



**United States Department of the Interior**

NATIONAL PARK SERVICE  
Minute Man National Historical Park  
174 Liberty Street  
Concord, Massachusetts 01742



1A2 (MIMA)

March 13, 2023

Ann Clifford, Senior Planner  
Concord Planning Division  
Town of Concord  
P.O. Box 535  
Concord, MA 01742

Re: Great American Outdoors Act Projects, Programmatic Review Package #3 Landscapes and Trails  
Third Submission, Minute Man National Historical Park, Concord, Lexington, Lincoln, MA

Dear Ms. Clifford,

In adherence with the stipulation IV(c)(2) of the *Programmatic Agreement Between the National Park Service, Minute Man National Historical Park and the Massachusetts Historical Preservation Officer Concerning Implementation of a Strategic Facilities Plan to Eliminate Deferred Maintenance Within the Park* (PA), Minute Man National Historical Park (Park) is pleased to provide you and the other consulting parties to the PA with this draft Construction Design (CD) package for review covering the Battle Road and trails portion of the Great American Outdoors Act (GAOA) projects at Minute Man National Historical Park. This augments the schematic design packages which were sent to your office on June 17, 2022.

The project is currently ready to contract. The chosen contractor will be expected to further refine the design using as the basis of their work these plans, the result of archeological investigation, a review of drainage needs, and park and partner input on minimizing impacts to natural, landscape and archeological resources. The final design is expected to be substantially similar to the current design with small changes in the location or number of drainage features. Work at the Battle Road/North Bridge Trail may be reduced in scope. The following provides additional updates to sections of the proposed trail work, including the next phase of archeological testing.

**North Bridge**

Public Archaeology Lab (PAL) completed standard test pit (STP) archeological testing at the Battle Road/North Bridge Site, path leading to the North Bridge, and the North Bridge Landscape surrounding The Minute Man statue and 1836 Battle Monument in December 2022 and January 2023. A summary of the work will be produced after metal detecting is completed within this area. The work will inform the design, which will refine options for alleviating current drainage and erosion issues. We expect that this project will not have an adverse effect on archeological resources or landscape features but look forward to your comments on the current design package so that we can take them into account in the final design.



## **Battle Road and Battle Road Trail**

National Park Service (NPS) archeologist have worked closely with the design team to determine where additional archeological testing will be needed prior to beginning repairs along the Battle Road and Battle Road Trail portion of this project.

Based on current designs, the Park and PAL identified 55 standard test pit (STP) locations along the length of Battle Road Trail as shown on the attached figure. The total number of STPs may change based on minor adjustments to the design as well as the results of field investigation. The following testing strategy was used to develop the STP locations and the same methodology will be used should the final design change the number or location of drainage features.

STPs will test the following types of new features associated with the trail plan:

- swale leak offs – STPs to be located at the terminus of the leak off
- new culverts – bracketed by STPs
- new trail sections – STPs at 10-meter intervals with positive radials spaced at 5-meter intervals in keeping with transit spacing for the septic project
- new drywells – STP in proposed location
- proposed concrete structures (pads, armored drainage) – STP in proposed locations

Leak offs shallower than known disturbance (such as in areas bounded by agricultural fields) would not be tested. Leak offs and features in areas where previous testing has confirmed a lack of sensitivity were also omitted from STP planning.

Monitoring will take place in areas where it would be difficult or impossible to test before the work has started (such as at the Paul Revere Capture Site in Lincoln) as well as in landscapes which have high sensitivity, but where work is planned in areas of known disturbance, including around the Hartwell Tavern.

NPS plans to use PAL under their existing contract to complete this work.

We request your comments on this testing strategy and will provide the results after testing is complete along with a final assessment of effect for this portion of the project. Currently, we expect a no adverse effect finding.

## **Landscapes and Septic Systems**

Landscape and septic system work continues to move forward in the design phase. The *Phase I Archeological Investigations in Support of Seven Minute Man NHP Great American Outdoors Projects* (PAL 2022) was completed for a portion of this proposed work, including the proposed septic field locations. As a result of the archeological survey, NPS has decided to eliminate the Barker House from the project to protect sensitive archeological resources related to the Elm Brook Hill site. Design at the Joshua Brooks House will proceed and work to avoid the evidence of the April 19, 1775 battle. The other septic locations (Second East Quarter Schoolhouse, George Hall House, Stow-Hardy House, Inferrera House and Farm Stand, and Rego House and Garage) were found not to have significant archeological resources. We expect that the septic systems would have no adverse effect on resources associated with the historic districts in these five locations. The Joshua Brooks House project will be evaluated for an effect finding after the design is complete.



Additionally, design work on the landscape portion of the project continues. NPS archeologists are working with the team to determine what additional advanced testing will be necessary. We expect to send you the testing strategy for this work within the next month or so.

We look forward to hearing your comments and any concerns as this work progresses toward a successful conclusion. Thank you for your continued support.

Sincerely,

*Simone Monteleone*

Simone Monteleone  
Superintendent

**Enclosures:**

Figure showing proposed STP locations  
Trail Design Package

Cc: Kerry Lafleur, Town of Concord  
Margie Coffin-Brown, NPS-MIMA  
Nicole Walsh, NPS-MIMA  
Margo Brooks, NPS-NERO



SECTION 01 35 92 - CULTURAL LANDSCAPE TREATMENT PROCEDURES

PART 1 GENERAL

1.1 SUMMARY

- A. This Section includes special procedures for the treatment and protection of historic fabric within the Cultural Landscape of this Project including, but not limited to, the following:
1. Special requirements due to historic nature of site.
  2. Definitions of words and phrase pertaining to historic preservation used throughout the Contract Documents.
  3. Cultural Landscape Treatment Plan requirements.
  4. Protection and monitoring of cultural landscapes.
  5. Wetland Protection requirements per jurisdiction
  6. Protection of Cultural Landscape features.
  7. Storage and protection of historic materials.
  8. Protection during application of chemicals.

1.2 RELATED DOCUMENTS AND REFERENCES

A. Related Documents:

1. Drawings and general provisions of contract including general and supplementary conditions and Division I specifications apply to work of this section.
2. Section 01 32 33 "Photographic Documentation for Historic Preservation Projects"
3. Section 01 35 13 "Archeological Protection"
4. Section 01 56 39 "Tree and Landscape Protection"

B. References: The following specifications and standards of the organizations and documents listed in this paragraph form a part of the specification to the extent required by the references thereto. In the event that the requirements of the following referenced standards and specification conflict with this specification section the requirements of this specification shall prevail. In the event that the requirements of any of the following referenced standards and specifications conflict with each other the more stringent requirement shall prevail.

1. ANSI A 300 (Part 5) – Standard Practices for Tree, Shrub and other Woody Plant Maintenance, most current editions.
2. Pruning practices shall conform with recommendations "Structural Pruning: A Guide for The Green Industry"; Published by Urban Tree Foundation, Visalia, California; most current edition, and current International Society of Arboriculture BMPs for pruning of plant materials.
3. Glossary of Arboricultural Terms, International Society of Arboriculture, Champaign II, most current edition.

1.3 INTENT

- A. Historic Nature of the Work Site: The Contractor shall note the historical significance of the site at which the Work will be performed.
- B. Due to the historic nature of the site, certain aspects of the work of the Contract will carried out with the materials and/or methods commonplace not commonplace in the modern construction industry. Contractor may be required to match existing conditions to maintain appearance and character of existing materials.

- C. It is incumbent upon the Contractor to furnish mechanics who can and will execute first-class workmanship in the materials and methods specified, and who will take the necessary precautions to protect the elements of this historic site not scheduled to receive Work under this Contract.
- D. It is important for the Contractor to provide protection for historical assets, landscape areas, and trees within the construction zone.

#### 1.4 DEFINITIONS

- A. "Historic Fabric": all existing materials and features that define the historic character of the project site and/or structure.
- B. "Preservation": To apply measures necessary to sustain the existing form, integrity, and authenticity of a historic property. Work may include preliminary measures to protect and stabilize the property.
- C. "Rehabilitation": To make possible a compatible use for a property through repair, alterations, and additions while preserving those portions or features that convey its historical, cultural, or architectural values.
- D. "Restoration": To accurately return the form, features, and character of a property to its appearance at a particular period of time by means of the removal of features from other periods in its history and the repair and reconstruction of missing and deteriorated features from the restoration period.
- E. "Reconstruction": To reproduce in the exact form and detail a building, structure, landscape, or artifact as it appeared at a specific period in time. Reconstructed elements do not possess historic integrity in their own right since it is not original fabric.
- F. "Stabilize": To apply measures designed to reestablish a weather-resistant enclosure and the structural reinforcement of an item or portion of the building while maintaining the essential form as it exists at present. This level of intervention is aimed at retarding or arresting adverse impacts to structures. Within landscapes, this refers to the application of pruning, pest control, planting, and site amendment to retard the loss of materials.
- G. "Protect and Maintain": To remove deteriorating corrosion, reapply protective coatings, and install protective measures such as temporary guards; to provide the least degree of intervention.
- H. "Repair": To stabilize, consolidate, or conserve; to retain existing materials and features while employing as little new material as possible. Repair includes patching, piecing-in, splicing, consolidating, or otherwise reinforcing or upgrading materials. Within restoration, repair also includes limited replacement in kind, rehabilitation, and reconstruction, with compatible substitute materials for deteriorated or missing parts of features when there are surviving prototypes.
- I. "Replace": To duplicate in its entirety a historic element or feature by matching its historic pattern, detail and appearance. . Replacement is justified when original or historic elements are damaged beyond repair or are missing. Replacement methods include the following conditions:
  - 1. "Replacement with Original or Historic Fabric": Includes fabric salvaged from other locations or projects having identical architectural qualities. It means duplication of appearance using identical material possessing historical significance. When replacing plant materials, this means replacement through careful cultivation of cloned material from original plant.
  - 2. "Replacement with New Materials": Includes replacement with new material of like kind (custom fabricated or manufactured) that is currently in production. It means duplication of appearance using like material. When replacing plant materials, this refers to

replacement with a new, live specimen or the same species obtained through the nursery trade.

3. "Replacement with Substitute Materials": Includes replacement with a compatible substitute that is frequently contemporary and unlike the historic fabric. It means duplication of appearance using modern (non-traditional) material. Use of substitute materials is not approved unless matching materials are not available. When replacing plant materials, this refers to replacement with approved substitute variety with similar characteristics to the original plant material.
- J. "Remove": Means to demolish or detach items from existing construction and legally dispose of them off-site unless indicated to be removed and salvaged or removed and reinstalled. For plant materials, this means removal of the original plant in a method that eliminates as much of the plant as possible without damage to surrounding plants, structures, or other assets.
- K. "Remove and Salvage": Means to detach items from existing construction and deliver them to the NPS.
- L. "Remove and Reinstall": Means to detach items from existing construction, repair and prepare them for reuse, and reinstall them where indicated. For plant materials, this means harvesting of plant, storage and care for plant while out of the ground, and reinstallation of plant in a method which will insure future survival and vigor.
- M. "Existing to Remain" or "Retain": Existing items of construction that are not to be removed and that are not otherwise indicated to be removed and salvaged, or removed and reinstalled. Existing items to remain shall be protected throughout the Work of this Project. For plant materials, this includes protection of existing plant materials in place.
- N. "Material in Kind": Material that closely matches existing materials, through comparison of qualities and characteristics such as species, size, habit, form, foliage, bloom, fruit, and fall color.

#### 1.5 SUBMITTALS

- A. Cultural Landscape Treatment Plan: See Paragraph 1.6, A below for requirements. Submit written plan to Government as part of Division 1 submittals prior to Pre-construction Conference.
  1. Plan shall be written on Contractor's letterhead.
  2. Government will review plan and make comments.
  3. Contractor shall revise plan as many times as required to make it complete and acceptable to the Government at no additional cost to the Government.
- B. Alternative Methods and Materials: If alternative methods and materials than those indicated are proposed for any phase of work, provide a written description including evidence of successful use on other, comparable historical projects, and program of testing to demonstrate effectiveness for use on this Project.

#### 1.6 QUALITY ASSURANCE

- A. Cultural Landscape Treatment Plan: Submit a written plan for each phase or process of the Work describing in detail materials, methods, and equipment to be used. Plan shall be project specific. The purpose of the Cultural Landscape Treatment Plan is to clearly demonstrate the Contractor's understanding of both the process for implementing the specified work and the requirements for protecting the historic materials to remain, surrounding natural and cultural elements, and the public and government personnel throughout the course of the Work. Plan shall address, but may not be limited to, the following:
  1. How adjacent historic materials not scheduled for Work under this Contract will be protected throughout the process of the Work.

- a. Location of key elements within or adjacent to work zone which should be protected during construction.
- b. How elements will be protected.
- c. When protective measures will be removed.
2. How areas of Work will be accessed without damaging historic materials or park environs.
  - a. How materials will be conveyed to work areas.
  - b. How adjacent landscapes and structures will be protected during the movement of these materials.
  - c. When protective measures will be utilized
  - d. When protective measures will be removed from the landscape.
3. How surrounding landscape will be protected during demolition. This includes, but it not limited to, historic stone walls, landscape beds, trees, and lawn.
  - a. Where and what type of tree protection will be used.
  - b. Where and what type protection will be used.
  - c. What procedures will be implemented in the case of damage to landscape.
  - d. Timeframe for removal of protective measures.
4. How surrounding landscape will be protected during construction. This includes, but it not limited to, historic stone walls, landscape beds, trees, and lawn.
  - a. Where and what type of tree protection will be used.
  - b. Where and what type protection will be used.
  - c. What procedures will be implemented in the case of damage to landscape.
  - d. Timeframe for removal of protective measures.
5. If historic materials are to be removed from site during construction activity, how they will be protected during transportation and while off site.
6. If materials are to be salvaged for reuse, identify methods of evaluation, cleaning, storage, and preparation.
- B. Photographs or Videotape: See Division 01 Section "Photographic Documentation for Historic Preservation Projects" for requirements.
- C. Wetland protection coordination: Coordinate protective measures required within Wetland Boundary and Buffer with authority having jurisdiction.
  1. Refer to attached Orders of Conditions prepared by jurisdictions with authority over wetland conservation.
  2. Prior to construction and per Order of Conditions, schedule a meeting with Conservation Commission staff from surrounding Towns to review site, Orders of Conditions, and proposed phasing and construction sequence.

## PART 2 PRODUCTS [Not Used]

## PART 3 EXECUTION

### 3.1 PROTECTION, GENERAL

- A. Protect existing materials during installation of temporary protection and construction. Do not deface or remove existing materials not scheduled for work under this contract.
- B. Attachments of temporary protection to existing construction shall be approved by Government prior to installation.
- C. Unanticipated disturbance shall be approved by Government prior to commencement.
- D. Protect landscape and paving adjacent to or within work areas.

### 3.2 PROTECTION AND MONITORING OF CULTURAL LANDSCAPE

- A. All work of this contract is within a designated Cultural Landscape. The principle aim of work within this landscape is the preservation of integrity of the assets within this landscape.
  - 1. Retain as much existing material as possible; repair and consolidate rather than replace.
  - 2. Only the gentlest methods available to achieve the necessary results shall be employed.
  - 3. Use traditional replacement materials and techniques wherever possible.
  - 4. Record the existing condition before commencing with repair work; document with preconstruction photos, sketches and field notes. Record repair work during construction with periodic construction photos and daily inspection reporting. Photo documentation is specified in Division 1 Section "Photo Documentation for Historic Preservation Projects".
  - 5. Notify Government of visible changes in the integrity of plants, materials, components, or structures when uncovered during construction activity.
- B. Plant Materials shall be protected per Section 01 56 39 "Tree and Plant Protection", and site restored to same or improved condition per Section 32 01 90.36.
- C. Do not proceed with the work in question until so directed by Government.
- D. Where Work requires existing historic assets to be removed, cleaned, and reinstalled, perform these operations without damage to the material itself, to adjacent materials, or to the historically significant substrates.

### 3.3 PROTECTION OF HISTORIC SITE FEATURES

- A. Protect Monuments, plaques, and signage from damage during construction.
  - 1. Where necessary, provide protective fencing and informational signage to ensure protection of foundations, plantings, or accessories surrounding feature.
  - 2. Repair of damage shall be the responsibility of the Contractor.
- B. Protect sidewalks, trails, and driveways from damage during movement of equipment and materials.
  - 1. In the event of closure, provide adequate barriers and signage to ensure the safety of visitors and park staff.
  - 2. Damage shall be repaired at the expense of the Contractor.
- C. Protect stone walls and retaining walls during construction.
  - 1. Where necessary, provide fencing and informational signage to define the limits of protection and potential for fall.
  - 2. Do not utilize stone stairs for movement of materials without approval of Contracting officer.
  - 3. Do not park equipment or store heavy materials on retained slope of wall.
  - 4. Do not remove any stones from the construction site. If stones are displaced, notify Contracting Officer for appropriate storage and treatment.
  - 5. Damage shall be repaired at the expense of the Contractor.

### 3.4 STORAGE AND PROTECTION OF REMOVED MATERIALS

- A. Do not dispose of items removed from existing construction without prior written consent of Government.
- B. Note location, orientation, and condition of items to be removed. If item is one of a set or a multiple, identify removed items with an inconspicuous mark indicating their original location and/or configuration so that they can be returned in the appropriate location.
- C. Removed and Salvaged Historic Materials:

1. Clean salvaged historic items in a manner appropriate for material, according to industry best practices.
  2. After cleaning store items as directed by the Government.
  3. If items are packed or crated:
    - a. Protect historical materials during packing to ensure that they are not damaged;
    - b. Identify contents on outside of containers;
    - c. If more than one container is necessary, keep a written roster of the items in each container. Maintain a copy of the roster at the Project Site from the time items are crated until they are uncrated.
  4. Store items in a secure area until delivery to the NPS.
  5. Safely transport items to storage area designated by Government.
  6. Protect items from damage during transport and storage.
- D. Removed and Reinstalled Historic Materials:
1. Clean and repair materials to be reused in a manner appropriate for material, according to industry best practices.
  2. After cleaning store items as directed by the Government.
  3. If items are packed or crated:
    - a. Protect historical materials during packing to ensure that they are not damaged;
    - b. Identify contents on outside of containers;
    - c. If more than one container is necessary, keep a written roster of the items in each container. Maintain a copy of the roster at the Project Site from the time items are crated until they are uncrated.
  4. Store items in a secure area until delivery to the NPS.
  5. Safely transport items to storage area designated by Government.
  6. Protect items from damage during transport and storage.
  7. Reinstall items in original location and/or in alternate locations indicated. Comply with installation requirements for new materials and equipment. Provide connections, supports, and miscellaneous materials necessary to make item functional for use indicated.
- E. Existing Historic Materials to Remain: Protect construction indicated to remain against damage and soiling during construction.
- F. Remove plants or trees flagged for reinstallation utilizing best practices for transplant of plant materials.
1. Retain as much of the plant structure as possible.
  2. When necessary, utilize an air spade to remove soil from the root structure to allow for root pruning before storage.
  3. Store in temporary facility in a manner which provides protection for plant materials and necessary environmental conditions to ensure health and stability of plant.
  4. Re-install plant materials in manner which insures future health and vigor.
- G. Storage and Protection: When removed from their existing location, store historic materials where they are protected from wetting by rain, snow, or ground water, and temperature variations. Secure stored materials to protect from theft.

### 3.2 PROTECTION DURING APPLICATION OF CHEMICALS

- A. Comply with all applicable manufacturers' recommendations.
- B. Application of pesticides shall only be performed by a professional licensed in the State of Massachusetts.
- C. Do not use chemicals during winds of sufficient force to spread chemicals to unprotected surfaces or plants.

MINUTE MAN NATIONAL HISTORICAL PARK  
GAOA

PMIS No. 256758A  
**REFERENCE**

END OF SECTION 01 35 92

