

Castle Hill Farm
Northbridge, Massachusetts

Prepared for: Metacomet Land Trust
P.O. Box 231
Franklin, Massachusetts 02038
508-271-7131

Prepared by: David S. Pickart, Conservation Agent
Town of Northbridge
14 Hill Street
Whitinsville, Massachusetts 01588
508-234-0817



Date: August 1, 2023

Table of Contents

Introduction	1
Property Overview	1
Methodology	2
Site History.....	3
Property Characteristics.....	3
Physical Characteristics	3
Geology and Soils	3
Ecological Communities	4
Water Resources	5
Wildlife Habitat	5
Climate Change Resilience/Mitigation	7
Cultural and Other Unique Features	7
Encroachments, Debris and Other Potential Concerns.....	8
Conservation Values	9
Acknowledgements	10

Tables

Table 1 – Property Details.....	1
Table 2 – Field Visit Summary	2
Table 3 – Ecological Community Characteristics.....	4

Attachment A – Figures

- Figure 1 – Locus Map
- Figure 2 – Flood Insurance Rate Map
- Figure 3 – Soils Map
- Figure 4 – Ecological Community Map
- Figure 5 – Important Habitats and Features

Attachment B – Property Deed

Attachment C – Site Photographs

- Figure C-1 – Photo Location Map

Attachment D – Plant Inventory

Attachment E – Bound Photographs/Details

- Figure E-1 – Bound Identification/Location Map

Table of Contents - Continued

Attachment F – Affidavits

Property Plans (in pocket)

Existing Conditions Graphic (in pocket)

Introduction

This Baseline Documentation Report (BDR) has been prepared for 97.67 acres of land located to the east, west and south of Castle Hill Road in Northbridge, Massachusetts (see Figure 1 in Attachment A). The land has been acquired by the Town of Northbridge for open space/recreation purposes under Chapter 44B of the Massachusetts Community Preservation Act (CPA). In August of 2022, the Community Preservation Committee (CPC) voted to sponsor a Warrant Article to acquire the land with CPA funds. The purchase was approved during the Fall Annual Town Meeting which occurred on October 25, 2022. The sale was finalized on May 5, 2023 and the land was placed under the management of the Northbridge Conservation Commission (NCC). Pursuant to state requirements, the land will be placed under a Conservation Restriction (CR) to be held by Metacomet Land Trust (MLT). MLT is a private, non-profit organization that is involved in protecting land for its natural, scenic, historical and/or productive values. MLT will be responsible for completing yearly inspections of the land to ensure that no encroachments from surrounding land have occurred.

This BDR has been prepared in accordance with guidance developed by Mass Audubon¹ and to fulfill the requirements noted in Section XV of the Model CR² developed by the State of Massachusetts. Plans of the property (completed in 2022 and 2023) and a large-format graphic that displays many of the features referenced in this report are provided in pockets at the end of the document.

Property Overview

According to records maintained by the Northbridge Assessor's Office, the property currently consists of part or all of four parcels of land that abut Castle Hill Road. Details on these parcels are provided in Table 1 below. These properties listed below were previously under the ownership of Alexander and Alexandra Vander Bann.

Table 1 – Property Details

Map	Parcel	Location	Character	Size (ac)
3	1	West Side of Abandoned Road	Forest	8.98
3	4	West Side of Castle Hill Road	Maintained Lawn and Forest	6.29
4	29	East Side of Castle Hill Road	Shrubland, Grassland and Forest	20.78
4	33 (partial)	East Side of Castle Hill Road	Shrubland, Grassland and Forest	61.62

The deed for the property is recorded at Book 69101/Page 362 at the Worcester County Registry of Deeds. A copy of the deed is included in Attachment B. Although the Assessor's maps identify Map 3/Parcels 1 and 4 and Map 4/Parcel 33 as three separate lots, they are referenced as one property in the deed and plan recorded at the Worcester County Registry of Deeds. In August of 2022, the Northbridge Planning Board approved the creation of a new lot (referred to as Lot 1) within a portion of Map 4/Parcel 33. This 7.85-acre lot (not part of the 61.62 acres listed in Table 1) has been retained by the former property owners.

The property is bordered by commercial development (a self-storage facility), single-family residences, and the Riley Pond Conservation Land (managed by the NCC to the north). The Fletcher Street Conservation Area (which is also managed by the NCC) and undeveloped land owned by the Whitinsville Golf Club are located to the east. A

1 Mass Audubon, 2006. *Massachusetts Conservation Restriction Stewardship Manual: A Handbook for Land Trusts and Conservation Commissions*.

2 Executive Office of Energy and Environmental Affairs/Division of Conservation Services, 2022. *EEA-DCS Model Conservation Restriction*.

portion of the property is abutted by a lot that contains Riley Pond (Map 3/Parcel 6) which is also managed by the NCC.

The Northbridge/Uxbridge town boundary forms the southern boundary of the property. Land located south of the town boundary is owned by Town of Uxbridge and is referred to as the “Hundred Acre Lot.” This municipally-owned lot (Map 11/Parcel 138) consists of overgrown fields, a community garden and recreational fields that are fringed by deciduous woods. The Uxbridge land does not appear to be permanently preserved for conservation purposes. Land located west of the property is owned by New England Power Company and consists of mixed deciduous/coniferous woods. A ±140-foot-wide overhead transmission line easement (which is periodically brush cut) extends in a northeasterly direction through this lot. The remainder of the power company land is undeveloped and consists of mixed deciduous/coniferous woods.

As indicated in Table 1, the Castle Hill Farm land consists of a mixture of maintained lawn, deciduous/coniferous forest, grasslands and shrublands. The grasslands are slowly being overtaken by shrub and sapling species. More information on these communities is provided in the Property Characteristics section of this report. Attachment D contains an inventory of plant species identified on the site.

Methodology

The findings/results presented in this BDR were developed from a review of published maps/surveys, analyses of high-resolution aerial photographs and observations made during a series of field visits that occurred during the winter of 2022/2023 and early spring of 2023. All site visits were made during leaf-off conditions. Table 2 summarizes the dates, times, and conditions that were present during the visits. It also lists individuals that were present onsite.

Table 2 – Field Visit Summary

Date	Weather	Time	Individuals Present
12/8/22	Clear, light wind, ±40 ⁰ F, bare ground	10:30 – 15:00	D. Pickart (Conservation Agent)
12/15/22	Overcast, light wind, ±48 ⁰ F, patchy snow	11:00 – 16:00	D. Pickart
12/21/22	Clear, no wind, ±40 ⁰ F, bare ground	10:30 – 16:00	D. Pickart
2/8/23	Clear, light wind, ±52 ⁰ F, bare ground	13:00 – 15:30	D. Pickart/G. Bechtholdt (Town Planner)
2/14/22	Clear, no wind, ±55 ⁰ F, bare ground	13:00 – 16:15	D. Pickart
2/22/23	Overcast, no wind, ±40 ⁰ F, bare ground	13:00 – 16:30	D. Pickart/K. O’Brien (NHS Student)
3/9/23	Clear, no wind, ±40 ⁰ F, patchy snow	12:30 – 16:30	D. Pickart
3/20/23	Clear, no wind, ±45 ⁰ F, bare ground	12:30 – 16:00	D. Pickart
3/24/23	Overcast, light wind, ±45 ⁰ F, bare ground	09:00 – 12:00	D. Pickart
3/29/23	Clear, no wind, ±45 ⁰ F, bare ground	11:00 – 14:00	D. Pickart

This report also contains information obtained during a series of site visits completed by David Pickart (Conservation Agent) and Macey Poitras (Conservation Intern) during the spring and summer of 2023.

Site History

As noted in a Phase I Environmental Site Assessment³ (ESA), most of the property was formerly used as pastures for a dairy farm which began operating in 1870's. Most of the remnants of farm buildings (including a stone barn) are located on the 7.58-acre lot that has been retained by the former owner. Most of the main barn burned down in 1957 but commercial use of the farm (for hay and grazing) continued until 1986⁴. The land was leased by local farmers (for hay and corn) until 2010.

The farm was originally operated by the Whitin Machine Works and heirs of the Whitin family. It was formed to provide guaranteed raw milk for workers at the mill. In 1955, the land and operation was sold to Garelick Brothers, a commercial dairy operation that was initially located in Franklin, Massachusetts. Milk from the farm was processed Garelick Farms until the late 1970's.

Based on a review of historical area photographs, the limits of active pastures varied throughout the period the property was operating as a dairy farm. Features related to the past farming use of the property (stone walls, barbed-wire fences, iron gates, outbuilding foundations and a stone wall) occur throughout the property.

Property Characteristics

Physical and ecological characteristics of the Castle Hill Farm conservation land are discussed below. Photographs illustrating site conditions and features are included in Attachment C. A large-format Existing Conditions Graphic of the property (which illustrates a variety of the characteristics discussed herein) has been prepared and is contained within a pocket of this report.

Physical Characteristics

Elevation on the property ranges from a high point of 432 feet (NGVD datum) along the southwestern boundary to a low point of 300 feet where the outlet of a small pond (referred to as Lower Pond) discharges into a pipe beneath the self-storage facility. Most of the site is gently to moderately sloping with grades ranging from 3 to 18 percent. Steeper slopes (up to 35 percent) occur along the upland margins of several wetland/intermittent stream systems that extend through the southern half of the property and along the upland margins of Lower Pond. An area of maintained lawn (located adjacent to existing residences on the west side of Castle Hill Farm Road) is relatively flat lying (slopes of 3 percent or less). No portion of the property is located within an area subject to inundation during the one percent annual chance flood event (Figure 2) according to mapping⁵ prepared by the Federal Emergency Management Agency (FEMA).

Geology and Soils

According to the Bedrock Geologic Map of Massachusetts⁶, the land is underlain by gneissic granite that formed during the Proterozoic Eon of the Precambrian Era. This partially-metamorphosed, igneous rock was formed approximately 600 million years ago. The regional surficial geologic map⁷ indicates the property contains thin/thick glacial tills and glaciofluvial outwash. Glacial till is unsorted mix of cobbles and boulders within a matrix of silt and sand that is deposited beneath the ice cap (basal till) or at a retreating ice front (melt-out till). Glaciofluvial outwash generally consists of stratified sand and gravel that is deposited from meltwater channels. Large boulders (glacial

3 Sage Environmental, Inc., 2022. *Phase I Environmental Site Assessment*. Sage Project #S4218.

4 Blodget and Lanpher, 2015. *Castle Hill Farm in Whitinsville, Massachusetts*. The Milk Route, Volume 423.

5 FEMA, 2011. *Flood Insurance Rate Map, Worcester County, Massachusetts*. Map Number 25027C1006E.

6 Zen, E. et al, 1983. *Bedrock Geologic Map of Massachusetts*.

7 Stone, B et al, 2018. *Surficial Materials Map of the Uxbridge Quadrangle, Massachusetts*.

erratics) occur throughout the southern half of the property (Photo 1). Several east-west trending linear ridges of ledge (bedrock outcrops) were noted in the southwestern corner of the land (Photo 2).

Soils mapped at the site include Charlton fine sandy loam, Chatfield-Hollis-Rock outcrop, Montauk fine sandy loam, Paxton fine sandy loam, Scituate fine sandy loam, Whitman fine sandy loam, and Udorthents (Figure 3) according to a regional survey⁸ produced by U.S. Department of Agriculture (USDA). The Charlton and Montauk series are well-drained and develop from melt-out till. Chatfield-Hollis-Rock outcrop soils are well to excessively well-drained loams (derived from till) intermixed with exposures of bedrock. Paxton soils are well-drained and develop from basal till. Moderately well-drained Scituate soils form from a thin layer of aeolian (wind-sorted) silt/sand that overlies basal till). Whitman soils are very poorly-drained and are derived from basal till. The Whitman series typically occurs with wetlands. Udorthents are soils modified by human activities (such as earthwork) that took place in glaciofluvial outwash.

Ecological Communities

The Castle Hill Farm land is comprised of a variety of different vegetative plant communities (Figure 4). According to the classification scheme⁹ utilized by the Massachusetts Natural Heritage & Endangered Species Program (NHESP), natural communities that occur on the property include Forest (Photos 3 and 4), Shrubland (Photo 5), Herbaceous/Open (Photo 6) and Palustrine (wetland). A summary of the habitat types within each of these communities that occur on the property is provided in Table 3. A listing of plant species identified on the property that occur in these communities is provided in Attachment D of this report. In addition to the natural communities listed above, an open water body (Lower Pond), an area of maintained lawn (Photo 7) and an abandoned road also occur on the property (Photo 8).

Communities ranked as S5 are demonstrably secure and are common, widespread and abundant in Massachusetts. S4 communities are uncommon but not considered to be rare. Shrublands and Grasslands are transitional communities that have developed in portions of the property that were formerly utilized as pastures and croplands. Naturally occurring shrublands and grasslands are not present in this region of Massachusetts. For these reasons, they have not been ranked by NHESP.

Table 3 – Ecological Community Characteristics

System	Community	Habitat Type	Ranking	Onsite Area (acres)
Terrestrial	Forest	Mixed Oak	S5	51.41
	Forest	White Pine	S5	3.98
	Shrubland	Transitional	N/A	21.23
	Herbaceous/Open	Cultural Grassland	N/A	5.35
Palustrine	Forest	Red Maple Swamp	S5	11.19
	Sparse/Open	Shallow Marsh	S4	1.54
N/A	--	Pond	--	0.72
N/A	--	Maintained Lawn	--	2.04

8 USDA Natural Resources Conservation Service, 1998. *Soil Survey of Worcester County, Massachusetts, Southern Part*.

9 Swain, PC, 2020. *Classification of the Natural Communities of Massachusetts*. Natural Heritage & Endangered Species Program.

Water Resources

The site lies within the watershed of the Mumford River (a major tributary to the Blackstone River which discharges into Narragansett Bay). The approximate extent of wetlands, watercourses and water bodies on the property are approximately shown on the accompanying Existing Conditions Graphic. The limits of wetlands displayed on this graphic were developed through a combination of boundaries depicted on old plans, examination of high-resolution aerial photographs, and field observations.

As shown on Figure 4, four intermittent streams and a small pond (Lower Pond) occur on the property. The intermittent stream in the northern portion of the property originates from the outflow of Riley Pond and extends northerly into Lower Pond (Photo 9). The pond (Photos 10 and 11) is impounded by a 200-foot-long stone/earthen dam. Overflow from the pond is piped beneath the self-storage facility and discharges into the Mumford River. The intermittent stream located in the western portion of the property originates offsite and flows northward into Riley Pond (Photo 12). An intermittent stream system (that is fed by two branches) extends across the southern portion of the property and flows eastward into the Whitinsville Golf Club. A north to south trending intermittent stream extends southward through the eastern portion of the property. This watercourse extends offsite (and merges with the stream that flows into the Whitinsville Golf Club. A total of 1.1 miles of intermittent streams occur on the property. The scheme¹⁰ developed by Cowardin and others classifies them as Riverine, intermittent, rocky shore, rubble bottom streams (R4RS2). Most of the streams have a moderate to high gradient and contain many riffle and pool complexes. The pond is classified as Palustrine, Unconsolidated Bottom, comprised of mud that is Permanently Flooded (PUB3H). According to several residents, the pond is occasionally used for skating.

Wetlands identified on the site included wooded swamps (dominated by red maples) and wet meadows (also termed shallow marshes) that border the streams discussed above. The swamps are classified as Palustrine, forested, broad-leaved deciduous, seasonally flooded/saturated (PFO1E) wetlands under the Cowardin classification scheme (Photo 13). The wet meadows are classified as Palustrine, emergent marsh, persistent, seasonally flooded/saturated (PEM1E) wetlands (Photo 14). As indicated in Table 3, approximately 12.7 acres of wetlands occur on the property.

Wildlife Habitat

According to the Natural Heritage & Endangered Species Program¹¹ (NHESP), the property does not contain any habitat for state-listed Rare Species or any Certified Vernal Pools. According to mapping¹² completed by the University of Massachusetts (UMass) in Amherst, the property does not contain any areas mapped as having habitat of potential regional or statewide importance. Although not being identified on these regional surveys, the site contains valuable habitat for a variety of wildlife species. The property will become part of a 279-acre block of undeveloped and unfragmented land that includes two Conservation Areas (Fletcher Forest and Riley Pond) and municipally owned land in Uxbridge (the 100 Acre Lot).

Mammals identified at the property during the course of conducting field visits (direct sightings, tracks, calls and scat) include white-tailed deer (*Odocoileus virginianus*), bobcat (*Lynx rufus*), red fox (*Vulpes vulpes*), American beaver (*Castor canadensis*), North American porcupine (*Erethizon dorsatum*), eastern cottontail (*Sylvilagus floridanus*), eastern gray squirrel (*Sciurus carolinensis*), and eastern chipmunk (*Tamias striatus*). Birds identified at

10 Cowardin et al, 1979. *Classification of Wetlands and Deepwater Habitats of the United States*. US Fish and Wildlife Service.

11 NHESP, 2021. *Massachusetts Natural Heritage Atlas*. 15th Edition.

12 UMass Amherst, 2021. *Habitat of Potential Regional or Statewide Importance: Town of Northbridge, MA*.

the site include wild turkey (*Meleagris gallopavo*), Canada goose (*Branta canadensis*), mallard (*Anas platyrhynchos*), downy woodpecker (*Dryobates pubescens*), hairy woodpecker (*Dryobates villosus*), American crow (*Corvus brachyrhynchos*), bald eagle (*Haliaeetus leucocephalus*), red-tailed hawk (*Buteo jamaicensis*), red-shouldered hawk (*Buteo lineatus*), eastern towhee (*Pipilo erythrophthalmus*), black-capped chickadee (*Poecile atricapillus*), American robin (*Turdus migratorius*), and red-winged blackbird (*Agelaius phoeniceus*). Reptiles and amphibians identified on the property thus far include Eastern garter snake (*Thamnophis sirtalis sirtalis*), spotted turtle (*Clemmys guttata*), spotted salamander (*Ambystoma maculatum*), wood frog (*Lithobates sylvaticus*), and spring peeper (*Pseudacris crucifer*).

Multiple seasonally flooded topographic depressions occur on and immediately adjacent to the property. Although not shown on a preliminary survey completed by NHESP (available as a data layer from the Massachusetts Bureau of Geographic Information [MassGIS]), these features could potentially provide breeding habitat for amphibians. Several of the pools appear to lie within areas that were previously quarried for rock. As determined by observations made during inspections that took place in March of 2023, evidence of breeding (egg masses and/or chorusing) has been noted in three of the offsite pools (Photo 15, 16, 17 and 18). Additionally, fairy shrimp and chorusing spring peepers were noted in one of the onsite depressions (Photo 19). These pools likely meet the criteria to be certified¹³ by the NHESP. The other onsite depressions did not exhibit any evidence of breeding by obligate or facultative vernal pool species. The location of pools determined to meet the criteria for certification located on and near the site is noted on Figure 5 and the Existing Conditions Graphic.

In addition to the pools themselves, the surrounding uplands provide crucial habitat for amphibians during non-breeding seasons. Estimates on the range that amphibians will travel from pools vary widely, but a distance of 750 feet has been adopted by the New England District of the U.S. Army Corps of Engineers¹⁴ (USACE). The USACE defines land within 750 feet of pools as Critical Terrestrial Habitat (CTH). An adult spotted salamander was observed at a distance of approximately 1,100 feet away from the nearest vernal pool during an inspection that occurred in June of 2023. Approximately 43.2 acres of CTH occur on the property (shown on Figure 5 and Existing Conditions Graphic). Although not yet shown mapping that accompanies a conservation initiative¹⁵ in Massachusetts, the pools on/near the property and surrounding land likely qualify as Vernal Pool Core Habitat.

As discussed earlier, the property contains fairly-large patches of grasslands and shrublands that occur within an extensive block of unfragmented and undeveloped land. Grasslands and shrublands do not naturally occur within this region of Massachusetts. The areal extent of these communities has significantly decreased following an overall decline in farming. A recent report¹⁶ published by the Massachusetts Chapter of the Audubon Society (MassAudubon) indicates that several grassland/shrubland bird species (American woodcock, Vesper sparrow, Savannah sparrow and bobolink) are highly vulnerable due to the effects of climate change and habitat loss. According to a report¹⁷ produced by several state agencies and private conservation-organizations, managing grassland and shrubland habitats is a conservation priority in Massachusetts. The loss of early successional habitats (including scrublands) to development and succession can have a serious impact on wildlife habitat¹⁸. Based on a

13 NHESP, 2009. *Guidelines for the Certification Vernal Pool Habitat*.

14 USACE, 2020. *New England District Compensatory Mitigation Standard Operating Procedures*.

15 MassWildlife and The Nature Conservancy, 2022. *BioMap: The Future of Conservation in Massachusetts*.

16 MassAudubon, 2017. *State of the Birds*. Report No. 3.

17 MassWildlife, NHESP, The Nature Conservancy, The Trustees of Reservation and MassAudubon, 2013. *An Action Plan for the Conservation of State-listed Obligate Grassland Birds in Massachusetts*.

18 DeGraaf, et al, 2006. *Technical Guide to Forest Wildlife Habitat in New England*. University of Vermont Press.

report¹⁹ prepared by academic institutions and government agencies, shrublands also provide habitat for New England cottontail, a mammal whose populations have declined due to habitat loss.

Approximately 55.4 acres of forest, that consists of mixed oak and white pine communities, occur on the site. Most of these woodlands on the property (37.5 acres) have been classified as Prime Forest (considered to have high timber productivity) based on criteria developed by the Agricultural Experiment Station of UMass Amherst. With the inclusion of surrounding areas, the forest is part of a ±250-acre block of unfragmented woodlands. Based on criteria developed by the Massachusetts Division of Fisheries and Wildlife (MassWildlife) and The Nature Conservancy, unfragmented blocks of woodlands that exceed more than 50 acres are considered to provide habitat for interior forest-dependent wildlife species.

Climate Change Resilience/Mitigation

According to a mapping tool that accompanies a study²⁰ assessing the resilience of undeveloped land, most of the Castle Hill Farm property is considered to be of average resilience to climate change. The remainder of the property is rated as being slightly less resilient. As discussed above, the property contains approximately 55 acres of woods, most of which are classified as Prime Forest and are in a relatively pristine condition. The trees and underlying soils of mature forests sequester atmospheric carbon dioxide²¹ (CO₂) which is a direct cause of climate change. Forests in New England have been estimated to absorb approximately 20 percent²² of carbon emissions.

Cultural and Other Unique Features

In addition to the natural ecologically important resources described above, the property contains a variety of cultural and unique features. Most of the land is encircled and traversed by a network of stone walls that include blocks of rock that were quarried (likely from the site) and cut to fit (Photo 20). Portions of the property afford vistas of the remnants of the unique barn (located on land that will be retained by the current owner) that was part of the dairy farm (Photo 21). Photo 22 depicts the condition of the main barn prior to fire that occurred in 1957. The property contains an old stone foundation (former farm outbuilding) that is located immediately south of the land being retained by the current owner.

Several outstanding occurrences of trees (also referred to as specimen trees) were noted on the property during the field visits. The location of these trees (which are healthy and have a diameter at breast height of more than 36 inches) are noted on Figure 5 and the Existing Conditions Graphic. Species of trees observed at the site that met these criteria include red oak, white oak, yellow birch and white pine. A dense grove of mature rhododendron shrubs occurs in the northern portion of the site adjacent to Lower Pond (Photo 23). The grove may have developed from seed stock introduced from a nursery (Bannon's Flower Shop and Greenhouses) that formerly occupied an abutting lot. Two mature coniferous trees that appear to resemble giant sequoia (*Sequoiadendron giganteum*) were also observed in the portion of the site.

Portions of the property are traversed by approximately 0.6 miles of trails (Photo 24). Most of the trails are in relatively good shape and are surfaced by bare ground and/or gravel. They appear to be frequently utilized and sporadically maintained. The old road that extends from the end of Castle Hill Road into the 100 Acre Lot is also

19 New England Cottontail Technical Committee, 2013. *Best Management Practices, How to Make and Manage Habitat for the New England Cottontail: A Regional Land Manager's Guide*.

20 The Nature Conservancy, 2016. *Resilient Sites for Terrestrial Conservation in Eastern North America: 2016 Edition*.

21 The Nature Conservancy, 2022. *Forest Carbon 101*. Nature Conservancy, Spring 2022 Edition.

22 Siliezar, J, 2022. *New England Forests, New Strategies Can Offset Most Regional Emissions Over 30 Years*. The Harvard Gazette.

used for hiking. Most of the trails are three to four feet in width. The approximate location of the existing trails is noted on Figure 5 and the Existing Conditions Graphic.

Based on conversations with residents and observations made during the field inspections, the property appears to be regularly used for hunting. A total of six deer stands were noted at the site. All of these were fairly new and showed signs of regular use. A game camera was observed at the edge of large patch of grassland in the northern portion of the property. The location of the deer stands are shown on the Existing Conditions Graphic.

Encroachments, Debris and Other Potential Concerns

Apparent encroachments and the location of debris piles on the property observed during the field visits are noted on the Existing Conditions Graphic. A large pile of demolition debris (that appears to have originated from a neighboring residential lot) is located along the eastern slope of Lower Pond (Photo 25). Two residential satellite dishes (overgrown by vines) were noted within a 40-foot-wide easement that extends the northern portion of the property. According to the attorney representing the current property owner, this easement has been abandoned. Most of the waste/debris (bottles, cans and an old bicycle) noted during the field visits occurs in the northern portion of the property in close proximity to Castle Hill Road.

Two junked cars were observed at the edge of wet meadow located immediately south of the land being retained by the former owner (Photo 26). The former owner was notified and these vehicles have since been removed. Several rusted (and empty) metal drums were noted along an existing trail located south of the maintained lawn area (Photo 27) and at a location in one of the grasslands. According to the previously referenced Phase I ESA, no evidence of oil and/or hazardous materials were observed around the drums or in the soil. This document identified that no further environmental investigations were warranted on the property but recommended that the solid waste (junked cars, old farm equipment, empty drums, etc.) be removed and properly disposed.

Cracking and leakage in and around the main spillway of the dam for Lower Pond was noted during the field inspections. Additionally, the overflow spillway was blocked by debris at several locations. Extensive algal blooms have been noted in Lower Pond in the past. Based on input from residents and local officials, Lower Pond has become filled with sediment and organic materials and is now less than three feet deep. Accordingly, the dam is estimated to impound approximately 2.2 acre-feet of water.

According to the Office of Dam Safety (OSD) of the Department of Conservation & Recreation, the dam for Lower Pond (identified as MA02861) does not have an open Chapter 253 Permit. The dam appears to have been identified as having a significant hazard potential (Class II) by the OSD in the past. The downgradient face of the dam is approximately 8 feet high. According to the Massachusetts Dam Safety Regulations (302 CMR 10.00), dams which impound less than 15 acre-feet are not regulated by the OSD. These factors may explain why the dam no longer has a Chapter 253 permit.

Because it does not impound a significant volume of standing water, failure of the dam is not likely to cause significant damage to downgradient properties. Without some form of management or repairs, the pond is likely to transition into a marsh or scrub-shrub swamp. Given the factors cited above, rehabilitation and/or removal of the dam for Lower Pond may need to be considered at some point in the future.

A section of Castle Hill Road that abuts the property (across from the parking area for Riley Pond) is bordered by a vertical rock wall that is approximately 10 feet high. Vertical walls that are approximately 15 feet high also line a section of the old road (that extends into the 100 Acre Lot) where it crosses through a wetland/intermittent stream system. Without railings or some other form of barricade, these walls pose a serious fall hazard by individuals using the property. An old stone well (not covered but surrounded by extremely dense brush) is located adjacent on the south side of the intermittent stream that drains into lower pond.

As noted in Appendix D, several invasive species of plants (vines, shrubs and forbs) have been identified on the property. Large outbreaks were noted along the edges of the forest and throughout the shrublands. Additionally, a large stand of Japanese knotweed was noted in proximity to the old outbuilding foundation. If left unchecked, the extent of invasive species may increase, could potentially encroach into pristine portions of the land and may outcompete native plants.

Most bounds that mark corners and edges of the property were located in the field and have been photographed (see Attachment E). Of the bounds that could not be located, most demarcate the boundary between the site and the Fletcher Forest Conservation Land or define the right-of-way for Castle Hill Road. Because the missing bounds correspond to a readily definable feature (Castle Hill Road) or involve land that is already preserved, their absence is not a critical issue. An iron pin that demarcates the southeastern corner of the property could not be located even though it was observed during a survey completed in 2022. Some cutting of trees was noted on the abutting lot. Efforts to clearly identify the boundary in this area is recommended to ensure that tree clearing does not inadvertently encroach into the Castle Hill Farm land in the future. Many of the bounds are quite hidden and should be supplemented with more visible markings to aid in subsequent inspections.

Conservation/Preservation Values

According to results produced through the use of an ecological model (MAPPR 2.0²³), the Castle Hill Farm land is rated moderately-high (numerical values of 5 and 6) for protection under the balanced scenario. The moderately-high rating is primarily due to presence of underrepresented settings (shrubland and grasslands) and the property's proximity to other protected lands.

In addition to the moderately-high ranking discussed above, the property contains a variety of important features that support it being permanently preserved. Ecologically significant features and habitat on the property include:

- One onsite and several nearby seasonally-flooded depressions that meet the criteria to be certified as vernal pools by NHESP;
- Approximately 51 acres of undeveloped land that likely provides Critical Terrestrial Habitat for several species of amphibians;
- A large patch of woods (55.4 acres) that is a part of ±250 acre block of unfragmented forest;
- Fairly large areas of shrublands (21.2 acres) and grasslands (5.4 acres) that can provide habitat for a variety of wildlife species whose populations are declining due to regional habitat loss; and
- Exemplary examples of stone walls and other cultural features related to past farming.

²³ MassAudubon, The Nature Conservancy and LandVest, 2016. *Mapping and Prioritizing Parcels for Resilience Project*. MAPPR Tool, Version 2.0.

Once placed under a CR, the property will become part of a 279 acre block of protected and/or municipally-owned land that is relatively unfragmented by roads/utility lines and contains extensive forest land that sequesters carbon dioxide emissions.

Considering the factors presented above, the property offers exceptional conservation opportunities including passive recreational use (wildlife viewing, hiking, cross-country skiing, snow shoeing, fishing, and environmental education) and the preservation of important wildlife habitat. The land has been the focus of several large-scale development proposals in the past including a 189 unit residential development (mix of senior housing and single-family homes) that was under consideration in 2021. Preservation of the property will ensure it remains undeveloped and can be enjoyed by existing and future residents.

Acknowledgements

The author is indebted to and wishes to thank the following individuals who provided advice, technical editing, assistance with field inspections, granted access to the land, and/or provided history and background information during the course of preparing this BDR:

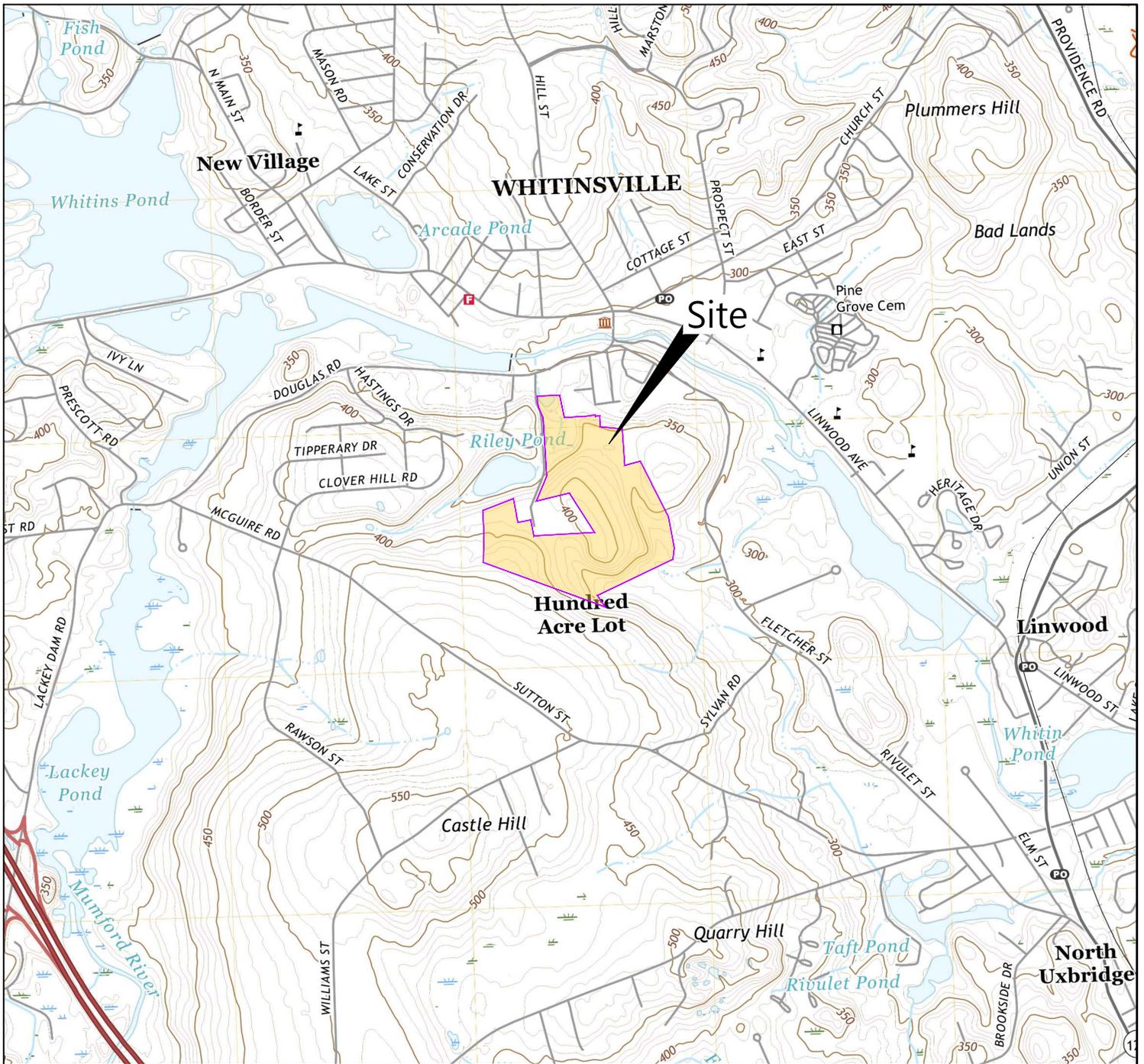
Alexander and Alexandra Vander Baan, Former Property Owners;
Lisa Mosczynski, Metacomet Land Trust;
Mike Penko, Metacomet Land Trust;
R. Gary Bechtholdt, Northbridge Town Planner;
Kathryn O'Brien, NHS Student;
Peter Plumb, Resident;
Glenn King, Chair, Northbridge Community Preservation Committee;
Timothy Labrie, Northbridge Police Chief: and
Macey Cote-Poitras, Conservation Intern/Wheaton College Student

Time spent on compiling the report would not have been possible without the agreement/support of members of the Northbridge Conservation Commission, the Northbridge Board of Selectmen and Adam Gaudette, Northbridge Town Manager.

Attachment A

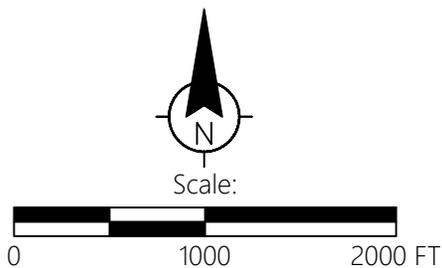
Figures

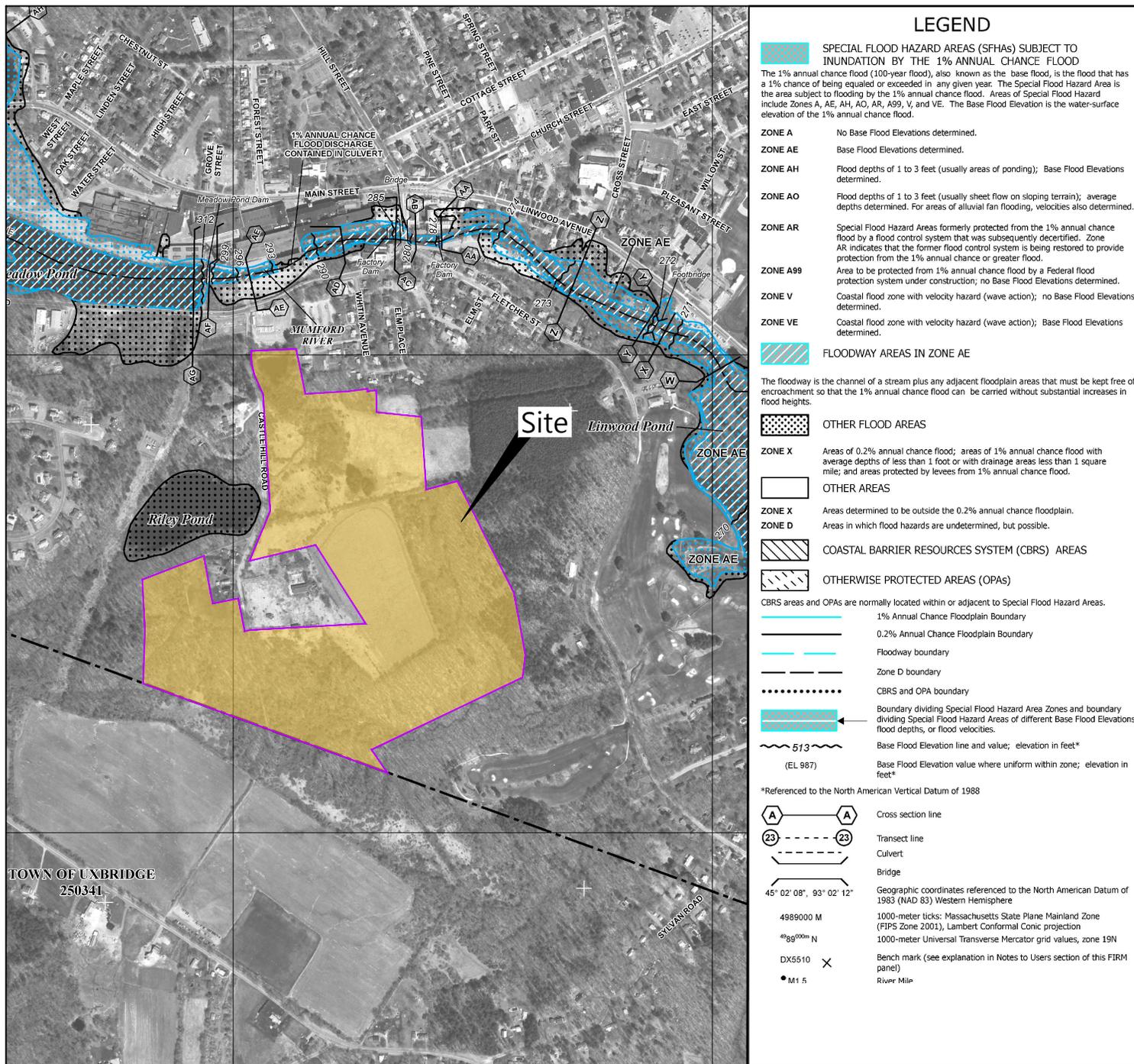
- Figure 1 – Locus Map
- Figure 2 – Flood Insurance Rate Map
- Figure 3 – Soils Map
- Figure 4 – Ecological Community Map
- Figure 5 – Important Habitats and Features



Source: USGS, 2021

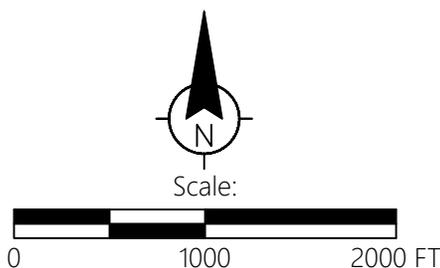
Figure 1 - Locus Map
 Castle Hill Farm Property
 Baseline Documentation Report
 Northbridge, Massachusetts

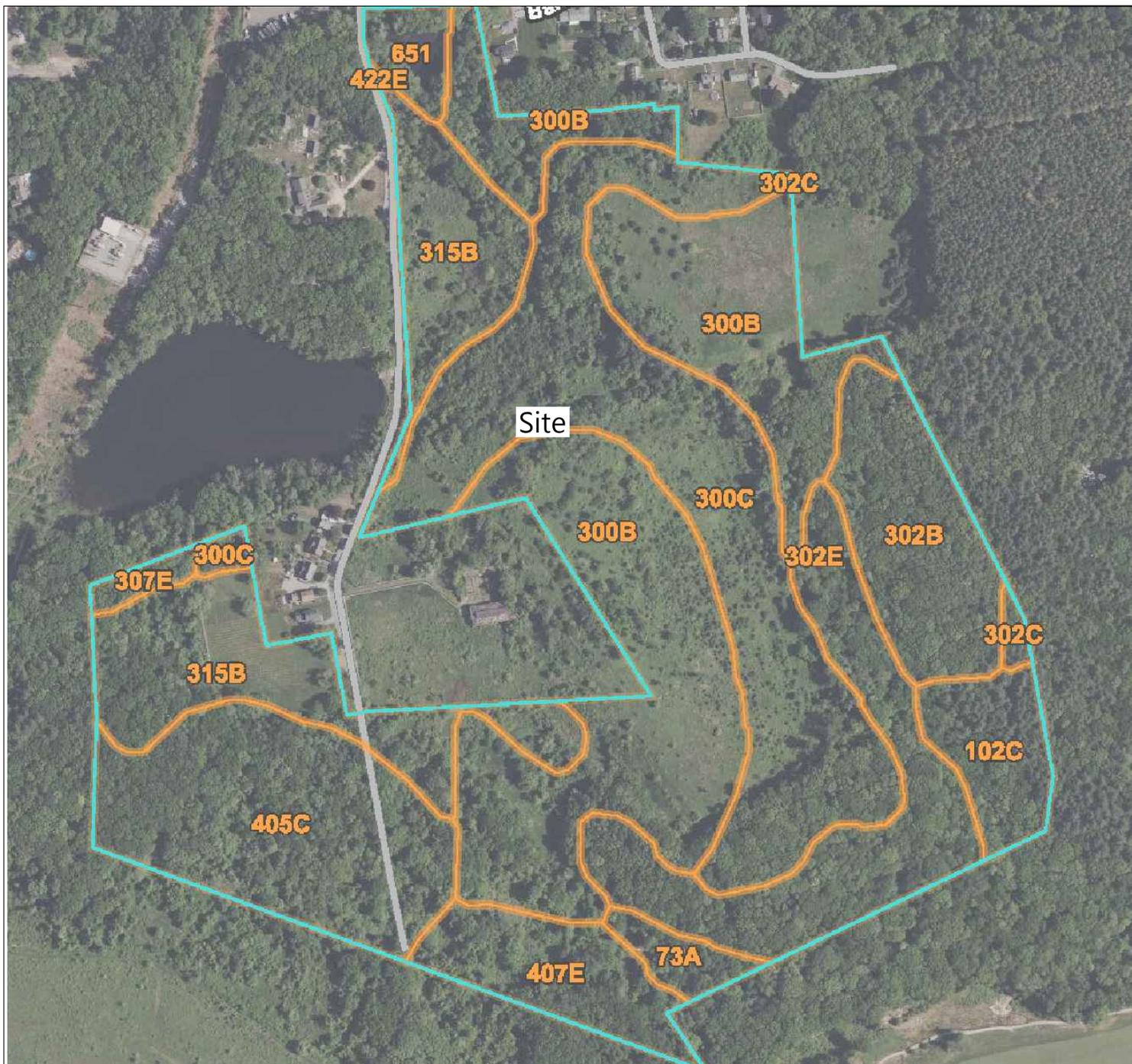




Source: FEMA, 2011
 Map Number 25027C1006E

Figure 2 - Flood Insurance Rate Map
 Castle Hill Farm Property
 Baseline Documentation Report
 Northbridge, Massachusetts





Source: USDA NRCS, 1988

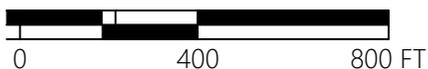
EXPLANATION:

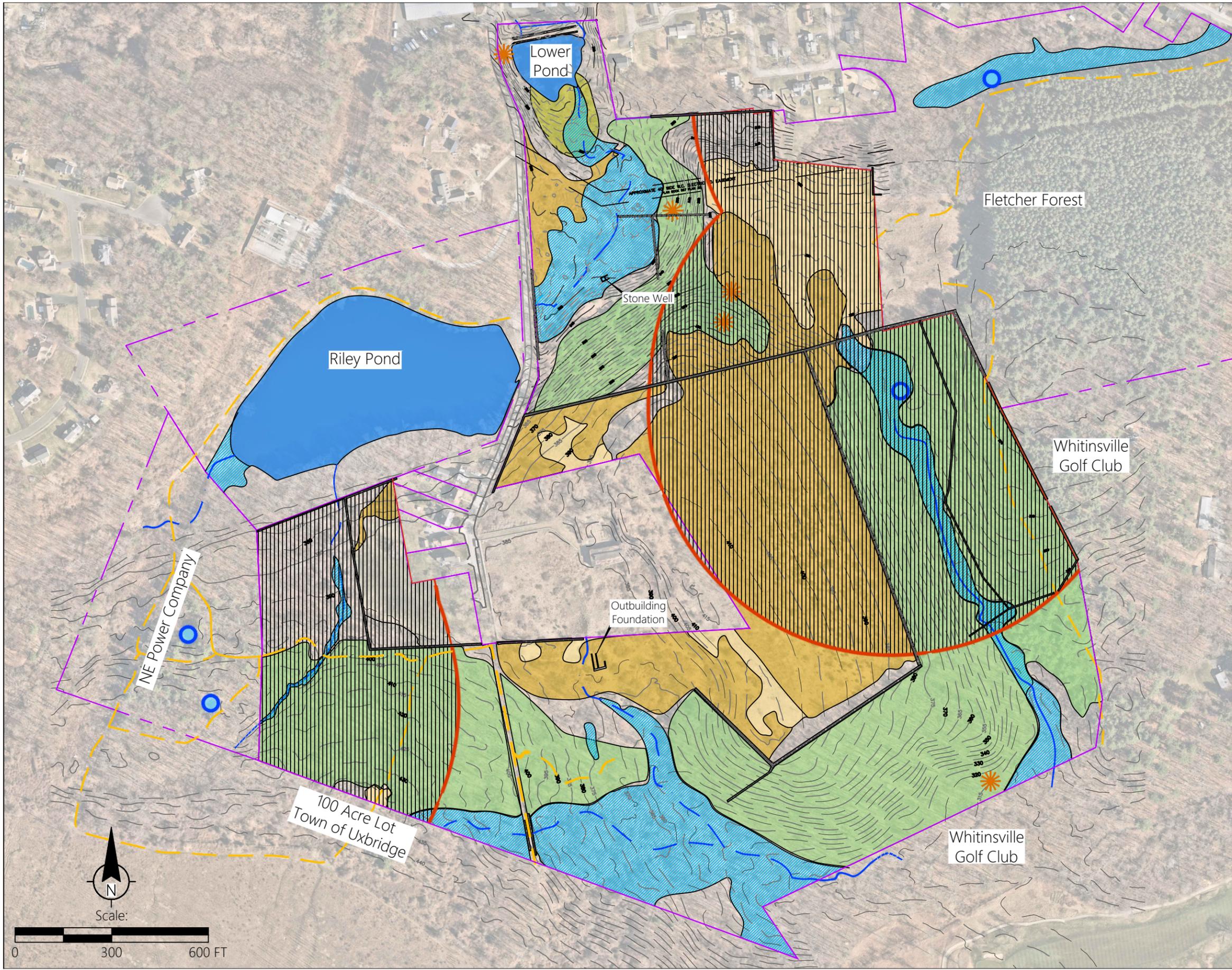
- | | |
|-----|----------------------------------|
| 73 | Whitman Series |
| 102 | Chatfield-Hollis-Rock Outcrop |
| 300 | Montauk Series |
| 302 | Montauk Series, Extremely Stony |
| 307 | Paxton Series |
| 315 | Scituate Series |
| 405 | Charlton Series |
| 407 | Charlton Series, Extremely Stony |
| 422 | Canton Series |
| 651 | Udorthents |
| A | 0 to 3% Slopes |
| B | 3 to 8% Slopes |
| C | 8 to 15% Slopes |
| E | 15 to 35% Slopes |

Figure 3 - Soils Map
 Castle Hill Farm Property
 Baseline Documentation Report
 Northbridge, Massachusetts



Scale:





EXPLANATION:

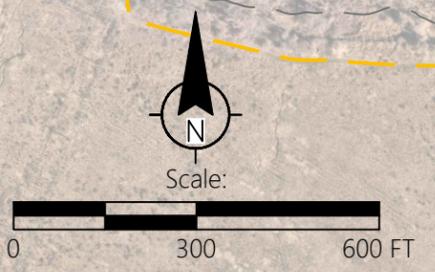
- Castle Hill Land Boundary
- - - Other Parcel Boundary
- - - Existing Trail
- Stone Wall
- Wetland
- - - Intermittent Stream
- - - 360 - - - 10' Topographic Contour
- - - - - Minor Topographic Contour
- Shrubland
- Grassland
- Prime Forest
- Vernal Pool
- Critical Terrestrial Habitat
- Rhododendron Grove
- Specimen Tree

NOTES:

1. Property boundaries and topography of Castle Hill Land obtained by surveys prepared by Allen Engineering & Associates, Inc. dated 7/28/22 and 2/21/2023.
2. Property boundaries of abutting land obtained from parcel data available from MassGIS.
3. Location of trails, stone walls, wetlands, intermittent streams and important habitat/features were determined through examination of aerial photography and field observations.

Base Source : Nearmap, 2021

Figure 5 - Important Habitat and Features
 Castle Hill Farm Property
 Baseline Documentation Report
 Northbridge, Massachusetts



Attachment B Property Deed

- Property Deed



Bk: 69101 Pg: 362
Page: 1 of 8 05/05/2023 02:07 PM WD

DEED

We, **ALEXANDER J. VANDER BAAN** and **ALEXANDRA P. VANDER BAAN**, a married couple of Dedham, Massachusetts, for consideration paid of ONE MILLION FOUR HUNDRED FIFTY THOUSAND and 00/100 (\$1,450,000.00) Dollars grant

to the **TOWN OF NORTHBRIDGE**, a Municipal Corporation having a usual mailing address of 7 Main Street, Whitinsville, Massachusetts 01588,

With **QUITCLAIM COVENANTS**

Two certain parcels of land situated on the easterly and westerly side of Castle Hill Road, in the Village of Whitinsville, in the Town of Northbridge, County of Worcester and Commonwealth of Massachusetts, bounded and described as follows:

Parcel 1

Beginning at a point on the easterly side of Castle Hill Road which point is 243.08 feet measured S. 04° 28' 51" E. from the intersection of the easterly side of said Castle Hill Road with the southerly side of the Douglas Road, said point being the southwesterly corner of land of Sidney Covich Trustee and being the northwesterly corner of the lot hereby described;

THENCE N. 83° 17' 30" E. with said Covich land 307.06 feet to land now or formerly of Bannings Flower Shop and Greenhouses, Inc.

THENCE S. 15° 56' 11" E. 312.63 feet to a stone bound;

THENCE N. 82° 09' 09" E. 283.48 feet partly with a stone wall to land now or formerly of Robert E. and Mary A. Conlee, the last two (2) lines bounded by said land of Bannings Flower Shop and Greenhouses Inc.;

THENCE N. 78° 33' 10" E. with said Conlee land 142.54 feet to land now or formerly of Alexander R. and Louise V. Gray;

THENCE S. 11° 42' 35" E. 16.52 feet to a point;

Property address: Castle Hill Road, Northbridge, MA

- THENCE N. 78° 21' 42" E. 61.55 feet to a stone wall at land of the Whitinsville Golf Club, the last two (2) lines bounded by said Gray land;
- THENCE S. 05° 07' 57" E. with said stone wall 150.00 feet;
- THENCE S. 88° 19' 01" E. 308.90 feet to a stone wall;
- THENCE S. 08° 14' 56" E. partly with a stone wall 498.30 feet to land now or formerly of Lillian Garelick Realty Trust, the last three (3) lines bounded by said land of the Whitinsville Golf Club;
- THENCE S. 71° 58' 50" W., with said land of the Lillian Garelick Realty Trust and partly with a stone wall 1,149.28 feet to the aforesaid Castle Hill Road;
- THENCE N. 17° 43' 50" E. 126.99 feet;
- THENCE N. 07° 54' 51" W. 799.07 feet;
- THENCE N. 27° 49' 51" W. 161.28 feet;
- THENCE N. 16° 44' 51" W. 80.02 feet;
- THENCE N. 04° 28' 51" W. 77.22 feet to the point of beginning, the last 5 courses bounded by said Castle Hill Road.

Containing 20.7827 Acres more or less.

Being shown as Lot 2 on a plan entitled "Plan of Land for White Consolidated Industries, Inc. And/Or ATF-Davidson Company, Northbridge, Mass." March 1983, Revised October, 1985, Scale 1 inch = 80 feet, Bibeault and Florentz Engineering Co., Civil Engineers and Land Surveyors, 99 Main Street Woonsocket, R.I., which plan is recorded with the Worcester District Registry of Deeds in Plan Book 567, as Plan 32.

Parcel 2

- Beginning at a point on the easterly side of Castle Hill Road which point is 1,487.66 feet from the intersection of the easterly side of said Castle Hill Road with the southerly side of the Douglas Road, said point being the southwesterly corner of the above-described "Parcel 1";
- THENCE N. 76° 32' 20" E. along a stone wall and land now or formerly of the Bernon Family Realty Associates 1,377.73 feet to a point at land now or formerly of the Town of Northbridge;
- THENCE S. 26° 34' 13" E. 339.90 feet to a drill hole;

- THENCE S. 26° 49' 13" E. 524.60 feet to a drill hole;
- THENCE S. 10° 17' 08" E. 437.66 feet to a drill hole;
- THENCE S. 08° 03' 47" W. 151.48 feet to an iron rod;
- THENCE S. 64° 30' 30" W. 1,150.00 feet to a drill hole;
- THENCE S. 33° 59' 49" E. 193.79 feet to a point; the last 6 courses being by land now or formerly of Whitinsville Golf Club;
- THENCE N. 69° 52' 19" W. 1,788.67 feet to a point by the Northbridge/Uxbridge Town line to a point;
- THENCE N. 01° 49' 29" E. by land now or formerly of New England Power Co. 356.82 feet to a point;
- THENCE N. 02° 43' 31" W. by land now or formerly of New England Power Co. 359.48 feet to a drill hole;
- THENCE N. 69° 08' 20" E. along a stone wall by land now or formerly of the Town of Northbridge 453.11 feet to a point;
- THENCE S. 10° 32' 16" E. by land now or formerly of Whalen Thibodeau, Robert DeYoung, Peter Lachapelle, and Plumb Family Trust 331.75 feet to a point;
- THENCE N. 79° 27' 44" E. by land now or formerly of Plumb Family Trust 180.00 feet to a point;
- THENCE S. 10° 32' 16" E. by Castle Hill Road 227.54 feet to a point;
- THENCE N. 79° 27' 44" E. crossing Castle Hill Road 50.00 feet to a point;
- THENCE N. 86° 54' 14" E. 785.84 feet to a point;
- THENCE N. 32° 22' 34" W 641.55 feet to a point;
- THENCE S. 76° 32' 20" W. 469.40 feet to a point;
- THENCE N. 22° 10' 24" E. by Castle Hill Road 246.08 feet to the point of beginning.

Being shown as "Remaining Land..." on a plan entitled "Plan of Land for Castle Hill Road in Northbridge MA 01588" dated May 4, 2023, and recorded in the Worcester District Registry of Deeds Plan Book 970, Plan 103.

Containing 69.04 acres, more or less.

Parcel 1 and Parcel 2, together, containing 89.82 acres, more or less.

Meaning and intending to convey a portion of the property conveyed in the Deed dated July 18, 2022, from Bernon Family Realty Associates to Alexander J. Vander Baan and Alexandra P. Vander Baan, recorded in Worcester District Registry of Deed in Book 67952, Page 244, expressly excepting the parcel of land containing 7.85 acres of land, more or less, which is shown as "Lot 1" on said plan entitled "Plan of Land For Castle Hill Road in Northbridge, MA 01588", recorded in Plan Book 970, as Plan 103.

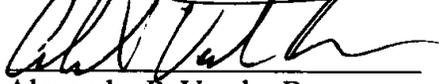
The grantors hereby state that the premises consist of vacant land and that no other persons are presently entitled to any homestead rights as set forth in M.G.L. c. 188.

No deed stamps are due pursuant to G.L. c. 64D, §1.

The undersigned certifies compliance with G.L. c. 7C, §38.

The Town's Acceptance to this Deed is attached hereto.

Witness our hands and seals this 4th day of May, 2023.


Alexander J. Vander Baan

Alexandra P. Vander Baan

COMMONWEALTH OF MASSACHUSETTS

Worcester, ss.

On this 4th day of May, 2023, before me the undersigned notary public, personally appeared Alexander J. Vander Baan and Alexandra P. Vander Baan, personally known to me / proved to me through satisfactory evidence of identification, which was personal knowledge, to be the person whose names are signed on the preceding or attached document and acknowledged to me that he/she signed it voluntarily for its stated purpose.




Henry J. Lane Notary Public
My Commission Expires: 8-29-2025



**TOWN OF NORTHBRIDGE
OFFICE OF THE TOWN CLERK**

7 MAIN STREET
WHITINSVILLE, MASSACHUSETTS, 01588
Phone: 508-234-2001

Linda B. Zywien, CMC
Town Clerk
lzywien@northbridgemass.org

Laura A. Medeiros
Assistant Town Clerk
lmedeiros@northbridgemass.org

**COMMONWEALTH OF MASSACHUSETTS
TOWN OF NORTHBRIDGE
PROCEEDINGS OF THE FALL ANNUAL TOWN MEETING
TUESDAY, OCTOBER 25, 2022 - 7:00 P.M.
Northbridge Middle School
Linwood Avenue**

The meeting was called to order by the Town Moderator, Henry J. Lane at 7:07 at the Northbridge Middle School on Linwood Avenue, in Whitinsville, in Northbridge, Massachusetts. The Moderator declared a quorum in attendance at the time with 124 voters present.

ARTICLE 3: 2/3 VOTE REQUIRED

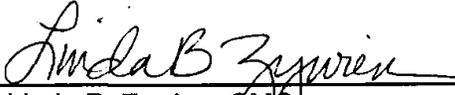
DECLARED VOTED BY THE MODERATOR

By virtue of Town bylaw 3-106

Moved and seconded that the Town vote to acquire, by purchase, gift or otherwise, for open space and recreation purposes, to be held under the care and custody of the Conservation Commission, a portion of the land known as Castle Hill Farm, located on Castle Hill Road and shown as Parcels 1 and 4 on Assessors' Map 3 and Parcels 29 and 33 on Assessors' Map 4, consisting of 97.67 acres more or less, and the portion of said Parcels 1 and 4 and Parcel 33 to be acquired being more particularly shown on a plan entitled "Plan of Land for Castle Hill Road" prepared by Allen Engineering & Associates dated June 28, 2022, a copy of which is on file with the Town Clerk; to appropriate the sum of One Million Four Hundred Fifty Thousand Dollars (\$1,450,000) for such acquisition and costs incidental and related thereto as follows: to authorize the Treasurer, with the approval of the Board of Selectmen, to borrow One Million Two Hundred Thousand Dollars (\$1,200,000) under and pursuant to section 11 of the Community Preservation Act, Massachusetts General Laws Chapter 44B and any other enabling authority, and to issue bonds or notes of the Town therefor for a term of up to thirty (30) years, and to appropriate the sum of Two Hundred Fifty Thousand Dollars (\$250,000) from the Community Preservation Fund Undesignated/Unreserved Balance; and further, to appropriate the sum of Fifty Thousand Dollars (\$50,000) from the Community Preservation Fund Undesignated/Unreserved Balance for costs associated with this acquisition, including legal fees, fees for the holding and administering of a conservation restriction on the property, and all other incidental and related expenses; to authorize the Community Preservation Committee, the Conservation Commission and the Board of Selectmen to submit on behalf of the Town any and all applications for grants and/or reimbursements from the Commonwealth of Massachusetts, the United States, or any private entity toward the cost of such acquisition; and to authorize the Board of Selectmen and the Conservation Commission to take all actions and execute all documents necessary and appropriate for such acquisition, including the grant of a perpetual conservation restriction in the land acquired that meets the requirements of M.G.L. Chapter 44B, § 12 and M.G.L. Chapter 184, §§ 31-33.

TRUE COPY

ATTEST:


Linda B. Zywien, CMC
Town Clerk

ACCEPTANCE BY CONSERVATION COMMISSION

On this 03 day of May, 2023, the Town of Northbridge, acting by and through its Conservation Commission pursuant to the provisions of G.L. c. 40, §8C and the vote taken under Article 3 of the October 25, 2022 Fall Annual Town Meeting, hereby accepts the custody, care, management and control of property located at Castle Hill Road, Northbridge, for conservation and passive recreation purposes under Article 97 of the Massachusetts Constitution.

TOWN OF NORTHBRIDGE,
By its Conservation Commission

Justine Carroll
Justine Carroll, Chair

Barbara McNamee
Barbara McNamee, Vice Chair

Chloe Mawn, Member

Steven Gniadek, Member

Justin Arbuckle
Justin Arbuckle, Member

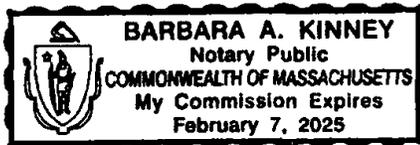
Richard C. Chiras
Richard Chiras, Member

Cynthia Cummiskey
Cynthia Cummiskey, Member

COMMONWEALTH OF MASSACHUSETTS

Worcester, ss.

On this 04 day of May, 2023, before me, the undersigned Notary Public, personally appeared Barbara McNamee, who proved to me through satisfactory evidence of identification, which was personally known, to be the person whose name is signed on the preceding or attached document, and acknowledged to me that he/she/they signed it voluntarily for its stated purpose as member of the Conservation Commission of the Town of Northbridge.



Barbara A. Kinney
Notary Public
My Commission Expires:
February 07, 2025

APPROVAL OF ACCEPTANCE OF DEED

On this 2d day of May, 2023, the Town of Northbridge, acting by through its Board of Selectmen pursuant to the vote taken under Article 3 of the October 25, 2022 Fall Annual Town Meeting, hereby accepts the foregoing deed to property located at Castle Hill Road, Northbridge, the custody, care, management and control of which is to be held by the Conservation Commission for conservation and passive recreation purposes under the provisions of G.L. c. 40, §8C and Article 97 of the Massachusetts Constitution.

TOWN OF NORTHBRIDGE,
By its Board of Selectmen

Russell D. Collins
Russell D. Collins, Chair

Thomas J. Melia
Thomas J. Melia, Vice Chair

Brian Paulhus
Brian M. Paulhus, Member

Charles Ampagoomian Jr.
Charles Ampagoomian, Jr., Member

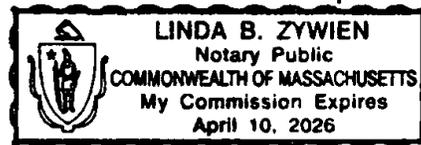
Thomas Begin
Thomas Begin, Member

COMMONWEALTH OF MASSACHUSETTS

Worcester, ss.

On this 2nd day of May, 2023, before me, the undersigned Notary Public, personally appeared Russell Collins, Thomas Melia, Brian Paulhus, Charles Ampagoomian, Thomas Begin, members of the Northbridge Board of Selectmen, as aforesaid, who proved to me through satisfactory evidence of identification, which was personal knowledge, to be the person whose name is signed on the preceding or attached document, and acknowledged to me that he/she/they signed it voluntarily for its stated purpose on behalf of the Town of Northbridge.

Linda B Zywien
Notary Public
My Commission Expires: April 10, 2026



Attachment C

Site Photographs

- Figure C1 – Photo Location Map
- Site Photographs



Photo 1 – Glacial erratic in the eastern portion of the site (D. Pickart, 2/22/23)



Photo 2 – Linear ridge of bedrock in southwestern portion of property (D. Pickart, 3/9/23)



Photo 3 – Mixed oak forest in the southern portion of the property (D. Pickart, 3/20/23)



Photo 4 – White pine forest in the southeastern portion of the property (D. Pickart, 3/20/23)



Photo 5 – View of Shrubland community looking towards Riley Pond (D. Pickart, 12/08/22)



Photo 6 – Grassland community looking towards the Fletcher Forest land (D. Pickart, 3/20/23)



Photo 7 – Maintained lawn located west of the terminus of Castle Hill Road (D. Pickart, 2/14/23)



Photo 8 – Abandoned road that extends southward from the terminus of Castle Hill Road into the 100 Acre Lot in Uxbridge (D. Pickart, 2/8/23)



Photo 9 – View of the intermittent stream that drains into Lower Pond (D. Pickart, 12/21/22)



Photo 10 – View of Lower Pond looking towards the self-storage facility (D. Pickart, 12/21/22)



Photo 11 – View of dam/main spillway of Lower Pond (D. Pickart, 3/9/23)



Photo 12 – View of a stream in western portion of property that drains into Riley Pond (D. Pickart, 2/8/23)



Photo 13 – View of a wooded swamp (that borders an intermittent stream) located in the eastern portion of the property (D. Pickart,2/14/22)



Photo 14 – View of a wet meadow (Shallow Marsh) located on the property (D. Pickart,3/12/23)



Photo 15 – Large pool located west of the property that likely meets the criteria to be certified by NHESP (D. Pickart,3/24/23)



Photo 16 – Wood frog egg masses within pool shown on Photo 15 (D. Pickart,3/24/23)



Photo 17 – Smaller pool located west of the property that contained more than a dozen spotted salamander and wood frog egg masses (D. Pickart,3/24/23)



Photo 18 – Large pool located in the Fletcher Forest Conservation Area where wood frogs and spring peepers were chorusing (D. Pickart,3/24/23)



Photo 19 – Large pool in the eastern portion of the property where fairy shrimp and chorusing spring peepers were noted (D. Pickart,3/29/23)



Photo 20 – Stone wall that forms a boundary of the property adjacent to Castle Hill Road (D. Pickart,3/20/23)



Photo 21 – Remnants of the main barn that was part of the dairy farming operation
(D. Pickart,3/24/23)



Photo 22 – View of the main barn before it burned down circa 1956 (The Milk Route, Volume 423)



Photo 23 – View of an intermittent stream (tributary to Lower Pond) discharging from the rhododendron grove (D. Pickart,3/12/23)



Photo 25 – Trail located south of the maintained lawn that extends to the power line right-of-way (D. Pickart,3/24/23)



Photo 24 – Demolition debris that extends into the property located immediately west of Map 4/Parcel 37 (D. Pickart,12/21/22)



Photo 26 – Junked cars located adjacent to wet meadow on the property (D. Pickart,2/8/23)



Photo 27 – Old drums and other debris located adjacent to one of existing trails (D. Pickart, 2/8/23)

Attachment D

Plant Inventory

- Table D1 – Plant Inventory

Table D1 - Plant Inventory:

Common Name	Scientific Name	Natural Community	Status
<u>Herbaceous:</u>			
Common milkweed	<i>Asclepias syriaca</i>	Grassland/Shrubland	Native
Canada thistle	<i>Cirsium arvense</i>	Grassland/Shrubland	Introduced
Queen Anne's-lace	<i>Daucus carota</i>	Grassland	Introduced
Tall goldenrod	<i>Solidago altissima</i>	Grassland/Shrubland	Native
Canadian goldenrod	<i>Solidago canadensis</i>	Grassland	Native
Wrinkle-leaf goldenrod	<i>Solidago rugosa</i>	Grassland	Native
Carolina horse-nettle	<i>Solanum carolinense</i>	Grassland	Native
White bedstraw	<i>Galium mollugo</i>	Grassland/Shrubland	Introduced
Eastern teaberry	<i>Gaultheria procumbens</i>	Forest	Native
Spotted wintergreen	<i>Chimaphila maculata</i>	Forest	Native
Skunk cabbage	<i>Symplocarpus foetidus</i>	Wetland	Native
Bracken fern	<i>Pteridium aquilinum</i>	Forest	Native
Sensitive fern	<i>Onoclea sensibilis</i>	Wetland/Grassland	Native
Hay-scented fern	<i>Dennstaedtia punctilobula</i>	Forest	Native
Princess pine	<i>Lycopodium obscurum</i>	Forest	Native
Cinnamon fern	<i>Osmunda cinnamomea</i>	Wetland	Native
Christmas fern	<i>Polystichum acrostichoides</i>	Forest	Native
Watercress	<i>Nasturtium officinale</i>	Wetland	Introduced
Common mullein	<i>Verbascum thapsus</i>	Grassland	Introduced
Broadleaf cattail	<i>Typha latifolia</i>	Wetland	Native
Japanese knotweed	<i>Polygonum cuspidatum</i>	Shrubland	Introduced/Invasive
Garlic mustard	<i>Alliaria petiolata</i>	Forest	Introduced/Invasive
Common toadflax	<i>Linaria vulgaris</i>	Grassland	Introduced
Meadow goat's beard	<i>Tragopogon pratensis</i>	Grassland	Introduced
Common St. Johnswort	<i>Hypericum perforatum</i>	Grassland	Introduced
<u>Grasses/Grass-Likes:</u>			
Soft rush	<i>Juncus effusus</i>	Wetland	Native
Upright sedge	<i>Carex stricta</i>	Wetland	Native
Fringed sedge	<i>Carex crinita</i>	Wetland	Native
New England sedge	<i>Carex novae-angliae</i>	Forest	Native
Orchard grass	<i>Dactylis glomerata</i>	Grassland	Introduced
Red fescue	<i>Festuca rubra</i>	Grassland	Native
Meadow foxtail	<i>Alopecurus pratensis</i>	Grassland	Introduced
Creeping wild rye	<i>Elymus repens</i>	Grassland	Introduced
Field brome	<i>Bromus arvensis</i>	Grassland	Introduced
Kentucky bluegrass	<i>Poa pratensis</i>	Grassland	Introduced

Table D1- Continued

Common Name	Scientific Name	Community	Status
<u>Trees/Saplings:</u>			
Eastern white pine ¹	<i>Pinus strobus</i>	Forest/Shrubland	Native
Northern catalpa	<i>Catalpa speciosa</i>	Forest/Shrubland	Native
Northern red oak	<i>Quercus rubra</i>	Forest	Native
Northern white oak	<i>Quercus alba</i>	Forest	Native
Quaking aspen	<i>Populus tremuloides</i>	Forest	Native
Red maple ¹	<i>Acer rubrum</i>	Wetland	Native
Sugar maple	<i>Acer saccharum</i>	Forest	Native
Black cherry ¹	<i>Prunus serotina</i>	Forest/Shrubland	Native
Sweet birch ¹	<i>Betula lenta</i>	Forest/Shrubland	Native
Yellow birch	<i>Betula alleghaniensis</i>	Forest/Wetland	Native
Paper birch	<i>Betula papyrifera</i>	Forest	Native
Gray birch	<i>Betula populifolia</i>	Forest	Native
Eastern red cedar ¹	<i>Juniperus virginiana</i>	Forest	Native
White ash	<i>Fraxinus americana</i>	Forest	Native
Eastern hemlock ¹	<i>Tsuga canadensis</i>	Forest/Wetland	Native
Apple	<i>Malus pumila</i>	Forest/Shrubland	Introduced
<u>Shrubs:</u>			
Silky dogwood	<i>Cornus amomum</i>	Wetland/Shrubland	Native
Glossy false buckthorn	<i>Frangula alnus</i>	Wetland/Shrubland	Introduced/Invasive
Great laurel	<i>Rhododendron maximum</i>	Forest/Wetland	Native
Japanese barberry	<i>Berberis thunbergii</i>	Shrubland	Introduced
Black huckleberry	<i>Gaylussacia baccata</i>	Forest	Native
American hazelnut	<i>Corylus americana</i>	Forest	Native
Burning bush	<i>Euonymus alatus</i>	Forest/Shrubland	Introduced/Invasive
Japanese honeysuckle	<i>Lonicera japonica</i>	Shrubland/Forest	Introduced/Invasive
Creeping juniper	<i>Juniperus horizontalis</i>	Grassland/Shrubland	Native
Highbush blueberry	<i>Vaccinium corymbosum</i>	Forest/Wetland	Native
Autumn olive	<i>Elaeagnus umbellata</i>	Shrubland	Introduced/Invasive
American holly	<i>Ilex opaca</i>	Forest	Native
Mountain laurel	<i>Kalmia latifolia</i>	Forest	Native
<u>Vines:</u>			
Multiflora rose	<i>Rosa multiflora</i>	Shrubland/Grassland	Introduced/Invasive
Asiatic bittersweet	<i>Celastrus orbiculatus</i>	Shrubland/Grassland	Introduced/Invasive
Poison ivy	<i>Toxicodendron radicans</i>	Shrubland/Grassland	Native
Summer grape	<i>Vitis aestivalis</i>	Shrubland	Native

Notes:

- ¹ Denotes species that also occurs in shrub form
- Invasive status per list developed by Massachusetts Invasive Plant Advisory Group

Attachment E

Bound Photographs/Details

- Figure E1 – Bound Location Map
- Bound Photographs/Coordinates



Bound ID: IP-1NW

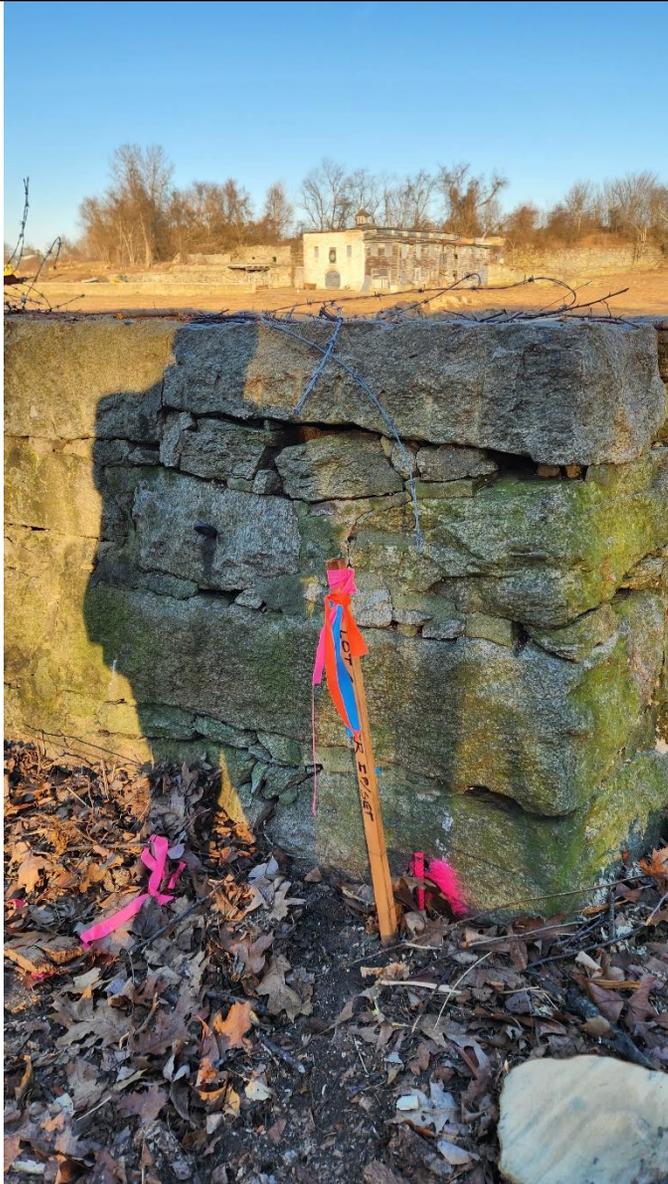
Coordinates: X 610343.14/Y 2862727.60



Bound ID: IP-1NE

Coordinates: X 610795.24/Y 2822875.67

Note: All Coordinates are in NAD83, Massachusetts State Planes, Mainland Zone, US Foot



Bound ID: IP-1SW
Coordinates: X 610353.34/Y 2862290.66



Bound ID: IP-1SE
Coordinates: X 611137.48/Y 2862335.87



Bound ID: IP-1626

Coordinates: X 610660.71/Y 2864219.85



Bound ID: SB-1609

Coordinates: X 619721.56/Y 2863913.48



Bound ID: SB-1558

Coordinates: X 611006.54/Y 2863930.65



Bound ID: IP-1553

Coordinates: X 611208.76/Y 2863938.83



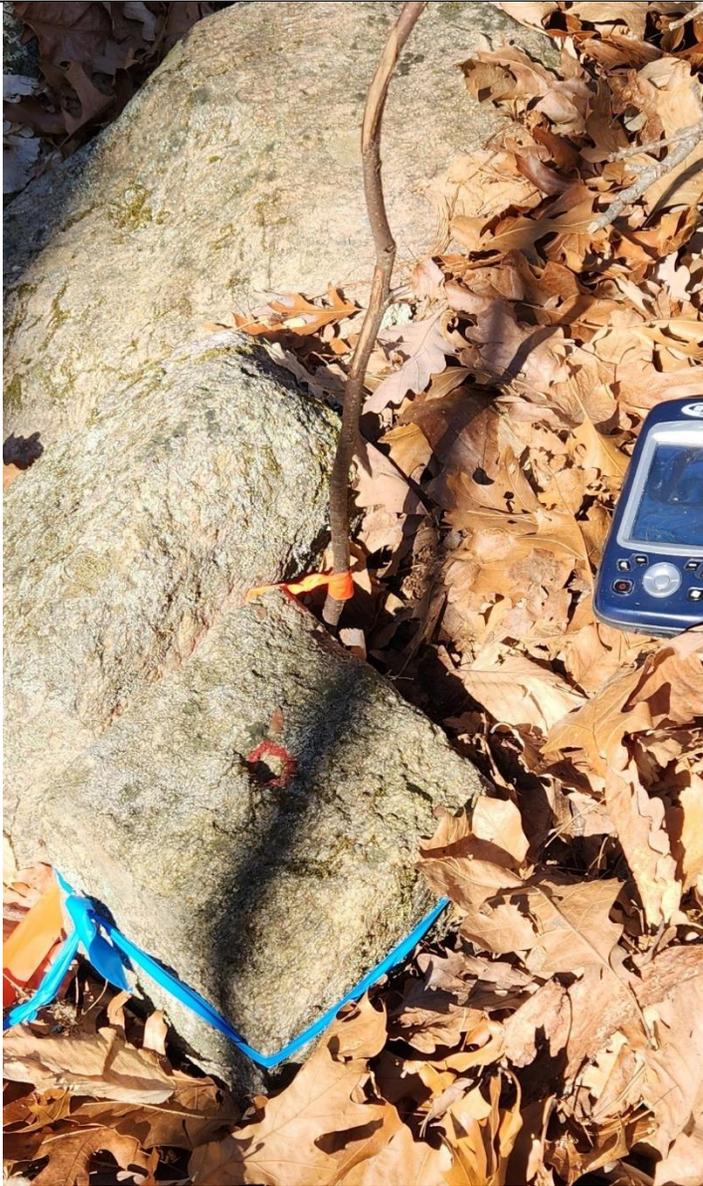
Bound ID: DH-1546

Coordinates: X 611212.71/Y 2863787.17



Bound ID: SB-1517

Coordinates: X 611768.19/Y 2863312.96



Bound ID: SB-1434

Coordinates: X 611916.91/Y 2863017.46



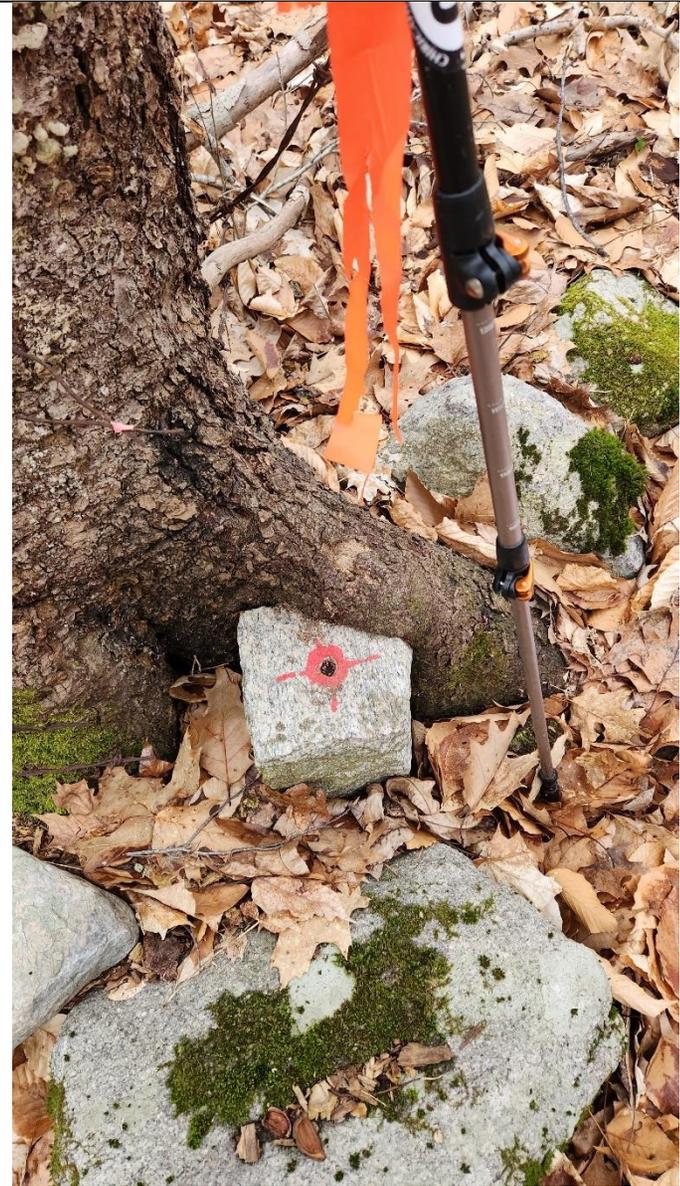
Bound ID: SB-1416

Coordinates: X 612155.42/Y 2862544.60



Bound ID: SB-1438

Coordinates: X 612232.24/Y 2862116.56



Bound ID: SB-1519

Coordinates: X 611178.43/Y 2861473.95



Bound ID: SB-1303

Coordinates: X 609613.22/Y 2861925.77



Bound ID: SB-1331

Coordinates: X 609607.23/ Y2862696.14



Bound ID: IP-1251

Coordinates: X 610074.07/Y 2862550.74



Bound ID: IP-1620

Coordinates: X 610089.77/Y 2862474.98



Bound ID: SM-1256

Coordinates: X 610435.63/Y 28663903.54

Attachment F Affidavits

Affidavit of Preparer of Baseline Documentation Report

The undersigned, hereby certifies:

1) That he/she prepared the accompanying Baseline Documentation Report dated 7/1/2023 pertaining to the above-described Property, 2) that said report describes and documents the natural and other resources of said Property sought to be protected under a Conservation Restriction that has yet to finalized and recorded at the Southern Worcester County Registry of Deeds, and 3) that based on all of the information cited in said Report, that said Report is an accurate representation of the Property and its conditions as of the date of the grant of said Conservation Restriction.

The undersigned further states and affirms 1) that the condition of the Property documented in said Baseline Documentation Report may not necessarily represent the entire condition of the Property, and 2) that the Northbridge Conservation Commission does not in any manner waive any of its rights, either at law or in equity, to enforce provisions of said Conservation Restriction.

Signed and sealed under the pains and penalties of perjury

This first day of August, 2023

Signature 
David S. Pickart, Northbridge Conservation Agent

Affidavit of Photographer of Photographs Contained in the Baseline Documentation Report

The undersigned hereby certifies that acting in my capacity as an employee of the Town of Northbridge during the period from 12/8/22 through 3/29/23, I visited the Castle Hill Farm CR Property located at Castle Hill Road and took documentary ground photographs (“the Photographs”), and that the Photographs, attached hereto, together with accompanying descriptions, and maps, fairly and accurately depict the Property as it appeared on the date that the photographs were taken.

Signed and sealed under the pains and penalties of perjury

This first day of August, 2023

Signature 
David S. Pickart, Northbridge Conservation Agent