

# REHABILITATE CLARA BARTON NATIONAL HISTORIC SITE CLBA 312325

# ASSESSMENT OF EFFECTS REPORT

December 19, 2023

Prepared by:

Mills + Schnoering Architects, LLC 200 Forrestal Rd., Suite 3A Princeton, NJ 08540 Consultants:

Hunter Research, Inc. 120 West State Street Trenton, NJ 08608 Heritage Landscapes, LLC 501 Lake Road, PO Box 321 Charlotte, VT 05445 Prepared for:

National Park Service Denver Service Center 12795 W. Alameda Parkway Lakewood, CO 80228

#### **TABLE OF CONTENTS**

#### List of Photographs

#### **Executive Summary**

•	_						luction					
1.	(1	r	ıŤ	r	$^{\sim}$	М	11		tı	$\sim$	۱.	П
			1 L		u	u	u		L	u	,,	ш

- 1.1 General
- 1.2 Section 106 and Section 110(f) Consultation Overview
- 1.3 Statement of Historic Significance
- 1.4 Basis in History

# 2.0 Project Goals and Preservation Treatment Philosophy

- 2.1 Project Objectives
- 2.2 Exterior
- 2.3 Interior
- 2.4 Vertical Circulation and Restrooms
- 2.5 Landscape
- 2.6 Summary

# 3.0 Area of Potential Effect (APE) Description

3.1 Cultural Context

#### 4.0 Historic Property Identification

4.1 Character-Defining Features

### 5.0 Assessment of Effects

- 5.1 Methodology
- 5.2 Three Design Alternatives
- 5.3 Assessment of Effects on Historic Structure Character-Defining Features
- 5.4 Assessment of Effects on Cultural Landscape Character-Defining Features

# 6.0 Avoidance / Minimization / Mitigation

- 6.1 Introduction
- 6.2 Minimization and Avoidance of Impacts on Character-Defining Features

#### 7.0 Conclusion

#### 8.0 Appendices

- 8.1 Bibliography
- 8.2 Table and Figures

# LIST OF PHOTOGRAPHS

Photograph 1. Clara Barton NHS from the northeast	1
Photograph 2. Atrium of the Clara Barton NHS	9
Photograph 3. View of the approach to the house from the northwest	11
Photograph 4. Aerial view from 1935 showing flooded Potomac River with Glen Echo Park at center and Clara	
Barton NHS below. (Reference: Library of Congress)	13
Photograph 5. View of first floor Hall of Clara Barton NHS where many character-defining features of the house	e are
evident and will be preserved	18
Photograph 6. North elevation clapboard above the existing porch is severely deteriorated and requires	
replacement. The porch has caused water infilitration at the wall and rotted window sills	27
Photograph 7 and Photograph 8. Front entrance doors to Clara Barton NHSNHS	28
Photograph 9. The door at the east elevation of the basement will be modified to accommodate a code complic	ant
egress. The grade will be lowered slightly to allow for the required height	29
Photograph 10 and Photograph 11. Exhaust air and outdoor air intake louvers are proposed for two basement	
windows located on the east elevation. The proposed locations are pictured above	30
Photograph 12. Clara Barton NHS circa 1904 showing original front porch design. (Reference: Library of Congre	ess)
	31
Photograph 13. Existing Colonial Revival porch which dates to 1919	31
Photograph 14. Hall 102 looking at Southeast wall. The approach to Room 115 is shown at right, and the appro	oach
to Room 116 at left side of photo	39
Photograph 15. Hall 102 detail - typical approach through closets. Door casing and decorative wood header trii	m at
face can be seen clearly (this photo depicts approach to Room 118 where no alterations will occur)	40
Photograph 16 and Photograph 17. Room 115. (Left) Wood frame closet door with painted muslin covering will	l be
removed and salvaged. (Right) The southwest / northwest corner will be enclosed within new partitions for the	
egress stair	44
Photograph 18 and Photograph 19. (Left) Board and batten partition within Room 116 will remain. (Right) Viev	v of
Room 117 looking towards the northwest where new restroom is proposed	44
Photograph 20. Two openings in the atrium of Main Hall 202: the opening shown with the red arrow will be	
widened by +/- 6" for the egress stair. The opening with the yellow arrow will have the door and stops removed	l for
a wider clear opening	
Photograph 21. The southeast wall of Room 215 has damage due to water infiltration. This wall's finishes will L	эe
restored.	48

All photographs taken by Mills + Schnoering Architects, LLC unless otherwise noted.

#### **EXECUTIVE SUMMARY**

This Assessment of Effects for the proposed undertaking describes the anticipated impacts of the rehabilitation of the Clara Barton National Historic Site (NHS). The document was prepared in compliance with Section 106 and Section 110(f). Section 1.0 provides necessary background information about the Clara Barton NHS, provides the regulatory context of the Proposed Rehabilitation, and describes the prior documentation and reporting that guided crucial decisions for individual interventions. The Proposed Rehabilitation, as described in Sections 2.0 through 5.0, will resolve ongoing issues of life safety, accessibility, and indoor environmental controls and building systems that the Clara Barton NHS requires to better serve National Park Service (NPS) staff and the general public. The crux of the assessment rests on Section 5.0, which delves into great detail the impacts of the Proposed Rehabilitation on each of the property's character-defining features and the resulting impacts on the subject feature's integrity. As described in Section 6.0, measures to minimize and avoid impacts will be implemented through the selection of specific spaces identified in prior documentation as having for the proposed interventions, as well as the proposed storage of architectural materials salvaged during construction. This Assessment of Effects concludes in Section 7.0 that the Proposed Rehabilitation will have no adverse effect on the Clara Barton NHS.

CLBA 312325 p. iii

#### 1.0 INTRODUCTION

#### 1.1 General

1

2

- 3 The Clara Barton National Historic Site (NHS)
- 4 is a National Historic Landmark (NHL) because
- 5 it was the home of Clara Barton, one of the
- 6 most revered women in the history of the
- 7 United States and was the headquarters of
- 8 the American Red Cross, which she founded.
- 9 The house and grounds pertain to the
- 10 approximately 9-acre Clara Barton National
- 11 Historic Site, which together with the
- 12 adjacent Glen Echo Park of the George
- 13 Washington Memorial Parkway (GWMP)
- 14 make up a contiguous National Park Service
- 15 (NPS) cultural landscape of 22-acres in
- 16 Montgomery County, Maryland. The site is
- 17 situated between a residential neighborhood,
- 18 NPS parking lots, and the east bank of the
- 19 Potomac River overlooking the Chesapeake &
- 20 Ohio (C&O) Canal and the Clara Barton
- 21 Parkway.



Photograph 1. Clara Barton NHS from the northeast.

- 22 The Clara Barton NHS was constructed adjacent to the grounds of the Chautauqua Assembly at Glen
- Echo, Maryland, in 1891. The building resembles two Red Cross hotels that had been constructed in
- 24 Johnstown, Pennsylvania, to house the victims of the 1889 Johnstown flood, and may have incorporated
- 25 some of the lumber from the disassembled hotels. The building was the temporary residence of Clara
- 26 Barton in 1891 but functioned primarily as a Red Cross warehouse from 1891 to 1897. The structure,
- 27 which originally had a stone façade, was remodeled by Clara Barton in 1897 as her home, where she
- 28 lived with her associate, Dr. Julian Hubbell, and other volunteers until her death on April 12, 1912, at the
- age of 90. Barton's home also served as the national headquarters of the American Red Cross from
- 30 1897 to 1904, of which she was president. Dr. Hubbell worked as Chief Field Agent for the organization
- and occupied the house until his death in 1929, except during a period from 1920-1925. Other than the
- 32 house, there are some contributing landscape features, but no associated outbuildings remain.
- 33 The principal purpose of this site is to tell the early story of the American Red Cross through the
- 34 interpretation of the life and times of its founder, Clara Barton. She was a remarkable person who
- 35 dedicated her life and energies to help others in times of need both at home and abroad, in peacetime
- as well as during military emergencies. Glen Echo was her home for the last 15 years of her life and this
- 37 structure illustrates her dedication and concern for those less fortunate than herself.

- 1 The Clara Barton NHS was listed in the National Register of Historic Places (NRHP) as an NHL on January
- 2 12, 1965. The established period of significance is 1897 to 1912.<sup>1</sup>

# 3 1.2 Section 106 and Section 110(f) Consultation Overview

- 4 The purpose of this Assessment of Effects Report is to identify the historic elements within an Area of
- 5 Potential Effects (APE) (36 CFR 800.4); evaluate the potential effects of the proposed rehabilitation on
- 6 the historic property; and apply the criteria of adverse effect (36 CFR 800.5) to determine if the
- 7 proposed undertaking may directly or indirectly alter any characteristics of the property in a manner
- 8 that would diminish its integrity. The analysis presented in this report will be used as a basis for
- 9 consultation between the NPS, the Maryland Historic Trust (MHT), and other consulting parties
- 10 concerning the effects of the proposed undertaking on the historic property.

#### 11 Section 106 Legal and Regulatory Context

- 12 The project is subject to compliance with the National Historic Preservation Act (NHPA) of 1966, as
- amended (54 USC 300101 et seq.), and its implementing regulations (36 CFR 800). Specifically, Section
- 14 106 of the NHPA (54 USC 306108) requires that the responsible Federal Agency consider the effects of
- 15 its actions on historic properties, which are properties listed on or determined eligible for listing on the
- 16 NRHP and provide the Advisory Council on Historic Preservation (ACHP) an opportunity to comment on
- 17 the undertaking.
- 18 Per Section 106 requirements, the lead Federal Agency, in consultation with the State Historic
- 19 Preservation Officer (SHPO), develops the APE, identifies historic properties (i.e., NRHP-listed and NRHP-
- 20 eligible) in the APE, and makes determinations of the proposed project's effect on historic properties in
- 21 the APE.

29

- 22 Section 106 review and National Environmental Policy Act (NEPA) compliance are being coordinated for
- the Rehabilitation of the Clara Barton NHS project. NPS is conducting consultation under Section 106 of
- the NHPA which was initiated with the MHT and the Maryland State Historic Preservation Office (SHPO)
- 25 on June 3, 2022.
- 26 Consulting Parties meetings occurred on September 12, 2022, November 16, 2022, May 1, 2023, and
- 27 July 31, 2023, to present the project, invite comment on the potential effects of the undertaking, and to
- 28 solicit input on ways to avoid, minimize, or mitigate adverse effects.

#### Section 110(f) Legal and Regulatory Context

- 30 As an NHL, the Clara Barton NHS is also subject to requirements outlined in Section 110(f) of the NHPA
- 31 (16 USC 470). Per Section 110(f), Federal agencies are required to "exercise a higher standard of care
- 32 when considering undertakings that may directly and adversely affect NHLs. The law requires that

<sup>&</sup>lt;sup>1</sup> While the established period of significance (1897-1912) of the Clara Barton NHS begins with the conversion of the building from an American Red Cross warehouse to Barton's residence and the organization's headquarters, a revised period of significance of 1891-1912 has been recommended for the NHS. This period of significance would begin with the construction of the building as an American Red Cross warehouse and end with Barton's death. Prior reporting and documentation recommending a revised and expanded period of significance (1891-1912) are the HSR prepared by Lampl (2002), CLI prepared by NPS (2011), and CLR prepared by Heritage Landscapes, LLC (2023).

- agencies, 'to the maximum extent possible, undertake such planning and actions as may be necessary to
- 2 minimize harm to such landmark.' In those cases when an agency's undertaking directly and adversely
- 3 affects an NHL, or when Federal permits, licenses, grants, and other programs and projects under its
- 4 jurisdiction or carried out by a state or local government pursuant to a Federal delegation or approval so
- 5 affect an NHL, the agency should consider all prudent and feasible alternatives to avoid an adverse
- 6 effect on the NHL."2
- 7 Section 110(f) also requires that the agency consider the "magnitude of the undertaking's harm to the
- 8 historical, archaeological and cultural qualities of the NHL; the public interest in the NHL and in the
- 9 undertaking as proposed; and the effect a mitigation action would have on meeting the goals and
- objectives of the undertaking." As with Section 106, the proposed undertaking is subject to review and
- 11 comment by the ACHP.

# 1.3 Statement of Historic Significance

- 13 The Clara Barton NHS is an NHL following authorization by the US Congress on January 12, 1965. An
- 14 updated National Register nomination dates to inscription in the List by the Keeper on January 3, 1980.
- 15 The updated nomination identifies the period of significance to begin with Barton's occupation of the
- house as the headquarters of the American Red Cross in 1897 and ends with her death at home in 1912.
- 17 The National Register documentation determines that the site is nationally and locally significant. The
- 18 specific areas of significance listed in the above National Register nominations were as follows:
- 19 architecture, art, commerce, education, entertainment, recreation, sculpture, and social/humanitarian.
- 20 These themes correlate with National Register listing Criteria A, B, and C. The 2011 Cultural Landscape
- 21 Inventory (CLI) and 2023 Cultural Landscape Report (CLR) recommend that Criterion D is valid for the
- 22 Clara Barton NHS cultural landscape and recommend an expansion of the period of significance to 1891,
- 23 when Edward and Edwin Baltzley transferred Barton a tract of land and constructed the building.
- 24 Areas of the Clara Barton NHS have been identified as having prehistoric and historic archaeological
- 25 potential based on documentary evidence. A Phase IA/IB archaeological survey will be completed based
- 26 on the proposed rehabilitation and the survey's findings incorporated into the final AOE at the
- appropriate time.
- 28 This project supports prior recommendations of significance for the property with a confirmation of a
- 29 period of significance between 1891 and 1912, which is being used as the basis for this Assessment of
- 30 Effects. The landscape is significant under Criterion A by virtue of its historic association with the
- 31 American Red Cross, a charitable foundation that has provided emergency relief and other forms of
- 32 humanitarian aid both domestically and internationally since its formation in 1881. During the years
- 33 1891-1897, the Clara Barton NHS served as an American Red Cross warehouse, and it was the
- 34 organization's national headquarters from 1897-1904. The house and grounds also meet National
- 35 Register Criterion B based upon its association with the lives of persons significant in our past,
- 36 specifically Clara Barton. Over the course of her lifetime, Barton was a dedicated Civil War nurse, an
- 37 active women's rights suffragette, and the founder and first president of the American Red Cross.

<sup>&</sup>lt;sup>2</sup> The Secretary of the Interior's Standards and Guidelines for Federal Agency Historic Preservation Programs Pursuant to the National Historic Preservation Act. 63 Fed. Reg. 20503 (April 24, 1998) (amending 53 FR 4727-46). Accessed December 2023, https://www.govinfo.gov/content/pkg/FR-1998-04-24/pdf/98-10972.pdf.

<sup>3</sup> Ibid.

- 1 Justification of Criterion C relates to the architectural quality of the extant historic building. The CLI
- 2 notes that the Clara Barton NHS is an outstanding example of late nineteenth-century American
- 3 vernacular architecture that defies simple classification. As part of this project, research by Hunter
- 4 Research, Inc. concludes that prehistoric and historic archeological potential exists with direct relation
- 5 to the significant themes of the property, and therefore the Clara Barton NHS is potentially significant
- 6 under Criterion D.
- 7 The Historic Structures Report (HSR) written in 1996 by Oehrlein & Associates Architects, identifies
- 8 spaces of Primary, Secondary, and No Significance, as it relates to the historic use and remaining
- 9 integrity of original architectural fabric, as shown in the appended drawings. The HSR was not prepared
- 10 within a Section 106 regulatory context, and these terms assigning "significance" are intended to
- 11 provide a tool for evaluating the relative historical importance of the spaces, but not to say spaces
- assigned a level of No Significance do not retain any significance as defined in Section 106. NPS has
- concurred that the levels of significance provided in the HSR remain appropriate to understanding the
- relative importance of the spaces for authenticity, documentation, and interpretation. Though the use
- of the term "significance" in the HSR is not used in the context of Section 106, it is an accurate reflection
- of the NPS's state of knowledge for this nationally significant site. The following passages explaining the
- 17 HSR's evaluation criteria and the definitions of Primary, Secondary, and No Significance have been taken
- directly from the HSR completed in 1996 (Part 1, Pages 133-135):

#### 19 <u>a. Evaluation Criteria</u>

- 20 In order to retain and preserve the character defining features of a property, those features must first be
- 21 identified. For the Clara Barton House, each space in the building has been surveyed and the
- 22 architectural features and finishes of each space have been recorded in the following Inventory of
- 23 Significant Spaces and Details. Each part of the building has been evaluated and assigned a level of
- significance. This evaluation was based upon the following criteria:

#### 25 Architectural Significance:

- What is the quality of the design, materials, detailing and craftsmanship?
- Is there known social, or historical significance?

#### 28 *Integrity:*

26

29

30

31

32

- Are the original features and materials of the space intact?
- Have original features or material been removed or destroyed by later alterations?
- What is the physical condition of the original materials?

#### **b.** Architectural Preservation Zones

- 33 All of the spaces in the building have been divided into three zones: those of Primary Significance, those
- of Secondary Significance and those that are Not Significant. Significant spaces and features are those
- 35 that date to the period of interpretation. Significant features may exist within non-significant spaces and
- 36 all significant features, regardless of their respective zones, have been listed.
- 37 The Inventory of Significant Spaces and Details summarizes the significance of each space, indicates the
- 38 finishes and character defining elements of the space and provides a general guide for the desired level
- 39 of preservation treatment. Specific recommendations for treatment are included in Part 2.

**Areas of Primary Significance:** These are areas of special architectural or documented historical significance which are important to the accurate interpretation to the site. Typically, these spaces contain significant original architectural or character defining features that should be preserved, restored, reconstructed and maintained.

These would be the primary public and private spaces in the building. They typically have a somewhat higher level of architectural detail and finish than [sic] other spaces in the house. In these areas, the original details and materials should be retained and restored. Alterations should be limited to those necessary to accommodate modern systems, to achieve code compliance and to provide access for the disabled.

**Areas of Secondary Significance:** These are areas of architectural or documented historical significance which support the accurate interpretation of the site, or contain significant architectural or character defining features which must be protected, preserved, and maintained. Areas of secondary significance may contain significant original features that warrant treatment commensurate with those in areas of primary significance.

These are the secondary spaces of the building which contain a lower level of detail and finish, have been altered with the resulting loss of original details and materials, or cannot be reused in their original form. While alteration of the space can be accepted as part of the rehabilitation, significant materials and details should be retained.

Areas that are not Significant: These areas lack special architectural or documented historical significance and/or do not support the accurate interpretation of the site. Even though these areas may lack significance, they may never-the-less contain significant original features that warrant treatment commensurate with those in areas of primary significance. These spaces may be rehabilitated, altered or redesigned as required to support the needs of the site, but care should be taken not to adversely affect any significant features.

These are areas of the building which are utilitarian in function and finish or have been so completely altered that the space now contains little or no remaining significant architectural fabric. The spaces identified as not significant may be altered and redesigned as required for reuse of the building. They contain only a few significant elements and materials which should be retained if possible.

# c. Inventory of Significant Spaces and Details

1 2

3

4

5

6

7

8

9

10

11 12

13

14

15

16

17

18

19

20

21

22

23

24

25

26

27

28

29

30

- 31 The following Inventory of Significant Spaces and Details lists the exterior and interior spaces of the
- building and their finishes. Materials believed to date from the period of interpretation are shown in
- 33 bold-face type. Because the building was constructed and renovated utilizing both new and recycled
- 34 materials, it is not always possible to accurately determine which features date from the original 1891
- 35 construction, the 1897 rehabilitation of from later alterations.
- 36 The diversity of materials used in the house is demonstrated by the presence of at least 8 different types
- 37 of beaded boards and six different types of wood door and window casings. Many other types of wood
- trim can be found throughout the house including different types of base boards, base shoes and caps,
- 39 and crown moldings. The diversity of trim types, coupled with the frequent use of trim in unconventional
- 40 ways makes evaluation difficult. Unless indicated otherwise, all trim throughout the house is wood.

- 1 An analysis of the paint layers on painted trim and board partitions may help to establish a chronology of
- 2 when the different types were introduced. While such an evaluation is beyond the scope of this historic
- 3 structures report, an analysis of the paint layers on the wood trim throughout the house is an area
- 4 recommended for further study. If a pain analysis is undertaken, care must be taken since the recycled
- 5 wood trim used in the house may introduce paint layers that pre-date their installation at the Clara
- 6 Barton House.
- 7 Like the trim, wall finishes also vary widely. Exposed beaded board walls are common throughout the
- 8 house, and it is assumed that most of these date from 1891, with some added later but still within the
- 9 period of interpretation. We know from diary entries that both fabric and platers on wood lath wall
- 10 finishes date from the 1897 rehabilitation. Observation suggests that the 1897 plaster work was rather
- 11 crudely finished and that it presents a distinctive appearance that may help to differentiate it from both
- 12 later plaster work and from the gypsum wall board that has been applied in recent years. Another
- 13 common wall finish is fiberboard. Typically, fiberboard sheets were applied over existing wall surfaces,
- 14 especially the board partitions. Since fiberboard is a relatively common material, it is likely that the
- 15 fiberboard was installed in the 1930's when the building was converted to apartments. It would have
- 16 provided the benefits of a more finished and modern appearance than the beaded board while at the
- same time rendering a measure of acoustic insulation between rooms.
- 18 Through comparison with historic photographs, we know that the existing windows on the front and side
- 19 elevations of the house match the configuration of the historic windows. The majority of the sash are in
- 20 good condition but it is difficult to make a determination of their age. It has been reported that the
- 21 Friends of Clara Barton replaced the windows on the front of the house in the 1960s. Other windows on
- 22 the side and rear elevations may have also been replaced over time. As with other wood components of
- 23 the house, paint analysis may assist in determining when windows were installed. As an additional aid in
- 24 dating the windows, the frames and one sash from each of the two blind windows that were installed in
- 25 front of the northeast wall of the vault remain, now concealed within the wall cavity. Since these frames
- 26 and sash almost certainly date from the 1897 rehabilitation, they could be used both to establish the
- 27 base paint layer for 1897, and for comparison with other windows on the front elevation.
- 28 Materials that are believed to date from the period of interpretation are shown below in bold face type.
- 29 Materials known to post-date the period of interpretation are identified as 'replacement' or 'new'
- 30 materials.
- 31 Both physical and documentary evidence aided in Oehrlein & Associates' assigning of levels of
- 32 significance to each exterior and interior space of the Clara Barton NHS. Documentary evidence cited
- 33 includes diary entries written by Barton from 1897, as well as historic photographs of the building and
- 34 property.
- 35 For her update to the HSR in 2002, Lampl used the same room-by-room inventory established by
- 36 Oehrlein & Associates Architects. She stated in her update that "[u]nless otherwise noted, I concur with
- 37 the significance associated with each room as stated in the Oehrlein Report."<sup>4</sup> In her updated HSR,
- Lampl revised the assigned levels of significance for several spaces in the Clara Barton NHS. These

<sup>&</sup>lt;sup>4</sup> Elizabeth J. Lampl, *Clara Barton National Historic Site: Historic Structure Report, Volume 1, Part 1: Developmental History* (Reissued and Expanded), U.S. Department of the Interior, National Park Service, Washington, D.C., 2002 [Compiled 2004], p. IV-8.

- 1 revisions to spaces impacted by the current undertaking are noted in Section 5.2. **See Existing**
- 2 Conditions Basement Plan and Spatial Significance Evaluations (Figures 1-4).

# 3 1.4 Basis in History

16

17

18

19

20

21

22

23

24

25

26

27

28

29

30 31

32

33

34

35

36

- 4 The building as originally constructed as well as the changes made during Clara Barton's occupancy have
- 5 been well researched and documented by historians. First and foremost, the biography Clara Barton,
- 6 Professional Angel by Elizabeth Brown Pryor covers her decision making, use, and occupancy of the
- 7 house and the site in great detail. Paul Goeldner, formerly of the Historic American Building Survey and
- 8 then Regional Architect for the Capitol Region of the NPS, wrote the National Register nomination.
- 9 Architectural historian and preservation planner, Elizabeth Lampl, prepared a developmental history of
- 10 the site in 2002 as part of the HSR, adding to earlier work of preservation architects at Oehrlein &
- 11 Associates. Oehrlein & Associates prepared a detailed analysis of the building for the HSR in 1996, which
- identified character-defining and original features. Elizabeth Brown Pryor, while living in the basement
- 13 apartment of the house in 1977, prepared an inventory of plantings during the Clara Barton period of
- significance. On this basis the NPS prepared a CLI in 2011.
- 15 The design team has sought to add to this extensive body of history in the following ways:
  - A full CLR for the historic site has been prepared by Heritage Landscapes, LLC, one of the preeminent landscape historians and preservation landscape architects in the United States. They have utilized both primary and secondary resources to research the site features, site development, and significance to arrive at recommendations for treatment.
  - The historians and archeologists at Hunter Research, Inc., who have broad experience with the NPS, have supplemented the CLR with studies and recommendations for the archeological resources of the site that may remain available for interpretation. Hunter Research is advising the team on an ongoing basis to avoid adverse impacts of any site disturbances required by site utilities and barrier-free access.
  - The architectural/conservator team of Mills + Schnoering Architects and Evergreene
     Architectural Arts have contributed their extensive knowledge of Clara Barton's life,
     architectural preferences, and decorative treatments gained during their prior study and
     restoration over a decade long project of Clara Barton's Apartment and Missing Soldiers Office
     on 7<sup>th</sup> Street in Washington, DC.
  - The same architectural/conservator team of Mills + Schnoering Architects and Evergreene Architectural Arts conducted thorough investigations at Clara Barton NHS in 2022 to document historic materials and their properties. Analyses at several locations included: plaster and mortar wet chemical and petrographic analysis; fiber and wallpaper material identification and approach to original applications; documentation of artifacts "found" in storage; paint and coating microscopy, interior and exterior, to identify historic substrates and paint or finish stratigraphies.

#### 2.0 PROJECT GOALS AND PRESERVATION TREATMENT PHILOSOPHY

#### 2.1 Project Objectives

1

2

3

4

5

6

7

- Protect integrity of NHL through repair and conservation of historic fabric.
- 2. Convey story of Clara Barton's life and humanitarian activities to local, national, and international visitors.
- 3. Rehabilitate site to provide safe, comfortable, and accessible facility for occupants.
  - 4. Improve landscape to convey historic character.
- 8 The overarching goal of the project is to protect the integrity of this NHL through undertaking needed
- 9 repairs and conservation of historic fabric, and to rehabilitate the building for critical code deficiencies
- 10 and accessibility. This will enable NPS to continue to tell the story of Clara Barton and the American Red
- 11 Cross on this site to local, national, and international audiences. Concurrent to the physical
- 12 rehabilitation project, NPS is developing the exhibits project by seeking input from historians and other
- interested parties to help direct the future interpretation of the site.
- 14 The preservation treatment for the Clara Barton NHS project as defined by NPS is "Rehabilitation." The
- 15 Secretary of Interior's Standards for the Treatment of Historic Properties defines Rehabilitation as "the
- 16 act or process of making possible a compatible use for a property through repair, alterations, and
- 17 additions while preserving those portions or features which convey its historical, cultural, or
- architectural values." Rehabilitation may include the other treatments under the Standards:
- 19 Preservation, Restoration, or Reconstruction where they assist in preserving and interpreting a historic
- site (https://home1.nps.gov/tps/standards/rehabilitation.htm). The intent is grounded in the
- 21 preservation of the structure, while making it compatible for contemporary use.
- The project rehabilitates the 130-year-old Clara Barton NHS. The building was originally constructed in
- 23 1891 as a warehouse for disaster relief supplies, and later became Clara Barton's residence and
- 24 American Red Cross Headquarters in 1897. After her death in 1912, it was converted to a boarding
- 25 house and in 1963 it was purchased by a friends' group for preservation. In 1974, Congress designated
- the Clara Barton NHS to be managed by the NPS. The property is an NHL and is over 14,000 square feet
- in floor area.

34

38

39

- 28 The project will involve the necessary interventions to restore the house to the 1897-1912 Period of
- 29 Significance and reopen to the public for interpreting the Red Cross and Clara Barton. Emphasis would
- 30 be on preserving the most historically intact rooms within the house. Rehabilitation would address
- deficiencies of the exterior envelope, structural framing, electrical, mechanical, and plumbing systems.
- 32 The site has suffered from ongoing deterioration of materials and deferred maintenance. The building
- has significant deficiencies that need to be addressed for any intended use:
  - The building does not have a safe, code compliant means of egress in the event of a fire.
- The second-floor structure is undersized and not able to safely support code-required live loads.
- Three of its four floors are not accessible.
- It does not have the required number of accessible restrooms for its size and occupancy.
  - The obsolete HVAC system needs to be replaced for improved climate control so that museum pieces may be displayed and for increased energy efficiency.

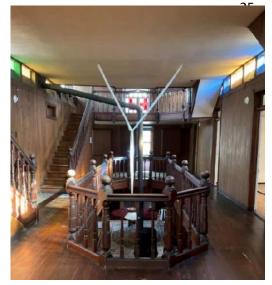
- 1 The entire project is grounded in the extensive history that has been meticulously researched by
- 2 historians and architectural historians over many years and has guided the design team in proposing the
- 3 treatments. The treatments are summarized as follows:

#### 2.2 Exterior

4

- 5 The house is a large, vernacular, late-Victorian frame structure. The house is said to be similar to other
- 6 purpose-built structures erected for disaster relief, such as those in Johnstown, Pennsylvania. The
- 7 exterior appearance is similar to a guest house that one might find at a Shore location, except for the
- 8 unusual stone towers that bracket the front façade. Clara Barton and Dr. Hubbell likely had a large
- 9 influence on the overall appearance of the design which consists of living areas on two floors
- 10 surrounding a common atrium.
- 11 The treatment approach to the envelope is mainly one of preservation of existing materials: metal
- 12 roofing, clapboard, windows, and doors. Exterior fabric will be replaced only where deteriorated
- conditions require it, and replacement will be in kind in accordance with the Standards.
- 14 An exception is the existing front porch, which was not built within the period of significance. It is a
- 15 Colonial Revival replacement constructed in 1918-1919 which is now in a serious state of deterioration,
- as is the front wall of the house due to the roof pitch directing rainwater toward the building rather than
- away from it. Documented through historic photographs and drawings prepared by the NPS in January
- of 1978, the original porch oriented the entrance steps toward the north and contained a smaller porch
- 19 footprint and roof. The proposed new porch will look more like the original porch that existed during the
- 20 Clara Barton period of significance. Its architectural features will be compatible with the historic
- 21 character of the building while adding a ramp at the east side for an accessible entrance to the front
- doors. The ramp's articulation of the railing will be similar in material, size and proportion to the porch
- railing and balusters yet differentiated through simplification of profiles.

# 24 **2.3 Interior**



Photograph 2. Atrium of the Clara Barton NHS.

-υ

The most memorable interior space of the Clara Barton NHS is the rectangular atrium which rises three stories in the center of the building. It was conceived as a communal space and the circulation spine for the rooms arrayed around it. It is detailed on all floors with clear finished wood balustrades having turned posts, and clerestory windows that conduct natural light into the space from above. This space and its materials will be carefully preserved and conserved in the project. The second floor will be available for public tours and interpretation by the NPS, with views of the third floor possible from the second floor.

Interpretive rooms as well as spaces designated for additional programming (classrooms, a bookstore, and special exhibit rooms) on the first and second floors will have their finishes restored including the historic muslin fabric ceilings. The historic muslin will be removed to a

- 1 conservation laboratory for cleaning and treatment, new building systems installed, and the muslin
- 2 reapplied to hide the interventions. Non-historic muslin will be replaced in-kind. Existing wood trim will
- 3 be preserved in place and conserved with appropriate finishes. The third-floor rooms will also have
- 4 necessary repairs and finishes restored, though no occupancy will be permitted.
- 5 The second floor needs to be strengthened to be safe for use by the NPS, and additional structure will
- 6 be inserted by way of removing and replacing ceiling finishes at the first floor to sister new metal joists
- 7 to the existing ones. The new structure will be hidden within the existing thickness of the second-floor
- 8 framing and will not disrupt the flooring material on the second floor. The new metal joists will be
- 9 supported by the existing bearing walls thereby not requiring any visible alteration except for new
- 10 columns in the basement and first floor in two locations (both concealed). Plaster ceilings, many of
- which have substantial loss of material and cracking, will be replaced in kind, drywall replaced, and the
- 12 restored muslin reinstalled. See Existing Conditions Interior Wall and Ceiling Finishes (Figures 6 9)
- for ceiling finishes at the first floor.
- 14 It is proposed to keep as much of the original architectural fabric as possible with only minor alterations
- made to support the necessary upgrades for code compliance of building systems and future exhibits. A
- 16 highly efficient heating and cooling system is planned for environmental comfort with piping and
- 17 ductwork hidden below the first floor, within first-floor closets to service the second floor, and cabinet
- units within second floor closets in historic spaces or on exterior walls in custom wood casework.

#### 2.4 Vertical Circulation and Restrooms

- 20 To achieve an environment that is safe, accessible, and code-compliant, for use of the second floor, a
- 21 new fire egress stair is required, and a new vertical platform lift is proposed between the first and
- second floors. Also, two new, barrier-free toilet rooms are required in addition to the existing restroom
- for a building of this size, use, and construction classification.
- 24 The design team re-evaluated whether an addition made sense to provide these features and
- determined that containing new features within the existing building has the least impact on the
- 26 exterior historic fabric and landscape. The team studied interior spaces of Primary, Secondary, and Low
- 27 Significance as identified in the HSR to find appropriate and viable locations for the new egress stair,
- restrooms, and lift. The following building conditions informed the rationale for the layout in the
- 29 preferred design:

19

30

31

32

33

34

35

36

37

38

39

40

41

- The rectangular atrium rises to the third floor giving opportunity for vertical circulation, however any intervention within the dominant character-defining space poses too great an impact to historic fabric.
- The perimeter rooms at the second floor have low sloping roofs above, which create six-foot high ceilings in the second-floor rooms at the exterior walls. The headroom is not adequate for a compliant egress stair or platform lift to be located near the exterior walls and within the existing envelope.
- Passages through the first-floor closets and second-floor door openings to the perimeter rooms
  are narrow. The proposed accessible routes on the first and second floors prioritize access to the
  stair, restroom, and lift following a path that requires the least alterations. Preservation of
  historic fabric (such as the stair near the historic kitchen at the west side) informs locations that
  are not viable because the clear width is too narrow.

- The basement floor varies in its height below grade and towards the rear of the building is more desirable for an egress at/or near grade. A level landing (or less than 2% slope) is required by code at the exterior at the same level as the egress stair interior bottom landing. To minimize impact on the historic viewshed and basement façade fenestration, the east elevation is preferable for the concrete egress landing. The existing door will be modified to increase its height by approximately 12".
- 7 During Value Analysis, the option of a vertical platform lift for access to the second floor was selected
- 8 because it presents many advantages for the site and the visitor experience and provides universal
- 9 access to the second floor.

3

4

5

6

15

- 10 The design approach for the vertical circulation, including the lift, and restrooms is to concentrate the
- features in a core, which is stacked at the first and second floor levels. The design creates an ancillary
- 12 vestibule space between the lift and restroom which is accessible and tucked away from the atrium.
- 13 The design seeks to unify services and avoid impacts to historic fabric in multiple disparate areas of the
- building. Refer to Existing and Proposed Plans (Figures 6-15).

# 2.5 Landscape

- 16 The landscape has
- 17 been assessed as
- 18 having a low level of
- 19 integrity to the Clara
- 20 Barton period. The
- 21 CLR recommends
- 22 rehabilitation for the
- 23 site to reflect the
- 24 historic character
- 25 during Clara Barton's
- 26 occupancy. The
- 27 current project does
- 28 not have funding to
- 29 implement substantial
- 30 landscape
- 31 improvements, except
- 32 for accessibility
- provisions.
- 34 Accessible parking and
- 35 a route to the entrance



Photograph 3. View of the approach to the house from the northwest.

- 36 of the house is proposed, which presents ancillary opportunities to remove or relocate some
- 37 incompatible signs and vegetation, rehabilitate adjacent planting beds in historic locations, and add
- 38 appropriate lighting along the walk. Rehabilitation of the walk interprets a missing historic feature,
- 39 which was the boardwalk that linked Clara Barton's front door and property with the adjoining Town of
- 40 Glen Echo.

41

#### 2.6 Summary

- 1 This project is based on historic research that yielded an understanding of the Clara Barton NHS's
- 2 significance and the character-defining features that contribute to this significance and the site's
- 3 remaining integrity. The selected preservation treatment of Rehabilitation is not only to recognize and
- 4 respect the original design of the structure and its material integrity, but to bring the property's
- 5 importance as a nationally significant site to the forefront through interventions that accommodate its
- 6 uses. As stated in Article 5 of the Venice Charter, "The conservation of monuments is always facilitated
- 7 by making use of them for some socially useful purpose." The goal of the Clara Barton NHS
- 8 Rehabilitation is to update and protect this structure for future visitors to enjoy.

# 3.0 AREA OF POTENTIAL EFFECT (APE) DESCRIPTION

- 2 The Area of Potential Effect (APE) is defined in Section 106 of the NHPA as "the geographic area or areas
- 3 within which an undertaking may directly or indirectly cause alterations in the character or use of
- 4 historic properties if any such properties exist. The APE is influenced by the scale and nature of an
- 5 undertaking and may be different for different kinds of effects caused by the undertaking."
- 6 The design team has identified the proposed APE shown in **Figure 16**. The APE for the cultural landscape
- 7 of the house, immediate grounds, and viewsheds shows the area surrounding the rehabilitation project
- 8 site and has been agreed upon by the MHT. The APE includes:
  - The entirety of the Clara Barton NHS, equivalent to the NHL and NHRP nominations
  - Residences adjacent to Oxford Road which is the entrance to the Clara Barton NHS
  - Properties within view of the project area during and following the project (primarily the Clara Barton NHS and surrounding Home Grounds) which includes the county owned MacArthur Boulevard Bike Path
- The limits of proposed ground disturbance defined for the purpose of evaluating project impacts are also shown.
- 16 To illustrate the Clara Barton NHS's large context and setting, **Figure 5** shows the APE with respect to the
- 17 broader context of historic properties including Glen Echo Park and the Clara Barton Parkway, which are
- units of the George Washington Memorial Parkway, and Chesapeake & Ohio Canal National Historical
- 19 Park. No direct or indirect effects are anticipated in the areas outside of the APE.



Photograph 4. Aerial view from 1935 showing flooded Potomac River with Glen Echo Park at center and Clara Barton NHS below. (Reference: Library of Congress)

CLBA 312325 p. 13

20

1

9

10

11

12

13

21 22

23

#### 3.1 Cultural Context

1

- 2 The Clara Barton NHS lies within the community of Glen Echo, Maryland. The property is situated within
- 3 a residential neighborhood adjacent to Glen Echo Park, a component of the GWMP, along the upper
- 4 east bank of the Potomac River overlooking the Clara Barton Parkway (also a GWMP component) and
- 5 the C&O Canal National Historic Site. The Clara Barton NHS is partially visible to directly adjacent
- 6 neighbors; however, it is almost entirely obscured by steep wooded slope from Glen Echo Park and
- 7 parks in the river valley. This enclosed situation dramatically contrasts with the open view to and from
- 8 the house present during the period of significance.
- 9 Located 350 feet east of the project area, Glen Echo Park is an arts and cultural center initially
- developed in 1891 as a National Chautauqua Assembly. While the grounds of the approximately 9-acre
- 11 Clara Barton NHS combine with Glen Echo Park to compose an interrelated cultural landscape of
- 12 approximately 22-acres, the two are physically and visually separated by the densely wooded
- 13 Minnehaha Branch ravine. Both parks are maintained by GWMP staff and share parking areas but are
- 14 two separate NPS units. Glen Echo Park has been under GWMP jurisdiction since 1976, while the Clara
- 15 Barton NHS has been administratively independent since 1975. The Glen Echo Park Historic District was
- inscribed in the National Register in 1984. The district nomination followed individual listings of the
- 17 1891 Chautauqua Tower and the Dentzel Carousel in 1980. Neither are visible from the project site.
- 18 The Clara Barton Parkway is a four-lane scenic byway that runs 6.8 miles parallel to the Potomac River
- 19 from MacArthur Boulevard in Carderock, Maryland, east to Canal Road at the Chain Bridge in
- 20 Washington. Constructed during the 1960s, the parkway is administered by the GWMP. Some 85 vertical
- 21 feet across 125 feet of dense woods separate the project site from the parkway to the south. Although
- 22 the parkway is named for Clara Barton, the roofline of the Clara Barton NHS is partially and seasonally
- 23 visible from the parkway.
- 24 Parallel to the Clara Barton Parkway and the Potomac River, the canal and towpath trail of the C&O
- 25 Canal extend 184.5 miles from the Georgetown section of Washington, D.C., to Cumberland, Maryland.
- The park was established in 1961 as a National Monument and was added in the NRHP in 1966. Due to
- 27 the amount of vertical separation and density of woodland cover on slopes south of the project site and
- 28 the higher elevation of the Clara Barton Parkway compared to the C&O Canal, the project area is not
- 29 visible from the park.

CLBA 312325 p. 14

.

<sup>&</sup>lt;sup>5</sup> Heritage Landscapes, LLC, Preservation Landscape Architects & Planners, *Cultural Landscape Report: Rehabilitate the Clara Barton National Historic Site* (2023), p. 1.6.

#### 4.0 HISTORIC PROPERTY IDENTIFICATION

- 2 An historic property is defined as any prehistoric or historic district, site, building, structure, or object
- 3 included in, or eligible for inclusion in, the NRHP. NPS categorizes their cultural resources as
- 4 archeological resources, cultural landscapes, historic districts and structure, museum objects, and
- 5 ethnographic resources. While the Clara Barton NHS NRHP nomination classifies the resource as a
- 6 building, its inscription of the nominated boundary includes the entire site, which contains several NPS
- 7 resource categories addressed in this AOE.
- 8 Historic properties and cultural resources within the APE for the Clara Barton NHS Rehabilitation Project
- 9 were studied based on a review of existing documentation and through consultation with the MHT and
- 10 other consulting parties. Resource types include properties in the Maryland Historic Register and
- properties, districts, and cultural landscapes listed on or determined for listing in the NRHP, and NHLs.
- 12 The APE is defined by and entirely contained within the Clara Barton National Historic Site (Date Listed:
- 13 10/15/1966; NHL Date: 1/12/1965; Revised Date: 1/3/1980). Individual character-defining features of
- the Clara Barton NHS cultural landscape on shown on the APE map.
- 15 The historic properties contained within the APE include:
- 16 Buildings

1

- Clara Barton National Historic Site
- 18 Structures
- South retaining wall
- 20 Objects
- **1** None None
- 22 Landscape

25

26

27

28

- See Section 4.1.2 for a more detailed discussion of landscape features within the APE
- 24 Archaeological Resources
  - Site 18MO154 (Clara Barton I) Eligibility of site not yet evaluated
  - See Section 4.1.2.9 for a more detailed discussion of potential archaeological resources within the APE.

#### 4.1 Character-Defining Features

1

12

13

15

16

17

18 19

20

21

23

24

26

27

#### 2 4.1.1 Clara Barton National Historic Site

- 3 The following list of character-defining features were developed in part through a review of the HSRs
- 4 completed in 1996 and 2002 and the National Register nomination (1980). Character-defining features
- 5 are characteristics that qualify the property for inclusion on the NRHP. The character-defining features
- 6 listed below relate to one or more of the seven aspects of integrity (location, design, setting, materials,
- 7 workmanship, feeling, and association) and contribute to the NHS's eligibility.
- 8 See Section 5.0 for detailed descriptions for how each intervention of the Proposed Rehabilitation will
- 9 impact the character-defining features of the Clara Barton NHS.
- 10 **4.1.1.1 Site and Landscape** (See section 4.1.2 for description of site and cultural landscape)

#### 11 **4.1.1.2** Location / Siting

Elevated residential site overlooking the Potomac River valley

#### 4.1.1.3 Exterior

- Massing
  - Symmetrical front façade with stone towers
    - Roof- Standing seam sheet metal roof, penthouse with alternating gable sections and pyramidal roof at center, false gable at front facade, and sheet metal mansard roofs at towers.
  - Texture and Materials
    - Uncoursed rubble stone foundation and corner towers
    - German Siding
- Exterior doors
  - Front entrance doors and screen doors
  - East door, basement egress
- Windows and trim
  - All floors except basement two openings
  - Two basement window openings
  - Flagpoles

28 29 30

33

#### 4.1.1.4 Interior

- Muslin ceilings
- o Vestibule, Main Hall, Topmost Chamber
  - o Rooms 112, 113, 114, 212, 213
- o Rooms 214, 215
- Plaster ceilings
- 36 o First floor Rooms 103, 105, 108, 109, 111, 115, 116, 117, 118, and 119
- 37 o Second floor Rooms 209, 211, 216
- Plaster ceilings and walls with cracks and localized deterioration

- Atrium and spatial organization/closets and closet interiors 1 2 Wood board partitions 3 Wood railings 4 Interior wood paneled doors, trim profiles, and corner blocks 5 Muslin and "ticking" on wood doors 6 Wood flooring 7 Windows, including transoms and colored glass 8 Cabinetry 9 Vault Third-floor penthouse 10 11
  - 4.1.1.5 Furnishings

13 14

15

16

17 18 All items original or historically associated with Clara Barton and the house during her occupancy are considered to be a part of the Clara Barton NHS. They are currently in storage and are available for reuse and interpretation, and will be unaffected by the current undertaking. A Historic Furnishings Report completed in 1983 by the NPS provides guidance and recommendations for interpretation of the furnishings, as well as offers recommendations on specific maintenance, installation and protective measures for various furnishings and features within the building.



Photograph 5. View of first floor Hall of Clara Barton NHS where many character-defining features of the house are evident and will be preserved.

#### 4.1.2 Cultural Landscape

1 2

3

4

- The following list of character-defining features related to the cultural landscape was developed as part of the CLR completed in 2023.
- 7 Character-defining features of the Clara Barton NHS cultural landscape generally consist of large-scale
- 8 landscape patterns that persist from the period of significance to the present. The landscape design
- 9 seeks to protect and enhance these contributing features.
- 10 The majority of individual site features including nearly all site vegetation have been added or accreted
- after the period of significance ending in 1912. Some features do not appear in historic documentation,
- such as a small stone-lined basin along the south retaining wall. Worth noting is that one large southern
- 13 magnolia tree east of the house has been verified through dendrochronology to post-date the period of
- significance. Current research indicates that no historic small-scale features remain in the landscape.
- 15 The extant contributing features of the Clara Barton NHS demonstrate the historic integrity of the
- 16 cultural landscape related to the significance of the site. The following list includes contributing features

17 organized by landscape characteristic:

- 1 4.1.2.1 Buildings and Structures: Habitable buildings and non-habitable landscape structures such as
- 2 retaining walls, free-standing walls, and sheds, including remnant features which indicate the location of
- 3 non-extant structures and may be below grade.
- Clara Barton NHS

- South retaining wall
- 6 **4.1.2.2 Circulation:** Patterns of movement and the arrangement, alignment, accessibility, and materials
- 7 of roads and walks for use by vehicles and pedestrians.
- Walk from Oxford Road, general pattern
- Driveway loop, general pattern
- 10 Oxford Road
- 11 **4.1.2.3 Natural Systems and Topography:** Physical landforms, soils, drainage patterns, and waterbodies.
- Minnehaha Branch perennial stream
- Woodland and edge habitat supporting historic native species
- Steep slope south toward Potomac River
- 15 **4.1.2.4 Spatial Organization:** Patterns and arrangement of features that comprise the landscape.
- Elevated residential site overlooking the Potomac River valley
- Lawn north of Clara Barton NHS
- Driveway loop defining homestead horticulture plot
- 19 **4.1.2.5 Land Use:** Historic activities and patterns of use related to Clara Barton's rural residence.
- Arrival loop at end of Oxford Road
- House museum; memorial function
- Service functions west of house
- 23 **4.1.2.6 Views:** Open, closed, screened and framed visual aspects of the site.
- Panoramic view south to Potomac River and beyond
- Visual relationship between Barton House and adjacent north and west suburban development
- 26 **4.1.2.7 Vegetation:** All types of plant material including ornamental, agricultural, native and invasive
- 27 plants.

32

- Lawn on ground plane near house
- 29 **4.1.2.8 Small-Scale Features:** Objects and furnishings such as benches, signs, trash and recycling
- 30 receptacles, and landscape ornamental elements.
- No extant contributing features.

- 4.1.2.9 Archeological Resources (Potential): Subsurface resources related to the historical evolution of
- 2 the property. Per a memorandum and figures regarding a preliminary archaeological assessment by
- 3 Hunter Research dated August 12, 2022, the areas below were identified as having potential
- 4 archaeological sensitivity. Refer to Figure 31.
- 5 Prehistoric
  - Lying within 100-150 feet of the southern bluff edge, throughout the grounds to the west and east of the house, and along the narrow strip of ground immediately to the south of the house.
- 8 Historic

7

9

- Area of two-story frame stable, which was located southwest of the house
- Area of carriage shed, i.e., "Auntie's House" and other outbuildings such as the henneries
- Undetermined location of privy
- Undetermined location of well and early water supply systems and utilities
- Past landscaping and horticultural features
- Possible refuse pits and midden deposits
- 15 A Phase IB study of areas of ground disturbance as part of this undertaking is anticipated but not yet
- 16 complete.

#### 1 5.0 ASSESSMENT OF EFFECTS

#### 2 **5.1 Methodology**

- 3 To assess the potential effects of the project on the character-defining features of the site and building,
- 4 this report applies the Criteria of Adverse Effects as defined in Section 106 (36 CFR 800.5) According to
- 5 this portion of the regulations, the criteria of adverse effect are defined as follows:
- 6 An adverse effect is found when an undertaking may alter, directly or indirectly, any of the
- 7 characteristics of a historic property that qualify the property for inclusion on the National Register in a
- 8 manner that would diminish the integrity of the property's location, design, setting, materials,
- 9 workmanship, feeling or association. Consideration shall be given to all qualifying characteristics of a
- 10 historic property, including those that may have been identified after the original evaluation of the
- 11 property's eligibility for the National Register. Adverse effects may include reasonably foreseeable
- 12 effects caused by the undertaking that may occur later in time, be farther removed in distance, or be
- 13 cumulative.

15

16

17

18

19

20

21

22

23

24

25

26

27

28

29

30

33

34

35

36

37

39

- 14 Examples of adverse effects are identified in 36 CFR 800.5 and include, but are not limited to:
  - Physical destruction of or damage to all or part of the property;
  - Alteration of a property, including restoration, rehabilitation, repair, maintenance, stabilization, hazardous material remediation, and provision of handicap access, which is not consistent with the Secretary's Standards for the Treatment of Historic Properties (36 CFR 68) and applicable guidelines;
  - Removal of the property from its historic location;
  - Change of the character of the property's use or of physical features within the property's setting that contribute to its historic significance;
  - Introduction of visual, atmospheric, or audible elements that diminish the integrity of the property's significant historic features;
  - Neglect of a property that causes deterioration, except where such neglect and deterioration
    are recognized qualities of a property of religious and cultural significance to an Indian tribe or
    Native Hawaiian organization; and
  - Transfer, lease, or sale of property out of federal ownership or control without adequate and legally enforceable restrictions or conditions to ensure long-term preservation of the property's historic significance.
- 31 The seven aspects of integrity were used to evaluate the proposed undertaking which include:
- Location
  - Location is the place where the historic property was constructed or the place where the historic event occurred.
  - Design
    - Design is the combination of elements that create the form, plan, space, structure, and style of a property.
- Setting
  - Setting is the physical environment of a historic property.
- 40 Materials

Materials are the physical elements that were combined or deposited during a particular period of time and in a particular pattern or configuration to form a historic property.

#### Workmanship

 Workmanship is the physical evidence of the crafts of a particular culture or people during any given period of history or prehistory.

#### Feeling

 Feeling is a property's expression of the aesthetic or historic sense of a particular period of time.

#### Association

 Association is the direct link between an important historic event or person and a historic property.

Of the four approaches outlined in the Secretary of the Interior's Standards for the Treatment of Historic Properties, the Rehabilitation Standard is applicable to the proposed project. Rehabilitation is defined as:

"...the act or process of making possible a compatible use for a property through repair, alterations, and additions while preserving those portions of features which convey its historical, cultural, or architectural value."

The following guidelines set forth in 36 CFR 800 were used to assess project effects on historic resources:

- **No Effect:** Per 36 CFR 800.4(d)(1). An undertaking may have no effect to historic properties present in the APE, and a finding of "no historic properties affected" may be determined for an undertaking. A determination of no historic properties affected means either there are no historic properties present in the area of potential effect or there are properties present in the area of potential effect, but the undertaking would not affect them. This finding indicates that an undertaking would not alter any aspects of integrity for any historic properties.
- **No Adverse Effect:** Per 36 CFR 800.5(b), an undertaking may be determined to have "No Adverse Effect" to historic properties if the undertaking's effects do not meet the criteria of adverse effect as described below. If project implementation would not alter a characteristic that qualifies that resource for inclusion in the NRHP in a manner that diminishes the significant aspect of integrity, the finding for the undertaking is "No Adverse Effect".
- Adverse Effect: An adverse effect is determined if the undertaking would alter directly or indirectly, any of the characteristics of a historic property that qualify the property for inclusion in the National Register in a manner that would diminish the integrity of the property's location, design, setting, materials, workmanship, feeling or association.

The following evaluation is organized following the list of character-defining features outlined in Section 4.0 as well as by impacted rooms. Under each feature, scope elements of the proposed project are listed with a brief description of the scope item. A brief analysis is provided addressing the impact of the scope on the character-defining feature, both direct physical impacts and potential indirect impacts including perceptions by visitors to the site. A recommended finding is included for each scope item.

# 5.2 Three Design Alternatives

1

8

9

10 11

12

13 14

15

16

17

18 19

20

21

22

23

24

25

26 27

28

29

30

31 32

33

34

35

36

37

38

39 40

41

- 2 The design team developed three Design Alternatives to meet the goals and objectives of the
- 3 rehabilitation project. They were organized twofold: 1) by the level of structural intervention to
- 4 safeguard the building, and 2) by the significance of rooms based on their impact in the life of Clara
- 5 Barton during the period of significance. New elements, such as vertical circulation and the restrooms,
- 6 were placed in areas of secondary or lower significance to avoid negative effects. **Refer to the appended**
- 7 drawings for (3) Alternatives to Structural Approach (Figures 17-25).

#### 1) Alternative 1: Repair and Rehabilitate

- Does not upgrade the reinforcement of the second-floor framing.
- Does not permit any occupancy of the second floor with the exception of maintenance personnel.
  - Provides a new accessible restroom at the first floor within the building footprint.
  - Replaces the existing boiler and pumps in the shed to provide heating and partial cooling to the building.

#### 2) Alternative 2: Moderate Structural Upgrade

- Increases the live load capacity of the second floor by sistering new lightweight metal joists to the existing joists. In order to conceal the new members within the existing ceiling finishes, the members' sizes are fixed, resulting in a load capacity that is lower than the code-required capacity for Assembly occupancy.
- Permits occupancy at the second floor determined by the structural load capacity. The total number allowable would be 77 people at the second floor, with required enforcement of the maximum number of people.
- Adds a code-compliant egress stair due to occupancy of the second floor, discharging at the basement exterior.
- Provides accessible restrooms at both the first and second floors.
- Provides the benefit of an installation at the interior of the building and with members of shorter spans (hence more cost-effective).
- Replaces the existing HVAC with a new energy-efficient, sustainable heat pump VRF heating and cooling system.

#### 3) Alternative 3A: Extensive Structural Upgrade

- Increases the live load capacity of the second floor by adding steel columns through the floor framing from the basement up to the underside of the second floor to support new steel beams placed within the depth of the second-floor framing. These columns would be located in the first-floor closets and exposed inside certain interpretive rooms. In addition, new wood beams would be inserted mid-span and the existing joists cut and re-supported with joist hangers.
- Permits a code-compliant occupancy of the second floor.
- Adds a code-compliant egress stair due to occupancy of the second floor, discharging at the basement exterior.
- Provides accessible restrooms at the first and second floors.

- Creates a more difficult installation, as the cantilevered steel beams in the atrium may need to be installed through new openings in the exterior walls.
- Replaces the existing HVAC with a new energy-efficient, sustainable heat pump VRF heating and cooling system.

#### 4) Alternative 3B: Extensive Structural Upgrade with a Lift

- Provides the same structural approach as Alternative 3, however adds a vertical platform lift to the design to provide accessibility to the second floor.
- A vertical platform lift does not contain a full machine room and can be retrofitted into small spaces with less impact on the existing structure. The vertical height of the lift's mechanics dictates that the location must be at the highest point of the second floor which is nearest the third story bearing wall on either side of the atrium. The lift shaft can stay within the envelope of the building and not penetrate the roof.
- The lift will connect the first and second floors only; it will be enclosed with surrounding walls.

# 5.2.1. The Value Analysis

1

2

3

4

5 6

7

8

9

10

11

12

13

14

15

16

- 17 The Value Analysis (VA) was conducted on September 20-21, 2023 with a Certified Value Specialist,
- 18 members of the GWMP, DSC, and Regional NPS offices, and members of the design team; the full report
- can be found under separate cover. NPS staff also previously received feedback from Consulting Parties
- after their review of the three Design Alternatives presented on July 31, 2023.
- 21 Alternative 1 received high marks for the preservation of historic fabric in its approach. Because the
- design did not involve any structural upgrade or use of the second floor, it also was deemed to not pose
- 23 any adverse effects in the restoration treatments. However, the alternative did not meet the project
- objectives for improving the visitor experience, safeguarding the building, or meeting code compliance.
- 25 Alternative 3 generated the most advantages for its extensive structural upgrade which allows second
- 26 floor use with a code-compliant occupancy count and egress stair, thereby creating more opportunities
- 27 for programming. The increased durability of the building also reduces the maintenance and
- administrative oversight and reduces the risk associated with future deterioration. However, the design
- 29 introduces new materials (such as the exposed steel columns) which may not be compatible for an NHL.
- 30 In addition, the second-floor joists would be cut and large steel beams inserted, which is a more difficult
- installation and could cause additional loss of historic fabric during construction.
- 32 Alternative 2 presented the most favorable outcome for increasing visitor enjoyment while avoiding the
- 33 potential adverse effects of Alternative 3. With this structural approach, the replacement of
- 34 deteriorating plaster ceilings in kind can be accomplished and the building can be made more resilient
- 35 for the future. Because the live load capacity is not upgraded to fully meet code, a small risk is
- associated with Alternative 2 and it is more critical that the egress stair be designed according to code.
- 37 While the overall structural approach does not involve removing historic wood flooring or other
- 38 materials, localized removals are required for the egress stair and restrooms.
- 39 With the preference determined for second floor occupancy through Alternative 2, the advantages of a
- 40 lift for accessibility as its own focus topic were evaluated at the VA. The vertical platform lift, unlike the
- 41 elevator in the previous Schematic Design, does not contain a large overrun and is entirely contained

- within the building envelope, avoiding impacts at the roof or exterior. The lift was selected to be added to Alternative 2 with the following conditions:
  - Consider refining the design to further limit impacts on resources, for instance by not removing the partition between 116 and 117
  - Interpret the lift with a focus on Clara Barton
  - Check the load requirements further and limit the program on the second floor accordingly
  - Provide more information on changes to the openings and frames at the lift lobby (116 and 215)
    - Confer with the signatories regarding support for the lift
    - Confer with the AHJ about acceptance of the existing clear widths at Doors 116 and 215 if the door stops and doors are removed
    - Better define the impacts on the character-defining features.

13

3

4

5

6

7

8

9

10

11

# 5.2.2. Refinement of Lift Framing in the Proposed Rehabilitation

- As part of Alternative 3, the lift opening was framed at the second floor with a heavy steel beam which
- cantilevered into the atrium. With the adoption of the lift into the Proposed Rehabilitation (Alternative
- 16 2), the design team developed multiple framing options. The first option included a W6 steel beam with
- 17 a visible column in Room 116 and one concealed column. To avoid the adverse effect of a visible steel
- column, both columns were placed within concealed locations of the lift framing wall and a closet in the
- 19 Main Hall. The framing members were changed to engineered wood beams with shorter spans; refer to
- 20 drawing sketches Design Development for Lift and Its Structural Components (Figures 26-28) for
- 21 additional details.

22

23

#### 5.3 Assessment of Effects on Historic Structure Character-Defining Features

- The following Assessment of Effects is organized by character-defining feature of the Clara Barton NHS.
- 25 Each feature is accompanied by a description of an impacting intervention as part of the Proposed
- 26 Rehabilitation. Table 1. Aspects of Integrity Impacted, Analysis, and Minimization or Avoidance
- 27 **Measures by Character-Defining Feature** describes how each relevant aspect of integrity of individual
- 28 character-defining features is impacted by alterations of the Proposed Rehabilitation, if at all, and what
- 29 measures will be taken to minimize and avoid those impacts. Refer to Table 1 for a complete review of
- 30 impacted aspects of integrity.

#### 31 **5.3.1 Site / Landscape** (See section 5.3 for full assessment of site and cultural landscape)

- Regrading at ramps to create walking surfaces that follow accessibility requirements.
- New rectilinear "boardwalk" concrete sidewalk will replace existing curved concrete sidewalk.
- 34 The modifications to grade are minimal, in some locations cutting into the existing topography, in others
- 35 building the topography up. The changes will have limited to no visual impact to visitors.

36

37

32

#### 5.3.2 Location

#### 5.3.2.1 Elevated residential site overlooking the Potomac River valley

2 The Clara Barton NHS has never been moved and will remain in the existing location.

4 <u>5.3.3 Exterior</u>

1

3

#### 5 **5.3.3.1 Massing**

- 5.3.3.1.1 Symmetrical front façade with stone towers. The building originally had a stone façade that
- 7 was altered to clapboard by Clara Barton in 1897. The stone tower at the north corner of the building
- 8 was left in place to avoid destabilizing an existing three-story stone vault at the north corner of the
- 9 building. The stone was also left at the opposite corner to balance the front façade creating flanking
- stone towers. The towers are remnant of the 1891 stone façade.
- 11 The new porch will be configured similarly to the original 1897 porch, and the ramp will be replaced in
- the same location as currently located. Refer to **5.1.3.7 Porch (1897 style)** commentary below. This will
- preserve the historic view of the front façade.

14

- 15 **5.3.3.1.2 Roof.** Standing seam sheet metal roof, penthouse with alternating gable sections and
- 16 pyramidal roof at center, false gable at front facade, and sheet metal mansard roofs at towers.
- 17 Analysis The original sheet metal has been replaced overtime but has retained its form and detail.
- Upper metal roofs: replace in kind
  - Lower metal roofs: rehabilitate, repair, and modify, if required, for new plumbing stack and restroom exhaust. A new lightning protection system and fall protection tie-offs (low profile) will be installed.
- The Upper roof appearance will not change. The Low roof appearance will be minimally impacted by the plumbing stack and tie-offs, which will be placed near the third-floor wall and away from windows.

24

25

19

20

21

#### 5.3.3.2 Texture and Materials

- 26 **5.3.3.2.1** Uncoursed rubble stone foundation and corner towers. The house rests on an exposed rubble
- 27 stone foundation composed of multiple piers. Historic documentation indicated that the stone towers
- were painted under Clara's direction to match the color of the house, though the stone also appears to
- 29 have been covered with ivy during most of her occupancy. The surface of the stone tower facing the
- 30 porch is brick with stucco and paint.
- 31 Analysis The stone towers and foundation retain material integrity however the areas have been
- 32 repointed overtime and the mortar generally lacks integrity of material and workmanship. The stone
- 33 foundations and towers will be repointed with mortar based on historic mortar analysis.
- **5.3.3.2.2 German Siding.** The exterior walls are wood novelty, German siding. In areas that have been
- 35 replaced or modified, vertical trim boards have been introduced. North siding typically had a 5"
- 36 exposure and a 1" undercut. The front façade has a false gable. The east elevation has a 5 3/8" exposure

- and  $\frac{3}{4}$ " undercut. The south elevation has a 5" exposure and  $\frac{3}{4}$ " undercut (some replacement). The West
- 2 elevation has various sizes of German siding: At the northeast end, and outside the kitchen and dining
- 3 room, the siding has a 5" exposure and a 1 \%" undercut. Outside rooms 103 and 203 there is a 4 \%" to 5"
- 4 exposure and a ¾" undercut. At the southwest end of the wall there is a 5" exposure and a ¾" undercut
- 5 panels at the clerestory level.

10

11

12

13

14 15

16

17

18

19

20

- Analysis The existing siding retains its integrity. Areas of siding were replaced by NPS circa 1978 at the south end of the west façade and the west half of the south façade where a former exterior porch and addition had been.
  - The clapboard wood siding will be replaced in kind where rotted or where clapboard is cupped and deteriorated. This condition occurs primarily on the north elevation above the porch roof. All other clapboard will be repaired or replaced in kind only as needed.
  - The new wood clapboard will match the profiles of the existing where removed.



Photograph 6. North elevation clapboard above the existing porch is severely deteriorated and requires replacement. The porch has caused water infilitration at the wall and rotted window sills.

#### **5.3.3.3 Exterior Front Entrance Doors**

- There are painted double wood panel doors (Doors 101A) with arched detailing at the front entrance and painted wood board batten doors on both the east and west elevation leading to basement and appear to date to Clara Barton's occupancy.
- 21 **Analysis** Original, paired two-panel doors with arched top panel

4

5

6

7

8

9

- Screen doors will be removed and salvaged to accommodate out swinging doors required by International Existing Building Code (IEBC), Alterations Level 2, 804.5.2 for Door Swing. It is unknown if the screen doors are original, but Barton had screen doors installed in 1903.
- Door swing will be reversed to accommodate emergency egress in the direction of travel.
- Power door operator and coordinator will be provided for use as the accessible entrance.
   Operator/Closer will be concealed to the extent possible.
- Hardware: Non-historic slide bolt will be removed. A panic bar may be added to the interior.
- Existing door will be repaired and painted based on finish analysis.
- Adjustments of doors required by Code will be done to match existing materials as closely as possible.

10 11

12

# 5.3.3.4 Exterior Door at East, basement level

- The existing board door (Door B-7B) will be modified to make it taller for a code-compliant exit from the egress stair. The door will be made taller by adding a solid bottom wood rail of +/- 12" flush with the boards, backed by a cross brace which is typical for barn board door construction. The door is currently concealed behind drywall in the basement so its operability is unknown at this time.
- The exit landing at the exterior must be at the same level as the interior floor/landing. Details regarding the stairs, minimal regrading at the slop on the east side, and the need for a retaining wall will be developed further during the DD phase. Adequate headroom will also be required for the door. At present, lowering the grade by approximately 9"-12" will cause level landings at both sides of the door.

202122

Adjustments of doors required by Code will be done to match existing materials as closely as possible.





23 24

Photograph 7 and Photograph 8. Front entrance doors to Clara Barton NHS.

# 5.3.3.5 Windows and trim - All floors except basement two openings

7 8

9

10

11

12

13

15

The wood windows in the building are 6-over-6 sash. They retain original glass. When Clara Barton altered the front face in 1897, the windows included 4-over-2 sash and 4-lite fixed sash, as well as various stained-glass sash including the 9-over-2 double hung Red Cross Window panels at the front, third level and a large multilight window at the main stair that was altered in 1898. There are also fixed stained glass panels at the clerestory although documentation indicates that some of the clerestory panels may have been replaced with Plexiglas.

14 Windo

Windows and door have simple 1x wood surrounds. At the first and third floors, the door and window heads have an applied triangular pediment while the second-floor openings have an applied segmental pediment.

pedimentAnalysis -

**Analysis** - Many of the windows have previously been replaced, though they retain their original fenestration pattern.

18 19

Restore and rehabilitate windows and screens. Install interior storm windows.

20

21

# 5.3.3.6 Windows and trim – Two basement window openings

22

- 1 Basement windows will be repaired except where replacement is necessary for HVAC or deterioration
- 2 beyond repair. The interior storm windows will be compression fit so as not require fasteners in wood
- 3 frame. The interior storm windows will assist environmental comfort and energy savings.
- 4 Analysis Two basement windows will require replacement with louvers for the mechanical system air
- 5 intake and exhaust.





Photograph 10 and Photograph 11. Exhaust air and outdoor air intake louvers are proposed for two basement windows located on the east elevation. The proposed locations are pictured above.

## 5.3.3.7 Porch (1897 style) and third-floor balcony and railing

A porch was constructed as part of the 1897 renovation in a traditional, vernacular style with painted wood railings and balusters as well as a small gabled overhang roof with posts over the main entrance. The original porch was removed in 1918 and the present porch with Tuscan columns and concrete and stone foundation was constructed. Though the porch is not a character-defining feature of the property, its proposed removal and reconstruction to fit the porch of 1897 will impact the front elevation of the building.

14 15 16

17

18 19

20

7

8

9

10

11 12

13

Analysis - Remove existing deteriorated 1919 porch and build a new porch that reflects the general form and character of the original 1897 porch which is a lost character-defining feature. The new porch will incorporate a new accessible ramp to the front door. Historic photographs and NPS drawings from c. 1978 will guide the design of the porch with compatible proportions for the railing and balusters. The third-floor balcony will be replaced in-kind where wood materials are rotted.

21 The e 22 north

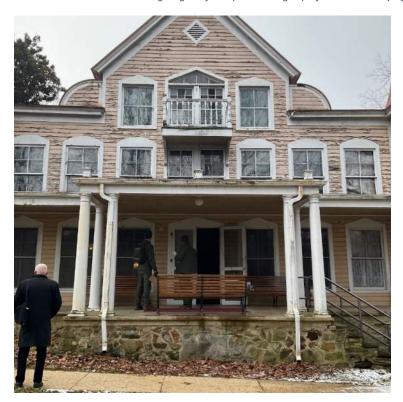
The existing front porch does not date to the period of significance and is causing deterioration of the north façade clapboard and windows. The design of the new porch will be more in keeping with how the house appeared during Clara Barton's occupancy and present visitors with a more historically appropriate design. The existing porch and third floor balcony contain little to no original materials and lack the workmanship of the original. The balcony will be restored.

26

23

24

25



Photograph 13. Existing Colonial Revival porch which dates to 1919.

# 5.3.3.8 Flagpoles

A wood flagpole rises from the center of the central pyramidal roof at the third-floor level. The flagpole penetrates the roof structure. Another flagpole was located at the front gable.

2 3 4

5

6

1

#### Analysis -

- Structural repair of center flagpole at third floor penthouse.
- Flagpole at front gable to be determined in the future.
- 7 The existing wood flagpole will be retained. Structural reinforcement of the flagpole will not be visible.

8

9

17

#### 5.3.4 Interior

- 10 The major improvements to the building include the installation of a new heating, ventilation, and air
- conditioning system (HVAC), structural upgrade to the second-floor framing, and the addition of code-
- 12 compliant vertical circulation, including a vertical platform lift (VPL), and restrooms. This section is
- organized in this order, followed by other character-defining features impacted by restoration work.
- 14 Materials that are believed to date from the period of interpretation are shown below in **bold face** type,
- as taken from the HSR (reference pages included).
- 16 The following interior character-defining features will be included in the Proposed Rehabilitation:

# 5.3.4.1 Heating, Ventilation, and Air Conditioning (HVAC) System

- 18 A new HVAC system will provide heating and cooling to the entire building in a manner that utilizes
- smaller pipes than the existing one, thereby requiring smaller and fewer risers in the closet and fewer
- 20 penetrations in the floors. The existing boiler in the shed c. 1980 provides heating water to unit heaters,
- 21 baseboard heaters, fan coil units, and one hot water radiator throughout the building; approximately
- forty separate heaters are located in the building. The baseboard heaters, which are in poor condition,
- 23 replaced cast iron radiators in 1980 and are inappropriate for the period of significance. The wood
- 24 flooring surrounding the baseboard heaters is also in poor condition in several rooms due to multiple
- 25 pipe penetrations and leaks over time.
- 26 The proposed system will be comprised of a Variable Refrigerant Flow heat pump system with a
- 27 Dedicated Outdoor Air system. The conditioned air at the first floor will be delivered by fan coil units in
- 28 the basement through ducts to floor grilles at the first-floor level. Because the grilles will generally be
- 29 located in the same vicinities as the baseboard radiators or fan coil units in the perimeter rooms, there
- 30 is little diminishment of integrity of the floor beyond which has already occurred. The proposed grilles
- 31 will be cast iron, less visually disruptive than radiators, and have simple patterns such as those designed
- 32 by manufacturers like Reggio Registers. New grilles in the Main Hall at the first floor will diminish the
- integrity of the pine wood flooring material in isolated locations only. The Schematic Design includes
- 34 supply air, return air, and relief air, each with two grilles, around the perimeter of the Main Hall. At each
- 35 grille, a portion of flooring measuring 16"x12" or smaller will be removed. The integrity of the materials
- and workmanship of the pine wood floors will not be diminished when considered as a whole. Three
- 37 wood stoves, though non-functioning, convey the character of the original building heating system.
- 38 Closets within the Main Hall and individual rooms will be used for pipe and duct risers. Air distribution
- 39 will be coordinated with other systems to minimize the number of penetrations in the floor within

- 1 closets. The risers feed fan coil units at the second floor which will typically be located one per room at
- 2 the perimeter walls offset from the windows due to the low windowsill heights. Because the fan coil
- 3 units are similar in size to old radiators, they will be concealed within custom wood enclosures, locations
- 4 to be coordinated with interpretive and exhibit needs in mind. Piping will be concealed within the floor
- 5 structure of the second floor which is an improvement over much of the piping that is currently
- 6 exposed. Reproduction baseboard trim will be added where it has been removed for the heaters. These
- 7 units require minimum size penetrations for piping, hence do not diminish the integrity of the existing
- 8 flooring.

16

17

18

19 20

21

22

23

24

25

31

32

33

34

35

36

37

38

39

40

- 9 The proposed heating and cooling system is suitable where there is limited space available for piping
- 10 and ductwork. Closet locations will contain risers grouped and pushed to the rear with false backs where
- the desire is to conceal them if the closet is opened. The removal of inappropriate baseboard heaters
- will make the interpretive rooms more compatible with the period of significance. All wood floors will be
- 13 refinished to match historic finishes; floor grilles will either be painted or metal finish to closely match
- wood finishes so they are less visible.

## Aspects of Integrity: Materials and Workmanship – Diminished

## **Minimization or Avoidance Measures:**

- The new HVAC system piping and ductwork, when installation is complete, will be contained to the basement, concealed within closets on the first floor, and the floor structure of the second floor
- Period-appropriate heat registers and grilles will be installed where currently inappropriate base board heaters, registers, and grilles are extant.
  - Wood stoves original to the building, though non-functioning, will remain intact.
  - The new HVAC system will offer climate control for the storage and maintenance of furnishings and artifacts used for interpretation at the Clara Barton NHS.

# 5.3.4.2 Structural Upgrade to Second-Floor Framing

- 26 The existing wood joists that frame the second floor are 2x6s and spaced such that they do not have the
- 27 required load bearing capacity for Assembly use/occupancy at that floor. The first-floor framing
- received reinforcement with new framing in between existing joists and additional columns in 1981.
- 29 Analysis The proposed upgrade will sister lightweight metal joists to the existing wood joists to
- 30 increase the live load capacity. The process will involve:
  - Carefully removing the muslin fabric at first floor ceiling (Refer to Muslin Ceilings and Plaster
    Ceilings below) for off-site treatment. Document locations that the fabric is attached to joists.
    Photograph and label all pieces to reinstall in-kind. Photograph existing and remove other ceiling
    materials, noting any features, such as ghosting of previous partition in a room.
  - Documenting all locations of existing wood joists. Spacing may not be uniform throughout and cross-bridging or blocking may be located in certain areas. Allow A/E team to observe the existing conditions once opened up.
  - Inserting new metal joists into joist bays. At cantilevered joists (to support second-floor atrium floor), lap metal joists with those in the adjacent room. Carefully insert metal joists over the hall closet walls.

- Carefully dismantling closet walls only at point of attachment to install new metal sister (where closet rear or face walls are constructed around existing joists). Reconstruct closet rear wall around new metal joist. Face walls conceal all joists and should not be impacted.
- Installing new HVAC and electrical conduit, primarily at rear of closets.
- Following all MEP and structural work, inserting new false back walls to match existing at closets as directed by A/E. The intent is to maintain at minimum one closet for interpretation with as deep a closet as possible, including the possibility of that closet having no MEP services at all. Selection TBD with consult of NPS.
- Reinstalling ceiling material: treated original muslin, wood board (some closets currently do not have ceilings), plaster in kind, drywall in kind.

# 11 Aspect of Integrity: Materials and Workmanship – Diminished (refer to Table 1 and descriptions by character-defining feature below)

#### Minimization or Avoidance Measures:

1 2

3

4

5

6

7

8

9

10

13

14

15

16 17

18

31

32

33

34

35

36

37

38

39

- The structural upgrade, when complete, will be concealed by conserved original muslin ceiling, wood board in closets, and in-kind plaster and drywall. Intrusions will not be visible.
- The structural upgrade will grant visitor and staff access to the second floor for interpretive, operational, and storage uses.

#### 5.3.4.2.1 Muslin ceilings and wall coverings

- 19 There are muslin ceilings throughout the building on both the first and second floor. Some rooms retain
- original muslin such as the central atrium space while others like the Red Cross Offices and former
- 21 dining room on the first floor and Clara Barton's Bedroom and Clara Barton's Sitting Room on the
- second floor have been replaced in kind over time.
- 23 An approach of applying a paper backing board below a textile fiber covering was used throughout the
- 24 interior which correlates with notations in Clara Barton's journal entries. This has helped to establish the
- 25 finishes as historic to the period of significance. Based on the function of the room, the fabric may have
- 26 received an adhered wallpaper or just painted. All original fabrics were identified as woven cotton with
- an uneven nap typical of early industrial or hand-woven fibers. Most have a typical plain weave while
- 28 the rarer occurrence of a twill weave pattern is also present.
- 29 Analysis There are original muslin ceilings present in Vestibule 101, Hall 102, and Room 303 (painted).
- 30 The remaining muslin ceilings and wall coverings are NPS restorations c. 1978.
  - Muslin ceilings: Vestibule (Room 101), Main Hall (Room 102), Topmost Chamber (Room 103) The original muslin in the first-floor Hall will be carefully removed under the care of a
    conservator for cleaning and replacement of backing. Structural stabilization work will be
    inserted while the ceiling materials are not in place. Original muslin ceilings at the third-floor
    penthouse will be carefully removed, cleaned, and reinstalled on a new backing under the care
    of a conservator.
  - Muslin ceilings: Rooms 112, 113, 114, 212, 213 Non-original c. 1978 muslin will be removed as required in locations needed to install structure or mechanical piping (Rooms 112, 113, and 114). The muslin ceilings will be replaced in kind. One ceiling in 213 will require mitigation of

- 1 1970's asbestos backing. C. 1970s muslin wall coverings will be removed and reinstalled where required to install mechanical piping.
  - Muslin ceilings: Rooms 214 and 215 The restored muslin ceilings in Rooms 214 and 215 will be
    replaced with a hard plaster ceiling due to the new egress stair (214) and lift and restroom (215).
- 5 Original materials will be conserved and reinstalled. Modern materials will be replaced in kind.

#### 6 5.3.4.2.2 Plaster ceilings and walls

- 7 There is plaster throughout the interior on the first, second, and third floors. Material analysis indicates
- 8 that the plaster is original. Throughout the house there are layers of post-historic material covering
- 9 historic plaster. The conservation assessment completed by Evergreene sampled approximately half of
- 10 the rooms and found most plaster material was historic. The survey findings will be used to determine
- specs for types of plaster to replace in each room. Rooms on east side will use representative samples.

12

14

15

16

17

18

19

20

21

22

3

4

- 13 Analysis Some walls have been covered with a modern fiberboard.
  - The existing plaster will be removed from the first-floor ceilings where required to insert new structural members. This includes the following spaces:
    - o Rooms 103, 105, 108, 109, 111, 115, 116, 117, and 118, 119 will have all plaster removed.
  - Rooms 209 and 216 require new hard plaster ceilings based on the current loss of material.
  - Room 211 will have structural insertions to in the ceiling and will require full replacement of plaster.
    - The remaining plaster ceilings require repairs to patch missing areas and to restore structural integrity of the material.
- 23 The plaster ceilings will be repaired in kind or where extensive patch would be required, will be replaced
- with a wallboard and a plaster veneer. Plaster walls will be repaired.
- 25 **5.3.4.2.3** Atrium spatial organization and closets
- 26 Analysis Restoration of finishes only. One structural column and new building systems will be confined
- to the closets and will not be visible in the atrium.
- This results in the preservation of a key contributing feature of the historic site.
- 29 **5.3.4.2.4** Atrium closet interiors
- 30 See 5.3.4.1 HVAC System and 5.3.4.2 Structural Upgrade to Second-Floor Framing for detailed
- 31 descriptions of work to take place within closet interiors.
- 32 5.3.4.2.5 Structural Upgrade to First-Floor Framing
- 33 New steel columns, steel beams, and concrete footings will be added to reinforce the first-floor framing
- 34 where the load bearing capacity is below code compliancy. The rooms have exposed joists or modern
- 35 drywall ceilings. Drywall will be removed and beams will be placed below the joists, lowering the
- 36 headroom at those locations. The design team will consult with NPS about replacement drywall ceilings.
- 37 Column locations are still in schematic stages of development; they will be located in Room B-1. Walls

- 1 reinforced with additional framing will support new sisters for joists in B-3, B-4, B-5, and B-6. Rooms B-1,
- 2 B-4, and B-6 have been modified and have low significance. Rooms B-3 and B-4 retain original fabric and
- 3 have primary significance. Vertical board partitions and uncoursed rubble stone from the period of
- 4 significance will not be altered.

6

# 5.3.4.3 Vertical Circulation and New restrooms within existing rooms

- 7 A vertical platform lift (VPL) is proposed for accessible vertical circulation rather than an elevator. The
- 8 VPL does not utilize a dedicated machine room nor has the same vertical height requirements as an
- 9 elevator for its shaft. This allows the lift to be within the low ceiling height of the second floor and not
- 10 penetrate the roof, which would diminish the integrity of the roofline.
- 11 In existing Rooms 116 and 215, the lift will be inserted by removing the wood vertical board partitions of
- the fronts and rear of closets; these are indicated in the table (refer to Table 1) as the board partitions
- 13 between Rooms 115 and 116 (115 northeast side, 116 southwest side) and between Room 214 and 215
- 14 (214 northeast side, 215 southwest side). This loss of integrity occurs in rooms considered Not
- 15 significant and of Secondary significance. While the board partitions are character-defining features,
- other rooms which flank the central hall (described in the 1996 HSR as storage rooms or bedrooms
- 17 which changed over time) also contain them. The new load-bearing wall which will replace the removed
- partition at the first and second floors will be in roughly the same location, thereby keeping the dividing
- 19 wall and room proportions like the historic proportions. Additionally, the board partitions will be
- 20 carefully documented, dismantled, and salvaged. Portions of the closest can be reconstructed in the
- 21 new rooms to the east/southeast of the lift. Other minimization efforts are included in **Table 1**.
- 22 Removal of ceiling finishes (plaster on the first floor and modern muslin on the second floor) does not
- 23 diminish the integrity of materials in a meaningful way. The plaster will be replaced-in-kind throughout
- 24 the first floor for the structural modifications; the replacement of non-historic muslin will allow for the
- 25 fire rating of the lift shaft and more maintainable ceiling in the Vestibule Room 116A, Room 116, and
- 26 Room 116B.
- 27 The four panel wood doors for the new lift vestibule rooms at first and second floors will be removed, as
- will the hinges and door stops; this allows the frame dimensions to be approximately 32" which is
- 29 required for an accessible entry. Rather than being stored remotely, the doors can be fixed to the
- 30 northwest wall of the lift vestibule rooms adjacent to the opening. This keeps the integrity of the doors
- 31 with their openings though their removal is required for clearance reasons. Due to the removal of the
- 32 board partition closets, four wood frame doors with fabric coverings will also be removed. These will be
- 33 well documented and salvaged; their inclusion in the exhibit design (by others) would be appropriate to
- demonstrate the use of material on doors during the period of significance.
- 35 The lift shaft will extend from the first floor to the second floor, with a depression below the first floor
- 36 for the cab landing; the wood flooring and framing structure of the first and second floors will be
- 37 removed. The wood flooring is character-defining, and removal will be localized to the lift shaft. The
- wood flooring in the lift vestibule and adjoining rooms (116 and 215) will be maintained. Because the
- 39 wood floors throughout the building will remain and be restored, the small amount to be removed for

40 the lift is de minimis.

- See below for a thorough description and room-by-room analysis of the impacts the lift and secondary 1
- 2 egress stair of the Proposed Rehabilitation will have on individual spaces and character-defining features
- 3 of the Clara Barton NHS. Overall, their inclusion in the Proposed Rehabilitation address life safety,
- 4 accessibility, and indoor environmental controls and building systems the Clara Barton NHS presently
- 5 needs.
- 6 The rooms impacted by these modifications are listed individually with references to the HSR. The HSR
- 7 uses true ordinal directions to identify walls (Northeast is the front of house, Southeast, Southwest,
- 8 Northwest). These correspond to the project North directions used in this report: North is the front of
- 9 house, East, South, West. Impacts to the rooms listed below will utilize the same directions as the HSR
- 10 for clarity between the two documents.
- As listed in the bibliography, HSR references for the room inventories are: 11

Lampl, Elizabeth J. Clara Barton National Historic Site: Historic Structure Report, Volume 1, Part 1: Developmental History (Reissued and Expanded). U.S. Department of the Interior, National Park Service, Washington, D.C., 2002 [Compiled 2004].

14 15 16

17

12

13

Oehrlein & Associates Architects. Clara Barton National Historic Site: Historic Structure Report, Volume 2, Part 2: Physical History and Condition Assessment Reissued and Expanded). U.S. Department of the Interior, National Park Service, Washington, D.C., 1997 [Compiled 2004].

18 19 20

22

23

24

25

33

34

# **5.3.4.3.1** Room B-5 Living Room

- 21 HSR, Vol 2, pg. 142 classifies Room B-5 as "not significant."
  - Part of the northeast end of the room will receive a new stud partition to frame the new egress stair. This incorporates the Bath in B7 into the passageway for the egress to the exterior door. Remove exist unfinished drywall to access the exterior door. Exterior door will be modified by adding a bottom wood rail, and egress panic hardware.

#### 26 5.3.4.3.2 Room B-6 Bedroom

- 27 HSR, Vol 2, pg. 143 classifies Room B-6 as "not significant."
- 28 The Northeast wall has modern knotty pine paneling. Remove the wall to construct new wall for 29 the egress stair.

#### 30 5.3.4.3.3 Room B-7 Bathroom

- 31 HSR, Vol 2, pg. 144 classifies Room B-7 as "not significant."
- 32 Remove modern bath fixtures and finishes. Construct new wall for egress passageway. Remove ceiling finish and replace with fire-rated drywall for exit passageway. Point chimney if required, and finish to match existing.

#### 35 5.3.4.3.4 Main Hall 102

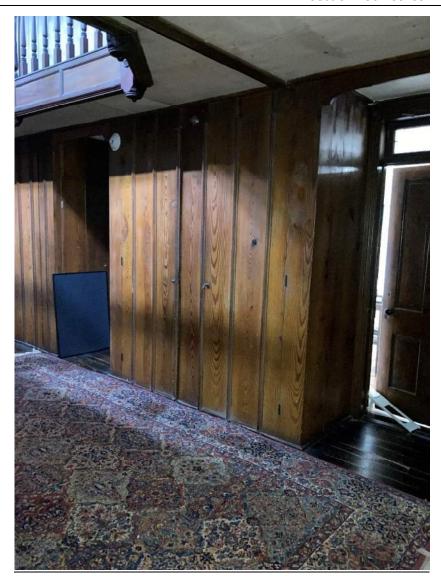
- HSR, Vol 2, pg. 147-149 classifies Main Hall 102 as having "primary significance." 36
- 37 NORTHEAST WALL
- 38 Swing existing vestibule doors (102A) outward for egress.

#### SOUTHEAST WALL

- Approach to Room 115 (new egress stair). The approach will be altered to create a 12"-wide opening between the hall closets. Code compliant approach requires 12" latch-side clearance and will require an exit sign (historically sensitive style and location).
  - o **Four-panel wood door** (Door 115) must provide 32" clearance. Remove and salvage door. Provide new fire-rated 34" four-panel wood door and frame to match existing; may require approval by code official for a door without a vision panel. New transom to match existing size with one-hour fire resistant glazing. Add panic hardware and closer.
  - o **Transom window.** Remove and salvage.
  - "Colonial" trim (type 3) with bull's eye corner blocks. Remove at left side of opening and top where door opening is shifted. Casing at right side of opening to remain to indicate location of original opening. Door casing does not have a plinth block or base at the bottom. The new opening is flush with the closet; use salvaged vertical boards to cover frame.
  - Closet vertical boards (southwest side of CL-07) will be dismantled; the opening will be adjusted at the face, and the closet door will be reinstalled. The vertical boards will be reinstalled to side wall of closet. Back of closet vertical beaded boards will remain or be removed and reinstalled for structural framing of lift.
  - Add steel column in closet for floor framing above which will not be visible from the Hall.
  - Decorative wood header trim at face of approach to room. Remove, modify existing, and reinstall, or remove and replace with new wider wood trim with same shape.
- Hall Closet opening to Room 116A (new lift and restroom vestibule). No alteration to opening.
  - Four-panel wood door (Door 116A). Remove from hinges. Remove stops. Avoid loss of door by fastening removed door to wall at the interior side of vestibule in Room 116A.
- Other Closet interiors. Ductwork and pipes will be routed vertically through the closets with locations to be developed further during design. The **beaded board backs** will remain. False backs to match existing wood boards will be installed to conceal pipes and ducts.

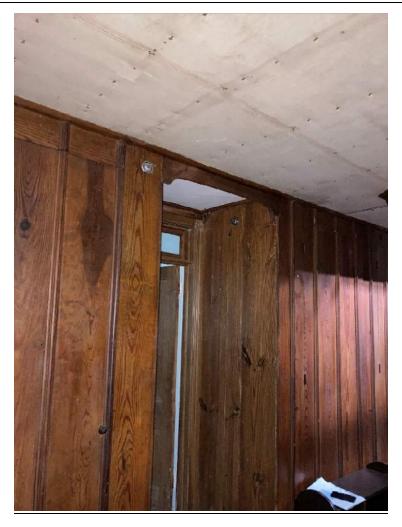
SOUTHWEST WALL – no change, existing doors to remain with ABAAS exception for opening clearance

NORTHWEST WALL – no change, existing doors to remain with ABAAS exception for opening clearance



Photograph 14. Hall 102 looking at Southeast wall. The approach to Room 115 is shown at right, and the approach to Room 116 at left side of photo.

2



Photograph 15. Hall 102 detail - typical approach through closets. Door casing and decorative wood header trim at face can be seen clearly (this photo depicts approach to Room 118 where no alterations will occur).

Because the finishes of the approach will be restored to match existing, the feeling and overall design of the atrium will not be altered. Board and batten proportions will be kept consistent. The visitor's

6 "reading" of the closets in the Hall will be the same.

#### 5.3.4.3.5 Room 115

- 8 HSR, Vol 2, pg. 164-165 classifies Room 115 as "not significant."
- 9 Per the HSR, "Not much is known about the use of this room, but it may have served as the tool room in
- the original 1891 construction. On October 23, 1897, Dr. Hubbell "cleared the tool room." The tool room
- 11 was plastered, along with an old storeroom on November 3, 1897. Since Rooms 115, 116 (and now 117)
- 12 are the only first floor rooms not previously mentioned in the diary with plaster, it stands to reason that
- these were storage rooms converted to chamber functions in 1897."6

#### 14 FLOORING

1

2

3

4

5

7

<sup>&</sup>lt;sup>6</sup> Lampl, Clara Barton National Historic Site: Historic Structure Report, Volume 1, Part 1: Developmental History, p. IV-20.

• Random width, tongue and groove pine flooring. Carefully remove and reinstall on egress stair landings. Salvage other flooring. Condition is fair. Cut and remove joists below.

#### 3 NORTHEAST WALL

1

2

4

5

7

9

10

11

12

14 15

17

18

19

20

22

- Vertical board partition covered with fiberboard. Remove and salvage boards.
  - Wood frame closet door with painted muslin covering at the closet. Salvage door.
- Trim and moldings are not character-defining (sanitary type 4); unknown date. Remove.
  - Closet with vertical wood board back. Remove and salvage.

#### 8 SOUTHEAST WALL

- Wall will receive steel tube to stiffen the structure where the floor framing is removed. Existing
  plaster wall will remain in stairwell with existing window and trim. (IBC 1023.7 Interior Exit
  stairway).
- Baseboard. Sanitary type with ogee shoe will be removed.

# 13 SOUTHWEST WALL

• Back side of beaded board partition. Painted chimney. Wall and chimney will remain behind new wall for stair.

#### 16 NORTHWEST WALL

- **Plaster on wood lath.** A small portion of the wall at the north/northeast side will be removed to widen opening. Remainder of wall will remain behind new partition for stair.
  - o **Four-panel wood door with transom.** Sanitary casing. Refer to Hall 102, approach to Room 115 for treatment.
- 21 CEILING
  - **Plaster on wood lath.** Remove ceiling, wood lath, and cut out structure.
- 23 **5.3.4.3.6 Room 116**
- HSR, Vol 2, pg. 165-166 classified Room 116 as "not significant," though the 2002 update elevated to
- 25 "secondary".
- The HSR updated research suggests that Clara Barton may have used Room 116 or Room 117 as a first-
- 27 floor sleeping room in the early days of the 1897 renovation. The evidence is conjectural, as is the
- possibility that the two rooms were combined. This and other small rooms that flank the central hall on
- 29 both the first and second floors were used for storage, some as bedrooms, and uses appear to have
- 30 changed over time.8

<sup>&</sup>lt;sup>7</sup> Lampl, Clara Barton National Historic Site: Historic Structure Report, Volume 1, Part 1: Developmental History, p. IV-20.

<sup>&</sup>lt;sup>8</sup> Oehrlein & Associates Architects, *Clara Barton National Historic Site: Historic Structure Report, Volume 2, Part 2: Physical History and Condition Assessment* Reissued and Expanded), U.S. Department of the Interior, National Park Service, Washington, D.C., 1997 [Compiled 2004], p. 165.

#### FLOORING

1

2

3

5

6

7

8

9

11

12

14

19

20

2122

24

25

• Random width, tongue and groove pine flooring. Carefully cut boards to remove flooring at the lift. Cut existing joists below in the vicinity of the lift.

#### 4 NORTHEAST WALL

Board and batten partition. Partition to remain with a new restroom partition in Room 117 constructed behind the original board and batten. A new opening will be created in the partition for the door to the restroom. The existing thru-door to Room 117 will remain. Use new flush painted wood door for restroom; an alternative could be to relocate a salvaged four-panel door from the basement (34" wide) for the restroom.

#### 10 SOUTHEAST WALL

• No change to plaster on wood lath wall. Repair wall at plaster where new Southwest wall intersects and stair/closet is removed.

# 13 SOUTHWEST WALL

- Vertical beaded board partition covered with fiberboard. Remove and salvage boards.
- Stair to basement. Not constructed during the period of significance ("later" per HSR). Remove.
- Door to stair (two-panel with infilled transom). Remove and salvage. Door casing is sanitary
   trim.

#### 18 NORTHWEST WALL

- Plaster on wood lath or gypsum board to remain.
  - Door casing. "Colonial" trim and baseboard to remain. It will remain behind new support walls for the lift at the south/southwest end.
  - Door 116A (four-panel wood door). Refer to Room 102, Southeast wall, for treatment.

#### 23 CEILING

- **Plaster on wood lath.** Remove ceiling at the location of the lift. Cut and remove exist joists in the vicinity of the lift. The ceiling will be replaced in kind.
- 26 While Room 116 will receive the new vertical platform lift and a privacy wall for the NPS Space, the
- 27 room's original spatial configuration will underlie the new insertions. Original wood flooring will be
- 28 continuous on both sides of the privacy wall. An alternative could design the privacy wall's termination
- below the ceiling to allow the ceiling to also be continuous. The east side of the room will retain its
- integrity with the northeast and southeast walls.

#### 31 **5.3.4.3.7 Room 117**

- HSR, Vol 2, pg. 166-168 classified Room 117 as "not significant", though 2002 elevated to "secondary."
- 33 As stated for Room 116, Clara Barton may have used Room 117 as a first-floor sleeping room in the early
- 34 days of the 1897 renovation for the period of only a couple of months. The room has served as a
- 35 bedroom, storage, and more recently an office.

#### 36 FLOORING

• Plywood overlay? with carpet (different than HSR). Random width tongue-and-groove pine flooring is probably below the existing flooring. New flooring in restroom will cover the existing. If random width pine flooring is below, it will be used for the finish floor in the new NPS Space.

#### NORTHEAST WALL

1 2

3

4

5

6

7

8

9

11

13

14

15

16

17

19

20

21

23

26

- **Vertical board partition**, southeast half is covered with fiberboard. Wall to remain with the new restroom partition constructed in front of existing board wall.
- (2) four-panel wood doors that connect to Rear Parlor. Secure both doors shut. An alternative could be to keep the east/southeast door to Room 118 operable. Door casing, Sanitary trim, type 4 to remain.

#### 10 SOUTHEAST WALL

No change to plaster on wood lath wall or window.

#### 12 SOUTHWEST WALL

- **Board and batten partition.** Wall to remain with the new restroom partition constructed in front of the existing board wall.
  - Exist door to Room 116 to remain. Use new flush painted wood door for the restroom; alternative could be to relocate a salvaged four-panel door from the basement (34" wide) for the restroom.

#### 18 NORTHWEST WALL

Plaster on wood lath with openings into two closets. Wall to remain with new restroom
partition constructed in front of the existing wall. Hang two salvaged paneled doors in the
openings and fix shut.

# 22 CEILING

- Replace plaster ceiling in kind.
- 24 The spatial configuration of Room 117 is maintained in the new layout though a restroom is inserted.
- 25 Vertical board partitions, character-defining components of the NHS, will be retained.



6

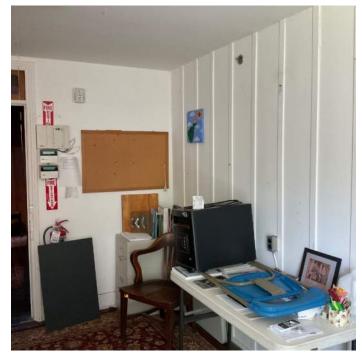
7

10





Photograph 16 and Photograph 17. Room 115. (Left) Wood frame closet door with painted muslin covering will be removed and salvaged. (Right) The southwest / northwest corner will be enclosed within new partitions for the egress stair.





Photograph 18 and Photograph 19. (Left) Board and batten partition within Room 116 will remain. (Right) View of Room 117 looking towards the northwest where new restroom is proposed.

# 5.3.4.3.8 Main Hall 202

8 HSR, Vol 2, pg. 172-173 classified Main Hall 202 as having "primary significance."

#### 9 SOUTHEAST WALL

Random width vertical beaded board. No change.

- 1
- 2 3 4
- 5 6 7
- 8 9 10 11
- 13 14

- 15 16
- 17

18 19

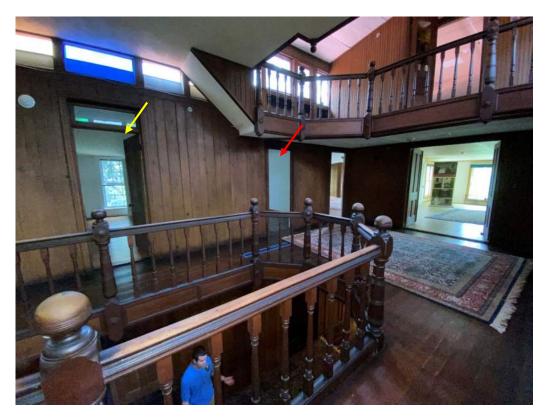
20

21

22

- Four-panel wood door to Room 214 (Door 214). Remove and salvage.
  - Door to Room 214 must provide 32" clearance. Opening will be widened by approximately 6" and wood board will cover frame to match existing. Provide new firerated 34" four-panel wood door and frame, which may require approval by AHJ without a vision panel; add panic hardware and closer.
  - "Colonial" trim (type 3) with bull's eye corner blocks will be removed at left side of opening and top where door opening is widened. Casing will be modified at top and reinstalled. Opening must be widened by +/- 6". Reinstall casing. Door casing does not have a plinth block or base at the bottom.
- Four-panel wood door and transom to Room 215A (Door 215A). Remove door from hinges and remove the door stops to achieve adequate clearance for barrier-free access. The door can be mounted to the wall at the interior of the room so it remains associated with the opening.
- Four-panel wood door and transom to Room 215 (second door on northern side). Secure shut.

The Main Hall retains its character, even with one door opening modified and a replacement four panel door to match existing. Specifications will indicate metal cleaning and restoration for historic hardware.



Photograph 20. Two openings in the atrium of Main Hall 202: the opening shown with the red arrow will be widened by +/- 6" for the egress stair. The opening with the yellow arrow will have the door and stops removed for a wider clear opening.

# 5.3.4.3.9 Room 214

HSR, Vol 2, pg. 186-187 classified Room 214 as "not significant", though 2002 elevated to "secondary".

- 1 "Barton had a room that she called her "second spare room" or her "second room" which may have
- 2 been Room 212 (her sitting room), but appears instead to have been a spare chamber. It may have been
- 3 Room 214, the chamber immediately adjacent to her own chamber."9
- 4 FLOORING

6

10

18

20

23

24

25

26

- Random width, tongue and groove pine flooring. Carefully remove and reinstall on landings at new egress stair. Condition is fair.
- 7 NORTHEAST WALL
- Vertical board partition covered with fiberboard. Remove and salvage vertical boards.
- Wood board closet door. Remove and salvage.
  - Fabric-covered door that connects through the closet to Room 215. Remove and salvage.
- Trim and moldings are not character-defining ("Colonial" type); unknown date. Remove.
- 12 SOUTHEAST WALL
- Fiberboard over stud framing (per HSR). Wall appears to be plaster. Existing wall may remain exposed in stairwell with existing window with approval by AHJ. (IBC 1023.7 Interior Exit stairway). Existing window and casing to remain.
- Window casing to remain. Remove baseboard.
- 17 SOUTHWEST WALL
  - Vertical board partition covered with fiberboard. Partition will remain behind new stair wall.
- 19 NORTHWEST WALL
  - Fiberboard on stud wall. Wall will remain behind new partition for stair.
- Four-panel wood door, Door 214. "Colonial" casing. Refer to Main Hall 202 for treatment.
- 22 CEILING
  - Restored muslin fabric of unknown restoration date, probably after 2002 HSR update. Justification for installing muslin fabric (which was listed as fiberboard in 1997) is not found in Lampl's *Vol 1, Part 1: Developmental History*. Remove muslin fabric. Install drywall ceiling tight to underside of roof framing over new egress stair.
- 27 **5.3.4.3.10** Room **215**
- HSR, Vol 2, pg. 187-188 classified Room 215 as "not significant", though 2002 elevated to "secondary".
- 29 "The large room probably served as a storeroom in the 1891 Red Cross House and continued to serve as
- a storeroom until the summer of 1904, when Barton no longer served as the President of the American

<sup>&</sup>lt;sup>9</sup> Lampl, Clara Barton National Historic Site: Historic Structure Report, Volume 1, Part 1: Developmental History, p. IV-30.

- 1 Red Cross and was free to convert some of her storage space to other uses.... There is no information
- 2 specifically about this room in the 1897 diaries..."<sup>10</sup>
- 3 FLOORING

6

7

8

9

11

18

19

21

24

25

26

27

- Random width tongue and groove pine flooring. Cut and remove as required for lift shaft.
- 5 NORTHEAST WALL
  - Vertical board partition covered with fiberboard. Wall to be protected and remain with the new restroom partition constructed inside the original.
    - **(2) Wood frame closet doors covered with painted fabric.** Closet doors secured shut. "Colonial" trim to remain behind restroom partition.
- 10 SOUTHEAST WALL
  - Fiberboard on stud framing to remain.
- Windows, casings, symmetrical trim (type 1) with bull's eye blocks, and baseboard to remain.
- 13 SOUTHWEST WALL
- Fiberboard over **original vertical board partition.** Remove and salvage vertical boards.
- Vertical board partitions at (2) Closet back walls. Remove and salvage vertical boards.
- **(2) Board doors to closets.** Colonial trim, type 3. Remove and salvage.
- 17 NORTHWEST WALL
  - Fiberboard over stud framing. Wall to be protected and remain behind new walls for lift and restroom.
- Four-panel wood door and transom (Door 215A). Refer to Main Hall 202 for treatment.
  - Four-panel wood door and transom (northern side). Secure shut. Protect for new restroom.
- "Colonial" trim, type 3 to remain.
- 23 CEILING
  - Restored muslin fabric of unknown restoration date, probably after 2002 HSR update.
     Justification for installing muslin fabric (which was listed as fiberboard in 1997) is not found in
     Vol 1, Part 1: Developmental History of HSR. Remove muslin fabric. Install drywall ceiling tight to underside of roof framing over new lift, lift vestibule, restroom, and Curatorial Workroom.

Room 215, with a new lift and restroom, can still be understood or felt as two smaller interventions within a larger room. Like the room below, original wood flooring will be continuous on both sides of the privacy wall that separates the Curatorial Workroom from the lift lobby. An alternative could design the privacy wall's termination below the ceiling by approximately 12" to allow the ceiling to also be

continuous. The east side of the room will retain its integrity with the northeast and southeast walls.

CLBA 312325 p. 47

28 29 30

31

32

<sup>&</sup>lt;sup>10</sup> Lampl, Clara Barton National Historic Site: Historic Structure Report, Volume 1, Part 1: Developmental History, pp, IV-30-31.



Photograph 21. The southeast wall of Room 215 has damage due to water infiltration. This wall's finishes will be restored.

# 5.3.4.4 Wood Interior Elements, located in other areas of the Clara Barton NHS

- 5 See **Table 1** for room-by-room review and detailed analysis of the Proposed Rehabilitation's impacts on
- 6 integrity of design, materials, and workmanship for interior wood elements.

# 7 **5.3.4.4.1 Wood board partitions**

1 2

3

4

- 8 The central interior of the house has vertical beaded board over stud walls. There are wood board
- 9 storage closets doors as part of wall system. There are nine types of beaded board throughout the
- 10 house with different profiles including Type 1, Type 2, Type 3, Type 4, Type 5, Type 6, Type 7, Board and
- 11 Batten (Type 1) and Board and Batten (Type 2).
- 12 **5.3.4.4.2 Wood Railings** Railed lightwell and stair railings.
- 13 **5.3.4.4.3 Trim profiles and corner blocks.** See Room-by-room narrative in **5.3.4.3 Vertical Circulation**
- and New restrooms within existing rooms for detailed descriptions of trim profiles and corner blocks.

#### 15 **5.3.4.4.4 Wood Floor Finishes**

- 1 The flooring throughout the upper floors of the house is a random width tongue-and-groove pine board
- 2 which is original and significant. (The basement flooring is concrete with the exception of the rooms at
- 3 the south end which have wood floors. The floors in B-3 and B-4 are random width wood on wood
- 4 sleepers. The wood floors in B-5 and B-6 postdate the period of significance.)
- 5 Analysis Interior woodwork and trim will remain in its existing configuration and will be refinished
- 6 where required to better represent the interior finishes that were present during the period of Clara
- 7 Barton's occupancy. This will include both transparent and painted finishes based on finishes analysis.
  - Floor mounted supply air registers will be located on the first floor.
  - The mechanical fan coil units in the interpretive spaces will be concealed within closets where possible and appropriate.
  - Other building system piping, ductwork, and conduit will be consolidated in locations for vertical routing, primarily at the Main Hall and room closets. Numerous building system components are currently exposed throughout various locations.
    - With sprinkler system, the number of fire alarm devices may be reduced. Where old devices (or fire extinguishers) are no longer required, they will be removed or relocated to less visible locations.
    - Consolidation of security system, communication hub, and fire and electrical panels will occur. Because ceilings will be open, and closets will be utilized for some pathways, consolidation may occur in an efficient manner. Defunct wires and pipes will be removed.
  - Floors: The existing wood floors throughout the house will be refinished.

#### 22 5.3.4.4.5 Windows including transoms and colored glass

- 23 The first-level vestibule has panel windows and transom pane windows surrounding the opening to
- 24 atrium space. Second level low rectangular single-light windows with colored glass are alternating in
- 25 width with pattern. Original transom windows over doors exist on the second level.
- 26 Analysis Some of the colored glass has been replaced by NPS in glass (marked) and there was also a
- 27 record noting that replacements of colored glass were made in Plexiglas.
  - Windows will be conserved and /or restored in place.
  - The transom at Door 115 will be replaced to match existing.
- 30 The light entering into the atrium will not be altered. Repairs to the windows will be consistent with the
- 31 Secretary of the Interior's Standards.

## Interior doors

8

9

10

11

12

13

14

15

16

17

18

19

20

21

28

29

32

34

# **5.3.4.4.6 Wood paneled doors** include:

- Wood panel doors and metal hardware hinges.
- Three leaf bi-fold doors restored by NPS based on photographs.
- 36 **Analysis -** The original and restored interior doors will be cleaned and repaired, and will remain in place
- 37 with their original hardware unless previously noted otherwise. Many hall door openings have 29" or
- 38 30" clear openings between the face of the open door and the opposite stop. While ABAAS requires 32"

- clearance, the following locations will seek approval from the code official for the original doors to remain in the open positions:
  - Rooms 108, 118, 119

4

5

6

8

9

14

15

16

17 18

19

- Rooms 109, approach to 109, 111- NPS to determine if these rooms will be programmed for full accessibility / visitation.
- Room 114 if the hall approach is required rather than the approach through Room 113 (TBD)
- 7 Rooms 206, 207, 216
  - Rooms 209, 211, hall door to back stair- NPS to determine if these rooms will be programmed for full accessibility / visitation.
- 10 If the code official determines that any room requires a wider opening, the door may be removed from
- its hinges and the stops on both sides of the frame removed, similar to the measure indicated for Doors
- 12 116A and 215A, and the door and hinges would be marked and salvaged/stored in the basement.

# 13 **5.3.4.4.7 Muslin and 'ticking' doors** include:

- Closet doors in various rooms contain muslin coverings. One closet door in Room 115 and one
  closet door in Room 214 will be removed and salvaged. The closet doors in Room 215A will be
  fixed in place, protected, and concealed behind the new restroom partition. Other fabric
  covered doors will be cleaned and will remain in place.
- There is painted blue and white stripe mattress 'ticking' fabric covering some doors which is supported by a journal entry dated July 17, 1897.

# 20 **5.3.4.4.8 Cabinetry**

- 21 There are custom built painted wood cabinets in the kitchen (Room 111) and two unpainted wood
- corner cabinets in the former dining room space. A built-in cabinet is also present in Room 112.
- 23 **Analysis -** All cabinets to be cleaned and refinished in their existing locations.
- 24 **5.3.4.5 Vault**
- 25 The brick and steel vaulted floors within the vaults, the steel doors on the first floor, and steel door
- frames, and basement wood board doors that are part of the fruit cellar are original and significant.
- 27 **Analysis -** The vault will be used as it currently is and there will be limited repairs in kind in these spaces.

# 28 **5.3.4.6 Third-floor penthouse**

29 Analysis -

30

31

32

33

34 35

- Repair of existing finishes, window restoration with interior storm windows, and new HVAC.
- Room 303 will have the muslin removed and conserved offsite (Refer to Muslin Ceilings). New
  framing for the roof will include hold-down connections to the walls at the four corners. Each
  hip rafter will be sistered with new wood to match the depth of the existing, then the new
  members hung with metal clip angles to the hold-downs. The flagpole connection will also be
  improved. Once muslin is reinstalled, the structural repairs will not be visible.

# 5.4 Assessment of Effect on Cultural Landscape Character-Defining Features

# 2 Integrity of Site and Landscape<sup>11</sup>

- 3 For a cultural landscape, integrity involves how the physical features of the site relate to its historic
- 4 significance. A full analysis is provided in the 2023 Cultural Landscape Report. Refer to Figure 30.
- 5 Multiple influences, including changes in ownership, property function, and land use, have deeply
- 6 altered the Clara Barton NHS cultural landscape from the as-built character of 1912 to the character
- 7 present today, now 110 years later. Notably, many of these changes occurred during the years following
- 8 Barton's death. Today, the property, as a whole, displays integrity with a focus on the primary building.
- 9 There are no remaining secondary structures and the landscape remains in a much-altered condition,
- 10 presenting generally low integrity.

#### 11 Location

- 12 The property remains on its original site with the main building in its original location as reshaped in
- 13 1897. While the landscape remains in its original location, there are few character-defining features
- 14 extant today. Judging from a landscape perspective the cultural landscape retains a high degree of
- 15 integrity of location.

# 16 **Design**

- 17 As design applies to the integrity to the Barton landscape, design describes spatial organization, scale,
- 18 materials, form, and ornamentation. Limited continuity and considerable change characterize the
- 19 Barton era designed landscape. Alteration and additions predominate to diminish design integrity for
- 20 this cultural landscape.

# 21 Setting

- 22 For the property owned by Barton, the setting is deeply altered in its character with the reshaping of
- 23 topography into steep slopes near the Home Grounds and new access roads and parking. There remains
- 24 only the partially open field to the north in a character relatively close to the historic. To the north
- 25 MacArthur Boulevard forms that boundary but no longer hosts a trolley and related tracks and station
- 26 that Barton used. To the east beyond the parking lots, Glen Echo Park remains relatively intact. The
- 27 southern boundary downslope has nearly blocked views to the Potomac River valley, that were
- 28 important to Barton. The adjacent Glen Echo residential area to the west along Oxford Road has
- 29 evolved, while the Oxford Road boundary remains. Overall, the historic Barton property reveals low
- 30 integrity of setting today.

# Materials

31

- 32 For this cultural landscape, shaped by the Barton household during the period of significance, these
- 33 historic materials include soils making up a relatively level topography, productive and, to a lesser
- degree, ornamental plants, boardwalks, a dry-laid stone retaining wall, and secondary structures within
- 35 the landscape. Today the relatively level topography, while disturbed over time, remains level, and the
- 36 stone retaining wall to the south, obscured beneath volunteer vegetation remain, while other historic

<sup>&</sup>lt;sup>11</sup> Heritage Landscapes, LLC, *Cultural Landscape Report*, pp. 4.44-4.45.

- 1 materials are no longer present. Material integrity is diminished due to the loss of original materials and
- 2 the accretion of non-historic materials.

# 3 Workmanship

- 4 The degree to which historic craft and construction skills expressed in the historic as-built landscape,
- 5 when preserved describes workmanship integrity. The absence of intact historic crafted features
- 6 reduces the workmanship integrity of the Barton property cultural landscape.

# 7 Feeling

- 8 The lack of remaining intact spatial and visual organization, vegetation, circulation, non-habitable
- 9 structures, and small-scale elements that date to the period of significance compromise the integrity of
- 10 feeling for the Barton cultural landscape.

# 11 Association

- 12 Association refers to the degree that a property continues to relate to the Criterion for which it is
- deemed significant. In the case of criteria A and B, important events and person, these aspects remain.
- 14 For Criterion C, type, the landscape has lost the character and details of the historic period making that
- aspect low in integrity for the cultural landscape, in contrast to a determination that may be assigned to
- the Barton house, itself. Criterion D remains valid although the archeological assessment notes a
- 17 number of areas of disturbance that are unlikely to yield information going forward. Again, focusing on
- the landscape, integrity of association is limited.

# 19 Integrity Summary

- 20 The seven aspects of integrity for this cultural landscape are:
- 21 **Location** High
- 22 **Design** Low
- 23 **Setting** Moderate
- 24 Materials Low
- 25 Workmanship Low
- 26 **Feeling** Low
- 27 **Association** Moderate
- 28 With this range, favoring low integrity for four of the seven aspects, the cultural landscape is
- demonstrated to lack high integrity as a component of this NHL property. The existing landscape
- 30 expresses evolution rather than continuity with the historic period. The contributing features of the
- 31 Clara Barton NHS cultural landscape remaining today consist of large-scale features and landscape
- 32 patterns, while small-scale features and details are missing. Additional non-contributing features have
- 33 altered spatial organization, views, topography, vegetation, circulation, landscape structures, and small-
- 34 scale elements. Most landscape features reflect high levels of alteration after the period of significance
- ending with Barton's death. Some features do not appear in historic documentation while the absence

- 1 ending with Barton's death. Some features do not appear in historic documentation while the absence
- 2 of other features from historical photographs indicates that these features are not historic. Research
- 3 findings indicate that no historic trees or small-scale features remain in the landscape. Due to the high
- 4 degree of change since the period of significance, the cultural landscape demonstrates generally low
- 5 levels of integrity and presents an illegible appearance that that fails to convey the significance of the
- 6 property during Clara Barton's years of residence. See Table 1 for the impacts, analysis, and
- 7 minimization or avoidance measures of each intervention of the Proposed Rehabilitation on the
- 8 landscape's aspects of integrity.

#### 5.4.1 Buildings and Structures

11 12

**5.4.1.1 Barton House** (See 5.2 for detailed review and analysis of the Proposed Rehabilitation to the building)

13 14 15

16 17

18

19

# 5.4.1.2 New porch replacement and barrier-free ramp

 The barrier-free ramp is required to meet ABA/DSC accessibility guidelines and Secretary of the Interior Standards for the Rehabilitation of historic properties (36 CFR Part 68) specifically aligning to accessibility considerations. The barrier-free ramp replaces the existing noncompliant ramp but is designed for compatibility with the new, rehabilitated Barton-era porch design.

20 21

22

23

24

# 5.4.1.3 South retaining wall

 Proposed work avoids alteration of this feature. Site protection will be put in place during construction.

25

#### 5.4.2 Circulation

262728

# 5.4.2.1 Walk from Oxford Road, general pattern

- 29 A new orthogonal sidewalk will replace the existing, non-historic, curvilinear sidewalk.
  - The general pattern of the walk is not changed. The new walk will meet ABA/DSC requirements and more closely align to the layout of the historic boardwalks that were a circulation feature of the site during Clara Barton's occupancy than the existing, non-historic walk.

33 34

35

36

30

31

32

# 5.4.2.2 Driveway loop, general pattern

 Proposed work avoids alteration of the general pattern of this feature. Existing gravel loop driveway will be maintained.

373839

40

41

#### 5.4.2.3 Oxford Road

• Proposed work avoids alteration of this feature. Construction traffic makes use of this public road; however it will not be altered.

#### 5.4.3 **Natural Systems and Topography**

3 4

#### 5.4.3.1 Minnehaha Branch perennial stream

5 6 7 Construction activities including excavation, utility trenching, and stormwater management during construction may result in drainage to this adjacent waterway. Site protection will be put in place during construction to mitigate erosion and control silt and runoff.

8 9

## 5.4.3.2 Woodland and edge habitat supporting historic native species

- 10 No work is proposed in historically wooded areas. Limited tree removal in historically open areas will be 11 undertaken to remove invasive tree species and trees planted too close to house or walks.
- 12 Selective tree removal will begin to open views between the house and its immediate surrounds. 13 This helps to rehabilitate some of the historic visual relationships between the site, neighborhood, 14 and Glen Echo Park that were characteristic of Clara Barton's occupancy.

15 16

17

18

# 5.4.3.3 Steep slope south toward Potomac River

Proposed work avoids alteration of this feature. Site protection will be put in place during construction to mitigate erosion and control silt and runoff.

19

#### 5.4.4 **Spatial Organization**

20 21 22

# 5.4.4.1 Elevated residential site overlooking the Potomac River Valley

23 Proposed work avoids alteration of this feature.

24

#### 5.4.5 **Land Use**

25 26 27

#### 5.4.5.1 Arrival loop at end of Oxford Road

- 28 Two new accessible parking spaces will be provided west of the arrival loop at the end of Oxford Road.
- 29 A new gate will be located beyond the accessible parking spaces. It will replace the existing non-historic
- 30 gate. Signage will be provided to limit access of the general public to the service loop and accessible
- 31 parking spaces.
- 32 The accessible parking spaces are located adjacent to a neighboring residential house and outside of the historic property owned by Clara Barton. Site vegetation buffers views between the two parking spaces and most of the historic site.

34 35 36

33

#### 5.4.5.2 Memorial and Service functions

37 No work is currently proposed to the location of historic ornamental gardens. Tree and shrub protection 38 will be put in place for plants to remain.

 Construction impacts temporary pause historic land use functions of the property. No lasting impacts to the cultural landscape inhibit these functions.

# 5.4.6 <u>Views</u>

# 5.4.6.1 Visual relationship between Barton House and adjacent north and west suburban development

- Limited tree removal in historically open areas will be undertaken to remove invasive tree species and trees planted too close to house or walks.
  - The removal of some trees will make the Clara Barton site more visible to the public roadways and parking area at Glen Echo Park. The currently diminished visual relationship between Barton House and public roadways will be strengthened to be more characteristic of the site during Barton's residency.

### 5.4.6.2 Panoramic view south to Potomac River and beyond

Limited tree removal in historically open areas will be undertaken to remove invasive tree species and trees planted too close to house or walks. The removal of some trees will make the Clara Barton site more visible to the public roadways and parking area at Glen Echo Park. The currently diminished visual relationship between Barton House and public roadways will be strengthened to be more characteristic of the site during Barton's residency.

# 5.4.7 Vegetation

## **5.4.7.1** Lawn on ground plane near house

- The limited grading and construction activities will require restoration of lawn on the ground plane as part of the site restoration after construction.
  - Replacement of lawn in areas disturbed by construction will not diminish the integrity of the property. Further, protection will be put in place for plants to remain.

# 5.4.8 <u>Archeological Resources (Potential)</u>

There have been no major archeological excavations on the Clara Barton NHS property. However, between 1978 and 2012, five minor investigations were carried out, each targeted to address a specific NPS ground-disturbing action related to utilities installations, house repairs or planting activity. The APE includes site 18MO154 (Clara Barton I), which has not yet been evaluated for National Register eligibility.

From the standpoint of the survival of both prehistoric and historic archeological resources, and in addition to the limited ground disturbance resulting from archeological testing conducted on the property, there has been episodic and ongoing land alteration over the past 131 years that has affected the archeological potential of the Clara Barton NHS property. The construction of buildings (most notably, excavations for the basement for the house in 1891, but also for the foundations of secondary buildings), trenching for the installation of utilities, excavations for retaining walls and landscaping features, the laying of paths and driveways, the planting of trees and shrubs, and other gardening activity have all taken their toll on the prehistoric archeological record, while at the same time contributing to that record in the historical period.

The limited archeological exploration of soils on the Clara Barton NHS property has produced evidence of a Native American presence on the now somewhat modified promontory-like landform where the house is situated. This landform originally extended further east to overlook the Minnehaha Branch ravine that separates the parking lot from Glen Echo Park. Native American artifacts have been recovered over an area extending 120 feet west of the house, roughly 100 feet from the southern bluff edge, and along the rim of this bluff edge immediately south of the house. No systematic effort has been made to test soils elsewhere on the property for the presence of Native American cultural materials.

Although the archeological testing undertaken in 1978 found no intact prehistoric cultural stratigraphy, or features such as pits or hearths, and concluded that the cultural materials recovered did "not seem to represent a lengthy or seasonal occupation of the site," so little of the underlying landform has been examined that it may be premature to rule out the possibility of more intact and substantive Native American archeological resources surviving elsewhere on the Clara Barton grounds. 12 The most archeologically sensitive portions of the property, with respect to prehistoric resources, may be defined as lying within 100 to 150 feet of the southern bluff edge, i.e., throughout the grounds to the west and east of the house and along the narrow strip of ground immediately to the south of the house. The rim of the bluff extending east-west to the south of the house and curving around the southwestern edge of the property may have suffered some loss of archeological integrity owing to slope erosion. The post-1890 construction of outbuildings, landscaping and gardening may also have compromised the uppermost cultural soil layers, but these may overlie intact soils containing Native American artifacts and deeper-buried features within or cutting down into the subsoil. See Archeological Sensitivity Map of Potential for Prehistoric (Native American) resources (Figure 31). A Phase IA/IB archaeological survey will be completed based on the Proposed Rehabilitation and the survey's findings incorporated into the final AOE at the appropriate time.

The historic archeological potential of the Clara Barton NHS property is confined to resources post-dating 1890. The documentary record offers no indication that earlier historic archeological remains exist on the Clara Barton NHS grounds. The Clara Barton NHS itself, as a standing building erected in 1891, which has experienced some modification within its basement, contains little of archeological importance beyond its foundations. However, there are numerous outbuildings and landscaping features from the 1890s and early 20th century, now all destroyed, of potential archeological interest.

<sup>&</sup>lt;sup>12</sup> Ellen M. Seidel, Internal NPS Memorandum: Archeological Clearance for the Placement of Underground Fuel Oil Tanks and Lines, Clara Barton National Historic Site, Montgomery County, Glen Echo, Maryland. On file, NPS/GWMP CRM, 1978.

- 1 There is a high/moderate potential for historic resources west and south of house in the areas of these
- 2 former resources.

# 3 Work Proposed:

- 4 Proposed excavations on the interior and exterior as well as utility trenching have the potential to
- 5 disturb archeological resources. Proposed excavations include the following areas:

Area of Work	Archeological Resource Potential
East excavation at egress door and utility	Area of previous disturbance at foundation wall;
trenching to electric service and HVAC units	Moderate to High potential for prehistoric
Utility trenching at west foundation wall	To be determined during design development
Accessible parking area	Moderate to High Potential for prehistoric; Low potential for Historic
Boardwalk sidewalk	Moderate to High for prehistoric; Low potential for historic
Grading at ramp	No potential as grades will be built up.

6

7

- NPS is currently in the process of conducting Phase IB Archaeological Survey of the CLBA Archaeological
- 8 APE within areas where ground disturbances are proposed by the selected alternative. Pending results
- 9 of the survey, NPS will follow Section 106 process and consult with the appropriate parties on the
- identification and eligibility of archaeological sources and next steps, which could include measures to
- 11 avoid archaeological resources, if they are present, or Phase II/III Archaeological Survey or monitoring as
- 12 appropriate.
- 13 Potential resources could also be impacted by compacted soils from heavy machinery. Construction
- 14 access and staging could also result in soil compaction. The lawn areas and trees will require protection
- to minimize compaction of soils. Ground surface protection will be utilized, where necessary, to reduce
- or avoid any potential soil compaction. **Refer to Figure 29**.

# 6.0 AVOIDANCE / MINIMIZATION / MITIGATION

#### 2 **6.1** Introduction

1

13

14

15

16

17

18

19

20

21

28

- 3 Per 36 CFR 800.6, a finding of adverse effect to historic properties requires that efforts to resolve such
- 4 effects by developing and evaluating alternatives or modifications to the undertaking that could avoid,
- 5 minimize, or mitigate adverse effects must be undertaken.
- 6 After the first schematic design phase was completed January 31, 2023, NPS determined, in discussions
- 7 with the Consulting Parties, that the project scope did not adequately protect the integrity of the Clara
- 8 Barton NHS or the cultural landscape. The Pre-Design and first Schematic Design Phases aimed at
- 9 avoiding or minimizing negative effects while making improvements to life safety, accessibility, indoor
- 10 environmental controls and building systems through an extensive structural upgrade and by
- 11 constructing an addition, which would be shared with a partner organization. The brief overview of the
- phases undertaken by the design team at that time to avoid and/or minimize negative effects were:
  - A Pre-Design phase which included thorough research of existing NPS documentation and studies, archeology sensitivity mapping, initiation of the CLR, dendrochronology, conservation assessments of architectural materials and finishes, and coordination with NPS staff who possess years of experience with the site.
  - A Schematic Design phase which included programmatic and rehabilitation planning through the
    consideration of design alternatives, a value analysis meeting which selected the preferred
    alternative, and official agency consultation. The MHT, the SHPO, the ACHP, the National Trust
    for Historic Preservation, and expert Clara Barton historians were consulted for input on the NPS
    preferred alternative and to refine the design accordingly.
- 22 On June 1, 2023, NPS kicked off the second Schematic Design phase with the design team to develop
- 23 new design alternatives with revised programming developed by GWMP. The revised programming
- increased the interpretive component by avoiding partner and shared services. The consolidation of
- 25 programming allowed all rooms of Primary Significance at the first and second floors to remain
- 26 interpretive with other functions occupying spaces of Secondary or Low Significance. Most of the
- 27 restoration scope of work remained the same as the previous Schematic Design.

# 6.2 Minimization and Avoidance of Impacts on Character-Defining Features

- 29 The preferred alternative design concentrates vertical circulation and restrooms into a core area at the
- 30 east side of the Main Hall / atrium; this avoids impacts in disparate areas of the house. The exterior
- 31 egress door is placed on the east at the basement for the least impact to the view from the driveway
- 32 and parking approach side. Specific minimization and avoidance measures for each character-defining
- feature impacted are detailed in **Table 1**.
- In accordance with the Secretary of the Interior's Standards, the following character-defining features
- will be designed with a high level of scrutiny to avoid adverse effects:
- 36 **6.2.1 Atrium spatial organization:** The widening of the approach to Room 115 will remove and reinstall
- 37 the vertical boards at the side of Closet CL-7 to match existing. The decorative header trim will be
- 38 replaced to match the new width of the approach opening. Door 115 and transom will be removed and
- a new fire-rated door and transom will match existing. Because the narrow approach is being modified

- 1 near a closet, the removal of vertical board partition occurs within the closet and is therefore not
- 2 perceptible from the Main Hall side. Where new shaftwall is installed and visible from the Main Hall, it
- 3 will receive salvaged vertical board finish to match existing.
- 4 The second floor Hall will similarly have a replacement door to match existing at the fire egress stair
- 5 (214) with the opening widened by approximately 6". Trim will be removed and reinstalled at the
- 6 atrium side. The doors to the lift vestibule (116A, 215A) will be removed from the hinges and the stops
- 7 removed from the doors; this allows the existing frames of the doors to remain unaltered to attain the
- 8 maximum clear width possible. This avoidance measure will require the code official's approval if the
- 9 clearance is slightly under 32".
- 10 **6.2.2 Main Hall closets:** The closets contribute to the significance of the property and convey the story
- of the Clara Barton NHS being used as a warehouse for storage of disaster response supplies. None of
- 12 the face/hall walls are being altered with the exception of the closet door shift at CL-7. However, the
- interiors of some closets are proposed to run vertical ductwork, piping, and conduit. A thorough closet
- survey will be conducted during the Design Development phase to document the integrity of design,
- 15 materials, and workmanship of each closet. With the detailed survey, mechanical, electrical, and
- 16 plumbing systems will be carefully planned. Coordination with structural design will also prioritize the
- 17 historic fabric at the vertical board rear partitions of the closets, floors, and ceilings. False backs can be
- installed if concealing systems is desirable.
- 19 **6.2.3 Size and perception of bedrooms / chambers (former uses):** The insertion of the egress stair into
- 20 Rooms 115 and 214 follows the Secretary of Interior's Standards because it preserves the character-
- 21 defining spaces of the Main Hall and atrium (Primary Significance), while utilizing an existing room of
- lesser significance to accommodate the function without destroying its spatial quality. The windows,
- 23 window trim, and plaster walls will remain at the exterior wall.
- 24 Room 116, 117, and 215 will also retain the underlying spatial quality of bedrooms. The vertical board
- 25 partition separating 116 and 117 will remain in place. Closet doors in 117 and 215 will be secured shut
- and covered with the new restroom walls. Other avoidance measures include salvaging features with
- 27 historic materials to reinstall elsewhere or use for exhibits, as well as lowering the privacy wall so the
- 28 plaster ceiling can be continuous in the subdivided lift lobby room. The doors to the Main Hall and
- 29 atrium can be removed from the hinges and fastened at the interior of Rooms 116A and 215A to avoid
- 30 the loss of association with the openings.
- 31 **6.2.4 Removal of other historic materials:** In addition to the aforementioned materials, limited
- removals of wood flooring, vertical board partitions, wood trim, and doors with muslin will occur within
- 33 the vertical circulation and restroom core. More detailed avoidance measures are described in Section
- 34 5.0 Assessment of Effects as well as **Table 1**.
- 35 **6.2.5 Salvage of historic materials:** Following the removal process, historic materials that cannot be
- 36 replaced in their original locations per the Proposed Rehabilitation's plans will be salvaged and stored in
- 37 the basement or offsite by NPS. The basement has a large amount of storage space available and
- 38 already houses other artifacts and materials that have been previously removed and stored. The
- 39 salvaged materials will be stored in a weather-tight manner and be protected from damage in a location

40 only accessible by NPS staff.

#### 7.0 CONCLUSION

1

13 14

- 2 The Clara Barton NHL reflects the final stages of Clara Barton's life and work. She was one of the most
- 3 important women in American history due to her successful humanitarian efforts in wartime and
- 4 peacetime. After her career as "battlefield angel" during the Civil War, she directed disaster relief
- 5 nationally and internationally from this site. She founded the American Red Cross, which is her
- 6 continuing legacy, and this was its first headquarters.
- 7 The site has suffered from ongoing deterioration of materials and deferred maintenance. The building
- 8 has significant deficiencies that need to be addressed for any intended use:
- The building does not have a safe, code-compliant means of egress in the event of a fire.
- The second-floor structure is undersized and not able to safely support code-required live loads.
- Three of its four floors are not accessible.
- It does not have the required number of accessible restrooms for its size and occupancy.
  - The obsolete HVAC system needs to be replaced for improved climate control so that museum pieces may be displayed and for increased energy efficiency.
- 15 The Proposed Rehabilitation will correct these issues while repairing and conserving the building's key
- 16 contributing historic features. The goal of this project is to preserve the NHL that will continue to be
- used by the NPS for the interpretation and preservation of Clara Barton's legacy.
- 18 Through an extensive project review process a preferred alternative, the Proposed Rehabilitation, has
- 19 been developed that delivers a project with no adverse impacts on the character-defining features of
- the building and site. Specific treatments and approaches have been outlined in the previous sections
- 21 that avoid and minimize adverse effects at the areas of intervention; we believe that these approaches
- are de minimis when compared with the resulting benefits. The Proposed Rehabilitation resolves
- 23 ongoing issues of life safety, accessibility, and indoor environmental controls and building systems for
- the Clara Barton NHS.
- 25 This Assessment of Effects Report has been prepared in accordance with the requirements of Section
- 26 106 of the NHPA of 1966 (54 U.S.C. 306108) and the implementing regulations (CFR Part 800) to
- 27 consider the effects of this undertaking on historic properties. As an NHL, the Clara Barton NHS is
- 28 subject to Section 110(f) of the NHPA as well, which requires a higher standard of guidance in the
- development of the undertaking to minimize impacts to the NHL. This report and other materials will be
- 30 utilized as part of the consultation process with the NPS Assessment of Effects.
- 31 The overarching purpose of the Proposed Rehabilitation is to update and protect this structure to
- 32 preserve Clara Barton's legacy and for future visitors to enjoy.

#### 8.0 APPENDICES 1 2 3 8.1 Bibliography 4 5 Goeldner, Paul. "Clara Barton National Historic Site." National Register of Historic Places Nomination -6 Inventory Form. National Capitol Region, National Park Service, Washington, D.C., January 3, 1980. 7 8 Heritage Landscapes, LLC, Preservation Landscape Architects & Planners. Cultural Landscape Report: 9 Rehabilitate the Clara Barton National Historic Site. 2023. 10 11 Lampl, Elizabeth J. Clara Barton National Historic Site: Historic Structure Report, Volume 1, Part 1: 12 Developmental History (Reissued and Expanded). U.S. Department of the Interior, National Park Service, 13 Washington, D.C., 2002 [Compiled 2004]. 14 15 National Park Service. Cultural Landscapes Inventory: Glen Echo Park-Clara Barton House Cultural 16 Landscape, George Washington Memorial Parkway. 2011. 17 18 Oehrlein & Associates Architects. Clara Barton National Historic Site: Historic Structure Report, Volume 19 2, Part 2: Physical History and Condition Assessment Reissued and Expanded). U.S. Department of the 20 Interior, National Park Service, Washington, D.C., 1997 [Compiled 2004]. 21 22 Pryor, Elizabeth B. Clara Barton National Historic Site Report on the Historic Grounds 1891 to 1912. 23 National Park Service. 1977. 24 25 Seidel, Ellen M. Internal NPS Memorandum: Archeological Clearance for the Placement of Underground 26 Fuel Oil Tanks and Lines, Clara Barton National Historic Site, Montgomery County, Glen Echo, Maryland. 27 On file, NPS/GWMP CRM. 1978. 28 29 The Secretary of the Interior's Standards and Guidelines for Federal Agency Historic Preservation 30 Programs Pursuant to the National Historic Preservation Act. 63 Fed. Reg. 20503 (April 24, 1998)

(amending 53 FR 4727-46). Accessed December 2023, https://www.govinfo.gov/content/pkg/FR-1998-

31

32

33

04-24/pdf/98-10972.pdf.

# 8.2 Table and Figures

1 2

- 3 Table 1. Aspects of Integrity Impacted, Analysis, and Minimization or Avoidance Measures by Character-
- 4 Defining Feature
- 5 Figure 1. Existing Conditions Basement Plan and Spatial Significance Evaluations
- 6 Figure 2. Existing Conditions First Floor Plan and Spatial Significance Evaluations
- 7 Figure 3. Existing Conditions Second Floor Plan and Spatial Significance Evaluations
- 8 Figure 4. Existing Conditions Third Floor Plan and Spatial Significance Evaluations
- 9 Figure 5. Context Map
- 10 Figure 6. Existing Conditions Basement Plan and Interior Wall and Ceiling Finishes
- 11 Figure 7. Existing Conditions First Floor Plan and Interior Wall and Ceiling Finishes
- 12 Figure 8. Existing Conditions Second Floor Plan and Interior Wall and Ceiling Finishes
- 13 Figure 9. Existing Conditions Third Floor Plan and Interior Wall and Ceiling Finishes
- 14 Figure 10. Dismissed Locations for Egress Stair, Toilet Room, and Vertical Platform Lift
- 15 Figure 11. Proposed Basement Plan
- 16 Figure 12. Proposed First Floor Plan
- 17 Figure 13. Proposed Second Floor Plan
- 18 Figure 14. Proposed Third Floor Plan
- 19 Figure 15. Proposed Roof Plan
- 20 Figure 16. Area of Potential Effects
- 21 Figure 17. Alternative 1 First Floor
- 22 Figure 18. Alternative 1 Axonometric Cutaway View
- 23 Figure 19. Alternative 2 First Floor
- 24 Figure 20. Alternative 2 Second Floor
- 25 Figure 21. Alternative 2 Axonometric Cutaway View
- 26 Figure 22. Alternative 3A First Floor
- 27 Figure 23. Alternative 3A Second Floor
- 28 Figure 24. Alternative 3A Axonometric Cutaway View
- 29 Figure 25. Alternative 3B Introduction
- 30 Figure 26. Design Development for the Lift and Its Structural Components
- 31 Figure 27. Cutaway View, Option 1

- 1 Figure 28. Cutaway View, Option 3
- 2 Figure 29. Ground Disturbance Map (Archaeology)
- 3 Figure 30. Home Grounds Landscape, c. 1906
- 4 Figure 31. Prehistoric (Native American) Archaeological Sensitivity

Table 1. Aspects of Integrity Impacted, Analysis, and Minimization or Avoidance Measures by Character-Defining Feature

Character-Defining Feature	Is the	Aspect(s) of	Is Integrity	HSR-Assigned	Analysis	Minimization or Avoidance Measures
	feature	Integrity	lost or	Significance of		
	altered?		diminished?	Feature or Rm <sup>1</sup>		
Location / Siting	No	Location	No	High		
Exterior	1		<u> </u>	1		
Massing: Symmetrical front façade		Design,	No	Primary	The building elevation maintains its characteristic forms, such as false gable, corner	
with stone towers, Porch (1897	directly	Materials,			towers, and fenestration. The proposed front porch replaces the existing	
style), and third floor balcony		Workmanship			symmetrical front porch (not period of significance) with the same extents from	
					the east to west tower. Several components are severly deteriorated, as is the	
					front wall siding, necessitating the removal of the porch to replace the rotted	
					wood. Historic photographs and NPS drawings from c. 1978 will guide design of the	
					new porch with compatible proportions for the railing and balusters. The third-	
					floor balcony will be replaced in kind where wood materials are deteriorated.	
Massing: Roof	Yes,	Design,	No	None given	The upper roof will be replaced in kind with a lightning protection system at the	
	directly	Materials,			highest point; the small lightning rods are appoximately 10" in height and barely	
		Workmanship			visible from the ground. The lower (second floor) roof will be repainted. New fall	
					protection anchors at lower roofs and plumbing vent will be low profile and	
					located near the third floor walls away from the roof edges to reduce visibility;	
					they will also be painted to match the color of the roof metal.	
Texture and Materials: Uncoursed	Yes,	Materials,	No	Primary	The stone retains integrity, however the mortar lacks integrity. The stone will be	
rubble stone foundation & corner	directly	Workmanship			repointed with mortar based on historic mortar analysis.	
towers						
Texture and Materials: German	Yes,	Materials,	No	Primary - NE, NW	Clapboard siding that is deteriorated will be replaced to match existing sizes and	
siding	directly	Workmanship		elevations,	profiles. Historic wood species is pine; new wood will be cedar or douglas fir to	
				Secondary - SE,	improve resistance to rot. At the Northeast (front) elevation, the siding above the	
				SW elevations	porch roof will be replaced; this siding is c. 1966. At the other elevations, less than	
					20% will be replaced where it is rotted or cupped; areas of this siding were	
					replaced c. 1978.	
Exterior Doors: Front entrance	Yes,	Design,	Yes	Primary	Existing front entrance doors will be re-hung to swing outwards. It is unknown if	Screen doors will be removed and salvaged. New egress hardware will
doors and screen doors (Doors	directly	Materials,			existing screen doors are original, however HSR documents screen doors being	be installed in sensitive manner at the interior side and be traditional
101A)		Workmanship			installed c. 1903 (Vol 2, pg 54).	style. Door operator may be omitted, due to occupancy below 300
						people if code official and NPS permit.
Exterior doors: East door,	Yes,	Design,	No	Secondary -	Door was not included in HSR inventories because it was concealed at the interior;	Existing door will be modified and receive painted finish. It will receive
basement egress (Door B-7B)	directly	Materials,		Exterior, Not	its date of construction is unknown although it is suspected to date to after the	egress hardware only at the interior side. The wood board infills at
		Workmanship		Significant -	period of significance. The larger masonry opening suggests that a pair of wood	either side will remain and be painted. A landing at the exterior that is
				Interior	doors were used for moving large items into storage in the basement. Existing door	level with the interior floor is required by code at an egress door. The
					will be modified with wood rail (+/- 12" high) of matching species to elongate the	landing may require a slight depression with a low retaining wall at
					door. Entire door will be painted.	the north/northeast side and possibly a step at the south/southeast.
Windows and trim: All floors	Yes,	Materials,	Yes, small	Varies	Paint analysis indicates that some windows have been replaced, which concurs	At north/northeast elevation, five windows at the second floor will be
except basement two openings	directly	Workmanship	percentage of		with the HSRs.	replaced with new sash to match existing (replacements c.1960s).
			windows			Existing frames, sills, and frames will remain, except where repairs are
			No, for most			needed. Interior storm windows will be added with frames to
						maintain the daylight opening sizes. New period window treatments
						will conceal the visibility of storm windows inside rooms.
Windows and trim: Two basement	Yes,	Materials,	Yes	Secondary	Windows at two openings on the east/southeast elevation will be replaced with	The louvers will be toward the rear of the building for less visibility to
window openings	directly	Workmanship			wood louvers for outside air distribution.	public. Louvers will be designed in wood frames within the existing
						wood jambs/sills to match sizes of existing sash. Existing sash will be
						salvaged, although it is unknown if previously replaced.

Character-Defining Feature	Is the feature altered?	Aspect(s) of Integrity	Is Integrity lost or diminished?	HSR-Assigned Significance of Feature or Rm <sup>1</sup>	Analysis	Minimization or Avoidance Measures
Flagpole	Yes, indirectly	Materials, Workmanship	No	None given	Structural reinforcement of flagpole at third floor penthouse will occur from the third floor ceiling and roof during roof replacement; it will not be visible after muslin ceiling is reinstalled. Existing flagpole will be retained.	
Interior						
Muslin ceilings: Vestibule (Room 101), Main Hall (Room 102), Topmost Chamber (Room 303)	Yes, directly	Materials, Workmanship	No	Primary	The specialized conservation treatment is to remove the muslin offsite for cleaning and applying a new paper backing. The restored muslin will be reinstalled to match original locations and tacking.	
Muslin ceilings: Rooms 112, 113, 114, 212, 213 - modern replacements	Yes, directly	Materials, Workmanship	No	Non-historic	Non-historic muslin will be removed and replaced-in-kind on first floor to allow structural and mechanical improvements. The ceiling in Room 213 will be removed and abated due to 1970s asbestos backing.	
Muslin ceilings: Rooms 214, 215 - modern replacements	Yes, directly	Materials, Workmanship	Yes	Non-historic	The material will be replaced with drywall due to fire-rating requirements for egress stair (Room 214) and lift shaft (Room 215A); performance in Toilet Room (Room 215B) and Curatorial Workroom (Room 215).	The selection of Rooms 214 and 215 for interventions avoids the removal of historic plaster in other rooms.
Plaster ceilings: First floor (Rooms 103, 105, 108, 109, 111, 115, 116, 117, and 118, 119). Second floor Rooms 209, 216, 211)	Yes, directly	Materials, Workmanship	Yes	Varies	The plaster will be removed to allow structural and building system improvements. Many rooms have network cracking, delamination, water damage, failed patches, and post-historic board covering original material which would require extensive repairs.	The plaster will be replaced in-kind. Comprehensive material analysis has identified at least four different compositions of plaster. Each room's removal will identify composition to match for replacement plaster.
Plaster ceilings and walls with cracks and localized deterioration	Yes, directly	Materials, Workmanship	No	Varies	Plaster will receive patching to restore finish.	
Atrium - spatial organization and Main Hall closets	Yes, directly	Design, Materials, Workmanship	No	Primary	Finishes of the wood board and batten walls will be restored at both floors. The approach to 115 will be widened by relocating the south wall of closet CL-7 to the north by 12". The opening at 214 will be widened by 6". These widenings are required to meet the code-required minimum for clearance. In the case of the first floor, the new wider opening occurs between closets, thereby minimizing its view from the hall itself. Because the pattern of room approaches through closets and all finishes are maintained, the impact to the hall spatial organization is neglible. The visitor's "reading" of both first and second floor halls will remain the same, therefore not dimishing the integrity.	
Atrium - closet interiors	Yes, directly	Design, Materials, Workmanship	Yes	Primary	Some closet interiors will receive vertical ductwork, piping, and conduit for building services. This will be coordinated with the existing (and good condition) sprinkler routing pathways and sprinkler heads. Closet CL-7 will receive a steel column to support the structure above for the new lift; its overall width will also be reduced to widen the approach to Room 115. Board and battens and the closet door will be removed and reinstalled to match existing proportions. The decorative header trim at the approach will be reconstructed at the new wider opening to Room 115.	be used for interpretation. Where new systems are added, routing will be grouped within small chases inside the closets or located at the closet rears. This avoids impact by minimizing number of penetrations. False backs can be added to conceal systems if closet
Wood board partitions: removals		Ī	1	T		
Room 115 Northeast side	Yes, directly	Design, Materials, Workmanship	Yes	Not significant	Vertical board partition, covered with modern fiberboard, will be removed. A new CMU load-bearing wall will be constructed to support the new lift; the wall will be shifted to the southwest from the original wall location to make the best use of space for the lift and restrooms.	Boards will be well documented and salvaged. Though the wall is removed, the new wall is in roughly the same location; this minimizes the loss because the perception of a chamber is maintained. The size and proportions are retained and the wall painted finishes for the new egress stair will be compatible with the rest of the building.
Room 214 Northeast side	Yes, directly	Design, Materials, Workmanship	Yes	Secondary	Vertical board partition, covered with modern fiberboard, will be removed. A new CMU load-bearing wall will be constructed to support the new lift; the wall will be shifted to the southwest from the original wall location to make the best use of space for the lift and restrooms.	Boards will be well documented and salvaged. Though the wall is removed, the new wall is in roughly the same location; this minimizes the loss because the perception of a chamber is maintained. The size and proportions are retained and the wall painted finishes for the new egress stair will be consistent with the rest of the building.

Character-Defining Feature	Is the feature altered?	Aspect(s) of Integrity	Is Integrity lost or diminished?	HSR-Assigned Significance of Feature or Rm <sup>1</sup>	Analysis	Minimization or Avoidance Measures
Wood board partitions: bedroom						
Room 116 Southwest side	Yes, directly	Design, Materials, Workmanship	Yes	Secondary	Vertical beaded board partition, covered with modern fiberboard, will be removed. The non-historic stair to the basement will also be removed. The additional space is needed for the lift and restroom.	Boards will be well documented and salvaged. The impact of the lift could be minimized by retaining the outer framing of the closet and building the new kitchennette within the former closet.
Room 215 Southwest side	Yes, directly	Design, Materials, Workmanship	Yes	Secondary	Vertical board partition, covered with modern fiberboard, will be removed. The additional space is needed for the lift and restroom.	Boards will be well documented and salvaged. Like Room 116 on the floor below, the new configuration can still be understood as two smaller interventions within a larger room. The wood floor will be continuous on both sides of the privacy wall that separates the Curatorial Workroom (215) from the lift lobby (215A). An alternative could design the privacy wall's termination below the ceiling to allow the ceiling to be continuous.
Wood board partitions: preservati	on by concea	ling or partial con-	cealing			
Room 115 Southwest side	Yes, indirectly	Design, Materials, Workmanship	No	Not significant	Beaded board partition will remain behind new shaft wall for egress stair. Impact of new egress stair is minimized by preservation of beaded board wall behind new shaft wall. The new shaft wall should "float" in front of board wall and not be fastened directly to the historic wall.	
Room 116 Northeast side	Yes, directly	Design, Materials, Workmanship	Yes for new opening	Secondary	Board and batten partition will remain with the new restroom wall "floated" behind the board partition. A new opening will be created for the door to the restroom (Room 116B). Much of the board partition will be exposed on both sides. The existing thru-door to Room 117 will remain.	Impact of new restroom is minimized by preservation of the board and batten wall. The new restroom wall should "float" inside board wall and not be fastened directly to the historic wall.
Room 117 Northeast side	Yes, indirectly	Design, Materials, Workmanship	No	Secondary	Vertical board partition will remain with the new restroom wall "floated" in front of the board partition. Two doors will be fixed in place so they are not operable (reversible action in future).	
Room 214 Southwest side	Yes, indirectly	Design, Materials, Workmanship	No	Secondary	Vertical board partition, covered with modern fiberboard, will remain behind new shaft wall for egress stair. Impact of new egress stair is minimized by preservation of vertical board wall behind new shaft wall. The new shaft wall should "float" in front of board wall and not be fastened directly to the historic wall.	
Room 215 Northeast side	Yes, indirectly	Design, Materials, Workmanship	No	Secondary	Vertical board partition will remain with the new restroom wall "floated" in front of the board partition. Two doors will be fixed in place so they are not operable (reversible action in future). Impact of new restroom is minimized by preservation of the vertical board partition. Closet in Room 216 is maintained behind new finished restroom wall.	
Wood railings	No	Materials, Workmanship	No	Varies	Finishes will be restored.	
Interior wood paneled doors, trim	profiles, and	corner blocks				
Opening to Room 115, Door 115	Yes, directly	Design, Materials, Workmanship	Yes	Hall, Not	Door 115 (four panel wood door) and its transom window will be removed and replaced-in-kind to meet the fire-rating. Because the opening is relocating by 12" to the north to add the egress stair, the vertical trim at the south end of the opening will remain to mark the location of the original opening. Reproduction trim will frame the new opening to match existing. Salvaged vertical boards will cover the new wall.	Door and transom will be well documented and salvaged. A new egress stair with fire-rated enclosure is required for safe egress from the building. Several alternative locations were studied; all single-door openings diectly attached to the Main Hall would have required modifications to meet the door + latch code requirement for clearance. Opening 115 is towards the rear of the Main Hall and Room 115 is Not Significant. While altering the original door opening is a loss of integrity, the original opening will be visible with the historic trim in place such that the change can be distinguished.

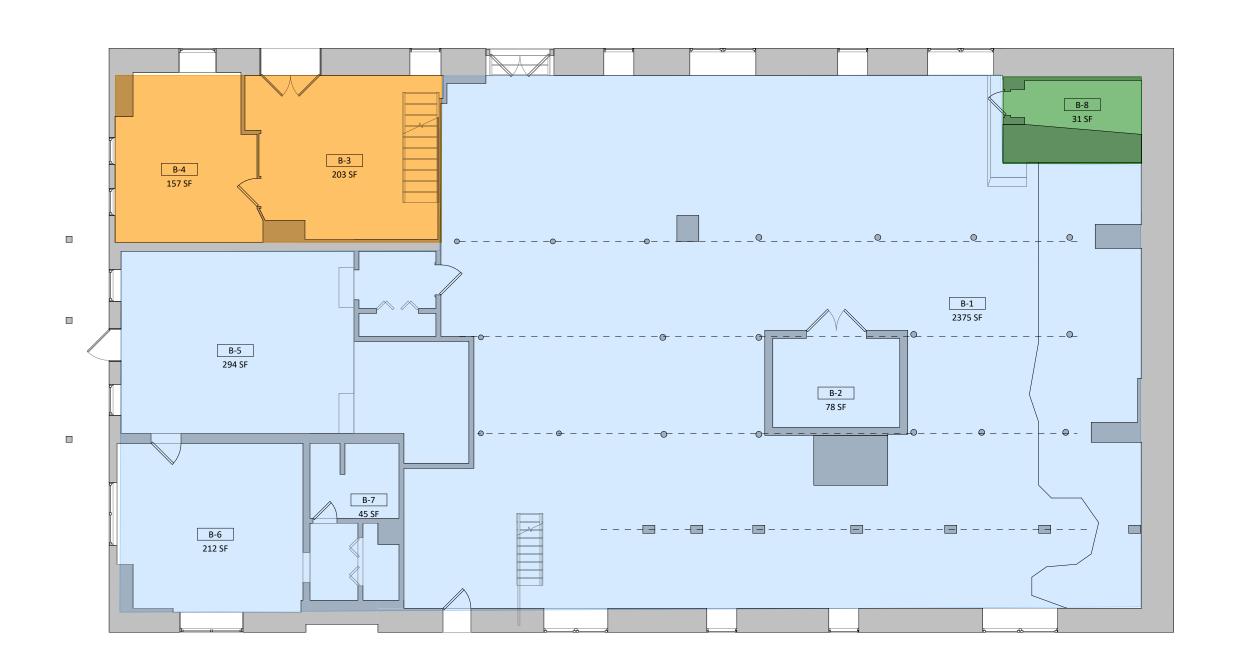
Character-Defining Feature	Is the feature altered?	Aspect(s) of Integrity	Is Integrity lost or diminished?	HSR-Assigned Significance of Feature or Rm <sup>1</sup>	Analysis	Minimization or Avoidance Measures
Opening to Room 116A	Yes, directly	Design, Materials, Workmanship	Yes	Primary - Main Hall, Secondary Room 116	Door 116A (four panel wood door) will be removed to provide the 32" opening for accessible route to the lift. The door stops will also be removed.	Door and hinges will be well documented and salvaged. The impact can be minimized by fixing the door itself to the wall adjacent to the opening inside Room 116A to maintain association with the opening.
Openings in CL-9 and CL-10 (doors previously removed)	No	Materials, Workmanship	No	Secondary (Room 117)	This closet had been reversed to open into Room 117 after the period of significance. The doors are currently missing, possibly stored with artifacts in the basement. To create flush wall for Toilet Room 116B, salvaged doors can be fixed in the openings, or the openings will be infilled and the Sanitary trim will remain.	
Glazed doors - Vestibule doors 102A	Yes, directly	Design, Materials, Workmanship	No	Primary	Doors with decorative yellow-glazed upper panels will be removed from hinges and installed to swing outwards to meet egress requirement. Push hardware or doors fixed open will be required.	
Opening to Room 214, Door 214	Yes, directly	Desing, Materials, Workmanship	Yes	1	Door 214 (four panel wood door) will be removed and replaced-in-kind to meet the fire-rating. Because the opening will be widened by 6" to add the egress stair, the vertical trim and corner block at the north end of the opening will be removed and reinstalled at the wider opening, and the top trim will modified.	Door and transom will be well documented and salvaged. A new egress stair with fire-rated enclosure is required for safe egress from the building. Several alternative locations were studied; all single-door openings diectly attached to the Main Hall would have required modifications to meet the door requirement for clearance. Opening 214 is towards the rear of the Main Hall and Room 214 has secondary significance. While altering the original door opening is a loss of integrity, the trim is reinstalled to maintain character of opening.
Opening to Room 215A	Yes, directly	Design, Materials, Workmanship	Yes	•	Door at Room 215A (four panel wood door) will be removed to provide the 32" opening for accessible route to the lift. The door stops will also be removed.	Door and hinges will be well documented and salvaged. The impact can be minimized by fixing the door itself to the wall adjacent to the opening inside Room 215A to maintain association with the opening.
Second (north) door to Room 215	No	Design	No	Primary - Main Hall, Secondary - Room 215	Four panel door will be secured shut.	
Other doors on accessible route	No	Design	No	Primary - Main Hall	Door opening clear widths are mostly between 29" and 30". ABAAS clearance is 32". The opening frames and doors can remain in place, propped open, with code official approval for exception due to their historic nature.	
Muslin and "ticking" on wood	•			_	<del>,</del>	<del>,</del>
Closet door in Room 115	Yes, directly	Design, Materials, Workmanship	Yes	Not significanct	Door will be removed, well documented and salvaged.	Door will be removed, well documented and salvaged. The door can become part of an exhibit or interpretation of building fabric in a different room.
Closet door in Room 214	Yes, directly	Design, Materials, Workmanship	Yes	Secondary	Door will be removed, well documented and salvaged.	Door will be removed, well documented and salvaged. The door can become part of an exhibit or interpretation of building fabric in a different room.
Closet doors in Room 215A	No	Design, Materials, Workmanship	No	Secondary	The doors and trim will remain with the new restroom wall "floated" in front. The doors will be fixed in place so they are not operable (reversible action in future). Impact of new restroom is minimized by preservation of the doors. Closet in Room 216 is maintained behind new finished restroom wall.	
Wood flooring	Yes, directly	Materials, Workmanship	Yes	Varies	Tongue and groove pine boards will be removed and salvaged in Rooms 115 and 214. The floor boards will also be removed in the lift shaft at Rooms 116 and 215. For supply and return air distribution for the HVAC system, several small penetrations will be made in the wood floor. Floor registers will be utilized at the first floor and select locations at the second floor. Larger rooms will typically have two to three registers in the floor, while smaller rooms will have only one or two. The size of registers varies with the largest at 16x12.	The floor removal will be minimized by salvaging and reinstalling the wood floor from Rooms 115 and 214 onto the new landings in the egress stair. The floor penetrations for the new supply and return grilles will be minimized by consolidating vertical ductwork where possible; there will be no new chases visible in the rooms, only chases within closets. The grilles will be located at existing baseboard radiator locations since the floor will require patching upon the removal of the baseboard radiators.

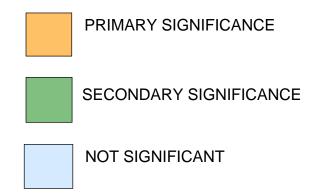
Character-Defining Feature	Is the feature	Aspect(s) of Integrity	Is Integrity lost or	HSR-Assigned Significance of	Analysis	Minimization or Avoidance Measures
NO. 1 . 1 . 1	altered?	5 .	diminished?	Feature or Rm <sup>1</sup>		
Windows including transoms and	No	Design,	No	Varies	The colored glass clerestory windows will be restored and colored glass will replace	
colored glass		Materials,			where Plexiglass has been inserted. The transom above the Door to Room 115 will be replaced to match existing at the larger width. The light entering the atrium will	
		Workmanship			be replaced to match existing at the larger width. The light entering the atrium will not be altered.	
Cabinetry	No	Materials,	No	Primary	The built-in cabinetry in Rooms 109, 111 (cupboard), and 112 (corner and wall	
Cabinetry	110	Workmanship	140	1 Tilliary	cabinets) will be restored,	
Vault	No	Materials,	No	Primary	The vault will receive limited repairs-in-kind and will be used for interpretation.	
		Workmanship				
Third floor penthouse	Yes,	Design,	No	Secondary	Muslin will be removed and restored. This enables reinforcement of the roof and	Repairs will not be visible upon reinstallation of the muslin ceiling
	directly	Materials,			flagpole.	material.
		Workmanship				
Cultural Landscape of property						
Barton House, porch replacement		Location, Design	, No	High	The proposed front porch replaces the existing symmetrical front porch (not period	
and barrier-free ramp	directly	Materials			of significance) with the same extents from the east to west tower. Several	
					components are severly deteriorated, as is the front wall siding, necessitating the	
					removal of the porch to replace the rotted wood. Historic photographs and NPS	
					drawings from c. 1978 will guide design of the new porch with compatible	
					proportions for the railing and balusters.	
South retaining wall	No	Design,	No	Low	The proposed work avoids alteration of this feature.	
		Materials,				
		Workmanship				
Circulation: Walk from Oxford	Yes,	Design,	No	Low	A new orthagonal walk will replace the existing, non-historic, curvilinear sidewalk.	
Road, general pattern	directly	Materials,			The grading will be altered slightly to make the entire path accessible. The new	
		Workmanship			walk will more closely align to the layout of the historic boardwalks that were a	
					circulation feature of the site during the period of significance.	
Circulation: Driveway loop,	No	Design, Setting	No	Low	Proposed work avoids alteration of the general pattern of this feature. Existing	
general pattern					gravel loop will be maintained.	
Circulation: Oxford Road	No	Setting	No	Low	Proposed work avoids alteration of this feature.	
Natural Systems and Topography:	Yes,	Setting	No	Moderate	Construction activities including excavation, utility trenching, and stormwater	
Minnehaha Branch erennial	indirectly				management during construction may result in drainage to this adjacent	
stream					waterway. Site protection will be put in place during construction to mitigate	
N	\ \ \ \ \ \ \ \ \ \ \ \ \ \ \ \ \ \ \	6 111			erosion and control silt and runoff.	
Natural Systems and Topography:	1	Setting	No	Moderate	Selective tree removal will begin to open up views between the house and its	
Woodland and edge habitat	indirectly				immediate surrounds. This helps to rehabilitate some of the historic visual	
supporting historic native species					relationships between the site, neighborhood, and Glen Echo Park that were characteristic of Clara Barton's occupancy.	
Natural Systems and Topography:	No	Setting	No	Moderate	Proposed work avoids alteration of this feature. Site protection will be put in place	
Steep slope south toward	110	Setting	l NO	Wioderate	during constructionto mitigate erosion and control silt and runoff.	
Potomac River					aums construction to intigate crosson and control site and runon.	
Spatial Organization: Elevated	No	Design, Setting	No	Moderate	Proposed work avoids alteration of this feature.	
residential site overlooking the		3.7.3008			,	
Land Use: Arrival loop at end of	Yes,	Design, Setting	No	Low	Two new accessible parking spaces will be provided west of the arrival loop at the	
Oxford Road	directly				end of Oxford Road. A new gate will be located beyond the accessible patking	
					spaces. Signage will be provided to limit access of the general public to the service	
					loop and accessible parking spaces.	

Clara Barton NHS Proposed Rehabilitation

Character-Defining Feature	Is the	Aspect(s) of	Is Integrity	HSR-Assigned	Analysis	Minimization or Avoidance Measures
	feature	Integrity	lost or	Significance of		
	altered?		diminished?	Feature or Rm <sup>1</sup>		
Land Use: Memorial and service	No	Design, Setting	No	Low	Construction impacts temporary pause historic land use functions of the property.	
functions					No lasting impacts to the cultural landscape.	
Views: Visual relationship	Yes,	Setting	No	Low	Limited tree removal in historically open areas will be undertaken to remove	
between Barton House and	directly				invasive tree species and trees planted too close to house or walks.	
adjacent north and west suburban						
Views: Panoramic view south to	Yes,	Setting	No	Low	Limited tree removal in historically open areas will be undertaken to remove	
Potomac River and beyond	directly				invasive tree species and trees planted too close to house or walks.	
Vegetation: Lawn on ground plane	Yes,	Materials,	No	Low	Limited grading and construction activities will require restoration of lawn on the	
near house	directly	Setting			ground plane as part of the site restoration after construction.	

<sup>&</sup>lt;sup>1</sup> Level of significance is documented in the two HSRs, with the higher significance noted here where the two reports differ. Refer to Section 1 of the narrative for how significance was established.

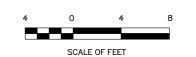






# **EXISTING CONDITIONS** - BASEMENT PLAN

REHABILITATE CLARA BARTON NATIONAL HISTORIC SITE



Mills + Schnoering Architects, L Architecture + Historic Preservat

Figure 1. Existing Conditions – Basement Plan and Spatial Significance Evaluations

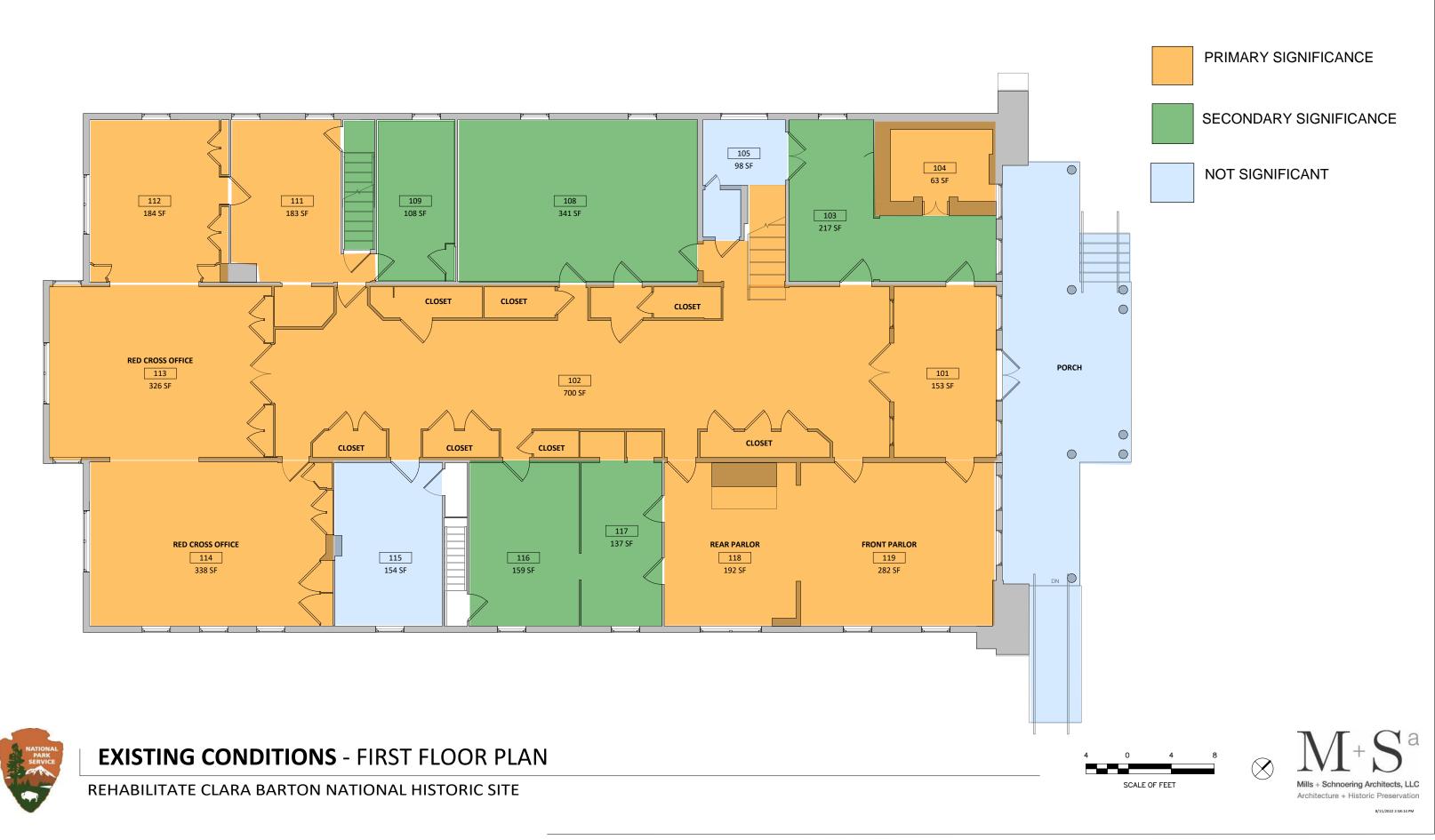
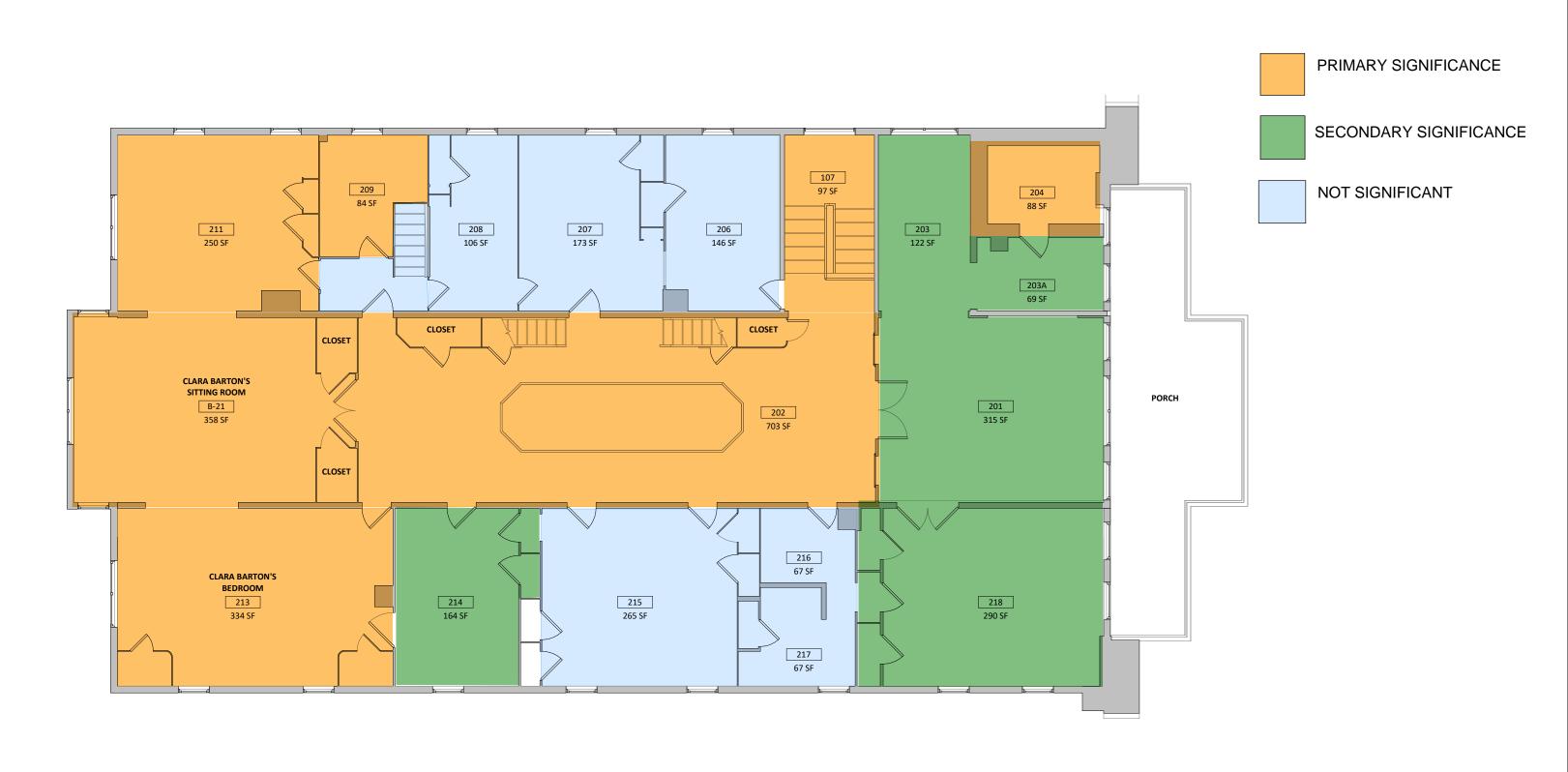


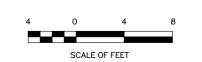
Figure 2. Existing Conditions – First Floor Plan and Spatial Significance Evaluations





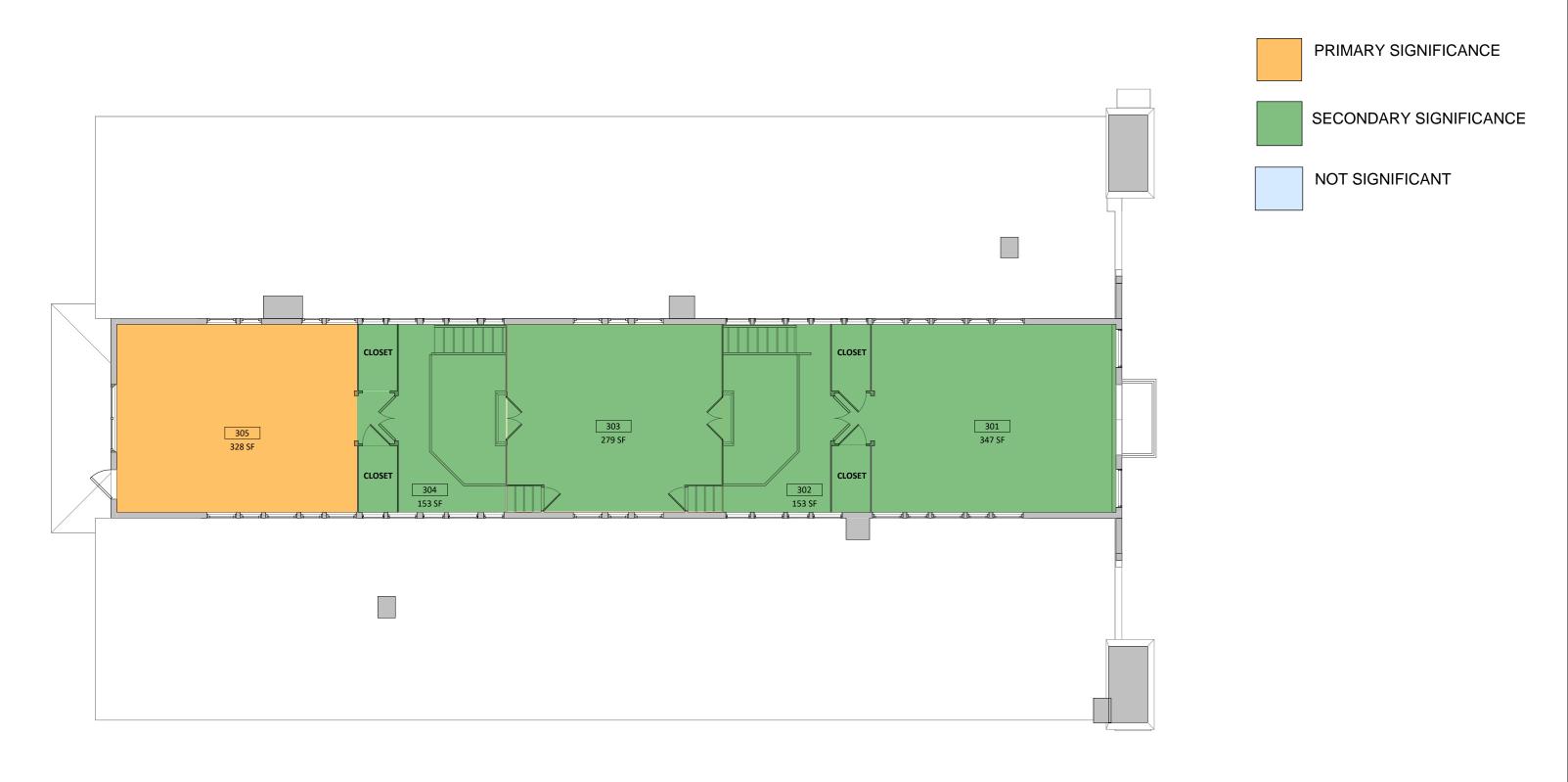
# **EXISTING CONDITIONS** - SECOND FLOOR PLAN

REHABILITATE CLARA BARTON NATIONAL HISTORIC SITE





Architecture + Historic Preservation





# **EXISTING CONDITIONS** - THIRD FLOOR PLAN

REHABILITATE CLARA BARTON NATIONAL HISTORIC SITE







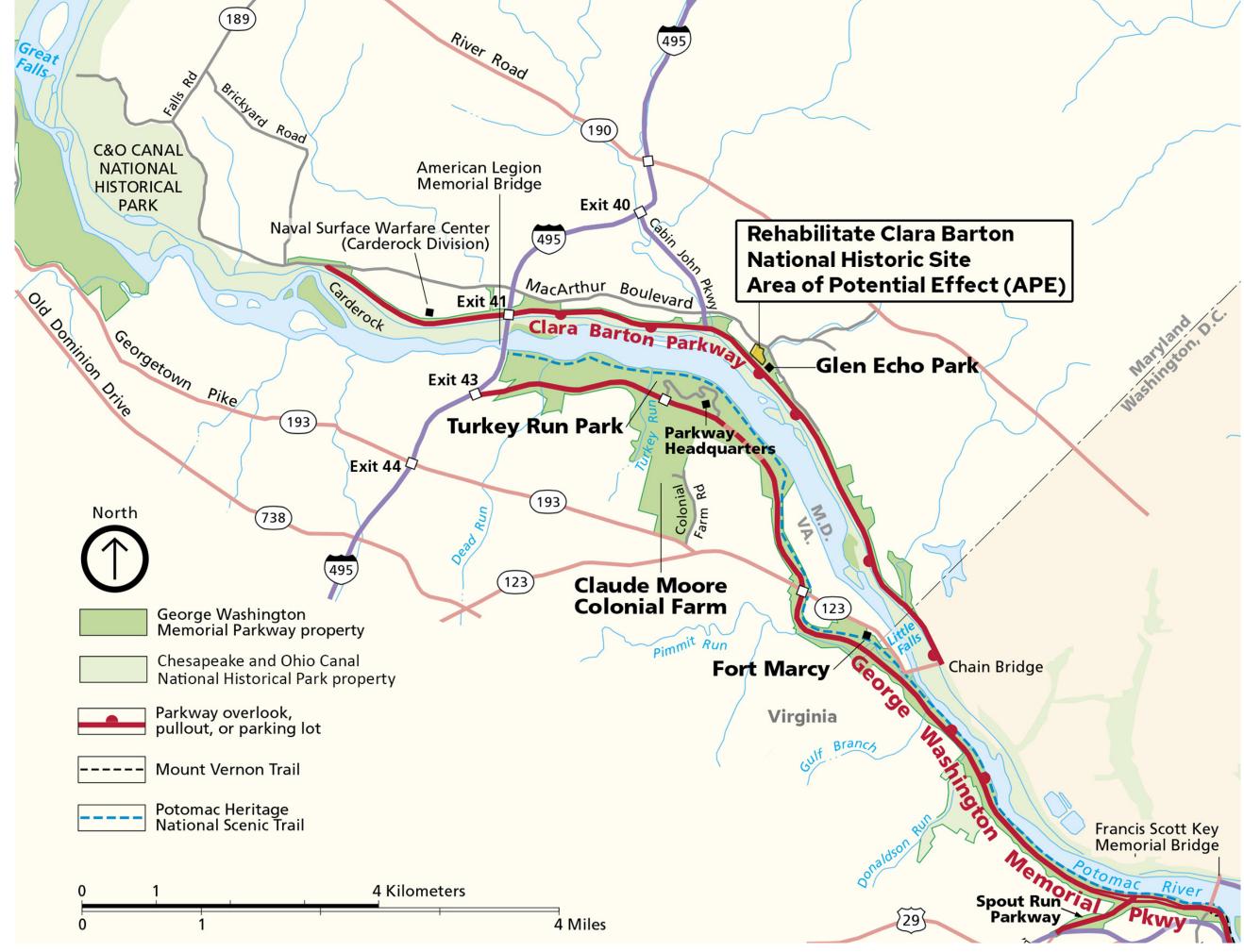
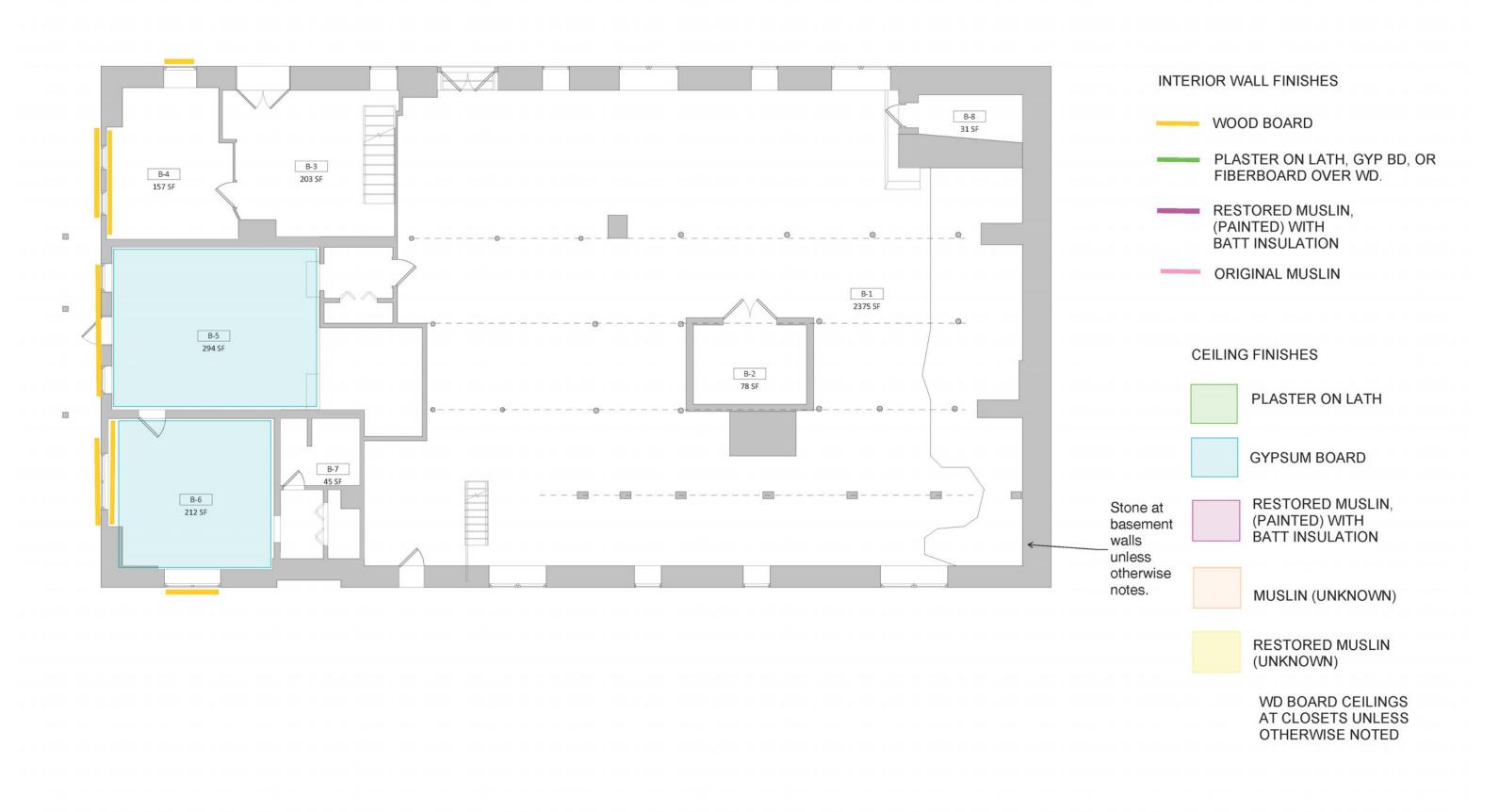
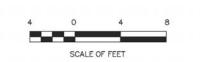


Figure 5. Context Map
p. 74











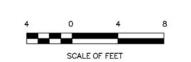






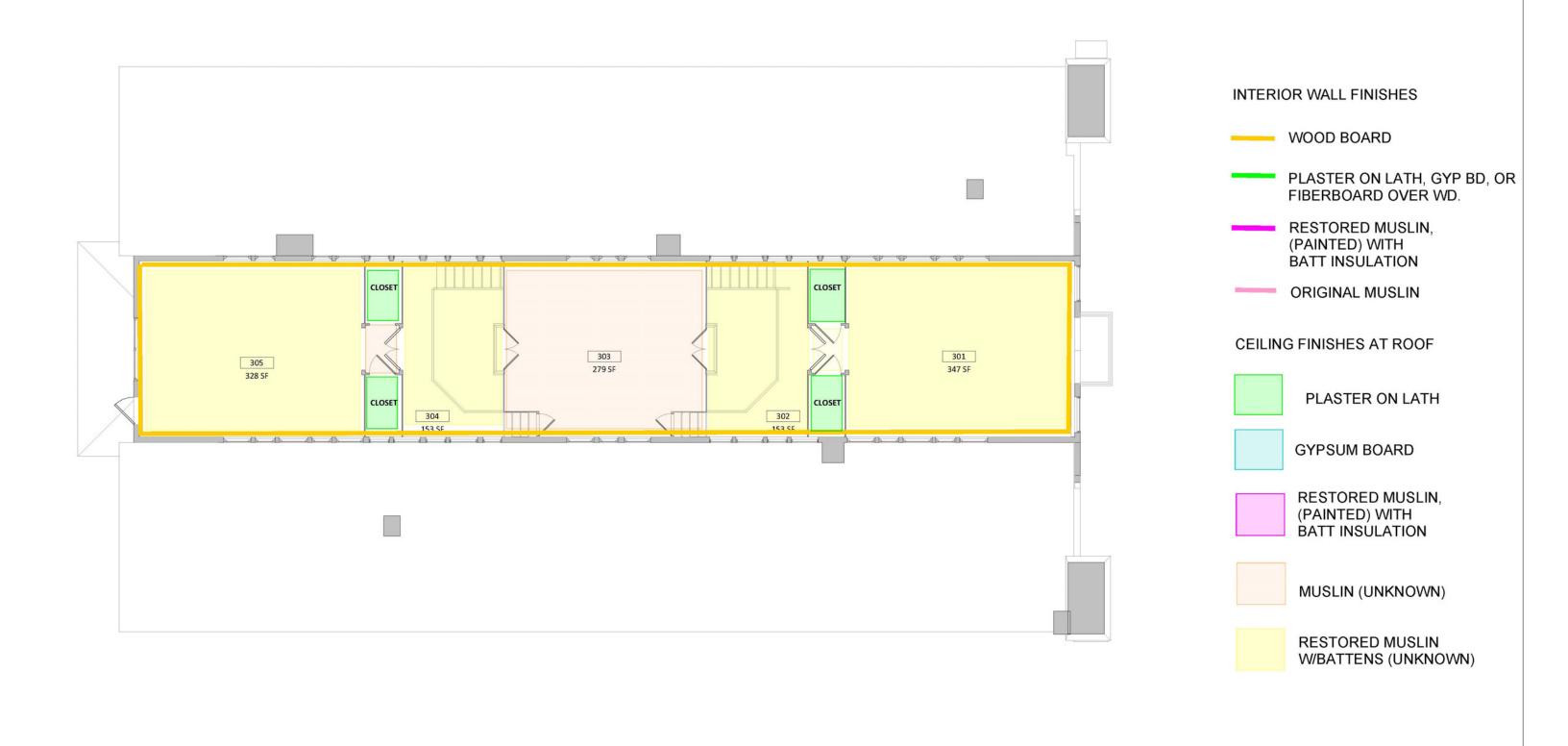








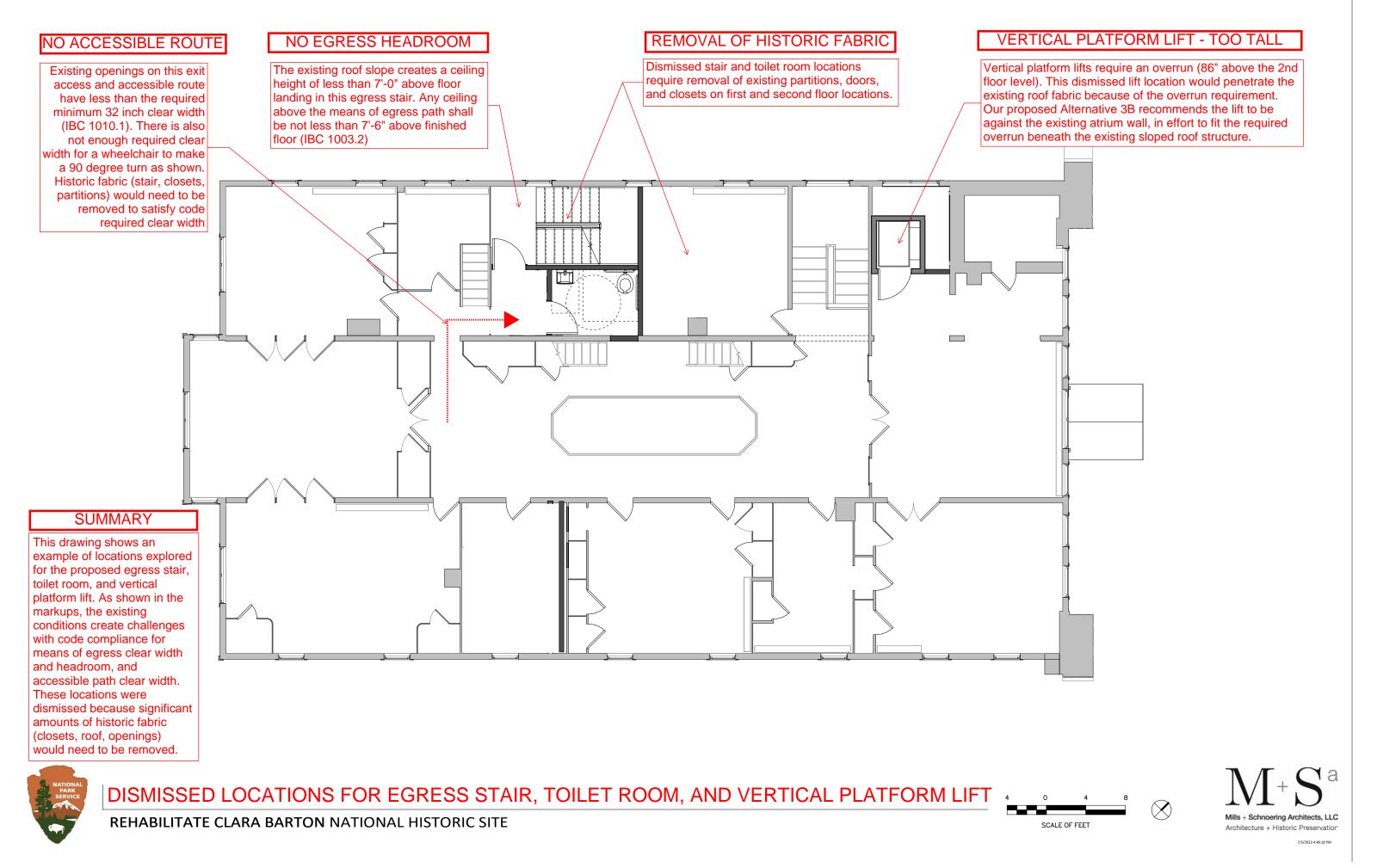








Architecture + Historic Preservation



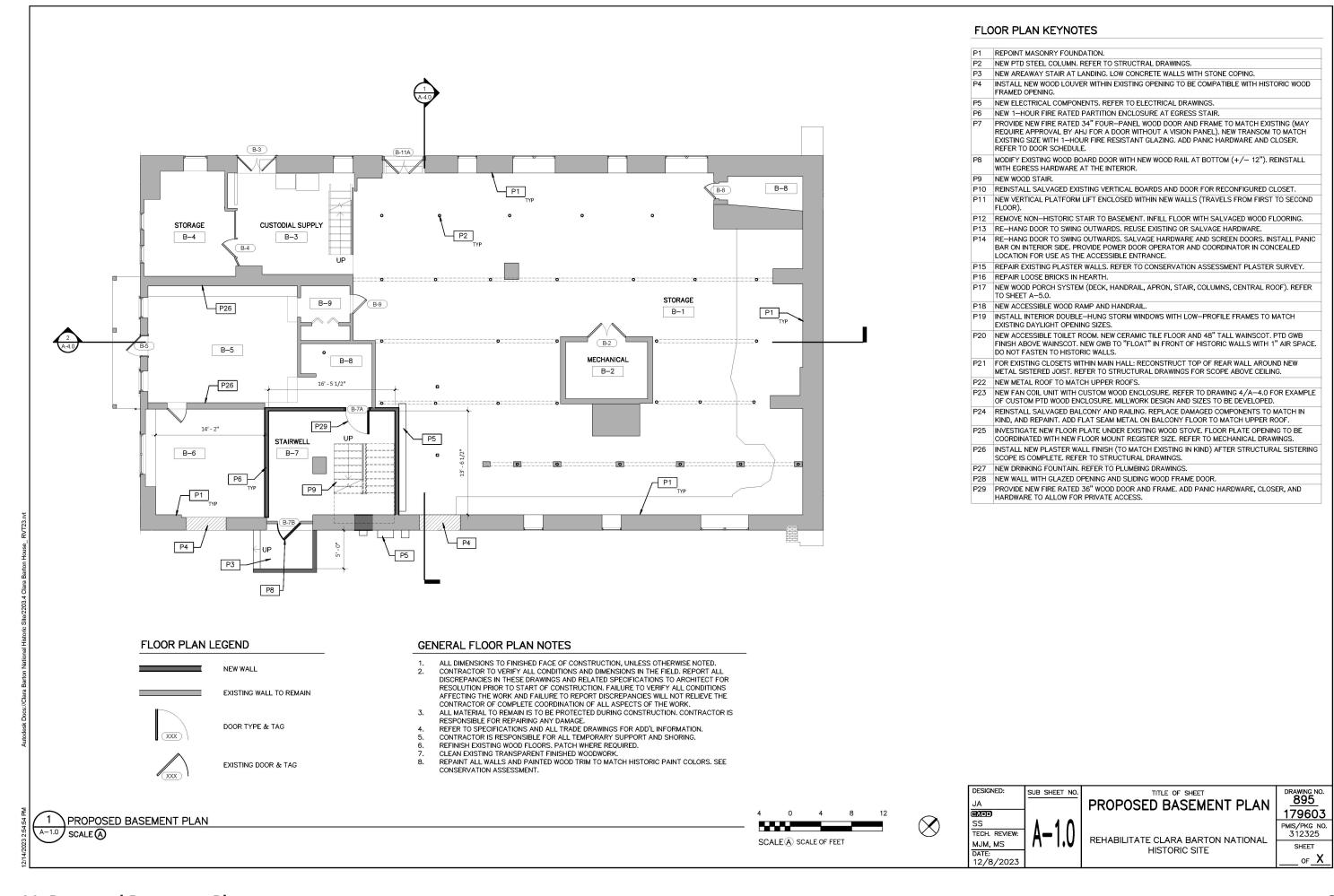
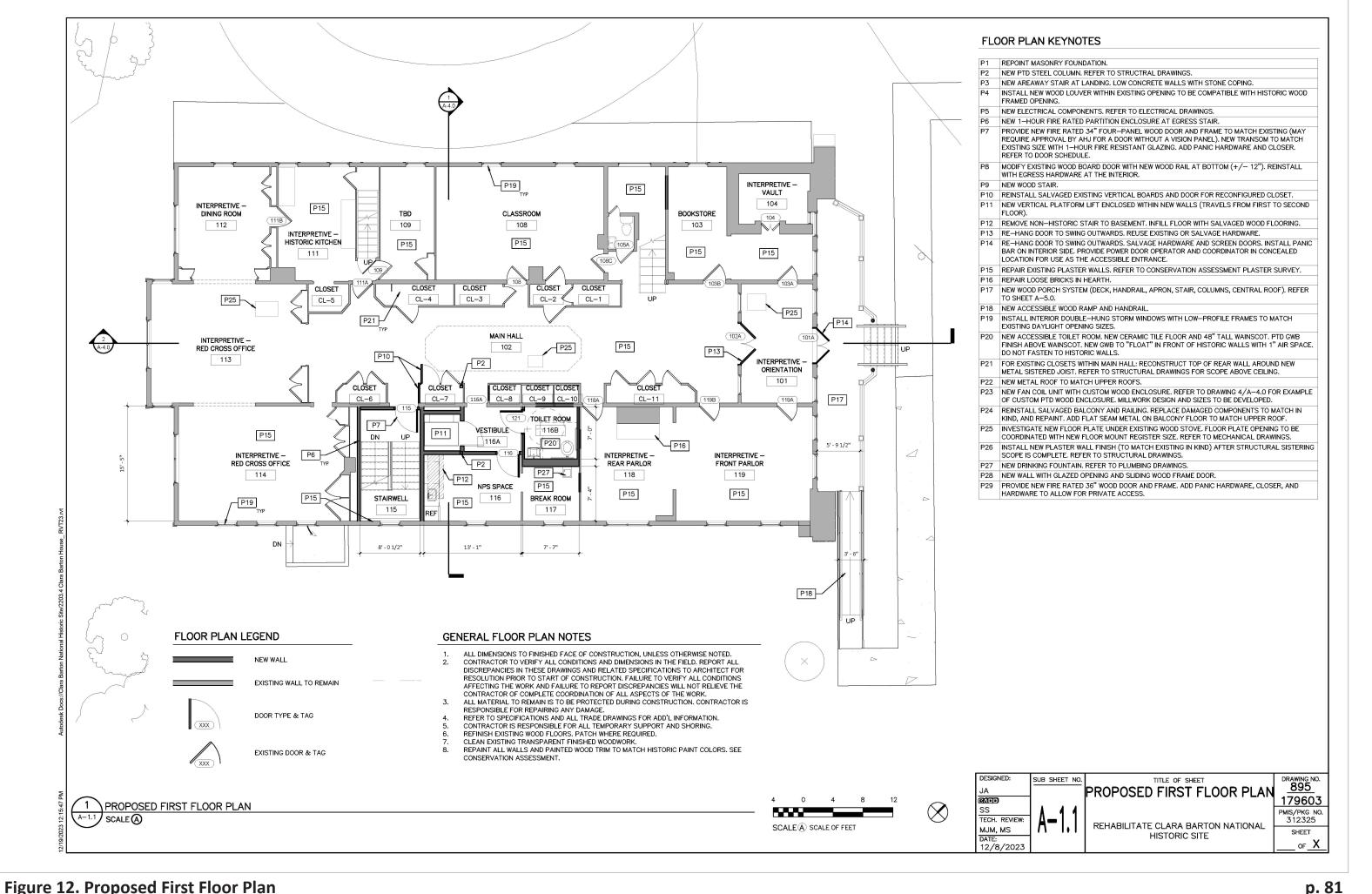
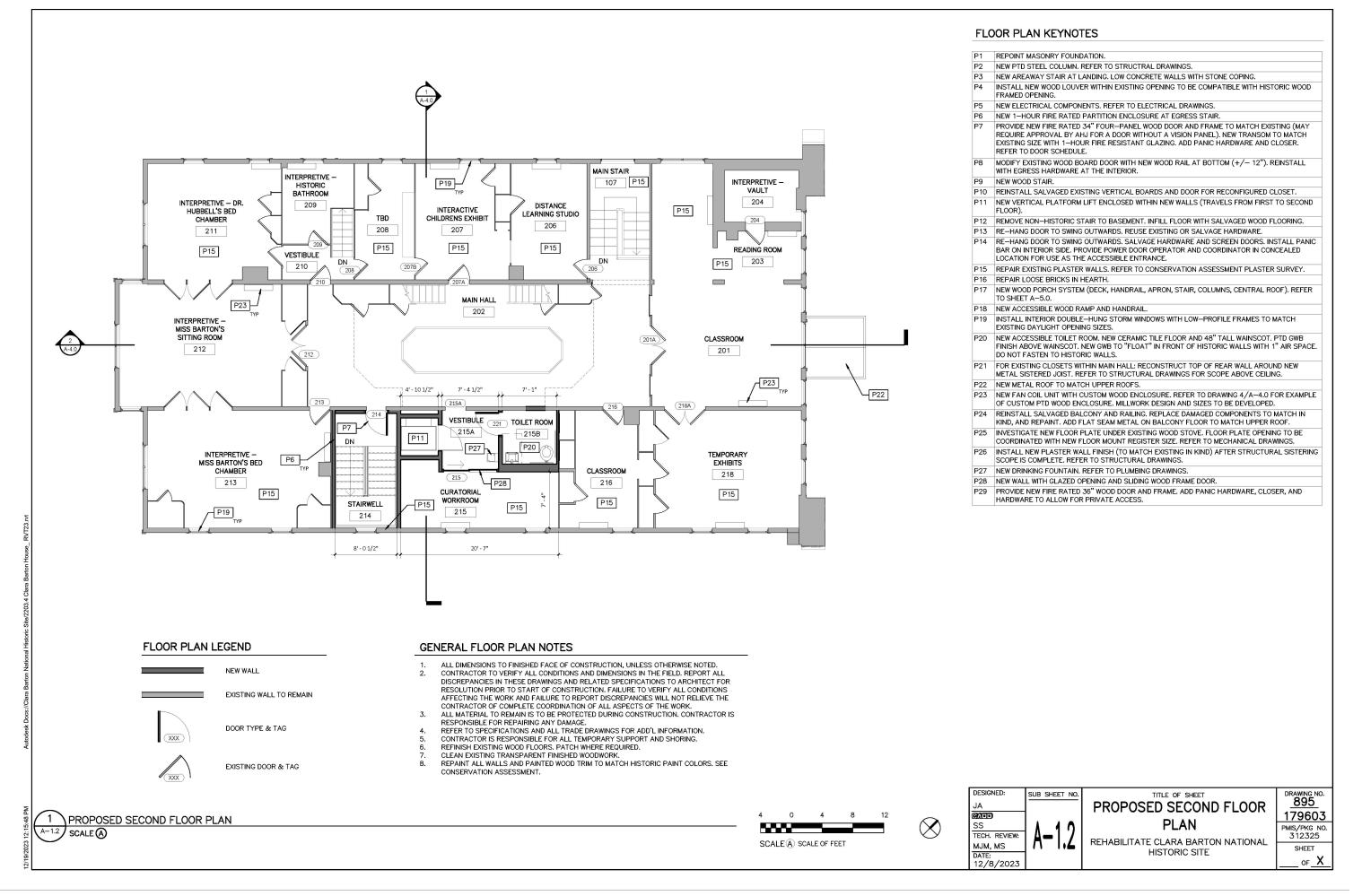


Figure 11. Proposed Basement Plan





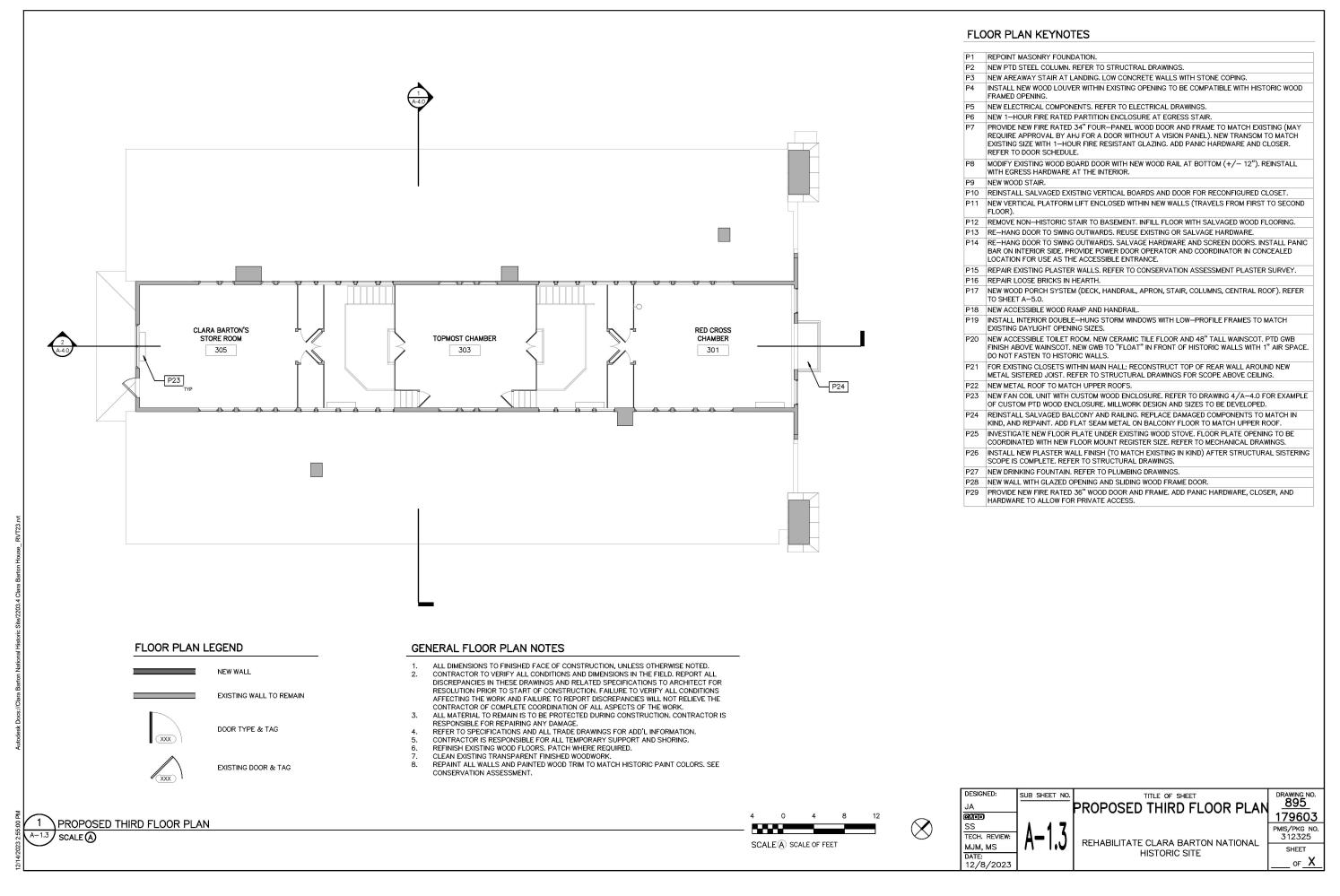


Figure 14. Proposed Third Floor Plan p. 83

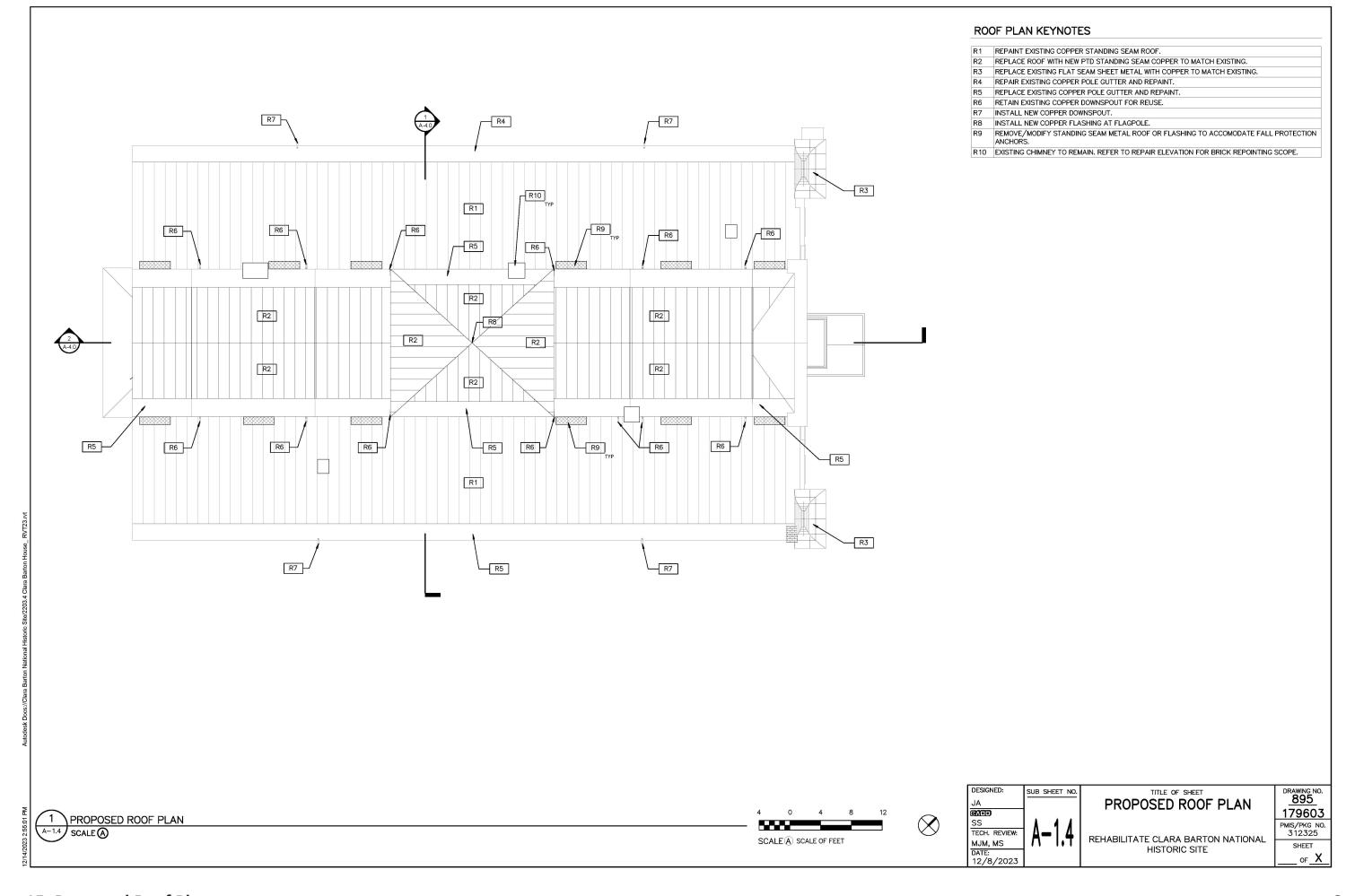


Figure 15. Proposed Roof Plan p. 84

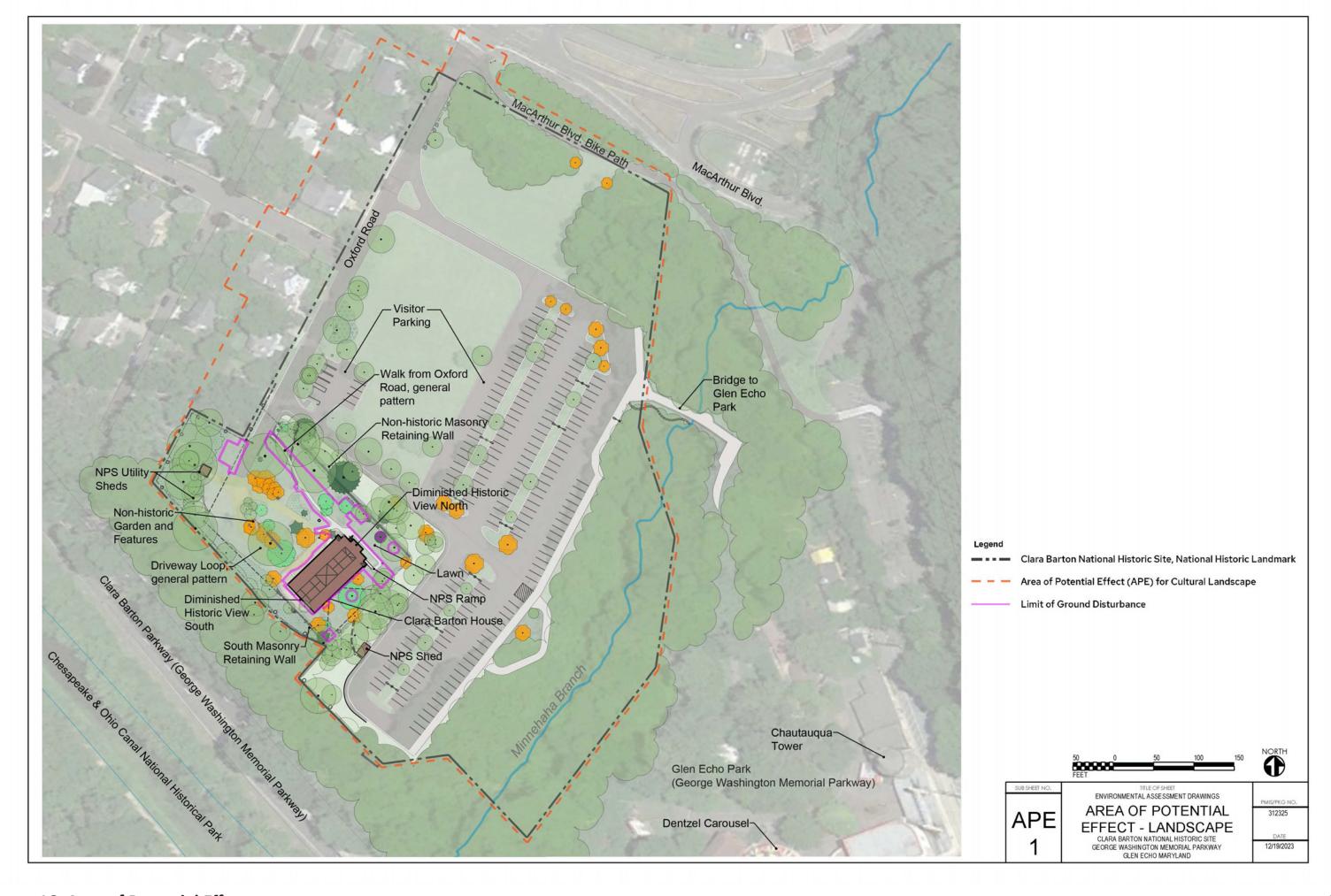
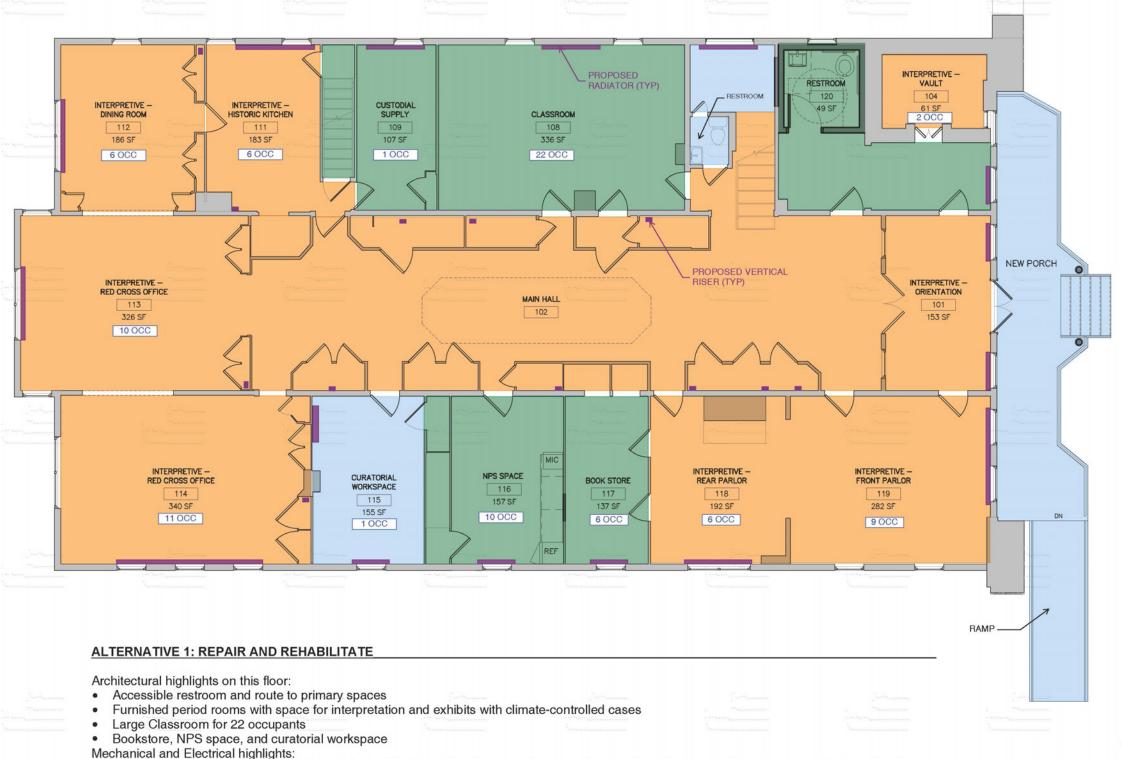


Figure 16. Area of Potential Effect p. 85



- Ductwork vertical risers, and electrical conduit will be located in closets; pathways to be coordinated with sprinkler pipes currently located in closets.
- Replace boiler and pumps in shed; the system will provide only partial cooling to regularly occupied spaces not interpretive period rooms.
- Perform upgrades to shed including new siding and doors.
- Locate mechanical cooling units and pads on east side at the exterior.

Civil and Landscape highlights (shown on Landscape plan):

Paved walks include the entry path only.



# ALTERNATIVE 1 - FIRST FLOOR

REHABILITATE CLARA BARTON NATIONAL HISTORIC SITE

### **ALTERNATIVE 1 - FLOOR PLAN LEGEND**

PRIMARY SIGNIFICANCE SPACE



LOW SIGNIFICANCE SPACE

EXISTING TO REMAIN WALL

PROPOSED WALL

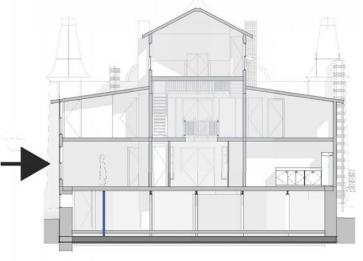
PROPOSED HVAC UNIT

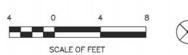
#### **ALTERNATIVE 1 - OCCUPANCY COUNT**

41.7 <sub>4</sub> ,	THIRD FLOOR	0 OCC (MAINTENANCE ONLY)
	SECOND FLOOR	0 OCC (MAINTENANCE ONLY)
	FIRST FLOOR	90 OCC
	BASEMENT	0 OCC (MAINTENANCE ONLY)

**TOTAL** 90 OCC

# **ALTERNATIVE 1 - STRUCTURAL APPROACH**









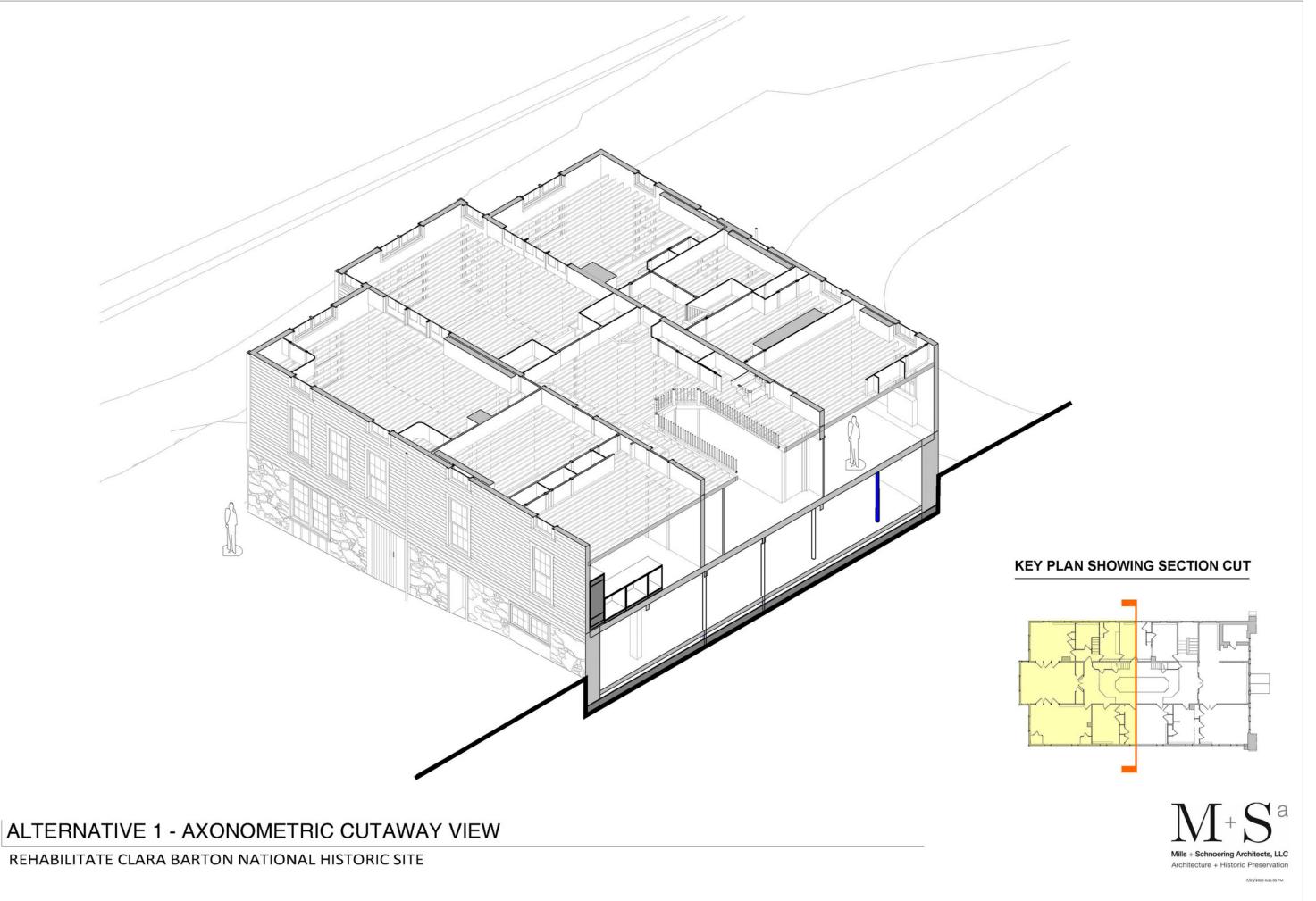
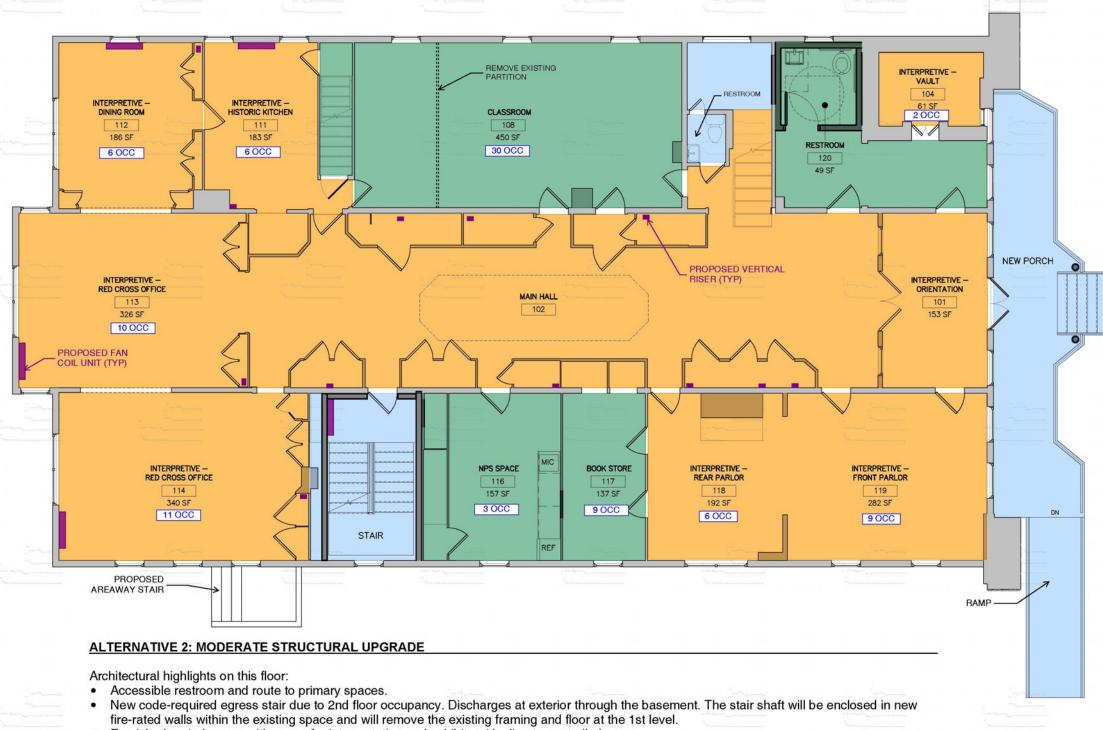


Figure 18. Alternative 1 – Axonometric Cutaway View



- · Furnished period rooms with space for interpretation and exhibits with climate-controlled cases
- Large Classroom for 30 occupants (requires removal of an original partition)
- · Bookstore and NPS space

#### Mechanical and Electrical highlights:

- Ductwork vertical risers and electrical conduit will be located in closets; pathways to be coordinated with sprinkler pipes currently located in closets.
- New VRF mechanical system to provide heating and air conditioning throughout all rooms.
- Locate mechanical cooling units and pads at southeast corner further from the house at the exterior.
- Civil and Landscape highlights (shown on Landscape plan):
- Paved walks include the entry path, east and south egress path.
- · Screen planting around mechanical cooling units.

# ALTERNATIVE 2 - FIRST FLOOR

REHABILITATE CLARA BARTON NATIONAL HISTORIC SITE

#### **ALTERNATIVE 2 - FLOOR PLAN LEGEND**

PRIMARY SIGNIFICANCE SPACE





EXISTING TO REMAIN WALL

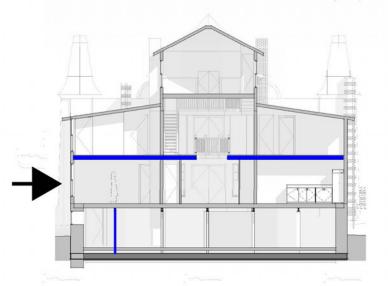
PROPOSED WALL

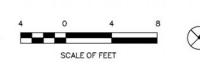
PROPOSED HVAC UNIT

### **ALTERNATIVE 2 - OCCUPANCY COUNT**

BASEMENT	0 OCC (MAINTENANCE ONLY)
FIRST FLOOR	92 OCC
SECOND FLOOR	77 OCC
THIRD FLOOR	0 OCC (MAINTENANCE ONLY)
TOTAL	169 OCC

## **ALTERNATIVE 2 - STRUCTURAL APPROACH**









#### ALTERNATIVE 2: MODERATE STRUCTURAL UPGRADE

Architectural highlights on this floor:

- New restroom
- New code-required egress stair due to 2nd floor occupancy. Discharges at exterior through the basement.
- Furnished period rooms with space for interpretation and exhibits with climate-controlled cases.
- Medium (10 occupants) and Small (5 occupants) Classrooms.
- Curatorial Workroom, Distance Learning Studio, Reading nook, Temporary Exhibits, Interactive Children's Exhibit with limited occupancies as shown. Mechanical and Electrical highlights:
- · Floor-mounted console fan coil units with custom enclosures.
- · New VRF mechanical system to provide heating and air conditioning throughout all rooms.

Note: Per ADAAG 206.2.3, Exception 7, vertical access to stories above or below the accessible story is not required.

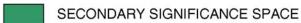


# **ALTERNATIVE 2 - SECOND FLOOR**

REHABILITATE CLARA BARTON NATIONAL HISTORIC SITE

#### **ALTERNATIVE 2 - FLOOR PLAN LEGEND**

PRIMARY SIGNIFICANCE SPACE



LOW SIGNIFICANCE SPACE

EXISTING TO REMAIN WALL

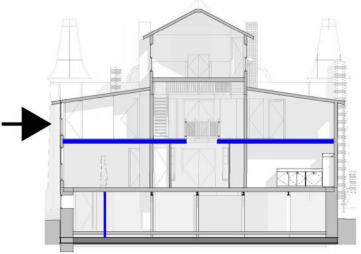
PROPOSED WALL

PROPOSED HVAC UNIT

# **ALTERNATIVE 2 - OCCUPANCY COUNT**

BASEMENT	0 OCC (MAINTENANCE ONLY)
FIRST FLOOR	92 OCC
SECOND FLOOR	77 OCC
THIRD FLOOR	0 OCC (MAINTENANCE ONLY)
TOTAL	169 OCC

# **ALTERNATIVE 2 - STRUCTURAL APPROACH**



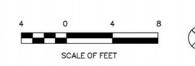




Figure 20. Alternative 2 – Second Floor

p. 89

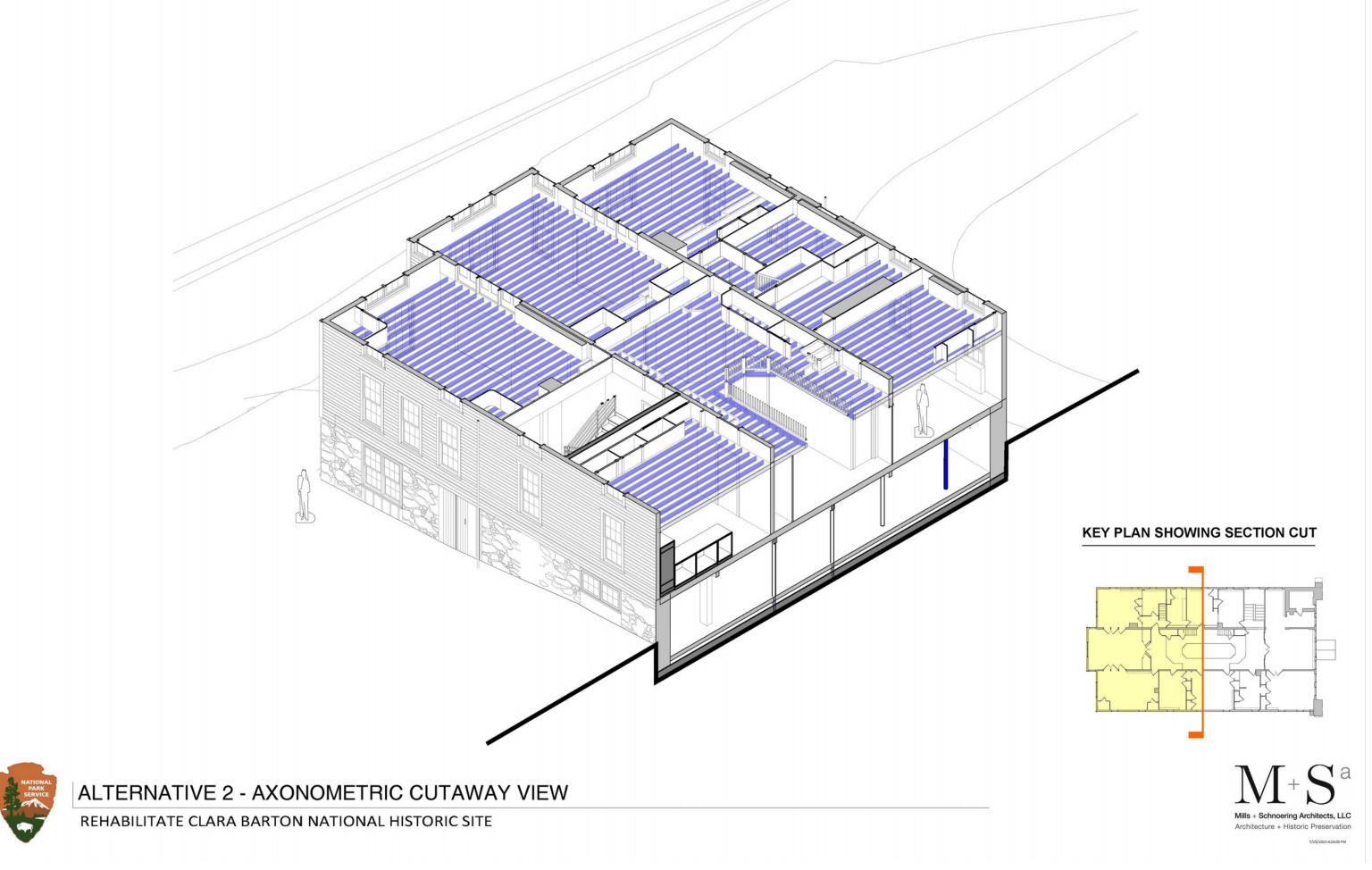
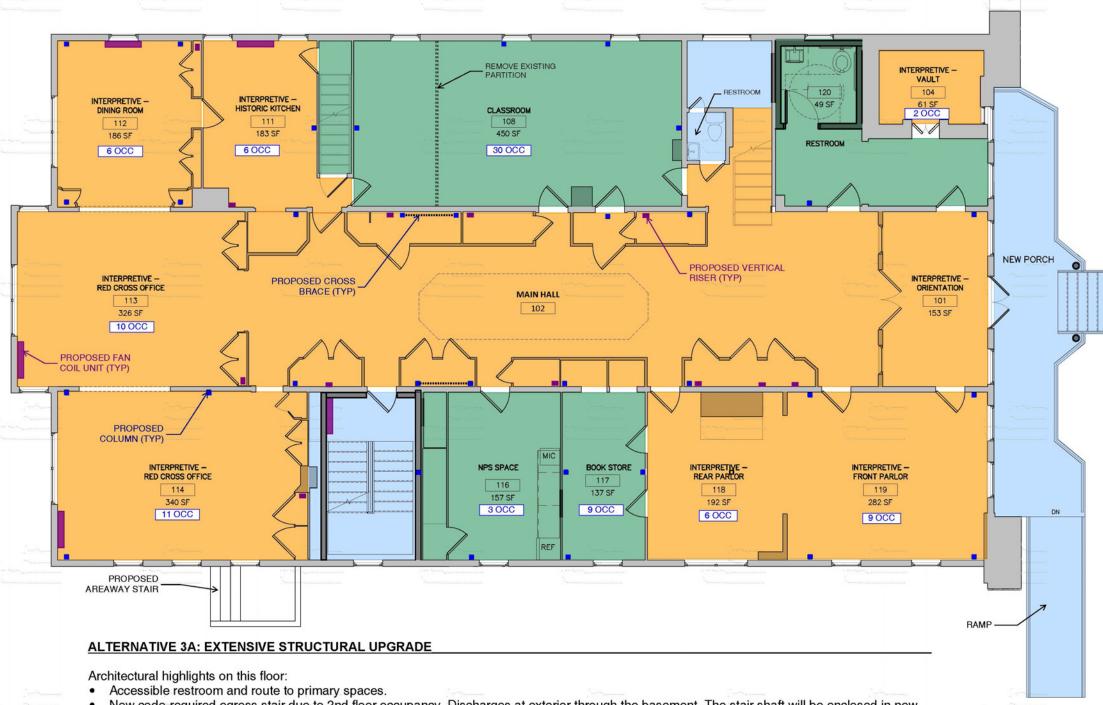


Figure 21. Alternative 2 – Axonometric Cutaway View



- New code-required egress stair due to 2nd floor occupancy. Discharges at exterior through the basement. The stair shaft will be enclosed in new
  fire-rated walls within the existing space and will remove the existing framing and floor at the 1st level.
- · Furnished period rooms with space for interpretation and exhibits with climate-controlled cases
- Large Classroom for 30 occupants (requires removal of an original partition)
- Bookstore and NPS space

### Mechanical and Electrical highlights:

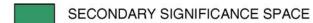
- Ductwork vertical risers and electrical conduit will be located in closets; pathways to be coordinated with sprinkler pipes currently located in closets.
- New VRF mechanical system to provide heating and air conditioning throughout all rooms.
- Locate mechanical cooling units and pads at southeast corner further from the house at the exterior.
- Civil and Landscape highlights (shown on Landscape plan):
- Paved walks include the entry path, east and south egress path.
- · Screen planting around mechanical cooling units.

# ALTERNATIVE 3A - FIRST FLOOR

REHABILITATE CLARA BARTON NATIONAL HISTORIC SITE

#### **ALTERNATIVE 3A - FLOOR PLAN LEGEND**

PRIMARY SIGNIFICANCE SPACE



LOW SIGNIFICANCE SPACE

EXISTING TO REMAIN WALL

PROPOSED WALL

PROPOSED HVAC UNIT

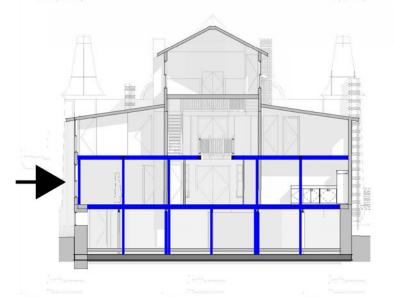
PROPOSED STRUCTURAL COLUMN

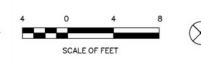
### **ALTERNATIVE 3A - OCCUPANCY COUNT**

 THIRD FLOOR	0 OCC (MAINTENANCE ONLY)
SECOND FLOOR	105 OCC
FIRST FLOOR	92 OCC
BASEMENT	0 OCC (MAINTENANCE ONLY)

TOTAL 197 OCC

## **ALTERNATIVE 3A - STRUCTURAL APPROACH**









#### **ALTERNATIVE 3A: EXTENSIVE STRUCTURAL UPGRADE**

Architectural highlights on this floor:

- New restroom
- New code-required egress stair due to 2nd floor occupancy. Discharges at exterior through the basement.
- Furnished period rooms with space for interpretation and exhibits with climate-controlled cases.
- (2) Medium (19 and 20 occupants) Classrooms.
- Curatorial Workroom, Distance Learning Studio, Reading nook, Temporary Exhibits, Interactive Children's Exhibit Mechanical and Electrical highlights:
- Floor-mounted console fan coil units with custom enclosures.
- · New VRF mechanical system to provide heating and air conditioning throughout all rooms.

Note: Per ADAAG 206.2.3, Exception 7, vertical access to stories above or below the accessible story is not required.

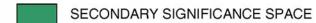


# ALTERNATIVE 3A - SECOND FLOOR

REHABILITATE CLARA BARTON NATIONAL HISTORIC SITE

## **ALTERNATIVE 3A - FLOOR PLAN LEGEND**

PRIMARY SIGNIFICANCE SPACE



LOW SIGNIFICANCE SPACE

EXISTING TO REMAIN WALL

PROPOSED WALL

PROPOSED HVAC UNIT

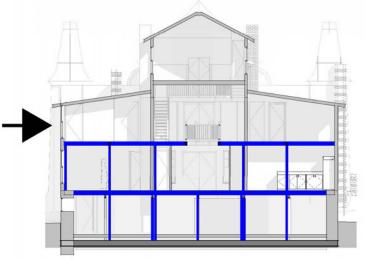
PROPOSED STRUCTURAL COLUMN

### **ALTERNATIVE 3A - OCCUPANCY COUNT**

·	
THIRD FLOOR	0 OCC (MAINTENANCE ONLY)
SECOND FLOOR	105 OCC
FIRST FLOOR	92 OCC
BASEMENT	0 OCC (MAINTENANCE ONLY)

TOTAL 197 OCC

# **ALTERNATIVE 3A - STRUCTURAL APPROACH**



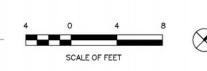




Figure 23. Alternative 3A – Second Floor

p. 92

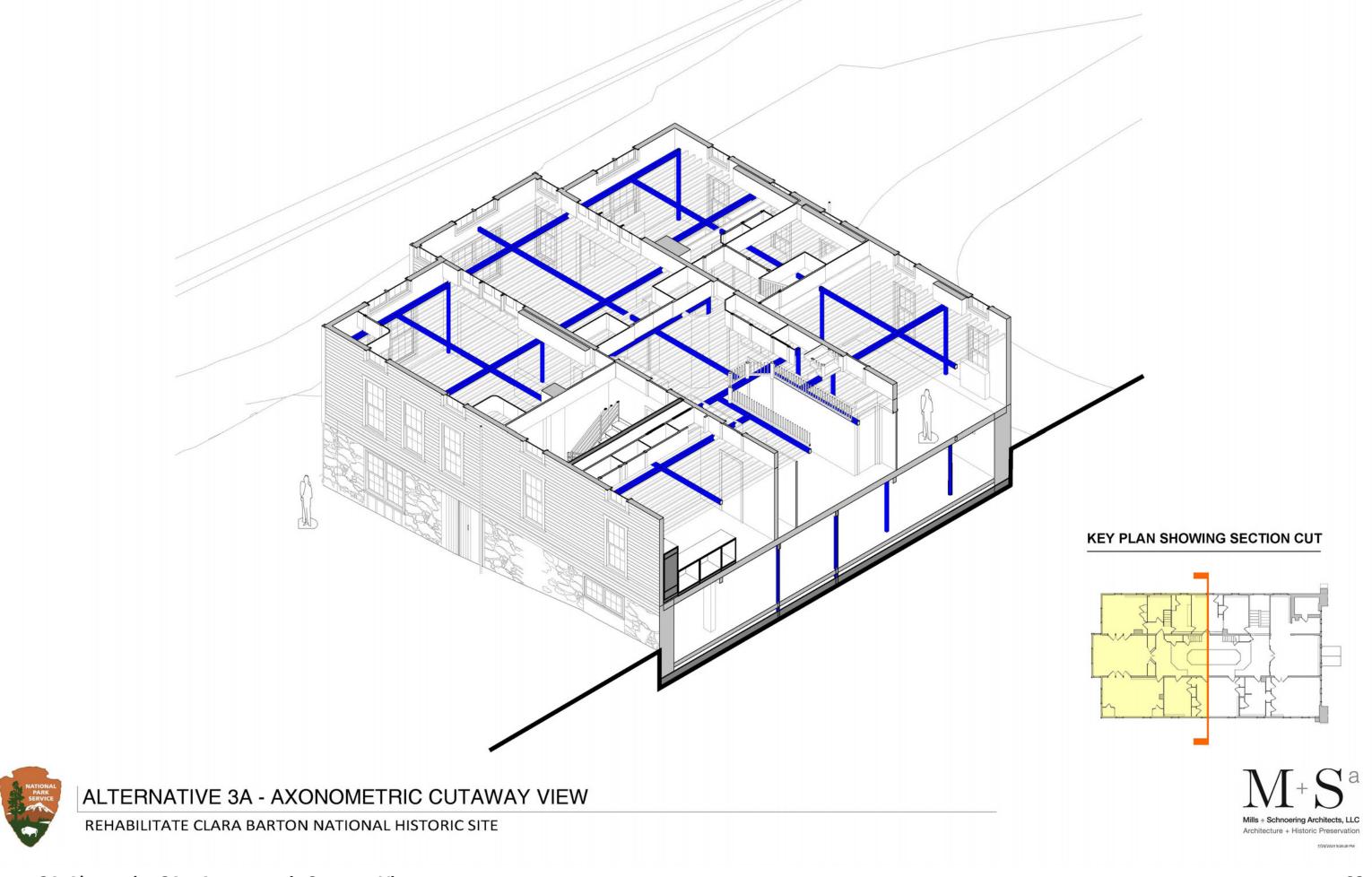
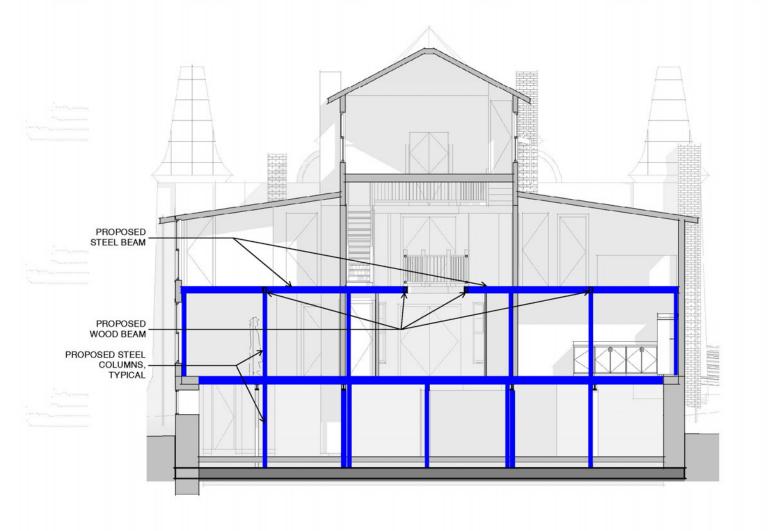


Figure 24. Alternative 3A – Axonometric Cutaway View





PROPOSED STEEL COLUMN



In addition to the structural base scope on Page 3, an extensive structural upgrade will increase the live load capacity of the 2nd floor and allow for a total of 97 occupants. New steel columns will be inserted through the floor framing from the basement up to the underside of the 2nd floor to support new steel beams placed within the depth of the 2nd floor framing; these columns will be located in the 1st floor closets and exposed inside certain rooms (Photo upper right: example of similar installation at different building; column is painted to match existing finish). In addition, new wood beams will be inserted mid-span and the existing joists cut and resupported with joist hangers. By cutting the existing joists, this installation damages the most historic fabric of the three alternatives. All ceiling finishes at the 1st floor will be removed similar to the work in Alternative 2.

The cantilevered steel beams in the atrium may need to be installed through new openings in the exterior walls, which would require selectively removing the clapboard and threading the new beams through the building joist depth. This is a more difficult field installation than Alternative 2. Once the ceiling materials are removed, field verifications of framing will determine how many beams can be installed from the interior and how many require new openings in walls. The upgrade will not be visible to visitors once as ceilings and walls will be restored to original appearance.

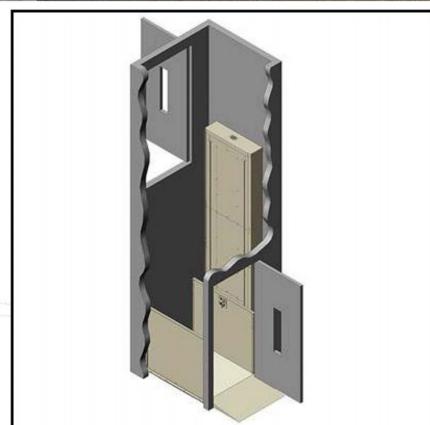
Lateral stiffness will be increased with diagonal bracing in the closets in 2 locations from the basement up to the 2nd floor.

Alternative 3B includes a vertical platform lift in a new shaft (Image lower right: cut-away diagram). The shaft will be adjacent to the new egress stair and will require removing existing floor framing and providing new framing for the shafts and lift support.



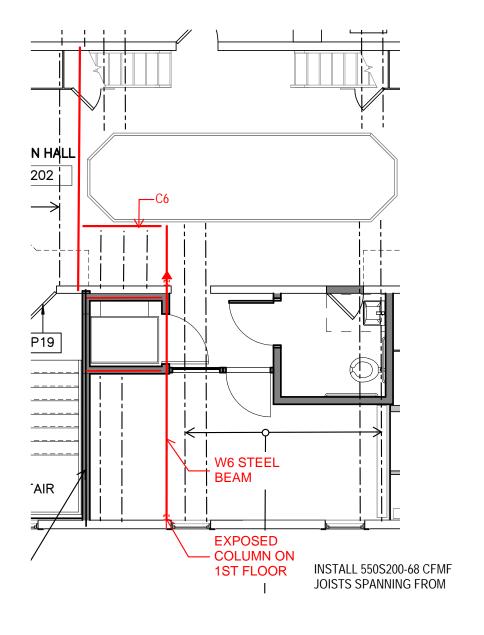
# ALTERNATIVE 3B - INTRODUCTION

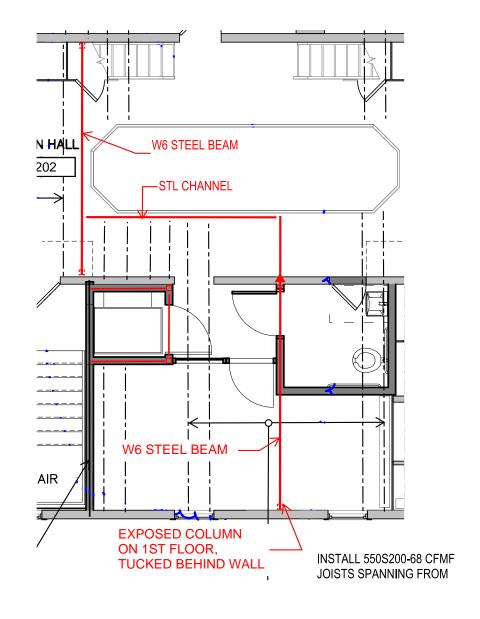
REHABILITATE CLARA BARTON NATIONAL HISTORIC SITE

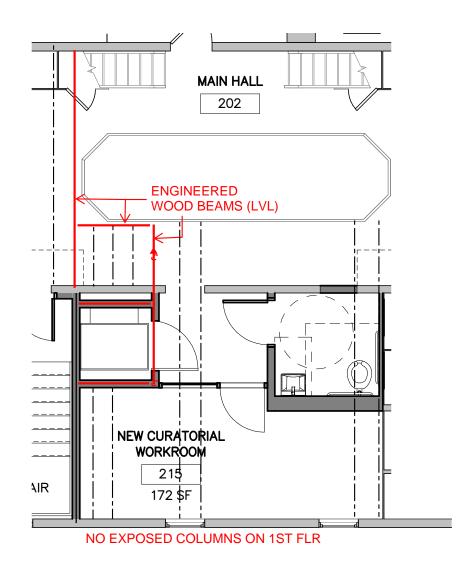


Cut-away diagram of vertical platform lift. The outside walls, or shaft walls, are cut to view inside.

Mills + Schnoering Architects, LLC
Architecture + Historic Preservation







2ND FLOOR FRAMING PLAN, OPTION 1

2ND FLOOR FRAMING PLAN, OPTION 2

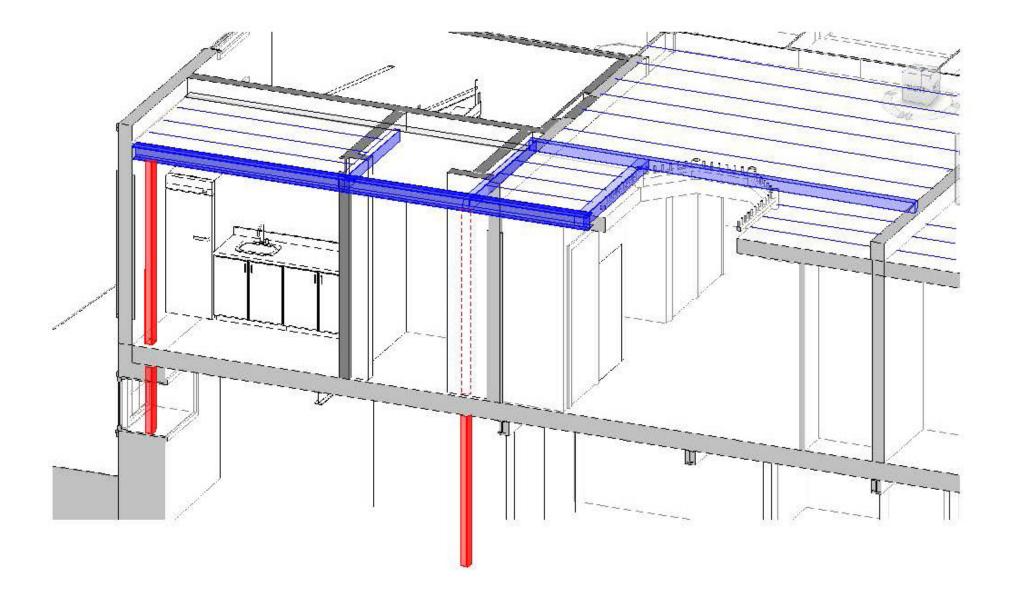
2ND FLOOR FRAMING PLAN, OPTION 3



DESIGN DEVELOPMENT FOR THE LIFT AND ITS STRUCTURAL COMPONENTS

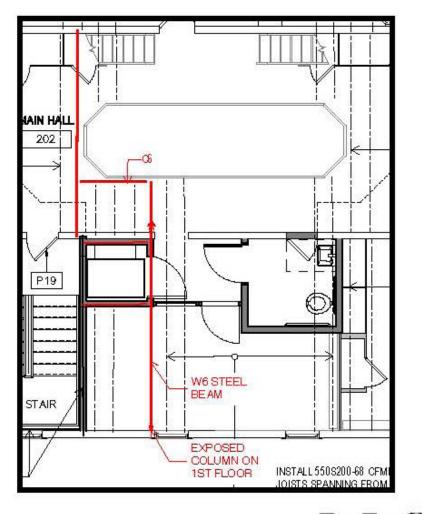
REHABILITATE CLARA BARTON NATIONAL HISTORIC SITE





**CUTAWAY VIEW, OPTION 1** 



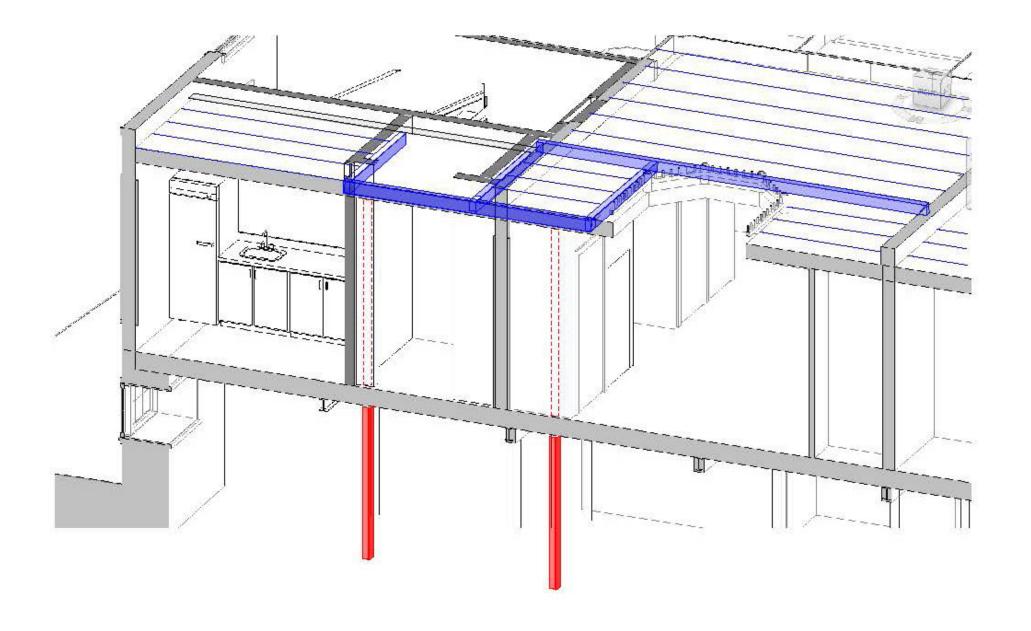




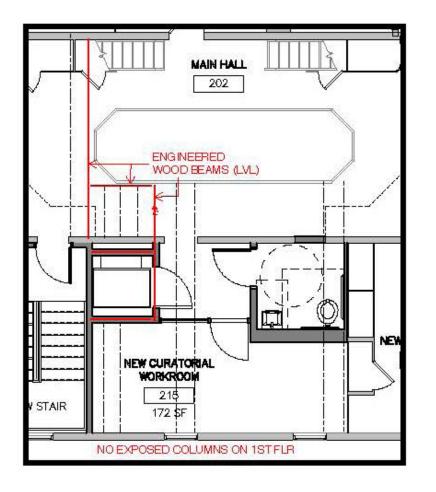
Mills + Schnoering Architects, LLC
Architecture + Historic Precervation

REHABILITATE CLARA BARTON NATIONAL HISTORIC SITE

Figure 27. Cutaway View, Option 1 p. 96



VIEW



**CUTAWAY VIEW, OPTION 3** 



Mills + Schnoering Architects, LLC
Architecture | Historic Preservation

REHABILITATE CLARA BARTON NATIONAL HISTORIC SITE

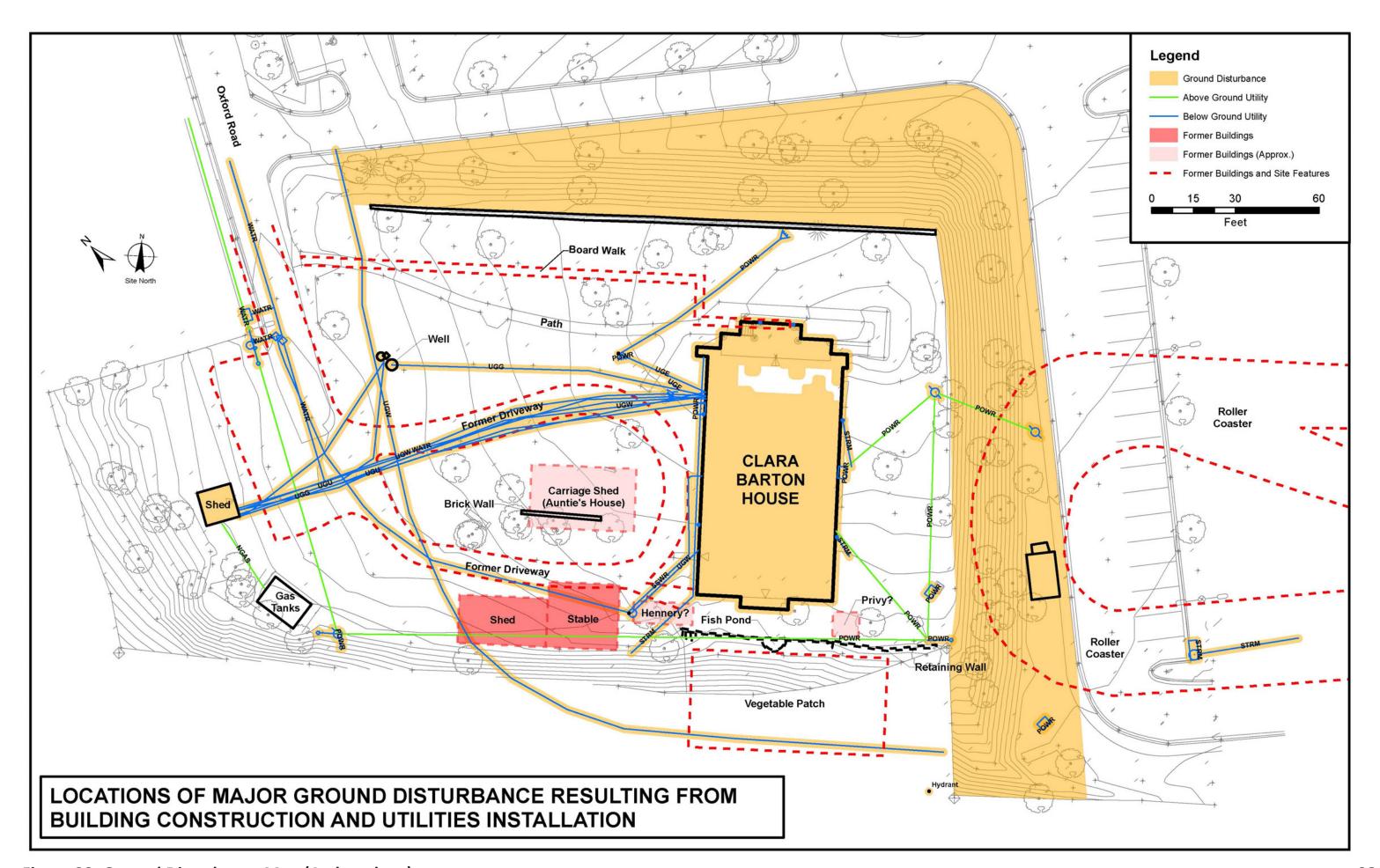
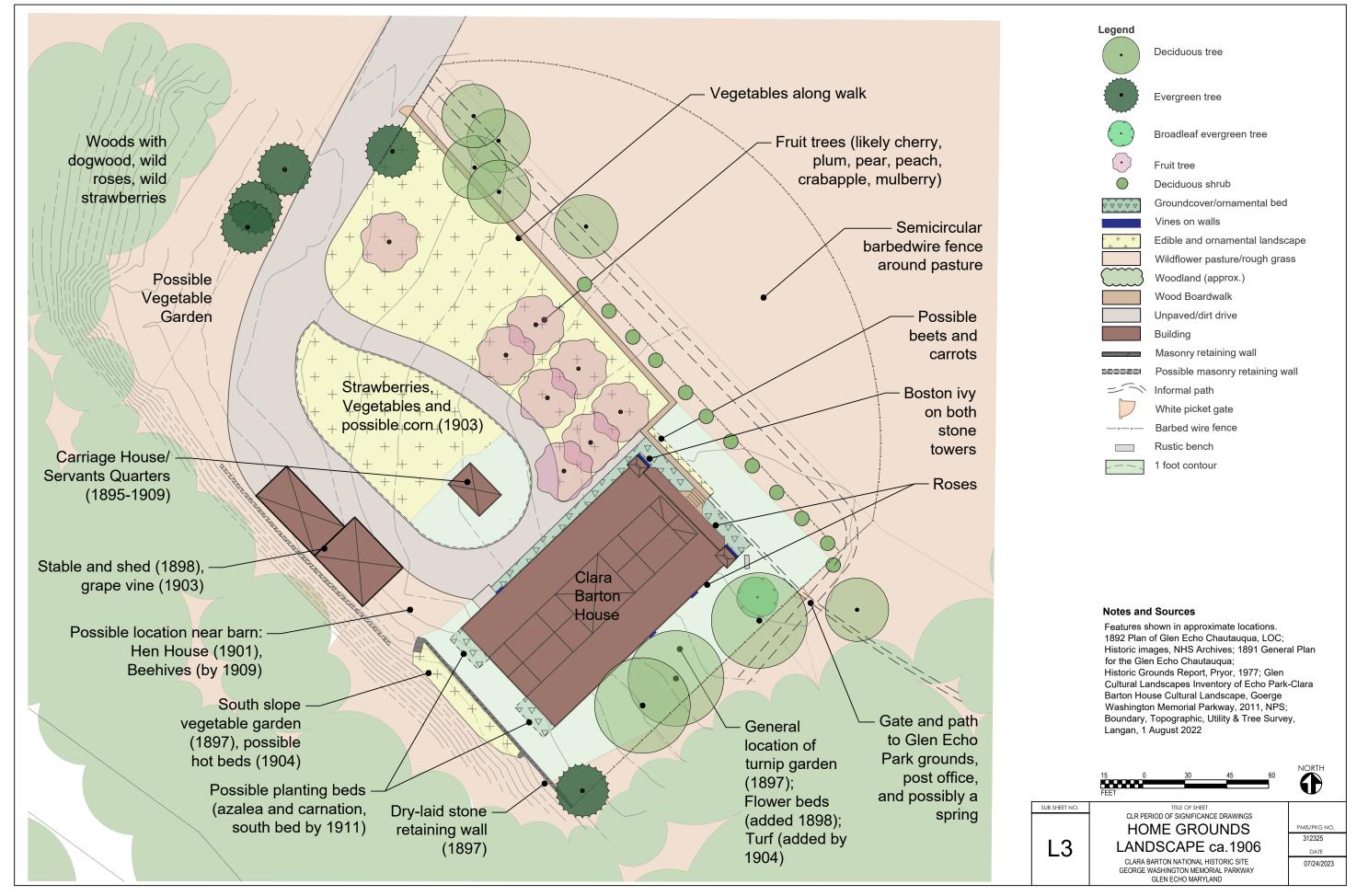


Figure 29. Ground Disturbance Map (Archaeology)



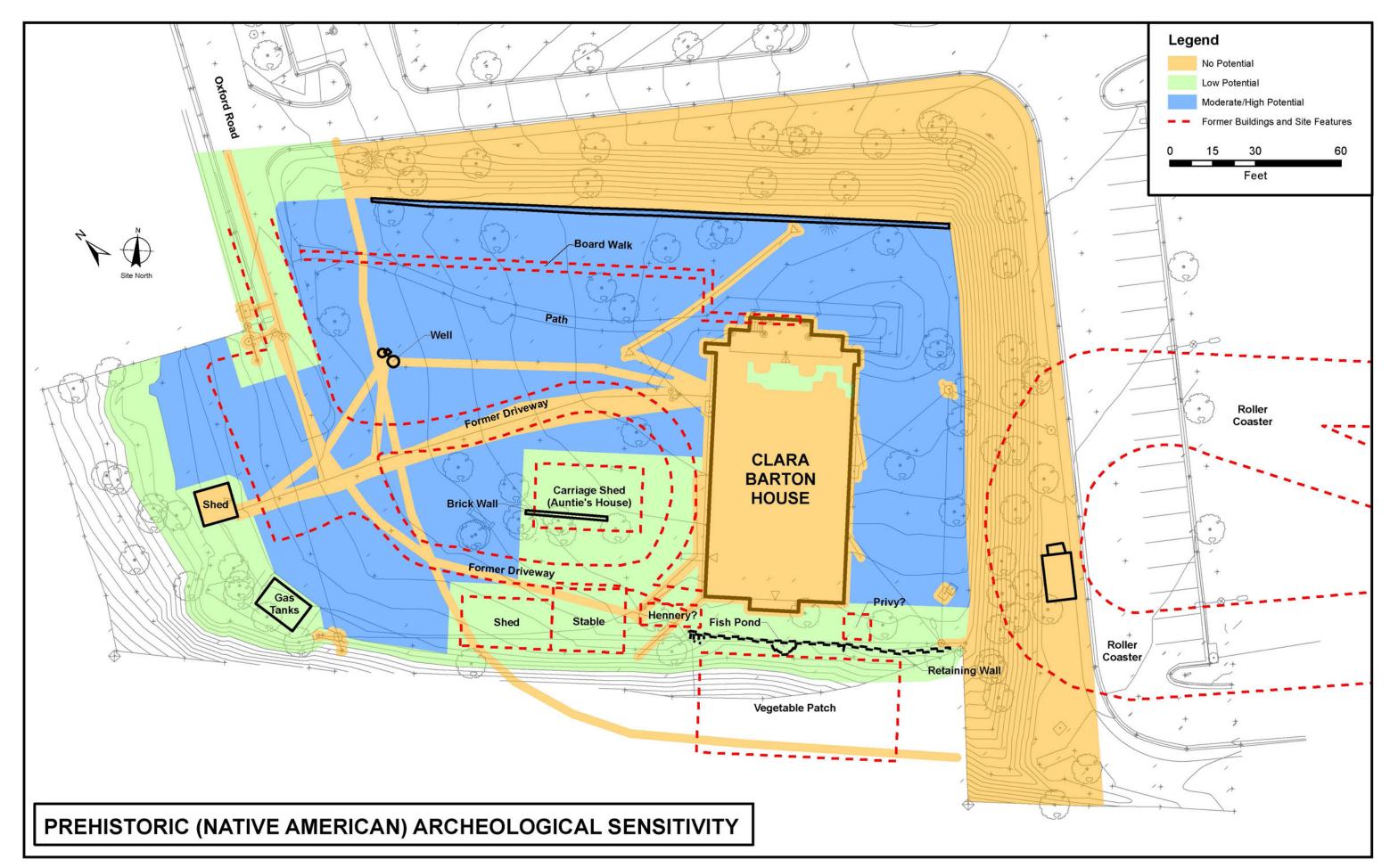


Figure 31. Prehistoric (Native American) Archaeological Sensitivity

