

Town of Nahant
Community Preservation Committee



Grant Application FY 2024

Applicant:

Nahant Open Space and Recreation Committee

Contact address and phone number:
Trish Aldrich, Chair of OSRC
163 Willow Road, Nahant, MA 01908
(617) 538-5758
welakahao@comcast.net

Application Purpose:

(please select all that apply)

☒ Open Space

☐ Community Housing

Town committee or board (if applicable):
Open Spaced and Recreation Committee

☐ Historic Preservation

☒ Recreation, Passive

1) **Project Name:** Bailey's Hill Complex-Fort Ruckman East Slope Restoration Project, Phase Two

2) **Project Description:** The goals of Phase Two are:

- * continued management and removal of invasive plants

- * the purchase and installation of new plant material, using native species

based on planting recommendations as described in Appendix B. These plants will stabilize the slope and pathways and help control the growth of invasive plants. The grasses, shrubs and trees will support native wildlife and pollinators and contribute to the aesthetic value of the area.

This project seeks to continue the restorative and sustainable work begun in the previous CPC 2021 grant Bailey's Hill complex-Fort Ruckman East Slope Restoration (See Appendix A and Fig 1-5) Many of goals of Phase One were realized, but the entirety of the project as described has not been completed. Significant progress has been made by the Nahant Department of Public Works, including removal of debris and invasive species, construction of pathways, slopes and rock walls, and stabilization of the slopes with native grass seed, which has already begun to sprout. Phase One funds were also used to develop a planting plan with native plants. This planting plan is currently in progress. Phase Two seeks to continue the work of Phase One with ongoing control of invasive species and the purchase and planting of vegetation in this area in the Fall of 2023, with the help of a professional ecological landscape company.

3) **Grant Amount Requested:** \$38,690 (Outlined and itemized in Appendix B)

4) **Contribution to the preservation Nahant's unique character:**

Bailey's Hill and the Fort Ruckman area occupy a significant portion of open space in our small town with its limited open space. This area is our largest wooded area and a frequent site for passive recreation activity.

Bailey's Hill has historical significance not only for our local community but also for the state and the nation. For more than a century, this portion of Nahant was a place of major defense installations, as was East Point, another major open space in Nahant. This area was first deemed essential to U.S military defense during the Spanish American War in 1898. A 45 acre plot of land incorporating Bailey's Hill and Bass Point area, named Fort Ruckman, was soon acquired by the government in 1900. Various military structures and installations were added as needs changed over World Wars I and II. Although decommissioned in 1951, the Cold War in the 1950's required a military presence until the early 1960's. The various concrete structures including a portion of the Battery Augustus P Gardner from WW I are listed as Heritage Sites on the Massachusetts Historical Commissions' Index of Historic Sites (MACRIS NAH 934 and 935). The entire area has been the subject of extensive surveys and historical recording by Nahant's resident historian, Captain Gerald W Butler. (See Gerald W Butler in *Fort Ruckman Through Time*, Nahant Historical Society 2013 and *Bayley's or Bailey's Hill*, Nahant Historical Society, 2017.)

The Bailey's Hill portion of the Fort Ruckman property has evolved without a management plan into a wooded area on the two major hills, with mown grass land in between. (Fig One) The section of concern of this grant is known as the Bunker portion, as it occupies part of the site of the gun emplacements and ancillary underground chambers and passageways of the Gardner Battery. Since the 1960's this area had been neglected and used for dumping of asphalt, brick and other debris over the years. Phase

One of the CPA Bailey's Hill grant (Appendix A) accomplished removal of the debris and sealed off access to underground military structures in that area. The area has been overgrown with black locust and Norway maple trees, and an understory of black cherry, Asiatic bittersweet, multiflora rose, and Japanese knotweed. (Cited from Town of Nahant Open Space and Recreation Plan 2022-2029, p 43, heretofore called 2022 OSRP) Phase One began the control of these invasive plants and developed a planting plan on the restructured land.

A portion of the Heritage Trail, which runs from Short Beach to Bailey's Hill, traverses this Bunkers section, providing passive recreation opportunities for Nahant residents. (Fig Two) The paths in this and other sections of Bailey's Hill are frequently used by Nahant residents for walking, jogging, biking, scenery viewing and dog walking.

The recently completed and approved 2022 OSRP emphasizes the importance of Bailey's Hill to our town. Results of an Open Space Committee Community Survey conducted in June and July 2021 lists Bailey's Hill as one of the most frequently visited open space areas. (2022 OSRP, Figure 44, p 82). The survey also reported these community priorities for all of Nahant:

Sustain the scenic quality and visual character of town
Preserve/protect places of historical or cultural interest
Open space for conservation and passive recreation
Control of invasive species
Better maintenance of open spaces (2022 OSRP, Fig 43, p 80)

The 2022 OSRP includes an "Action Plan" for both general town-wide goals and those specific to the Bailey's Hill. (2022 OSRP, Fig 54, p 97-102) These are:

Goal 1: Protect and improve Nahant's parks, open space and natural resources

Action 1.1.1 :Work with the DPW to develop preventative maintenance standards and site-specific plans for parks, playgrounds, open spaces, beaches, trails and recreational facilities.(p 97)

Goal 4: Develop procedures for further evaluation of open spaces

Action 4.1.3: Implement plan to remove invasive species and restore natural vegetation at Bailey's Hill Complex as described in OSRC CPA Grant approved at Town Meeting May 2021. Seek additional funding to continue restoration of Bailey's Hill Complex. (p 100).

5) **Planning Context:** Is the project part of a general Town planning study (e.g. Open Space and Recreational Plan, Master Plan etc.)? If so, when was the plan prepared and who has approved the plan?

_____ Is **NOT** part of a Program Plan

X **Is** part of a Program Plan prepared on _____ and approved by _____ **Grant Application** (cont.): Town of Nahant Open Space and Recreation Plan 2022-2029
CPC Grant FY 2021 Bailey's Hill complex-Fort Ruckman East Slope Restoration

- 6) **Evaluation Criteria:** Provide a brief description of how this project meets as many of the selection criteria as may be applicable. Refer to Selection Criteria attached as Appendix A.

Feasibility The Phase Two project is part of an already Town approved plan and has the support of Zachary Taylor, Superintendent of Nahant Department of Public Works . He participated in the Phase One CPA grant request and has completed much of that work. We have discussed the Phase Two Project with the Superintendent and he is supportive of this plan and its time line.

Consistent with town planning documents? This project is consistent with Goals and Objectives of the 2022 OSRP.

Time sensitivity, urgency Phase One of this project has begun with the removal of invasive plants, earthwork to construct slopes, trails and stone walls, stabilization with native grass seed plantings. It is planned that in the spring, the DPW will continue their work removing invasive plants, and shaping up of the site and planting will commence in the fall of 2023. .

Serve multiple needs Phase Two of the project will further the work begun in Phase One. Fall is an optimum time to plant as it affords new plants the time to establish themselves with limited competition. Fall planting also will allow the plants to put down roots in cooler weather, with fewer pests, with less watering and at a better price for the plant material. The additional work of planting this section will help stabilize the earthwork slopes and trails. This project will also begin to establish the natural aesthetic appeal of the area for visitor enjoyment.

Multiple CPA categories Open space, recreation, passive

Has community support Survey results:

Frequently visited open space site, OSRP 2022,(p 82)

Importance of maintaining open space

Protect scenic quality,

Control of invasive species OSRP 2022 (p 80) as above

Protect currently owned town assets

Baileys Hill is Nahant's largest open space wooded area. In the past, neglecting this area has created considerable damage to the ecology of Nahant's natural resources. It is long past due that open spaces in Nahant adopt up to date management plans to ensure sustainability, security and aesthetic appeal.

Stimulate other projects

Following the approval at Town Meeting 2021 of Phase One of this project, involving the East Slope of Fort Ruckman of Bailey's Hill Complex, a second project was approved by

Town vote in 2022 to eliminate the invasive species on the South Hill of Bailey's Hill Complex, in a CPC grant submitted by the Town of Nahant. CPC FY 2023 Bailey's Hill Restoration (See Figure One) Realistic and successful eradication of invasive species involves years of successive work, employing a variety of techniques. Further work will be needed to restore the adjacent areas of this north hill in the future. These projects are small steps in a wider town effort to introduce sustainable open space management that addresses our specific coastal climate change issues. The ongoing work of our DPW and Open Space and Recreation Committee through management in Bailey's Hill and Lodge Park will generate a change in the way Nahant plans for management of its public spaces in the future.

		Single Year Projects - Anticipated Costs				
Project Timeline	Fiscal Year*	Stipend Request Guideline #3	Professional Services	Total of CPC Funds Requested	Other Funding Sources	Total Cost
	2024					\$38,690
Sub Totals						
		Refer To Appendix B			Total	\$38,690

If your project is expected to continue over **more than one year**, detail the project's cost on the following chart (explanation may be attached on a separate sheet).

		Multiple Year Projects - Anticipated Costs				
Project Timeline	Fiscal Year*	Stipend Request Guideline #3	Professional Services	Total of CPC Funds Requested	Other Funding Sources	Total Cost
Prior year						
First year						
2nd year						
3rd year						
4th year						
Sub Totals						
Project Total						

* **Note:** The fiscal year begins on July 1 of a given year and ends on June 30 of the following year.

Grant Application (cont.):

Other Funding Sources: Include total amount and all funding sources including any potential grants or gifts. List all sources approached even if denied funds.

List of independent funding sources		
Funding Source		Amount of Grant / Gift
1.		
2.		
3.		
4.		
Total		

8) For Acquisition projects, attach appraisals and agreements, if available. Please indicate name of present owner and attach a copy of most recent deed. In addition to property address, please provide Nahant assessor's office identification (Map, Block and Lot number). N/A

9) Coordination: If the project is dependent upon one or more other projects, identify them and indicate what the relationship(s) are among the projects. If the project is not dependent upon, but should be linked to one or more other projects, identify them and indicate the proposed relationship.

As previously stated, this is Phase Two of project begun on Fort Ruckman area of Bailey's Hill Complex, funded by CPC FY 2021. It is anticipated that continued control of invasives and stabilization work will occur in the Spring of 2023. The Phase Two work of further invasive control and planting of native species would begin in the Fall of 2023. The Phase Two project is a continuation of the already established goals set forth in Phase One, which have not yet been achieved.

10) Previous Town Meeting Action: If the project has previously been included in the Warrant of a Town Meeting, indicate the year, warrant article number, and Town Meeting action.

FY2021 Bailey's Hill Complex-Fort Ruckman East Slope Restoration
(Appendix A)

Grant Application (cont.):

11) Project Priority: If you are submitting applications for more than one project, indicate the priority of this project recognizing that your most important project may not be needed or be ready for action until two or three years from now. **N/A**

12) Time Sensitivity: Describe any time sensitive critical issues that may impact the ability to protect the resource or otherwise impact schedule and/or grant making decisions. See #13.

13) Contingency Planning: What are the consequences if CPA funding is not available for the current fiscal year? Describe alternate plans for temporary stabilization, long term solution.

If funding is not available, the DPW will maintain the area as best as possible, until funding established. This project is dependent on further invasive plant removal and replanting of area with native species. Without this further work, the area will revert to its previous state of uncontrolled invasive and destructive vegetation.

List of Appendices and Figures

Appendix A.	FY 2021 Bailey's Hill Complex-Fort Ruckman East Slope Restoration
Figure One	Bailey's Hill Complex
Figure Two	Signage at work site and Heritage Trail marker
Figure Three	Walkway and Gardner Battery area
Figure Four	Slope Stabilization
Figure Five	View of current project from above Gardner battery
Appendix B	Parterre Proposal

Grant Application (cont.):

Appendix A: Project Description of Phase One Project.

**Town of Nahant
Community Preservation Committee**



Grant Application FY 2021

Applicant: Ellen Antrim

On behalf of Nahant Open Space and Rec Committee

Application Purpose:

Applicant's address and phone number:

267 Nahant Rd Nahant MA 01908

978-985-6078

(please select all that apply)

xx ☒ Open Space

☐ Community Housing

☐ Historic Preservation

☐ Recreation

Town committee or board (if applicable):

1) Project Name: Bailey's Hill Complex--Fort Ruckman East Slope Restoration

2) Project Description:

Funding is for the design, engineering, permitting and construction of the ecological restoration and access improvements to the area east of gun turret at Fort Ruckman area of Bailey's Hill complex.

Scope of project:

Remove debris (asphalt/bricks/construction fill) from area east of gun turret closest to Oceanview/Pond Beach.

Grade and install hardscape and or retaining walls as needed. (per Engineering Design).

Installed foot path to allow pedestrian flow with the adjacent heritage trail path with retaining steps for safe walking.

Restore natural ecological landscape by planting native vegetation which will also provide stability and prevent erosion.

[A0282585.6]

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Grant Application (cont.):

Figure One

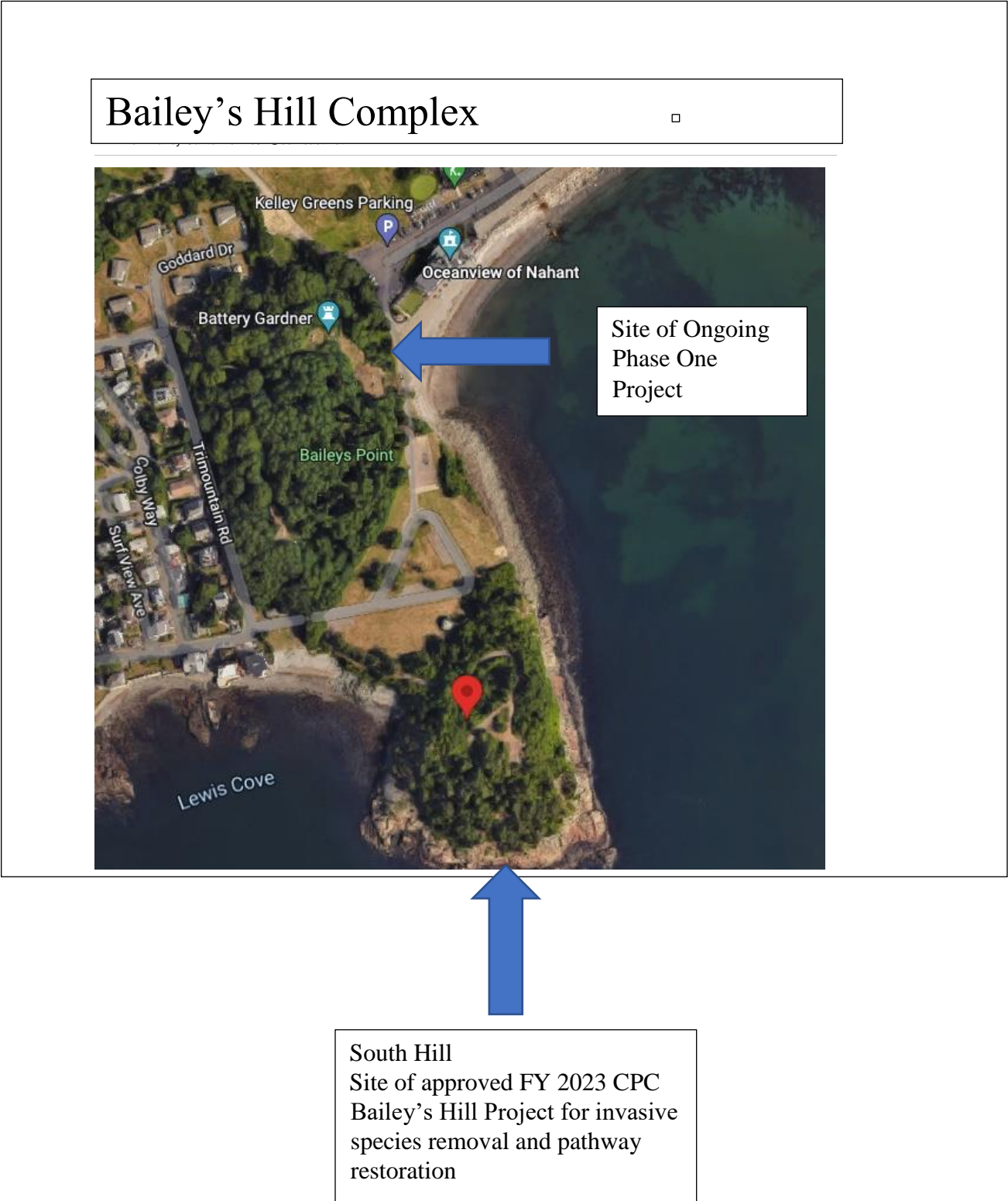


Figure Two

Sign at beginning of work site
FY 2021 Project



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Heritage Trail
marker at base of
path leading up the
hill to Gardner
Battery area.

Figure Three

Path to upper level showing area cleared of debris, securement of Gardner Battery area and retaining walls



Figure Four

Slope with stabilization



Net covering used for stabilization of slope with recent growth of newly planted native grasses

Figure Five



View of area from above Gardner Battery

Grant Application (cont.):
Appendix B



PROPOSAL

Date: 1/23/2023

Mailing Address:

Trish Aldrich
334 Nahant Rd.
Nahant, MA 01908

Site Address:

[Nahant-Bailey's Hill Park]
0 Willow Rd.
Nahant, MA 01908

Native Tree, Shrub & Perennial Wildflower Planting - Proposal #9452

Dear Trish:

I am pleased to present you with this proposal for the property at 0 Willow Rd. in Nahant. We look forward to providing you with expert native plant restoration strategies. Native plants to be installed for this project are listed in the following proposal.

SCOPE OF WORK

- Site preparation, layout, and any necessary field adjustments based on site conditions
- Procurement, purchase, delivery, and installation of all material to project site
- Leaf mulch for planted areas (as indicated in proposal)
- Remove and recycle all debris generated by project

TERMS

- Included with these services is a one-year warranty on the plant material as described in the attached Addendum
- Any work that is beyond the project scope outlined above will be considered an additional service and will be proposed in a separate Scope of Work

Prices within this proposal are final. Changes in scope or cost may occur after excavation begins and subterranean obstacles are found that could require additional excavation equipment services and labor. If such circumstances arise the contractor will notify the client immediately with an evaluation and proposed change order. The client is responsible for labor costs incurred until that point and for any materials used that cannot be returned.

Please review the proposal and the attached addendum. This proposal and pricing within is valid for a period of three (3) weeks from the proposal date. If you have comments or questions, please contact me. To begin work we will need a signed proposal and a **deposit of 50%** returned to our office. I am looking forward to working with you on this project.

Sincerely,
PARTERRE ECOLOGICAL

Miles Hilton Connors
Director of Ecological Services
mconnors@parterreecological.com

2 Republic Rd. / N. Billerica, MA 01862 / P: (617) 492-2230 / info@parterreecological.com

Grant Application (cont.):



PARTERRE
ECOLOGICAL

Native Plant Restoration

\$26,550.00

**Native Tree, Shrub, and Perennial
Wildflower Planting**

\$26,550.00

Installation of native tree, shrub, and perennial wildflower species as described in the following plant list. As we develop the planting plan we will detail the layout of native species included in this list, with the expectation that there will be a planting of tree, shrub, grasses and perennial species along the lower stone wall, perennial wildflowers on the conservation slope, and intermittent tree and shrub species near seating areas.

PLUG: Aquilegia canadensis, Eastern Columbine	100.0	2"
Arctostaphylos uva-ursi, Bearberry	20.0	1 Gallon
Aronia melanocarpa, Black Chokeberry	7.0	5 Gallon
PLUG: Asclepias tuberosa, Butterfly Milkweed	200.0	2"
Comptonia peregrina, Sweetfern	25.0	3 Gallon
Panicum virgatum, Switchgrass	50.0	1 Gallon
Myrica pensylvanica, Northern Bayberry	25.0	3 Gallon
Nyssa sylvatica, Tupelo	1.0	7 Gallon
Pinus rigida, Pitch Pine	1.0	5 Gallon
Prunus maritima, Beach Plum	25.0	3 Gallon
Quercus alba, White Oak	2.0	2-2.5" Caliper
Rosa virginiana, Virginia Rose	25.0	1 Gallon
Schizachyrium scoparium, Little Bluestem	50.0	1 Gallon
PLUG: Solidago sempervirens, Seaside Goldenrod	100.0	2"
Viburnum lentago, Nannyberry	5.0	1 Gallon
Leaf Mulch	10.0	CY
Fertilizer: BioPlex 5 in 1	1.0	1 lb
Delivery Plants	100.0	\$

2 Republic Rd. / N. Billerica, MA 01862 / P: (617) 492-2230 / info@parterreecological.com

Grant Application (cont.):



PARTERRE
ECOLOGICAL

Invasive Plant Management **\$10,155.00**

Invasive Plant Management Visit **\$10,155.00**

Schedule (3) independent invasive plant management visits over the season, in spring, summer, and late summer. At each visit, Field Technicians who maintain Massachusetts Pesticide Applicators licenses and are trained in the identification of invasive plant species will complete prescribed management strategies, including manual hand-pulling, cutting, and plant-specific herbicide application techniques. We will treat identified invasive plant species, including Bittersweet, Black Swallow-wort, Japanese Knotweed, among other species.

Herbicide: (Glyphosate based)	48.0	OZ
Herbicide Recovery: per visit	1.0	1
Eco Disposal Fee	1.0	CY

Project Management **\$1,985.00**

Initial site visit, client communication, and scheduling.

Project Management **\$1,985.00**

Total	\$38,690.00
Tax	\$0.00
GRAND TOTAL	\$38,690.00

Grant Application (cont.):