

CPA PROJECT APPLICATION FORM

[CPC Use Only: Date Received _____ By: _____]

Assigned CPC #2019-06]

1. a) Applicant Name and Organization: **Funch, Paul**

Organization: **Groton Trails Committee**

b) Regional Project: Yes ___ No X

2. Submission Date: March 15, 2018

3. Applicant Address: 92 Reedy Meadow Rd.
Groton, MA 01450

4. Ph. #: 978-448-2813 e-mail: pgfunch@verizon.net

5. CPA Purpose. Check all that apply:

Community Housing: Historic Preservation: Open Space: Recreation: X

6. Town Committee or boards participating: Groton Trails Committee

7. Project Location/Address: Eastern side of Nashua River between Rte. 225 and Fairgrounds/Hazel Grove

8. Project Name: **Marion Stoddart Riverwalk, Phase 1**

9. Additional Responsible Parties:

Role	Name	Address	Phone	e-mail
Landowner, Lawrence Woods Parcel	Groton Conservation Trust (GCT) Ted Lapres, President	P.O. Box 395 Groton, MA 01450	978- 302- 7938	laprested@ gmail.com
Landowner, Groton Fairgrounds / Hazel Grove	Town of Groton Park Commission, Manager Evan Boucher, Chairman	173 Main St. Groton, MA 01450	978- 732- 1893	parks@ townofgroton.org
Landowner, Parcel "A" of Partridgeberry Woods Subdivision	Robert Taisey, Trustee Taisey Family Nominee Trust	460 Mountfort Rd. N. Yarmouth, ME 04097		
Holder of Conservation Restriction (CR) on Parcel "A"	Town of Groton Conservation Commission John Smigelski, Chairman	173 Main St. Groton, MA 01450	978- 448- 1106	conservation@ townofgroton.org
Civil Engineering & Environmental Consulting Firm	TBD	TBD	TBD	
MA Licensed Archaeologist	TBD	TBD	TBD	TBD
Trail Design Company	TBD	TBD	TBD	TBD
Project Manager	Paul Funch	92 Reedy Meadow Rd. Groton, MA 01450	978- 448- 2813	pgfunch@ verizon.net

10. As appropriate, indicate if proposal requires P&S agreement: Deed: Option agreement:
Other-describe: Consent of the following landowners and Conservation Restriction (CR) holder is required for this project (design phase of the Marion Stoddart Riverwalk) to proceed:
- a.) Groton Conservation Trust (Attachment G)
 - b.) Town of Groton Park Commission (Attachment H)
 - c.) Groton Conservation Commission, which holds CR on Parcel "A" (Attachment I)
 - d.) Taisey Family Nominee Trust for Parcel "A" of Partridgeberry Woods subdivision (Attachment J; approval pending)
11. a.) Assessor info. (map/block): Parcel "A" - 217-34; GCT - 218-7; Town of Groton - 217-79
b.) Tax classification type: RA
12. Permits required: Necessary permits and approvals are the output of this project. No permits or approvals (other than from landowners) are required for this design phase of the project to be carried out.
13. Historic Commission Approval signoff (when required): approval not required by Groton Historic Commission
14. Funding:
- a.) Requested from CPC: Not-to-Exceed estimate is \$19,200 (Attachment L)
 - b.) Committed from other sources: Trail design work is not an allowable expense under the Department of Conservation & Recreation (DCR) Recreational Trails Program (RTP) grant program. Therefore, no other grant funds are available for the design phase of this trail project.
 - c.) Annual anticipated total income: \$0
 - d.) Annual anticipated total expense: \$0
 - e.) Anticipated net income (loss): \$0
 - f.) Estimators names/companies: Paul Funch / Project Manager; Dick O'Brien, Conservation Works, LLC; Dan Wolfe, Ross Associates, Inc.; Michael Roberts, Licensed MA Archaeologist
15. CCP Objectives:
- OSRP 8.3 Provide recreational opportunities for all Groton residents
OSRP 9.3.3 Update facilities to meet Americans with Disabilities (ADA) requirements
OSRP 9.3.4 Explore developing a river walk along the Nashua and Squannacook Rivers
16. Project Timelines:
- Proposed Start Date: July 1, 2018
Projected Completion Date: November 30, 2018
17. Estimated Delivery Date of Completion Report to CPC: December 2018

18. Project description and explanation (attach additional sheets as needed):

The proposed Marion Stoddart Riverwalk will be only the second non-paved trail in Groton that will be designed for use by people of all abilities. This trail will meet Americans with Disabilities Act (ADA) requirements and will provide access for people of all abilities to a rich natural landscape as well as beautiful views of the Nashua River that is a source of great pride to Groton. The proposed multi-use trail will provide a safe and spectacular recreational experience along the Nashua River for all, including parents with children in strollers, individuals in wheelchairs, anyone needing a flat stable surface upon which to travel, bicyclists, and equestrians on horses. The trail will also, by its name and by informational signage that will be placed on an observation deck along the trail, pay tribute to the decades-long work performed and inspired by Groton resident Marion Stoddart in restoring and protecting the Nashua River Watershed and by her leadership of many regional conservation efforts over the years. All of these aspects of the Marion Stoddart Riverwalk fully meet the criteria listed in Groton's Open Space and Recreation Plan in paragraphs 8.3, 9.3.3, and 9.3.4 and will provide a unique recreational and educational opportunity that will be accessible to all.

This request for funding is for only the design and permitting of this trail project, referred to as Phase 1. The products of Phase 1 will be a detailed specification for actual construction of the trail and its ancillary structures (bridges, rest areas with benches, observation deck, handicapped parking lots at both ends of the trail, fencing, and signage) by a landscape firm as well as the securing of all necessary permits and approvals for the construction phase. It is anticipated that Phase 1 will be completed by the end of 2018. The products of Phase 1 will be used in 2019 to prepare applications to several funding sources to support the actual construction, or Phase 2, of the Marion Stoddart Riverwalk project. Phase 2 could begin as early as July 2019 and is expected to be completed by early 2020.

The proposed Riverwalk will extend from Rte. 111 (Long Hill Rd.) to the Groton Fairgrounds, a distance of slightly over a mile in length (Attachments A through C). The main tread width will be nominally six feet wide and will consist of a customized crushed rock 3/8" minus aggregate (a specific "stone dust" material that is well suited to this type of application) that will be compacted to a depth of six inches. It is likely that two-foot-wide tapered shoulders consisting of the same material will be added on each side of the trail so that it will be nominally 10 feet wide. This identical design has worked very well for the 0.22-mile long John Tinker Trail in Rich State Forest off Nod Rd. (Attachment D) that was built in December 2015 with funds from both a Massachusetts Recreational Trails Program grant and from our previous CPA project (2015-01). However, the final decision on trail design will depend upon the results of trade-off analyses performed by the trail design firm that will be hired in Phase 1.

The proposed trail will be built predominantly along the existing undeveloped trail that goes from Rte. 111 to the Fairgrounds to the north (Attachment C). Re-routing of some short trail sections may be necessary to address safety or riverbank erosion concerns. However, the northernmost roughly 750 feet of the trail will be re-routed entirely off the existing trail to

minimize its footprint in the 100-year floodplain (Attachment E) and to replace the sharp turn that the existing trail takes to go to the Fairgrounds with a more gradual bend. Likewise, the southernmost roughly 150 feet of the trail will also be re-routed to avoid the 100-year floodplain (Attachment B4).

There are several paths that provide access to the existing riverside trail from Riverbend Dr. and Wintergreen Ln. (Attachment C). These connections are all part of Parcel "A" and they will also be made accessible for the 88 homeowners in the Partridgeberry Woods subdivision. While vehicles with handicap permits could park near curb cuts on Riverbend Dr. or Wintergreen Ln. to access the connecting trails, parking areas specifically for vehicles with handicap permits and handicap vans with side-loading lifts will be made available at both ends of the trail so that roads will not need to be entered or crossed to access the Marion Stoddart Riverwalk. The current parking at Groton Place, across Long Hill Rd. from the Riverwalk entrance, should be sufficient for non-handicapped parking access to the trail. At the Fairgrounds/Hazel Grove end, there is ample parking for non-handicapped access on the grass and dirt on both sides of the end of Jenkins Rd. Nevertheless, a small number of non-handicapped parking spots will be designed with the same crushed rock surface to provide a better parking surface for when rainwater creates wet and muddy conditions elsewhere (Attachment B2).

Several rest/viewing areas with benches will be provided along the trail. At these points the trail will roughly double in width so that those travelling down the trail are not impacted by those stopping to rest or to take in the views. A large "observation deck" will also be built at the edge of the Nashua River to allow greater unobstructed views of the river. Signage will be developed on the deck to tell the story of how the Nashua River supported the early settlement of Petapawag, subsequently called Groton, how the watershed became badly polluted in the 20th century, and how it was returned to the much healthier state we see it in today through the leadership of Marion Stoddart.

While it would be simpler and less expensive (due to the need for less aggregate material) to excavate the trail to a depth of six inches for a nominal width of six feet, add the crushed rock aggregate to the wide, shallow trench created, and compact the aggregate to make it level with the surrounding soil, this may not be cost-effective because of the possibility of archaeological artifacts being buried beneath the trail. The University of Massachusetts performed a Community-Wide Archaeological Reconnaissance Survey of the Town of Groton in 2010. According to this survey, essentially the entire length of the proposed trail is in an area that has the potential to contain both prehistoric and historic resources. In order to ensure that no artifacts would be impacted by excavating the soil along the trail, an Intensive Survey would be required. This is a systematic and detailed archaeological field sampling investigation conducted under permit from the State for the purpose of locating and identifying the sites that may exist in a given area. The cost of doing an Intensive Survey over the entire trail might be on the order of \$20,000 and could thus be greater than the cost of the additional aggregate material that would be required if it were put on top of the soil along the existing trail. These and other

design/cost trade-offs will need to be considered by the trail design firm. In addition, submission of a Project Notification Form (PNF) and its approval by the Massachusetts Historical Commission (MHC) will be required. The PNF will require inputs from both the trail design firm and the civil engineering design firm (both tasks could possibly be performed by a single firm, else two separate firms will be hired) in order to present the best design/cost solution that will also satisfy the MHC.

Another significant factor that will need to be considered for the trail design cost trade-offs is that there are sections of the trail near its two ends that are within the 100-year (annual chance of 1%) or 500-year (annual chance of 0.2%) floodplains (Attachments B4 and E). By the regulations of the Commonwealth of Massachusetts and the Town of Groton related to wetlands, if any material is added to an area of the floodplain then an equal amount of material must be removed from the nearby floodplain. To address these issues, the services of a civil engineering design firm will be required to prepare a Notice of Intent (NOI) for the Conservation Commission's approval. This NOI will provide the results of surveying where the floodplain and the trail corridor intersect, determining how much material, if any, will be added in those areas and where compensatory removal of material may need to be performed, and much other information required by the NOI.

There are at least three areas where bridges will be required and one where an observation deck will be built along the trail. One bridge site is near the mid-point of the trail where a deep ravine carries run-off from heavy rains into the Nashua River (Attachment E). There are also changes in elevation along this section of the trail that will require the approaches to the bridge to be sloped at grades that are appropriate for accessibility. The other two bridge areas are near the two ends of the trail, as noted above. These bridges will require footings to be installed in the ground about every 10 feet. The observation deck will be built near the mid-point of the trail and will require 12-15 footings to be installed, depending on its size. Therefore, in these three areas, Intensive Surveys will need to be performed. Furthermore, if Intensive Survey testing revealed a significant number of artifacts in the soil around where any of the bridges would be built, then it is likely that archaeological testing would have to continue at least to the Site Examination level. Such a Site Examination would only be performed over a limited physical area that was highlighted by the Intensive Survey, but it could be very expensive. While a rough estimate of what a possible Site Examination might cost has been included in the cost estimate for Phase 1, it is actually only a contingency cost in case artifacts are discovered during the Intensive Survey.

The final factor that will need to be considered for design and construction of the Marion Stoddart Riverwalk is whether or not this proposed project must be reviewed by the Natural Heritage and Endangered Species Program (NHESP) for Massachusetts Endangered Species Act (MESA) and Wetlands Protection Act (WPA) compliances. According to the most recent Priority & Estimated habitats (14th Edition Natural Heritage Atlas, August 1, 2017), the proposed trail does not intersect with any Priority Habitat area (Attachment F). However, there is a possibility

that before this trail is built, a newly designated Priority Habitat area or the expansion of an existing Priority Habitat area could intersect the proposed Marion Stoddart Riverwalk. In this case, the NOI submitted to the Conservation Commission would also be sent to NHESP for their review and approval.

In summary, the products of Phase 1 will be the following:

- a. A detailed design that can be used as a specification to hire a landscape firm to build the trail and its ancillary structures in Phase 2
- b. An NOI that is approved by the Groton Conservation Commission
- c. Approval of the PNF by the Massachusetts Historical Commission
- d. Determination of compliance with MESA and WPA by the Natural Heritage and Endangered Species Program if areas of Priority Habitat are identified that intersect the proposed trail

19. Feasibility:

Phase 1 of the Marion Stoddart Riverwalk project requires the approval of the three landowners and one CR holder for the parcels over which the trail will pass in order to submit this request for funding with CPA funds. As of January 18, 2018, approvals from the Groton Conservation Trust and the Groton Park Commission have been obtained (Attachments G and H). The Groton Conservation Commission, holder of the CR on Parcel "A" of the Partridgeberry Woods subdivision, has voted unanimously to support this project (Attachment I). However, the Taisey Family Nominee Trust, the owner of Parcel "A," has not yet given their approval for this project (Attachment J) due to a serious illness in their lawyer's family. We are still hopeful that their approval will be forthcoming shortly.

20. List of Attachments:

- A. USGS Map of Site
- B. Assessor's Maps of Site
 - B1. Assessor's Map of Taisey's Parcel "A" (217-34)
 - B2. Assessor's Map of Groton Fairgrounds/Hazel Grove Parcel (217-79)
 - B3. Assessor's Map of GCT's Lawrence Woods Parcel (218-7)
 - B4. Potential Re-routing of Trail in Lawrence Woods and Handicap Parking Location
- C. Area Trail Map
- D. John Tinker Trail in Rich State Forest
- E. Floodplains in Project Area
- F. Priority Habitat
- G. Letter of Support from Groton Conservation Trust
- H. Letter of Support from Park Commission
- I. Letter of Support from Groton Conservation Commission
- J. Letter of Support from Taisey Family Nominee Trust (pending)
- K. Letter of Support from Groton Commission on Accessibility
- L. Project Manager's Cost Estimate

21. Additional Information: None

22. Management Plan:

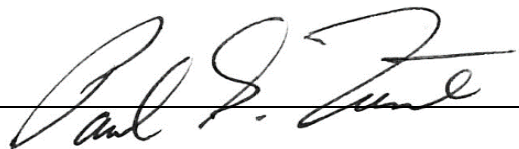
Paul Funch will act as Project Manager for this project. He is Chairman of the Groton Trails Committee and a member of the Montachusett Regional Trails Coalition. He took a two-day hands-on course in building accessible/sustainable trails at Crotched Mtn., New Hampshire in October 2013. He was the Project Manager for the Nashua River Accessible Trail CPA project (2015-01), known as the John Tinker Trail.

The trail design contractor that is selected to prepare the detailed design of the trail and its ancillary structures (bridges, rest areas with benches, observation deck, handicapped parking lots at both ends of the trail, fencing, and signage) will be one that has experience with multi-use and accessible trail design and construction as well as experience with the historical and environmental permitting processes required by this project.

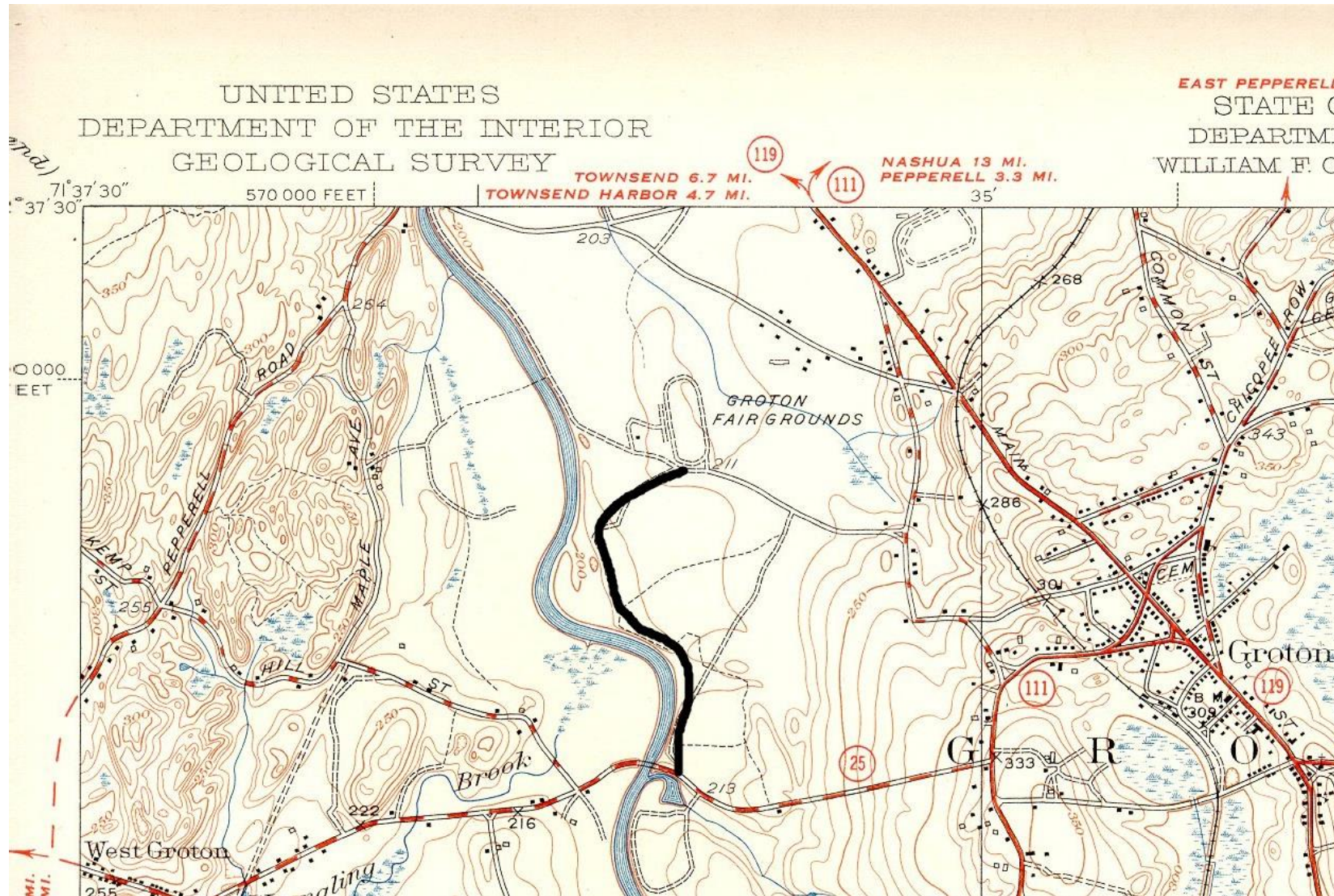
If a trail design contractor cannot be identified that also has expertise and experience with preparing NOIs then a separate civil engineering contractor will be selected to prepare the NOI, in coordination with the trail design contractor.

According to the Uniform Procurement Act, at least three quotes must be solicited for service contracts between \$10,000 and \$34,999. Working with the Town of Groton, we will identify the best-priced offer from a responsible contractor offering the quality of service needed. Monitoring of the contractors will be performed by the Project Manager.

23. Applicant Signature:

A handwritten signature in black ink, appearing to read "Paul J. Funch", is written over a horizontal line.

Date: 1/18/2018



Attachment A. USGS Map of Site

The map shown above is the top left corner of the Ayer NW Quadrant map. The location of the proposed Marion Stoddart Riverwalk is shown in black.



Attachment B1 – Assessor’s Map of Taisey’s Parcel “A” (217-34)

The location of the proposed Marion Stoddart Riverwalk is shown in red. Parcel boundary is in blue.



Green = Riverwalk Trail; stone dust
Red = Handicap Parking (20'x50'), 2 vans with aisles, 2 cars; stone dust
Blue = Non-handicap parking (20x54'), 6 cars; stone dust

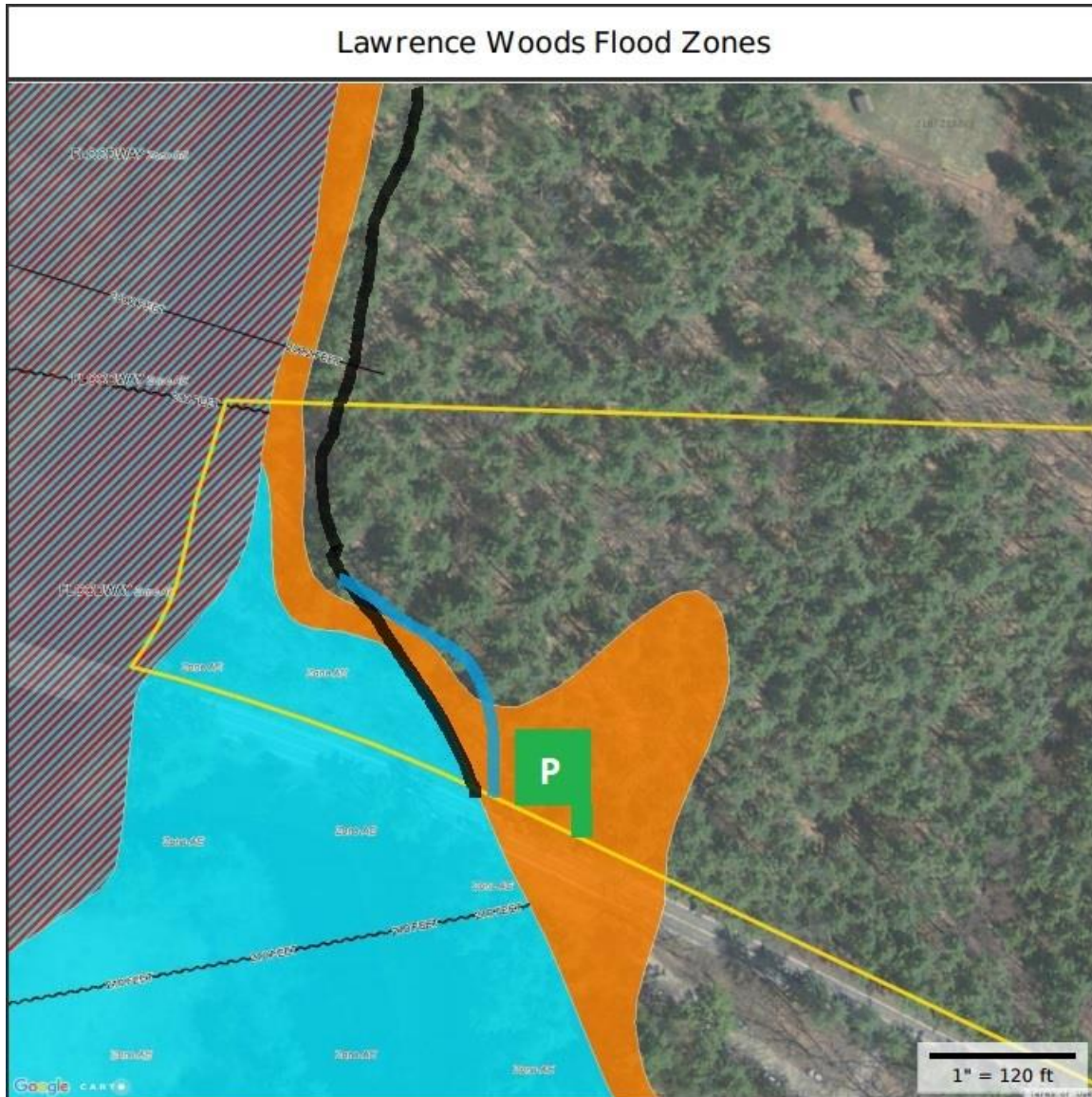
Attachment B2. Assessor's Map of Groton Fairgrounds/Hazel Grove Parcel (217-79)

Map on left shows the entire parcel. Map on right shows southwest corner of parcel where Marion Stoddart Riverwalk will terminate and parking will be provided.



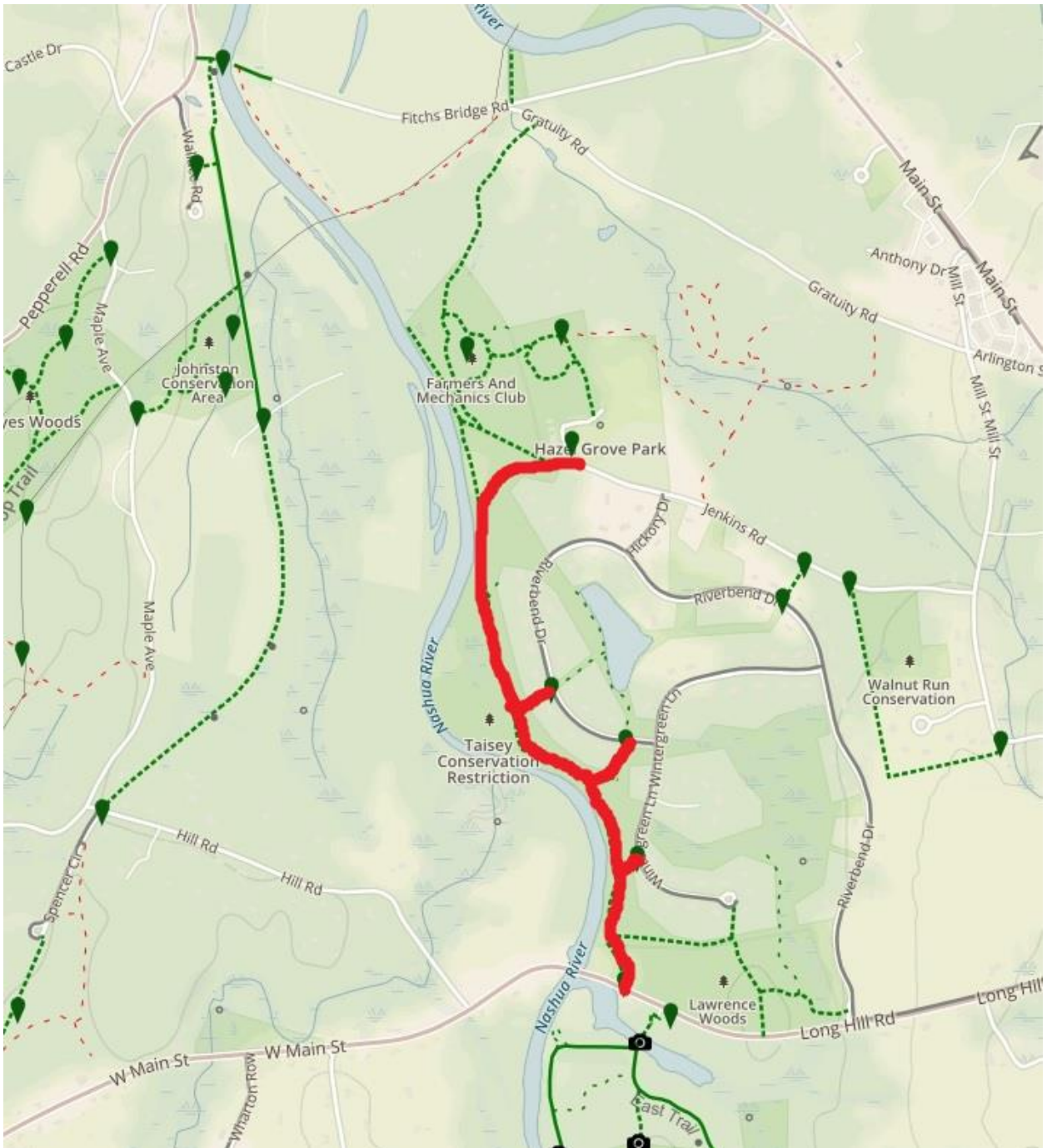
Attachment B3. Assessor's Map of GCT's Lawrence Woods Parcel (218-7)

The location of the proposed Marion Stoddart Riverwalk is shown in red. Parcel boundary is in blue.



B4. Potential Re-routing of Trail in Lawrence Woods and Handicap Parking Location

The 1% annual chance ("100-year") floodplain is shaded in aqua. The 0.2% annual chance ("500-year") floodplain is shaded in orange. The existing trail is shown in black and the proposed re-routing is shown in blue. The location of the proposed handicap parking area is shown notionally by the green square.



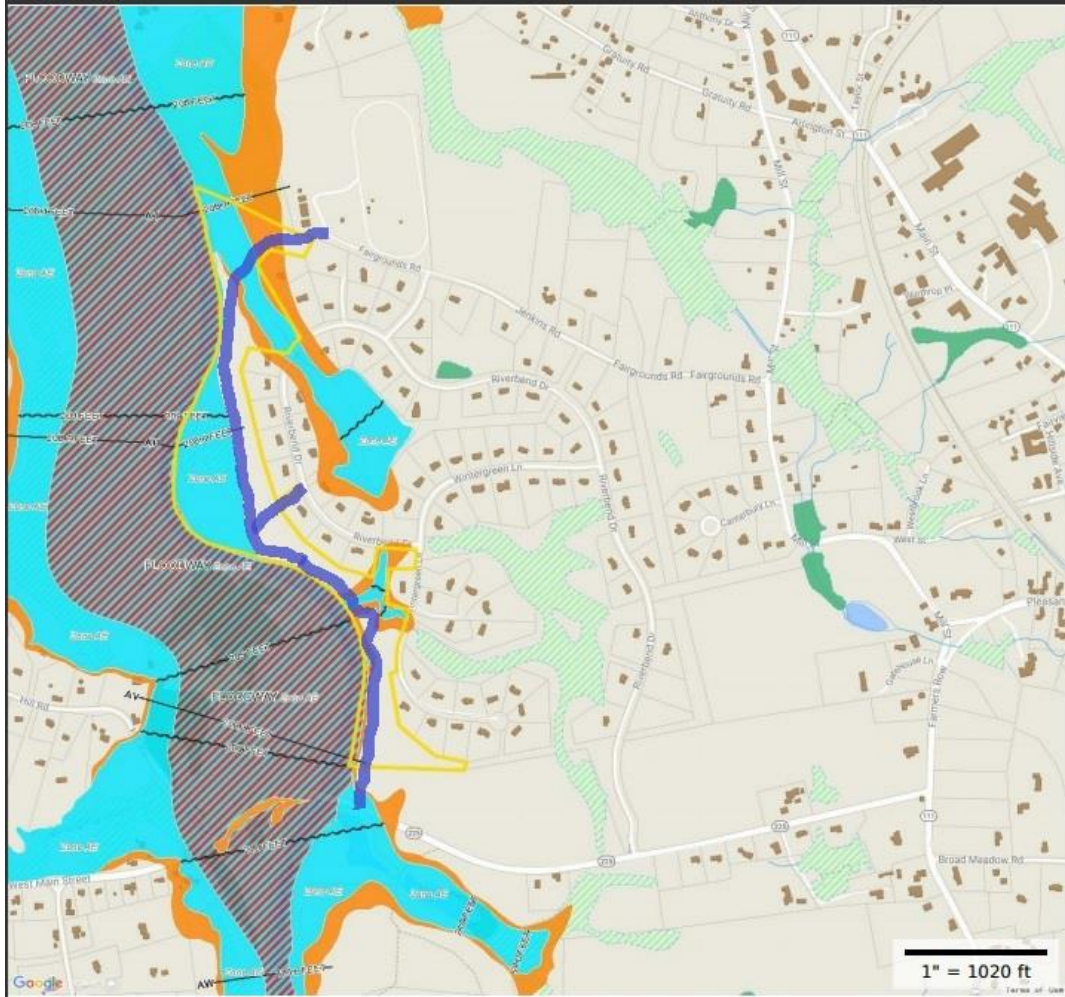
Attachment C. Area Trail Map

Proposed trail, shown in red, extends from Long Hill Rd. (GCT's Lawrence Woods) at the southern end to Jenkins Rd. (Park Commission's Fairgrounds/Hazel Grove at the northern end. Existing trail connections with neighborhood streets are also shown; these are proposed to be made accessible as well.



Attachment D. John Tinker Trail in Rich State Forest

Clockwise, from top left: a) Crushed rock tread, nominally 10' wide; b) rest area with bench; c) terminus of trail with bench and handicap picnic table; d) view of Nashua River ox bow from terminus.



Attachment E. Floodplains in Project Area

The 1% annual chance (“100-year”) floodplain is shaded in aqua. The 0.2% annual chance (“500-year”) floodplain is shaded in orange. The proposed trail is shown in dark blue.



Attachment F. Priority Habitat

Priority Habitat, indicated by green shading, is near, but not in, the project area, which is to the right (east) of the Nashua River. The proposed trail is shown in black.



P.O. Box 395
Groton, MA 01450

gctrust.org

January 4, 2018

Bruce Eason, Chair
Community Preservation Committee
Town of Groton
173 Main St
Groton, MA 01450

Dear Mr. Eason,

The Groton Conservation Trust (GCT) is a private land trust with a more than 50-year history that owns over 1,400 acres in Groton. The GCT is dedicated to protection, management, and provision of public access to natural lands in town. One of the GCT's parcels, Lawrence Woods, is located on the eastern bank of the Nashua River on the north side of Long Hill Road (Route 225). The Groton Trails Committee has approached the GCT regarding our interest in a handicapped accessible trail that would affect our parcel and a number of properties to the north. The proposed trail would be named in honor of Marion Stoddart and would be compliant with relevant rules of the Americans with Disabilities Act (ADA). In addition to a small portion of the trail itself, GCT's parcel is proposed for a small parking lot suitable for three vehicles and dedicated to handicapped access.

The GCT supports the concept of the Marion Stoddart Trail as consistent with its mission as well as an important enhancement of our community. We applaud the work of the Groton Trails Committee and believe that the extensive trail network improves the quality of life for Groton residents and encourages both visitors and new residents. The Marion Stoddart Trail would contribute a new and valuable feature to the trail network. For this reason, we offer our support to the project and encourage the Community Preservation Committee to provide financial support to the design phase of the project.

We note that the GCT has acquired the Lawrence Woods parcel with a set of restrictions on its use and potential development. In addition, the GCT granted a Conservation Restriction to the Town of Groton in 2012 pursuant to the statutory provisions of Chapter 184, which Restriction was approved by the Massachusetts Secretary of Environmental Affairs. We have reviewed those restrictions and believe that none of them represents an impediment to the proposed trail, parking lot, or their anticipated use. The proposed construction of an unpaved parking lot will require notice to the Town of Groton and approval by the Town of Groton. If the GCT approves the final design, the GCT will follow the necessary procedures for obtaining approval from the holder of the Conservation Restriction.

While the GCT supports this project, we do have two concerns: 1) Although the GCT may be prepared to grant permission for the construction of a trail, the GCT is not prepared to accept permanent open-ended responsibility for the maintenance of such a trail in accordance with all applicable standards and requirements; rather, the GCT would seek a commitment from the Town of Groton to cover all such costs and obligations; and 2) We are concerned that the

parking lot could adversely affect the quality of the Lawrence Woods parcel as viewed from Long Hill Road. We have raised these concerns with the Groton Trails Committee and, based on our long experience working with them, are optimistic that they will be resolved during the design process.

The GCT appreciates the work that the Community Preservation Committee does and its attention to this matter. If you have questions for us, please do not hesitate to contact either of signatories.

Sincerely,



Ted Lapres
President



Mark Gerath
Vice President

cc: Paul Funch, Groton Trails Committee



January 12, 2018

Groton Park Commission
173 Main Street
Groton, MA 01450

Groton Community Preservation Committee
173 Main Street
Groton, MA 01450

RE: Marion Stoddart Riverwalk

Dear CPC Members,

The Groton Park Commission voted at the January 9, 2018 meeting unanimously to support the CPC application for the design of the Marion Stoddart Riverwalk submitted by the Groton Trails Committee.

Sincerely,

Kenneth Bushnell, Chair
Evan Boucher Vice Chair
Robert Flynn
James Gaffney
Timothy Siok

CC: Paul Funch, Groton Trails Committee



TOWN OF GROTON
Groton Conservation Commission

173 Main Street
Groton, MA 01450-1237
(978) 448-1106
Fax: 978-448-1113
ngualco@townofgroton.org

Memorandum

TO: Robin Eibye, CPC Administrator
FROM: Nikolis Gualco, Conservation Administrator
DATE: January 16, 2018
RE: Conservation Commission support of Trails Committee Marion Stoddart Riverwalk at Partridgeberry Woods.

At its regular meeting on December 12th, 2017 the Conservation Commission reviewed and considered comments it received during a previous Commission meeting (November 28th, 2017) as well as those included in a petition created by the Partridgeberry Homeowners dated December 11th, 2017. After a discussion, the Conservation Commission voted unanimously to endorse the Marion Stoddart Riverwalk as proposed by the Groton Trails Committee.

The Conservation Commission owns the Conservation Restriction on this property, which specifically permits the construction of trails so long as the landowner (Taisey Family Nominee Trust) provides prior approval as to the location and design. As of today, the Commission has send two letters to the Taisey Trust to no response. Until a response is secured from the landowner, the Commission can take no further action.

Thank you.

Approval for this design/permitting phase of the Marion Stoddart Riverwalk project from Mr. Robert Taisey, Trustee for the Taisey Family Nominee Trust, is pending.

Attachment J. Letter of Support from Taisey Family Nominee Trust



TOWN OF GROTON
COMMISSION ON ACCESSIBILITY
173 Main Street
Groton, Massachusetts 01450

January 18, 2018

Community Preservation Committee
Town of Groton
173 Main St.
Groton, MA 01450

Dear Members of the Committee:

The Groton Commission on Accessibility met with Paul Funch of the Trails Committee on January 8, 2018 to discuss the proposed design of the "Marion Stoddart Riverwalk," to be located on conservation land along the Nashua River. The trail will extend from Long Hill Road, on property owned by the Groton Conservation Trust, to Jenkins Road on the Fairgrounds owned by the Town of Groton Park Commission. The trail will cross a parcel of open space, subject to a conservation restriction held by the Conservation Commission. The land subject to the conservation restriction was dedicated with public access as part of the grant of the special permit for the Partridgeberry Woods subdivision in 1988.

The Commission on Accessibility voted unanimously to support the application submitted by the Groton Trails Committee for a grant to design the universally accessible trail. The Commission is very supportive of all means of pedestrian access including access for recreational use in such a scenic location. The project is in keeping with the Goals and Objectives of the Comprehensive Master Plan adopted in 2012 including the goals, "To continue to ensure that Groton's roads, trails, and sidewalks are safe and accessible for all users" and "To improve accessibility and universal designs for trails."

Commission members frequently use the accessible John Tinker Trail on the Harry Rich State Forest and expressed enthusiasm for the Trails Committee's initiative to design a similar trail. The Commission urges you to act favorably on the Trails Committee request for funding the proposed design of the universally accessible trail.

Very truly yours,

A handwritten signature in cursive script that reads "Michelle Collette".

Michelle Collette
ADA Coordinator

cc: Paul Funch, Trails Committee

Attachment K. Letter of Support from Groton Commission on Accessibility

Trail Design Contract*	\$4,000
<ul style="list-style-type: none"> - Site visits and surveys - Mapping work - Design of trail and tread - Design of ancillary trail structures <ul style="list-style-type: none"> o Bridges o Observation deck o Rest areas and benches o Fences o Signs o Handicap parking areas - Detailed Design Specification - Meetings with Trails Committee - Public outreach 	
Civil Engineering Contract#	\$5,000
<ul style="list-style-type: none"> - Site visits and surveys - Mapping work - Preparation of Notice of Intent (NOI) - Presentation and meetings with Conservation Commission 	
Licensed Archaeologist Consulting I^	\$3,500
<ul style="list-style-type: none"> - Intensive Archaeological Survey of bridge and deck sites, based on trail design - Project Notification Form (PNF) preparation 	
Licensed Archaeologist Consulting II (necessary only if Intensive Archaeological Survey finds artifacts)^	\$3,500
<ul style="list-style-type: none"> - Site Examination if Intensive Survey finds artifacts - PNF preparation 	
20% Contingency	<u>\$3,200</u>
Total	\$19,200

* Estimate assistance by Dick O'Brien, Conservation Works, LLC, North Hatfield, MA

Estimate assistance by Dan Wolfe, David Ross Associates, Harvard, MA

^ Estimate assistance by Michael Roberts, Archaeologist, Groton, MA

Attachment L. Project Manager's Cost Estimate