hope this will become a stopover for canoe trips along the Licking River.

The District anticipates working with other interested community groups to remove refuse from various locations on the property. The Conservancy will assist in organizing volunteers for this effort.

Volunteers will also be used for initial work on a trail system, which is also contingent upon the location chosen for the main entrance to the property. The Conservancy will assist in organizing volunteers for this effort.

At this time, no permanent restroom facilities are planned. A refurbished portable restroom will be purchased to provide this needed service, and cleaned by a local vendor as needed.

Staff will be provided by the Conservation District to oversee the project, with assistance from the Conservancy and other cooperating agencies and organizations. Additional staff may be secured by an intern-relationship with Northern Kentucky University or Thomas More College.

The cost of liability and property insurance has been absorbed by the District into their existing policy through the Kentucky Association of Counties All Lines Fund.

3.7. Coordination:

Through projects including the Hawthorne Crossing and St. Anne Woods and Wetlands, the Campbell County Conservation District coordinated with The Campbell Conservancy, Inc. and the Campbell County Fiscal Court to ensure that our goals as a community were being met.

4. Improvements, Access, Agreements, Public Use, and Restrictions.

4.1. Physical Improvements:

The only existing physical improvements that were on the site were the two home sites and the gravel road described above. Study, restoration, and/or the removal of these improvements haven't and will not involve the alteration of land or vegetation in any meaningful way.

If the acquisition of the adjacent tract fails, then installation of the temporary parking facility will be in an area that will not involve the removal or disturbance of any significant vegetation or trees. Work will be done without disturbing Riffle Creek and the surrounding area.

Other work, such as restoration of the bridge and road improvements will be necessary, depending upon the determination of the main entrance.

Trails will not be paved or mulched, but the path will be cleared of sufficient vegetation to allow for foot traffic. Some strategic rock placement or steps may be needed to provide safe access in some areas and water bars or other methods may need to be employed in areas to limit soil erosion.

As noted previously, no permanent restroom facilities are planned. A refurbished portable restroom will be purchased to provide this needed service, and cleaned out by a local vendor as needed.

4.2. **Access:**

Primary initial access will be provided by the installation of the small parking area described above. From there, access to the property will be limited to foot traffic only by the public, which will eliminate mountain biking and horses as well as ATVs. Currently, there are no plans to open the property to vehicle traffic other than for maintenance work.

Public visitation will be limited to daylight hours and access to any existing structures will be prohibited until such access is determined to be safe. Public access will be limited entirely at first, until the property can be thoroughly evaluated for any hazards that can be mitigated, marked or both.

4.3. **Agreements:**

Agreements with the NKU CER to completed restoration projects on the property have been made and we hope to continue a working relationship while they monitor these projects over the coming years.

All agreements executed in the future will be in compliance with the requirements of the Kentucky Heritage Land Conservation Fund Board.

4.4. **Public Use:**

Upon the installation a parking area, the uses are for hiking, bird and wildlife watching, and other related forms of passive recreation; launching of canoes and kayaks; conservation land management demonstration projects; educational programs on a variety of natural resource issues, management and restoration techniques; and natural and cultural history. There have been some small groups to engage in environmental education studies, or research by students from nearby Northern Kentucky University, Thomas More College, Gateway Community College, or any of the other colleges in the area. Any future research projects and methods will require prior approval by the District and/or the Kentucky Heritage Land Conservation Fund Board, the Kentucky Department of Fish and Wildlife Resources, or other local, state, or federal agencies.

4.5. **Restrictions:**

The collection of living and non-living things will be restricted to use for qualified educational and research programs. The use of motorized vehicles (maintenance excluded) will be prohibited. Hunting and open fires of any kind (maintenance excluded, with proper permits) will be prohibited.

Public visitation will be limited to daylight hours and access to any existing structures will be prohibited until such access is determined to be safe. Public access will be limited entirely until the property can be thoroughly evaluated for any hazards that can be mitigated, marked or both.

5. **Monitoring.**

5.1 **Biological Monitoring**

In the past the Conservation District has enlisted the assistance from NKU's Center of Environmental Restoration with similar projects. We hope that with their support, we will continue this relationship with projects affecting the proposed property. The Conservation District staff is prepared for necessary monitoring of the property on a regular basis as needed.

5.2 **Public Use Monitoring**

The proposed trail will abide by the KHLCF trail resource standards listed and trail conditions will be assessed the same. Public use of the property will be regularly monitored and groups visiting the property will be tracked for safety precautions.

6. **Identification as KHLCF Site.**

A kiosk will be located at the parking lot upon appropriate installation and will acknowledge that the land was purchased with Kentucky Heritage Land Conservation funds. Additional signage has been placed at key points around the property.

7. **Cost Estimate and Funding Sources.**

Annual funding from the Conservation District will continue for maintenance. This does not include the Conservation District staff time dedicated to the initial start-up of the project or ongoing maintenance of the property.

The Campbell Conservancy has pledged their continuing support, volunteer services, skills and labor, and some funds for initial start-up costs, as well as continued funding as their finances allow. The Conservancy has also indicated an interest in helping the District to continue seeking both public and private funds for the establishment and maintenance of the property.

The District intends to utilize any local, state, or federal in-kind services or programs that will help implement the restoration and maintenance projects outlined in this project.

8. Priority Schedule.

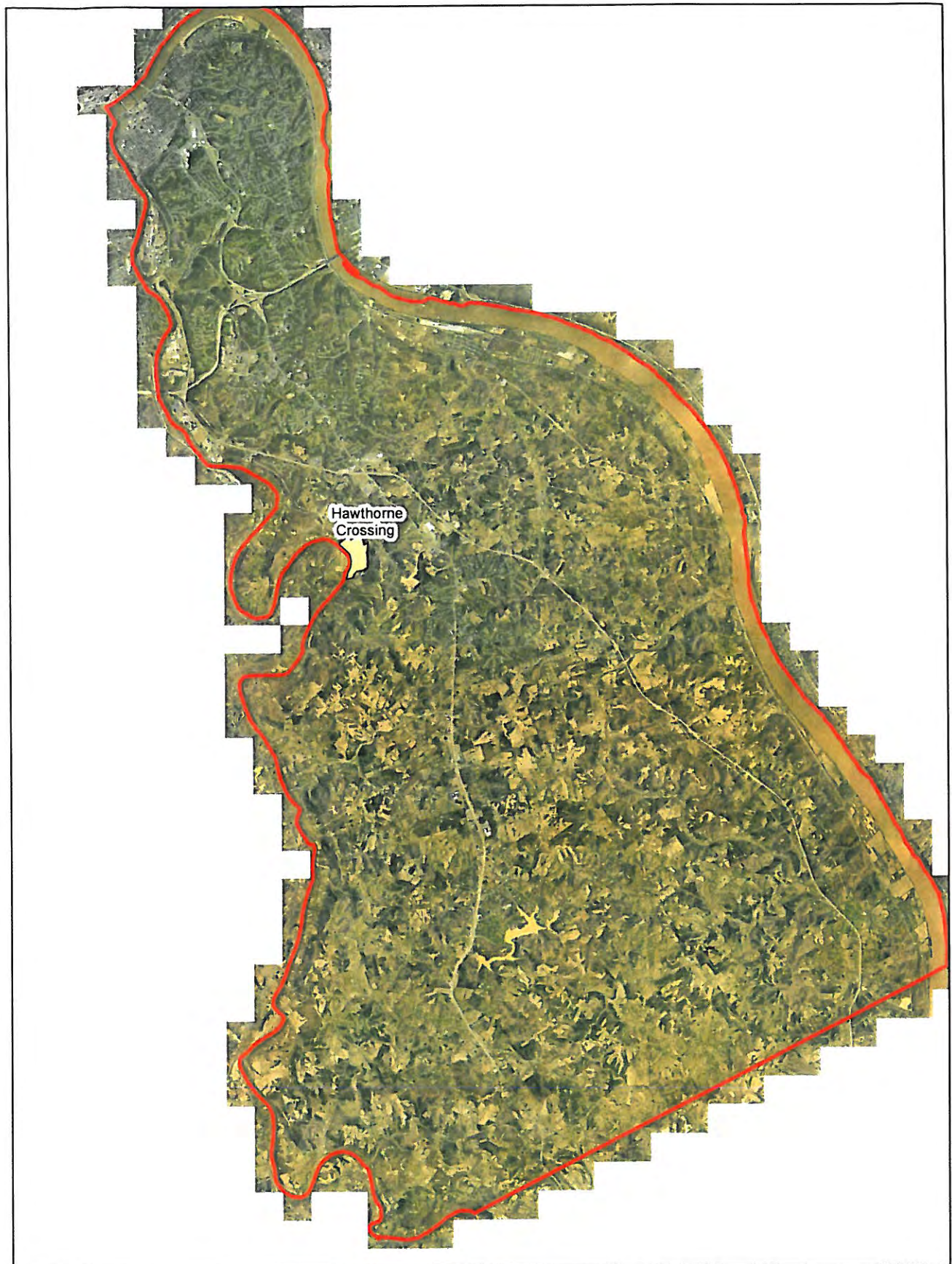
- May 2016 Complete Final Resource Management Plan
- June 2016 Send notice for Request for Proposal to complete invasive species removal and select contractor
- July 2016 Response on adjacent tract addition for parking lot and canoe launch. Based on this response the Conservation District will determine rather another option for parking may have to be made.
- August 2016 Begin working on a proposed trail system
- August 2017 Open property to the public

*This schedule is in speculation that a parking lot will either be plausible from acquisition of the adjacent tract or by other means.

9. Exhibits. Attach the following exhibits to the final RMP:



- a) A location map;
- b) A boundary map;
- c) Appropriate photo documentation of the project site;
- d) Biological inventory completed to KHLCF standards;
- e) Archeological inventory completed to KHLCF standards;
- f) Site plan document;
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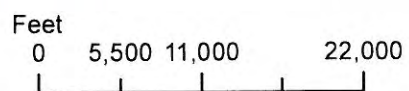
Hawthorne Crossing Conservation Area



Hawthorne Crossing

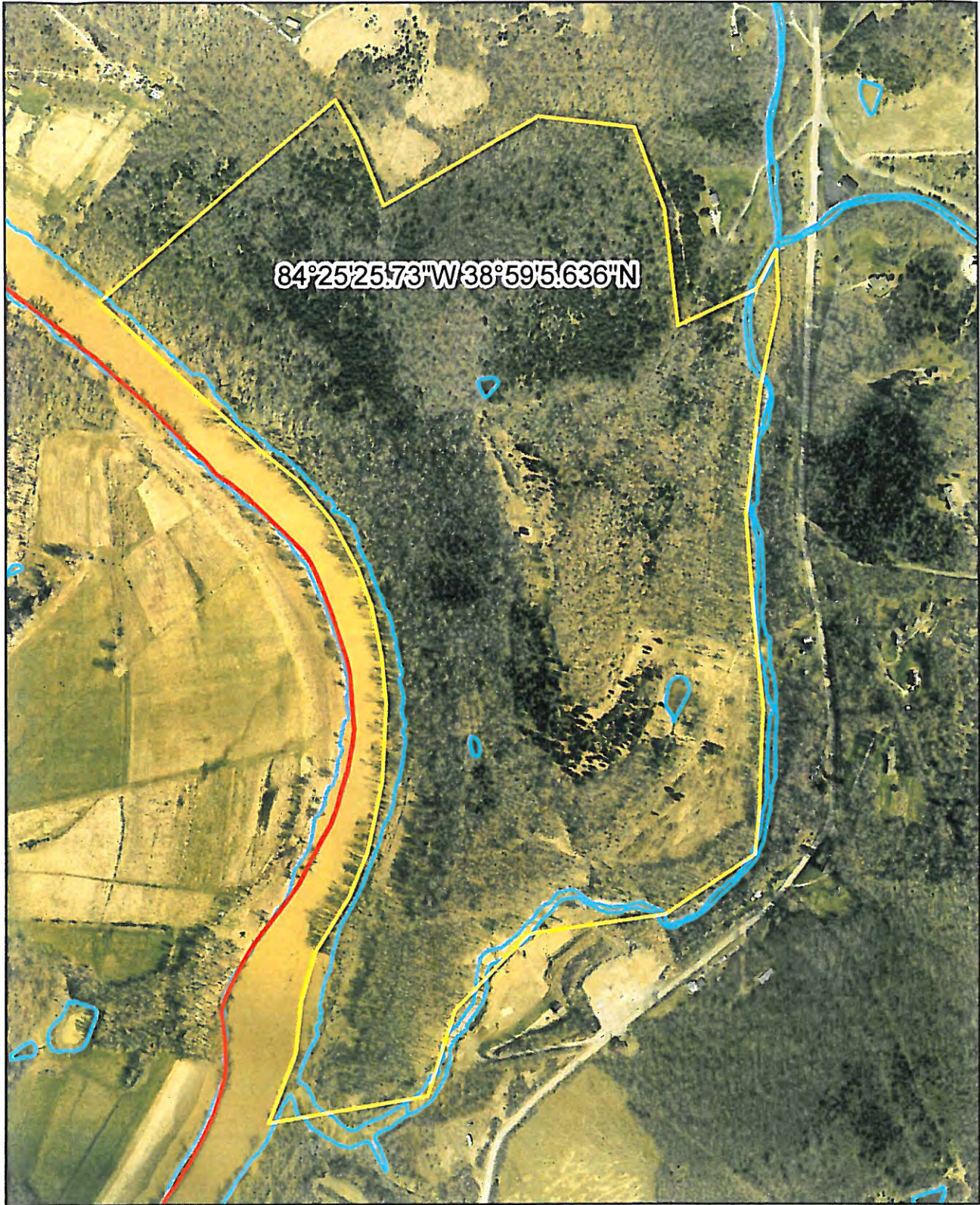
Legend

-  Hawthorne_Boundary
-  Campbell Co Boundary






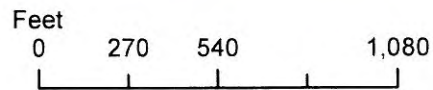
April 2016
AMW- 2014 Aerials

Hawthorne Crossing Conservation Area



Legend

-  Hawthorne_Boundary
-  Campbell Co Boundary
-  waterways/water features

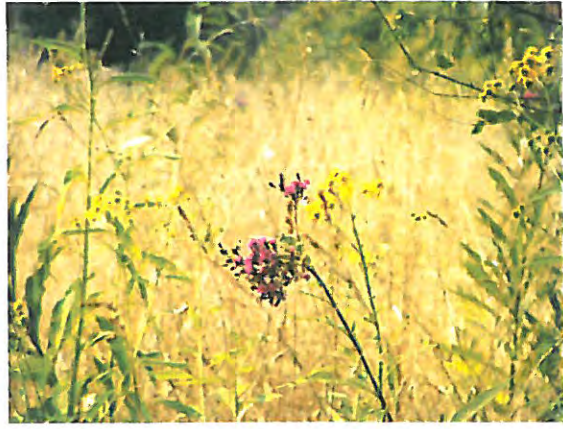


April 2016
AMW- 2014 Aerials

Hawthorne Crossing Conservation Area

Pictures taken by: CC Conservation District Staff and Supervisors and NKU-CER staff









Biological Inventory

Hawthorne Crossing Conservation Area Campbell County, Kentucky

Prepared for
Campbell County Conservation District
Campbell Conservancy
8351 East Main Street, Suite 104
Alexandria, KY 41001

August 4, 2009
Revised October 8, 2009

Prepared by
Third Rock Consultants, LLC
2526 Regency Road, Suite 180
Lexington, KY 40503
859.977.2000

Prepared by:



Rain Storm

Reviewed by:



Ed Hartowicz

Table of Contents

	Page
I. INTRODUCTION.....	1
II. TERRESTRIAL HABITATS.....	1
A. Flora.....	1
1. Plant Communities.....	4
2. Invasive Species.....	7
B. Fauna.....	9
II. AQUATIC HABITATS.....	9
A. Riffle Creek.....	9
B. Licking River.....	10
C. Ponds.....	10
IV. CONCLUSION.....	11

EXHIBITS

Exhibit 1 – Vegetation Communities, Macroinvertebrate and Fish Sampling Locations (Aerial)	2
Exhibit 2 - Vegetation Communities, Macroinvertebrate and Fish Sampling Locations (Topographic).....	3

APPENDICES

Appendix A – Photo Log	
Appendix B – Plant List	
Appendix C – RBP Form and Macroinvertebrate Bench Sheets	

I. INTRODUCTION

Third Rock Consultants, LLC (Third Rock) was contracted by the Campbell County Conservation District and the Campbell Conservancy to perform a biological inventory of the Hawthorne Crossing Conservation Area (CCA). The Hawthorne CCA is comprised of 140 acres adjacent to the Licking River. Hawthorne CCA was acquired in 2008 through the combined efforts of the Campbell County Conservation District, the Campbell Conservancy, and the Campbell County Fiscal Court. The Campbell County Conservation District received a grant through the Kentucky Heritage Land Conservation Fund board to purchase 134.6 acres, and the Campbell Conservancy purchased the additional acreage. The property includes 3,000 feet of forested stream bank along the Licking River and over 2,000 feet of stream bank of Riffle Creek, including the confluence with the Licking River. The Campbell County Conservation District anticipates implementing land restoration projects such as forest improvement, exotic species removal, and native plant establishment as well as providing educational and recreational opportunities. This report may serve as baseline data for these management goals.

Prior to field surveys, a desktop review of aerial photographs, topographic maps, and soil survey maps was conducted to delineate general vegetation types and to identify natural features, buildings, and other specific landmarks.

A photo log compiled to document existing conditions during the field efforts and is located in Appendix A.

II. TERRESTRIAL HABITATS

A. Flora

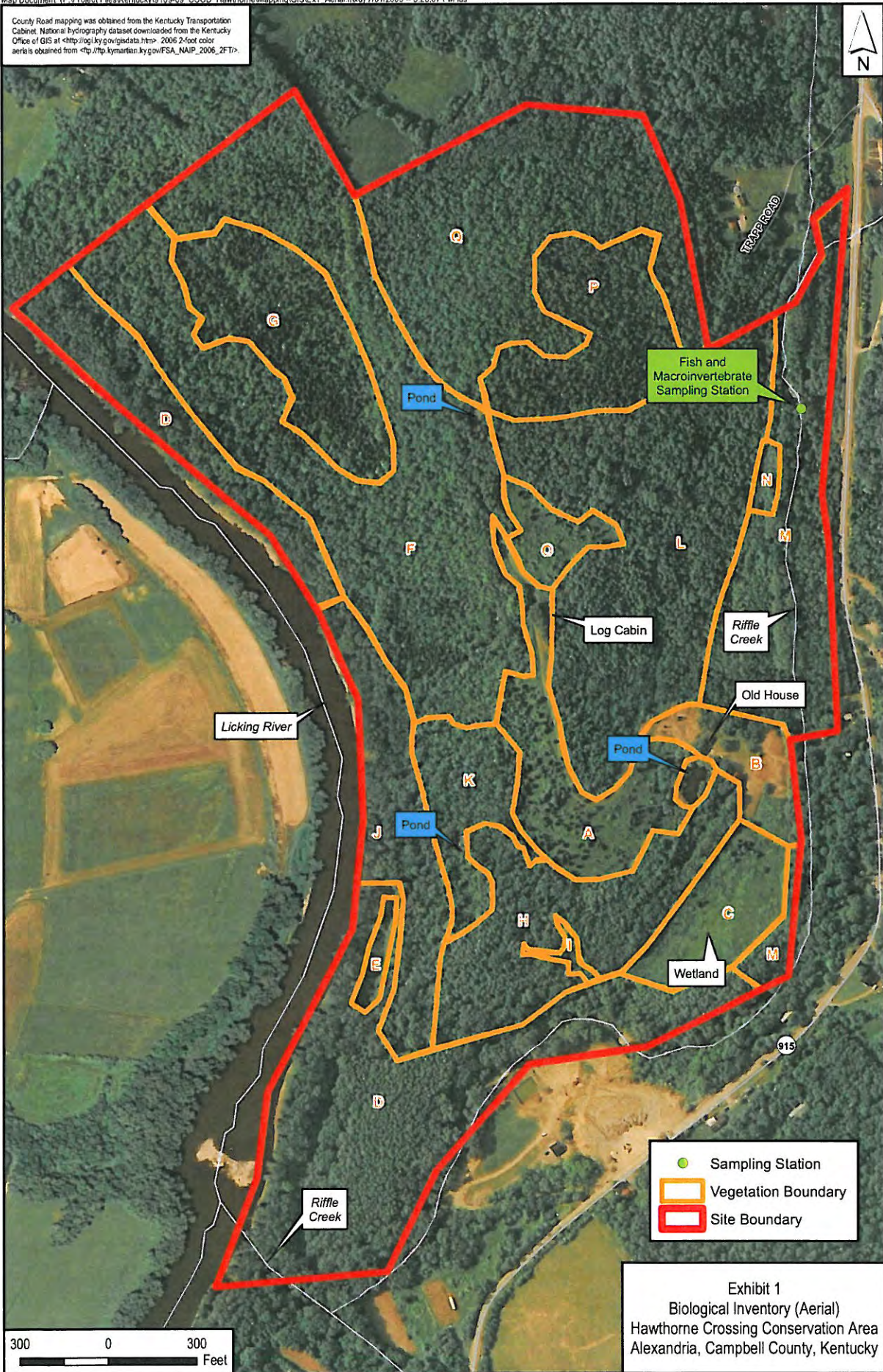
Field visits to identify and delineate the various vegetation communities were conducted by Third Rock biologists on April 24, May 12, and July 28,

2009. During these field surveys the entire project area was examined and the dominant vegetation within the canopy, shrub layer, and herbaceous groundcover was recorded. Aerial photographs and GPS were used to locate the boundaries of vegetative communities. Communities were defined based on canopy species composition, size (diameter at breast height (dbh)), and density, as well as slope aspect, density of the bush honeysuckle (*Lonicera maackii*) understory, and successional stage. Notes on tree canopy size (dbh), exotic species abundance, and ground cover density were recorded for each community when appropriate.

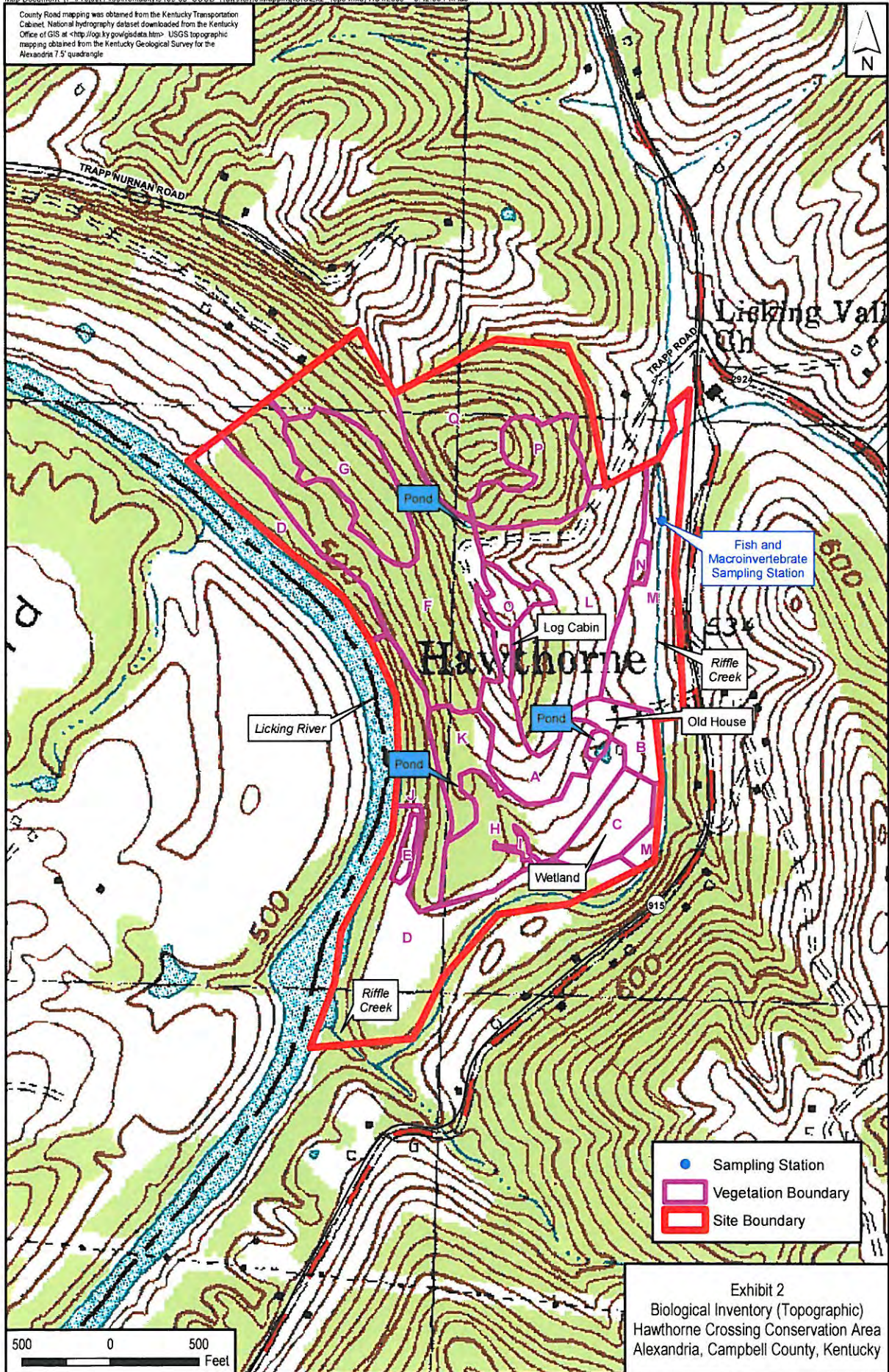
Differences in past land use and timing of maintenance abandonment are major factors that shaped each community. As a result of the land use history, some communities are more homogeneous than others. For example, Areas C and D were obviously crop fields in the past and began natural succession as a unit. Area C is in a late perennial weed stage of succession and is dominated by tall goldenrod (*Solidago canadensis*). Area D is a bottomland forest totally dominated by silver maple (*Acer saccharinum*), with trees almost all the same age despite some differences in tree size. Most of the hill plant communities (Areas F, H, L, P, and Q), on the other hand, were probably pastures and were colonized by trees over a prolonged period, producing a less homogeneous community.

Mapping depicting the delineated boundaries of the various plant communities as they occur within the boundaries of the site is shown on Exhibits 1 and 2, pages 2 and 3. Each distinct plant community has been labeled with a letter that corresponds to a plant dominance list and accompanying narrative contained on the following pages. This map depicts the major plant communities within the site in order to provide a basis for understanding the plants and

County Road mapping was obtained from the Kentucky Transportation Cabinet. National hydrography dataset downloaded from the Kentucky Office of GIS at <<http://oqi.ky.gov/gisdata.htm>>. 2006 2-foot color aerials obtained from <http://ftp.kymartian.ky.gov/FSA_NAIP_2006_2FT/>.



County Road mapping was obtained from the Kentucky Transportation Cabinet. National hydrography dataset downloaded from the Kentucky Office of GIS at <http://ogis.ky.gov/gisdata.htm>. USGS topographic mapping obtained from the Kentucky Geological Survey for the Alexandria 7.5' quadrangle.



animals that live there, as well as to serve as baseline information for resource management, planning, and development.

1. Plant Communities

Area A (6.14 acres) – Red Cedar/Old Field Grassland

This grassland community is becoming established with shrubs; but the community is still approximately 65 percent open grassland. Dominant shrubs are red cedar (*Juniperus virginiana*), bush honeysuckle, and Osage orange (*Maclura pomifera*). Other shrubs common in the area are rough-leaf dogwood (*Cornus drummondii*), slippery elm (*Ulmus rubra*), hawthorn (*Crataegus* sp.), redbud (*Cercis canadensis*), and plum (*Prunus americana*). Multiflora rose (*Rosa multiflora*) and blackberry (*Rubus* sp.) are common throughout the area. The herbaceous layer is dominated by smooth brome (*Bromus inermis*), spotted knapweed (*Centaurea maculosa*), and goldenrod (*Solidago* sp.).



Large Cedar Trees in Old Field Grassland

Area B (2.77 acres) – Pasture/Overgrown Lawn

This grassland community is located in what was once pasture and mowed lawn for the homestead. It is approximately 90 percent open grassland with scattered shrubs and trees. The

dominant vegetation is smooth brome, tall fescue (*Schedonorus phoenix*), orchard grass (*Dactylis glomerata*), and moneywort (*Lysimachia nummularia*), with frequent occurrences of Queen Anne's lace (*Daucus carota*), asters (*Aster* sp.), garlic mustard (*Alliaria petiolata*), teasel (*Dipsacus sylvestris*), curly dock (*Rumex crispus*), white clover (*Trifolium repens*), red clover (*Trifolium pretense*), and wild rye (*Elymus virginicus*).



House and Outbuilding in Area B - Overgrown Lawn and Pasture

Area C (3.76 acres) – Old Field/Wet Meadow

This grassland/forb community is located in what was once pasture and/or a row crop field and is approximately 95 percent open. The lowest elevations within this relatively flat creek bottom field, which are likely the remains of an abandoned stream channel, are dominated by hydrophytic vegetation, indicating that portions of this area are wetland. An examination of the soil revealed oxidized root zones, indicating that there is standing water for extended periods, resulting in anaerobic conditions. The non-wetland areas are dominated by a community similar to Area B, but with a greater abundance of goldenrod. The wetland portions are dominated by sedges (*Carex* sp.), rushes (*Juncus effusus*), agrimony (*Agrimonia parviflora*), bugleweed (*Lycopus americana*), moneywort, and swamp milkweed (*Asclepias incarnata*).

Area D (5.3 acres) – Bottomland Silver Maple Forest 6-10 inch DBH

This bottomland forest community was most likely used as cropland in the past. This forest is completely dominated by silver maple (*Acer saccharinum*) trees of nearly the same size (dbh). The groundcover within this forest is dominated by honewort (*Cryptotaenia canadensis*), goldenglow (*Rudbeckia laciniata*), giant ragweed (*Ambrosia trifida*), ground ivy (*Glechoma hederacea*), moneywort, and wood nettle (*Laportea canadensis*).



Silver Maple Forest in Bottomland Near Licking River



Old Field Opening in Bottomland Forest. Reed Canary Grass on Floodplain of River

Area E (0.59 acres) – Opening (Old Field) in Bottomland Forest

These narrow bottomland forest openings, which were crop fields in the past, are still in an early

stage of succession. They are dominated by giant ragweed, hop vine (*Humulus japonicus*), reed canary grass (*Phalaris arundinacea*), stinging nettle (*Urtica dioica*), and poison hemlock (*Conium maculatum*).

Area F (26.17 acres) – Large Red Cedar/Bush Honeysuckle Forest

This forest is located on a dry, west-facing slope and is dominated by large red cedar and Osage orange trees, plus scattered scarlet oak (*Quercus coccinea*), chinquapin oak (*Quercus muhlenbergii*), and white ash (*Fraxinus americana*). The understory is a dense stand of bush honeysuckle, and scattered multiflora rose (*Rosa multiflora*) is also common. Other species present in the understory include small pignut hickory (*Carya glabra*), sugar maple (*Acer sacharum*), redbud, white ash, rough-leaf dogwood, poison ivy (*Toxicodendron radicans*), and chinquapin oak. The thin groundcover consists of Virginia creeper (*Parthenocissus quinquefolia*) and Canada moonseed (*Menispermum canadense*).

Area G (7.29 acres) – Cedar/Bush Honeysuckle Forest

This hill forest is similar to F with a canopy dominated by red cedar and scattered Osage orange, but it lacks the native tree seedlings mentioned above. The understory is densely crowded with bush honeysuckle.

Area H (8.78 acres) – Black Locust/Bush Honeysuckle Forest

This hill forest has a canopy dominated by black locust (*Robinia pseudoacacia*), with some silver maple near the base of slope. Scattered box elder (*Acer negundo*), Osage orange, pignut hickory, black cherry (*Prunus serotina*), white ash, and slippery elm are also present in the overstory. Large bush honeysuckle shrubs dominate the understory, along with scattered Osage orange, multiflora rose, box elder, spicebush (*Lindera benzoin*), and coralberry

(*Symphoricarpos orbiculatus*). The herbaceous groundcover is dominated by white snakeroot (*Eupatorium altissima*), ground ivy (*Glechoma hereracea*), garlic mustard, Virginia creeper, and scattered colonies of May apple (*Podophyllum peltatum*).

Area I (0.25 acres) – Ravine (Breached Pond) Forest

In the past, portions of this area may have been a pond, and remnants of the dam are present. The overstory in this area is sparse and consists of box elder, Osage orange, black walnut (*Juglans nigra*), and buckeye (*Aesculus glabra*). The understory is multiflora rose, grape (*Vitis* sp.), bush honeysuckle and pawpaw (*Asimina triloba*). The herbaceous groundcover in this forest is dominated by corn salad (*Valerianella radiata*), smartweed (*Polygonum persicaria*), wild rye, white snakeroot, wingstem (*Verbesina alternifolia*), and Japanese stiltgrass (*Microstegium viminum*).

Area J (6.16 acres) – Buckeye/Hackberry River Slope Forest

This forest is located on the steep lower slope immediately above the Licking River terrace but is more mesic than the upper slope forest in areas F and G. The overstory is dominated by hackberry (*Celtis occidentalis*) and buckeye, with some box elder, Osage orange, hawthorn, and red mulberry (*Morus rubra*). The understory is less dense, but still dominated by bush honeysuckle with scattered buckeye and coralberry. The herbaceous groundcover consists primarily of garlic mustard, with some ground ivy, violet (*Viola* sp.), wood nettle (*Laportea canadensis*), white snakeroot, and wild rye.

Area K (3.77 acres) – West Facing Osage Orange/Bush Honeysuckle Forest

This forest consists of trees that vary from 4 to 10 inches dbh and has a more diverse canopy than F or G. The dominant overstory consists of

large red cedar and Osage orange, but also contains black locust, black walnut, chinquapin oak, hackberry, and slippery elm. The understory is densely crowded with bush honeysuckle. The understory contains coralberry, spicebush, multiflora rose, sugar maple, and white ash. The groundcover in this forest consists of white snakeroot, garlic mustard, lyre-leaf sage (*Salvia lyrata*), and common groundsel (*Senecio vulgaris*).

Area L (17.79 acres) - East Facing Osage Orange/Bush Honeysuckle Forest

This forest consists of trees that vary from 4 to 10 inches dbh. The dominant overstory species are Osage orange, black locust, red cedar, box elder, slippery elm, and white ash. The understory is densely crowded with bush honeysuckle, but also contains multiflora rose and bittersweet (*Celastrus scandens*). The groundcover in this forest is almost absent due to the dense bush honeysuckle, but scattered Virginia creeper, garlic mustard, and mock strawberry (*Duchesnea indica*) does occur.



Bush Honeysuckle in Forest Understory

Area M (6.18 acres) – Box Elder/Silver Maple Riparian Forest

This forest is located along the riparian area of Riffle Creek. The trees vary in size from 4 to 14 inches dbh. The overstory is dominated by

box elder and silver maple, but other trees present in the overstory include cottonwood (*Populus deltoides*), buckeye, black walnut, Osage orange, hackberry, sycamore (*Platanus occidentalis*), and slippery elm. The understory is dominated by small buckeye and has scattered bush honeysuckle. The herbaceous groundcover is diverse and includes phlox (*Phlox divicarta*), dwarf larkspur (*Delphinium tricorne*), wingstem, wild rye, white snakeroot, ground ivy, garlic mustard, violet, bedstraw (*Galium aparine*), Star-of-Bethlehem (*Ornithogalum umbellatum*), wild bean (*Phaseolus polystachios*), common groundsel, wild ginger (*Asarum canadense*), waterleaf (*Hydrophyllum* sp.), corn salad, and goldenglow. Trumpet creeper (*Campsis radicans*) occurs on the forest edge.

Area N (0.4 acres) – Opening in Riparian Forest

This narrow opening in the forest was used for agriculture in the past. Wild rye, yellow wingstem (*Verbesina occidentalis*), fleabane (*Erigeron philadelphicus*), mock strawberry, phlox, and violets dominate the opening with scattered, small black walnut and box elder. Scattered multiflora rose is also present.

Area O (1.62 acres) – Hill Top Old Field/Successional Scrubland

This open area is in a mid-stage of old-field succession and is dominated by shrubs and saplings. The dominants are rough leaf dogwood and Osage orange. Other saplings and shrubs present are honey locust (*Gleditsia triacanthos*), coralberry, white ash, red cedar, box elder, black haw (*Viburnum prunifolium*), black walnut, and bush honeysuckle. The groundcover is dominated by goldenrods (*Solidago* sp.), knapweed (*Centaurea* sp.), and poison ivy, with common milkweed (*Asclepias syriaca*), blackberry, wild rye, grape (*Vitis* sp.), and dewberry (*Rubus* sp.) also common.

Area P (5.97 acres) – Young Red Cedar/Osage Orange/Bush Honeysuckle Forest

This partially open canopied forest is dominated by red cedar, Osage orange, and white ash. Some chinquapin oak, honey locust, and persimmon (*Diospyros virginiana*) also occur. The understory is densely crowded by bush honeysuckle, multiflora rose, and poison ivy, but also has bittersweet, privet (*Ligustrum sinense*), coralberry, and Japanese honeysuckle (*Lonicera japonica*). The herbaceous groundcover is thin and consists of lyre leaf sage, common milkweed, knapweed, and Virginia creeper. Seedling sugar maples are also present.

Area Q (15.11 acres) –Osage Orange/Bush Honeysuckle Forest

This forest has older scattered overstory trees of Osage orange, honey locust, slippery elm, and white ash. The understory is dense bush honeysuckle with white ash and multiflora rose. Some small pignut hickory and chinquapin oak saplings are present in the understory as well. The herbaceous groundcover is thin due to dense shade from the bush honeysuckle. The species present include white snakeroot, common groundsel, and ebony spleenwort (*Asplenium platyneuron*).

2. Invasive Species

Invasive plant species are found throughout the property. Some of the more common species are discussed in greater detail below.

In particular, amur honeysuckle (*Lonicera maackii*), commonly known as bush honeysuckle, dominates the shrub layer in nearly all forests within the property and is invading most of the open communities. This species is native to Asia and is now naturalized in much of the eastern and mid-western United States. This exotic species occurs so densely within the forests that only herbaceous plants that tolerate nearly complete shade are present, and in most areas the ground is bare. Walking through the forests

is difficult due to the density. Because bush honeysuckle is well established, it leaves little opportunity for seedlings of native tree species to develop, indicating that these forests will remain choked by this aggressive exotic species unless management actions are taken.

A second prevalent exotic species within the forested communities is Osage orange (*Maclura pomifera*), which is native to the southern Great Plains but not to Kentucky. This spiny, branching tree is also known as "hedge apple" for its large, uniquely shaped fruit. Similar to bush honeysuckle in its ability to block sunlight from reaching the ground, very little ground cover or seedlings of native trees or shrubs are present where it is dominant. In most of the hill forests within the property, the tree canopy is partially dominated by Osage orange, which also dominates the understory.

Within the riparian forests of the Licking River and Riffle Creek the exotic Japanese stilt grass (*Microstegium vimineum*) dominates the ground cover in many areas. This annual plant is native to Asia and has become common in riparian habitats, lawns, woodlands, wetlands, and roadside ditches. It is capable of invading natural areas and swiftly replacing natural communities with nearly monospecific stands. Japanese stilt grass prefers moist shady conditions, and has become established in the forested riparian areas of the streams adjacent to the property.

Garlic mustard (*Alliaria petiolata*) is a biennial herb native to Europe that invades and dominates the understory of forested areas in North America. It occurs within the Hawthorne CCA property in the hill and riparian forests of the Licking River, growing in the dense shade of the bush honeysuckle understory. Garlic mustard tolerates cool winters, grows early in the spring, and continues to produce seed into the fall when native species are dormant. Garlic mustard is considered a threat to some species of butterfly

because they lay their eggs on the plants but the larvae do not mature. Garlic mustard serves as a population sink for these species.

Spotted knapweed (*Centaurea maculosa*) is common in several of the open, old-field communities. This European native is a biennial or short-lived perennial, which spreads by seed and contains allelopathic compounds that suppress other plants.

Within the narrow bottomland forest openings along the Licking River are colonies of the aggressive reed canary grass (*Phalaris arundinacea*), a persistent grass that forms dense monotypic stands in wetlands, moist meadows, and riparian areas. Reed canary grass spreads by rapidly growing underground rhizomes that quickly exclude native species, creating areas of little use to wildlife. It is difficult to eradicate and new seed may be introduced by floodwaters.

Also associated with these openings is Japanese hop vine (*Humulus japonicus*), which forms a dense tangle of vines that cover the ground and low-growing vegetation. This annual spreads by seeds that may have been brought in by river floodwater as well.

Multiflora rose (*Rosa multiflora*) is a perennial shrub native to Japan with compound leaves and small white or pink flowers. The plant is extremely prolific and invades pastures and other unmaintained areas, crowding out existing vegetation and creating dense impenetrable thickets. This species, which is common in the grassland/shrub communities within the property, is also scattered throughout the forests and riparian areas of the Licking River and Riffle Creek.

Winter creeper (*Euonymus fortunei*), an Asian evergreen vine, covers the north slope that begins at the edge of the lawn and drops down to

the riparian forest along Riffle Creek. It can tolerate a wide range of light and soil conditions and will out compete native species. This is a species that will readily spread and is difficult to eradicate.

The grassland/shrub land communities within the property are frequently dominated by smooth brome (*Bromus inermis*), which is a Eurasian cool season grass that is widely planted as a forage and cover crop. It is a highly persistent species that forms a dense sod that can exclude other species contributing to the reduction of species diversity in natural area.

Growing with the smooth brome in the grassland/old field habitats is tall fescue (*Schedonorus phoenix*), another cool season grass native to Europe. Kentucky 31 fescue has been widely planted and is considered valuable as a turf and forage grass. However, this persistent perennial competes strongly with native species, especially where burning is suppressed.

Other exotic species that occur within the various plant communities that are common but less abundant include teasel, Queen Anne's lace, Japanese honeysuckle, privet, poison hemlock, Star-of-Bethlehem, self-heal, ground ivy, moneywort, red and white clover, and tree of heaven (adjacent to the cabin). A complete list of plants observed is included in Appendix B, and all non-native plants are marked with an asterisk.

B. Fauna

During the April 24, May 12, and July 28, 2009 field visits, Third Rock biologists recorded the occurrences of mammals, birds, reptiles, and amphibians. The field effort included listening for and identifying bird and frog calls, as well as identification through observation. Mud near streams and ponds was searched for animal tracks and animal scat was identified. Existing tin, lumber, boards, logs, and rocks were turned

when encountered to search for reptiles and amphibians. The various old houses, barns, and outbuildings were examined with a spotlight for bats, guano, and bird nests.

Animals that were observed, or determined present on site by the observation of feathers, tracks, scat, etc., during the field surveys include: wild turkey (*Meleagris gallopavo*), white tailed deer (*Odocoileus virginianus*), grey squirrel (*Sciurus carolinensis*), raccoon (*Procyon lotor*), garter snake (*Thamnophis sirtalis*), green frog (*Rana clamitans*), box turtle (*Terrapene carolina*), cardinal (*Cardinalis cardinalis*), red-tailed hawk (*Buteo jamaicensis*), gold-finch (*Carduelis tristis*), barn swallow (*Hirundo rustica*), phoebe (*Sayornis phoebe*), crow (*Corvus brachyrhynchos*), mourning dove (*Zenaida macroura*), indigo bunting (*Passerina cyanea*), turkey vulture (*Cathartes aura*), and blue jay (*Cyanocitta cristata*). Additionally, bat guano was observed within one of the outbuildings near the old home site, but no roosting bats were observed. Several larval salamanders were observed within Riffle Creek and reptile egg casings were observed from a recent snake or turtle hatching.

II. AQUATIC HABITATS

A. Riffle Creek

During the July 28, 2009 field visit, Third Rock biologists sampled Riffle Creek for fish, collected samples to identify macroinvertebrates, and performed a habitat assessment using the *High Gradient Field Data Sheet* from EPA's *Rapid Bioassessment Protocol* (RBP). The sampling station location on Riffle Creek is shown on Exhibit 1 (page 2).

Riffle Creek was sampled using a seine, and eight species of fish were collected. These species include: creek chub (*Semotilus atromasulatus*), blunt nose minnow (*Pimephales notatus*), emerald shiner (*Notropis atherinoides*), rose fin shiner (*Lythrurus ardens*), striped shiner (*Luxilus chrysocephalus*), central stoneroller

(*Campostoma anomalum*), spotted bass (*micropterus punctulatus*), and rainbow darter (*Etheostoma caeruleum*).



Riffle Creek with Forested Riparian Zone

Macroinvertebrate sampling consisted of both quantitative and qualitative methods. Twenty-eight taxa (taxa richness) were identified from the samples collected. The macroinvertebrate biotic indices (MBI) score for the Riffle Creek sample is 56.2, which is considered a "fair" rating for this bioregion. The percentage of Ephemeroptera (mayflies), Plecoptera (stoneflies), and Trichoptera (caddisflies) (modified %EPT), which are considered pollution intolerant species, is 5.7%. The results of the macroinvertebrate sample identification are located in Appendix C.

The RBP habitat assessment of Riffle Creek resulted in a total score of 165 out of a possible 200 points on the ten parameter rating form. A score of 165 indicates that this stream has excellent habitat for macroinvertebrates. Riffle Creek scored highest in those parameters that involved frequency of riffles and bends, bank stability, and riparian vegetation. The lowest scores were in categories that involved available cover (due to lack of woody debris) and velocity depth regime and channel flow status (the channel was mostly pooled). The completed RBP form is located in Appendix C.

B. Licking River

No aquatic sampling was conducted on the Licking River during the field effort. The Licking River is deep, with steep forested banks on the water's edge. No relic mussel shells were observed on the banks of the river; however, the Licking River is known to be habitat for many mussel species, making it an important habitat for these rare organisms. Within the Licking River near the confluence with Riffle Creek, a wide riffle with exposed cobble and a large patch of water willow (*Justicia americana*) is present. This feature is commonly associated with mussel beds. The Licking River not only provides the Hawthorne CCA with an aesthetically pleasing aspect and recreational opportunity, but also provides habitat for fish, mussels, benthos, aquatic turtles and other reptiles, beaver, muskrat, and numerous other aquatic and riparian species of plants and animals.



Gravel Bar and Water Willow in Licking River near the Mouth of Riffle Creek

C. Ponds

Three ponds are located on the Hawthorne CCA property. These ponds are manmade and were likely used previously as water sources for livestock. The margins of these ponds have some wetland vegetation, such as black willow (*Salix nigra*), sedges (*Carex* sp.), moneywort, pond weed (*Potamogeton nodosus*), and spikerush (*Eleocharis ovata*). These ponds

serve as water sources and foraging area for terrestrial animals, such as bats and turtles, and they also provide breeding areas for amphibians such as frogs, toads, and salamanders. During the field surveys, frogs were observed in these ponds. Insects that spend part of their life cycles in aquatic environments, such as dragonflies and damselflies, use these ponds as well.



Willows on Margin of Old Farm Pond

A variety of aquatic habitat exists throughout the property due to the presence of the Licking River, the perennial stream Riffle Creek, several old farm ponds, and one wet meadow wetland. The Licking River provides high quality habitat in this location. Riffle Creek has abundant habitat for aquatic organisms due to the well established riparian zone, stable banks, abundant cobble, and perennial flow. The benthic community did not contain high numbers of pollution intolerant species. The fish community consisted of common species of fish, which may be an indication that the watershed is not in excellent condition.

The wildlife observed during the field effort were common species known to be tolerant of habitats with obvious man-induced influences, such as old pasture and farmland that has been colonized by exotic plant species.

IV. CONCLUSION

The vegetative community assessment resulted in the identification of 17 distinct communities, the majority of which were dominated by early successional species that are commonly found in areas that have recently been disturbed by agricultural uses. The forested bottomlands are predominantly silver maple, hackberry, and box elder forests. These are all species that have wind disseminated seeds, which allow early colonization. Exotics and native trees that can withstand thin soils and disturbed conditions, such as black locust and red cedar, dominate the forested hillsides and ridges within the property. The dense understory of bush honeysuckle and Osage orange has resulted in low species diversity throughout the property as shade provided by these species reduces tree regeneration and native herbaceous plant growth. The forests, shrublands, and grasslands have low species diversity and do not have high wildlife value.

APPENDICES

APPENDIX A – PHOTO LOG



Area A - Exotic Brome Dominates Grassland Near Old Roadway, July 28, 2009



Area A - Large Red Cedar in Old Field Grassland, July 28, 2009



Area A - Old Field Grassland, July 28, 2009



Area B - Overgrown Lawn, July 28, 2009



Area B - Pasture, July 28, 2009



Area B - Pasture, April 29, 2009



Area C - Examining Soil In Wet Meadow, July 28, 2009



Area C - Old Field, July 28, 2009



Area D - Bottomland Silver Maple Forest, July 28, 2009



Area D - Bottomland Silver Maple Forest, July 28, 2009



Area E - Old Field Opening in Bottomland Forest, July 28, 2009



Area E - Old Field Opening In Bottomland Forest, April 29, 2009



*Area G - Cedar And Bush Honeysuckle Forest,
April 29, 2009*



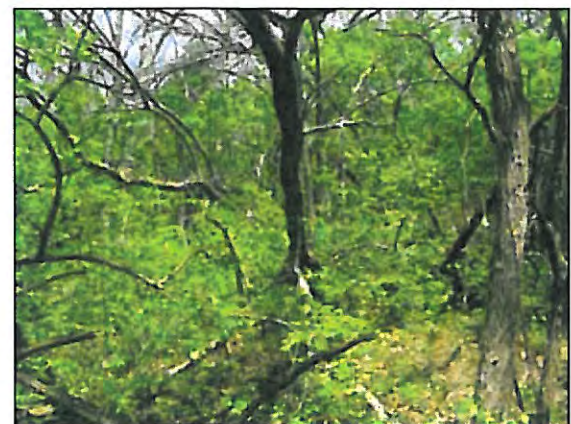
*Area J – Buckeye/Hackberry River Slope Forest, April
29, 2009*



*Area J - Snag With Exfoliating Bark Provides Bat
Habitat, July 28, 2009*



Edge of Area A and K, July 28, 2009



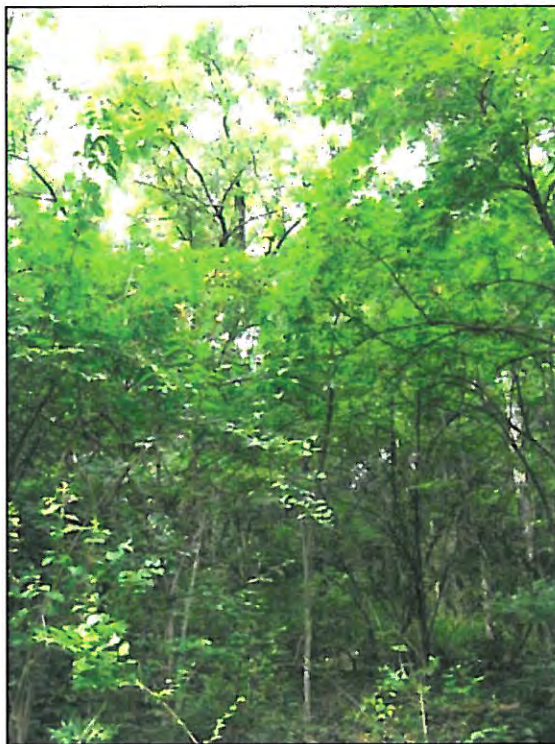
*Area K - Osage Orange And Bush Honeysuckle
Forest, April 29, 2009*



Area K - Osage Orange And Bush Honeysuckle Forest, April 29, 2009



Area M - Box Elder, Silver Maple Riparian Forest, April 29, 2009



Area R - Forest Along Gravel Road, July 28, 2009



Licking River from Hawthorn Property, July 28, 2009



Riffle Creek At Fish And Macro Sampling Station, Downstream View, July 28, 2009



*Riffle Creek At Fish And Macro, Upstream View
Sampling Station, July 28, 2009*



*Riffle Creek, Downstream View From Foot Bridge,
July 28, 2009*



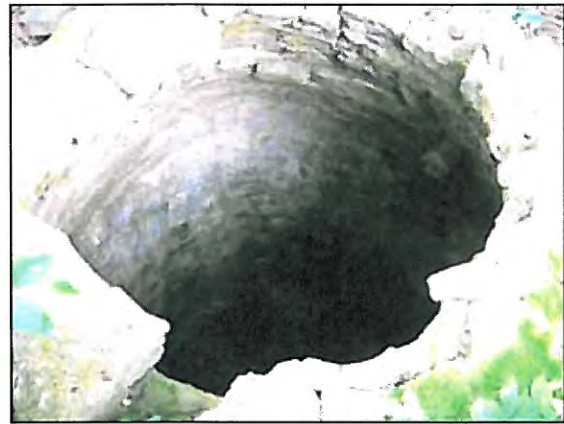
*Riffle Creek, Upstream View From Foot Bridge, July
28, 2009*



Pond Wetland Edge, July 28, 2009



Pond Behind Old House Site, July 28, 2009



Rock Cistern Interior, July 28, 2009



Barn Swallow Nest in Dairy Barn, July 28, 2009



Box Turtle Shell, July 28, 2009



Box Turtle Shell, July 28, 2009



Butterfly Weed, July 28, 2009



Dairy Barn, July 28, 2009



Damselfly, July 28, 2009



Searching Barn Ceiling For Bats And Nests, July 28, 2009



Searching Ceiling Of Diary Barn For Bats And Nests, July 28, 2009



Fish Captured In Seine, July 28, 2009



Grain Trolley And Wood Silo, July 28, 2009



Garter Snake Location Under Old Tin, July 28, 2009



Green Frog in Riffle Creek, July 28, 2009



*Large Osage Orange Trees Along Old Fence Row,
Dense Bush Honeysuckle, July 28, 2009*



Log Cabin, July 28, 2009



Outbuilding of Log Cabin, interior, July 28, 2009



Phoebe Nest in Dairy Barn, July 28, 2009



Raccoon Scat, July 28, 2009



Rainbow Darter, July 28, 2009



Reptile Egg Shells, July 28, 2009



Searching For Reptiles Under Roofing Paper, July 28, 2009



Searching Under Rocks For Salamanders, July 28, 2009



Wood Silo, July 28, 2009



Silo Interior, July 28, 2009



*Bare Ground Under Bush Honeysuckle, May 15,
2009*



Dense Bush Honeysuckle Understory, May 15, 2009

APPENDIX B – PLANT LIST

COMMON NAME	SCIENTIFIC NAME	PLANT COMMUNITY IN WHICH THE SPECIES WAS OBSERVED																
		A	B	C	D	E	F	G	H	I	J	K	L	M	N	O	P	Q
Aster	<i>Aster sp.</i>		x		x	x												
Barnyard Grass*	<i>Echinochloa crusgalli</i>	x																
Rough Bedstraw	<i>Galium asprellum</i>				x													
Bedstraw*	<i>Galium aparine</i>						x			x	x		x					
Bee balm	<i>Monarda fistulosa</i>	x																
Bittersweet	<i>Celastrus scandens</i>							x				x	x				x	x
Black Cherry	<i>Prunus serotina</i>								x									
Black Haw	<i>Viburnum prunifolium</i>																x	
Black Locust	<i>Ronina pseudoacacia</i>	x					x		x				x					
Black Snakeroot	<i>Sanicula canadensis</i>									x		x		x				x
Black Walnut	<i>Juglans nigra</i>									x		x		x	x	x		
Black Willow	<i>Salix nigra</i>	x					x											
Blackberry	<i>Rubus sp.</i>		x														x	
Blue Violets	<i>Viola sp.</i>				x													
Bluegrass	<i>Poa pratensis</i>		x															
Box Elder	<i>Acer negundo</i>				x		x		x	x	x		x	x	x	x		
Bugleweed	<i>Lycopus americana</i>			x														
Burdock*	<i>Actium minus</i>		x															
Bush Honeysuckle*	<i>Lonicera maackii</i>	x			x		x		x	x	x	x	x	x	x	x	x	x
Butterfly Milkweed	<i>Asclepias tuberosa</i>	x	x	x														
Canada Moonseed	<i>Menispermum canadense</i>	x					x											
Catalpa	<i>Catalpa speciosa</i>										x							
Cattail	<i>Typha latifolia</i>	x																
Chinese Elm*	<i>Ulmus parvifolia</i>		x															
Chinquapin Oak	<i>Quercus muhlenbergii</i>						x					x					x	x
Clearweed	<i>Pilea pumila</i>		x															
Common Groundsel	<i>Senecio vulgaris</i>											x						
Common Milkweed	<i>Asclepias syriaca</i>	x	x														x	x
Coralberry	<i>Symphoricarpus orbiculatus</i>	x					x				x	x			x	x	x	
Corn Salad	<i>Valerianella radiata</i>	x			x					x				x				
Cottonwood	<i>Populus deltoides</i>													x				
Cream Violet	<i>Viola stricta</i>	x			x		x		x	x				x	x			
Crown Vetch*	<i>Coronilla varia</i>		x															
Curly Dock	<i>Rumex crispus</i>		x															
Dandelion*	<i>Taraxacum officinale</i>	x																
Day Lily*	<i>Hemerocallis fulva</i>													x				
Dead Nettle	<i>Lamium purpureum</i>		x															
Deptford Pink	<i>Dianthus armeria</i>		x															
Dewberry	<i>Rubus sp.</i>																x	

COMMON NAME	SCIENTIFIC NAME	PLANT COMMUNITY IN WHICH THE SPECIES WAS OBSERVED																	
		A	B	C	D	E	F	G	H	I	J	K	L	M	N	O	P	Q	
Dogbane	<i>Apocymun cannabinum</i>	x	x																
Dwarf Larkspur	<i>Delphinium tricorne</i>												x						
Ebony Spleenwort	<i>Asplenium platyneuron</i>																	x	
Elderberry	<i>Sambucus candensis</i>				x														
False Grape	<i>Ampelopsis sp.</i>	x																	
Feabane	<i>Erigeron philadelphicus</i>				x														
Fescue*	<i>Shedonorus phoenix</i>		x																
Fleabane	<i>Erigeron annuus</i>	x												x					
Fox Sedge	<i>Carex vulpinoidea</i>									x									
Fuller Teasel*	<i>Dipsacus fullonum</i>		x																
Garlic Mustard*	<i>Alliaria petiolata</i>				x		x		x	x	x	x	x						
Giant Ragweed	<i>Ambrosia trifida</i>				x	x													
Giant Foxtail*	<i>Alopecorus sp.</i>	x																	
Goldenglow	<i>Rudbeckia laciniata</i>				x	x							x						
Goldenrod	<i>Solidago sp.</i>	x	x														x		
Grape	<i>Vitis sp.</i>									x							x		
Green Ash	<i>Fraxinus pennsylvanica</i>				x														
Groovebur	<i>Agrimonia parviflora</i>			x															
Ground Ivy*	<i>Gecoma hederacea</i>								x		x			x					
Hackberry	<i>Celtis occidentalis</i>						x				x	x		x					
Hawthorn	<i>Cratageus sp.</i>	x									x								
Heal All*	<i>Prunella vulgaris</i>		x																
Henbit	<i>Lamium amplexicaule</i>				x														
Honewort	<i>Cryptotaenia canadensis</i>				x														
Honey Locust	<i>Gleditsia triacanthos</i>						x										x	x	x
Hop Vine*	<i>Humulus japonicus</i>	x																	
Horse Nettle	<i>Solanum sp.</i>		x																
Ironweed	<i>Veronia gigantea</i>		x																
Japanese Honeysuckle*	<i>Lonicera japonica</i>	x						x	x									x	
Japanese Stiltgrass*	<i>Microstedium vimineum</i>									x									
Jewelweed	<i>Impatiens sp.</i>				x					x									
Knapweed*	<i>Centaurea maculosa</i>	x															x	x	
Longleaf Pondweed	<i>Potamogeton nodusus</i>	x																	
Lyre Leaf Sage	<i>Salvia lyrata</i>							x				x						x	
May Apple	<i>Podophyllum peltatum</i>								x										
Mint	<i>Mentha sp.</i>	x																	
Mock Strawberry*	<i>Duchesnea indica</i>												x		x				
Moneywort*	<i>Lysimachia nummularia</i>		x	x	x		x			x									
Multiflora Rose*	<i>Rosa multiflora</i>	x	x		x		x		x	x		x	x		x		x	x	
Muscadine	<i>Vitis rotundifolia</i>	x																	

COMMON NAME	SCIENTIFIC NAME	PLANT COMMUNITY IN WHICH THE SPECIES WAS OBSERVED																	
		A	B	C	D	E	F	G	H	I	J	K	L	M	N	O	P	Q	
Orchard Grass*	<i>Dactylis glomerata</i>		x																
Ohio Buckeye	<i>Aesculus glabra</i>				x		x			x	x			x					
Osage Orange**	<i>Maclura pomifera</i>	x					x		x	x	x	x	x		x	x	x		
Pawpaw	<i>Asimina triloba</i>									x									
Persimmon	<i>Diospyros virginiana</i>																	x	
Phlox	<i>Phlox divicarta</i>				x									x	x				
Pignut Hickory	<i>Carya glabra</i>						x		x									x	
Plum	<i>Prunus americana</i>	x																	
Poison Hemlock*	<i>Conium maculatum</i>		x		x	x													
Poison Ivy	<i>Toxicodendron radicans</i>				x		x						x			x	x		
Pond Weed	<i>Potamogeton nodosus</i>						x												
Privet*	<i>Ligustrum sinense</i>																	x	
Queen Ann's Lace*	<i>Daucus carota</i>	x	x																
Rattlebox	<i>Ludwigia alternifolia</i>			x															
Red Bud	<i>Cercis canadensis</i>						x												
Red Cedar	<i>Juniperus virginiana</i>	x	x				x	x				x	x			x	x		
Red Clover*	<i>Trifolium pretense</i>	x	x				x												
Red Mulberry	<i>Morus rubra</i>										x								
Reed Canary Grass*	<i>Phalaris arundinacea</i>	x				x													
Rough Leaf Dogwood	<i>Cornus drommondii</i>	x					x									x			
Rush	<i>Juncus effusus</i>			x															
Russion Olive*	<i>Elaeagnus angustifolia</i>	x																	
Scarlet Oak	<i>Quercus coccinea</i>						x												
Sedge	<i>Carex sp.</i>	x		x	x		x												
Shagbark Hickory	<i>Carya ovata</i>		x																
Shepherd's Purse	<i>Capsella bursa-pastoris</i>		x																
Silver Maple	<i>Acer saccharinum</i>		x		x				x					x					
Slippery Elm	<i>Ulmus rubra</i>	x					x		x			x	x	x				x	
Smartweed*	<i>Polygonum persicaria</i>									x									
Smartweed	<i>Polygonum sp.</i>	x																	
Smooth Brome*	<i>Bromus inermis</i>	x	x																
Solomon Seal	<i>Polygonatum biflorum</i>									x									
Spicebush	<i>Lindera benzoin</i>	x							x			x						x	
Spikerush	<i>Eleocharis ovata</i>	x					x												
Spring Beauty	<i>Claytonia virginica</i>				x									x					
Star of Bethelhem*	<i>Ornithogalum umbellatum</i>													x					
Stinging Nettle*	<i>Urtica dioica</i>				x	x													
Sugar Maple	<i>Acer sacharum</i>						x					x		x				x	
Swamp Milkweed	<i>Asclepias incarnata</i>			x															
Sweet Cicely	<i>Osmorhiza claytonii</i>				x														

COMMON NAME	SCIENTIFIC NAME	PLANT COMMUNITY IN WHICH THE SPECIES WAS OBSERVED																		
		A	B	C	D	E	F	G	H	I	J	K	L	M	N	O	P	Q		
Sycamore	<i>Platanus occidentalis</i>														x					
Teasel*	<i>Dipsacus sylvestris</i>	x	x																	
Timothy*	<i>Phleum pratense</i>		x																	
Tree of Heaven*	<i>Ailanthus altissima</i>	x																		
Trumpet Creeper	<i>Campsis radicans</i>												x							
Virginia Blue Bells	<i>Mertensia virginica</i>		x																	
Virginia Creeper	<i>Parthenocissus quinquifolia</i>				x		x		x				x	x				x	x	
Virgins Bower	<i>Clematis</i> sp.				x															
Waterleaf	<i>Hydrophyllum</i> sp.													x						
White Snakeroot	<i>Eupatorium altissima</i>						x													
White Ash	<i>Fraxinus americana</i>	x					x	x	x				x	x				x	x	x
White Avens	<i>Geum canadensis</i>				x		x								x					
White Clover*	<i>Trifolium repens</i>	x	x																	
White Snake Root	<i>Ageratina altissima</i>								x	x	x	x		x					x	
Wild Bean	<i>Phaseolus polystachios</i>				x									x						
Wild Cherry	<i>Prunus</i> sp.				x															
Wild Ginger	<i>Asarum canadensis</i>									x				x						
Wild Rye	<i>Elymus virginicus</i>		x		x					x	x			x	x	x				
Wild Strawberry	<i>Fragaria</i> sp.	x							x											
Yellow Wingstem	<i>Verbesina occidentalis</i>									x				x	x					
Winter Creeper*	<i>Euonymus fortunea</i>						x							x						
Wood Nettle	<i>Laportea canadensis</i>											x								
Wood Reed Grass	<i>Cinna arundinacea</i>	x																		
Yarrow	<i>Achillea millefolium</i>								x											
Yellow Mustard	<i>Barbarea vulgaris</i>	x																		

* Introduced species not native to the US
** Species native to the US, but not native to northern KY

APPENDIX C – RBP FORM AND MACROINVERTEBRATE BENCH SHEETS

HABITAT ASSESSMENT FIELD DATA SHEET — HIGH GRADIENT STREAMS (FRONT)

STREAM NAME: Riffle Creek		LOCATION:	
STREAM WIDTH (FT): 24 DEPTH (FT): 0.5 - 2		PERENNIAL <input checked="" type="checkbox"/> INTERMITTENT <input type="checkbox"/> EPHEMERAL <input type="checkbox"/>	
STATION #:		RIVERMILE:	
COUNTY: Campbell		STATE: KY	
LAT: 38.983 LONG: -84.421		RIVER BASIN: Licking River	
CLIENT: Hawthorne CCA		PROJECT NO. 9109-09	
INVESTIGATORS/CREW: R. Storm and E. Hartowicz			
FORM COMPLETED BY: R. Storm		DATE: 7/28/09	
		REASON FOR SURVEY: Biological Inventory	
		TIME:	

Habitat Parameter	Condition Category																				
	Optimal					Suboptimal					Marginal					Poor					
1. Epifaunal Substrate/ Available Cover Greater than 70% of substrate favorable for epifaunal colonization and fish cover; mix of snags, submerged logs, undercut banks, cobble or other stable habitat and at stage to allow full colonization potential (i.e., logs/snags that are <u>not</u> new fall and <u>not</u> transient). SCORE: 14	20	19	18	17	16	15	14	13	12	11	10	9	8	7	6	5	4	3	2	1	0
	2. Embeddedness Gravel, cobble, and boulder particles are 0-25% surrounded by fine sediment. Layering of cobble provides diversity of niche space. SCORE: 19	20	19	18	17	16	15	14	13	12	11	10	9	8	7	6	5	4	3	2	1
3. Velocity/Depth Regime All four velocity/depth regimes present (slow-deep, slow-shallow, fast-deep, fast-shallow). (Slow is < 0.3 m/s, deep is > 0.5 m.) SCORE: 14	20	19	18	17	16	15	14	13	12	11	10	9	8	7	6	5	4	3	2	1	0
	4. Sediment Deposition Little or no enlargement of islands or point bars and less than 5% of the bottom affected by sediment deposition. SCORE: 16	20	19	18	17	16	15	14	13	12	11	10	9	8	7	6	5	4	3	2	1
5. Channel Flow Status Water reaches base of both lower banks, and minimal amount of channel substrate is exposed. SCORE: 14	20	19	18	17	16	15	14	13	12	11	10	9	8	7	6	5	4	3	2	1	0
	Water fills > 75% of the available channel; or <25% of channel substrate is exposed. Water fills 25-75% of the available channel, and/or riffle substrates are mostly exposed. Very little water in channel and mostly present as standing pools.	20	19	18	17	16	15	14	13	12	11	10	9	8	7	6	5	4	3	2	1

Parameters to be evaluated in sampling reach

HABITAT ASSESSMENT FIELD DATA SHEET — HIGH GRADIENT STREAMS (BACK)

	Habitat Parameter	Condition Category																				
		Optimal					Suboptimal					Marginal					Poor					
Parameters to be evaluated in sampling reach	6. Channel Alteration	Channelization or dredging absent or minimal; stream with normal pattern.					Some channelization present, usually in areas of bridge abutments; evidence of past channelization, i.e., dredging, (greater than past 20 yr) may be present, but recent channelization is not present.					Channelization may be extensive; embankments or shoring structures present on both banks; and 40 to 80% of stream reach channelized and disrupted.					Banks shored with gabion or cement; over 80% of the stream reach channelized and disrupted. Instream habitat greatly altered or removed entirely.					
	SCORE: 18																					20
	7. Frequency of Riffles (or bends)	Occurrence of riffles relatively frequent; ratio of distance between riffles divided by width of the stream < 7:1 (generally 5 to 7); variety of habitat is key. In streams where riffles are continuous, placement of boulders or other large, natural obstruction is important.					Occurrence of riffles infrequent; distance between riffles divided by the width of the stream is between 7 to 15.					Occasional riffle or bend; bottom contours provide some habitat; distance between riffles divided by the width of the stream is between 15 to 25.					Generally all flat water or shallow riffles; poor habitat; distance between riffles divided by the width of the stream is a ration of > 25.					
SCORE: 19	20																					19
Parameters to be evaluated in sampling reach	8. Bank Stability (score each bank) Note: determine left or right side by facing downstream.	Banks stable; evidence of erosion or bank failure absent or minimal; little potential for future problems. < 5% of bank affected.					Moderately stable; infrequent, small areas of erosion mostly healed over. 5-30% of bank in reach has areas of erosion.					Moderately unstable; 30-60% of bank in reach has areas of erosion; high erosion potential during floods.					Unstable; many eroded areas; "raw" areas frequent along straight sections and bends; obvious bank sloughing; 60-100% of bank has erosional scars.					
	SCORE: 8 (LB)																					Left Bank
	SCORE: 9 (RB)	Right Bank	10	9	8	7	6	5	4	3	2	1	0									
	9. Vegetative Protection (score each bank)	More than 90% of the streambank surfaces and immediate riparian zone covered by native vegetation, including trees, understory shrubs, or non-woody macrophytes; vegetative disruption through grazing or mowing minimal or not evident; almost all plants allowed to grow naturally.					70-90% of the streambank surfaces covered by native vegetation, but one class of plants is not well-represented; disruption evident but not affecting full plant growth potential to any great extent; more than one-half of the potential plant stubble height remaining.					50-70% of the streambank surfaces covered by vegetation; disruption obvious; patches of bare soil or closely cropped vegetation common; less than one-half of the potential plant stubble height remaining.					Less than 50% of the streambank surfaces covered by vegetation; disruption of streambank vegetation is very high; vegetation has been removed to 5 centimeters or less in average stubble height.					
SCORE: 9 (LB)	Left Bank																					10
SCORE: 9 (RB)	Right Bank	10	9	8	7	6	5	4	3	2	1	0										
Parameters to be evaluated in sampling reach	10. Riparian Vegetative Zone Width (score each bank riparian zone)	Width of riparian zone >18 meters; human activities (i.e., parking lots, roadbeds, clear-cuts, lawns, or crops) have not impacted zone.					Width of riparian zone 12-18 meters; human activities have impacted zone only minimally.					Width of riparian zone 6-12 meters; human activities have impacted zone a great deal.					Width of riparian zone <6 meters; little or no riparian vegetation due to human activities.					
	SCORE: 7 (LB)																					Left Bank
	SCORE: 9 (RB)	Right Bank	10	9	8	7	6	5	4	3	2	1	0									

TOTAL SCORE: 165



gai consultants

Phase IA Archaeological Reconnaissance

Hawthorne Crossing Conservation Area
Campbell County, Kentucky

Prepared for:

Campbell Conservancy Inc.
Campbell County Conservation District
8351 East Main Street, Suite 104
Alexandria, Kentucky 41001

Prepared by:

Principal Investigators:
Marie E. Pokrant, M.A., RPA
and
David E. Breetzke, M.A., RPA

GAI Consultants, Inc.
Airport Exchange Business Park F2
1830 Airport Exchange Blvd, Suite 220
Erlanger, Kentucky 41018

GAI Project No. G090805.00

December 19, 2009

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Prepared by:

Marie E. Pokrant, M.A., RPA, Principal Investigator



David E. Breetzke, M.A., RPA Principal Investigator

With contributions by:

Margaret Sams, M.S. CPSS
Margo Warminski, B.A.

GAI Consultants, Inc.
Airport Exchange Business Park F2
1830 Airport Exchange Blvd, Suite 220
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December 19, 2009

Table of Contents

1.0	Abstract	2
2.0	Project Description	2
3.0	Area of Potential Effect (APE)	2
4.0	Background Research	5
5.0	Phase IA Methods	6
	Archaeological Field Methods	6
	Architectural Review	6
6.0	Phase IA Field Results	6
	Uplands	6
	Terraces	8
	Floodplain	10
	Summary of the Phase IA Reconnaissance Results	11
	Architectural Review	11
7.0	Project Summary and Conclusions	14
	Archaeological Reconnaissance Summary	15
	Architectural Evaluation Summary	15
	Conclusions	15
8.0	Recommendations for Further Work	16
9.0	References Cited	17
	APPENDIX A	1
	APPENDIX B	1

List of Figures

Figure 1	Study Area and Vicinity	3
Figure 2	Field Designations	4
Figure 3	Soils within the APE	7
Figure 4	Historic map of HCCA and Vicinity	9

List of Tables

Table 1	Archaeological sites located within 2 km (1.2 mi) of the HCCA.	5
Table 2	Architectural resources located within 2 km (1.2 mi) of the HCCA	5
Table 3	Recommended Level of Field Investigations by Area	11
Table 4	Level of Archaeological Investigation by Acreage	15

List of Photographs

Photograph 1	Overview of uplands, view north	6
Photograph 2	Overview of terrace, view east	10
Photograph 3	Overview of floodplain, view east	10
Photograph 4	Ware House, view northwest	12
Photograph 5	Tratt House, view west	13

1.0 Abstract

This document describes the results of a Phase IA archaeological reconnaissance of the Hawthorne Crossing Conservation Area (HCCA) property. The property is located in Campbell County, Kentucky (Figure 1). The survey was conducted for the Campbell Conservancy Inc. and Campbell County Conservation District by GAI Consultants, Inc. (GAI) in October 2009.

2.0 Project Description

The Phase IA study area encompasses an area approximately 140 acres, owned jointly by the Campbell County Conservation District and the Campbell Conservancy. The Campbell County Conservation District owns approximately 134.6 acres and the Campbell Conservancy owns nearly 5.3 acres. The goals of the Phase IA archaeological reconnaissance was to characterize the potential of the project area to contain unrecorded archaeological sites in order to provide guidance for subsequent development and to identify areas that require archaeological investigation. The Phase IA tasks consisted of preliminary background research for archaeological and architectural resources and an archaeological reconnaissance of the proposed project area.

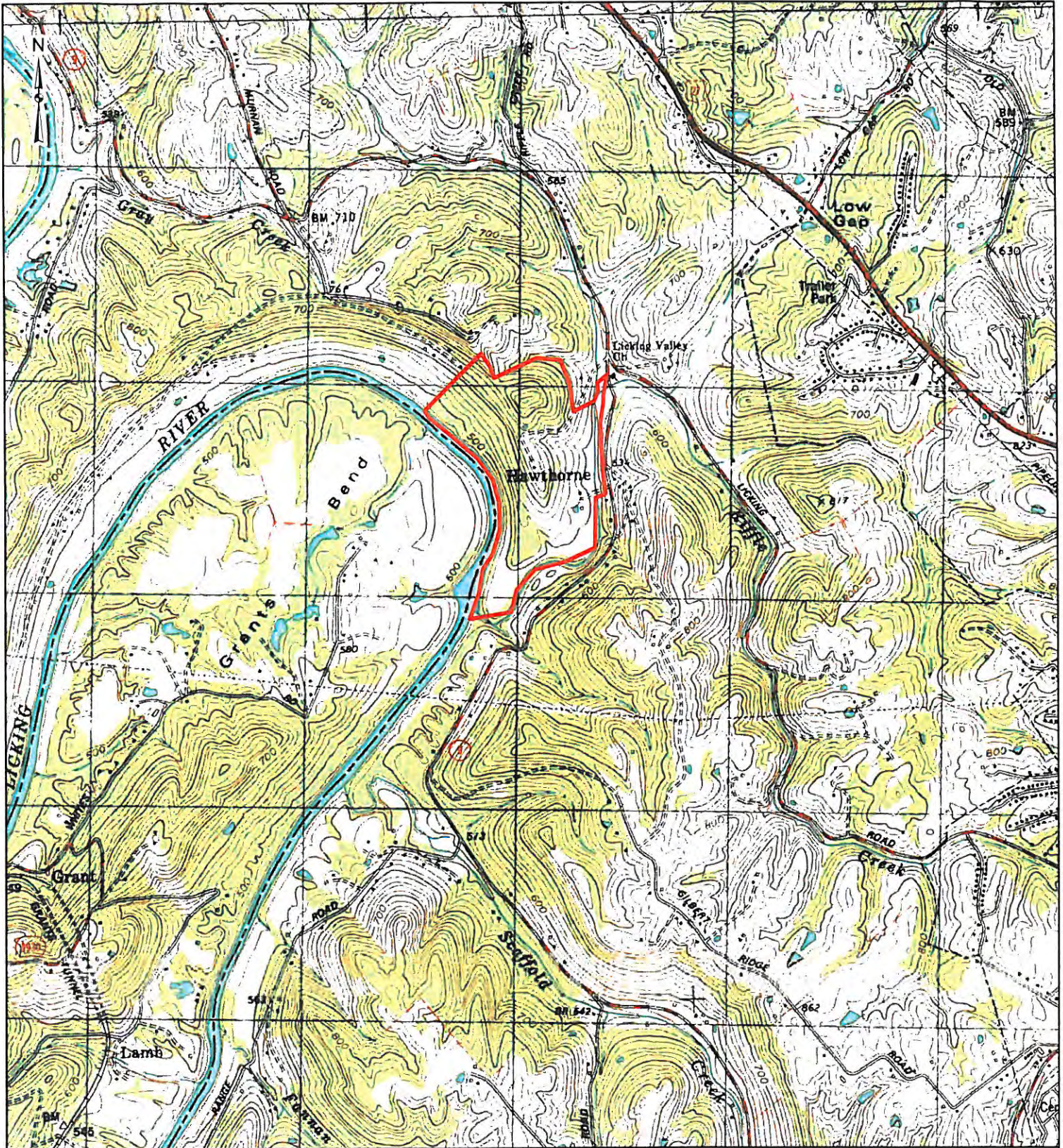
Reconnaissance revealed that the majority of the project area consists of ground exceeding 15 percent slope. As such, these areas maintain little potential to contain intact historic or prehistoric cultural resources. However, the HCCA contains two historic farmsteads and areas that retain the potential for prehistoric and historic archaeological sites, discussed below.

3.0 Area of Potential Effect (APE)

The Campbell County Conservation District proposes to restore the property within the HCCA. This restoration project includes forest improvement, removal of exotic and invasive plant species, and native plant establishment. Proposed land use within the HCCA consists of recreational and educational activities.

The HCCA is adjacent to Grant's Bend and includes the confluence of Riffle Creek and the Licking River (see Figure 1). The property includes over 3,000 feet (914 meters) of frontage along Grant's Bend on the Licking River. Seasonal flooding affects areas along the Licking River and there are several possible wetland areas around the confluence of Riffle Creek and the Licking River. Large canopy trees are found along the floodplain. Riffle Creek is an active, rock-strewn stream with a wide bed.

The property includes a well-defined ridge that is topped with two knolls. Elevation varies from over 460 feet to 660 feet (140 meters to 201 meters). There are three small ponds on the property, all under a quarter acre. One is located on the ridge between the two knolls, another is near the old farmstead and barn, and the third is located close the Licking River. The upland area consists primarily of old fields and pasture reverting to woods. No endangered or threatened plant or animal species have been identified on the property.



Legend

 Hawthorne CCA Study Area



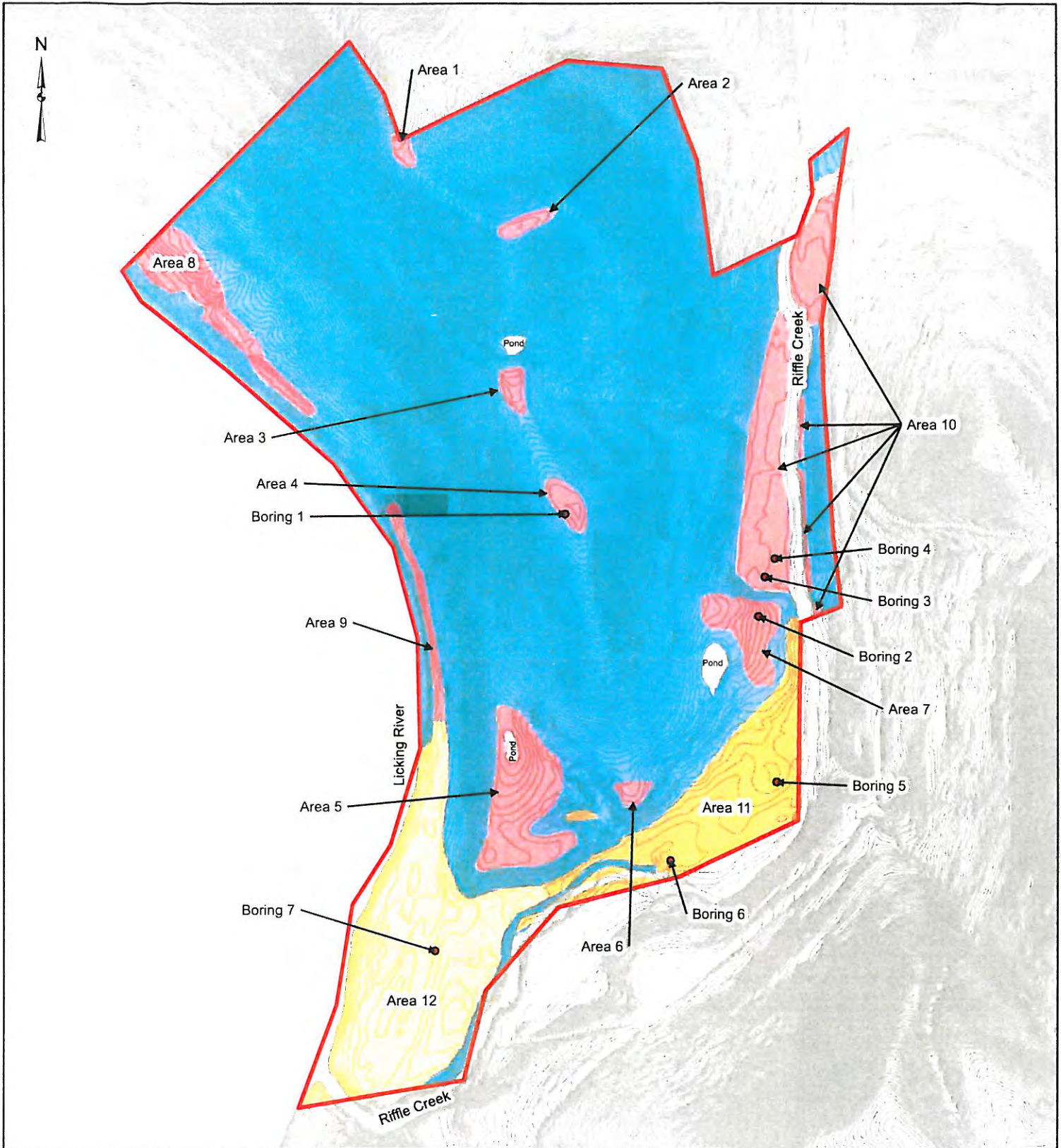
gai consultants

Hawthorne CCA Project

Figure 1. Study Area and Vicinity

Reference: USGS 7.5'-Quadrangle
Topographic Map
Alexandria, Kentucky


DWN: NLE CHKD: DEB
APPD: DEB DATE: 11/24/09



Legend

- Hawthorne CCA Study Area
- Disturbed Area
- Deep Testing and Shovel Testing
- Soil Boring Locations
- Shovel Testing
- Sloped Area 15% or greater

490 245 0 490
 Scale in Feet



gai consultants

Hawthorne CCA Project

**Figure 2. Phase 1A
Field Designations**

Reference: 2' Contour CAD based topographic map	DWN: NLE CHKD: DEB APPD: DEB DATE: 11/24/09
--	--

4.0 Background Research

The Kentucky Heritage Council (KHC) and the Office of State Archaeology (OSA) generated a GIS file of background research for previously identified archaeological sites, cultural resource management (CRM) surveys, historic structure files, and National Register files. The purpose of this task was to 1) identify previously recorded cultural resources in the vicinity of the study area and 2) assess the study area's potential for unrecorded cultural resources.

This Phase IA background research represents a preliminary review of previously recorded cultural resources and architectural resources and an evaluation of the archaeological potential for the study area.

The archaeological background research for this project identified three archaeological resources within a 2-km (1.2-mi) buffer of the study area (Table 1). In addition, seven architectural resources have been recorded within this buffer (Table 2). However, all of the previously recorded historic properties were located outside of the property boundary of the HCCA. Also, a single archaeological survey was conducted within 2 km (1.2 mi) of the proposed study area. This survey was conducted by Miller and Bergman (2003) for a Wal-Mart expansion project near Alexandria, Kentucky. No archaeological sites were found during the 2003 survey. Based on the information obtained from the background research, undisturbed areas have the potential to yield unrecorded cultural resources within the study area. Moreover, two historic architectural sites with extant standing structures are located within HCCA. An architectural evaluation was completed for each resource and the results are presented in Section 6.

Table 1.
Archaeological sites located within 2 km (1.2 mi) of the HCCA

Site Number	Affiliation	National Register Status
15Cp46	Historic cemetery	Undetermined
15Cp52	Historic farm / residence	Undetermined
15Cp53	Historic farm / residence	Undetermined

Table 2.
Architectural resources located within 2 km (1.2 mi) of the HCCA

Site Number	Historic Name	National Register Status
KERH 11	Barn	Undetermined
CP 01	Claryville	Undetermined
CP 09	George Gary House	Undetermined
CP 10	I Baker House	Undetermined
CP 11	Charles Hoffman Farm Complex	Undetermined
CP 13	Distler House	Undetermined
CP 90	Culverson-Wolbert House	Undetermined

Also, within the HCCA, the potential exists for unrecorded prehistoric archaeological sites. The presence of landforms and topographic features adjacent to water suggests this area could have been used for food procurement and transportation by Native Americans.

5.0 Phase IA Methods

Archaeological Field Methods

GAI's Phase IA field reconnaissance of the HCCA included both archaeological and geomorphological survey. The archaeological reconnaissance consisted of pedestrian survey of the APE and mapping of areas of archaeological potential. The geomorphological survey consisted of hand auger borings at various locations to determine the depth of soil deposits.

Architectural Review

The architectural review was accomplished through photo-documentation of the standing structures within the APE. In addition, Kentucky Historic Resources Individual Survey Forms were completed for both of the farmsteads identified during the Phase IA.

6.0 Phase IA Field Results

The results of the Phase IA are initially discussed below in terms of landform/soils, degree of disturbance, and archaeological resource potential. The prospect for archaeological resources for each of the major landforms is presented at the end of this section. The results of the geomorphological investigation are presented in Appendix A. This section also discusses the results of the architectural evaluation. The Kentucky Historic Resources Individual Survey Forms were completed as part of the Phase IA reconnaissance and were submitted to KHC and are also included in Appendix B.

Within the HCCA, three major landforms are identified: uplands, terraces, and floodplains. Each of these three landforms is discussed below.

Uplands

The upland soils are the Eden silty clay loam, the Faywood silt loam and silty clay loam, and the Nicholson silt loam, as shown in Figure 3. Each soil type will be discussed below in reference to degree of disturbance and archaeological potential.

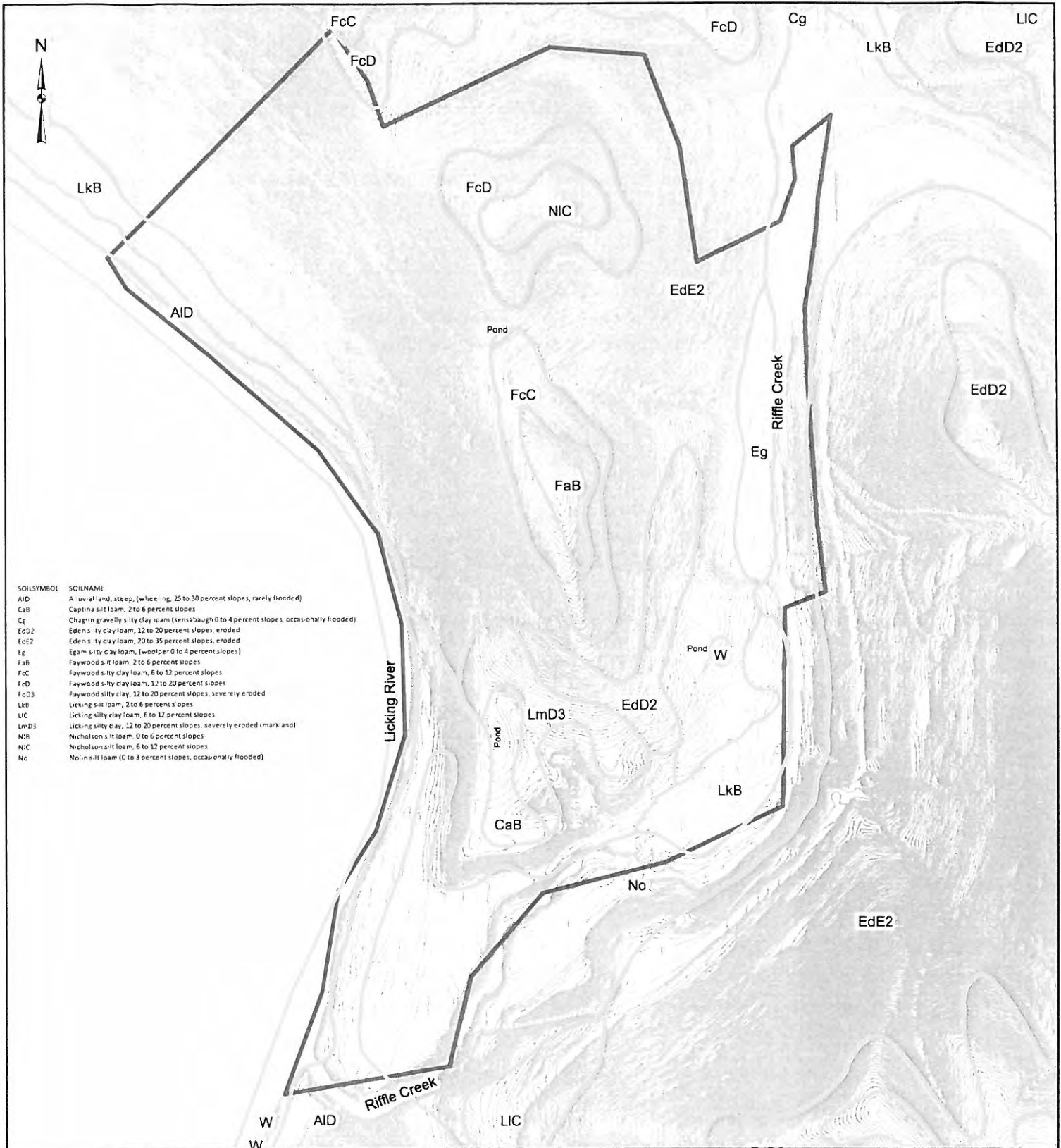
The Eden silty clay loam is a well-drained and well-developed soil forming in weathered limestone and shale bedrock. It occurs over the majority of the study area; on the steep side slopes which have been eroded from deforestation and the agricultural use of the area (see Figure 3). The Eden soil has 25 to 30 percent slopes and has low archaeological potential due to erosion, as shown in Photograph 1. Due to the presence of limestone and shale



bedrock, no potential exists within the study area for rock shelters and overhangs associated with the steep Eden soils.

Photograph 1 Overview of uplands, view north

The Faywood silt loam is almost identical to the Eden soil. This soil occurs over the high ridges of the study area, as shown in Figure 3. The Nicholson soil is a well developed but moderately well drained soil, forming



SOILSYMBOL	SOILNAME
AID	Alluvial land, steep, (wheeling, 25 to 30 percent slopes, rarely flooded)
CaB	Caprina silt loam, 2 to 6 percent slopes
Cg	Chapin gravelly silty clay loam (sensabaugh 0 to 4 percent slopes, occasionally flooded)
EdD2	Eden silty clay loam, 12 to 20 percent slopes, eroded
EdE2	Eden silty clay loam, 20 to 35 percent slopes, eroded
Eg	Egam silty clay loam, (woolper 0 to 4 percent slopes)
FaB	Faywood silt loam, 2 to 6 percent slopes
FcC	Faywood silty clay loam, 6 to 12 percent slopes
FcD	Faywood silty clay loam, 12 to 20 percent slopes
FdD3	Faywood silty clay, 12 to 20 percent slopes, severely eroded
LkB	Licking silt loam, 2 to 6 percent slopes
LIC	Licking silty clay loam, 6 to 12 percent slopes
LmD3	Licking silty clay, 12 to 20 percent slopes, severely eroded (markland)
NiB	Nicholson silt loam, 0 to 6 percent slopes
NiC	Nicholson silt loam, 6 to 12 percent slopes
No	No-in-silt loam (0 to 3 percent slopes, occasionally flooded)

Legend

- Hawthorne CCA Study Area
- Campbell County Soils



Hawthorne CCA Project

Figure 3. Soils in APE

Reference: Campbell County Soils,
2' Contour CAD based
topographic map

DWN: NLE CHKD: DEB
APPD: DEB DATE: 11/24/09

from Pleistocene-age wind-blown loess deposits. This soil occurs on a narrow portion of the high ridgetop within the northern portion of the study area. The Faywood soils have 2 to 5 percent slopes and have high archaeological potential. An extant historic farmhouse and ancillary structures are associated with the Faywood soil within the project area, identified as Area 4 (see Figure 2). Due to the relatively flat and well drained nature of these soils, they also have a high potential for prehistoric archaeological resources as well. The Nicholson silt loam is a well developed but moderately well drained soil forming in Pleistocene-age loess deposits. This soil occurs on a narrow portion of the high ridgetop within the northern portion of the study area (see Figure 3). Within the project area, this soil has 6 to 12 percent slopes and has, therefore, a high potential for archaeological sites.

Within the uplands of the HCCA, four areas are recommended for archaeological testing (see Figure 2). Areas 1-3 have a high potential for archaeological sites and should be surveyed prior to any ground-disturbing activities. Area 4 contains the remains of a nineteenth-century log structure and associated outbuildings. This structure is shown on an 1883 map of the area, as shown in Figure 4. GAI recommends systematic shovel testing for the four upland areas identified for further archaeological investigation. The area identified as slope (shown in blue in Figure 2) is considered as having no archaeological potential in the uplands.

Terraces

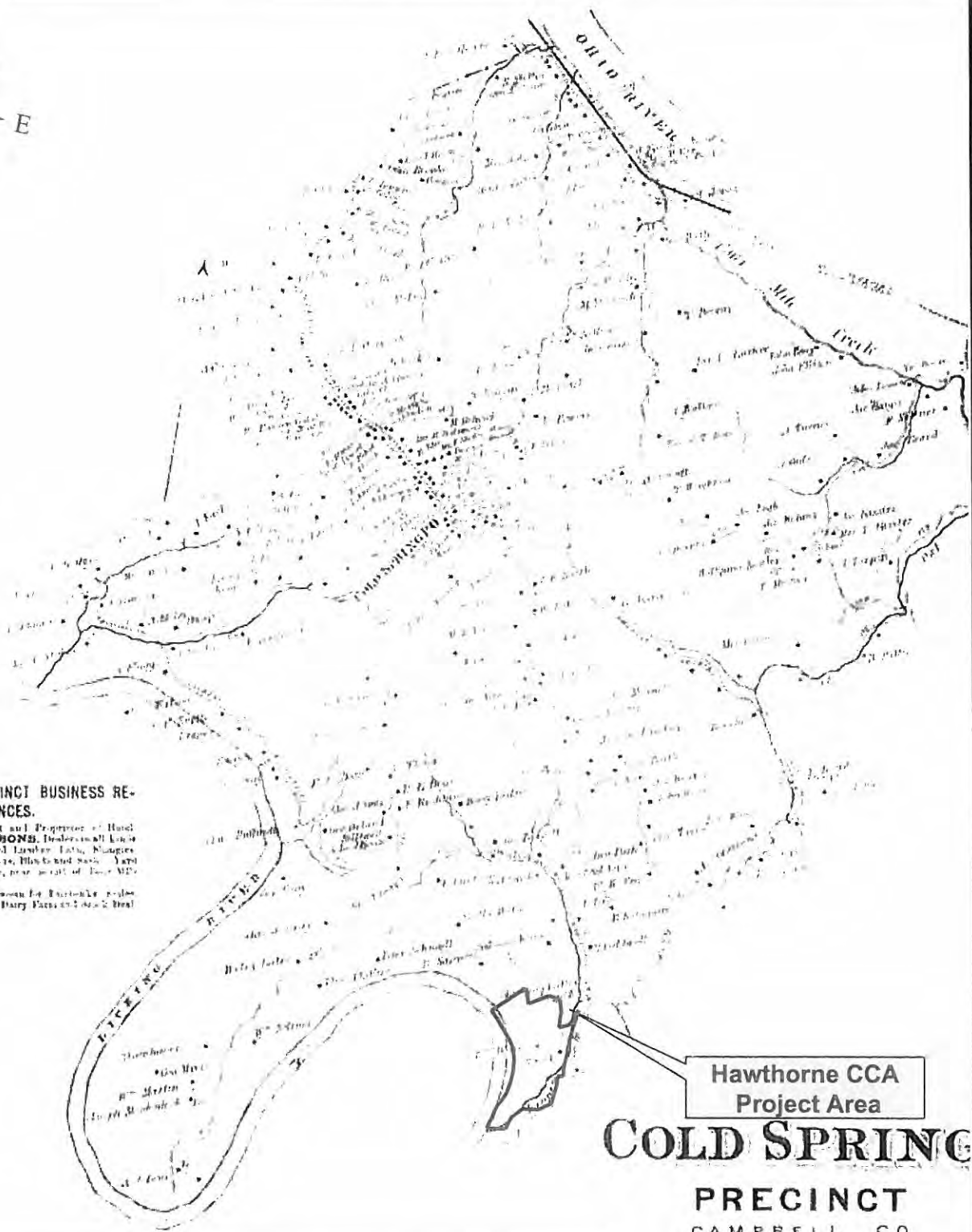
The terrace soils of the area formed in the high-clay lacustrine deposits emplaced high on the landscape during the pre-Illinoian flooding of the area. These soils are the Captina silt loam and the Licking silt loam, silty clay loam, and silty clay. Each soil type will be discussed below in reference to degree of disturbance and archaeological potential.

The Captina soil is a well developed and moderately well drained profile of lacustrine alluvium over weathered limestone and shale. These soils have 2 to 6 percent slopes and should be considered to have a high potential for archaeological sites. The Captina soil is identified in Area 5, a large portion of the terrace overlooking the floodplain formed by the confluence of Riffle Creek and the Licking River, as shown in Figure 3.

The Licking soils are well developed and moderately well drained soils forming in deep deposits of clay and silt lacustrine sediments. Within the study area, these terrace soils are present as an “apron” of less sloped land at the base of the upland side slopes, above the floodplain elevations of Riffle creek and the Licking River. Licking soils have slopes of 2 to 6 percent, have a moderate to high potential for archaeological sites, and should be surveyed prior to any ground-disturbing activities. One area of Licking soils has been identified (Area 6) within the study area as having a moderate potential for archaeological sites as shown in Figure 3. Another area (Area 11) has been identified as disturbed. Within Area 11, the surface and upper subsoil has been excavated or extensively graded. Auger boring 5, as shown in Figure 2, taken within this area suggests the soil has been deeply scalped, possibly to obtain the materials required to support a near-by road bed. Area 11 should be considered to have a low potential for intact archaeological deposits.

The Licking soils are adjacent to Alluvial land, discussed below. These soils exhibit 25 to 30 percent slopes, as shown in Figure 3. The steepness of these alluvial soils precludes them from archaeological consideration. Two areas (Areas 8 and 9, shown in Figure 3) among the Licking soils and Alluvial land have been identified for intensive reconnaissance survey and judgmental shovel testing of relatively flat landforms.

Another terrace location associated with the Licking soils (Area 7) contains the remains of an abandoned farmstead (see Figures 2 and 4). The house is situated on a terrace above the



COLD SPRING PRECINCT BUSINESS REFERENCES.
A BUNTEL, Merchant and Proprietor of Hotel
C W WILLIAMS & SONS, Dealers in Lumber
 at Eagle and Howard Streets, Leno, Manager
 of the Hotel, 10th and 11th Sts., and
 on Taylor St. Dye, near west of Piney
J FRANK DYE, Saloon on 14th St. near
 Piney River. Dye, near west of Piney River.

**Hawthorne CCA
 Project Area**

**COLD SPRING
 PRECINCT
 CAMPBELL CO
 North of Piney River**

REFERENCE: D.J. Lake & Co. 1883 Atlas
 Cold Springs Precinct, Campbell County, Kentucky



Figure 4. D.J. Lake & Co. 1883 Atlas
 Hawthorne CCA Project
 Phase IA, Campbell County, Kentucky

DWN: DEB	CHKD: MEP
APPD.: DEB	DATE 11/22/09
SCALE	2-inches to 1-mile
PROJECT NUMBER	G090805.00



floodplain of Riffle Creek, as shown in Photograph 2. This farmstead is comprised of several standing structures including a frame house, a barn and silo, and outbuildings. The dwelling is shown on an 1883 map of the area, as shown in Figure 4.

Photograph 2 Overview of terrace, view east

Floodplain

The Holocene floodplain soils within the study area are the Alluvial land (steep), the Egam silty clay loam, and the Nolin silt loam, as shown in Figure 3. Each

soil type will be discussed below in reference to degree of disturbance and archaeological potential.

The designation of Alluvial land is assigned to the steep “riser” of the Pleistocene terraces, below the more level surfaces of these landforms. These steep areas rise either directly from the river channel, as in the northwestern corner of the study area along the Licking River, or from the distal edge of the Holocene floodplain, as within the southern and eastern portions of the study area along Riffle Creek (see Figure 3). These areas are rarely flooded, and have no level surface on which sediments may be deposited. Slopes range from 25 to 30 percent. As previously stated, the steep nature of these alluvial soils precludes them from archaeological consideration. Due to the presence of limestone and shale bedrock, no potential exists within the study area for rock shelters and overhangs associated with the steep Alluvial land.

Photograph 3 Overview of floodplain, view east

The Egam soil is a well drained and moderately well developed silty clay loam forming in floodplain sediments. This soil occurs along the Riffle Creek floodplain within the northeastern corner of the study area (see Figure 3). The high-clay sediments are deposited by very slow or stagnant water during periods of high flow within the Licking River, when quiet water is backed up into the Riffle Creek valley. The relatively flat (0 to 4 percent slopes) of the Egam soil suggests it has a



potential for archaeological sites. However, the geomorphological investigations indicated that the lack of soil development along Riffle Creek suggests recent origin; therefore no testing for the presence of archaeological resources was recommended. Area 10, which

flanks Riffle Creek, has been identified for judgmental shovel testing only in advance of ground disturbing activity (see Figure 2).

The Nolin soil, present over the large section of floodplain northeast of the confluence of Riffle Creek into the Licking River, is a deep, well drained and moderately well developed soil forming in silty alluvium of Holocene age. These silty sediments are deposited by overbanking floodwaters from either the Licking River or Riffle Creek (see Figure 3). The Nolin soil has only 0 to 3 percent slopes and should be considered to have a high potential for archaeological sites. Moreover, due to overbank flooding the potential exists for deeply buried sites within the floodplain. Area 12, as identified in Figure 3, has a high potential for archaeological resources and is recommended for systematic shovel testing and deep testing.

Summary of the Phase IA Reconnaissance Results

Auger borings and a visual reconnaissance of the HCCA indicate that the integrity of the study area is relatively intact. Overall, the majority of land within the HCCA is steeply sloped and contains no archaeological potential. Therefore, no further work is recommended for the steeply sloped areas shown in blue in Figure 2. However, in areas of less than 15 percent slope, archaeological survey should be conducted prior to any ground disturbing activity. During the Phase IA survey, a single area, Area 11, was identified as heavily disturbed and, therefore, retains no archaeological potential. Table 3 lists the areas shown in Figure 2 along with the recommended level of field investigations.

Table 3
Recommended Level of Field Investigations by Area

Area	Recommended Level of Field Investigations
Uplands	
Area 1	Systematic shovel testing
Area 2	Systematic shovel testing
Area 3	Systematic shovel testing
Area 4	Systematic shovel testing
Terraces	
Area 5	Systematic shovel testing
Area 6	Systematic shovel testing
Area 7	Systematic shovel testing
Area 8	Reconnaissance survey/ Judgmental shovel testing
Area 9	Reconnaissance survey/ Judgmental shovel testing
Area 10	Judgmental shovel testing
Floodplain	
Area 11	Disturbed/ No further work
Area 12	Systematic shovel testing/ Deep testing

Architectural Review

GAI performed an architectural evaluation of two structures (and associated outbuildings) located on the HCCA property. The two extant structures included the William Ware House, a log cabin and the V. Tratt House, a frame structure.

The architectural evaluation of the two resources located on HCCA property was conducted by Margo Warminski, Architectural Historian, according to the Kentucky Heritage Council's Specifications for Conducting Fieldwork and Preparing Cultural Resource Assessments Reports (KHC updated 2006); *Archeology and Preservation: Secretary of the Interior's Standards and Guidelines* (48 FR 44716-44742) (National Park Service 1983); and *National*

Register Bulletin 15—How to Apply the National Register Criteria for Evaluation (National Park Service 1998).

For this project, the architectural evaluation focused on documenting the Ware House and the Tratt House and completing the Kentucky Heritage Council, Kentucky Historic Resources Individual Survey Forms in order to assign a site number to each resource.

This section provides descriptions, evaluations and photographs for the two resources studied. The two architectural resources surveyed by GAI were evaluated for their significance according to National Register of Historic Places (NRHP) Criteria. Below is a brief description of each of these resources and their associated outbuildings followed by the National Register eligibility recommendations.

Ware House

The Ware House is a log cabin that appears to be the one depicted on the Alexandria Precinct of Lake's 1883 *Atlas of Boone, Kenton and Campbell Counties, Kentucky*, labeled "Wm. Ware" (Lake 1883). No further information is supplied.

The Ware House is an abandoned log dwelling that has been vacant for many years. Of rectangular footprint, it stands one-and-a-half-stories high under a side-gabled roof of moderate pitch that has been covered with raised-seam metal. The house apparently evolved through a three-stage process. The house's original pen is contained in the north half of the structure. Its main façade contains a window and a door. The house was expanded laterally to the south at an unknown date. The main façade of the right pen, of frame construction, contains only a door. The house features small, rectangular attic windows aligned with the door openings, and square attic windows in the gable ends.

The house is built of squared, hewn logs chinked with what appears to be clay, with small chunks of limestone added to protect the chinking. The logs are secured by V-notching. The house rests on a rubble limestone foundation. In addition, there appears to be a cellar in place beneath the dwelling. A small brick chimney is centered in the ridgeline.



Photograph 4 Ware House, view southeast

During its long period of vacancy, the house suffered the loss of some original fabric. No doors survive; one 1/1 wood window sash remains on what is now an interior wall. The logs are covered with weatherboarding, much of which have falling away.

The interior of the Ware House features a massive fireplace of coursed limestone ashlar. The mantelpiece has been removed, and the chimney has partly collapsed into the firebox. A hole has been inserted above the fireplace for a stovepipe. A steep winder stair, next to the fireplace, leads to the attic. Below

the stairs is a storage cupboard, with hinged door providing access. Door and window enframements are flat, plain moldings.

Furring strips remain in evidence on some walls, installed to attach wall coverings which have since been removed. Some walls retain paint or synthetic wood paneling. In addition, the ceiling has been plastered. There is no evidence of modern utilities within the interior. At the rear of the dwelling is a shed-roofed, partly collapsed, frame addition.

Several outbuildings are believed to be associated with the Ware House and closely surround the house. These outbuildings include a circular stone-and brick-lined well or cistern and the foundation of a former outbuilding, possibly a barn. The possible barn foundation is constructed of coursed, rubble limestone, some of which has been rather crudely mortared. A smokehouse is located directly west of the Ware House. This structure is built of uncoursed rubblestone, some of which has been rather crudely pointed with concrete, under a gabled tin roof. The main façade contains only a single doorway. The interior walls also are pointed with concrete. At the rear is a rectangular frame structure, also tin-roofed, that has collapsed.

Based on currently available information, the Ware House does not appear to be associated with significant persons, events or broad patterns of history. Therefore it does not appear to meet National Register criteria A or B. The house retains hewn logs that appear to be in fairly good condition, as well as character-defining features such as the fireplace and winder stair. But its integrity of design is somewhat compromised by the rear and side additions. The stone smokehouse is also an intact example of a locally uncommon type, but does not appear to possess sufficient distinction to qualify for National Register listing in its own right. Therefore, the property does not appear to meet National Register Criterion C. Nonetheless, the Ware House may have the potential to reveal significant information about methods of log construction in rural northern Kentucky during the 19th century. Therefore it is potentially eligible under Criterion D for information potential.

Tratt House

The Tratt House is a frame house that appears to be the structure that is indicated on Lake's *1883 Atlas of Boone, Kenton and Campbell Counties, Kentucky*, in the community of Hawthorn in the Alexandria Precinct. It is labeled "V. Tratt" (Lake 1883). This may be a misspelling of "Trapp", a family name found elsewhere in the vicinity.



Photograph 5 Tratt House, view west

The Tratt House is a 1.5-story, single-pile, vernacular wood-frame residence of simple design, of apparent double-cell plan. It rests on a rubblestone foundation that has been parged and painted; some of the covering has fallen away. The main façade, which faces east, contains four symmetrically arranged bays. The center of the façade contains twin, half-glazed, paneled doors with wooden storm doors, flanked by single wood sashes in

the end bays. The doorways are sheltered by a minimal frame porch of simple design. The porch features a low, nearly flat roof, simple spindled balustrades, and widespread, turned wood columns posts. It rests on a stone foundation approached by four steps. It should be noted that this porch may have been added in the early 20th century. The house's gable ends contain single windows in the first and attic stories, vertically aligned. All the windows contain 1/1 sashes and have simple enframements. A narrow, straight-stack brick chimney was added to the north elevation at an unknown date, likely in the mid-20th century. The house is covered by a side-gabled, asphalt shingle roof of moderate pitch, with corner returns and hanging gutters. The roof is asymmetrically gabled, with a saltbox-like longer rear slope with corner returns. Misaligned fenestrations, and discrepancy in the trim boards, suggest this may have been a somewhat later addition, although this is by no means certain.

A one-story, single-room addition, covered by a gabled roof, was appended to the south elevation of the house, likely in the mid-20th century. It contains paired, multi-pane casement windows and is set on a concrete block foundation. This addition is set back from the plane of the main façade, somewhat reducing its prominence. It wraps around the south half of the rear of the house, as attested by a visible seam and the presence of small window openings. The house's walls are weather boarded and painted white with gray trim. The house appears to be in fair condition from the exterior, with peeling paint evident.

Several outbuildings are associated with the Tratt House and closely surround the house. These include several agricultural outbuildings. Most appear to have been built in the mid-20th century and they include: a frame shed-roofed chicken coop covered in weatherboarding; a front-gabled, one-story frame garage/storage shed; a vestigial wood frame of outbuilding of unknown use; and a below ground cistern.

In addition to these outbuildings, there is also a frame dairy barn, built into a gentle slope. The barn's first story is whitewashed concrete block, and the upper story is clad in weathered vertical wood siding. The first story of the barn contains several small, square windows that are boarded. The uphill side of the barn contains a broad, off-center doorway whose door is missing. The barn is covered by a gabled roof of moderate pitch; most of its raised-seam metal roofing has been peeled away. A gabled hay hood projects from the north gable. Adjacent to the south gable is a circular wooden silo, capped by a gabled rooflet that extends outward from the barn's main roof. An attached one-story, shed-roofed, concrete-block milk house adjoins the barn.

The Tratt farmstead is a characteristic example of a small family farm of the late 19th through mid-20th centuries, comprised of a small group of specialized mid-20th century outbuildings associated with dairy farming and poultry raising. These structures are typical of those found on many similar farms throughout northern Kentucky. They do not appear to possess significance individually or collectively for their design or construction, or for their association with local farming practices. The Tratt House appears to be a typical example of a small, rural vernacular dwelling of the late 19th century, similar to many others in northern Kentucky. Further, its integrity of design has been compromised by the mid-20th century rear addition. The property also does not appear to be associated with persons of historical importance. Therefore, the farm it does not appear to meet National Register Criteria A, B, C or D.

7.0 Project Summary and Conclusions

In October 2009, GAI conducted a Phase IA archaeological reconnaissance of the Hawthorne Crossing Conservation Area in Campbell County, Kentucky. The project APE includes an area covering approximately 140 acres.

Archaeological Reconnaissance Summary

From the visual reconnaissance and auger borings conducted within the HCCA, GAI identified areas recommended for archaeological survey. Steeply sloped and disturbed portions of the APE are considered to have no archaeological potential and should be eliminated from further archaeological investigations.

As previously stated the majority of the HCCA contains slope greater than 15 percent. Nearly 105 acres, or 75 percent of the area, within the HCCA has no archaeological potential due to slope, as shown in Table 4. Almost 5 percent (6.8 acres) are disturbed and require no further archaeological investigation. Shovel test survey has been recommended for 13.5 acres or 9.6 percent of the HCCA. Shovel testing in combination with deep testing (backhoe trenching) has been recommended for 12 acres or 8.5 percent of the property.

Table 4

Level of Archaeological Investigation by Acreage

Level of Archaeological Investigation	Acres	Percent of HCCA
No further work		
Slope (15+ percent)	105.0	75 %
Disturbed	6.8	4.8 %
Shovel test survey	13.5	9.6 %
Deep testing and shovel test survey	12.0	8.5 %

Architectural Evaluation Summary

Based on currently available information, the Ware House does not appear to be associated with significant persons, events or broad patterns of history. Therefore it does not appear to meet National Register criteria A or B. The house retains hewn logs that appear to be in fairly good condition, as well as character-defining features such as the fireplace and winder stair. But its integrity of design is somewhat compromised by the rear and side additions. The stone smokehouse is also an intact example of a locally uncommon type, but does not appear to possess sufficient distinction to qualify for National Register listing in its own right. Therefore, the property does not appear to meet National Register Criterion C. Nonetheless, the Ware House may have the potential to reveal significant information about methods of log construction in rural northern Kentucky during the 19th century. Therefore it is potentially eligible under Criterion D for information potential.

The Tratt farmstead is a characteristic example of a small family farm of the late 19th through mid-20th centuries, comprised of a small group of specialized mid-20th century outbuildings associated with dairy farming and poultry raising. These structures are typical of those found on many similar farms throughout northern Kentucky. They do not appear to possess significance individually or collectively for their design or construction, or for their association with local farming practices. The Tratt House appears to be a typical example of a small, rural vernacular dwelling of the late 19th century, similar to many others in northern Kentucky. Further, its integrity of design has been compromised by the mid-20th century rear addition. The property also does not appear to be associated with persons of historical importance. Therefore, the farm it does not appear to meet National Register Criteria A, B, C or D.

Conclusions

In working with the Campbell County Conservation District, GAI has identified areas that should be considered for archaeological resources within the HCCA as well as disturbed

areas and areas of excessive slope that should not require any archaeological testing. In addition, GAI has conducted an architectural evaluation of two historic resources located within the property limits of HCCA and has made National Register eligibility recommendations for each resource.

8.0 Recommendations for Further Work

GAI recommends consultation with the Kentucky Heritage Council (KHC) to discuss the scope of further archaeological investigations within the project area chosen for modifications and/or improvements. Based on the results of Phase IA studies, a general, preliminary work plan for a Phase IB archaeological survey is presented here.

GAI recommends systematic Phase IB subsurface archaeological investigations in portions of the project area assessed as having a high to moderate archaeological potential. It is expected that investigations of high to moderate potential upland localities will consist of systematic shovel testing (at 15-meter intervals) to identify near-surface archaeological resources. Subsurface investigations in these localities will incorporate both systematic shovel testing and a program of surface investigations wherever possible. Close-interval shovel testing (e.g. 5- to 7.5-meter intervals) will also be incorporated at all identified prehistoric and historic archaeological sites. Because there is potential for deeply buried archaeological resources along a portion of the Licking River floodplain, a series of deep excavation trenches combined with systematic shovel testing is recommended.

If during the Phase IB survey archaeological sites are identified, and these sites cannot be avoided by proposed project construction activities, further archaeological investigations (i.e., Phase II investigation) may also be required to evaluate their NRHP-eligibility.

Portions of the project area considered to have a low archaeological potential will generally be excluded from systematic subsurface testing. Limited judgmental testing may be required on select low potential areas, particularly along the edges of low-lying, stream channels adjacent to steep-sloped areas.

Disturbed portions of the project APE are considered to have no archaeological potential will be eliminated from further archaeological investigations.

Finally, GAI will work closely with the Campbell County Conservation District to assist them in their planning process on preserving, protecting and recording their cultural resources for the future.

9.0 References Cited

D.J. Lake & Company

1883 An Atlas of Boone, Kenton and Campbell Counties, Kentucky from actual surveys under the direction of B.N. Griffing.

Kentucky Heritage Council (KHC)

2006 Specifications for Conducting Fieldwork and Preparing Cultural Resource Assessment Report. Kentucky Heritage Council, Frankfort, Kentucky.

Miller, Donald and Christopher Bergman

2003 Phase I Intensive Survey of the Proposed Wal-Mart Expansion Near Alexandria, Campbell County, Kentucky. Office of State Archaeology, UK, Lexington, KY.

National Park Service

1983 Secretary of the Interior Standards and Guidelines for Archaeology and Historic Preservation (48FR 44716-44742). National Park Service, Washington, D.C.

1998 National Register Bulletin 15 – How To Apply the National Register Criteria for Evaluation. National Park Service, Washington, D.C.

APPENDIX A

**Geomorphological Report
(Margaret Sams M.S. CPSS)**

GAI Consultants, Inc.
Campbell County, KY
Hawthorne Crossing Geomorphological Evaluation
November 20, 2009

Introduction and background

The project study area is within the Outer Bluegrass Section of the Bluegrass Physiographic Region (Kentucky Geologic Survey, 2007), and consists of a portion of land between the Licking River to the west and Riffle Creek to the east and south. Riffle Creek empties into the Licking River at the southwestern point of the study area. The area is underlain primarily by interbedded Ordovician limestones and shales (Kentucky Geologic Survey, 2006).

Prior to the Illinoian glaciation more than 300,000 years ago, the broad watershed including northern Kentucky, southeastern Indiana, southern Ohio, and western Pennsylvania drained through the Teays River system. The main trunk of the Teays River flowed from south central Ohio to the northwest through the Dayton area, then turned west toward the Indiana border (Teller 1973). The river continued west, eventually joining with the Mississippi River in Illinois. The main tributaries to the Ohioan portion of the Teays River were the Ohio River from the east, and the Kentucky River, the Manchester River, and the Licking River from the south and southwest.

The outlet of the Teays River flowing to the north through Ohio was blocked by pre-Illinoian glacial advances, and water became impounded within the main and tributary valleys. Thick beds of lacustrine (lakebed) sediments were deposited within these valleys. Lacustrine sediments settle out of quiet or still water, and are high in clay and very fine silt content. As water levels continued to rise, watershed divides were breached and became alternative outlets, changing the drainage patterns of broad watersheds. The present-day course of the Ohio River through southwestern Ohio and southern Indiana was created, pirating flow from the Teays River. As outlets were eroded to lower elevations, drainageways incised down through the lacustrine sediments and the river systems of the present day became established. Remnants of the lacustrine deposits have remained as abandoned terraces at elevations above Holocene (post-ice age) flooding.

According to the online *Web Soil Survey*, the soils occurring within the study area can be divided into three types: upland soils, Pleistocene terrace soils of lacustrine origin, and Holocene floodplain soils. The upland soils are the Eden silty clay loam, the Faywood silt loam

and silty clay loam, and the Nicholson silt loam. The Eden is a well drained and well developed soil forming in residuum weathered from limestone and shale bedrock. This soil is often high in rock content, and is shallow to bedrock. It occurs over the majority of the study area, on the steep side slopes which have been eroded from deforestation and the agricultural use of the area. The Faywood is almost identical to the Eden soil, but is less shallow to bedrock. This soil occurs over the high ridges of the study area. The Nicholson soil is a well developed but moderately well drained soil forming in Pleistocene-age loess deposits (wind-blown silts and fine sands) over residuum of limestone and shale. No coarse fragments are typically present within the veneer of loess overlying the residual materials. This soil occurs on a narrow portion of the high ridgetop within the northern portion of the study area.

The terrace soils of the area are forming in the high-clay lacustrine deposits emplaced high on the landscape during the pre-Illinoian flooding of the area. These soils are the Captina silt loam and the Licking silt loam, silty clay loam, and silty clay. The Captina soil is a well developed and moderately well drained profile of lacustrine alluvium over residuum weathered from limestone and shale. The Licking soils are well developed and moderately well drained soils forming in deep deposits of lacustrine sediments high in clay and fine silt content. Within the study area, these terrace soils are present as an "apron" of less sloped land at the base of the upland sideslopes, above the floodplain elevations of Riffle creek and the Licking River.

The Holocene floodplain soils within the study area are the Alluvial land (steep), the Egam silty clay loam, and the Nolin silt loam. The designation of Alluvial land, steep, is assigned to the steep "riser" of the Pleistocene lacustrine terraces, below the more level tread surface of these landforms. These steep areas, a more vertical profile of lacustrine sediment, rise up either directly from the river channel, as in the northwestern corner of the study area (Licking River), or from the distal edge of a Holocene floodplain, as within the southern and eastern portions of the study area (Riffle Creek). These areas are rarely flooded, and have no level surface on which sediments may be deposited. Slopes range from 25 to 30 percent. The Egam soil is a well drained and moderately well developed soil forming in floodplain sediments high in clay content. This soil occurs along the Riffle Creek floodplain within the northeastern corner of the study area. The high-clay sediments are deposited by very slow or stagnant water during periods of high flow within the Licking River, when quiet water is backed up into the Riffle Creek valley. The Nolin soil, present over the large section of floodplain northeast of the confluence of Riffle Creek into the Licking River, is a deep, well drained and moderately well developed soil forming

in silty alluvium of Holocene age. These silty sediments are deposited by overbanking floodwaters from either the Licking River or Riffle Creek.

Methodology

To assess the potential of the study area landforms, soils, and sediments to contain intact archaeological resources, the area was inspected and several auger borings were taken to view soil profiles. Of the auger boring profiles viewed, eight were chosen as typical and representative of the soils encountered within the study area. These profiles were examined and described according to the methods and nomenclature prescribed by the United States Department of Agriculture, Natural Resources Conservation Service (Schoeneberger, et al., 2002). The profile descriptions are included with this report.

Results and conclusions

The landforms within the study area include two high and relatively narrow ridgetops, steep sideslopes, a broad Pleistocene lacustrine terrace, and floodplains of Riffle Creek and the Licking River (Photos 1 and 2). Auger Boring 1 was taken on the southern ridgetop south of an abandoned residence. The profile of this boring was of a shallow, well developed soil forming in residuum weathered from shale and limestone bedrock. The subsoil was found within 8 cm (3 in) of the surface, indicating that the majority of the original surface horizon has been lost to erosion which was accelerating after the initial deforestation and use of the area for agricultural production. Surface testing for archaeological resources is recommended within undisturbed areas of less than 15 percent slope.

Auger Borings 2 and 5 were taken on the terrace landform. This lacustrine terrace lies as an apron between the lower floodplain landforms and the higher upland sideslopes. Boring 2 was taken in the front yard of a second abandoned residence, and Boring 5 was taken southeast from the barn associated with the residence. The profile of these borings consisted of deep deposits of lacustrine sediments. The presence of well developed argillic horizons in the subsoil (horizons Bt1 and Bt2) of each boring identifies these deposits as having been subjected to long-term *in situ* weathering and subsequent extensive soil development. A second plow horizon was found within Auger Boring 5, which was further downslope from Auger Boring 2. Deforestation and agricultural use of the area caused erosion of the upper slopes of the terrace and redeposition of sediment over the lower portions of the terrace, resulting in the lifting of the plow blade a second, higher plow zone. Other portions of this landform have been disturbed such that the surface and upper subsoil has been excavated or extensively graded. Auger borings taken within the area surrounding the barn and from downslope from the access road leading to the south from the barn revealed profiles of lacustrine sediments minus the surface

and upper subsoil. The area downslope from the access road appeared to have been deeply scalped, possibly to obtain the soil materials required to support the road bed.

Auger Borings 3, 4, and 6 were taken on the floodplain of Riffle Creek. Auger Boring 3, taken on the distal portion of the floodplain close to the upland wall of the valley, was of relatively undeveloped sediments of Holocene age, high in clay content. These sediments were deposited by quiet water, most likely by waters backed up into the Riffle Creek floodplain during periods of high precipitation and high water levels in the Licking River. A buried profile, also relatively undeveloped, was encountered below 85 cm (33 in). The subsoil of the buried profile was saturated and gleyed. Gleyed conditions are noted by a predominantly gray soil color, resulting from reduced conditions caused by frequent and prolonged saturation. This lower profile (2AC and 2Cg horizons), high in clay content, saturated, and gleyed below the surface, was deposited within a backchannel depression of over the distal portion of the floodplain, then covered with additional sediment (A and C horizons) after deforestation and agricultural use of the watershed. Testing for archaeological resources is not recommended within the outer, distal portions of the Riffle Creek floodplain, where only modern or backchannel depression deposits were found.

Auger Boring 4 was taken on the Riffle Creek floodplain, closer to the creek bank. The profile of this boring was of 150 cm+ (59 in+) of relatively undeveloped, silty clay loam alluvium with thin lenses of silty alluvium. No buried profile was noted within this boring. These sediments have been deposited by the accretion of sediment from slow or quiet water backing up into Riffle Creek, and overbanking over the floodplain. The soil was saturated below 146 cm (57 in). A vacuum created by the saturation of sediments below 150 cm (59 in) precluded the deeper augering and retrieval of soil samples. Extrapolation from the height of the creek bank exposure indicated that gravels from lateral deposition (channel lag or point bar sands and gravels) lie between 160 and 200 cm (63 and 79 in) below the surface within this section of the floodplain. The total lack of soil horizon development within this profile indicates that the sediments are too young to have been exposed to sufficient weathering for significant pedogenic processes to have occurred; therefore no testing for archaeological resources is recommended over the upstream portions of the Riffle Creek floodplain within the project area.

Auger Boring 6 was taken further downstream on the Riffle Creek floodplain, due south from the barn. The profile from this boring was also of 100 cm (39 in+) of undeveloped, silty clay loam sediment. The lack of development within this profile suggests that it also is of recent origin; therefore no testing for the presence of archaeological resources is recommended.

Further downstream along Riffle Creek, the channel and landforms adjacent to the creek have been extensively disturbed from excavations (Photo 3) such that the floodplain landform, if one existed, is no longer present. The high bank now adjacent to the creek is an exposure of the lakebed sediments of Pleistocene age.

Riffle Creek flows into the Licking River at the southern point of the study area. A broad, relatively level floodplain extends from the bank of the creek to the edge of the river. Auger Borings 7 and 8 were taken on this floodplain. Auger Boring 7 was begun and extended to 60 cm (24 in) below the ground surface, but was abandoned due to an impenetrable root. The profile was of moderately well developed silty alluvium. Auger Boring 8 was then completed to the immediate west of Boring 7. The profile of Boring 8 was of 240 cm (94 in) of deep, moderately well developed silty and fine sandy overbank alluvium over the coarse sands of point bar deposition. The presence of two cambic horizons (Bw1 and Bw2) within the subsoil identifies this soil as having been exposed *in situ* to weathering for a significant portion of the Holocene epoch. The fining-upward pattern of deposition is typical for the slow, steady accretion of sediment particular to Holocene-era floodplain creation. As the surface elevation of a floodplain rises due to sediment deposition, the velocity and frequency of subsequent flooding slows, resulting in slower accretion and the deposition of finer sediments. The slowing of sediment deposition over the surface allows for the more prolonged *in situ* weathering of the upper profile, resulting in the blocky structure exhibited within the Bw1 and Bw2 horizons. This type of pedogenic development was not present within any of the floodplain profiles along Riffle Creek. The size of this floodplain and the presence of silty and sandy sediments indicate that this landform has been created predominantly by the larger Licking River, and not Riffle Creek.

Deep testing for the presence of archaeological resources is recommended over this broad floodplain, and should extend from the surface down to coarse point bar deposition. The depth to these coarse point bar deposits most likely will range within 100 cm (39 in) above and below the 240 cm (94 in) depth seen within the profile of Auger Boring 8, due to the scrolling pattern of sediment deposition typical for creeks and rivers.

References

Kentucky Geologic Survey, 2006. *Geologic Map of Kentucky*, University of Kentucky, Lexington, Kentucky

Kentucky Geologic Survey, 2007. *Physiographic Map of Kentucky*, University of Kentucky, Lexington, Kentucky

Schoeneberger, P.J., Wysocki, D.A., Benham, E.C., and Broderson, W.D. (editors), 2002. *Field book for describing and sampling soils, Version 2.0* Natural Resources Conservation Service, National Soil Survey Center, Lincoln, Nebraska

Teller, James T., 1973. *Preglacial (Teays) and Early Glacial Drainage in the Cincinnati Area, Ohio, Kentucky, and Indiana*. Geological Society of America Bulletin November 1973; v. 84; no. 11; p. 3677-3688

United States Department of Agriculture, Natural Resources Conservation Service (USDA, NRCS) 2005. *Web Soil Survey*. Website at <http://websoilsurvey.nrcs.usda.gov/app/WebSoilSurvey.aspx>

Photos



General view of the central portion of the project area, facing north. Gently-sloped Pleistocene lakebed terrace in the foreground, steeper sideslope forming in weathering bedrock in the background.



General view of the floodplain of the Licking River, facing south.



Excavations along Riffle Creek, facing northeast.

SOIL PROFILE
Auger Boring 1
38° 58' 51.446" N, 84° 25' 28.47" W

Date: October 29, 2009
 Soil Description By: M.G. Sams, CPSS

County: Campbell County, KY
 Project Location: Hawthorne Crossing

Horizon/Depth	SOIL COLOR		Texture	Structure	Consistence	Boundary	Comments
	Matrix	Redox					
Ap/0-8 cm (0-3 in)	10YR 3/4 dark yellowish brown		silt loam	moderate medium granular	friable	abrupt	eroded
Bt/8-25 cm+ (3-10 in+)	10YR 4/6 dark yellowish brown		silty clay loam	moderate medium prismatic	firm, sticky		medium, continuous 10YR 4/4 dark yellowish brown clay films
Additional Notes: Upland position, convex nose of ridge sloping down to the south; well developed profile forming in limestone and shale residuum. Thin surface horizon (8 cm, or 3 in) from repeated agricultural use and significant erosion.							
Margaret Sams Consulting Geomorphology – Soil Science							

SOIL PROFILE
Auger Boring 2
38° 58' 47.435" N, 84° 25' 19.029" W

Date: October 29, 2009
 Soil Description By: M.G. Sams, CPSS

County: Campbell County, KY
 Project Location: Hawthorne Crossing

Horizon/Depth	SOIL COLOR		Texture	Structure	Consistence	Boundary	Comments
	Matrix	Redox					
Ap/0-12 cm (0-5 in)	10YR 4/2 dark grayish brown		silt loam	moderate medium granular	friable	abrupt	
Bt1/12-30 cm (5-12 in)	10YR 5/4 yellowish brown	few: 10YR 5/1 gray	silty clay loam	moderate medium prismatic	firm, sticky	gradual	medium, continuous 10YR 4/4 dark yellowish brown clay films
Bt2/30-42 cm+ (12-17 in+)	10YR 5/4 yellowish brown	common: 10YR 5/1 gray cracks and mottles	silty clay	moderate medium prismatic	firm, sticky		thick, continuous 10YR 4/4 dark yellowish brown clay films
Additional Notes: Terrace position in front yard of residence; well developed profile forming in lacustrine deposits of Pleistocene age.							
Margaret Sams Consulting Geomorphology – Soil Science							

SOIL PROFILE
Auger Boring 3
38° 58' 48.9" N, 84° 25' 18.7" W

Date: October 29, 2009
 Soil Description By: M.G. Sams, CPSS
 County: Campbell County, KY
 Project Location: Hawthorne Crossing

Horizon/Depth	SOIL COLOR		Texture	Structure	Consistence	Boundary	Comments
	Matrix	Redox					
AC/0-15 cm (0-6 in)	10YR 3/3 dark brown		silt loam	very weak medium granular	friable	clear	
C/15-85 cm (6-33 in)	10YR 4/4 dark yellowish brown		silty clay loam	massive	sticky, slightly plastic	clear	
2AC/85-130 cm (33-51 in)	10YR 3/4 dark yellowish brown		silty clay loam	very weak medium granular	friable	gradual	
2Cg/130-140 cm+ (51-55 in+)	10YR 4/2 dark yellowish brown	common: 10YR 5/1 gray 5YR 4/4 reddish brown	sandy clay loam	massive	plastic, slightly flowing		saturated, suction preventing retrieval of deeper deposits

Additional Notes: Floodplain position, distal portion close to upland wall; undeveloped profile of Holocene alluvium. Young, undeveloped profile (AC and C) overlying a "buried A" horizon (2AC) from a former relatively stable surface. Saturated, undeveloped sediments below the 2AC horizon.

Margaret Sams Consulting
Geomorphology – Soil Science

SOIL PROFILE
Auger Boring 4
38° 58' 49.6" N, 84° 25' 18.3" W

Date: October 29, 2009 **County:** Campbell County, KY
Soil Description By: M.G. Sams, CPSS **Project Location:** Hawthorne Crossing

Horizon/Depth	SOIL COLOR		Texture	Structure	Consistence	Boundary	Comments
	Matrix	Redox					
AC/0- 15 cm (0-6 in)	10YR 3/3 dark brown		silty clay loam	very weak coarse granular	friable	clear	
C1/15-146 cm (6-57 in)	10YR 3/4 dark yellowish brown		silty clay loam, with thin lenses of silt	massive	plastic, slightly flowing	gradual	
C2/146-150 cm+ (57-59 in+)	10YR 3/4 dark yellowish brown		sandy clay loam	massive	plastic, flowing		saturated, suction preventing retrieval of deeper deposits
Additional Notes: Floodplain position; undeveloped profile of Holocene alluvium. Saturated, undeveloped sediments below 146 cm (57 in).							
Margaret Sams Consulting Geomorphology – Soil Science							

SOIL PROFILE
Auger Boring 5
38° 58' 41.0" N, 84° 25' 18.3" W

Date: October 29, 2009
 Soil Description By: M.G. Sams, CPSS

County: Campbell County, KY
 Project Location: Hawthorne Crossing

Horizon/Depth	SOIL COLOR		Texture	Structure	Consistence	Boundary	Comments
	Matrix	Redox					
Ap1/0-12 cm (0-5 in)	10YR 4/2 dark grayish brown		silt loam	moderate medium granular	friable	clear	
Ap2/12-25 cm (5-10 in)	10YR 4/4 dark yellowish brown		silty clay loam	moderate medium prismatic	firm	clear	
Bt/25-52 cm+ (10-20 in)	10YR 4/4 dark yellowish brown	common: 10YR 5/1 gray	silty clay	very weak medium granular	firm, sticky		
Additional Notes: Terrace position south of barn; well developed profile forming in lacustrine deposits of Pleistocene age.							
Margaret Sams Consulting Geomorphology – Soil Science							

SOIL PROFILE
Auger Boring 6
38° 58' 38.1" N, 84° 25' 23.6" W

Date: October 29, 2009
 Soil Description By: M.G. Sams, CPSS

County: Campbell County, KY
 Project Location: Hawthorne Crossing

Horizon/Depth	SOIL COLOR		Texture	Structure	Consistence	Boundary	Comments
	Matrix	Redox					
A/0-22 cm (0-9 in)	10YR 3/3 dark brown		silt loam	weak coarse granular	friable	clear	
C/22-100 cm+ (9-39 in+)	10YR 3/4 dark yellowish brown		silty clay loam	massive	sticky, slight plastic		
Additional Notes: Floodplain position; undeveloped , young profile of Holocene alluvium.							
Margaret Sams Consulting Geomorphology – Soil Science							

SOIL PROFILE
Auger Boring 7
38° 58' 34.8" N, 84° 25' 35.1" W

Date: October 29, 2009
 Soil Description By: M.G. Sams, CPSS

County: Campbell County, KY
 Project Location: Hawthorne Crossing

Horizon/Depth	SOIL COLOR		Texture	Structure	Consistence	Boundary	Comments
	Matrix	Redox					
A/0-20 cm (0-8 in)	10YR 3/3 dark brown		silt loam	weak medium granular	friable	clear	
Bw/20-60 cm (8-24 in+)	10YR 4/3 brown		silt loam	weak medium subangular blocky	friable		root prevented deeper augering
Additional Notes: Floodplain position; moderately well developed profile of Holocene alluvium.							
Margaret Sams Consulting Geomorphology – Soil Science							

SOIL PROFILE

Auger Boring 8 near Auger Boring 7

Date: October 29, 2009
 Soil Description By: M.G. Sams, CPSS
 County: Campbell County, KY
 Project Location: Hawthorne Crossing

Horizon/Depth	SOIL COLOR		Texture	Structure	Consistence	Boundary	Comments
	Matrix	Redox					
Ap/0-20 cm (0-8 in)	10YR 3/3 dark brown		silt loam	weak medium granular	friable	clear	
Bw1/20-87 cm (8-34 in)	10YR 4/3 brown		light silt loam	weak medium subangular blocky	friable	gradual	
Bw2/87-152 cm (34-60 in)	10YR 4/3 brown	few: 10YR 5/1 gray	light silt loam	very weak medium subangular blocky	friable	gradual	
C1/152-160 cm (60-63 in)	10YR 4/3 brown	few: 10YR 4/1 gray	fine sandy loam	massive	slightly plastic	gradual	
C2/160-240 cm (63-94 in)	10YR 4/3 brown		fine sandy loam, increasing in sand with depth	massive	plastic	abrupt	
C3g/240-278 cm (94-109 in) point bar deposits	10YR 5/1 gray	many: 5YR 4/4 (Fe) reddish brown N 2/0 (Mn) black	coarse sand	massive	plastic, slightly flowing		saturated – water table fluctuations
C4/278 cm+ (109 in+) point bar deposits	10YR 5/1 gray	common: 5YR 4/4 (Fe) reddish brown	coarse sand	massive	plastic, slightly flowing		point bar deposition, saturated

Additional Notes: Floodplain position; moderately well developed profile of Holocene alluvium. This profile was created by slow, steady accretion of overbank alluvium.

Margaret Sams Consulting
 Geomorphology – Soil Science

APPENDIX B

Kentucky Historic Resources Individual Survey Forms

KENTUCKY HISTORIC RESOURCES
INDIVIDUAL SURVEY FORM
(KHC 2002-1)

COUNTY Campbell
RESOURCE # CP-197
RELATED GROUP #
EVALUATION U
SHPO EVALUATION
DESTROYED

For instruction, see the Kentucky Historic Resources Survey Manual.

1. NAME OF RESOURCE (how determined): 2____/
V. Tratt Farm

19. FOUNDATION:
TYPE MATERIAL
2____/continuous F____/rubble limestone original
____/____ replacement

2. ADDRESS/LOCATION:
west side of creek, about 500' west of Ripple Creek Road (county),
Hawthorn, Alexandria vicinity

20. PRIMARY WALL MATERIAL:
I____/weatherboard____ original
____/____ replacement

3. UTM REFERENCE:
Quad. Name: Cold Spring
Date: 1984____ / Zone: 16____ / Method: G____
Easting: 0____/7____/2____/3____/2____/8____/8____/

Northing: 4____/3____/1____/7____/4____/9____/5____/

21. ROOF CONFIGURATION/COVERING:
CONFIGURATION COVERING
A____/side gabled____ 7____/tin____
____/____ replacement

4. OWNER/ADDRESS: Campbell County Conservation District

22. CONDITION: F____/fair

8351 E. Main Street, Suite 104, Alexandria, KY 41001.

23. MODIFICATION: 2____/moderate alteration

5. FIELD RECORDER/AFFILIATION: Margo Warminski, GAI
Consultants, Inc.

24. ARCHITECT/BUILDER
Write resource # on back of all prints.

6. DATE RECORDED: 10/2009

25. PHOTOGRAPHS

7. SPONSOR: Campbell County Conservation District

8. INITIATION: 3____/Review & Compliance

9. OTHER DOCUMENTATION/RECOGNITION:
____ Survey _____ HABS/HAER
____ KY Land _____ Local Land
____ NR _____ NHL
Other:
Report Reference:

11. ORIGINAL PRIMARY FUNCTION: 0____/9____/X____/
farmstead

12. CURRENT PRIMARY FUNCTION: 9____/9____/V____/
vacant

13. CONSTRUCTION DATE: 6____/c. 1850-1874____ estimated
____/____/____/____ documented

14. DATE OF MAJOR MODIFICATIONS:
2____/1-s frame addition to side and rear____
____/____

15. CONSTRUCTION METHOD/MATERIAL:
W____/3____/wood frame unknown original
____/____/____ subsequent

16. DIMENSIONS:
Height 1.5 s.____ Width 4 bays____ Depth 1 bay

17. PLAN:
U____/undetermined____ first
____/____ second
____/____ third

18. STYLISTIC INFLUENCE:
____/____;____/____ first
____/____;____/____ second
____/____;____/____ third



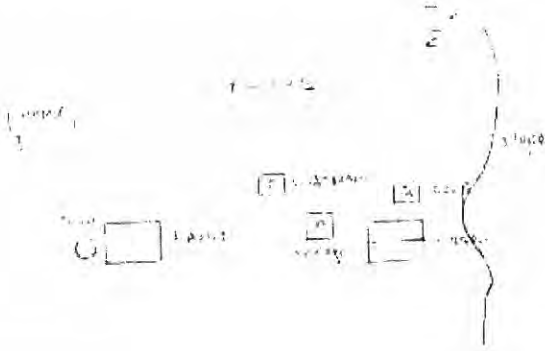
COMMENTS/HISTORICAL INFORMATION:

A house that appears to be this one is indicated in Hawthorn, Alexandria Precinct, in Lake's 1883 *Atlas of Boone, Kenton and Campbell Counties, Kentucky*, labeled "V. Tratt." (This may be a misspelling of "Trapp," a family name found elsewhere in the vicinity.)

The Tratt House is a 1.5-story, single-pile, vernacular wood-frame residence of simple design, of possible double-cell or saddlebag plan. It rests on a rubblestone foundation that has been parged and painted; some of the covering has fallen away. (continued on Continuation Sheet below)

26. SUPPORT RESOURCES:	<u>SITE PLAN KEY</u>	<u>FUNCTION</u>	<u>CONSTRUCTION DATE</u>	<u>METHOD MATERIAL</u>
A	chicken coop	1/7/L/	2/c. 1950	W/3/wood frame
B	garage/shed	1/9/M/	2/c. 1950	W/3/wood frame
C	below ground cistern	1/8/J/	0/unknown	0/0/unknown
D	dairy barn	0/9/F/	2/c. 1950	W/3/wood frame, concrete block
E	silo	1/7/J/	2/c. 1950	W/3/wood

27. SITE PLAN (Complete if #25 was answered).



28. MAP (Scan or attach copy of map showing exact location of resource)



Figure 1 16/0723288/4317619

(continued from page 1 of Individual Survey Form CP-197) The main façade, which faces south, contains four symmetrically arranged bays. The center of the façade contains twin, half-glazed, paneled doors with wooden storm doors, flanked by single wood sashes in the end bays. The doorways are sheltered by a minimal frame porch of simple design. The porch features a low, nearly flat roof, simple spindled balustrades, and widespread, turned wood columns posts. It rests on a stone foundation approached by four steps. This porch may have been added in the early 20th century. The house's gable ends contain single windows in the first and attic stories, vertically aligned. All the windows contain 1/1 sashes and have simple enframements. A narrow, straight-stack brick chimney was added to the north elevation at an unknown date, likely in the mid-20th century. The house is covered by a side-gabled, asphalt shingle roof of moderate pitch, with corner returns and hanging gutters. The roof is asymmetrically gabled, with a saltbox-like longer rear slope with corner returns. Misaligned fenestration, and discrepancy in the trim boards, suggests this may have been a somewhat later addition, although this is by no means certain.

A one-story, single-room addition, covered by a gabled roof, was appended to the south elevation of the house, likely in the mid-20th century. It contains paired, multi-pane casement windows and is set on a concrete block foundation. This addition is set back from the plane of the main façade, somewhat reducing its prominence. It wraps around the north half of the rear of the house, as attested by a visible seam and the presence of small window openings. The house's walls are weatherboarded and painted white with gray trim. The house appears to be in fair condition from the exterior, with peeling paint evident.

The farm includes several outbuildings, including a frame dairy barn, built into a gentle slope. The barn's first story is whitewashed concrete block, and the upper story is clad in weathered vertical wood siding. The first story of the barn contains several small, square windows that are boarded. The uphill side of the barn contains a broad, off-center doorway whose door is missing. The barn is covered by a gabled roof of moderate pitch; most of its raised-seam metal roofing has been peeled away. A gabled hay hood projects from the north gable. Adjacent to the south gable is a circular wooden silo, capped by a gabled rooflet that extends outward from the barn's main roof. An attached one-story, shed-roofed, concrete-block milk house adjoins the barn.

COUNTY Campbell

RESOURCE # CP-197

KENTUCKY HISTORIC RESOURCES
CONTINUATION SHEET

CATEGORY #'s 25

PAGE 4 OF 5 PAGES



Figure 1 CP197_02. View to the northwest.



Figure 2 CP197_03. View to the southeast.

COUNTY Campbell
RESOURCE # CP-197

KENTUCKY HISTORIC RESOURCES
CONTINUATION SHEET

CATEGORY #'s 25 _____
PAGE 5 OF 5 PAGES



Figure 3 CP197_04. View to the southwest.

KENTUCKY HISTORIC RESOURCES
INDIVIDUAL SURVEY FORM
(KHC 2002-1)

COUNTY Campbell _____
RESOURCE # CP-198 _____
RELATED GROUP # _____
EVALUATION U _____
SHPO EVALUATION _____
DESTROYED _____

For instruction, see the Kentucky Historic Resources Survey Manual.

1. NAME OF RESOURCE (how determined): 2 _____/
William Ware House

19. FOUNDATION:
TYPE MATERIAL
2 _____/continuous _____ F _____/rubble limestone original
_____ / _____ _____ / _____ replacement

2. ADDRESS/LOCATION:
end of Tratt Road off Ripple Creek Road (county), about 750' east of
Licking River, Hawthorn, Alexandria vicinity

20. PRIMARY WALL MATERIAL:
L _____/log _____ original
I _____/ weatherboard _____ replacement

3. UTM REFERENCE:
Quad. Name: Cold Spring
Date: 1984 _____ / Zone: 16 _____ / Method: G _____
Easting: 0 _____ / 7 _____ / 2 _____ / 3 _____ / 0 _____ / 7 _____ / 3 _____ /
Northing: 4 _____ / 3 _____ / 1 _____ / 7 _____ / 6 _____ / 1 _____ / 9 _____ /

21. ROOF CONFIGURATION/COVERING:
CONFIGURATION COVERING
A _____/side gabled _____ 0 _____/unknown _____
A _____/side gabled _____ 7 _____/tin _____

4. OWNER/ADDRESS: Campbell County Conservation District

22. CONDITION: P _____/poor

8351 E. Main Street, Suite 104, Alexandria, KY 41001.

5. FIELD RECORDER/AFFILIATION: Margo Warminski, GAI
Consultants, Inc.

23. MODIFICATION: 2 _____/moderate alteration

24. ARCHITECT/BUILDER

25. PHOTOGRAPHS

6. DATE RECORDED: 10/2009

7. SPONSOR: Campbell County Conservation District

8. INITIATION: 3 _____/Review & Compliance

9. OTHER DOCUMENTATION/RECOGNITION:
_____ Survey _____ HABS/HAER
_____ KY Land _____ Local Land
_____ NR _____ NHL
Other:
Report Reference

11. ORIGINAL PRIMARY FUNCTION: 0 _____ / 9 _____ / X _____ /
farmstead

12. CURRENT PRIMARY FUNCTION: 9 _____ / 9 _____ / N _____ /
abandoned

13. CONSTRUCTION DATE: 7 _____ / c. 1850-1874 _____ estimated
_____ / _____ / _____ / _____ documented

14. DATE OF MAJOR MODIFICATIONS:
0 _____ / 1-s side addition _____
0 _____ / 1-s rear addition _____

15. CONSTRUCTION METHOD/MATERIAL:
L _____/4 _____/log, V-notch _____ original
W _____/3 _____/wood frame unknown _____ subsequent

16. DIMENSIONS:
Height 1.5 s. _____ Width 4 bays _____ Depth 1 bay _____

17. PLAN:
B _____/ single pen, rectangular _____ first
C _____/ double pen _____ second
_____ / _____ third

18. STYLISTIC INFLUENCE:
_____ / _____ ; _____ / _____ first
_____ / _____ ; _____ / _____ second
_____ / _____ ; _____ / _____ third

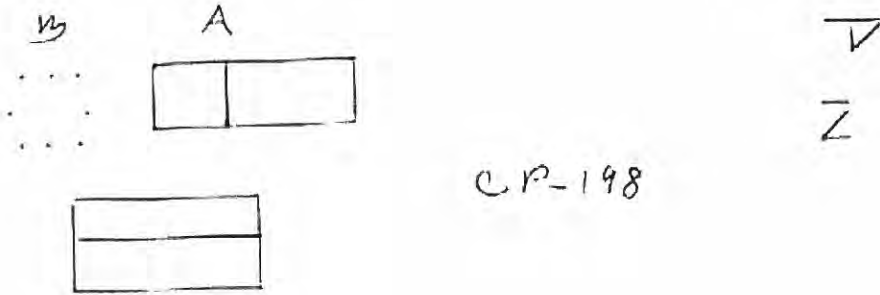


COMMENTS/HISTORICAL INFORMATION:

A house that appears to be this one appears on Lake's 1883 *Atlas of Boone Kenton and Campbell Counties, Kentucky*, labeled "William Ware." The Ware House is an abandoned log dwelling, apparently vacant for many years. Of rectangular footprint, it stands one-and-a-half-stories high under a side-gabled roof of moderate pitch that has been covered with raised-seam metal. The house apparently evolved through a three-stage process. The house's original pen is contained in the south half of the structure. Its main façade contains a window and a door. (continued)

26. SUPPORT RESOURCES:	<u>SITE PLAN KEY</u>	<u>FUNCTION</u>	<u>CONSTRUCTION DATE</u>	<u>METHODMATERIAL</u>	
	A	smokehouse	1/6/A/	6/c. 1850-1874	S/2/
	B	foundation (ruin)	0/9/G/	0/unknown	S/1/drylaid stone

27. SITE PLAN (Complete if #25 was answered).



28. MAP (Scan or attach copy of map showing exact location of resource)



Table 1 16/0723073/4317619

(continued from Page 1 of Individual Survey Form CP-198)

The house was expanded laterally to the south at an unknown date. The main façade of the right pen, of frame construction, contains only a door. The house features small, rectangular attic windows aligned with the door openings, and square attic windows in the gable ends.

The main façade of the right pen, of frame construction, contains only a door. The house features small, rectangular attic windows aligned with the door openings, and square attic windows in the gable ends.

The house is built of squared, hewn logs chinked with what appears to be clay, with small chunks of limestone added to protect the chinking. The logs are secured by V-notching. The house rests on a rubble limestone foundation; there appears to be a cellar in place beneath the dwelling. A small brick chimney is centered in the ridgeline. The side-gabled roof is covered in raised-seam metal.

During its long period of vacancy, the house suffered the loss of some original fabric. No doors survive; one 1/1 wood window sash remains on what is now an interior wall. The logs are covered with weatherboarding, much of which is falling away.

The interior of the Ware House features a massive fireplace of coursed limestone ashlar. The mantelpiece has been removed, and the chimney has partly collapsed into the firebox. A hole has been inserted above the fireplace for a stovepipe. A steep winder stair, next to the fireplace, leads to the attic. Below the stairs is a storage cupboard, with hinged door providing access. Door and window enframements are flat, plain moldings. Furring strips remain in evidence on some walls, installed to attach wall coverings which have since been removed. Some walls retain paint or synthetic wood paneling. The ceiling is plastered. There is no evidence of modern utilities. At the rear of the dwelling is a shed-roofed frame addition in near-ruinous condition, partly collapsed.

Several outbuildings closely surround the house:

Circular stone- and brick-lined well or cistern

Foundation of former outbuilding (barn?): coursed, rubble limestone, some of which has been rather crudely mortared

Smokehouse: front-gabled structure of uncoursed rubblestone, some of which has been rather crudely pointed with concrete, under a tin roof. The main façade contains only a single doorway. The interior walls also are pointed with concrete. At the rear is a rectangular frame structure, also tin-roofed, that has collapsed.



Figure 1 CP198_02. View to the southwest.



Figure 2 CP198_03. View to the west.

COUNTY Campbell
RESOURCE # CP-198

KENTUCKY HISTORIC RESOURCES
CONTINUATION SHEET

CATEGORY #'s 25 _____
PAGE 5 OF 5 PAGES



Figure 3 CP198_04. View to the west.

Hawthorne Crossing Conservation Area

Site Plan

Establish a parking lot:

Acquire the adjacent tract,

Establish a permanent agreement with the Licking Valley Baptist Church and the Campbell County Conservation District for the use of parking spaces in their lot, or

Work with Campbell County Fiscal Court and the KY Dept. of Transportation to find an acceptable location

Invasive Species Removal:

Approximately 40 to 45 acres of Bush Honeysuckle removal. A completed Request for Proposal of invasive removal is prepared to be sent out.

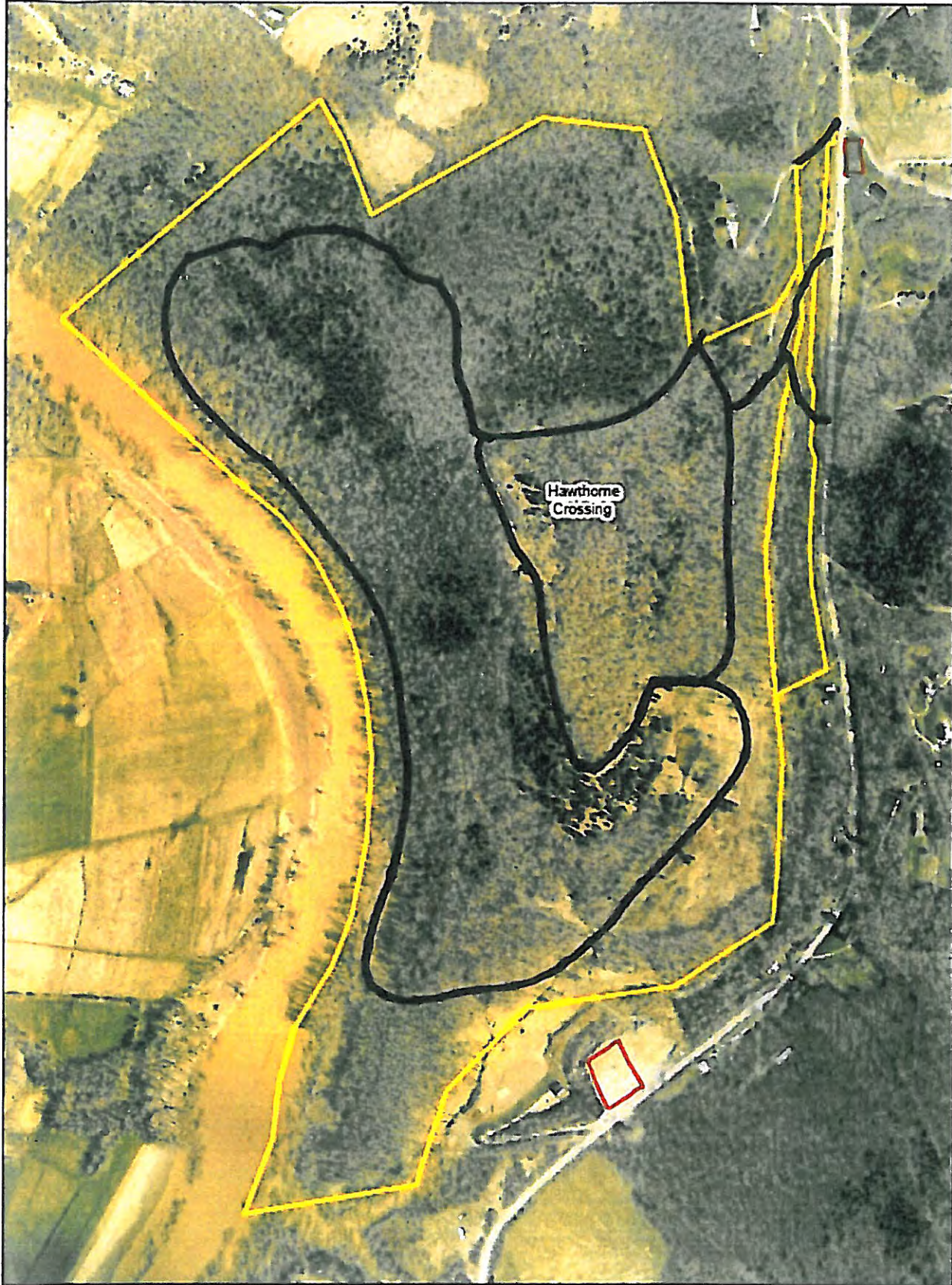
Trail system:

A trail system will be established upon the indication of a parking location. The removal of invasive species will clear out a lot of space as well as a good representation of managing invasive species.




Open the property to the public:

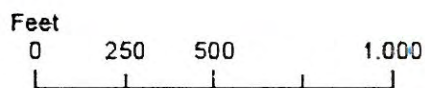
It has always been the goal to share this land with the Campbell County community. Visitors will be able to participate in hiking, bird and wildlife watching, and other related forms of passive recreation; launching of canoes and kayaks; conservation land management demonstration projects, and educational programs on a variety of natural resource issues, management and restoration techniques, and natural and cultural history.

Hawthorne Crossing Conservation Area



Legend

-  hawthorne_boundary
-  Proposed trail
-  Proposed parking



April 2016
AMW- 2014 Aerials

Kentucky Forest Stewardship Plan



Campbell County Conservation
District
8351 East Main St.
Alexandria, KY 41001
Campbell County
Case #: 247
Stewardship Plan Acres: 135
Date: January 20, 2009

LANDOWNER

PRIMARY GOALS:

1. Proper Forest Management
2. Fish and Wildlife Management

PROPERTY DIRECTIONS:

This property is located on Licking Pike near the intersection with Tollgate Road and Kellan Court, approximately 3 miles west of Alexandria.

PREPARED BY:

Ron Meyer, Consulting Forester
Meyer Forest Management

GENERAL INFORMATION

General Property Description:

The property discussed in this plan is known as Hawthorn Crossing Conservation Area. The property's features are characteristic of the Outer Bluegrass Physiographic Region. Specifically, this property lies at the confluence of Riffle Creek and the Licking River in western Campbell County. Topography is steep with some gentle slopes and flat bottomland ground adjacent to the creek and river.

Major Forest Types And Conditions:

Several forest types are represented on this property. Depending on the severity of past site disturbances, forest types found include oak/hickory, ash/elm/maple, eastern red cedar and bottomland forest. Invasive species, in the form of bush honeysuckle, is a major forest health issue on this property.

Forest Wildlife Conditions:

During my examination, I found indications of the presence of beaver, white-tailed deer, turkey, and various small mammals on your property. Due to the density of bush honeysuckle, wildlife conditions are poor to fair.

Watershed Conditions:

The watershed is in good condition with minimal erosion problems noted. However, considering the topography and the soils present, run-off is rapid and erosion potential is high. Any type of land disturbance should be done with care in order to minimize the erosion potential.

Aesthetic Features:

You have several great locations providing scenic vistas overlooking the Licking River valley.

Potential for Recreation:

This property has great potential for recreation. Activities such as hiking, wildlife viewing, picnicking and canoeing are a just a few of opportunities offered.

Rare, Threatened and Endangered Species:

Rare, threatened and endangered species and their habitats are important to the overall biodiversity of the

region. The Kentucky State Nature Preserves Commission has developed a database of specific locations of these species. If you are interested, please contact them for further information at (502) 573-2886.

Wetlands:

The areas adjacent to the Licking River and Riffle Creek are potentially considered wetlands. You should work with your local Natural Resources Conservation Services (NRCS) representative to help identify specific wetland areas.

**Archeological
Cultural, and/or
Historic Values:**

During my examination, I identified the old cabin site on top of the ridge, the old farmstead adjacent to the creek and an additional site along the river. These locations may hold historic significance and should be protected. You should work with your local Historical Society to investigate these sites. You may also wish to investigate the archaeological and cultural significance of your property.

AREA DESCRIPTIONS

AREA: A

ACRES:

116

**Major Tree
Species and
Size Class:**

The major tree species found in area A are osage orange, elm, hackberry, eastern red cedar and black locust. Desirable species found, but less frequently, are white ash, hickory, chinkapin oak and red oak. The minimal amount of tree species in the understory consists of redbud and dogwood. The trees are predominately medium to large poletimber (8" – 12" DBH) size.

Stocking:

Area A is generally fully stocked.

**Forest Stand
Health:**

This forest stand is in very poor health. Due to the tremendous density of bush honeysuckle, regeneration of desirable tree species is nonexistent. Bush honeysuckle is a non-native invasive shrub has become established over the past twenty years.

**Timber Stand
Quality:**

For the most part this area contains low quality trees. Tree species, such as elm, hackberry and osage orange seldom provide stems of high quality.

**Reproduction
And Species:**

Reproduction is basically non-existent due to the presence of bush honeysuckle. Minimal amounts of ash, oak and hickory regeneration can be found in isolated portions of the area.

Site Quality:

The site quality is low to moderate.

Soil Type:

Soils found on area A are primarily in the Eden soil series. Small amounts of Faywood and Nicholson soils are also found.

Stand History:

This area had been used as pasture for many years. Tree species such as osage orange, cedar and buckeye, are good indicators of past livestock use.

Recommendations for Area A:

1. This area contains a high level of invasive species that are threatening the health of your forest. Invasive non-native plants, such as bush honeysuckle, infest under and beside forest canopies and dominate small forest openings, increasingly eroding forest productivity. They also degrade biological diversity and wildlife habitat. Both chemical and mechanical control treatments are available to combat these plants. Eradication of bush honeysuckle should be your highest management priority on the property.
2. Isolated portions of area A can be improved through timber stand improvement. This practice involves identifying desirable trees and releasing them from adjacent competition. I will be happy to assist you in identifying those areas appropriate for timber stand improvement.

AREA: B

ACRES:

12

**Major Tree
Species and
Size Class:**

The major tree species found in area B are silver maple and box elder with lesser amounts of sycamore, cottonwood, black walnut and ash. This area is comprised primarily of sawtimber (12 to 22" DBH).

Stocking:

Area B is fully stocked.

**Forest Stand
Health:**

Overall, this area is healthy, with some problems being caused by wild grape vines. Also of note, beaver damage was found in this area.

**Timber Stand
Quality:**

The form and quality of the timber in area B is fair, very representative of the species found.

**Reproduction
And Species:**

Reproduction in this area is low and is comprised of box elder.

Site Quality: The site quality in area B is high. The alluvial soils found on this streamside area are deep and rich. This area is subject to frequent flooding from the Licking River.

Soil Type: Soils found on area B are classified as alluvial.

Stand History: For the most part, this area had been left undisturbed in the past due to its frequent flooding hazards. A small section on the northern portion of this area was cleared and has reforested in box elder and black walnut.

Recommendations for Area B:

1. This highly sensitive and environmentally critical riverside area should be left generally undisturbed. Passive recreational uses, such as hiking trails, can be installed but will be a maintenance problem due to frequent flooding.
2. Timber stand improvement is recommended in isolated portions of Area B. Area B contains several nice quality black walnut trees that should be managed by killing the adjacent box elder trees and severing the vines growing in the area. I can provide this service if desired.

AREA: C

ACRES:

4

**Major Tree
Species and
Size Class:**

This area is considered your best quality upland forests on the property. The major tree species found in area C are Chinkapin oak, white oak, hickory, black walnut, elm and ash. There are lesser amounts of osage orange, hackberry and buckeye. This area is comprised primarily of large poletimber and sawtimber (10 to 22" DBH). This area has a few extremely large specimen trees that should recognize and protected. I can help you with this activity.

Stocking: Area C is fully stocked.

**Forest Stand
Health:**

Although not as severe as area A, this area has some forest health problems being caused by bush honeysuckle and wild grape vines.

Timber Stand Quality: The form and quality of the timber in area C is good.

Reproduction And Species: Reproduction in this area is fair and is comprised of ash, hickory and oak. Portions of the area contain heavy amounts of bush honeysuckle limiting the establishment of desirable regeneration.

Site Quality: The site quality in area C is high.

Soil Type: Soils found on area C are Eden, Licking and Chenault.

Stand History: This history of this area is similar to area A, in that, it has been grazed where slope allowed.

Recommendations for Area C:

1. Timber stand improvement is recommended in portions of Area C. Area C contains some undesirable trees referred to as undesirable growing stock or cull trees. These are trees with no commercial value and are often defective making them susceptible to insect and disease infestations. Cull trees compete with valuable, healthy trees for the sunlight trees need to grow. By removing the cull trees from the forest stand the tree crowns of other trees will expand allowing better trees to grow bigger faster.

2. This area also contains a significant amount of bush honeysuckle that should be eradicated at your earliest convenience.

AREA: D **ACRES: 3**

Major Tree Species and Size Class: This old field area consists of an even-aged forest. The major tree species found in area D is silver maple. This area is comprised primarily of medium to large poletimber (6 to 10" DBH).

Stocking: Area D is overstocked.

Forest Stand Health: Forest health conditions are fair due to some over crowding.

Timber Stand Quality: The form and quality of this young stand is high.

Reproduction And Species: Reproduction in this area is poor due to the high density overstory.

Site Quality: The site quality in area D is high.

Soil Type: Nolin soil series is found in area D.

Stand History: This history of this area is that of an abandoned agricultural field.

Recommendations for Area D:

1. This highly sensitive and environmentally critical riverside area should be left generally undisturbed. Passive recreational uses, such as hiking trails, can be installed but will be a maintenance problem due to frequent flooding.

GENERAL FOREST STEWARDSHIP RECOMMENDATION

The following are general recommendations, in addition to those given above, which are made for you to consider in managing this property. These recommendations are made to aid you in achieving your goals and in promoting and protecting the long-term health and productivity of your woods.

1. This property should be protected from fire at all times. A forest fire often kills trees 4" in diameter and smaller. Though it seldom will kill larger trees, it damages them to the extent that insects and disease will attack the fire-wounded area and drastically lower their value. For assistance in case of fire, please contact 911, your local dispatch, the State Police or the Kentucky Division of Forestry District Office at Frankfort, Kentucky, at phone number: 502-573-1085.

2. You should use Best Management Practices (BMPs) in all your woodland activities. Best Management Practices are designed to protect water quality from non-point source pollution by preventing or reducing the movement of sediment, nutrients (fertilizer), pesticides, and other pollutants associated with silvicultural activities into surface or ground water. Non-point source pollution is defined as water pollution from a non-specific point such as muddy water runoff from a field or logging road as opposed to point source pollution from a factory outlet pipe. BMPs have been developed to achieve a balance between water quality protection and our doing what needs to be done for the necessary management of our forestland. Most BMPs just involve a little common sense and they benefit the land as well as water quality.

In 1994, the Kentucky General Assembly enacted Senate Bill 241, known as the Agriculture Water Quality Act. The Act requires all landowners, who own 10 or more contiguous acres in the Commonwealth, to prepare and implement a water quality plan that outlines which best management practices (BMPs) will be used to protect water quality during agriculture and/or silviculture (forestry) operations and activities. I have enclosed a copy of the publication **FOR-96 "Forestry Water Quality Plan,"** which was produced jointly by the University of Kentucky and the Kentucky Division of Forestry. The Act does not specify the format to be used for a water quality plan, so completion of the planning form on page 5 (make copies as necessary) for each planned forestry activity on your property will satisfy the requirements of the Act regarding silviculture. Although not required by law, it would be in your best interest to complete the self-certification sheet on page 11 and submit a copy of it to your local county conservation district office. You may wish to include copies of your planning forms and perhaps a copy of your Forest Stewardship Plan. A workbook is also available from your local conservation district that will satisfy these requirements, as well as other agricultural activities. If you have any questions in this regard, please don't hesitate to contact me.

3. In 1998, the Kentucky General Assembly passed the *Kentucky Forest Conservation Act*. A Fact Sheet, which describes the major details of the act, is included in the Stewardship Folder. The major thing of which you should be aware is that effective July 15, 2000, **all commercial timber harvesting operations in the state must have a Master Logger on site at all times and they must be using appropriate Best Management Practices**. Landowners doing their own logging, loggers logging with horses or mules or the harvesting of specialty products such as Christmas trees, or firewood, or logging incidental to land clearing for non-forestry purposes do not require a Master Logger. BMPs are required in all forestry operations, however. Please give me a call if you have questions directly related to this act.

4. When working in your woodland, be aware of your woodland's aesthetic value and its potential for recreation. You can improve the appearance of your property by leaving flowering trees or those that are unique or unusual. Also try to leave trees that have good fall color. Remove trees that interfere with a scenic overlook of surrounding areas and leave visual buffer strips around cutting areas. Practices such as these will increase the aesthetic beauty and value of your property. You may also be able to enhance your property's recreational value by establishing paths and trails, pruning, thinning, fencing, establishing vegetative cover, or a variety of other things. Contact me if I can be of help in implementing any of these practices.

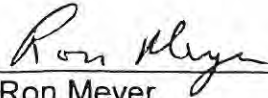
5. Also included as part of the report are Appendices A through E, which are provided as a packet enclosed with the plan. These include Appendix A, Explanation of Forestry Terms; Appendix B, Forestry Internet Sites; Appendix C, which provides information on growing Shitake Mushrooms; Appendix D, which provides information on Ginseng; and Appendix E, which provides information on Goldenseal.

As listed in the forestry internet addresses in Appendix B, Purdue University Cooperative Extension Service provides a web site for landowners on the following topics: tax strategies, new Internal Revenue code changes and rulings, case law and findings, federal and state tax forms, market segment specialization program. Also, it is linked to other tax sites, federal and state natural resource agencies.

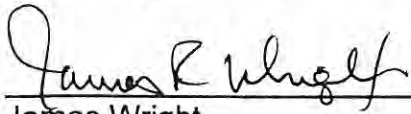
6. Once you begin implementation of your plan, you have the opportunity to have your property certified as a Stewardship Forest and you, yourself, be certified as a Forest Steward. Becoming a Forest Steward is an honorary designation that says you are interested in the wise stewardship of our forest resources and promoting the stewardship ethic. You will receive a Stewardship sign to display on your property and also a framed Forest Stewardship Certificate. Please give me a call and I will be happy to recommend Forest Stewardship certification for you.

7. A forester should be contacted on any future plans or problems with your woodland. An update of the enclosed report should be made every 5 years to monitor any changes in the progress of the stand as well as to keep your management plans and woodland's progress up-to-date.

Respectfully submitted by:



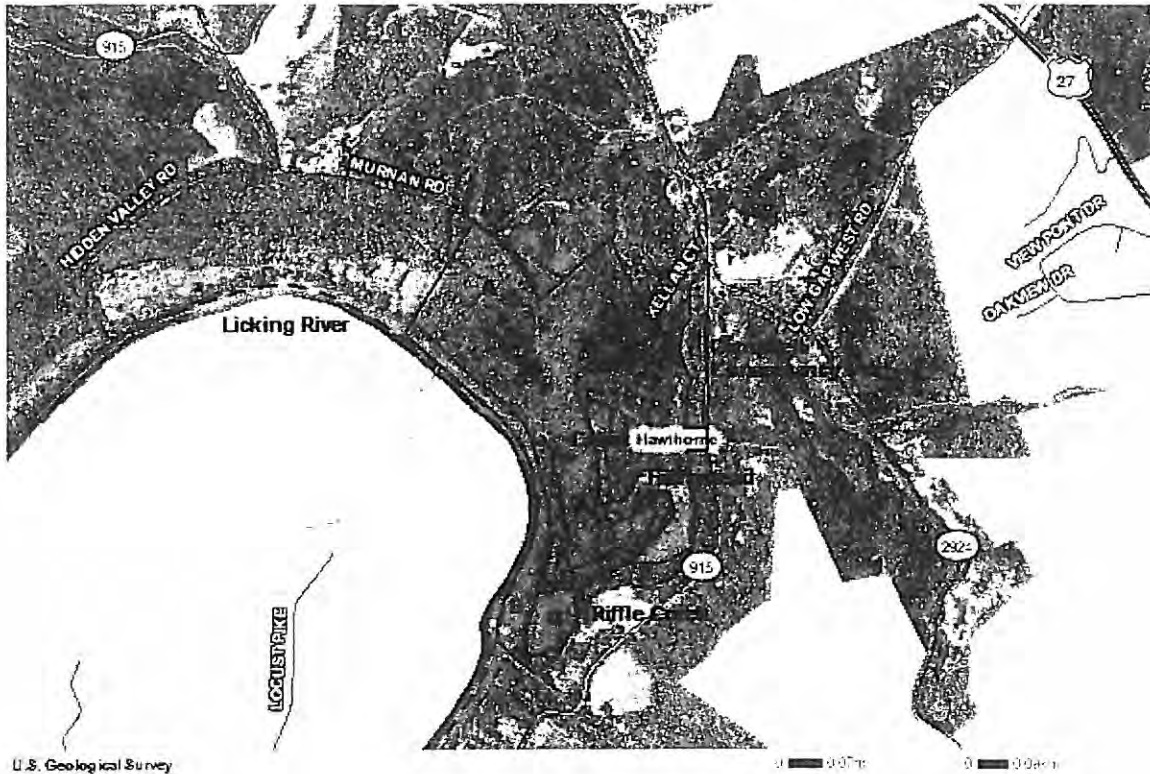
Ron Meyer
Consulting Forester



James Wright
KY Division of Forestry

Meyer Forest Management
Ron Meyer, Consulting Forester

PROPERTY OF CAMPBELL COUNTY CONSERVATION DISTRICT
8351 East Main Street, suite 104
Alexandria, Kentucky 41001
Case Record #: CA-247 February 11, 2009



LEGEND:

Property Line and Area Boundary
Stream or Drain

Black
Blue

Area A	116 acres
Area B	12 acres
Area C	4 acres
Area D	<u>3 acres</u>
Total	135 acres

(859) 879-8453
cell (859) 533-8576
125 Buck Run Road
Versailles, KY 40383
mmever125@windstream.net

Appraisals
Inventories
Timber Sales
Management Plans
Timber Stand Improvement

Meyer Forest Management

Ron Meyer, Consulting Forester

This letter is designed to further detail the approximately five (5) acres of land owned by the Campbell Conservancy as part of the Hawthorn Crossing Environmental Area.

General Property

Description:

This property lies between Licking Pike and Riffle Creek. Topography is steep roadside slopes with flat bottomland ground adjacent to the creek.

Major Forest Types And Conditions:

Three distinct forest types are represented on this area. Forest types occurring I will refer to as boxelder, creekside, and cedar/hardwood mix. A small pocket of pure boxelder poletimber exists near the northern portion of this area. This area developed from an abandoned creekside field. The creekside forest type consists of sycamore, black walnut, and boxelder. This narrow area runs the entire length of the creek. The cedar/hardwood mix consists of pole timber size cedar, black walnut, osage orange, elm, and black locust. Invasive species, in the form of bush honeysuckle, is a major concern on this portion of the property.

Recommendations:

This area should be protected for its environmental values. Streamside forests, such as this, are critical in the protection of soil and water quality. In order to promote biodiversity, I would recommend eliminating all invasive species such as bush honeysuckle on this property. This will help to promote the reestablishment of native plant communities and increase wildlife diversity. Grapevines should also be severed in order to promote quality tree development.

(859) 879-8453
cell (859) 533-8576
125 Buck Run Road
Versailles, KY 40383
mmeyer125@windstream.net

Appraisals
Inventories
Timber Sales
Management Plans
Timber Stand Improvement

MEMORANDUM OF AGREEMENT

between the

COMMONWEALTH OF KENTUCKY

**KENTUCKY HERITAGE LAND
CONSERVATION FUND BOARD**

and

CAMPBELL COUNTY CONSERVATION DISTRICT

SUBJECT: TOLLGATE PROJECT

CAMPBELL COUNTY

This Memorandum of Agreement, entered into by and between the Kentucky Heritage Land Conservation Fund Board (hereinafter "KHLCFB"), for and on behalf of the Commonwealth of Kentucky, and the Campbell County Conservation District in Campbell County, Kentucky (hereinafter "Applicant"),

WITNESSETH:

WHEREAS, pursuant to KRS 146.560(1), the KHLCFB administers the Kentucky Heritage Land Conservation Fund (hereinafter "KHLCF"), established in KRS 146.570; and

WHEREAS, pursuant to KRS 146.570(3), money in the KHLCF must be used exclusively for the acquisition and management of lands as defined in KRS 146.560; and

WHEREAS, pursuant to KRS 146.570(3), lands acquired with KHLCF money must be maintained in perpetuity for the purposes set out in KRS 146.560; and

WHEREAS, 418 KAR 1:030, Section 5, 418 KAR 1:040, Section 3, and 418 KAR 1:050, Section 2, require each successful applicant, prior to receiving KHLCF money, to enter into a written memorandum of agreement with the KHLCFB which requires the applicant, at a minimum, to meet the requirements of KRS 146.550 through 146.570, 418 KAR Chapter 1, any other applicable laws of the Commonwealth of Kentucky, the application, any conservation easement pertaining to the project site, and the latest resource management plan approved by the KHLCFB; and

WHEREAS, on October 22, 2007, the KHLCFB approved funding for certain property described in Applicant's application (hereinafter "Application") dated August 22, 2007; and

WHEREAS, Applicant desires to accept KHLCF money to acquire land for the purposes set out in KRS 146.560;

NOW, THEREFORE, in consideration of the mutual covenants expressed herein, the KHLCFB and Applicant hereby AGREE as follows:

1. The KHLCFB shall award to Applicant KHLCF money in an amount not to exceed Nine Hundred Seventy-Seven Thousand Three Hundred Sixty Dollars (\$977,360.00). This award shall be applied toward the purchase and management of the Tollgate Project (hereinafter referred to as the "Project Site") described in Applicant's August 22, 2007 Application package. Any portion of the KHLCF award not expended toward acquisition or management of the Project site shall be returned to KHLCF.
2. Applicant shall have the Project Site appraised by an appraiser under contract with the Commonwealth of Kentucky, Finance and Administration Cabinet (Cabinet (a list of appraisers under contract to the Finance and Administration Cabinet is available upon request to the KHLCFB). All appraisal products received from appraisers shall follow the requirements outlined in the KHLCFB's "Appraisal Requirements," a copy of which is available upon request to the KHLCFB.
3. If the Project Site is estimated to cost Two Hundred Thousand Dollars (\$200,000) or more, two (2) appraisals shall be conducted pursuant to Paragraph 2 above prior to purchase.
4. The Finance and Administration Cabinet has the discretion to require one (1) appraisal in addition to the appraisal(s) in Paragraphs 2 and 3. If there

is a third appraisal, it shall also meet the requirements of Paragraph 2 above.

5. Prior to purchasing the Project Site, Applicant shall have it surveyed by a surveyor chosen from the list of state-approved surveyors, and the survey shall follow the requirements specified in the "Outline of Boundary Survey Procedures." Copies of the list of surveyors and Outline of Boundary Survey Procedures are available upon request to the KHLCFB.
6. Prior to purchasing the Project Site, Applicant shall submit a certified copy of all appraisals and surveys to the Director of the Division of Real Properties, Department for Facilities Management, Finance and Administration Cabinet, 3rd Floor, Bush Building, 403 Wapping Street, Frankfort, Kentucky 40601.
7. KHLCF money paid toward the purchase of the Project Site shall not exceed the fair market value as determined by the Finance and Administration Cabinet.
8. Applicant shall submit the deed, title opinion, and any other pertinent information regarding conveyance of title on the Project Site to the Division of Real Properties for review and approval prior to execution of same.
9. Applicant shall comply with:
 - (a) The Kentucky Model Procurement Code (KRS Chapter 45A);
 - (b) The Executive Branch Code of Ethics (KRS Chapter 11A);
 - (c) All laws relating to nondiscrimination;

- (d) All laws relating to protection of the environment; and
 - (e) All other laws applicable to real property acquisition and the acquisition of services related to real property acquisition.
10. Applicant shall apply no less than One Hundred Ten Thousand Three Hundred Sixty Dollars (\$110,360.00) of the KHLCF award toward management of the Project Site, in accordance with paragraph 11 of this Agreement.
11. Applicant shall manage the Project Site in accordance with:
- (a) The requirements of KRS 146.550 through 146.570, 418 KAR Chapter 1, and any other applicable laws of the Commonwealth of Kentucky;
 - (b) The Application;
 - (c) The conservation easement required to be conveyed to the Commonwealth by Applicant; and
 - (d) The most recent resource management plan pertaining to the Project Site which has been approved by the KHLCFB.
12. Applicant shall maintain the Project Site in perpetuity for the purposes set out in KRS 146.560.
13. Applicant shall comply with all requirements of KRS 146.550 through 146.570 and 418 KAR Chapter 1, including but not limited to all management, verification and reporting requirements.
14. Applicant shall not convey or encumber any interest in the Project Site without prior KHLCFB approval.

15. Applicant hereby expressly recognizes and agrees that the KHLCFB may invoke any of the remedies in 418 KAR 1:070 for the reasons set forth therein.
16. Applicant warrants that the Project Site is not subject to outstanding subsurface rights. Any deviation from this shall be disclosed to KHLCFB by Applicant prior to disbursement of any KHLCF money to Applicant.
17. This Agreement shall not be modified except by written agreement of the parties hereto.
18. The parties certify, by the signatures of duly authorized representatives hereinafter affixed, that they are legally entitled to enter into this Agreement, and that they will not be violating, either directly or indirectly, any conflict of interest statute of the Commonwealth of Kentucky by performance of this Agreement. Further, the parties covenant that they presently have no conflict of interest, in any manner or degree, with the performance of duties pursuant to this Agreement. The parties further covenant that in the performance of this Agreement no persons having any such conflict of interest shall be employed to manage the Project Site.
19. Applicant agrees that the contracting agency, the Finance and Administration Cabinet, the Auditor of Public Accounts, and the Legislative Research Commission, or their duly authorized representatives, shall have access to any books, documents, papers, records, or other evidence which is directly pertinent to this Agreement for the purpose of financial audit or program review. Furthermore, any books,

documents, papers, records, or other evidence provided to the contracting agency, the Finance and Administration Cabinet, the Auditor of Public Accounts, or the Legislative Research Commission, which is directly pertinent to the Agreement, shall be subject to public disclosure regardless of the proprietary nature of the information, unless specific information is identified and exempted and agreed to by the Secretary of the Finance and Administration Cabinet as meeting the provisions of KRS 61.878(1)(c) prior to the execution of the Agreement. The Secretary of the Finance and Administration Cabinet shall not restrict the public release of any information that would otherwise be subject to public release if a state government agency were providing the services.

20. All notices, requests, demands, waivers, and other communications given as provided in this Agreement shall be in writing, sent by First Class Mail, deemed effective upon mailing, and addressed as follows:

If to the KHLCFB: Mary Jean Eddins
Department for Natural Resources
375 Versailles Road
Frankfort, KY 40601

If to Applicant: Dennis C. Walter
Campbell County
Conservation District
8351 East Main Street, Suite 104
Alexandria, KY 41001

21. Either party to this Agreement may change the address at which it is to receive notices, requests, demands, waivers, and other communications, on the condition that the party first provides written notice of that change of address to the other party.

APPLICANT

AGREED TO BY:

Dennis Walter
Campbell County Conservation District

11-5-07
Date

APPROVED AS TO FORM AND LEGALITY:

Justin D. Voss
Attorney for
Campbell County Conservation District

11-12-07
Date

CAMPBELL COUNTY FISCAL COURT/CAMPBELL COUNTY
CONSERVATION DISTRICT AGREEMENT AMENDMENT
NOVEMBER 2013

1. The Campbell County Fiscal Court wishes to assist the Campbell County Conservation District with labor and equipment to develop and maintain the Conservation District property know as Hawthorne Crossing located along the Licking River in central Campbell County, Kentucky and the St. Anne's Woods and Wetlands near Melbourne, Kentucky. Said work may include but is not necessarily limited to, road grading, transporting and spreading gravel, culvert replacement, parking lot construction, tree removal, and weed clearing and trimming as requested and within the capabilities of the County.

2. The Campbell County Conservation District shall provide oversight and direction for the work that is to be completed and pay for necessary materials needed to complete said work. The Conservation District shall allow the property to be used by the public as they see appropriate, keeping in mind that these areas are to be maintained as Conservation Areas.

3. The term of this agreement shall be for a period of year to year as agreed upon by the parties

4. This agreement may be terminated by either party upon thirty (30) days notice to the other, however termination shall not relieve any party of its obligation of reimbursement for services and/or materials provided prior to termination.

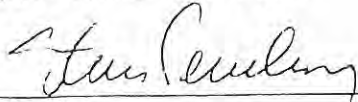
5. The Conservation District shall hold the Campbell County Fiscal Court harmless from all claims, demands, suits, damage and causes of action arising from or relating to the activities provided for in this contract, other than actual negligence or intentional wrongdoing of the Fiscal Court, or its agents or employees.

6. Each party hereby certifies that it has authorized the execution of this agreement by its legislative body at a regular or special meeting thereof.

7. The Conservation District hereby represents to the County that all labor, equipment and/or materials provided pursuant to this contract shall be used exclusively for public proposes and no part of the labor, equipment and/or material will be used for private purposes or on private property;

8. The effective date of this contract shall be November 6, 2013 regardless of the date signed by the parties.

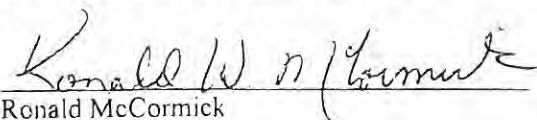
Campbell County Fiscal Court



Steve Pendery
Judge/Executive

Date: 11/14/2013

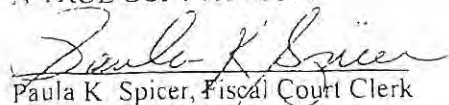
Campbell County Conservation District



Ronald McCormick
Chair

Date: 12/2/13

A TRUE COPY ATTEST:



Paula K. Spicer, Fiscal Court Clerk

**CAMPBELL COUNTY FISCAL COURT
CAMPBELL COUNTY, KENTUCKY**

RESOLUTION R-145-13

**A RESOLUTION OF THE CAMPBELL COUNTY FISCAL COURT
AUTHORIZING THE COUNTY JUDGE/EXECUTIVE TO EXECUTE AN
AMENDED AGREEMENT WITH THE CAMPBELL COUNTY
CONSERVATION DISTRICT IN REGARDS TO THE HAWTHORNE
CROSSING CONSERVATION AREA AND THE ST. ANNE'S WOODS AND
WETLAND CONSERVATION AREA**

WHEREAS, the Campbell County Fiscal Court has previously agreed to assist the Conservation District with labor and equipment from the Campbell County Transportation Department to assist with projects that may include but are not necessarily limited to road grading, transporting gravel and spreading gravel, culvert replacement, parking lot construction, and weed clearing and trimming on the Hawthorne Crossing Conservation Area; and

WHEREAS, the Campbell County Conservation District has recently acquired a 165 acre natural area and environmental education center along the Ohio River near Melbourne, Kentucky known as the St. Anne's Woods and Wetland Area; and

WHEREAS, the vision for this 165 acres is to see that this land is protected into the future, to open this property once it is ready, to citizens to hike, bird watch, and study nature, and for the fostering of stewardship for the land and waters of our county with the citizens of the County; and

WHEREAS, the Campbell County Conservation District organized in 1945, is a local unit of government, supported by county tax funds and is administered by a board of seven elected supervisors; and

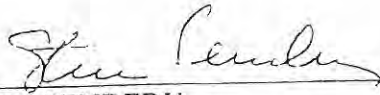
WHEREAS, the mission of conservation districts is responsibility for carrying out programs to protect our soil, water and other natural resources and the mission of the Campbell County Conservation District is to plan for the best use of land and other natural resources within the district, encourage the use of Best Management Practices to control soil erosion and sedimentation during all land use activities, improve water management, and encourage the improvement of damaged lands, croplands, forests and wildlife habitat and about the value of preserving land for the future; and

WHEREAS, the Campbell County Fiscal Court is very supportive of the purpose of the Campbell County Conservation District and wishes to support their efforts on the Hawthorne Crossing Conservation Area and the St. Anne's Woods and Wetland Area.

NOW THEREFORE BE IT RESOLVED that the Campbell County Fiscal Court authorizes the County Judge/Executive to execute an Amended Agreement between the Campbell County Fiscal Court and the Campbell County Conservation District for labor and

equipment from the Campbell County Transportation Department to assist with projects that may include but are not necessarily limited to road grading, transporting gravel and spreading gravel, culvert replacement, parking lot construction, tree cutting and weed clearing and trimming on the Hawthorne Crossing Conservation Area and at the St. Anne's Woods and Wetland Area as requested and within the capabilities of the Department.

Approved and adopted at a regular meeting of the Campbell County Fiscal Court on the 6th day of November, 2013.



STEVE PENDERY
Judge/Executive

ATTEST:



Paula K. Spicer
Fiscal Court Clerk

GENERAL WARRANTY DEED

Lewis H. Seiler and Tawn A. Fichter, husband and wife, the Grantors, whose mailing address is 105 Three Mile Road, Wilder, KY 41076, in consideration of \$740,850.00 paid to them by the Grantee herein, whose mailing address and the in-care-of address to which the property tax bill for 2008 may be sent to is 8351 East Main St., Suite 104, Alexandria, KY 41001 do hereby grant and convey with general warranty covenants to:

Campbell County Conservation District, a government subdivision of the State of Kentucky and public body corporate and politic exercising public power, its

successors and assigns forever, a certain 134.6934 acre tract of land off of Licking Pike-Kellan Ct. (Trapp Rd.) Campbell County, KY which tract of land is more particularly described as set forth in Exhibit A attached hereto and incorporated herein.

Group Numbers: 70395/Z and 70396/Z PIDN: 999.99-20-041.00

FOR LEGAL DESCRIPTION SEE EXHIBIT A ATTACHED HERETO

The legal description of the subject property conveyed herein, which is set forth in Exhibit A attached hereto, is in accordance with a survey made of the subject property by James W. Berling, L.S.Ky.Reg.No.206 and which legal description correctly reflects the distance in its third to last call as 382.62 feet rather than 283.62 feet which distance appears in the third to last call in the description in the source of title deeds. A survey plat of the subject property approved by the Planning & Zoning Commission of Campbell County, Kentucky on August 7, 2008 is attached hereto. Also see the August 6, 2008 letter (attached hereto) of Peter J. Klear, AICP, and Director of Planning & Zoning relative to two tracts adjacent to the subject property.

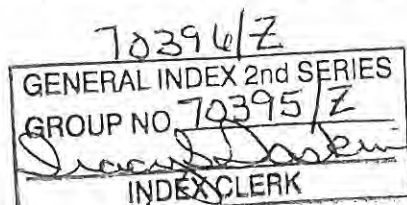
Source of Title: Deed Book 189, Page 371 and Deed Book 189, Page 375, Campbell County Clerk's Records at Alexandria, KY.

Together with all of the PRIVILEGES AND APPURTENANCES to the same belonging. TO HAVE AND TO HOLD the same to the said

Campbell County Conservation District, a governmental subdivision of the State of Kentucky and public body corporate and politic exercising public power, its

successors and assigns forever.

The Grantors and the Grantee certify pursuant to KRS 382.135 that the above stated consideration is the true, correct and full consideration paid for the property herein conveyed. We further certify our understanding that falsification of the stated consideration or sale price of the property is a Class D. Felony subject to one to five years imprisonment and fines up to \$10,000.00. The Grantee joins in this Deed for the sole purpose of making this certification about the valuation.





JAMES W. BERLING ENGINEERING, PLLC

Land Surveying • Site Development • Civil Engineering Services • Land Planning

KY License No. 5745

1671 PARK ROAD, SUITE ONE • FT. WRIGHT, KENTUCKY 41011 • (859) 331-9191 • FAX (859) 344-7422

Land Surveyor License KY 206

Exhibit A

August 7, 2008

LEGAL DESCRIPTION

CAMPBELL COUNTY CONSERVATION DISTRICT
2436 LICKING PIKE
CAMPBELL COUNTY, KENTUCKY

Situated along the east side of the Licking River and along the west side of Licking Pike (Kentucky Highway #915) at Kellan Court (Old Trapp Road) in Campbell County, Kentucky, and being more particularly described as follows:

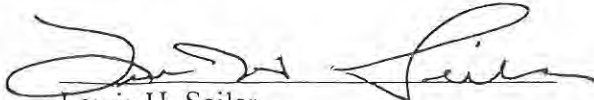
Beginning at a point in Riffle Creek at the forks of same, said point being S 2'-22' E 352.17 feet from the center of a bridge on Kellan Court (Old Trapp Road) along the center of said creek, said point also being 128.42 feet west of the center of relocated Licking Pike (Kentucky Highway #915); thence with the center of said creek and with a east line of Elmer Bayer (Deed Book 104, Page 144), S 28°-07' W 175.00 feet to a point in same; thence leaving said creek and with the south and west lines of Bayer S 65°-01' W 345.50 feet to a pipe in a fence line just north of Kellan Court (Old Trapp Road) and N 6'-25' W 467.46 feet to a pipe in a fence line and N 20°-31' W 341.69 feet to a pipe at the northwest corner of a 5 acre parcel conveyed to Doran (Deed Book 146, Page 58) on the south bank of a creek; thence with said creek and along the north lines of a 93 acre parcel (Deed Book 146, Page 58), N 80'-21' W 401.01 feet to a point in a fork of said creek and S 59°-18' W 721.19 feet to a pipe in the center of an old county road; thence with the center of said road N 19°-53' W 251.27 feet to a pipe and N 30°-33' W 219.01 feet to a pipe in said road at the north line of said 93 acre parcel; thence with the north lines and the west lines of said 93 acre parcel S 46'-25' W 322.15 feet to a post and S 49°-47' W 911.47 feet to a point at the east edge of the water in the Licking River at 29.0 stage; thence with said waters edge of the Licking River S 47°-32' E 891.05 feet, S 51°-15' E 188.50 feet, S 38°-47' E 209.12 feet, S 27°-40' E 209.02 feet, S 19°-59' E 152.06 feet, S 11'-12' E 205.92 feet, S 5°-46' E 199.00 feet, S 3°-14' W 212.34 feet, S 11°-42' W 285.94 feet, S 22°-04' W 199.62 feet, S 31°-47' W 250.59 feet, S 16°-06' W 209.20 feet, S 6°-09' W 205.18 feet and S 20°-58' W 293.43 feet to a point at the mouth of Riffle Creek; thence with the south line of a 6 acre parcel (Deed Book 146, Page 58) conveyed to Doran N 80°-30' E 617.48 feet to a point in Riffle Creek; thence with said creek N 21'-03' E 367.52 feet, N 44°-31' E 426.40 feet, N 81°-59' E 545.32 feet to a point 120.00 feet north of said creek center; thence N 56°-30' E 432.96 feet to a point in the center of said creek; thence with the center of Riffle Creek N 5°-02' E 196.90 feet, N 2°-04' E 285.69 feet and N 5°-41' W 401.67 to a pipe in said creek; thence with the east lines of a 2.4 acre parcel and a 10.4 acre parcel conveyed to Doran (Deed Book 146, Page 58) and with the center of Riffle Creek N 4°-01' W 382.62 feet, N 6°-28' E 522.00 feet to a point in same; thence N 12°-29' E 344.00 feet and N 2°-22' W 200.67 feet to the place of beginning.


Containing 134.6934 Acres

SEE NEXT PAGE FOR
CONTINUATION OF LEGAL DESCRIPTION


Executed this 12th day of August, 2008.

GRANTORS:


Lewis H. Seiler


Tawn A. Fichter


GRANTEE:


Campbell County Conservation District
By: C. Alan Ahrman, Secretary-Treasurer

STATE OF KENTUCKY
COUNTY OF KENTON

The foregoing instrument, including the certification of consideration reflected herein, was acknowledged, sworn to and subscribed before me this 12th day of August, 2008 by Lewis H. Seiler and Tawn A. Fichter, husband and wife, the Grantors herein.


My Commission Expires:
12/08/09


Notary Public, State of Kentucky
F. Edward Worland, Jr.

STATE OF KENTUCKY
COUNTY OF KENTON

The foregoing certification of consideration reflected herein was acknowledged, sworn to and subscribed before me this 12th day of August, 2008 by C. Alan Ahrman, Secretary-Treasurer of Campbell County Conservation District a governmental subdivision of the State of Kentucky and public body corporate and politic exercising public power, on behalf of the District, the Grantee herein.

My Commission Expires:
12/08/09

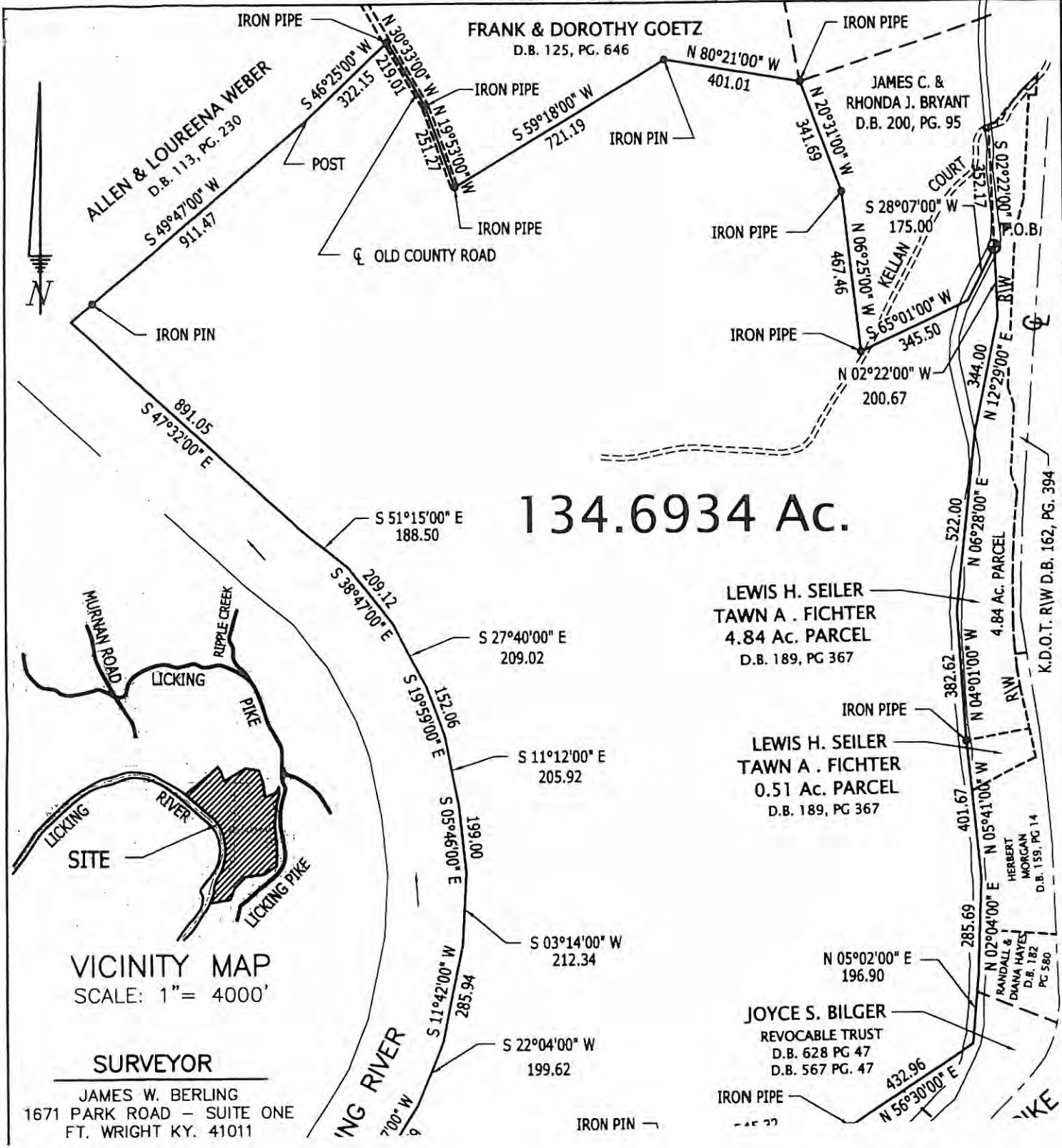

Notary Public, State of Kentucky
F. Edward Worland, Jr.

This Instrument Prepared By:


F. Edward Worland, Jr.

Attorney at Law
PO Box 2420
Covington, KY 41012-2420
(859) 581-8787

Recorded : JACK SNODGRASS
ALEXANDRIA CAMPBELL COUNTY CLERK
Document Type : DEED
Book / Page : 289 / 41 6 pgs
Document No : 00 00 12 019 00152
Dt/tm Recorded: 08/12/2008 14:37:0
Total Fees : 767.00 741.00
Clerk Name : PATTY J VELOSKY



134.6934 Ac.

ALLEN & LOURENA WEBER
D.B. 113, PG. 230
S 49°47'00" W
911.47

FRANK & DOROTHY GOETZ
D.B. 125, PG. 646
N 80°21'00" W
401.01

JAMES C. & RHONDA J. BRYANT
D.B. 200, PG. 95
N 20°31'00" W
341.69

IRON PIPE
S 28°07'00" W
175.00
N 06°25'00" W
467.46
S 65°01'00" W
345.50
N 02°22'00" W
200.67

S 51°15'00" E
188.50

LEWIS H. SEILER
TAWN A. FICHTER
4.84 AC. PARCEL
D.B. 189, PG 367

LEWIS H. SEILER
TAWN A. FICHTER
0.51 AC. PARCEL
D.B. 189, PG 367

JOYCE S. BILGER
REVOCABLE TRUST
D.B. 628 PG 47
D.B. 567 PG. 47

VICINITY MAP
SCALE: 1" = 4000'

SURVEYOR

JAMES W. BERLING
1671 PARK ROAD - SUITE ONE
FT. WRIGHT KY. 41011

K.D.O.T. R/W D.B. 162, PG. 394

HERBERT MORCAN
D.B. 159, PG 14

RANDALL & DIANA HAYES
D.B. 182 PG 580

IRON PIN

DEED OF CONSERVATION EASEMENT

THIS DEED OF CONSERVATION EASEMENT is entered into by and between the Campbell County Conservation District, a government subdivision of the state of Kentucky and public body corporate and politic exercising public power, 8351 East Main Street, Suite 104, Alexandria, Kentucky 41001 (hereinafter "GRANTOR"), and the Commonwealth of Kentucky, by and through the Finance and Administration Cabinet, for the use and benefit of the Kentucky Heritage Land Conservation Fund Board (hereinafter "GRANTEE"), Kentucky Department for Natural Resources, 375 Versailles Road, Frankfort, Kentucky 40601.

WITNESS THAT:

WHEREAS, GRANTOR is the owner in fee simple of certain real property located in Campbell County, Kentucky (hereinafter the "Property"), located at 2435

Licking Pike and more particularly described as follows:

999-99-20-041-00
70395/2 and 70396/2

Situated along the east side of the Licking River and along the west side of Licking Pike (Kentucky Highway #915) at Kellan Court (Old Trapp Road) in Campbell County, Kentucky, and being more particularly described as follows:

Beginning at a point in Riffle Creek at the forks of same, said point being S 2°-22' E 352.17 feet from the center of a bridge on Kellan Court (Old Trapp Road) along the center of said creek, said point also being 128.42 feet west of the center of relocated Licking Pike (Kentucky Highway #915); thence with the center of said creek and with a east line of Elmer Bayer (Deed Book 104, Page 144), S 28°-07' W 175.00 feet to a point in same; thence leaving said creek and with the south and west lines of Bayer S 65°-01' W 345.50 feet to a pipe in a fence line just north of Kellan Court (Old Trapp Road) and N 6°-25' W 467.46 feet to a pipe in a fence line and N 20°-31' W 341.69 feet to a pipe at the northwest corner of a 5 acre parcel conveyed to Doran (Deed Book 146, Page 58) on the south bank of a creek; thence with said creek and along the north lines of a 93 acre parcel (Deed Book 146, Page 58), N 80°-21' W 401.01

feet to a point in a fork of said creek and S 59°-18' W 721.19 feet to a pipe in the center of an old county road; thence with the center of said road N 19°-53' W 251.27 feet to a pipe and N 30°-33' W 219.01 feet to a pipe in said road at the north line of said 93 acre parcel; thence with the north lines and the west lines of said 93 acre parcel S 46°-25' W 322.15 feet to a post and S 49°-47' W 911.47 feet to a point at the east edge of the water in the Licking River at 29.0 stage; thence with said waters edge of the Licking River S 47°-32' E 891.05 feet, S 51°-15' E 188.50 feet, S 38°-47' E 209.12 feet, S 27°-40' E 209.02 feet, S 19°-59' E 152.06 feet, S 11°-12' E 205.92 feet, S 5°-46' E 199.00 feet, S 3°-14' W 212.34 feet, S 11°-42' W 285.94 feet, S 22°-04' W 199.62 feet, S 31°-47' W 250.59 feet, S 16°-06' W 209.20 feet, S 6°-09' W 205.18 feet and S 20°-58' W 293.43 feet to a point at the mouth of Riffle Creek; thence with the south line of a 6 acre parcel (Deed Book 146, Page 58) conveyed to Doran N 80°-30' E 617.48 feet to a point in Riffle Creek; thence with said creek N 21°-03' E 367.52 feet, N 44°-31' E 426.40 feet, N 81°-59' E 545.32 feet to a point 120.00 feet north of said creek center; thence N 56°-30' E 432.96 feet to a point in the center of said creek; thence with the center of Riffle Creek N 5°-02' E 196.90 feet, N 2°-04' E 285.69 feet and N 5°-41' W 401.67 to a pipe in said creek; thence with the east lines of a 2.4 acre parcel and a 10.4 acre parcel conveyed to Doran (Deed Book 146, Page 58) and with the center of Riffle Creek N 4°-01' W 382.62 feet, N 6°-28' E 522.00 feet to a point in same; thence N 12°-29' E 344.00 feet and N 2°-22' W 200.67 feet to the place of beginning, containing 134.6934 Acres.

Being the same property conveyed to **GRANTOR** by Deed dated August 12, 2008 and duly recorded in Deed Book 289, Page 41, Office of the Campbell County Clerk at Alexandria, Kentucky.

WHEREAS, pursuant to KRS 382.850(1), **GRANTOR** guarantees that the Property is not subject to subsurface rights; and

WHEREAS, the Property's significant natural characteristics, including its ecological and aesthetic values, are described and documented in the reports, drawings, photographs and other information and data collectively referred to as "Baseline

Documentation,” which the parties agree provides a fair and accurate representation of the Property as of the date the Property was conveyed to **GRANTOR**; and

WHEREAS, the parties further agree that Baseline Documentation for the Property is contained in the Application filed by **GRANTOR** in connection with this project, and in the preliminary resource management plan and other documentation submitted by **GRANTOR** pursuant to KRS 146.550 through 146.570 and 418 KAR 1:040 Section 1; and

WHEREAS, while the Baseline Documentation may be used by **GRANTEE** to establish that a change in the use or character of the Property has occurred, its existence shall not preclude **GRANTEE** from using other evidence to establish the condition of the Property as of the date of this Easement; and

WHEREAS, pursuant to KRS 146.550 through 146.570, the Property was acquired with Kentucky Heritage Land Conservation Fund (“KHLCF”) money; and

WHEREAS, KRS 146.570 mandates that lands acquired with KHLCF money be maintained in perpetuity for the purposes set out in KRS 146.560; and

WHEREAS, **GRANTOR** stated in its KHLCF application and preliminary resource management plan that the Property will be dedicated for public use, outdoor recreation and education consistent with the purposes of KRS 146.550 through 146.570; and

WHEREAS, 418 KAR 1:040 Section 4 requires local governments to convey to the Commonwealth of Kentucky, simultaneously with the disbursement of KHLCF money, a conservation easement over all land acquired either in whole or in part with KHLCF money; and

WHEREAS, **GRANTEE** is a governmental body empowered to hold an interest in real property under the laws of the Commonwealth of Kentucky and the United States, and therefore qualifies as a holder pursuant to KRS 382.800; and

WHEREAS, both **GRANTOR** and **GRANTEE** desire the Property to be maintained in perpetuity for the purposes set out in KRS 146.560; and

WHEREAS, **GRANTOR** desires to grant to **GRANTEE**, and **GRANTEE** desires to accept, a conservation easement in gross in perpetuity on the Property;

NOW, THEREFORE, in consideration of SEVEN HUNDRED FIFTY-TWO THOUSAND THREE HUNDRED THIRTEEN DOLLARS AND SEVENTY CENTS (\$752,313.70), which is the amount of the KHLCF grant to **GRANTOR** being used to acquire the Property, excluding administrative expenses authorized by 418 KAR 1:010 Section 1(2) associated with the acquisition, and FURTHER pursuant to KRS 382.800 through 382.860, **GRANTOR** does hereby convey to **GRANTEE**, its successors and assigns forever, in consideration of the benefit to the people of the Commonwealth of Kentucky, with general warranty of title, a Conservation Easement (hereinafter "Easement") in perpetuity over the Property, subject to the following conditions, limitations, and affirmative obligations:

I. PURPOSES OF THE EASEMENT

A. **GRANTOR** shall manage the Property in strict accordance with:

- (1) The requirements of KRS Chapter 146.550 through 146.570;
- (2) 418 KAR Chapter 1;
- (3) KRS 382.800 through 382.860;

(5) The preliminary and final resource management plans pertaining to the Property which have been and will be submitted to and approved by **GRANTEE**.

B. It is the purpose of this Easement to ensure the preservation and continuation of the natural characteristics of the Property that meet the priorities for acquisition under KRS 146.560(2). **GRANTOR** and **GRANTEE** recognize these natural characteristics and share the common vision and purpose of conserving them by placing restrictions on the use and development of the Property for any purpose or in any manner that conflicts with the maintenance of these characteristics. **GRANTEE** accepts such conservation restrictions and development rights in order to conserve these values for present and future generations.

II. RESTRICTED USES OF PROPERTY

Any activity on or use of the Property that either constitutes trespass or that may become inconsistent with the purposes of this Easement, the preliminary or final resource management plans, or KRS 146.550 through 146.570, or 418 KAR 1:010 through 1:070 is prohibited. The restrictions hereby imposed upon the Property are as follows:

A. Character of Public Visitor Activity. The only public visitor activities at the Property shall be those specifically authorized and described in the preliminary and final resource management plans, and for scientific research as approved by **GRANTEE**. These activities may be monitored by **GRANTOR** in order to prevent disturbance of the Property beyond what it can tolerate without deterioration and impairment of natural conditions. Activities and uses that are unrelated to purposes articulated in the application and preliminary and final resource management plans, or unrelated to

necessary scientific research, are prohibited except as may be expressly permitted by **GRANTOR** in order to carry out the primary purposes of this Easement.

Prohibited public visitor activities include, but are not limited to, use of all-terrain vehicles and other motorized vehicles except as needed for approved trail maintenance and for law enforcement or medical purposes; overnight parking or camping; hunting; and the removal, disturbance or defacement of minerals, archeological features or other natural features. Any disturbance or gathering of plants or animals, or plant or animal products, trapping, or collecting anything from the Property is prohibited.

Except for animals trained to work or perform tasks for an individual with a disability, no animals shall be brought onto the Property without the prior written permission of **GRANTOR** or **GRANTEE**.

B. Fire. Prescribed or controlled fires may be utilized as a management tool in such areas or situations where fire is needed to maintain or protect biological communities on the Property that can be demonstrated to be fire-maintained communities.

C. Water Level Control. The Property shall be managed to maintain its natural water regime. Water levels that previously have been altered by human activity may be changed, if approved by **GRANTEE**.

D. Disturbance of Natural Features. Any disturbance or alteration of the Property and its natural conditions through the removal of vegetation, flora, fauna, soil, rocks, or other components is prohibited unless it is consistent with this Easement and expressly permitted in writing by **GRANTEE**.

E. Erosion Control and Pollution Control. Erosion and soil deposition or other pollution caused by human activity or natural conditions originating within or outside the Property may be controlled by **GRANTOR** as necessary.

F. Control of Succession. Control of natural succession may be undertaken in a manner approved by **GRANTOR** if necessary to maintain or restore ecosystems naturally occurring on the Property or to preserve threatened, rare, endangered, or uncommon native species.

G. Control of Exotic Species. **GRANTOR** shall manage and control exotic species on the Property. No invasive non-native plant or animal species may be introduced into the Property. **GRANTEE** shall determine whether a non-native species is invasive or whether it would have adverse effects on the Property.

H. Control of Populations. **GRANTOR** shall use its best efforts to control wildlife populations on the Property in order to correct those situations where wildlife populations have been documented as significantly affecting natural conditions. Any measures taken for population control, including regulated hunting, shall be submitted to **GRANTEE**.

I. Restoration and Management of Threatened or Endangered Species. **GRANTOR** shall actively manage the Property for the preservation and protection of threatened, rare, endangered, or uncommon native species on the Property. Active management may include, but need not be limited to, mechanical thinning of woody species, the use of herbicides, and prescribed burning. Restoration of native species shall be performed with caution and based on scientific evidence documenting the species' historical occurrence on the Property.

J. Use Tolerance. **GRANTOR** shall from time to time determine the proper use-tolerance or durability of all or any portion of the Property and specify the corrective steps to be taken if overuse occurs that may, in **GRANTOR**'s opinion, impair natural conditions.

K. Research and Collecting Permits. Anyone wishing to engage in scientific research on the Property shall first obtain written permission from **GRANTOR**.

L. Boundary Markers. Boundaries on the Property shall be made clearly evident by placing markers or boundary signs in a conspicuous manner at corners and/or other strategic locations.

M. Fences. Fences and barriers may be installed as necessary to further the purposes of this Easement. Fences and barriers shall not be in a form that will have a detrimental effect on the movement of wildlife or other natural objects.

N. Trails. The location and specification of any trails other than natural wildlife paths shall be approved by **GRANTEE**. Trails shall be adequate to provide for permitted use of the Property, as outlined in the preliminary and final resource management plans and other baseline documentation.

O. Other Structures and Improvements. Structures or facilities shall be allowed on the Property in harmony with the purposes set forth in the preliminary and final resource management plans.

P. Subdivision. Subdividing the Property by any means is strictly prohibited.

Q. Rights of Way. Except for those in existence when this Agreement is signed, the granting of new rights-of-way through the Property for the installation,

transporting, or use of lines for water, sewage, electricity, telephone, gas, oil or oil products is strictly prohibited except with written permission of the **GRANTEE**.

R. Grantor's Retained Rights. **GRANTOR** and its successors in interest retain the right to perform any act not specifically prohibited or limited by this section, provided it does not violate the purpose of this Easement. These ownership rights include but are not limited to the right to exclude any member of the public from trespassing on the Property.

III. INDEMNIFICATION; TAXES

Indemnification. **GRANTOR** does hereby agree to pay, protect, indemnify, hold harmless and defend at its own cost and expense, **GRANTEE** and its agents, employees and representatives, from and against any and all claims, liabilities, expenses, costs, damages, losses, and expenditures (including reasonable attorneys' fees and disbursements hereafter incurred) arising from, of, or in connection with injury to or death of any persons; physical damage to the Property; the presence or release in, on or about the Property at any time, of any substance now or hereafter defined, listed or otherwise classified pursuant to any law, ordinance, or regulation as a hazardous, toxic, polluting substance; or other injury or other damage occurring on or about the Property, unless such injury or damage is caused by **GRANTEE** or one of its agents, trustees, employees or representatives.

Taxes. **GRANTOR** shall pay immediately, when first due and owing, all general taxes, special taxes, special assessments, water charges, sewer service charges, and other charges which may become a lien on the Property unless **GRANTOR** objects timely to the amount or validity of the assessment or charge and diligently prosecutes an appeal

thereof, in which case the obligation hereunder to pay such charges shall be suspended for the period permitted by law for prosecuting such appeal and any applicable grace period following completion of such action.

IV. ADMINISTRATION AND ENFORCEMENT

Written Notice. Any notice that either **GRANTOR** or **GRANTEE** may want or need to give to the other shall be in writing and shall be delivered by either first-class postage or hand-delivery; if to **GRANTOR**, then at the Campbell County Conservation District, 8351 East Main Street, Suite 104, Alexandria, Kentucky 41001; and if to **GRANTEE**, then at the Department for Natural Resources, 375 Versailles Road, Frankfort, KY 40601. Either party may change its mailing address by written notice to the other party.

Grantee's Right of Entry. **GRANTEE** shall have the right to enter the Property, in a reasonable manner and at reasonable times, but always upon prior notice to **GRANTOR** for the purposes of either inspecting the Property to determine if **GRANTOR** is in compliance with the terms of this Easement, obtaining evidence for the purpose of seeking enforcement of this Easement, or performing scientific research and/or actively managing the Property to effectuate the purposes of this Easement.

Grantee's Remedies. In the event of a violation of any term, condition, covenant, or restriction contained in this Easement, **GRANTEE** may immediately enforce any of the remedies set forth in 418 KAR 1:070 or any other remedies available by law. Any failure by **GRANTEE** to avail itself of these remedies shall not be deemed a waiver or forfeiture of the right to enforce any term, condition, covenant or purpose of this Easement. Grantee may, following reasonable written notice to **GRANTOR**,

institute suit to enjoin any violation of the terms of this Easement, including injunctive relief. Except when an ongoing or imminent violation could irreversibly diminish or impair the conservation values of the Property, **GRANTEE** shall give **GRANTOR** written notice of the violation and sixty (60) days to correct it before taking legal action. **GRANTEE** shall also have available all legal and equitable remedies to enforce **GRANTOR**'s obligations under this Easement. If **GRANTOR** is found in violation of any of its obligations, **GRANTOR** shall bear all costs associated with correcting the violation, including costs of work required and materials used to correct the violation and restore the restricted land to its condition prior to the violation; administrative costs incurred by **GRANTEE**, and court costs and reasonable attorneys' fees incurred by **GRANTEE** in enforcing the Easement.

The rights herein granted shall be in addition to, and not in limitation of, any other rights and remedies available to **GRANTEE** for protection of the Property. Exercise by **GRANTEE** of one remedy hereunder shall not have the effect of waiving the use of any other remedy at any other time.

Notice from Government Authorities. **GRANTOR** shall deliver to **GRANTEE** copies of any notice of violation or lien relating to the property received by **GRANTOR** from any state or federal authority within five (5) days of receipt by **GRANTOR**. Upon request by **GRANTEE**, **GRANTOR** shall promptly furnish **GRANTEE** with evidence of **GRANTOR**'s compliance with such notice or lien where compliance is required by law.

Notice of Proposed Sale. In addition to the requirements set forth in the Baseline Documentation, Memorandum of Agreement, and 418 KAR Chapter 1, **GRANTOR**

shall promptly notify **GRANTEE** in writing of any proposed sale of the Property and provide the opportunity for **GRANTEE** to explain the terms of the Easement to potential new owners. Additionally, **GRANTOR** agrees that the terms, conditions, restrictions and purposes of this Easement will either be referenced or inserted by **GRANTOR** in any subsequent deed or other legal instrument by which **GRANTOR** divests itself of any interest in the Property.

V. BINDING EFFECT; ASSIGNMENT

Runs with the Land. Except as otherwise provided in this Easement, the obligations imposed herein shall be a burden upon and shall run with the Property and shall bind **GRANTOR**, its successors and assigns in perpetuity. This Easement shall extend to and be binding upon **GRANTOR** and **GRANTEE**, their respective successors in interest and all persons hereafter claiming under or through **GRANTOR** and **GRANTEE**. Any right, title or interest herein granted to **GRANTEE** also shall be deemed granted to each successor in interest of **GRANTEE** and the word “**GRANTEE**” shall include all such successors and assigns.

Assignment. With the written approval of **GRANTEE**, **GRANTOR** may convey, assign, or transfer this Easement to a unit of federal, state or local government or similar local, state, or national entity that is a “qualified holder” under KRS 382.850(1) and whose purposes include promoting the preservation or conservation of natural resources; provided, however, that any such conveyance, assignment or transfer requires that the purposes for which this Easement was granted will continue to be carried out.

Extinguishment. GRANTOR agrees that this conveyance of a perpetual Easement gives rise to a property right, immediately vested in GRANTEE, with a fair market value that is at least equal to the proportionate value that the Easement, at the time of this conveyance, bears to the value of the Property as a whole at that time. The proportionate value of GRANTEE's property rights shall remain constant.

Recording and Effective Date. GRANTEE shall ensure that all acts necessary for the prompt recording of this Easement in the land records of Campbell County, Kentucky, shall be accomplished. GRANTOR and GRANTEE intend that this Easement and the restrictions arising hereunder shall take effect on the day of execution by GRANTOR and GRANTEE.

VI. INTERPRETATION

Interpretation. This Easement shall be interpreted under the laws of the Commonwealth of Kentucky. The invalidity or unenforceability of any provision of this Easement shall not affect the validity or enforceability of any other provision of this Easement or any ancillary or supplementary agreement relating to the subject thereof.

Any legal action brought to enforce the terms of this Easement shall be filed in the Franklin Circuit Court, Frankfort, Kentucky.

VII. AMENDMENT

If circumstances arise under which an amendment to or modification of this Easement is appropriate or necessary, GRANTOR and GRANTEE may by mutual written agreement jointly amend this Easement, provided that no amendment shall be made that will adversely affect the qualification of this Easement or the status of GRANTEE under any applicable federal or state laws. Any such amendment shall be

consistent with the protection of the conservation and preservation values of the Property and the purposes of this Easement, shall not affect its perpetual duration, shall not permit any private inurement to any person or entity, and shall not provide any less protection to the conservation values protected by this Easement. Any such amendment shall be recorded in the land records of Campbell County, Kentucky. Nothing in this paragraph shall require **GRANTOR** or **GRANTEE** to agree to any amendment or to consult or negotiate regarding any amendment.

THIS EASEMENT reflects the entire agreement of **GRANTOR** and **GRANTEE** regarding the terms of any conservation easement pertaining to the Property. Any prior or simultaneous correspondence, understandings, agreements and representations are null and void upon execution hereof, unless set out in this Easement.

TO HAVE AND TO HOLD this Conservation Easement, together with all appurtenances and privileges belonging or in any way pertaining thereto, either in law or in equity, for the use and benefit of **GRANTEE**, its successors and assigns, forever.

IN WITNESS WHEREOF, the Campbell County Conservation District, **GRANTOR**, has executed this Deed of Conservation Easement this the 12th day of

August, 2008.

CAMPBELL COUNTY CONSERVATION DISTRICT

By C. Alan Ahrman Sec. / Treas.
C. Alan Ahrman
Secretary/Treasurer

STATE OF KENTUCKY
COUNTY OF CAMPBELL

I, the undersigned, a notary public duly authorized in the county and state aforesaid, do hereby certify that on this day C. Alan Ahrman personally appeared before me and executed the foregoing instrument as Secretary/Treasurer of the Campbell County Conservation District, Alexandria, Kentucky and acknowledged before me that he executed the same as such officer in the name of and for and on behalf of said entity, having been designated by Grantor's Board on August 4, 2008 to act as its representative in executing this Deed of Conservation Easement.

IN WITNESS WHEREOF, I have hereunto set my hand and official seal this the 12 day of August, 2008.


NOTARY PUBLIC

My Commission Expires: 5/1/2012

IN WITNESS WHEREOF, the Kentucky Heritage Land Conservation Fund Board, **GRANTEE**, hereby accepts this Deed of Conservation Easement this the 4 day of September, 2008.

KENTUCKY HERITAGE LAND
CONSERVATION FUND BOARD

BY: 
Chairman

STATE OF KENTUCKY
COUNTY OF FRANKLIN

I, the undersigned, a notary public duly authorized in the county and state aforesaid, do hereby certify that on this day William H. Martin personally appeared before me and executed the foregoing instrument as Chairman of the Kentucky Heritage

Land Conservation Fund Board, and acknowledged before me that he executed the same as such officer in the name of and for and on behalf of said entity.

IN WITNESS WHEREOF, I have hereunto set my hand and official seal this the 4 day of September, 2008.



NOTARY PUBLIC

My Commission Expires: 5/1/2012

CERTIFICATE OF CONSIDERATION

I, C. Alan Ahrman, Secretary/Treasurer of the Campbell County Conservation District, Alexandria, Kentucky, having been designated by Grantor's Board on August 4, 2008 to act as its representative in executing this Deed of Conservation Easement, do hereby certify, pursuant to KRS Chapter 382, that the above-stated consideration is the true, correct and full consideration paid for the property herein conveyed.

CAMPBELL COUNTY
CONSERVATION DISTRICT

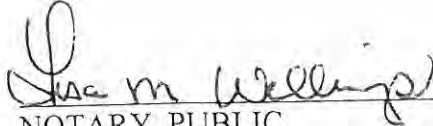
By: 
C. Alan Ahrman
Secretary/Treasurer

STATE OF KENTUCKY
COUNTY OF CAMPBELL

I, the undersigned, a notary public duly authorized in the county and state aforesaid, do hereby certify that on this day C. Alan Ahrman personally appeared before me and executed the foregoing instrument as Secretary/Treasurer of the Campbell County Conservation District, Alexandria, Kentucky and acknowledged before me that he

executed the same as such officer in the name of and for and on behalf of said entity, having been designated by Grantor's Board on August 4, 2008 to act as its representative in executing this Deed of Conservation Easement.

IN WITNESS WHEREOF, I have hereunto set my hand and official seal this the 12 day of August, 2008.


NOTARY PUBLIC

My Commission Expires: 5/1/2012

CERTIFICATE OF CONSIDERATION

I, William H. Martin, Chairman of the Kentucky Heritage Land Conservation Fund Board, acting for and on behalf of the Commonwealth of Kentucky, **GRANTEE**, do hereby certify, pursuant to KRS Chapter 382, that the above-stated consideration is the true, correct and full consideration paid for the property herein conveyed.

KENTUCKY HERITAGE LAND
CONSERVATION FUND BOARD


Chairman

STATE OF KENTUCKY
COUNTY OF FRANKLIN

I, the undersigned, a notary public duly authorized in the county and state aforesaid, do hereby certify that on this day William H. Martin personally appeared before me and executed the foregoing instrument as Chairman of the Kentucky Heritage Land Conservation Fund Board, and acknowledged before me that he executed the same as such officer in the name of and for and on behalf of the said entity.

IN WITNESS WHEREOF, I have set my hand and official seal this the 4
day of September, 2008.

Lisa M Wellmeyer
NOTARY PUBLIC

My Commission Expires: 5/1/2012

APPROVED BY:

Jonathan B. Mitchell
Jonathan Miller, Secretary
Finance and Administration Cabinet

THIS INSTRUMENT PREPARED BY:

APPROVED TO FORM AND LEGALITY:

Barbara M. Pauley
Barbara M. Pauley, Attorney
Office of General Counsel
Energy and Environment Cabinet
12th Floor, Capital Plaza Tower
Frankfort, Kentucky 40601
502/564-3350
502/564-3354 - facsimile

Patrick McLean
Attorney
Finance and Administration Cabinet

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Campbell County Conservation District
8351 East Main Street, Suite 104, Alexandria, KY 41001
Phone: 859-635-9587 FAX: 859-635-0496 E-mail: campbelcd@fuse.net
Kentucky Heritage Land Conservation Fund Board
Tollgate Property Grant Application - 21 August 2007

Preliminary Resource Management Plan

1. Purpose

The Campbell County Conservation District's goal is to protect and restore the land while providing for appropriate public use. This may include recreational uses such as a canoe and kayak launch site, hiking trails that offer both easy and challenging terrain, areas for bird watching, and other nature study activities. The District anticipates implementing land restoration projects such as forest improvement, exotic species removal, and native plant establishment. Educational programs on land management, wildlife habitat management and restoration, as well as on the historical and cultural resources would be offered by the Conservation District and partners. The area would also be made available to small groups for environmental education studies, or for students from nearby universities and colleges to conduct research.

2. Management Activities

a. Natural Resource Protection:

Protection and restoration of the land along the Licking River and protection of buffer lands around the property will be of primary concern in the initial stages.

The Tollgate property includes over 3,000 feet of frontage along Grant's Bend on the Licking River. The property also encompasses over 2,000 feet of stream bank along Riffle Creek, including its junction with the Licking River. Seasonal flooding affects areas along the Licking River and there are several possible wetland areas around the confluence of Riffle Creek and the Licking River. Large canopy trees, predominately soft maple 20-30" in diameter, are found along the flood plain. Riffle Creek is an active, rock-strewn stream with a wide bed that is pleasing to the eye and to walk along.

The Tollgate property includes a well-defined ridge that is topped with two knolls. Elevation runs from approximately 666 feet to 460 feet. There are two small ponds on the property, both under ¼ acre. One is located on the ridge between the two knolls and the other pond is near the old farmstead and barn. The upland area consists primarily of old fields and pasture that is reverting to woods. A little over 50 percent of the soils are Eden silty clay loam.

A brief consultation with the Nature Conservancy indicated that to date, no endangered or threatened plant or animal species have been identified on the property. We anticipate finding animals and birds typical to the area, and the Kentucky Department of Fish and Wildlife Resources lists 230 species that are generally recognized to be found in Campbell County.

Protection of the area from encroachment by development will be a primary concern. The District will work with their partners to promote the concept of conservation easements for

adjacent property owners to help provide a buffer for this land, helping to ensure future possibilities for expansion of the area along the river corridor.

b. Resource protection and enhancement

The detailed biological inventory will be conducted according to the requirements of the Kentucky Heritage Land Conservation Fund Board. The Resource Management Plan will be revised to accommodate any findings from that report.

The goal of the Conservation District will be to provide a variety of habitats for migratory birds, as well as plants and animals endemic to the area. Habitat improvement may also result in attraction of species that have been extirpated over the years, due to lack of appropriate food and cover. The District intends to work with interested entities and individuals to survey the bird population on the property and to take appropriate measures to protect and enhance that population. If the biological survey reveals any threatened or endangered species, or species of special concern, specific management plans will be developed to protect and enhance these populations.

Non-native species such as fescue, garlic mustard, several varieties of honeysuckle, and multiflora rose are commonly found in this area. A plan for eradication and/or control of these species will be developed and implemented. There are some areas on the ridge tops consisting of Faywood and Nicholson soils that present an opportunity for enhancement with native grasses and other herbaceous plants. Soils and topography indicate that forest enhancement practices for wildlife habitat are well-suited for much of the land.

The pond on the north section of the property appears to be in good condition and it should provide quality habitat for wildlife. Upland ponds such as this one normally provide excellent habitat for amphibians such as salamanders. The other pond may present an opportunity for restoration work or conversion to a shallow wetland area. The property includes some possible wetland areas along the Licking River and Riffle Creek that have the potential for enhancement, and possibly eradication of non-native species.

Refuse needs to be policed from the banks of both the Licking and Riffle Creek. Like many old farm sites, there are various small refuse piles and scattered debris throughout the property but no large dump sites. A preliminary inspection did not reveal any chemical storage tanks, drums or similar refuse. One initial goal will be the use of volunteer community efforts to remove all refuse from the property. This will not only enhance the beauty of the property but will prevent these objects from being carried into the Licking River.

c. Archeological and Historical Resource Protection

An archeological survey of the property will be conducted in accordance with the guidelines established by the Kentucky Heritage Land Conservation Fund Board. The Resource Management Plan will be revised to accommodate any findings from that report.

Two home sites are known to exist on the property: the “Old Farmhouse” and the “Log Cabin.” The latter is part of an abandoned farm site that is scenically located on top of the lower knoll. The site includes the shell of a four room house, part of which is a two room log cabin. Because much of the log cabin remains under at least partial roof and siding, many of the logs appear to

be useable for restoration. A stone smokehouse 10 feet behind the cabin appears to be in reasonably good condition. In the immediate vicinity are the remains of several large foundations or walls, including a well-laid stone retaining wall that is 4 to 5 feet high in places. Nearby is a large beehive-shaped, stone-lined well.

The Campbell Conservancy will work with the local historical society to identify any historical resources present on the property. The Conservancy has already identified a local resident with first hand knowledge of the family that once lived in the Log Cabin. The cabin site may provide an interesting area for archaeology, restoration and history-based educational programs.

The Old Farmhouse site is on the lower portion of the property, facing Riffle Creek. It includes a small, old farm home that is currently uninhabited. Although the home had a tenant/renter until several months ago, it appears to be in poor condition. A large dairy barn nearby includes an interesting wooden silo that appears to be in reasonably good condition. The barn has significant damage to the uphill foundation wall and restoration of the barn, other than the silo, may be questionable.

d. Security and Safety

Riffle Creek acts as a natural barrier that protects much of the property from encroachment by motorized vehicles. The north entrance road that leads to the top of the ridge can be easily secured with a gate and there is currently an old gate at this site. Topography will prevent bypassing the gate without extensive additional protective measures.

Two other gates are deemed necessary to protect the property. One will be placed at the entrance to an old bridge that crosses Riffle Creek until that bridge can be repaired or replaced. The bridge consists of two large stone piers approximately 20 to 25 feet tall, with a dilapidated wooden deck that is only suitable, at best, for foot traffic at this point. The other gate will be used to secure an old entrance road or driveway that leads down to a small flat area on the east side of Riffle Creek, along Highway 915. This area is currently overgrown with scrub growth and an old cable secures the entrance. This would be replaced with a gate, as the intention is to use this area for an initial parking area. The creek can be easily crossed at this area with the strategic placement of a few creek rocks. The north entrance, an old farm road, will provide access for work on the upper portion of the property.

The Old Farmhouse may provide an excellent opportunity for use by a tenant/caretaker. A reduced rent could be offered in exchange for basic caretaker responsibilities. Unless and until such use could be arranged the property will be boarded shut or otherwise secured, as will the other existing structures on the property to the extent feasible.

Known well openings will be secured prior to any public access of the property.

The borders of the property will be marked with appropriate signage and an additional sign regarding the rules for proper use of the property and emergency contact information will also be posted at the entrance and parking area.

e. Maintenance

The District plans to initially clear a small parking area on the east side of Riffle Creek that will provide parking during the initial phases of the project.

A simple kiosk with a map and information about the property, including project sponsors, will be constructed in the main entrance parking area. Additional signage and information will be posted at the canoe launch area, as we hope this will become a stopover for canoe trips on the Licking River.

Two options are under consideration at this time for the main entrance to the property, depending on the feasibility of repairing or replacing the bridge that crosses Riffle Creek. This entrance provides the best access to the canoe launch site. The road crossing the bridge to the old farmstead, as well as the old farm road leading to the river, will need to be graded and graveled. Several culvert pipes will also need to be installed. Maintenance work is also needed on the gravel road that leads to the top of the ridge. Currently this single lane road is only suitable for four wheel drive vehicles. Maintenance will include grading the surface, applying additional gravel and installing some erosion control measures at several locations. Depending on the final location of the main entrance to the property, this road may need more extensive improvements and extension to provide safe access to the canoe launch site. Parking areas will need to be established at the main entrance and the canoe launch site. The District intends to install lots based on agricultural heavy use area construction designs consisting of filter fabric topped with #2 or #4 rock with a finish layer of dense grade aggregate. The parking lots and roads will require minimal maintenance, with more anticipated for the lot near the canoe access as it is located in an area subject to flooding.

The District anticipates working with other interested community groups to remove refuse from various locations on the property. The Conservancy will assist in organizing volunteers for this effort.

Volunteers will also be used for initial work on a trail system, which is also contingent upon the location chosen for the main entrance to the property. The Conservancy will assist in organizing volunteers for this effort.

At this time, no permanent restroom facilities are planned. A refurbished portable restroom will be purchased to provide this needed service, and cleaned by a local vendor as needed.

Staff will be provided by the Conservation District to oversee the project, with assistance from the Conservancy and other cooperating agencies and organizations. Additional staff may be secured by an intern-relationship with Northern Kentucky University or Thomas More College.

The cost of liability and property insurance will be absorbed by the district into their existing policy through the Kentucky All Lines Fund.

3. Improvements, Access, Agreements, Public Use and Restrictions

a. Physical Improvements

The only existing physical improvements currently on the site are the two home sites and the gravel road described above. Study and/or restoration of these improvements will not involve the alteration of land or vegetation in any meaningful way.

Installation of the temporary parking facility will be in an area that will not involve the removal or disturbance of any significant vegetation or trees. Work will be done without disturbing Riffle Creek and the surrounding area.

Other work, such as restoration of the bridge and road improvements will be necessary, depending upon the determination of the main entrance.

Trails will not be paved or mulched, but the path will be cleared of sufficient vegetation to allow for foot traffic. Some strategic rock placement or steps may be needed to provide safe access in some areas and water bars or other methods may need to be employed in areas to limit soil erosion.

As noted previously, no permanent restroom facilities are planned. A refurbished portable restroom will be purchased to provide this needed service, and cleaned out by a local vendor as needed.

b. Access

Primary initial access will be provided by the installation of the small parking area described above. From there, access to the property would be by foot only. Opening the property to vehicular traffic will be contingent upon the decision made on the location of the main entrance and improvements to the road. Currently, there are no plans to open the property to vehicle traffic other than for maintenance work.

Public visitation will be limited to daylight hours and access to any existing structures will be prohibited until such access is determined to be safe. Public access will be limited entirely at first, until the property can be thoroughly evaluated for any hazards that can be mitigated, marked or both.

c. Agreements

There are no known existing agreements affecting the property. Eventually, agreements may include a lease agreement for a tenant caretaker and perhaps agreements relating to certain maintenance work, as described in this plan.

All agreements executed in the future will be in compliance with the requirements of the Kentucky Heritage Land Conservation Fund Board.

d. Public Use

The land is currently privately owned, with no public use of the property. The intended uses at this point are for hiking, bird and wildlife watching, and other related forms of passive

recreation; launching of canoes and kayaks; conservation land management demonstration projects, and educational programs on a variety of natural resource issues, management and restoration techniques, and natural and cultural history. The area would also be open for small groups to engage in environmental education studies, or for the conduct of research by students from nearby Northern Kentucky University, Thomas More College, Gateway Community College, or any of the other colleges in the area. Research projects and methods will require prior approval by the District and/or the Kentucky Heritage Land Conservation Fund Board, and any necessary permits from the Kentucky Department of Fish and Wildlife Resources or other local, state, or federal agencies.

We understand that any other future uses, such as non-motorized bike trails and horseback riding, or installation of permanent facilities such as shelter houses and restrooms would require written approval from the Kentucky Heritage Land Conservation Fund Board.

e. Restrictions

The collection of living and non-living things will be restricted to use for qualified educational and research programs. The use of motorized vehicles (maintenance excluded) until proper roads and parking facilities are installed will be prohibited. Hunting and open fires of any kind (maintenance excluded, with proper permits) will be prohibited.

Public visitation will be limited to daylight hours and access to any existing structures will be prohibited until such access is determined to be safe. Public access will be limited entirely at first, until the property can be thoroughly evaluated for any hazards that can be mitigated, marked or both.

4. Preliminary Cost Estimates and Funding Sources

The itemized budget is included on page three of the grant application form.

We anticipate annual funding from the Conservation District to continue at a minimum of \$5,000 per year. This does not include the Conservation District staff time dedicated to the initial start-up of the project or ongoing maintenance of the property. Funds for a future intern would be provided by the Conservation District, as that person may also have other work responsibilities not tied to management of the property. The cost of liability and property insurance will be absorbed by the district into their existing policy through the Kentucky All Lines Fund.

The Campbell Conservancy has pledged their continuing support, volunteer services, skills and labor, and some funds for initial start-up costs, as well as continued funding as their finances allow. The Conservancy has also indicated an interest in helping the District to continue seeking both public and private funds for the establishment and maintenance of the property.

The District intends to utilize any local, state, or federal in-kind services or programs that will help implement the restoration and maintenance projects outlined in this project.

Kentucky Heritage Land Conservation Fund Annual Management Report

Date: 01 June 2009
Awarded Agency: Campbell County Conservation District
Project Name: Hawthorne Crossing Conservation Area (Tollgate)
County: Campbell
Acres: 134.693
Date of Acquisition: 12 August 2008

General Comments:

The name Hawthorne Crossing Conservation Area was chosen to commemorate the history of the area. The name was selected by members of the Campbell County Conservation District and Campbell Conservancy, in consultation with the Campbell County Fiscal Court and Campbell County Historical Society.

1. Status of the Project:

- a. 12 August 2008 - Closing on Property. A separate bank account for this project was set up prior to the closing. Any interest received on these funds is kept in this account to be applied to management of the property.
- b. September 2008 – A gate was put up on the established gravel road leading to the cabin. No trespassing signs were posted. Temporary measures were taken to control access to buildings, cabin, and cisterns for safety reasons. Work continues on this.
- c. 18 September 2008 – Executed agreement with Campbell County Fiscal Court that outlines Campbell County’s assistance with property for established road upkeep and necessary mowing.
- d. September 2008 – Dr. Doug Hume from the Northern Kentucky University Department of Applied Anthropology was contacted to help with community meetings about the property. He designed a student research project to measure conservation attitudes of neighbors and those interested in the project, and to gather history about the property.
- e. 03 October 2008 - Dedication of Hawthorne Crossing Conservation Area. Horace Brown, Joe Dietz, and Lisa Wellings from the Heritage Land Conservation Fund Board attended. The Conservation District newsletter with the article about the Dedication is attached, along with a copy of the program from the Dedication. A photographic journal was also prepared for the event. Approximately 60 people attended the event, which was invitation-only, due to limited access to the property at this time. Campbell County Community Media (local cable access) filmed the event and is incorporating it into a program about the area. We have started putting information on our web site about Hawthorne Crossing at <http://home.fuse.net/campbellcd/>
- f. November 2008 - The Conservation District set up a board committee consisting of Ken McCormick, chair; Larry Varney; Dennis Walter and Gene Dobbs. Board member Alan Ahrman assists as time permits. All committee meetings are advertised as public meetings and the committee makes a report at all regularly scheduled Conservation District board meetings.
- g. November 2008 – Boundary marking initiated. All survey pins are now located with a metal post to which signs will be affixed. Marking of boundary trees will commence in fall of 2009. We plan

to use a red ring around the trees and post signs at each corner and possible site of entry from neighboring properties. We will send the sign language to the KHLCF Board for approval later this year.

- h. December 2008 - Heritage Council was contacted for their determination on the presence of known archaeological sites that might be located on the property and if an archaeological survey will be needed. We received their opinion in March 2009 stating that an archaeological assessment would be needed.
- i. December 2008 - Application was made to the Ky. Div. of Forestry for a Forest Stewardship Plan. Field work for the plan was accomplished in December and January and the plan was received in February 2009.
- j. December 2008 – Requested Conservation Plan from Natural Resources Conservation Service. Not completed to date.
- k. December 2008 – Joyce Bender with the Kentucky Nature Preserves Commission was asked to make a site visit to assist with questions on marking of boundaries, access issues, buildings on the property, and overall management strategies for a natural area. Site visit accomplished in February 2009. Also consulted with Joe Dietz and Lisa Wellings on various questions about boundary markings and property management.
- l. January 2009 – Biological Inventory request for proposals was sent out. A contract was executed in April 2009 with Third Rock Consultants, Inc. to complete the work.
- m. January 2009 – Clay Smitson, Private Lands Biologist with the Kentucky Department of Fish and Wildlife Resources, was requested to prepare a Wildlife Habitat Plan for the property. Site visit made in February 2009. Plan in process.
- n. January 2009 - Joint Management Team Established – The first meeting was held in February 2009 and the team will meet monthly as needed, on the fourth Thursday of the month. The team consists of the Conservation District committee; members of the Campbell Conservancy - David Peck, Joe Piller, Don Girton, and Pete Garrett; and a representative of the Campbell County Fiscal Court, Melissa Williams. Dr. Doug Hume from the Northern Kentucky University Department of Applied Anthropology was asked to join the team as a partner. The Campbell Conservancy owns 5 acres adjoining the Conservation District's 135 acres and it is the intent of all parties to manage them in harmony and uniformity. The Joint Advisory Team can make only recommendations which must be taken back to each party's full board for action. Conservation District actions that may require permission from the Kentucky Heritage Land Conservation Fund Board will be forwarded to that body. The Joint Advisory Team is currently working on a memorandum of understanding that will guide the joint management effort into the future.
- o. February 2009 – Draft timeline for work submitted to Joint Advisory Team for review.
- p. 30 March 2009 – A community meeting about the property was held at the Licking Valley Baptist Church with 72 people in attendance. Joe Dietz with KHLCF attended and spoke about the Heritage Land Conservation Fund. Consulted with Joe on preparation of materials for the meeting, which included a summary of the conservation easement and permitted uses on the land. Dr. Hume introduced the history/conservation attitudes project and set up two evenings for people

to visit with students to gather their histories of the area. Students continue work on the project and one student has elected to write their master's thesis on history of the area. To learn more about this project, visit: <http://aearg.nku.edu>. They hope to complete their work by August 2009.

- q. March 2009 – Initial contact was made with the 478th Engineer Battalion (Army Reserve) in Ft. Thomas about possible assistance on property access (bridge and road), and buildings. They have assistance available for road construction for the canoe access, parking lot construction, surveying for trails, and possibly with the house and other buildings.
 - r. April 2009 – Application made for Environmental Quality Incentives Program – Air Quality Initiative to provide technical assistance and funds for planned establishment of native grasses and reforestation. Application pending.
 - s. May 2009 – Archaeological Assessment request for proposals was sent out with replies requested by June 19.
 - t. May/June 2009 – Temporary access control measures for buildings and cisterns are being replaced with more substantial control measures until decisions can be made about restoration, demolition, or permanent closure of these features. These decisions are pending historical and archaeological review, at which time we will request permission from the KHLCF Board for any actions.
2. Compliance with Preliminary Resource Plan
- a. Boundary marking has started and Heritage signs have been posted.
 - b. A locked gate was put up to control access to the property. Work has been initiated to secure buildings and cisterns on the property until decisions are made on what to do with them in the future.
 - c. Initial Community Meeting held and gathering of history started.
 - d. Forest Stewardship Plan was completed.
 - e. Wildlife Plan is in progress.
 - f. Conservation Plan has been requested from Natural Resources Conservation Service.
 - g. Historical Building Review – scheduled for mid-late June with Rhonda Deeg, a specialist/instructor in building restoration. Campbell County Historical Society has also been asked to provide assistance with the Cabin.
 - h. A timeline for the project is being developed by the Joint Advisory Team.
3. Status of the Final Resource Management Plan:
- a. Biological Inventory – Request for proposals was sent out in January 2009. A contract was executed with Third Rock Consultants of Lexington in April 2009. Their work is to be completed by December 2009.
 - b. Archaeological Assessment – The Kentucky Heritage Council was contacted in December 2008 for their determination on the presence of known archaeological sites that might be located on the property and if an archaeological survey will be needed. We received their opinion in March 2009 stating that an archaeological assessment would be needed. With advice from Craig Potts at the Ky. Heritage Council, a request for proposals was drafted and sent out. We hope to complete this by December 2009.

Approved by the Joint Advisory Team on 28 May 2009

Submitted by Mary Kathryn Dickerson, Campbell County Conservation District

Kentucky Heritage Land Conservation Fund

Annual Management Report

Date: 02 July 2010

Awarded Agency: Campbell County Conservation District

Project Name: Hawthorne Crossing Conservation Area (Tollgate) County: Campbell

Acres: 134.693 Date of Acquisition: 12 August 2008

General Comments:

As reported in 2009, a Joint Advisory Team was formed for the Hawthorne Crossing Conservation Area, which consists of the Heritage Land Conservation Fund Board tract of 134.693 acres (Heritage Tract) and the adjacent 5 acres owned by the Campbell Conservancy (Conservancy Tract). The team includes four members from the Campbell County Conservation District Board (District), four members from the Campbell Conservancy and one advisor from the Campbell County Fiscal Court. Others join the group for meetings as their expertise is needed. A working agreement for the team was executed and the team meets as frequently as monthly, as determined by the work to be accomplished. The Campbell County Conservation District meets monthly and includes the project as a part of their regular business.

Students from Northern Kentucky University, under the leadership of Professor Doug Hume, completed a brief history of the Hawthorne Crossing area. They conducted interviews with residents and collected information which was published and is available on the Conservation District web site at <http://home.fuse.net/campbellcd/>. The project included a community attitudes survey about conservation and preservation. This project greatly helped with community outreach about the project and generated a lot of interest. Additions and corrections to the history are being made as time and student help is available.

The District recently secured the services of a local volunteer who has an undergraduate degree in wildlife biology. She has worked in the past in various capacities with land and wildlife management and since May 2010 has devoted about two afternoons a month to assist the District Coordinator with projects on the property.

A local birder conducted a winter (Dec. 2009) bird count on the property and plans to include the site in his bird count each year.

Conservancy members led a group of hikers from a Cincinnati hiking club on a tour of the property in May 2010. This group is interested in volunteering to assist with trail establishment and maintenance, as well as work on invasive species removal.

Conservation District Chairman Larry Varney and District Coordinator Mary Kathryn Dickerson attended the Heritage Land Conservation Fund Board training in October 2009 in Louisville.

A. Status of the Project:

To date the District has spent only a small amount of the management funds allocated for the project. In order to successfully accomplish all of the needed work, we will need to secure additional funds to stretch the funding that we currently have available. We are pursuing several grants and funding opportunities to ensure that we can achieve the restoration goals for the project. We will likely need to request an extension on the use of the Heritage Land Conservation Fund Board management funds that were attached to the project. We will request the extension in January 2011 based on our progress over the next six months. The final resource management plan is due in February 2011.

B. Compliance with the Preliminary Management Resource Plan:

Boundary Marking:

Boundary marking has proceeded with over ½ of the property boundary marked with signs. (Photo at right: Conservation District supervisor and joint team chairman Ken McCormick with sign.)



We have consulted three adjacent landowners about the boundary marked to date to ensure that they are in agreement with placement of signs before we start marking the boundary by painting a ring around the trees.

Habitat Restoration Work:

The application for the Environmental Quality Incentives Program – Air Quality Incentive was changed by the Natural Resources Conservation Service to a Wildlife Habitat Incentives Program application and later withdrawn after it was deemed that the District was not eligible to receive funds under this federal Farm Bill program.

Several private contractors have been contacted to provide estimates on work on the property to include removal of invasive species and re-establishment of native vegetation. One contractor is interested in, and prefers, working with volunteers to provide some of the labor for the project to keep costs at a minimum.

The District Coordinator is in the process of obtaining the required non-commercial pesticide applicator license with a forestry certification to be able to assist with work on the property.

The Northern Kentucky University Center for Applied Ecology, through the Northern Kentucky Stream and Wetland Restoration Program (NKSWRP), has developed and submitted a project for consideration of the Kentucky Interagency Review Team. The NKSWRP is the "In-lieu Fee Mitigation Program" serving nine northern Kentucky counties: Boone, Kenton, Campbell, Carroll, Gallatin, Grant, Pendleton, Bracken and Mason. (In-lieu fee mitigation for the remainder of the state is administered by the Kentucky Department of Fish and Wildlife Resources.) The program uses fees paid by public and private entities that have impacted aquatic ecosystems to implement stream and wetland restoration and preservation projects in the region. This project would potentially assist with habitat restoration efforts on approximately 30 acres of the property along Riffle Creek and the Licking River. Activities proposed include wetlands hydrology re-establishment, bridge and fill removal and restoration of floodplain, ephemeral channel rehabilitation, meadow land vegetation rehabilitation, and forest land rehabilitation. The \$256,830 project includes funds for interpretive and boundary signage. The State Interagency Review Team will vote on this project at their July 2010 meeting.

Stream specialist Bob Hawley volunteered time to look at issues with Riffle Creek that may later impact the work proposed by the NKU Center for Applied Ecology. Mr. Hawley will furnish his comments to NKU as that project proceeds.

Professors at Northern Kentucky University, Dr. Kristy Hopfensperger and Dr. Rick Boyce, are working with the District on a National Fish and Wildlife Foundation Native Plant Conservation Initiative Grant. The proposal would look at different methods of removing *Lonicera maackii* and how that affects native plant community and ecosystem recovery. The District has offered matching funds and in-kind services for the project to provide materials and labor for removal of the bush honeysuckle on these acres. The Kentucky State Nature Preserves Commission and U. S. Fish and Wildlife Service have been informed about the project and we hope to receive their assistance with the grant if we are asked to develop a full proposal. If invited, we would enter a full proposal in September 2010.

We have been in contact with the Lee Andrews with the U. S. Fish and Wildlife Service in Kentucky to discuss possible joint projects at the property. He and Don Dott, Kentucky State Nature Preserves Commission, are planning a visit to the property in July 2010.

We have been in discussions with Don Dott, Kentucky State Nature Preserves Commission (KSNPC), to allow KSNPC to use the purchase price of the Heritage Tract as match for a Recovery Lands Acquisition grant. KSNPC has requested permission of the Heritage Land Conservation Fund Board and the Conservation District to do this. The Conservation District agreed in theory to the proposal but had some questions that are being answered. We hope to complete this by the end of July 2010.

Representatives from Gardens With Wings, Fred Miller and Patty Bigner, attended a joint team meeting in April 2010 to discuss possibilities for projects to enhance butterfly habitat at Hawthorne Crossing Conservation Area. This local team founded a web site at www.gardenswithwings.com to promote awareness of butterflies and habitat loss. They are based in Campbell County. The team will enlist their assistance with selection of plants as plans proceed for re-vegetation after invasive species removal. The team also will enlist their assistance with any type of plantings around the log cabin restoration site, as they felt this was the most appropriate place for any type of established gardens.

Farm Dump and Debris Removal:

Members of the Conservancy, District, Fiscal Court, and a community volunteer worked about six hours in March 2010 to remove trash, debris and tires from the Conservancy Tract, which fronts Licking Pike. They removed and properly disposed of approximately 60 tires and at least 45, 30-gallon bags of trash. Items were disposed of through the county's annual cleanup and fees were waived

for disposal of tires and trash. Although this work was not accomplished on the Heritage tract, it was a good learning experience for many as they had not been involved in this type of effort before.

Furthering this work, District staff and our volunteer are mapping and estimating volume and equipment needed for removal of farm and homestead refuse on the Heritage tract. Three District supervisors attended training in April 2010 to enable them to supervise workers from the county jail work release program. One District supervisor, Gene Dobbs, has been tutoring inmates at the jail for a number of years to prepare them to take the GED exam, so he is familiar with inmate behaviour. They will be able to take inmates out for work details and plan to use them for some of the cleanup work in the fall of 2010 as well as other projects.

Public Access:

We are pursuing an agreement with the 478th Army Reserve Engineer Battalion in Ft. Thomas to provide services and work on the property for establishing roads, trails, and possibly help with the buildings. They are looking for local training opportunities for survey work, heavy equipment operation, and other types of compatible training. The District would be responsible for any expendable materials such as fuel, rock, filter fabric, etc. used in the construction of roads and parking areas. They may also assist with other work. The request for this project is being processed, but may take until April 2011 to be cleared by the Army. However, this timeline fits within the project timeline for the major road building work. Smaller projects can be accomplished as training exercises and can be approved locally by the Commander.

The team has consulted with the Campbell County Road Department, the Kentucky Transportation Cabinet, and Cardinal Engineering, who volunteered their services. This information was used to generate six access options that were evaluated by the team. Considerations in the evaluation process included safety of route and highway encroachment, number and type of stream crossings, wetland and floodplain areas impacted and permits that would be needed for the work, length of roadway, impact on archaeological sites that would require further testing, ease of management to restrict access to sensitive areas (soils, vegetative communities, high-water conditions, cabin), and cost. The team selected their preferred access option and an alternative. Both are being evaluated and will be presented to the community before a final decision is made. Both routes, although previously established for private access to the land would bring more traffic past homes and the team wants to include the neighbors in the decision-making process as much as possible.

The local Department of Fish and Wildlife Resources Conservation Officer has been contacted and said that he will assist with patrolling to limit deer poaching on the property. A local fish and game club was also contacted and they have agreed to alert their members and have them talk to local residents about the issue.

Historical/Cultural Features

Rhonda Deeg, a professor of historical restoration in Indiana, volunteered her time to conduct an initial assessment of the log cabin and other buildings at the property. She furnished valuable information and recommended that the district have a full assessment performed. A work day was held in December 2009 to take down trees that were damaging the foundation of the cabin. This was done on the advice of Ms. Deeg and with consultation from the firm conducting the archaeological assessment. The District contracted with a Preservation Trades Member, Rudy Christian, to conduct an historical assessment of the buildings. It was further recommended that the District have the cabin dated by dendrochronologist Darrin Rubino from Hanover College. The District decided to wait on this until cabin restoration is in the foreseeable future. The District is making plans to "mothball" the cabin until it can be restored. The cabin and accompanying ice house have been insured under the District's policy.

The District has received donations of logs from several cabins in the county that were destroyed by fire or otherwise demolished. Some of the timbers were salvageable and may be used to help with restoration work.

David Peck with the Conservancy has applied for a grant from Leadership Northern Kentucky to assist with fundraising for cabin restoration.

The old farmhouse, barn, and cabin have been damaged in varying degrees by graffiti. The county police department and neighbors have assisted in helping to stop the damage. The District's insurance company was notified and a claim has been filed. Also, a claim was filed for damages to the barn roof from winds associated with Hurricane Ike in Sept. 2008. The fate of the old farmhouse and barn has not been decided but the Heritage Land Conservation Fund Board will be consulted before any final decisions are reached.

Old cisterns and other possible safety hazards are marked and contained with fencing as they are discovered. One of the more picturesque cisterns will be covered with grating to enable visitors to view it safely. The County Highway Department and Army Engineers have volunteered to assist with this project.

C. Status of the Final Resource Management Plan: (include status of archaeological and biological inventories, if applicable)

The Biological Inventory was completed in August 2009 and a public meeting was held in September to release the report. Ed Hartowicz with Third Rock Consultants in Lexington attended the meeting to present the report. Thirty-five people attended the presentation and the project received favorable news reports from the local papers. The document can be found on the District web site at <http://home.fuse.net/campbellcd/>

The Archaeological Assessment was completed in January 2010 and a public meeting was held in January to release the report. Marie Pokrant with GAI Consultants attended the meeting to present the report. Twenty-one people attended the presentation and the project received favorable news reports from the local papers. The document can be found on the District web site at <http://home.fuse.net/campbellcd/>

A Conservation Plan is being prepared for the property by Conservation District Agriculture Conservation Technician Kristin Scott.

District Coordinator Mary Kathryn Dickerson is compiling information from the various reports and projects to in order to prepare the final resource management plan. The timetable for this work includes a preliminary report to be presented to the team and subsequently to the public in late October or early November 2010.

Submitted by Mary Kathryn Dickerson, District Coordinator, Campbell County Conservation District

Kentucky Heritage Land Conservation Fund

Annual Management Report

Date: June 2011 (Submitted 05 July 2011 and incorporating the update of February 2011)

Awarded Agency: Campbell County Conservation District

Project Name: Hawthorne Crossing Conservation Area (Tollgate)

County: Campbell

Acres: 134.693

Date of Acquisition: 12 August 2008

General Comments:

The Joint Advisory Team, formed in 2009, continues to meet to guide the work on the property. Hawthorne Crossing Conservation Area consists of the Heritage Land Conservation Fund Board tract of 134.693 acres (Heritage Tract) and the adjacent 5 acres owned by the Campbell Conservancy (Conservancy Tract). The team includes four members from the Campbell County Conservation District Board (District), four members from the Campbell Conservancy and one advisor from the Campbell County Fiscal Court. Others join the group for meetings as their expertise is needed. The team meets as frequently as monthly, as determined by the work to be accomplished. The Campbell County Conservation District meets monthly and includes the project as a part of their regular business. Several District volunteers continue to assist with projects on the property.

A. Status of the Project:

To date the District has spent only a small amount of the management funds allocated for the project. Additions funds and services continue to be secured in order to successfully accomplish all of the needed work. This will help maximize the funding available for habitat restoration through the Kentucky Heritage Land Conservation Fund Board (KHLCFB) grant. We have received a one year extension to both submit the Final Resource Management Plan and to use the Heritage Land Conservation Fund Board management funds that were attached to the project.

B. Compliance with the Preliminary Management Resource Plan:

Habitat Restoration Work:

The Northern Kentucky University Center for Applied Ecology, through the Northern Kentucky Stream and Wetland Restoration Program (NKSWRP), received approval for a project on the property in November 2010. The Northern Kentucky Stream and Wetland Restoration Program, often referred to as the in-lieu fee mitigation program, is fully funded by fees assessed to developers to compensate for losses of aquatic resources in northern Kentucky. The project will assist with habitat restoration efforts on approximately 44 acres of the property along Riffle Creek and the Licking River.



Above Left: Mark Leopold with the NKU Center For Applied Ecology instructs a student in the correct application of herbicide to a bush honeysuckle stump. (January 2011 – MKD) Above Right: NKU Center For Applied Ecology staff cuts bush honeysuckle and multiflora rose as part of the habitat restoration project. (May 2011 – MKD)

Activities include wetlands hydrology re-establishment, bridge and fill removal and restoration of floodplain, ephemeral channel rehabilitation, meadow land vegetation rehabilitation, and forest land rehabilitation. The project total is \$ 183,480 and is expected to be completed within 12 months.

Severe and prolonged flooding delayed some work on the project this spring. The project includes a 5-year monitoring

period. This project will help us maximize the remaining funds allocated for habitat restoration on the remainder of the 135-acre Heritage Tract. A large part of the project is removing invasive species and work started on this in late January 2011 and has proceeded through June 2011. Work is proceeding on the remediation of two breached pond dams. The necessary trees have been removed and the trailer-frame bridge removed.

A service/training request has been submitted to the U. S. Army 478th Engineer Battalion in Ft. Thomas. This included assistance with removal and reshaping of the west abutment of the trailer-frame bridge, tree removal and minor excavation in the wetland restoration area, and removal of a breached pond dam and removal of sediment and debris from a channel with channel reshaping.

Lee Andrews with the U. S. Fish and Wildlife Service in Kentucky, and Don Dott, Kentucky State Nature Preserves Commission, visited the property in July 2010 to assist with assessments on possible future habitat restoration projects.

Boundary Marking:

The perimeter of the property boundary has been marked with signs. We have consulted with four of the seven adjacent landowners to ensure that they are in agreement with placement of signs before marking the boundary by painting a ring around the trees. Several adjacent landowners do not live on their property and contacts are in progress. Signs will be finalized for the corners and entrances to the properties. Signs are posted to alert people that no hunting is permitted on the property.

Farm Dump and Debris Removal:

Members of the Conservancy, District, Fiscal Court, and three Boy Scout volunteers worked about six hours in November 2010 to remove trash, debris and tires from the Conservancy Tract, which fronts Licking Pike. They removed and properly disposed of the items through the county's annual cleanup and fees were waived for disposal of tires and trash. They also began work to assemble debris and trash around the old home and barn so they can be removed when equipment is available.

Public Access:

The team has been researching their preferred access option and an alternative. Both routes, although previously established for private access to the land would bring more traffic past homes. The U. S. Army 478th Engineer Battalion in Ft. Thomas was asked for assistance with engineering and surveying for the location of public access roads and parking areas, as well as foot trails. The Conservation District will use independent funding for completion of the work that is not included in the budget approved by the KHLCFB. The Engineer Battalion's work on this part of the project is pending the District's final decision on the best access route to use to the property. District board members and staff continue to evaluate access routes and hired legal counsel, using interest generated from the Heritage funds, to confirm earlier work on the existing easement and research possible access from other county and state roads. The District is seeking the most sustainable access route to the property to provide the greatest access with the least disturbance to natural areas and cultural and historic features.

Historical/Cultural Features

David Peck with the Campbell Conservancy applied for a grant from Leadership Northern Kentucky to assist with fundraising for cabin restoration. Melissa Williams with the Campbell County Fiscal Court and District Coordinator Mary Kathryn Dickerson made the presentation. The project was not funded, but several members of Leadership Northern Kentucky volunteered materials and time to assist with the cabin restoration. The Campbell Conservancy is working on a plan to secure materials to mothball the cabin until restoration can begin. The Campbell Conservancy has been working with Legacy, a group of young professionals in Northern Kentucky, on a project to raise money for restoration of the historic cabin.

The old farmhouse, barn, and cabin were damaged in varying degrees by graffiti, as previously reported. No new incidences have occurred since last summer. The Conservation District settled a claim with their insurance carrier for \$12,179 for wind damage to barn and vandalism to farm house and barn. The money was deposited in the Conservation District's Heritage Fund account. The joint management team recommended to the Conservation District board to remove the farm house and barn, and salvage the silo if possible. Estimates for this work are in progress and we hope to complete the work by the end of this summer, pending favorable weather conditions and coordination with other work at the property.

Other

An agreement was finalized to allow the Kentucky State Nature Preserves Commission to use part of the purchase price of the Heritage Tract as match for a Recovery Land Acquisition grant. This action was approved by the KHLCFB.

Professors at Northern Kentucky University (NKU), Dr. Kristy Hopfensperger and Dr. Rick Boyce, are working with the District on a grant to the National Water Resources Institute to study native plant and ecosystem recovery after invasive removal in a riparian forest. The proposal would look at different methods of removing *Lonicera maackii* and how that affects native plant community and ecosystem recovery. The District has offered matching funds and in-kind services in the form of materials and labor for removal of the bush honeysuckle. The District would also supply plant materials where needed. The project spans three years, which includes monitoring. The Kentucky State Nature Preserves Commission has also been asked to assist with the grant. This project would affect approximately three acres of the property and NKU hopes to learn the status of the grant this summer.

Dr. Kristy Hopfensperger is supervising two students to conduct research on native and non-native earthworms. They have selected several sites on the property for their research.

C. Status of the Final Resource Management Plan: (include status of archaeological and biological inventories, if applicable)

The Biological Inventory was completed in August 2009 and a public meeting was held in September 2009 to release the report. Ed Hartowicz with Third Rock Consultants in Lexington attended the meeting to present the report. Thirty-five people attended the presentation and the project received favorable news reports from the local papers. The document can be found on the District web site at <http://home.fuse.net/campbellcd/>

The Archaeological Assessment was completed in January 2010 and a public meeting was held that month to release the report. Marie Pokrant with GAI Consultants attended the meeting to present the report. Twenty-one people attended the presentation and the project received favorable news reports from the local papers. The document can be found on the District web site at <http://home.fuse.net/campbellcd/>. Additional archaeological work may need to be performed, depending on the route selected for the access road.

A forestry plan was prepared by Consulting Forester Ron Meyer in 2009 with funds from the Kentucky Division of Forestry.

Consultations with the Kentucky Nature Preserves Commission and Kentucky Department of Fish and Wildlife Resources were held in the first quarter of 2009.

A Natural Resources Conservation Service Conservation Plan was being prepared for the property by the Conservation District Agriculture Conservation Technician, who resigned in September 2010. We do not consider this to be a critical piece of information at this point and will not pursue completion of this plan.

District Coordinator Mary Kathryn Dickerson is compiling information from the various reports and projects to assist in preparing the final resource management plan.

Submitted by Mary Kathryn Dickerson, District Coordinator, Campbell County Conservation District

Kentucky Heritage Land Conservation Fund Annual Management Report

Date: 02 July 2012

Awarded Agency: Campbell County Conservation District

Project Name: Hawthorne Crossing Conservation Area (Tollgate)

County: Campbell

Acres: 134.693*

Date of Acquisition: 12 August 2008

* The total acreage is now 140.043

General Comments:

Hawthorne Crossing Conservation Area consists of the Heritage Land Conservation Fund Board tract of 134.693 acres (Heritage Tract) and the adjacent property owned by the Campbell Conservancy (Conservancy Tract). The Campbell Conservancy deeded their adjacent 5.35-acre tract to the Campbell County Conservation District in April 2012. The deed has been recorded with the following provision: "No construction or development on the property without the approval of the Campbell Conservancy, Inc." The Conservation District is considering placing an easement on this portion that duplicates the easement that is on the Heritage tract. The two tracts are being managed as one unit, under the guidelines set forth in the preliminary management plan.

The Joint Advisory Team, formed in 2009, continues to meet to guide the work on the property. The team includes four members from the Campbell County Conservation District Board (District), four members from the Campbell Conservancy and one advisor from the Campbell County Fiscal Court. Others join the group for meetings as their expertise is needed. The team meets as frequently as monthly, as determined by the work to be accomplished. The Campbell County Conservation District meets monthly and includes the project as a part of their regular business. Several Conservation District volunteers continue to assist with projects on the property.

A. Status of the Project:

To date the Conservation District has spent only a small amount of the management funds allocated for the project. Additional funds and services continue to be secured in order to successfully accomplish the needed work. This will help maximize the funding available for habitat restoration through the Kentucky Heritage Land Conservation Fund Board (KHLCFB) grant.

We have received a one year extension to both submit the Final Resource Management Plan and to use the Heritage Land Conservation Fund Board management funds that were attached to the project. The management plan is now due in April 2013. We appreciate the KHLCFB's consideration and support as we work to maximize funds that are available and continue to build team and community support for the decisions that are made for the future management of the property.

Zeb Weese visited the property on 21 September 2011. His recommendations were reviewed by the Joint Advisory Team, and the team was very receptive to his ideas for access to the property, as well as his other recommendations.

The property will be site of an educational field day on Saturday 06 October 2012 from 9:00 a.m. to noon. The Conservation District will host a field day on invasive species management, showcasing the work of the Northern Kentucky University Center for Applied Ecology, providing training for invasive plant species removal, and beginning the groundwork for better cooperation regarding invasive species control. This field day is part of a Weed Management Area grant that the Boone, Campbell and Kenton County Conservation Districts received from the Kentucky Soil Erosion and Water Quality Cost Share Program.

B. Compliance with the Preliminary Management Resource Plan:

Habitat Restoration Work:

Northern Kentucky University Center for Applied Ecology Project

The Northern Kentucky University Center for Applied Ecology, through the Northern Kentucky Stream and Wetland Restoration Program, received approval for a project on the property in November 2010. The Northern Kentucky Stream and Wetland Restoration Program, often referred to as the in-lieu fee mitigation program, is fully funded by fees assessed to developers to compensate for losses of aquatic resources in northern Kentucky.

To date, approximately 20 acres of the property along Riffle Creek and the Licking River have been treated for invasive species, including bush honeysuckle and multiflora rose. A corridor along the river and creek was treated. Work started on this in late January 2011.

The old trailer-frame bridge across Riffle Creek has been removed and the area has been restored to make it blend in with the adjacent landforms, helping to restore part of the floodplain. Photographs are attached.

A headcut area along Riffle Creek, approximately 0.25 acres in size, has been graded and stabilized. Invasive species and an old garbage dump were removed in the process. We believe that there was an old pond in this area that was partially dammed up by an old farm road. The headcut had probed about 120 feet from Riffle Creek to the toe of the slope. It was repaired after reshaping with creek rock and jute erosion control matting and planted with native vegetation to stabilize the area. Photographs are attached.

Work is in progress to repair the spillway of the old farm pond located near the barn. The next phase will be enhancement of the wetland areas in the bottom along the creek. The Natural Resources Conservation Service made a visit to the site in November 2010 to evaluate the soils for this project. All necessary permits have been obtained. Photos attached.

The total project estimated cost is \$183,480 and is expected now to be completed by the end of 2012. Severe and prolonged flooding delayed work on the project last year. The project includes a 5-year monitoring period. This project will help us maximize the remaining funds allocated for habitat restoration on the remainder of the 135-acre Heritage Tract.

Other:

Contacts have been made with three companies to provide additional work for invasive species removal: Chris Blake, Ron Meyer, and Eco-Logic. These companies are of varying sizes and expertise and we may contract with all three to do parts of the remaining work.

Northern Kentucky University Center for Applied Ecology is evaluating several sections of small streams along the Licking River to see if they can apply any of their funds toward stabilization of these streams. We would at the very least like to stabilize sections of the streams to allow the existing old farm road to be used as a trail along the river.

Boundary Marking:

The perimeter of the Heritage tract property boundary has been marked with signs. The boundary signs will be moved to incorporate the tract that has been transferred to the Conservation District by the Conservancy. We have consulted with four of the now eight adjacent landowners to ensure that they are in agreement with placement of signs before marking the boundary by painting a ring around the trees. Other contacts are in progress. Now that the property transfer is complete, the signs will be finalized for the corners and entrance to the properties. Signs are posted to alert people that no hunting is permitted on the property. New KHLCFB signs are being posted to replace those damaged by graffiti. A KHLCFB sign will also be placed near Licking Pike on the newly acquired Conservancy property for uniformity.

Farm Dump and Debris Removal:

Members of the Conservancy, Conservation District, Fiscal Court, and Boy Scout volunteers worked about four hours in November 2011 to remove trash, debris and tires from the Conservancy Tract, which fronts Licking Pike. They also removed several truckloads of refuse from the cabin area on the Heritage tract. They removed and properly disposed of the items through the county's annual cleanup and fees were waived for disposal of tires and trash.

Public Access:

With the transfer of the Conservancy tract to the Conservation District, the approach for access to the site has changed. The team has agreed to work on establishing a parking area along Licking Pike to provide access to the property. The District Coordinator is working on this option, which may involve having some land (excess right-of-way) donated to the county or Conservation District in order to provide a better design for the parking area along Licking Pike. When plans are finalized they will be presented to the KHLCFB for review.

Although the team has not abandoned their idea to in the future provide a way for canoes and kayaks to access the river through the site, they have agreed to re-evaluate this idea. The District Coordinator is working with the team to develop the idea that rather than provide access to the river at this site, the site be listed as a stop on a blueways trail along the Licking River. This idea is being pursued with Vision 2012, the organization that has been heading up the blueways trail effort in northern Kentucky.

Historical/Cultural Features

Bids are being received for the demolition of the old farmhouse and barn, as previously sanctioned. The Conservation District settled a claim with their insurance carrier for \$12,179 for wind damage to barn and vandalism to farm house and barn. The money was deposited in the Conservation District's Heritage Fund account. The joint management team recommended to the Conservation District board to remove the farm house and barn, and salvage the silo if possible. If possible, materials will be salvaged from the barn and house to mothball the cabin until it can be restored. The team has also discussed relocation of the cabin either to a more accessible point on the property or to another county property where it can be properly restored and maintained.

Other

An agreement is in place to allow the Kentucky State Nature Preserves Commission to use part of the purchase price of the Heritage Tract as match for a Recovery Land Acquisition grant, as approved by the KHLCFB. Documents about the acquisition of the property are being transmitted to the State Nature Preserves Commission as requested.

Dr. Kristy Hopfensperger and Dr. Rick Boyce, professors at Northern Kentucky University, worked with the Conservation District on a grant to the National Water Resources Institute to study native plant and ecosystem recovery after invasive removal in a riparian forest. The proposal was not funded.

Dr. Kristy Hopfensperger supervised two students to conduct research on native and non-native earthworms. They selected several sites on the property for their research, but did not use the sites due to accessibility and other work at the property.

C. Status of the Final Resource Management Plan: (include status of archaeological and biological inventories, if applicable)

The Biological Inventory was completed in August 2009 and a public meeting was held in September 2009 to release the report. Ed Hartowicz with Third Rock Consultants in Lexington attended the meeting to present the report. Thirty-five people attended the presentation and the project received favorable news reports from the local papers. The document can be found on the District web site at <http://home.fuse.net/campbellcd/>

The Archaeological Assessment was completed in January 2010 and a public meeting was held that month to release the report. Marie Pokrant with GAI Consultants attended the meeting to present the report. Twenty-one people attended the presentation and the project received favorable news reports from the local papers. The document can be found on the District web site at <http://home.fuse.net/campbellcd/>. Additional archaeological work may need to be performed, depending on the route selected for the access road.

A forestry plan was prepared by Consulting Forester Ron Meyer in 2009 with funds from the Kentucky Division of Forestry.

Consultations with the Kentucky Nature Preserves Commission and Kentucky Department of Fish and Wildlife Resources were held in the first quarter of 2009.

A Natural Resources Conservation Service Conservation Plan was being prepared for the property by the Conservation District Agriculture Conservation Technician, who resigned in September 2010. We do not consider this to be a critical piece of information at this point and will not pursue completion of this plan.

District Coordinator Mary Kathryn Dickerson is compiling information from the various reports and projects to prepare the final resource management plan.

Submitted by Mary Kathryn Dickerson, District Coordinator, Campbell County Conservation District

Hawthorne Crossing Conservation Area



Trailer frame bridge across Riffle Creek



Bridge area March 2012 after removal of bridge and grading and stabilization of west stream bank.



Bridge area prior to removal of bridge - looking west. Bridge was knocked down and partially carried away by flood waters in 2011.



Bridge area after removal of bridge - looking west.



Bridge area after removal of bridge - looking north.



Bridge area after removal of bridge - looking west.

Hawthorne Crossing Conservation Area



Headcut area in April 2010. Progressed to about 15 - 20 feet deep in this area and had reached the toe of the slope (upper right in photo).



Above: headcut looking toward Riffle Creek, May 2011.

Below: headcut area in Feb. 2011. Looking at old farm road, above head cut. Note debris.



Restoration work by Northern Kentucky University Center for Applied Ecology, 2012. Above left, looking toward hill; above, installing jute matting; below left, planting cane and other native plants (looking toward Riffle Creek).

Hawthorne Crossing Conservation Area



Steve Jacobs with the Natural Resources Conservation Service performing soil borings in the meadow.



Meadow area where wetlands will be enhanced.

Kentucky Heritage Land Conservation Fund

Annual Management Report

Date: 01 July 2013

Awarded Agency: Campbell County Conservation District

Site Name: Hawthorne Crossing Conservation Area County: Campbell County

Acres: Total 140.043 Date of Acquisition: 12 August 2008

General Comments:

Hawthorne Crossing Conservation Area consists of the Heritage Land Conservation Fund Board tract of 134.693 acres (Heritage Tract) and the adjacent 5.35 acre tract owned by the Campbell Conservancy (Conservancy Tract), which was deeded to the Conservation District in April 2012. As requested, I have attached a copy of the deed for the Conservancy Tract.

The Joint Advisory Team, formed in 2009, continues to meet to guide the work on the property. The team includes four members from the Campbell County Conservation District Board (District), four members from the Campbell Conservancy and one advisor from the Campbell County Fiscal Court. Others join the group for meetings as their expertise is needed. The team meets quarterly unless work dictates more frequent meetings. The Campbell County Conservation District meets monthly and includes the project as a part of their regular business.

A. Status of the Project:

As stated in our December 2012 letter to the KHLCF, the Conservation District decided that for the long-term management of the property, it would be best to remove the old farm house, barn, and other buildings on the property. These buildings were removed in February 2013, and the area has been stabilized by reseeding with annual rye and winter wheat and mulched. The Conservation District does want to preserve, and restore the old log cabin and ice/smoke house at some point in the future. Portions of the cabin that were unstable have been removed and work is in progress to protect the cabin from further weathering. One cistern in the farmstead/barn area was collapsed and filled and three cisterns on the ridge at the cabin site were covered to offer protection not only for the structures but against accidental entry. The ice/smoke house has been covered with a tarp to provide some protection from the elements until repairs can be made.

We are working with the Kentucky Transportation Cabinet, Campbell County Planning and Zoning, and Campbell County Fiscal Court to acquire excess right-of-way from the Kentucky Transportation Cabinet to build a parking lot for 8 – 10 vehicles off of Licking Pike. The Conservation District will not at this time be building interior roads to provide access for a canoe launching area, so they will pursue the idea of having Hawthorne Crossing Conservation Area listed on a future “blueways trail” for the Licking River. We would designate an appropriate area for canoe/kayak landing along the river.

The stream mitigation - land restoration project with the Northern Kentucky University Center for Applied Ecology is almost completed. The wetland areas have been established, repairs have been made to several head cuts in streams, and the leaking pond has been repaired. There are some funds remaining in the project and we anticipate doing more invasive species removal on the property with these funds.

B. Compliance with the current Management Resource Plan (list any deviations):

Before any final plans are made for the parking area or for restoration to the cabin and ice/smoke house, the preliminary plan will be presented to the KHLCF for review.

District staff is performing preliminary work needed to write a request for proposals for removal of invasive species on sections of the property not affected by the work of the NKU-Center for Applied Ecology. As a part of this work, permanent monitoring plots will be established to document the effectiveness of treatments applied for invasive species control and will also be used to formulate the resource management plan.

District staff is moving boundary signs to incorporate the tract of land given to the Conservation District by the Campbell Conservancy. Gates will be erected at two access points on the former Conservancy property to restrict vehicular access at these points. Although there have been no issues with unauthorized access, this will further ensure that access is controlled.

C. Specific Management Activities to be completed in following 12 months:

Complete boundary marking. Boundary signs have been posted and paint will be used to further mark the boundary. Erect property use signs at corners and potential access points (will be submitted for review by KHLCF staff prior to printing of signs).

Erect gates at access points on the former Conservancy property. Encroachment permit from Kentucky Transportation Cabinet has been secured.

The Conservation District should know within the next 12 months if it will be possible to obtain the excess right-of-way from the Kentucky Transportation Cabinet for the proposed parking area. If this is not feasible, other alternatives will be pursued, including an alternate location along Licking Pike or collaboration with neighboring landowners. If it is feasible, a plan would be submitted to the KHLCF staff for review prior to construction.

Complete Request for Proposals and hiring of firm for invasive species management work on interior portions of the property not treated by the NKU-Center for Applied Ecology project. Work is anticipated to begin in late 2013, with the contract to include maintenance for an estimated five – ten years.

Continue writing Final Resource Management Plan, now due April 2014.

D. Summary of Management Funds

KHLCF Management funds received to date: \$ 110,360

Management funds expended to date (list/describe management practice category)

EXAMPLE: Invasive species control

1. Biological Inventory	\$ 7,800.00
2. Archaeological Assessment	\$ 7,552.28
3. Boundary Marking	\$ 778.28
4. Security (gates, etc.)	\$ 288.94
5. Cleanup	\$ 46.77
6.	\$
Total	\$ 16,466.38

Estimate of Management Funds to be Expended in following 12 months \$ 26,960

Note: The Conservation District has spent a total of \$17,336.04 in District funds for property management to date. Part of this was to cover closing costs not paid for by the grant, legal work related to access and transfer of the Conservancy parcel, and management of the buildings on the property. This amount does not include staff time invested in the project.

Kentucky Heritage Land Conservation Fund

Annual Management Report

Date: 01 July 2014

Awarded Agency: Campbell County Conservation District

Site Name: Hawthorne Crossing Conservation Area County: Campbell County

Acres: Total 140.043 Date of Acquisition: 12 August 2008

General Comments:

Hawthorne Crossing Conservation Area consists of the Heritage Land Conservation Fund Board tract of 134.693 acres (Heritage Tract) and the adjacent 5.35 acre tract owned by the Campbell Conservancy (Conservancy Tract), which was deeded to the Conservation District in April 2012.

The Joint Advisory Team, formed in 2009, continues to meet to guide the work on the property. The team includes four members from the Campbell County Conservation District Board (District), four members from the Campbell Conservancy and one advisor from the Campbell County Fiscal Court. Others join the group for meetings as their expertise is needed. The team meets quarterly unless work dictates more frequent meetings. The Campbell County Conservation District meets monthly and includes the project as a part of their regular business.

The Conservation District hosted a Stewardship Hike in April 2014, with 20 people participating in two hikes held that day. Participants included two staff members from Vision 2015, a local non-profit planning organization. The Conservation District hosted, in cooperation with Kenton County, tours of the Heritage properties held by the Kenton and Campbell Conservation Districts. The purpose of these tours was to better acquaint Conservation District board members with the projects and the land. District staff visits are also being scheduled.

A. Status of the Project:

Due to the Conservation District's desire to preserve, and restore the old log cabin and ice/smoke house at some point in the future, the entrances have been secured and the cabin has been enclosed in a protective Tyvek cover to prevent any continued weathering. Materials remaining from the removal of portions of the cabin that were unstable have been kept for possible future use and are also protected from additional weathering. The area where the old farm house and barn were removed is monitored to ensure that vegetative cover is sufficient and that invasive species are not encroaching on these clearings.

An application to acquire excess right-of-way from the Kentucky Transportation Cabinet to build a parking lot for 8-10 vehicles off of Licking Pike was submitted. Although the Department of Highways declined to sell the excess right of way they stated that they may be amenable to granting an encroachment easement if the parking lot is located further off the road. This has led to the investigation of alternate locations which are currently pending review by the board chair.

Gates have been installed at access points on the former Conservancy property.

Boundary signs have been posted. However, one tract remains questionable and will require additional survey work to ensure that the signs are placed accurately. Drafts of signs for corners and entrances have been completed.

The Conservation District constructed five monitoring plots in order to establish a baseline of the presence of invasive species in various areas of the property, and to monitor the effectiveness of removal efforts. The information is being used to prepare the Request for Proposals for removal work that we hope to schedule for the fall and winter of 2014. Several large infestations of Honeysuckle exist in various areas of the property.

The first year of monitoring has been completed on the stream mitigation-land restoration project with the Northern Kentucky University Center for Applied Ecology now the Northern Kentucky University Center for Environmental Restoration (NKU-CER). Their results revealed that they exceeded their goal of 75% native species cover. They will monitor the site again in 2015 and 2017 and at those times any necessary corrective action will be taken. We have discussed using some remaining funds for further invasive species clearing. The reports from the NKU-CER are available if the Heritage Board would like to review them. The wetlands installed as a part of this project are being monitored on a casual basis and wildlife signs are abundant.

A Northern Kentucky University professor has visited the site with students to survey turtle populations.

A research permit protocol has been adopted by the board and will be sent to the HLCFB for review.

B. Compliance with the current Management Resource Plan (list any deviations):

No deviations.

C. Specific Management Activities to be completed in following 12 months:

Complete boundary marking and erect property use signs at corners and potential access points.

Complete Request for Proposals and hiring of firm for invasive species management work on interior portions of the property not treated by the NKU-CER project. The contract is anticipated to include maintenance for an estimated five – ten years.

Continue investigation into the granting of an encroachment easement from the Kentucky Transportation Cabinet for the building of a parking lot for 8-10 vehicles off of Licking Pike.

D. Summary of Management Funds

KHLCF Management funds received to date: \$ 110,360

Management funds expended to date (list/describe management practice category)

EXAMPLE: Invasive species control

1. ___ Biological Inventory _____	\$ 7,800.00
2. ___ Archaeological Assessment _____	\$ 7,552.28
3. ___ Boundary Marking _____	\$ 778.28
4. ___ Security (gates, etc.) _____	\$ 629.88
5. ___ Cleanup _____	\$ 46.77
6. ___ Invasive Species Monitoring _____	\$ 18.76
Total	\$ 16,825.97

Estimate of Management Funds to be Expended in following 12 months \$ 23,000 _____

Note: The Conservation District has spent a total of \$17,336.04 in District funds for property management to date. Part of this was to cover closing costs not paid for by the grant, legal work related to access and transfer of the Conservancy parcel, and management of the buildings on the property. This amount does not include staff time invested in the project.

Kentucky Heritage Land Conservation Fund

Annual Management Report

Date: 01 July 2015

Awarded Agency: Campbell County Conservation District

Site Name: Hawthorne Crossing Conservation Area County: Campbell County

Acres: Total 140.043

Date of Acquisition: 12 August 2008

General Comments:

Hawthorne Crossing Conservation Area consists of the Heritage Land Conservation Fund Board tract of 134.693 acres (Heritage Tract) and the adjacent 5.35 acre tract owned by the Campbell Conservancy (Conservancy Tract), which was deeded to the Conservation District in April 2012.

The Joint Advisory Team, formed in 2009, continues to meet to guide the work on the property. The team includes four members from the Campbell County Conservation District Board (District), four members from the Campbell Conservancy and one advisor from the Campbell County Fiscal Court. Others join the group for meetings as their expertise is needed. The team meets quarterly unless work dictates more frequent meetings. The Campbell County Conservation District meets monthly and includes the project as a part of their regular business.

The Conservation District was unable to host our Stewardship Hike this past spring due to the weather. It was agreed that future hikes are to be scheduled in the fall in hopes there will be better weather conditions.

A. Status of the Project:

An application to acquire excess right-of-way from the Kentucky Transportation Cabinet to build a parking lot for 8-10 vehicles off of Licking Pike was submitted. Although the Department of Highways declined to sell the excess right of way they stated that they may be amenable to granting an encroachment easement if the parking lot is located further off the road. This has led to the investigation of alternate locations which are currently pending review by the board chair.

Boundary signs have been posted. Drafts of signs for corners and entrances have been completed.

The Conservation District constructed five monitoring plots in order to establish a baseline of the presence of invasive species in various areas of the property, and to monitor the effectiveness of removal efforts. The information is being used to prepare the Request for Proposals for removal work that we hope to schedule for the fall and winter of 2015. Several large infestations of Honeysuckle exist in various areas of the property.

B. Compliance with the current Management Resource Plan (list any deviations):

No deviations.

C. Specific Management Activities to be completed in following 12 months:

Complete boundary marking and erect property use signs at corners and potential access points.

Complete Request for Proposals and hiring of firm for invasive species management work on interior portions of the property not treated by the NKU-CER project. The contract is anticipated to include maintenance for an estimated five – ten years.

Continue investigation into the granting of an parking permits from the Kentucky Transportation Cabinet for the building of a parking lot for 8-10 vehicles off of Licking Pike.

The Northern Kentucky University Center for Applied Ecology now the Northern Kentucky University Center for Environmental Restoration (NKU-CER) will monitor the stream mitigation-land restoration project.

D. Summary of Management Funds

KHLCF Management funds received to date: \$ 91,489.46

Management funds expended to date (list/describe management practice category)

3. Boundary Marking \$ 13.44

Total \$ 13.44

Estimate of Management Funds to be expended in the following 12 months- Is pending on quotes for invasive removal invitation to bid and parking lot installation permits.

Note: The Conservation District has spent a total of \$85.79 in District funds for property management to date. Part of this was to cover management of the buildings on the property. This amount does not include staff time invested in the project.