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**CONSERVATION EASEMENT
BASELINE DOCUMENTATION REPORT
WALDEN RIDGE PARTNERS, LLC
ROANE COUNTY, TENNESSEE
12-27-2016**



Prepared by
Lead Author
Tom Howe, Biologist
Foothills Land Conservancy, Maryville, Tennessee

BASELINE DOCUMENTATION
WALDEN RIDGE PARTNERS, LLC
CONSERVATION EASEMENT

Baseline data for Conservation Easement granted by Walden Ridge Partners, LLC,
Roane county, Tennessee, to Foothills Land Conservancy

Prepared by:



Tom Howe, Biologist

Contributing Authors:

Meredith Clebsch – supervised
development of document and contributed
data for species list as noted

Ray Boswell – authored maps as noted.

(See Preparer Qualifications below)

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A. Conservation Easement

PROJECT BRIEF

Size: Approximately 1,070 acres

Location: Roane County, TN

USGS Quad: Harriman

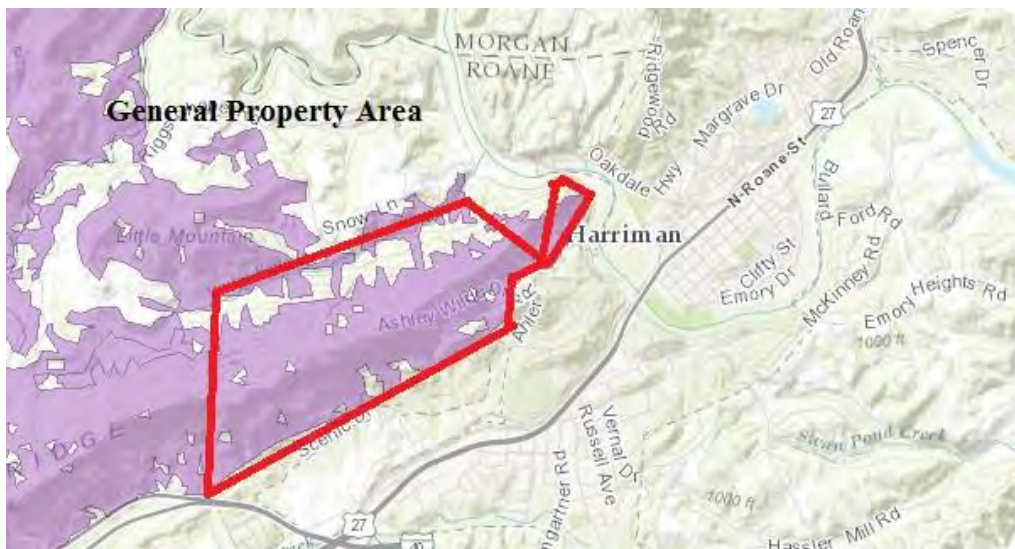
Elevation: c. 780'–1,760' above mean sea level

Watersheds: Emory/Emory River/Emory River Lower 060102080408; Watts Bar Lake/Tennessee River/Caney Creek 060102010601

Ecoregions: Plateau Escarpment region 68c; Cumberland Plateau region 68a; Southern Limestone/Dolomite Valleys and Low Rolling Hills 67f

The Walden Ridge Partners, LLC property (henceforth “the Property”) consists of approximately 1,070 acres of upland forest and riparian forest in Roane County, TN located within the city of Harriman. It is on the north side of Interstate 40, north of West Hill Road. Harriman’s city line forms the western boundary. The northern boundary roughly follows Avery Branch south of Snow Lane and the easternmost portion touches on Riggs Chapel Road along the Emory River. Walden Ridge traverses the entire length of the Property, forming steep forested slopes on both sides with uplifted escarpment rock outcrops on the south-facing slope.

The Property is being preserved for its scenic open space forest, escarpment outcrops as well as the protection of the relatively natural habitat corridor for the terrestrial and aquatic wildlife and rich plant life it supports. It is within several recognized priority conservation areas including the Tennessee Wildlife Resources Agency (TWRA) State Wildlife Action Plan (SWAP) (NatureServe, 2016a).



[State Wildlife Action Plans](#) (NatureServe, 2016a)

BACKGROUND INFORMATION

OWNER ACKNOWLEDGEMENT OF CONDITION

This inventory is an accurate representation of the Protected Property at the time of the conveyance of the easement.

12.27.2016

Date

For the Grantors:

Walden Ridge Partners, LLC

By:



Chris G. Allen, Managing Member

For the Grantee:



William C. Clabough, Sr.
Foothills Land Conservancy

OWNER INFORMATION

Attn: King Howington
Walden Ridge Partners, LLC
2165 Union Church Road
Bishop, Georgia 30621

PROPERTY DESCRIPTION

(See Exhibit A Below)

Parcel Maps and Property Data

Note: Tax Map nor Data Report as yet reflect the boundaries of the proposed easement.



OR-GIS Services

Location RIGGS CHAPEL ROAD	Property Account Number	Parcel ID 026-017.00-000 Old Parcel ID --
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Current Property Mailing Address

Owner WALDEN RIDGE PARTNERS LLC	City WATKINSVILLE
Address 2165 UNION CHURCH ROAD	State GA
Lot:	Zip 30677
	Zoning

Current Property Sales Information

Sale Date 12/23/2015	Legal Reference 1556-974
Sale Price 1,650,000	Grantor(Seller) BUZZARD BLUFF HOLDINGS LLC,

Current Property Assessment

Year 2015	<u>Card 1 Value</u>
	Building Value 0
	Xtra Features Value 0
Land Area 1,034.400 acres	Land Value 3,020,100
	Total Value 3,020,100

Narrative Description

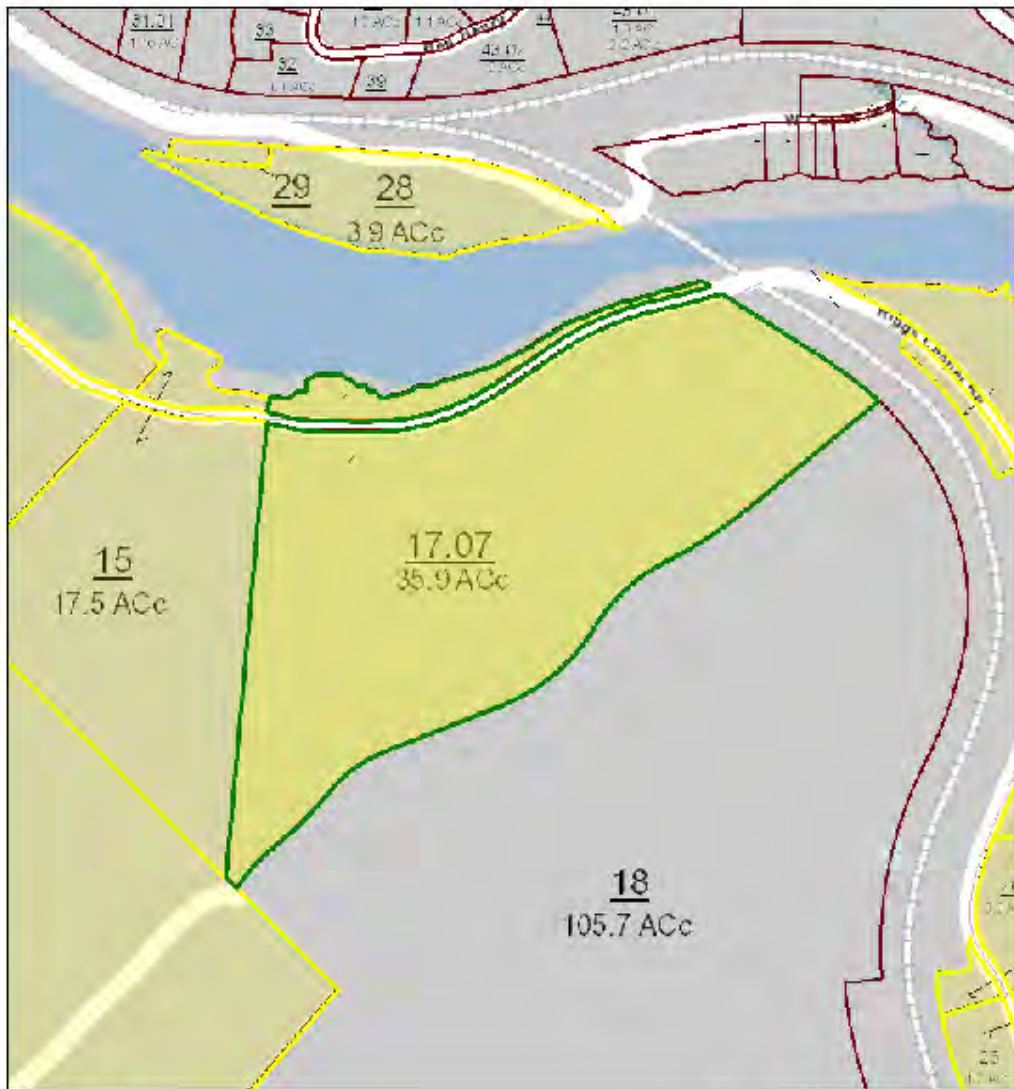
This property contains **1,034.400 acres** of land mainly classified as **N/A** with a(n) **N/A** style building, built about , having **N/A** exterior and **N/A** roof cover, with **0** unit(s), **0** total room(s), **0** total bedroom(s), **0** total bath(s), **0** total half bath(s), **0** total 3/4 bath(s).

Legal Description

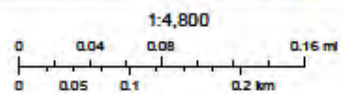
Property Images

No Sketch Available		No Picture Available
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Roane County - Parcel: 026 017.07



May 18, 2014



QIR-GIS Services

Card 1 of 1

Location RIGGS CHAPEL ROAD	Property Account Number	Parcel ID 026-017.07-000
		Old Parcel ID --

Current Property Mailing Address

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Current Property Sales Information

Sale Date 12/23/2015	Legal Reference 1556-974
Sale Price 1,650,000	Grantor(Seller) BUZZARD BLUFF HOLDINGS LLC,

Current Property Assessment

Year 2015	<u>Card 1 Value</u>
	Building Value 0
	Xtra Features Value 0
Land Area 35.900 acres	Land Value 132,800
	Total Value 132,800

Narrative Description

This property contains **35.900 acres** of land mainly classified as **N/A** with a(n) **N/A** style building, built about , having **N/A** exterior and **N/A** roof cover, with **0** unit(s), **0** total room(s), **0** total bedroom(s), **0** total bath(s), **0** total half bath(s), **0** total 3/4 bath(s).

Legal Description

Deed Acres 35.90 FL EASE 3.7ACC

Property Images

No Sketch Available		No Picture Available
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PURPOSE AND SUMMARY OF CONSERVATION EASEMENT PROVISIONS

It is the purpose of this Easement to assure that the Property will be retained forever in its current natural, scenic, forested, and/or open land condition and to prevent any use of the Property that will impair or interfere with the Conservation Values of the Property, subject only to the terms and provisions set forth herein. Grantor intends that this Easement will allow the use of the Property for such activities that are not inconsistent with the purposes of this Easement, including, without limitation, those involving agricultural and forest management, fire management and control, wildlife habitat improvement, hiking, and other private recreational uses that are not inconsistent with the purposes of this Easement.

Sections 3 and 4 of the Conservation Easement (CE) document contain the major provisions. The CE is attached herein as Exhibit A.

**FOOTHILLS LAND CONSERVANCY BOARD OF DIRECTOR'S
RESOLUTION ACCEPTING CONSERVATION EASEMENT**

Date: 12/8/2016

The Board of Directors of the Foothills Land Conservancy, a private non-profit corporation, hereby authorizes the acceptance of a conservation easement if offered from Walden Ridge Partners, LLC, Roane County, Tennessee.



Madge Cleveland, President



Mark Jendrek, Secretary

MINUTES OF BOARD MEETING AT WHICH THE EASEMENT WAS ACCEPTED

(excerpted)

Minutes of the Meeting of the Board of Directors of the Foothills Land Conservancy

December 8, 2016, at the offices of FLC, 373 Ellis Ave., Maryville, TN 37804

Notice of the December 8, 2016 meeting, agenda, and the November 2016 minutes were distributed a week prior to the meeting. The financials were sent on December 7, 2016. The following members were in attendance at the December 8, 2016 meeting: Dan Barnett, Madge Cleveland, Jenny Hines, Wes James, Craig Jarvis, Mark King, David Long, Stan Malone, Billy Minser, Mike Parish, Steve Polte, John Proffitt, Susanna Sutherland and David Zandstra. Non-voting Recording Secretary, Mark Jendrek was in attendance. Not in attendance was Sara Rose and Ken Rueter. The members in attendance during the meeting's discussion and voting constituted a quorum. FLC staff members, Bill Clabough, Meredith Clebsch, Elise Eustace, Tom Howe & Karen Petrey were present.

Call to Order

President, Madge Cleveland, called the meeting to order at 6:06pm.

Approval of the Minutes

Minutes from the November 2016 Board meeting were sent out to FLC Board Members a week prior to the December 2016 meeting. Susanna Sutherland made a motion to approve the November 2016 minutes and Craig Jarvis seconded the motion. The vote for approval of the minutes was unanimous.

Committee Reports

Land Protection Committee

Bill Clabough provided an overview of FLC's current fee simples. There are 11 tracts from potential bequests that could be coming to Foothills. Out of these there are a few where the land owner wants FLC to hold on to the land and so Bill has asked them to provide FLC with an endowment to pay the taxes, etc. When FLC receives calls about possible land donations to the Conservancy, Bill asks about any restrictions that would be placed on the donation and also reviews the potential of the projects similarly to how a potential FLC CE is evaluated. He also looks at what type of endowment would be included with the donation of land. There is potential to move a few of the fee simple properties over to the FLC Properties Foundation in the near future.

Bill Clabough also discussed an 82 acre fee simple property given to FLC last year in Newport, TN. A contractor named Ronnie Trent wants to buy 3000 yards of primarily clay dirt on the tract. Trent will come back in after extracting the dirt and clean it up, sow it back down and level it up. It is both Bill and Land Protection's recommendation to allow the purchase. Bill said that Trent comes well recommended and he would also make sure there is some type of performance bond for the project as well have an FLC representative on site part of the time. A motion was made by Billy Minser to accept the dirt extraction from the Newport fee simple property and it was seconded by Jenny Hines. The motion passed unanimously.

Meredith Clebsch reviewed a PowerPoint of 5 potential fee simple donations for the Board's final approval, if offered by the donor. These projects are: 2 Chip, CCD Sod – Carter, Champion View, English Mtn., and Rock Springs (see spreadsheet below). Clebsch also provided information about these projects for final approval via email to the Board prior to the meeting. A motion was made by Mike Parish to approve all of the fee simple properties with a second from Dan Barnett. David Long recused himself from voting. The motion passed unanimously.

(excerpted)

Meredith Clebsch reviewed a PowerPoint of 15 potential conservation easements for the Board's final approval, if offered by the donor, during the Board Meeting. Clebsch also provided information about the following projects for final approval via email to the Board prior to the meeting. These projects include:

(excerpted)

Approval	Property	~Acres	County	State	Date Approved	New House Sites	Scenic	Nat Res	Open Space	Agric
FINAL	Walden Ridge	1070	Roane	TN	2/11/2016	0	x	x	x	x

The Land Protection made the motion for final approval of the 15 potential CE projects, if offered by the donor, and it was seconded by Billy Minser. David Long recused himself from voting. The motion passed unanimously.

RECITALS
from WALDEN RIDGE PARTNERS, LLC
CONSERVATION EASEMENT

(any reference to “Exhibits” in this section refers to the CE document)
(from CE of 12-26-16)

WHEREAS, Grantor is the owner in fee simple of approximately One Thousand Seventy (1070) acres of real property located in Roane County, Tennessee, which is more particularly described on **Exhibit A**, attached hereto and incorporated by this reference (“Property”); and

WHEREAS, Grantor certifies that the Property possesses ecological, natural, scenic, open space, and wildlife habitat values (collectively, “Conservation Values”) of great importance to Grantor, the citizens and residents of, and visitors to, Roane County, Tennessee, and the people of, and visitors to, the State of Tennessee, including those traveling on Interstate 40 in Roane County and visitors to the parks and natural areas located on or near the Cumberland Plateau, and which further local, state, and national goals to conserve scenery and wildlife for the enjoyment of future generations; and

WHEREAS, the Property remains substantially undeveloped and is ecologically well-balanced, and includes a variety of mature trees, creeks, and streams, all of which provide habitat for a number of species of wildlife; therefore, preservation of the Property is desirable for conservation and ecological reasons as well as for aesthetic reasons; and

WHEREAS, the Property is mainly open space, forested land, comprising approximately 1034 acres, thus meeting the definitions of “forest land” or “open space land” under The Agricultural, Forest, and Open Space Land Act of 1976. As such, it is to be given special treatment pursuant to such Act. While the Property is classified as “Farm” land, the majority of the Property is devoid of development. As such, the Property serves as an important natural area that provides both habitat and corridors for breeding, foraging, and migration for native wildlife, as well as scenic viewshed for people visiting or living in a developing area; and

WHEREAS, the Property is a part of the Walden Ridge mountain ridge and escarpment, which marks the eastern edge of the Cumberland Plateau, a geological region noted for its waterways and rich terrestrial and aquatic biodiversity. The Nature Conservancy has cited “increased recreational use and second-home development” as sources of new pressures on the Cumberland Plateau, “the world’s longest hardwood forested plateau” and “one of the most biologically rich regions on Earth”; and

WHEREAS, located in Roane County, the Property is within five miles of Roane State Community College and Roane County Park. Roane State Community College is a two-year college with about 7,000 students, offering mostly career preparation and transfer programs. Roane County Park, located on Watts Bar Lake, is a popular

recreation area for local families. Open year-round, the Park offers disc golf, a paved walking trail, a fishing pier, a swimming area, picnic shelters, primitive campsites, and canoe rentals. David Webb Riverfront Park and Killifer Park are two other popular local parks located within two miles of the Property; and

WHEREAS, the Property has many scenic qualities, and is near many important creeks, streams, and waterways. The Property is accessible to or can be seen by the general public from US Interstate 40, US 27, State Route 1, State Route 61, Ashley Wilde Drive, and many other local roads in the area. Because the Property represents a significant portion of ridgeline along the eastern edge of the Cumberland Plateau, it provides scenic views for travelers along these roads and visitors to the area; and

WHEREAS, there are many creeks, streams, and waterways on and around the Property, which is located in the Emory River watershed. The Emory River watershed contains parts of four counties and drains 872 square miles. Recreational boating and hunting are popular in the Emory River watershed, which supports cattle and tobacco farms. According to the Tennessee Department of Environment and Conservation, the Emory River watershed provides habitat for 82 rare or endangered species, including several federally-listed crayfish and freshwater mussel species. Previous coal and natural gas mining in the watershed has affected its creeks, streams, and rivers, and protection of these scenic waterways, as well as the surrounding lands and ridges, like the Property, is important for the ecological preservation of the region and its waters; and

WHEREAS, parts of Clear Creek, the Emory River, and the Obed River are part of the National Wild and Scenic River System. In the 1998 Tennessee Rivers Assessment Summary Report, the Emory River, which is located within one half of a mile of the Property, was classified as being of “regional significance” for natural, scenic qualities, and recreational boating opportunities, and was also considered to have water quality that “fully support[s] designated uses assigned to it by the Water Quality Control Board.” Portions of the Emory River, including 31 miles in neighboring Morgan County (within 2 miles of the Property) are included in the Nationwide Rivers Inventory, with Outstandingly Remarkable Values noted in the following categories: Scenic, Recreation, Geology, Fish, and Wildlife. It was noted as a “scenic pastoral stream that flows through impressive gorge area; supports game fishery.” Protection of the Property and its ridgeline will contribute to the conservation of this important waterway and its associated creeks and streams; and

WHEREAS, one tributary of the Emory River, Avery Branch, forms a boundary of the Property. Other creeks, streams, and waterways located near the Property include Clifty Creek, Mill Creek, Wolf Branch, White Oak Creek, Cardiff Creek, Blake Branch, Rock Bottom Branch, Board Camp Branch, Caney Creek, Swan Pond Creek, and many other unnamed waterways. The Tennessee River, an important river throughout the region, is within four miles of the Property, as are many important recreational areas, such as Watts Bar Lake; and

WHEREAS, many parks and camps are located on Watts Bar Lake, which is also a

destination for recreational fishermen and birdwatchers. The Lake is home to a large population of Great Blue Herons (*Ardea herodias*), and heron rookeries have been found in the area as well, according to the Tennessee Department of Environment and Conservation's Natural Heritage Program; and

WHEREAS, the presence of so many streams with high water quality is essential to the survival of many native species, some of which are threatened or endangered. One such species, the Purple Bean (*Villosa perpurpurea*), is found within one mile of the Property. The Purple Bean is classified as being "extremely rare and critically imperiled in the world" and in the State. It is listed as Endangered by the federal government and the State of Tennessee. The Purple Bean is a freshwater mussel species that is mainly found in northeastern Tennessee and southwestern Virginia. Current threats to the species, which is in decline, include changes in turbidity, increased suspended solids, and pesticides, as well as habitat change and runoff from localized coal-mining operations; and

WHEREAS, according to the U. S. Fish and Wildlife Service, freshwater mussel species like the Purple Bean are good indicators of the health of a stream, and it has drafted a Recovery Plan for the species. This Recovery Plan outlines "what and where priority research and restoration projects must be done to recover the purple bean mussel." Current conservation efforts include a captive breeding and reintroduction program, fencing of sensitive streams, repairing erosion, and local community education programs; and

WHEREAS, another freshwater mussel species, the Alabama Lampmussel (*Lampsilis virescens*), is found within six miles of the Property. The Alabama Lampmussel, like the Purple Bean, is considered "extremely rare and critically imperiled in the world" and in the State, and it is listed as Endangered by both the federal government and the State of Tennessee. Like the Purple Bean and other sensitive endemic species, the Alabama Lampmussel is highly sensitive to habitat changes, including increased turbidity; and

WHEREAS, in addition to the abundance of freshwater mussel species found in the region, many fish species also inhabit the numerous waterways on and around the Property, including the Spotfin Chub (*Erimonax monachus*), populations of which are found within one half-mile of the Property. Many fish species in the region were affected by ichthyocides that poisoned the waters in 1957, including the Spotfin Chub, now listed as Threatened by both the state and federal governments, and considered "very rare and imperiled" within the State and throughout its range. Endemic to the Tennessee River watershed, the Spotfin Chub has been extirpated from Alabama and Georgia, and the four remaining known populations survive in four tributaries along the Tennessee River. The Spotfin Chub is sensitive to sedimentation, introduction of invasive species, habitat fragmentation, and alteration of hydrology; and

WHEREAS, another fish species found within six miles of the Property is the Blue Sucker (*Cytleptus elongatus*), which has become rare because of habitat segmentation

and its sensitivity to water pollution. The Blue Sucker is now listed as Threatened by the Tennessee Department of Environment and Conservation and is considered “very rare and imperiled” in the State of Tennessee. The Tangerine Darter (*Percina aurantiaca*) has been “deemed in need of management” by the State of Tennessee, and is considered “rare and uncommon in the State.” The Tangerine Darter, like many freshwater species, is sensitive to habitat degradation and pollution; and

WHEREAS, another aquatic species, found within three miles of the Property, is the Valley Flame Crayfish (*Cambarus deweesae*), considered “extremely rare and critically imperiled” in the State of Tennessee and listed as Endangered in the State. In Tennessee, the Valley Flame Crayfish is only known to inhabit a restricted range in the Clinch and Emory Rivers, although the species is also found in Kentucky; and

WHEREAS, Virginia Spiraea (*Spiraea virginiana*), found within two miles of the Property, is listed as Threatened by the federal government and as Endangered by the State of Tennessee. The Virginia Spiraea is considered “very rare and imperiled” in the State and throughout its range. Virginia Spiraea is a flowering plant in the rose family native to the Southern Appalachian Mountains, where it prefers riparian habitat, such as floodplains and riverbanks. Most populations of Virginia Spiraea are small and poor in quality, and the species faces threats from habitat fragmentation and alteration, isolation of populations, significant flooding, and competition from invasive and exotic species; and

WHEREAS, identified within six miles of the Property, the White Fringeless Orchid (*Platanthera integrilabia*) is a plant species listed as Endangered by the State of Tennessee. This species, which is a Candidate species for listing by the federal government, is found in acidic seeps and stream heads, like those found on the Property. The species is considered “very rare and imperiled” both globally and in the State of Tennessee. Threats to the White Fringeless Orchid include habitat alteration primarily caused by alteration of hydrology. It is also classified as a Commercially Exploited species by the federal government. The USDA Forest Service notes that the White Fringeless Orchid is rare throughout its range and is a candidate for federal listing, and lists habitat alteration (“through alteration of hydrology”) as the main threat to the species; and

WHEREAS, found within a half-mile of the Property, the Missouri Gooseberry (*Ribes missouriense*) is considered a species “Of Special Concern” in Tennessee, and is classified as being “very rare and imperiled within the State.” Known for its edible berries, the Missouri Gooseberry was once abundant throughout its range, but was nearly extirpated during the 19th and 20th centuries; and

WHEREAS, another species listed as Threatened in Tennessee is *Pressia quadrata*, a liverwort endemic to the region. It is considered “extremely rare and critically imperiled within the State” and prefers to inhabit seepy limestone cliffs and bluffs. One historical species, currently listed as “Possibly Extirpated,” is *Myurella juiacea*, a moss. Both species have had populations within one mile of the Property; and

WHEREAS, several plant species listed as Endangered by the State of Tennessee are found within four miles of the Property. Found within one mile of the Property boundary, Western Wallflower (*Erysimum capitatum*) is considered “extremely rare and critically imperiled in the State.” Large-flowered Barbara’s buttons (*Marshallia grandiflora*), also found within one mile of the Property boundary, has been extirpated from much of its historical range, and is listed as Endangered in Kentucky, Pennsylvania, and Tennessee. Considered “very rare and imperiled” in the State and throughout the world, Large-flowered Barbara’s buttons prefers bogs and scoured riverbanks as habitat. A third plant species, Barrens Silky Aster (*Symphyotrichum pratense*), is found within four miles of the Property. This species, also listed as Endangered by the State of Tennessee, is considered “extremely rare and critically imperiled within the State”; and

WHEREAS, found within five miles of the Property, Hart’s tongue-fern (*Asplenium scolopendrium* var. *americanum*) is listed as Threatened by the federal government and as Endangered by the State. The American variety of this species occurs as rare, widely scattered populations and is reputed to be difficult to cultivate. This species is especially rare in the southeastern United States, where it is found almost exclusively in sinkhole pits; and

WHEREAS, two species considered “Of Special Concern” by the State of Tennessee are Schreber’s Aster (*Eurybia schreberi*), found within one mile of the Property, and Spreading False-foxglove (*Aureolaria patula*), found within five miles of the Property. Schreber’s Aster is a perennial herb that is listed as Endangered in Indiana and Iowa, possibly extirpated in Maine, and is considered “extremely rare and critically imperiled in the State.” Spreading False-foxglove, native to Tennessee, Alabama, Kentucky, and Georgia, where it is listed as Threatened, is sensitive to improper timbering practices, stream impoundment, and invasion by exotic and invasive species; and

WHEREAS, three honeysuckle species are also found within five or six miles of the Property boundary, including Mountain Honeysuckle (*Lonicera dioica*), considered “very rare and imperiled within the State” and listed as a species “Of Special Concern” in Tennessee. Another species, Mountain Bush-honeysuckle (*Diervilla sessilifolia* var. *rivularis*) is considered “very rare and imperiled” on a state level, and “rare and uncommon” globally. Mountain Bush-honeysuckle is listed as Threatened by the State of Tennessee, as is Northern Bush-honeysuckle (*Diervilla lonicera*), also found within five miles of the Property, and considered “very rare and imperiled within the State.” Many honeysuckle species native to North America have been threatened by invasive honeysuckle species, particularly Japanese Honeysuckle (*Lonicera japonica*); and

WHEREAS, found within six miles of the Property, the Eastern Slender Glass Lizard (*Ophisaurus attenuatus longicaudus*) is considered “rare and uncommon in the State” and has been “Deemed in Need of Management” by the State of Tennessee. Another vertebrate species, the Eastern Spotted Skunk (*Spilogale putorius*), is found within three miles of the Property, and is also considered “rare and uncommon in the

State.” Preservation of the Property in its natural, undisturbed state would contribute to conservation efforts for these, and many other, native species; and

WHEREAS, the Property is located within five miles of the Catoosa Wildlife Management Area, an 82,000 acre game-management preserve. Catoosa Wildlife Management Area is 98% forested, and nearly all of its wildlife populations are restored. It is a popular destination for tourists who wish to partake in outdoor activities such as hiking, backpacking, horseback riding, and whitewater rafting. Catoosa Wildlife Management Area is a popular fishing area, boasting populations of smallmouth bass, rock bass, bluegill, and muskellunge. Hunting is another popular recreational activity in Catoosa WMA, which provides habitat for populations of beaver, bobcat, coyote, gray fox, red fox, mink, muskrat, opossum, river otter, raccoon, striped skunk, spotted skunk, longtailed weasel, and least weasel; and

WHEREAS, Catoosa WMA is such a popular recreation destination that one of the major concerns of the Tennessee Wildlife Resources Agency’s Strategic Plan for 2006-2012 was increasing urbanization in the area surrounding Catoosa Wildlife Management Area and all of the Cumberland Plateau; and

WHEREAS, the Property is located in an area rich with natural, historical, or recreational parks and sites that attract many visitors to the region throughout the year. Frozen Head State Park and Natural Area, located 12 miles from the Property, consists of more than 24,000 acres of wilderness area and contains some of Tennessee’s highest peaks west of the Blue Ridge. Frozen Head State Park contains approximately eighty miles of backpacking and day-hiking trails, a large campground and eleven backcountry campsites, a large amphitheater, several picnic areas, and an observation tower that allows for a 360-degree view of the surrounding terrain—including the Property on Walden Ridge. A section of the Cumberland Trail traverses the State Park, which is also host to the Barkley Marathons. The Barkley Marathons is an ultramarathon event that has been held in the park since 1984. Competitors, only 14 of which have ever completed the race, must complete a 100-mile course over 60 hours, traversing rugged and brushy terrain; and

WHEREAS, the Property is within five miles of Mount Roosevelt State Forest, an 11,000-acre Wildlife Management Area that surrounds the city of Rockwood. Mount Roosevelt State Forest contains a well-known overlook, which visitors can access by car. The overlook is said to be one of the highest on the Cumberland Plateau in Tennessee and is popular among visitors to the region; and

WHEREAS, within 10 miles of the Property is Lone Mountain State Forest, a 3,600-acre tract of protected land that contains over twenty miles of trails for hiking, mountain biking, and horseback riding. The popular Coyote Point Overlook provides views of the surrounding mountains, and on clear days, visitors can see all the way to the Smoky Mountains; and

WHEREAS, also within ten miles of the Property is the Long Island Unit of the

Watts Bar Wildlife Management Area, which attracts visitors for its wildlife viewing and outdoor recreation opportunities. According to the Tennessee Wildlife Resources Agency, visitors to the Long Island Unit can hope to see osprey, bald eagles, great blue herons, black-crowned night-herons, cattle egrets, great egrets, white-tailed deer, muskrats, foxes, and coyotes, all of which are common around the lake. Similar wildlife can be found at the Paint Rock Wildlife Management Area, a 1,600-acre tract adjacent to Watts Bar Lake, also located within 10 miles of the Property; and

WHEREAS, located within 15 miles of the Property, the North Boundary Greenway is a popular spot for outdoor recreation near Oak Ridge. Offering 14 miles of multi-use trails, the North Boundary Greenway is known for hiking, mountain biking, wildflower viewing, and bird watching; and

WHEREAS, the Property is part of the Catoosa/Emory River Conservation Opportunity Area, as identified in the 2015 Tennessee State Wildlife Action Plan. It was classified as being of medium to high priority for existing terrestrial habitat for “Greatest Conservation Need (GCN)” species in Tennessee. The neighboring Emory River and some tributaries were classified as being of high aquatic habitat priority for GCN species, and the upstream habitat was of medium priority.

WHEREAS, the specific Conservation Values of the Property are further documented in an inventory of relevant features of the Property, which is on file at the offices of Grantee, a partial listing of which is attached hereto as **Exhibit B** and incorporated by this reference (“Baseline Documentation”), which consists of reports, maps, photographs, and other documentation that, Grantor certifies and the parties agree, provide, collectively, an accurate representation of the Property at the time of this grant, and which is intended to serve as an objective, though non-exclusive, information baseline for monitoring compliance with the terms of this grant; and

WHEREAS, Grantor intends that the Conservation Values of the Property be preserved and maintained by prohibiting those land uses on the Property that impair, interfere, or are inconsistent with those Conservation Values; and

WHEREAS, Grantor further intends, as the owner of the Property, to convey to Grantee the right to preserve and protect the Conservation Values of the Property in perpetuity; and

WHEREAS, Grantee is a publicly supported, tax-exempt nonprofit organization and is a qualified organization under Sections 501(c)(3), 170(b)(1)(A)(vi) and 170(h), respectively, of the Internal Revenue Code of 1986, as amended, and the regulations promulgated thereunder (“Internal Revenue Code”), whose primary purpose is to preserve land, water, air, wildlife, scenic qualities, and open space by implementing programs for, without limitation, protecting unique or rare natural areas, water front, stream corridors, and watersheds; and

WHEREAS, Grantee has a commitment to protect the Conservation Values of the

Property and has the resources to enforce conservation restrictions; and

WHEREAS, preservation of the Property shall serve the following purposes (“Conservation Purposes”):

- (a) Preservation of the viewshed for the scenic enjoyment of the general public, which will yield a significant public benefit;
- (b) Protection of a relatively natural habitat for fish, wildlife, plants, and the ecosystems in which they function;
- (c) Preservation of open space for the scenic enjoyment of the general public, and pursuant to a clearly delineated government conservation policy which provides significant public benefit from both open space (including farm land and forest land) and agricultural use; and

WHEREAS, Grantor and Grantee desire to perpetually conserve the natural, scientific, educational, open space, and scenic resources of the Property to accomplish the Conservation Purposes; and

WHEREAS, Grantor intends to grant the easement and impose the restrictive covenants on the Property as set forth in this Easement to accomplish the Conservation Purposes;

LEGAL CONDITION

Deed of Conservation Easement with Property Description

_(See Exhibit A)

(Copies will reside in the files of the Donor, the Donee, and the Roane County, Tennessee Register of Deeds)

CONSERVATION VALUES

The conservation values that make the Walden Ridge Partners, LLC property unique are described below and are detailed in the recitals (the “Whereas” statements) in the Conservation Easement. All field data was gathered on site visits made on 3-15-2016 and 06-17-2016 by Meredith Clebsch, Land Director, Tom Howe, FLC Biologist, and Bill Clabough, Executive Director.

Landscape and Conservation Context

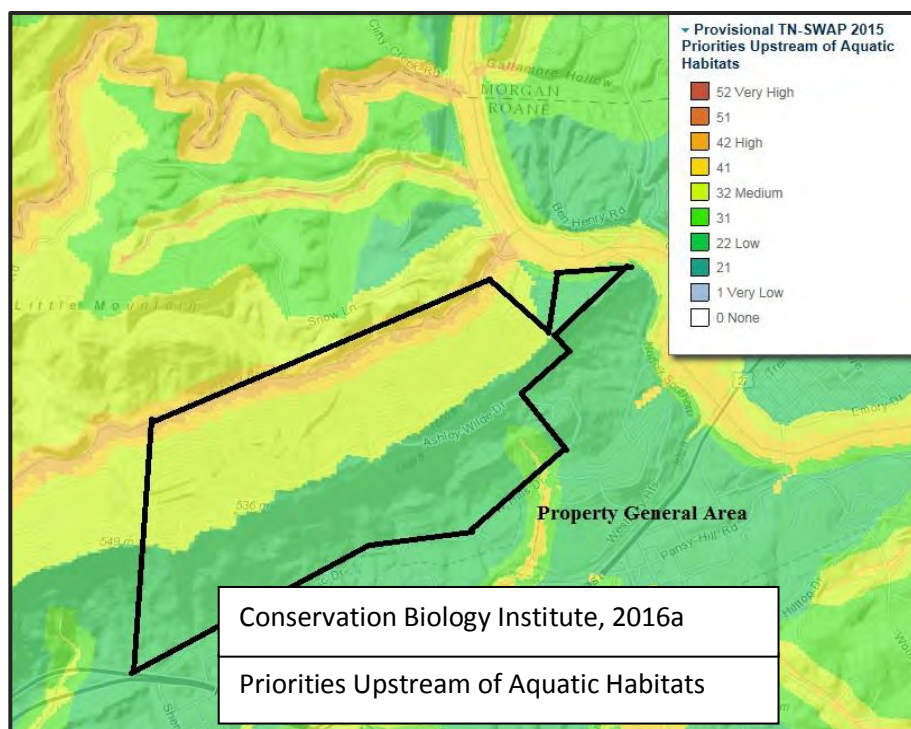
The Property is in a prominent and ecologically important landscape, locally known for its scenic beauty and vistas. It lies within the Appalachian Plateau physiographic province, and both the Plateau Escarpment, Cumberland Plateau and Southern Limestone/Dolomite Valleys and Low Rolling Hills ecoregions. The Escarpment, which makes up approximately 96% of the Property is described as:

“..steep, forested slopes and high velocity, high gradient streams. Local relief is often 1000 feet or more. The geologic strata include Mississippian-age limestone, sandstone, shale, and siltstone, and Pennsylvanian-age shale, siltstone, sandstone, and conglomerate. Streams have cut down into the limestone, but the gorge talus slopes are composed of colluvium with huge angular, slabby blocks of sandstone. Vegetation community types in the ravines and gorges include mixed oak and chestnut oak on the upper slopes, more mesic forests on the middle and lower slopes (beech-tulip poplar, sugar maple-basswood-ash-buckeye), with hemlock along rocky streamsides and river birch along floodplain terraces” (Griffith, et al 1998).

The Property is within The Nature Conservancy’s Emory River and Emory/Obed/Catoosa/Cumberland Mountains priority Conservation Areas. These areas are so designated by evaluating a number of factors that indicate that if the property is adequately conserved it has a good probability of preserving the ecoregions’ biodiversity (NatureServe, 2016b). Intact natural ecosystems are addressed by the state of

Tennessee in their State Wildlife Action Plan as important and valuable resources that should be respected and protected (TWRA, 2015).

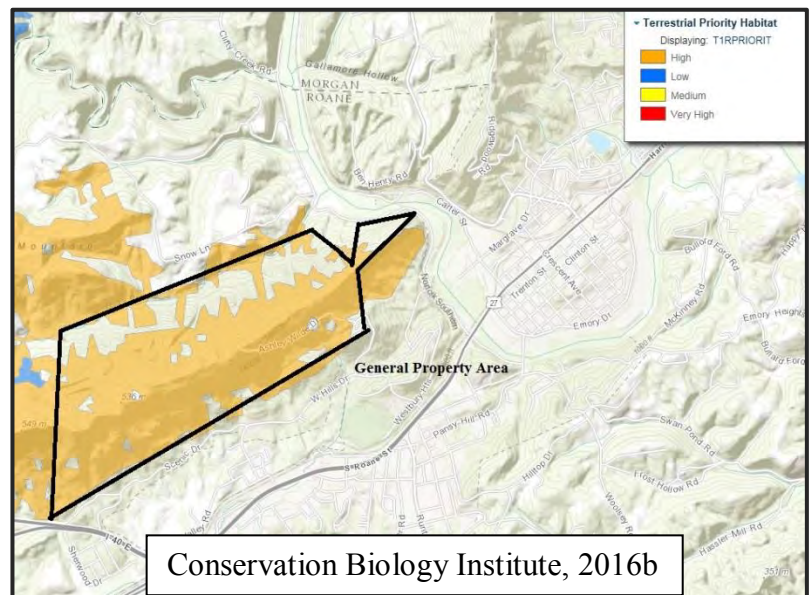
The north half of the Property lies within the Emory River Lower watershed within one half mile downstream of a U.S. Fish and Wildlife Service Critical Habitat for Threatened & Endangered Species within the same watershed, designated so for the presence of the Spotfin Chub, *Erimonax monachus*. This species is found in the Emory River just above the confluence with Avery Branch, which flows along the



northern boundary of the Property (NatureServe, 2016c). Preservation of the Property will help ensure continued quality of the water into which this threatened species may expand or may already use. The TN SWAP agrees with this designation by provisionally ranking the riparian zone along Avery Branch as high to very high in their “Priorities Upstream of Aquatic Habitats” map (Conservation Biology Institute, 2016a).

Much of the southern half of the Property is within the Ft. Loudon/Watts Bar watershed, which is designated by NatureServe as a Critical Watershed for Freshwater Species (NatureServe, 2016d). TDEC lists 270 rare, threatened and endangered (RTE) species for this watershed (TDEC, 2016a). This includes 49 fish, 16 amphibian, and 19 mollusk species that depend on good water quality, the preservation of which via a conservation easement would contribute to preserving these species deemed worthy of protection by the state of Tennessee.

The TN SWAP has also provisionally placed much of the southeast quarter of the Property within its Terrestrial Priority Areas (Conservation Biology Institute, 2016b). The Conservation Biology Institute (2016c), however, has since mapped most of the Property on either side of the ridgeline as high Terrestrial Priority Habitat based on tier 1 GCN (Greatest Conservation Need) species worthy of protection. The convergence of these qualities of the Property compounds the public’s benefit from its preservation under a conservation easement, which agrees with the goal of the Endangered Species Act of 1973 (NatureServe, 2016e), i.e. to help preserve and recover species threatened with extinction.



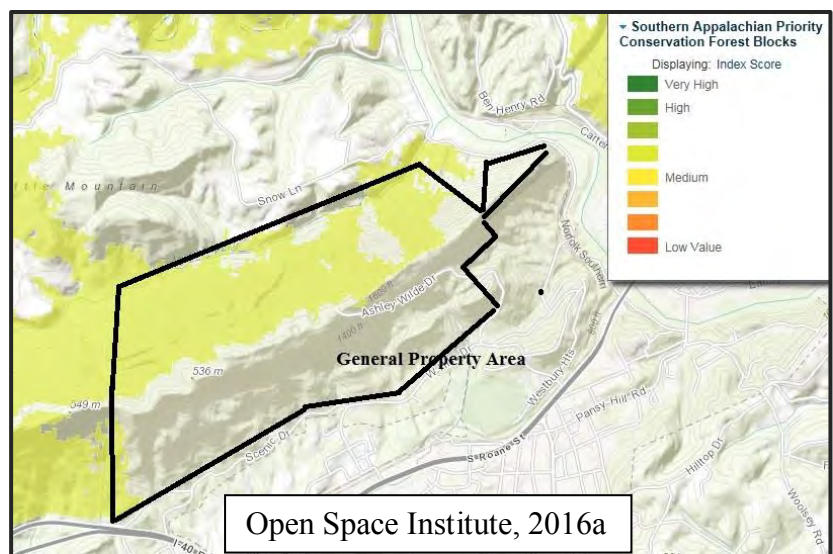
The general forest type for the region is Mixed Mesophytic, which is considered by a number of conservation organizations such as The Nature Conservancy (TNC) and the World Wildlife Fund (WWF) to be one of the most biologically diverse temperate region forest types in the world. The distinctiveness of the region is classified as “Globally Outstanding” and the conservation status is classified as “Critically Endangered”. “Over 95 percent of this habitat, perhaps more, has been converted or degraded at some point in the last 200 years. Only a few very small and scattered fragments of undisturbed or old-growth forests still remain” but “Secondary forests have the capacity to conserve a great deal of biodiversity and represent, in combination with the last fragments of undisturbed forest, the best opportunity to conserve the region’s biodiversity over the long-term” (WWF, 2016). The forest on the Walden Ridge Property is second growth. Judging by the age of the trees, it was logged at least during the timber industry’s booming years between 1870 and 1920, but possibly more recently. Herein lies the value of preserving large tracts of this forest type when so little of old-growth forests remain.

Tennessee also recognizes the value of this forest in their SWAP, placing it among most important conservation areas, the Allegheny-Cumberland Dry Oak Forest and Woodland (NatureServe, 2016a). The description of this forest composition below agrees with our findings on site:

“dry hardwood forests mainly on acidic soils in the Allegheny and Cumberland plateaus...This is a dry forest system, found on nutrient-poor or acidic soils. These forests are typically dominated by white oak, southern red oak, chestnut oak, and scarlet oak, with lesser amounts of red maple, pignut hickory, and mockernut hickory. Small stands of shortleaf pine and/or Virginia pine may occur, particularly adjacent to escarpments or following wildland fire. Eastern white pine may be prominent in some stands, especially in areas that have not burned in wildland fire. Sprouts of American chestnut can often be found in areas where it was formerly a common tree”.

(NatureServe, 2016f).

The Property’s forest value is also recognized by the national Morphological Spatial Pattern Analysis which indicates a medium to high degree of connectivity the Property has with other forested areas that contain GCN species, as well as species with high CCVI (Climate Change Vulnerability Index) (Open Space Institute, 2016a). Landscape diversity and connectedness are also acknowledged as critical elements for the persistence of species during a changing climate. This region has been identified as above average in resilience, which, if protected, can act as a refuge for flora and fauna through what is expected to be an extended and unpredictable change in climate (Open Space Institute, 2016b). This adds to its potential overall habitat value and ecological importance. Thus, the Property’s preservation would enhance the viability of the region’s biota and aid in maintaining this wildlife corridor of forests in Tennessee that stretches nearly complete from Alabama to Kentucky.



This corridor, known in this region as Walden Ridge, on which the Property lies, is a well-known migratory pathway for raptors, songbirds, and butterflies. The most popular viewing spot is on an outcrop in the neighboring Mount Roosevelt Wildlife Management Area (WMA) that begins at the Property’s western border and continues southwest to the west side of Rockwood, TN. It has an excellent view up the ridge towards the Property for viewing this southward migration. Red-tailed Hawks, Broad-winged Hawks, Turkey Vultures, Blue Jays, Northern Flickers, and monarch butterflies, to name a few, are among the wildlife depending on this ridgeline corridor for food and shelter away from the urban sprawl below (Tennessee Wildlife Resources Agency, 2016).

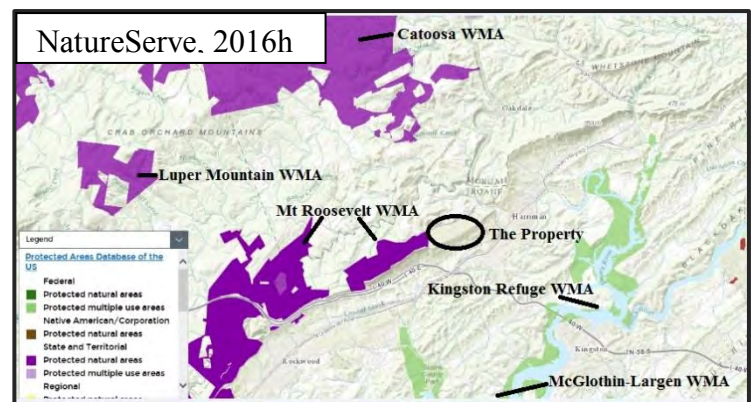
The ridgeline on the Property is also a documented migratory flyway for the state S1 ranked (extremely rare and critically imperiled) Golden Eagle, *Aquila chrysaetos*. The TWRA Golden Eagle Project recorded radio-tagged eagles’ presence on 03-08-2014 and 11-14-2014 (David Hanni, Tennessee State

Ornithologist, personal communication). This state threatened status raptor depends on large forested blocks as are found on the Property for passage between its breeding grounds in northeastern Canada and its wintering grounds in the Southeast. This species is declining in eastern North America, and is enigmatic and indicative of broad conservation value (Katzner et al, 2012). Curbing development of these lands through a conservation easement would serve to help perpetuate this bird considered imperiled in Tennessee.

During our site visits, the FLC team determined the plant life to be quite diverse. There were 158 vascular plant species observed, which included 37 canopy trees and 7 understory trees. Seven of these were oaks and two were hickories, both of which provide much mast for local wildlife such as white-tailed deer and squirrels. Additional game hunted in Roane County and the neighboring Mt. Roosevelt WMA that would be expected on the Property include black bear, wild turkey, northern bobwhite, mourning dove, possum, raccoon, coyote, and rabbits. The team found sign at a den which indicated the presence of coyote.

The understory, particularly on the north slopes, was abundant with ferns including New York, hay-scented, lady, marginal wood, cinnamon, and interrupted ferns dominating. Rarer species included walking fern. A complete list of species observed is found below. Twenty-nine species of birds were seen—mostly closed forest dwellers, as there were no openings apart from narrow roads and rock outcrops. The deciduous forests found on the Property are good breeding habitat for Neotropical migrants that are in overall decline (Hall, 1984) (North American Bird Conservation Initiative, 2016). Species found, which by virtue of observation date were possibly breeding, included Blue-headed and Red-eyed Vireos, Hooded Warbler, Louisiana Waterthrush (along Avery Branch), Ovenbird, Scarlet Tanager and Yellow-billed Cuckoo. The deciduous forests such as those found on the Property provide ample insectivora upon which these Neotropical birds depend.

The richness of the region is attested to by the many nearby state-preserved lands managed for their biodiversity. These include: Mount Roosevelt State WMA whose 8,476 acres joins the Property along its western border north of the ridgeline, Kingston Refuge WMA (472 acres, 4.5 miles), McGlothlin-Largen WMA (114 acres, 6 miles), Catoosa WMA (77,450 acres, 3 miles), Luper Mountain WMA (1990 acres, 11 miles), Frozen Head State Park and State natural Area (SNA) (24,000+ acres, 15 miles), and Northern Cumberland WMA (88,987 acres, 17 miles). In addition, other nearby private easements held or co-held by the Foothills Land Conservancy include approximately 1,675 acres in Roane County alone (NatureServe, 2016h).



The principle water on the Property is Avery Branch which flows along its north border. Two main side branches off the ridge feed it with numerous wet-weather drainages across the steep folded landscape. According to the 2014 assessment (TDEC, 2016a), the stream quality had not been assessed. On the south side below the escarpment there are at least seven small creeks feeding Caney Creek, which is

assessed as “not supporting” due to *Escherichia coli* from sewer overflow and grazing in riparian zones, plus siltation from grazing in the same areas. There is no such activity on the property contributing to the stream’s assessment. Maintaining natural shade with native vegetation near aquatic habitats is important for maintaining cool temperatures for sensitive aquatic fauna. Plus, the waterways are important conduits for movement of both plant and animal species across the landscape, therefore supporting the increasingly critical need of maintaining landscape continuity and biodiversity. These riparian corridors are especially important natural features of the Property and are considered Conservation Management Area B, deserving extra protection in the Conservation Easement. (See below and maps.)

Conservation Management Areas

For the best protection of the resources, three Conservation Management Areas have been designated (see maps section). Across all management areas, the restrictions set out in the Conservation Easement apply in order to maintain conservation values. Also, the right to improve conservation value, if approved by the land trust, is also provided.

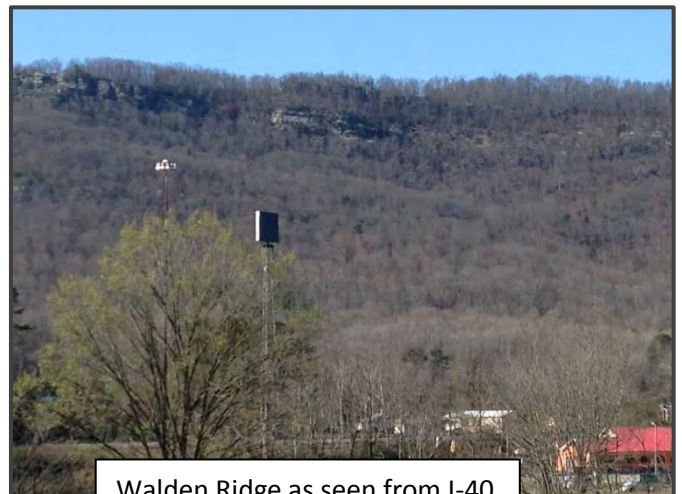
Conservation Management Area A covers any of the Property not included in Area B. This area is primarily forests on the upper ridge and the north slopes. Conservation Management Area B includes a 200 foot buffer around wetlands, streams, outcrops and other significant natural features. Area B is further extended to include the entire viewshed on the SW side of the Property as well as a 200’ buffer on the upper edge of the escarpment bluffs. In addition to the general restrictions, these locations are to have no commercial timber harvest or agricultural activities, and no new roads, skid paths, sedimentation impacts, or structures. Reserved rights are described in the Conservation Easement.

Open Space

Curbing development through a conservation easement on the forested ridge and escarpment of the Property not only protects its natural resources but also serves to maintain the quality of its mountainous scenic viewshed for the local community, the many tourists visiting the Cumberland Plateau, and other outdoor enthusiasts. Walden Ridge stretches 74 miles along the eastern edge of the Cumberland Plateau. Also known as the Cumberland Escarpment, it is known for its beatific rock outcrops rising nearly 1,000



Walden Ridge extending southward seen from the overlook on the Property



Walden Ridge as seen from I-40

feet from the valley below. This outstanding scenery is enjoyed by residents and tourists on the south side of the ridge in the Rockford and Harriman communities and by westbound travelers on Interstate 40, which is a major thoroughfare across Tennessee from North Carolina to Memphis and points west. The north side showcases a very peaceful backdrop to the community on Snow Lane.

From the rock outcrops within the Property, one has spectacular views to the north, east and south. Among the scenery to the southeast is the ridgeline of the Great Smoky Mountains National Park from 50 up to 80 miles distant. The Property and the entire Cumberland Escarpment can be viewed from high points in the Smoky Mountains such as Gregory Bald and Look Rock. The latter is a very popular destination for scenic enjoyment by travelers and bikers on the Foothills Parkway in Blount County.

The Property is less than 3 miles from and visible from the Walton Road Historic Byway, one of the earliest wagon roads over the rugged Cumberland Plateau, designated to preserve, promote, and protect the cultural and natural resources of the Upper Cumberland and Cumberland Plateau region, and to develop the area as an eco- and heritage tourism destination (Walton Road Tennessee Historic Byway, 2016). Tourism is increasingly important in the region, and local residents as well as visitors to Roane County are drawn to the vast scenic landscapes and many natural areas of the Cumberland Plateau. Watts Bar Lake, extending 72 miles on the Tennessee River, is less than 6 miles from the Property and is known for its sports fishing for crappie and bass (Wikipedia, 2015). Recreational use of nearby lands for hunting and OHV use continues to be popular. The preservation of the scenic attributes of the undeveloped Walden Ridge Partners LLC property will add significantly to the enjoyment of travelers to these already protected properties and support continued tourism in the region.

The Property is within about an hour's travel time from Chattanooga, an increasingly popular tourist destination, especially for those interested in outdoor recreation. Other natural areas on the Cumberland Plateau such as those mentioned above, continue to attract more and more tourism interest, largely as a result of the many opportunities for enjoying nature that they provide. With extensive trail systems and areas designated for hunting and other forms of recreation, the expansive public land areas nearby offer residents and visitors a range of opportunities for finding tranquility and rediscovering nature. The Property serves as a continuation of the natural and scenic nature of the Cumberland Plateau and nearby Cumberland Mountains.

One of the major concerns of the Tennessee Wildlife Resources Agency's Strategic Plan for 2006-2012 was the threat of increasing urbanization of the Cumberland Plateau (TWRA, 2015).

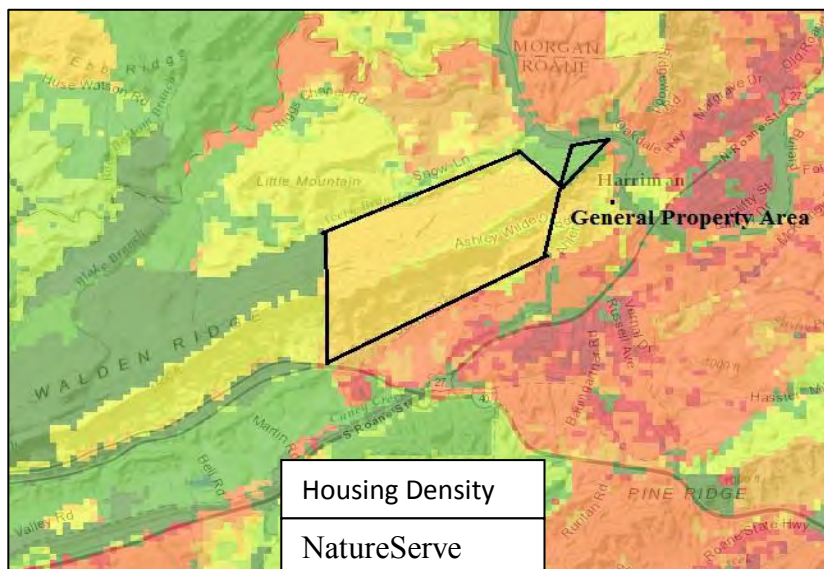
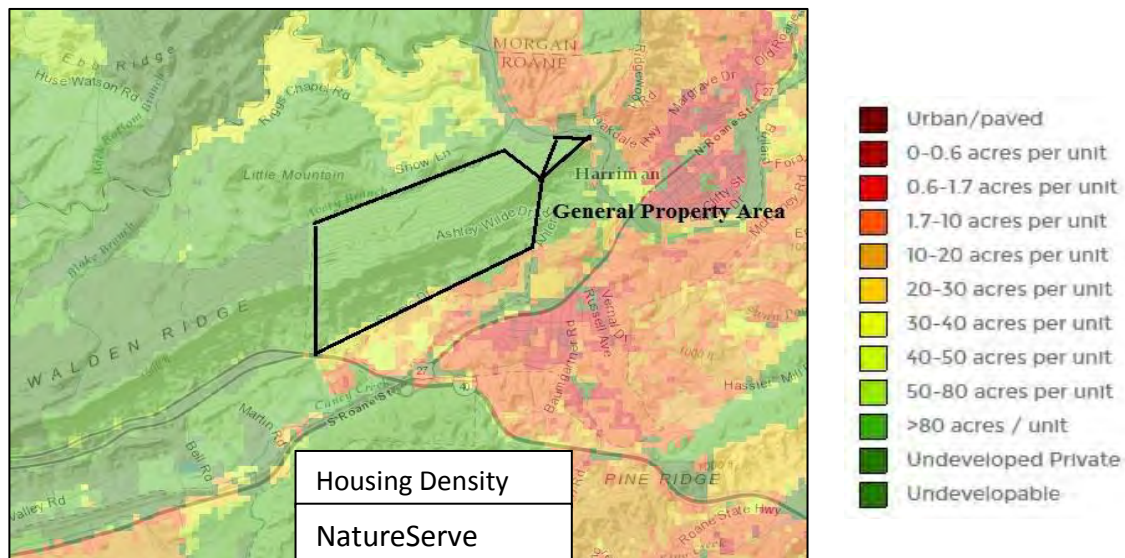
When describing the Cumberland Plateau, The Nature Conservancy states that:

"...In recent years, however, many timber companies have divested themselves of their forest holdings. Because of its scenic beauty and its largely undeveloped character, the Cumberland Plateau has become increasingly attractive to developers of second homes and vacation getaways. The result is fragmentation and degradation of the area's rich forests and pure streams." (The Nature Conservancy, 2016).

As demonstrated by the maps below (NatureServe, 2016g), housing density in 1970 was >80 acres/unit both on and in much of the area surrounding the Property. In just 30 years by the year 2000 much of the surrounding area had doubled or tripled in density to 30-40 acres/unit with even greater density along Scenic Drive at or near the Property's southern border. The Property itself was never developed, although a road ascends from the south and traverses the ridge where utility lines were put in place. This

whole region, close to and within view of the escarpment, is under great pressure from developers taking advantage of its scenic beauty. Preservation of the Property in its relatively natural and undeveloped state, before it is lost, is therefore crucial to maintaining this scenery which is increasingly sought out as relief from the fast pace and closeness of urban life, and would greatly benefit residents and visitors. Another potential threat to the scenic beauty of this open space is mining. The Property is, at least in part, underlain by the Wartburg Coalfield (Coalfields of the Appalachian Mountains, 2001) and would be protected by this easement from the threat of mountain top removal or the compromising of water quality by acid mine drainage through coal mining. This in turn could greatly benefit the public by preventing the possible loss of revenues from the tourism industry that might ensue.

In summary, as an integral component of one of the remaining relatively intact ecosystems of the Cumberland Escarpment, adding permanent protections to the Walden Ridge Partners, LLC property will support international conservation goals that include minimizing habitat fragmentation of wildlife corridors, and will help maintain healthy and diverse wildlife populations for the future. The Property



also serves a vital function as a significant contributor to the ecological viability of the important and unique habitats on the Cumberland Plateau and Escarpment, which may play an important role as a refuge for flora and fauna as climate change plays out. Including this large block of open space in a conservation easement will also offer an important buffer for healthy natural waterways, an increasingly limiting resource in the region, while providing critical opportunities for supporting, in perpetuity, the goal of increased biodiversity in the area. Protecting these conservation values and the scenic vistas of the Property will thus provide valuable services to the general public, both ecologically and economically.

GEOLOGY

The north side of the Property along the ridge is underlain by the Crab Orchard Mountains Group, which is described as conglomerate, sandstone, siltstone, shale and coal. Below that and much more extensive, is the Rockcastle Conglomerate sandstone with coal shale. On the south side, the ridge is underlain with the Gizzard Group shale siltstone, sandstone and conglomerate. Below that, and also more extensive, is the Pennington Formation, made of variegated clay shales with siltstone and sandstone. Touching the southern boundary in spots, is the Fort Payne Formation bedded chert with Newman Limestone appearing in the southeast corner. For map and detailed descriptions, see the Maps section below.

SOILS

The soils are all residuum from sandstone with or without a mixture of siltstone and shale. They are predominately Gilpin-Petros or Gilpin Bouldin-Petros. Neither are suited for crops or pasture. Ramsey Rock outcrops are on both sides of the Lily-Ramsey ridgetop and again are unsuited for agriculture. There is a narrow region along the upper reaches of Avery Branch which is prime agricultural soil of the Pope-Philo complex; however, due to frequent flooding, this soil is rarely farmed (United States Department of Agriculture, 2009). An even narrower unused strip of Shady loam, FEMA zone AE, occasionally flooded, is along Riggs Chapel Road. For detailed description and maps see Maps section below.

LAND USE INFORMATION

Hunting and forestry are the classic historical uses of the Property. In recent years, it has been an OHV playground, judging by the several steep eroded side roads observed. The scenic overlook at a rock outcrop towards the west end appears to have been a popular destination where some of the rocks are covered with perhaps decades of graffiti. At the east end of the road on the ridge, there was once a radio station that is no longer functioning. Access to the Property is permitted only by permission of the land owner at this time.

ANTHROPOGENIC FEATURES

Ashley Wilde Drive is a dirt road that ascends the ridge from the southeast corner, continues west along the ridge, and exits off the Property. This road is impassable by any means other than an ATV. There is one small, abandoned block building on the ridgetop at the east end of an unnamed road, which was the sight of the now defunct WKJS-FM radio station. Next to it, the concrete pilings are all that remain of the radio tower. This is the only structure the team observed on the Property other than utility lines that follow the road. There is an inholding with a cell tower, however, at the crest of the ridge on Ashley Wilde Drive. A network of a few OHV side-trails provide access off the main road along the ridge. On the north side, there are old presumed logging roads which are overgrown with mountain laurel and hardwoods and mostly unrecognizable. A map of some of these roads is located in the Maps section below.

FLORA AND FAUNA REPORTS

TN DEPARTMENT OF NATURAL HERITAGE DATABASE REPORT ON LISTED SPECIES

Tom Howe

From: Stephanie Ann Williams <Stephanie.Ann.Williams@tn.gov>
Sent: Wednesday, February 17, 2016 6:07 PM
To: 'thowe@foothillsland.org'
Subject: RE: Walden Ridge Property, Roane Cty

Hi Tom-

I can't complain, all is well here. Hope all is well your way.

I looked up the property in Roane County and the following rare species have been previously observed within four miles of the property. There were no observations within one mile.

Type	Scientific Name	Common Name	Global Rank	St. Rank	Fed. Prot.	St. Prot.	Habitat
Invertebrate Animal	Cambarus deweesae	Valley Flame Crayfish	G4	S1	—	E	Primary burrower; open areas with high water tables; northern Ridge & Valley.
Vascular Plant	Conradina verticillata	Cumberland Rosemary	G3	S3	LT	T	Sandy, Rocky River Banks And Bars
Vertebrate Animal	Erimonax monachus	Spotfin Chub	G2	S2	LT,XN, PXN	T	Clear upland rivers with swift currents & boulder substrates; portions of the Tennessee River watershed.
Vascular Plant	Erysimum capitatum	Western Wallflower	G5	S1S2	—	E	Rocky Bluffs
Vascular Plant	Eurybia schreberi	Schreber's Aster	G4	S1	—	S	Mesic Woods & Seepage Slopes
Invertebrate Animal	Fusconala cuneolus	Finerayed Pigtoe	G1	S1	LE	E	Riffles of fords and shoals of mod gradient streams in firm cobble and gravel substrates; middle & upper Tennessee River watershed.
Invertebrate Animal	Lampsilis virescens	Alabama Lampmussel	G1	S1	LE	E	Found in sand and gravel substrates in shoal areas of small-medium size rivers; middle and upper TN R system; recently rediscovered in Emory River.
Vascular Plant	Marshallia grandiflora	Large-fl. Barbara's-buttons	G2	S2	—	E	Rocky River Bars
Nonvascular Plant	Myurella julacea	A Moss	G5	SH	—	S-P	Shale Bluffs
Vertebrate Animal	Percina aurantiaca	Tangerine Darter	G4	S3	—	D	Large-moderate size headwater tribs to Tennessee River, in clear, fairly deep, rocky pools, usually below riffles.
Nonvascular Plant	Preissia quadrata	A Liverwort	G5	S1	—	T	Seepy Limestone Cliffs And Bluffs

OBSERVED SPECIES LIST during site visits 3-15-16 & 6-7-16 (plants after Weakley, 2015)

Plants		
Genus	Species	Common Name
<i>Acer</i>	<i>negundo</i>	Box Elder
<i>Acer</i>	<i>rubrum</i>	Red Maple
<i>Acer</i>	<i>saccharinum</i>	Silver Maple
<i>Adiantum</i>	<i>pedatum</i>	Northern Maidenhair
<i>Aesculus</i>	<i>sylvatica</i>	Painted Buckeye
<i>Ailanthus</i>	<i>altissima</i>	Tree-of-Heaven
<i>Allium</i>	<i>canadense</i>	Wild Onion
<i>Ambrosia</i>	<i>artemisiifolia</i>	Annual Ragweed
<i>Amelanchier</i>	<i>sp.</i>	Serviceberry
<i>Amianthium</i>	<i>muscitoxicum</i>	Fly-poison
<i>Anemone</i>	<i>americana</i>	Round-lobed Hepatica
<i>Apocynum</i>	<i>cannabinum</i>	Indian Hemp
<i>Arisaema</i>	<i>triphyllum</i>	Jack-in-the-Pulpit
<i>Arundinaria</i>	<i>appalachiana</i>	Hill Cane
<i>Asclepias</i>	<i>tuberosa</i>	Butterfly-weed
<i>Asplenium</i>	<i>platyneuron</i>	Ebony Spleenwort
<i>Asplenium</i>	<i>rhizophyllum</i>	Walking Fern
<i>Athyrium</i>	<i>asplenoides</i>	Southern Lady Fern
<i>Bignonia</i>	<i>capreolata</i>	Crossvine
<i>Cardamine</i>	<i>hirsuta</i>	Hairy Bitter Cress
<i>Carex</i>	<i>sp.</i>	Sedge
<i>Carpinus</i>	<i>caroliniana</i>	Ironwood (American Hornbeam)
<i>Carya</i>	<i>glabra</i>	Pignut Hickory
<i>Carya</i>	<i>tomentosa</i>	Mockernut Hickory
<i>Castanea</i>	<i>dentata</i>	American Chestnut
<i>Celtis</i>	<i>occidentalis</i>	Northern Hackberry
<i>Cercis</i>	<i>canadensis</i>	Redbud
<i>Chimaphila</i>	<i>maculata</i>	Pipsissewa
<i>Circaea canadensis</i>	<i>canadensis</i>	Canada Enchanter's-nightshade
<i>Collinsonia</i>	<i>canadensis</i>	Richweed
<i>Coreopsis</i>	<i>major</i>	Greater Tickseed
<i>Cornus</i>	<i>florida</i>	Flowering Dogwood
<i>Cretagus</i>	<i>sp.</i>	Hawthorne
<i>Cunila</i>	<i>origanoides</i>	Wild Oregano
<i>Danthonia</i>	<i>sp.</i>	Oat Grass
<i>Daucus</i>	<i>carota</i>	Wild Carrot
<i>Dennstaedtia</i>	<i>punctilobula</i>	Hay-scented Fern
<i>Dichanthelium</i>	<i>sp.</i>	Deertongue
<i>Diphasiastrum</i>	<i>digitatum</i>	Common Running-cedar

Genus	Species	Common Name
<i>Dioscorea</i>	<i>villosa</i>	Wild Yam
<i>Dryopteris</i>	<i>marginalis</i>	Marginal Woodfern
<i>Euonymus</i>	<i>alata</i>	Winged Burning Bush
<i>Euonymus</i>	<i>americanus</i>	Strawberry Bush
<i>Eurybia</i>	<i>schreberi</i>	Schreberi's Aster
<i>Fagus</i>	<i>grandifolia</i>	American Beech
<i>Fraxinus</i>	<i>americana</i>	White Ash
<i>Galium</i>	<i>aparine</i>	Cleavers
<i>Galium</i>	<i>lanceolatum</i>	Wild-licorice
<i>Geranium</i>	<i>maculatum</i>	Wild Geranium
<i>Geum</i>	<i>donianum</i>	Southern Barren Strawberry
<i>Goodyera</i>	<i>pubescens</i>	Downy Rattlesnake Plantain
<i>Hamamelis</i>	<i>virginiana</i>	Witch-hazel
<i>Helianthus</i>	<i>microcephalus</i>	Small-headed Sunflower
<i>Hexastylis</i>	<i>sp.</i>	Heartleaf
<i>Houstonia</i>	<i>caerulea</i>	Azure Bluet
<i>Houstonia</i>	<i>purpurea</i> v. <i>purpurea</i>	Bluets
<i>Hypericum</i>	<i>hypericoides</i>	St. Andrew's Cross
<i>Hypericum</i>	<i>hypericoides</i>	St. Andrew's Cross
<i>Ilex</i>	<i>ambigua</i>	Carolina Holly
<i>Ilex</i>	<i>montana</i>	Mountain Holly
<i>Ilex</i>	<i>opaca</i>	American Holly
<i>Iris</i>	<i>cristata</i>	Dwarf Crested Iris
<i>Juncus</i>	<i>effusus</i>	Soft Rush
<i>Juniperus</i>	<i>virginiana</i>	Red Cedar
<i>Kalmia</i>	<i>latifolia</i>	Mountain Laurel
<i>Lathyrus</i>	<i>latifolius</i>	Everlasting Pea
<i>Lepidium</i>	<i>virginicum</i>	Poor Man's Pepper
<i>Lespedeza</i>	<i>sp.</i>	Lespedeza
<i>Leucothoe</i>	<i>fontanesiana</i>	Mountain Doghobble
<i>Ligustrum</i>	<i>sinense</i>	Chinese Privet
<i>Lindera</i>	<i>benzoin</i>	Spicebush
<i>Liquidambar</i>	<i>styraciflua</i>	Sweet Gum
<i>Liriodendron</i>	<i>tulipifera</i>	Tulip Poplar
<i>Lonicera</i>	<i>japonica</i>	Japanese Honeysuckle
<i>Lonicera</i>	<i>maackii</i>	Amur Honeysuckle
<i>Luzula</i>	<i>sp.</i>	Wood-rush
<i>Lygodium</i>	<i>palmatum</i>	Climbing Fern
<i>Lysimachia</i>	<i>ciliata</i>	Fringed Loosestrife
<i>Maianthemum</i>	<i>racemosum</i>	False Solomon's Seal
<i>Magnolia</i>	<i>acuminata</i>	Cucumber Magnolia

Genus	Species	Common Name
<i>Magnolia</i>	<i>fraseri</i>	Fraser Magnolia
<i>Magnolia</i>	<i>tripetala</i>	Umbrella Magnolia
<i>Mahonia</i>	<i>aquifolium</i>	Oregon Holly
<i>Medeola</i>	<i>virginiana</i>	Cucumber-root
<i>Melilotus</i>	<i>albus</i>	White Sweetclover
<i>Melilotus</i>	<i>officinalis</i>	Yellow Sweetclover
<i>Microstegium</i>	<i>vimineum</i>	Japanese Stilt Grass
<i>Monarda</i>	<i>sp.</i>	Bee-balm
<i>Muscadinia</i>	<i>rotundifolia</i>	Muscadine
<i>Nyssa</i>	<i>sylvatica</i>	Black Gum
<i>Osmunda</i>	<i>claytoniana</i> var. <i>claytoniana</i>	Interrupted Fern
<i>Osmundastrum</i>	<i>cinnamomeum</i>	Cinnamon Fern
<i>Oxalis</i>	<i>violacea</i>	Violet Wood Sorrel
<i>Oxydendrum</i>	<i>arboreum</i>	Sourwood
<i>Packera</i>	<i>anonyma</i>	Small's Ragwort
<i>Panicum</i>	<i>sp.</i>	Panic Grass
<i>Parthenocissus</i>	<i>quinquefolia</i>	Virginia Creeper
<i>Pinus</i>	<i>echinata</i>	Short-leaf Pine
<i>Pinus</i>	<i>strobus</i>	White Pine
<i>Pinus</i>	<i>taeda</i>	Loblolly Pine
<i>Pinus</i>	<i>virginiana</i>	Virginia Pine
<i>Platanus</i>	<i>occidentalis</i>	Sycamore
<i>Pleopeltis</i>	<i>michauxiana</i>	Resurrection Fern
<i>Podophyllum</i>	<i>peltatum</i>	May-apple
<i>Polygonatum</i>	<i>biflorum</i>	Small Solomon's-seal
<i>Polystichum</i>	<i>acrostichoides</i>	Christmas Fern
<i>Polytrichum</i>	<i>commune</i>	Haircap Moss
<i>Potentilla</i>	<i>canadensis</i>	Dwarf Cinquefoil
<i>Prenanthes</i>	<i>sp.</i>	Rattlesnake Root
<i>Prosartes</i>	<i>sp.</i>	Mandarin
<i>Prunus</i>	<i>serotina</i>	Black Cherry
<i>Pteridium</i>	<i>aquilinum</i>	Bracken
<i>Pueraria</i>	<i>montana</i>	Kudzu
<i>Pyrularia</i>	<i>pubera</i>	Oil-nut
<i>Pyrus</i>	<i>calleryana</i>	Bradford Pear
<i>Quercus</i>	<i>alba</i>	White Oak
<i>Quercus</i>	<i>coccinea</i>	Scarlet Oak
<i>Quercus</i>	<i>falcata</i>	Southern Red Oak
<i>Quercus</i>	<i>marilandica</i>	Blackjack Oak
<i>Quercus</i>	<i>montana</i>	Chestnut Oak
<i>Quercus</i>	<i>rubra</i>	Northern Red Oak
<i>Quercus</i>	<i>velutina</i>	Black Oak

Genus	Species	Common Name
<i>Rhus</i>	<i>copallinum</i>	Winged Sumac
<i>Rosa</i>	<i>multiflora</i>	Multiflora Rose
<i>Rubus</i>	<i>argutus</i>	Southern Blackberry
<i>Rubus</i>	<i>occidentalis</i>	Raspberry
<i>Rudbeckia</i>	<i>fulgida</i> var. <i>fulgida</i>	Orange Coneflower
<i>Sanicula</i>	<i>trifoliata</i>	Large-fruited Sanicle
<i>Sassafras</i>	<i>albidum</i>	Sassafras
<i>Scutellaria</i>	<i>pseudoserrata</i>	Falseteeth Skullcap
<i>Silene</i>	<i>rotundifolia</i>	Roundleaf Fire-pink
<i>Sisyrinchium</i>	<i>sp.</i>	Blue-eyed-grass
<i>Smilax</i>	<i>glauca</i>	Glaucous Greenbrier
<i>Smilax</i>	<i>rotundifolia</i>	Common Greenbrier
<i>Solidago</i>	<i>canadensis</i>	Canada Goldenrod
<i>Stellaria</i>	<i>pubera</i>	Star Chickweed
<i>Taraxacum</i>	<i>officinale</i>	Common Dandelion
<i>Thalictrum</i>	<i>thalictroides</i>	Rue Anemone
<i>Thaspium</i>	<i>trifoliatum</i>	Yellow Meadow Parsnip
<i>Thelypteris</i>	<i>noveboracensis</i>	New York Fern
<i>Tiarella</i>	<i>cordifolia</i>	Foamflower
<i>Tilia</i>	<i>americana</i> var. <i>heterophylla</i>	Mountain Basswood
<i>Tipularia</i>	<i>discolor</i>	Cranefly Orchid
<i>Toxicodendron</i>	<i>radicans</i>	Poison Ivy
<i>Trillium</i>	<i>sp.</i>	Trillium
<i>Tsuga</i>	<i>canadensis</i>	Eastern Hemlock
<i>Ulmus</i>	<i>americana</i>	American Elm
<i>Vaccinium</i>	<i>pallidum</i>	Lowbush Blueberry
<i>Vaccinium</i>	<i>stamineum</i>	Dwarf Deerberry
<i>Veratrum</i>	<i>parviflorum</i>	Mountain Bunchflower
<i>Verbascum</i>	<i>thapsus</i>	Mullein
<i>Verbesina</i>	<i>alternifolia</i>	Common Wingstem
<i>Viburnum</i>	<i>acerifolium</i>	Mapleleaf Viburnum
<i>Viola</i>	<i>hastata</i>	Halberd-leaved Violet
<i>Viola</i>	<i>sororia</i> var. <i>sororia</i>	Common Blue Violet
<i>Vitis</i>	<i>sp.</i>	Grape
<i>Xanthorhiza</i>	<i>simplicissima</i>	Yellowroot
<i>Yucca</i>	<i>sp.</i>	Yucca

Birds	
Canada Goose	<i>Branta canadensis</i>
Turkey Vulture	<i>Cathartes aura</i>
Red-shouldered Hawk	<i>Buteo lineatus</i>
Red-tailed Hawk	<i>Buteo jamaicensis</i>
Yellow-billed Cuckoo	<i>Coccyzus americanus</i>
Ruby-throated Hummingbird	<i>Archilochus colubris</i>
Red-bellied Woodpecker	<i>Melanerpes carolinus</i>
Downy Woodpecker	<i>Picoides pubescens</i>
Hairy Woodpecker	<i>Picoides villosus</i>
Pileated Woodpecker	<i>Dryocopus pileatus</i>
Eastern Phoebe	<i>Sayornis phoebe</i>
Blue-headed Vireo	<i>Vireo solitarius</i>
Red-eyed Vireo	<i>Vireo olivaceus</i>
Blue Jay	<i>Cyanocitta cristata</i>
American Crow	<i>Corvus brachyrhynchos</i>
Carolina Chickadee	<i>Poecile carolinensis</i>
Tufted Titmouse	<i>Baeolophus bicolor</i>
White-breasted Nuthatch	<i>Sitta carolinensis</i>
Brown Creeper	<i>Certhia americana</i>
Carolina Wren	<i>Thryothorus ludovicianus</i>
Eastern Bluebird	<i>Sialia sialis</i>
American Pipit	<i>Anthus rubescens</i>
Ovenbird	<i>Seiurus aurocapilla</i>
Louisiana Waterthrush	<i>Parkesia motacilla</i>
Hooded Warbler	<i>Setophaga citrina</i>
Pine Warbler	<i>Setophaga pinus</i>
Yellow-throated Warbler	<i>Setophaga dominica</i>
Scarlet Tanager	<i>Piranga olivacea</i>
Northern Cardinal	<i>Cardinalis cardinalis</i>

Insects	Reptiles & Amphibians
Appalachian Brown	Fence Lizard
Black Swallowtail	Frog sp.
Carrion Beetle	Gray Treefrog
Common Whitetail	Northern Water Snake
Crane Fly spp.	Upland Chorus Frog
Diana Fritillary	
Duskywing sp	Mammals
Eastern Comma	White-tailed Deer
Ebony Jewelwing	Fox or Coyote Den
Great-spangled Fritillary	Small mammal burrows
Mourning Cloak	
Spicebush Swallowtail	
Spring Azure	
Summer Azure	
Tiger Beetle sp.	
Tiger Swallowtail	
Syrphid Fly sp	

ARCHAEOLOGICAL REPORT

TN DIVISION OF ARCHAEOLOGY LETTER ON ARCHAEOLOGY DATABASE

Tom Howe

From: Mark Norton <Mark.Norton@tn.gov>
Sent: Tuesday, February 16, 2016 9:22 AM
To: thowe@foothillsland.org
Subject: RE: Walden Ridge, Roane County Property

Hello Tom,

I just checked the site files and did not find any historic or prehistoric sites recorded within the 6 areas. Thanks, Mark

From: Tom Howe [<mailto:thowe@foothillsland.org>]
Sent: Monday, February 15, 2016 10:35 AM
To: Mark Norton
Subject: Walden Ridge, Roane County Property

*** This is an EXTERNAL email. Please exercise caution. DO NOT open attachments or click links from unknown senders or unexpected email - STS-Security. ***

Mark,

The new year is starting early for us at Foothills. I hope everything is well with you.

We have a new property in Roane County for which we will be needing an archaeological report. I have attached a map which is within the Harriman quadrangle.

The TN property parcel numbers, if needed, are 026-017.00-000 and 026-017.07-000.

Coordinates near the property's center are 35°55'39.28"N, 84°35'04.19"W.

Thank you,
Tom Howe
Foothills Land Conservancy
865-681-8326

PHOTOGRAPHS OF CURRENT SITE CONDITIONS

From visits on 3/23/15, 3/15/16, & 6/7/16 (see table below)

PHOTO POINT MAP

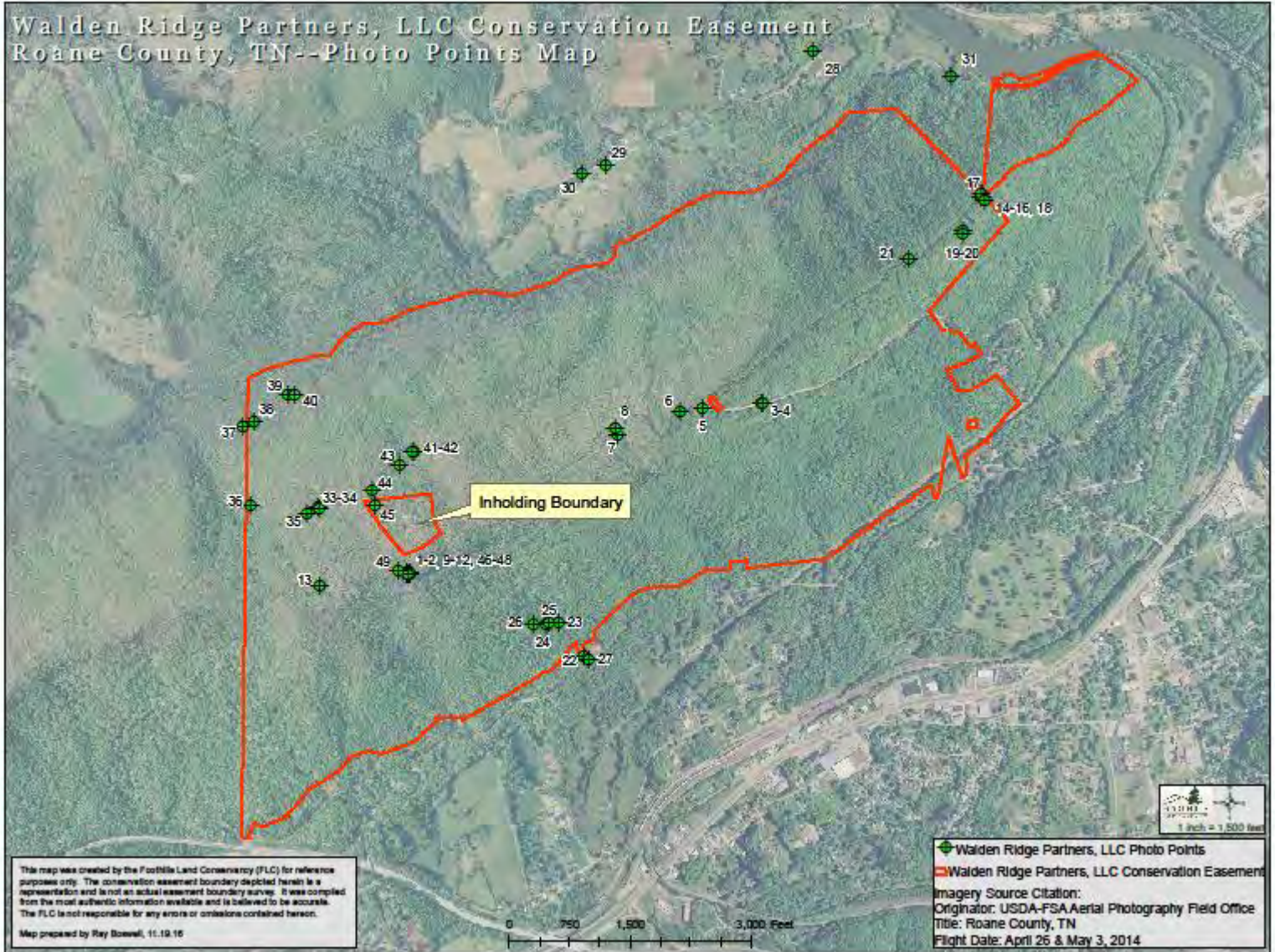


PHOTO KEY

Photo #	File Name	Title	Description	Latitude	Longitude	Time Stamp	Date Stamp	Elev	Photo Dir	Author
1	IMG_0347.JPG	Walden Ridge Partners LLC	Overlook View to SW	N 35° 55' 20.61"	W 84° 35' 37.28"	9:03:01 AM	3/23/2015	1732 ft	200° SSW	MClebsch
2	IMG_0348.JPG	Walden Ridge Partners LLC	Overlook View to South	N 35° 55' 20.61"	W 84° 35' 37.44"	9:03:28 AM	3/23/2015	1732 ft	130° SE	MClebsch
3	IMG_0349.JPG	Walden Ridge Partners LLC	Ashley Wilde Drive	N 35° 55' 40.97"	W 84° 34' 43.39"	9:18:24 AM	3/23/2015	1539 ft	257° WSW	MClebsch
4	IMG_0350.JPG	Walden Ridge Partners LLC	Ashley Wilde Dr Near Top	N 35° 55' 41.00"	W 84° 34' 43.20"	9:18:30 AM	3/23/2015	1528 ft	57° ENE	MClebsch
5	IMG_3053.JPG	Walden Ridge Partners LLC	Cell Tower at Inholding	N 35° 55' 40.53"	W 84° 34' 52.37"	9:19:38 AM	3/15/2016	1641 ft	57° ENE	THowe
6	IMG_3054.JPG	Walden Ridge Partners LLC	Utility Lines on Ridge	N 35° 55' 40.12"	W 84° 34' 55.78"	9:41:01 AM	3/15/2016	1620 ft	331° NNW	THowe
7	IMG_3055.JPG	Walden Ridge Partners LLC	OHV Trail	N 35° 55' 37.47"	W 84° 35' 05.23"	10:03:04 AM	3/15/2016	1605 ft	329° NNW	THowe
8	IMG_3056.JPG	Walden Ridge Partners LLC	Large White Oak	N 35° 55' 38.11"	W 84° 35' 05.56"	10:03:34 AM	3/15/2016	1599 ft	303° WNW	THowe
9	IMG_3058.JPG	Walden Ridge Partners LLC	I-40 Interchange to South	N 35° 55' 20.81"	W 84° 35' 37.42"	10:29:57 AM	3/15/2016	1695 ft	149° SSE	THowe
10	IMG_3060.JPG	Walden Ridge Partners LLC	Overlook with Years of Graffiti	N 35° 55' 20.73"	W 84° 35' 37.09"	10:30:16 AM	3/15/2016	1731 ft	252° WSW	THowe
11	IMG_3062.JPG	Walden Ridge Partners LLC	Trash below Overlook	N 35° 55' 20.65"	W 84° 35' 37.03"	10:30:41 AM	3/15/2016	1735 ft	239° WSW	THowe
12	IMG_3063.JPG	Walden Ridge Partners LLC	Turnaround at Overlook	N 35° 55' 20.66"	W 84° 35' 36.98"	10:30:52 AM	3/15/2016	1739 ft	307° NW	THowe
13	IMG_3064.JPG	Walden Ridge Partners LLC	Ruttled OHV Challenge	N 35° 55' 19.40"	W 84° 35' 50.71"	10:44:36 AM	3/15/2016	1682 ft	84° E	THowe
14	IMG_3065.JPG	Walden Ridge Partners LLC	Old Radio Tower Building	N 35° 56' 05.85"	W 84° 34' 09.69"	10:59:11 AM	3/15/2016	1428 ft	21° NNE	THowe
15	IMG_3066.JPG	Walden Ridge Partners LLC	Trail to Bluff on NE Corner	N 35° 56' 05.94"	W 84° 34' 09.39"	10:59:50 AM	3/15/2016	1460 ft	48° NE	THowe
16	IMG_3067.JPG	Walden Ridge Partners LLC	Road on Ridge's East End	N 35° 56' 05.88"	W 84° 34' 09.53"	10:59:57 AM	3/15/2016	1456 ft	255° WSW	THowe
17	IMG_3068.JPG	Walden Ridge Partners LLC	Boundary Marker near Radio Tower	N 35° 56' 06.36"	W 84° 34' 09.64"	11:01:58 AM	3/15/2016	1443 ft	330° NNW	THowe
18	IMG_3069.JPG	Walden Ridge Partners LLC	Old Supports for Radio Tower	N 35° 56' 05.58"	W 84° 34' 09.17"	11:06:55 AM	3/15/2016	1445 ft	68° ENE	THowe
19	IMG_3070.JPG	Walden Ridge Partners LLC	View to SE from Radio Tower Area	N 35° 56' 01.94"	W 84° 34' 12.58"	11:22:38 AM	3/15/2016	1468 ft	83° E	THowe
20	IMG_3071.JPG	Walden Ridge Partners LLC	Looking West Along Ridge, East End	N 35° 56' 01.58"	W 84° 34' 12.60"	11:22:48 AM	3/15/2016	1474 ft	245° WSW	THowe
21	IMG_3073.JPG	Walden Ridge Partners LLC	Road and OHV Trail on Ridgetop	N 35° 55' 58.49"	W 84° 34' 20.84"	11:29:37 AM	3/15/2016	1521 ft	62° ENE	THowe
22	IMG_3075.JPG	Walden Ridge Partners LLC	Boundary Marker Along Scenic Dr	N 35° 55' 10.21"	W 84° 35' 10.91"	1:03:55 PM	3/15/2016	892 ft	72° ENE	THowe
23	IMG_3076.JPG	Walden Ridge Partners LLC	Possible Boundary Marker Above Scenic Dr	N 35° 55' 14.36"	W 84° 35' 14.65"	1:22:37 PM	3/15/2016	1021 ft	345° NNW	THowe
24	IMG_3078.JPG	Walden Ridge Partners LLC	Drainage Near Scenic Drive	N 35° 55' 14.08"	W 84° 35' 16.49"	1:25:38 PM	3/15/2016	1008 ft	355° N	THowe
25	IMG_3079.JPG	Walden Ridge Partners LLC	Pools in Creek N of Scenic Dr	N 35° 55' 14.38"	W 84° 35' 15.97"	1:25:54 PM	3/15/2016	1007 ft	7° N	THowe
26	IMG_3081.JPG	Walden Ridge Partners LLC	Woods South of Overlook	N 35° 55' 14.14"	W 84° 35' 18.41"	1:40:19 PM	3/15/2016	1024 ft	54° NE	THowe
27	IMG_3083.JPG	Walden Ridge Partners LLC	Boundary Marker Along Scenic Dr	N 35° 55' 09.75"	W 84° 35' 10.06"	2:03:27 PM	3/15/2016	904 ft	7° N	THowe
28	IMG_3084.JPG	Walden Ridge Partners LLC	View of North Side of Ridge from Snow Ln	N 35° 56' 24.09"	W 84° 34' 34.85"	2:35:15 PM	3/15/2016	902 ft	101° E	THowe
29	IMG_3085.JPG	Walden Ridge Partners LLC	View from Snow Lane	N 35° 56' 10.41"	W 84° 35' 06.41"	2:38:48 PM	3/15/2016	1110 ft	268° W	THowe
30	IMG_3086.JPG	Walden Ridge Partners LLC	White Pines in Lowlands from Snow Ln	N 35° 56' 09.48"	W 84° 35' 10.06"	2:39:24 PM	3/15/2016	1110 ft	85° E	THowe
31	IMG_3088.JPG	Walden Ridge Partners LLC	Boundary Along Riggs Chapel Rd	N 35° 56' 20.78"	W 84° 34' 13.89"	2:45:55 PM	3/15/2016	760 ft	115° ESE	THowe
32	IMG_3089.JPG	Walden Ridge Partners LLC	View of Escarpment from I-40	N 35° 54' 32.28"	W 84° 35' 01.90"	2:56:28 PM	3/15/2016	818 ft	350° N	THowe
33	IMG_3408.JPG	Walden Ridge Partners LLC	Rich Woods Down N Side of Ridge	N 35° 55' 28.98"	W 84° 35' 50.74"	10:35:54 AM	6/7/2016	1527 ft	246° WSW	THowe
34	IMG_3409.JPG	Walden Ridge Partners LLC	Sandstone Boulders on North Side of Ridge	N 35° 55' 28.75"	W 84° 35' 50.60"	10:36:04 AM	6/7/2016	1504 ft	63° ENE	THowe
35	IMG_3410.JPG	Walden Ridge Partners LLC	Rock Outcrops on North Side	N 35° 55' 28.27"	W 84° 35' 52.52"	10:39:16 AM	6/7/2016	1519 ft	274° W	THowe
36	IMG_3411.JPG	Walden Ridge Partners LLC	Opening Along Old Logging Road	N 35° 55' 29.39"	W 84° 36' 00.96"	10:59:17 AM	6/7/2016	1426 ft	314° NW	THowe
37	IMG_3412.JPG	Walden Ridge Partners LLC	Lush Undergrowth on N Side	N 35° 55' 38.99"	W 84° 36' 01.94"	11:21:34 AM	6/7/2016	1189 ft	25° NNE	THowe
38	IMG_3414.JPG	Walden Ridge Partners LLC	One of Many Lush NY Fern Beds	N 35° 55' 39.57"	W 84° 36' 00.35"	11:25:18 AM	6/7/2016	1154 ft	348° NNW	THowe
39	Deleted			N 35° 55' 42.77"	W 84° 35' 55.11"	11:33:15 AM	6/7/2016	1104 ft	175° S	THowe
40	IMG_3417.JPG	Walden Ridge Partners LLC	Fern Dominated Undergrowth	N 35° 55' 42.92"	W 84° 35' 54.01"	11:34:33 AM	6/7/2016	1128 ft	147° SSE	THowe
41	IMG_3424.JPG	Walden Ridge Partners LLC	Woods on North Slope	N 35° 55' 35.70"	W 84° 35' 36.10"	1:03:44 PM	6/7/2016	1433 ft	290° WNW	THowe
42	IMG_3425.JPG	Walden Ridge Partners LLC	Large Oaks on North Slope	N 35° 55' 35.66"	W 84° 35' 36.37"	1:03:54 PM	6/7/2016	1434 ft	186° S	THowe
43	IMG_3427.JPG	Walden Ridge Partners LLC	Uncommon Interrupted Ferns	N 35° 55' 33.98"	W 84° 35' 38.32"	1:09:28 PM	6/7/2016	1477 ft	27° NNE	THowe
44	Deleted			N 35° 55' 30.97"	W 84° 35' 42.55"	1:17:11 PM	6/7/2016	1587 ft	222° SW	THowe
45	Deleted			N 35° 55' 29.19"	W 84° 35' 42.20"	1:20:31 PM	6/7/2016	1678 ft	224° SW	THowe
46	IMG_3432.JPG	Walden Ridge Partners LLC	Watts Bar Lake from Overlook	N 35° 55' 20.59"	W 84° 35' 37.36"	1:35:38 PM	6/7/2016	1684 ft	202° SSW	THowe
47	IMG_3433.JPG	Walden Ridge Partners LLC	Mt Roosevelt State WMA Down Walden Ridge	N 35° 55' 20.65"	W 84° 35' 37.34"	1:35:58 PM	6/7/2016	1719 ft	244° WSW	THowe
48	IMG_3434.JPG	Walden Ridge Partners LLC	From Overlook Looking West	N 35° 55' 20.63"	W 84° 35' 37.31"	1:36:17 PM	6/7/2016	1724 ft	260° W	THowe
49	IMG_3435.JPG	Walden Ridge Partners LLC	Kingston Steam Plant & Smoky Mtns to SE	N 35° 55' 21.11"	W 84° 35' 38.79"	1:40:37 PM	6/7/2016	1715 ft	44° NE	THowe

PHOTOGRAPHS

Walden Ridge Partners LLC IMG_0347.JPG
1 Overlook View to SW

MClebsch



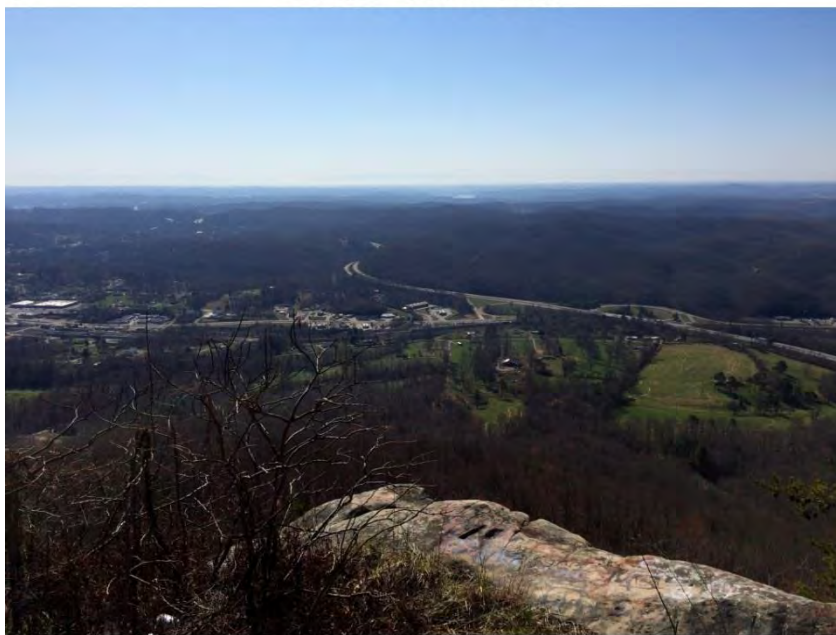
W 84° 35' 37.28"
N 35° 55' 20.61"

1732 ft
200° SSW

3/23/2015
9:03:01 AM

Walden Ridge Partners LLC IMG_0348.JPG
2 Overlook View to South

MClebsch



W 84° 35' 37.44"
N 35° 55' 20.61"

1732 ft
130° SE

3/23/2015
9:03:28 AM



W 84° 34' 43.39" 1539 ft 3/23/2015
N 35° 55' 40.97" 257° WSW 9:18:24 AM



W 84° 34' 43.20" 1528 ft 3/23/2015
N 35° 55' 41.00" 57° ENE 9:18:30 AM



W 84° 34' 52.37" 1641 ft 3/15/2016
N 35° 55' 40.53" 57° ENE 9:19:38 AM



W 84° 34' 55.78" 1620 ft 3/15/2016
N 35° 55' 40.12" 331° NNW 9:41:01 AM



W 84° 35' 05.23" 1605 ft 3/15/2016
N 35° 55' 37.47" 329° NNW 10:03:04 AM



W 84° 35' 05.56" 1599 ft 3/15/2016
N 35° 55' 38.11" 303° WNW 10:03:34 AM



W 84° 35' 37.42"
N 35° 55' 20.81"

1695 ft
149° SSE

3/15/2016
10:29:57 AM



W 84° 35' 37.09"
N 35° 55' 20.73"

1731 ft
252° WSW

3/15/2016
10:30:16 AM



W 84° 35' 37.03"
N 35° 55' 20.65"

1735 ft
239° WSW

3/15/2016
10:30:41 AM



W 84° 35' 36.98"
N 35° 55' 20.66"

1739 ft
307° NW

3/15/2016
10:30:52 AM



W 84° 35' 50.71"
N 35° 55' 19.40" 1682 ft 84° E 3/15/2016 10:44:36 AM



W 84° 34' 09.69"
N 35° 56' 05.85" 1428 ft 21° NNE 3/15/2016 10:59:11 AM



W 84° 34' 09.39" 1460 ft 3/15/2016
N 35° 56' 05.94" 48° NE 10:59:50 AM



W 84° 34' 09.53" 1456 ft 3/15/2016
N 35° 56' 05.88" 255° WSW 10:59:57 AM



W 84° 34' 09.64"
N 35° 56' 06.36"

1443 ft
330° NNW

3/15/2016
11:01:58 AM



W 84° 34' 09.17"
N 35° 56' 05.58"

1445 ft
68° ENE

3/15/2016
11:06:55 AM



W 84° 34' 12.58"
N 35° 56' 01.94"

1468 ft
83° E

3/15/2016
11:22:38 AM



W 84° 34' 12.60"
N 35° 56' 01.58"

1474 ft
245° WSW

3/15/2016
11:22:48 AM



W 84° 34' 20.84"
N 35° 55' 58.49"

1521 ft
62° ENE

3/15/2016
11:29:37 AM



W 84° 35' 10.91"
N 35° 55' 10.21"

892 ft
72° ENE

3/15/2016
1:03:55 PM



W 84° 35' 14.65" 1021 ft 3/15/2016
N 35° 55' 14.36" 345° NNW 1:22:37 PM



W 84° 35' 16.49" 1008 ft 3/15/2016
N 35° 55' 14.08" 355° N 1:25:38 PM



W 84° 35' 15.97" 1007 ft 3/15/2016
N 35° 55' 14.38" 7° N 1:25:54 PM



W 84° 35' 18.41" 1024 ft 3/15/2016
N 35° 55' 14.14" 54° NE 1:40:19 PM



W 84° 35' 10.06"
N 35° 55' 09.75"
904 ft
7° N
3/15/2016
2:03:27 PM



W 84° 34' 34.85"
N 35° 56' 24.09"
902 ft
101° E
3/15/2016
2:35:15 PM



W 84° 35' 06.41"
N 35° 56' 10.41"

1110 ft
268° W

3/15/2016
2:38:48 PM



W 84° 35' 10.06"
N 35° 56' 09.48"

1110 ft
85° E

3/15/2016
2:39:24 PM

Walden Ridge Partners LLC IMG_3088.JPG
31 Boundary Along Riggs Chapel Rd

THowe



W 84° 34' 13.89"
N 35° 56' 20.78"

760 ft
115° ESE

3/15/2016
2:45:55 PM

Walden Ridge Partners LLC IMG_3089.JPG
32 View of Escarpment from I-40

THowe



W 84° 35' 01.90"
N 35° 54' 32.28"

818 ft
350° N

3/15/2016
2:56:28 PM



W 84° 35' 50.74" 1527 ft 6/7/2016
N 35° 55' 28.98" 246° WSW 10:35:54 AM



W 84° 35' 50.60" 1504 ft 6/7/2016
N 35° 55' 28.75" 63° ENE 10:36:04 AM



W 84° 35' 52.52"
N 35° 55' 28.27"

1519 ft
274° W

6/7/2016
10:39:16 AM



W 84° 36' 00.96"
N 35° 55' 29.39"

1426 ft
314° NW

6/7/2016
10:59:17 AM

Walden Ridge Partners LLC IMG_3412.JPG
37 Lush Undergrowth on N Side

THowe



W 84° 36' 01.94"
N 35° 55' 38.99"

1189 ft
25° NNE

6/7/2016
11:21:34 AM

Walden Ridge Partners LLC IMG_3414.JPG
38 One of Many Lush NY Fern Beds

THowe



W 84° 36' 00.35"
N 35° 55' 39.57"

1154 ft
348° NNW

6/7/2016
11:25:18 AM



W 84° 35' 54.01"
N 35° 55' 42.92"

1128 ft
147° SSE

6/7/2016
11:34:33 AM



W 84° 35' 36.10"
N 35° 55' 35.70"

1433 ft
290° WNW

6/7/2016
1:03:44 PM



W 84° 35' 36.37"
N 35° 55' 35.66"

1434 ft
186° S

6/7/2016
1:03:54 PM

Walden Ridge Partners LLC IMG_3427.JPG
43 Uncommon Interrupted Ferns



W 84° 35' 38.32"
N 35° 55' 33.98"

1477 ft
27° NNE

6/7/2016
1:09:28 PM

Walden Ridge Partners LLC IMG_3432.JPG
46 Watts Bar Lake from Overlook

THowe



W 84° 35' 37.36"
N 35° 55' 20.59"

1684 ft
202° SSW

6/7/2016
1:35:38 PM

Walden Ridge Partners LLC IMG_3433.JPG
47 Mt Roosevelt State WMA Down Walden Ridge

THowe



W 84° 35' 37.34"
N 35° 55' 20.65"

1719 ft
244° WSW

6/7/2016
1:35:58 PM



W 84° 35' 37.31"
N 35° 55' 20.63"

1724 ft
260° W

6/7/2016
1:36:17 PM



W 84° 35' 38.79"
N 35° 55' 21.11"

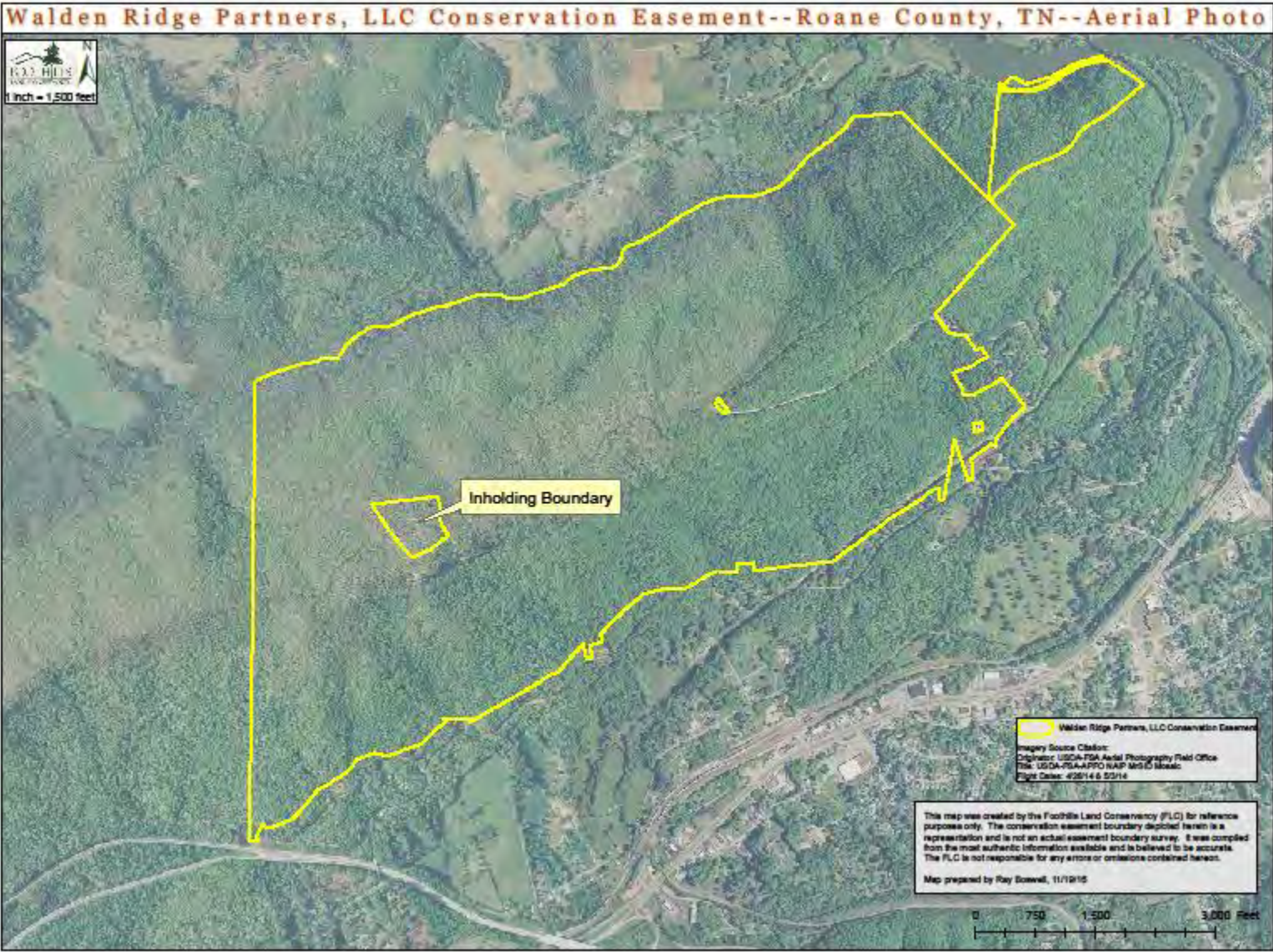
1715 ft
44° NE

6/7/2016
1:40:37 PM

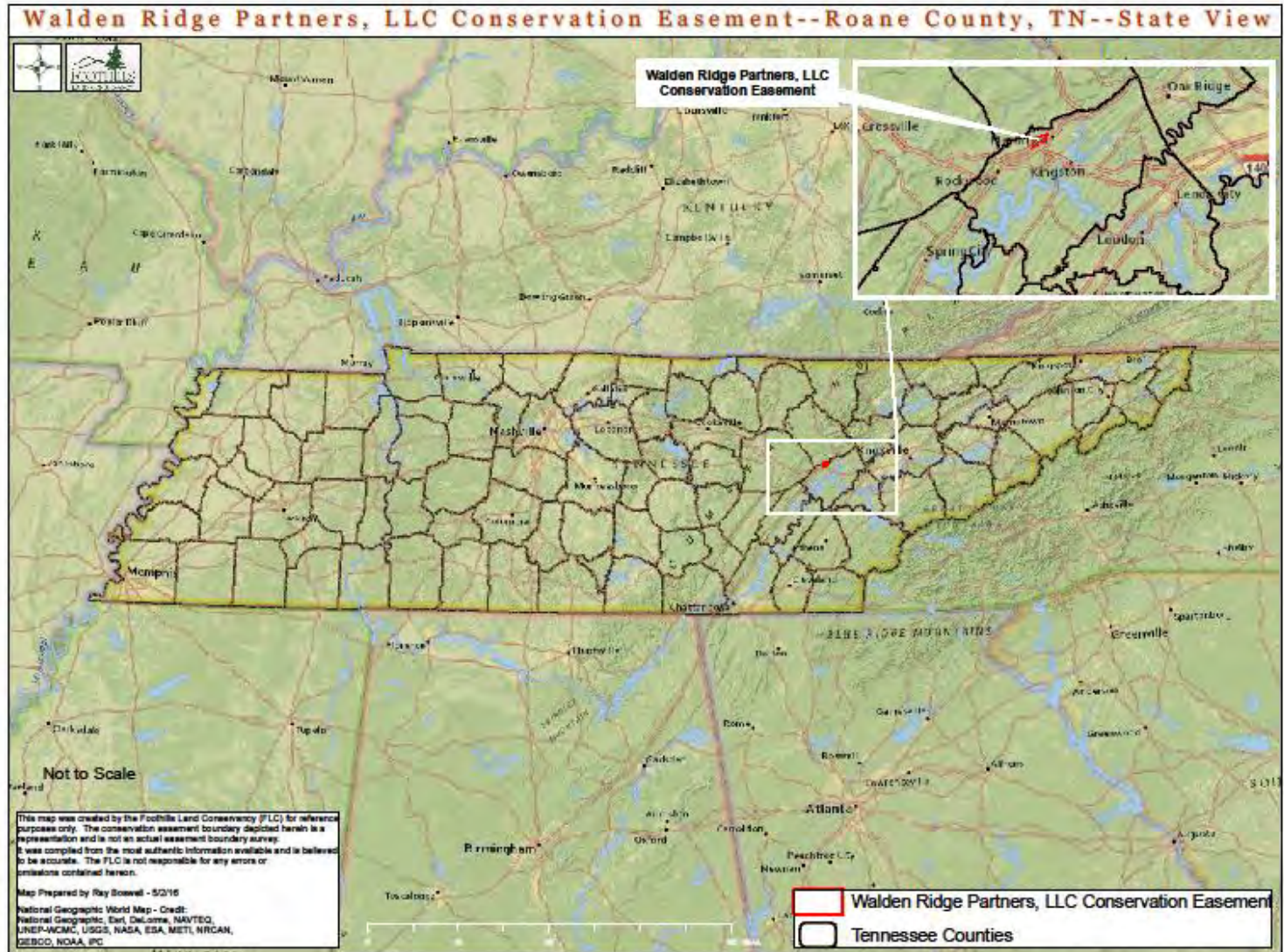
MAPS

- Aerial Photograph with Boundaries
- State Map
- County Map
- USGS Quadrangle Map
- Watershed Map
- Wetlands Map
- Flood Map
- Soils Map with Descriptions
- Prime Agricultural Soils
- Sub-surface Geology Map and Legend
- Land Use Map
- Survey Drawing
- House Site Survey
- Conservation Management Areas Map
- Anthropogenic Features Map

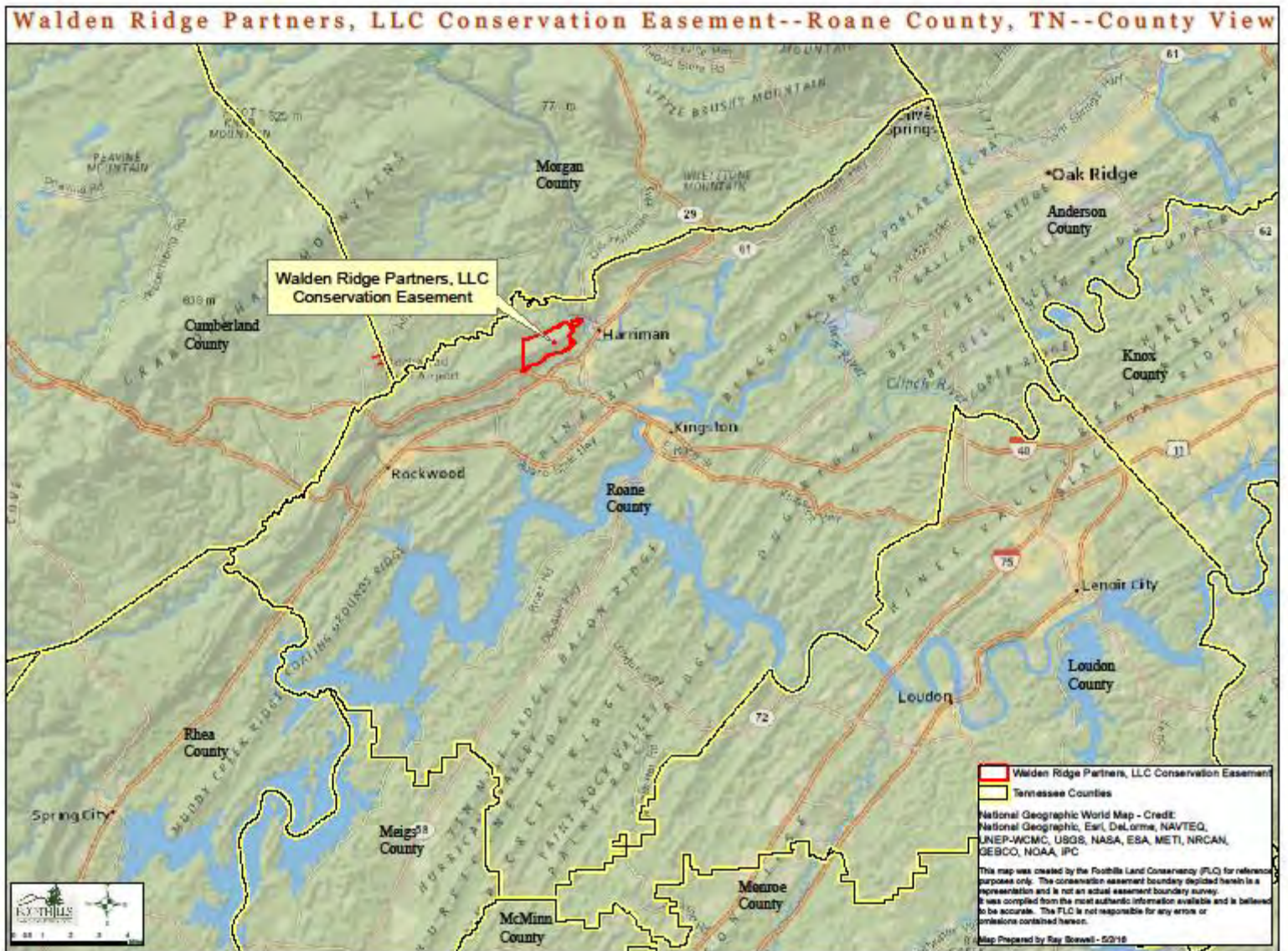
AERIAL PHOTOGRAPH WITH BOUNDARIES



STATE MAP



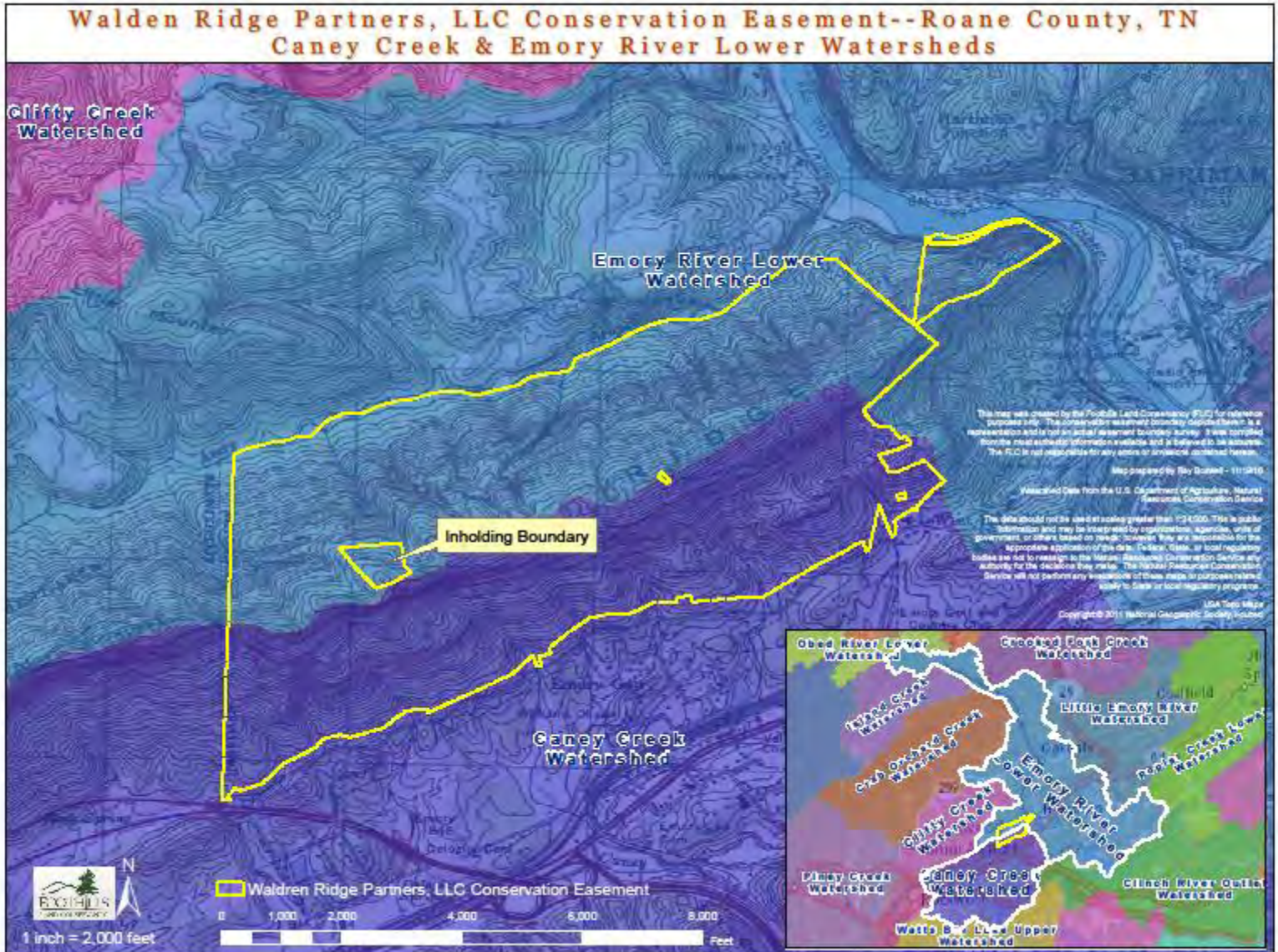
COUNTY MAP



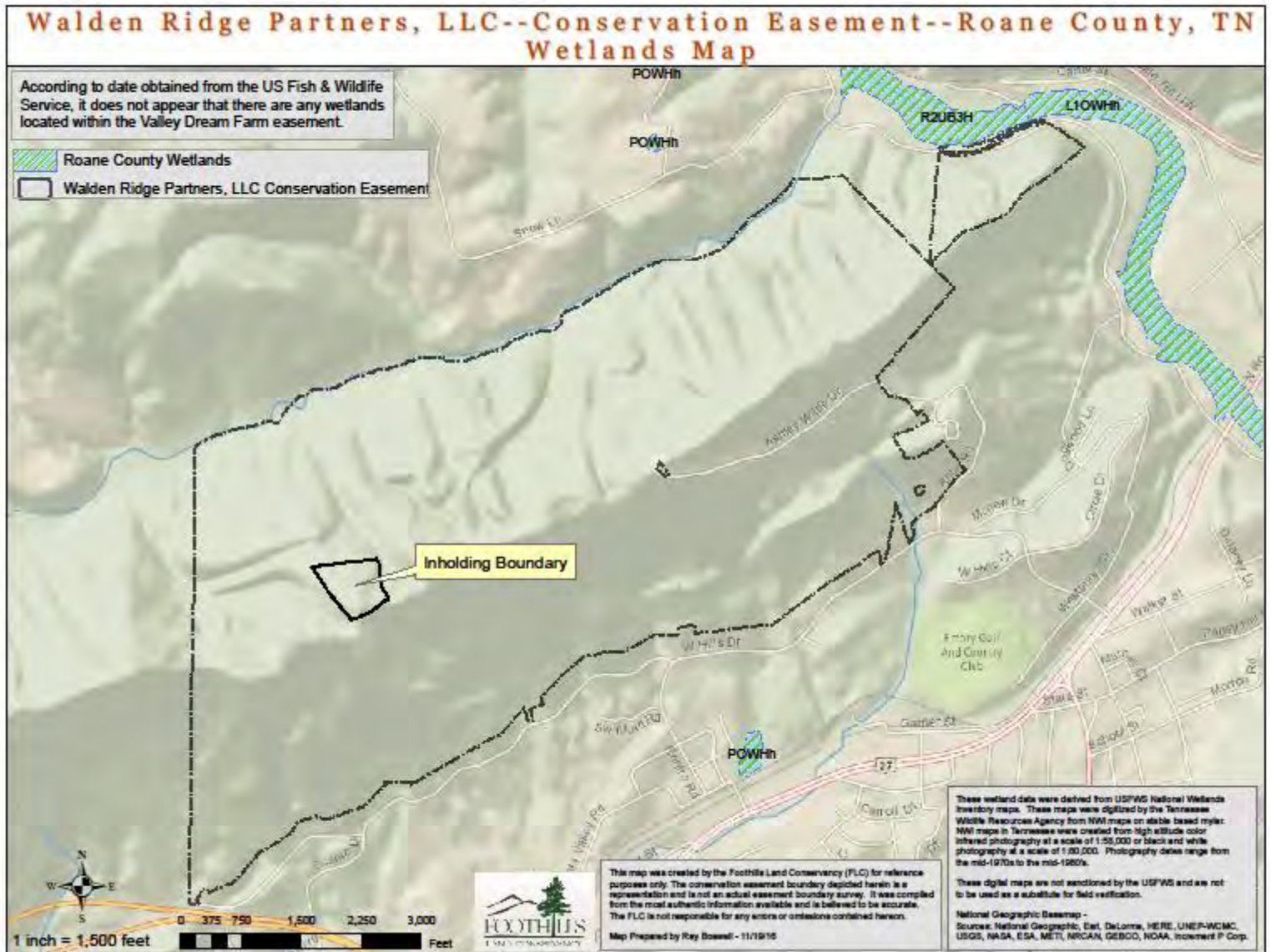
USGS QUADRANGLE MAP



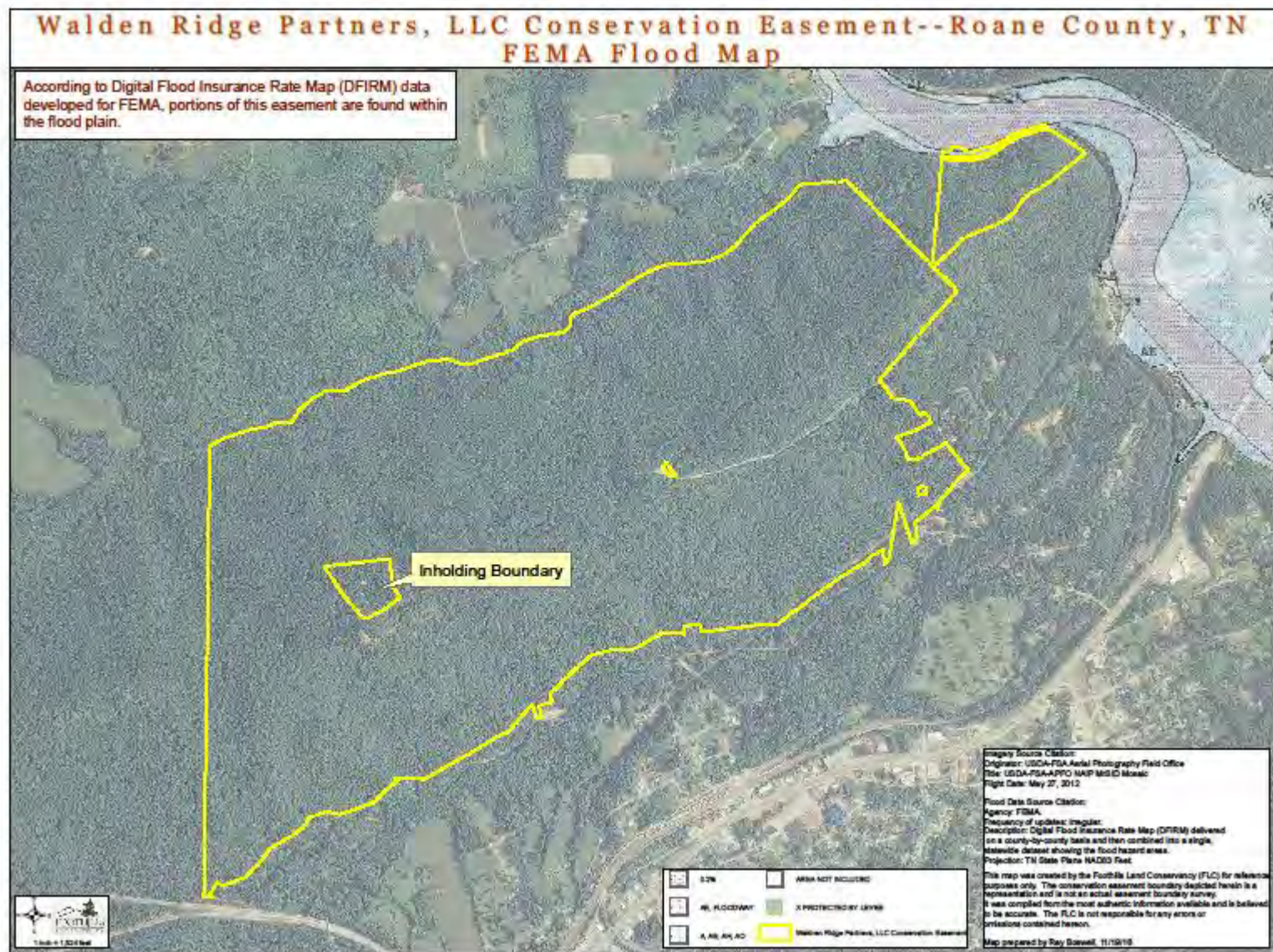
WATERSHED MAP



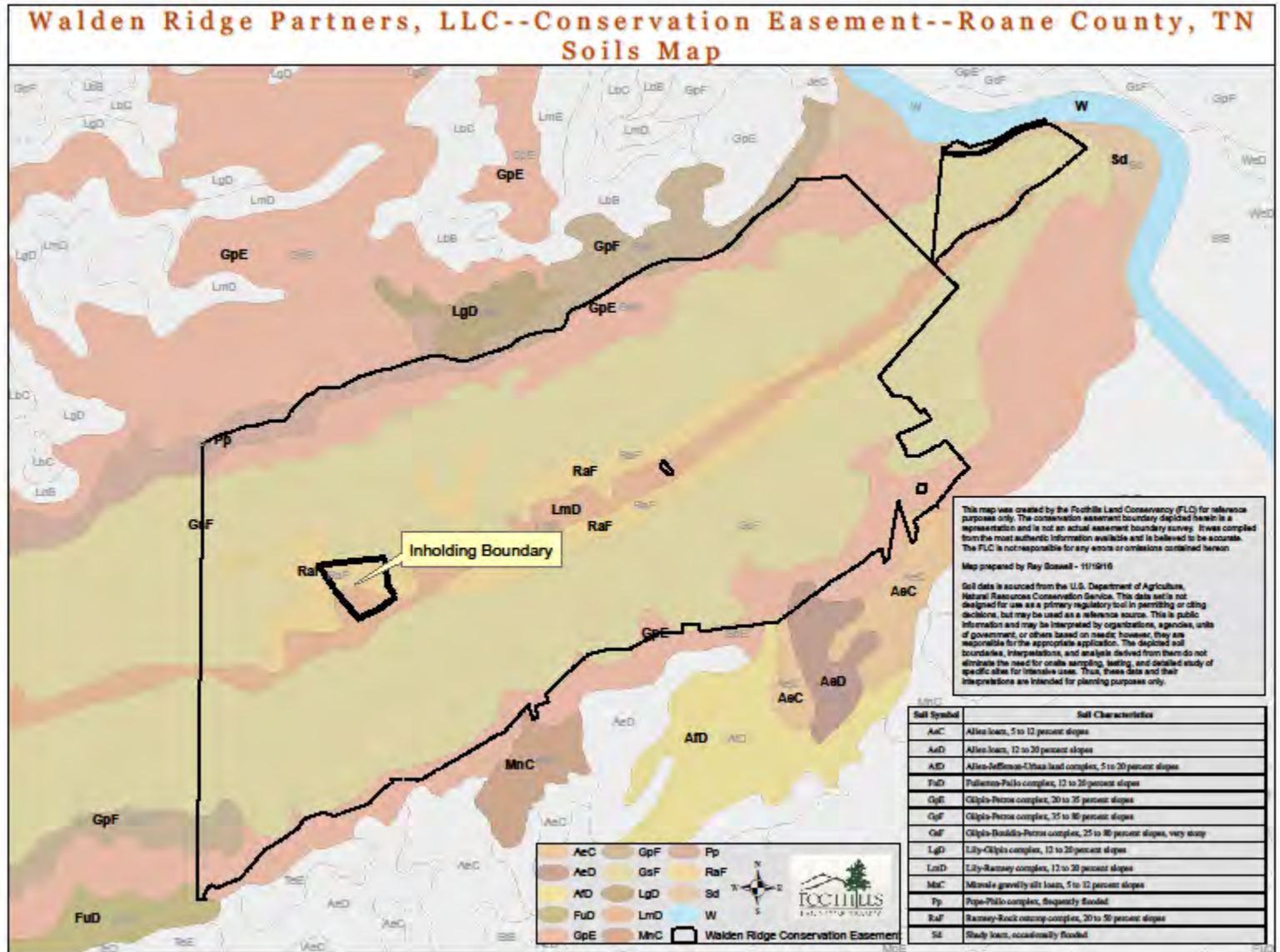
WETLANDS MAP



FLOOD MAP

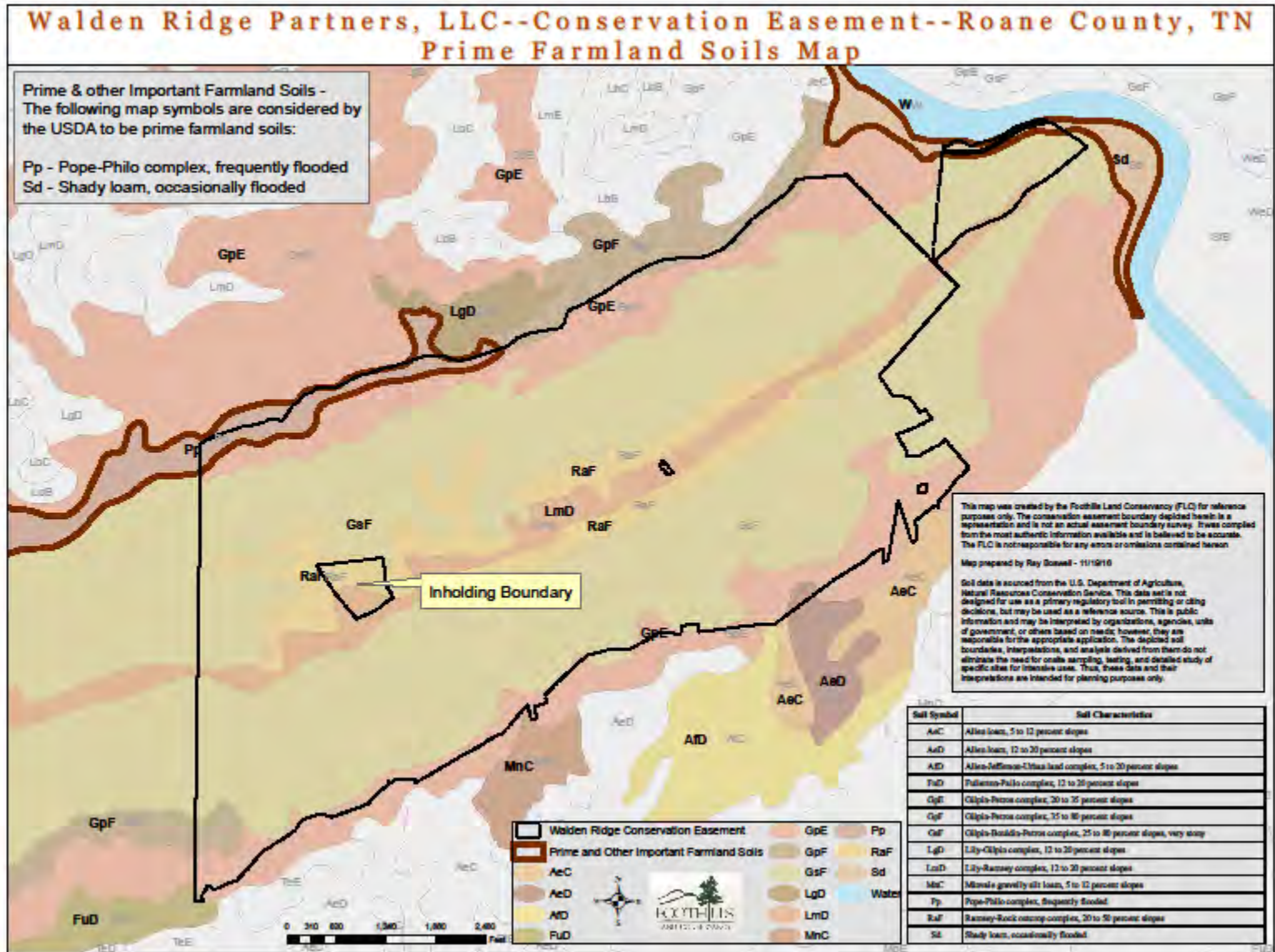


SOILS MAP WITH DESCRIPTIONS

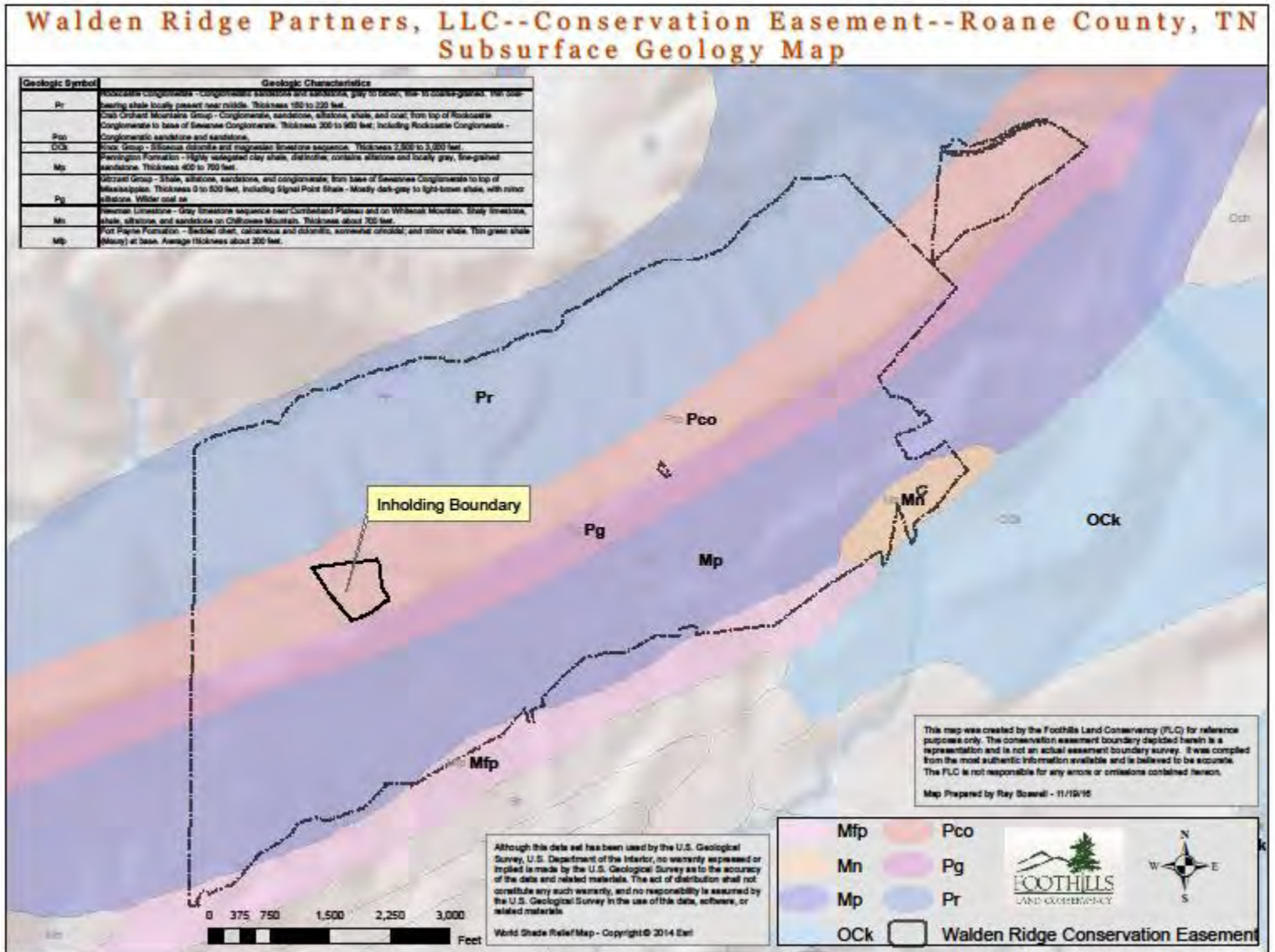


Soil Symbol	Soil Characteristics
AeC	Allen loam, 5 to 12 percent slopes
AeD	Allen loam, 12 to 20 percent slopes
AfD	Allen-Jefferson-Urban land complex, 5 to 20 percent slopes
FuD	Fullerton-Pailo complex, 12 to 20 percent slopes
GpE	Gilpin-Petros complex, 20 to 35 percent slopes
GpF	Gilpin-Petros complex, 35 to 80 percent slopes
GsF	Gilpin-Bouldin-Petros complex, 25 to 80 percent slopes, very stony
LgD	Lily-Gilpin complex, 12 to 20 percent slopes
LmD	Lily-Ramsey complex, 12 to 20 percent slopes
MnC	Minvale gravelly silt loam, 5 to 12 percent slopes
Pp	Pope-Philo complex, frequently flooded
RaF	Ramsey-Rock outcrop complex, 20 to 50 percent slopes
Sd	Shady loam, occasionally flooded

PRIME AGRICULTURAL SOILS

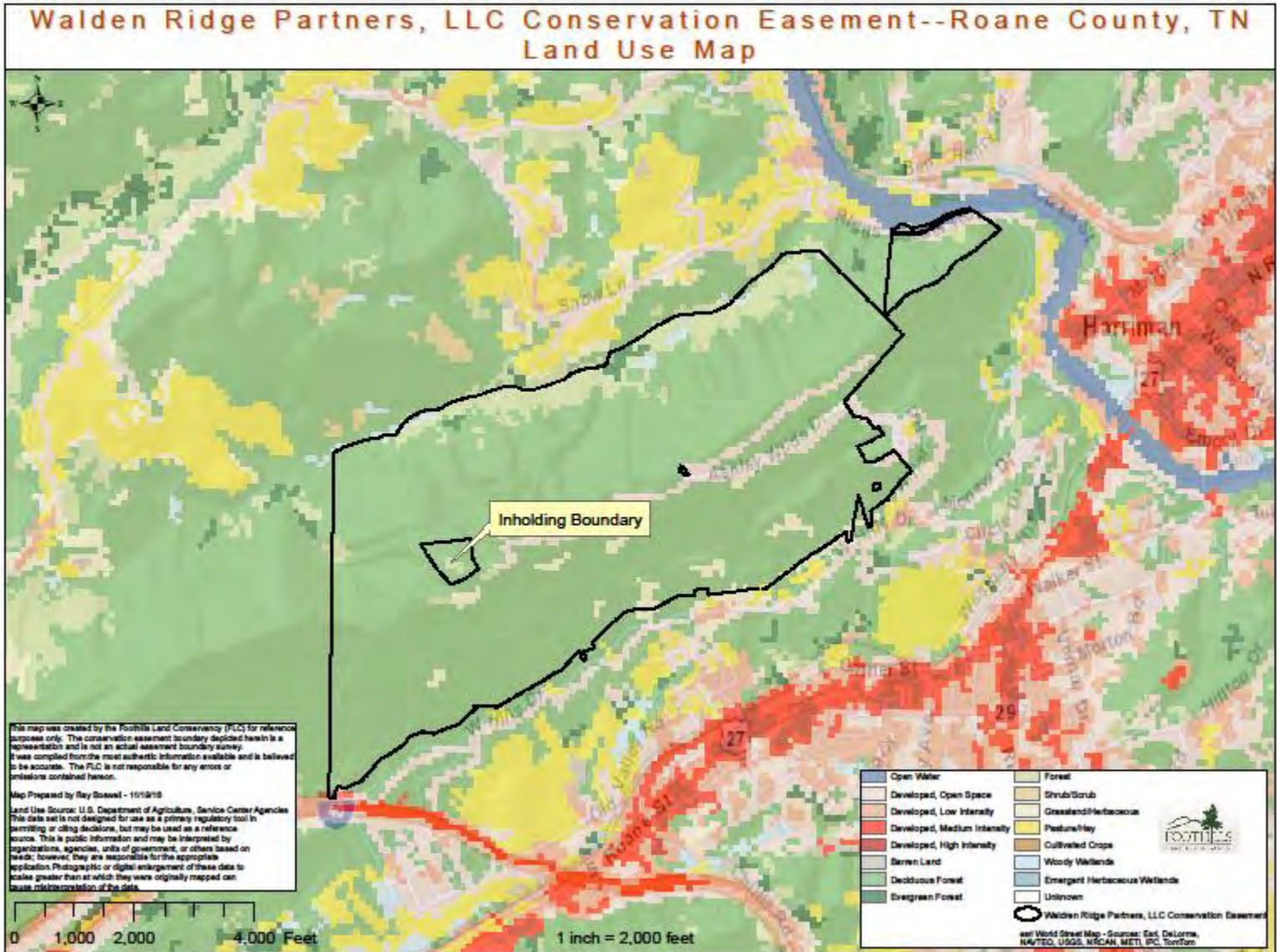


SUB-SURFACE GEOLOGY MAP AND LEGEND

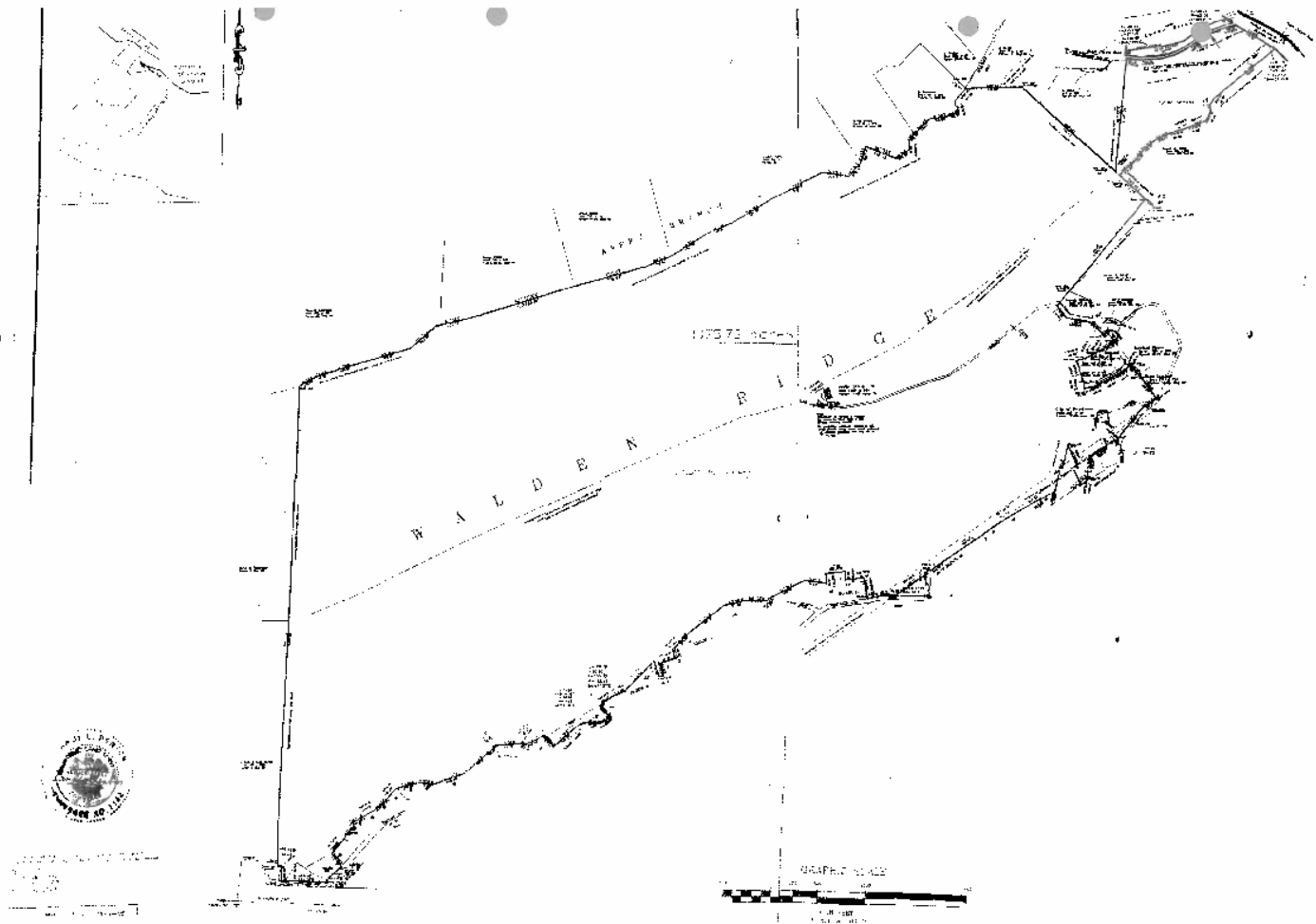


Geologic Symbol	Geologic Characteristics
Pr	Rockcastle Conglomerate - Conglomeratic sandstone and sandstone, gray to brown, fine- to coarse-grained. Thin coal-bearing shale locally present near middle. Thickness 150 to 220 feet.
Pco	Crab Orchard Mountains Group - Conglomerate, sandstone, siltstone, shale, and coal; from top of Rockcastle Conglomerate to base of Sewanee Conglomerate. Thickness 200 to 950 feet; including Rockcastle Conglomerate - Conglomeratic sandstone and sandstone,
Ock	Knox Group - Siliceous dolomite and magnesian limestone sequence. Thickness 2,500 to 3,000 feet.
Mp	Pennington Formation - Highly variegated clay shale, distinctive; contains siltstone and locally gray, fine-grained sandstone. Thickness 400 to 700 feet.
Pg	Gizzard Group - Shale, siltstone, sandstone, and conglomerate; from base of Sewanee Conglomerate to top of Mississippian. Thickness 0 to 520 feet, including Signal Point Shale - Mostly dark-gray to light-brown shale, with minor siltstone. Wilder coal ne
Mn	Newman Limestone - Gray limestone sequence near Cumberland Plateau and on Whiteoak Mountain. Shaly limestone, shale, siltstone, and sandstone on Chilhowee Mountain. Thickness about 700 feet.
Mfp	Fort Payne Formation - Bedded chert, calcareous and dolomitic, somewhat crinoidal; and minor shale. Thin green shale (Maury) at base. Average thickness about 200 feet.

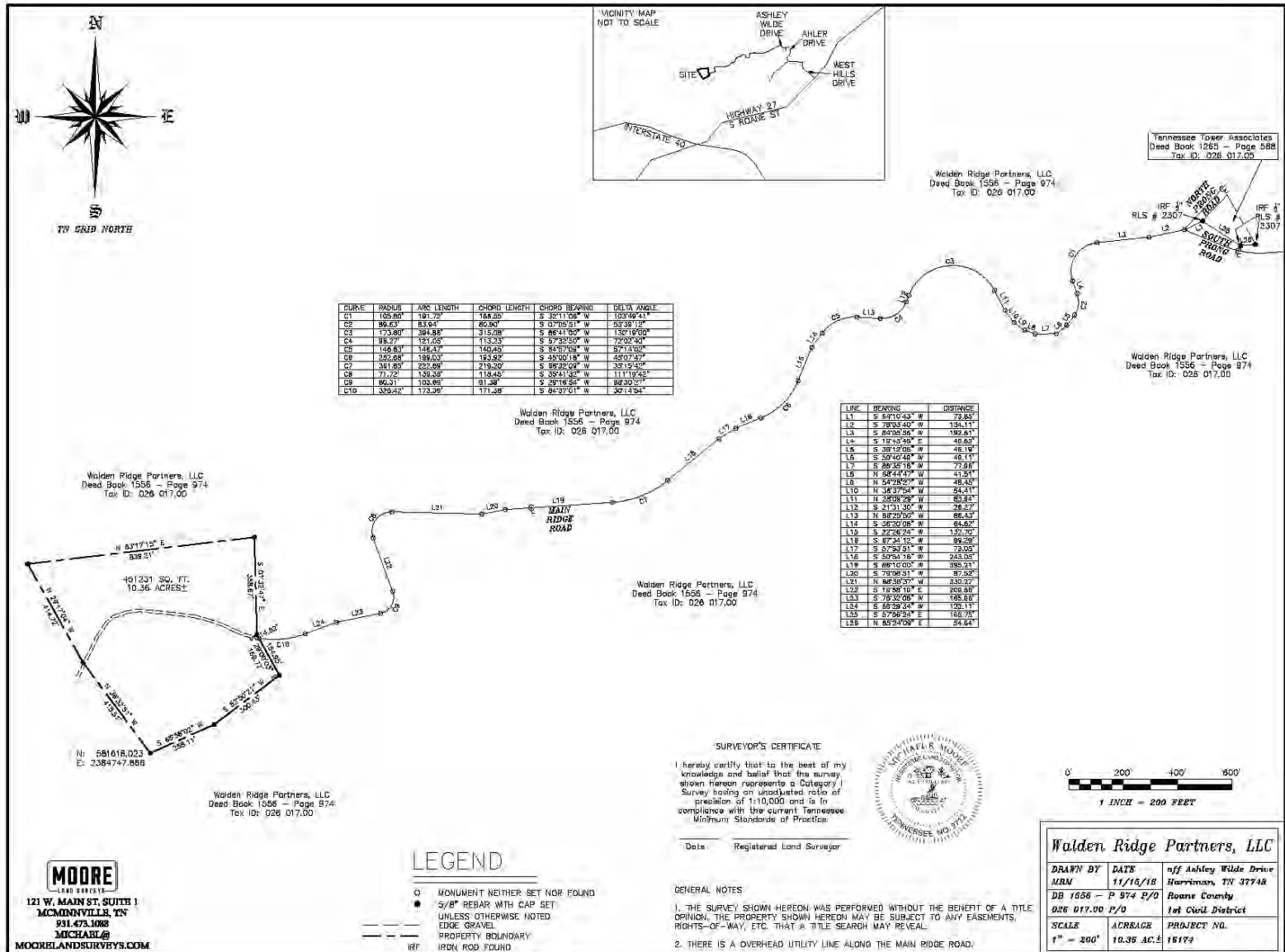
LAND USE MAP



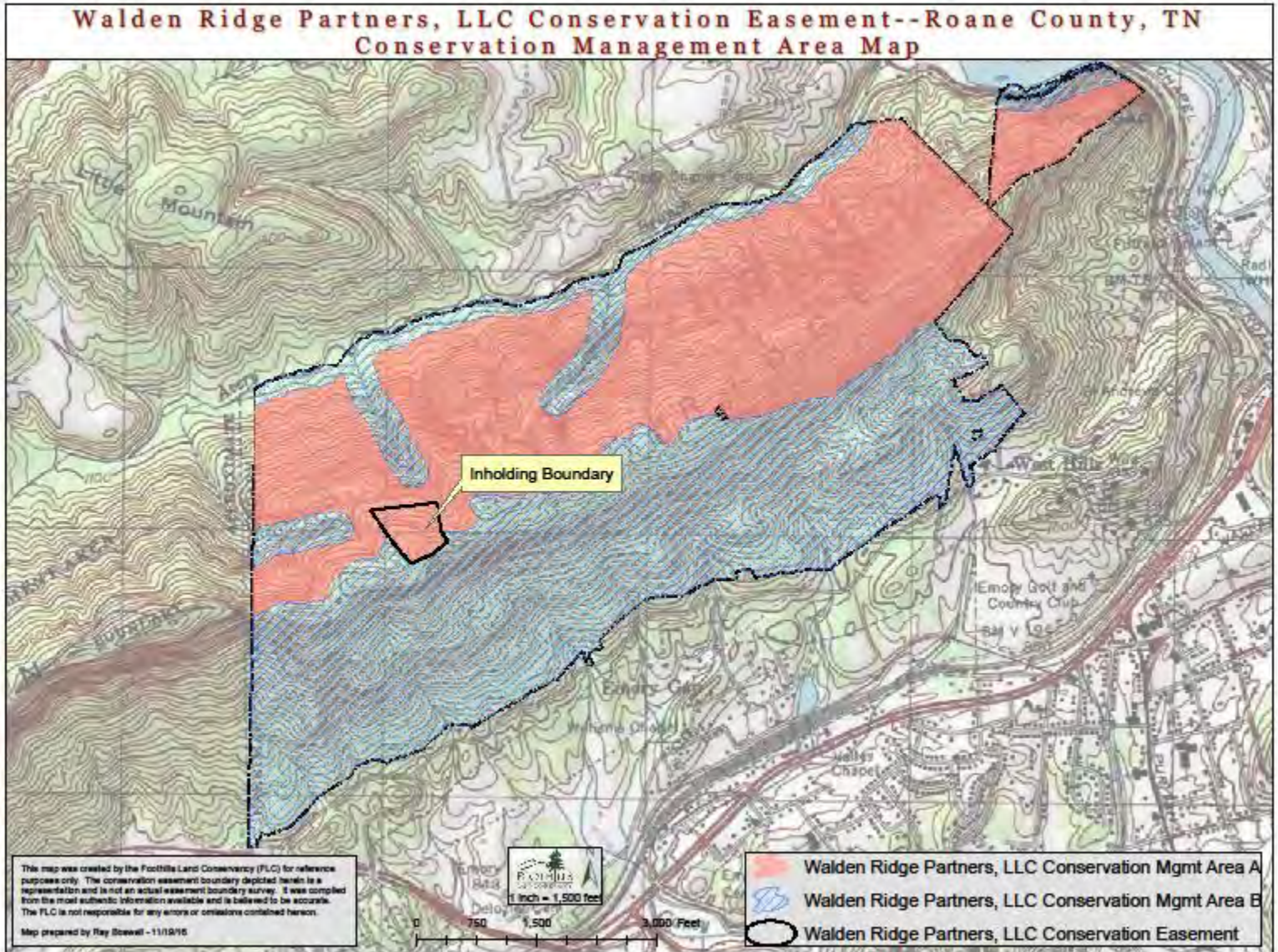
SURVEY DRAWING



HOUSE SITE SURVEY

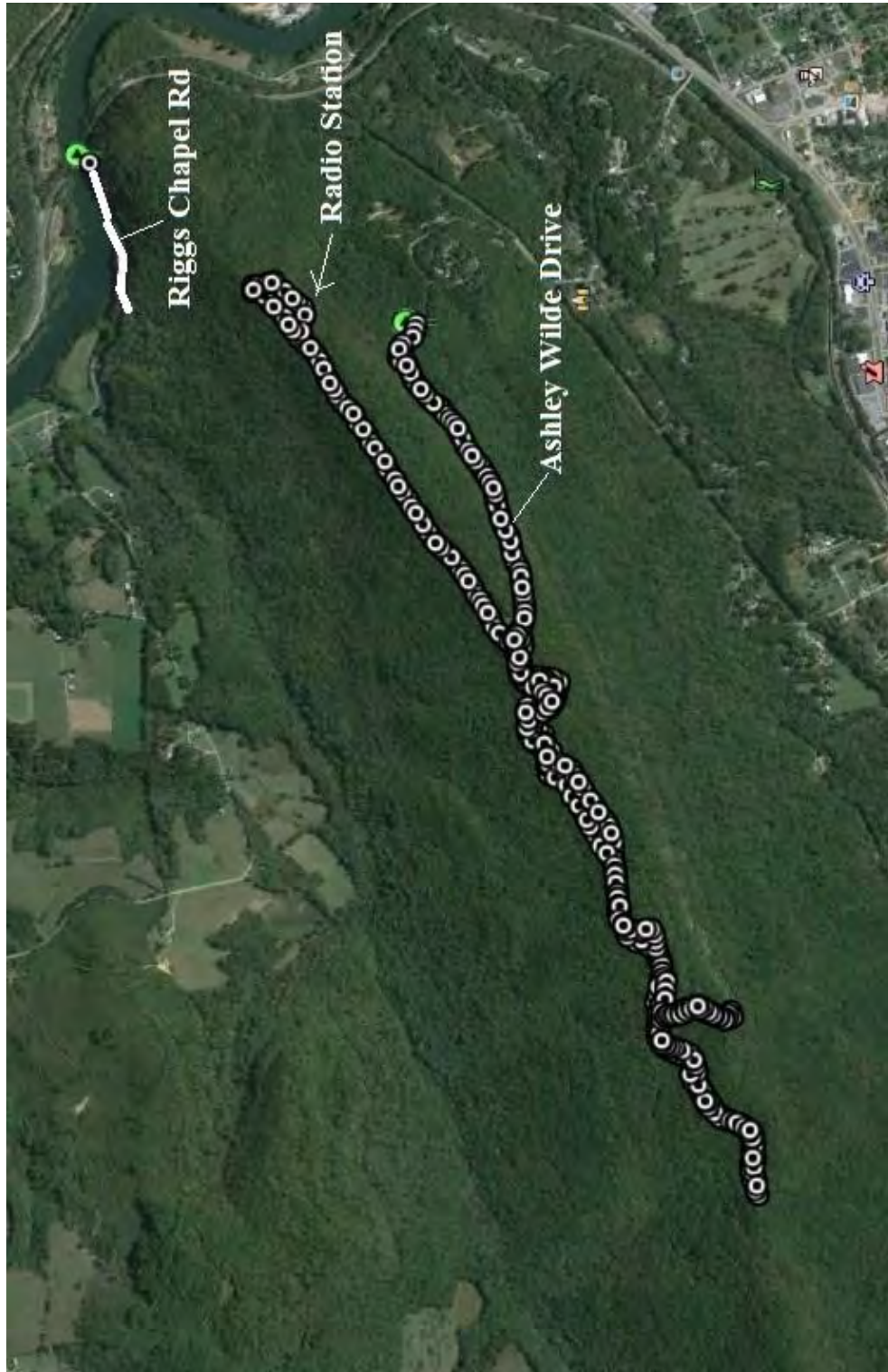


CONSERVATION MANAGEMENT AREAS MAP



ANTHROPOGENIC FEATURES MAP
(Track indicates main roadways and OHV Trails)

↑ N



DIRECTIONS TO PROPERTY

373 Ellis Ave, Maryville, TN 37804 to 126 Ashley Wilde Drive, Harriman,... Page 1 of 2



373 Ellis Ave, Maryville, TN 37804 to 126
Ashley Wilde Drive, Harriman, TN 37748

Drive 51.7 miles, 57 min

373 Ellis Ave

Maryville, TN 37804

Get on I-140 W in Alcoa from S Hall Rd and US-129 N

- | | | |
|---|---|-----------------|
| ↑ | 1. Head northeast on Ellis Ave toward Patton Alley | 10 min (3.5 mi) |
| ↩ | 2. Turn left onto S Washington St | 0.2 mi |
| ↑ | 3. Continue onto S Hall Rd | 0.4 mi |
| ↘ | 4. Slight right onto US-129 N | 2.5 mi |
| ⬆ | 5. Use the right lane to merge onto I-140 W via the ramp to Oak Ridge | 3.5 mi |
| | | 0.2 mi |

Follow I-140 W and I-40 W to TN-29 N/Pine Ridge Rd in Harriman. Take exit 350 from I-40 W

- | | | |
|---|--|------------------|
| ⬆ | 6. Merge onto I-140 W | 29 min (41.7 mi) |
| ↑ | 7. Continue onto TN-162 N | 11.2 mi |
| ↘ | 8. Take exit 1D for I-40 W/I-75 S toward Nashville/Chattanooga | 0.1 mi |
| Y | 9. Keep left at the fork and merge onto I-40 W/I-75 S | 0.4 mi |
| ↘ | 10. Keep right at the fork to continue on I-40 W, follow signs for Nashville | 7.8 mi |
| ↘ | 11. Take exit 362 toward Buttermilk Road | 0.6 mi |
| ↩ | 12. Turn left onto Buttermilk Rd | 0.3 mi |
| ⬆ | 13. Turn left onto the Interstate 40 E ramp to Knoxville | 456 ft |
| ⬆ | 14. Merge onto I-40 E | 0.3 mi |
| ↘ | 15. Take exit 364 for US-321/TN-95 toward Lenoir City/Oak Ridge | 1.5 mi |
| | | 0.3 mi |

<https://www.google.com/maps/dir/373+Ellis+Ave,+Maryville,+TN+37804/...> 3/10/2016

- 16. Turn left onto TN-95 N/US-321 S (signs for Oak Ridge) 0.1 mi
- 17. Turn left to merge onto I-40 W toward Nashville 13.4 mi
- 18. Take exit 350 for Tennessee 29 toward Harriman/Midtown 0.1 mi

Continue on TN-29 N. Drive to Ashley Wilde Dr

- 19. Turn right onto TN-29 N/Pine Ridge Rd 8 min (3.5 mi)
 - Continue to follow TN-29 N
- 20. Turn right onto S Roane St 2.2 mi
- 21. Turn left onto W Hills Dr 0.2 mi
- 22. Turn right onto Ahler Rd 0.3 mi
- 23. Turn right onto Ashley Wilde Dr 0.5 mi
 - Destination will be on the right

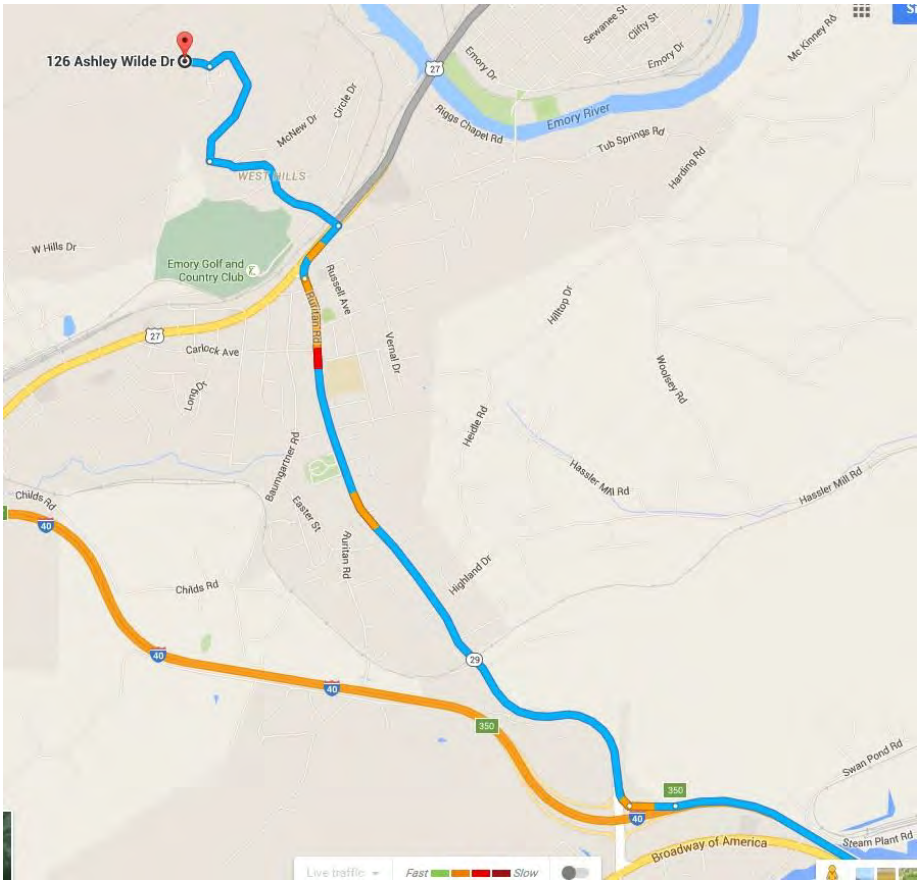
126 Ashley Wilde Dr

Harriman, TN 37074

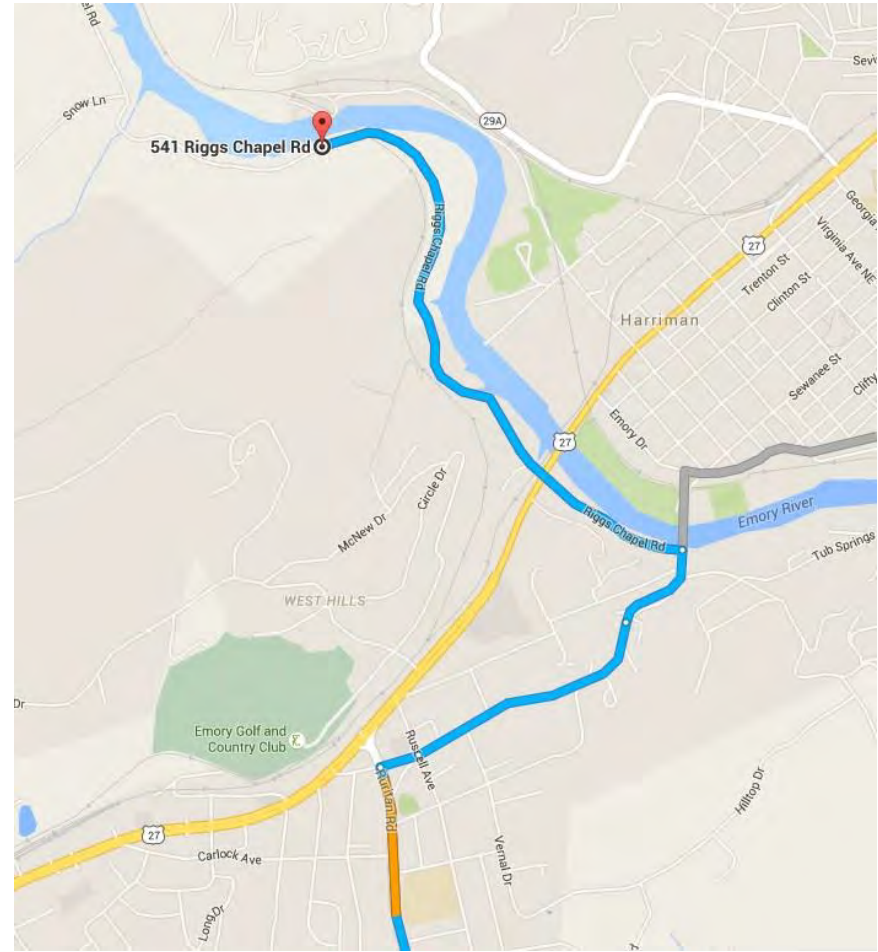
These directions are for planning purposes only. You may find that construction projects, traffic, weather, or other events may cause conditions to differ from the map results, and you should plan your route accordingly. You must obey all signs or notices regarding your route.

Google Maps





Ridge Entry



River Entry

REFERENCES

- Coalfields of the Appalachian Mountains, 2001, Eastern Tennessee,
<http://www.coalcampusa.com/tennessee-coal-mines/tennessee-coal-mines.htm> (accessed 11-29-16)
- Conservation Biology Institute, 2016a, Provisional TN-SWAP 2015 Priorities Upstream of Aquatic Habitats map, <https://databasin.org/maps/new#datasets=a174f129b8044a73b1ad16556c2863a7> (accessed 11-29-16)
- Conservation Biology Institute, 2016b, Provisional TN SWAP 2015 Terrestrial Priority Areas
<https://databasin.org/maps/new#datasets=ecd7b830cfd5466d8671b105fdc80255> (accessed 11-29-16)
- Conservation Biology Institute, 2016c, Terrestrial Priority Habitat,
<https://databasin.org/maps/new#datasets=1d2db01b631f4dc39677082a413a5a45> (accessed 11-29-16)
- Griffith, G., Omernik, J., Azevedo, S., 1998, *Ecoregions of Tennessee*,
ftp://newftp.epa.gov/EPADDataCommons/ORD/Ecoregions/tn/tn_front.pdf (accessed 11-29-16)
- Hall, G.A. 1984, Population decline of Neotropical migrants in an Appalachian forest, *Am. Birds* 38:14-18.
- Katzner, Todd, Brian W. Smith, Tricia A. Miller, David Brandes, Jeff Cooper, Michael Lanzone, Daniel Brauning, Christopher Farmer, Sergio Harding, David E. Kramar, Craig Koppie, Charles Maisonneuve, Mark Martell, Elizabeth K. Mojica, Charlie Todd, Junior A. Tremblay, Maria Wheeler, David F. Brinker, Tony E. Chubbs, Rolf Gubler, Kieran O'Malley, Scott Mehus, Brady Porter, Robert P. Brooks, Bryan D. Watts, and Keith L. Bildstein, 2012, Status, Biology, and Conservation Priorities for North America's Eastern Golden Eagle (*Aquila chrysaetos*) Population, 2012, *The Auk*, 129(1):168-176,
<https://nrm.dfg.ca.gov/FileHandler.ashx?DocumentID=83943> (11-29-2016).
- NatureServe, 2016a, State Wildlife Action Plans,
<http://www.landscape.org/map/#minLong=84.64028&maxLong=84.51051&minLat=35.88194&maxLat=35.96048&level=13&baseMap=topo&themes=Custom&title=&drawingID=0&layers=84d53221b5864f50b02329800a6bb0f3-40-1> (accessed 11-29-16)
- NatureServe, 2016b, The Nature Conservancy's Priority Conservation Areas Overview,
http://www.landscape.org/map_descriptions/conservation_priorities/tnc_priority_conservation_areas/18034/ (accessed 11-29-2016)
- NatureServe, 2016c, Critical Habitat for Threatened & Endangered Species (Lines),
<http://www.landscape.org/map/#minLong=84.62912&maxLong=84.50673&minLat=35.90992&maxLat=35.98579&level=13&baseMap=topo&themes=Custom&title=&drawingID=0&layers=4bff24905a4d495d8ca3a939082821b5-0-1> (accessed 11-29-16)
- NatureServe, 2016d, Critical Watersheds for Freshwater Species,

<http://www.landscape.org/map/#minLong=84.6108&maxLong=84.53441&minLat=35.90276&maxLat=35.94343&level=14&baseMap=topo&themes=Custom&title=&drawingID=0&layers=83752167054a49f1b26982358218e07e-0-1> (accessed 11-29-16)

NatureServe, 2016e, Rare and Endangered Species, <http://www.landscape.org/explore/plants/imperiled/> (accessed 11-29-2016)

NatureServe, 2016f, Allegheny-Cumberland Dry Oak Forest and Woodland, <http://www.landscape.org/explore/ecosystems/descriptions/723154/> (accessed 11-29-2016)

NatureServe, 2016g, Housing Density 1970 and 2000, <http://www.landscape.org/map/#minLong=84.62912&maxLong=84.50673&minLat=35.90991&maxLat=35.98578&level=13&baseMap=topo&themes=Custom&title=&drawingID=0&layers=7a5b40a2e0804e97a48999ea730472c4-0-112f345746bb5b4163b9f253c32001e93b-0-1> (accessed 11-29-2016)

NatureServe, 2016h. Protected Areas. <http://www.landscape.org/map/#minLong=85.12037&maxLong=84.12062&minLat=35.58094&maxLat=36.24494&level=10&baseMap=topo&themes=Protected%20Areas&title=&drawingID=0&layers=>

North American Bird Conservation Initiative, 2016, State of North America's Birds 2016, http://www.stateofthebirds.org/2016/#_ga=1.119912527.699639979.1467303010 (accessed 11-29-16).

Open Space Institute, 2016a, Southern Appalachian Priority Conservation Forest Blocks, <https://databasin.org/maps/new#datasets=7a656af663e24272ba974baef260d347> (accessed 11-29-2016)

Open Space Institute, 2016b. Protecting Southern Appalachian Wildlife in an Era of Climate Change. <http://www.osiny.org/site/News2?page=NewsArticle&id=7633&AddInterest=1163>. (accessed 11-29-2016).

TDEC, 2016a, Rare Species by Watershed, http://environment-online.state.tn.us:8080/pls/enf_reports/f?p=9014:4:..... (accessed 11-29-2016)

TDEC, 2016b, OIR-GIS Services, State of Tennessee, <http://tnmap.tn.gov/wpc/> (accessed 11-29-16)

Tennessee Wildlife Resources Agency, 2016, Tennessee's Watchable Wildlife, *Tennessee Wildlife Viewing Trail >>East Tennessee, Mount Roosevelt WMA*, http://www.tnwatchablewildlife.org/watchareadetails.cfm?uid=09071608240740801®ion=Mount_Roosevelt_WMA&statearea=East_Tennessee (accessed 11-29-2016).

The Nature Conservancy, 2016, Tennessee, A Big Deal to Connect the Cumberlands, <http://www.nature.org/ourinitiatives/regions/northamerica/unitedstates/tennessee/explore/tennessee-cumberland-plateau-deal.xml> (accessed 11-29-2016)

TWRA, 2015, TN State Wildlife Action Plan, <http://www.tnswap.com/swap.cfm> (accessed 11-29-16)

United States Department of Agriculture, 2009, Soil Survey of Roane County, Tennessee, http://www.nrcs.usda.gov/Internet/FSE_MANUSCRIPTS/tennessee/TN145/0/Roane_TN.pdf (accessed 11-29-16)

Walton Road Tennessee Historic Byway, 2016, <http://waltonroad.com/> (accessed 11-29-16)

Weakley, A.S. 2015. Flora of the Southern and Mid-Atlantic States. UNC Herbarium, North Carolina Botanical Garden; http://www.herbarium.unc.edu/FloraArchives/WeakleyFlora_2015-05-29.pdf; (accessed 11-29-2016)

WikipediA, 2015, Watts Bar Lake, https://en.wikipedia.org/wiki/Watts_Bar_Lake (accessed 11-29-16)

World Wildlife Fund, 2016. Appalachian mixed mesophytic forests. <http://www.worldwildlife.org/ecoregions/na0402> (accessed 11-29-2016)

PREPARERS' QUALIFICATIONS AND CONTRIBUTIONS

Tom Howe

Tom Howe is a lifelong naturalist especially experienced in the study of vascular plants and birds. He received a B.S. in Biology from Cornell University in 1974 and has worked for the Park Service, et al, as a biological technician and consultant. He resides in east Tennessee where he is the president of the Knoxville Chapter of the TN Ornithological Society and works as a volunteer for the Great Smoky Mountains National Park doing biological inventories. Tom joined Foothills Land Conservancy as a consultant in 2015 and on staff in 2016 preparing baseline document reports and monitoring easement properties.

Meredith Clebsch

Meredith's formal education includes a BS degree in Animal Science from Clemson University with minors in Horticulture and Wildlife Biology. She also completed a number of graduate and undergraduate level courses at the University of TN in botany, ecology, horticulture and wildlife biology. For 25 years she owned and operated a successful native plant nursery, which included consultation and design services involving considerable field work in plant identification and landscapes interpretation. She has attended many field botany and ecology study classes and assisted in gathering and interpreting data for a number of projects associated with plant ecology.

Much of Meredith's recreational time is spent in outdoor recreation and pursuing nature study. She has worked for Foothills Land Conservancy since 2007, and has been Land Director since 2010, preparing and overseeing development of baseline documentation reports, drafting conservation easements, and monitoring easement properties. At present this includes approximately 200 properties in 7 states totaling nearly 100,000 acres. She has attended the Land Trust Alliance national meeting and training sessions in 2007, 2008, 2013, 2014 and also annual regional land trust meetings.

Raymond D Boswell, GISP

Education: Bachelor of Arts with a major in Environmental Studies and a minor in Geography from The University of Tennessee, Knoxville in 1995.

Professional Employment: Work Experience:

Blount County GIS Group, GIS Manager (July 2005 to Present): Managed all aspects of the development of an enterprise GIS GeoDatabase for the cities of Alcoa & Maryville and Blount county government.

Produced map exhibits for public hearings; Assisted public with information requests

City of Franklin, TN - Sr. GIS Specialist (April 2002 to July 2005): Managed all aspects of the development of the City's GIS GeoDatabase for the Franklin Water Management Department.

Produced map exhibits for public hearings; Assisted public with information requests

County of Sonoma, CA – GIS Tech II (February 2000 to April 2002): Lead technician on GIS Base Map project which included the development of a seamless parcel polygon layer and QA/QC of orthophotography; Created ortho-rectified parcel base for City of Cotati, CA.

Trained Environmental Health Department staff on the use of their Trimble ProXRS GPS receiver. Supervised the collection of positional and attribute information for known leaking underground storage tanks throughout the County.

Produced map exhibits for public hearings; Assisted public with information requests

Santa Rosa Junior College – Adjunct Professor (January 2002 to March 2002): Created curriculum and taught the fundamentals of GPS technology, and its roles with GIS and Natural Resource Management.

Miller Legg & Associates – Environmental Specialist (October 1998 to June 1999): Performed field work and report writing associated with obtaining appropriate permits from Federal, State, and Local permitting agencies for land development projects.

Monitored wetland mitigation sites to verify that those areas were within permit compliance. Responsible for the preparation of quarterly monitoring reports for Federal, State, and Local permitting agencies.

Performed field work, office research, and report preparation associated with Phase 1 environmental site assessments.

Onsite Environmental Staffing – GIS Technician (August 1998 to September 1998): Temporary contract for Steven Bernstein & Associates (SBA) of Boca Raton, FL. Used MapInfo to create individual site maps for nationwide network of cellular tower locations.

CADDUM, Inc – Stereo Compiler (October 1996 to February 1998): Responsible for the photogrammetric compilation of planimetric features for municipalities and utility companies. Created Digital Terrain Models at scales of 1" = 50' and 1" = 100' by compiling mass points and breaklines from aerial photography.

CADDUM, Inc – GPS Technician (January 1996 to October 1996): Used Trimble ProXL GPS receiver to collect positional and attribute information for utility companies throughout Tennessee and Alabama.

Work in Land Preservation: Foothills Land Conservancy (2007 – Present) – contract work preparing map exhibits for Conservation Easement baseline documentation and developing a GIS to support the goals of the organization.

BDR EXHIBITS

(Electronic versions saved as independent files)

A. Conservation Easement

BDR EXHIBIT A
CONSERVATION EASEMENT