

Albany-Hudson Electric Trail Trail Maintenance Plan

February, 2018 DRAFT For Public Comment



Hudson River
Valley Greenway

INTRODUCTION

The Hudson River Valley Greenway (the Hudson Greenway) is undertaking the planning, design, and construction of the Albany-Hudson Electric Trail (AHET), a 35-mile bicycling and pedestrian trail running from the City of Rensselaer to the City of Hudson in Rensselaer and Columbia Counties. Trail construction is slated to be completed in December, 2020. Detailed information is available on the trail project website: www.AHETtrail.org.

The total AHET Trail project cost, including planning, engineering designs, environmental review, permitting, construction contracts, and construction management/inspection, is estimated at \$35 to \$45 million. New York State is covering 100% of the design and construction cost, utilizing funding from a \$200 million appropriation in the enacted FY2017-18 state budget for the Empire State Trail initiative (the AHET Trail will be one segment of the much larger 750-mile Empire State Trail).

The Hudson Greenway also retains financial responsibility for future capital rehabilitation and repairs to the AHET Trail. As a brand new trail incorporating durable design features, capital rehabilitation needs will be modest for the first five to ten years post construction. Eventually though, capital repairs will be needed, such as resurfacing asphalt and stonedust, replacing safety fencing that is damaged or ages out, maintaining bridges installed as part of the project, replacing missing trail signage, repair of any washouts or culvert failures that may occur, etc. During the spring of each year, the Greenway will complete annual end-to-end inspections of the AHET Trail to identify any needed capital repairs, and will also respond to any site-specific capital issues as they arise over the course of the year. The Greenway will provide National Grid and all Trail Managers information on how to contact the appropriate Greenway staff person in the event any problems or issues are identified along the trail corridor.

Although the Hudson Greenway is responsible for the cost of constructing the AHET Trail, along with its long-term capital maintenance, the Greenway does not have on-the-ground trail maintenance staff or capacity. As such, the Greenway is proposing that the involved town, village, and county governments and interested non-profit organizations assume responsibility for routine maintenance of the off-road sections of the trail.

This plan provides a detailed list of trail maintenance activities required for operation of the AHET Trail, including the frequency of each task. Routine maintenance needs for the Trail are modest. The largest item is mowing a narrow 2 to 4 foot strip of grass along the sides of the trail, along with grass edges along trail parking lots, benches, and other amenities, which will need to be done periodically during the growing season. Other needs include removing the occasional branch or tree that falls onto the trail and addressing any dumping of trash (to the extent it occurs).

The plan provides two frequencies – “Required” versus “Enhanced” – for some maintenance activities. For example, the grass margins and lawn areas along the trail should be mowed at least four times per year. However, an enhanced mowing schedule of every two weeks during the growing season (total of 10 times per year) is ideal, if staffing resources are available.

Based on experience with other rail trails in New York State, the Hudson Greenway estimates the annual cost of maintaining off-road sections of the AHET Trail is approximately \$825 to \$1,675 per mile (a detailed explanation of this cost projection is provided in Appendix A). The fact that the trail crosses through eight towns and three villages minimizes the impact on any single municipality (Appendix A provides a chart projecting annual cost for each municipality along the trail route). Moreover, volunteers can be utilized to undertake some routine maintenance costs, such as litter removal and trail clean-up days, reducing costs to local governments and non-profits.

The off-road sections of the AHET Trail are being developed on a utility corridor owned by National Grid, which maintains electric transmission lines and associated infrastructure along the corridor (formerly an electric trolley route). This document has been reviewed by National Grid to confirm that recommended trail maintenance activities are consistent with corporate safety and right-of-way maintenance activities. In various places in the plan, restrictions on maintenance activities are established to assure safety for off-road sections of the trail (examples include restrictions on the size of vehicles and motorized equipment allowed on the Right of Way, and procedures for removing any standing trees along the trail corridor).

The Hudson Greenway's agreement with National Grid, authorizing construction of the AHET Trail, anticipates that routine maintenance of the trail will be a partnership effort between the Greenway, involved local governments, and non-profit trails and friends groups. Local government and non-profit organizations that accept responsibility for maintaining sections of the AHET Trail will enter into a formal three-way written agreement (signed by National Grid, the Hudson Greenway, and the local government or non-profit organization) and will provide insurance and liability protection to National Grid. Local governments and non-profits that enter into written maintenance agreements are referred to as "Trail Managers" in this document. A copy of the AHET Trail Manager Agreement, including liability and insurance requirements, is provided in Appendix B.

Note: This Maintenance Plan applies only to off-road sections of the AHET trail. Due to physical impediments that exist along the historic trolley line, in certain locations the designated AHET route runs along short sections of local roads (for example to by-pass missing bridges and interstate highways). Maintenance of on-road sections of the AHET route remain the responsibility of state, county, town, village, or city that owns the specific road section.

SECTION 1

ROUTINE MAINTENANCE

Restrictions on Vehicles and Motorized Equipment

Trail Managers are allowed to use vehicles and motorized equipment to undertake routine maintenance activities, as well as to undertake patrols of the trail. However, to ensure the safety of equipment operators and the public, the following restrictions apply to vehicle use on the off-road sections of the AHET Trail.

- **Eight Feet Maximum Vehicle and Equipment Height Restriction.** Federal and state safety regulations require vehicles and construction equipment to maintain minimum approach distances per the National Electric Safety Code. This is typically at least 10 feet vertical and horizontal clearance to energized utility lines (e.g. conductors) – to prevent equipment from contacting utility lines, and to avoid the possibility of electrical current arcing from energized lines to nearby objects. **To maintain safe conditions at all times, Trail Managers are prohibited from operating vehicles and motorized equipment with a height of more than eight feet (8') on the National Grid corridor. The eight feet height limit applies to both the vehicle itself, as well as to the maximum extension of any excavator arm, lift, bucket, or boom.** In the way of example, Trail Managers are prohibited from utilizing excavators, dump trucks, bucket trucks, bobcats, or other vehicles with arms or equipment that can extend more than eight feet above ground surface.
- **Motor Vehicles.** The AHET Trail surface will be designed and constructed to an HS-20 loading standard, and bridges will be constructed to an HS-25 loading standard, which is sufficient to support standard motor vehicles up to a full-size ambulance or fire truck (Note: In the event any bridges are installed with less than HS-25 capacity, they will be signed with weight limits and designed to prevent use by overweight vehicles). The Trail Manager is allowed to utilize motor vehicles, such as sedans, pickup trucks, equipment trailers, and tractors on the AHET Trail, provided they comply with the maximum eight feet height restriction. Operators of motor vehicles used for maintenance purposes must be attentive for pedestrians and bicyclists, and should observe a 5-mph maximum speed limit. Note: The Trail Manager should avoid using motor vehicles on stonedust and asphalt sections of the AHET Trail during the spring thaw season, to avoid the possibility of rutting the trail surface.
- **Motorized Equipment.** Trail Managers are allowed to use motorized equipment, such as ride-on or stand-on mowers, small tractors, and utility vehicles such as golf carts and “gator” carts while undertaking trail maintenance activities. Handheld equipment such as weed whackers, hedge and string trimmers, and hand saws are also allowed.
- **Chain Saws.** Trail Managers are allowed to use chain saws to remove downed trees and limbs, provided that any personnel utilizing chain saws must be fully trained in their safe use and must use appropriate Personal Protective Equipment (PPE) at all times.
- **Plows & Snowblowers.** The AHET Trail is open to public use dawn to dusk, year-round. In winter months, the public will use the trail for cross-country skiing, snowshoeing, bicycling, or walking, depending on the trail’s condition. The AHET Trail will not be plowed or salted (in particular, plowing is not allowed on stonedust sections of the trail, which are susceptible to damage by snowplows). Snow and ice will be allowed to melt naturally.

Safety Training & Personal Protection Equipment (PPE)

Trail Managers shall maintain a comprehensive worker safety program, shall train all staff undertaking maintenance activities on the safe use of all pieces of equipment prior to their use, shall comply at all times with applicable Occupational Safety and Health Administration (OSHA) requirements, and shall provide appropriate Personal Protective Equipment (PPE) to all maintenance personnel.

Routine Maintenance Activities

Below is a narrative explanation of each Routine Maintenance Activity required for the Albany-Hudson Electric Trail.

1. **Grass Mowing: Required 4 Times/Year. (Enhanced frequency up to 10 Times/Year (e.g. twice per month)).**
 - The trail design includes a narrow grass margin, typically two to four feet wide, along both sides of the asphalt or stonedust trail. The mowed grass margins prevent vegetation from growing up and leaning into the trail, and provide space for users to move off the trail when stopping. The grass trail margins will be graded and compacted during construction of the trail, meaning they can be easily mowed with commercial landscaping equipment, such as a ride-on or stand-on mower or tractor capable of mowing a 24" to 48" swath in one or two passes.
 - Lawn mowing will also be required adjacent to the eight AHET Trail trailhead parking areas and at locations where the trail crosses major roads.
 - Personnel operating mowers must be attentive to guy wires that support National Grid's utility poles. Generally speaking, the trail is being designed to avoid the need to mow under or around guy wires. However, personnel operating mowers must be trained to avoid striking guy wires, including anchor points where guys are attached to the ground.
 - In late fall, after trees have dropped their leaves, the trail manager may decide to remove leaves from the trail surface, either by utilizing a mower to blow them off, or using a mechanical sweeper. Removal of leaves is a recommended but not required activity (not required if budget constraints preclude leaf removal).
2. **Weed Whacking, Landscaping, and Trimming: Required 2 Times/Year (Enhanced frequency up to 4 Times/Year).**
 - Grass and weeds that grow up around signposts, benches, safety fencing, etc. that cannot be reached with mowers will need to periodically cut, typically with hand held string trimmers (e.g. weed whackers).

- The AHET Trail will be designed to require minimum landscaping management. The Greenway will not install flowerbeds or areas requiring regular planting, weeding, or mulching. Shade trees and shrubs, where planted, will be native species that are disease and drought tolerant.
- In some locations, the AHET Trail will pass near trees or shrubs that will need to be occasionally trimmed to prevent limbs from growing into the trail corridor (typically using hand-held loppers).

3. **Removal of Fallen Trees and Limbs: As Needed, Low Frequency**

- National Grid maintains an active vegetation management program along the AHET corridor to prevent the growth of trees that could impact their transmission lines and infrastructure. As such, removal of fallen trees and limbs do not present a major concern. However, in a small number of locations the AHET Trail will pass near/under mature trees, meaning there will be occasional situations where the Trail Manager will need to utilize chainsaws or hand tools to cut and remove downed trees or limbs. Downed trees and limbs can be left in an out-of-the-way location on the ROW, provided material shall not be piled or pushed into the proximity of poles, anchors, guy wires, or other utility infrastructure. Moreover, material shall not be deposited into environmentally sensitive areas.

4. **Removal of Standing Trees or Branches: Will Be Removed by National Grid**

- National Grid's vegetation management program generally prevents mature trees from growing in proximity to the trail corridor. However, it is conceivable that an individual tree(s) in proximity to the AHET Trail could become diseased or damaged (for example by wind or ice), creating risk that a tree or limb could fall onto the trail. In the event a Trail Manager believes a standing tree presents a potential risk to trail users, the Manager shall review with National Grid and the Hudson Greenway. To avoid any risk of a tree striking electrical transmission infrastructure, **any felling or removal of standing trees that could fall and strike a conductor and/or the removal of any branches within 10 feet of conductors (other than telephone or cable television (CATV)) will be undertaken solely by National Grid or its contractors.**

5. **Litter and Dumping: As Needed, Low Frequency**

- Experience with other rail-trails in NYS indicates that litter is not expected to be a significant issue along the AHET Trail. To the extent litter does occur, personnel undertaking routine maintenance (mowing, weed whacking, etc.) will be expected to remove litter.
- Dumping is not a pervasive problem along the AHET ROW today (and should be even more infrequent after the trail is developed). However, there a handful of locations along the 35-mile trail route where dumping has been observed (typically individual

large items such as discarded furniture or tires). The Trail Manager will need to remove and properly dispose of dumped materials to the extent dumping occurs.

- Litter and trash removal is an excellent activity for volunteers, through “adopt a trail section” or annual clean-up days, reducing the need for the Trail Manager to use paid staff to keep the trail clean.
- The AHET Trail will be a “carry-in, carry-out” trail. The Hudson Greenway will not install trash cans, meaning the Trail Manager will not need to empty trash cans.

6. Stonedust Surface Maintenance: As Needed, Low Frequency

- The AHET Trail surface will be asphalt in high-use areas, and stonedust in lower-use rural areas. The asphalt and stonedust surfaces do not require routine maintenance.
- The majority of the AHET Trail will have a stonedust surface, which is a specified stone material (typically limestone) that is crushed to a powder. It is installed over a crushed stone sub-base, using paver and roller equipment, providing a highly stable and water-resistant surface similar to a commercial driveway and requiring little or no routine maintenance. Infrequently, potholes or ruts may develop on stonedust sections of the trail. To the extent this occurs, the Trail Manager is encouraged to address localized trail surface issues by manually applying stonedust to address potholes or ruts that may develop over time.

7. Trail Patrol and Inspection: Integrated Into Mowing Activities

- During the spring of each year, the Hudson Greenway will complete annual end-to-end inspections of the AHET Trail to identify any needed capital repairs to address potential safety hazards (trip and fall, fencing integrity, trail surface condition, damaged/missing safety signage, etc.), as well as monitor structural issues such as the condition of bridges, culverts and drainage structures. The Greenway and National Grid will jointly develop a written inspection checklist, to be completed annually by the Greenway.
- On a month-in, month-out basis, personnel operating mowing equipment will be asked to report any issues or concerns encountered along the trail to the Trail Manager (eliminating the need for separate trail patrol staff). The Trail Manager will address minor issues such as removal of downed trees and limbs or dumping, to the extent they occur. Any issues requiring capital repair (such as missing signage, damaged fencing, erosion, or failure of drainage structures) will be reported to the Hudson Greenway, which is responsible for addressing capital rehabilitation needs.

8. Trailhead Parking Areas: Unique To Each Parking Area

- The AHET Trail Concept Plan anticipates eight trailhead parking areas will be developed along the 35-mile route. While all parking areas will share some common elements, such as orientation and wayfinding signage and a list of key trail use rules,

each parking area will be unique. They will range in size from a modest 6-car gravel pull-off to a paved lot accommodating 15+ cars. Some are existing parking areas in municipal parks (one is an existing NYSDOT parking area), while others will be new construction. Given the narrow configuration of National Grid's ROW, many of the parking areas will be located on adjacent property. The Greenway's designation of AHET trailhead parking areas located on municipal property is dependent on approval by the involved local government, which will be responsible for maintaining the area, including maintaining the asphalt or gravel surface, mowing of lawn areas, litter removal, etc. Because each of the eight proposed AHET parking areas is unique, the cost of maintaining them is not included in the "per mile" routine maintenance cost estimate presented in Appendix A.

SECTION 3

Projecting Annual Routine Maintenance Costs

The Hudson Greenway has developed a projected annual cost estimate for the routine maintenance costs described above for the Albany-Hudson Electric Trail (see Appendix A). Key factors supporting the cost projection:

- The estimate is presented as a range, reflecting the fact that each Trail Manager has discretion on the frequency of maintenance activities (most notably mowing, which is required a minimum of 4 times per year, but may occur as often as 10 times per year if the Trail Manager has sufficient capacity).
- The cost estimate is presented on a "per mile" basis, allowing each Trail Manager to project their annual cost based on the length of the AHET trail under their jurisdiction (see Appendix A for the off-road trail length in each municipality along the AHET route).
- Labor is the largest component of routine maintenance. The cost estimate assumes an average labor rate of \$25/hour for maintenance staff, including direct salary and fringe rate. Trail Managers with higher or lower staff costs can adjust the annual estimate accordingly.

The Hudson Greenway estimates the annual cost of maintaining off-road sections of the AHET Trail is approximately \$825 to \$1,675 per mile (a detailed explanation of this cost projection is provided in Appendix A). The fact that the trail crosses through eight towns and three villages minimizes the impact on any single municipality. Moreover, volunteers can be utilized to undertake some routine maintenance costs, such as litter removal and trail clean-up days, reducing local government costs.

SECTION 6

AHET TRAIL MANAGING ENTITIES

NYS/Hudson Greenway Responsibilities

The Hudson Greenway is responsible for completing long-term capital repairs and rehabilitation of the AHET Trail, as needs arise in the future. However, the Greenway does not have on-the-ground maintenance staff or capacity to undertake routine maintenance of the AHET Trail. As such, the Greenway is proposing that local governments and non-profit organizations enter into a partnership for the routine AHET Trail maintenance activities outlined in Section 1 above.

County/Town/Village Responsibilities

Local governments and non-profit organizations that accept responsibility for maintaining sections of the AHET Trail will enter into a formal three-way written agreement (signed by National Grid, the Hudson Greenway, and the local government or non-profit organization) and will provide insurance and liability protection to National Grid. Entities that enter into written maintenance agreements are referred to as a “Trail Manager” in this document. A copy of the AHET Trail Manager Agreement, including liability and insurance requirements, is provided in Appendix B.

Elected officials have asked whether funding is available to cover routine maintenance costs incurred by local officials. At this time, the Hudson Greenway does not have dedicated, recurring funding for trail maintenance activities. While the Greenway may request funding in future state budget cycles, local governments and non-profits that become Trail Managers should assume they will absorb staff and related maintenance costs.

To jumpstart local efforts, the Hudson Greenway can purchase and donate trail maintenance equipment, such as mowers and related equipment, to local governments and non-profit Trail Managers (this is a one-time commitment, funded from the AHET Trail capital construction budget).

Volunteers

The Hudson Greenway anticipates that volunteers will play an important role in maintaining the AHET Trail, ranging from the efforts of formal “Friends Groups” and organizations that “Adopt” a section of the trail, to actions by individual trail users who pick up the occasional piece of litter or report a trail condition problem.

While the Greenway welcomes citizen participation, volunteer efforts involving the use of motorized or non-motorized equipment need to be integrated into formal written Trail Manager agreements. In other words, individual citizens who undertake maintenance activities such as mowing or removing downed trees and limbs need to do so under the umbrella of a local government or non-profit that has entered into a formal written agreement with National

Grid and the Hudson Greenway (among other reasons, to include volunteers in insurance coverage).

Appendix A

Estimated Annual AHET Trail Routine Maintenance Costs

The Hudson River Valley Greenway has developed a projection of the annual cost for the routine maintenance activities for off-road sections of the AHET Trail. Costs are based on information from a variety of sources, including NY State Parks and Canal Corporation and the Rails to Trails Conservancy. Key assumptions underlying the cost projection are:

- The cost projection assumes an average labor cost of \$25/hour. This figure includes hourly pay rate and fringe costs, plus an allotment for gas, supplies, etc. Trail Managers with higher or lower labor costs can adjust accordingly. The projected costs assume all maintenance work is completed by paid staff. Trail Managers that are able to secure volunteers for basic maintenance activities will realize cost savings.
- The projection is calculated on a per-mile basis, and indicates a range of frequency from Required (min) to Enhanced (max). For example, mowing is required 4 times per year, but if resources allow could be as frequent as 10 times per year under an enhanced approach.
- The cost projections do not include the cost of purchasing mowers and other maintenance equipment. The Hudson Greenway has committed to purchasing/donating mowers and related equipment to assist Trail Managers with start-up costs.
- The projections do not include the cost of maintaining designated trailhead parking areas, such as mowing and litter removal. Each trailhead is unique and will have its own annual maintenance cost (depending on the number of parking spots, surface material, amount of lawn requiring mowing, level of public use, etc.).

Based on these assumptions, the annual projected cost of routine maintenance activities for off-road sections of the AHET Trail ranges from \$775 per mile (Required) to \$2,075 per mile (Enhanced frequency).

Maintenance Activity	Cost per mile/ occurrence	Cost per mile/year	Frequency
Mowing (mowing staff also cover patrol needs)	\$50	\$200-\$500	4 min / 10 max per year
Leaf Removal (seasonal)	\$25	\$25	1 per year (fall)
Litter Clean-Up (can often be completed by volunteers)	\$25	\$50	2 per year
Weed Whacking, Landscaping, and Trimming	\$250	\$500-\$1,000	2 min / 4 max per year
Miscellaneous (removal of fallen trees, maintenance of stone dust surfaces, etc.)	n/a	\$50 - \$100	As needed (assumes 2 to 4 hours per year)
Total Annual Cost (Per-Mile):		\$825 - \$1,675	

The projected cost for maintaining the off-road segments of the Albany-Hudson Electric Trail is depicted on the chart below, reflecting the minimum and maximum costs in the above chart, multiplied by the miles of off-road trail in each municipality.

	Off-Road Miles	Low Cost	High Cost
CITY OF RENSSELAER	0.0	\$0	\$0
EAST GREENBUSH	2.5	\$2,090	\$4,244
SCHODACK	6.6	\$5,435	\$11,035
VILLAGE OF NASSAU	0.8	\$685	\$1,390
NASSAU	1.8	\$1,453	\$2,950
RENSSELAER COUNTY	11.7	\$9,663	\$19,620
CHATHAM	2.4	\$1,982	\$4,024
KINDERHOOK	2.5	\$2,021	\$4,104
VILLAGE OF VALATIE	1.4	\$1,139	\$2,312
VILLAGE OF KINDERHOOK	1.4	\$1,114	\$2,261
STUYVESANT	2.1	\$1,724	\$3,501
STOCKPORT	3.8	\$3,143	\$6,382
GREENPORT	1.7	\$1,361	\$2,764
COLUMBIA COUNTY	15.1	\$12,484	\$25,346
TOTAL	26.8	\$22,147	\$44,966

Appendix B
National Grid Approval and Requirements:
Albany-Hudson Electric Trail Maintenance Agreement

MUNICIPAL/NON-PROFIT AHET TRAIL MAINTENANCE AGREEMENT

THIS TRAIL MAINTENANCE AGREEMENT (this “Agreement”) is made as of this ____ day of _____, 2018, by and between **NIAGARA MOHAWK POWER CORPORATION**, a New York corporation having a usual place of business at 300 Erie Boulevard West, Syracuse, New York 13202 (hereinafter, “Licensor”) and **[INSERT MUNICIPALITY’S OR NON-PROFIT’S NAME AND MAILING ADDRESS]** (hereinafter, “Trail Manager”) and **GREENWAY CONSERVANCY FOR THE HUDSON RIVER VALLEY**, a New York State public benefit corporation having a usual place of business at 625 Broadway, 4th Floor, Albany, New York 12207-2995 (hereinafter, “Hudson River Valley Greenway”).

RECITALS:

WHEREAS, Licensor is the owner of certain real property located in Rensselaer and Columbia Counties;

WHEREAS, the Trail Manager has agreed to maintain a portion of Licensor’s Property described in **Exhibit A** (hereinafter, “Licensor’s Property”); [NOTE: Exhibit A will be a narrative description and map of the specific section of the AHET Trail that the municipality or non-profit has agreed to manage (e.g. the trail section in specific county, town or village).]

WHEREAS, Licensor owns, operates, and maintains electric distribution and transmission line infrastructure and related appurtenances on Licensor’s Property, including, by way of example only, one or more overhead electric lines carried on single poles, transformer stations, related infrastructure, and access/egress routes to facilitate inspection, maintenance, and repair of such infrastructure;

WHEREAS, to promote healthy lifestyles, enhance the conservation and enjoyment of natural or scenic resources, establish an alternative means of transportation, support recreation-based tourism and economic development activities, and further the general welfare of the public, Licensor has authorized the Hudson River Valley Greenway to construct, operate, and maintain a new linear recreational trail for use by the general public, named the Albany-Hudson Electric Trail (the “Trail” which, together with its related improvements, may be referred to collectively herein as the “Improvements”);

WHEREAS Licensor and Hudson River Valley Greenway entered into a License Agreement dated the 29th day of November, 2017 to authorize Hudson River Valley Greenway’s construction of a Trail and Improvements on Licensor’s Property;

WHEREAS, the Trail Manager has agreed to maintain the section of the Trail identified in Exhibit A; and

WHEREAS, Licensor is willing to enter into this Agreement as an accommodation to the Trail Manager and the Hudson River Valley Greenway.

NOW, THEREFORE, in consideration of the foregoing recitals, which are hereby incorporated herein and made a part hereof, and in further consideration for the mutual covenants contained herein, the parties agree as follows:

(i) Trail Maintenance Plan. The Hudson River Valley Greenway has developed the AHET Trail Maintenance Plan, dated _____, which has been reviewed and approved by Licensor (attached as Exhibit B).

(ii) Trail Manager Maintenance. Licensor hereby authorizes the Trail Manager to undertake trail maintenance activities on the segments of the Trail and Improvements identified in Exhibit A. All maintenance activities undertaken by the Trail Manager shall comply with the AHET Trail Maintenance Plan.

TRAIL MAINTENANCE AGREEMENT PERIOD

(a) Initial Period; Renewal. The initial period of this Agreement shall commence as of the Effective Date and shall run through December 31 of the year next succeeding the Effective Date, and after which date shall, provided no Trail Manager Default exists hereunder, automatically renew on a year to year basis through December 31, 2075 unless earlier terminated pursuant to paragraph (b) below.

(b) Cancellation by Licensor. Licensor may terminate this agreement at any time, by delivering thirty (30) days prior written notice to the Trail Manager and to the Hudson River Valley Greenway. Upon delivery of such notice, this Agreement shall terminate and be of no further force and effect except those provisions expressly stated to survive the termination of this Agreement.

(c) Cancellation by Trail Manager. The Trail Manager may terminate this agreement at any time, by delivering thirty (30) days prior written notice to Licensor and to the Hudson River Valley Greenway. Upon delivery of such notice, this Agreement shall terminate and be of no further force and effect except those provisions expressly stated to survive the termination of this Agreement.

COMPLIANCE

The Trail Manager shall comply with all provisions of applicable federal, state, and municipal laws, statutes, codes, rules, regulations and ordinances and any successor laws, statutes, codes, rules, regulations and ordinances thereto affecting the Licensor's Property and its occupancy, use, and maintenance thereof pursuant to the terms of this Agreement (the "Applicable Laws"). If any provision of this Agreement is less restrictive than the Applicable Laws, then the Trail Manager shall comply with the more restrictive Applicable Laws.

INDEMNIFICATION

The Trail Manager assumes all risks in the performance of all activities authorized by this Agreement and agrees to defend, indemnify and hold harmless Licensor, its officers, employees, agents and assigns (hereinafter, collectively the “Indemnitees”) from and against any and all claims, demands, suits, losses, costs, fees, fines, penalties, causes of action and liabilities (including, without limitation, attorneys’ fees and expenses) (“Claims”) for any damage to property or injury to persons of whatever kind and nature (including death, disability or dismemberment), whether direct or indirect, caused or contributed to by the Trail Manager and the Trail Manager’s contractors, vendors, materialmen, employees, agents, invitees and guests, and/or arising out of Trail Manager’s acts or omissions and/or Trail Manager’s performance (or failure to perform) pursuant to the terms of this Agreement, and/or any legal action against Licensor and/or the Indemnitees arising from the permission herein granted (including, but not limited to, use by the general public and third party challenges to the validity of this Agreement); provided, however, that the Trail Manager’s indemnity obligation shall not extend to any Claims which are the result of Licensor’s negligence or willful misconduct. The Trail Manager shall defend at Trail Manager’s sole cost and expense any action commenced for the purpose of asserting any Claims of whatever character arising out of this Agreement. The Trail Manager’s responsibility under this section shall not be limited to the required or available insurance coverage.

The indemnification requirements of this Agreement shall survive the termination of this Agreement such that any event that would form the basis of a claim which arises during the term of this Agreement, irrespective of when such claim is actually made, shall be included in the indemnification required by the immediately preceding paragraph.

INSURANCE

The Trail Manager shall comply with the Insurance Requirements set forth in the attached **Exhibit C**, incorporated herein by reference and made a part hereof. The Trail Manager agrees that Licensor shall have no obligation to insure the Improvements. The Trail Manager shall not conduct any work or other activities upon the Licensor’s Property unless and until it has obtained the insurance required by this Section and has delivered a certificate of insurance evidencing the required insurance to Licensor. For the avoidance of doubt, the provisions hereof shall apply to any contractor performing work at the request or on behalf of the Trail Manager.

NOTICE

All notices required or permitted under this Agreement shall be in writing and either delivered in hand or mailed (a) by certified mail (return receipt requested) with the United States Postal Service, or (b) by Federal Express or other nationally recognized overnight mail carrier furnishing evidence of receipt, to:

Licensor: Niagara Mohawk Power Corporation
300 Erie Boulevard West
Syracuse, NY 13202
Attention: Real Estate

With a copy to: c/o National Grid USA Service Company, Inc.
40 Sylvan Road
Waltham MA 02451
Attention: Legal Department – Real Estate Group

With a copy to: National Grid
1125 Broadway, Albany, NY 12204
Attention: ROW and Survey Engineering

Trail Manager: [Insert name and mailing address]

And: Hudson River Valley Greenway
625 Broadway, 4th Floor
Albany, NY 12207-2995

IN WITNESS WHEREOF, the parties have caused this Agreement to be executed by their respective duly authorized officers upon the date first above written.

LICENSOR: NIAGARA MOHAWK POWER CORPORATION

By: _____
Name: _____
Title: _____

TRAIL MANAGER: [INSERT NAME OF MUNICIPALITY OR NON-PROFIT]

By: _____
Name: _____
Title: _____

GREENWAY CONSERVANCY FOR THE HUDSON RIVER VALLEY

By: _____
Name: Andy Beers
Title: Director, Empire State Trail

Exhibit A

Description and Map of Licensor's Property Subject to this Trail Maintenance Agreement

Exhibit B
Approved AHET Trail Maintenance Plan

Exhibit “C”
National Grid/Niagara Mohawk Insurance Requirements

1. From the commencement of the Agreement, through final expiration or longer where specified below, Grantee shall provide and maintain, at its own expense, insurance policies, intended to be primary (with no right of contribution by any other coverage available to National Grid USA its direct and indirect parents, subsidiaries and affiliates (the “Insured Entities”)), covering all Operations, Work and Services to be performed under or in connection with this Agreement, issued by reputable insurance companies with an A.M. Best Rating of at least B+, which at least meet or exceed the requirements listed herein:

(a) **Workers’ Compensation and Employers Liability insurance** as required by the State in which the work activities under this Agreement will be performed. If applicable, Coverage shall include the U.S. Longshoreman’s and Harbor Workers Compensation Act, and the Jones Act. The employer’s liability limit shall be at least \$500,000 each per accident, per person disease, and disease by policy limit.

If Grantee is exempt from having to obtain and maintain workers’ compensation coverage due to their legal status as a sole proprietor or partnership, Grantee shall obtain:

1. Long term disability insurance covering any illness or injury incurred in connection with this Agreement that prevents Grantee from working, with benefits of at least 50% of the Grantee’s monthly income on the last day before the disability begins.
2. Health Care Insurance, covering any loss occasioned by bodily injury, sickness or disease, and medial expense, with limits, coverage, deductibles, co-insurance payments, and any other cost sharing features customarily maintained by other entities of a similar size and business nature.

(b) **Commercial General Liability (CGL) Insurance**, covering all operations to be performed by or on behalf of Grantee under or in connection with this Agreement, with **minimum** limits of:

<i>Bodily Injury (BI)</i>	- <i>\$1,000,000 per occurrence</i>
Property Damage (PD)	- \$ 500,000 per occurrence
OR	
Combined Single Limit	- \$1,000,000 per occurrence
OR	
BI & PD per Occurrence	- \$1,000,000
General Aggregate & Product Aggregate	- \$2,000,000 each

- Coverage shall include: contractual liability (with this Agreement, and any associated verbal agreements, being included under the definition of “Insured Contract” thereunder), products/completed operations, and if applicable, explosion, collapse and underground (XC&U).
- If the products-completed operations coverage is written on a claims-made basis, the retroactive date shall not precede the effective date of this Agreement and coverage shall be maintained continuously for the duration of this Agreement and for at least two years thereafter.
- Additional Insured as required by Article 3 below.
- The policy shall include a separation of insureds condition.

- In the event Grantee is a governmental entity such as a Town, County, Municipality etc., and such entity's liability to a third party is limited by law, regulation, code, ordinance, by-laws or statute (collectively the "Law"), this liability insurance shall contain an endorsement that waives such Law for insurance purposes only and strictly prohibits the insurance company from using such Law as a defense in either the adjustment of any claim, or in the defense of any suit directly asserted by an Insured Entity.

(c) **Automobile Liability**, covering all owned, non-owned and hired vehicles used in connection with all operations, work or services to be performed by or on behalf of Grantee under or in connection with this Agreement with **minimum** limits of:

Bodily Injury - **\$500,000 per occurrence; 1,000,000 aggregate**
 Property Damage - \$500,000 per occurrence
 OR
 Combined Single Limit - \$1,000,000 per occurrence

Additional Insured as required in Article 3 below.

(d) **Umbrella Liability or Excess Liability** coverage, with a **minimum** per occurrence limit of \$4,000,000. This coverage shall run concurrent to the CGL required in Article 1(b) above, shall apply excess of the required automobile, CGL and employer's liability coverage required in this Insurance Exhibit, and shall provide additional insured status as outlined in Article 3 below.

(e) **Watercraft Liability (not applicable).**

(f) **Aircraft Liability (not applicable).**

(g) **Contractors Pollution Liability (CPL):** covering any sudden and accidental pollution liability which may arise out of, under, or in connection with this Agreement, including all operations to be performed by or on behalf of Grantee, or that arise out of the Grantee's use of any owned, non-owned or hired vehicles, with a **minimum** liability limit of:

Bodily Injury (BI) - **\$1,000,000 per occurrence**
 Property Damage (PD) - \$ 500,000 per occurrence
 OR
 Combined Single Limit - \$1,000,000 per occurrence

This requirement may be satisfied by providing either this CPL policy, which would include naming the Insured Entities, including their officers and employees, as additional insured's as outlined in Article 3 below; **OR** by providing coverage for sudden and accidental pollution liability under the CGL and commercial automobile insurance policies required above - limited solely by the Insurance Services Organization (ISO) standard pollution exclusion, or its equivalent.

In the event grantee is unable to secure and/or maintain any or all of this sudden and accidental pollution liability coverage, Grantee agrees to indemnify and hold the Insured Entities harmless against any and all liability resulting from any coverage deficiency that is out of compliance with this insurance requirement.

(h) **Risk of Loss: Grantee** shall be responsible for all risk of loss to its equipment and materials, and any other equipment and materials owned by its employees or by other third parties that may be in their care, custody and control. If this coverage is excluded from the Commercial General Liability policy, then coverage will be acceptable under Grantee's property policy.

In the event that any equipment or materials (Goods) are supplied by the Insured Entities, an Insured Entities representative will provide the insurable value of the Goods to Grantee in writing, both cumulatively and on a maximum per item basis. Grantee will provide replacement cost insurance for these Goods under a blanket builder's risk policy, an equipment floater, or other equivalent coverage, while such Goods are under the care, custody and control of Grantee. Such insurance shall cover all Goods outlined in the Agreement or as noted on subsequent contract amendments. The coverage limit shall apply on either a per location basis or a maximum per item basis, and shall name the Insured Entities, as a Loss Payee with respect to their insurable interest as required in Article 3 below.

(i) **Homeowners/Sole Proprietors Insurance:** In the event that Grantee is either a homeowner or sole proprietor, the requirements in section 1 A and D do not apply. However, these requirements do apply to any contractors that have been hired by Grantee to perform any work activities on the premises as defined in this Agreement.

In addition, if a Homeowners insurance company will not provide the additional insured status to National Grid as required in section 3, Grantee agrees to indemnify and hold harmless the Insured Entities for any liability that would have otherwise been covered had the insurance carrier recognized the additional insured status.

(j) **Limits:** Any combination of Commercial General Liability, Automobile Liability and Umbrella Liability policy limits can be used to satisfy the limit requirements in items 1 b, c & d above.

If the term of this agreement is longer than five (5) years, in the fifth year, and every five (5) years thereafter, the Commercial General Liability and Umbrella/Excess Liability insurance limits required above shall be increased by the percentage increase in the Consumer Price Index from the month the Agreement was executed to the month immediately preceding the first month of the year in which the increase is required.

2. Self-Insurance: Proof of qualification as a qualified self-insurer, if approved in advance in writing by an Insured Entities representative, will be acceptable in lieu of securing and maintaining one or more of the coverages required in this Insurance Section. Such acceptance shall become a part of this insurance provision by reference herein.

For Workers' Compensation, such evidence shall consist of a copy of a current self-insured certificate for the State in which the work will be performed.

In order for self insurance to be accepted, Grantee's unsecured debt must have a financial rating of at least investment grade. For purposes of this section, "Investment Grade" means (i) if Grantee has a Credit Rating from both S&P and Moody's then, a Credit Rating from S&P equal to or better than "BBB-" and a Credit Rating from Moody's equal to or better than "Baa3"; (ii) if Grantee has a Credit Rating from only one of S&P and Moody's, then a Credit Rating from S&P equal to or better than "BBB-" or a Credit Rating from Moody's equal to or better than "Baa3; or (iii) if the Parties have mutually agreed in writing on an additional or alternative rating agency, then the equivalent credit rating assigned to an entity by

such additional or alternative rating agency that is equal to or better than “BBB-” from S&P and/or “Baa3” from Moody’s.

3. Additional Insured and Loss Payee: The intent of the Additional Insured requirement under the CGL, Auto, CPL, Umbrella/Excess, Aircraft and Watercraft policies is to include the Insured Entities, their directors, officers and employees, as Additional Insured’s for liabilities associated with, or arising out of, all operations, work or services to be performed by or on behalf of Grantee, including ongoing and completed operations, under this Agreement. The following language should be used when referencing the additional insured status: **National Grid USA, its subsidiaries and affiliates shall be named as additional insured.**

The Loss Payee language, as required in article 1.h above, shall read as follows: **National Grid USA, its subsidiaries and affiliates shall be included as a Loss Payee as their interest may appear.**

To the extent Grantee’s insurance coverage does not provide the full Additional insured coverage as required herein, Grantee agrees to indemnify and hold harmless the Insured Entities against any and all liability resulting from any deficiency in Grantee’s insurance coverage that may be out of compliance with this insurance requirement.

4. Waiver of Recovery: Grantee and its insurance carrier(s) shall waive all rights of recovery against the Insured Entities and their directors, officers and employees, for any loss or damage covered under those policies referenced in this insurance provision, or for any required coverage that may be self-insured by Grantee. To the extent Grantee’s insurance carriers will not waive their right of subrogation against the Insured Entities, Grantee agrees to indemnify the Insured Entities for any subrogation activities pursued against them by Grantee’s insurance carriers. However, this waiver shall not extend to the gross negligence or willful misconduct of the Insured Entities or their employees, sub-contractors or agents.

5. Contractors: In the event Grantee uses Contractors in connection with this Agreement, it is expressly agreed that Grantee shall have the sole responsibility to make certain that all Contractors are in compliance with these insurance requirements and remains in compliance throughout the course of this Agreement, and thereafter as required. Grantee shall remain liable for the performance of the Contractor, and such sub-contract relationship shall not relieve Grantee of its obligations under this agreement.

Unless agreed to in writing by the Risk Management Department of National Grid USA Service Company, any deductible or self insured retentions maintained by any Contractor, which shall be for the account of the Contractor, and shall not exceed \$100,000. In addition, Contractor shall name both the Grantee and National Grid USA, (including their subsidiaries, affiliates, officers and employees), as additional insured’s under the Commercial General Liability and Umbrella/Excess Liability insurance. If requested by National Grid, Grantee shall provide National Grid with an insurance certificate from its Contractor evidencing this coverage.

In the event any Contractor is unable to maintain all of the same insurance coverage as required in this insurance article, Grantee agrees to indemnify and hold the Insured Entities harmless against any and all liability resulting from any deficiency in Contractor’s insurance coverage that may be out of compliance with these insurance requirements.

6. Insurance Certification: Upon execution of this Agreement, Grantee shall promptly provide National Grid with (a) **Certificate(s) of Insurance** for all coverage’s required herein at the following address:

National Grid
Attn: Risk Management Bldg. B-3
300 Erie Boulevard West
Syracuse, NY 13202

Such certificates, and any renewals or extensions thereof, shall outline the amount of deductibles or self-insured retentions which shall be for the account of Grantee. Such deductibles or self-insured retentions shall not exceed \$100,000 unless agreed to in writing by the Risk Management Department of National Grid USA Service Company, whose approval shall not be unreasonably withheld, delayed or conditioned.

Grantee shall provide National Grid with at least 30 days prior written notice of any cancellation or diminution of the insurance coverage required in this insurance article.

7. Insurance Obligation: If any insurance coverage is not secured, maintained or is cancelled and Grantee fails immediately to procure other insurance as specified, National Grid has the right, but not the obligation, to procure such insurance and to invoice Grantee for said coverage.

8. Incident Reports: Grantee shall furnish the Risk Management Department of National Grid USA Service Company with copies of any non-privileged accident or incident report(s)(collectively, the "Documents") sent to Grantee's insurance carriers covering accidents, incidents or events occurring as a result of the performance of all operations, work and services to be performed by or on behalf of Grantee under or in connection with this Agreement, excluding any accidents or incidents occurring on Grantee property. If any of the National Grid Companies are named in a lawsuit involving the operations and activities of Grantee associated with this Agreement, Grantee shall promptly provide copies of all insurance policies relevant to this accident or incident if requested by National Grid. However, in the event such Documents are deemed privileged and confidential (Attorney Client Privilege), Grantee shall provide the relevant facts of the accident or incident in a format that does not violate such Attorney Client Privilege.

9. Other Coverage: These requirements are in addition to any which may be required elsewhere in this Agreement. In addition, Grantee shall comply with any governmental site specific insurance requirements even if not stated herein.

10. Coverage Representation: Grantee represents that it has the required policy limits available, and shall notify National Grid USA Service Company's Risk Management Department in writing when the minimum coverage's required in this article herein have been reduced as a result of claims payments, expenses, or both. However, this obligation does not apply to any claims that would be handled solely with in Grantee's deductible or self-insured retention.

11. Responsibility: The complete or partial failure of the Grantee's insurance carrier to fully protect and indemnify the Insured Entities per the terms of the Agreement, including without limitation, this exhibit, or the inadequacy of the insurance shall not in any way lessen or affect the obligations of the Grantee to the Insured Entities.

12. Coverage Limitation: Nothing contained in this article is to be construed as limiting the extent of the Grantee's responsibility for payment of damages resulting from all operations, work and services to be performed by or on behalf of Grantee under or in connection with this Agreement, or limiting, diminishing, or waiving Grantee's obligation to indemnify, defend, and save harmless the Insured Entities in accordance with this Agreement.