

Purpose: The Mill Brook Preserve Recreation Plan is to be consistent with the Conservation Purpose and Conservation Values as defined the Mill Brook Preserve, Town and Village Conservation Easements.

Town CE filed January 5, 2017

Village CE filed September 19, 2017

This Rec Plan was Submitted on:

_____ [Town]* _____ [Village]* by Mill Brook Preserve, Inc. (MBPI).

Approved by the Wallkill Valley Land Trust(WVLT): _____ (required)

Approved by the Town of New Paltz (Town): _____ (required)

Approved by the Village of New Paltz (Village): _____ (required)

1. Development, descriptions and location of Buildings permitted in Section 5.04 in the Conservation Easement [Town and Village]- Specifics Noted when Appropriate:

a. Building Envelope [Town]; Amphitheater Envelope [Village];

i. Show on map of property-

Attachment 1- Building Envelopes: “Easement Areas and Planned Improvements” Map.

Shows Town Nature Center and Parking Area

Shows Village Amphitheater Area

b. Nature Center [Town] - (show restroom if not physically located in Nature Center)-

i. Attachment 2- Map Detail-

Town Nature Center location: Map of Building Area with general location of Nature Center depicted.

Show location of structure(s) within allowed Building Envelope on map of property as close to expected location. *At this time, general location is noted on the “Easement Areas and Planned Improvements” Map and used for Attachment 2. Once more details are known, this attachment will be updated/replaced.*

ii. Town Nature Center Description - Describe and include as attachments for what is known now, updated as appropriate* (Attachment 3- Town Nature Center Detail- once known). (CE limit is 1,500 square feet and cannot exceed 20 feet in height).

**Information to fill in once known: Size of structure, height, footprint, material and finished color, utility installation plans, property clearing plans, area mediation during and after construction plans, etc.,*

- Concept: Cabin of rustic design.
- Intent will be as a gathering location for visitors, mainly school groups prior to naturalist-led hikes.

- Included inside will be interactive displays highlighting local flora and fauna.
- Storage for education program materials will also be incorporated into the layout.
- The building will only be open when in use. *Further details on security, keys, access, and maintenance will be defined between the land owner (Town) and MBPI at time of construction and opening.
- **NOTE: Nature Center building design has yet to be developed. As plans are developed, they will be added to the Rec Plan and provided to all parties for approval, and details on size etc. will be added as well.*

***FUTURE SAMPLE**:* The not larger than 1500 square footprint Nature Center, as shown on Attachment 2 Town Detail- Nature Center location and Attachment 3- Town Nature Center Detail, not to exceed 35 feet max.

Utilities to the Nature Center will be installed from west side on the property, along the access path entering on the front side of the building, and the utilities will be placed underground. The 1500 square footprint Nature Center will include the restroom facilities within this footprint unless it is external- in which case details on the Restroom facilities external design and details will be in section iii.

The concept for the construction of the Nature Center is to clear a 1500 square foot area, using small excavation equipment. All cut trees and vegetation will be removed from the property, or mulched on property in order to create the least amount of disturbance to the surrounding areas. Silt fences will border the clearing area, and after the completion of the construction, plantings and hay will be installed in order to reduce runoff from the cleared area around the building. However, minimal clearing of the area is the primary goal in the construction...etc....

iii. **Town Restroom facilities- (Attachment 3a- Restroom facilities design: if not location in Nature Center).** (CE limit is 200 square feet if external from Nature Center).

** Information to fill in as once known: Location of restroom, appropriate details as plans for external structure if not located in the Nature Center building: height, footprint, material and finished color, utility installation plans (if needed), property clearing plans, area mediation during and after construction plans and how it will be serviced (access for service should be addressed as well).*

- Concept is external building for restrooms, made of natural materials and employing a rustic design.
- Possible Composting toilets or the like, which will be handicap accessible.

c. **Research Facility [Town]-** *Structure not included in initial/ early phases of improvement plans at this time, so information on this is not available.*

- General location, as shown on the **Attachment 2- Town Map Detail- Parking Area**, is an area that is currently a grassy knoll. Few to no trees will need to be removed to improve the area for a parking lot.
- Access to the parking lot is being examined, and there are two potential options. (CE limits the road width to and from this parking area not to exceed 5 feet in width).
 - a. One option requires an easement from a private land owner of an adjoining parcel, and would allow for the access road to enter over land which gradually climbs to the level of the parking lot, no shale would need to be removed.
 - b. The other option would require traversing the property more directly, and the need to remove shale in order to reduce some of the topography would be necessary, as well as the need to remove some small shrubs and trees.

c. Road to access the Town Parking Area-

- i. Show location access road for parking area (see comments above):
Attachment 2- Town Map Detail- Parking Area. (CE limit is one access road that cannot exceed 5 feet in width. This permitted allowance different from the permitted Connector Road-Town only).

3. Development, description and locations of the Passive Recreation Trails, as permitted in the Conservation Easements, including the trail improvements, such as (listed below) and shown as currently known Attachment 5 – “Easement Areas and Planned Improvements” Map:

a. Access Points, Kiosks locations:

- i. Depicted on **Attachment 5 – “Easement Areas and Planned Improvements”** Map:
 - Access points- depicts every existing and planned access into/ out of the Property.
 - Kiosk locations- depicts all planned kiosk locations at this time.
- ii. Describe Access Points:
 - Property/Trailhead access points- details of these are noted on the **Attachment 5- “Easement Areas and Planned Improvements”** Map. (*Include any additional information as necessary here*).
- iii. Describe/ Give overview of Kiosks, including installation: (CE States: Permitted kiosk signs shall not exceed 4 feet by 6 feet (total of 24 square feet) in size each and shall be non-illuminated.)
 - Trailhead Kiosk Signs- Kiosks at trailheads will contain the rules/regulations for the Preserve and a statement about the general concept of the Preserve, as well its ecology.
 - Contact information for MBPI will be displayed along with volunteer opportunities and a request for donations.

- There will be a lockable clear-window material enclosure displaying notices about events, volunteer and citizen science opportunities, etc.
- Kiosks would also have a place where trail maps may be obtained. The design of kiosks is to be consistent with those found at trailheads in the Catskills and the Adirondacks.
- Initial design concept for the Kiosks is a single panel structure with a roof, made with natural wood. Construction standards for accessibility will be followed.

b. Trail locations, trail use intent:

- i. Show on Attachment 5- “Easement Areas and Planned Improvements” Map
 - Hiking Trails- existing and planned
 - Town and Village Multi-Use Trail- planned
- ii. Describe any important details regarding Trail maintenance and intended experience/ use:
CE States: **Hiking Trail** width cannot exceed 9 feet in width, with a hardened pervious tread surface of 5 feet wide max.
 - Though the CE allows for a max width for the creation of the Hiking Trails, these trails will be constructed in accordance with environmentally sound practices with the lowest possible impact. In order to protect the Preserve’s ecosystems and to maintain the physical beauty of the property, based on advice from experts in the field, these trails may not be built as wide as their full, allowable widths per the CE.
 - Hiking Trails General: The hiking trails are intended to provide visitors with a “wilderness in the city” experience when they walk through the Preserve.
 - Hiking Trails will be designed to maintain natural curves found in the landscape, and to ensure long-term sustainability of the trails. Resource protection is a priority goal when considering and managing all activities on the Preserve.
 - Existing trails will be used whenever possible to reduce the need for removal of native vegetation.
 - New trails will be proposed and planned with the protection and preservation of native flora and habitat preservation as priorities.
 - Hiking trails will be maintained for passive (non-motorized, no bikes) recreation.
 - To minimize exposure to ticks and poison ivy, trees/bushes will be cut back from the trail as needed so visitors do not brush vegetation as they pass, but no wider than 9 feet in width.
 - Down trees and “widow-makers” (leaning and dangerous trees) will be removed as needed.
 - A volunteer trail crew will maintain the trails.

- Bog bridges will be employed as needed, as Hikers tend to go around muddy sections when possible and the trail gets widened over time.
- To allow for a variety of footwear to be worn and to protect vegetation, bog bridges will be installed over areas where water/mud accumulate.
- MBPI will arrange for an annual tree assessment along active trails, which will be performed by a licensed professional.
- In locations where ATVs and Dirt Bikes are/ become a maintenance concern, proactive measures beyond signage such as those employed by the NY/NJ Trail Conference will be examined, which may include adding steps, sharp turns, or narrow “squeeze” passageways in order to dissuade these motorized and bicycle users from damaging the Preserve.

*Town CE States: A [Town] **Multi-Use Trail** is permitted, with a width which cannot exceed 14 feet, of which a hardened pervious tread surface of 10 feet wide max is permitted (Town). The Multi-use Trail cannot be located the Core Biodiversity Area [Town].

*Village CE States: A [Village] **Multi-Use Trail** is permitted, with a width which cannot exceed 20 feet, of which a hardened pervious tread surface of 15 feet wide max is permitted for up to one (1) mile in total length; provided that to accommodate for multi-use trail design, up to eight hundred (800) feet of said Multi-Use Trail in no more than four (4) sections may have a tread-width up to twenty-five (25) feet, of which not more than fifteen (15) feet shall be a hard, pervious surface [Village].

- Though the CEs allows for a max width for the creation of the Multi-Use Trails, these trails will be constructed in accordance with environmentally sound practices with the lowest possible impact. In order to protect the Preserve’s ecosystems and to maintain the physical beauty of the property, based on advice from experts in the field, these trails may not be built as wide as their full, allowable widths per the CE.
- Multi-Use Trail: Designed for walkers/hikers and people on bicycle.
- The Multi-Use Trail on the Town’s property will begin at the ‘Building Area’ from Sunset Ridge and travel eastward, heading southeast into the Village’s portion of the Preserve and cross over Tributary 13 (Mill Brook) to terminate on to the North Manheim access point.
- The intention is for this trail to be a significantly wider multi-use path and allow bikes (wide enough for two bikes to pass one another) and maintain a “carriage trail” experience, with grades of 3% to 5%.

- c. **Trail signage/ interpretive signage.** types of signs, sizes, expected locations, but each and every sign location does not have to be on a map, and how will these signs be installed. **Attachment 6- Trail Signage Details (samples).**
(CE States: Permitted education, informative, and all other signs shall not exceed 2 feet by 3 feet (total of 6 square feet) in size each and shall be non-illuminated. CE also states: Billboards and advertisements are prohibited).
- The intention is that the number of signs be kept to a minimum to maintain a “wilderness feel.”
 - The material should be wood in most cases, but not all.
- i. **Informational trail signage-** To help visitors navigate the Preserve.
Material- wood.
Examples:
- Directional/ navigational: “To North Manheim”.
 - Signs will also identify when a trail leads to private property such as Duzine school, and Woodland Pond: “Private Property” or “Woodland Pond Property”.
 - If needed, warning signs would be placed, such as “Trail Restoration in Progress.”
- ii. **Interpretive Signs-** Educate visitors and help convey the richness of the resources within the Preserve’s boundaries. Material- possibly aluminum or composite- not yet finalized.
- Interpretive signs are to be placed in select locations throughout the Preserve; their exact locations are to be established in consultation with biologists.
 - The signs will highlight the particular flora and fauna that benefit from the specific features of the area (e.g. dense canopy in the hemlock forest).
 - The lower beaver pond is the center of the Core Biodiversity Area. The interpretive signage at this location will be on or near observation platform and will explain wetland and beaver pond ecology.
- iii. **Trail marking/blazing**
- **Trail markers:** All trails will be marked using paint on trees, primarily, because of concerns about defacement/destruction of markers that are nailed into trees.
 - The color of the paint on the trees will orient hikers to what path they are on.
 - The USFS and NY/NJ Trail Conference protocols will be followed for marking trails. This is detailed on **Attachment 6a- Trail Blazing protocols (sample).**
- d. **Bridges, boardwalks, viewing platforms... Show on Attachment 5- “Easement Areas and Planned Improvements” Map the currently known areas needing:**

bridges (small/rustic, large), boardwalks/ bog bridges, and viewing platforms/ observation platforms.

i. **Define each Trail Amenity:**

- **Large Bridge:** Crossing Mill Brook for Multi-Use Trail. Substantial enough for wide crossing area and both bicycle and pedestrian use.
- **Small/rustic Bridge:** Smaller bridge for stream/ runoff area crossings in order to prevent stream bank erosion. This includes but is not limited to board attached to the earth at either side of a small intermittent stream to several pieces of wood attached to fallen trees to form a small pedestrian crossing.
- **Bog Bridge (rustic boardwalk):** These low wooden walkways protect the land as mud on a trail tends to make people go around and widen the trail, trampling flora.
 - a. Judicious use of bog bridges will allow visitors to avoid walking in mud during a wet spring.
 - b. DESIGN: Two planks are placed next to each other, so it is a double-wide walkway. Each plank measures 3"x10"x8' (or 10').
- **Viewing Platform:** A primary reason for a viewing platform/Boardwalk at the Lower Beaver Pond is to let people view pond life from one location, rather than multiple locations which would result in higher impact on the land and wildlife.
 - a. This would be built in consultation with biologists who will advise regarding protection of local amphibian population, as well as the beaver population which currently maintains the dam.
 - b. Besides location, careful consideration would be given to the Viewing Platform's/Boardwalk's design. It should have low ecological impact, low visual impact.
- **Observation Platform:** Like the Viewing Platform described above, there are areas in the Preserve that provide opportunities for bird and nature observation year-round.
 - a. This would be built in consultation with biologists who will advise regarding protection of local amphibian population, as well as the beaver population which currently maintains the dam.
 - b. Observation Platform concept would be a platform with railings, allowing for a controlled area visitors could congregate along the edges of different habitats.

- ii. **Attachment 7- Trail Amenities Details:** Illustrations/ samples of what each Trail Amenity *may look like (samples)*. *NOTE: as plans develop,

additional attachments for each item can be added providing more detail, as these will require written notification and approval from the land owner and the easement holder. *For Example, in the future, will add a more detailed Attachment 7.a Bog Bridge Detail: which would have specs and detailed drawings. Attachment 7.b Viewing Platform Detail, etc).*

4. **Vegetation Management** as permitted by the Conservation Easement. In consultation with professionals in the fields of wildlife management and forestry, MBPI will apply sound forest management practices.
 - a. **Removal of Invasives**
 - i. Targeted areas shown on map *once known*: **Attachment 8- Vegetation Plan Map.**
 - ii. As part of MBPI focus on sustainable forestry management practices, efforts to do some removal of invasives to help native species become established will be ongoing.
 - iii. Commonly found invasives include: multiflora rose, Japanese barberry, honeysuckle, and burning bush (*Euonymus alatus*). Honeysuckle is especially prevalent.
 - iv. Importantly, sections would be addressed at a time to avoid sudden, large-scale disturbance of wildlife habitat.
 - b. **Control of poisonous plants along trails/ public areas**
 - i. Targeted areas will be shown on a map *once known*. **Attachment 8 Vegetation Plan Map**
 - ii. In consultation with poison ivy removal professionals, efforts will be made to minimize the potential for visitors to encounter poison ivy.
 - iii. Only ecologically friendly methods will be considered. No chemicals such as Round-up will be sprayed.
 - c. **Plantings**
 - i. Planned native vegetation (trees and bushes) areas *once known* **Attachment 8- Vegetation Plan Map.**
 - It may be determined that planting of trees or native shrubs is desired. The goal is to support biodiversity of both flora and fauna through prudent forest management.
 - New plantings may be protected from overbrowsing by wraps/ protective cages temporarily until the plants or trees are large enough to withstand deer browsing.
5. **Signage as permitted by the Conservation Easement**
 - a. **Kiosk Information** (general concept, maintenance plan) **Attachment 9- Kiosk Design Sample.**
 - i. Covered above in 3(a)(iii), repeated here, with added notes*:
 - Trailhead Kiosk Signs- Kiosks at trailheads will contain the rules/regulations for the Preserve and a statement about the general concept of the Preserve, as well its ecology.

- Contact information for MBPI will be displayed along with volunteer opportunities and a request for donations.
- There will be a lockable clear-window material enclosure displaying notices about events, volunteer and citizen science opportunities, etc. *MBPI will update and maintain the information in the kiosks as needed.
- Kiosks would also have a place where trail maps may be obtained. *MBPI will refill and maintain the maps/brochures on an as-needed basis.
- The design of kiosks is to be consistent with those found at trailheads in the Catskills and the Adirondacks.
- Initial design concept for the Kiosks is a single panel structure with a roof, made with natural wood. Construction standards for accessibility will be followed.

b. Signage:

- i. Locations, types
 - Covered above in 3(c)

6. All other permitted improvements, e.g., utilities, lighting.

- a. Where located (shown on map- *once known*) Attachment 5 – “Easement Areas and Planned Improvements” Map
 - i. Any new utility improvement locations, as known, should be shown.
 - ii. The intention is for the Preserve to be open from dawn until dusk, so no trails will have lights.
 - iii. There may be lights associated with the Nature Center, for reasons of safety and security, and as that information is further defined, the Rec Plan will be updated.

Attachments to MASTER Town and Village Mill Brook Rec. Plan (See “Master Attachments” document)

Attachment 1- Building Envelopes

“Easement Areas and Planned Improvements” Map for Town and Village

Attachment 2- Map Detail*:

Nature Center and Parking Area [Town]

Amphitheater Area [Village]

*once more specific locations are known, map with more detail will be updated, and show:

Location of Nature Center depicted

Location of Rest rooms depicted (if not inside Nature Center)

Location of Research Building depicted (if known)

Location of Parking area depicted

Location of Road to access parking area depicted

Location of Amphitheater

Attachment 2a- Town Parking Area Details (*once known*)

Attachment 3- Town Nature Center Details: plans/ drawings of Nature Center (*once known*)
(Attachment 3a- Town Restroom Details/ Plans/ Drawings *if not in Nature Center*)

Attachment 3- Village Amphitheater Details: plans/ drawings of Amphitheater (*once known*)
(Attachment 3a- Town Restroom Details/ Plans/ Drawings *if not in Nature Center*)

Attachment 4- Town Research Facility Details: plans/ drawings (*once known*)

Attachment 5- Map of Entire Property- Trails Detail and Trails Accessories Detail.
“Easement Areas and Planned Improvements” Map

Shows Town and Village Property Boundaries
Shows defined areas (Core Bio Area, Building Envelope Area, etc.)
Shows Hiking Trail locations, existing and planned
Shows Multi-Use Trail location, planned
Shows bridge locations, and type
Shows viewing platform locations- *once known*
Shows observation platform location
Shows access locations and kiosk locations -*as known*

Attachment 6- Trail Signage Detail

Types of Informational Signs-*samples*
Types of Interpretive Signs- *samples*

Attachment 6a- Trail Blazing protocols

NY-NJ Trail Conference standards on trail blazing as a *sample*

Attachment 7- Trail Amenities Detail

Large Bridge- *sample*
Small Bridge- *sample*
Bog Bridge- *sample*
Observation Platform - *sample*

Attachment 8- Vegetation Plan Map – *once known*
Show targeted planting areas

Attachment 9- Kiosk Illustration

Sample of kiosk