Conservation Land Management Plan

Town of Westwood Conservation Commission March 2024

CONSERVATION LAND MANAGEMENT PLAN



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Westwood, MA

Town of Westwood Conservation Commission

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Prepared by: BETA GROUP, INC.

Prepared for: Town of Westwood Conservation Commission

March 2024

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1.0 EXECUTIVE SUMMARY

In May of 2022, the Town of Westwood (the Town) Conservation Agent approached BETA Group, Inc. (BETA) to request assistance with scoping a Conservation Land Management Plan (CLMP) to aid the Town in securing \$50,000 in American Rescue Plan Act (ARPA) earmarked for conservation and open space purposes. BETA provided a scope of work to prepare the CLMP and was authorized by the Town to commence work on this document and associated tasks shortly thereafter. This CLMP is not intended to be an exhaustive assessment of all public lands in the Town; rather, the goal of the CLMP is to provide specific technical and planning direction for a select number of properties in support of the Town's ongoing efforts to proactively preserve and manage Town-owned open space parcels. As a living document, the completed CLMP will serve the Town for years to come and will be adaptable to changes in budgets, priorities, and open space goals. The CLMP process developed by BETA consists of four (4) steps that were implemented to select appropriate parcels and provide a meaningful land use analysis with actionable recommendations:

- 1. Initial desktop assessment of properties based on an objective evaluation matrix;
- 2. Field assessment of selected properties;
- 3. Development of recommendations and opportunities for each property based on existing conditions analyses; and,
- 4. Development of initial costs and graphics to support the recommendations.

BETA's initial desktop assessment of Town-owned open space properties considered existing documents such as the Town's Open Space & Recreation Plan (OSRP) and public data sources including the Massachusetts Geographic Information Systems (MassGIS) MassMapper data viewer. A matrix was developed to objectively score each property based off factors including connectivity, accessibility, wetland preservation, floodplain preservation, flood control, wildlife habitat, existing uses and popularity, ground and surface water protection, capacity to support OSRP goals, and educational and interpretive opportunities. Following the selection of five (5) high-scoring properties, BETA attended a Westwood Conservation Commission (WCC) public meeting to apprise the WCC of the initial research associated with the CLMP and the properties selected for further evaluation in the final report.

Field assessments were then conducted for the selected properties to gather data regarding existing trail conditions, vegetative communities, passive recreation opportunities, wildlife habitat features, public access, and parking infrastructure. After performing field assessments for the five (5) initial sites, BETA determined that an additional three (3) properties (selected based on the aforementioned scoring matrix) could be evaluated under the allocated budget. These additional sites were assessed using the same methods as the initial locations. The final eight (8) properties assessed in the field and subject to this CLMP include the following:

- 1. Rock Meadow Brook Conservation Area,
- 2. Lowell Woods Conservation Area,
- 3. Mulvehill Conservation Area,
- 4. Sandy Valley Conservation Area,
- 5. Grimm Conservation Area,
- 6. Wight/Mill Brook Conservation Area,
- 7. Pignatelli/Mill Brook Conservation Area, and
- 8. Traylor Conservation Area.



Several of these properties abut one another, forming contiguous tracts of Town-owned open space as noted in Field Assessment Results. These properties will be discussed as overall areas based on their proximity to one another and are identified as follows:

- The Lowell Woods Area, which includes Lowell Woods Conservation Area, Mulvehill Conservation Area, Sandy Valley Conservation Area, and Grimm Conservation Area; and,
- The Mill Brook Area, which includes Wight/Mill Brook Conservation Area, Pignatelli/Mill Brook Conservation Area, and Traylor Conservation Area.

The third step in the evaluation process involved the analysis of the data gathered in the field to determine maintenance issues, open space management strategies, and recreation and preservation opportunities at each property. To convey these findings to the Town, BETA prepared GIS exhibits and narratives detailing how the existing conditions and desktop research findings were considered in developing the CLMP. Based on these existing conditions findings, BETA developed a list of recommendations for each property and compiled those into one master recommendations matrix.

After developing recommendations and methods for conservation, the final step concluded with determining the approximate costs and level of effort required to complete each recommendation. The CLMP defines 18 proposed recommendations for the properties, each split by property to address specific goals. These recommendations consider the necessary permits required to complete the work, the cost, and the feasibility of completing work using volunteer hours. The objective of these recommendations is to support the protection and conservation of Town-owned land and suggest ways for the community to better engage with natural recreational opportunities.



2.0 SELECTED PROPERTIES

From the primary research conducted prior to field work, each property was assessed based on Town data and protection status. After the examination of twenty-nine (29) parcels, BETA chose eight (8) properties to investigate further through the field assessment described in the Field Assessment Results.

Each property was evaluated using a variety of sources including the Town's 2019 OSRP, MassMapper, and the Town's GIS maps. The assessment included reviewing each site's access and connectivity to other sites, overlays with the Federal Emergency Management Agency's (FEMA) Flood Insurance Rates Maps (FIRMs), existing uses, and public popularity and context. Information reviewed included wetland preservation, wildlife habitat, ground and surface water protection, and educational opportunities. Each site was also evaluated using aerial photography from the year 1990 onward to determine if any major changes in encroachment or other factors occurred. The primary evaluations for each of the twenty-nine (29) parcels can be found in Appendix D: Primary Site Evaluations.

After a primary review of all twenty-nine (29) parcels was completed, the five (5) highest rated were initially chosen for a field review, with three additional high-scoring properties added after the completion of the initial field review. All eight (8) parcels examined are protected by Article 97 of the Amendments to the Massachusetts Constitution (Art. 97) and The Public Lands Preservation Act (PLPA). None of the properties contained any Natural Heritage and Endangered Species Program (NHESP)-mapped Estimated or Priority habitat. The eight properties are described after their initial evaluation below.

2.1 ROCK MEADOW BROOK CONSERVATION AREA

Rock Meadow Conservation Area (Parcels 05-001, 09-155, 09-194, and 13-074) abuts Conant Road and Lorraine Road in two locations and otherwise is surrounded by private properties and the Conant Road pump station, which is operated by Town of Westwood Department of Public Works (DPW). The parcel is currently designated as conservation land and has an easement leading to Lorraine Road between 18 and 28 Lorraine Road and a potential access at the Conant Road bridge crossing Rock Meadow Brook, adjacent to 10 Conant Road. The conservation area contains approximately 28.75 acres of protected land.

The area is composed primarily of shrub swamp wetlands, as shown in Figure 1. The area is hydraulically connected to Rock Meadow Brook, which then flows to Stevens Pond and Lee Pond before draining into the Charles River. South of the property, the Brook flows through Dedham-Westwood Water Supply Land. Several street signs indicate the area, referring primarily to Rock Meadow Brook the waterway, not mentioning the conservation area.

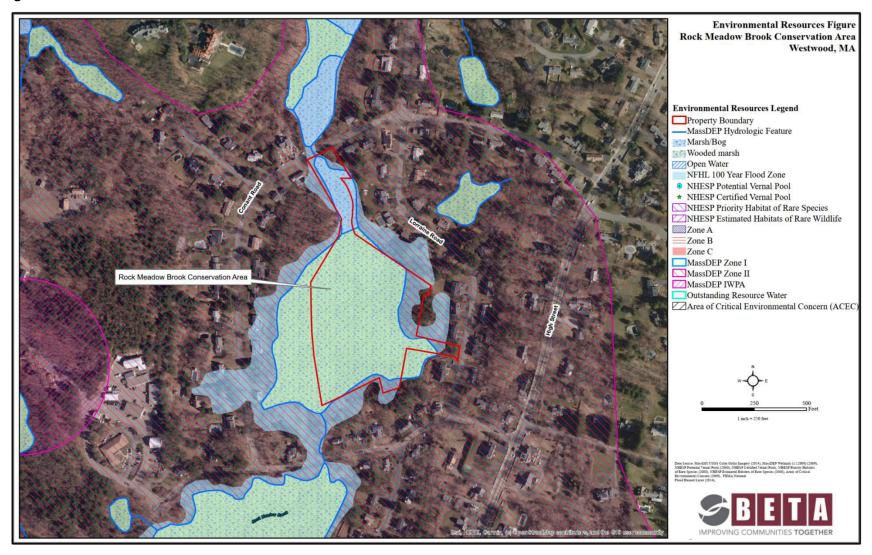
The property is located near the Deerfield School and Public Library, and there are mapped recreation trails near, but not within, the property. Rock Meadow Brook Conservation Area contains several Certified Vernal Pools (CVPs) and is adjacent to other BioMap Critical habitats. 2

² MassMapper



¹ OpenStreetMaps and Trailforks

Figure 1: Rock Meadow Brook Conservation Area Environmental Resources





2.2 LOWELL WOODS AREA

The first grouping of properties is the Lowell Woods Area within the north-central area of the Town. The Lowell Woods Area consists of the Lowell Woods Conservation Area, the Mulvehill Conservation Area, the Sandy Valley Conservation Area, and the Grimm Conservation Area. The environmental resources for each property are displayed in Figure 2: Lowell Woods Area Environmental Resources.

2.2.1 LOWELL WOODS CONSERVATION AREA

The Lowell Woods Conservation Area borders the Sandy Valley, Grimm, and Mulvehill Conservation Areas. Combined, this group of conservation lands make up the largest contiguous acreage of town-owned conservation land in the Town.³ Lowell Woods Conservation Area contains approximately 122.23 acres of protected land in Parcels 10-052 through 10-055, 10-057, 10-059, 15-028, 36-005, and 36-026.

The site is bordered to the north by Interstate 95 and the Westwood/Dedham town line. The Lowell Woods Conservation Area is accessible from the surrounding conservation areas as well as the Fox Meadow Trail, a public neighborhood path beginning in Fox Meadow Drive. The western edge of the parcel is bordered by private residential properties. The parcels within Lowell Woods Conservation Area are all currently designated for conservation and well-suited for both passive and trail recreation.

The property contains wetlands as mapped by MassDEP and viewed on MassMapper, including areas designated as Wooded Swamp Deciduous and Deep Marsh. The property also contains three Potential Vernal Pools (PVPs).⁴

2.2.2 MULVEHILL CONSERVATION AREA

The Mulvehill Conservation Area directly abuts the eastern end of the Lowell Woods Conservation Area and combined with the other adjacent properties is known colloquially as the Lowell Woods Area. Mulvehill Conservation Area consists of approximately 88.5 acres of land on Parcel 10-056. The land is currently designated as conservation land and is bordered to the north and west by the Sandy Valley, Lowell Woods, and Grimm Conservation Areas, and to the east by private residential properties and the Paul Hanlon Elementary School. Active construction at the Hanlon School is currently restricting access to a trailhead in the area.

Mulvehill Conservation Area contains both Woodland Swamp Deciduous and Shrub Swamp wetlands. Purgatory Brook, a Department of Fish and Wildlife (DFW) designated Coldwater Fisheries Resource, runs through Mulvehill Conservation Area.⁵ The property currently contains several multi-use trails as seen on Trailforks and other hiking trail applications.⁶

2.2.3 SANDY VALLEY CONSERVATION AREA

Sandy Valley Conservation Area makes up the far northern point of the Lowell Woods Area properties and lends its name to Sandy Valley Road, where the main trailhead and parking area are located. Sandy Valley consists of Parcels 10-058, 11-001, and 11-004 totaling approximately

⁶ Trailforks, OpenStreetMap



³ Westwood Open Space and Recreation Plan, 2018

⁴ MassMapper

⁵ MassMapper

44.63 acres of protected land.⁷ The land is currently categorized as conservation with passive recreation and trail usage. Sandy Valley is bordered to the north by Interstate-95, to the west by private residential parcels, and to the south and east by the Lowell Woods and Mulvehill properties.

Sandy Valley Conservation Area contains Wooded Swamp Deciduous and Shrub Swamp wetlands, and several multi-use trails run through the area.⁸

2.2.4 GRIMM CONSERVATION AREA

The Grimm Conservation Area is the last of the four Lowell Woods Area contiguous conservation properties. Grimm Conservation Area lies in the southwest of the Lowell Woods Area, in Parcel 15-015, and is approximately 38.42 acres. The land is designated as conservation land and contains Wooded Swamp Deciduous wetlands. Multi-use trails are present according to various trail applications. The parcel is bordered to the north, east, and west by the Lowell Woods Conservation Area, and to the south by private residential properties and Sandy Valley Road. Grimm Conservation Area contains the apparent main trailhead with access to all four properties along Sandy Valley Road.

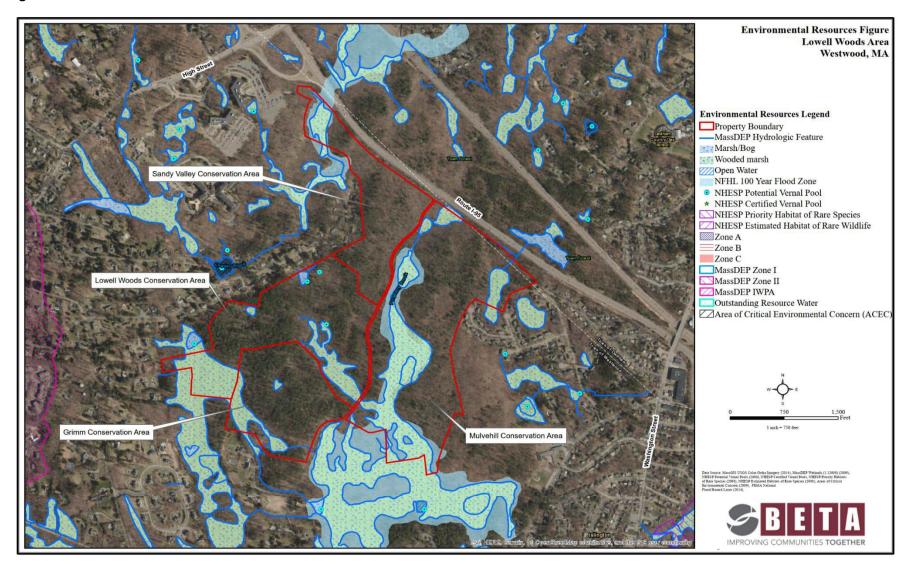


⁷ Westwood OSRP

⁸ MassMapper

⁹ Trailforks, OpenStreetMap

Figure 2: Lowell Woods Area Environmental Resources





2.3 MILL BROOK AREA

The second grouping of properties is the Mill Brook Area located within the southwest portion of the Town. Mill Brook Area consists of the Wight/Mill Brook Conservation Area, the Pignatelli/Mill Brook Conservation Area, and the Traylor Conservation Area. The onsite environmental resources are displayed in Figure 3—Mill Brook Area Environmental Resources Map.

2.3.1 WIGHT/MILL BROOK CONSERVATION AREA

The Wight/Mill Brook property is located on Parcel 19-009 and contains approximately 6.13 acres of land potentially accessible from an easement connecting to Hartford Street between parcels 587 and 569. The land borders Hale Reservation, an approximately 1137-acre (around 474 acres within the Town) area run by a private, nonprofit recreational and educational institution that crosses from the town of Dover into Westwood. Multi-use trails appear to be present based on images from trail applications. These trails connect to official Hale Reservation trails.

The Wight/Mill Brook property contains Wooded Swamp Deciduous wetlands and Mill Brook, a DFW Coldwater Fisheries Resource, as shown in Figure 3—Mill Brook Area Environmental Resources Map. The site is bordered to the east by Traylor Conservation Area, to the north and northeast by Hale Reservation, to the west by the Town of Dover, and to the south by dispersed residential parcels.

2.3.2 PIGNATELLI/MILL BROOK CONSERVATION AREA

The Pignatelli/Mill Brook area is nearly indistinguishable from the Wight/Mill Brook property on many online maps; it is situated on Parcel 19-012, southeast of the Wight/Mill Brook site, and is approximately 1.13 acres in size. The Pignatelli Area appears to be the parcel that acts as an easement connecting the Wight property to Hartford Street between 559 and 537 Hartford Street. It is the smallest property among the eight profiled in this plan.

The Pignatelli parcel contains Wooded Swamp Deciduous wetlands and Mill Brook, a DFW Coldwater Fisheries Resource. The Pignatelli property is bordered by private land besides its northernmost point connected to the Traylor Conservation Area.

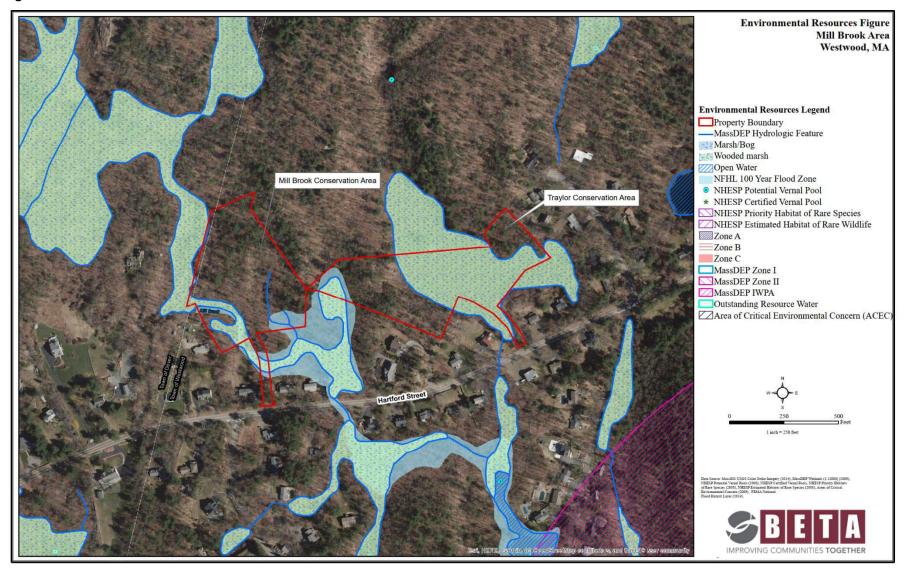
2.3.3 TRAYLOR CONSERVATION AREA

The Traylor Conservation Area is located on Parcel 19-016 and contains approximately 6.82 acres of potentially accessible land. There is existing signage connecting the property to Hartford Street between 491 and 477 Hartford Street. Traylor Conservation Area also directly abuts the Hale Reservation.

Traylor Conservation Area contains Wooded Swamp Deciduous wetlands and Mill Brook, a DFW Coldwater Fisheries Resource. The property is bordered to the south and east by private residential parcels, Hale Reservation to the north, and Wight/Mill Brook Conservation Area to the west.



Figure 3: Mill Brook Area Environmental Resources





3.0 FIELD ASSESSMENT RESULTS

BETA completed a total of three (3) days of field work to identify and evaluate the conditions of each property. BETA developed assessment criteria used in the field to qualify existing conditions. These criteria are detailed in Appendix B: Field Assessment Criteria. The assessment was designed to examine general conditions of each property and rate them using qualitative tests for trails, public access, and signage to better prioritize future efforts. Each criterion may be rated as: good, fair, poor, or unusable.

3.1 ROCK MEADOW BROOK CONSERVATION AREA

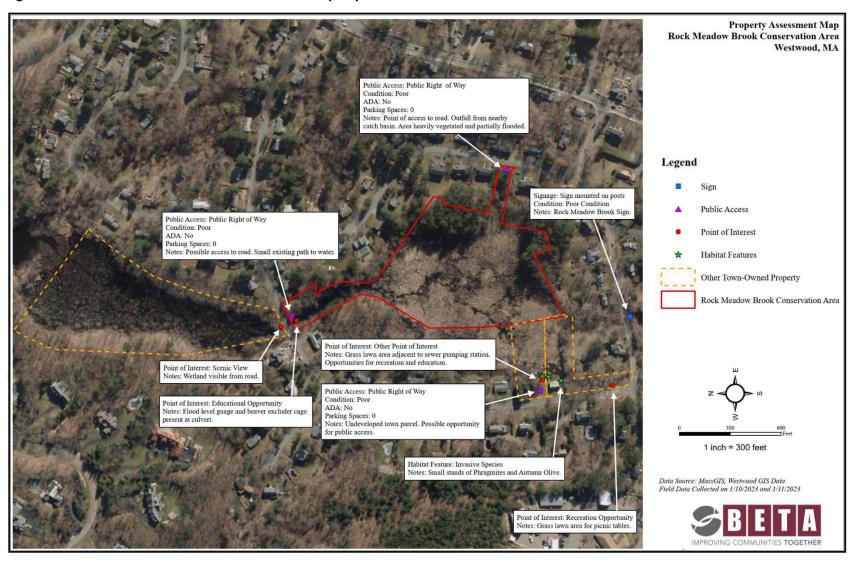
BETA completed a field assessment for the Rock Meadow Brook Conservation Area on January 10, 2023. Table 3.1 below shows a summary of BETA's facility evaluation. Figure 4: Rock Meadow Brook Conservation Area Property Assessment, displays the assessment of the existing conditions recorded from the same visit. The full view of Figure 4 is in Appendix C: Maps.

Table 3.1: Rock Meadow Brook Conservation Area Facility Evaluation

Evaluation Criteria	Assessment Result
Trail Assessment	Not Applicable
Public Access Assessment	Unusable Condition – Facility is inaccessible due to damage or lack of maintenance.
Signage Assessment	Unusable Condition – Sign has major damage or is missing and requires replacement.



Figure 4: Rock Meadow Brook Conservation Area Property Assessment





3.1.1 PARKING & ACCESS

Rock Meadow Brook is currently inaccessible to uses other than conservation due to the shrub swamp wetland present at the site. Despite the cold temperatures on the day of the field visit, the wetland was not frozen over, and the area was inaccessible without specialized gear.

The potential public access point at the Conant Road pump station contains space for around two vehicles, while the potential access point at the Lorraine Road easement is heavily wooded and inaccessible. Due to the site's inaccessibility and wetland habitat, no recreational development is recommended onsite.

3.1.2 TRAILS

Rock Meadow Brook does not contain any trails, either mapped or made as desire paths.

3.1.3 WILDLIFE HABITAT

The wooded areas surrounding the wetland at Rock Meadow Brook contains litter and debris that is visible from Conant Road. As such, a site cleanup may be beneficial to continue to preserve the wetland and surrounding woodland habitat on the property. The residents of the private properties abutting the parcel would also benefit from this action. BETA identified a number of invasive species in the area bordering the Conant Road pump station, including small stands of autumn olive (*Elaeagnus umbellate*) and common reed (*Phragmites australis*), both of which likely extend into the Rock Meadow Brook property.

3.2 LOWELL WOODS

Lowell Woods, the largest set of properties, was surveyed on January 10 and 11, 2023. BETA completed an assessment of trail conditions and traversed all four properties to determine the existing conditions of the sites, and any identify any issues or opportunities. Table 3.2 below provides a summary of BETA's facility evaluation of the Lowell Woods parcels, with trail conditions described in Section 3.2.2. Figure 5: Grimm Conservation Area Property Assessment, Figure 6: Lowell Woods Conservation Area Property Assessment, Figure 7: Sandy Valley Conservation Area Property Assessment display the assessments of the current conditions on the properties recorded from the same visit. The full view of each property assessment is in Appendix A: Full Property List Preliminary Assessment.

Table 3.2: Lowell Woods Facility Evaluation

Evaluation Criteria	Assessment Result									
Trail Assessment	Completed per trail. See Figure 9.									
Public Access Assessment	Fair Condition – Facility is fully accessible but requires minor maintenance or repairs.									
Signage Assessment	Poor Condition – Sign is damaged or illegible.									



Figure 5: Grimm Conservation Area Property Assessment

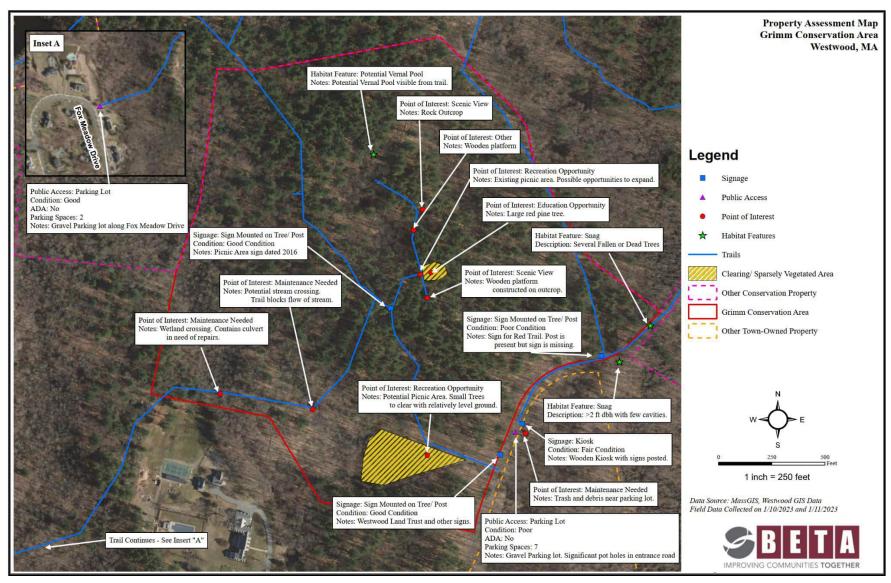




Figure 6: Lowell Woods Conservation Area Property Assessment

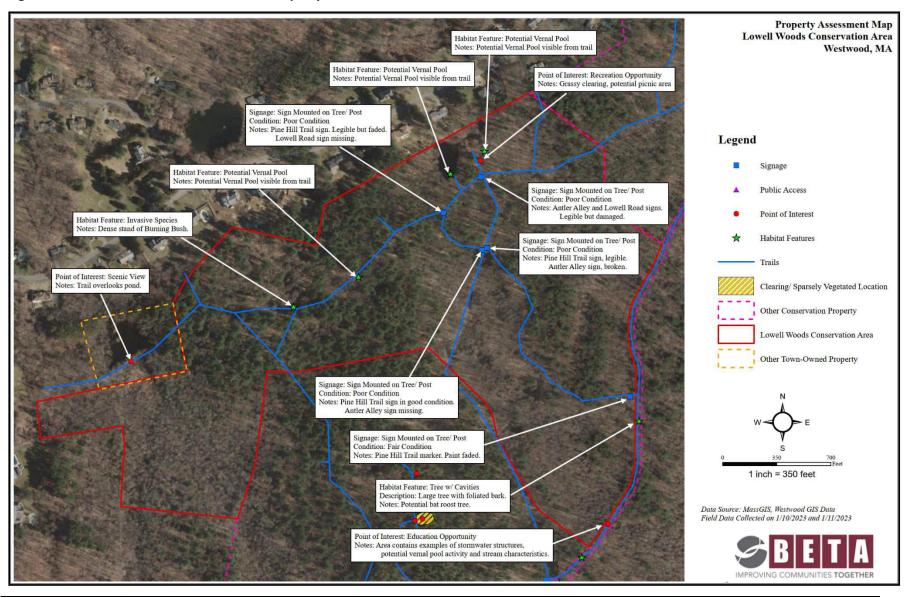


Figure 7: Sandy Valley Conservation Area Property Assessment

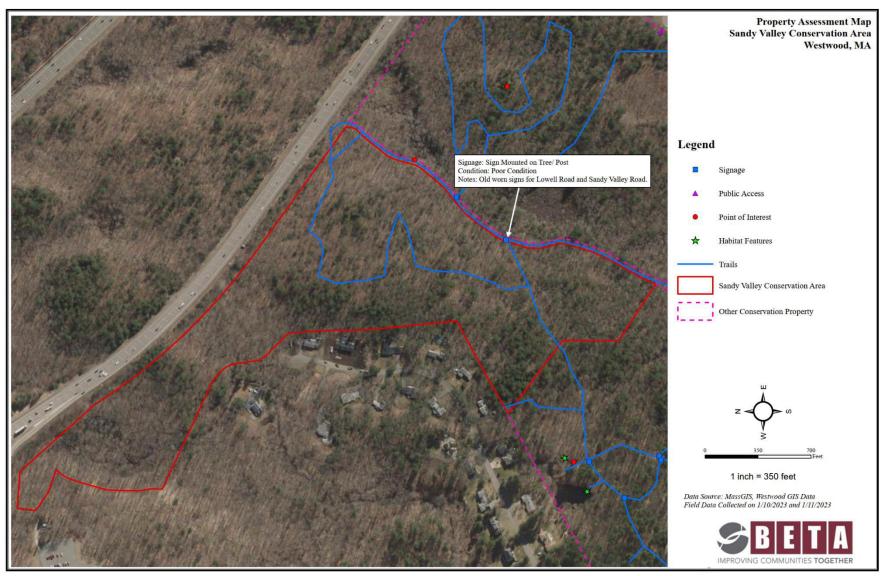
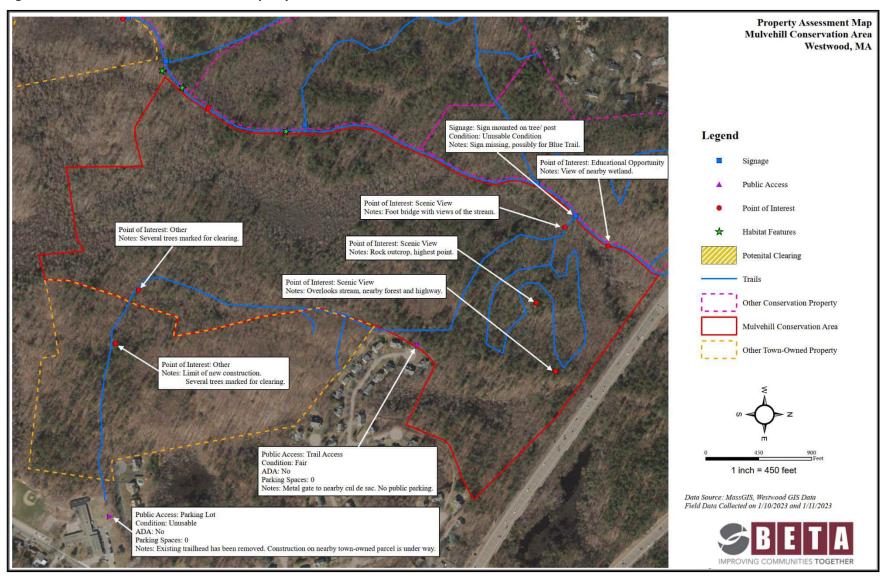




Figure 8: Mulvehill Conservation Area Property Assessment



3.2.1 PARKING & ACCESS

The first item of note from this field assessment is the active use of the sites by the public. During all hours of the field assessment there were members of the public present for walks with and without pets with cars being parked in the primary parking area at the end of Sandy Valley Road throughout the day. There was also evidence of mountain bike use on the trails.

The singular access point to the property is at the parking lot on Sandy Valley Road. The road originates off Gay Street and passes through a residential neighborhood. The road itself becomes less maintained and is unpaved as it nears the parking area. Road work is needed on the approach, especially for filling major potholes and evening out the surface.

The primary parking area at the end of Sandy Valley Road is a gravel lot with enough space for approximately seven cars parked side-by-side and the opportunity for more vehicles to park informally along the sides of the road and cleared space. There are no marked accessible spaces in the parking area at the end of Sandy Valley Road, and access to the trails cannot currently accommodate those using mobility devices. The trail with the most potential to be retrofitted for accessibility is the Sandy Valley Trail, which is the primary and best-kept trail.

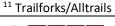
Two other parking areas exist for this group of sites. The first is at the Hanlon School and leads onto the Mulvehill property from Gay Street. Depending on the time of day and year, parking in this area may be restricted due to school being in session. As of 2023, a large construction project is barring most access to the trails here, and though a hiker may be able to access the trails on foot, the construction makes access to the property challenging. The second area is at the trailhead for the Fox Meadow Trail, which contains two parking spots within the neighborhood on Fox Meadow Drive. Both lots are fully paved and easily accessible as they are located near main town roads; however, the proximity of the Sandy Valley Road Lot to the trails within Lowell Woods makes it the better option for parking and potential improvements.

3.2.2 TRAILS

The public trails on the four (4) properties cross parcel lines and will therefore be discussed as a whole, and not separated by property. BETA recorded trail names from official Town of Westwood trail maps and from online records of public use for the trails. BETA also recorded several unnamed connector trails that linked officially marked trails, as shown BETA assessed and assigned a condition to each trail, as listed below:

- Sandy Valley Road Good and Fair Condition
- Lowell Road Fair, Poor, and Unusable Conditions
- Blue Trail Fair Condition
- Antler Alley Good and Poor Condition
- Pine Hill Trail Fair and Poor Condition
- Fox Meadow Trail Fair Condition
- Krissy's Trail Fair Condition
- Scout Trail Poor Condition

Though site visits were conducted in the winter, many of the trails onsite are well-kept and usable. Several fallen trees are present throughout that will need to be cleared for the peak use season in





the warmer months. Figure 9 illustrates trail conditions in the area. Those marked as unusable traverse large areas of wet ground and could be hazardous or unpleasant for visitors with mobility restrictions or who lack waterproof boots.

Sandy Valley Road is a trail extension of the approach road to the Lowell Woods properties and is therefore named the same as the road. Sandy Valley Road is the most well-maintained trail, with a wide flat path along the duration of the trail. Several offshoots along Sandy Valley Road connect the other trails with some signage. Images in Appendix D: Photo Documentation showcase the need for replacement or restoration of several of these signs.

Lowell Road is a well-marked trail, though less well-maintained than Sandy Valley Road. The trail is not as flat as Sandy Valley Road and is cut off at several points due to unclear signage, fallen trees, or inaccessible trail offshoots. The western portion of Lowell Road is unusable due to the presence of mud and flooding.

The Blue Trail is the easternmost trail on the property, and traverses behind several private homes. The trail has no signage from the neighborhood but is used by neighbors who do not have to drive to a trailhead. Blue trail is well-kept along a mostly even and level surface, with several informal trail offshoots leading to abutting backyards.

Antler Alley is a connecting trail between Sandy Valley Road and Lowell Road. The trail is wide enough for vehicles to pass freely and sewer manholes and associated sewer line run underneath and along the trail. Several lower areas of the wide trail were flooded at the time of the site visit, making the trail difficult to traverse.

Pine Hill Trail is another connecting trail between Sandy Valley Road and Lowell Road. Pine Hill Trail and Antler Alley cross at their northwestern end. Pine Hill Trail is not as wide as Antler Alley, with no sewer manholes. At the time of the site visit, several trees have fallen across the path.

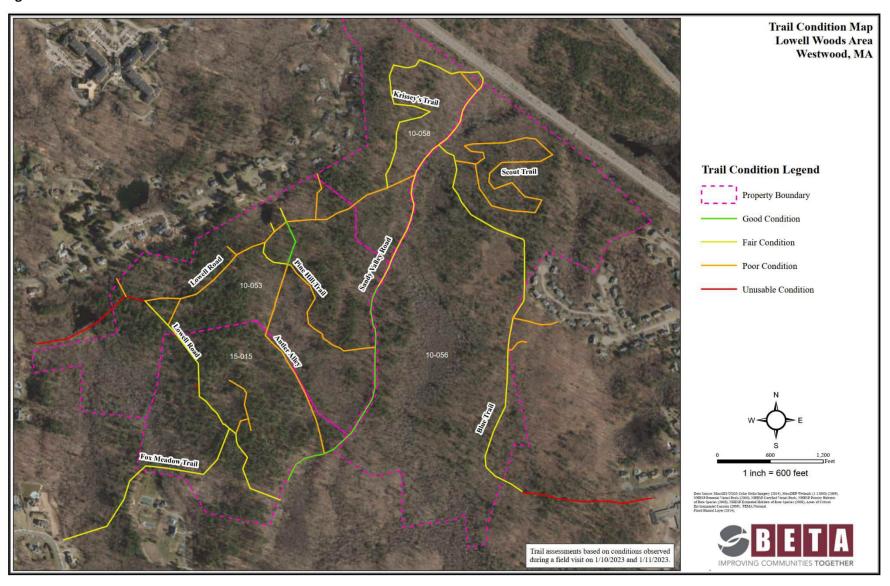
Fox Meadow Trail is the second most well-kept trail in the area. It runs from the Fox Meadow neighborhood and connects to Lowell Road. The western portion of the trail closest to the Fox Meadow neighborhood contains a mesh layer beneath a mulch layer. As the trail continues to approach Lowell Road, it becomes more natural and passes behind several private homes. There are several trees down along the trail and a stream crossing that may become flooded in high precipitation.

Krissy's Trail runs close to Route I-95 without any fencing or other physical barrier separating the trail from the roadway. The trail itself is well-kept with several downed trees.

Scout Trail is a difficult trail to traverse for hikers, and likely serves primarily as a mountain biking route. The trail is poorly defined along some of its length, it is hilly, and the path itself is thin and winding. Markers along the trail keep bikers aware that they are still on Scout Trail.



Figure 9: Lowell Woods Area Trail Conditions





3.2.3 WILDLIFF HABITAT

Multiple known and potential vernal pools exist along the trails (specifically Antler Alley) as shown in Figure 6: Lowell Woods Conservation Area Property Assessment. An area of wetlands stretches further back between the formal trails in Mulvehill Conservation Area, along Purgatory Brook as shown in Figure 2: Lowell Woods Area Environmental Resources. Portions of Antler Alley are also mapped wetlands, specifically at the southwestern edge of the Lowell Woods Conservation Area. Lowell Woods Conservation Area also contains several Potential Vernal Pools and a dense stand of Burning Bush (*Euonymus alatus*) on its western side (see Figure 6) which could be cleared to reduce the spread of invasive species on the rest of the conservation areas.

3.2.4 Additional Notes

A picnic and camping area from a 2016 Eagle Scout project exist at the intersection of Lowell Road and Fox Meadow Trail. The area contains several picnic tables and tent platforms in poor or weathered condition. Along the far edge of the area down a dead-end trail are several fire pits – either formally or informally constructed. The trail in the surrounding area also needs maintenance. Development of an accessible access trail to this area would greatly expand recreational opportunity.

3.3 MILL BROOK AREA

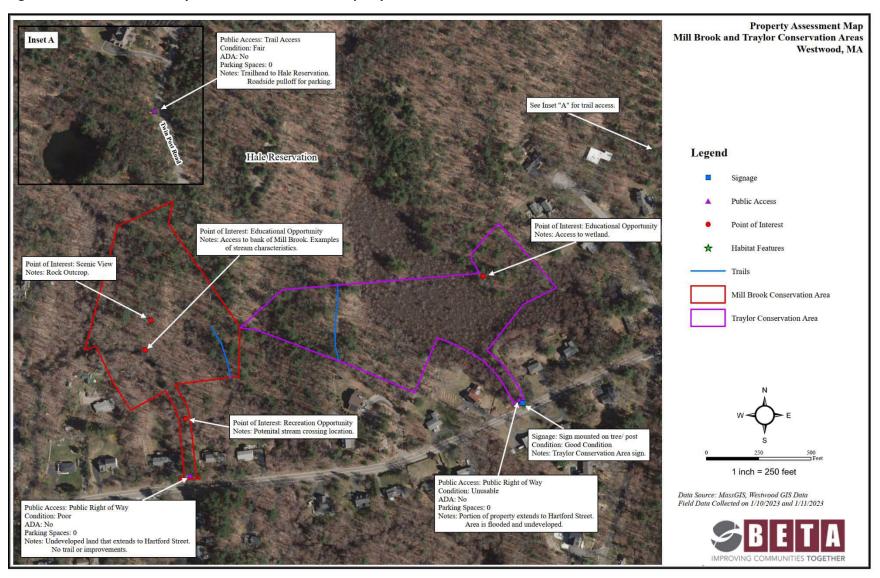
The field assessment for the Mill Brook Area properties took place on March 8, 2023. Table 3.3 shows BETA's facility evaluation of the Mill Brook properties. Figure 10: Mill Brook and Traylor Conservation Areas Property Assessment, displays the assessment of the current conditions on the property recorded from the same visit. The full view of Figure 10 is in Appendix C: Maps.

Table 3.3: Mill Brook Facility Evaluation

Evaluation Criteria	Assessment Result
Trail Assessment	Not Applicable
Public Access Assessment	Poor Condition – Facility is damaged or worn in a way that impacts accessibility.
Signage Assessment	Fair Condition – Facility is fully accessible but requires minor maintenance or repairs.



Figure 10: Mill Brook and Traylor Conservation Areas Property Assessment





3.3.1 PARKING & ACCESS

The Mill Brook Area is not directly accessible from the Hartford Street easements, where no parking, signage, or notable path to the site exist. This entrance is also blocked by the path of Mill Brook itself, which flows parallel to the road at this segment and must be crossed to reach the rest of the properties. The Traylor Conservation Area has an easement leading to Hartford Street that is similarly inaccessible but does contain signage denoting the property as conservation land.

BETA used the small parking area at Twin Post Road to access the Hale Reservation Trail leading from the neighborhood. This trail leads through the Hale Reservation and into the Mill Brook Area, specifically the Traylor conservation Area, though it is difficult to tell where the Hale Reservation end due to the lack of signage.

3.3.2 TRAILS

Mill Brook does not have any mapped trails, though the way onto the property crosses several unmarked trails on the Hale Reservation that connect with the entrance at Twin Post Road. Evidence of some informal trails created by local homeowners is visible, and Hale Reservation trails could potentially be better connected to the town-owned area.

3.3.3 WILDLIFE HABITAT

BETA noted several white-tailed deer within the property along with evidence of deer hunting, including a tree stand and several rangefinders set up in trees.

Along Mill Brook is a dense cluster of greenbriers (*Smilax spp.*) that make crossing the brook difficult due to thorns. Though not invasive to the area, this greenbrier patch makes it difficult to access the brook from any of the trails assessed in the Mill Brook Area.



4.0 RECOMMENDATIONS & OPPORTUNITIES

With the collected data, BETA scientists were able to highlight existing strengths and weaknesses for the eight properties, allowing for the creation and further analysis of potential on-site improvements. The following sections discusses general opportunities BETA has identified for parcel improvements and specific recommendations for implementing them. These general opportunities can be viewed in three categories: education, recreation, and conservation. Using these, BETA has determined how each area may be improved:

- The Rock Meadow Conservation Area provides opportunities for enhanced education and conservation;
- The Lowell Woods Area (composed of the Lowell Woods Conservation, Mulvehill Conservation, Sandy Valley Conservation, and Grimm Conservation Areas) provides opportunities for enhanced recreation and conservation; and,
- The Mill Brook Area (Comprised of the Wight/Mill Brook Conservation, Pignatelli/Mill Brook Conservation, and the Traylor Conservation Areas) provides opportunities for enhanced conservation and recreation.

BETA's recommendations to the Town have been designed to be actionable, and as such, details including costs and required permits are included.

4.1 ROCK MEADOW BROOK CONSERVATION AREA

Rock Meadow Brook is not an ideal property for recreation, but it has potential as an educational and conservation property. An educational opportunity exists at the northern portion of the property, at its nexus with Conant Road, at the culvert under Conant Road. The sidewalk that crosses the culvert provides a spot for reaching primarily neighborhood residents who already walk in the area. This culvert is protected by a beaver cage and contains a flood gauge, both of which could be used to educate the public on interactions between beavers and humans and flooding. This educational opportunity aligns with the goals set forth in the Town of Westwood's recent Hazard Mitigation Plan (HMP) Update in 2023.

Rock Meadow Brook also poses a small opportunity for education regarding local habitats. Signage about wetland habitats, beaver education, and invasive species could be placed along the edge of the property so that residents walking around the neighborhood have an opportunity to stop and interact with the benefits of this hidden property. However, because of the lack of trails on the property, signage would not be viewed by many Westwood residents. Developing an annual volunteer cleanup of litter and clearing of invasive species on the property may create more of a draw and expose more Westwood residents to the benefits of the area.

An area for potential passive recreation exists at the southwestern border of the property around the pump station. The area of grass is currently unoccupied on Town-owned property not necessarily designated for conservation on the side of Conant Road to the edge of the intersection with Dover Road. The area remains flat and not overgrown, so smaller amenities such as the addition of picnic tables could convert the previously empty green space into a place for community gathering that borders the conservation area.

It is important to note that any changes to the landscape of the wetland within the property may impact flooding in the Conant Road area, as wetlands provide natural beneficial flood storage, and any alterations may impact this environmental service. Conant Road is noted as an area of repeated



flooding in the 2023 Westwood HMP, especially in relation to the adjacent municipal pump station. Flooding has previously impacted private properties along Conant Road. Tying in strategies from the HMP, including addressing issues with the undersized culvert causing issues at Conant Road, is a proactive way to align Town goals to the conservation of Rock Meadow Brook. This effort may include annual cleanups of litter and clearing of invasive species.

4.2 LOWELL WOODS

The Lowell Woods properties provide the greatest opportunity for enhanced recreation alongside conservation efforts. The increased breadth of environmental resources provides opportunities to educate visitors about local habitats and ecological features.

Key access improvements are needed to achieve those enhanced recreational and educational opportunities at Lowell Woods. The approach to the site along Sandy Valley Road should be paved to improve the overall condition of the road and the experience of arriving at the properties. Additional signage along Gay Street where it intersects with Sandy Valley Road identifying the direction of the Lowell Woods properties and highlighting the biking and hiking trails would help increase visibility and potentially increase visitation. Similarly, the addition of sidewalks along Gay Street and Sandy Valley Road could increase the number of neighborhoods in walkable distance to Lowell Woods. The parking area itself could be expanded to accommodate larger vehicles such as school buses or accessible vans. The signage within the parking area can be improved with a larger map and more informational resources about the site.

Signage beyond the parking lot is also in need of restoration. Installation and restoration of trail markers for all trail off-shoots will help guide visitors though the trail network. Trail signage includes tree markings, which are inconsistent across different trails. Formalizing a map of Lowell Woods with all usable trails marked in accordance with the trail markings on the properties would allow visitors to make more knowledgeable decisions about their chosen paths.

The addition of new signage poses an opportunity for education. The historic stone walls that dot the parcels are a chance to educate residents on the history of Westwood and the land-use history of the properties. Interpretive signage describing vernal pools and different flora and fauna of the area can be used as a tool to expand knowledge about local habitats and ecological systems.

Efforts to improve recreation at Lowell Woods have already been made, specifically in the 2016 Boy Scout project at Lowell Road. However, due to deterioration from exposure, weather, and wildlife, the project needs repair. This presents an opportunity to greatly improve recreation facilities along Lowell Road in the form of new picnic tables, protected fire pits, strong tent platforms and trail maintenance.

The area itself is not far from the parking lot and has the potential to be expanded to become more easily accessible from the lot. Sandy Valley Road could potentially be made Americans with Disabilities Act (ADA) compliant due to how flat the initial portion of the trail is. However, the rest of the trails on the properties are not well-kept enough to become ADA accessible. The recreation area initiated by the Boy Scout Project on Lowell Road could be expanded closer to the entrance of the trail near the Sandy Valley parking lot to allow access to mobility aids onto the recreation site, but the incline of Lowell Road on the approach to the Project may prevent direct access from the parking area.

On the conservation front, the town or other partners should consider organizing regular litter cleanup and invasive species clearing events at Lowell Woods. Ideally, these events would occur at



least annually. They would be volunteer events to help protect the environmental value of the land and showcase the site as a local open space and recreational amenity.

4.3 MILL BROOK AREA

Due to its proximity to Hale Reservation, the Mill Brook parcels are already connected to an area managed with conservation as a core value. A more formalized connection between Hale Reservation and the town-owned properties could be beneficial to both parties, as it would expand the recreational opportunities on the Reservation land and improve Town resources.

Like the other two properties, the Mill Brook Area properties would benefit from an annual clearing of invasive species, especially those around the water resources in the property. Such events would protect valuable native habitat while providing a venue for educating the public on invasive species and the importance of their management.

Recreation may be difficult on the parcels due to their proximity to private residential properties, and the general inaccessibility from public access points. Without public parking areas at public trailheads, the greatest opportunity for encouraging use of the land may be through formalizing the patchwork trails on the properties and connect them to those in Hale Reservation. Evidence of some hunting materials on the properties also brings up the potential necessity to enforce local hunting laws to protect and conserve the parcels and adherence to town policies. However, without providing new public access to the Town-owned land, and in the absence of neighborhood complaints about this type of use, enforcement may not be a high priority.

The above-referenced recommendations are provided in a table below for ease of review and include anticipated costs. To assist the Town with establishing improved amenities such as signage, mockups have been developed by BETA's Landscape Architects and are included in Appendix G.



Action	Туре	Parcel	Area Description	Permits Required*	Cost**								
	Rock Meadow Brook Conservation Area												
Use the adjacent Townowned land adjacent to the Pump station and the Conant Road/Dover Road intersection to develop a small passive recreation space, with picnic tables.	Recreation	09_226	Town owned land at the intersection of Conant Road and Dover Road	N/A (Assuming no ground disturbance)	Installation: Volunteer or in-kind labor Wood Table: ~ \$450 each Composite Table: ~ \$920 each								
Place educational signage regarding wetland habitats, safe beaver education, and invasive species around the perimeter of the property.	Education	09-194	Northern-most culvert on the property.	N/A	Installation: Volunteer or in-kind labor Total: ~ \$1,500 for multiple signs								
Schedule and publicize yearly litter cleanups and invasive species clearing programs on site.	Conservation	05-001, 09-155, 09-194, 13-074	Full site	RDA or NOI (for clearing activities within jurisdictional areas – assuming no work within wetlands)	Permitting Cost: Dependent on scope Volunteer time								
			Lowell Woods Area										
Pave Sandy Valley Road	Conservation and Recreation	N/A	Sandy Valley Road	NOI	Permitting: \$10,000 Installation: In-kind labor (DPW) Total: ~\$259,500								



Action	Туре	Parcel	Area Description	Permits Required*	Cost**
Install signage directing to Lowell Woods at the intersection of Gay Street and Sandy Valley Road	Recreation	N/A	Sandy Valley Road at Gay Street	N/A	Installation: Volunteer or in-kind labor Total: ~ \$1,200
Consider the installation of sidewalks along Gay Street to increase pedestrian access.	Recreation	N/A	Gay Street	N/A	Installation: In-kind labor (DPW), Note: It is assumed that adequate row is available for sidewalk. Total: ~\$540,600
Expand the Sandy Valley Road parking area to accommodate larger vehicles (Parking Area, 15 +/- spaces, 1 accessible space, 1 school bus space)	Recreation	N/A	Sandy Valley Road	NOI	Permitting: \$7,000 Installation: In-kind labor (DPW) Gravel: ~ \$61,600 Paved: ~ \$108,000
Improve official signage in the Sandy Valley Road parking area with a larger official trail map, safety information, and additional notifications	Recreation and Conservation	15-015	Trail information sign in the Sandy Valley Road parking lot	N/A	Installation: Volunteer or in-kind labor Total: ~ \$600 per sign
Add official trail signage at the Fox Meadow and Hanlon School entrances	Recreation	15-041 and 16- 005	Other two public entrances to the Lowell Woods site – where no signage currently appears.	N/A	Installation: Volunteer or in-kind labor Total: ~ \$600 per sign
Improve and/or install	Recreation	10-052 through	Throughout the properties,	N/A	Installation: Volunteer or



Action	Туре	Parcel	Area Description	Permits Required*	Cost**
trail signage at the head of each trail		10-055, 10-057, 10-059, 15-028, 36-005, 36-026, 10-056, 10-058, 11-001, 11-004, 15-015	signage incorporating the trail names and lengths. (Potentially From Vacker Sign, etc.)		in-kind labor Total: \$ 800 for multiple signs
Incorporate educational signage along Lowell Road to point out Potential Vernal Pools	Education	10-053	Vernal Pools mapped on Figure 2: Lowell Woods Area Environmental Resources (Potentially from Fossil Graphics, Pulse Design, etc.)	N/A	Installation: Volunteer or in-kind labor Total: ~ \$1,500 for multiple signs
Incorporate educational signage along Sandy Valley Road to share the history of the properties.	Education	15-015	Along Sandy Valley Road, specifically near visible historic stone walls (Potentially from Fossil Graphics, Pulse Design, etc.)	N/A	Installation: Volunteer or in-kind labor Total: ~ \$1,500 for multiple signs
Restore and expand the 2016 Boy Scout project tables, tent platforms, and fire pits.	Recreation	15-015	2016 Boy Scout Project near the intersection of Lowell Road and Fox Meadow Trail.	N/A	Installation: Volunteer or in-kind labor Wood Table: ~ \$450 each Composite Table: ~ \$920 each Tent Platform: ~ \$950 Fire Pit: ~ \$350
Flatten and level the entrance to Sandy Valley Road (trail) to accommodate mobility aids	Recreation	15-015 and 15- 016	Connection between parking lot and trail portion of Sandy Valley Road.	RDA	Permitting: \$3,000 Installation: In-kind labor (DPW) Total: ~\$41,100



Action	Туре	Parcel	Area Description	Permits Required*	Cost**
Schedule and publicize yearly litter cleanups and invasive species clearing programs on site.	Conservation	10-052 through 10-055, 10-057, 10-059, 15-028, 36-005, 36-026, 10-056, 10-058, 11-001, 11-004, 15-015	Full site	RDA or NOI (for clearing activities within jurisdictional areas – assuming no work within wetlands)	Permitting Cost: Dependent on scope Volunteer time
			Mill Brook Area	'	
Discuss the possibility of connecting Hale Reservation trails formally to the Mill Brook properties	Recreation	19-016	Trail connection from Hale Reservation to the north of Traylor Conservation Area.	NOI (unless jurisdictional areas can be avoided)	In-kind and volunteer time
Review Town hunting policies and install signage on the pre-existing Traylor Conservation Area Sign.	Conservation	19-016	Traylor Conservation Area easement, where the one public facing sign exists.	N/A	Policy review: In-kind (Conservation Commission or Agent) Installation: Volunteer or in-kind labor Total: ~ \$200
Schedule and publicize yearly litter cleanups and invasive species clearing programs on site.	Conservation	19-009, 19-012, 19-016	Full site	RDA or NOI (for clearing activities within jurisdictional areas – assuming no work within wetlands)	Permitting Cost: Dependent on scope Volunteer time

^{*}Required permits are those which are anticipated based on Site observations and desktop research. Site-specific assessments, such as wetland delineations, would be required to confirm the applicability of permits for these projects.

^{**}The cost estimates provided in this Appendix are conceptual and subject to change based on cost fluctuations of labor and materials and the final design for each recommendation.



APPENDIX A: FULL PROPERTY LIST PRELIMINARY ASSESSMENT



Open Space Property	Connectivity ¹	Access ²	Wetland Preservation ³	Floodplain Preservation and Flood Control ⁴	Wildlife Habitat ⁵	Existing Uses and Popularity with the Public ⁶	Ground & Surface Water Protection ⁷	Capacity to Support OSRP Goals ⁸	Educational/ Interperative Oppurtunities ⁹	TOTAL SCORE	NOTES
Rock Meadow Brook Conservation Area	3	1	3	5	3	2	4	2	3	26	¹ Adjacent to Hale Reservation ⁵ Certified and Potential Vernal Pools in the area, adjacent to other BioMap Critical habitats ⁶ Mapped trails are present near, but not on, the property (OpenSteetMaps and Trailforks) ⁸ The property could support goals generally related to conservation, particularly regarding educational opportunities ⁹ Located near the Deerfield School and Public Library
Halsam's Pond	1	3	3	1	3	1	1	2	1		⁵ Potential vernal pool on the property (MassMapper) ⁸ The area could support goals generally related to conservation and recreation given the proximity to a pond
Lowell Woods Conservation Area	5	4	3	4	3	3	1	2	1	26	 ¹ Connected to Grimm, Mulvehill, and Sandy Valley Conservation Areas ² Possible trailhead at Sandy Valley that could connect to Lowell Woods ³ Wetlands present per MassMapper include Wooded Swamp Deciduous (9% coverage) and Deep Marsh (2% coverage) ⁵ Three potential vernal pools (MassMapper) ⁶ Mapped/marked trails are used for cycling and running (OpenStreetMaps and Trailforks) ⁸ The property could support goals generally related to conservation and recreation opportunities considering its connectivity to other local conservation areas
Mulvehill Conservation Area	5	4	3	4	3	3	1	2	1	26	¹ Connected to Grimm, Lowell, and Sandy Valley Conservation areas ³ Wetlands present per MassMapper include Wooded Swamp Deciduous (12% coverage) and Shrub Swamp (12% coverage) ⁵ A DFW Coldwater Fisheries Resource, Purgatory Brook, is present (MassMapper) ⁶ Marked trails and use for some biking and running (OpenStreetmaps and Trailforks) ⁸ The property could support goals generally related to conservation and recreation opportunities considering its connectivity to other local conservation areas

Sandy Meadow (Valley) Conservation Area	5	4	3	4	2	3	1	2	1	25	 ¹ Connected to Grimm, Mulvehill, and Lowell Conservation Areas ² Possible trailhead at Sandy Valley ³ Wetlands present per MassMapper include Wooded Swamp Deciduous (15% coverage) and Shrub Swamp (10% coverage) ⁶ Mapped/marked trails appear to be used for cycling and hiking (OpenStreetMaps and Trailforks) ⁸ The property could support goals generally related to conservation and recreation opportunities given its connectivity to other local open space areas
Baker/Deviney Conservation Area	3	3	4	4	1	2	1	2	1	21	¹ Adjacent to Westwood Cemetery ³ Wetlands present per MassMapper include Wooded Swamp Deciduous (100% coverage)
Rice Reservation Conservation Area/Lyman's Pond	3	3	4	1	1	2	1	2	3	20	 Wetlands present per MassMapper include Wooded Swamp Deciduous (25% coverage), Deep Marsh (entirety of Lyman's Pond), and Shrub Swamp 25% coverage) The property could support goals generally related to conservation, education, and recreation opportunities given its proximity to educational facilities Adjacent to schools and the senior center
Grimm Conservation Area	5	4	3	4	1	3	1	2	1	24	¹ Connected to Sandy Valley, Mulvehill, and Lowell Conservation Areas ² Possible connecting trailhead at Sandy Valley ³ Wetlands present per MassMapper include Wooded Swamp Deciduous (15% coverage) ⁶ Trails that appear to be used for cycling and hiking are present (Trailforks) ⁸ The property could support goals generally related to conservation and recreation opportunities given tis connectivity to other local conservation areas
Wentworth Conservation Area	1	1	4	1	3	2	1	2	1	16	 ^{1 & 2} Property is isolated, with only roadside access available and seemingly no established public access point ³ Wetlands present per MassMapper include Wooded Swamp Deciduous (13% coverage) and Shrub Swamp (65% coverage) ⁵ BioMap2 Core Habitat/Critical Natural Landscape is present (MassMapper) ⁸ The property would not lend itself to supporting OSRP goals due to surrounding private property
Cedar Hill Conservation Area	3	1	3	1	3	1	1	1	1	15	 Wetlands present per MassMapper include Wooded Swamp Deciduous (65% coverage) Certified Vernal pool on property (MassMapper) The property would not lend itself to supporting OSRP goals due to surrounding private property

Wight/Mill Brook Conservation Area	4	3	3	5	3	2	1	2	1	Wight, Pignatelli, and Traylor Conservation Areas all appear to be part of the Mill Brook Conservation Area 1 Connected to Hale Reservation 2 The property could potentially be accessed thorugh Hale Reservation per OpenStreetMap mapping 3 Wetlands present per MassMapper include Wooded Swamp Deciduous (25% coverage) 5 A DFW Coldwater Fisheries Resource, Mill Brook, is present (MassMapper) 8 The area could support goals generally related to conservation and open space connectivity
Pignatelli/Mill Brook Conservation Area	4	3	3	5	3	2	1	2	1	¹ Connected to Hale Reservation ² Could potentially be accessed thorugh Hale Reservation ³ Wetlands present per MassMapper include Wooded Swamp Deciduous (25% coverage) ⁵ A DFW Coldwater Fisheries Resource, Mill Brook, is present (MassMapper) ⁸ The area could support goals generally related to conservation and connectivity of open space parcels
Traylor Conservation Area	4	3	3	5	3	2	1	2	1	¹ Connected to Hale Reservation ² Could potentially be accessed thorugh Hale Reservation per OpenStreetMap mapping ³ Wetlands present per MassMapper include Wooded Swamp Deciduous (25% coverage) ⁵ A DFW Coldwater Fisheries Resource, Mill Brook, is present (MassMapper) ⁸ The property could support goals generally related to conservation of open space
Crouse Pond Conservation Area	1	1	3	1	1	2	1	1	1	 Wetlands present per MassMapper include Shrub Swamp (45% coverage) The property would not lend itself to supporting OSRP goals due to surrounding private property
Twin Post Conservation Area	3	3	2	1	1	3	2	2	1	Property appears to be recognized as Crouse Sisters Conservation Area off Twin Post Road ¹ Close to Hale Reservation ² No visible trailhead or parking (Google Maps, OpenStreetMaps) ⁶ One trail and associated parking is noted on Trailforks; however, this was not observed on Google Maps ⁷ Portion of the property (15%) is within a Zone II Wellhead Protection Area (MassMapper) ⁸ The property could support the OSRP connectivity goal due to its proximity to Hale Reservation
Veterans Park Conservation Area	3	4	1	1	1	2	2	2	3	² On-street parking and direct access to downtown is available ⁷ Nearly the entirety of the property is within a Zone II Wellhead Protection Area ⁸ Property could be used to support awareness of open space and conservation areas due to its centralized and accessible location ⁹ Property is near Westwood Middle/High Schools

Temple Conservation Area	3	4	1	1	1	2	2	2	3	19	¹ Located across the street from Veterans Park ² On-street parking and direct access to downtown is available ⁶ No visible usage of park through an assessment of OpenStreetMap and Trailforks ⁷ Approximately 50% of the property is within a Zone II Wellhead Protection Area ⁸ Property could be used to support awareness of open space and conservation areas due to its centralized and accessible location ⁹ Property is near Westwood Middle/High Schools
Clapboardtree Meadow/Prout Farm Conservation Area	2	3	3	4	1	1	1	2	3	20	 Publicly-owned portion of the property is accessible from the roadway; however, no formal parking was observed Wetlands present per MassMapper include Wooded Swamp Deciduous (45% coverage) and Shrub Swamp (13% coverage) Property consists of a meadow that could be used as a passive recreation space In proximity of Universal Technical Institute of MA Inc., Xaverian Brothers High School, and Westwood High School
O'Toole Conservation Area	1	1	3	3	1	1	1	1	1	13	^{1 & 2} located along Providence Highway and surrounded by private property) ³ Some Wooded Swamp Deciduous (40%)
Currier Reservaton Conservation Area	2	3	3	1	1	2	1	2	1	16	³ Some Wooded Swamp Deciduous (15%), MassMapper ⁸ Potential to contribute to programming and raising awareness for open spaces
Pheasant Hill Conservation Area	1	1	1	1	1	2	1	2	1	11	⁶ No trails or biking on site but playground is bordering the area, ⁹ Playground and surrounding open space provde areas to improve recreational opportunities
Lakeshore Memorial Park Conservation Area	3	3	4	4	1	1	1	2	1	20	Wooded Swamp Deciduous (50%) and Shrub Swamp (25%) present Located near Buckmaster Pond, so potential for activity regarding the pond and conservation
Pitts/Ruynassardt Conservation Area/Buckmaster Pond	3	4	1	4	1	2	1	2	4	22	⁸ Buckmaster Pond presents opportunity for passive recreation ⁹ William E. Sheehan Public School is located nearby
Reiner Conservation Area	4	3	3	1	1	1	1	2	1	17	¹ In proximity to Fay and Lasalle Road Conservation Areas ³ Wetlands present per MassMapper include Wooded Swamp Deciduous (10% coverage)
Fay Conservation Area	4	3	1	1	1	1	1	1	1	14	¹ In proximity to Reiner and Lasalle Road Conservation areas ⁸ Appears to be generally innaccessible and would not likely support OSRP goals
Endicott Conservation Area	1	1	1	1	1	1	2	1	1	10	² Within a commercial area and fencing appears to preclude public access ⁷ Approximatley 65% of the property is within a Zone II Wellhead Protection Area (MassMapper)

Draper Avenue Conservation Area	1	1	3	4	3	1	1	1	1	16	 Wetlands present per MassMapper include Wooded Swamp Deciduous (45% coverage) Contains regulatory floodway (Mill Brook) and a portion of the property (5%) is within the 100-year floodplain per FEMA mapping A DFW Coldwater Fisheries Resource, Mill Brook, is present (MassMapper)
Martha Jones Conservation Area	2	4	3	1	1	3	1	2	4	21	³ Wetlands present per MassMapper include Wooded Swamp Deciduous (9%), Deep Marsh (12%), and Shrub Swamp (6%) ⁶ Existing trails are present and appear to be used by the public (Strava and Trailforks) ⁸ School connectivity and the numerous residential properties within walking distance would potentially support this property's use as an active recreation area ⁹ Located near/connected to Martha Jones Elementary School
Germany Brook/Lovell Conservation Area	1	1	3	4	3	2	1	2	1	18	 Wetlands present per MassMapper include Wooded Swamp Deciduous (30% coverage) A DFW Coldwater Fisheries Resource, Germany Brook, is present (MassMapper) Public appears to traverse the area surrounding, but not within, the property (Strava) The property is generally isoalted and would require improved connectivity to support OSRP goals

Westwood, MA

APPENDIX B: FIELD ASSESSMENT CRITERIA





MEMORANDUM

Date: 12/23/2022 Job No.: 22.10481.00

To: N/A
Cc: N/A

From: Tyler Drew, Staff Scientist - BETA

Subject: Westwood, MA Conservation Land Management Plan

Field Assessment

The purpose of this memorandum is to establish the criteria used to evaluate several Open Space parcels identified as having potential for improvement by the Conservation Land Management Plan (CLMP) created by the Westwood Conservation Commission in Westwood, MA. These parcels and their associated facilities were evaluated in the field using the following criteria:

Property Evaluation Criteria:

The following criteria were used to evaluate Open Space parcels selected for evaluation by the CLMP. These criteria consider the general conditions of each property and rate them on a scale of 1 to 5 based on the following criteria:

Connectivity:

- 1. Property is landlocked by private development
- 2. Property is landlocked by private development, but potential greenway connections exist
- 3. Property is in the vicinity of, but does not directly connect to, other open space
- 4. Property is connected to one (1) other open space property
- 5. Property is integrated into a network of open space properties

Accessibility:

- 1. Property is entirely inaccessible
- 2. No access exists, but there is potential for easement acquisition
- 3. Property can be accessed by pedestrians, but no parking exists
- 4. Property can be accessed by pedestrians or by parking at a nearby municipal facility
- 5. Property has formalized parking and, if applicable, a trailhead OR there appears to be clear opportunity

Existing Uses:

- 1. Effectively no online documentation about the property can be sourced
- 2. The property is mapped as having trails on sources such as OpenStreetMap, but no indication of consistent use was found
- 3. The property has mapped trails and some activity is exhibited by reviewing heatmaps
- 4. The property has mapped trails and significant activity is exhibited by reviewing heatmaps

5. Significant activity is exhibited by reviewing heatmaps, the property is documented online through resources such as the Town website, and sources such as Google Maps explicitly map the property

Wetland Preservation:

- 1. No wetlands appear to be present on the property
- 2. No wetlands are present on the property, but nearby downgradient properties feature wetlands
- 3. Minimal wetlands are present on the property
- 4. Significant wetland and/or stream complexes are present on the property
- 5. The vast majority of the property consists of wetland resources and multiple palustrine, riverine, or lacustrine wetland communities are present

Wildlife Habitat:

- 1. The property and the immediate surrounding area are not mapped as having particular wildlife habitat value
- 2. The property is near, but not directly connected to, other properties with mapped wildlife habitat value
- 3. 3 through 5 This is a sliding scale based on how many of the following overlap with the property: NHESP mapped habitat, BioMap Core2 Critical Natural Landscape/Core Habitat, Coldwater Fisheries, Potential Vernal Pools, and Certified Vernal Pools

Floodplain Function:

- 1. No 100- or 500-year floodplains are present on or near the property
- 2. The property is near, but not within, the 100- and/or 500-year floodplain
- 3. The property is within the 500-year floodplain but not the 100-year floodplain
- 4. A portion of the property is within the 100-year floodplain
- 5. A majority of the property is within the 100-year floodplain and a regulatory floodway is present on or adjacent to the property

Ground/ Surface water Protection:

- 1. No ground or surface water protection areas are present
- 2. A portion of the property is within a Zone II or IWPA
- 3. A majority of the property is within a Zone I or Zone II
- 4. The property is within a Zone A/B
- 5. The property is within a Zone A / Outstanding Resource Water AND/OR the water supply (well or surface water) is located on the property

Educational/Interpretive Opportunities:

- 1. The property is in an isolated area with no formal access
- 2. The property has formal access but is not near any educational institutions



- 3. The property is adjacent to an educational institution but there is no formal access
- 4. The property is near or adjacent to an educational institution and has formal access
- 5. The property is near or adjacent to an educational institution, has formal access, and online documentation or signage and existing interpretive exhibits exists

Capability to Support OSRP Goals:

- 1. Property is not relevant to the goals or actions of the OSRP
- 2. Property could support one or more goals in OSRP, broadly speaking
- 3. Property is named in any OSRP action
- 4. Property is named in a high priority OSRP action
- 5. Property is named in multiple OSRP actions

Facility Evaluation Criteria:

The following criteria were used to evaluate existing recreational facilities on each parcel evaluated by the CLMP. Facilities were located and identified through online databases or in the field by BETA during evaluations. Each facility is given a qualitative assessment using the criteria below to prioritize repairs and maintenance efforts.

Trail Assessment:

Good Condition – The trail is in good working order, free of obstructions or damage.

Fair Condition – The trail requires minor maintenance, few obstructions or minor damage.

Poor Condition – The trail requires repairs or maintenance, contains major obstructions or damage.

Unusable Condition – The trail is impassable due to damage, lack of maintenance or other obstructions.

Public Access Assessment:

Good Condition – Facility is fully accessible to the public and free of damage or obstructions.

Fair Condition – Facility is fully accessible but requires minor maintenance or repairs.

Poor Condition – Facility is damaged or worn in a way that impacts accessibility.

Unusable Condition – Facility is inaccessible due to damage or lack of maintenance.

Signage Assessment:

Good Condition – Sign is undamaged and legible.

Fair Condition – Sign shows signs of wear and tear but is legible.

Poor Condition – Sign is damaged or illegible.

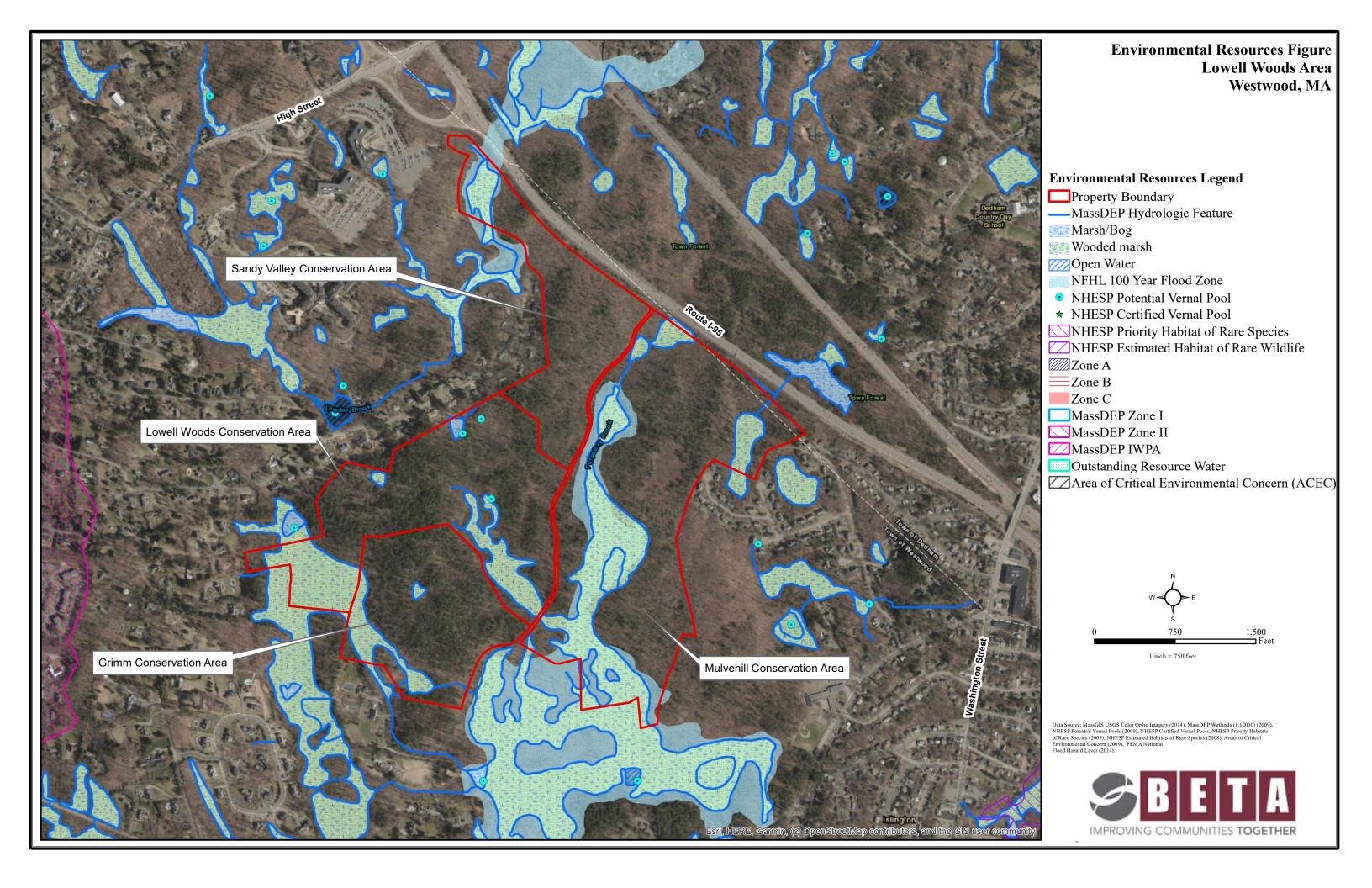
Unusable Condition – sign has major damage or is missing and requires replacement.

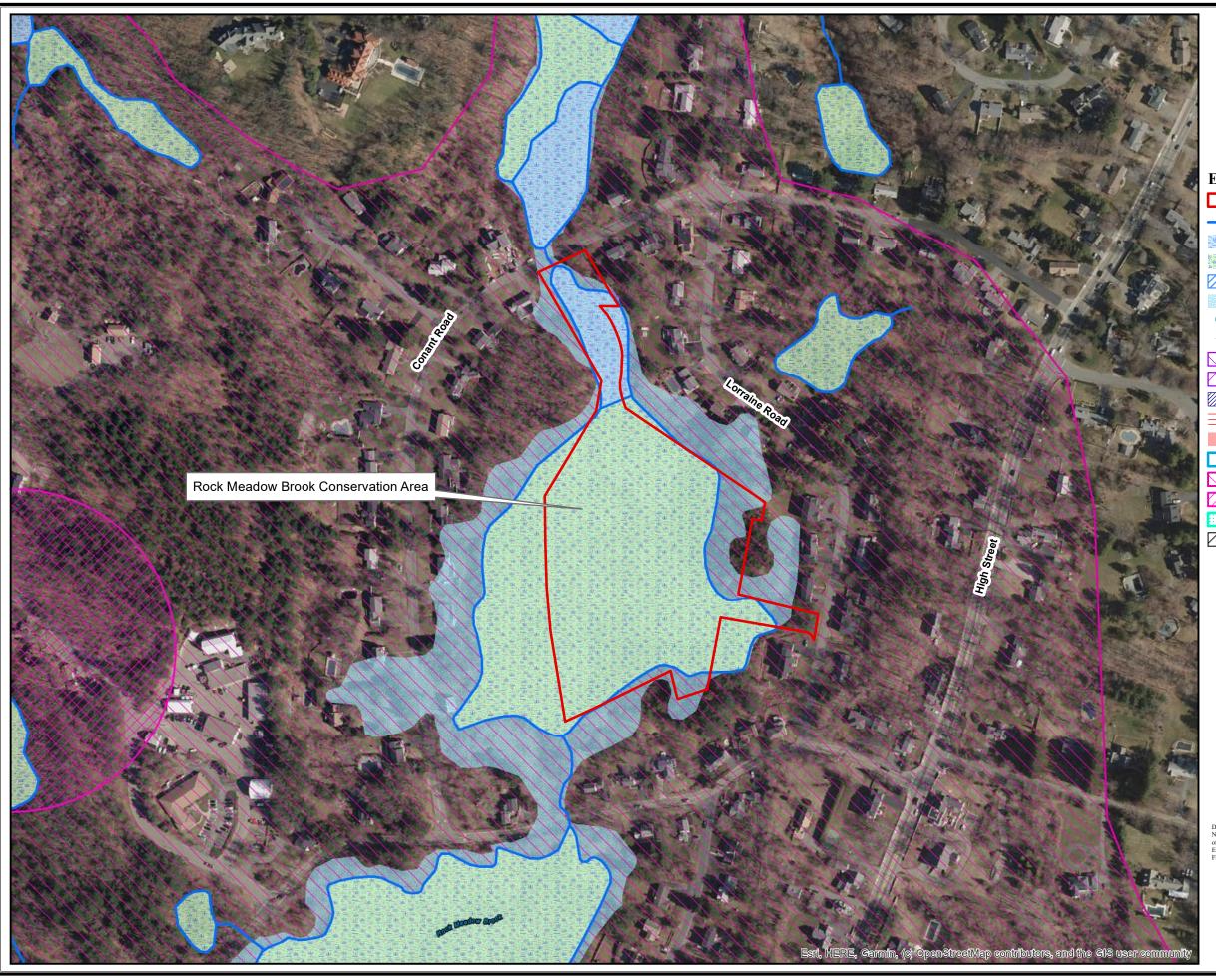


Westwood, MA

APPENDIX C: MAPS



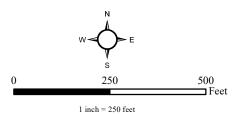




Environmental Resources Figure Rock Meadow Brook Conservation Area Westwood, MA

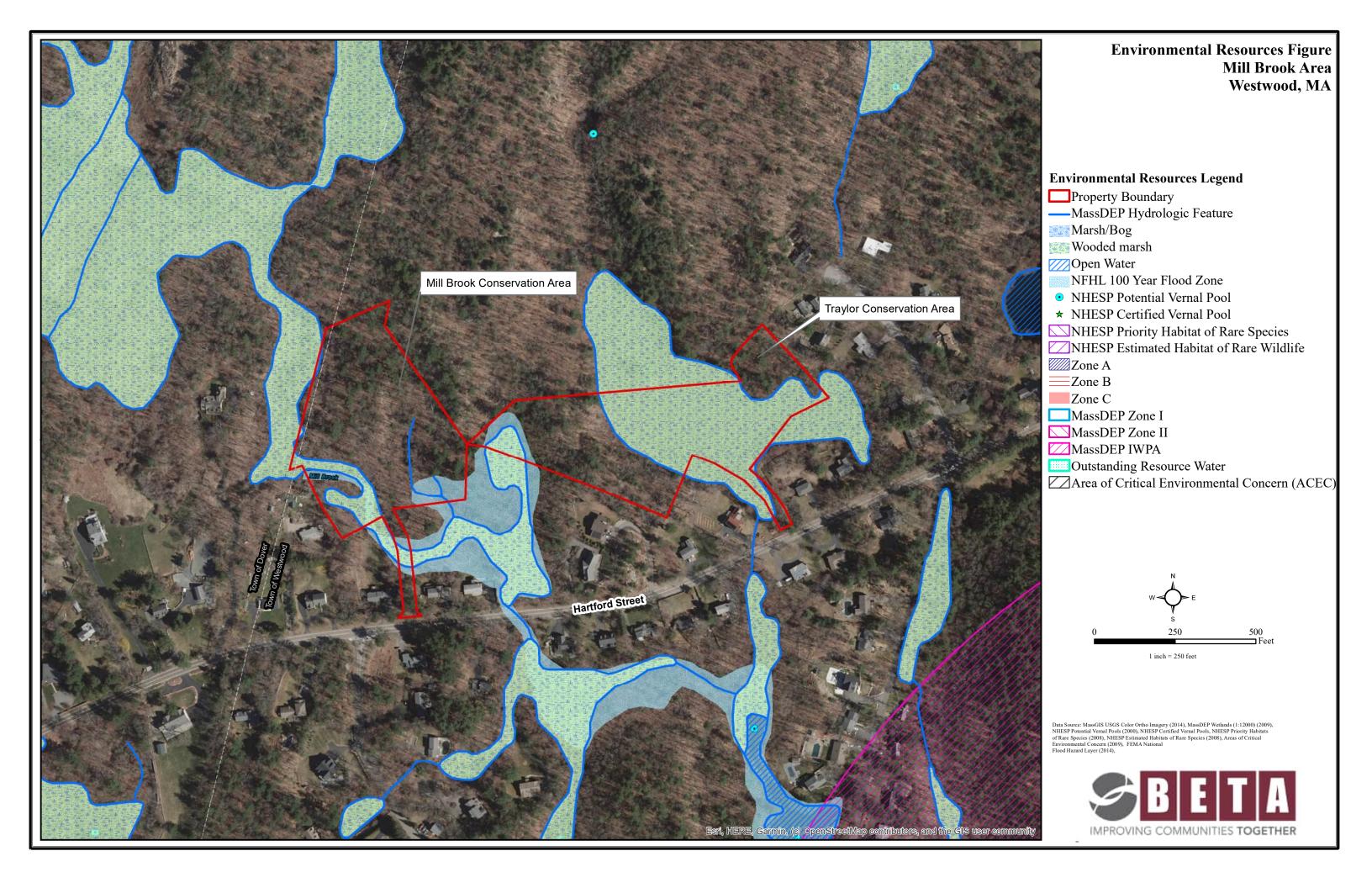
Environmental Resources Legend

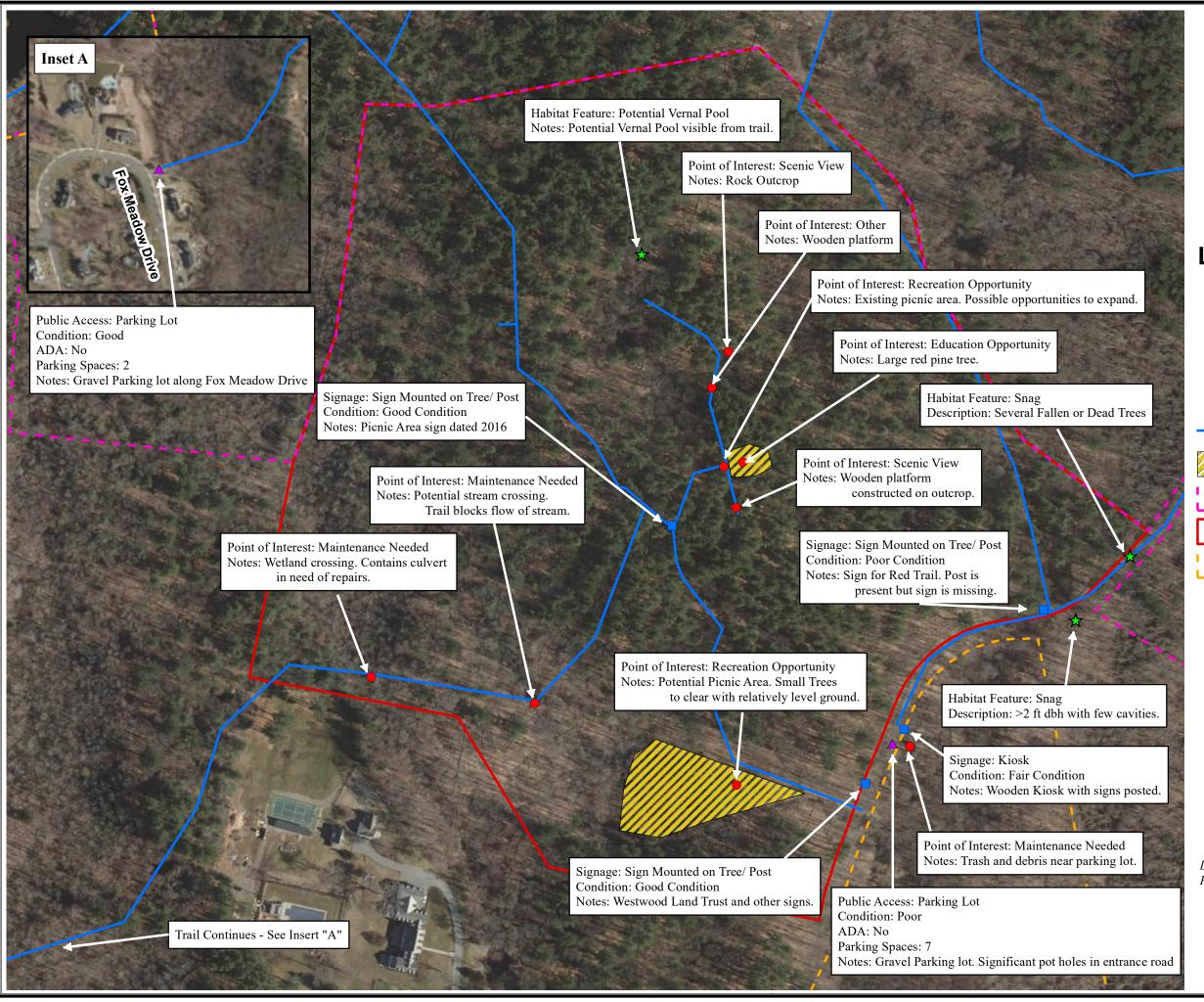
- Property Boundary
- —MassDEP Hydrologic Feature
- Marsh/Bog
- Wooded marsh
- Open Water
 - NFHL 100 Year Flood Zone
- NHESP Potential Vernal Pool
- ★ NHESP Certified Vernal Pool
- NHESP Priority Habitat of Rare Species
- NHESP Estimated Habitats of Rare Wildlife
- Zone A
- Zone B
- Zone C
- MassDEP Zone I
- MassDEP Zone II
- MassDEP IWPA
- Outstanding Resource Water
- Area of Critical Environmental Concern (ACEC)



Data Source: MassGIS USGS Color Ortho Imagery (2014), MassDEP Wetlands (1:12000) (2009), NHESP Potential Vernal Pools (2000), NHESP Certified Vernal Pools, NHESP Priority Habitats of Rare Species (2008), NHESP Estimated Habitats of Rare Species (2008), Areas of Critical Environmental Concern (2009), FEMA National Flood Hazard Layer (2014).







Property Assessment Map Grimm Conservation Area Westwood, MA

Legend

- Signage
- Public Access
- Point of Interest
- ★ Habitat Features

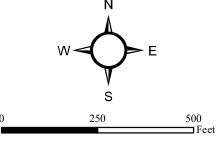
Trails

Clearing/ Sparsely Vegetated Area

Other Conservation Property

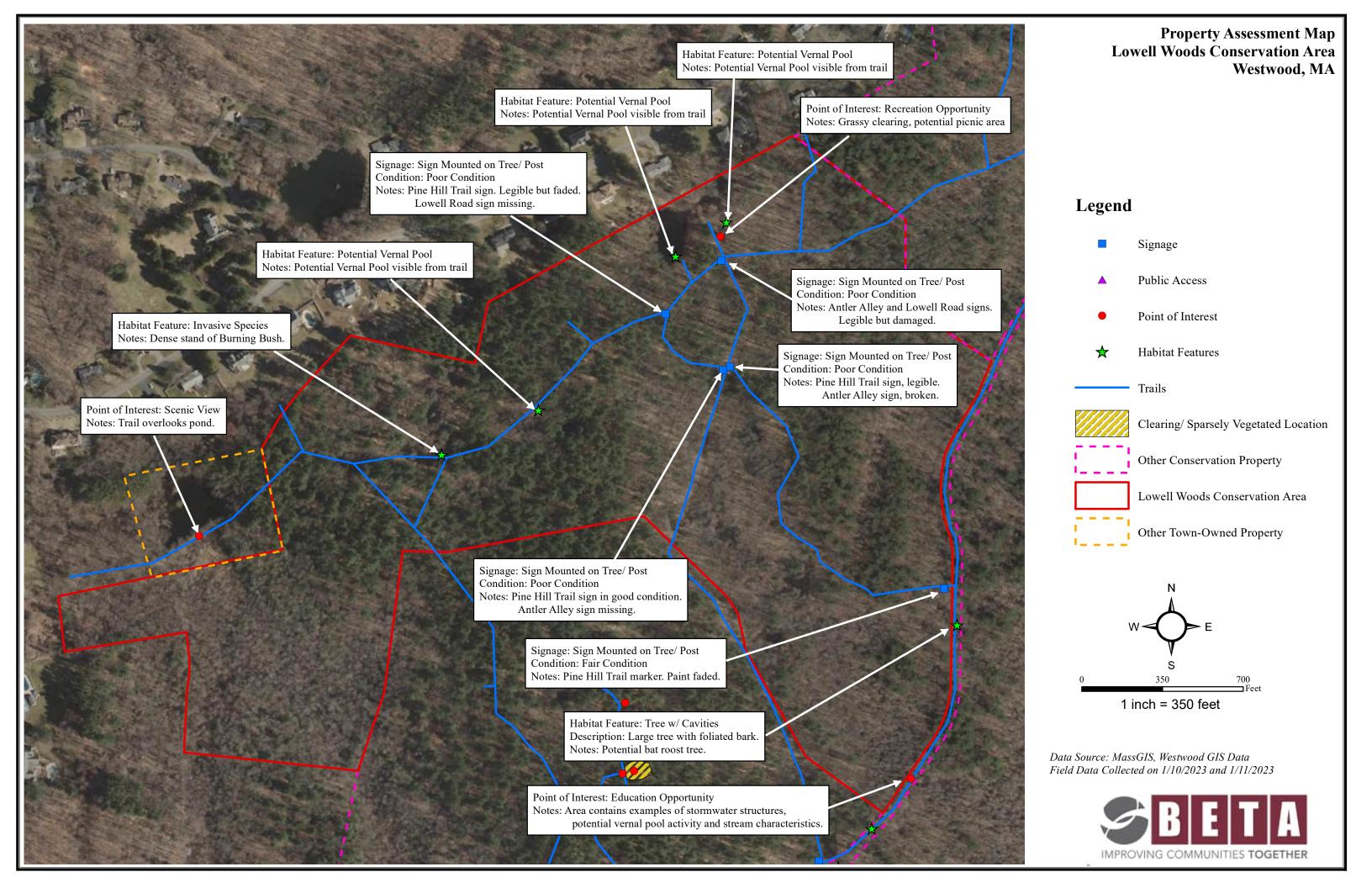
Grimm Conservation Area

Other Town-Owned Property



1 inch = 250 feet







Property Assessment Map Sandy Valley Conservation Area Westwood, MA

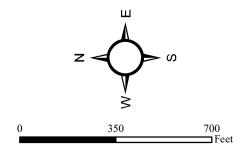
Legend

- Signage
- Public Access
- Point of Interest
- Habitat Features

Trails

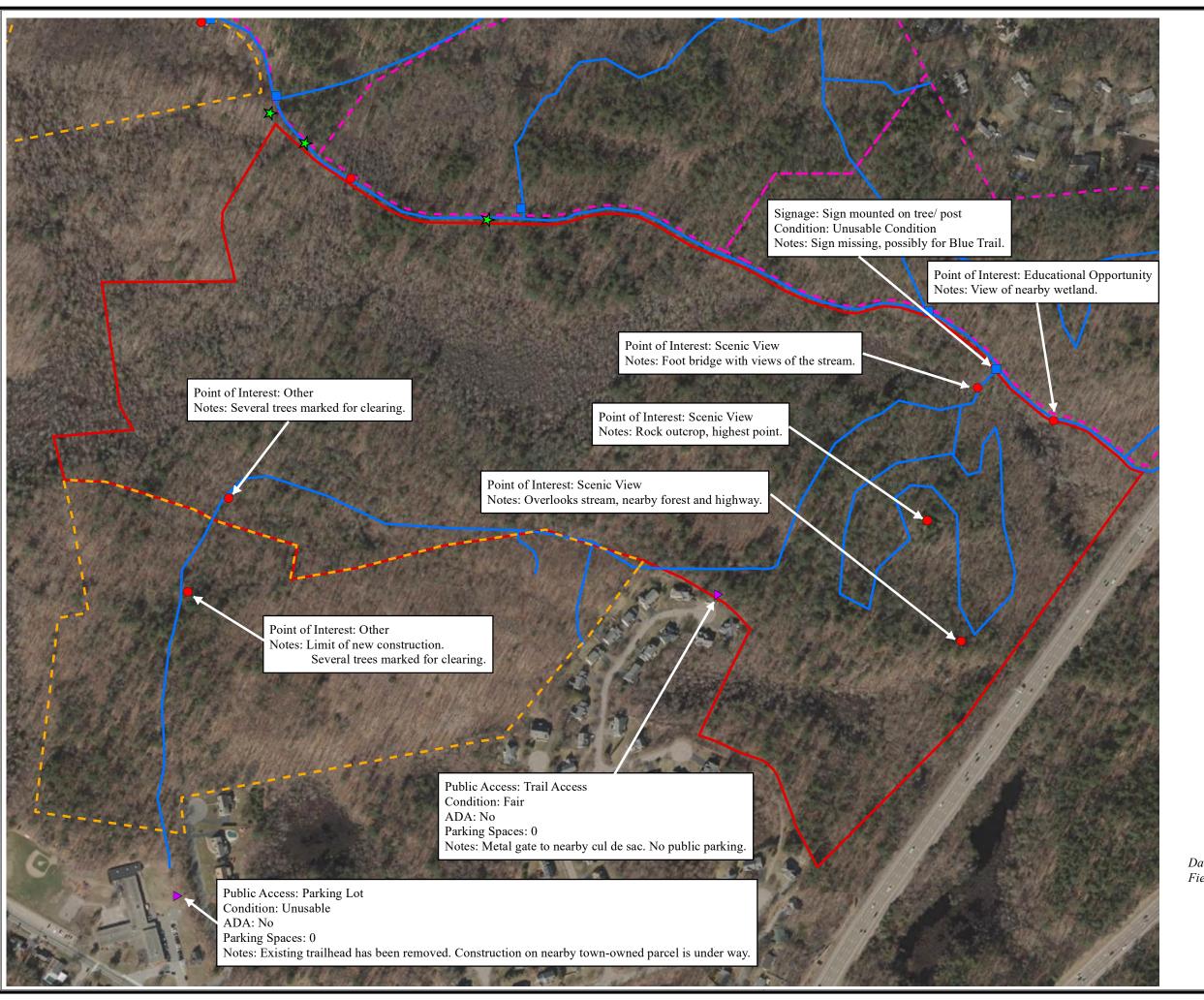
Sandy Valley Conservation Area

Other Conservation Property



1 inch = 350 feet





Property Assessment Map Mulvehill Conservation Area Westwood, MA

Legend

- Signage
- ▲ Public Access
- Point of Interest
- ★ Habitat Features



Trails

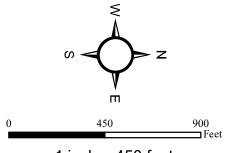
Other Conservation Property



Mulvehill Conservation Area



Other Town-Owned Property



1 inch = 450 feet

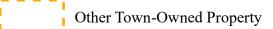




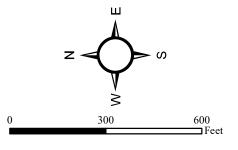
Property Assessment Map Rock Meadow Brook Conservation Area Westwood, MA

Legend

- Sign
- Public Access
- Point of Interest
- ★ Habitat Features

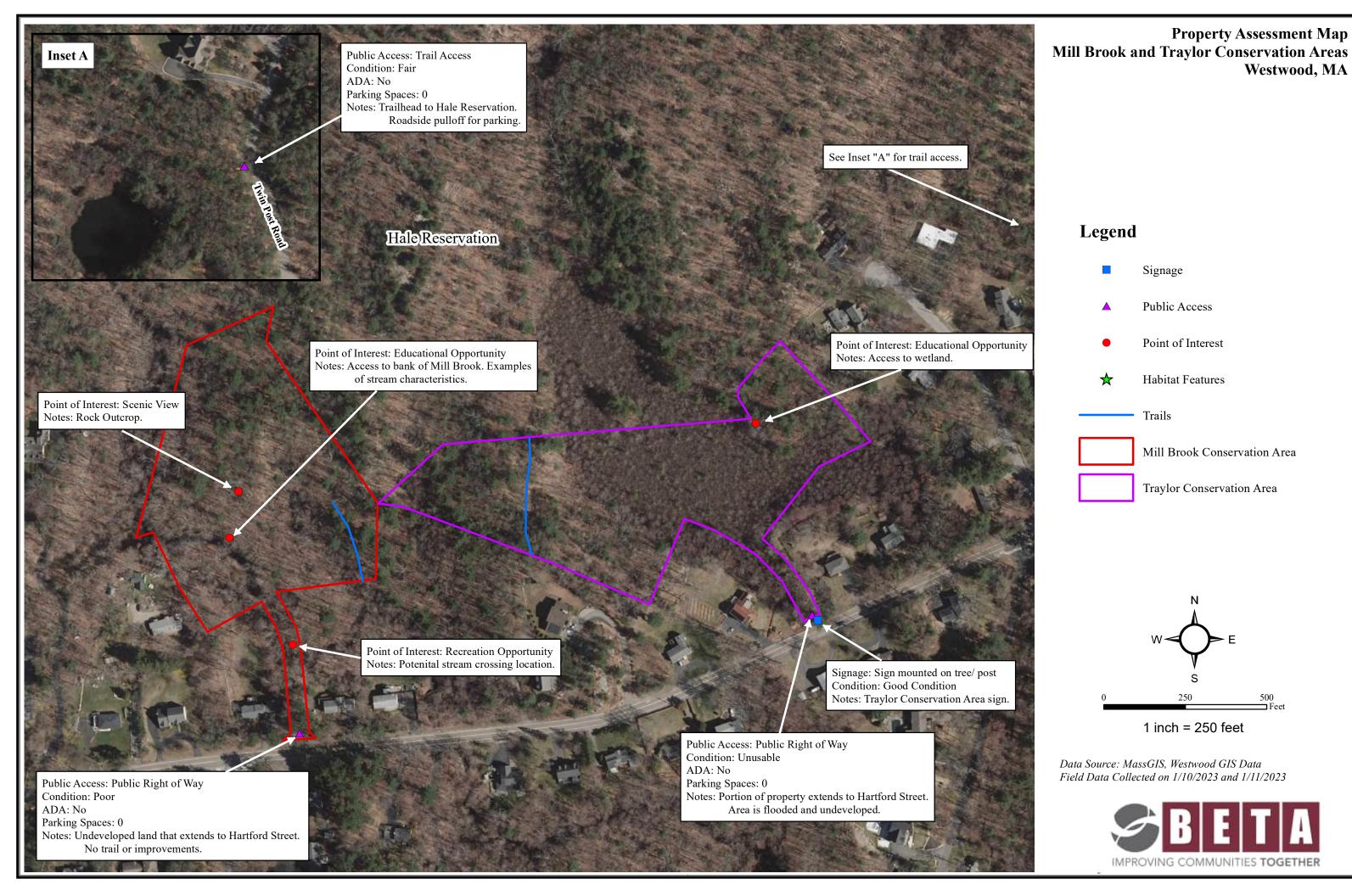


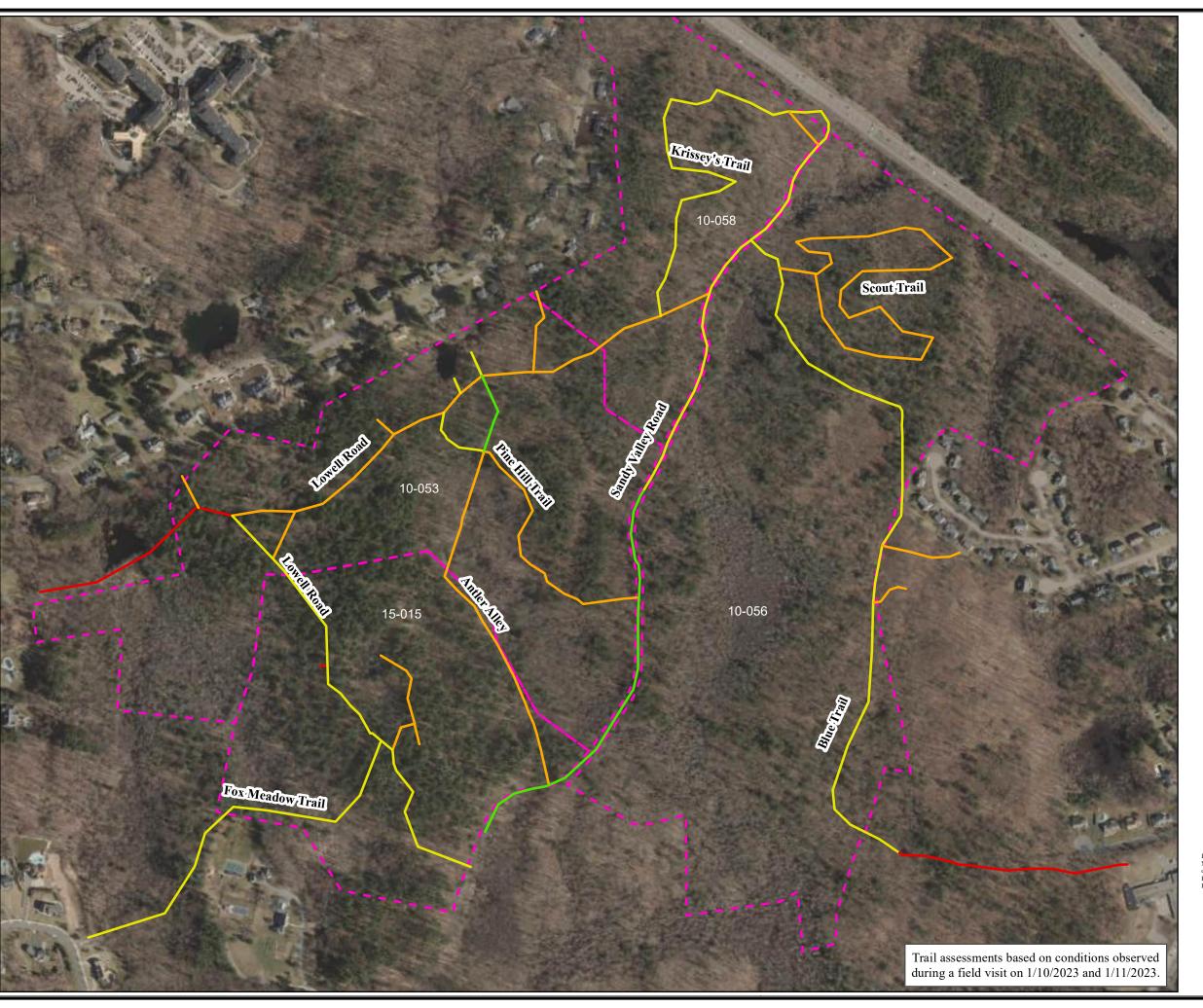
Rock Meadow Brook Conservation Area



1 inch = 300 feet

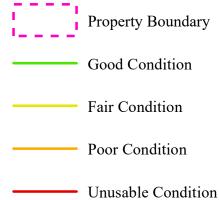


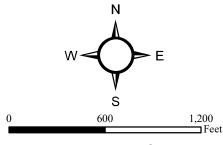




Trail Condition Map Lowell Woods Area Westwood, MA

Trail Condition Legend





1 inch = 600 feet

Data Source: MassGIS USGS Color Ortho Imagery (2014), MassDEP Wetlands (1:12000) (2009), NHESP Potential Vernal Pools (2000), NHESP Certified Vernal Pools, NHESP Priority Habitats of Rare Species (2008), NHESP Estimated Habitats of Rare Species (2008), Areas of Critical Environmental Concern (2009), FEMA National Flood Hazard Layer (2014),



Westwood, MA

APPENDIX D: PHOTO DOCUMENTATION





View of the Pumping station access and parking along Conant Road—facing north

Photo 2



View of the Lorraine Road Right-of-Way—facing northwest

PHOTOGRAPHIC DOCUMENTATION

Rocky Meadow Brook -Westwood CLMP Westwood, Massachusetts Photographs Documented January 10, 2023



View of Rocky Meadow Brook north of Conant Road—facing north

Photo 4



View of Phragmites near pumping station—facing northeast

PHOTOGRAPHIC DOCUMENTATION

Rocky Meadow Brook -Westwood CLMP Westwood, Massachusetts Photographs Documented January 10, 2023



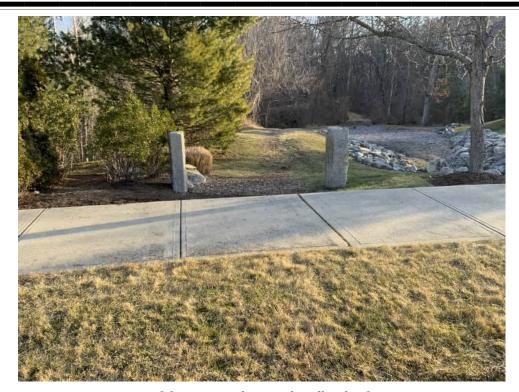
View of the Sandy Valley Road parking area—facing south

Photo 6



View of the Hanlon School Trail head—facing west

PHOTOGRAPHIC DOCUMENTATION



View of the Fox Meadow Trail trailhead—facing east

Photo 8



View of Sandy Valley Road—facing north

PHOTOGRAPHIC DOCUMENTATION



View of Lowell Road—Facing west

Photo 10



View of Blue Trail—facing east

PHOTOGRAPHIC DOCUMENTATION



View of Antler Alley—facing south

Photo 12



View of Pine Hill Trail—facing east

PHOTOGRAPHIC DOCUMENTATION



View of Fox Meadow Trail—facing west

Photo 14



View of Krissy's Trail—facing north

PHOTOGRAPHIC DOCUMENTATION



View Scout's Trail—facing west

Photo 16



View of a potential vernal pool along Blue Trail—facing north

PHOTOGRAPHIC DOCUMENTATION



View of B1-100—facing east

Photo 18



View of B1-107—facing south

PHOTOGRAPHIC DOCUMENTATION



View of Right-of-Way access to Mill Brook Conservation Area—facing north

Photo 20



View of Mill Brook and the Right-of-Way access to Hartford Street—facing south

PHOTOGRAPHIC DOCUMENTATION

Mill Brook Area—Westwood CLMP Westwood, Massachusetts Photographs Documented March 8, 2023



View of the Right-of-Way to Traylor Conservation Area—facing north

Photo 22



View of the Hale Reservation Trailhead—facing west

PHOTOGRAPHIC DOCUMENTATION

Mill Brook Area—Westwood CLMP Westwood, Massachusetts Photographs Documented March 8, 2023



View of unnamed trail leading to Mill Brook Area—facing south

Photo 24



View of unnamed trail leading to Traylor Conservation Area—facing south

PHOTOGRAPHIC DOCUMENTATION

Mill Brook Area—Westwood CLMP Westwood, Massachusetts Photographs Documented March 8, 2023 Westwood, MA

APPENDIX E: COST ESTIMATE DOCUMENTATION



BUDGETARY ESTIMATE

	Flatten and	d Leve	el the Entrai	nce to San	dy Valley	Road (Trail)
			West	wood, MA		
Date	2/20/2024					
ngth						LAST \$\$ Update 2/2024
	ITEM	UNIT	QUANTITY	UNIT \$	\$	COMMENTS
	Pavement Reconstruction	SF	-	\$11.63	\$0	
	Pavement Reclamation	SF	-	\$22.27	\$0	
	Cold Plane / Resurface	SF	-	\$2.05	\$0	
	Overlay	SF	-	\$1.61	\$0	
	Earthwork	CY	30	\$25.00	\$800	25'x25'x1.25'
	Flatten Trail (HMA SW)	SF	4,000	\$7.84	\$31,400	Parking Area to trail
	Concrete Sidewalk	SF		\$10.37	\$0	
	Conrete Drive	SF	-	\$8.91 \$9.45	\$0 \$0	
	Hot Mix Sidewalk Hot Mix Drive	SF SF	-	•	\$0 \$0	
	Brick Sidewalks	SF	-	\$4.79 \$38.71	\$0 \$0	
	Ledge Removal	CY	-	\$300.00	\$0 \$0	
	WheelChair Ramps	EA	-	\$300.00 \$2,356	\$0 \$0	
	Brick Crosswalks	LF	-	\$465.99	\$0 \$0	
	Imprint X Walks	LF	-	\$200.00	\$0 \$0	
	mpinit A Waits	LI	-	Ψ200.00	Ψυ	
	New Curb	LF	-	\$75.50	\$0	
	RR Curb	LF	-	\$47	\$0	
	HMA Berm	LF	-	\$3	\$0	
	Drainaga Struatura Adiuata	EA	-	\$563	\$0	
	Drainage Structure Adjusted Drainage Pipe	LF	-	\$363 \$110	\$0 \$0	
	CB/ MH	EA	-	\$2,800	\$0 \$0	
	Storm water BMP	LS	-	\$250,000	\$0 \$0	
	Storm water bivil	LO	_	Ψ230,000	ΨΟ	
	utility poles relocated	EA	-	\$5,000	\$0	
	Street Lighting	EA	-	\$9,500	\$0	
	Traffic Signal	LS	-	\$220,000	\$0	
	Traffic Signal Upgrade	LS	-	\$175,000	\$0	
	Signs	EA	-	\$225	\$0	
	High Visib. Ped. Crossing	EA	-	\$30,000	\$0	
	Markings	LF	_	\$2.75	\$0	
	Coloring	SF	-	\$3.00	\$0	
	Street Print	SF	-	\$8.00	\$0	
	Duratherm	SF	-	\$14.00	\$0	
	Imprint	SF	-	\$15.00	\$0	
	Clearing and Crubbins	Q.F	_	¢10	¢٥	
	Clearing and Grubbing Trees	SF EA		\$10 \$750	\$0 \$0	
	rees Shrubs	EA	-	\$750 \$100	\$0 \$0	
	Surface Restoration	SF	1,000	\$100 \$2.03	\$0 \$2,028	
	Ounded Nestoldholl	JF	1,000	ψΔ.ΟΟ	ψε,020	
	Bench	EA	-	\$4,900	\$0	
	Tree Grate	EA	-	\$4,000	\$0	
	Bicycle Rack	EA	-	\$2,000	\$0	
	Trash Receptacle	EA	-	\$4,250	\$0	
	Granite Planter	LF	-	\$100	\$0	
	Retaining Walls	SF	-	\$125	\$0	
			SUB TOTAL		\$34,228	
	MISC/TMP / POLICE		SUB TOTAL	0%	\$0 \$34,228	
	CONTINGENCY		TOTAL	20%	\$6,846 \$41,073	

SAY \$41,100.00

ENGINEERS FINAL ESTIMATE	\$ -
CONTRACT BID PRICE	\$ -
FINAL COST	\$ -

BUDGETARY ESTIMATE

	Expand Sandy	Valley	Road Parki	ng Area - (Gravel w/	paved ADA space
				wood, MA		
Date	2/20/2024					
gth						LAST \$\$ Update 2/2024
	ITEM	UNIT	QUANTITY	UNIT \$	\$	COMMENTS
	Pavement Reconstruction	SF	500	\$11.63	\$5,815	Sandy Valley Road Parking Area - 1 accessible space
	Pavement Reclamation	SF	-	\$22.27	\$0	Salidy Valley (Voad Falking Alea - Faccessible space
	Cold Plane / Resurface	SF	-	\$2.05	\$0 \$0	
	Gravel	SF	5,500	\$5.00	\$27,500	12" Gravel 15+/- spaces, 1 school bus space
	Earthwork	CY	-	\$25.00	\$0	12 Graver 13+/- spaces, 1 scribbi bus space
	Concrete Sidewalk	SF		\$10.37	\$0 \$0	
	Conrete Drive	SF	_	\$8.91	\$0	
	Hot Mix Sidewalk	SF		\$9.97	\$ 0	
	Hot Mix Drive	SF	_	\$4.79	\$0	
	Brick Sidewalks	SF	_	\$38.71	\$0	
	Ledge Removal	CY	-	\$300.00	\$0	
	WheelChair Ramps	EA	_	\$2,356	\$0	
	Brick Crosswalks	LF	_	\$465.99	\$0	
	Imprint X Walks	LF	_	\$200.00	\$0 \$0	
	impilit A vialito	Li		Ψ200.00	ΨΟ	
	New Curb	LF		\$75.50	\$0	
	RR Curb	LF	_	\$47	\$0	
	HMA Berm	LF		\$3	\$0	
				- -	**	
			-			
	Drainage Structure Adjusted			\$563	\$0	
	Drainage Pipe	LF	-	\$110	\$0	
	CB/ MH	EA	-	\$2,800	\$0	
	Storm water BMP	LS	-	\$250,000	\$0	
	utility poles relocated	EA	_	\$5,000	\$0	
	Street Lighting	EA	_	\$9,500	\$0	
	Traffic Signal	LS	-	\$220,000	\$0 \$0	
	Traffic Signal Upgrade	LS	_	\$175,000	\$ 0	
	Signs	EA	_	\$225	\$0	
	High Visib. Ped. Crossing	EA	-	\$30,000	\$0	
	Markings	LF		\$2.75	\$0	Stripping
	Coloring	SF	-	\$3.00	\$0	
	Street Print	SF	-	\$8.00	\$0	
	Duratherm	SF	-	\$14.00	\$0	
	Imprint	SF	-	\$15.00	\$0	
	Clearing and Grubbing	SF	1,700	\$10	\$17,000	
	Trees	EA	-	\$750	\$0	
	Shrubs	EA	-	\$100	\$0	
	Surface Restoration	SF	500	\$2.03	\$1,014	Loam and Seed
	Bench	E ^		¢4 000	¢٥	
	Tree Grate	EA EA	-	\$4,900 \$4,000	\$0 \$0	
	Bicycle Rack	EA	-		\$0 \$0	
	,	EA	-	\$2,000 \$4,250	\$0 \$0	
	Trash Receptacle Granite Planter	LF	-	\$4,250 \$100	\$0 \$0	
	Retaining Walls	SF	-	\$100 \$125	\$0 \$0	
	Notalling Walls	3F	-	ψιΔΟ	ΨU	
	Water Main Improvements	LF	0 SUB TOTAL	\$150	\$0 \$51,329	
	MICOTAR / POLICE			001		
	MISC/TMP / POLICE		SUB TOTAL	0%	\$0 \$51,329	
			JOD TOTAL		φυ 1,3 2 3	
	CONTINGENCY		TOTAL	20%	\$10,266 \$61,594	\$

ENGINEERS FINAL ESTIMATE	\$ -
CONTRACT BID PRICE	\$ -
FINAL COST	\$ -

BUDGETARY ESTIMATE

#########
LAST \$\$ Update 2/2024
Note
Pavement Reconstruction SF 6,000 \$11.63 \$69,778 Sandy Valley Road Parking Area - 15+/- Pavement Reclamation SF - \$22.27 \$0 Cold Plane / Resurface SF - \$2.05 \$0 Overlay SF - \$1.61 \$0
Pavement Reclamation SF - \$22.27 \$0 Cold Plane / Resurface SF - \$2.05 \$0 Overlay SF - \$1.61 \$0
Cold Plane / Resurface SF - \$2.05 \$0 Overlay SF - \$1.61 \$0
Overlay SF - \$1.61 \$0
Earthwork CY - \$25.00 \$0
Concrete Sidewalk SF \$10.37 \$0
Conrete Drive SF - \$8.91 \$0
Hot Mix Sidewalk SF \$9.97 \$0 Hot Mix Drive SF - \$4.79 \$0
110t Wilk Diffe
Ledge Removal CY - \$300.00 \$0 WheelChair Ramps EA - \$2,356 \$0
Brick Crosswalks LF - \$465.99 \$0
Imprint X Walks LF - \$200.00 \$0
пірнік A vvaino Li - ф200.00 ф0
New Curb LF \$75.50 \$0
RR Curb LF - \$47 \$0
HMA Berm LF \$3 \$0
- CSCC CONTRACTOR STATE OF CSCCC CONTRACTOR STATE OF CSCCCC CSCCC CSCCCC CSCCCCC CSCCCC CSCCCC CSCCCC CSCCCC CSCCCC CSCCCC CSCCCC CSCCCC CSCCCCC CSCCCC CSCCCCC CSCCCCC CSCCCCC CSCCCCC CSCCCCC CSCCCC CSCCCCCC
Drainage Structure Adjuster EA \$563 \$0 Drainage Pipe LF - \$110 \$0
CB/ MH
Stufff water biving LS - \$250,000 \$0
utility poles relocated EA - \$5,000 \$0
Street Lighting EA - \$9,500 \$0
Traffic Signal LS - \$220,000 \$0
Traffic Signal Upgrade LS - \$175,000 \$0
Signs EA - \$225 \$0
High Visib. Ped. Crossing EA - \$30,000 \$0
Markings LF 800 \$2.75 \$2,200 Stripping
Coloring SF - \$3.00 \$0
Street Print SF - \$8.00 \$0
Duratherm SF - \$14.00 \$0
Imprint SF - \$15.00 \$0
Clearing and Grubbing SF 1,700 \$10 \$17,000
Clearing and Grubbing SF 1,700 \$10 \$17,000 Trees EA - \$750 \$0
Shrubs EA - \$700 \$0
Surface Restoration SF 500 \$2.03 \$1,014 Loam and Seed
Table 1. Tab
Bench EA - \$4,900 \$0
Tree Grate EA - \$4,000 \$0
Bicycle Rack EA - \$2,000 \$0
Trash Receptacle EA - \$4,250 \$0
Granite Planter LF - \$100 \$0
Retaining Walls SF - \$125 \$0
Water Main Improvements LF 0 \$150 \$0
SUB TOTAL \$89,992
MISC/TMP / POLICE 0% \$0
SUB TOTAL \$89,992
CONTINGENCY 20% \$17,998 TOTAL \$107,990

ENGINEERS FINAL ESTIMATE	\$ -
CONTRACT BID PRICE	\$ -
FINAL COST	\$ -

BUDGETARY ESTIMATE

			Pave Sand	dy Valley F	Road	
				wood, MA		
Date	2/20/2024		77001	noou, nn i		
Date	2/20/2024					
Length	990					LAST \$\$ Update 2/2024
	ITEM	UNIT	QUANTITY	UNIT \$	\$	COMMENTS
	Pavement Reconstruction	SF	17,900	\$11.63	\$208,170	Sandy Valley Road -990' x 18'
	Pavement Reclamation	SF	-	\$22.27	\$0	
	Cold Plane / Resurface	SF SF	-	\$2.05	\$0 \$0	
	Overlay Earthwork	CY	-	\$1.61 \$25.00	\$0 \$0	
	Concrete Sidewalk	SF	-	\$10.37	\$0 \$0	
	Conrete Drive	SF	_	\$8.91	\$0	
	Hot Mix Sidewalk	SF	-	\$9.97	\$0	
	Hot Mix Drive	SF	-	\$4.79	\$0	
	Brick Sidewalks	SF	-	\$38.71	\$0	
	Ledge Removal	CY	-	\$300.00	\$0	
	WheelChair Ramps	EA	-	\$2,356	\$0	
	Brick Crosswalks	LF	-	\$465.99	\$0	
	Imprint X Walks	LF	-	\$200.00	\$0	
	New Curb	LF		\$75.50	\$0	
	RR Curb	LF	_	\$47	\$0 \$0	
	HMA Berm	LF	_	\$3	\$0	
				* -	* -	
			-			
	Drainage Structure Adjusted	EA	-	\$563	\$0	
	Drainage Pipe	LF EA	-	\$110	\$0 \$0	
	CB/ MH Storm water BMP	LS	-	\$2,800 \$250,000	\$0 \$0	
	Otomi water bivii	LO		Ψ230,000	ΨΟ	
	utility poles relocated	EA	-	\$5,000	\$0	
	Street Lighting	EA	-	\$9,500	\$0	
	Traffic Signal	LS	-	\$220,000	\$0	
	Traffic Signal Upgrade	LS	-	\$175,000	\$0	
	Signs	EΑ	-	\$225	\$0	
	High Visib. Ped. Crossing	EA	-	\$30,000	\$0	
	Markings	LF	-	\$2.75	\$0	
	Coloring	SF	-	\$3.00	\$0	
	Street Print	SF	-	\$8.00	\$0	
	Duratherm	SF	-	\$14.00	\$0	
	Imprint	SF	-	\$15.00	\$0	
	Clearing and Grubbing	SF	_	\$10	\$0	
	Trees	EA	_	\$750	\$0	
	Shrubs	EA	_	\$100	\$0	
	Surface Restoration	SF	4,000	\$2.03	\$8,111	
	Danah	F.		#4.000	ФC.	
	Bench Tree Grate	EA EA	-	\$4,900 \$4,000	\$0 \$0	
	Bicycle Rack	EA	-	\$2,000	\$0 \$0	
	Trash Receptacle	EA	-	\$4,250	\$0 \$0	
	Granite Planter	LF	_	\$100	\$0	
	Retaining Walls	SF	-	\$125	\$0	
			_	0.45-	0.5	
	Water Main Improvements	LF	SUB TOTAL	\$150	\$0 \$216,281	
	MISC/TMP / POLICE			0%	\$0	
	7. OLIOL		SUB TOTAL	0 70	\$216,281	
	CONTINGENCY		TOT4:	20%	\$43,256	
			TOTAL		\$259,538	

\$/LF \$262.16

ENGINEERS FINAL ESTIMATE	\$ -
CONTRACT BID PRICE	\$ -
FINAL COST	\$ -

BETA GROUP

BUDGETARY ESTIMATE

	In	stalla	tion of Side	walks alor	na Gav Str	reet
				wood, MA		
Date	2/20/2024					
ength	4100					LAST \$\$ Update 2/2024
riigiii	ITEM	UNIT	QUANTITY	UNIT \$	\$	COMMENTS
	Pavement Reconstruction	SF	QUANTITI	\$18.28	\$ 0	COMMENTS
	Pavement Reclamation	SF	_	\$22.27	\$ 0	
	Cold Plane / Resurface	SF	_	\$2.05	\$0	
	Overlay	SF	_	\$1.61	\$0	
	Earthwork	CY	_	\$25.00	\$ 0	
	Concrete Sidewalk	SF		\$10.37	\$ 0	
	Conrete Drive	SF	_	\$8.91	\$0	
	Hot Mix Sidewalk	SF	26,950	\$9.27	\$249,861	4900' x 5.5' Deerfield Ave to High St - One side
	Hot Mix Drive	SF	-	\$4.79	\$0	1000 X 010 20011010 Y V 0 to Y light Ot One old
	Brick Sidewalks	SF	-	\$38.71	\$0	
	Ledge Removal	CY	_	\$300.00	\$0	
	WheelChair Ramps	EA	5	\$2,356	\$11,781	
	Brick Crosswalks	LF	-	\$465.99	\$0	
	Imprint X Walks	LF	_	\$200.00	\$0 \$0	
	p.iit /t vraino			Ψ200.00	ΨΟ	
	New Curb	LF		\$75.50	\$0	
	RR Curb	LF	_	\$47	\$0	
	HMA Berm	LF	4,700	\$3	\$13,160	
	20		.,. 00	ΨΟ	ψ.0,.00	
			-			
	Drainage Structure Adjusted	EA	9	\$563	\$5,067	
	Drainage Pipe	LF	-	\$110	\$0	
	CB/ MH	EA	-	\$2,800	\$0	
	Storm water BMP	LS	1	\$15,000	\$15,000	
	Extend Culvert/Guardrail	LS	1	\$20,000	\$20,000	
	utility pales releasted	EA	_	¢ E 000	\$0	
	utility poles relocated			\$5,000		
	Street Lighting	EA	-	\$9,500 \$220,000	\$0 \$0	
	Traffic Signal Upgrade	LS	-			
	Traffic Signal Upgrade	LS EA	-	\$175,000	\$0 \$0	
	Signs High Visib. Ped. Crossing	EA	-	\$225 \$30,000	\$0 \$0	
	High visib. Fed. Crossing	EA	-	\$30,000	ΦU	
	Markings	LF	230	\$2.75	\$633	Crosswalks
	Coloring	SF	-	\$3.00	\$0	
	Street Print	SF	-	\$8.00	\$0	
	Duratherm	SF	-	\$14.00	\$0	
	Imprint	SF	-	\$15.00	\$0	
	Classica and Coulching	C.F.	40.500	C40	6405.000	
	Clearing and Grubbing	SF	13,500	\$10 \$750	\$135,000	
	Trees	EA	-	\$750 \$100	\$0 ©0	
	Shrubs	EA	-	\$100 \$2.03	\$0 \$0	
	Surface Restoration	SF		\$2.03	\$0	
	Bench	EA	-	\$4,900	\$0	
	Tree Grate	EA	_	\$4,000	\$0	
	Bicycle Rack	EA	_	\$2,000	\$0	
	Trash Receptacle	EA	_	\$4,250	\$0	
	Granite Planter	LF	_	\$100	\$0	
	Retaining Walls	SF	-	\$125	\$0	
			_		* -	
	Water Main Improvements	LF	SUB TOTAL	\$150	\$0 \$450,502	
	MISC/TMP / POLICE			0%	\$0	
			SUB TOTAL	0 /0	\$450,502	
	CONTINGENCY		TOTAL	20%	\$90,100 \$540,603	
			. O.AL		ψο-10,000	

ENGINEERS FINAL ESTIMATE \$ - NOT CONTRACT BID PRICE \$ - FINAL COST \$ -

NOTE: IT IS ASSUMED THAT ADEQUATE ROW IS AVAILABLE FOR SIDEWALK

Westwood, MA

APPENDIX F: LEVELS OF ENVIRONMENTAL PROTECTION

Property	Parcel Numbers	Parcel Size (in Acres)	Existing Use/Condition	Public Access	Zoning	Level of Protection
Rock Meadow Brook Conservation Area	05-001, 09-155, 09-194, 13-074	28.75	Conservation/Poor	No	Single Residence C	Article 97
Lowell Woods Conservation Area	10-052 through 10-055, 10-057, 10-059, 15-028, 36-005, 36-026	122.23	Conservation/Good	Yes	Single Residence E	Article 97
Mulvehill Conservation Area	10-056	88.5	Conservation/Good	Yes	Single Residence E	Article 97
Sandy Valley Conservation Area	10-058, 11-001, 11-004	44.63	Conservation/Good	Yes	Single Residence E	Article 97
Grimm Conservation Area	15-015	38.42	Conservation/Good	Yes	Single Residence E	Article 97
Wight/Mill Brook Conservation Area	19-009	6.13	Conservation/Poor	Yes	Single Residence C	Article 97
Pignatelli/Mill Brook Conservation Area	19-012	1.13	Conservation/Poor	Yes	Single Residence C	Article 97
Traylor Conservation Area	19-016	6.82	Conservation/Good	Yes	Single Residence C	Article 97

Source: Westwood Open Space and Recreation Plan, sp. Table 12 Protected Open space Parcels. Westwood Massachusetts, 2019.



Westwood, MA

APPENDIX G: PROJECT MOCKUPS

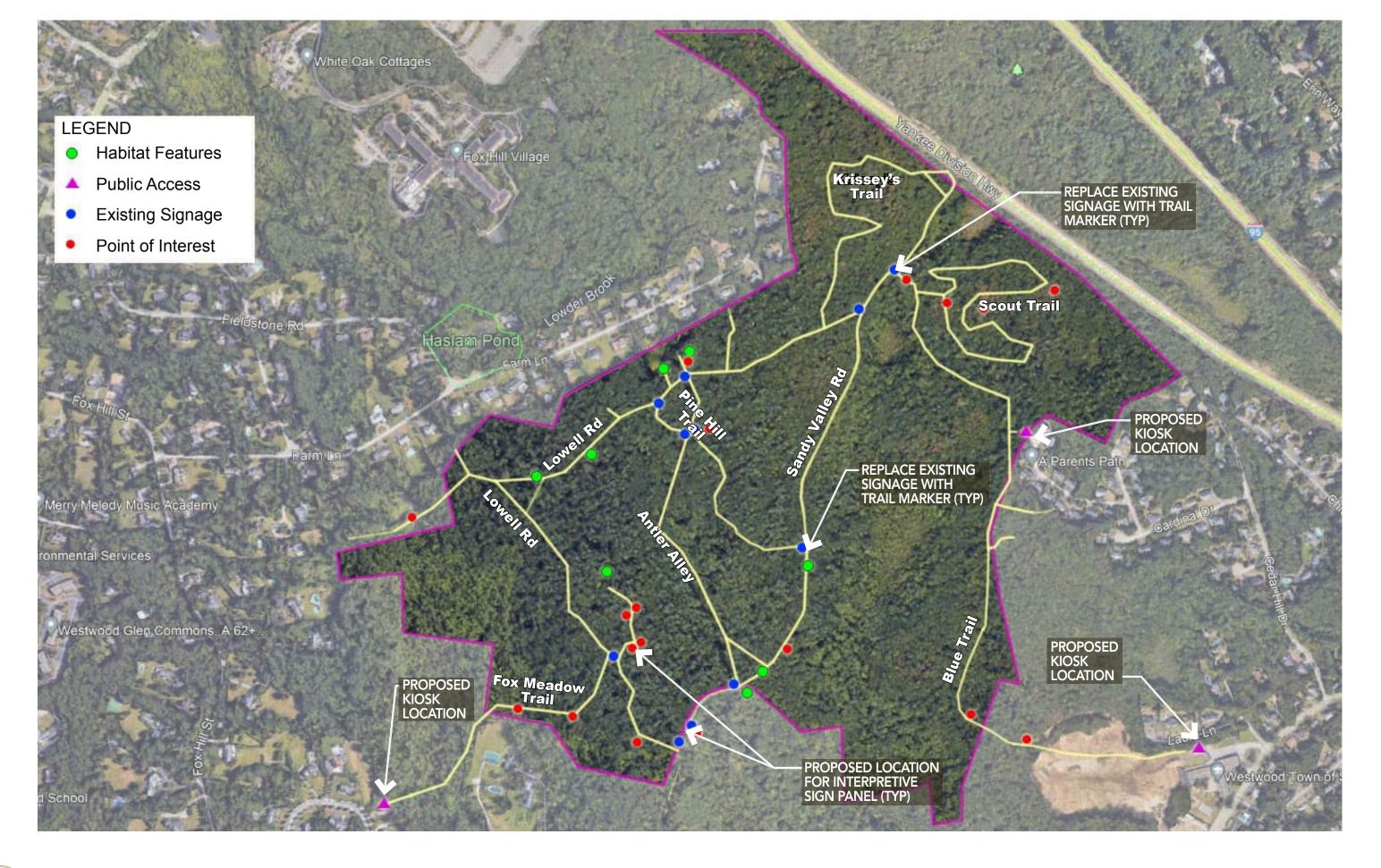


Town of Westwood

Conservation Land Management Plan

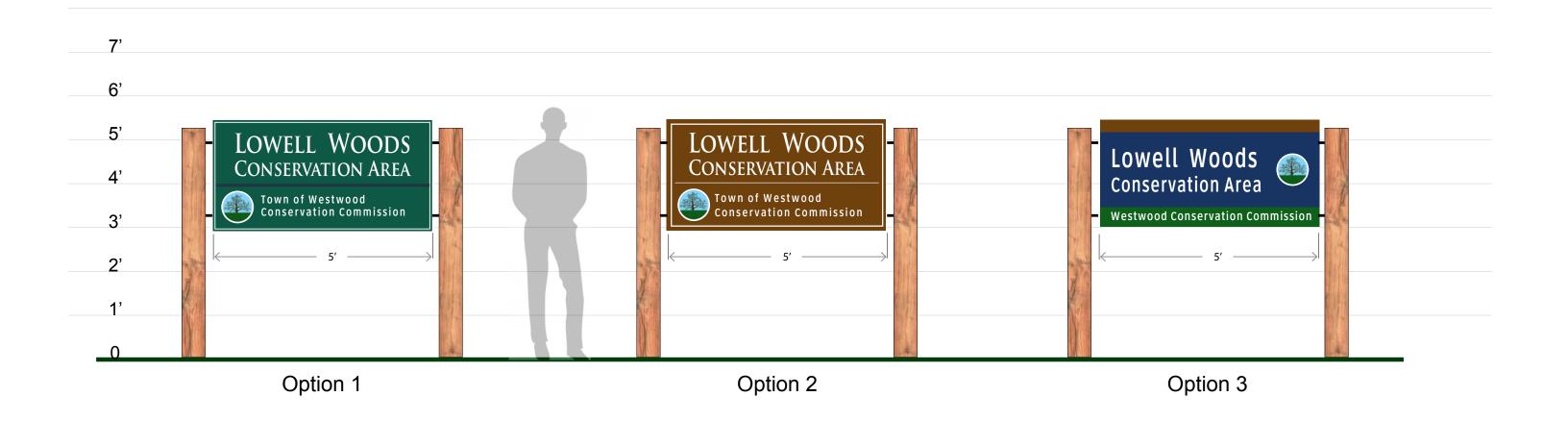
March 2024











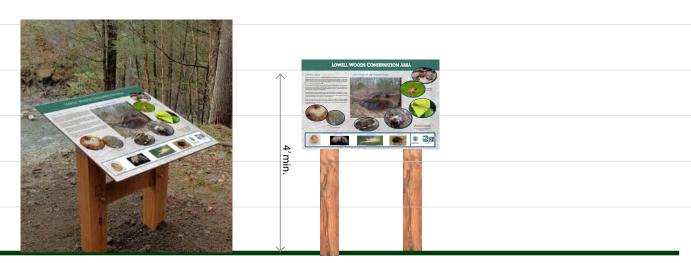








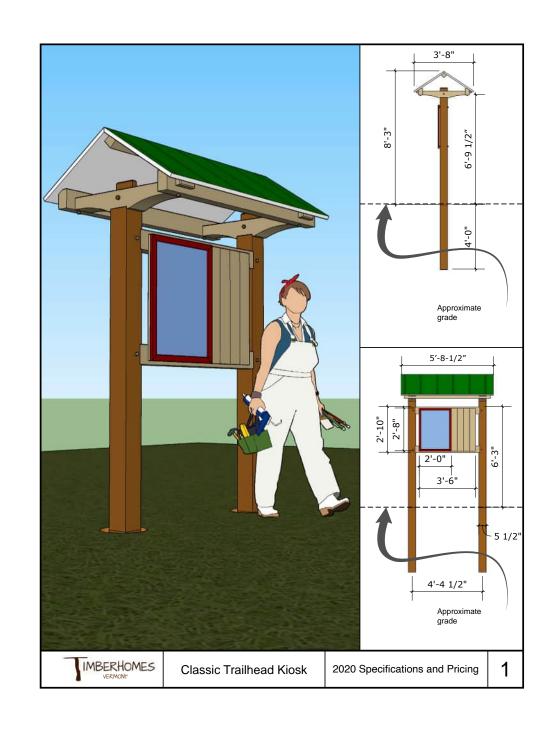


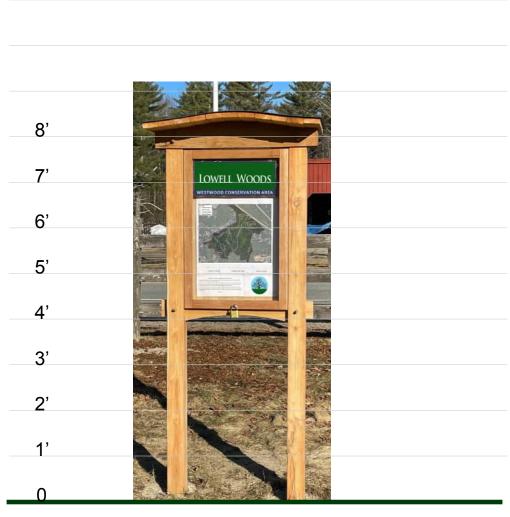


Interpretive Sign

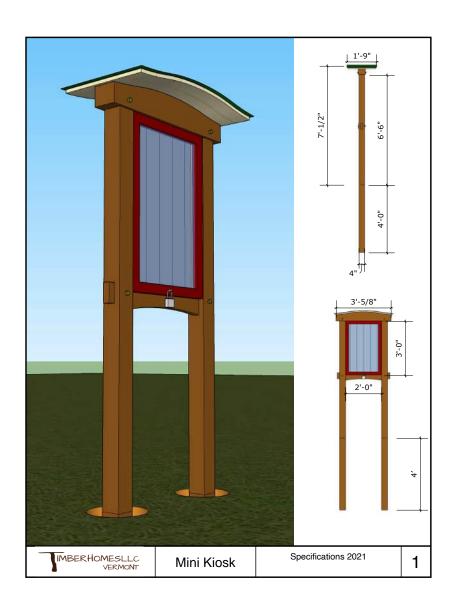


Wayfinding Kiosk (Large)





Wayfinding Kiosk (Small)



Wooden Picnic Table (6' - 8')



- Pressure treated 2"x6" pine boards
- Rust-resistant hardward
- Pre-sanded finish

DESCRIPTION	SIZE L x W x H
6' A-Frame	72 x 59 x 28"
8' A-Frame	95 x 59 x 28"

Wooden Tent Platform (10' - 12')



- Pressure treated 2"x6" pine boards
- Rust-resistant hardward
- Pre-sanded finish



Existing Signage - Sandy Valley Road



Existing Kiosk



Existing Signage - Fox Hill Street



Existing Signage - Lowell Rd. - Antler Alley





Existing Picnic Area



Existing Signage - Mill Brook



