Conservation Master Plan

Framingham, Massachusetts

Prepared for:
City of Framingham
150 Concord Street
Framingham, MA 01702

Prepared by:
Beals and Thomas, Inc.
Reservoir Corporate Center
144 Turnpike Road
Southborough, MA 01772

November 2019



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CIVIL ENGINEERS | LANDSCAPE ARCHITECTS |
LAND SURVEYORS | PLANNERS | ENVIRONMENTAL SPECIALISTS

November 2019

Robert D. McArthur, Conservation Administrator
City of Framingham
150 Concord Street
Framingham, MA 01702

Via: email to rdm@framinghamma.gov

Reference: Conservation Master Plan
Framingham, Massachusetts
Project No. 2817.00

Dear Mr. McArthur:

Beals and Thomas, Inc. has had the great pleasure undertaking the creation of a master plan for the City of Framingham's Conservation and Open Space Division. Enclosed, you will find a plan that gives acknowledgement toward Framingham Conservation's history and carves out a path for a productive and focused future. We have dedicated a great amount of time and resources towards ensuring that we provide you, your staff, and fellow colleagues a detailed and cohesive master plan.

With the goals and objectives of Framingham's Conservation and Open Space Division in mind, our staff created written documents, maps, plans, and digital data to meet these goals. This includes narratives with recommendations for all parcels in Framingham, brochures for primary parcels, Article 97 protection analysis, a plan for a boardwalk crossing the Cedar Woods parcel, and more. All of these will be strong assets when pursuing the goals outlined in the Open Space and Recreation Plan (OSRP).

We again want to thank you for the opportunity to work on this master plan. Framingham is a unique municipality that has the resources, now more than ever, to paint a bright future for conservation and subsequently the entire population of the City.

Very truly yours,

BEALS AND THOMAS, INC.

David J. LaPointe, RLA, LEED AP, CPSI
Principal

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EXECUTIVE SUMMARY

Beals and Thomas, Inc. was retained by the City of Framingham's Conservation and Open Space Division to develop the following Conservation Master Plan. Enclosed, you will find a plan that gives acknowledgement toward Framingham Conservation's history and outlines a path for continued focus and productivity.

With the goals and objectives of Framingham's Open Space and Recreation Plan (OSRP) in mind, our staff created written documents, maps, plans, and digital data to meet these goals. This includes narratives with recommendations for all conservation parcels in Framingham, brochures for primary parcels, Article 97 protection analysis, and a separate, standalone plan for aesthetic and ecological improvements to the Cedar Woods parcel. These will be valuable assets when pursuing the goals outlined in the OSRP.

More specifically, project deliverables consist of:

- A detailed plan for the Cedar Woods Reservation including layout, design, and construction costs for a proposed ADA trail/boardwalk through the site
- GIS trail maps for each of the Primary parcels
- Overall GIS map of all open space parcels throughout Framingham showing Conservation parcels, Parks and Recreation parcels, DCR State Parklands, DCR Reservoir Lands, MWRA Aqueducts (by name), existing and potential Rail Trails, Sudbury Valley Trustee properties, Garden in the Woods, and the Nobscot Boy Scout Camp
- Overall GIS map of all trails within Framingham (existing and proposed)
- A report detailing Conservation parcel conditions, ecological value, and recommended improvements such as a trail connection project at the Macomber Reservation
- An action plan outlining the aforementioned recommendations in a checklist style for the Conservation staff to follow.

The intent of this narrative is to not only facilitate a bright future for Framingham Conservation with fresh ideas, but to also build upon what the City has been doing in years past regarding Conservation. Before the current Conservation and Open Space administration, Framingham's Conservation parcels did not see much attention in the way of active land management. However, that changed when in 2014, the current administration created the Seasonal Conservation Crew (the Crew). This Crew was tasked with carrying out the administration's vision of actively managed land which included invasive plant removal, trash cleanup, trail maintenance, and general stewardship of public open space. Framingham is in a unique position with this kind of staffing, but it has ultimately been made possible through careful planning and allocation of funds by the Conservation Administrator and his staff. Additionally, Framingham Conservation works with other entities such as the Framingham Department of Public Works to acquire vehicles and equipment to aid in the Crew's work efforts. This style of active land management, described in more detail herein, should serve as a model for other local municipalities when planning how conservation lands are utilized and managed. While many municipalities rely solely on volunteer

efforts, having a hired seasonal crew allows for consistent monitoring of conservation lands during the portion of the year in which they are most actively used (late Spring through early Fall). With these accomplishments in mind, this Master Plan was created to assist Framingham Conservation in expanding on and continuing these efforts.

1.0 INTRODUCTION

1.1 Purpose and Need

Conservation and open space parcels provide places for people to walk, run, bike, and hike in Framingham. They are a means for people to separate themselves from the urban environment in which they spend a majority of their time in and make an invaluable connection with nature. Open space is as much a fundamental educational tool as it is a destination for exercise, having fun, exploring nature, and observing the natural environment. Charles Eliot, a landscape architect affiliated with the birth of the Trustees of Reservations and the creation of the Metropolitan Park System once eloquently stated that "For crowded populations to live in health and happiness, they must have space for air, for light, for exercise, for rest, and for the enjoyment of that peaceful beauty of nature which, because it is the opposite of the noisy ugliness of the town is so refreshing to the tired souls of townspeople" (Twenty Years After: The Revival of Boston's Parks and Open Spaces).

The need for humans to have open space as a part of their lives can also be scientifically quantified. In a study published in 2015 by the National Academy of Sciences titled "Nature Experience Reduces Rumination and Subgenual Prefrontal Cortex Activation", Gregory N. Bratman explored the connection between mental health and the availability of nature. From the abstract:

> "Urbanization has many benefits, but it also is associated with increased levels of mental illness, including depression. It has been suggested that decreased nature experience may help to explain the link between urbanization and mental illness. […] We show in healthy participants that a brief nature experience, a 90-min walk in a natural setting, decreases both self-reported rumination and neural activity in the subgenual prefrontal cortex (sgPFC), whereas a 90-min walk in an urban setting has no such effects on self-reported rumination or neural activity. […] This study reveals a pathway by which nature experience may improve mental well-being and suggests that accessible natural areas within urban contexts may be a critical resource for mental health in our rapidly urbanizing world.[1]"

Framingham is a diverse community in regards to land use, income, and numerous other demographics. Citizens of Framingham are able to enjoy the benefits of a vibrant mixed-use "main street" downtown surrounded by suburban residential neighborhoods, dotted with parks and schools, and several large contiguous areas of open space and recreation land. The Conservation Master Plan will play an important role in guiding the decision-making that will connect the people who live in Framingham to the convenient places they frequent regularly, and the open spaces that provide them with an enhanced quality of life.

[1] "Nature Experience Reduces Rumination and Subgenual Prefrontal Cortex Activation," G. Bratman et al, Proceedings of the National Academy of Sciences of the United States of America, vol. 112 no. 28, July 14, 2015

1.2 Background

Framingham's Open Space and Recreation Plan creates a vision for the City's open spaces, trails, and recreation opportunities:

- *"To identify unique open space and recreation assets and places that have ecological, recreational, civic, historic and/or scenic value;*
- *To prioritize the open space and recreation needs for all citizens of Framingham;*
- *To identify specific goals, objectives and recommended priority actions; and*
- *To qualify the Town for State and Federal cost-sharing funds that might be available for capital improvement and acquisition projects."*

Beals and Thomas, Inc. was contracted to create the Conservation Master Plan. The purpose of this Conservation Master Plan, as identified in the Request for Proposals include:

- *"Review and analysis of those Primary Conservation Parcels and Large Secondary Conservation Parcels identified in the Scope of Services in Section II of this Request for Proposals that are managed by the Conservation Commission through the Conservation and Open Space Division of Framingham's Department of Public Works.*
- *Determination of how each parcel serves the community as a whole and the immediate area.*
- *Assessment of the accessibility, parking, trails, signage, and branding for each open space parcel.*
- *Assessment of connectivity of the open space parcels to the community as a whole, through trails, roadways, and habitat corridors.*
- *Evaluation of abutting properties and/or properties within close proximity of the open space parcels to better assess and prioritize future land acquisition and/or open space protection.*
- *Development of a detailed plan for each Primary and Secondary open space property."*

1.3 Goals and Objectives

The overall goal of the Framingham Conservation Master Plan is to advance the following goals taken from the Open Space and Recreation Plan[2]:

- Maintain and improve the current inventory of conservation and open space parcels;
- Conserve natural resources and open space to protect water resources, wildlife habitat, and horticultural, agricultural and sylvan opportunities, and passive recreational opportunities;
- Undertake other City-wide efforts that will support open space and recreation.

We understand that the Conservation and Open Space Division is responsible for managing passive recreation and conservation land, as well as annually reassessing the priority parcel list from the Open Space and Recreation Plan. This assessment prioritizes the listed parcels, identifies new and potential land acquisitions, and determines when a parcel may need to be removed due to development or other. The Conservation Master Plan will supplement this inventory with additional documentation regarding level of protection of the parcels, site-specific recommendations for management and improvement, and City-wide recommendations to support existing and future open space efforts.

In order to achieve this overall goal and create deliverable product expectations for Beals and Thomas, Inc., the project team developed the following goals and objectives[3]:

1. Inventory Conservation Commission-Owned-and-Managed Parcels
2. Make Recommendations for Signage and Branding
3. Evaluate Parcels
4. Create a Plan for Cedar Woods
5. Establish a Long-Term Implementation Structure
6. Improve Trail Visibility, Access, and Use
7. Bring all Existing Trails up to Standards
8. Build New Trails on City Lands
9. Build New Trails Connecting Existing Systems
10. Implement and Carry Out Annual Inspection and Maintenance

The project team's goals and objectives helped to guide the development of the Conservation Master Plan and will continue to be used as a gauge for determining the effectiveness of the Master Plan and its implementation.

[2] "Framingham Open Space and Recreation Plan," dated October 2013, prepared by the Open Space and Recreation Plan Implementation Working Group
[3] "Request for Proposals, Conservation Master Plan, RFP #331," dated August 3, 2016, prepared by the Town of Framingham Department of Public Works

2.0 PROPERTY CONDITIONS SURVEY AND RECOMMENDATIONS

2.1 City-Wide Observations



Conservation parcels in Framingham are generally associated with the largest tracts of open space, parks, and other undeveloped parcels. The larger tracts of open space, which are generally in the perimeter areas in the northwesterly and westerly sections of the City, show that this part of the City has maintained much of its historical land use type. The existing land use patterns within Framingham have a higher concentration of densely developed neighborhoods within the central and southern portions of the City.

There is a strong disconnect between the largest contiguous parcels of open space on the northwesterly and westerly sections of the City and the densely developed residential neighborhoods located in the central and southern portions of the City.

There is no clear nexus for trail activities in Framingham, nor is there reference to any connectivity between trails on any of the parcels. Framingham has significant potential to connect trails both within the City and regionally using the various railroad corridors and aqueducts.

2.2 Conservation Review

As a part of the Master Plan process, Beals and Thomas undertook a review of conservation parcels in Framingham. These were divided into 3 categories – Primary, Secondary, and Tertiary Parcels. Beals and Thomas, Inc. performed in-field reviews of the Primary and Secondary Parcels, taking into account wetlands, natural resources, flora, fauna, and parcel conditions. For the Tertiary Parcels, a representative from Beals and Thomas, Inc. accompanied Framingham's Conservation Administrator and Conservation Administrative Assistant on a drive-by review of the parcels. These parcels were identified from the road, and the Conservation Administrator dictated pertinent information including use, connections to Primary and Secondary Parcels, and more.

Refer to Table 1 for a list of the conservation parcels and their designation.

Table 1: List of Conservation Parcels by Type

ID	PROPERTY NAME	ST #	STREET NAME	ASSESSORS ID	ACRES
Primary Parcels: 7					
P1	Wittenborg Woods Reservation	55	Wayside Inn Rd	414-1-39	83.73
		99	Wayside Inn Rd	414-1-1	12.87
		43	Wayside Inn Rd	414-1-38	3.00
P2	Macomber Reservation	18	Badger Rd	447-2-3	6.50
		26	Badger Rd	447-2-2	51.32
		0	Hickory Hill Lane	758-1-C	0.03
P3	Arthur-Morency Woods	229	Arthur St	85A-1-37	7.00
		62	Morency St NATICK	39-32B	1.19
		67	Morency St NATICK	39-32A	14.50
P4	Cochituate Brook Reservation	0	Speen St., Off	311-235-7	0.70
		619	Old Conn Path	312-236-14	26.70
P5	Carol Getchell Nature Trail	81	Little Farms Rd	293-184-22	1.90
		0	Little Farms Rd, end	293-184-23	1.30
			Danforth St	301-208-798	1.93
		1	Sudbury Landing	301-208-931*	3.30
P6	Cedar Woods	117R	Cedar St.	139-289-101	4.61
		0	Cedar St	138-286-9B	1.98
		32	Cypress St.	140-290-31	6.20
		0	Mellen St, off	138-286-10	1.25
		0	Waverly St	138-286-8A	0.39
		618	Waverly St, RR	138-286-8B	1.40
P7	Nobscot Park	0	Edgell Rd, off	371-120-34A	0.43
		850	Edgell Road	372-120-34	3.23
		840	Edgell Road	371-120-13	1.05
Secondary Parcels: 5					
S1	Grove Street Conservation Parcels	0	Grove St	359-3-22	0.57
		0	Grove St	359-3-12	0.51
		0	Grove Street	359-3-19	0.73
		0	Grove St	359-3-18	0.64
		0	Grove St	359-3-20	0.81
		0	Grove St	359-3-14	0.71
		0	Grove St	359-3-6D	4.38
		0	Grove St	359-3-16A	0.68
		8	Grove St	359-3-13	0.59
		8	Grove St	359-3-15	0.70
		8	Grove St	359-3-17A	2.30
		0	Grove St	359-3-21	1.65
S2	Sudbury River Oxbow Reservation	0	Elm St	292-183-6A	22.33
		0	Meadow St NS	293-184-1	25.68
		0	Meadow St NS	293-184-3	9.80
		0	Elm St	293-184-4	28.76

Table 1, continued

ID	PROPERTY NAME	ST #	STREET NAME	ASSESSORS ID	ACRES
S3	Spring Lane	746	Water St., RR	375-104-3	3.10
			Water St	376-105-305A	11.09
			Pamela Rd	375-104-4	3.22
		235	Brook St. RR	377-106-17	8.70
S4	Old Wood/Old Worcester Road	0	Old Worcester Rd, Off	407-1-9	8.82
		0	Old Worcester Rd, off	407-1-8	2.03
		0	Westgate Rd	407-1-47	0.96
		0	Old Worcester Rd	407-1-8A	0.76
S5	Edmands-Mohawk Property	0	Edmands Rd	411-1-17B	14.96
		1	Ferrazzi Dr	410-1-24	6.19
		3	Ferrazzi Dr	410-1-25	1.08
		4	Ferrazzi Dr	410-1-29	1.02
		5	Ferrazzi Dr	410-1-26	1.13
		6	Ferrazzi Dr	410-1-28	1.01
		0	Juniper Lane	410-1-27	2.59
		0	Mohawk Dr	684-1-A	0.44
Tertiary Parcels: 42					
T1	Nobscot Spring	1244	Edgell Rd	412-1-13	5.86
T2	Hemenway Road	0	Hemenway & Catherine	713-1-1	1.47
T3	Chickatawbut Road	0	Chickatawbut Rd	684-1-54	6.54
T4	Hiram Pond	0	Baldwin Ave., RR	403(B)-1-13B*	2.65
		0	Hiram Rd	193-1-1111	2.36
T5	Hiram Pond (Access)	0	Apple D'Or Rd	403-1-0000*	0.43
T6	Hop Brook	963	Edgell Rd., RR	403-8-19	1.38
T7	Winch Street	297	Winch St	840-1-18C	3.29
T8	Norton Pond	0	Elm St	496-1-1	2.78
		212	Elm St	496-1-425	0.60
		230	Elm St	495-1-409	0.50
T9	Bacon Road	0	Bacon Rd	745-1-41	11.79
T10	Lyman-McAdams Road	6	McAdams Rd	558-1-C	0.41
T11	Whiting Road	3	Whiting Rd	749-1-101	0.47
T12	Lyman-McAdams Road	5	Lyman Rd	558-1-B	0.71
T13	Lamphere Circle	0	Lamphere Cir	545-1-B	0.98
T14	Brook Meadow	0	Brook Meadow	438-2-0000A	5.66
T15	Woodmere Road	Lot 1	Woodmere Rd.	602-1-1	0.46
		Lot 2	Woodmere Rd.	602-1-2	0.46
T16	Brook Street	0	Brook St	367-1-19D	1.30
		545	Brook St	367-101-19B	1.04
		547	Edgell Rd RR	367-101-9B	4.92

Table 1, continued

ID	PROPERTY NAME	ST #	STREET NAME	ASSESSORS ID	ACRES
T17	Perry H Henderson Drive	8	Perry H Henderson Dr	489-1-16	0.21
		10	Perry H Henderson Dr	489-1-17	0.23
		12	Perry H Henderson Dr	489-1-18	0.30
T18	Perry H Henderson Drive	34	Perry H Henderson Dr	365-1-29	0.50
		38	Perry H Henderson Dr	365-1-30	0.30
		40	Perry H Henderson Dr.	365-1-31	0.29
T19	Perry H Henderson Drive	0	Perry H Henderson Dr	784-1-A	3.14
T20	Florita Drive	0	Florita Dr	363(A)-90-95*	7.04
T21	Central Street	425	Central St ABT	335-13-22	9.90
T22	Arlene Drive	0	Arlene Dr	266-133-97	4.01
T23	Clearview Drive	29	Clearview Drive	535-1-23	0.76
T24	Crosby Circle	0	Crosby Circle, off	776-1-B	4.38
T25	Worcester Road	1161	Worcester Rd	73-04-7178	1.53
T26	Sundial Place	0	Worcester Rd	943-9-26	2.48
T27	Lillian Road Extension	0	Lillian Rd Extension	228-88-9B	2.61
T28	Sucker Pond	6	Fairbanks Rd	240-75-8(C)*	4.00
		0	Hastings Street	240-75-4	4.03
T29	Main Street Cemetery	0	Main St	210-23-44	4.08
T30	Union Avenue Terrace	571	Union Ave RR	203-5-9	0.91
		0	Union Ave Terr	203-5-25	0.22
T31	Circle Drive	60	Circle Dr	213-26-28	2.66
T32	Walnut Street	141	Walnut St	32-88-4	1.89
T33	Mt Wayte	0	Mt Wayte Ave	188-12-7(A)*	9.00
		23	Vincent Ave	187-8-66L	0.43
		14	Vincent Ave	187-8-54L	0.09
		0	Vincent Ave	187-8-343	0.06
		15	Vincent Ave	187-8-338	0.05
		17	Vincent Ave	187-8-346	0.11
		21	Vincent Ave	187-8-340	0.06
		0	Vincent, pvt	187-8-339	0.05
T34	Prindiville Avenue	0	Prindiville Ave	52-104-000*	0.23
		21	Prindiville Ave	50-98-4	0.40
T35	Cronan Park	0	Thelma & Duffet Rds	65-129-10	0.66
T36	Bishop Street	0	Bishop St.	769-1-36B	1.42
T37	Travis Drive	0	Fountain St, off	763-1-10A	7.21
		29	William J Heights, RR	446-2-263	7.49
T38	Flannagan Drive	0	Flanagan Dr	773-1-B	0.23
T39	Goodnow Lane	21	Goodnow Ln	733-1-41	1.14
T40	Worcester Road	1325	Worcester Rd	408-1-48	0.24
T41	Shortiss Park	585	Central St	335-100-6	0.15
T42	Central Street	0	Central St	335-100-18	0.03

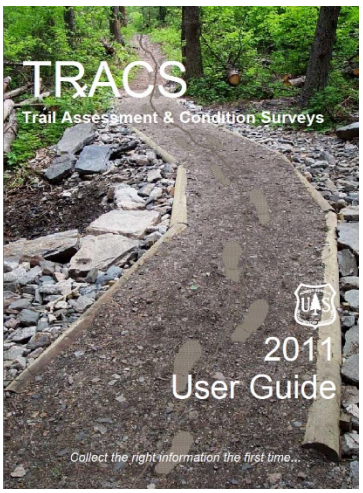
Table 1, continued

ID	PROPERTY NAME	ST #	STREET NAME	ASSESSORS ID	ACRES
	Agnes Drive	0	Winch St RR	840-1-0000	3.19
	Sun Valley Recreation Area		Sun Valley Dr	590-1-0000	0.66
	Bates Rd Extension	40	Bates Rd Extension	165-346-3	2.50
Property Total	57	**Parcel Total**	122	**Total Acreage**	551.37

2.3 Trail Survey Methodology

For the purposes of this Master Plan, only those trails located within City-owned properties were surveyed to establish the existing trails maps and inventory. Global Positioning System (GPS) technology, which uses satellites to determine a position on the earth's surface, was employed to locate the trails. Trail locations within other properties, including those owned by the state and private landowners, were gathered from available resources that include the Framingham City Geographic Information System (GIS), Metropolitan Area Planning Council (MAPC), online trail maps, and aerial survey. The locations of these trails are depicted on the enclosed "City of Framingham Massachusetts Existing Trails" Map in Appendix A.

Trails were located in the winter of 2016-2017 by Beals and Thomas, Inc. using a Topcon GRS-1 receiver. In addition to the trail segments, other features, such as signs, kiosks, trail connections, gates, parking areas, bridges, and boardwalks were also located.



Beals and Thomas, Inc. conducted an evaluation of trail conditions simultaneously with the survey using a modified Trail Assessment and Conditions Survey (TRACS) classification system. The United States Department of Agriculture Forest Service developed TRACS in order to evaluate trail conditions in national forests. TRACS includes a set of adaptable standards that are used to plan, inventory, assess, prioritize, and maintain trails within the national forests. TRACS provides a standardized dictionary of terms, methodology for data collection and trail management objectives. Beals and Thomas, Inc. utilized a modified TRACS to evaluate trail conditions in Framingham.

Trail assessment using the modified TRACS was performed at the same time that the trails were GPS located. Trail conditions were categorized and assigned to those trail segments where they were observed. The observations of the trail conditions include: tread width, drainage issues, maintenance needs, blaze color, trail name, trail intersections, proximity to wetlands, and proximity to abutting properties. Trails were given a rating from Class 1 to Class 5, with 1 being an extremely narrow and minimal trail, and 5 being a paved path. Additional information gathered in some locations includes, boundary markers, and stonewalls.

Tread width measurements were taken where the width changed significantly along the trail and noted at all intersections. Maintenance needs were identified in the field and documented herein. Trail locations that pass through wet or seasonally flooded areas and where they are adjacent to potential vernal pools were recorded in order to note both seasonal drainage issues and potentially sensitive habitat. Other items, such as grass clippings/lawn debris dumping, broken or overgrown signs, and "bootleg trails" (unofficial trails created by users) that lead into abutting private property were also located.

Trail slope was not recorded with GPS. To provide the readers of the public conservation maps the ability to gauge trail/parcel difficulty, topographic contours at 2-foot intervals were included in the maps.

GPS data collection permitted special features and notes to be recorded electronically, and associated with a specific geographic point. Therefore, the paper TRACS data collection sheets were not necessary, as this information was imported to the GIS directly. Trail information, such as tread width, length, and blaze color, are all stored in a dynamic GIS, can be queried any number of ways, and displayed either by location as a map or printed as a spreadsheet. Furthermore, this electronic GIS will be integrated into the City of Framingham GIS, enabling the City to utilize, modify, and update the information.

Quick and easy access to trail conditions data via the GIS will enable the City to update their trail conditions survey on a regular basis, prioritize maintenance work and improvements for those trails needing immediate attention, track trail conditions over time, and modify their trail management objectives.

A "Field Observations" GIS map was created for each parcel that had a significant amount of data collected in the field. These maps were created to assist the Conservation staff in continuing to utilize the Seasonal Conservation Crew for land management tasks such as parcel maintenance, invasive plant removal, and trail creation. While not intended as public documents, these maps are to be used as an internal checklist to ensure the continued productivity and success of the Seasonal Conservation Crew.

2.4 Property Conditions

Existing trails, signage, habitats, accessibility, and connections inventoried within individual City-owned parcels are discussed in the following sections.

2.4.1 Primary Parcels

P1 – Wittenborg Woods Reservation



Wittenborg Woods Reservation (Wittenborg Woods) is a 96± acre parcel located in the far northern end of Framingham on the historic Wayside Inn Road. A gravel lot provides parking for approximately a half dozen cars. An additional parking area with capacity for approximately two cars is located in the southern portion of the property. We understand from the City of Framingham that this parking area is primarily used during the Fall by hunters permitted through the Conservation Commission's Land Management Bow Hunting Program.

The Snow Property is located 200 feet north at 99 Wayside Inn Road, which was more recently acquired as part of a larger 12.8 acres of conservation land abutting Wittenborg Woods. While trails on the Snow Property connect to Wittenborg Woods, the Snow Property acquisition is not included in the bow hunting designated area. Wittenborg Woods has a dense population of fauna including deer, owls, woodpeckers, and squirrels, amongst other species. This is in part due to the naturalized center of the parcel where no trails exist. The legal hunting zone coincides with much of this naturalized area.

Historical and Cultural Information

There are many sights to see on the Wittenborg Woods Property. The property is home to a multitude of different ecosystems; white pine forests, red maple wetlands, grass meadows, and vernal pools. The Bay Circuit Trail bisects the property connecting Plum Island in Newburyport to Bay Farm in Duxbury. There is also a burial crypt dated 1899 that can be seen from the trail system on an abutting property.[4]

[4] "Land Use and Management Plan, Wittenborg Woods, Wayside Inn Road, Framingham, Massachusetts"



Wittenborg Woods is located off of Wayside Inn Road, named for the historic Wayside Inn *(pictured at left)*, opened in 1714 as How's Tavern and later made famous in 1862 by Henry Wadsworth Longfellow and his Tales of a Wayside Inn. Wittenborg Woods abuts the Howe farm property to the south. This property is home to the Ezekiel Howe Homestead, which was built in 1699, and abuts the Howe family tomb. At one point, a portion of the property was used for agricultural purposes.

The City of Framingham purchased the Wittenborg Woods property in 1999 with assistance from an Urban Self Help Grant, with a collaboration between the Massachusetts Department of Environmental Management and Division of Conservation Services, the Sudbury Valley Trustees, and Harriett Wittenborg.[5] We understand from the City of Framingham that the Massachusetts Department of Conservation (DCR) and Recreation holds a conservation restriction on the original 83+ acre Wittenborg Woods parcel. Both this parcel and the later acquired Snow Property are protected under Article 97 of the Amendments to the Massachusetts Constitution for conservation purposes.

Natural Communities, Vistas, and Habitats

Wittenborg Woods is a unique and valuable property that contains multiple habitats and opportunities for wildlife. The property is dominated by mixed oak-pine woodlands set among steep topography and large elevation changes. There is also a large wetland system within the southwestern portion of therr property as well as a smaller system within the northeast corner. In addition, the property contains a cleared field area that appears to have been part of a historic agricultural operation. The field lies adjacent to an existing farm operation.

[5] "Town of Framingham Self-Help Program Application, Wayside Inn Road Land Acquisition Project"

The wooded uplands on the property are dominated by white pine (*Pinus strobus*), northern red oak (*Quercus rubra*), white oak (*Quercus alba*), and black oak (*Quercus velutina*) along with scattered American beech (*Fagus grandifolia*), red maple (*Acer rubrum*), black birch (*Betula lenta*), and hickory (*Carya sp.*). The understory is generally sparse and contains saplings from the canopy. One exception is an area adjacent to the trail in the southwestern corner of the property that contains entanglements of bittersweet (*Celastrus orbiculatus*) and brambles (*Rubus* sp.). There is also a stand of scotch pine (*Pinus sylvestris*) that lies directly east of the cleared field area. It is possible that these trees were planted as a windbreak, screening, or as a tree farm in the past.

The wetland system within the southwestern portion of the site transitions from a red maple swamp within the wooded section to a wet meadow within the cleared field. The swamp area is connected via an intermittent stream, which is not depicted on the current USGS map of the property, to a small vegetated wetland within the central portion of the parcel, just east of the walking trail. A small vegetated wetland is located within the northeast corner of the parcel and appears to have an off-site hydrologic connection to the north. The vegetated portions of the on-site wetlands consist of red maple (*Acer rubrum*), yellow birch (*Betula allaghaniensis*), American elm (*Ulmus americana*), highbush blueberry (*Vaccinium corymbosum*), white pine saplings (*Pinus strobus*), cinnamon fern (*Osmunda cinnamomea*), and sphagnum moss (*Sphagnum* sp.).



According to the United States Department of Agriculture soil survey for Middlesex County, dominant soils within upland portions of the site are mapped as Narragansett silt loam, with slopes ranging from 3 to 25 percent. These are generally classified as well drained soils that are the backslopes or side slopes of ground moraines. Dominant soils within the wetland areas are classified as Raypol silt loam and Swansea muck. These are classified as poorly drained soils with slopes of 0 to 5 percent that pond frequently. These map designations are generally consistent with field observations.

Wittenborg Woods is an ideal location to provide habitat for numerous species. With the exception of a handful of dwellings and the farm mentioned above, there is very little development surrounding the parcel. While the site appears large enough to host a variety of bird, mammal, amphibious, and reptilian species on its own, there are large tracts of undeveloped land directly abutting the parcel and in the general vicinity. Large areas of undeveloped woodlands lie across Wayside Inn Road to the southwest and the Nobscot Scout Reservation lies to the northeast. It is likely that many species move back and forth between the Wittenborg Woods and these parcels in their pursuit of food, shelter, breeding and nesting habitat. To support this, there should be a placement of bat boxes, bee habitat, and boxes for birds.

Mammal species that potentially inhabit or periodically visit the Wittenborg Woods parcel include raccoon (*Procyon lator*), skunk (*Mephitis mephitis*), opossum (*Didelphis virginiana*), red squirrel (*Tamiasciurus hudsonicus*), gray squirrel (*Sciurus carolinensis*), white-footed mouse (*Peromyscus leucopus*), chipmunk (*Tamias striates*), red fox (*Vulpes vulpes*), gray fox (*Urocyon cinereoargenteus*), white-tailed deer (*Odocoileus virginianus*), and coyote (*Canis latrans*). Northern squirrel (*Glaucomys sabrinus*) and Southern flying squirrel (*Glaucomys volans*) are both nocturnal, but likely inhabitants of many of Framingham's conservation parcels. Fisher (*Pekania pennant*), which have been documented in Framingham are also a possible inhabitant of Wittenborg Woods.

A wide variety of bird species likely utilize the parcel for food, shelter, mating, and nesting at various times of year. The parcel also contains areas of "edge" habitat, notably along the extents of the cleared field that lies adjacent to the existing farm. In addition, the Massachusetts Natural Heritage and Endangered Species Programs has determined that the small wetland within the northeast section of the parcel is a Potential Vernal Pool and that there are a number of Potential and Certified Vernal Pools within the surrounding area. Vernal pools provide critical habitat for a number of species that rely on them for breeding, including the wood frog (*Lithobates sylvaticus*), spotted salamander (*Ambystoma maculatum*), blue-spotted salamander (*Ambystoma laterale*), Jefferson salamander (*Ambystoma jeffersonianum*), marbled salamander (*Ambystoma opacum*), and fairy shrimp (*Anostraca* sp.).
Other species that will often utilize vernal pools include spring peeper (*Pseudacris crucifer*), gray treefrog (*Hyla versicolor*), American toad (*Anaxyrus americanus*), and Fowler's toad (*Anaxyrus fowleri*).

Wittenborg Woods also features an abutting property with great aesthetic and ecological value. This property, the "Howe Property", is a farm with boundaries that protrude into Wittenborg Woods. While it is not an active farm, it is maintained to prevent overgrowth. This makes it a great habitat for birds and browsers. If acquired under a conservation restriction, its beauty and value could be preserved and ensured as a long lasting asset affiliated with Wittenborg Woods.

Access, Kiosks, and Signage

The trail system here is most popularly accessed by the main gravel parking lot on Wayside Inn Road. Erosion of gravel in this area was observed during a site visit, particularly at the entrance to the parking area. Absence of stormwater management coupled with damage done by snow plows are the main contributors to this issue. The Snow Property that was more recently acquired by the City also offers a trail that leads up into the main trail system. There is also a very small pull-off area farther south on Wayside Inn Road that can fit approximately two cars. As mentioned in a previous section, this parking area's best use is for access by permitted bow hunters during the Fall. Additionally, according to Framingham Conservation, there is a deeded trail access from the Brimstone Lane neighborhood on the east side of Wittenborg Woods. By providing proper signage, its use as trail access by local residents would be encouraged.

There are no kiosks or maps at Wittenborg Woods. The only signage present identified the parcel at the gravel parking area. Minimal trail markers were observed throughout the trail system. Additionally, some boundary markings were observed around the extents of the property. Recommendations for consistent and cohesive signage will be discussed in this Master Plan in a later section.



Trail Conditions, Use and Connectivity

Wittenborg Woods provides a trail experience much closer to hiking when compared to other parcels in the City. With 11,229 linear feet ± (2.13 miles ±) of trails, Wittenborg Woods offers significant elevation and terrain changes to make it physically challenging. These trails are best suited for people with an interest in hiking, or those who seek more of a challenge.

The trails were in good condition upon observation, but there are many exposed roots and rocks which adds to the aforementioned challenge. However, these hindrances are countered by trails of a decent width. The only issue noticed with the trail conditions was the apparent erosion. One instance of this is on a trail on the eastern portion of the property, which coincides with the Bay Circuit Trail. It appears that efforts have been made to curb the erosion by the placement of rocks. An actual water bar should be installed here to divert the amount of water needed to diminish the erosion. The aforementioned trail that allows access from the Snow property into Wittenborg Woods is also in need of water management. Its steep grade unfortunately lends itself to damage from storm water runoff.



In regards to trail connectivity, Wittenborg Woods offers access to the Bay Circuit Trail as well as the Nobscot Scout Reservation. Signage was present for both of these connections. Wittenborg Woods also has a short trail that offshoots into the neighboring Howe farm property. With many of its property lines protruding into Wittenborg Woods, this property offers a unique opportunity for Framingham to be able to preserve some historic agricultural aesthetics. An official connection from Wittenborg Woods to the Howe Property by way of either outright purchase or a conservation restriction should be explored in order to maintain a piece of natural history.

Additionally, The Sudbury Valley Trustees, working with staff from the City of Framingham, and generous abutters recently secured funding to protect fifty acres of woodland, wetlands, vernal pools, and ledge located on the west side of Wayside Inn Road. The property, known as the Wayside Woods, is now owned by the Sudbury Valley Trustees with a conservation restriction held by the Framingham Conservation Commission.

Boundary Conditions

Due to abutting private homes and development, it is very easy for a trail user to determine where the extents of the parcel lie. Conservation boundary badges were also found along the perimeter. Unique to this parcel, there are also marked boundaries for the hunting area in the center of the forest. These were apparent at times by tree markers, but more signage informing trail users should be installed.

Maintenance Needs

Erosion along the Bay Circuit Trail was observed and should be evaluated by the summer crew more extensively. Additionally, the Snow Property has recently seen a sharp drop in the density of invasive plant species such as Oriental bittersweet (*Celastrus orbiculatus*). It would be beneficial to plant native meadow grass mix to dominate the soils and lower the risk of any invasive species returning at a rapid rate.

As for Wittenborg Woods itself, there are invasive plants all throughout the property including Japanese barberry (*Berberis thunbergii*), glossy buckthorn (*Rhamnus frangula*), and the aforementioned bittersweet. Much of it had died off and was not visible during the time of site visit, but it can be seen growing off some of the trails during the spring and summer. It is sparse enough that pulling the plants and removing them from the parcel may suffice to mitigate the issue.

Other Observations

With it being so large and teeming with different types of ecosystems, Wittenborg Woods could serve as a great site for guided nature walks. These walks would be more suited for hikers and anyone else that is in good physical health. Informational programming would need to highlight this caveat.

Recommendations

- Install appropriate trail signage, trail markers, boundary markers, and intersection markers to coordinate with the public trail map. Additionally, install other signage as needed, including a cantilever sign to hang alongside Wayside Inn Road.
- Address the erosion both at the east side of the parcel and adjacent to the Snow Property with water bars to mitigate flow.

- Prioritize the protection of the Howe parcel, as its inclusion into a conservation parcel is crucial for maintaining its aesthetic and ecological importance.
- Naturalize the Snow Meadow by seeding it with a natural meadow grass mix. Once the seeds take to the soil and grow, the risk of invasive plants species spreading through this area will greatly diminish. Tall grass can also provide good habitat for many types of animals such as songbirds. The Crew will need to continue to monitor the meadow each year and manually remove invasive species as the appear.
- Regrade and resurface the main parking lot with additional gravel. Concurrent to this, new water bars should be installed in the trail that leads out of the parking lot to divert stormwater runoff from the parking lot. Additionally, gentle drainage swales should be created across the access slope leading up to the parking area to prevent erosion of the entrance to the parking lot.
- Conduct survey of southwestern property line adjacent to Wayside Inn Road and abutting properties, especially along the northern edge of the wetland area located here.
- Install bat boxes, bee habitat, and boxes for birds to encourage species diversity.

P2 – Macomber Reservation

The Macomber Reservation (Macomber) is located on Framingham's southwest side and is bounded by Singletary Lane to the east and Badger Road to the west, with a parking area located behind a stone wall of Badger Road. The parking area here was in need of work, but was recently graded by the City's DPW to smooth out the many depressions and spread new material. Once in the parking lot, a paved path can be followed to the trailhead. There is ample signage within the parking area and some in the woods as well. Macomber is primarily comprised of old cart paths, so aside from the occasional section containing some exposed roots and rocks, it is a relatively easy site to traverse. This makes it a great parcel for people with young children or those who have difficulties walking on tough terrain.



Historical and Cultural Information

The Macomber Property is located adjacent to reservoirs associated with the Sudbury River and managed by the Department of Conservation and Recreation (DCR), making it very aesthetically pleasing. There are trails throughout the property highlighting the property's upland forests, standing dead snags, hay field, and its wetlands. Each area contains a wide range of biodiversity, making this property a very valuable asset.

The property was originally a pasture, but was abandoned in the 1900s and became forested by oak and pine trees. More recent growth includes conifers planted in 1938 after a strong hurricane destroyed some of the trees. The property was a portion of the larger, former estate of John R. Macomber, which had contained a residence and stables used for horseracing and steeplechase. Roads were also constructed in the early 1940s. The property has remained untouched since the 1950s. A portion of the original site was granted to the Massachusetts Society for the Prevention of Cruelty to Animals. The City initially identified the property as the future location of a school, but instead acquired the land for conservation purposes in 1972, and added to it with an additional acquisition in 1974.[6] The City of Framingham's Dog Pound once stood at the end of the paved entrance path and was removed sometime during the late 1990's or early 2000's.

Natural Communities, Vistas, and Habitats

The Macomber Property is dominated by mid-successional pine-oak woodlands with an understory that varies in both species composition and density. These types of woodlands are typical in areas of New England that were historically cleared for pasture and agriculture and then abandoned in the late 19th and early 20th centuries. The property also contains two wetland systems, including a red maple swamp within the western portion of the site and vegetated wetlands associated with a stream system in the eastern portion of the parcel.

Dominant tree species within the upland areas include white pine (*Pinus strobus*), eastern red cedar (*Juniperus virginiana*), northern hemlock (*Tsuga Canadensis*), white oak (*Quercus alba*), northern red oak (*Quercus rubra*), and black oak (*Quercius velutina*). In addition, scattered American beech (*Fagus grandifolia*) and hickory (*Carya* sp.) were located throughout the parcel. The understory was variable, with some sparse areas containing very little vegetation and other areas containing saplings from the canopy layer along with glossy buckthorn (*Rhamnus frangula*), mountain laurel (*Kalmia latifolia*), and rhododendron (*Rhododendron* sp.).

[6] "Macomber Woods Conservation Area Forest Stewardship Plan," dated 2007, prepared by John F. Robbins, Consulting Forester

The rhododendron and possibly the mountain laurel appear to have been historically planted adjacent to portions of the existing trails. Due to the time of year, groundcover and herbaceous growth were sparse; however, princess pine (*Lycopodium obscurum*), teaberry (*Gaultheria procumbens*), and dewberry (*Rubus* sp.) were observed within the site.

The wetland abutting the open field within the western portion of the site is classified as a "Wooded Swamp Deciduous" according to the Massachusetts DEP GIS datalayer. The wetland contains small depressions that may hold standing water at certain times of year and shows evidence of water stained leaves and soil saturation. Vegetation within the wetland includes red maple (*Acer rubrum*), American elm (*Ulmus americana*), swamp white oak (*Quercus bicolor*), along with various species of sedges (*Carex* sp.), rushes (*Juncus* sp.), and sphagnum moss (*Sphagnum* sp.).

The wetland system within the eastern portion of the site is associated with two streams, one of which flows to the north, while the other flows to the east. Both streams are flowing into the Stearns Reservoir Number 1. The wetlands adjacent to the stream systems are vegetated by red maple, swamp white oak, winterberry (*Ilex verticillata*), sweet pepperbush (*Clethra alnifolia*), speckled alder (*Alnus incana*), cinnamon fern (*Osmunda cinnamomea*), sensitive fern (*Onoclea sensiblis*), and sphagnum moss. There was moderate flow within each of the stream channels at the time of the site visit.



According to the United States Department of Agriculture soil survey for Middlesex County, dominant soils within upland portions of the site are mapped as Narragansett-Hollis-Rock outcrop complex, with slopes ranging from 3 to 25 percent. These are generally classified as well drained soils interspersed among areas of lithic bedrock at or near the surface. Dominant soils within the wetland areas are classified as Raynham and Raypol silt loam. These are classified as poorly drained soils with slopes of 0 to 5 percent. These map designations are generally consistent with field observations.

The Macomber parcel is an ideal location to provide habitat for numerous species. Even though there are a number of single-family homes bordering the southern and southeastern property boundary, the site appears large enough to host a variety of bird, mammal, amphibious, and reptilian species. In addition, there is a large area of undeveloped forested land across Badger Road to the southwest that eventually connects to the Ashland Town Forest. It is likely that many species move back and forth between this Town Forest area and the Macomber parcel in their pursuit of food and shelter.

Mammal species that potentially inhabit or periodically visit the Macomber parcel include raccoon (*Procyon lator*), skunk (*Mephitis mephitis*), opossum (*Didelphis virginiana*), red squirrel (*Tamiasciurus hudsonicus*), gray squirrel (*Sciurus carolinensis*), white-footed mouse (*Peromyscus leucopus*), chipmunk (*Tamias striates*), red fox (*Vulpes vulpes*), gray fox (*Urocyon cinereoargenteus*), white-tailed deer (*Odocoileus virginianus*), and coyote (*Canis latrans*). It is also possible that mink (*Mustela vison*), weasels (*Mustela* sp.), and river otters (*Lutra Canadensis*), utilize the perennial stream system and adjacent reservoir as habitat.

A wide variety of bird species likely utilize the parcel for food, shelter, mating, and nesting at various times of year. The Macomber parcel also contains many areas of "edge" habitat, including areas adjacent to the wetland systems, the area adjacent to the cleared field to the south of the parking area, and along the Stearns Reservoir. These transitional habitat areas serve an important function for many species.

Access, Kiosks, and Signage

The only suitable public access to Macomber is from the parking area along Badger Road, which can accommodate approximately twelve (12) cars. This parking area has been recently regraded and repaired as a part of Framingham's long-term Conservation maintenance goals. There could also be access through the meadow that borders the parking lot even when the grass is high in the summer if a trail was created here. Potential access from Hickory Hill Lane is also being explored at the time of this writing. (See Appendix G for renderings and descriptions of potential options to improve and enhance the access to the Macomber Reservation from the Hickory Hill neighborhood.) In the parking lot, there was a kiosk with information about the parcel which has now been replaced with a kiosk at the trailhead. The old kiosk will be moved to the Arthur-Morency Woods parcel. No maps were present at the kiosk during the site visit. In the woods, there were red and yellow blazes on the trees which seemed fairly cohesive, but these should be replaced with the same uniform trail marking system that will be used on other parcels.

Similar to Wittenborg Woods Reservation, Macomber also requires a cantilever sign along Badger Road to indicate where to turn into the parking area. See the Signage & Branding section of this report for details. Additionally, there is an unused, shaded area of grass and expanded pavement by the trailhead that could be an ideal location to install picnic tables and encourage use by families. Presently one picnic table and a bench are located here on the paved area formerly associated with the old dog kennel. Two other park benches that were donated to the Conservation Commission by MassPort from the Logan Express site at the time of its expansion were installed by The Crew along the paved access path.

Trail Conditions, Use and Connectivity

As previously addressed, much of the 7,403 linear feet ± (1.4 miles ±) of trails in Macomber are old cart paths. Therefore, they are wide, hard packed, and well-drained. Due to this, they are a great choice year-round for activities including hiking, and cross-country skiing. The simple layout of the trail system is very easy to follow. It appears that red and yellow blazes on trees distinguish different loops. These markers need to be replaced with signage consistent with the other parcels, outlined in the Signage & Branding section of this narrative.



There is a cart path connection to Singletary Lane, but there is no parking available to access the trails from this point. Besides the main paved path that leaves the parking area off of Badger Lane to the trailhead, another feasible connection into Macomber that may offer additional variety would be connecting the parking lot to the woods more directly by establishing a trail through the meadow and entering the forest by the old stone walled cart path entrance further south on Badger Road.

Boundary Conditions

DCR has a small parcel abutting Macomber on the east side of the property along Singletary Lane. This parcel contains a sizeable wetland along with an old stone bridge, and should be protected and monitored as part of a Macomber management unit. Additionally, a chain link fence that runs along the south side of the parcel behind homes on Hickory Hill Lane has fallen into disrepair. Removal of this fence and installation of boundary markers would alleviate this issue and prevent future maintenance costs.

Maintenance Needs

Due to the maturity and health of the woodland at Macomber Reservation, there are often a number of trees that come down on the trail that need to be cut up and removed periodically, as well as trees that are dangerously hanging over the trail. Additionally, many trees and branches have fallen into the stream that the bridges cross. These should be evaluated to ensure that they are not posing problems to water flow; if they present no problem then they may be considered beneficial for habitat.

Although evidence was not apparent at the time of the site visit due to the time of the year, Macomber has a growing problem with the invasive plant wisteria (*Wisteria sp.*). Many areas throughout the parcel are densely overgrown with the woody vine, and it is preventing native ferns and other plants from thriving. After the growing season commences, the Crew should take a GPS inventory of this plant on the parcel. While there is also glossy buckthorn (*Frangula alnus*) scattered throughout that can be removed by physical pulling methods, wisteria is the larger issue. One method to use is to log the extent of the growth in an area in which it is dense, and then comparing it to the next year after a removal effort is made. This removal effort should focus on responsibly and safely applying herbicide to the wisteria. According to Framingham Conservation, the Crew has made a great effort to physically remove the vines. While this has made a small impact, the only chance of this property being rid of wisteria is to create a long-term management plan that involves herbicides and GPS data collection.

Recommendations

- Create a trail of ample width (approximately 48") that connects the parking lot to the path bounded with historic stonewalls by following the woods line in the meadow. The trail should also feature boxes for songbirds and bats to support their habitat.
- Set aside the grass area next to the current trailhead as space for picnics and rest. This area could have picnic tables and benches, with the grass and shady tree cover kept as is. Since Macomber provides the most child-friendly trails in the City as far as difficulty goes, it would make sense to support a family-friendly destination.
- Remove remaining chain link fencing and posts from old kennel area
- Remove the fence on the south side of the parcel and replace with boundary markers consistent with the other Conservation parcels.
- Improve signage by creating a trail marking system that coordinates with the public trail map. Additionally, re-install a cantilever sign at the roadside entrance.
- Replace the kiosk sign and include maps and other pertinent parcel information.
- After physical methods have been exhausted, a herbicidal approach to mitigating the wisteria on the property needs to be developed. It would be advantageous to map out the affected areas with a GPS unit to gauge effectiveness year to year.

P3 – Arthur-Morency Woods

As the name implies, Arthur-Morency Woods is situated in between Arthur Street in Framingham and Morency Street in Natick. It also borders Pumpkin Pine Road, which gives another access to a Natick neighborhood. The property is approximately 14.5 acres with at least 11 of those acres in Natick. A DPW yard primarily used for snow storage and frequent staging area for specific projects is located at the end of Arthur Street; this poses an issue due to Framingham Conservation having jurisdictional oversight of the stream that runs along this area. Once used as a sewer bed for the City, the parcel was proposed for sale in the early 2000's.



Seeing the potential in a plot of land abused by BMX bike riders and paintball players, the Conservation Commission assessed the potential of the site and requested the then-Town to transfer the ownership to the Conservation Commission for protection. While there are many invasive plant species that reside here, the transformation of a parcel from having minimal groundcover and successional growth to being a pleasant wooded area speaks volumes of the successes of tactfully planned conservation.

Historical and Cultural Information

Arthur-Morency Woods has remained practically undeveloped since its inception. The City acquired Arthur-Morency Woods in 1894, but it was only transferred to the control of the Conservation Commission in 2003 via a Town Meeting Warrant Article.[7] The purchase of the Property may have originally been made in conjunction with plans for Framingham's first sewer beds. Anecdotal evidence suggest that the property was operated as sewer beds until 1940. However, conflicting data from the City's 1888 sewer plans depicts the sewer beds were located in the area that is now the Natick Mall.

Natural Communities, Vistas, and Habitats

The Arthur-Morency Woods has a large stand of mature trees, with successional forest establishing beneath the mature trees. The woodlands are an isolated pocket of forest in an area that is densely developed by both residential and commercial uses. The property also contains a relatively small wetland system and stream within the western section of the site.

The dominant tree species within the upland area is northern red oak (*Quercus rubra*). Other species include white pine (*Pinus strobus*), white oak (*Quercus alba*), black oak (*Quercius velutina*), black locust (*Robinias pseudoacacia*), red maple (*Acer rubrum*), and American beech (*Fagus grandifolia*). The understory is variable and contains saplings from the canopy layer along with glossy buckthorn (*Rhamnus frangula*), highbush blueberry (*Vaccinium corymbosum*), American chestnut (*Castanea dentata*), multiflora rose (*Rosa multiflora*), oriental bittersweet (*Celastrus orbiculatus*), and Japanese honeysuckle (*Lonicera japonica*). Due to the time of year, groundcover and herbaceous growth were sparse; however, some invasive groundcover was observed, including garlic mustard (*Alliaria petiolata*) and pachysandra (*Pachysandra* sp.), which likely escaped from a nearby garden.

[7] "Morency Woods Management Plan, Town of Framingham," prepared by the Framingham Conservation Commission, dated April 2004.

The wetland within the western portion of the site is classified as "Wooded Swamp Deciduous" according to the Massachusetts DEP GIS datalayer. There is a well-defined stream channel that contained standing water at the time of the site visit within the southern portion of the parcel. As the channel traverses, it becomes less defined and spills out into a vegetated wetland area. Vegetation within the wetland includes red maple (*Acer rubrum*), American elm (*Ulmus americana*), sweet pepperbush (*Clethra alnifolia*), highbush blueberry (*Vaccinimu corymbosum*), and sphagnum moss (*Sphagnum* sp.).



According to the United States Department of Agriculture soil survey for Middlesex County, dominant soils within upland portions of the site are mapped as Deerfield loamy sand and Paxton fine sandy loam, with slopes ranging from 0 to 15 percent. These map designations are generally consistent with field observations; however, it is possible there has been historical filling and/or alterations on the parcel associated with the surrounding development.

The Arthur-Morency Woods do not appear to provide significant habitat for bird or mammal species in terms of size or connectivity. However, they do provide a critical niche for any species that are attempting to survive in this densely developed urban environment. It is likely that a variety of bird species use the parcel for feeding and resting, as well as for breeding and nesting during the mating season. It is also likely that small mammals, reptiles, and amphibious species frequent the area and some may live within the parcel. It appears there are virtually no other undeveloped parcels within the vicinity of Arthur-Morency Woods.

Access, Kiosks, and Signage

There is a very clear and suitable parking area at the end of Arthur Street; however, cars associated with nearby homes that are left there for extended periods of time make access here difficult. Signage prohibiting overnight parking and its subsequent enforcement needs to be in place here to make this a viable parking area for trail users. Currently, the parking area consists of gravel and a maintained woods line. Installation of the aforementioned signage as well as a guardrail along the woods line would be the best ways to make this more of an official parking area. The parcel can also be accessed from Morency Street and Pumpkin Pine Road, but one must park on the street as there is no dedicated parking area.

Trash/recycling bins maintained by volunteers as well as map boxes were observed, but otherwise there is no clear indication that this is conservation land. Arthur-Morency Woods currently has the old kiosk that once existed at Macomber Reservation. To be consistent with other parcels and the overall signage and branding goals, Arthur-Morency needs a new kiosk that contains maps and other pertinent parcel information.



Trail Conditions, Use and Connectivity

The 7,192 linear feet ± (1.36 miles ±) of trails here make for an enjoyable walk, but it is apparent that some were cut years ago in a haphazard manner. Many of them have turned into perfectly suitable walking trails, but there are some entrances to overgrown trails that could be eliminated. Cutting down on trail "braiding" (the creation of unneeded shortcut trails that take a person to the same place as the main trail does) helps increase the area of naturalized land, as well as make the trail system easier to follow. All of the trails here are of a moderate width but generally consist of roots, rocks, and uneven terrain. Additionally, there are several bridges that users must cross.

Arthur-Morency Woods is fairly isolated from other parcels due to its urban surroundings, but it does offer connectivity between the three aforementioned neighborhoods of Framingham. It is also a short walk down Arthur Street to Butterworth Park, managed by the Department of Parks and Recreation.

To the west of Arthur-Morency Woods lies Clark's Hill Village, a new residential development. Conservation could maintain a short path leading from the units to Arthur Street, which would provide an important connection to Conservation land for residents of the area. There is a rough path already in place, which was requested in a Planning Board Decision to encourage use of Arthur-Morency Woods.

Boundary Conditions

It appears as though the dumping of organic yard waste and concrete blocks towards the northwest side of the parcel is coming from the apartment complexes that abut the property. No evidence of conservation signage was found along this or any of the other boundaries. Additionally, a very small portion of a trail on the north end seems to jut out onto abutting property. This property should be bounded with conservation signage.

There is also evidence of encroachment issues, which are highlighted on the Arthur-Morency Woods Field Observations map. This includes a private property owner who has a shed on conservation land, and another abutter whose maintained yard encroaches onto the parcel.

Maintenance Needs

There are some fallen and overhanging trees throughout the property that need to be removed. Additionally, on the northwest side of the parcel, there is a significant amount of trash as well as some large concrete blocks. These appear to fall within the conservation boundary. Much like other Conservation parcels in Framingham, the glossy buckthorn (*Frangula alnus*) problem here has persisted through years of physical removal efforts. All trails in this parcel need to be consistently monitored for buckthorn throughout the summer, and much like the wisteria problem found at Macomber reservation, a long term invasive plant management strategy utilizing herbicides needs to be developed.

Other Observations

There does not appear to be any buffer between the stream along the end of Arthur Street and any activities that may occur at the DPW yard.

Recommendations

- Remove the auxiliary trail from the Bishop Garden Apartments and other abutters, as well as overgrown interior trails outlined in the Arthur-Morency Woods Field Observations map.
- The bridge highlighted on the maintenance map needs to be repaired – it is still usable, but needs to be secured to the ground.
- Trash and dumping, especially the concrete blocks near the Bishop Garden Apartments, need to be removed. Abutters such as this apartment complex need to be informed of this endeavor and that dumping on Framingham Conservation parcels in strictly prohibited.
- To support the previous recommendation, boundary signage consistent with the other parcels needs to be installed.

- Much like what was recommended for the wisteria issue in Macomber, it would be advantageous for the Seasonal Conservation Crew to go out with a GPS unit and record their buckthorn removal efforts. This can allow Framingham Conservation to make a determination as to how well the physical removal process is working, and if any alternative strategies should be considered.
- Utilize a GPS unit to confirm and mitigate encroachments as shown on the Arthur-Morency Woods Field Observations map.
- A stream runs along the bottom of Arthur Street which is bordered by the conservation parcel and the DPW yard. There does not appear to be any buffer here, and knowing that the yard is used for snow storage, amongst other uses, raises concerns of pollution from salt. Some sort of drainage system such as a vegetated swale should be installed if the City is to ensure the future integrity of the stream and the ecosystems surrounding it. This swale could be designed to allow filtration of salt and sand from snow melt before it reaches the stream. At the very least, there should be a 75-foot buffer here to protect the quality of the stream. This buffer could be represented on site by removing asphalt within 75 feet of the stream and installing a wooden guardrail or by fencing the DPW yard. A gate should be placed in line with the culverted access to Arthur-Morency Woods to allow for access of equipment when necessary.
- An official parking area needs to be created here. This should be at the end of Arthur Street where the current unofficial parking area exists, but supplemented with gravel and a guardrail along the woods line. Additionally, “No Parking” signage needs to be installed and enforced to curtail cars parking here and further north along Arthur Street for extended periods of time.
- The DPW yard that abuts Arthur-Morency Woods would make for an ideal location for the storage of tool and materials associated with the seasonal Conservation crew. A 60’ x 40’ area should be cordoned off with chain link fence and dedicated for space to keep a toolshed, landscape trailer, etc.

P4 – Cochituate Brook Reservation & Rail Trail



This conservation parcel is bordered by Reardon Park, the Cochituate Rail Trail, and Cochituate State Park. This area serves as a recreation hub for many people as there are both paved and unpaved trails as well as a playground and ballfield at Reardon Park. Upon first arrival, one would find it hard to navigate the full extent of the parcel, as trails are separated and without much signage. It is also apparent that there is a prevalent glossy buckthorn (*Frangula alnus*) issue along some of these trails.

Historical and Cultural Information

The property was originally owned by the Framingham Sportsmen's Association and was purchased by the City in 1964. The original 27 acres was the first land acquired and preserved as conservation land under the Framingham Conservation Commission. Steps were taken to manage the property cooperatively with the Parks and Recreation Department and to ensure that no wetlands were impacted by recreational development. The trails today are very similar or the same as those when the property was first protected aside from the creation of Reardon Park.

Natural Communities, Vistas, and Habitats

The Cochituate Brook Reservation contains two upland forested communities that are separated by the Cochituate Brook and an emergent marsh system within the Eversource Utility Easement. The Cochituate Brook snakes through the parcel, connecting the Sudbury River to the northwest and Lake Cochituate to the east.

The upland area within the western portion of the property is early successional pine-oak woodlands with a moderately dense understory. Dominant tree species within this area include white oak (*Quercus alba*) and northern red oak (*Quercus rubra*) along with scattered white pine (*Pinus strobus*), American beech (*Fagus grandifolia*), black locust (*Robinia pseudoacacia*), red maple (*Acer rubrum*), and gray birch (*Betula populifolia*). The understory is moderately dense and contains saplings from the canopy layer along with highbush blueberry (*Vaccinium corymbosum*), greenbriar (*Smilax rotundifolia*), and areas of invasive glossy buckthorn (*Rhamnus frangula*).

The upland area within the eastern portion of the site can be characterized as early to mid-successional pine woodlands. Dominant tree species within this area are white pine and red pine (*Pinus resinosa*) along with scattered species similar to the western section of woodlands. There a cleared Eversource Utility Easement associated with a series of power lines between the upland area and Cochituate Brook. The power lines travel over the marsh's system and eventually cross Interstate 90 to the south.

The wetland system that lies within the Eversource Utility Easement is classified as a "Shallow Marsh Meadow" according to the Massachusetts DEP GIS datalayer. The marsh is dominated by cattails (*Typha* sp.) and lies between Cochituate Brook to the east and the Cochituate Rail Trail to the west.

According to the United States Department of Agriculture soil survey for Middlesex County, dominant soils within upland portions of the site are mapped as Windsor loamy sand with 3 to 8 percent slopes. These are generally classified as excessively drained soils composed of loose sandy glaciofluvial deposits. Dominant soils within the wetland areas are classified as Swansea muck. These are classified as very poorly drained soils with slopes of 0 to 1 percent. These map designations are generally consistent with field observations.

The Cochituate Brook Reservation is an important location to provide habitat for numerous species. It is the last respite of undeveloped land surrounded by dense residential and commercial development. In addition, the Reservation directly abuts the Massachusetts Turnpike to the south and has high voltage power lines running through the property. Regardless of the surroundings, the parcel appears large enough to host a variety of bird and small mammal species. In addition, Cochituate Brook is hydrologically connected to Lake Cochituate, which allows fish and other aquatic species to utilize the parcel as well as animals that rely on these species as a food source. The fact that these areas are adjacent to one another creates a valuable corridor for various fauna.

Mammal species that potentially inhabit or periodically visit the Cochituate Brook parcel include raccoon (*Procyon lator*), skunk (*Mephitis mephitis*), opossum (*Didelphis virginiana*), red squirrel (*Tamiasciurus hudsonicus*), gray squirrel (*Sciurus carolinensis*), white-footed mouse (*Peromyscus leucopus*), and chipmunk (*Tamias striates*). Red fox (*Vulpes vulpes*), gray fox (*Urocyon cinereoargenteus*), white-tailed deer (*Odocoileus virginianus*), and coyote (*Canis latrans*) are also present, although the surrounding development and size of the parcel may make habitation more difficult. It is also possible that mink (*Mustela vison*), weasels (*Mustela* sp.), and river otters (*Lutra canadensis*), utilize the brook, marsh system, and adjacent lake as habitat. In addition, it is likely that many amphibious, reptilian, and aquatic species visit or live within the parcel.

Access, Kiosks, and Signage

Two handicap parking spaces currently exist on Maymont Drive. Aside from these, the rest of the road has posted "No Parking" signage. Framingham Conservation should work with the Parks and Recreation Department, as well as the City, to assess the possibility of allowing parking on this street. However, if parking here, it is not very clear to the individual as to where the parcel actually lies. There is one sign at the back of the Reardon Park baseball field, but aside from that, the parcel is lacking in signage. This poses a problem for access from other areas (i.e. Cochituate State Park and the rail trail) due to the fact that people may be unaware that they are abutting a conservation parcel with trails. There is a brand new kiosk sign along the bike path at the mouth of one of the conservation trails, but it does not appear to be utilized at all. The utilization of this kiosk as well as others along the bike path is being explored as a part of a project affiliated with the Master Plan.



Trail Conditions, Use and Connectivity

The 4,529 linear feet ± (0.86 miles ±) of trails at the Cochituate Brook Reservation have a lot of potential for connectivity, but currently fall short. There is no defined connection between the trails around the Cochituate Rail Trail and the trails adjacent to the Eversource Utility Easement leading to the state park, which adds to the already unclear nature of the layout. With proper signage, individuals will be informed of exactly what this parcel has to offer.

These trails can offer a great alternative for a person who wants to stray from the rail trail and enter the woods. Additionally, due to how proximate they are to Reardon Park, they would make great locations for parents to introduce their children to nature.

Boundary Conditions

A portion of the trail that is farthest east and runs at the bottom of Delmar Avenue ends up leaving City land and crosses onto DCR property. Boundary markings need to be installed along all boundaries to Cochituate Brook Reservation. Very few were located.

Maintenance Needs

The trails adjacent to the rail trail also suffer from the aforementioned glossy buckthorn issue. Both sides of these few trails have become dense with this invasive. A long term maintenance plan involving herbicide application and GPS monitoring needs to be explored to continue and improve on past invasive plant management effort.

Additionally, there are two large piles of dumped debris that should be removed. The one farthest west consist of a pile of asphalt that will need to be broken down, and the other is a pile of old wood from the railroad that needs be cut up and removed. Access for a truck for removal would be via the gate on Old Connecticut Path and down the trail. Removal will most likely required some equipment such as a tractor with fork attached to lift the old ties into a truck.

Other Observations

Small amounts of graffiti were seen on the benches and signs. It is unfortunate to see the benches defaced, as they are high quality granite benches. Cleaning and returning them to their original state should be a checklist item for the Seasonal Conservation Crew.

Recommendations

- Similar to what was seen in Arthur-Morency Woods, this parcel has a plethora of buckthorn. A long-term invasive species management plan is needed for this parcel – similar to ones needed at Macomber Reservation and Arthur-Morency Woods.
- Proper wayfinding signage should be installed. This signage should allow people either parking along Reardon Park or walking along the rail trail to know exactly where they need to go to access the conservation parcel. Additionally, it can provide a much-needed clear link between the trails along the rail trail to the west and the southeastern trails that lead to the state park. This signage could then be synthesized with coordination with DCR to advertise the connection between the state park and the conservation land/rail trail. This could provide people who normally use the rail trail and other City lands to utilize some state land, and vice versa. The properties are already connected and a trail could possibly be further established to take one around the edge of the lake. One ideal place to illustrate all of this would be the aforementioned underutilized kiosk sign. Information that could be included on a kiosk to promote this includes maps and designated uses of all properties, pictures, etc.

- Consistent with many other City parcels, parking here needs to be better defined – however, it may be more difficult to do so due to the "No Parking" signage found on Maymont Drive. In order to develop official parking, Framingham Conservation needs to work with the Parks and Recreation Department, as well as the City, to analyze whether or not allowing parking here is a possibility, and if not, determine what would be the best approach for parking access to both Reardon Park and Cochituate Brook Reservation.
- Vehicle access for maintenance and emergency purposes is allowed on the rail trail.

P5 – Carol Getchell Nature Trail



The Carol Getchell Nature Trail (CGNT) is situated in the northern half of Framingham, following the bank of the Sudbury River between Sudbury Landing and Danforth Street at the southern end to Little Farms Road to the north and beyond, connecting to the Weston Aqueduct. This nature trail provides fantastic views of the river, fishing spots, access to two local schools and a church, and generally flat terrain suitable for walking. There is also a lot to see here as far as natural ecosystem, although much of the sides of the trail are overrun with glossy buckthorn (*Rhamnus frangula*) and hemmed in by greenbrier (*Smilax rotundifolia*) north of the Hultman Aqueduct.

Historical and Cultural Information

The CGNT is located in the Saxonville village of Framingham, which was a 19th century mill community built around the Sudbury River. The trail is named after Carol J. Getchell, a former principal of the nearby Mary E. Stapleton Elementary School. The Old Danforth Street Bridge, located at the southern extent of the trail, was constructed in 1890 as a pony truss highway bridge, and is reportedly one of two such bridges still existing in Massachusetts. The bridge was restored in 2001 with assistance from the Massachusetts Historic Preservation Fund and the federal Save America's Treasures program. A Preservation Restriction was subsequently placed on the bridge.[8]



The City owns the land or holds an easement along the length of the trail. The portion of the trail adjacent to Sudbury Landing was granted to the City of Framingham in 1995 by the Danforth Development Corporation in association with the construction of a subdivision roadway. Other portions along the northern extent of trail were acquired from New England Sand and Gravel.[9]

Natural Communities, Vistas, and Habitats

The CGNT traverses through a variety of natural communities including wooded upland areas and wetland areas adjacent to the Sudbury River. There are a number of small bridge crossings of small tributaries along the trail as well as a boardwalk system that traverses wetlands associated with the Sudbury River along the southern portion of the trail.

[8] Massachusetts Historic Inventory Form, FRM.914, Massachusetts Historic Commission
[9] Memorandum entitled "Warrant Article Consideration," prepared by the Framingham Conservation Commission, dated September 25, 2008



Dominant tree species within the upland areas include white pine (*Pinus strobus*), white oak (*Quercus alba*), northern red oak (*Quercus rubra*), and black locust (*Robinia pseudoacacia*). In addition, scattered American beech (*Fagus grandifolia*), black oak (*Quercius velutina*) and hickory (*Carya* sp.) were located throughout the parcel. The understory was variable, with some sparse areas containing very little vegetation and other areas containing saplings from the canopy layer along with dense stands of glossy buckthorn (*Rhamnus frangula*) and greenbrier (*Smilax rotundifolia*).

The wetland within the northern portion of the site is classified as "Wooded Swamp Deciduous" according to the Massachusetts DEP GIS datalayer. The wetland lies adjacent to the Sudbury River and contains small depressions and moderately defined channels, including some that contained standing water at the time of the site visit. Vegetation within the wetland includes red maple (*Acer rubrum*), American elm (*Ulmus americana*), highbush blueberry (*Vaccinium corymbosum*), winterberry (*Ilex verticillata*), spicebush (*Lindera benzoin*), sphagnum moss (*Sphagnum* sp.), along with various species of sedges (*Carex* sp.), and rushes (*Juncus* sp.). In addition, glossy buckthorn was observed growing aggressively in a number of areas within and directly adjacent to the wetland. A stand of phragmites (*Phragmites australis*) was observed to the west of the second crossing traveling from north to south.

The wetland system within the southern portion of the site is also classified as "Wooded Swamp Deciduous" according to the Massachusetts DEP GIS datalayer. Vegetation within this wetland system is similar to the northern wetland system.

In addition to the glossy buckthorn and phragmites mentioned above, other invasive species observed within the parcel includes garlic mustard (*Alliaria petiolata*), bittersweet (*Celastrus orbiculatus*), Japanese stiltgrass (*Microstegium vimineum*) and honeysuckle (*Lonicera* sp.).

According to the United States Department of Agriculture soil survey for Middlesex County, dominant soils within upland portions of the site are mapped as Rippowam fine sandy loam, with slopes ranging from 0 to 3 percent.

These are generally classified as poorly drained soils that lie at the toe of slope of alluvial flats. Dominant soils within the wetland areas are classified as Saco mucky silt loam with slopes of 0 to 1 percent. These are classified as very poorly drained soils with frequent flooding. These map designations are generally consistent with field observations.

The CGNT parcel has unique habitat value due to its location in a densely developed setting as well as connectivity to undeveloped land to the northeast. The Sudbury River takes on Wild and Scenic River designation starting at the Old Danforth Street Bridge and so the length of the CGNT is within that Wild and Scenic area. The City owned lands on the western bank of the Sudbury River provide tremendous habitat for a variety of species within this otherwise suburban setting. This, coupled with the Sudbury River Oxbow Reservation on the eastern bank of the river and the Great Meadows National Wildlife Refuge downstream, provides protection to a much larger habitat area within the City of Framingham and beyond for both terrestrial and aquatic species. The Weston Aqueduct property located at the northern end of the CGNT provides both a trail corridor and wildlife corridor. The Weston Aqueduct is open for passive recreation and connects to the Great Meadows National Wildlife Refuge within the Town of Wayland. The Weston Aqueduct trail, along with some associated side trails, overlook the Sudbury River Oxbow Reservation, but do not have a direct connection trail-wise to the Reservation. The CGNT is bordered by two schools to the northwest and west, as well as residential development on all sides with the exception of the connection along the Sudbury River to the Oxbow Reservation. Regardless, the site appears large enough to host a variety of bird, mammal, amphibious, reptilian, and aquatic species. These include species of owls, hawks, woodpeckers, songbirds, beavers, muskrats, and deer. It is likely that many species move back and forth between the forested areas to the north and the CGNT as well as within the Sudbury River in their pursuit of food and shelter. This part of the Sudbury River has recently been added to the Natural Heritage and Endangered Species Program Priority Habitats for Rare Species data layer on MassGIS.

Access, Kiosks, and Signage

Parking for this trail is available at the end of Little Farms Road and the beginning of Sudbury Landing. Additionally, staircases down to the trail allow Stapleton Elementary School, Edwards Church, and the Cameron Middle School to be accessed as well. The Little Farms parking area was recently upgraded as part of a DPW sewer project. This has improved the parking area with, delineated parking spaces as well as a dedicated space for the car top boat access located here. Additionally, repair to the stormwater outfall, improved catch basins, and improved landscaping have formalized the area and helped to deter some of the evening activities that had resulted in litter problems at this site in the past. The state signage for the boat access is in need of replacement and upgrade.



Both the Little Farms and Sudbury Landing areas contain signage and map boxes for the trail, but they are all deteriorating. There is also a sign at the trail intersection to the Cameron Middle School staircase closest to Little Farms Road that is frequently vandalized.

Trail Conditions, Use and Connectivity



The trail here is very well cut and cleared, and measures 3,707 linear feet± (0.70 miles±). As it stood at the time of observation, there was no major trail work needing to be done aside from minor erosion maintenance. It is an appropriate trail for use by hikers, dog walkers, and cross country skiers. Unfortunately, due to its width, the boardwalk found here is not wheelchair accessible and in many places abruptly steps up rather than gradually ramps up to the boardwalk surface. Portions of the trail, due to years of use, have exposed roots and rocks that can pose tripping hazards.

A great connection to view the Sudbury Oxbow exists – if one walks from the trail to the Little Farms parking area and crosses over to the other side, there is a trail that leads up to the Weston Aqueduct. Along this short portion of trail a large beaver dam can frequently be seen at the outlet end of the Oxbow on the opposite side of the river. This aqueduct can be followed to the right in an easterly direction to power lines where a trail to the right and in a southerly direction take you to additional views of the Oxbow as well as the Pod Meadow. If you follow the aqueduct trail to the left in a westerly direction from the Little Farms spur of the CGNT, the trail will take you to Elm Street and on toward Potter Road and the Nobscot section of Framingham. On the Sudbury Landing end of the CGNT is the historic Old Danforth Bridge and easy access into the historic village of Saxonville and all that it offers.

Boundary Conditions

There appears to be some signs of encroachment along the nature trail north of Little Farms Road, where one property owner's patio and staircase was observed as encroaching onto Conservation land. Boundary markers should be installed periodically along the length of the CGNT.

Maintenance Needs

One location of the aforementioned erosion is on the stretch of gravel leading from Sudbury Landing to the boardwalk. The other location where it is slightly more severe is on the staircase leading down to the trail from the Edwards Church and Stapleton School. Mitigating this erosion could consist of the addition of gravel to patch the areas as well as possibly diverting water. The steps themselves could be improved by restoring them with a box design that would prevent erosion along the sides of the steps.

The CGNT should see continued efforts by the Seasonal Conservation Crew to curb the buckthorn issue. While it is not as extensive as a parcel such as Cochituate Brook, action should be taken to ensure that it does not reach that condition. In addition to the buckthorn, the parcel is also adversely affected by bittersweet, Japanese stiltgrass, and some Japanese knotweed. Attacking invasive species before their populations get out of control often results in greater long-term success.

Other Observations

There was once a "Nature's Classroom" area intended for use by the elementary school north of the stairs coming from the church and Stapleton Elementary School, but it appears that the benches have been removed due to vandalism. Perhaps a more rustic version with sawed log halves could be established in the original location and may not receive the same degree of vandalism.

Recommendations

- The first concern that should be addressed on the parcel is the development of an invasive species management plan to curb the buckthorn population. A vast majority of these shrubs and small trees are young enough that physical pulling of them could suffice. A plan is also important for managing the Japanese stiltgrass and knotweed populations, as they can still be prevented from growing beyond management.
- Boundary marking along the length of the CGNT should take place.
- Improvements to the trail should be made including mitigating any erosion on the staircases and monitoring the boardwalk for damage. Since seasonal flooding occurs under the boardwalk, it needs to be inspected and evaluated every Spring for signs of damage and possible repairs. Previously, the Friends of Saxonville and the Seasonal Conservation Crew have gone to great lengths to keep the boardwalk sturdy and repaired after winter damage. The boardwalk was last repaired during the summer of 2016, and it continues to be monitored. Additionally, maintenance to the areas where exposed roots and rocks pose safety hazards should be undertaken.
- Both the Little Farms Road and Sudbury Landing parking areas require new kiosk signs and map boxes. More specifically, the kiosk at the Old Danforth Bridge adjacent to Sudbury Landing could have an interpretive trail map incorporated into what already exists, and Little Farms Road could use a new kiosk all together.
- Significant improvements to access can be made on this parcel. As a form of community engagement, the Conservation Commission may consider working more closely with the two schools by once again providing a sort of outdoor classroom area along the river, as well as offering some guided walks and interpretive programming. This can be a great way to provide hands-on supplements to science classes. Stairs going from the school's field down to the trail are already in place, so access already exists. One thing to keep in mind, however, is while these stairs can serve most people very well, they are not ADA approved for use by people with physical disabilities. Another important point of access is making an official connection from the end of Little Farms Road to the views of the Sudbury Oxbow via the Weston Aqueduct. The MWRA now permits access along the Weston Aqueduct, so it comes down to having the proper signage.
- Related to this, signage should be installed where the CGNT crosses the Hultman Aqueduct approximately midway between the two trail heads. Here the CGNT has an easement with the MWRA to allow crossing of the Hultman Aqueduct, but the Hultman is not officially open for passive recreational use.

P6- Cedar Woods



Cedar Woods is tucked away in the urban environment of south Framingham and is bordered by Mellen Street, Cedar Street, Cypress Street and Route 135, Waverly Street. Unfortunately, years of misuse by way of dumping has taken a toll on the parcel. Many large objects have been dumped in the northern extent of the swamp, including tires, large pieces of metal, etc.

In years past, efforts by volunteer groups and the Seasonal Conservation Crew have removed a significant amount of dumping. These efforts still continue every summer. The desire to focus on and improve the Cedar Woods parcel was at the center of the current Conservation Administrator's efforts to establish a seasonal Conservation crew, beginning in the summer of 2014.

Historical and Cultural Information

In the 1970s, a portion of the property was the proposed site of low-income housing by a private developer, but the overall site was taken by the City by eminent domain for use as a school.[10] Drainage issues made redevelopment of the site prohibitive, along with passage of the State's Wetlands Protection Act so soon after acquisition. Control of the property was transferred to the Conservation Commission in 1994.[11] It is our understanding from information provided by the City that contextually, Cedar Woods was a part of a larger wetland system that ran between Farm Pond and Waushakum Pond and eventually to Beaver Dam Brook. Loss of wetlands on the south side of Framingham has increased the threat of flooding along Beaver Dam Brook, which itself has lost much of its abutting wetlands that once absorbed and then slowly released floodwaters. A large drainage outfall in the southeasterly section of Cedar Woods now diverts much of the accumulated water from this area to drainage infrastructure in the Arlington Street area and eventually to Beaver Dam Brook. Cedar Woods itself however, still provides that valuable function of wetlands to absorb stormwater, recharge groundwater, and filter pollutants, while providing a small natural oasis for wildlife.

[10] "On Cedar Swamp: They Talk But Action Delayed," The Framingham-Natick News, dated February 5, 1971
[11] Town Meeting Warrant Article 12, dated October 5, 1994

Natural Communities, Vistas, and Habitats

The Cedar Woods parcel is a unique area of undeveloped land surrounded by a dense sea of development. The majority of the parcels consist of wooded swampland with pockets of uplands at the northern and southern extents. The area appears to have been historically degraded through a combination of dumping, filling, and encroachment. Despite the degraded state of portions of the property, signs of wildlife including abandoned nests and deer scat were observed within the limits. It appears that Cedar Woods may serve as the last bastion for wildlife attempting to survive in this urban environment.

The small area of upland within the northern section of the property has been historically disturbed and is vegetated by a combination of native and invasive species, including black locust (*Robinia pseudoacacia*), Norway maple (*Acer platanoides*), red oak (*Quercus rubra),* bittersweet (*Celastrus orbiculatus*), and phragmites (*Phragmites australis*).

The wooded upland within the southern portion of the parcel can be characterized as mixed oak woodlands with a canopy of red oak, black oak (*Quercus velutina*) and scattered American beech (*Fagus grandifolia*). The understory in this area is relatively sparse and contains saplings from the canopy.



The large wetland system that dominates the property is characterized as a deciduous wooded swamp. The wetland is relatively flat, although it contains pit and mound micro-topography with many depressions holding standing water and numerous hummocks located throughout the wetland area. The wetland is vegetated by a canopy of red maple (*Acer rubrum*), black willow (*Salix nigra*), American elm (*Ulmus americana*), eastern cottonwood (*Populus deltoides*), and black locust. The understory is moderately dense and contains highbush blueberry (*Vaccinium corymbosum*), sweet pepperbush (*Clethra alnifolia*), northern arrowwood (*Viburnum dentatum*), speckled alder (*Alnus incana*), glossy buckthorn *(Rhamnus frangula*), and phragmites (*Phragmites australis*). Groundcover and herbaceous growth were limited due to the time of year, however remnants of cinnamon fern (*Osmunda cinnamomea*) and sensitive fern (*Onoclea sensibilis*) were observed along with soft rush (*Juncus effuses*), sedges (*Carex* sp.), and sphagnum moss (*Sphagnum* sp.).

In addition to the black locust, Norway maple, phragmites, and bittersweet mentioned above, other invasive species observed within the property include garlic mustard (*Alliaria petiolata*), Japanese barberry (*Berberis thungbergii*), and vinca (*Vinca* sp.).

According to the United States Department of Agriculture soil survey for Middlesex County, dominant soils within upland portions of the site are mapped as Hinckley loamy sand, with slopes ranging from 3 to 8 percent. These are generally classified as sandy soils that are excessively drained. Dominant soils within the wetland areas are classified as Swansea muck and Freetown muck with slopes of 0 to 1 percent. These are classified as very poorly drained soils with frequent ponding. These map designations are consistent with field observations.

The central portion of the wetland appeared relatively healthy and productive, yet the edges were marred by dumping and intrusion. The northern section contained numerous tires, car parts, trash, and other debris. The eastern and western extents that abut residential dwellings contain trash and landscape debris. The southern extent contains trash and landscape debris as well as numerous piles of asphalt that appear to have been historically discarded in this section of the property. An area of the southern portion has been used as a homeless encampment and is frequently broken down during the summer months when the Conservation Crew is working. The character and vitality of the wetland resource can be vastly improved by removing the accumulated debris and strongly discouraging these activities moving forward.

Regardless of the dumping and intrusion that has occurred on the property, it still has unique habitat value as the only undeveloped property within the area. In addition, the Massachusetts Natural Heritage and Endangered Species Program has determined there is a Potential Vernal Pool within the southern portion of the site. Vernal pools provide critical habitat for a number of species that rely on them for breeding, including the wood frog (*Lithobates sylvaticus*), spotted salamander (*Ambystoma maculatum*), blue-spotted salamander (*Ambystoma laterale*), Jefferson salamander (*Ambystoma jeffersonianum*), marbled salamander (*Ambystoma opacum*), and fairy shrimp (*Anostraca* sp.). It is possible that species travel to this pool in the springtime and some may live within the parcel. The pool had standing water during a site visit in January 2017, which could bode well for the spring breeding season.

Access, Kiosks, and Signage

This parcel can be accessed from either a trailhead on Cypress Street, or from the parking area owned by the City near the former Silton Glass on Waverly Street. Up until recently, parking was available by pulling off the side of Cypress Street, but the City recently installed a wooden guardrail along the entire extent of the frontage of Cedar Woods. The lack of an extensive trail system doesn't make map availability a priority, but having informational kiosks would be extremely beneficial. The installation of a kiosk would educate the public on a wide range of topics. With interpretive panels present, the public could learn about the history of Cedar Woods, the wildlife that exists there, the effects of dog waste on conservation parcels, and more.

Trail Conditions, Use and Connectivity

Cedar Woods has a few trails that are in use, but lacks a greater overall trail system. It currently covers 763 linear feet ± (0.14 miles ±). As of the date of this report, the feasibility of a boardwalk stretching from the north end of the property to the bottom of the wetland is being explored. This could easily connect into the trails that are already there, while providing better public access to this unique and valuable resource. This can lead to greater stewardship and respect for the parcel overall by its immediate abutters and the citizens of Framingham by advertising this parcel as a resource that can be used by everyone in the City.

Boundary Conditions

Cedar Woods faces a lot of misuse, and much of this could stem from the fact that it is not common knowledge that it is conservation land as well as a general lack of appreciation of wetlands themselves. Due to this, it is important to clearly mark boundaries, particularly because the entire parcel is surrounded by private owners -- many of whom seem to be encroaching. Boundary signage will give people a clear definition between what is private and what is public land.

The encroachments on Cedar Woods by private residences illustrates the need for boundary marking to be done. Encroachments include a driveway, a portion of a parking lot, and landscaping. Part of the rehabilitation of this parcel relies on remediating these boundary discrepancies.

Maintenance Needs

While not apparent at the time of the site visit, this parcel has seen an issue with knotweed growing at the trailhead as well as along Cypress Street. The Seasonal Conservation Crew takes care of the vast majority of it each summer, but managing the Japanese knotweed needs to be a long term project in order to succeed. Ongoing monitoring needs, as well as putting a plan in place to manage this invasive species will help to ensure the success of past and future efforts.



Cedar Woods sees an unfortunately large amount of dumping on the north side. The Cedar Woods Field Observations map shows the "epicenter", so to speak, of this large dumping issue. Here, one can find tires, large pieces of metal, plastics and more. Clean up efforts have been led in the past by the current Conservation Administration, including a volunteer group from BOSE, an Eagle Scout project, and the Seasonal Conservation Crew's work. While these efforts from volunteers and City staff need to continue in the coming years, Framingham Conservation needs to perform a detailed analysis of this dumping to determine at what point removal of dumping by hand will become ineffective. This will allow the City to plan and allocate funds for any machinery that may be required to move some of the larger pieces of debris out of the north side of the swamp. Additionally, a similar analysis should be performed on the south side of the parcels – much of the trash here can easily be removed by hand, but equipment will be necessary to remove the asphalt piles if the City wishes to have them removed.

Other Observations

Framingham DPW installed a wooden guardrail running the length of Cypress Street, presumably to discourage misuse. A portion of this could be removed to create a small parking pull off for no more than four cars and to promote user access, while maintaining the guardrail for the remainder of the length of Cypress Street. Greater user access to this parcel should encourage a greater overall appreciation of this parcel and role it plays in providing some open space protection to an otherwise densely populated portion of Framingham.

Recommendations

- The Crew should continue their clean-up efforts, but they may soon find that what needs to be removed is beyond the efforts possible by hand removal. This is when an analysis of the remaining debris needs to be performed; it should be determined whether machinery can be brought into to remove it or if there would be less damage to Cedar Woods by leaving it behind.

- Due to the aforementioned potential need for heavy equipment to clean up some of the dumping, the City should look into having geotechnical borings performed within and adjacent to the wetlands. This will give an accurate analysis of the makeup of on-site soils. Along with providing useful data for a future clean-up, these borings could also be very useful for any future land use plans on the site, i.e. a boardwalk. This option is currently being explored as a part of the Master Plan.
- All potential encroachments need to be addressed with the respective property owners. Ideally, this will assist in reducing on-site dumping.
- This site's parking needs should be addressed with the Department of Public works. Parking is proposed for a City-owned parcel on the north end of Cedar Woods, but the guardrail on Cypress Street will need to be removed if there are plans for allowing parking on this street.

See also Appendix I for additional information pertaining to the development of improvements to Cedar Woods including an elevated boardwalk through the wetland area, pedestrian access from Waverly Street, and parking improvements.

P7- Nobscot Park

Nobscot Park is a small "pocket park" located on the western side of Edgell Road within the north-central portion of Framingham. The park has a small unimproved parking area for approximately 8 cars directly off Edgell Road. There is a bench, water fountain and small grass area adjacent to the parking area. The park contains a small loop trail that is unmarked. The park is generally surrounded by residential development to the south and southeast and commercial development to the north and east. There are two (formerly three) undeveloped abutting parcels to the west that would expand Nobscot Park and also connect to the MWRA's Weston Aqueduct and the passive recreational trail associated with that aqueduct. Formerly, a woodland trail connected to Nobscot Park and through the woodlands associated with these abutting properties. That trail accessed those woodlands via the one parcel lost to development.



Historical and Cultural Information

The present Nobscot Park is made up of three parcels. The first and largest parcel is all woodland and ledge and was acquired by the Parks Department prior to the establishment of a Conservation Commission. The Conservation Commission Act of 1957 establishes Conservation Commissions across the Commonwealth of Massachusetts with the original intention of identifying, holding and preserving open space within communities for passive recreation.

The two smaller parcels were transferred to the Conservation Commission in the mid 1990's. Originally, in the 1850's, School House #8 was constructed on the site. As Framingham's population grew, the need for larger schools grew also. The Nobscot neighborhood however retained much of its agrarian nature until after World War II and the old school house had transitioned to being a Grange Hall. As even that need diminished, the building's care transferred to the Boy Scouts in around 1981 and the scouts, besides having their own needs for the structure, also had agreements for other groups to use it, including as a grange hall and at least one church.

The old schoolhouse/scout lodge burned on July 4, 1994 and was a total loss. After its removal from the site, the property was eventually transferred to the Conservation Commission. The Commission originally established a cooperative agreement with the Garden Club which maintained small flower beds and plantings near the parking lot. The site has been cooperatively managed by the Conservation Commission and the Parks and Recreation Department.

Natural Communities, Vistas, and Habitats

The Nobscot Park parcel is dominated by mixed oak-pine woodlands with a limited understory. Dominant tree species within the Park include white pine (*Pinus strobus*), northern red oak (*Quercus rubra*), and white oak (*Quercus alba*), with a few scattered American beech (*Fagus grandifolia*).



A patch of vinca (*Vinca* sp.), which likely escaped from a nearby garden, was observed near the southeastern property boundary. A series of rock outcroppings is located within the central portion of the site. There are no wetlands located within the parcel.

According to the United States Department of Agriculture soil survey for Middlesex County, dominant soils within the parcel are Charlton-Hollis-Rock outcrop complex with 3 to 8 percent slopes. These are classified as well drained soils with shallow or exposed lithic bedrock. Field observations are consistent with this designation.

Nobscot Park does not appear to provide significant habitat for bird or mammal species in terms of size or connectivity. However, it does provide a critical niche for any species that are attempting to survive in this densely developed urban environment. It is likely that a variety of bird species use the parcel for feeding and resting, as well as for breeding and nesting during the mating season. It is also likely that small mammals frequent the area and some may live within the parcel. Based on recent aerial photographs, it appears the park was recently connected to a relatively large undeveloped parcel to the west; however, this parcel had been cleared and was an active construction site at the time of the site visit.

Access, Kiosks, and Signage

A dirt parking lot is located on the western side of Edgell Road that provides access to Nobscot Park. The parking lot is located within the eastern portion of the property and provides parking for approximately 10 vehicles. A relatively new sign welcomes visitors to the Park and indicates the parcel was developed by the Framingham Garden Club and The Nobscot Community in conjunction with the Framingham Conservation Commission. Any new signage implemented here should also recognize the efforts made by the Parks and Recreation Department in assisting in managing this parcel.



Trail Conditions, Use and Connectivity

A small cleared grass area is located adjacent to the parking lot and contains a bench, a trash barrel, a picnic table, and a water fountain. A loop trail traverses the parcel that begins and ends adjacent to the cleared grass area. The trail provides an easy stroll through the wooded section of the parcel and travels around a rock outcropping located in the central portion of the property. There is no connectivity from either the trail or parcel to adjoining properties, as the property to the north is commercially developed and a residential property lies to the south. The most northerly of three "priority parcels" located to the west of Nobscot Park has been cleared and construction was ongoing during a site visit in January 2017. Originally, a trail connected through this "lost" property and wandered through the other two, still undeveloped private lots.

Boundary Conditions

There are no markers indicating the boundary of the parcel. It is possible there is some infringement from the commercial property to the north. It appears that clearing has been performed directly adjacent to the western property boundary associated with ongoing construction.

Maintenance Needs

The dirt parking lot, which can hold approximately 10 cars, is in relatively good condition but may require the use of chip seal if any depressions or ruts develop. There was limited trash observed on the parcel; however, it is expected that this may increase during warmer weather when the parcel is used more frequently. Nobscot Park is cooperatively managed by the Conservation Commission, Parks and Recreation Department, and the Framingham Garden Club. All three groups have sponsored litter clean ups. The Garden Club has planted areas near to the parking lot and the Conservation Commission has sponsored several highly successful invasive species eradication projects in the past. During the summer season, the Conservation Crew litter picks the parcel every Monday and Friday.

Recommendations

- Additional signage should be installed at this parcel. While signage is clear enough to show people where they are, there needs to be some sort of rules and regulations notice. Additionally, Parks and Recreation should be credited on this signage as they are part of the joint management unit at Nobscot Park.
- Boundary markers should be used here, especially in the event of encroachment from any of the surrounding development. These would need to differ from the standard signage used on other parcels in that Conservation is not alone in managing Nobscot Park.
- Chip seal parking lot and grade it slightly to prevent the icing that frequently occurs during the winter season.

- Per recommendations in the Open Space and Recreation Plan (OSRP), the two remaining undeveloped lots to the west should be acquired and a new trail connecting Nobscot Park through those parcels and southerly to the Weston Aqueduct should be established.

2.4.2 Secondary Parcels

S1- Grove Street Conservation Parcels

The Grove Street Conservation Parcels are situated north of the Massachusetts Turnpike (I-90) and the Edgell Grove Cemetery. They are bordered on the east side by additional open space, which adds to the value of this area as expanded habitat for the many species of animals that make this area their home. This parcel is also City-owned and belongs to the Edgell Grove Cemetery. The Edgell Grove Cemetery Commission has been encouraged to conduct an Abbreviated Notification of Resource Area Delineation (ANRAD) to determine whether any of this very wet property could be economically used for cemetery expansion. However, the abundance of permitting and planning required on a parcel with such a large amount of wetlands may not make this an economical choice. With all of the wetlands present, public access should be limited to only a few trails. The great value of the Grove Street parcels, coupled with the abutting Edgell Grove property, as well as numerous Sudbury Valley Trustees (SVT) parcels in close proximity, is the expansive habitat connectivity provided by all of these properties together.

Natural Communities, Vistas, and Habitats

The Grove Street parcels contain a mixture of pine-oak woodlands and vegetated wetland resource areas. The upland areas consist of white pine (*Pinus strobus*), orthern red oak (*Quercus rubra*), white oak (*Quercus alba*), and black oak (*Quercus velutina*). Wetlands typically described as Red Maple Swamps are interspersed within the central and southern portions of the parcels. In addition, an emergent marsh dominated by cattails (*Typha* sp.) extends onto the western edge of the parcels adjacent to Grove Street and continues to the north on SVT property.



According to the United States Department of Agriculture soil survey for Middlesex County, dominant soils within upland portions of the site are mapped as Merrimac fine sandy loam, with slopes ranging from 3 to 8 percent. These are generally classified as well drained soils that were formed as outwash plains or terraces. Dominant soils within the wetland areas are classified as Freetown muck with slopes of 0 to 1 percent. These are classified as very poorly drained soils with frequent ponding. These map designations are generally consistent with field observations.

The Grove Street parcels appear to provide moderate habitat value based on size and location. The parcels are bounded by the Massachusetts Turnpike to the south and some residential properties to the north and west. However, there are a number of other undeveloped open space parcels as previously mentioned that are held by SVT and together potentially make these parcels attractive to a variety of bird and mammal species. In addition, the Massachusetts Natural Heritage and Endangered Species Program has determined there are two Potential Vernal Pools within the site, as well as two potential and two certified vernal pools on the Edgell Grove parcel. Vernal pools provide critical habitat for a number of species that rely on them for breeding, including the wood frog (*Lithobates sylvaticus*), spotted salamander (*Ambystoma maculatum*), blue-spotted salamander (*Ambystoma laterale*), Jefferson salamander (*Ambystoma jeffersonianum*), marbled salamander (*Ambystoma opacum*), and fairy shrimp (*Anostraca* sp.). It is possible that species travel to these pools in the springtime and some may live within the parcel.

Access, Kiosks, and Signage

There is no defined parking for this parcel. Since there are no trails or signage to be found here, this may be an opportunity to manage a parcel with limited public access. A single trail had previously been established by the Conservation Commission, but has since become overgrown due to a lack of formalized parking access and encroachment by a neighboring property across the access to the property. While many of the other primary and secondary parcels have established trail system, this would be an ideal property to re-establish that single trail and include some interpretive exhibits that highlight the functioning ecosystems on site and their importance.

Trail Conditions, Use and Connectivity

There are currently no trails on the Grove Street parcels. According to the City of Framingham, there was a trail here at one point in the past. As a part of limited public access, this single trail could be restored and used as a medium for the placement of interpretive exhibits.

Boundary Conditions
There were no indications in the field of boundary markers or Conservation ownership. Boundary markers similar to that found on many of the primary parcels should be used here.

Recommendations
- If the parcel owned by Edgell-Grove Cemetery proves to be unsuitable for cemetery expansion due to the extensive resource areas within, then this would be an ideal parcel to transfer to Conservation.
- An Abbreviated Notice of Resource Area Delineation (ANRAD) would be an appropriate course of action to take in determining whether expansion of the cemetery to this parcel would economically feasible.
- Signage/boundary markers should be placed at this site to ensure that there are no encroachments.
- The paper street Cemetery Lane appears to have been blocked off by an abutter. Framingham Conservation should address this issue with the abutter and work to remove the blockade.

S2- Sudbury River Oxbow Reservation

Location and Site Conditions
The Sudbury River Oxbow Reservation (SROR) is comprised of four contiguous parcels located in the northeast corner of Framingham and directly abuts the City line with Wayland along its northern and eastern extent. The land was donated to the City of Framingham in 2014 in association with the Danforth Green residential development immediately to the south. The northern boundary of the property is contiguous with the City boundary, and can be further defined by the Sudbury River. The U.S. Army Corps of Engineers conducted a flood control project on the Sudbury River in 1957 by constructing a channel bisecting the oxbow, thus reducing flow through it. This section of the river was designated as a Wild and Scenic River by U.S. Congress in 1999. Portions in the south of the SROR were previously cleared as part of the former New England Sand and Gravel operation. This operation

Natural Communities, Vistas, and Habitats



The SROR contains areas of wooded uplands, however large portions of the parcels are comprised of wetland resource areas. The woodlands are primarily located within the southern and southwestern extents of the parcels. The canopy is comprised of mixed oaks (*Quercus* sp.), white pine (*Pinus strobus*), American beech (*Fagus grandifolia*), black birch (*Betula lenta*), and eastern hemlock (*Tsuga canadensis*). Wetland systems dominate the central, northern, and eastern portions of the site. The central portion of the SROR is comprised of a wooded swamp that is dominated by red maple (*Acer rubrum*) trees and also contains swamp white oak (*Quercus bicolor*), highbush blueberry (*Vaccinium corymbosum*), sweet pepperbush (*Clethra alnifolia*), and winterberry (*Ilex verticillata*). The eastern section of wetlands consists of an emergent marsh system that is dominated by cattails (*Typha* sp.). The expansive marsh system continues east and extends into the Town of Wayland.

The SROR has the potential to provide significant habitat value to numerous species, particularly wading birds and waterfowl that utilize the wetland and marsh systems for foraging and nesting. In addition, the SROR directly abuts large tracts of undeveloped land to the east. Most of the surrounding land in Framingham is developed; however, the Great Meadows National Wildlife Refuge and Weston Aqueduct land within the Town of Wayland directly abut the SROR to the east. This large tract of contiguous, undeveloped land is likely home to numerous bird, mammal, amphibious, reptilian, and aquatic species. It is likely that many species move back and forth between the undeveloped areas to the northeast and the SROR as well as within the Sudbury River in their pursuit of food, shelter, breeding and nesting habitat.

In addition, the Massachusetts Natural Heritage and Endangered Species Program has determined there is one Certified Vernal Pool and two Potential Vernal Pools within the site as well as a number of Potential and Certified Vernal Pools within the surrounding area. Vernal pools provide critical habitat for a number of species that rely on them for breeding, including the wood frog (*Lithobates sylvaticus*), spotted salamander (*Ambystoma maculatum*), blue-spotted salamander (*Ambystoma laterale*), Jefferson salamander (*Ambystoma jeffersonianum*), marbled salamander (*Ambystoma opacum*), and fairy shrimp (*Anostraca* sp.). Other species that will often utilize vernal pools include spring peeper (*Pseudacris crucifer*), gray treefrog (*Hyla versicolor*), American toad (*Anaxyrus americanus*), and Fowler's toad (*Anaxyrus fowleri*).

Access, Kiosks, and Signage

Although one will not currently find City maps or signage indicating the location of the Oxbow, future signage for the Carol Getchell Nature Trail should show the Oxbow in order to provide reference to how it relates to the CGNT properties on the western back of the Sudbury River. As previously mentioned the Little Farms Road trailhead of the CGNT offers access to a trail that leads up to the Weston Aqueduct and then followed in an easterly direction into Wayland and which overlooks the Oxbow. The main access to the Sudbury River Oxbow Reservation parcels would be from

Trail Conditions, Use and Connectivity



As mentioned, the Oxbow is connected to both the Weston Aqueduct and the Carol Getchell Nature Trail. The Oxbow also abuts the power lines, but one can only walk these so far before coming to a dense marsh area. The power lines feature a short loop trail that offers fantastic views of the Oxbow, and has been the site of past nature walks. The total length of these trails is equal to 4,189 linear feet ± (0.79 miles ±). Trails within the Oxbow property itself were established long ago and do not necessarily connect in a typical manner. Thought should be given to plan a more cohesive trail system. Inside of the Oxbow itself the area has been flooded by beaver activity and for the most part is not accessible except by canoe or kayak. During the spring or other high water, blue trails or trails associated directly with boating offer unique opportunity to explore this private oasis.

Boundary Conditions
Even people who are using the nearby Carol Getchell Nature Trail may not even realize where or what the Oxbow is. The maps as well as signage for the nature trail should be supplemented with information about the Oxbow to promote the public to take advantage of its beautiful views. In addition, boundary markers should be hung around the borders of this parcel.

Maintenance Needs
As indicated in the Sudbury Oxbow Field Observations map, there is a section of trail that should be cut back due to it being overgrown. There is also an extensive patch of knotweed that should be removed before it spreads any further. Additionally, there is an abundance of knotweed on the south side of the Oxbow parcel, adjacent to the fire road.

Recommendations
- The removal of the knotweed on this parcel should be prioritized. Physical removal by hand has worked well on other parcels; that approach should be attempted before herbicides are utilized.
- Place boundary markers around the parcel to identify the area as protected Conservation land of the City of Framingham.
- All parcels encompassed by the Oxbow should be managed by the Conservation and Open Space Division to ensure their protection. This includes two meadow areas, which would make for great habitat restoration projects to support the fauna here such as songbirds or birds of prey.

S3- Spring Lane

The Spring Lane Parcels are located in the northern central area of Framingham between Water Street and the Weston Aqueduct to the north and the Hultman Aqueduct to the south. The parcels are located directly between two residential neighborhoods. They are also proximate to the Walsh Middle School and King Elementary School, making for an opportunity to provide outdoor education sessions.

Natural Communities, Vistas, and Habitats



The northern and southern sections of the parcels are similar in nature and are comprised of mixed oak-pine woodlands. The central portion of the site consists of a mature white pine (*Pinus strobus*) grove with towering pines and minimal understory. A number of pines have fallen within the area and many have been cut and left on the sides of the trail. Dominant tree species within the northern and southern sections include northern red oak (*Quercus rubra*), white oak (*Quercus alba*), black oak (*Quercus velutina*) with scattered American beech (*Fagus grandifolia*). The parcels contain relative steep topography, sloping approximately 50 feet downwards from east to west.

According to the United States Department of Agriculture soil survey for Middlesex County, dominant soils within the parcel consist of Paxton fine sandy loam with 8 to 15 percent slopes and extremely stony. These are classified as well drained, stony hills or slopes. Field observations are consistent with this designation.

The Spring Lane parcels are similar to a number of the other relatively small undeveloped properties that remain in Framingham. They do not appear to provide significant habitat for bird or mammal species in terms of size yet they do provide a critical niche for any species that are attempting to survive in this developed urban environment. It is likely that a variety of bird species use the parcel for feeding and resting, as well as for breeding and nesting during the mating season. It is also likely that small mammals frequent the area and some may live within the parcel. The Spring Lane parcels are unique since they connect to the Hultman Aqueduct to the south. It is possible that species could utilize this aqueduct as a corridor, even though it is surrounded by development along most of its route.

Access, Kiosks, and Signage

The Spring Lane Parcels can be accessed by parking on Spring Lane or walking in from Water Street on the north side; however, there is no street parking on this end. The Spring Lane parking does not seem to be specifically for the trails but rather for the Jewish worship center that is close by. While the trail system is quite simple, it could use some markers to point people in the right direction.

For example, people should be informed that the one long stretch of trail going to the north takes them to Water Park, and the trails connecting to the paved path on the south lead to the Hultman Aqueduct – although public access is not permitted on this aqueduct as it is part of the Weston Aqueduct.

The trailhead on Spring Lane would benefit from an informational kiosk. There is enough area present where trail users would benefit from a map. The paved path at Spring Lane crosses the Hultman Aqueduct and connects to the Walsh Middle School. Another paved school path connects the King School across the Hultman to Brook Street, but not directly to the Spring Lane parcels. The is an undeveloped parcel that connects the King School to the Spring Lane parcels, but there is no formalized trail across it and the parcel was not transferred to Conservation when the other parcels were.

Trail Conditions, Use and Connectivity

While the 5,167 linear feet ± (0.98 miles ±) of trails do not contain any challenging slopes, they are narrow and littered with rocks and roots. The trails extend outside of the conservation parcels and surround the paved path that connects Spring Lane to the Hultman Aqueduct and Walsh Middle School. Walking far down the aqueduct will eventually bring you to Elm Street, which can be traveled for a short period of time before reaching Little Farms Road (Carol Getchell Nature Trail). However, MWRA does not currently permit foot traffic on this aqueduct. The Spring Lane conservation area also connects to "Water Park" along Water Street and to the Weston Aqueduct where passive recreation is officially allowed.



Boundary Conditions

There did not appear to be any encroachments, but boundaries markers were not present. The change from Conservation to Parks and Recreation ownership when crossing parcel lines is also not evident in the field.

Maintenance Needs

Aside from trimming overhanging trees, the only apparent maintenance truly needed at Spring Lane is curbing the buckthorn problem. As shown with the map of field observations, the buckthorn here is plentiful but it could be manageable. The trails themselves are in great shape and appear to be used quite often.

Recommendations

- Like most other parcels, Spring Lane could benefit from an improved method of marking trails and parcel boundaries. For instance, putting up conservation badges on trees would delineate boundaries.
- Spring Lane also presents the potential for expansion. On the south end, there is a parcel abutting the King Elementary School as well as a parcel on the other side of the aqueduct as the southern-most gate. The continued joint management of these parcels will ensure that Spring Lane remains as a passive use conservation property that offers connectivity to the Weston Aqueduct and the nearby schools.

S4- Old Wood/Old Worcester Road Parcels

The Old Wood and Old Worcester Road parcels are located within a residential neighborhood situated between I-90 to the north, Route 9 to the south, and Commonwealth of Massachusetts Foss Reservoir land to the west. With various wetland areas and a small stream passing through the property, the parcel is in a naturalized state and seems to be ecologically productive. However, there is trash and yard waste dumping along many of the boundaries of the abutting properties.

Natural Communities, Vistas, and Habitats

The parcels consist of pit and mound topography and are dominated by a red maple swamp throughout much of the extent. Two separate areas of wooded upland are located within the southwest and northeast corners of the parcels, respectively.

Dominant tree species within the upland areas include white pine (*Pinus strobus*), white oak (*Quercus alba*), northern red oak (*Quercus rubra*), and yellow birch (*Betula allaghaniensis*). The understory was variable, with some sparse areas containing very little vegetation and other areas containing saplings from the canopy layer along with dense stands of glossy buckthorn (*Rhamnus frangula*) and greenbriar (*Smilax rotundifolia*).

The wetland that dominates the site is classified as “Wooded Swamp Deciduous” according to the Massachusetts DEP GIS datalayer. The wetland extends off-site to the west onto a parcel that contains Framingham Reservoir #3, directly north of Route 9. The wetland contains numerous small depressions, including some that contained standing water at the time of the site visit. Vegetation within the wetland includes Red Maple (*Acer rubrum*), American elm (*Ulmus americana*), highbush blueberry (*Vaccinium corymbosum*), sphagnum moss (*Sphagnum* sp.) and relatively dense stands of sweet pepperbush (*Clethra alnifolia*).

According to the United States Department of Agriculture soil survey for Middlesex County, dominant soils within the upland portions of the parcels consist of Haven silt loam with slopes of 0 to 3 percent. These are classified as well drained soils comprised of friable loamy eolian deposits. Dominant soils within the wetland areas of the parcels consist of Freetown muck, which are very poorly drained soils found as depressions, marshes or swamps. Field observations are generally consistent with these designations.

The Old Wood and Old Worcester parcels are another example of a relatively small undeveloped property that is surrounded by development. Similar to a number of properties mentioned above, the parcels do not appear to provide significant habitat for bird or mammal species in terms of size yet they do provide a critical niche for any species that are attempting to survive in this developed urban environment. It is likely that a variety of bird species use the parcel for feeding and resting, as well as for breeding and nesting during the mating season and that small mammals frequent the area and some may live within the parcels. It is also likely that various amphibian and reptile species visit or live within the parcels. While it is surrounded by development and busy roadways to the north, south, and east, the parcels abut undeveloped land to the west that lies adjacent to the Foss Reservoir. Many species likely travel back and forth between the Reservoir property and the Old Wood and Old Worcester parcels.

Access, Kiosks, and Signage
Surrounded by development, the Old Wood and Worcester Road parcels do not offer much access to anyone except private property owners abutting the property. However, this level of access could be positive given the nature of the property. Not all conservation parcels need to be actively used and these are great examples. They offer ecological value, but would not gain much by being easily accessible to the public. It can still be seen as a positive for the public– it offers a rare place for nature in such a developed area.

Trail Conditions, Use and Connectivity
There are no trails within any of the parcels.

Boundary Conditions
Conservation property badges were hung on the trees along the road to delineate the parcel boundary, yet there was still a fair amount of dumping done from abutters. This demonstrates that signage is needed in areas such as the boundaries of the parcel that coincide with private property lines. The private property owners should be made aware of the boundary issues.

Maintenance Needs
The only maintenance required here is the cleaning up of the aforementioned dumping and trash.

Recommendations

- While many taxpayers like to see the conservation parcels that they contribute toward have access for recreation, there is something to be said for the importance of undisturbed open space. Few secondary parcels offer this kind of untouched land within so much development, therefore these parcels serve a unique purpose that should be preserved.
- Habitat enhancement could be considered through the installation of an osprey platform near the boundary with Foss Reservoir lands or the installation of bat or owl boxes.

S5- Edmands-Mohawk Property

The Edmands-Mohawk property contains a series of parcels located within the north-central portion of Framingham. The parcels are located to the north of Edmands Road and west of Juniper Lane. The main entrance is at the terminus of Mohawk Drive, which lies north of the parcels.

Natural Communities, Vistas, and Habitats

The Edmands-Mohawk parcels contain a variety of natural communities, including mixed oak-pine woodlands, a pond, two wetlands and associated stream systems, and a series of historically cleared fields.



Dominant tree species within the woodland areas include white pine (*Pinus strobus*), white oak (*Quercus alba*), northern red oak (*Quercus rubra*), black oak (*Quercus velutina*), gray birch (*Betula populifolia*), and eastern hemlock (*Tsuga Canadensis*). In addition, red maple (*Acer rubrum*) and American elm (*Ulmus americana*) were observed within some upland areas. The understory was variable, with some sparse areas containing very little vegetation and other areas containing saplings from the canopy layer along with glossy buckthorn (*Rhamnus frangula*), highbush blueberry (*Vaccinium corymbosum*), and northern arrowwood (*Viburnum dentatum*). Along with glossy buckthorn, other invasive vegetation observed on the parcel includes Japanese barberry (*Berberis thungbergii*), oriental bittersweet (*Celastrus orbiculatus*), winged euonymus (*Euonymus alatus*), phragmites (*phragmites australis*), and purple loosestrife (*Lythrum salicaria*).

Vegetation within the two wetland systems is similar, with red maple and American elm as the dominant canopy species. The understory consists of highbush blueberry, northern arrowwood, speckled alder (*Alnus incana*), soft rush (*Juncus effusus*), sedges (*Carex* sp.), and sphagnum moss (*Sphagnum* sp.).

According to the United States Department of Agriculture soil survey for Middlesex County, dominant soils within the upland portions of the parcels consist of Deerfield loamy sand with slopes of 3 to 8 percent. These are classified as moderately well drained soils comprised of loose sandy glaciofluvial deposits. Dominant soils within the wetland areas of the parcels consist of Wareham loamy fine sand and Raypol silt loam. These are both defined as poorly drained soils with slopes of 0 to 5 percent. Field observations are generally consistent with these designations.

The Edmands-Mohawk parcels have unique habitat value due to their location in a developed residential setting as well as connectivity to undeveloped land to the northwest. The parcels currently connect to large tracts of undeveloped and forested land, including the Nobscot Scout Reservation within the northwest section of Framingham and southwest section of Sudbury. These parcels are relatively small compared to the large areas of woodlands to the northwest, however they appear large enough to host a variety of bird, mammal, amphibious, reptilian, and aquatic species. In addition, the Massachusetts Natural Heritage and Endangered Species Program has determined there is one Potential Vernal Pool within the site and a number of Potential and Certified Vernal Pools within the surrounding area. Vernal pools provide critical habitat for a number of species that rely on them for breeding, including the wood frog (*Lithobates sylvaticus*), spotted salamander (*Ambystoma maculatum*), blue-spotted salamander (*Ambystoma laterale*), Jefferson salamander (*Ambystoma jeffersonianum*), marbled salamander (*Ambystoma opacum*), and fairy shrimp (*Anostraca* sp.). Other species that will often utilize vernal pools include spring peeper (*Pseudacris crucifer*), gray treefrog (*Hyla versicolor*), American toad (*Anaxyrus americanus*), and Fowler's toad (*Anaxyrus fowleri*). It is likely that many species move back and forth between the forested areas to the northwest and the Edmands Mohawk parcels in their pursuit of food, shelter, and breeding habitat.

Access, Kiosks, and Signage

The most accessible way into this area is the cul-de-sac at the end of Mohawk Drive. Here, one will find a chain across a path that follows the edge of the pond and leads to the mowed fields. There are no signs for the property here, but this may be desirable to the City as there is very limited parking on the street. Improved parking at Mohawk Pond would be desirable if the Mohawk parcels end up connected to the Chickatawbut parcel (T3 below) as proposed.

Trail Conditions, Use and Connectivity
There is 1,139 linear feet ± (0.22 miles ±) of trail on the Mohawk Drive parcel. This includes a defined trail entering from Mohawk Drive, along with a vague trail around one of the fields. Aside from some wet areas, current trails seem to be in good condition. Adding more trails to this property would allow people to pass through the additional fields even when the grass gets tall, which could open up opportunities for activities such as bird watching. Expanding the trails could also lead to future connections between the Mohawk Drive parcel, Chickatawbut parcel, and Callahan State Park.

Boundary Conditions
There were no signs of conservation boundary markings.

Maintenance Needs
The first objective in regards to maintenance is to monitor the beaver activity. On the southern side of the pond, there is a spill-off area that upon a site visit had clear signs of beaver activities. Gnawed stumps were observed as well as branches stacked in the water. Both the City and the abutting property owners should be watchful, as leaving this unchecked could lead to future flooding issues. A secondary concern here is maintaining current trails. Some spots were collecting water, but with improvements, this issue can be resolved.

Other Observations
There is an abutter on the north side of the parcel that is maintaining up to the edge of the pond. They also reportedly assist with monitoring beaver activity.

Recommendations
- Aside from performing the aforementioned maintenance, the best thing that can be done for this parcel is to expand the trail system. With a large amount of contiguous forest next to it, the Mohawk Drive parcel could be connected to both the Chickatawbut parcel and Callahan State Park. There is currently no entrance to be found to the Chickatwabut parcel, so this could allow access and passive recreation to actually be had here.
- Also crucial to this connection is the acquisition of the Framingham Civic League Parcel, which was donated specifically for open space. Transfer of this parcel, which has a couple of existing trails across it, would allow for direct trail connections between the Mohawk parcels and the Chickatawbut property and connect to Callahan State Park.
- The dam here should be monitored due to the observed beaver activity.

2.4.3 Tertiary Parcels

T1- Nobscot Spring
This parcel shares parking with and abuts land managed by DCR, amongst other conservation parcels in Sudbury. Its primary purpose was to preserve the historic Nobscot Spring site where Framingham residents for years filled bottles with water from this spring. Its 5.86 acres add to the protected land in the area with the Boy Scouts of America's Nobscot Boy Scout Reservation and a section of DCR's Callahan State Park properties.

T2- Hemenway Road
The Hemenway Road parcel borders Garden in the Woods, a 45-acre botanical garden run by the New England Wildflower Society. Currently, Conservation owns a 1.47 acres parcel. Next to this parcel is another 4.90 acre parcel, which is under the ownership of Parks and Recreation.

T3- Chickatawbut Road
Offering a potential connection between Mohawk Pond and Callahan State Park, this 6.54-acre parcel should be surveyed to see if a trail system is feasible. It is worth noting that the Framingham Civic League parcel previously addressed in this report is also crucial for this connection to be possible. A trail system that includes several trails presently crosses the Civic League parcel and connects the Mohawk parcels to the Chickatawbut parcel. Transfer of this property to Conservation has been identified in several past Open Space Recreation plans as a priority and would tie several important conservation lands to a portion of the Callahan State Park and Nobscot Boy Scout Reservation. If space allows for it, a switchback trail could be cut up the hill at the end of the cul-de-sac on Chickatawbut Road. The parcel can be accessed either from the end of Chickatawbut Road or by parking on Mohawk Drive. If the parcel is finally connected to the Mohawk parcels, a more formalized parking area at the end of Mohawk Drive should be developed.

T4/T5- Hiram Pond
What once was a pond created and utilized for apple orchards has naturally filled in with sediments and plant life over time. The dam at the downstream end of what was Hiram Pond has been proposed for removal. This project proposed by DPW would restore ecological and hydrologic functions to this location, and enhance flood storage capacity through the now-meandering stream and wetlands.

T6- Hop Brook

This Conservation-owned parcel sits just off of Edgell Road near Donovan Drive and surrounds a portion of Hop Brook. This allows Framingham Conservation to protect this water resource by keeping the parcel as undisturbed open space. Hop Brook is a fairly important resource in Framingham, as its waters are associated with Landham Brook, wetlands on the Winch Street parcel, Hiram Pond, and more. The ownership and purpose of this parcel should remain as it is now.

T7- Winch Street

The Winch Street parcel is a small, landlocked portion of land between Winch Street and Agnes Drive. It is abutted by two other City of Framingham parcels which should be transferred to Conservation, and also by a 10+ acre parcel owned by the Sudbury Valley Trustees. Aerial imagery shows that there are stream channels running through it. Ownership of the rest of this landlocked, wooded area should be determined so that a small trail system can be created for the neighborhood to enjoy. Currently, it appears that the City owns this parcel through a tax title. The ownership of it should be transferred to Framingham Conservation due to the presence of stream channels and wetlands for the use as undeveloped open space.

T8- Norton Pond

The entirety of this 3.87 acre pond that lies along Elm Street in between the Hultman and Weston Aqueducts is managed by Framingham Conservation. This location makes it easily accessible from the sidewalk on Elm Street. Since it lies along the road, the Crew should routinely monitor the area and collect any litter before it enters the water. This parcel can be accessed from the road but it is worth noting that across the street lies an MWRA access path that leads down to the Carol Getchell Nature Trail as well as the Sudbury River. This is not currently open for public use, however the Conservation Department has worked with the MWRA to access the center portion of the Carol Getchell Trail for maintenance purposes.

T9- Bacon Road

This is generally a wet parcel, with a section of it being completely inundated. At the time of the field visit, it seems as though there could be possible encroachments from homeowners (sheds, gardens, etc.). This highlights Framingham Conservation's need for a modern and accurate GPS unit to collect data on potential encroachments like this.

T10/T12- Lyman-McAdams Road

Lyman-McAdams parcels are pockets of open space that run along the Weston Aqueduct. These include 5 Lyman Road, 6 McAdams Road, and an unnumbered parcel between 7 and 9 McAdams Road. As the aqueduct develops as a greenway, these parcels will offer a scenic view and visual buffer to those walking by.

While listed as owned by the City in the City's Assessor database, it would benefit management of the parcel for ownership to be transferred to Conservation. Transferring any wetland dominated parcels such as these to Conservation is crucial – for example, protecting these would also be protecting a stream course and other associated wetlands.

T11- Whiting Road

The Whiting Road parcel is a small, ½ acre wet parcel tucked away in a neighborhood in the Nobscot section of the City. Since it is very small and offers no connectivity, this parcel should be regarded as one that offers purely ecological and environmental benefits to this area. An encroachment by an immediate abutter has filled along the edge of the wetland as well as the dumping of yard waste onto the conservation land.

T13- Lamphere Circle

This property consists of two parcels totaling approximately 2.08 acres, located at the end of Lamphere Circle. They are bounded on the west and north by residential properties off Lamphere Circle and Ruthellen Road, but do not currently have frontage and are thus land-locked. The northern portion of the parcels contain a deciduous wooded swamp, while a potential vernal pool has been identified in the south-central portion of the property. The property is bounded to the southeast by the CSX right-of-way, which is coincident with the proposed right-of-way for the Bruce Freeman Rail Trail. The existing vegetation on the parcel offer essential visual buffer between the proposed rail trail and existing residences. Protection of this parcel will further provide opportunity for neighborhood access to the trail. Additionally, this parcel could be used for a small trail loop serving the users of the potential rail trail.

T14- Brook Meadow

This is another valuable piece of open space, partly due to Baiting Brook running through it. This 5.66-acre parcel also abuts the fields on Millwood Street that border Callahan State Park, so there is potential for a connection here if a trail is established. This could also promote access onto state land for the many neighborhoods in the area. Framingham Conservation should also check for potential encroachments due to numerous residential abutters. Although there are no direct connections to Brook Meadow Circle or to Ditullio Drive and Hancock Lane to the west, the property does provide a direct connection along the stream course between the aqueduct and Callahan.

T15- Woodmere Road

Baiting Brook also runs through these parcels and is entirely surrounded by houses and roads, making them important to remain parcels of undisturbed open space. Private properties prevent the Woodmere parcels from offering connectivity to the Brook Meadow and Callahan State Park parcels.

Parcels that contain water resources such as brooks flowing through them should be monitored by the Crew during the summer to diminish the effects of littering and dumping.

T16- Brook Street

The Brook Street parcel contains a water line easement which allows it to be walkable, but the presence of resource areas here suggests that it may not be the best parcel for recreation. Instead, Dunsdell Brook, which passes through this parcel, could be protected from disturbance if this continues to be untouched open space. Due to a number of abutters, this parcel should be bounded with Conservation boundary markers.

T17/T18/T19- Perry H. Henderson Drive

Before this area was developed, all of the parcels located here were a part of an old park known as Grace Park. The City-owned tax title parcel at 64 Londonderry Road that abuts these parcels was at one point in time the entrance to the park. Since these conservation parcels totaling nearly 5 acres have now become naturalized and contain a small stream running through them, these are also parcels that should be kept as untouched open space. Much like other parcels that should be kept undisturbed, the property lines behind abutting houses should be analyzed to ensure that there are no encroachments. There have been previous incidents of dumping of abutters dumping yard waste, which is something that should be monitored.

T20- Florita Drive

One of the most aesthetically pleasing tertiary parcels, Florita Drive offers a beautiful marsh that would be ideal to utilize as an educational tool for science classes in the City, due to the variety of flora and fauna that reside here. There is also an abutting City parcel on Elda Road that is small, but unprotected. If protected, this parcel should be included with the marsh. While there are no trails throughout the parcel due to how wet it is, it can still be accessed off of Florita Drive for anyone that wants to enjoy the sights and sounds of this productive 7-acre resource area. Conservation badges were present on trees along the frontage of the parcel, but signage indicating what the land is for may be a useful addition in the future. The Florita parcel does abut another passive parcel that was transferred to the Parks Department in 2013. It may have made more sense to have kept them together as one passive recreation management unit.

T21- Central Street/T41- Shortiss Park
The Central Street parcel abuts Shortiss Park. Both of these parcels are along the Sudbury River. Shortiss Park is protected by Article 97, though the deed for the Central Street parcel does not contain any language dedicating it for conservation purposes.

The Simpson Park Rotary Club has signage here, but it is not clear if they are a part of any sort of management efforts. Regardless, the maintenance and monitoring of this site is important to the integrity of this part of the Sudbury River.

T22- Arlene Drive
Many of the tertiary conservation parcels do not have much in the way of signage. It is crucial to install boundary markers at this location due to the dumping that was seen adjacent to the parcel. This parcel extends to the area behind Saxony Apartments where it stops before a section of upland. It looks as though excessive dumping of yard waste is ongoing, as there are piles only big enough to be from large trucks. Framingham Conservation should look into acquiring this piece of upland for two purposes. First, it would prevent the apartments from being able to expand closer to the conservation parcel. Secondly, cleaning up this bit of upland and acquiring it for conservation would allow there to be a buffer in between the development and the wetland located at the Arlene Drive parcel.

T23- Clearview Drive
The Clearview Drive parcel is completely landlocked by houses and could use boundary markers to indicate to the neighborhood that it is Conservation land. A parcel in an urban setting such as this is important not only for its ability to provide habitat, but also for the purpose of flood control for the neighborhood.

T24- Crosby Circle
This is a 4.38 acre wetland area associated with Baiting Brook. It provides flood storage and natural habitat. The Crosby Circle parcel should be kept as undisturbed open space. A related ½ acre parcel at the end of West Street off of Route 9 serves similar purposes and is a tax title property that should be transferred to Conservation.

T25- Worcester Road
This 1.5-acre parcel is yet another important piece of land for the integrity of Baiting Brook. It offers flood control and habitat.

T26- Sundial Place
This 2.475-acre conservation parcel abuts a few houses as well as the proposed path for the Bruce Freeman Rail Trail. Although CSX still owns the right of way, and design of the trail has not begun yet, it is important to keep connectivity like this in mind for the future.

T27- Lillian Road Extension
Except for access via a sewer easement, this 2.6-acre parcel is heavily overgrown. As a result, this parcel is yet another piece of land that would benefit by being left untouched as natural habitat.

T28- Sucker Pond
Although Sucker Pond is a conservation parcel, there is an abutting ball field that is maintained by Parks and Recreation. It would be advantageous have proper boundary signage indicating that part of this 10-acre site is a conservation parcel. Framingham Conservation should also review the boundary to ensure that there are no encroachments from the abutting private properties.

T29- Main Street Cemetery
The entirety of this 4-acre parcel is maintained by Parks and Recreation, although it is listed by the City Assessor as a Conservation parcel. While Parks and Recreation manages the landscaping and maintenance of the cemetery, there are numerous wetland resources areas on and around the parcel that should be monitored by the Crew for debris and litter associated with the abutting Interstate-90.

T30- Union Avenue Terrace
These parcels totaling just under one acre don't offer much opportunity for recreation, but provide flood control and undisturbed open space. One issue with these parcels is the Knotweed infestation, which could be curbed by efforts from the seasonal Conservation crew.

T31- Circle Drive
The 2.66-acre Circle Drive Parcel sits along the Sudbury River and serves to protect a water resource. While this parcel should remain untouched, it and others that abut a resource area should be monitored for dumping and encroachments.

T32- Walnut Street
This is a very wet area comprised of one 1.89-acre parcel listed under Conservation jurisdiction. However, given that there are stream channels running through the area, it would be wise for Framingham Conservation to review ownership of the adjacent parcels; if the parcels are in fact not protected then they certainly should be considered for protection.

T33- Mt. Wayte
This area is made up of eight small and wet parcels, which should be grouped together as conservation land. They are currently listed as a City-owned tax title but most certainly serve as conservation land.

T34- Prindiville Avenue
These parcels totaling just over ½ an acre provides protection to the northern bank of Gleason Pond. There is also an informational kiosk here along with bat boxes that were installed for an Eagle Scout project. It appears that private properties abut the portion of the bank that isn't owned by Framingham Conservation. This area should be monitored for encroachments.

T36- Bishop Street
The Bishop Street parcel is important due to its relationship with Arthur-Morency Woods, a primary conservation parcel. It is fairly inundated with water and connects two highly channelized streams that pass between the Bishop Gardens Condominiums and the Wilson Gardens Apartments before passing through Author-Morency Woods Reservation, making this an ecologically valuable tertiary parcel. However, the standing water here has presented problems over the years. We understand from the City that Middlesex County Mosquito Control frequently cleans the stream channel of debris in order to alleviate standing water, although they have not conducted the same services in the interior marsh.

T37- Travis Drive
These two parcels totaling 14.7 acres offer a unique connection to the Town of Ashland. The parcels are identified in old Town Annual Reports as the Framingham Town Forest. Framingham Conservation should analyze the contours and terrain of this parcel to determine if constructing a trail is feasible. If it is, this parcel would offer a great connection to Cowassock Woods (owned by the Sudbury Valley Trustees) which then connects to Ashland Town Forest. At first, this parcel seemed to be owned by the Board of Selectmen. The property was transferred to Conservation from the Board of Selectmen in 1981.

T38- Flannagan Drive
A long and skinny piece of land, this approximately ¼-acre parcel sits in between Flannagan Drive and Tally Ho Lane. As it stands, it is a very small parcel surrounded by many houses; aside from a trail connection between neighborhoods its best purpose would be for the conservation of natural land.

T39- Goodnow Lane
The .142-acre Goodnow Lane parcel is situated at the intersection of Route 9 and I-90. Because of its location, it could offer habitat to animals that are displaced due to the amount of highway traffic. It is currently listed as being owned by the Board of Selectmen for conservation purposes, however full transfer to the Conservation Commission would be appropriate.

T40- Worcester Road
This parcel is a very small strip of land on the westbound side of Route 9, and abutting Oakcrest Drive. It is currently owned by the City.

The tertiary parcels described above may not individually make up as much area as the aforementioned primary or secondary parcels, but their ecologic and hydrologic values are just as significant. This significance is magnified by the fact that a majority of these tertiary parcels comprise the only open space in densely developed areas of Framingham. Many of these parcels are made up of wetland resource areas that contribute to important functions and values including but not limited to flood control, groundwater recharge, and pollution prevention. Maintaining these small parcels in a naturalized state is not only beneficial to the diversity of land use in the City, but also to the citizens that inhabit the adjacent neighborhoods.

2.5 Level of Protection – Article 97 Status

Beals and Thomas, Inc. conducted an evaluation of the Conservation Parcel Inventory with respect to Article 97 of the Amendments to the Constitution of the Commonwealth of Massachusetts (Article 97). The evaluation consisted of a review of available deeds for language designating the parcels for conservation purposes, as well as a review of City files for historic Town Meeting votes[12] designating the Conservation Commission as the controlling authority for the parcels. For the purposes of our analysis, we made the following assumptions:

- Parcels controlled by the Conservation Commission whose deed contains language designating the land for conservation purposes prior to the adoption of Article 97 are adequately protected.
- Parcels that are designated for conservation purposes in the deed but are not explicitly under the control of the Conservation Commission, either in the deed or by subsequent Town Meeting vote, are adequately protected.

Of the 122 assessors' parcels that comprise the 57 properties in the Conservation Parcel Inventory, approximately 35 had adequate protection in the deed.

- 42 parcels were under the control of the Conservation Commission via a Town Meeting vote or other means, but had no protection in the deed. We recommend obtaining a legal opinion confirming that the Town Meeting votes provide sufficient written dedication such that these parcels are protected under Article 97.
- 17 parcels had no protection under Article 97. We recommend transferring these parcels to the Conservation Commission via a Town Meeting vote or other means designating these parcels for conservation purposes.
- 26 parcels had no available deed information, and were unable to be fully evaluated with respect to Article 97. We recommend a title search be conducted for these properties and a subsequent evaluation be conducted.

[12] Framingham was governed by a Board of Selectmen and a representative Town Meeting until incorporated as a City on January 1, 2018. Documents referenced herein that predate this incorporation maintain language referring to the Town of Framingham.

The ruling in a case of the Massachusetts Supreme Judicial Court, *Virginia B. Smith & others vs. City of Westfield & another* (SJC-12243), may change the assumptions outlined in this inventory. Around 2010, the City of Westfield proposed to take a 1.37 acre portion of the Cross Street Playground property for a new school on Ashley Street. The playground property had been taken for tax purposes, but had been in recreational use since the 1940s, and the City used federal funds to make improvements to the playground in 1979. Residents of the City started legal proceedings in 2012 on the basis that the playground was protected under Article 97, and thus required a 2/3 vote of the Massachusetts legislature before the change in use could go into effect. While the initial Court issued a preliminary injunction in 2012 prohibiting construction of the school until the City complied with Article 97, the Superior Court and Appeals Court both ruled that the playground was not protected by Article 97, largely due to the fact that there was no recorded restriction designating the property for conservation use. In September 2016, the Attorney General's office urged the Supreme Judicial Court (SJC) to consider the case. The SJC then solicited amicus briefs in February 2017. A number of conservation organizations, including Massachusetts Audubon Society, the Association to Preserve Cape Cod, and the Massachusetts Association of Conservation Commissions, filed briefs in March 2017. Arguments against the decision included ongoing conservation use and receipt of federal funds also establish properties as protected under Article 97, a recording requirement placed undue burden on municipalities. The SJC ruled in October 2017 that a recorded restriction is not the sole factor determining Article 97 protection where public land had been designated or dedicated for a purpose consistent with Article 97. Such dedication must be made before the public, orally or in writing. This may be accomplished by a vote of local legislature, accompanied by transfer of property control to the appropriate municipal entity.

Refer to the attached Article 97 Evaluation in Appendix B.

3.0 SIGNAGE AND BRANDING

3.1 Existing Signage/Conditions

The existing signage conditions varies across the conservation areas, as indicated in the table below:

Table 2: Existing Signage for Primary and Secondary Parcels

ID	PROPERTY NAME	SIGNAGE	KIOSK	TRAIL MARKERS	MAP BOX
P1	Wittenborg Woods Reservation	x		x	x
P2	Macomber Reservation	x	x	x	x
P3	Arthur-Morency Woods			x	
P4	Cochituate Brook Reservation	x	x		
P5	Carol Getchell Nature Trail	x			x
P6	Cedar Woods				
P7	Nobscot Park	x			
S1	Grove Street Conservation Parcels				
S2	Sudbury River Oxbow Reservation				
S3	Spring Lane			x	
S4	Old Wood/Old Worcester Road				
S5	Edmands-Mohawk Property				

A few of the parcels have signage and trail markers whereas others have no signage or signs in poor condition:

- *Wittenborg Woods* has a sign with the parcel name, but lacks an informational kiosk that could provide visitors with directions or rules. Trail markers are present but vague at intersections. A map box is present, but when observed, was empty.
- *Macomber* also has a distinct sign with the parcel name as well as a kiosk. Trails are marked but are marked with paint and appears to be vague at times. Macomber's map box was also empty when observed.
- *Arthur-Morency Woods* does not have a sign with a parcel name nor a kiosk. Trail markers are occasional but should be more consistent. A map box was not found at Arthur-Morency Woods.
- *Cochituate Brook Reservation* has a sign with the parcel name and a kiosk at the entrance along the Cochituate Rail Trail. At this parcel, there are no trail markers and no trail map box.
- *Carol Getchell Nature Trail* has a sign present with the parcel name, however, it is in poor condition. There is no kiosk sign or trail markers, but an empty trail map box is present.
- *Cedar Woods* has no parcel signage, no kiosk, no trail markers and no trail map box.

- *Sudbury Oxbow* there is no signage for the parcel, no kiosk, trail markers or trail map box.
- *Spring Lane* does not have a parcel signage, kiosk or trail map box. The trails at Spring Lane are marked, but the paint marks are vague.
- *Edmands Road Parcels* there is no signage for the parcel or a kiosk. The trails have no markers and a map box is not present.

All the parcels mentioned could use boundary markers. Some of them have none, where others have very few. These would be useful to delineate the parcel boundaries to inform visitors, as well as abutting property owners, the line between public and private properties. Additional information regarding existing conditions and specific recommendations for delineation of the boundaries of the primary and secondary parcels can be found above in sections 2.4.1 and 2.4.2, respectively.

The locations that currently have map boxes have the maps placed in zip lock bags. A better alternative would be to utilize a map box that has a seal as well as a clear front to keep moisture out and discourage the colonization of bugs. Additionally, the current kiosks have Plexiglas display areas yet still appear to have an earwig problem. A better design for the kiosks may help eliminate this bug problem.



Existing Trail Markers

The current trail marking conditions are not consistent and at some trails they are painted but appear vague and questionable. Some trail marking recommendations - dots on trees in some cases such as Spring Lane or switch out all the existing markers to be something that can be attached to a tree and be of the same colors throughout the city parcels.

At the Spring Lane Parcel, the existing trail markers are barely visible. The paint markings are vague and not consistent with the other parcels throughout Framingham.



Recommended alternatives for the trail markers could be colorful markers with a graphic that can relate to all the parcels and made from a material that will hold up against the outdoor elements. These markers can be attached to wooden posts or on trees where they can be visible to visitors.

3.2 Research for Branding

The use of a consistent logo symbol throughout is desired – such as a Red Winged Black Bird, King Fisher, leaf symbol or cat tail. A simple element that was common to Framingham in general and could be used interchangeably between the logo, trail markers and signs.

Trailhead/Welcome Signage:
The consensus was to use a consistent, simple sign at all parcels, which would include similar colors, logos, graphics and font-types. Currently, the existing signs use different bird graphics. They would like to use a single common symbol, such as a Red Winged Black Bird, King Fisher, leaf, cat tail, or other such animal/plant – or a combination of them. The idea is to keep consistency throughout every Conservation parcel, beginning with the welcome sign.

As for sign material, the thought is to use a composite plastic/aluminum sign, which can easily be reproduced. The signs can be mounted on 4x4 pressure treated wooden posts, which are easy to maintain and/or replace by summer employees or volunteer groups.

Kiosk Signage
The overall design should be consistent with the same graphics, colors, fonts, etc. as the welcome signage. It should be updateable, and sturdy to hold up against the outside elements. The idea is to include general parcel information, such as open hours, basic rules/regulations, contact information and a simple trail map that shows any existing trails, picnic areas, points of interest, etc.

Kiosks should be located near a trail entrance, parking area or other point where it will be easily accessible and noticed.

- Design and constructability:
    - Wood versus metal kiosks: consensus was that metal ones would have to be pre-fabricated, and would most likely be very costly. As a result, the consensus was to use pressure treated wood for the kiosk materials.
    - Kiosks should include a roof. Roof design should be simple, yet large enough to give some cover to the signs/people looking at the signs, but small enough not to be overwhelming.
    - Kiosk should be simple to construct so that volunteer groups, such as Boy Scouts, can easily build them. In consultation with City staff, the overall consensus was to have a single-sided, dual compartment kiosk design. It includes a fixed Plexiglas front with a hinged back panel that locks. Scouts built these, making them simple enough for volunteer and/or summer workers to construct.





- The kiosks should include other informational signs (site-specific ones, such as warnings about poison ivy, etc. or even interpretive/educational information about the parcel/area). Instead of posting signs all over the site, post them in the second compartment next to the trail map sign, as mentioned earlier.
- There should be map boxes attached to the kiosks, and mounted in a manner that resists tampering and vandalism. One idea was to use metal mailboxes, as they are relatively low-cost and can be purchased at any hardware or home improvement store for easy maintenance/replacement.

Trail Markers

Currently there are a few different types of trail markers, including wooden directional signs, spray-paint on trees, and various nailed-on markers to trees. The problem is that they are not consistent or easy to read. Also the City cannot get any more of the colored arrow markers that they were using, as they do not know who supplied them or manufactured them.

The City want a tree-mounted marker – not post mounted markers or additional signs. The idea is to, once again, maintain consistency throughout the sites. The City would like to use a marker that incorporates the same logo/graphic symbol as are on the signs (such as a leaf, a bird, or Framingham Conservation Commission logo), but it would need to be able to be rotated. For instance, a leaf symbol might work well, as you can rotate it, and it does not change its readability or become "upside-down".

B+T commented that the markers should be color coded or numbered to correspond to the trail map – that make it simple for visitors/hikers to locate themselves and know which trail they are on. It is not important to categorize by trail class, but rather by location and/or connectivity to other regional trails. This should be easily discernable by recognizing a marker and being able to correspond it to the trail map they have in their hand or that they see on the kiosk trail map.

Neighborhood Scale Wayfinding
It was discussed that perhaps a unified, easily recognizable system should be incorporated at the neighborhood or street level, that will help people locate and access Framingham Conservation parcels. A few ideas included post-markers located along regional trails (similar to what the Town of Wayland uses). At the street level, to help motorists find park/parcel entrances and parking areas, a small street sign that includes the same graphic/logo that is used throughout the sites can guide them.

3.3 Signage Design, Recommendations and Graphics

Trailhead Signs: Current signs only have the park/trail name, and no other information. At the Cochituate Rail Trail, there is an existing kiosk. However, it is empty. New trailhead/welcome signage has been designed and includes unifying graphics, colors, and fonts to match other trail signage, trail markers and brochures. The kiosk structure will be wooden with a plexiglass front that is hinged from the top and propped open to allow for easy switching out displays. The backside of these kiosk structures will also have a plexiglass front if the location of the kiosk is placed in an area where both sides are easily accessible. “A good trail head sign should have an address, a map, mileage markers, and directional wayfinding. It should also be 311/911 identifiable. Trailheads should be at prominent easy to find places with parking and/or transit.” (from https://jonesfallstrail.us/2015/10/01/improving-the-jones-falls-trails-signage/).

Map Boxes: Map boxes can be found at sites such as the Carol Getchell Nature Trail, Arthur Morency Woods and Wittenborg Woods. They are made of wood, and most say “Maps” on the outside. However, most boxes are in disrepair. They are falling apart and/or rotted – as wood tends to do over time. We recommend replacing the existing map boxes with a more durable material. An easy and cost effective solution could be to use metal mailboxes or a heavy duty plastic for the map boxes. The color of these new boxes will be a hunter green plastic version that is similar in style to the original wooden boxes with the color matching the green on the maps and kiosk signs. The new boxes have a clear plexiglass front that slides into a groove. Two slots within the boxes would be large enough to hold regular 3 or 4 panel brochures or maps that measure 8.5” tall by about 4” wide. Although researched, pre-fabricated boxes meeting the specifications desired to not appear to be readily available, and as a result, custom wooden boxes may need to be constructed to accommodate the maps as desired. Map boxes should be located at the trailheads, on the kiosks.

Wayfinding and Trail Markers: Existing trail markers are difficult to read, broken or even non-existent. Most are on trees, which means that they tree will eventually overgrow the marker. Spray-painted markers fade or get overgrown as well. New trail-markers and wayfinding signs should be stand-alone, and easily identifiable. For instance, trails and the corresponding trail-markers should be color coded. The markers should be able to easily be interpreted through use of clearly marked and color-coded arrows. Essential elements for a successful wayfinding system include the following:

- Entrances, Exit and Gateway Signage – Identification of where to enter and exit a trail or route so that travelers know their position relative to accessing and leaving a byway or other route.
- Repetitive Route Markers – A sequence of visual cues for visitors to follow along a trail or other route.
- Direction Signage to Planned Destinations – Signs that alert and guide visitors to featured attractions (such as interpretive signage, historical/cultural features, scenic overlooks, etc.) along or near the trail.
- A Portable Map – A carry-along map of the trail/park and its various attractions and amenities.

The City envisions these new markers as being thin metal medallions in a few colors, red, yellow, green and blue with a black outline of the Conservation Commission logo or a version of it printed on them. Arrow medallions would also be used and nailed up underneath the logo ones to designate trail direction.

Wayfinding from Roadways: Wayfinding signage is needed at the street level, to help motorists, cyclists and pedestrians find the different parks and trails. There is an existing wayfinding sign located at the Macomber Estate, but only marks the entrance to the site. There is no other signage located along the local streets to guide visitors to the site. New wayfinding signage should be installed at a regional scale, along local access roads/corridors. The signage should be graphically unified with the Framingham Conservation Commission's overall signage for the parcels. For instance, it should use the same logo, colors, fonts and directional arrows as the trailhead kiosks, brochures and other marketing material so that it is easily identified as "Conservation Land". The signs should be located in areas that are readily visible to drivers, cyclists and pedestrians. They should be located along major routes/streets, and be located to give drivers proper advanced warning. They should be overall designed as "Point of Interest" signs, to alert visitors that there is a park/trail/conservation parcel open to the public, and direct them how to travel to that site.

Interpretive Signage: Many of the parcels have unique cultural and historical features that should be highlighted and shown in the way of interpretive signage. This interpretive signage should give information about any historical, cultural or scenic features that are found on each of the parcels. The signs should be easy to read and interpret, and located in obvious locations along the trail or at the trailhead.

Design of Interpretive Signs
The following are guidelines to be considered when designing new interpretive signage. As with other features to be implemented, consistency would be key, including fonts, colors and overall design, which upon becoming accustomed to a specific design "language", gives a viewer quick and easy recognition that a subsequently viewed sign is related to others previously observed.

Text: Must be an appropriate reading level--usually between a 7th and 9th grade level. Use short sentences and paragraphs. Keep text blocks short. Avoid using jargon or technical terms. Use upper and lower case text, not just uppercase. Should be vivid language using active verbs; however, do not overload the reader with information.

Design and layout: Do not crowd text and graphics. Avoid distractions such as busy backgrounds, illegible type, too dark or bright colors, etc. Use colors and images that attract audience. Limit colors to dominate, subordinate, and accent colors. Use type styles and sizes that are easy to read. Do not use more than three different types. Serif fonts can be easier to read, especially in longer text blocks. Mount at appropriate height and angle for comfortable viewing, keeping in mind those with disabilities.

Location: Answer the following questions to determine the best location for a sign. What is the relationship between the sign and the subject it is interpreting? What is the potential for vandalism? How accessible is the sign, particularly for those with disabilities? Where is the location that gets the most traffic? Who will maintain the sign?

4.0 TRAIL MAPS/BROCHURES

4.1 Parcel Trail Map/Brochures

Public trails maps have been generated that depict existing trails located within City-owned properties. These maps are 8½ by 11 inches and designed to be included in a threefold pamphlet that also includes general information about the property and its trails. These pamphlets may be distributed at the Park and Recreation office, Conservation Commission office, Public Library, or other City offices, and placed in the kiosks to be located at each trail property. These maps were also designed to be easily upgraded by the City. The maps were generated using ArcMap 10.4.1 and the electronic data provided to the City from Beals and Thomas, Inc. as well as field data collected as part of the Conservation Master Plan.

The brochures are formatted to give general information about the parcel and its trails, including trail classification, trail use guidelines, parking and access information and contact information for the Framingham Conservation Commission – so that visitors can report any problems or ask questions. A trail map is also included on the back of the brochure, as mentioned above.

These brochures were developed using Adobe Creative Suite software, and can easily be updated using these programs. They can also be reproduced and modified for future parcels that become developed for public use.

Along with the brochure-style trail maps intended for distribution to the public, Beals and Thomas, Inc., has also created maintenance maps for the primary and secondary parcels. These 8½ by 11-inch maps include parcel boundaries, trails, and any issues observed including but not limited to downed trees, broken bridges, overgrown sections of trail, invasive plants, and dumping. These can ideally be utilized by the summer land management crew as a way to develop an effective approach to improving the parcels.

5.0 MAINTENANCE PLAN

5.1 Priorities

Maintenance priorities are based on the relative importance of the trail within the scope of the entire network. The relative level of importance is determined by the amount of use the trail receives, its accessibility, and the use/mobility requirements for that trail. Maintenance priority has been assigned to trails based on their designated Trail Class under the Maintenance Standards. By simplifying prioritization and aligning it with class, the authority charged with maintenance will not be referring to multiple parameters for trail maintenance. During future trail master planning, should the need arise to increase maintenance of a particular trail; this will be easily achieved by upgrading the trail to a higher class.

5.1.1 Friends of Framingham Trails

A "Friends of Framingham Trails" group could be formed to give citizens a vehicle for expressing their ideas and concerns relating to trails matters. It would be comprised of volunteer individuals and would solicit involvement from a variety of interested Framingham groups of the following types: general service, civic, fraternal, educational (including schools), youth, and religious. We envision the "Friends" group as being open to any interested citizen and to be primarily a consulting body that keeps Framingham Conservation connected to its constituency. Participation in the "Friends" group would not confer any policy or decision-making authority, as that would necessarily rest with the Conservation Commission and the Open Space and Conservation Division staff.

5.1.2 Potential Volunteer Resources

Volunteer resources will be critical to supporting trail stewardship that is community supported and within the means of the City's financial resources. Volunteers play an active role in many private non-profit trail organizations, such as the Appalachian Mountain Club, and in performing stewardship for local municipalities. Volunteers participate in order to be involved with their community, contribute to the recreational facilities that they use, and enjoy the outdoors. Volunteers may have extensive skills that are conducive to trail maintenance and stewardship, such as carpentry, woodworking, engineering, orienteering, cartography, forestry, or other skills. In order to seek out volunteers, especially some who may already have trail maintenance skills that they would be willing to share, the stewardship plan should utilize several sources for potential volunteers.

5.1.2.1 Trail Construction and Maintenance Funding Sources

With general increases in population, infrastructure needs and costs, and increased competition for funding, Massachusetts' municipalities are under greater pressure to develop local financing mechanisms and programs in order to maintain and expand trail systems. Local governments need to become more innovative, act locally, develop new revenue streams, and increase their share of local revenue contributions to build and maintain public facilities. Additionally, some municipalities have developed other programs to provide dedicated and specific funds. Examples of these programs include those towns and cities that maintain trails with funds appropriated to a municipal department that oversees trail maintenance.

Potential funding sources will be challenging to develop into consistent revenue and should be considered part of pursuing a City-wide trail system funding strategy.

As a City within the metropolitan Boston region, Framingham has an opportunity to form partnerships with other regional entities such as The Trustees of Reservations, as well as state agencies such as the Department of Conservation and Recreation (DCR). Partnerships and shared trail maintenance responsibilities could increase the likelihood of success by providing several funding sources that are administered by these partner groups.

The following is a list of potential funding sources for trail projects within Framingham:

Massachusetts Department of Conservation and Recreation (DCR), Recreational Trails Program

The DCR Recreational Trails Program in partnership with the Massachusetts Recreational Trails Advisory Board and the Executive Office of Transportation (EOT) provides funding on a reimbursement basis for a variety of trail protection, construction, and stewardship projects. Recreational Trails grants are 80-20 challenge grants where 80% of the project costs are reimbursed to grantees, but at least 20% of the total project value must come from other sources. Program legislation requires that portions of funds be reserved for different types of projects. The Recreational Trails program also requires that projects be primarily recreation, rather than transportation-oriented, and gives priority to projects creating or facilitating physical, on-the-ground trail improvements, which protect or enhance the site's natural and cultural resources, and link individuals and communities to these resources.

DCR, Greenways and Trails Program
DCR provides small grants and technical assistance to municipalities, non-profits and regional planning agencies to support trail user education programs, such as sustainable and accessible design workshops, for both non-motorized and motorized trail users greenway and trail networks throughout Massachusetts.

Massachusetts Executive Office of Housing and Economic Development, MassWorks Infrastructure Program
This program was consolidated from several other state grant programs, including the Public Works for Economic Development (PWED) program. It funds infrastructure to support economic development and job creation, including projects consistent with regional land use and development plans.

New England Mountain Bike Association (NEMBA) Trail Maintenance Grants
NEMBA awards individual grants of $100 to $500 to mountain bikers and trail stewardship partners to perform trail projects on public land around New England where mountain biking is allowed. Preference is given to projects that build or improve trails, but all projects will be considered.

Massachusetts Division of Conservation Services (DCS), Local Acquisitions for Natural Diversity (LAND) Program
The LAND Program, formerly the Self Help Program, provides municipal Conservation Commissions with reimbursement funding for the acquisition of land or a conservation restriction, as well as for limited associated acquisition costs. Lands acquired may include forests, fields, wetlands, wildlife habitat, unique natural, historic or cultural resources, and some farmland. Access by the general public is required. Appropriate passive outdoor recreational uses such as hiking, fishing, hunting, cross-country skiing, and bird watching are encouraged.

DCS, Parkland Acquisitions and Renovations for Communities (PARC)
The PARC Program (formerly the Urban Self-Help Program) was established in 1977 to assist cities and towns in acquiring and developing land for park and outdoor recreation purposes. Any town with a population of 35,000 or more year-round residents, or any city regardless of size, that has an authorized park /recreation commission is eligible to participate in the program. Communities that do not meet the population criteria listed above may still qualify under the "small town," "regional," or "statewide" project provisions of the program. Only projects that are to be developed for suitable outdoor recreation purposes, whether active or passive in nature, shall be considered for funding.

Grants are available for the acquisition of land and the construction, or renovation of park and outdoor recreation facilities. Access by the general public is required.

DCS, Land and Water Conservation Fund
The federal Land and Water Conservation Fund provides up to 50% of the total project cost for municipalities, special districts, and state agencies to acquire, develop and renovate park, recreation or conservation areas. DCS oversees this grant program in Massachusetts.

National Park Service, Rivers, Trails and Conservation Assistance Program (RTCA)
The RTCA is a community assistance program sponsored by the National Park Service whose mission is to help citizens and community leaders plan and advance locally-led conservation projects. RTCA does not give financial grants or loans, but can provide a National Park Service employee to help organize, strategize, build public participation, and help implement a project. Projects can include protecting waterways from pollution and misuse, converting old railways into trails, maintaining greenways to connect neighborhoods and beautify towns, introducing greenery to urban areas, planning and constructing trails, and beautifying open spaces.

Massachusetts Department of Transportation (MassDOT), Transportation Alternatives Program
The Transportation Alternatives Program was established by the federal Moving Ahead for Progress in the 21st Century Act, replacing funding previously provided by the Transportation Enhancement program and the Safe Routes To School program. Eligible activities for funding include construction, planning, and design of on-road and off-road trail facilities for pedestrians, bicyclists and other non-motorized forms of transportation.

American Hiking Society (AHS), National Trails Fund (NTF)
Created in 1998, the NTF is the only privately-supported national grants program that provides funding to grassroots organizations working to establish, protect, and maintain foot trails in America. To date, the AHS has granted more than $679,000 to 209 trail projects across the country for land acquisition, constituency-building campaigns, and traditional trail work projects. Only AHS Alliance Members and 501(c)(3) non-profit organizations are eligible to receive funding, but a partnership or use of a fiscal agent may allow the City to apply.

The Conservation Alliance
The Conservation Alliance was founded to fund grassroots conservation organizations and their efforts to protect rivers, trails, and wild lands for muscle-powered outdoor recreation. The Conservation Alliance has awarded $17,445,059 in grants since its formation in 1989. Grants are only awarded to 501(c)(3) non-profit organizations.

American Trails Organization
The American Trails Organization is a comprehensive resource for information on fundraising, grant acquisition, researching lending sources, establishing youth programs, federal assistance, and community involvement.

Recreational Equipment Inc. (REI)
Annually, REI dedicates a portion of its operating profits to help protect and restore the environment, increase access to outdoor activities, and encourage involvement in responsible outdoor recreation. REI store teams can nominate select non-profits to receive funding or gear donations. Each store also organizes local volunteer stewardship projects dedicated to restoring and improving areas in which outdoor recreation is enjoyed.

T.J. Maxx
T.J. Maxx has developed community programs with many organizations through their TJX Foundation with a variety of support options including a combination of sponsorships, product donations, associate volunteerism and others.

Genzyme
Sanofi Genzyme has a Community Relations group that makes contributions to non-profit organizations focused on science education, access to health care, and other community needs in areas of the U.S. where Sanofi Genzyme has a business presence. Organizations can also request employee volunteers for one-time events or regular, on-going activities.

MathWorks
The MathWorks Community Grant Program provides grants to nonprofit organizations that can demonstrate tax-exempt status to support the vitality of the communities in which they are located, with conservation as one of their major initiatives for community support.

Foundation for MetroWest
The Foundation for MetroWest is a community foundation that connects donors and nonprofits to address local need. They offer grants to non-profit organizations by invitation only, related to protecting and enhancing natural resources, as well as youth development.

MetroWest Chamber of Commerce
The MetroWest Chamber of Commerce posts volunteer opportunities to connect member businesses and their employees to initiatives that support a wide variety of non-profit causes and activities throughout the MetroWest region.

PeopleForBikes, Community Grant Program
PeopleForBikes offers grants to non-profit organizations with a focus on bicycling, active transportation, or community development to fund engineering and design work, construction costs including materials, labor, and equipment rental, and reasonable volunteer support costs for bicycle infrastructure projects.

Fields Pond Foundation, Inc.
The Field Ponds Foundation, Inc. offers grants for trailmaking and other enhancement of public access to conservation lands and natural resources, land acquisition and conservation, establishment of endowments as a means of funding stewardship of newly-protected conservation areas, and directly-related education programs and publications as components of a land protection project. They encourage proposals from municipal government agencies.

Rails to Trails Conservancy, Doppelt Family Trail Development Fund
The Rails to Trails Conservancy offers grants to members of their Trail Expert Network to advance development of multi-use trails, help establish corridor connections or improve current conditions on multi-use trails.

Appendices

Appendix A

Citywide Trails Map

FRAMINGHAM
MASSACHUSETTS
Citywide Trails Map

N
W E
S

Bruce Freeman Rail Trail (proposed)

Weston Aqueduct

Hultman Aqueduct

Cochituate Rail Trail

Cochituate Rail Trail (proposed future section)

Bay Circuit Trail

Upper Charles Trail

MARLBOROUGH
SOUTHBOROUGH
WAYLAND
SUDBURY
SOUTHBOROUGH
ASHLAND
HOPKINTON
ASHLAND
NATICK
SHERBORN

Edgell Road
Elm Street
Water Street
School Street
Belknap Road
Central Street
Concord Street
Old Connecticut Path
Speen Street
Cochituate Road
Pleasant Street
Massachusetts Turnpike
Worcester Road
Ramp-Rt 9 WB to Rt 9
Main Street
Winter Street
Union Avenue
Hartford Street
Waverly Street
Beaver Street
Kendall Avenue
Hollis Street

- Potential Regional Trails
- Existing Regional Trails
- Existing Conservation Commission Trails - B+T
- Other Existing Local Trails
- Open Water
- Conservation Commission Parcels
- Other Open Space Parcels
- Town Line

Assorted surface features, regulatory limit lines, and imagery provided by the Office of Geographic and Environmental Information (MassGIS), Commonwealth of Massachusetts Executive Office of Energy and Environmental Affairs

Appendix B

Article 97 Evaluation

13-Feb-17

ID		File Name	Deed Book	Deed Page	St #	Street Name	Assessor's #	Acres	Condition	Potential	Zoning	Current Use	Type of grant	Public Access?	Degree of protection based on OSRP	Degree of protection based on document review	Priority Protection from OSRP	Article 97 Recommendations	Notes
P1	P	Wittenborg Woods	L.C. 1205	14	55	Wayside Inn Rd	414-1-39	83.73	Excellent	Passive rec.	R-4	Natural state	N/A	Yes	ConCom G.L.c.40, sec. 8C; Art.97	Conservation Commission owned; G.L.c.40, sec. 8C; Subject to Conservation Restriction to DCR (Book 30174 Page 59); Town meeting vote 4/28/1998 acquire for conservation purposes	Conservation (Commission) Lands with Trails, Map 10 Code: U	Adequate Article 97 protection	
			L.C. 1473	11	99	Wayside Inn Rd	414-1-1	12.87								Conservation Commission owned; G.L.c.40, sec. 8C; for "administration, control and maintenance"		Confirm Town meeting vote	Not included on Town sketch, Conservation GIS layer, or OSRP Inventory - 2015 aquisition
			L.C. 1231	115	43	Wayside Inn Rd	414-1-38	3.00								Conservation Commission owned; G.L.c.40, sec. 8C; for "administration, control and maintenance"		Confirm Town meeting vote	Not included on Town sketch - separate from Wittenborg Woods?
P2	P	Macomber	12343	583	18	Badger Rd	447-2-3	6.50	Excellent	Passive rec.	R-4	Natural state	Land & Water	Yes	ConCom G.L.c.40, sec. 8C; Art.97	Town owned; taking for conervation purposes	Conservation Lands with Trails, Map 10 Code: Y	Confirm Town meeting vote	
					26	Badger Rd	447-2-2	51.32											
	N		12552	494	0	Hickory Hill Lane	758-1-C	0.03				Reclaim this access	N/A		Town Owned	Town owned		No Article 97 protection	Not included on Town sketch
P3	N	Morency	2331	538	229	Arthur St	85A-1-37	7.00			G					Town owned		No Article 97 protection	Not included on OSRP Inventory, or Conservation GIS layer; included on Town sketch
	M		2014	16	62	Morency St NATICK	39-32B	1.19										Locate deed	
	C		2331	538	67	Morency St NATICK	39-32A	14.50	Excellent	Passive rec.	RSA	Natural state	N/A	Yes		Town owned; Town meeting vote 9/17/2003 transferred to Conservation Commisison for conservation purposes	Conservation Lands with Trails, Map 10 Code: Z	Deed language needed	Not included on Conservation GIS layer; included on OSRP Inventory
P4	P	Cochituate Brook Res	10591	348	0	Speen St, Off	311-235-7	0.70	Excellent	Passive rec.	M	Natural state	N/A	Yes	Town Owned - Conservation Commission	Conservation Commission owned; G.L.c.40, sec. 8C; for promotion and development of natural resources	Conservation Lands with Trails, Map 10 Code: W	Confirm Town meeting vote	Not included on Town sketch
					619	Old Conn Path	312-236-14	26.70			R-1								
P5	P	Carol Getchell	14454	531	81	Little Farms Rd	293-184-22	1.90	Excellent	Scenic view	R-3	Natural state	N/A	Yes	ConCom G.L.c.40, sec. 8C; Art.97	Town owned; passive recreation, protecting natural resources and watershed	Conservation Lands with Trails, Map 10 Code: X	Confirm Town meeting vote	
	N				0	Little Farms Rd, end	293-184-23	1.30							Town Owned		Conservation Lands with Trails, Map 10 Code: X	No Article 97 protection	Cannot identify--not in current assessors data
	M		L.C. 604	125		Danforth St	301-208-798	1.933										Locate deed	Not included on OSRP Inventory, or Conservation GIS layer; included on Town sketch
	C		L.C. 1233	159	1	Sudbury Landing	301-208-931*	3.3							Town Owned Tax Title	Town owned; tax title; Town meeting vote 10/28/2008 transferred to Conservation Commisison for conservation purposes		Deed language needed	
P6	C	Cedar Woods	12118	233	117R	Cedar St.	139-289-101	4.61	Fair	Scenic view	G	Natural needs clean	N/A	Limited	Town Owned	Town owned; taken for school purposes; Town meeting vote 10/5/1994 transferred to Conservation Commisison for conservation purposes		Confirm ownership of paper streets, deed language needed	
	M		0	0	0	Cedar St	138-286-9B	1.98								Town meeting vote 10/5/1994 transferred to Conservation Commisison for conservation purposes		Locate deed, confirm ownership of paper streets	
	C		12088	660	32	Cypress St.	140-290-31	6.20						Yes		Town owned; taken for school purposes; Town meeting vote 10/5/1994 transferred to Conservation Commisison for conservation purposes		Confirm ownership of paper streets, deed language needed	
	M		0	0	0	Mellen St, off	138-286-10	1.25								Town meeting vote 10/5/1994 transferred to Conservation Commisison for conservation purposes		Locate deed, confirm ownership of paper streets	
	C		12135	60	0	Waverly St	138-286-8A	0.39						Limited		Town owned; taken for school purposes; Town meeting vote 10/5/1994 transferred to Conservation Commisison for conservation purposes		Confirm ownership of paper streets, deed language needed	
			12118	221	618	Waverly St, RR	138-286-8B	1.40								Town owned; taken for school purposes; Town meeting vote 10/5/1994 transferred to Conservation Commisison for conservation purposes		Confirm ownership of paper streets, deed language needed	Not included on Conservation GIS layer; included on OSRP Inventory
P7	C	Nobscot Park	6582	209	0	Edgell Rd, off	371-120-34A	0.43	Excellent	Passive rec.	R-4	Natural state	N/A	Yes	Town Owned	Town owned; Town meeting vote 4/16/1996 transferred to Conservation Commisison for conservation purposes		Deed language needed	
	N?		11930	562	850	Edgell Road	372-120-34	3.233								Park Commisioners owned; G.L.c.45 sec 14; taking for recreational use		Determine Conservation Commission control, and alternate regulatory protection	Not included on OSRP Inventory, or Conservation GIS layer; included on Town sketch
	M		0	0	840	Edgell Road	371-120-13	1.05							Board of Selectmen owned	Town meeting vote 4/16/1996 transferred to Conservation Commisison for conservation purposes	Conservation (Commission) Lands with Trails, Map 10 Code: V	Locate deed	
S1	M	Grove Street Conservation Parcels	0	0	0	Grove St	359-3-22	0.57	Excellent	Passive rec.	R-4	Natural state	N/A	Limited	Town Owned - Conservation Commission			Locate deed	Not included on Town sketch
			19046	424	0	Grove St	359-3-12	0.51								Wrong deed?			
	N		43507	258	0	Grove Street	359-3-19	0.73								Town owned; Judgment on tax title		No Article 97 protection	Not included on OSRP Inventory, or Conservation GIS layer; included on Town sketch
	M		0	0	0	Grove St	359-3-18	0.64										Locate deed	
			0	0	0	Grove St	359-3-20	0.81											
			0	0	0	Grove St	359-3-14	0.71											
			0	0	0	Grove St	359-3-6D	4.38											
			0	0	0	Grove St	359-3-16A	0.68											
			0	0	8	Grove St	359-3-13	0.59											
			0	0	8	Grove St	359-3-15	0.70											
			0	0	8	Grove St	359-3-17A	2.30											
			0	0	0	Grove St	359-3-21	1.65											Not included on Town sketch
S2	C?	Sudbury River Oxbow Reservation	L.C. 1459	4	0	Elm St	292-183-6A	22.326			M					Board of Selectmen owned; environmental conservation, open space and passive public park/recreation uses		Confirm Town Meeting vote/transfer to Conservation Commission	Not included on OSRP Inventory, or Conservation GIS layer; included on Town sketch
					0	Meadow St NS	293-184-1	25.677											
					0	Meadow St NS	293-184-3	9.796											
					0	Elm St	293-184-4	28.762			R-3								
S3	C	Spring Lane Woods	12125	282	746	Water St., RR	375-104-3	3.1	Excellent	Passive rec.	R-3	Natural state	N/A	Yes	Board of Selectmen owned	Town owned; Town meeting vote 10/28/1998 transferred to Conservation Commisison for conservation purposes	Tax-Title Land of Conservation and Recreation Interest, Map 10 Code: 37, Interest. Dept.: Conservation	Deed language needed	
	C?		11937	86		Water St	376-105-305A	11.087								Town owned; For recreational purposes; reverts to MDC if not		Deed language needed, evaluate MDC restrictions	
	N		12125	282		Pamela Rd	375-104-4	3.222								Town owned	Town Parcels to be Considered for Internal Transfer/Protection, Map 10 Code: 44	No Article 97 protection	Not included on OSRP Inventory, or Conservation GIS layer; included on Town sketch
	C		7224	213	235	Brook St. RR	377-106-17	8.7	Excellent			Town Owned Tax Title Book 7224, Page 213				Town owned; tax title; Town meeting vote 10/28/1998 transferred to Conservation Commisison for conservation purposes	Tax-Title Land of Conservation and Recreation Interest, Map 10 Code: 38, Interest. Dept.: Conservation	Deed language needed	Not included on Town sketch
S4	P	Old Worcester Rd	12222	632	0	Old Worcester Rd, Off	407-1-9	8.82	Very Good	Passive rec.	R-1	Natural state	N/A	Limited	Board of Selectmen; conservation purposes	Board of Selectmen owned; taking for conervation purposes; Town meeting vote 4/24/1980 transferred to Conservation Commisison for conservation purposes		Adequate Article 97 protection	
	M		0	0	0	Old Worcester Rd, off	407-1-8	2.03							Town Owned Tax Title Book 11745, Page 622	Wrong deed? Town meeting vote 5/20/1981 transferred to Conservation Commisison for conservation purposes		Locate deed	
	N		10511	278	0	Westgate Rd	407-1-47	0.96							Board of Selectmen owned	Town owned; Board of Selectment transferred to Conservation Commission jurisdiction according to 1984 Conservation Properties Guidebook		No Article 97 protection	
			11745	622	0	Old Worcester Rd	407-1-8A	0.76								Town owned; tax title; Board of Selectmen transferred to Conservation Commission jurisdiction according to 1984 Conservation Properties Guidebook			Not included on OSRP Inventory, or Conservation GIS layer; included on Town sketch
S5	P	Mohawk Pond	13365	365	0	Edmands Rd	411-1-17B	14.96	Excellent	Passive rec.	R-1	Natural state	N/A	Yes	Town Owned - Conservation Commission	Conservation Commission owned; for passive recreation, protect natural and watershed resources		Adequate Article 97 protection	
			13502	617	1	Ferrazzi Dr	410-1-24	6.19			R-4					Conservation Commission owned; G.L.c.40, sec. 8C; for passing, recreational, and protecting natural and watershed resources		Confirm Town meeting vote	
					3	Ferrazzi Dr	410-1-25	1.08											
					4	Ferrazzi Dr	410-1-29	1.02											
					5	Ferrazzi Dr	410-1-26	1.13											
					6	Ferrazzi Dr	410-1-28	1.01											
			13282	480	0	Juniper Lane	410-1-27	2.59							ConCom G.L.c.40, sec. 8C; Art.97	Conservation Commission owned; G.L.c.40, sec. 8C; for conservation purposes			
	M		865	102	0	Mohawk Dr	684-1-A	0.44							Town Owned - Conservation Commission	Under Conservation Commission jurisdiction for strictly conservation purposes and to be kept in its natural state according to 1984 Conservation Properties Guidebook		Locate deed	Not included on Town sketch
T1	N	Nobscot Spring	11860	332	1244	Edgell Rd	412-1-13	5.86	Excellent	Passive rec.	R-4	Natural state	N/A	Yes	Board of Selectmen owned	Board of Selectmen owned		No Article 97 protection	
T2	P	Hemenway-Catharine Road	12018	469	0	Hemenway & Catherine	713-1-1	1.47	Excellent	Passive rec.	R-3	Natural state	N/A	Yes/view	ConCom G.L.c.40, sec. 8C; Art.97	Town owned; G.L.c.40, sec. 8C; taking for conervation purposes		Confirm Town meeting vote	
T3	C	Chickatawbut Road	L.C. 763	63	0	Chickatawbut Rd	684-1-54	6.54	Excellent	Passive rec.	R-4	Natural state	N/A	Yes	Town Owned - Conservation Commission	Town owned (Not official deed from registry); Town meeting vote 4/24/1980 transferred to Conservation Commisison for conservation purposes		Deed language needed	
T4	P	Hiram Pond	12485	240	0	Baldwin Ave., RR	403(B)-1-13B*	2.65	Very Good	Scenic view	R-3	Natural state	N/A	Yes/view		Board of Selectmen owned; conservation purposes		Confirm Town meeting vote	
	C		12633	394	0	Hiram Rd	193-1-1111	2.36							Town Owned Tax Title Book 12633, Page 394	Town owned; tax title; Town meeting vote 4/29/1992 transferred to Conservation Commisison for conservation purposes		Deed language needed	
T5	P	Hiram Pond Access	12485	240	0	Apple D'Or Rd	403-1-0000*	0.43	Fair	Pub. access	R-3	Natural state	N/A	Limited	Board of Selectmen owned; conservation purposes	Town owned; for conservation purposes		Confirm Town meeting vote	
T6	P	Hop Brook	L.C. 1312	109	963	Edgell Rd., RR	403-8-19	1.38	Good	Scenic view	R-3	Natural state	N/A	Limited	Town Owned - Conservation Commission	Town owned; for conservation purposes		Confirm Town meeting vote	
T7	C	Winch Street	14842	64	297	Winch St	840-1-18C	3.29	Excellent	Passive rec.	R-4	Natural state	N/A	Limited	Town Owned Tax Title Book 14842, Page 64	Town owned; tax title; Town meeting vote 5/13/1993 transferred to Conservation Commisison for conservation purposes		Deed language needed	
T8	C	Norton Pond	10942	28	0	Elm St	496-1-1	2.78	Good	Passive rec.	R-3	Natural state	N/A	Yes	Town Owned Tax Title Book 10942, Page 28	Town owned; tax title; Town meeting vote 4/21/1983 transferred to Conservation Commisison for conservation purposes		Deed language needed	
			10275	376	212	Elm St	496-1-425	0.60							Town Owned Tax Title Book 10275, Page 376	Town owned; tax title; Town meeting vote 4/21/1983 transferred to Conservation Commisison for conservation purposes		Deed language needed	
					230	Elm St	495-1-409	0.50											
T9	C?	Bacon Road	12859	26	0	Bacon Rd	745-1-41	11.79	Excellent	Passive rec.	R-4	Natural state	N/A	Limited	Board of Selectmen owned; conservation purposes	Town owned; retention purposes; Town meeting vote 5/20/1981 transferred to Conservation Commisison for conservation purposes		Deed language needed? Retention sufficient?	
T10	N	Lyman-McAdams	10256	280	6	McAdams Rd	558-1-C	0.41	Very Good	Scenic view	R-4	Natural state	N/A	Limited	Board of Selectmen owned	Town owned		No Article 97 protection	
T11	P	Whiting Road	16586	139	3	Whiting Rd	749-1-101	0.47	Good	Passive rec.	R-3	Natural state	N/A	Limited	ConCom G.L.c.40, sec. 8C; Art.97	Town owned; G.L.c.40, sec. 8C; for conservation purposes		Confirm Town meeting vote	
T12	N	Lyman-McAdams Road	10256	276	5	Lyman Rd	558-1-B	0.71	Very Good	Scenic view	R-4	Natural state	N/A	Limited	Board of Selectmen owned	Town owned		No Article 97 protection	
T13	C	Lamphere Circle	12507	242	0	Lamphere Cir	545-1-B	0.98	Very Good	Passive rec.	R-4	Natural state	N/A	Limited	Town Owned Tax Title Book 12507, Page 242	Town owned; tax title; Town meeting vote 5/20/1981 transferred to Conservation Commisison for conservation purposes		Deed language needed	
T14	C	Brook Meadow	43462	219	0	Brook Meadow	438-2-0000A	5.66	Excellent	Passive rec.	R-3	Natural state	N/A	Limited	ConCom G.L.c.40, sec. 8C; Art.97	Conservation Commission owned		Deed language needed	
T15	C	Woodmere Road	49133	347	Lot 1	Woodmere Rd.	602-1-1	0.46	Excellent	Scenic view	R-3	Natural state	N/A	Limited	Town Owned Tax Title Book 491333, Page 347	Town owned; tax title; Town meeting vote 5/20/1981 transferred to Conservation Commisison for conservation purposes		Deed language needed	
					Lot 2	Woodmere Rd.	602-1-2	0.46											
T16	P	Brook Street	13413	244	0	Brook St	367-1-19D	1.30	Excellent	Passive rec.	R-3	Natural state	N/A	Yes	ConCom G.L.c.40, sec. 8C; Art.97	Conservation commission owned; G.L.c.40, sec. 8C; for administration, conntrol and maintenance		Confirm Town meeting vote	
			28779	322	545	Brook St	367-101-19B	1.04							Board of Selectmen owned; conservation purposes	Town owned; conservation purposes		Confirm Town meeting vote	
	N		12442	211	547	Edgell Rd RR	367-101-9B	4.92							Town Owned Tax Title Book 12442, Page 211	Town owned; tax title; transferred to Conservation Commission jurisdiction according to 1984 Conservation Properties Guidebook		No Article 97 protection	
T17	C	Perry H Henderson Drive	16606	555	8	Perry H Henderson Dr	489-1-16	0.21	Very Good	Passive rec.	R-1	Natural state	N/A	Limited	Town Owned Tax Title Book 16606, Page 555	Town owned; tax title; Town meeting vote 4/11/1991 transferred to Conservation Commisison for conservation purposes		Deed language needed	
			16606	556	10	Perry H Henderson Dr	489-1-17	0.23							Town Owned Tax Title Book 16606, Page 556				
			16606	557	12	Perry H Henderson Dr	489-1-18	0.30							Town Owned Tax Title Book 16606, Page 557				
T18	P	Perry H Henderson Drive	15158	552	34	Perry H Henderson Dr	365-1-29	0.50	Very Good	Passive rec.	R-1	Natural state	N/A	Limited	ConCom G.L.c.40, sec. 8C; Art.97	Conservation Commission owned; water retention and conservation purposes		Confirm Town meeting vote	
					38	Perry H Henderson Dr	365-1-30	0.30											
					40	Perry H Henderson Dr.	365-1-31	0.29											
T19	P	Perry H Henderson Drive	15158	552	0	Perry H Henderson Dr	784-1-A	3.14	Very Good	Passive rec.	R-1	Natural state	N/A	Limited	ConCom G.L.c.40, sec. 8C; Art.97	Conservation Commission owned; water retention and conservation purposes		Confirm Town meeting vote	
T20	C	Florita Drive	13283	107	0	Florita Dr	363(A)-90-95*	7.04	Excellent	Passive rec.	R-1	Natural state	N/A	View	Town Owned Tax Title Book 13283. Page 107; ConCom	Town owned; tax title; Town meeting vote 4/24/1980 transferred to Conservation Commisison for conservation purposes		Deed language needed	
T21	C	Central Street	L.C. 664	105	425	Central St ABT	335-13-22	9.90	Good	Passive rec.	R-1	Natural state	N/A	No - boat	Town Owned Tax Title; ConCom	Town owned (Not official deed from registry); Town meeting vote 4/24/1980 transferred to Conservation Commisison for conservation purposes		Deed language needed	
T22	P?	Arlene Drive	10203	86	0	Arlene Dr	266-133-97	4.01	Very Good	Passive rec.	R-1	Natural state	N/A	Yes	Board of Selectmen owned; recreation purposes	Town owned; recreation purposes; Town meeting vote 5/20/1981 transferred to Conservation Commisison for conservation purposes		Deed language needed	
T23	P?	Clearview Drive	13306	665	29	Clearview Drive	535-1-23	0.76	Very Good	Passive rec.	R-3	Natural state	N/A	Limited	Town Owned - Conservation Commission	Town owned; recreation purposes		Confirm Town meeting vote, deed language needed	
T24	C	Crosby Circle	13496	708	0	Crosby Circle, off	776-1-B	4.38	Excellent	Passive rec.	R-1	Natural state	N/A	Limited	ConCom G.L.c.40, sec. 8C; Art.97	Conservation Commission owned		Confirm Town meeting vote, deed language needed	
T25	P	Worcester Road	51675	480	1161	Worcester Rd	73-04-7178	1.53	Very Good	Scenic view	B	Natural state	N/A	Limited	ConCom G.L.c.40, sec. 8C; Art.97	Conservation Commission owned; conservation and open space		Confirm Town meeting vote	
T26	N	Sundial Place	15490	495	0	Worcester Rd	943-9-26	2.48	Very Good	Passive rec.	R-3	Natural state	N/A	Limited	Board of Selectmen owned	Town owned		No Article 97 protection	
T27	P	Lillian Road Extension	41601	485	0	Lillian Rd Extension	228-88-9B	2.61	Excellent	Passive rec.	R-3	Natural state	N/A	Limited	ConCom G.L.c.40, sec. 8C; Art.97	Conservation Commission owned; G.L.c.40, sec. 8C; for conservation purposes		Confirm Town meeting vote	
T28	C	Sucker Pond	11342	49	6	Fairbanks Rd	240-75-8(C)*	4.00	Good	Scenic view	R-1	Natural state	N/A	Limited	Park Commissioners	Town owned; Town meeting vote 4/18/1984 transferred to Conservation Commisison for conservation purposes		Deed language needed	
	N		10219	371	0	Hastings Street	240-75-4	4.03							Board of Selectmen owned	Town owned		No Article 97 protection	
T29	N	Main Street Cemetery	193	517	0	Main St	210-23-44	4.08	Very Good	Passive rec.	R-1	Cemetery	N/A	Yes	Town Owned	Town owned		No Article 97 protection	
T30	C	Union Avenue Terrace	6505	491	571	Union Ave RR	203-5-9	0.91	Good	Passive rec.	G	Natural state	N/A	Yes	Town Owned Tax Title Book 6505, Page 491	Town owned; tax title; Town meeting vote 4/21/1983 transferred to Conservation Commisison for conservation purposes		Deed language needed	
			5824	175	0	Union Ave Terr	203-5-25	0.22							Town Owned Tax Title Book 5824, Page 175	Town owned; tax title; Town meeting vote 4/21/1983 transferred to Conservation Commisison for conservation purposes		Deed language needed	
T31	P	Circle Drive	34185	90	60	Circle Dr	213-26-28	2.66	Good	Passive rec.	R-1	Natural state	N/A	Limited	Town Owned - Conservation Commission	Conservation Commission owned; for conservation purposes		Confirm Town meeting vote	
T32	P	Walnut Street	13694	689	141	Walnut St	32-88-4	1.89	Good	Passive rec.	R-1	Natural state	N/A	Limited	ConCom G.L.c.40, sec. 8C; Art.97	Conservation Commission owned; G.L.c.40, sec. 8C; for passing, recreation, protecting natural and watershed resources		Confirm Town meeting vote	
T33	N	Mt Wayte	4831	562	0	Mt Wayte Ave	188-12-7(A)*	9.00	Excellent	Passive rec.	R-1	Natural needs clean	N/A	Limited		Town owned		No Article 97 protection	Not included on Conservation GIS layer
	C		8953	569	23	Vincent Ave	187-8-66L	0.43							Town Owned Tax Title Book 8953, Page 569	Town owned; tax title; Town meeting vote 5/6/1986 transferred to Conservation Commisison for conservation purposes		Deed language needed	
			7224	211	14	Vincent Ave	187-8-54L	0.09							Town Owned Tax Title Book 7224, Page 211	Town owned; tax title; Town meeting vote 5/6/1986 transferred to Conservation Commisison for conservation purposes		Deed language needed	
	M		0	0	0	Vincent Ave	187-8-343	0.06							Town Owned	Town meeting vote 5/6/1986 transferred to Conservation Commisison for conservation purposes		Locate deed	
			6908	261	15	Vincent Ave	187-8-338	0.05							Town Owned Tax Title Book 6908, Page 260	Town meeting vote 5/6/1986 transferred to Conservation Commisison for conservation purposes		Locate deed	
	C		12591	486	17	Vincent Ave	187-8-346	0.11							Town Owned Tax Title Book 12591, Page 480	Town owned; tax title; Town meeting vote 5/6/1986 transferred to Conservation Commisison for conservation purposes		Deed language needed	
			5825	7	21	Vincent Ave	187-8-340	0.06							Town Owned Tax Title Book 5825, Page 7	Town owned; tax title; Town meeting vote 5/6/1986 transferred to Conservation Commisison for conservation purposes		Deed language needed	
	M		0	0	0	Vincent, pvt	187-8-339	0.05							Town Owned	Town meeting vote 5/6/1986 transferred to Conservation Commisison for conservation purposes		Locate deed	
T34	M	Prindiville Avenue	0	0	0	Prindiville Ave	52-104-000*	0.23	Good	Passive rec.	R-1	Natural state	N/A	Yes	Town Owned			Locate deed	
	N		27424	9	21	Prindiville Ave	50-98-4	0.40							ConCom G.L.c.40, sec. 8C; Art.97	Board of Selectmen owned		No Article 97 protection	
T35	C	Cronan Park	11577	649	0	Thelma & Duffet Rds	65-129-10	0.66	Excellent	Passive rec.	R-1	Natural state	N/A	Limited	Town Owned Tax Title Book 11577, Page 649	Town owned; tax title; Town meeting vote 4/27/1997 transferred to Conservation Commisison for conservation purposes		Deed language needed	
T36	P	Bishop Street	15445	498	0	Bishop St.	769-1-36B	1.42	Good	Passive rec.	G	Natural state	N/A	Limited	Board of Selectmen owned; conservation purposes	Board of Selectmen owned; conservation purposes		Confirm Town Meeting vote/transfer to Conservation Commission	
T37	C	Travis Drive	12193	506	0	Fountain St, off	763-1-10A	7.21	Excellent	Passive rec.	R-4	Natural state	N/A	Limited	Board of Selectmen owned	Town owned; Town meeting vote 5/20/1981 transferred to Conservation Commisison for conservation purposes		Deed language needed	
	M		758	59	29	William J Heights, RR	446-2-263	7.49							Town Owned			Locate deed	
T38	M	Flannagan Drive	12785	293	0	Flanagan Dr	773-1-B	0.23	Good	Passive rec.	R-4	Natural state	N/A	Yes	Town Owned - Conservation Commission	Wrong deed?		Locate deed	
T39	P	Goodnow Lane	30653	354	21	Goodnow Ln	733-1-41	1.14	Good	Passive rec.	R-4	Natural state	N/A	Limited	Board of Selectmen owned; conservation purposes	Town owned, conservation purposes		Confirm Town meeting vote	
T40	C	Worcester Road	12023	542	1325	Worcester Rd	408-1-48	0.24	Good	Scenic view	R-1	Natural state	N/A	Limited	Board of Selectmen owned	Town owned; Town meeting vote 4/13/1971 Conservation Commisison accepted gift for conservation purposes		Deed language needed	
T41	P	Shortiss Park	19651	371	585	Central St	335-100-6	0.15	Excellent	Passive rec.	R-3	Natural state	N/A	Yes	ConCom G.L.c.40, sec. 8C; Art.97	Conservation Commisison owned; G.L.c.40, sec. 8C		Confirm Town meeting vote	
T42	M	Central Street	0	0	0	Central St	335-100-18	0.03	Fair	Passive rec.	R-1	Natural state	N/A	Yes	Town Owned - Conservation Commission	Town meeting vote 11/13/1985 acquire by Board of Selectmen		Locate deed	
	M	Agnes Drive	684	152	0	Winch St RR	840-1-0000	3.19			R-4							Locate deed	Not included on Conservation GIS layer or inventory; included in 1984 Conservation Properties Report
	M	Sun Valley Recreation Area	0	0		Sun Valley Dr	590-1-0000	0.66			R-3							Locate deed	Not included on Conservation GIS layer or inventory
	C	Bates Rd Extension	5824	161	40	Bates Rd Extension	165-346-3	2.50	Excellent	Passive rec.	M	Natural & ballfield	N/A	Yes	Board of Selectmen owned	Town meeting vote 4/11/1991 transferred to Conservation Commisison for conservation purposes		Deed language needed	Not included on Conservation GIS layer
Total		57						551.4											

KEY

Inventory

- Missing from Town sketch
- Missing from inventory/Conservation GIS layer
- Unable to find deed to confirm ownership

Article 97 Evaluation

P	Confirmed Article 97 protection
C	Under control of Conservation Commission, not confirmed to be protected under Article 97
M	Misisng deed information
N	Not under control of Conservation Commission and not confirmed to be protected under Article 97

Appendix C

Trail Maps/Brochures



TRAIL INFORMATION:

Welcome to Cochituate Brook Reservation!

In 1964 the town acquired this 27 acre property from the Framingham Sportsmen's Association for conservation purposes.

The property surrounds the beginnings of Cochituate Brook where it comes from a dam on Lake Cochituate to where it crosses Old Connecticut Path. The brook continues on, eventually joining up with the Sudbury River in Saxonville.

Main Trail

The major trail through the reservation starts at Old Connecticut Path just south of Brownlea Road by the reservation sign, crosses Cochituate Brook, and connects to the Cochituate State Park trails. The Cochituate Rail Trail (not yet officially open) crosses Old Connecticut Path nearby and gives a view from the south of the emergent marsh next to the brook. There is a connecting trail from Cochituate Brook Reservation to the Cochituate Rail Trail.

Other Trails

Other trails start from Reardon Park off of Brownlea Road and explore the pine and oak woods in the east section of the reservation. Another trail from the end of Delmar Avenue connects to the state park near the dam on Lake Cochituate.

COCHITUATE BROOK RESERVATION
FRAMINGHAM CONSERVATION COMMISSION

TRAIL CLASS DESCRIPTION:

Class 4: Easy, broad, flat trails - 8 feet wide or greater, <5% slopes

Class 3: Easy/moderate trails - 4 to 8 feet wide, rolling, <12% slopes

Class 2: Moderate/challenging trails - 2 to 4 feet wide, rough, less than 12% slopes

Class 1: Challenging trails - narrow and rough, less than 2 feet wide, <20% slopes

TRAIL USE GUIDELINES

- All motorized use prohibited.
- No littering or dumping.
- Closed from dusk to dawn.
- Fires and camping are not permitted.
- No alcoholic beverages.
- Do not feed, approach, or touch wildlife.
- Take personal protection measures to reduce your exposure to ticks and mosquito bites.
- Dogs must be leashed.
- No hunting permitted at any time.

PROPERTY ACCESS AND PARKING INFORMATION:

Public parking is available off Brownlea Road at Reardon Park.

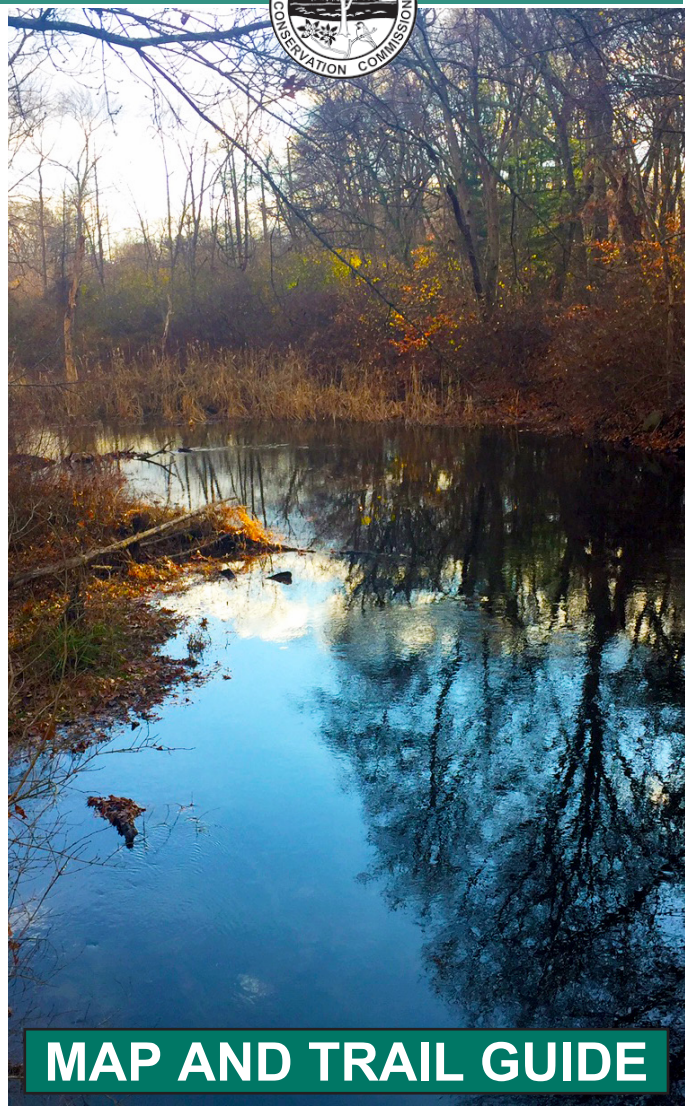
CONTACT INFORMATION:

For additional information on Framingham Conservation Commission Trails, or to report problems, please go to our website at www.framinghamma.gov. Or you can email, call or visit us at the Conservation Commission office.

(508) 532-5460 | ConservationCommission@FraminghamMA.gov
150 Concord Street, Room 213, Framingham, MA 01702

FRAMINGHAM
MASSACHUSETTS

Cochituate Brook Reservation



MAP AND TRAIL GUIDE


FRAMINGHAM
MASSACHUSETTS
Cochituate Brook Reservation
Reardon Park
Reardon Park
Capri Dr
Brownlea Rd
Old Connecticut Path
Florissant Ave
Laclede Ave
Bellefontaine Ave
Maymont Dr
Cochituate State Park
Cochituate Rail Trail
Trail Intersection
Parking
Bench
Bridge
Gate
Kiosk
Red Trail
Blue Trail
Green Trail
Yellow Trail
Open Water
Streams
Wetland
2-Foot Contours
Roads
Cochituate Brook Reservation Boundary
Buildings
Abutting Open Space
Cochituate Rail Trail
Cochituate Rail Trail
0 150 300 600
Feet
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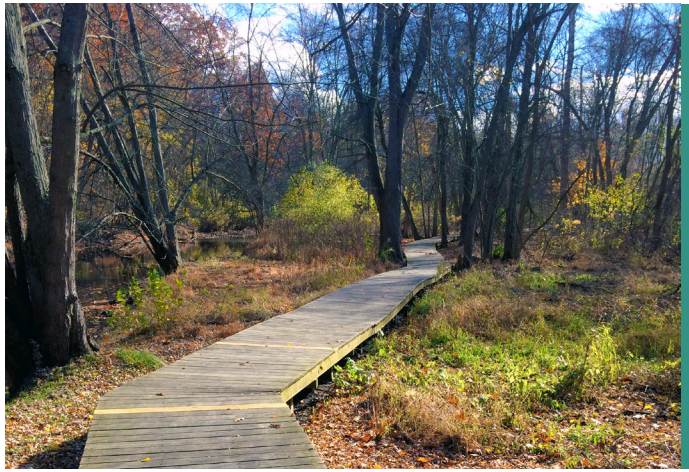


TRAIL INFORMATION:

Welcome to the Carol Getchell Nature Trail!

The Carol Getchell Nature Trail was conceived in the mid-90's as a trail that follows the west bank of the Sudbury River. In 2001 it was dedicated to the memory of Carol J. Getchell, who was the former principal of the Stapleton School and an early proponent of the trail.

Trails

This nature trail is a single trail that runs north to south along the west side of the Sudbury River. It takes trail users through hardpack trail, a boardwalk, and bridges to enjoy the sights and sounds of the river. There are also offshoots that can be taken to link users up to the Edwards Church, the Stapleton School, and the Cameron School.

Points of Interest

On the farthest south end of the trail, users can get onto Sudbury Landing to view the historic Danforth Bridge. Go to the far north end and one can cross the parking area at Little Farms Road to hook up with a trail that leads to the Weston Aqueduct. This aqueduct can be accessed to view the scenic Sudbury Oxbow, another one of Framingham's conservation parcels.

An excellent canoe launch site is also located at the end of Little Farms Road, off the parking lot, and is managed by the Public Access Board.

CAROL GETCHELL NATURE TRAIL
FRAMINGHAM CONSERVATION COMMISSION

TRAIL CLASS DESCRIPTION:

Class 4: Easy, broad, flat trails - 8 feet wide or greater, <5% slopes

Class 3: Easy/moderate trails - 4 to 8 feet wide, rolling, <12% slopes

Class 2: Moderate/challenging trails - 2 to 4 feet wide, rough, less than 12% slopes

Class 1: Challenging trails - narrow and rough, less than 2 feet wide, <20% slopes

TRAIL USE GUIDELINES

- All motorized use prohibited.
- No littering or dumping.
- Closed from dusk to dawn.
- Fires and camping are not permitted.
- No alcoholic beverages.
- Do not feed, approach, or touch wildlife.
- Take personal protection measures to reduce your exposure to ticks and mosquito bites.
- Dogs must be leashed.
- No hunting permitted at any time.

PARKING INFORMATION:

A large, public parking lot is located at the end of Little Farms Road. Parking is also available at the parking lot along Edwards Street near the cemetary.

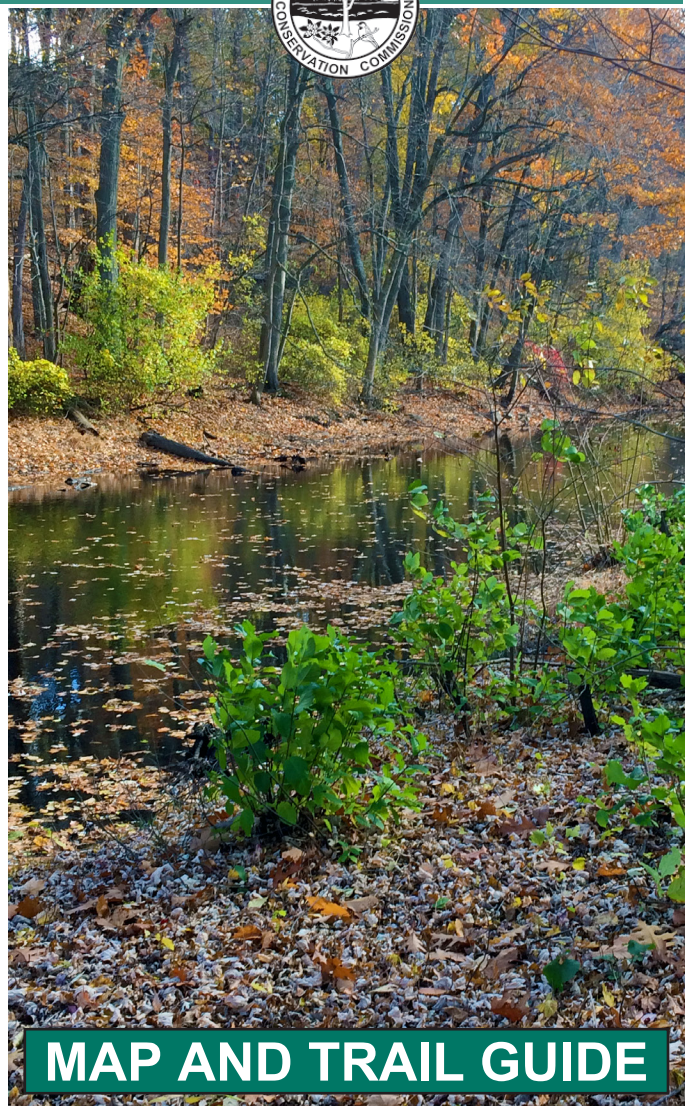
CONTACT INFORMATION:

For additional information on Framingham Conservation Commission Trails, or to report problems, please go to our website at www.framinghamma.gov. Or you can email, call or visit us at the Conservation Commission office.

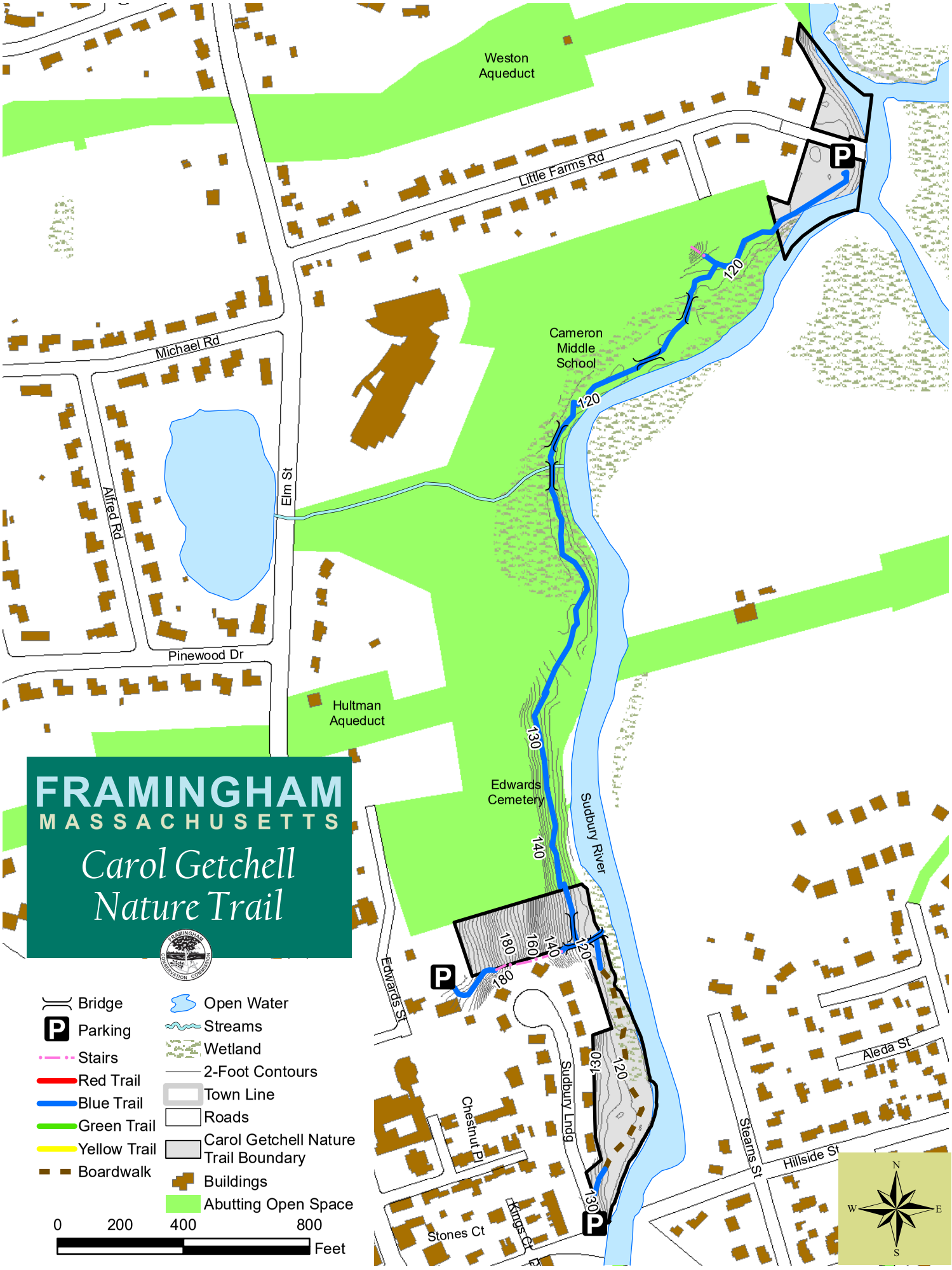
(508) 532-5460 | ConservationCommission@FraminghamMA.gov
150 Concord Street, Room 213, Framingham, MA 01702

FRAMINGHAM
MASSACHUSETTS

Carol Getchell Nature Trail



MAP AND TRAIL GUIDE


FRAMINGHAM
MASSACHUSETTS
Carol Getchell
Nature Trail
Weston
Aqueduct
Little Farms Rd
Michael Rd
Alfred Rd
Elm St
Pinewood Dr
Hultman
Aqueduct
Cameron
Middle
School
Edwards
Cemetery
Sudbury River
Edwards St
Sudbury Lndg
Chestnut Pl
Stones Ct
Kings Ct
Stearns St
Hillside St
Aleda St
120
130
140
160
180
Bridge
Parking
Stairs
Red Trail
Blue Trail
Green Trail
Yellow Trail
Boardwalk
Open Water
Streams
Wetland
2-Foot Contours
Town Line
Roads
Carol Getchell Nature Trail Boundary
Buildings
Abutting Open Space
0
200
400
800
Feet
N
W
E
S



TRAIL INFORMATION:

Welcome to Arthur-Morency Woods!

Arthur-Morency Woods is a 14.5-acre parcel split between the towns of Framingham and Natick that was acquired by the Conservation Commission in 2001. Once intended to be the location of sewer beds, it ended up laying undisturbed and now offers habitat for an array of flora and fauna. This conservation parcel can be accessed either from Arthur Street, Pumpkin Pine Road, or the intersection of Longview Street and Morency Street.

Trails

Arthur-Morency Woods does not offer one main trail – it is instead comprised of many short and winding trails, making the potential for a different route every visit. For the best experience, users should park at the end of Arthur Street and walk the trails clockwise, hugging the outside of the trail systems to make a loop. Users should expect to come across bridges and narrower trails.

ARTHUR-MORENCY WOODS
FRAMINGHAM CONSERVATION COMMISSION

TRAIL CLASS DESCRIPTION:

Class 4: Easy, broad, flat trails - 8 feet wide or greater, <5% slopes

Class 3: Easy/moderate trails - 4 to 8 feet wide, rolling, <12% slopes

Class 2: Moderate/challenging trails - 2 to 4 feet wide, rough, less than 12% slopes

Class 1: Challenging trails - narrow and rough, less than 2 feet wide, <20% slopes

TRAIL USE GUIDELINES

- All motorized use prohibited.
- No littering or dumping.
- Closed from dusk to dawn.
- Fires and camping are not permitted.
- No alcoholic beverages.
- Do not feed, approach, or touch wildlife.
- Take personal protection measures to reduce your exposure to ticks and mosquito bites.
- Dogs must be leashed.
- No hunting permitted at any time.

PARKING INFORMATION:

Parking is located at the end of Arthur Street in Framingham, at the end of Pumpkin Pine Road in Natick, as well as at the end of Morency Street in Natick.

CONTACT INFORMATION:

For additional information on Framingham Conservation Commission Trails, or to report problems, please go to our website at www.framinghamma.gov. Or you can email, call or visit us at the Conservation Commission office.

(508) 532-5460 | ConservationCommission@FraminghamMA.gov
150 Concord Street, Room 213, Framingham, MA 01702

FRAMINGHAM
MASSACHUSETTS

Arthur-Morency Woods



MAP AND TRAIL GUIDE


FRAMINGHAM
MASSACHUSETTS
Arthur-Morency Woods
Butterworth Park
Bishop St
Wilson Dr
NATICK
FRAMINGHAM
Morency St
Longview St
Nolin St
Bishop Dr
Arthur St
Pumpkin Pine Rd
Tamarack Rd
Willis St
West Central St
Homeward Ln
Garden Rd
160
170
180
190
150
1
2
3
4
5
6
7
8
9
10
11
12
P
Trail Intersection
Bridge
Parking
Red Loop
Blue Trail
Green Trail
Yellow Trail
Open Water
Streams
Wetland
2-Foot Contours
Town Line
Roads
Arthur-Morency Woods Boundary
Buildings
Abutting Open Space
0
150
300
600
Feet
N
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TRAIL INFORMATION:

Welcome to the Macomber Reservation!

In 1971, the town acquired a part of Macomber Estate known as “Raceland” for conservation purposes. The name Raceland was coined when the estate was first built in 1925 by John R. Macomber. The estate was equipped to hold horse racing and steeplechase events which attracted tens of thousands of visitors on race days. After Mr. Macomber’s passing, the Massachusetts Society for the Prevention of Cruelty to Animals (MSPCA) took over and used the estate as an educational medium. This 57-acre parcel contains meadows, upland forests, streams, and habitat for wildlife. Barton Brook runs through the property and does a rarely seen split – one part drains to an emergent marsh and the other part flows into the Stearns Reservoir, a body of water to the north managed by MWRA.

Trails

The entrance to Macomber’s trail system can be found by following the paved path that starts at the parking area. This leads to the head of the trail system, where the broad trails are old carriage roads with stone and metal grate bridges where they cross Barton Brook. This trail system is essentially one big loop that goes around the parcel with two trails that pass through the center. These trails are wide and easy to traverse, making them great for family outings.

MACOMBER RESERVATION
FRAMINGHAM CONSERVATION COMMISSION

TRAIL CLASS DESCRIPTION:

Class 4: Easy, broad, flat trails - 8 feet wide or greater, <5% slopes

Class 3: Easy/moderate trails - 4 to 8 feet wide, rolling, <12% slopes

Class 2: Moderate/challenging trails - 2 to 4 feet wide, rough, less than 12% slopes

Class 1: Challenging trails - narrow and rough, less than 2 feet wide, <20% slopes

TRAIL USE GUIDELINES

- All motorized use prohibited.
- No littering or dumping.
- Closed from dusk to dawn.
- Fires and camping are not permitted.
- No alcoholic beverages.
- Do not feed, approach, or touch wildlife.
- Take personal protection measures to reduce your exposure to ticks and mosquito bites.
- Dogs must be leashed.
- No hunting permitted at any time.

PARKING INFORMATION:

Parking is located along Badger Road, at the entrance to Macomber Reservation.

CONTACT INFORMATION:

For additional information on Framingham Conservation Commission Trails, or to report problems, please go to our website at www.framinghamma.gov. Or you can email, call or visit us at the Conservation Commission office.

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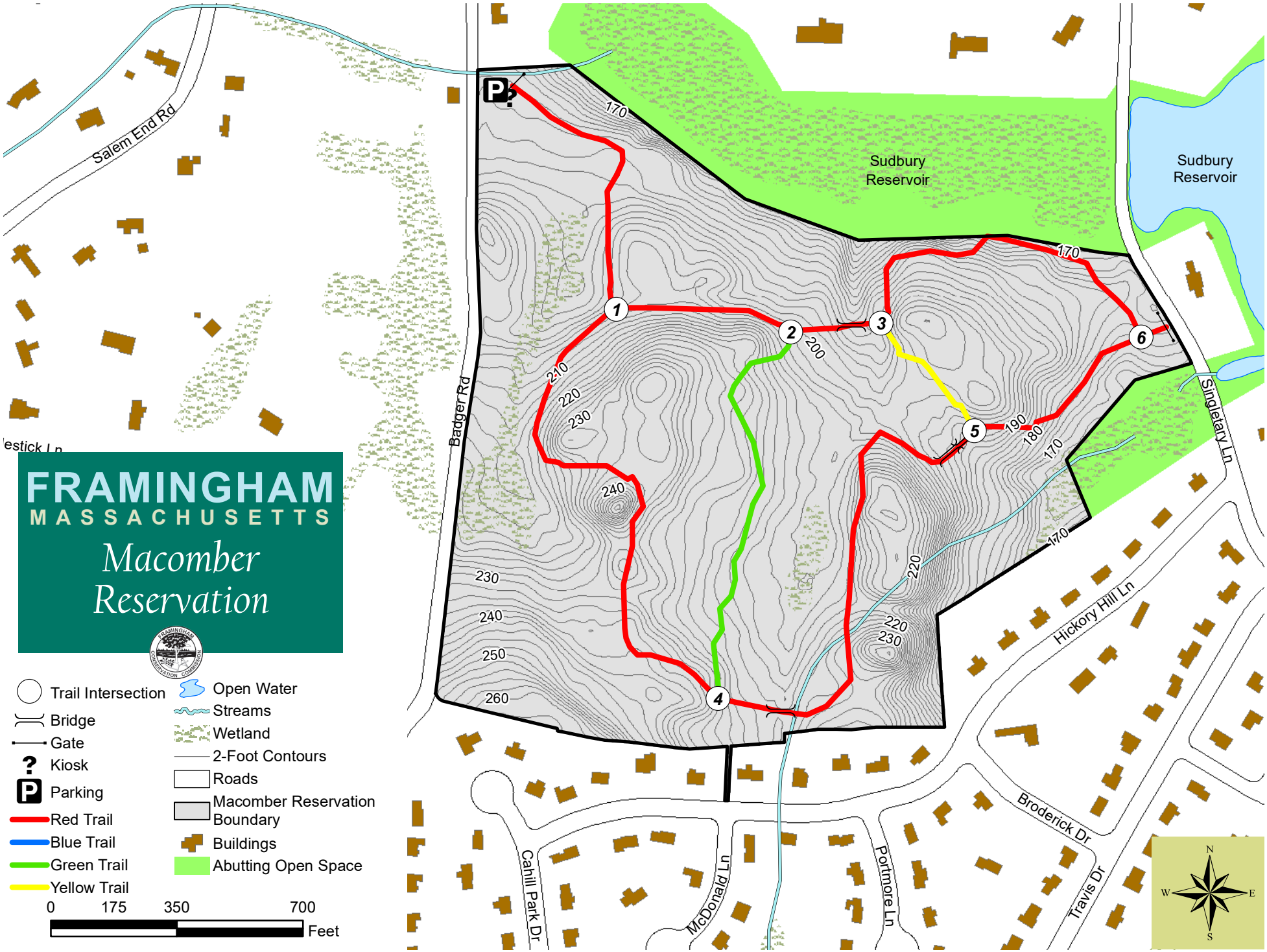
FRAMINGHAM
MASSACHUSETTS

Macomber Reservation



MAP AND TRAIL GUIDE


FRAMINGHAM
MASSACHUSETTS
Macomber Reservation
Trail Intersection
Bridge
Gate
Kiosk
Parking
Red Trail
Blue Trail
Green Trail
Yellow Trail
Open Water
Streams
Wetland
2-Foot Contours
Roads
Macomber Reservation Boundary
Buildings
Abutting Open Space
0
175
350
700
Feet
Salem End Rd
Badger Rd
Sudbury Reservoir
Sudbury Reservoir
Singletary Ln
Hickory Hill Ln
Broderick Dr
Travis Dr
Portmore Ln
McDonald Ln
Cahill Park Dr
170
180
190
200
210
220
230
240
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260
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TRAIL CLASS DESCRIPTION:

Class 4: Easy, broad, flat trails - 8 feet wide or greater, <5% slopes

Class 3: Easy/moderate trails - 4 to 8 feet wide, rolling, <12% slopes

Class 2: Moderate/challenging trails - 2 to 4 feet wide, rough, less than 12% slopes

Class 1: Challenging trails - narrow and rough, less than 2 feet wide, <20% slopes

FRAMINGHAM
MASSACHUSETTS

Wittenborg Woods

TRAIL INFORMATION:

Welcome to Wittenborg Woods!

In May of 1999, Framingham acquired 83 acres with money from a state Self-Help Grant and also a collaboration between the Massachusetts Department of Environmental Management and Division of Conservation Services, the Sudbury Valley Trustees, and Harriett Wittenborg. Being the largest conservation parcel, Wittenborg Woods offers ample room for wildlife to establish a home as well as space for plenty of trails. Users should exercise caution during hunting season by wearing orange, as the open area in the center of this parcel is used for bow hunting by a small number of permitted hunters.

Trails

The trails start from the parking lot on the east side of Wayside Inn Road, beside mailbox #95. The walk up is steep and consists of switchbacks before leveling out onto flatter trails. However, elevation and terrain changes return when traversing through the east side of the property, which coincides with the Bay Circuit Trail. Trail users can make a number of loops of various sizes out of the trail system here. However, everyone should make sure that at some point in their travels they take in the fantastic views provided by both the neighboring Howe Farm and Snow Meadow.

Wittenborg Woods
Framingham Conservation Commission

TRAIL USE GUIDELINES

- All motorized use prohibited.
- No littering or dumping.
- Closed from dusk to dawn.
- Fires and camping are not permitted.
- No alcoholic beverages.
- Do not feed, approach, or touch wildlife.
- Take personal protection measures to reduce your exposure to ticks and mosquito bites.
- Dogs must be leashed.
- No hunting permitted at any time.

PARKING INFORMATION:

Parking is located on the east side of Wayside Inn Road, beside mailbox #95.

CONTACT INFORMATION:

For additional information on Framingham Conservation Commission Trails, or to report problems, please go to our website at www.framinghamma.gov. Or you can email, call or visit us at the Conservation Commission office.

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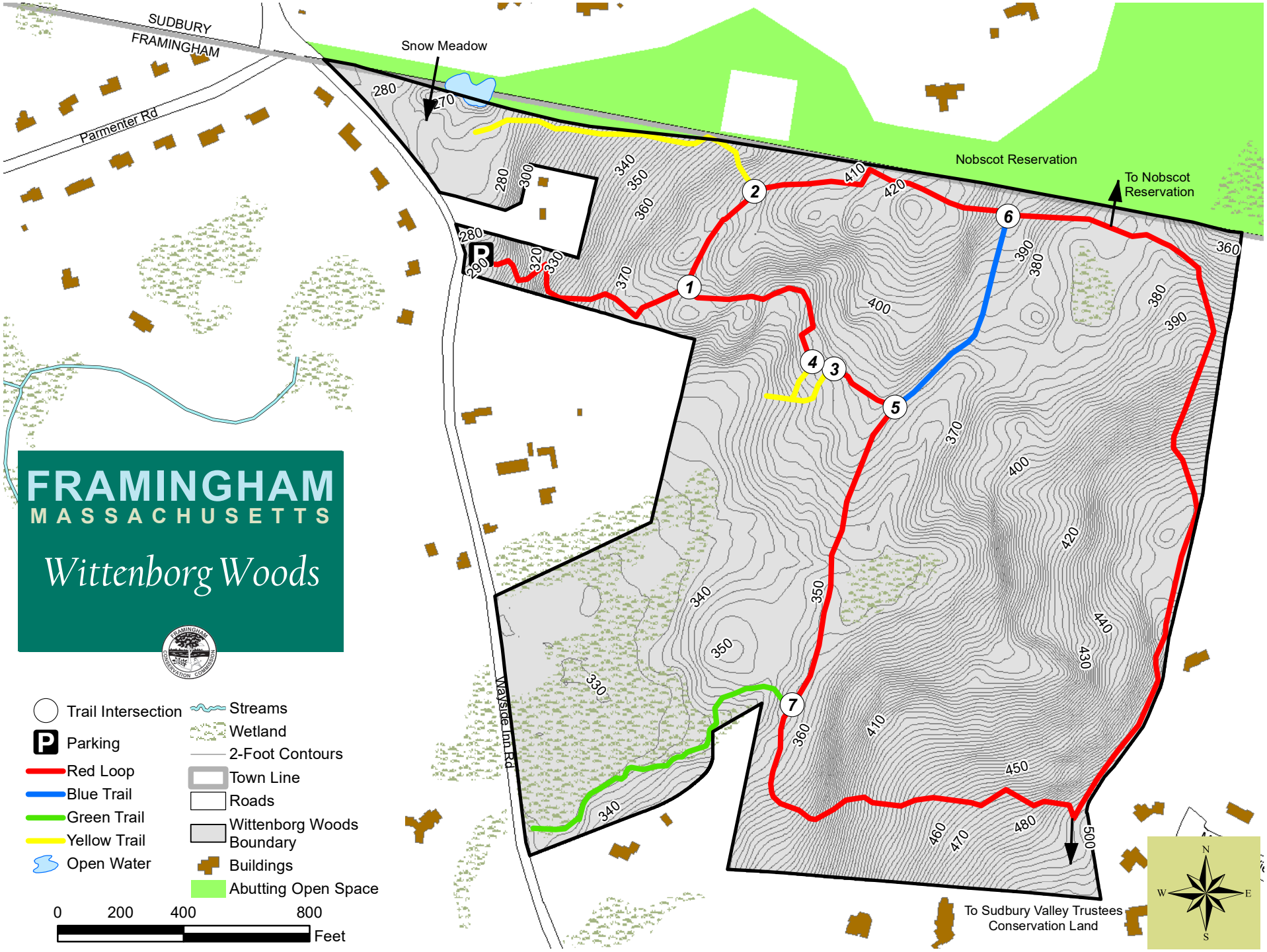
MAP AND TRAIL GUIDE


SUDBURY
FRAMINGHAM
Parmenter Rd
Snow Meadow
Nobscot Reservation
To Nobscot Reservation
Wayside Inn Rd
To Sudbury Valley Trustees Conservation Land
FRAMINGHAM
MASSACHUSETTS
Wittenborg Woods
Trail Intersection
Parking
Red Loop
Blue Trail
Green Trail
Yellow Trail
Open Water
Streams
Wetland
2-Foot Contours
Town Line
Roads
Wittenborg Woods Boundary
Buildings
Abutting Open Space
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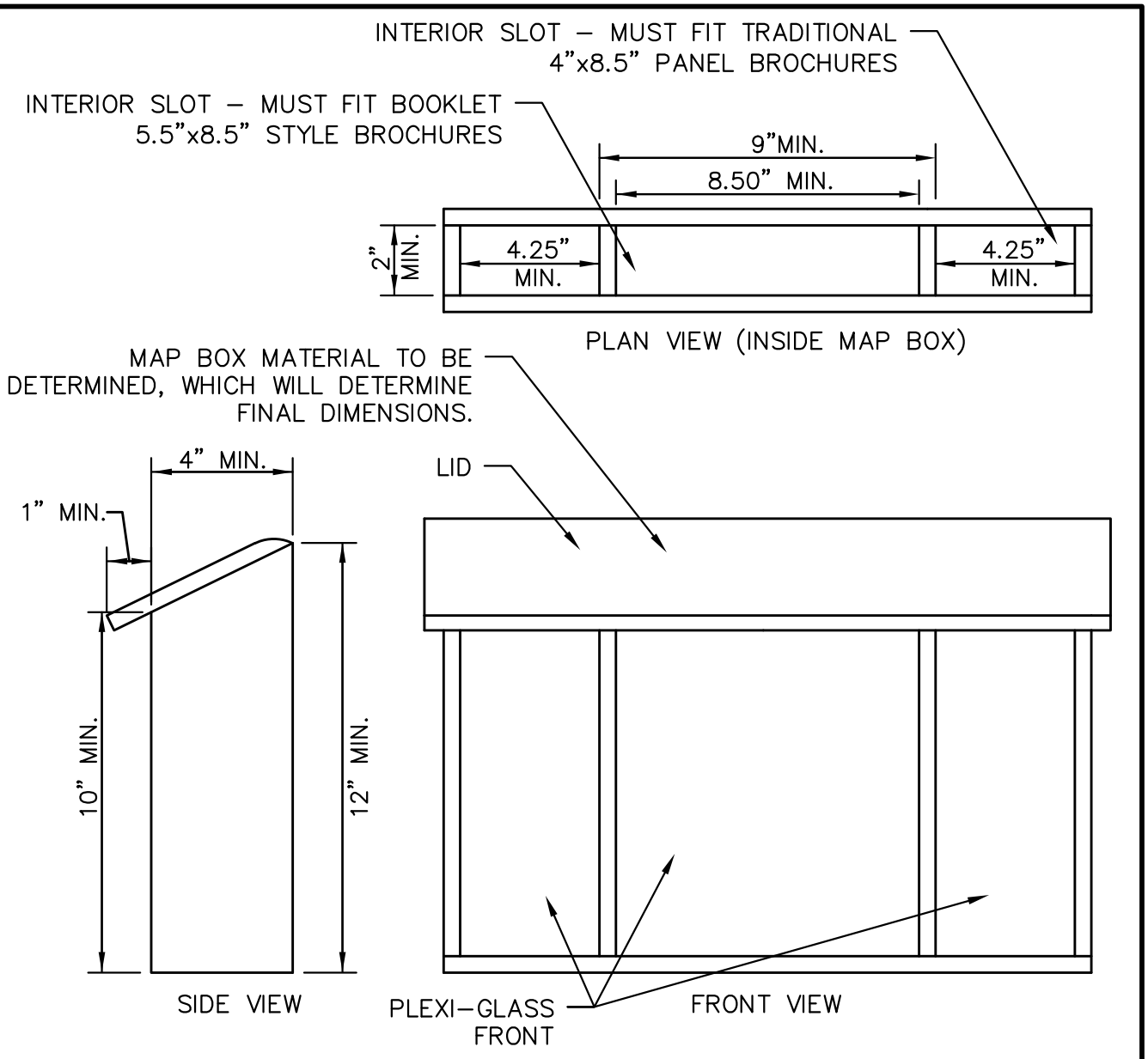
Appendix D

Map Box Samples



MAP BOX

NOT TO SCALE

Conservation Master Plan
Town, Massachusetts

City of Framingham
150 Concord Street, Room 213
Framingham, Massachusetts

Map Box Detail
Sketch Number 001

Scale: Not To Scale Date: 10/24/2019

B+T Drawing No. 281700P085B–001
B+T Project No. 2817.00

DRAFT

BEALS AND THOMAS, INC.



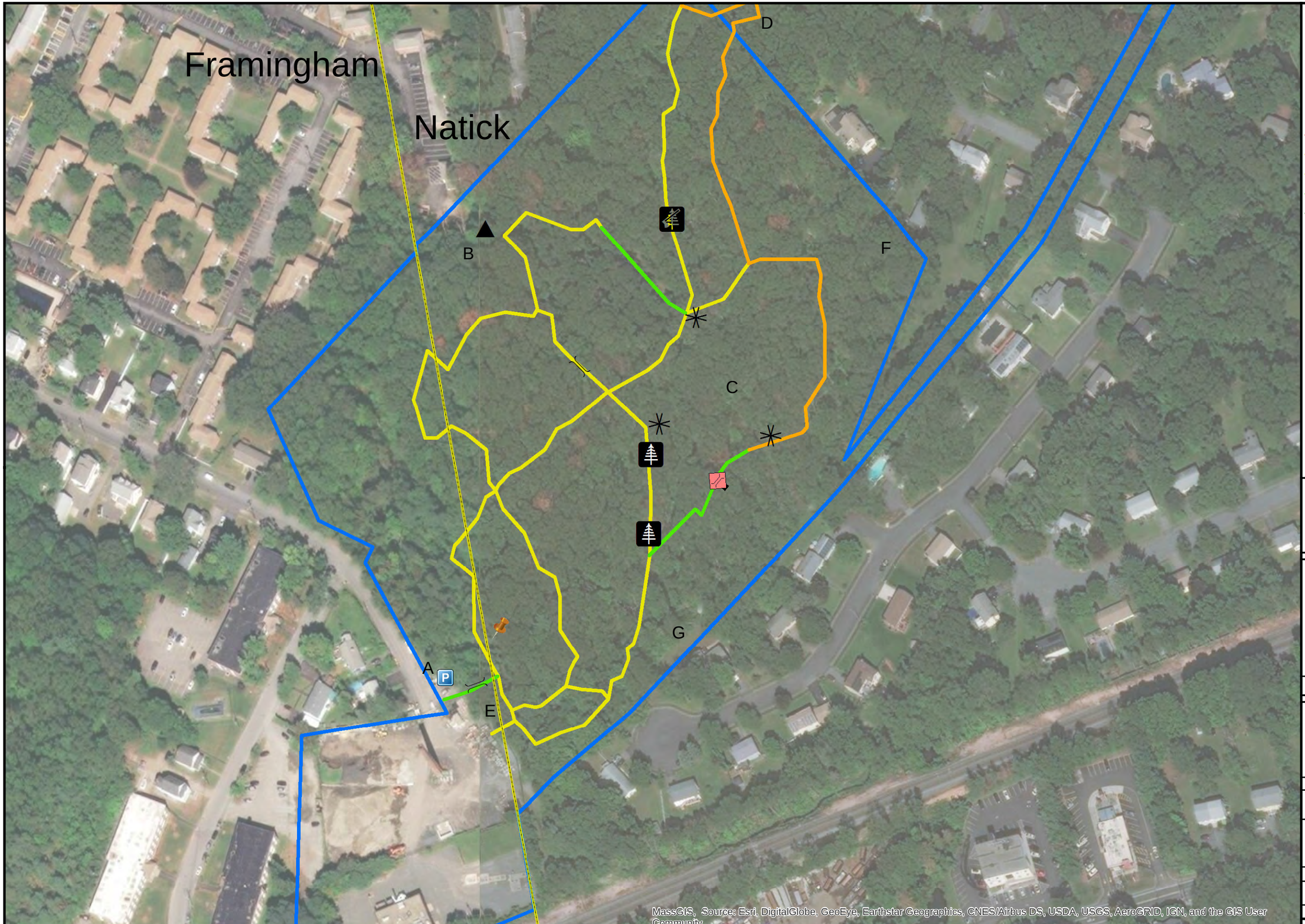




Appendix E

Maintenance Maps and Recommendations

Arthur-Morency Woods Field Observations



N
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Legend

- Trail Class 1
- Trail Class 2
- Trail Class 3
- Trail Class 4
- Trail Class 5
- Parking
- Bridge
- Close Trail
- Downed Tree
- Dumping
- Overhanging Tree
- Repair Bridge
- Trash

PREPARED FOR:

TOWN OF FRAMINGHAM

DEPARTMENT OF PUBLIC WORKS
110 WESTERN AVENUE
FRAMINGHAM, MASSACHUSETTS

PREPARED BY:

BEALS+THOMAS
Civil Engineers + Landscape Architects + Land Surveyors + Planners + Environmental Specialists

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PROJECT:

CONSERVATION MASTER PLAN
FRAMINGHAM, MASSACHUSETTS

SCALE: 1" = 150' DATE: NOVEMBER 17, 2016

0 75 150 225
FEET

GPS FIELD OBSERVATIONS

B+T JOB NO. 2817.00

Arthur-Morency Woods Recommendations

Maintenance

- Address downed and overhanging trees symbolized on map.
- Take a look at the bridge that is shown as in need of repair. A new bridge is not needed, but rather the current one should be reinforced.
- Take care of the trash and dumping shown.

Boundary Concerns

B.) Remove dumping as previously mentioned and contact the abutter (apartment complex) about this encroachment.

E.) This portion of the parcel spills into a DPW yard that is used for snow storage. This is also an area that borders the stream that passes under the bridge. It would be wise to look into preventing any snow from being pushed far into the conservation parcel by imposing a 30-foot buffer, and possibly even creating a vegetated swale to clean snow melt.

F.) Abutter has a shed that appears to be an encroachment.

G.) Abutter's yard encroaches onto the parcel. Both this and the encroachment outlined in "F" show that boundary markers are very necessary when there are this many private residences in the area.

Parking

A.) Establish official parking area – a guardrail and some signs are needed to make this clear to the public.

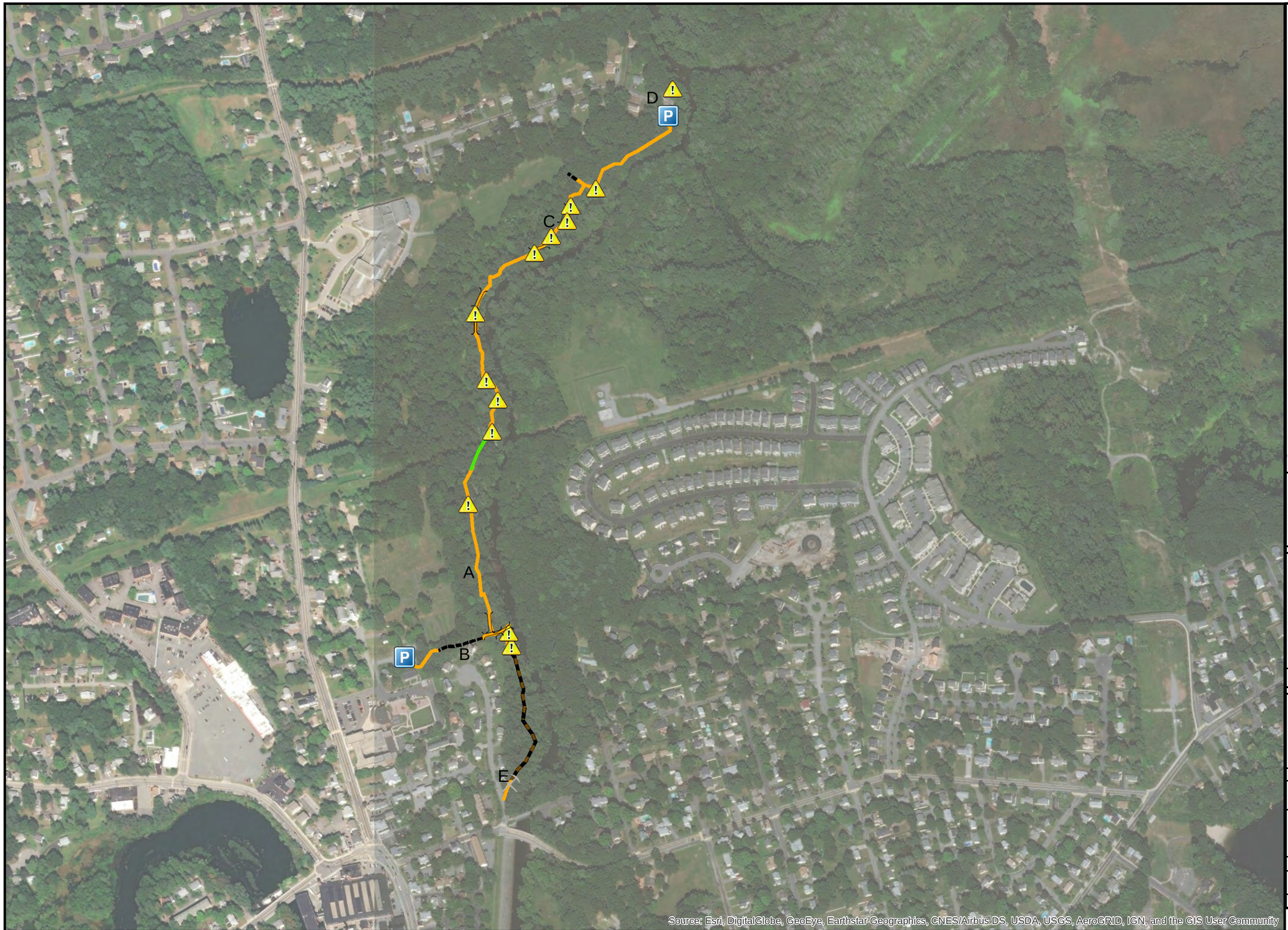
Trail Conditions

C.) Close these 3 "bootleg" trail openings. These are remnants of old BMX trails and should be naturalized.

D.) Confirm whether this trail lies outside of the boundary or not. If so, this short portion of it should be re-routed.

Other

Carol Getchell Nature Trail Field Observations



N

W E

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Legend

- Trail Class 1
- Trail Class 2
- Trail Class 3
- Trail Class 4
- Trail Class 5
- Bridge
- Trail Work Needed
- Buckthorn
- Parking
- Stairs
- Boardwalk

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TOWN OF FRAMINGHAM

DEPARTMENT OF PUBLIC WORKS
110 WESTERN AVENUE
FRAMINGHAM, MASSACHUSETTS

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PROJECT:

CONSERVATION MASTER PLAN
FRAMINGHAM, MASSACHUSETTS

SCALE: 1" = 425' DATE: NOVEMBER 17, 2016

0 50 100 200 300 400
Feet

GPS FIELD OBSERVATIONS

B+T JOB NO. 2817.00

Carol Getchell Nature Trail Recommendations

Maintenance

E.) This area was once taken over by knotweed, but it appears that the removal done by the summer crew mitigated this. Monitor to ensure that it does not return.

C.) Concentrate on the northern portion of the parcel for buckthorn removal. The side of the trail farthest from the river is generally worse off than the area along the bank.

- While buckthorn is the primary issue as far as invasive plants go, there are also patches of knotweed, Japanese stiltgrass, and Japanese barberry throughout. These could not be seen at the time of field visit, but they can easily be spotted in the summer. The summer crew should pay attention to these and remove them as they continue their efforts to remove buckthorn.

Boundary Concerns

Parking

- Parking can be had on Little Farms Road. There is also parking available at the top of the stairs that lead to the church, but it is unclear whether or not this is discouraged.

Trail Conditions

B.) Monitor and mitigate water flowing down these stairs. Early signs of erosion were noted. This is also seen at the trailhead on Sudbury Landing, symbolized on the map.

Connectivity

D.) The side of the parking area opposite the entrance to the nature trail has a trail that leads up to the Weston Aqueduct, which then leads to the Sudbury Oxbow parcel. This connection should be noted on a kiosk at the Little Farms Road parking area, as it offers an ideal way to get to the Oxbow.

- The parking on Sudbury Landing also allows one to view the historic Danforth Bridge.

Other

A.) Restore the "Nature's Classroom area. Bring back benches and possibly install an informational sign along the river. It would be wise to utilize metal park-style benches and either affix them to the ground via concrete or chain them to trees to prevent vandalizing.

Cedar Swamp Field Observations



N
W E
S

Legend

- Trail Class 1
- Trail Class 2
- Trail Class 3
- Trail Class 4
- Trail Class 5
- Asphalt Pile
- Trash

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TOWN OF FRAMINGHAM

DEPARTMENT OF PUBLIC WORKS
110 WESTERN AVENUE
FRAMINGHAM, MASSACHUSETTS

PREPARED BY:

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PROJECT:

CONSERVATION MASTER PLAN
FRAMINGHAM, MASSACHUSETTS

SCALE: 1" = 175' DATE: NOVEMBER 17, 2016

0 60 120 180
FEET

GPS FIELD OBSERVATIONS

B+T JOB NO. 2817.00

Cedar Park Recommendations

Maintenance

A.) There are many asphalt piles in this area that need to be cleaned up. While there are pieces that could be hauled out via wheelbarrow, many of the deposits are solid piles that would need to be broken up first.

B.) There was a bit of trash located on the south side of the parcel, but the north side was in much worse shape. This point represents the epicenter of a large dumping area filled with tires, metal, plastics and more. With efforts from the seasonal crew, much of this could be brought out and loaded onto a truck. However, some of the larger pieces of metal would first need to be cut up to be able to get them out.

Boundary Concerns

C.), D.), E.), F.), G.), and H.) show encroachments onto conservation land. These include stone walls, yards, and even a driveway in one case. As part of the plan for Cedar Park's rehabilitation, these should be addressed with the property owners.

Parking

I.) The Framingham DPW recently installed a wooden guardrail running the length of Cypress Street. This does not allow parking to take place here. Once Cedar Park goes through its rehabilitation, parking on this end will need to be considered to supplement any parking that may be available on the north end.

Trail Conditions

Connectivity

Other

-The proposed work, including construction of a boardwalk running from north to south within the parcel is very important for the presence of conservation in the south part of town. Currently underserved by open space, this part of town will finally have a parcel that serves as a space for passive recreation and the enjoyment of nature instead of a dumping ground. Cedar Park’s rehabilitation should be regarded as one of the most important components of the Master Plan, as it is spearheading a move to expand the accessibility of open space.

Cochituate Brook Field Observations



N
W E
S

Legend

- Trail Class 1
- Trail Class 2
- Trail Class 3
- Trail Class 4
- Trail Class 5
- Bench
- Bridge
- Gate
- Kiosk
- Dumping

PREPARED FOR:

TOWN OF FRAMINGHAM

DEPARTMENT OF PUBLIC WORKS
110 WESTERN AVENUE
FRAMINGHAM, MASSACHUSETTS

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PROJECT:

CONSERVATION MASTER PLAN
FRAMINGHAM, MASSACHUSETTS

SCALE: 1" = 125' DATE: NOVEMBER 17, 2016

0 20 40 80 120 160
Feet

GPS FIELD OBSERVATIONS

B+T JOB NO. 2817.00

Cochituate Brook Reservation Recommendations

Maintenance

B.) The entirety of this trail is lined with buckthorn -- removal is possible but would be a great effort. Access for a truck can be had via the gate at the northwest. Since the DPW maintains the trail and the buckthorn issue borders it, they may be a good resource to look toward for assistance.

Boundary Concerns

- Using conservation boundary tags on trees as a medium of communication to the public, note where exactly land ownership changes. This means making people who are on the rail trail aware that there is conservation land right beside them, as well as showing people on the conservation parcel where exactly the ownership changes to the state park.

Parking

- Parking can be had on Maymont Drive. There is currently no signage here indicating where to go to access the conservation parcel. Conservation may want to work with Parks and Recreation to get some sort of signage to supplement what is already there for Reardon Park.

Trail Conditions

- The Class 4 trails to the southeast are very wide which is fantastic for groups of people taking walks. However, the edges of these trails are not very well defined due to this being an area populated by spaced out pine trees. There are many felled trees littering the area which can be cut up and laid along trail edges that seem ambiguous.

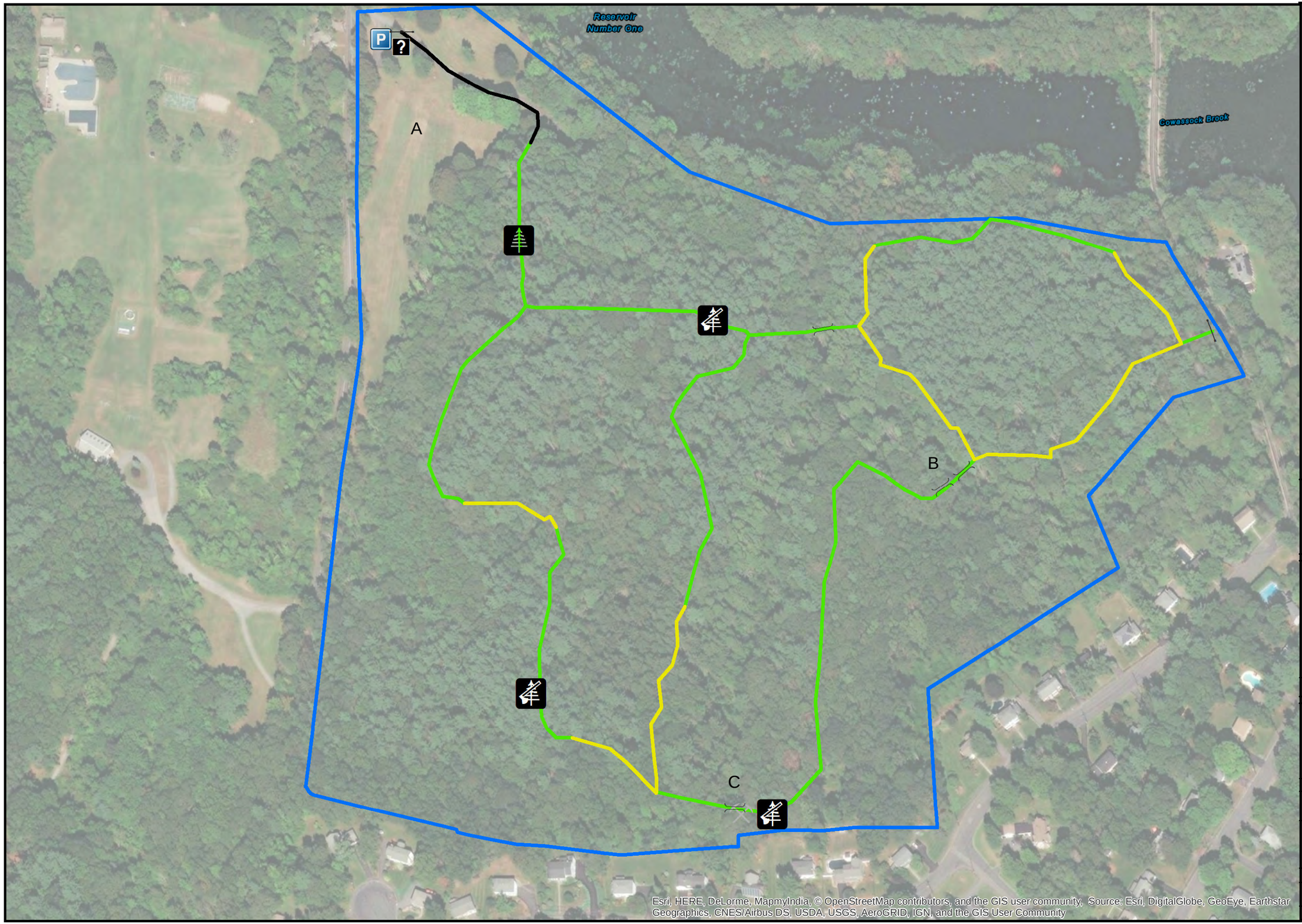
Connectivity

A.) Work on establishing a clear connection with signage between the trails leading to the rail trail and the trails next to the power lines. This area was recently cleared for power line work, so it is hard to tell that there is a whole other area of trails. Connecting these areas is crucial for more official access to Cochituate State Park.

C.) Work with DCR to establish an official connection between properties. This could include signs on both DCR and town land indicating such. The empty kiosk on the rail trail would be a good place to advertise this, as well as any maps.

Other

Macomber Field Observations



N
W E
S

Legend

- Trail Class 1
- Trail Class 2
- Trail Class 3
- Trail Class 4
- Trail Class 5
- Bridge
- Downed Tree
- Overhanging Tree
- Trail Work Needed
- Paved
- Potential Trail
- Parking
- Gate
- Kiosk

PREPARED FOR:

TOWN OF FRAMINGHAM

DEPARTMENT OF PUBLIC WORKS
110 WESTERN AVENUE
FRAMINGHAM, MASSACHUSETTS

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PROJECT:

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FRAMINGHAM, MASSACHUSETTS

SCALE: 1" = 200' DATE: NOVEMBER 17, 2016

0 25 50 100 150 200
Feet

GPS FIELD OBSERVATIONS

B+T JOB NO. 2817.00

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Macomber Recommendations

Maintenance

B.) All stream crossings should be checked and monitored, but these two in particular had a buildup of debris that should be removed. This buildup appeared to have been inhibiting the flow of water in the stream.

- Wisteria is by far the worst maintenance issue that Macomber possesses. The summer crew should make it a point to keep track of their progress via GPS so as to see if physical removal is not enough -- in that case, the town may want to look into a safe herbicide.

- Take care of the downed and overhanging trees that were located and displayed on the Macomber Field Observations/Recommendations map.

Boundary Concerns

Parking

- Continue to trim back parking area to prevent trail users coming in contact with poison ivy.

Trail Conditions

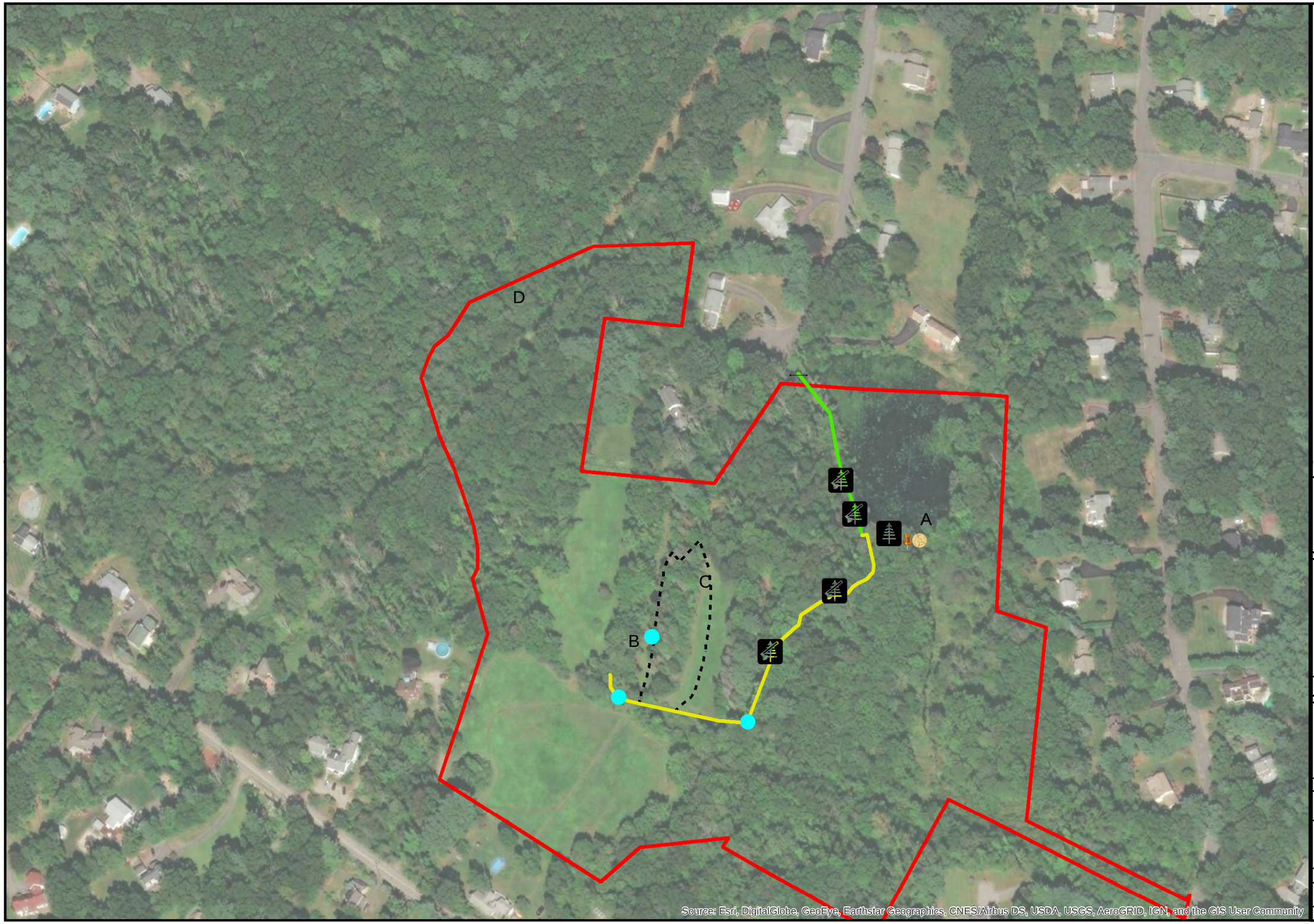
A.) A trail could be cut through the meadow following the woods line to offer a new way in and out of the parcel. This trail should be wide enough (48”+) to allow two people to walk side by side and still not be too close to the grass on either side, which get tall and full of ticks in the summer.

C.) The trail work down here should be prioritized due to the fact that a short stretch of trail is starting to turn into mud. Laying down some sort of stone aggregate is suggested.

Connectivity

Other

Mohawk Drive Field Observations



N
W E
S

Legend

- Trail Class 1
- Trail Class 2
- Trail Class 3
- Trail Class 4
- Trail Class 5
- Potential Trail
- Trash
- Beaver Activity
- Chain
- Overhanging Tree
- Downed Tree
- Wet Spot

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FRAMINGHAM, MASSACHUSETTS

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PROJECT:

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FRAMINGHAM, MASSACHUSETTS

SCALE: 1" = 175' DATE: NOVEMBER 17, 2016

0 25 50 100 150 200 Feet

GPS FIELD OBSERVATIONS

B+T JOB NO. 2817.00

Mohawk Drive Recommendations

Maintenance

A.) Beaver activity at the south side of the pond should be noted and monitored. At the time of the site visit, there was some tree debris in the water as well as stumps that were clearly gnawed by beavers. Conservation/summer crews should make a point to check this area every couple of months.

Boundary Concerns

Parking

- The only parking available for this parcel is on Mohawk Drive itself. This raises the question of whether the neighborhood is okay with people parking on the coul-de-sac to access this area.

Trail Conditions

B.) This spot and the two others shown have become quite wet and require one to walk off the trail to avoid them. This could be alleviated with some drainage or stone aggregate.

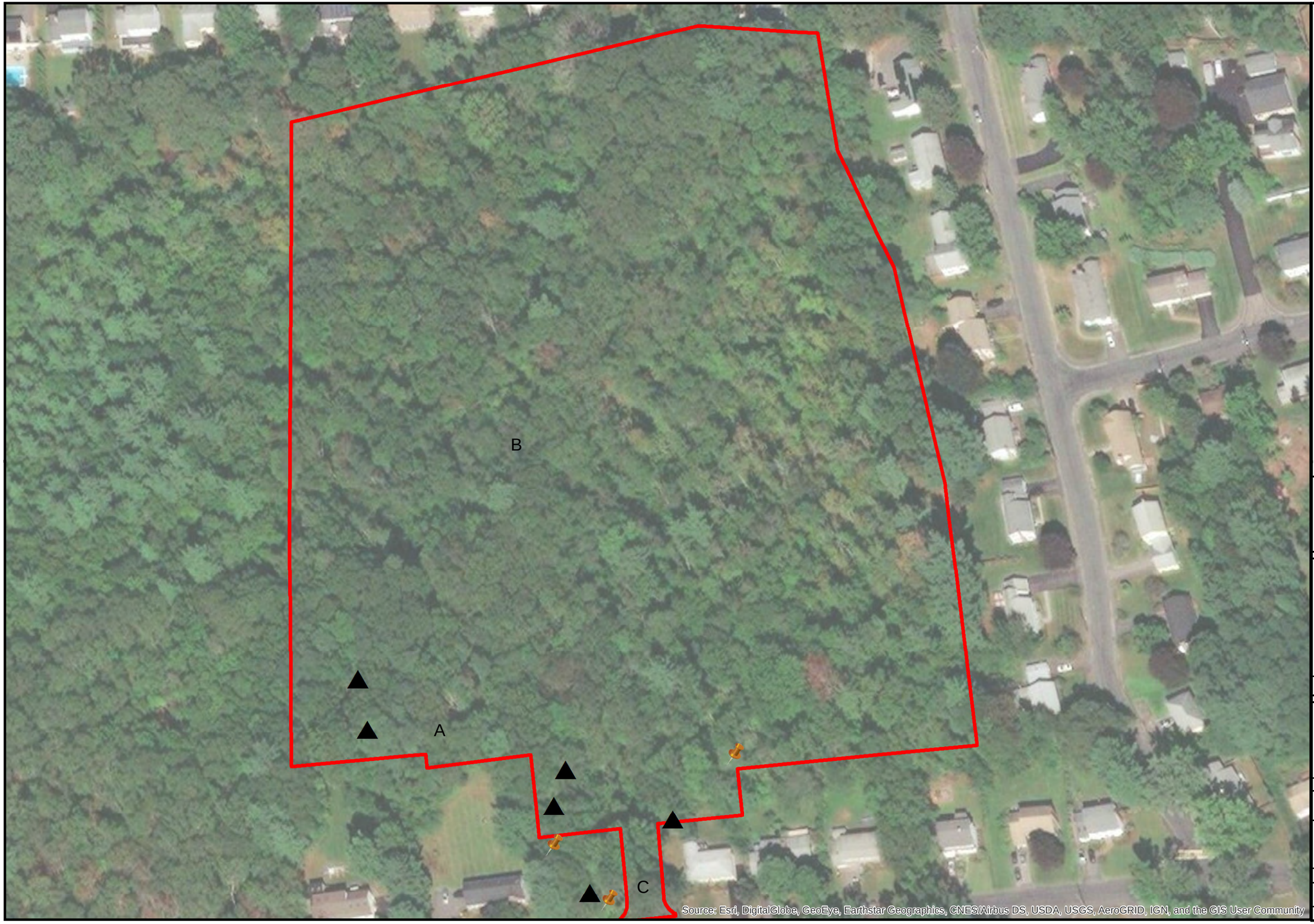
C.) This could be a very nice loop going through the eastern most field, but the trail was very hard to distinguish. While improving trail conditions, it would be wise to reinstate this trail. This can be said for other parts of the parcel as well. On this aerial image, it is clear that at one point there were some more defined paths such as the one that goes to the private property to the south. Posts could be used on this property as trail markers due to there not always being trees to hang tags on, in the case of the fields.

Connectivity

D.) A long term goal for this parcel should be to bring the trail to this far portion of the parcel and continue it to the Chickatawbut parcel, which does not seem to have any trails at this time. Trails here would also be useful due to the fact that there is potential to also tie into Callahan State Park.

Other

Old Worcester Road Field Observations



N
W E
S

Legend

- Dumping
- Trash

PREPARED FOR:

TOWN OF FRAMINGHAM

DEPARTMENT OF PUBLIC WORKS
110 WESTERN AVENUE
FRAMINGHAM, MASSACHUSETTS

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PROJECT:

CONSERVATION MASTER PLAN
FRAMINGHAM, MASSACHUSETTS

SCALE: 1" = 3,500' DATE: NOVEMBER 17, 2016

0 50 100 150
FEET

GPS Field Observations

B+T JOB NO. 2817.00

Old Worcester Road Recommendations

Maintenance

- Remove trash and dumping at locations shown on Old Worcester Road Field Observations/Recommendations map.

Boundary Concerns

A.) The main sources of the yard waste dumping on this parcel are the two private properties that sit at the southwest corner. Some of the piles are large and include leaves, plants, and branches. The owners should be made aware of where their boundary is so this does not continue for many more years.

B.) Conservation badges were seen on trees on this short border of the parcel, but sparsely if not at all anywhere else. These badges should span all the borders, especially on a parcel that is surrounded by this many private owners. It may also be advantageous to put up "no dumping" signs.

Parking

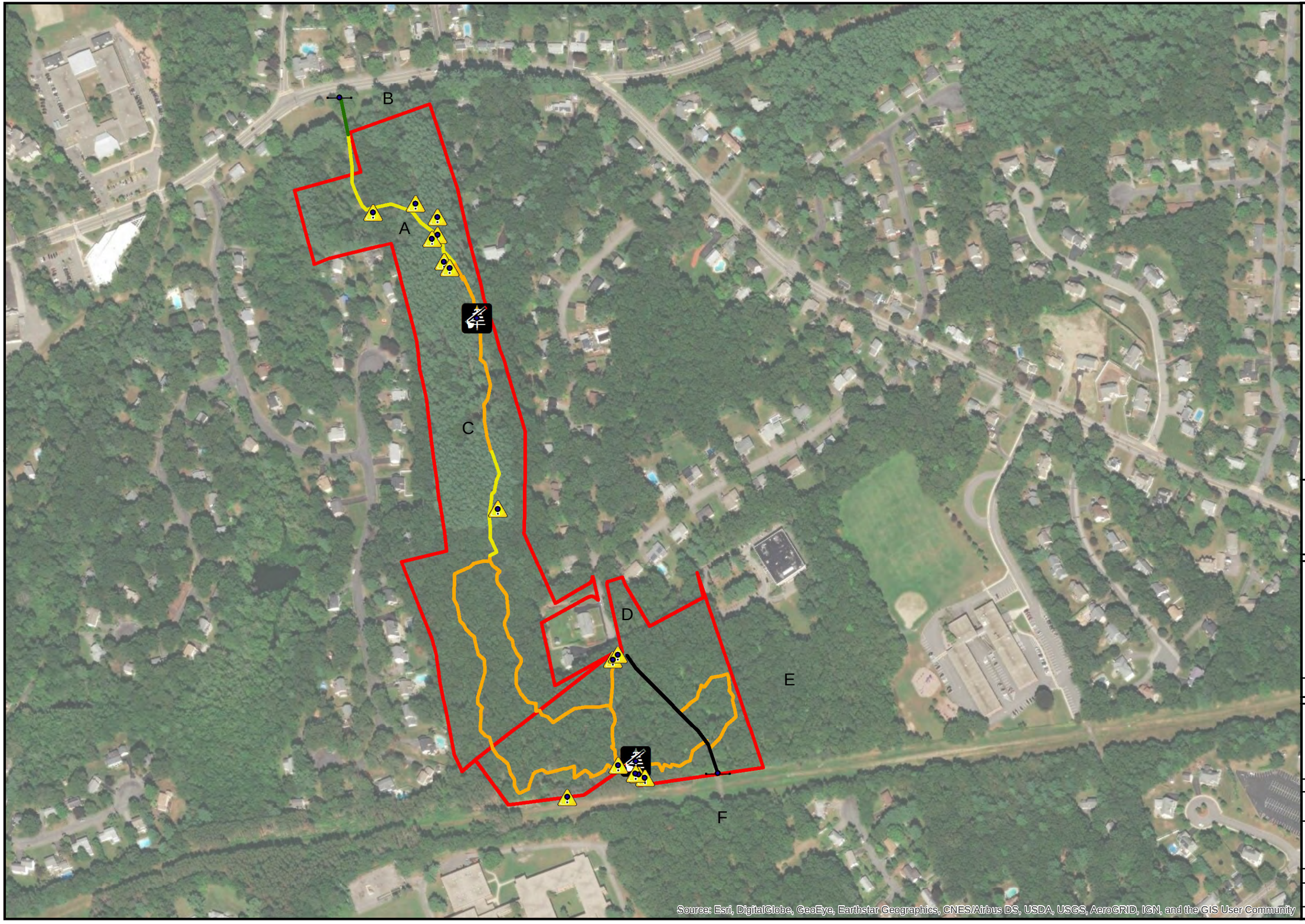
Trail Conditions

Connectivity

Other

B.) The center of this parcel features a stream that was running quite well upon the field visit. This in addition to some BVWs that have been flagged out are the primary reasons as to why this is an ideal parcel to keep as untouched open space.

Spring Lane Field Observations



N
W E
S

Legend

- Gate
- Buckthorn
- Downed Tree
- Overhanging Tree
- Trail Class 1
- Trail Class 2
- Trail Class 3
- Trail Class 4
- Trail Class 5
- Paved

PREPARED FOR:

TOWN OF FRAMINGHAM

DEPARTMENT OF PUBLIC WORKS
110 WESTERN AVENUE
FRAMINGHAM, MASSACHUSETTS

PREPARED BY:

BEALS+THOMAS
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PROJECT:

CONSERVATION MASTER PLAN
FRAMINGHAM, MASSACHUSETTS

SCALE: 1" = 300' DATE: NOVEMBER 17, 2016

0 FEET 100 200 300

GPS FIELD OBSERVATIONS

B+T JOB NO. 2817.00

B+T PLAN NO. 28170OP014A

Spring Lane Recommendations

Maintenance

A.) Concentrate on Buckthorn removal on the northern side where it seems to be spreading more rapidly. The southern side also needs Buckthorn removal, but the plant does not seem to be as dominant here as it is to the north.

- Take down the trees that are symbolized as hanging over the trail.

Boundary Concerns

- There does not appear to be a clear delineation of ownership on the northern portion of the parcel. Starting at the top, Parks and Recreation apparently has ownership. However, at approximately where the evergreens stop is where conservation has ownership. Instead of noting this change in ownership with signage, the town should look into transferring this property to conservation. Trail systems and wooded properties such as this are much better suited for conservation management, as they require a passive use outlook. Parks and Recreation does a very good job of handling active use parcels, but conservation would better serve the best interest of a property such as Spring Lane.

Parking

- It appears that the only sort of official parking on Spring Lane is for Temple Beth Shalom. While many of the people seen on this parcel appeared to be people who live in the neighborhood, parking may be an issue for people who have to drive here. Framingham Conservation may want to work with Temple Beth Shalom to establish some sort of shared parking agreement.

Trail Conditions

C.) Better define this large stretch of trail. While it is traversable as it stands, it could use some spot trimming to open sections up as well as being leaf blown just to better outline the edges of the trail.

- There were some vague paint markers located that seems to distinguish between the short loop trail and the longer trail that runs straight to the north end of the property. These should be refreshed as well as increased in amount.

Connectivity

B.) The north end of this parcel connects to the Weston Aqueduct, which can be crucial for connecting to other parcels such as the Carol Getchell Nature Trail and the Sudbury Oxbow. The location and access to this aqueduct should be made known to not only the neighborhood but to the public as well. Bordering the south side of the parcel is the Hultman Aqueduct which also offers connectivity to parcels such as the Carol Getchell Nature Trail. Currently, the MWRA does not permit public access on this aqueduct. Framingham Conservation should try to work

with the MWRA to promote access here, so as to allow another sort of greenway to exist in town. There is also potential for connectivity to the Walsh School contingent on the acquisition noted in “E”.

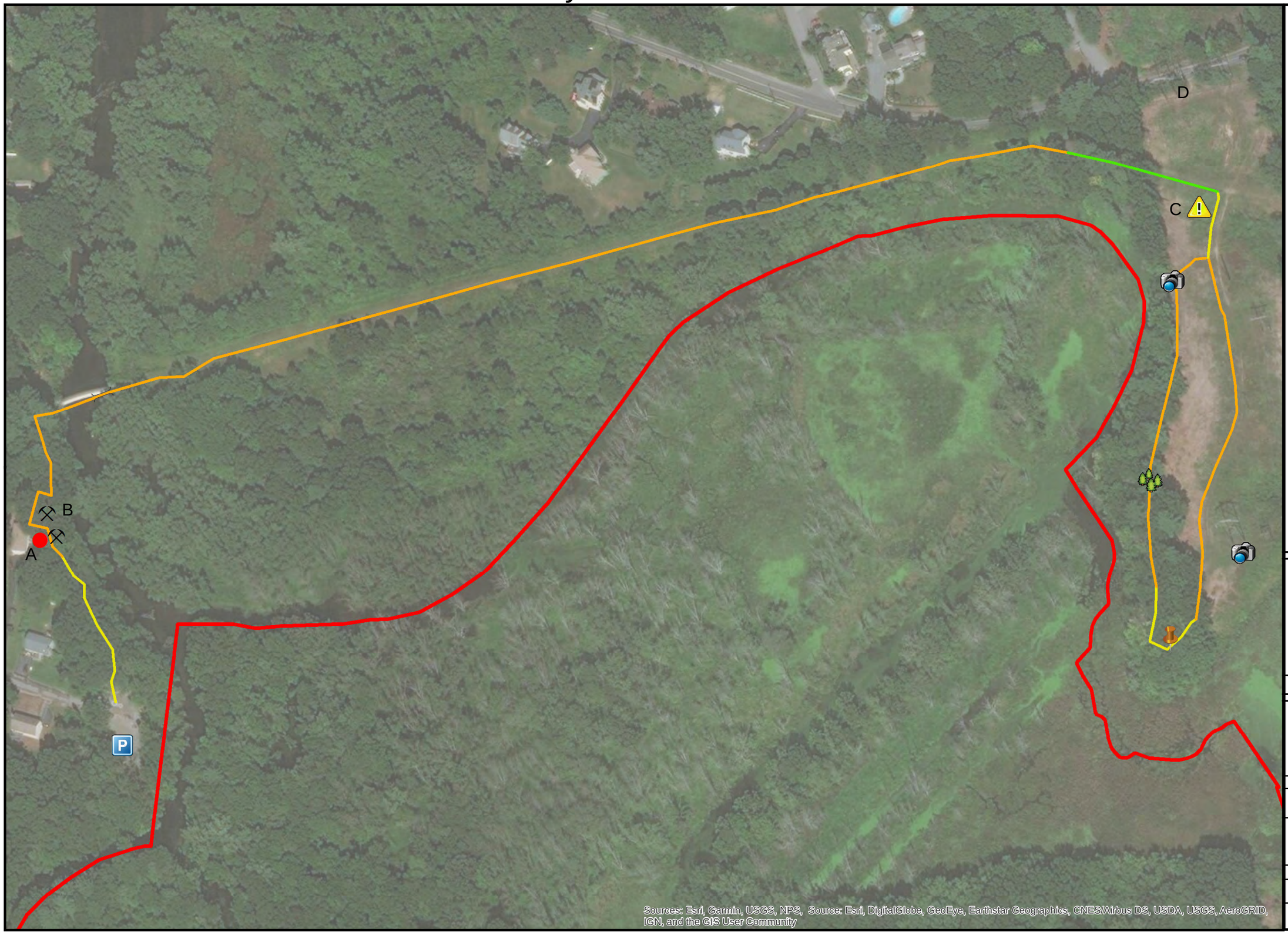
Other

D.) This small piece of property on the opposite side of Spring Lane does not offer much value to conservation due to its size, isolation and location. If this could be sold then conservation could see some extra money to put into the maintenance of valuable parcels, or even purchase another parcel. It looks as though this plot of land has potential to be zoned as buildable for a small house.

E.) This parcel that abuts King School should be transferred to conservation if it is in fact currently owned by the town. If conservation is able to maintain this parcel and implement trails, then the school could have an opportunity to work with the town for outdoor education purposes.

F.) This area across the aqueduct from Spring Lane is Town of Framingham-owned land that would benefit from being protected as a part of the Spring Lane parcels. This would allow better connectivity between Spring Lane and the Walsh school.

Sudbury Oxbow Field Observations



N
W E
S

Legend

- Trail Class 1
- Trail Class 2
- Trail Class 3
- Trail Class 4
- Trail Class 5
- Bridge
- Encroachment
- Knotweed
- Overgrown
- Parking
- Trail Work
- Scenic View
- Trash

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DEPARTMENT OF PUBLIC WORKS
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PROJECT:

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FRAMINGHAM, MASSACHUSETTS

SCALE: 1" = 150' DATE: NOVEMBER 17, 2016

0 50 100 150
FEET

GPS FIELD OBSERVATIONS

B+T JOB NO. 2817.00

Sources: Esri, Garmin, USGS, NPS, Source: Esri, DigitalGlobe, GeoEye, Earthstar Geographics, CNES/Airbus DS, USDA, USGS, AeroGRID, IGN, and the GIS User Community

Sudbury Oxbow Field Observations



N
W E
S

Legend

- Knotweed
- Tree stand

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FRAMINGHAM, MASSACHUSETTS

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CONSERVATION MASTER PLAN

FRAMINGHAM, MASSACHUSETTS

SCALE: 1" = 245' DATE: NOVEMBER 17, 2016

0 100 200 300
FEET

GPS FIELD OBSERVATIONS

B+T JOB NO. 2817.00

Sudbury Oxbow Recommendations

Maintenance

C.) A clump of knotweed with a diameter of about 20 feet was located here. It does not appear to have spread too far, so removing these is crucial for preventing the issue from getting worse in this area.

F.) Remove these few patches of knotweed as soon as possible. At the time of the site visit it was very confined, which is all the more reason to act now so as to prevent any sort of spreading.

E.) What appears to be an old hunting stand exists here and should be removed due to the fact that hunting is not allowed here and the stand looks to be in unsafe condition. It is unknown if anyone has recently tried hunting here.

Boundary Concerns

A.) A potential encroachment onto the buffer zone of the Sudbury River was located. It appears that the homeowner built a set of stairs leading down to a patio, but his boundaries are very unclear. This should be reviewed sooner than later.

Parking

- Parking for the Sudbury Oxbow is shared with the parking for the Carol Getchell Nature Trail at the end of Little Farms Road.

Trail Conditions

B.) Re-grading of the trail here would do a lot of good, as much of it is washing away toward the river.

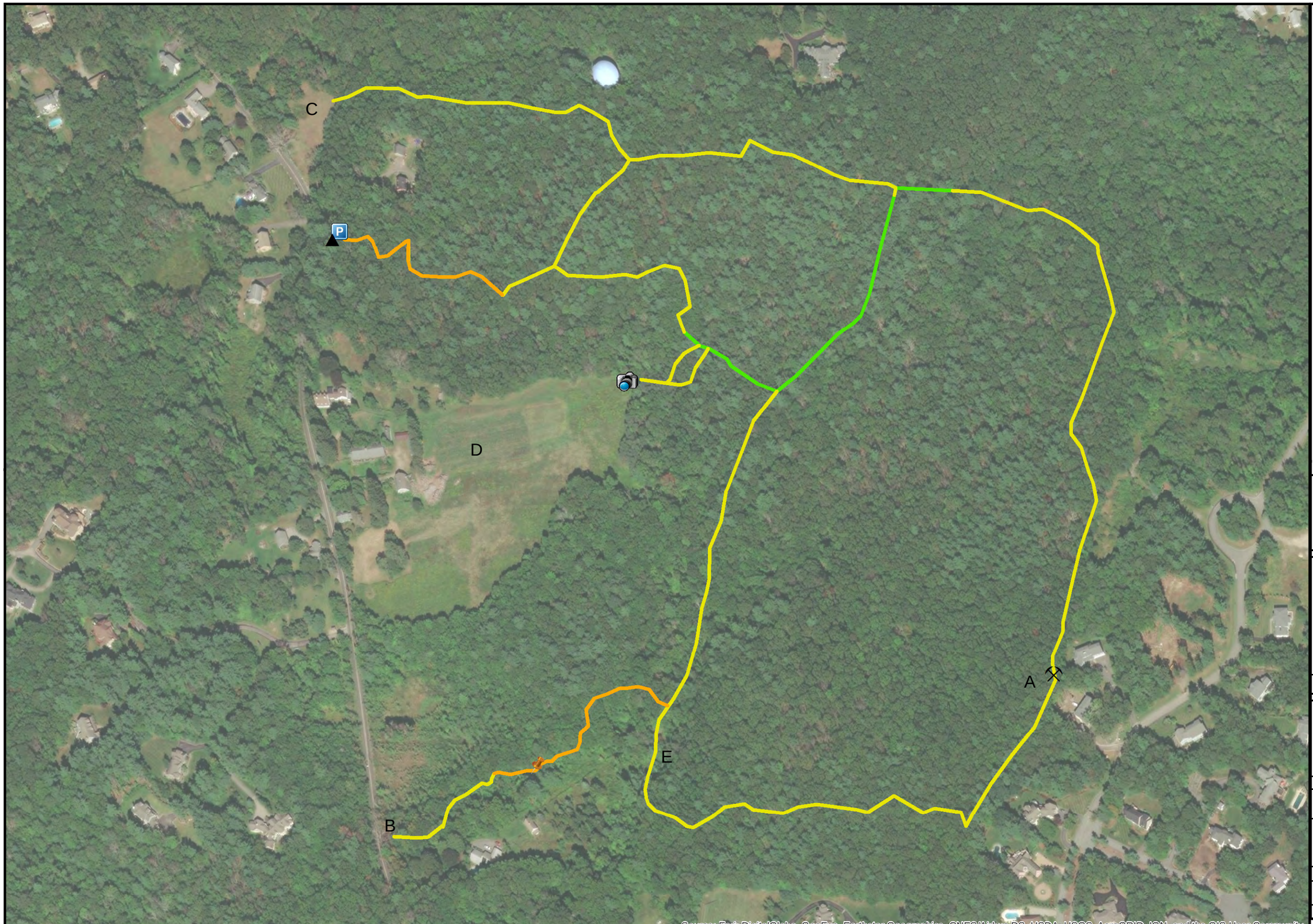
- Cut back the section of the loop trail on the east side that is starting to become overgrown. This appears to be a trail that is sparsely traveled and should be monitored for conditions.

Connectivity

D.) Access to the Sudbury Oxbow from Stonebridge Road can be had at this location. It seems to be an access route for the company that manages the power lines, but it also offers a point to walk in from. If one follows the power lines going south, it connects with Reardon Park -- the location of the Cochituate Brook parcel. A portion of the power lines that sits along the Oxbow is a marsh, so a trail going around this would be required to go straight from the Oxbow to Cochituate Brook. This section can also be avoided by getting onto the power lines from Riverpath Drive. On the way to Cochituate Brook, one would also pass Saxonville Beach, which is managed by Parks and Recreation.

Other

Wittenborg Woods Field Observations



N
W E
S

Legend

- DUMP
- EROSION
- TRASH
- Trail Class 1
- Trail Class 2
- Trail Class 3
- Trail Class 4
- Trail Class 5
- Scenic View

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PROJECT:

CONSERVATION MASTER PLAN
FRAMINGHAM, MASSACHUSETTS

SCALE: 1" = 270' DATE: NOVEMBER 17, 2016

0 100 200 300
FEET

GPS FIELD OBSERVATIONS

B+T JOB NO. 2817.00

Wittenborg Woods Recommendations

Maintenance

C.) A large effort to remove bittersweet from the Snow Meadow has been carried out here, and it seems to have worked. However, this area could use a seeding of native meadow grass so that the bittersweet would have a more difficult time coming back and taking over. Additionally, this trail offers a slightly less steep way into the parcel that may be preferred by some users.

E.) Wittenborg Woods does not have any heavily concentrated invasive problems, but there is Japanese barberry and bittersweet along this trail. It is contained enough as to where physical pulling of the plants may be the best removal option. It could not be located exactly due to the time of year that field work was done, but it is clearly visible during the spring and summer.

Boundary Concerns

- Wittenborg Woods is unique in that the wide open section with no trails toward the east side contains a legal hunting zone where hunters a permitted by the town to hunt here and curb the deer population. Efforts have been made to start to mark the boundaries of this area, but more official signage should be put up to keep the trail users informed.

Parking

B.) As it currently stands, this pull-off area can fit one or two cars. This may be an advantageous place for hunters to access the parcel, as it prevents having them walk in with guns and/or bows alongside other trail users. This also speaks to the need for clear hunting boundary markers, as well as encouraging hunters to enter from this location.

Trail Conditions

A.) Address the erosion issue occurring on the trail running along the east side of the parcel. It appears that someone has placed rocks to try and mitigate water flow, but more work could certainly be done to repair damage already done and better prevent future damage from occurring.

Connectivity

D.) It would be very advantageous to the integrity of Wittenborg Woods as a whole if a conservation restriction/easement was placed on this farm. It does not appear to be actively used for farming, so it could offer possibility for another trail running from north to south. Additionally, there is a bench here that overlooks a fantastic view of some hills of in the distance.

Other

Appendix F

Action Plans

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Action Plan

Arthur-Morency Woods

Item	Needed?	Comment	Priority Level	Completed
Signage				
Kiosks	Yes	Install a kiosk and mapbox.	Medium	
Trail Markers	Yes	Implement new trail markers -- no trail markers exist.	High	
Boundary Markers	Yes	Install boundary markers -- existing markers insufficient, especially abutting the apartments.	High	
Welcome Signs	Yes	Implement new signage -- no welcome sign exists.	High	
Trails				
Trail Work	Yes	Remove fallen and hazard trees, close "bootleg" trails marked on the Maintenance Map.	Medium	
Trail Construction	No	No new trails are needed.	N/A	
Connectivity	Yes	Install signage on Arthur Street directing users to Butterworth Park.	Low	
Community Outreach				
Interpretive Exhibits	No	Arthur Morency is not a suitable site for an interpretive exhibit.	N/A	
General Parcel Maintenance				
Invasives	Yes	Continue management of the widespread buckthorn issue.	High	
Repairs	Yes	Repair bridge marked on the Maintenance Map.	Medium	
Trash/Dumping Clean-Up	Yes	Focus on removing dumping by the apartments as marked on the Maintenance Map.	Medium	
Site-Specific Improvements				
DPW Yard buffer	Yes	Create a buffer zone between DPW yard and the stream to protect water quality.*	Medium	
Create Official Parking	Yes	An official gravel parkign area needs to be established on Arthur Street where people currently illegally park.		
*See Master Plan Narrative for details.				

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Action Plan

Carol Getchell Nature Trail

Item	Needed?	Comment	Priority Level	Completed
Signage				
Kiosks	Yes	Install kiosks and map boxes at either end of the trail.	High	
Trail Markers	No	No trail markers are needed, as it is only a single straight trail.	N/A	
Boundary Markers	Yes	No boundary markers were observed in the field.	Medium	
Welcome Signs	Yes	Implement new signage -- existing sign is heavily damaged.	High	
Trails				
Trail Work	Yes	Mitigate erosion by Sudbury Landing -- see the Maintenance Map.	Low	
Trail Construction	No	No new trails are needed here.	N/A	
Connectivity	Yes	Maintain connectivity to the Weston Acqueduct via the trail off of Little Farms.	Medium	
Community Outreach				
Interpretive Exhibits	Yes	Offer guided nature walks and "nature's classroom" sessions for the elementary school.	Low	
General Parcel Maintenance				
Invasives	Yes	Mitigate invasives -- buckthorn is the main issue here; bittersweet, Japanese stiltgrass and knotweed also present.	High	
Repairs	Yes	Smooth out damage caused by erosion to stairs behind the church and mitigate water flow.	Medium	
Trash/Dumping Clean-Up	No	This site does not require any large clean-up effort.	N/A	
Site-Specific Improvements				
"Nature's Classroom" Area	Yes	Restore the "nature's classroom" for elementary science classes -- bring back benches, interpretive signage, etc.	Medium	

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Action Plan

Cedar Woods

Item	Needed?	Comment	Priority Level	Completed
Signage				
Kiosks	Yes	Install kiosk -- eventually reflect additions such as the boardwalk once completed.	High	
Trail Markers	Yes	Install minimal trail markers once the boardwalk is created to make users aware of where it goes.	Low	
Boundary Markers	Yes	Install boundary markers to address numerous encroachments.	High	
Welcome Signs	Yes	Install new signage -- welcome signs are not present here.	High	
Trails				
Trail Work	Possible	Grade trails to meet ADA standards if the boardwalk is up to those standards as well.	Low	
Trail Construction	Possible	Re-route trails to accommodate the boardwalk.	Low	
Connectivity	No	This is an isolated parcel in an urban setting.	N/A	
Community Outreach				
Interpretive Exhibits	Yes	Host outdoor classroom sessions at wetland resource areas.	Low	
General Parcel Maintenance				
Invasives	Yes	Address small outbreaks of phragmites, bittersweet, and knotweed via physical pulling.	Medium	
Repairs	No	No repairs needed.	N/A	
Trash/Dumping Clean-Up	Yes	Clean up extremely heavy dumping at the north end -- equipment may be needed to pull out larger objects.	High	

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Action Plan

Cochituate Brook Reservation & Rail Trail

Item	Needed?	Comment	Priority Level	Completed
Signage				
Kiosks	No	Kiosk on the rail trail is in great shape -- this should be utilized as the sign for the site.	N/A	
Trail Markers	No	Trail system is not expansive enough to warrant trail markers.	N/A	
Boundary Markers	Yes	Install markers to distinguish between the conservation parcel and DCR land.	Medium	
Welcome Signs	Yes	Replace signage -- existing sign is heavily damaged.	High	
Trails				
Trail Work	No	No trail work needed.	N/A	
Trail Construction	Yes	Create a more clear cut path to connect Reardon Park to the trails.	Low	
Connectivity	Yes	Maintain conenction to Cochituate SP and the rail trail by maintaining trails and using signage.	Medium	
Community Outreach				
Interpretive Exhibits	No	Cochituate Brook is not a suitable site for interpretive exhibits.	N/A	
General Parcel Maintenance				
Invasives	Yes	Curb the buckthorn infestation along rail trail.	High	
Repairs	Yes	Remove graffiti from benches and signs.	Medium	
Trash/Dumping Clean-Up	Yes	Remove the piles of wood and asphalt from the parcel -- see Maintenance Map for location.	Low	
Site-Specific Improvements				
Define Parking	Yes	Better define where users can park, especially around Reardon Park. Include signage.	Medium	

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Action Plan

Edmands Road Parcels

Item	Needed?	Comment	Priority Level	Completed
Signage*				
Kiosks	No	No kiosk is needed here.	N/A	
Trail Markers	No	No trail markers are needed due to the simplicity of the layout.	N/A	
Boundary Markers	Yes	Mark boundary, as with all other sites.	High	
Welcome Signs	No	Welcome signage is not needed here.	N/A	
Trails*				
Trail Work	Yes	Fill and grade trail spots with standing water.	Medium	
Trail Construction	Yes	Cut trail through one of the fields to allow users to be able to pass through even when grass is high.	Low	
Connectivity	Yes	Evaluate Mohawk Drive parcel connectivity to Callahan State Park through the Chickatawbut parcel.	Low	
Community Outreach*				
Interpretive Exhibits	No	This site is not suited for interpretive exhibits.	N/A	
General Parcel Maintenance*				
Invasives	Yes	Physically pull sparse amounts of invasives including bittersweet, Japanese barberry, and winged euonymus.	High	
Repairs	No	No repairs needed.	N/A	
Trash/Dumping Clean-Up	No	No significant trash or dumping was located.	N/A	
Site-Specific Improvements*				
Beaver Activity	Yes	Monitor beaver activity for potential flooding	Low	
*References the Mohawk Drive parcel unless otherwise noted				

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Action Plan

Grove Street

Item	Needed?	Comment	Priority Level	Completed
Signage				
Kiosks	No	No kiosk needed at this site.	N/A	
Trail Markers	No	This site does not contain trails.	N/A	
Boundary Markers	Yes	Mark boundary, as with all other sites.	High	
Welcome Signs	No	This site does not need a welcome sign.	N/A	
Trails				
Trail Work	No	This site does not contain trails.	N/A	
Trail Construction	No	This site does not need trails if it is going to remain as untouched open space.	N/A	
Connectivity	No	This site does not offer connectivity to other parcels.	N/A	
Community Outreach				
Interpretive Exhibits	No	This site is not suited for interpretive exhibits.		
General Parcel Maintenance				
Invasives	No	No invasives located at this site.	N/A	
Repairs	No	No repairs needed.	N/A	
Trash/Dumping Clean-Up	No	No significant dumping was located here.	N/A	

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Action Plan

Macomber Reservation

Item	Needed?	Comment	Priority Level	Completed
Signage				
Kiosks	Yes	Replace front kiosk and map box.	High	
Trail Markers	Yes	Implement new marking system.	High	
Boundary Markers	Yes	Increase amount of markers.	High	
Welcome Signs	Yes	Implement new welcome sign, create new sign for street entrance.	High	
Trails				
Trail Work	Yes	Remove fallen and hazard trees, clean up debris around bridges, mitigate erosion.	High	
Trail Construction	Yes	Construct trail running through the meadow along woods line.	Low	
Connectivity	No	Macomber does not offer connectivity to other parcels.	N/A	
Community Outreach				
Interpretive Exhibits	Yes	Host public nature walks - explore stream channels, flora, fauna, etc.	Low	
General Parcel Maintenance				
Invasives	Yes	Create and execute wisteria removal plan (possibly herbicidal).	High	
Repairs	Yes	The parking lot needs to have the large depression filled in.	High	
Trash/Dumping Clean-Up	No	No notable trash or dumping located.	N/A	
Site-Specific Improvements				
Picnic Area	Yes	Improve the grass area to facilitate picnics, etc.	Low	
Remove Chain Link Fence	Yes	Remove the fence once associated with the old dog kennel.	Low	

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Action Plan

Nobscot Park

Item	Needed?	Comment	Priority Level	Completed
Signage				
Kiosks	Yes	Install kiosk sign with relevant parcel information.	High	
Trail Markers	No	No markers are needed as the trail is one short loop.	N/A	
Boundary Markers	Yes	Install boundary markers around the parcel due to nearby development.	Medium	
Welcome Signs	No	Although it is not uniform with other parcels, a welcome sign in good shape exists here.	N/A	
Trails				
Trail Work	No	No trail work needed.	N/A	
Trail Construction	No	No trail construction needed.	N/A	
Connectivity	No	Due to its small size and surrounding development, this parcel does not offer much connectivity.	N/A	
Community Outreach				
Interpretive Exhibits	No	This site does not offer much for interpretive exhibits.	N/A	
General Parcel Maintenance				
Invasives	Yes	Conduct physical removal of vinca, if not desired for aesthetic purposes.	High	
Repairs	No	No repairs needed.	N/A	
Trash/Dumping Clean-Up	No	No significant clean-up efforts needed.	N/A	

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Action Plan

Old Wood/Old Worcester Road Parcels

Item	Needed?	Comment	Priority Level	Completed
Signage				
Kiosks	No	No kiosks are needed here.	N/A	
Trail Markers	No	There are no trails on this parcel.	N/A	
Boundary Markers	Yes	Install boundary markers due to encroachments.	High	
Welcome Signs	No	Welcome signage is not needed here.	N/A	
Trails				
Trail Work	No	There are no trails on this parcel.	N/A	
Trail Construction	No	There are no trails needed on this parcel if it is to remain untouched open space.	N/A	
Connectivity	No	This parcel is isolated in an urban environment and does not offer connectivity to other parcels.	N/A	
Community Outreach				
Interpretive Exhibits	No	This site is not particularly well suited for interpretive exhibits, but does offer a good example of a Red Maple Swamp.	N/A	
General Parcel Maintenance				
Invasives	Yes	Evaluate removal of buckthorn throughout the property -- may be difficult due to the remote location.	Medium	
Repairs	No	No repairs are needed here.	N/A	
Trash/Dumping Clean-Up	Yes	Remove yard waste and trash dumping here from abutters. See the Maintenance Map for locations.	High	

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Action Plan

Spring Lane

Item	Needed?	Comment	Priority Level	Completed
Signage				
Kiosks	Yes	Install simple kiosk sign with relevant information.	High	
Trail Markers	Yes	Implement new trail marking system due to there being multiple loops.	High	
Boundary Markers	Yes	Mark the boundary.	High	
Welcome Signs	No	No welcome sign is needed here.		
Trails				
Trail Work	Yes	Cut up and remove downed/overhanging trees.	High	
Trail Construction	No	No new trail construction is needed here.	N/A	
Connectivity	Yes	Maintain connectivity to the Hultman Aqueduct, as well as the Parks & Recreation Water St. Parcel.	Medium	
Community Outreach				
Interpretive Exhibits	No	This site is not suited for interpretive exhibits.	N/A	
General Parcel Maintenance				
Invasives	Yes	Remove buckthorn in a handful of locations -- see Maintenance Map.	High	
Repairs	No	No repairs needed here.	N/A	
Trash/Dumping Clean-Up	No	No significant trash or dumping was located here.	N/A	

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Action Plan

Sudbury River Oxbow Reservation

Item	Needed?	Comment	Priority Level	Completed
Signage				
Kiosks	Yes	Install simple kiosk with parcel information.	Medium	
Trail Markers	Yes	Install a trail marker to direct people from Little Farms to the Oxbow.	Medium	
Boundary Markers	Yes	Install boundary markers.	High	
Welcome Signs	No	This site does not require a welcome sign.	N/A	
Trails				
Trail Work	Yes	Cut back overgrown section of trail -- see the Maintenance Map.	Medium	
Trail Construction	No	No new trails are needed here.	N/A	
Connectivity	Yes	Maintain connectivity to the Weston Aqueduct and Carol Getchell Nature Trail.	High	
Community Outreach				
Interpretive Exhibits	Yes	The Oxbow offers some fantastic views and opportunities to see wildlife -- prime parcel for a nature walk.	Low	
General Parcel Maintenance				
Invasives	Yes	Address patches of knotweed -- see the Maintenance Map.	High	
Repairs	No	No repairs needed here.	N/A	
Trash/Dumping Clean-Up	No	No significant dumping located here.	N/A	

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Action Plan

Wittenborg Woods Parcel

Item	Needed?	Comment	Priority Level	Completed
Signage				
Kiosks	Yes	Install kiosk and a new map box with site information.	High	
Trail Markers	Yes	Implement new marking system -- current markers are incohesive.	High	
Boundary Markers	No	Boundary markers were found to be sufficient at time of visit.	N/A	
Welcome Signs	Yes	Implement new welcome signage.	High	
Trails				
Trail Work	Yes	Mitigate erosion on the east side of parcel.	Medium	
Trail Construction	No	No new trails are needed.	N/A	
Connectivity	Yes	Maintain connectivity to Bay Circuit Trail and Nobscot.	Low	
Community Outreach				
Interpretive Exhibits	Yes	Lead a nature/historical walk.	Low	
General Parcel Maintenance				
Invasives	Yes	Keep up with mitigating spot problems of bittersweet, Japanese barbery, and buckthorn.	Medium	
Repairs	Yes	The parking area needs to be re-graded as well as have water flow issues addressed.	Medium	
Trash/Dumping Clean-Up	Yes	Clean up small amounts of dumping in the parking area.	Low	
Site-Specific Improvements				
Hunting Area Boundary	Yes	Improve the marking of the hunting area boundary with signage utilizing GPS.	Medium	
Snow Meadow Restoration	Yes	Plant meadow grass seed while invasives are mostly eliminated so as to naturalize the area.	High	

Appendix G

Macomber Access Trail

AG-1.0 MACOMBER ACCESS TRAIL

AG-1.1 Introduction

As part of the evaluation of the Macomber Reservation, creating an improved access from the Hickory Hill Lane neighborhood was explored. As this area consists of residential homes most proximate to this conservation land, it was desired to enhance the access to the property to encourage visitors to utilize the area for passive recreation. Discussions with the immediate abutting neighbors should be had to discuss implementing an improved access route to the property.

AG-1.2 Alternatives

AG-1.2.1 Path Surface Options

Several options exist for the surface of the access pathway to the Macomber Conservation Land, including:

- Paved (bituminous concrete) - high initial cost, issue with tree roots near street
- Mowed lawn - Not recommended unless consistent maintenance is provided, visual impact on neighbor if not maintained, surface is not accessible, could become worn and eventual dirt path is used frequently
- Stone dust - (stabilized in the residential lawn areas, unstabilized through conservation land) – due to the durability, accessibility and cost, this is the recommended alternative for the path surfacing.

AG-1.2.2 Fence/Visual Barrier Options

Options were considered to define the border between the City of Framingham property and the abutting property owners' land to clearly delineate the boundary between the public and private property, including:

- Wood fence - lowest cost of three options, defines edges well and separates trail use from residences, least durable for future maintenance considerations, likely to get damaged by maintain adjacent lawn with string trimmers
- Granite posts with wood rails - Highest relative cost, best appearance, defines edges well, durable, moderately low maintenance
- Granite posts only - less definition of edges but likely adequate for low traffic access point, lower cost than granite posts with wood rail, durable, lowest maintenance, 6 x 6 post recommended for aesthetics

AG-1.2.3 Landscape Materials along Edging

Considerations for landscape materials to be installed along the boundary in addition to the fencing options above, including:

- Gravel - unsightly for abutting residences if not maintained well, problematic when adjacent to mowed edges
- Lawn - not recommended unless consistent maintenance is provided
- Low groundcover recommended to define existing lawn area of abutters with path, maintenance required until groundcover fully establishes


Welcome to
Malcomber
Reservation


Welcome to
Macomber
Reservation


Welcome to
Macomber
Reservation

LEGEND

LOCUS PROPERTY LINE	MINOR CONTOUR
OVERHEAD WIRE	MAJOR CONTOUR
POST	SPOT ELEVATION
CATCH BASIN	BENCHMARK
GUY WIRE	BITUMINOUS CONCRETE
SIGN	FOUND
MAIL BOX	STONE BOUND
STONE WALL	DRILL HOLE
TREE	ASSESSOR ID MAP/LOT
UTILITY POLE	
GRANITE CURB	
CHAIN LINK FENCE	

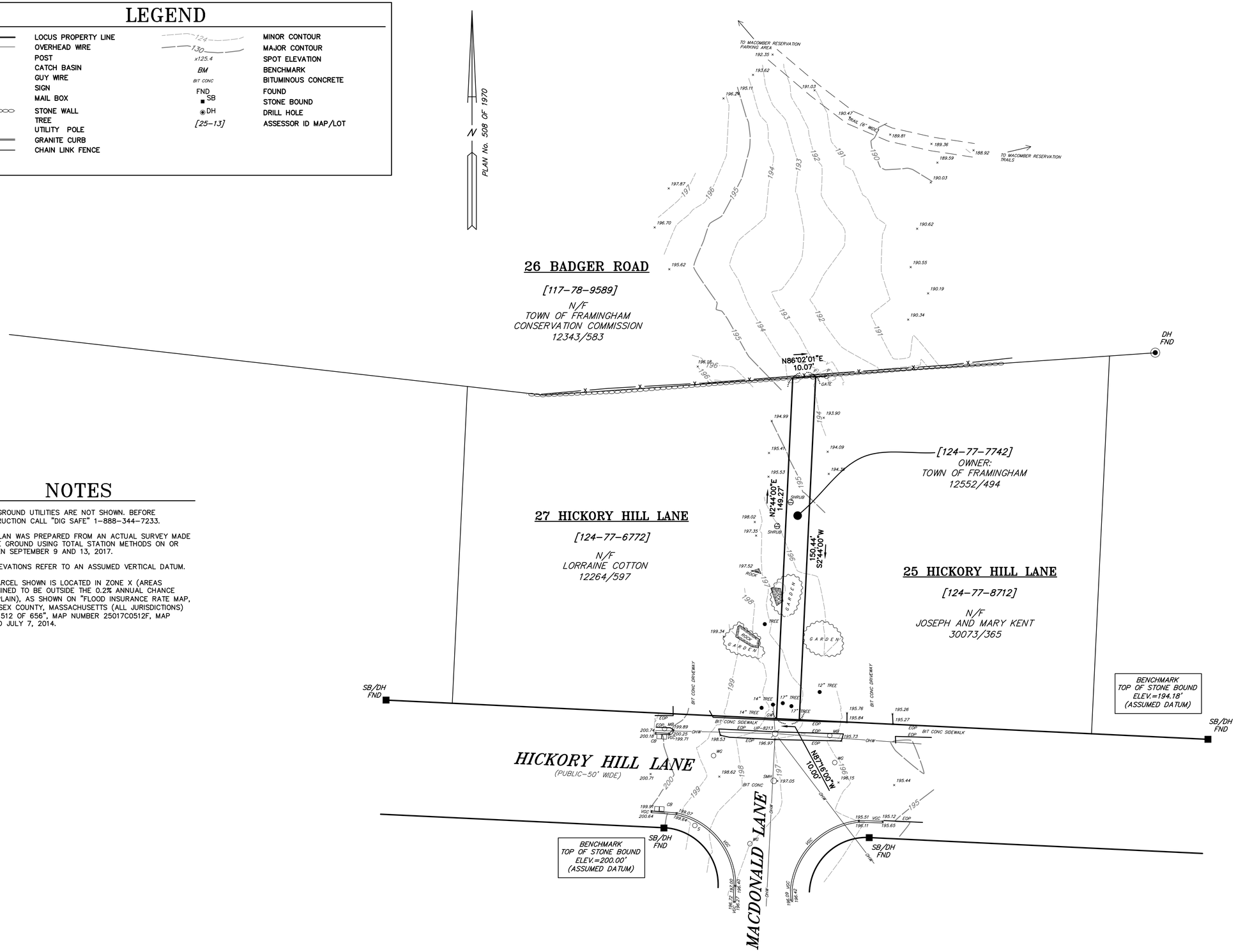
NOTES

1) UNDERGROUND UTILITIES ARE NOT SHOWN. BEFORE CONSTRUCTION CALL "DIG SAFE" 1-888-344-7233.

2) THIS PLAN WAS PREPARED FROM AN ACTUAL SURVEY MADE ON THE GROUND USING TOTAL STATION METHODS ON OR BETWEEN SEPTEMBER 9 AND 13, 2017.

3) ALL ELEVATIONS REFER TO AN ASSUMED VERTICAL DATUM.

4) THE PARCEL SHOWN IS LOCATED IN ZONE X (AREAS DETERMINED TO BE OUTSIDE THE 0.2% ANNUAL CHANCE FLOODPLAIN), AS SHOWN ON "FLOOD INSURANCE RATE MAP, MIDDLESEX COUNTY, MASSACHUSETTS (ALL JURISDICTIONS) PANEL 512 OF 656", MAP NUMBER 25017C0512F, MAP REVISED JULY 7, 2014.



PREPARED FOR:

TOWN OF FRAMINGHAM

RECORD OWNER:

TOWN OF FRAMINGHAM
12552/494

5			
4			
3			
2			
1			
0	09/15/2017	INITIAL ISSUE	
ISSUE DATE		DESCRIPTION	
JAN	JAN/MEB	MEB/BAL	RJB
FLD	CALC	DWN	CHK'D

ROBERT JORDAN BUCKLEY No. 37324 REGISTERED PROFESSIONAL LAND SURVEYOR

9/15/17

TOPOGRAPHIC PLAN

HICKORY HILL LANE
FRAMINGHAM, MA
(MIDDLESEX COUNTY)

PREPARED BY:

BEALS+THOMAS
Civil Engineers + Landscape Architects + Land Surveyors + Planners + Environmental Specialists

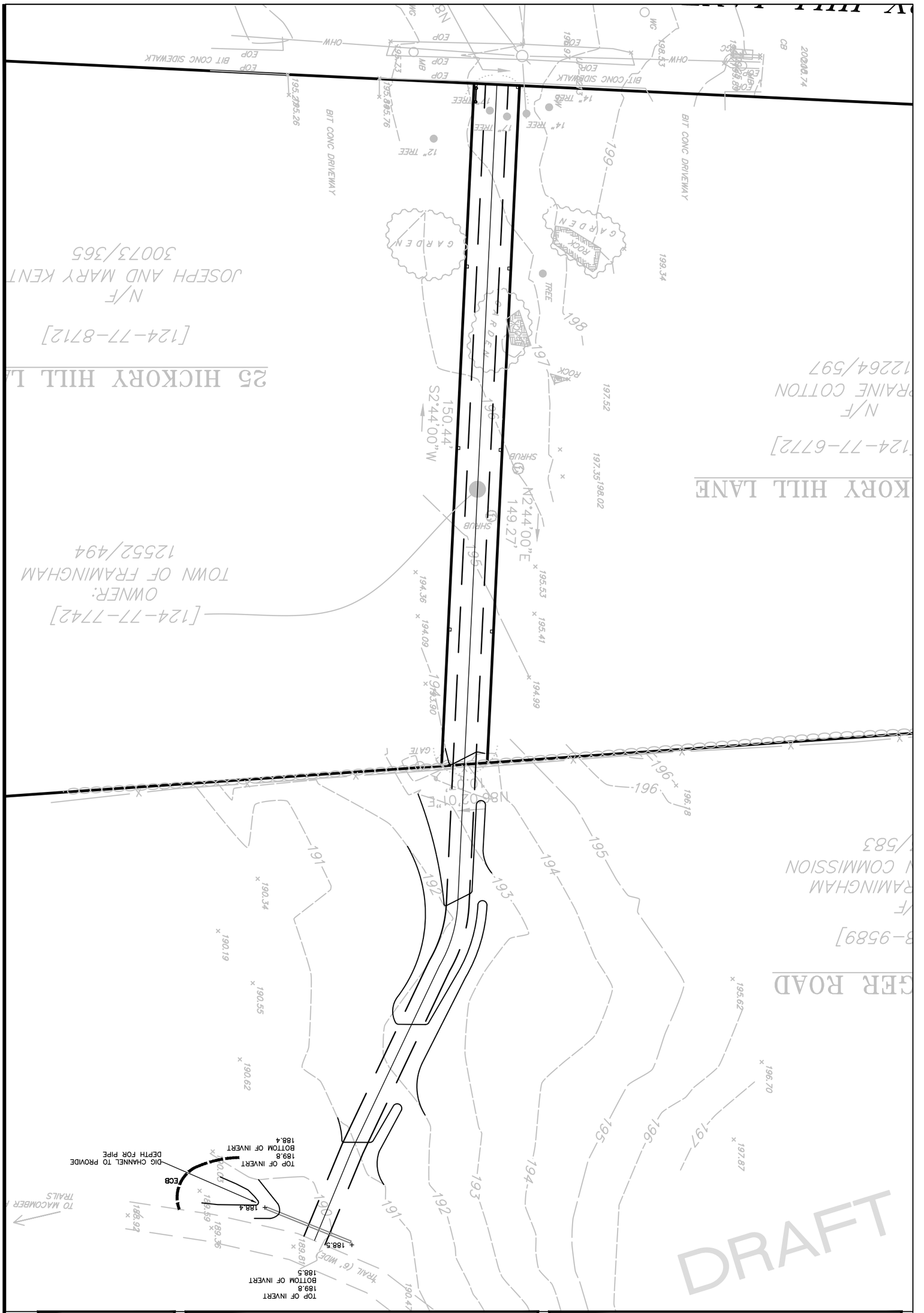
BEALS AND THOMAS, INC.
Reservoir Corporate Center
144 Turnpike Road
Southborough, Massachusetts 01772-2104
T 508.366.0560 | www.bealsandthomas.com

DATE: SEPTEMBER 15, 2017

SCALE: 1"=20'

B+T JOB NO. 2817.01	TP
B+T PLAN NO. 281701P080A-001	
SHEET No. 1 OF 1	

BEALS AND THOMAS, INC.



North Arrow

NORTH

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Macomber Parcel – Access Trail
Framingham, Massachusetts

Town of Framingham
150 Concord Street
Framingham, Massachusetts

Design Option 1
Figure or Sketch Number 001

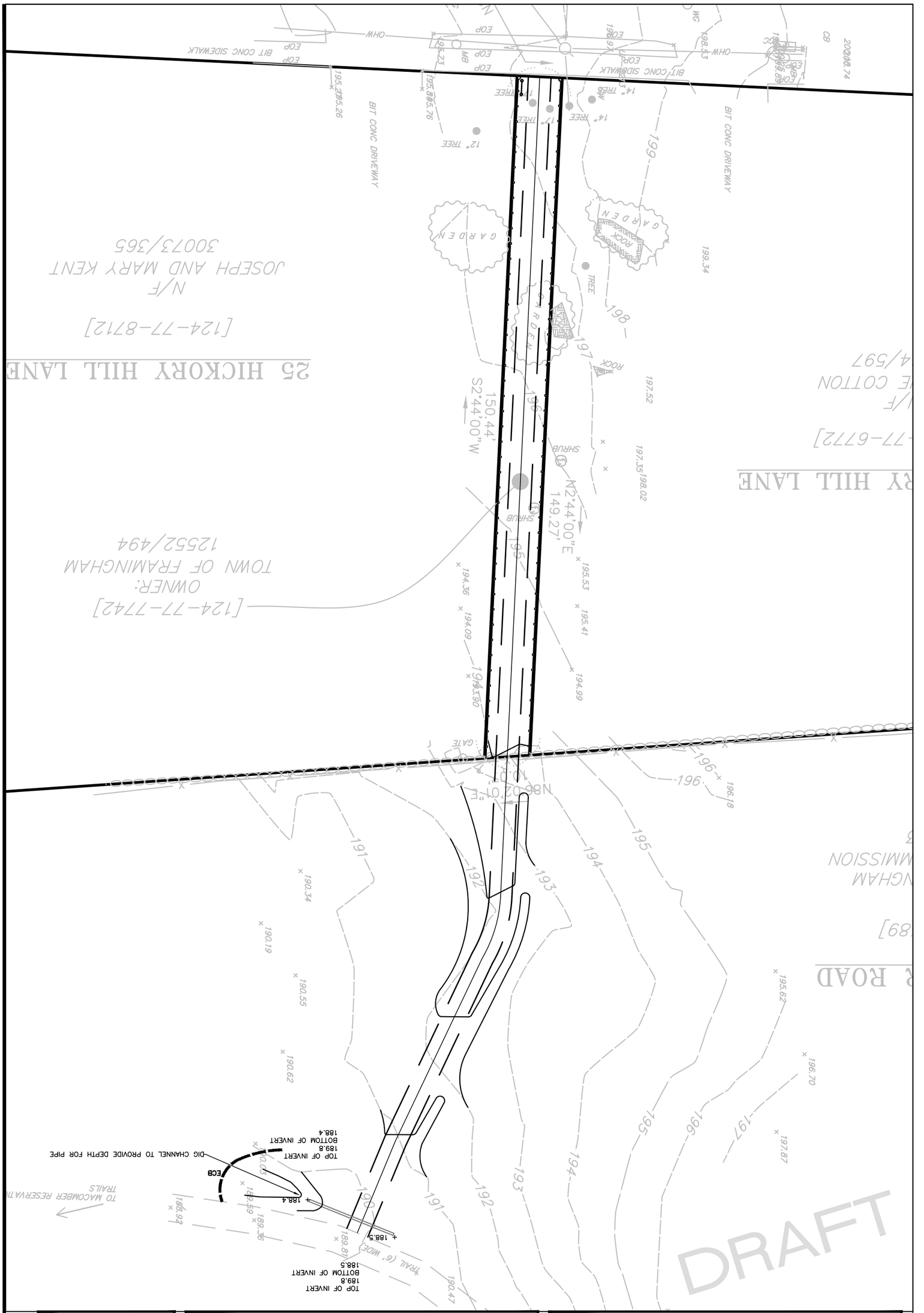
Scale: 1" = 20'

Date: 09/19/2017

B+T Drawing No. 281701D004A

B+T Project No. 2817.01

BEALS AND THOMAS, INC.



North Arrow

NORTH

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Macomber Parcel – Access Trail
Framingham, Massachusetts

Town of Framingham
150 Concord Street
Framingham, Massachusetts

Design Option 2
Figure or Sketch Number 002

Scale: 1" = 20'

Date: 09/19/2017

B+T Drawing No. 281701D004A

B+T Project No. 2817.01

Appendix H

CRT Kiosks

Welcome to

Cochituate Rail Trail CRT

FRAMINGHAM
MASSACHUSETTS

School Street & Concord Street

The intersection of School and Concord Streets is the trailhead of the Cochituate Rail Trail (CRT), built on the abandoned right-of-way of the Saxonville Branch Line that once carried passengers and goods between Natick and the mill village of Saxonville.

Saxonville Village

Saxonville's village center is just up the road in an oxbow of the Sudbury River, surrounded by water on three sides. The village grew around the falls on the river, where plentiful fish and other wildlife had earlier supported a large, nearby Native American village. These Indians were members of the "Nipmuck" tribe, which means "fresh water people" in their own language. European settlers called the area Stones End after John Stone, who settled there in 1647, building a house near the falls.

Saxonville was Framingham's first industrial center. Many mills have stood at the falls since the 1600's, including a gristmill in 1659. The village was incorporated as Saxonville in 1827, named after the Saxon Factory Company, the first woolen mill at the falls.

During the Civil War, Saxonville Mills made blankets and cloth for Union army uniforms. At the peak of operations in 1923, the mills, then Roxbury Carpet, employed 700. Saxonville's woolen mill closed in 1973, after 150 years of weaving under many names and owners since 1823. Today, the once mill buildings have been reborn as commercial space, retail businesses, and artists' studios.

Railroads & Saxonville

Railroads were the engines of economic development in the nineteenth century. When the railroad first came to Framingham in 1835, horse-drawn carts hauled goods between Saxonville and the Boston and Worcester Railroad stations at Natick and South Framingham. Then, in 1846, a rail spur was built to Saxonville. The Saxonville Branch Line, as it was called, originated in Natick and ended at the mill, then called New England Worsted. Trains would bring coal and wool directly into the mill yard and take away finished goods. A passenger depot and train shed were across the street. A railroad roundhouse would turn the train engines to return to Natick.

"Cochituate"

'Cochituate' derives from Native American word meaning "torrent" or "place of rushing water." The "torrent" was Lake Cochituate's outfall, whose waters Cochituate Brook carried to the nearby Sudbury River. Cochituate Brook joins the Sudbury River just beyond the CRT trailhead.

1955 Flood

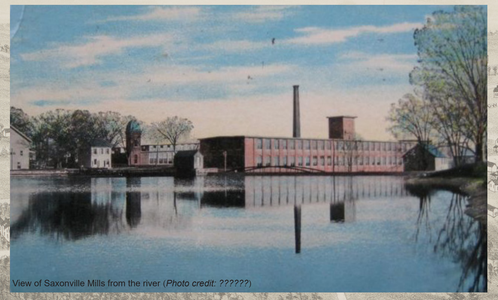
August 1955, two hurricanes skirted and passed by Southern New England within just over a week of the other, generating massive amounts of flooding in the region. Hurricane Connie brought 4-6 inches of rain within two days (August 11 & 12), which saturated the ground and brought water levels up. A week later, Hurricane Diane came across the southern edge of New England and dropped nearly 20 inches of rainfall within a two day span. Both these events resulted in setting records as well as destructive flooding.



Saxonville Train Station (*Photo courtesy of City of Framingham*)



Train at the Saxonville Train Station circa 1880 (*Photo courtesy of Framingham Public Library on Flickr*)



View of Saxonville Mills from the river (*Photo credit: ??????*)

View of Saxonville
(*Photo Credit: Norman B. Leventhal Map Center Collection*)



The Historic Flood August 1955
(*Photo courtesy of City of Framingham*)

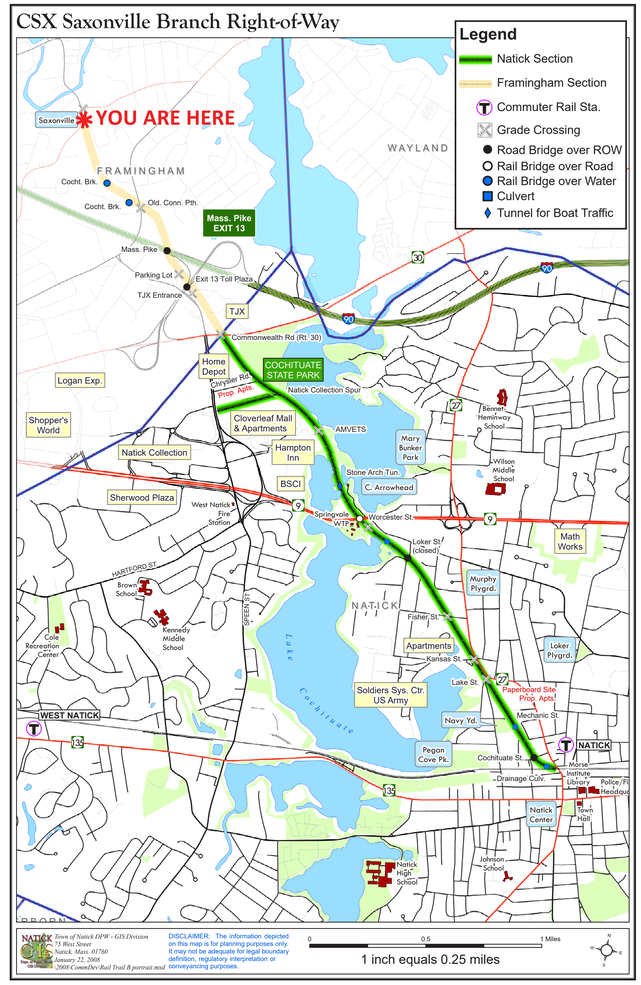






Bell's Dairy on School Street
(*Photo courtesy of City of Framingham*)

You are Here....



Contact Information

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Welcome to

Cochituate Rail Trail CRT

FRAMINGHAM
MASSACHUSETTS

Old Connecticut Path

Old Connecticut Path was one of the earliest roadways crossing New England. In 1633, four English adventurers were the first Europeans to pass through what would become Framingham on what, even then, was known as the "Connecticut Path." Native peoples had long used the path, which kept upland, bypassing swamps and rivers, and ran northeast and southwest between the Massachusetts coast and the Connecticut River valley. By the 1640s, colonists seeking new land to clear and farm would use the path to establish a settlement in Framingham.

By 1675, the Connecticut Path beyond Framingham was largely abandoned as a series of frontier wars between colonists and native peoples made travel through the then wilderness treacherous for the English. By the early 1700's, a new, longer, more westerly route through Worcester to Springfield was the preferred route to the Connecticut Valley.

Framingham grew and prospered in the 17th, 18th, and 19th centuries as a farm and mill town. In the years leading up to the American Revolution, Framingham's residents vocally supported independence and began to stockpile munitions. Its citizens answered the call to join the battle of Lexington and Concord in 1775 and served in the Revolutionary army.

Crispus Attucks

In 1770, Crispus Attucks of Framingham became the first martyr of the American Revolution. What has come to be known as the Boston Massacre, on March 5,1770, was one of the earliest clashes that would lead to war and American independence. That day, Crispus Attucks was at the head of a mob of protesters that challenged British soldiers at the Town House, and he was the first of five men killed by British rifle fire.

Attucks, of mixed Native American and African descent, was an escaped slave. Slavery was then legal in the Massachusetts colony and was a reality of life in Framingham where many wealthy residents owned slaves. In 1747, William Brown of Framingham had purchased Crispus Attucks as a "servant for life." Brown owned a gristmill and farm near where Old Connecticut path crosses Cochituate Brook, and Attucks worked in the mill and fields. In 1750, Attucks ran away from his master and went to sea. Brown never saw Attucks again, despite advertising a reward for his servant's return. 1770 found Crispus Attucks landed in Boston where, confronting the British, he became the first recorded American death of the Revolution.















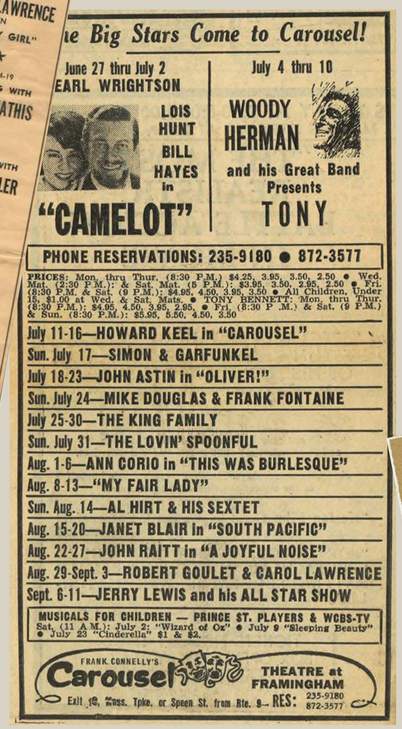

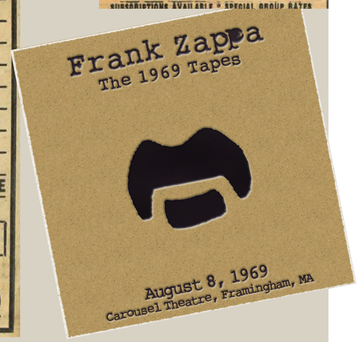

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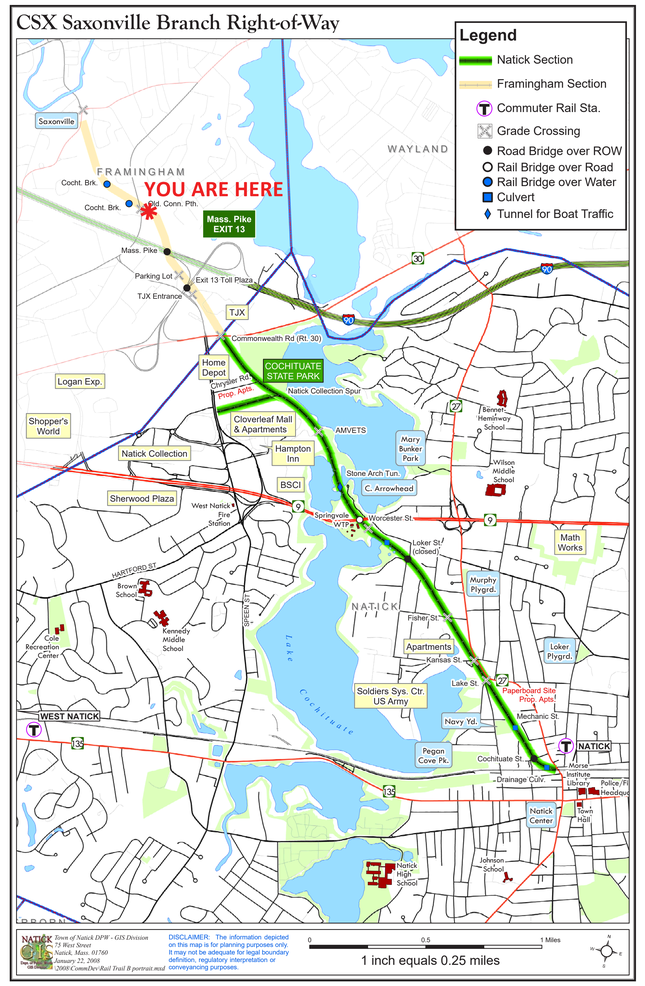

Contact Information

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Welcome to

Cochituate Rail Trail CRT

FRAMINGHAM CONSERVATION COMMISSION

FRAMINGHAM
MASSACHUSETTS

Cochituate Brook Native Species


AMerican Goldfinch - Spinus tristis


Northern Cardinal - Cardinalis cardinalis


Baltimore Oriole - Icterus galbula


Red-winged Blackbird - Agelaius phoeniceus


Black-capped Chikadee - Poecile atricapillus

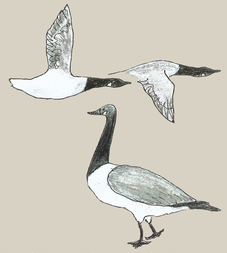

Mourning Dove - Zenaida macroura


A 'Murder' of Crows


American Crow - Corvus brachyrhynchos

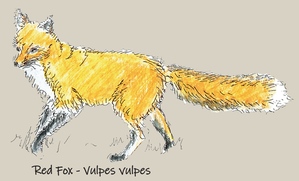

Great Blue Heron - Ardea herodias


in flight


Canada Goose - Branta canadensis


Great Horned Owl - Bubo virginianus


Muskrat - Ondatra zibethicus


Red Fox - Vulpes vulpes


American Beaver - Castor canadensis


Gray Squirrel - Sciurus carolinensis


Cottontail Rabbit - Sylvilagus


White-Tailed Deer - Odocoileus virginianus


Coyote - Canis latrans

Native Trees & Shrubs


White Oak - Quercus albea
Native Species


Staghorn Sumac - Rhus typhina
Native Species


Red Oak - Quercus rubra
Native Species


Red Maple - Acer rubrum
Native Species


White Pine - Pinus strobus
Native Species


American Beech - Fagus grandifolia
Native Species


Slippery Elm - Ulmus rubra
Native Species


'Poison Ivy - Toxicodendron radicans
"See three leaves, let it be!"
Native Species

Invasive Species


Japanese Bittersweet - Celastrus orbiculatus
Invasive Species


Virginia Creeper - Parthenocissus quinquefolia
Invasive Species


Japanese Knotweed - Polygonum cuspidatum
Invasive Species


Glossy Buckthorn - Frangula alnus
Invasive Species


Garlic Mustard - Alliaria petiolata
Invasive Species



Cochituate Brook

"Cochituate" derives from Native American word meaning "torrent" or "place of rushing water." The "torrent" was Lake Cochituate's outfall, which Cochituate Brook carried to the Sudbury River.

Native peoples had long lived along the lake and brook, supported by abundant wildlife. An Indian village and fortifications stood on the tallest of two hills at the lake outfall. By the time Europeans arrived in this area, this village and most others in the area already were abandoned, their people the victims of diseases they had no resistance to that had been carried by colonists.

Praying Indians from Natick were the village's final inhabitants. They had survived a terrible winter imprisonment in Boston Harbor in 1675 during King Philip's War, a vicious two-year conflict between colonists and native peoples marked by atrocities on both sides. In October 1675, five months into the war, the Massachusetts Council had ordered all Christian Indians rounded up and interned on Deer Island for the war's duration. After their release at war's end, Deer Island survivors living at Cochituate were still recuperating when, in 1677, marauding Mohawk Indians attacked and marched off sixteen young men. The young Natick Praying Indians, just as educated as their white neighbors, were never heard of again. As late as 1800, the Indian village was still visible as a raised earth berm circling the site. But in the mid-1950s, when the Massachusetts Turnpike was being constructed nearby, about 35' of elevation was borrowed from Cochituate's high hill, destroying any remaining vestiges of the Indian village.

In colonial times, the rushing water of Cochituate Brook powered a succession of mills. At least four dams have been built there over the centuries. In the mid-nineteenth century, the dam height at the outfall was raised to create a drinking water reservoir for the City of Boston, and millions of gallons were diverted to supply water to the City.

Today, both Cochituate Reservation, public conservation land owned by Framingham, and this section of the Cochituate Rail Trail follow the course of Cochituate Brook.

Natural History

While the migrating shad, salmon, eel and alewife that once fed the Indians that lived along Cochituate Brook are long gone, Cochituate Reservation still is home to a wide variety of wildlife and plants, some native and others immigrants.

Bird information: https://www.allaboutbirds.org

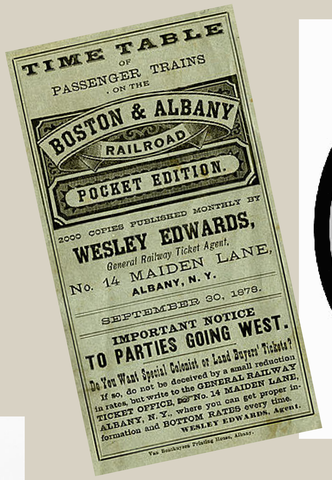
Welcome to

Cochituate Rail Trail CRT

FRAMINGHAM MASSACHUSETTS

Lake Cochituate

"Cochituate" derives from Native American word meaning "torrent" or "place of rushing water" The "torrent" was the outfall of the north segment of Long Pond, now called Lake Cochituate. The outfall drained to the Sudbury River by Cochituate Brook. In 1844, the City of Boston acquired the rights to use Long Pond as a water supply reservoir for the city. A new dam on the pond raised the water level, and millions of gallons of water were diverted to Boston away from its natural flow into the Sudbury River. The reservoir developers re-christened the once-pond as Lake Cochituate, perhaps to create a sense of purity at a time when clean water was in short supply. Lake Cochituate continued to supply water to Boston until 1951. More recently, the lake has become the central feature of Cochituate State Park.


TIME TABLE
OF
PASSENGER TRAINS
ON THE
BOSTON & ALBANY
RAILROAD
POCKET EDITION.
3000 COPIES PUBLISHED MONTHLY BY
WESLEY EDWARDS,
General Railway Ticket Agent,
No. 14 MAIDEN LANE,
ALBANY, N. Y.
SEPTEMBER 30, 1878.
IMPORTANT NOTICE
TO PARTIES GOING WEST.
Do You Want Special Cabinet or Land Buyers' Tickets?
If so, do not be deceived by a small reduction in rates, but write to the GENERAL RAILWAY TICKET OFFICE, No. 14 MAIDEN LANE, ALBANY, N.Y., where you can get proper information and BOTTOM RATES every time.
WESLEY EDWARDS, Agent.
For Backeyes Folding Hours, Albany.

Mikado train on the Saxonville Branch circa 1900s (*Photo courtesy of City of Framingham*)






Train at the Saxonville Train Station circa 1875 (*Photo courtesy of City of Framingham*)

Cochituate Rail Trail

The name "Cochituate Rail Trail" (CRT) commemorates both the Native Americans who once inhabited this area and the railroads that were this region's engines of economic development in the 19th century.



The CRT follows the course of a railroad spur called the Saxonville Branch Line built in 1846 off the Boston to Albany rail line. Construction of the Boston and Worcester Railroad began in August 1832. The completed line was opened at Worcester on July 4, 1835. By 1842, using a series of east/west connecting lines, the rail network extended all the way to Albany. That line became part of a network of rail lines that crisscrossed the country.

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The Saxonville Branch Line originated at Natick, on the main line, and terminated in Saxonville, Framingham's mill village on the Sudbury River. Additional spurs along the main line terminated at other milll towns: Milford, Webster, Winchendon, and North Adams. The Saxonville spur hauled people and freight, supplying industry along the way with raw materials and bringing finished goods to markets. Major local manufacturers along the spur included the Carling Brewery at Lake Cochituate, the Continental Baking Company's Wonder Bread plant in Natick, and Saxonville Mills in Framingham.

By the second half of the 20th century, rail traffic was shrinking and lines contracting, replaced by interstate trucking and private vehicles. As was the case elsewhere in Massachusetts and New England, the trains ceased, tracks were pulled up, and vegetation took over the rights-of-way. But the emergence of the rail trail concept has given new life to these routes as open space corridors with bike and pedestrian-friendly grades for outdoor recreation and non-motorized travel.

The CRT is the result of the dedicated efforts of citizen volunteers, in collaboration with local and state government.

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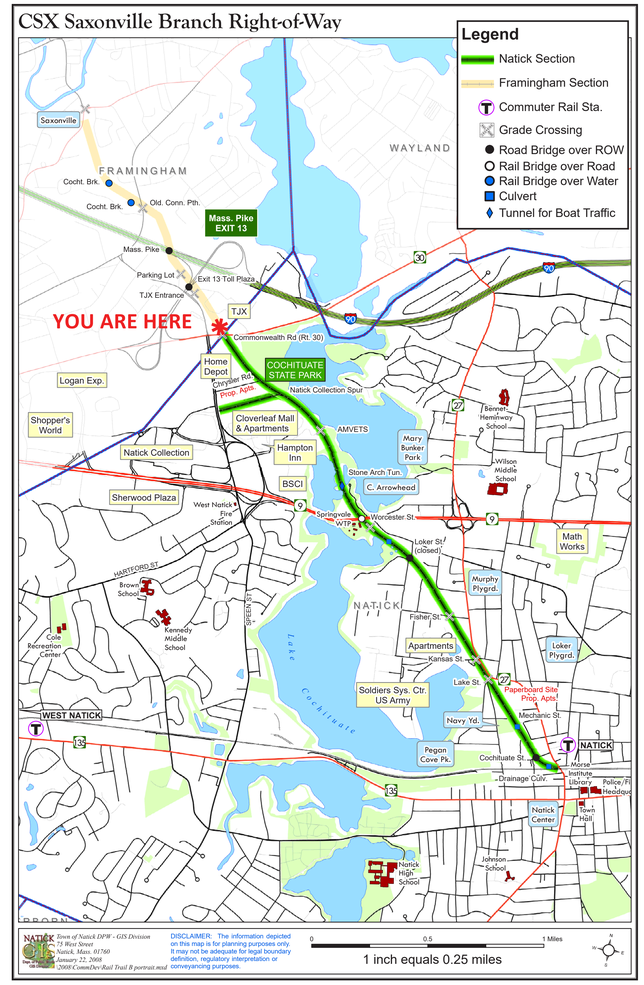

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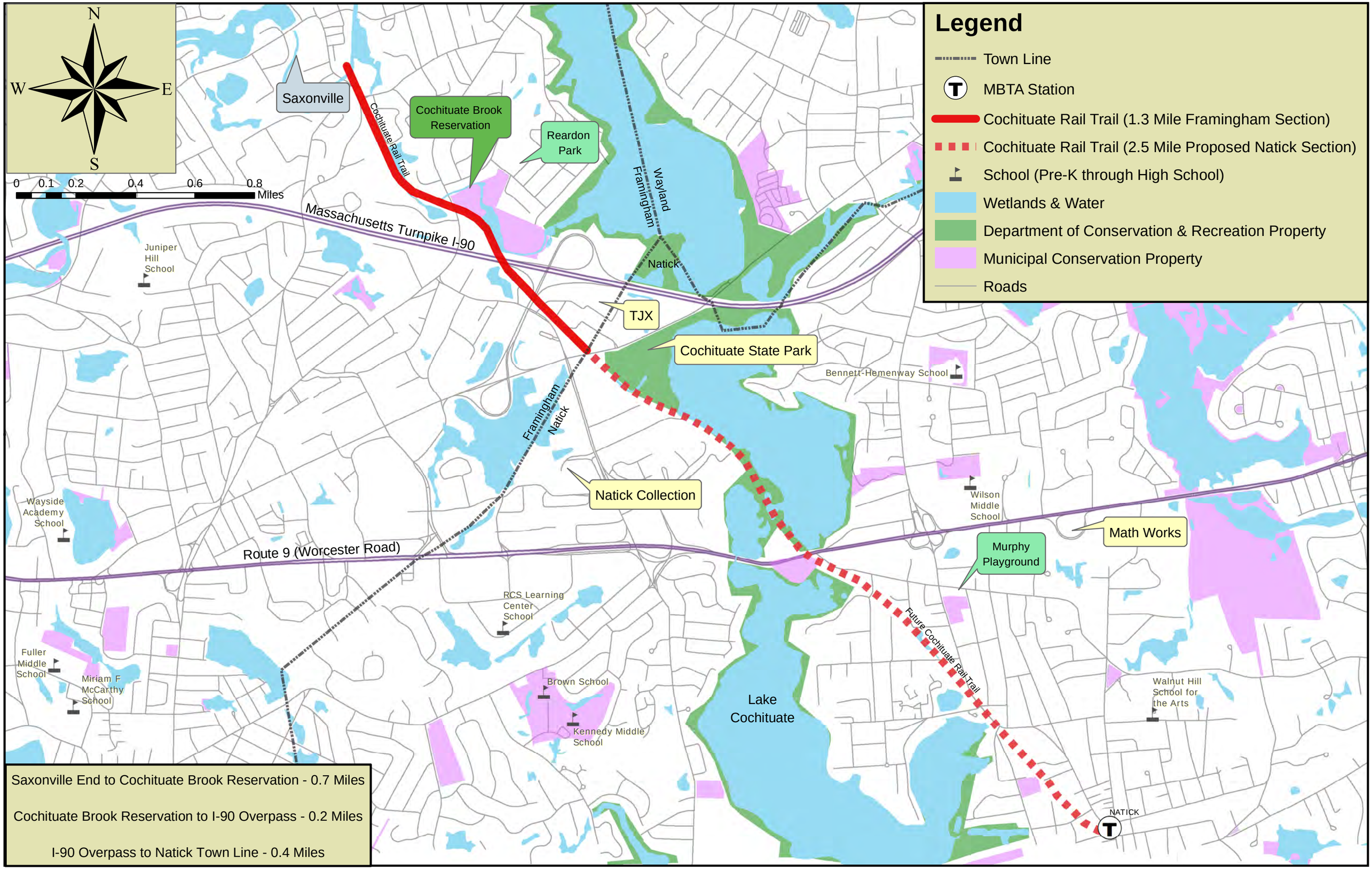
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Miles
Legend
Town Line
MBTA Station
Cochituate Rail Trail (1.3 Mile Framingham Section)
Cochituate Rail Trail (2.5 Mile Proposed Natick Section)
School (Pre-K through High School)
Wetlands & Water
Department of Conservation & Recreation Property
Municipal Conservation Property
Roads
Saxonville
Cochituate Rail Trail
Cochituate Brook Reservation
Reardon Park
Wayland
Framingham
Massachusetts Turnpike I-90
Juniper Hill School
Natick
TJX
Cochituate State Park
Bennett-Hemenway School
Framingham
Natick
Natick Collection
Wayside Academy School
Route 9 (Worcester Road)
Wilson Middle School
Math Works
Murphy Playground
RCS Learning Center School
Fuller Middle School
Miriam F McCarthy School
Brown School
Kennedy Middle School
Lake Cochituate
Future Cochituate Rail Trail
Walnut Hill School for the Arts
NATICK
Saxonville End to Cochituate Brook Reservation - 0.7 Miles
Cochituate Brook Reservation to I-90 Overpass - 0.2 Miles
I-90 Overpass to Natick Town Line - 0.4 Miles

Appendix I

Cedar Woods Preliminary Design

AI-1.0 CEDAR WOODS PRELIMINARY DESIGN

AI-1.1 Introduction

As part of the Framingham Conservation Master Plan, the Conservation and Open Space Division of the City of Framingham desired a preliminary design of improvements at the Cedar Woods (Swamp) Conservation Land on Waverly Street. The goal of the project is to promote the enjoyment of the wetlands and conservation lands located within a dense urban area. The project proposes the design of an enhanced trail system with a proposed boardwalk to provide access for users to view and enjoy the unique wetland resource. A boardwalk through the wetland area would further provide an opportunity for visitors to observe and interact with the flora and fauna of the surrounding ecosystem.

AI-1.2 Boardwalk

AI-1.2.1 Recommendations

A minimum 6-foot wide boardwalk through the wetland of Cedar Woods, to provide suitable access for those with mobility impairments while also maintaining reasonable costs, is recommended. Due to accessibility requirements, the gap between decking shall not exceed one-half inch (½") in width. Additionally, handrails on boardwalks are required to meet building codes when the elevation drop between the boardwalk and the adjacent ground surface exceeds thirty inches (30"). The costs of boardwalks increase significantly when handrails are required due to the additional structural requirements. Therefore, it is recommended that the boardwalk be designed for less than 30 inches of drop due to costs, accessibility and access to wetland.

During the permitting process required to implement the boardwalk, the Conservation Commission would likely consider the impact of shade on the adjacent wetland ecosystem as a result of the boardwalk. However, the Cedar Woods site is a woodland swamp and does not have significant ground level vegetation not already impacted by shade. Discussions should be had with the Conservation Commission to determine if they would allow a boardwalk, with elevation less than 30 inches above the ground surface, without the requirement of mitigating (replication) for shade impacts. Alternatively, the Commission might require the elevation of the boardwalk be raised, typically 6 feet high for a 6-foot wide boardwalk, to provide sunlight beneath the boardwalk to reduce or eliminate the shade impacts. If the boardwalk was to be raised, a long ramp would be required to elevate the boardwalk to the point of minimizing shade impacts. If possible, it is not recommended that the boardwalk be raised, for structural and accessibility reasons, as the need to address these requirements would result in additional costs.

AI-1.2.2 Replication

If the Commission allows the boardwalk at 30 inches or less above the wetland ground surface without requiring replication for shade impacts, then the only impacts likely requiring replication are those associated with the boardwalk footings, which would be minimal. The lowest cost boardwalk option consists of driven wooden piles, and by constructing the boardwalk from the upland through the wetland. This results in pilings, roughly a pair of 12 inch diameter piles every 10-12 feet. It is anticipated that as the project advances, that if the Commission would approve the project without replication required for the minimal impacts by the footings/pilings, would result in a lower cost for the overall project.

Additionally, as discussed with the City, there is an area located in the northerly portion of the property that, based on its current condition, would benefit from "enhancements," as it is not a beneficial environment for wetlands or wildlife. The other alternative is to create replication in the wooded area on the southerly side of the site, that currently contains areas of historic dumping of asphalt. The area is wooded and would require cutting of trees to remove the asphalt. As a result, it is not recommended that this area be utilized for replication or that the asphalt be removed, as it would appear that the removal would result in disturbance to the area, that could be more detrimental than leaving the asphalt in place.

AI-1.2.3 Costs for Boardwalks

Without handrails, curbs along each side of the boardwalk deck would be recommended to provide a cue that visitors are at the edge of the boardwalk surface, which would be particularly important for those with visual impairments or in wheelchairs. Materials for boardwalks such as that proposed vary, and include pressure-treated lumber, exotic hardwood (*e.g.:* ipe or other) and composite decking material. Composite decking, although potentially the most weather resistant is likely the most costly, but also presents issues with the buildup of static electricity which can be a nuisance to visitors when it discharges. The most cost-effective material for the structural framing components and boardwalk decking would be pressure-treated lumber.

In order to establish some preliminary costs for the boardwalk at Cedar Woods, B+T contacted York Bridge to determine an order of magnitude estimate. The methods used by York are to work from upland and drive wooden piles into the wetland and build the boardwalk as they advance through the wetland, without disturbance of the ground surface. Using this method they need to have minimum width of the boardwalk at 6 feet, which works out to about 5 feet clear with curbs. Handrails are not considered in the estimate, as it is anticipated that the drop off of the boardwalk would be less than 30 inches.

York can provide the boardwalk design and structural engineering and boardwalk construction for approximately $445,000 which is about $68 per square foot. This includes their protective finishes and York Bridge maintenance services. Without these services, York can provide the boardwalk for approximately $365,000 or about $56 per square foot. Alternatively, the cost could be approximately $550 per linear foot for an 8-foot wide boardwalk, with no handrails and less than a 30 inch drop, and total length of approximately 1100 linear feet, resulting in an approximate $605,000 total cost. These options are much less of what would be expected with a narrower boardwalk using helical coils.

AI-1.2.4 Design Process

In order to properly design a boardwalk system, exploratory soil borings were performed in July 2018 to identify the characteristics and specifically the bearing capacity of the soils in the area of the proposed boardwalk. Four borings were performed to depths of between 22' and 27' deep. The soils encountered peat and organic silt material in the upper depths of the borings, with sands and gravels encountered at approximately 10' to 19' depths. This information may be utilized by a structural engineer in the design of the boardwalk system as the project advances to determine the specific lengths of piles required to provide adequate support of the boardwalk.

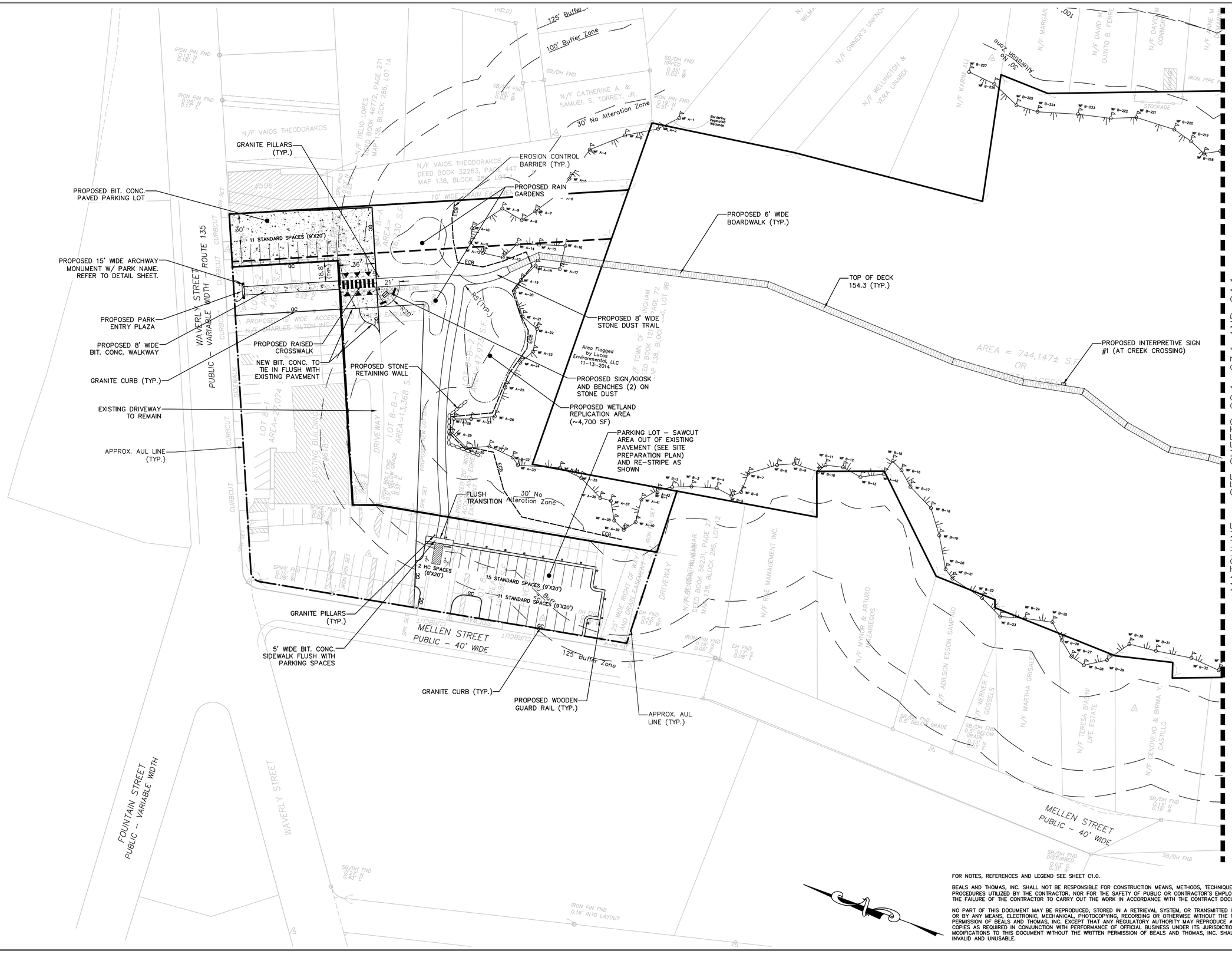
AI-1.3 Access/Parking

B+T prepared a preliminary set of design plans for the overall improvements to the Cedar Woods property including providing additional accommodation for visitor parking and access to the property. The preliminary design plans included in Appendix I depict improvements at the southern end of the property along Cypress Street to provide parking for approximately three vehicles. In addition, the plans include improvements at the northern end including re-striping of the existing paved area along Waverly Street to provide parking for 11 vehicles. Also, the plans include the improvement of the former parking area behind the Silton Glass, creating 15 standard parking spaces and two accessible parking spaces, with access from Mellen Street. Due to these various parking options, providing parking for up to 31 vehicles, it does not appear that the purchase by the City of the paved lot along Mellen Street for additional parking would be warranted, as it would seem unlikely that more parking than that proposed would be necessary.

In order to promote this hidden gem of conservation land, the plans also included the creation of an allee of trees framing a proposed walkway off of Waverly Street. Enhancing this pedestrian entrance from Waverly Street would attract the attention of passersby identifying the area as a special place and inviting visitors to explore the natural area encompassed by development that many likely are unaware that it exists.

AI-1.4 Potential Contamination

During the performing of the borings, the boring contractor noted that there appeared to be contamination of the soil present. This area at the northerly side of the property had originally been identified as an area for potential wetland replication, as needed. As a result, the City engaged their environmental consultant to perform a Phase I Environmental Site Assessment (ESA) of the Cedar Swamp (Woods) area. At the time of this writing, B+T has not received a final ESA; however, it is understood that there has been a recommendation made to perform a Phase II study. Consequently, the design of the improvements was put on hold until further study of the contamination could be evaluated and potential remediation determined. Any proposed wetland replication required as a result of installing pilings for the boardwalk or to restore wetlands that may have historically been filled to enhance the function of the wetland system, would need to be further studied to determine the full scope of work required and associated costs.


125' Buffer
100' Buffer Zone
30' No Alteration Zone
GRANITE PILLARS (TYP.)
EROSION CONTROL BARRIER (TYP.)
PROPOSED BIT. CONC. PAVED PARKING LOT
PROPOSED RAIN GARDENS
PROPOSED 6' WIDE BOARDWALK (TYP.)
11 STANDARD SPACES (9'X20')
PROPOSED 15' WIDE ARCHWAY MONUMENT W/ PARK NAME. REFER TO DETAIL SHEET.
TOP OF DECK 154.3 (TYP.)
PROPOSED PARK ENTRY PLAZA
PROPOSED 8' WIDE STONE DUST TRAIL
PROPOSED 8' WIDE BIT. CONC. WALKWAY
PROPOSED RAISED CROSSWALK
PROPOSED INTERPRETIVE SIGN #1 (AT CREEK CROSSING)
NEW BIT. CONC. TO TIE IN FLUSH WITH EXISTING PAVEMENT
PROPOSED STONE RETAINING WALL
GRANITE CURB (TYP.)
PROPOSED SIGN/KIOSK AND BENCHES (2) ON STONE DUST
EXISTING DRIVEWAY TO REMAIN
PROPOSED WETLAND REPLICATION AREA (~4,700 SF)
PARKING LOT – SAWCUT AREA OUT OF EXISTING PAVEMENT (SEE SITE PREPARATION PLAN) AND RE-STRIPE AS SHOWN
APPROX. AUL LINE (TYP.)
FLUSH TRANSITION
2 HC SPACES (8'X20')
15 STANDARD SPACES (9'X20')
11 STANDARD SPACES (9'X20')
GRANITE PILLARS (TYP.)
5' WIDE BIT. CONC. SIDEWALK FLUSH WITH PARKING SPACES
GRANITE CURB (TYP.)
PROPOSED WOODEN GUARD RAIL (TYP.)
APPROX. AUL LINE (TYP.)
MATCHLINE – SEE SHEETS C2.1, C3.1 AND C4.1
MELLEN STREET PUBLIC – 40' WIDE
FOUNTAIN STREET PUBLIC – VARIABLE WIDTH
WAVERLY STREET
WAIVERLY STREET – ROUTE 135 PUBLIC – VARIABLE WIDTH
Area Flagged by Lucas Environmental, LLC 11-13-2014
Bordering Vegetated Wetlands
AREA = 744,147± S.F. OR 17.08± ACRES
N/F VAIOS THEODORAKOS
N/F DELIO LOPES DEED BOOK 46772, PAGE 271 MAP 138, BLOCK 286, LOT 1A
N/F CATHERINE A. & SAMUEL S. TORREY, JR.
N/F OWNER'S UNKNOWN
N/F WELLINGTON & VERA LINARDI
N/F KARIM ALI
N/F MARGARET
N/F DAVID M. QUINTO B. FERRE
N/F DAVID M. CONNOR
N/F ANNE M.
N/F TOWN OF FRAMINGHAM DEED BOOK 12345, PAGE 72 MAP 138, BLOCK 286, LOT 9B
N/F VAIOS THEODORAKOS DEED BOOK 32263, PAGE 447 MAP 138, BLOCK 286, LOT 1
N/F RAE MANAGEMENT INC.
N/F ADILSON EDSON SAMPAIO
N/F WERNER F. GOSSELS
N/F MARTHA GRISALES
N/F TERESA BIASINI LIFE ESTATE
N/F GENOVEVO & BIRMA Y. CASTILLO
N/F MYRON & ARTURO M. LARIEGOS
LOT 8-A AREA=4,830 S.F.
LOT 8-B-1 AREA=13,368 S.F.
LOT 8-A-1 AREA=2,074
LOT 8-B-2 AREA=47,971 S.F.
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MATCHLINE – SEE SHEETS C2.0, C3.0 AND C4.0

PROPOSED INTERPRETIVE SIGN #1 (AT CREEK CROSSING)

PROPOSED 6' WIDE BOARDWALK (TYP.)

TOP OF DECK 154.3 (TYP.)

PROPOSED 8' WIDE STONE DUST TRAIL (TYP.)

PROPOSED INTERPRETIVE SIGN #2 (AT CREEK CROSSING)

EXISTING TRAIL (TYP.)

PROPOSED NEW TRAIL SECTION

PROPOSED SNOW STORAGE AND WATER QUALITY SWALE

30' No Alteration Zone

PROPOSED INTERPRETIVE SIGN LOCATION

PROPOSED 6' WIDE BOARDWALK (TYP.)

VEGETATED DRAINAGE SWALE & SNOW STORAGE

EX. CHAIN LINK FENCE TO REMAIN, THIS SIDE

12" WIDE PEA GRAVEL STRIP (TYP.)

PROPOSED 24' WIDE DOUBLE GATE

APPROX. LOCATION OF EXISTING UTILITY POLE

EXISTING TREES TO REMAIN (APPROX. LOCATIONS SHOWN)

NEW 4' CHAIN LINK FENCE (TYP.)

NEW 4' CHAIN LINK FENCE ALONG PROPERTY LINE

EX. CHAIN LINK FENCE TO REMAIN, THIS SIDE

EXISTING WOODEN GUARDRAIL TO REMAIN

NEW WOODEN GUARD RAIL (TYP.)

5' WIDE BIT. CONC. SIDEWALK

BIT. CONC. BERM (TYP.)

BIT. CONC. PARKING AREA (3 SPACES)

SIGN/KIOSK

BIT. CONC. SIDEWALK TO BE FLUSH WITH TRAIL

GRANITE PILLARS (TYP.)

BIRCH ROAD
PRIVATE – 40' WIDE

ALDER ROAD
PRIVATE – 40' WIDE

CHESTNUT STREET
PRIVATE – 40' WIDE

CYPRESS STREET
PUBLIC – 40' WIDE

MELLEN STREET
PUBLIC – 40' WIDE

30' No Alteration Zone

125' Buffer Zone

100' Buffer Zone

744,147± S.F.

FOR NOTES, REFERENCES AND LEGEND SEE SHEET C2.0.

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PREPARED FOR:

TOWN OF FRAMINGHAM

150 CONCORD STREET
FRAMINGHAM, MASSACHUSETTS

IN PROGRESS
4/28/2017

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PREPARED BY:

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Civil Engineers + Landscape Architects + Land Surveyors + Planners + Environmental Specialists

BEALS AND THOMAS, INC.
Reservoir Corporate Center
144 Turnpike Road
Southborough, Massachusetts 01772-2104
T 508.366.0560 | www.bealsandthomas.com

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PROJECT:

CEDAR PARK

FRAMINGHAM, MASSACHUSETTS

SCALE: 1" = 40' DATE: MONTH XX, 2017

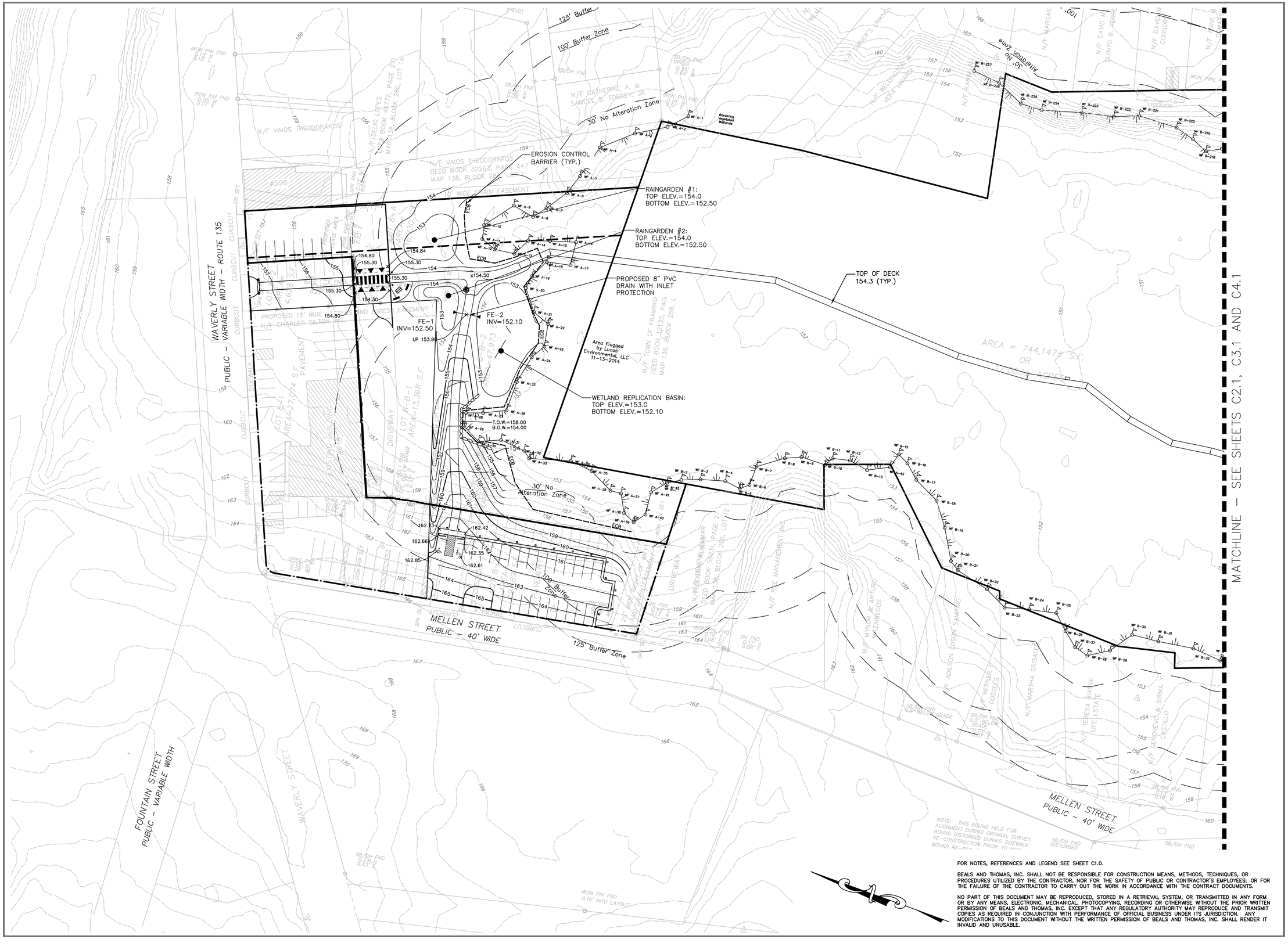
METERS 0 5 10 25
FEET 0 20 40 80 120

LAYOUT AND MATERIALS PLAN

B+T JOB NO. 2817.00

B+T PLAN NO. 2817OOP015A–006

C3.1



FOR NOTES, REFERENCES AND LEGEND SEE SHEET C1.0.

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PREPARED FOR:

TOWN OF FRAMINGHAM

150 CONCORD STREET
FRAMINGHAM, MASSACHUSETTS

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4/28/2017

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ISSUE DATE	DESCRIPTION	

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PROJECT:

CEDAR PARK

FRAMINGHAM, MASSACHUSETTS

SCALE: 1" = 40' DATE: MONTH XX, 2017

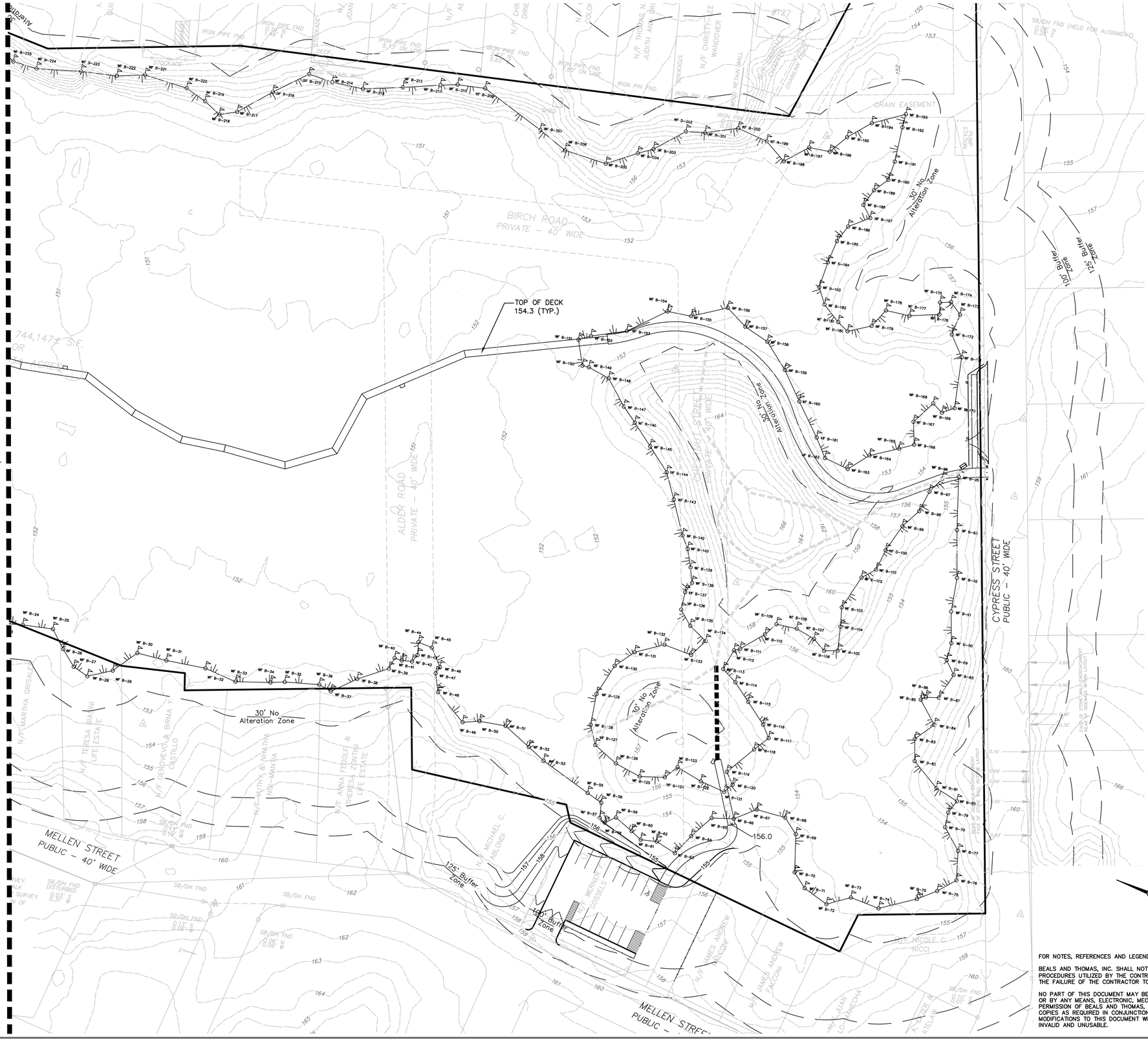
METERS 0 5 10 25
FEET 0 20 40 80 120

GRADING AND DRAINAGE PLAN

B+T JOB NO. 2817.00

B+T PLAN NO. 281700P015A-007

C4.0



FOR NOTES, REFERENCES AND LEGEND SEE SHEET C2.0.

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PREPARED FOR:

TOWN OF FRAMINGHAM

150 CONCORD STREET
FRAMINGHAM, MASSACHUSETTS

IN PROGRESS
4/28/2017

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ISSUE DATE	DESCRIPTION			
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PROJECT:

CEDAR PARK

FRAMINGHAM, MASSACHUSETTS

SCALE: 1" = 40' DATE: MONTH XX, 2017

METERS 0 5 10 25
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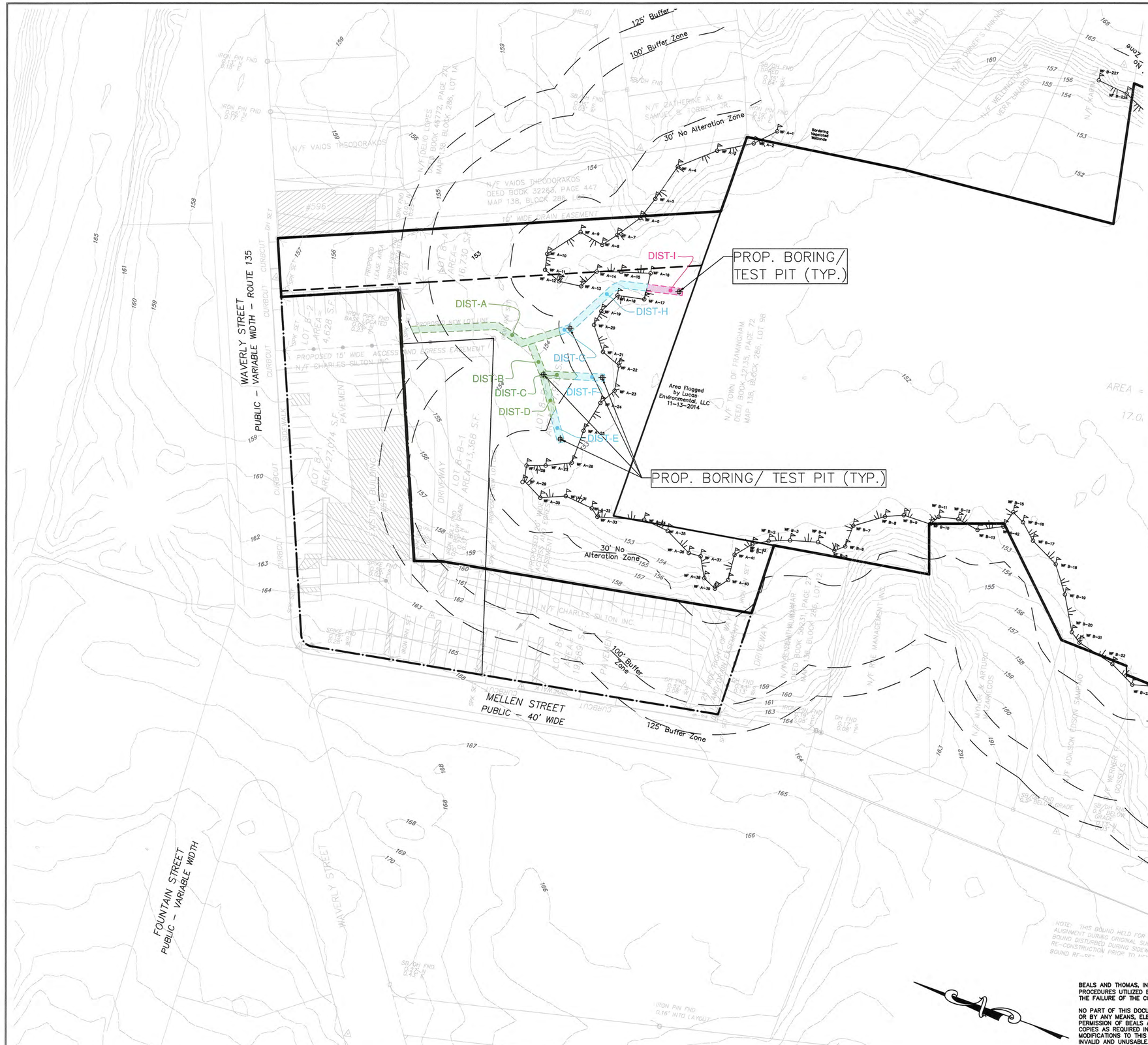
GRADING AND DRAINAGE PLAN

B+T JOB NO. 2817.00

B+T PLAN NO. 281700P015A–008

C4.1



TEMPORARY ACCESS / DISTURBANCE TABLE

DISTURBANCE	AREA (SQARE FEET) SF
	0–30 FOOT BUFFER
DIST–E	AREA=160± SF.
DIST–F	AREA=150± SF.
DIST–G	AREA=60± SF.
DIST–H	AREA=485± SF.
DIST–J	AREA=705± SF.
DIST–L	AREA=780± SF.
TOTAL	AREA=2,340± SF.
	30–100 FOOT BUFFER
DIST–A	AREA=810± SF.
DIST–B	AREA=160± SF.
DIST–C	AREA=180± SF.
DIST–D	AREA=185± SF.
DIST–K	AREA=1,505± SF.
TOTAL	AREA=2,840± SF.
	WETLAND DISTURBANCE
DIST–I	AREA=185± SF.
DIST–M	AREA=230± SF.
TOTAL	AREA=415± SF.

NOTE:
1. PROPERTY LINE SURVEY PREPARED BY TOWN OF FRAMINGHAM BRUCE KINSMAN, PLS.
2. WETLAND MAPPING A–1 THROUGH A–42 FLAGGED BY LUCAS ENVIRONMENTAL FOR TOWN OF FRAMINGHAM, 2014.
3. OTHER WETLANDS SHOWN PROVIDED BY TOWN OF FRAMINGHAM.

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PREPARED FOR:

CITY OF FRAMINGHAM

150 CONCORD STREET
FRAMINGHAM, MASSACHUSETTS

COMMONWEALTH OF MASSACHUSETTS
ROBERT E. WEIDONER IV
REGISTERED LANDSCAPE ARCHITECT
NO. 897
8/8/2017

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ISSUE DATE	DESCRIPTION	

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PROJECT:

CEDAR SWAMP

FRAMINGHAM, MASSACHUSETTS

SCALE: 1" = 40' DATE: JULY 27, 2017

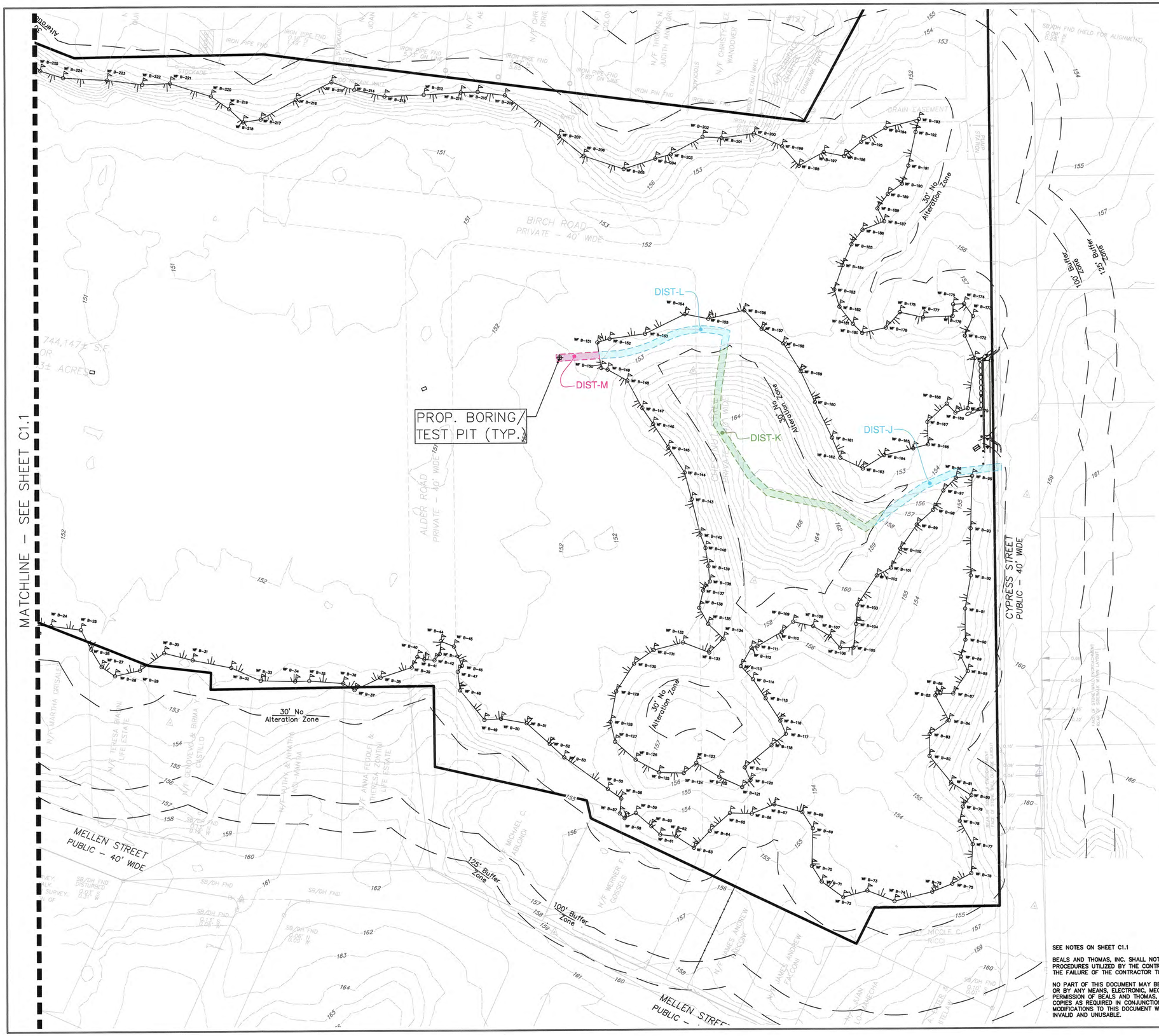
METERS 0 5 10 25
FEET 0 20 40 80 120

PROPOSED BORING PLAN

B+T JOB NO. 2817.00

B+T PLAN NO. 28170OP077A-001

C1.1



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TOTAL	AREA=2,840± SF.
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DIST–M	AREA=230± SF.
TOTAL	AREA=415± SF.

SEE NOTES ON SHEET C1.1

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PREPARED FOR:

CITY OF FRAMINGHAM

150 CONCORD STREET
FRAMINGHAM, MASSACHUSETTS

MASSACHUSETTS
ROBERT E. WEIDNER
REGISTERED LANDSCAPE ARCHITECT
NO. 897

8/9/2017

FOR PERMITTING ONLY

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PREPARED BY:

BEALS + THOMAS
Civil Engineers + Landscape Architects + Land Surveyors + Planners + Environmental Specialists

BEALS AND THOMAS, INC.
Reservoir Corporate Center
144 Turnpike Road
Southborough, Massachusetts 01772-2104
T 508.366.0560 | www.bealsandthomas.com

5				
4				
3				
2				
1				
0	08/09/2017	FIRST ISSUE		
ISSUE DATE		DESCRIPTION		
DES		DWN	CHK'D	APP'D

PROJECT:

CEDAR SWAMP

FRAMINGHAM, MASSACHUSETTS

SCALE: 1" = 40' DATE: JULY 27, 2017

METERS 0 5 10 25
FEET 0 20 40 80 120

PROPOSED BORING PLAN

B+T JOB NO. 2817.00

B+T PLAN NO. 281700P077A–002

C1.2

Cedar Park Reservation

Framingham Conservation Commission

PROPOSED PARKING LOT (11 SPACES)

PROPOSED SNOW STORAGE AND WATER QUALITY SWALE

PROPOSED WATER QUALITY BASIN

PROPOSED 8' WIDE STONE DUST TRAIL

PROPOSED PARK ENTRY PLAZA

PROPOSED RAISED CROSSWALK

NEW BIT. CONC. TO TIE INTO EXISTING DRIVEWAY

EXISTING DRIVEWAY TO REMAIN

PROPOSED SIGN/KIOSK AND BENCH AREA

PROPOSED WETLAND REPLICATION AREA (~6,000 SF)

PROPOSED SNOW STORAGE AND WATER QUALITY SWALE

PROPOSED WEST ENTRY AND TRAIL, WITH ACCESSIBLE PARKING

PROPOSED INTERPRETIVE SIGNAGE LOCATIONS (AT CREEK CROSSINGS)

PROPOSED 6' WIDE BOARDWALK (TYP.)

PROPOSED 8' WIDE STONE DUST TRAIL (TYP.)

EXISTING ASPHALT PILES TO BE REMOVED (TYP.)

EXISTING TRAIL (TYP.)

NEW TRAIL SECTION

PROPOSED SNOW STORAGE AND WATER QUALITY SWALE

PROPOSED INTERPRETIVE SIGN LOCATION

PROPOSED 6' WIDE BOARDWALK (TYP.)

EXISTING TREES TO REMAIN (APPROX. LOCATIONS SHOWN)

MODIFIED PARKING LOT

EXISTING WOODEN GUARDRAIL

PARKING AREA (3 SPACES)

MODIFIED GUARD RAIL

SIGN/KIOSK

PROPOSED NEW TRAIL-HEAD (SEE PHOTO EXAMPLE, THIS SHEET)



SAMPLE TRAIL ENTRY



ENTRY PLAZA SECTION RENDERING
NOT TO SCALE

BEALS+THOMAS

DATE: February 28, 2017
BTI FILE NO: 281700P062A-001

0 30 60 120 180 360

Scale = 1"=60'

Conceptual Design
Framingham, Massachusetts



CEDAR WOODS ENTRY PLAZA- SECTION

Not to Scale

Appendix J

Parcel Welcome Signs



Welcome to

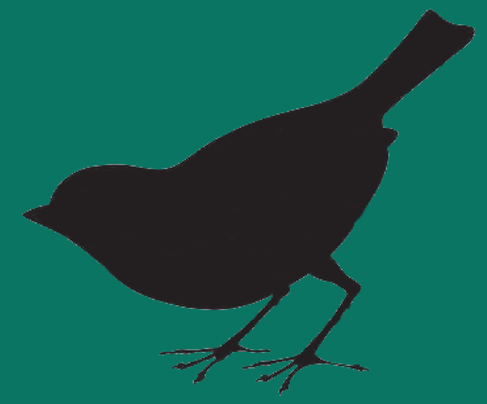


Arthur-Morency Woods

Framingham Conservation Land



Welcome to



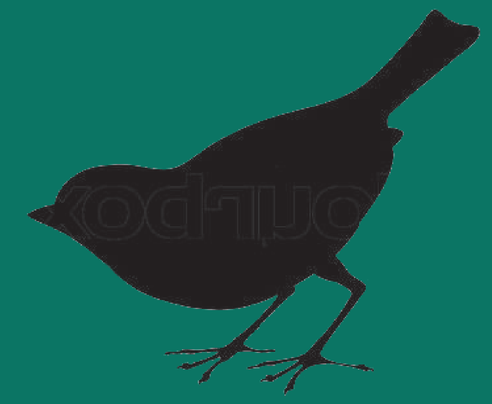
Carol Getchell

Nature Trail

Framingham Conservation Land



Welcome to



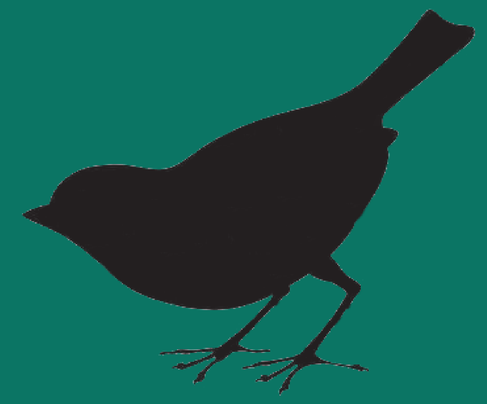
Cochituate Brook Reservation

Framingham Conservation Land

Gift of the Framingham Sportsmen's Club



Welcome to



Macomber

Reservation

FRAMINGHAM CONSERVATION LAND



Welcome to

Wittenborg Woods



FRAMINGHAM CONSERVATION LAND

Appendix K

Parcel Kiosks

Welcome to
Arthur-Morency Woods



Park Hours

Park open daily, dawn until dusk
Park closed daily, from dusk until dawn

Trail Use Guidelines

All motorized use prohibited

No littering or dumping - carry in, carry out!

Fires and camping not permitted

No alcoholic beverages

Do not feed, touch or approach wildlife

Take personal protection measures against ticks and mosquito bites

No hunting permitted at any time

Dogs Welcome

Dogs with responsible owners are welcome here. Please remember to be considerate to the other people who also visit the park.

These simple rules should help everyone keep safe and happy - and also make sure that you and your dog remain within the law.

- Keep your dog on a leash at all times
- Always keep your dog under proper control
- Clean up right away after your dog

Contact Information

For additional information or to report problems, please go to www.FraminghamMA.gov or call us at (508) 532-5460.

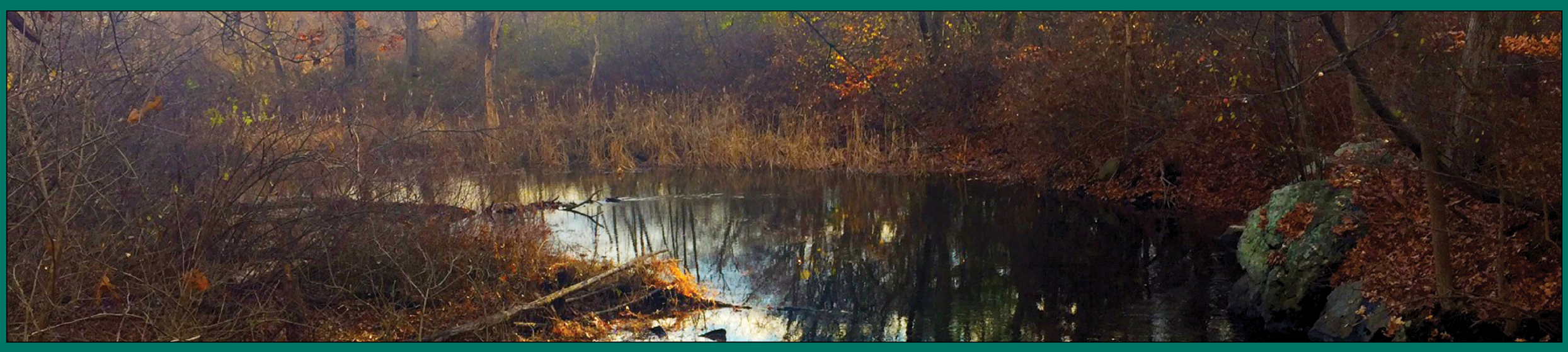


Map Symbols

- Trail
- 1 — Trail Intersection
- ? — Kiosk
- Bench
- Bridge Crossing
- Open Water
- Stream
- Wetland Area
- Abutting Open Space
- Roads

Thanks for Visiting!

Welcome to
Carol Getchell Nature Trail



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Map Symbols

- Trail
- 1 — Trail Intersection
- ? — Kiosk
- Bench
- Bridge Crossing
- Open Water
- Stream
- Wetland Area
- Abutting Open Space
- Roads

Thanks for Visiting!

Welcome to
Cochituate Brook Reservation



Park Hours

Park open daily, dawn until dusk
Park closed daily, from dusk until dawn

Trail Use Guidelines

All motorized use prohibited

No littering or dumping - carry in, carry out!

Fires and camping not permitted

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Do not feed, touch or approach wildlife

Take personal protection measures against ticks and mosquito bites

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Map Symbols

- Trail
- 1 — Trail Intersection
- ? — Kiosk
- Bench
- Bridge Crossing
- Open Water
- Stream
- Wetland Area
- Abutting Open Space
- Roads

Thanks for Visiting!

Welcome to
Macomber Reservation



Park Hours

Park open daily, dawn until dusk
Park closed daily, from dusk until dawn

Trail Use Guidelines

All motorized use prohibited

No littering or dumping - carry in, carry out!

Fires and camping not permitted

No alcoholic beverages

Do not feed, touch or approach wildlife

Take personal protection measures against ticks and mosquito bites

No hunting permitted at any time

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Contact Information

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Map Symbols

- Trail
- 1 — Trail Intersection
- ? — Kiosk
- Bench
- Bridge Crossing
- Open Water
- Stream
- Wetland Area
- Abutting Open Space
- Roads

Thanks for Visiting!

Welcome to Wittenborg Woods



Park Hours

Park open daily, dawn until dusk
Park closed daily, from dusk until dawn

Trail Use Guidelines

All motorized use prohibited

No littering or dumping - carry in, carry out!

Fires and camping not permitted

No alcoholic beverages

Do not feed, touch or approach wildlife

Take personal protection measures against ticks and mosquito bites

No hunting permitted at any time

Dogs Welcome

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Map Symbols

- Trail
- 1 — Trail Intersection
- ? — Kiosk
- Bench
- Bridge Crossing
- Open Water
- Stream
- Wetland Area
- Abutting Open Space
- Roads

Thanks for Visiting!

Appendix L

Trail Markers


FRAMINGHAM
CONSERVATION

