
Historic Structure Treatment Record

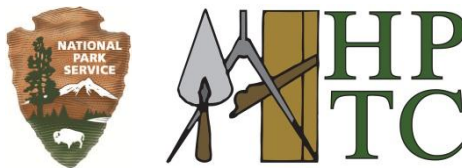
Reconstruct Historic Wirth Hall Porch Stephen T. Mather Training Center

For the

Stephen T. Mather Training Center

PMIS #161111

Historic Preservation Training Center
National Park Service
Frederick, MD



December 2012

Table of Contents

Part I | Completion Report

Project Narrative

Accounting

Selected Photos

Part II | Project History

Project Agreement

Compliance

Correspondence

Weekly Reports

Field Drawings

Part III | Appendix

Part I | Completion Report

Project Narrative

Project Summary

This Historic Structure Treatment Record (HSTR) outlines the preservation work completed by the Historic Preservation Training Center (HPTC) wood crafting section to the Wirth Hall porch at the Stephen T. Mather Training Center. The original porch was removed in 1964 and a flagstone terrace was constructed in its place. This terrace was then removed in 2011 when the foundation drainage was installed and the training center decided to reinstall the porch shortly thereafter.

For this project, there was both a wood crafting and a masonry component; each component has a separate HSTR in order to provide a detailed account of the tasks of each section.

Project History

02/29/2012:	Final Project Agreement signed
05/03/2012:	Pre-construction Meeting
06/09/2012:	Project started
12/03/2012:	Project completed

Project Description

This project required HPTC's wood crafting section to reconstruct an 1881 porch that was removed by the NPS in 1964. Using drawings taken in 1963 of the porch, the new porch was intended to reflect the 1881 design with classical revival style lines and Doric columns. HPTC provided architectural drawings that included a foundation plan, floor plan, elevations, sections, and details to assist in an accurate reconstruction.

Section 106 Compliance

Section 106 clearance was handled under the Memorandum of Agreement XXX process and was obtained by the Park. Any necessary compliance requirements are the responsibility of the park.

Summary of Work

Following the pre-construction meeting that took place on May 3, 2012, scaffolding was erected on the perimeter of the foundation, and job boxes laden with necessary tools and other materials were transported and staged on site. The pediment and roof were framed with pressure treated lumber and plywood sheathing. The four 10" structural columns with 15" wood abacus and capitals were fabricated in the HPTC shop. Architectural millwork was fabricated for the ceiling, cornice and pediment. An ice and water shield was installed over the plywood, and lead coated copper pans were soldered together for a flat seam roof. All of the wood components were primed with oil primer and given two applications of latex paint.

Project Participants

NPS Project Supervisor:	Chris McGuigan, Section Leader HPTC Wood Crafting Team
NPS Project Leader:	Dean Wigfield, Exhibit Specialist HPTC Wood Crafting Team
HSTR Author:	Victoria Peterson, Exhibits Specialist Intern HPTC Masonry Team
STMA Support Staff:	Dave Dahlen, Superintendent
HAFE Support Staff:	Peter Dessauer, Historic Architect

Project Accounting

Historic Preservation Training Center **Direct Charge Authorization** **FY2011**



Please complete all entries, including the proper signatures, and fax to the HPTC Contact listed below.

<u>Park:</u>	Stephen T. Mather Training Center	<u>Alpha Code:</u>	HAFE
<u>Region:</u>	NCR	<u>Date:</u>	1/4/2012
<u>Project Title:</u>	Reconstruct Historic Porch for the East Elevation of Wirth Hall	<u>Home Org.</u>	
<u>Account Number:</u>		<u>Fund Type:</u>	
<u>Authorized Amount:</u>	\$85,080.00	<u>PMIS Number:</u>	161111
<u>Project ID No.:</u>		<u>Funding Obligation Date:</u>	

Project Description:

This project will reconstruct the historic porch for the east elevation of Wirth Hall, Stephen T. Mather Training Center.

APPROVALS

Office Contact:	Peter Dessauer	Telephone Number:	304-535-6040
		Fax Number:	304-535-4022
Signature:		Date:	7/12/2010
Office Budget Contact:	Dave Hammers	Telephone Number:	202-619-7072
		Fax Number:	202-619-7066
Signature:		Date:	7/12/2010
HPTC Contact:	Chris Robinson	Telephone Number:	301-663-8206
		Fax Number:	301-663-8032
		Date:	9/24/2009
HPTC Budget Contact:	Carol Burkhard	Telephone Number:	301-663-8206
HPTC Project Contact:	Chris McGuigan	301-698-5784	

Selected Photographs



Figure 1 : Scaffolding was erected around doorway of the porch prior to preservation work commencing.



Figure 2 : Scaffolding staged.



Figure 3 : HPTC wood crafting section creates the frame for the porch roof.



Figure 4 : The mahogany pediment panel, fascia and soffit above the pediment were installed following the completion of the frame.



Figure 5 : The architrave was installed with the 3 mahogany wood panels being attached to the framing followed by the 8" wide frieze casing and the 6" wide vertical frieze trim. The installation of the frieze panel molding on the inside of the casing completed the fabrication of the architrave panels. The mahogany pediment panel was completed with the installation of flashing on the sill of the pediment and the installation of the frieze casing and panel trim inside the pediment.



Figure 6 : Wire mesh was installed beneath the double beaded ceiling boards.



Figure 7 : The crew installed the double beaded ceiling boards with 1/4" spacing between the boards.



Figure 8 : Mahogany lumber was milled, cut on a bevel, glued with tight bond III glue, and clamped together. The rough laminated columns were then turned on the lathe and machined to a smooth round column.



Figure 9 : After they were machined to a smooth round column, the columns were sanded, and primed with oil based primer on the inside and outside.



Figure 10 : The starter strip was attached to the eaves and rake edges with copper nails. The lead coated copper pans were fitted together and nailed with clips on the two edges that were not mechanically locked. The pans were then soldered together, with the ridge being folded over and soldered.



Figure 11 : A member of HPTC's wood crafting crew solders pieces of the lead coated copper pans together.



Figure 12 : Close-up of the finished solder work.



Figure 13 : The masonry riglets were gouged out with hand tools and counter flashings installed in the riglets and tuck-pointed with matching mortar.



Figure 14 : Finished lead coated copper pan roof.

Part II | Project History

Project Agreement

Final Project Agreement between Stephen T. Mather Training Center and the National Park Service (NPS),
Historic Preservation Training Center (HPTC). February 29, 2012.

- Final Project Agreement



FINAL PROJECT AGREEMENT

**PMIS 161111
RECONSTRUCT HISTORIC WIRTH HALL PORCH
STEPHEN T. MATHER TRAINING CENTER
FY12**

February 29, 2012

RECOMMENDED: _____ DATE: _____
SUPERINTENDENT, HISTORIC PRESERVATION TRAINING CENTER

APPROVED: _____ DATE: _____
SUPERINTENDENT, STEPHEN T. MATHER TRAINING CENTER

APPROVED: _____ DATE: _____
ARCHITECT, HARPERS FERRY NATIONAL HISTORICAL PARK

Submitted by:
National Park Service
Historic Preservation Training Center
4801-A Urbana Pike
Frederick, Md.

I. DESCRIPTION OF THE PROJECT

The scope of work for this preservation project was developed from the PMIS statement #161111 as prepared by the Mather Training Center superintendent, Dave Dahlen. Work executed under the agreement will include the reconstruction of the east porch in a manner that is compatible to the historic structure. The dimensions of the new porch were taken from the 1963 as-built drawings of Wirth Hall which include the dimensions of the 1881 porch. The new porch will reflect the 1881 design with classical revival style lines and Doric columns. The HPTC provided architectural drawings that included a foundation plan, floor plan, roof plan, elevations, sections, and details.

II. STRUCTURE DESCRIPTION

The National Park Service acquired the building in 1962, removed the porch in 1964, and constructed a flagstone terrace in its location. The flagstone terrace was removed in 2011 when the foundation drainage was installed.

III. STRUCTURE CONDITION

Currently, the entrance does not have a porch or stairs to provide egress for the building.

IV. SCOPE OF WORK

HPTC will work within the Secretary of the Interior's Standards for the Treatment of Historic Properties as preservation specialists to complete the following tasks on Wirth Hall. The tasks labeled as "WC" will be performed by the Wood-Crafting Section, and tasks labeled as "M" will be performed by the Masonry Section.

TASK # WC-1: DESIGN AND PLANNING.

Prior to the start of the project a Project Safety Plan will be prepared, which identifies risks and hazards associated with this project. Procurement documents will be prepared to purchase materials and services for the project.

TASK # WC-2: MOBILIZATION, SCAFFOLDING, AND DEMOBILIZATION

A team of preservation craft persons, appropriate for the project, will be assembled. All necessary tools, equipment, and materials will be assembled and transported to a STMA designated staging area. Scaffolding will be erected on the grounds and span the width and height of the porch. The scaffold will be built to OSHA standards and reach to the new roofline. Temporary construction fencing will be erected around the new porch to protect visitors.

Upon completion of all the tasks, HPTC tools and equipment will be removed from the site and transported to HPTC Facilities. Any remaining materials will be accessioned to the Center or disposed of. Following the completion of all tasks, the work site will be restored to an acceptable condition.

TASK # WC-3: FABRICATE ARCHITECTURAL MILLWORK

Fabricate four 10" diameter structural wood columns with 15" wood abacus and capitals consisting of thumb molding. Fabricate fascia, soffit, and frieze board elements for the pediment and cornice. Manufacture 38 double beaded ceiling boards that will be spaced at 1/4" when installed and have galvanized steel mesh installed above them. Construct recessed wood panels for the front and sides. Prime all wood components with oil based primer and apply one application of high quality latex finish paint. All wood components will be fabricated out of mahogany.

TASK # WC-4: INSTALLATION OF NEW ROOF FRAMING

Erect structural scaffold on the stone porch to support the framing of the pediment and roof framing. After the construction of the new ceiling/pediment framing and roof framing remove the structural scaffold and set the columns under the ceiling beams.

TASK # WC-5: INSTALLATION OF NEW ROOFING

Install 3/4" OSB roof sheathing over the pressure treated rafters. Install ice and water shield under a new lead coated copper flat seam roof. Pans will measure 20" by 28" and be soldered and have a neat appearance. Cut reglets into the masonry wall to receive the counter flashings.

TASK # WC-6: INSTALLATION OF ARCHITECTURAL MILLWORK

Install all remaining architectural millwork and ceiling boards on the structural framing after back priming all cuts. Apply 2nd application of the high quality latex paint to all wood surfaces.

TASK # M-1: MOBILIZATION/DOCUMENTATION/DEMobilIZATION

MOBILIZATION

The HPTC will identify material needs, prepare procurement documents and obtain the necessary tools, materials, and equipment to facilitate the work and project scheduling. A team of preservation craft persons, appropriate for the project, will be assembled. HPTC tools, equipment, and materials will be assembled and organized for HPTC ground transport to STMA.

A safety/hazard analysis will be conducted with the park staff as part of this task and will be supported with the preparation of a safety plan for all onsite activities.

DOCUMENTATION

HPTC will document all existing conditions and on-going stabilization work tasks with high resolution digital photographs. Project documentation will include weekly reports, correspondence, compliance, photographic narrative, archival research, field sketches, material and vendor lists and any related contract services and product data. This task is accomplished on a daily basis under the duties and responsibility of the Exhibits Specialist/Project Leader.

DEMOBILIZATION

Following the completion of all tasks, HPTC tools and equipment will be removed from the site and prepared for HPTC transport. Any remaining materials, products and supplies will be accessioned to the Park or disposed off. Upon the completion of all construction tasks, the work site will be restored to an acceptable condition unless directed by the Park to do otherwise. All work sites and staging areas will be restored to an acceptable condition at the completion of the work comparable to conditions existing before project inception.

TASK #M-2: WORK SITE STAGING

Prior to commencement of site work, industry standard 8-foot tall construction fencing will be assembled to establish a working and staging area for the project duration of the HPTC project for masonry and wood crafting tasks. It is estimated that an area of 64 feet x 100 feet minimum will be required for equipment operations, material handling, material storage and construction activities will be required for a safe working zone. Hardscape areas (sidewalks & paving) as well as earthen areas will be protected with wood sheathing during mechanical equipment operations. Protective materials will also be installed under other mechanical equipment used on site (mortar mixers, delivery trucks, backhoes..)

Parking, access, and egress areas will be established. Signs will be installed, as required. The work area will be a posted hard hat area - additional signage may also be displayed at project commencement.

TASK #M-3: TRENCH WORK - GROUND EXCAVATION FOR NEW CONSTRUCTION

(Ref: Drawing Sheets A1-1 & A1-2)

The foundation slab assembly designed for the new porch assembly will be constructed approximately 8-feet below the current finish grade. The new slab is approximately 8-foot wide x 16-feet in length.

Trenching depths more than 5-feet deep require additional protective safety measures such as shoring, trench boxes and/or soil banking. Soil banking is anticipated to be used in this case. Additional shoring may be utilized if necessary and will be determined by soil conditions and daily inspections. The trench area will be inspected daily for hazards as well as standing water.

Based on a factor of 33%, it is estimated that 4800 cubic feet of earth will require excavation to construct the porch foundation assembly. An area approximately 40 feet the length of the structure x 15 feet from the structure x 8-foot digging depth will be dug to establish a sizeable working area that will provide the worker safe egress and room to work. The earthen wall sides will be benched once at four feet from existing grade. Extension ladders will be used for access and egress as well as one earth ramp for material delivery and handling.

All soil and excavation material will be stock piled on site within the work site fenced area and used for infill and re-grading tasks at the completion of the foundation construction. The soil stockpile will be piled no closer than 6' to any side of the open trench/pit area.

The STMA Training Center will be responsible for completing an underground utility survey and marking the utility locations accordingly.

TASK #M-4: CONSTRUCT PORCH FOUNDATION SLAB

(Ref: Drawing Sheets A1-1, A5-1 & A5-2)

The concrete foundation slab will be constructed per the NPS construction drawings. The HPTC masonry team will confirm all measurements and establish construction datum's accordingly. At this time, standard 3500 psi strength concrete will be planned for slab construction. Reinforcement rebar will be installed on the 12" grid as designed. Hot dip galvanized rebar is recommended for this task. Epoxy-coated rebar is a second consideration. (TBD)

TASK #M-5: CONSTRUCT CMU SUPPORT WALL ASSEMBLY FOR PORCH SLABS, FACE PANELS, STRINGERS & STEPS

(Ref: Drawing Sheets A1-2, A5-1, A5-2, A7-1)

The concrete masonry unit support walls will be constructed per the NPS construction drawings. The HPTC masonry team will confirm all measurements and establish construction datum's accordingly. At this time, standard weight CMU blocks will be used for the assembly. Type "M" masonry cement is planned for all below grade construction. Reinforcement horizontal joint bridge wire will also be installed in combination with vertical rebar placements every four feet. All block cavities will be grout reinforced with the Type M masonry cement mortar and in-filled as construction proceeds daily. All work will be protected from weather on a daily basis as well. Overhead shelters will be constructed if necessary.

TASK #M-6: FABRICATE STONE COMPONENTS FOR THE PORCH SLABS, FACE PANELS, STRINGERS AND STEPS

(Ref: Drawing Sheets A6 & A7)

Finish stone components (14) will be contract procured by HPTC per the NPS construction drawings. HPTC will coordinate all aspects of this purchase transaction.

Submittals of the Pennsylvania bluestone material will be provided to the STMA project POC prior to contract award. HPTC will be requesting "architectural grade" stone for the fabrication of these finish components.

TASK #M-7: INSTALL & MOUNT STONE COMPONENTS –PORCH STONE SLABS, FACE PANELS, STRINGERS AND STEPS

(Ref: Drawing Sheets A3-1, A3-2, A5-1, A5-2, A6, A7 & A8-5)

The stone slabs, panels and steps will be assembled and be constructed per the NPS construction drawings. Installation and sequence will be conducted in manner to protect all edges and finishes. Assembly is expected to be completed with the assistance of a small truck crane.

V. DATA COLLECTION

The following documents provided historical, existing condition assessments, structure specific recommendations, and management guidelines for this project:

Wirth Hall Center Porch Design by Mark Slater of the Historic Preservation Training Center, 2011.

Historic photos from the Library of Congress and HAFE park collection.

Anthony Hall Survey drawings No. NM-HF 3036, prepared by Wm. Cramp Scheetz Jr., AIA, February 1963.

Camp Hill Cultural Landscape Report, prepared by Heritage Landscapes, June 2009.

VI. COMPLIANCE

Any necessary compliance requirements will be the responsibility of the Park.

VII. PROJECT COORDINATION:

The successful execution of this project will depend upon the timely completion of any and all necessary actions as outlined by each of the following parties to this Project Agreement:

HPTC: Review existing documentation and reports and prepare a Project Agreement and cost estimate describing project work.

Coordinate phasing of the work performed by the HPTC preservation team.

Conduct preconstruction, final inspection, and other such on-site, project-related meetings as required.

Provide project supervision for all work performed by the HPTC's preservation team.

Provide crafts people, tools, and materials to perform all construction activity outlined in Section IV, Products.

Provide weekly reports on project progress and activities to Park.

Provide proper disposal facilities for and periodic collection of all construction debris associated with this project.

Maintain a record of treatment for all documentation on all phases of the subject work. Prepare and distribute a record of treatment within six months of the date of the final inspection.

Provide for NPS/visitor access and protection while the project is ongoing.

Maintain work and staging area according to OSHA Regulations and Guidelines, mow and maintain work area during project.

Prepare and provide to the park a mobilization plan, a detailed schedule, and a safety plan.

STMA: Consistent with the provisions of this Project Agreement, provide access to the project site for the day labor crew and any related contract or supply or service contract associated with the project work or as stipulated at the preconstruction conference.

Provide toilet facilities for HPTC crew.

Provide parking for 2 vehicles near the site.

Provide inside area for HPTC crew for breaks and lunch.

Provide any and all necessary clearances and/or permits for the project including federal, state, and local permits required. Prepare all compliance documents as required by the Historic Preservation Act of 1966, as amended. Provide a copy to the HPTC for inclusion in the Record of Treatment.

Review, comment, and approve/reject all project submittals in a timely manner.

Provide staging area in yard close to project.

Provide access to a clean water source and electrical service for the project related purposes.

Designate a single administrative contact.

The HPTC and STMA will determine matters regarding site related issues (access, closures, signings, etc.). The HPTC's project leader may vary from time to time, but at all times a designated person will retain on site authority and serve as the immediate HPTC project contact. HPTC project leaders do not have approval authority on matters concerning time, money, scope of work, or design changes. Matters concerning project objectives and/or design-related issues will be determined by approved compliance and design documents; any unresolved issues or changes will be handled among STMA and the HPTC's supervisory staff. Matters regarding logistics and/or techniques of project execution will be determined by the HPTC. Further refinement of these roles and responsibilities will be discussed at the preconstruction meeting.

VIII. SAFETY

Worker and visitor safety is a primary concern within the NPS. Safety awareness and compliance shall be both a team and individual concern, with all parties striving to attain a safer work environment.

GENERAL

A project-specific Safety Plan will be developed for this STMA project and made available to the client upon request. Each member of the project team will acknowledge their familiarity with the Plan by affixing their signature to the "Crew sign off sheet." The plan designates the "Competent Person" for all OSHA regulated activities.

This STMA project is a hard hat area in compliance with OSHA regulations. All persons entering the designated work area will wear an approved hard hat at all times. The HPTC section chiefs are the only individuals who may grant exception to this HPTC policy. The HPTC Project Leader is responsible for ensuring that all activities are compliant with all safety related issues.

Project leaders shall conduct weekly "tailgate safety meetings" with workers assigned to the project and file OSHA required records in the project file.

Project leaders shall ensure that all work activities are consistent with applicable health and safety regulations and the HPTC Safety Programs.

ACCIDENT FORMS

On all HPTC projects, HPTC is responsible for reporting and investigating all accidents in accordance with HPTC's Safety Program (available upon request), laws and regulations.

Occupational Safety and Health Act – COMPLIANCE

All HPTC project work shall be in accordance with OSHA regulations-29 CFR Part 1926.

IX. PRODUCTS

Products to be furnished by the agreements within this Project Agreement from the HPTC to the STMA are:

1. Completion of preservation tasks as detailed in Section IV of this Project Agreement.
2. The HPTC shall prepare a Record of Treatment for this project in accordance with the NPS Directors's Order (DO) #28, Cultural Resource Management. The record of treatment includes account data, photographs, sketches, narrative and correspondence outlining the course of work, conditions encountered, and materials used.

The HPTC shall provide limited distribution of the Historic Structure Record of Treatment. Broad distributions of the Historic Structure Record of Treatment as outlined in Appendix D, DO #28 shall be the responsibility of the park. The HPTC shall provide the park with 2 Historic Structure Record of Treatments prepared in a CD Rom format and 4 hardcopies. Included in this document will be select scanned photographic images. All original photographs and negatives will be packaged separately in a loose leaf binder and provided to the park. The HPTC shall retain an electronic copy with duplicates of all photographs for the HPTC's library. The HPTC shall distribute a CD Rom copy of the Historic Structure Record of Treatment with electronically scanned photographic image to the HPTC Deputy Superintendent, the designated Project Leader, the Regional Office, the Harpers Ferry Center Library and the DSC Technical Information Center.

X. ESTIMATED SCHEDULE

Final Project Agreement:	February 29, 2012
Project Start Date:	April 2, 2012
Project Completion Date:	September 29, 2012
Distribute Project Record:	March 1, 2013

XI. PRODUCT TEAM

HPTC: Dean Wigfield, Project Supervisor

STMA: Dave Dahlen, Superintendent
HAFE: Peter Dessauer, Architect

XII. COST ESTIMATE

The tasks labeled as "WC" will be performed by the Wood-Crafting Section, and tasks labeled as "M" will be performed by the Masonry Section.

TASK: # WC-1: DESIGN AND PLANNING

Labor:	
(1) Exhibits Specialist @ 1 week	1,840
SUBTOTAL	1,840

TASK # WC-2: MOBILIZATION, SCAFFOLDING, AND DEMOBILIZATION

Labor:	
(1) Exhibits Specialists @ 1 week	1,840
(3) Maintenance Workers @ 1 week	5,520
Materials: Fencing	750
SUBTOTAL	8,110

TASK # WC-3: FABRICATE ARCHITECTURAL MILLWORK

Labor:	
(1) Exhibits Specialist @ 3 weeks	5,520
(3) Maintenance Workers @ 3 weeks	16,560
Materials:	
Mahogany 560bf, paint, etc.	4,750
SUBTOTAL	26,830

TASK # WC-4: FRAMING OF NEW ROOF SYSTEM

Labor:	
(1) Exhibits Specialist @ 1 day	460
(2) Maintenance Workers @ 1 week	3,680
Materials:	
Lumber, connectors, etc.	800
SUBTOTAL	4,940

TASK # WC-5: INSTALLATION OF NEW ROOFING

Labor:	
(1) Exhibits Specialist @ 1 day	460
(2) Maintenance Workers @ 2 weeks	7,360
Materials:	
Lead coated copper pans, ice/water shield, etc.	2,500
SUBTOTAL	10,320

TASK # WC-6: INSTALLATION OF ARCHITECTURAL MILLWORK

Labor:	
(1) Exhibits Specialist @ 1 week	1,840
(2) Maintenance Workers @ 1 week	3,680
Materials:	
Cast aluminum plinths, paint, etc.	700
SUBTOTAL	6,220

ITEM # WC-1 Project-Related Costs

Preparation of Record of Treatment	1,500
Project Supervision	2,000
Tool repair/replacement	300
SUBTOTAL	3,800

WOOD-CRAFTING COST ESTIMATE SUMMARY

TASK #1.....	1,840
TASK #2.....	8,110
TASK #3.....	26,830
TASK #4.....	4,940
TASK #5.....	10,320
TASK #6.....	6,220
ITEM #1.....	3,800
SUBTOTAL	62,060
HPTC Overhead	20,687
WOOD-CRAFTING ESTIMATED TOTAL	82,747

TASK: # M-1: MOBILIZATION/DOCUMENTATION/DEMOBILIZATION

Labor:

(1) Exhibits Specialists @ 50 hrs	3,250
(1) Carpenter @ 40 hrs	1,600
(2) Masons @ 40 hrs	4,400
(2) Mason Workers @ 40 hrs	2,800

SUBTOTAL **12,050**

TASK # M-2: TRENCH WORK – GROUND EXCAVATION

Labor:

(1) Exhibits Specialists @ 20 hrs	1,300
(1) Masons @ 40 hrs	2,200
(2) Mason Workers @ 40 hrs	2,800

SUBTOTAL **6,300**

TASK # M-3: CONSTRUCT PORCH FOUNDATION SLAB

Labor:

(1) Exhibits Specialists @ 40 hrs	2,600
(2) Masons @ 40 hrs	4,400
(2) Mason Workers @ 40 hrs	2,800

SUBTOTAL **9,800**

TASK # M-4: CONSTRUCT CMU SUPPORT WALLS

Labor:

(1) Exhibits Specialists @ 50 hrs	3,250
(2) Masons @ 40 hrs	4,400
(2) Mason Workers @ 40 hrs	2,800

SUBTOTAL **10,450**

TASK # M-5: FABRICATE STONE COMPONENTS

Labor:

(1) Exhibits Specialists @ 50 hrs	3,250
(1) Masons @ 10 hrs	550

SUBTOTAL **3,800**

TASK # M-6 INSTALL STONE COMPONENTS

Labor:

(1) Exhibits Specialists @ 60 hrs	3,900
(2) Masons @ 60 hrs	6,600
(2) Mason Workers @ 60 hrs	4,200

SUBTOTAL **14,700**

ITEM # M-1 Project-Related Costs

All construction materials, crane and backhoe rental,
fuel, tool repair, supervision, etc 47,995

SUBTOTAL **47,995**

MASONRY COST ESTIMATE SUMMARY

TASK #M-1.....	12,050
TASK #M-2.....	6,300
TASK #M-3.....	9,800
TASK #M-4.....	10,450
TASK #M-5.....	3,800
TASK #M-6.....	14,700
<u>ITEM #M-1.....</u>	<u>47,995</u>
SUBTOTAL	105,095
HPTC Overhead	35,032
MASONRY ESTIMATED TOTAL	140,127

GRANDTOTAL (WOOD-CRAFTING AND MASONRY) **\$222,874**

NOTE: HPTC's salaries are calculated on a pay period basic. The number of pay periods is based upon an estimate of the total amount of hours required for each team member to complete the required project tasks. The hourly rate for each occupation is determined by combining the direct hourly rate plus benefits with a prorated amount for the indirect costs of annual and sick leave, holidays, and training time.

XIII. TRAINING

It is the objective of the HPTC to expand our programs by providing opportunities for all NPS employees to receive training, which increases their appropriate levels of sensitivity and responsibility in the recognition and implementation of historic preservation of cultural resources. The focus of HPTC's training is on work based learning and skill improvement.

Various aspects of this project offer different learning opportunities for those involved in its execution. HPTC shall make every effort to maximize the training potential of the project described in this Project Agreement by scheduling HPTC staff, program participants, and Park personnel to appropriate project duties.

PRESERVATION WORK ASSIGNMENT - GENERAL GUIDELINES

To foster a better understanding of the Historic Preservation Training Center's (HPTC) programs and mission, and to enable Park staffs to develop a sense of ownership and feeling of personal involvement in the park project, we have developed the Preservation Work Assignment Program.

This program will be offered only if the assignment will afford a "good" training experience for the park staff. Factors such as project leader and crew skill, knowledge and experience levels, type of project, etc., will be considered before the assignment is offered.

The Project Supervisor or HPTC Superintendent will ask the Maintenance Chief of the host park if they would like any of their staff to work with our crew on the project. If they are agreeable, the park will identify employees. Developmental objectives will be established after meeting with the park staff.

Midway through the assignment, a progress report (Verbal if assignment is two weeks, written if longer) will be sent to the park staff to solicit their input about how the assignment is progressing. The Maintenance Chief and the HPTC Project Supervisor or HPTC Superintendent will solve any problems that have arisen.

At the end of the assignment, participants will be issued a training certificate, and evaluations will be sent to the participant, the Maintenance Chief/Supervisor, and the Project Leader.

The following criteria will be negotiated between the Maintenance Chief and HPTC Project Supervisor or HPTC Superintendent:

- ◆ Park staff must work the agreed upon number of days on the project in order to achieve the established objectives.
- ◆ Park staff will work the same schedule as the HPTC crew or as close to it as possible.
- ◆ Park staff must notify the HPTC Project Leader as soon as possible when their employee has called in sick or is taking annual leave. Likewise, the HPTC Project Leader will notify park staff when the crew must return to the HPTC before scheduled. This includes inclement weather arrangements.

- ◆ Park staff must take breaks and lunch period at the project site and not return to the maintenance yard.
- ◆ Park staff must work at the project site during their entire assignment and not leave to perform other park duties.
- ◆ Park staff must provide own tools.

If it is arranged for a park employee to come to the HPTC to work in the Shop, the Training Manager should be notified so that travel arrangements can be made. All of the other above information applies to this situation also.

Compliance

Section 106 clearance was handled under the Memorandum of Agreement XXX process and was obtained by the Park. Any necessary compliance requirements are the responsibility of the park.

Correspondence

- Wigfield, Dean (HPTC Wood Crafting Team). *Memo to Superintendent, Historic Preservation Training Center*. "Pre-Construction Meeting Minutes." May 3, 2012.
- Wigfield, Dean (HPTC Wood Crafting Team). *Memo to Superintendent, Stephen T. Mather Training Center*. "PMIS Completion Report as of 09-20-12." September 20, 2012.



United States Department of the Interior

NATIONAL PARK SERVICE
Historic Preservation Training Center
4801A Urbana Pike
Frederick, MD 21704



IN REPLY REFER TO:

May 3, 2012

Memorandum

To: Superintendent, Historic Preservation Training Center

From: Project Leader, Historic Preservation Training Center

Ref: Reconstruct Historic Wirth Hall Porch
Stephen T. Mather Training Center
PMIS 161111, FY 12

Subject: Pre-Construction Meeting Minutes

The subject meeting was held as scheduled on Thursday, May 3, 2012 at 9:00 a.m. on site. The following people were in attendance:

Micheal Castagnetto, Facility Manager, HAFE
David Dahlen, Superintendent, STMA
Roger Anderson, Cultural Resources, STMA
Peter Dessauer, HAFE
Dean Wigfield, Project Supervisor, HPTC
Scott Jones, Project Supervisor, HPTC

The meeting began at 9:00 a.m., with Scott Jones and Dean Wigfield conducting the meeting. The Project Agreement and the scope of work were covered in detail. Administrative concerns and logistical issues were also addressed. These items included the following:

Project Contact People:

Dave Dahlen/STMA

Project Work Hours

There is a noise ordinance in effect to 8:00 a.m. for the town.

Safety

Park representatives were briefed on HPTC safety policies and procedures. In case of an emergency, HPTC field personnel will call 911, or travel to the Jefferson Memorial Hospital.

An AED is located in the training center?

The site is designated a hard hat work area and entry into the fenced area will require the proper protection.

A chain link fence will surround the work area between the sidewalks and outside the tree drip line.

Project Details

The project scope of work was covered with all in attendance; the schedule was discussed with project work starting on June 4 and ending in late September.

Park Specific Regulations

Parking will be provided for vehicles in the Shipley School parking lot.

Toilet/Break Facilities

Facilities are available inside the building, HPTC people will wear disposable shoe coverings when entering the building.

Potable water is available on the outside of the building.

Materials/Tool Storage

Materials and tools will be stored in the barricaded work area and also in the cellar.

Project Site Utilities

Power will be provided from inside the building and run out the window. Generators will be used if additional power is needed.

Distribution of Weekly Reports and Correspondence

All correspondence will be distributed to the following key individuals; all at the meeting.

Open Discussion

If there are any questions or concerns regarding this meeting, please contact Dean Wigfield or Chris McGuigan at 301-698-5784.

Dean Wigfield
Project Leader

bcc: (All Electronic)
McGrath, HPTC
Gordon, HPTC
C. McGuigan, HPTC
D. Wigfield, HPTC
Project file, HPTC



United States Department of the Interior
NATIONAL PARK SERVICE
Historic Preservation Training Center
4801A Urbana Pike
Frederick, MD 21704



IN REPLY REFER TO:

(HPTC)

September 20, 2012

Memorandum

To: Dave Dahlen, Superintendent, STMA
From: Dean Wigfield, Historic Preservation Training Center
Ref: PMIS # 161111 Reconstruct Historic Wirth Hall Porch
Subject: PMIS Completion Report as of 09-20-12

Project Dates- Final Project Agreement signed March 2012
Pre-construction meeting-05-03-2012
Work Began- 06-09-12
Final Inspection- November, 2012

Total HPTC Cost- \$82,747 for Wood crafting element

Work Descriptions and Quantities

Staging - 35 l.f. of tubular scaffold erected to a height of 20 feet high.

Fencing for stockade - 100 l.f. feet of metal panels.

Framing- The structural framing of the new ceiling/pediment, architrave and roof framing is 100% complete. (\$4,940 for the framing)

The fabrication of the architectural millwork is 100% complete. (\$26,830 for the millwork)

The installation of the architectural millwork is 90% complete with the exception of the wood columns. (\$6,220 for the installation of millwork, architrave, pediment, etc.)

The 160 s.f. metal roof will be completed the week of September 24-27, 2012.
(\$10,320 for the installation of the new lead coated copper roof.)

Thanks, Dean

Weekly Reports

- Wigfield, Dean (HPTC Wood Crafting Team Project Leader). "Final Field Report #1." August 20, 2012.
- Wigfield, Dean (HPTC Wood Crafting Team Project Leader). "Final Field Report #2." August 27, 2012.
- Wigfield, Dean (HPTC Wood Crafting Team Project Leader). "Final Field Report #3." September 4, 2012.
- Wigfield, Dean (HPTC Wood Crafting Team Project Leader). "Final Field Report #4." September 24, 2012.
- Wigfield, Dean (HPTC Wood Crafting Team Project Leader). "Final Field Report #5." October 1, 2012.
- Wigfield, Dean (HPTC Wood Crafting Team Project Leader). "Final Field Report #6." December 3, 2012.

**NATIONAL PARK SERVICE
HISTORIC PRESERVATION TRAINING CENTER (HPTC)
FINAL FIELD REPORT #1
FY – 12**

SITE: Stephen T. Mather Training Center

PROJECT: Reconstruct Historic Wirth Hall Porch – WC **PMIS#:** 161111

DATE: August 20, 2012 **WEEK ENDING:** August 16, 2012

GENERAL

Scaffolding, tools and framing material was loaded at the HPTC shop facility and transported to the work site. The mahogany trim components for the new porch were milled, sanded, and primed with oil based primer over the last 6 weeks.

WORK PERFORMED

The HPTC crew erected two scaffold towers on each side of the new CMU foundation and set metal walk planks across the towers to construct the ceiling frame of the new wood porch. The framing and installation of all the trim components will be applied while resting on 4 temporary 6" x 6" vertical timbers. Once the masons have installed the stone floor slabs the new mahogany columns will be placed and the temporary timbers removed.

The ceiling framing was started this week with the installation of pressure treated 2" x 6" ledgers being attached to the brick masonry wall with stainless steel anchors.

PROJECTED WORK TO BE COMPLETED NEXT WEEK

The framing of the new porch will continue.

VISITORS TO THE SITE

None

SAFETY

The Project Leader reviewed the safety plan with the crew.

WEATHER

Mild and warm with showers on Tuesday.

PERSONNEL ASSIGNED TO THE PROJECT

Two exhibits specialists
Two maintenance workers

RECAP

Start Date: July 16, 2012
Completion Date: September 2012
Percentage Complete: 10%
Starting Balance: \$82,747

/s/ Dean Wigfield
Project Leader

Cc: (electronically)

STMA: David Dahlen, Superintendent
Roger Anderson, Cultural Resources Training Manager

HAFE: Peter Dessauer, Historic Architect
Michael Castagnetto, Facility Manager

HPTC: McGrath, Robinson, McGuigan, Wigfield, Owens, Project file

**NATIONAL PARK SERVICE
HISTORIC PRESERVATION TRAINING CENTER (HPTC)
FINAL FIELD REPORT #2
FY – 12**

SITE: Stephen T. Mather Training Center

PROJECT: Reconstruct Historic Wirth Hall Porch - WC **PMIS#:** 161111

DATE: August 27, 2012 **WEEK ENDING:** August 23, 2012

GENERAL

The installation of the mahogany trim components was started this week.

WORK PERFORMED

The knee walls were constructed on top of the ceiling framing and connected to the brick masonry with stainless steel anchors to complete the architrave. The rafters were fabricated and installed on top of the knee walls to complete the framing of the pediment. All framing was constructed out of pressure treated material. The ¾" plywood sheathing was installed with exterior screws. Ice and water shield was used to cover the plywood. A flat seam lead coated copper roof will be installed to complete the roof in September.

The mahogany pediment panel was installed this week and the fascia and soffit above the pediment was installed also.

PROJECTED WORK TO BE COMPLETED NEXT WEEK

The installation of the trim components will continue.

VISITORS TO THE SITE

Tom Vitanza, HPTC
Peter Dessauer, HAFE
Mike Castagnetto, HAFE

SAFETY

The Project Leader reviewed Operational Leadership with the crew.

WEATHER

Mild and warm with temperatures in the 80's.

PERSONNEL ASSIGNED TO THE PROJECT

Two exhibits specialists

Two maintenance workers

RECAP

Start Date:	July 16, 2012
Completion Date:	September 2012
Percentage Complete:	25%
Starting Balance:	\$82,747

/s/ Dean Wigfield

Project Leader

Cc: (electronically)

STMA: David Dahlen, Superintendent
Roger Anderson, Cultural Resources Training Manager

HAFE: Peter Dessauer, Historic Architect
Michael Castagnetto, Facility Manager
Mia Parsons, Chief of Resource Management

HPTC: McGrath, Robinson, McGuigan, Wigfield, Owens, Project file

**NATIONAL PARK SERVICE
HISTORIC PRESERVATION TRAINING CENTER (HPTC)
FINAL FIELD REPORT #3
FY – 12**

SITE: Stephen T. Mather Training Center

PROJECT: Reconstruct Historic Wirth Hall Porch - WC **PMIS#:** 161111

DATE: September 4, 2012 **WEEK ENDING:** August 30, 2012

GENERAL

There will be no crew on site for the next 2 weeks; all project work will be in the HPTC shop.

WORK PERFORMED

The architrave was installed this week with the 3 mahogany wood panels being attached to the framing followed by the 8” wide frieze casing and the 6” wide vertical frieze trim. The installation of the frieze panel molding on the inside of the casing completed the fabrication of the architrave panels. All of the mahogany trim components were back primed and the nail holes were filled.

The mahogany pediment panel was completed with the installation of flashing on the sill of the pediment and the installation of the frieze casing and panel trim inside the pediment.

The pediment and the architrave were given two applications of Benjamin Moore’s latex finish paint.

Galvanized metal mesh was attached to the bottom of the ceiling joists.

PROJECTED WORK TO BE COMPLETED NEXT WEEK

The 4 columns will be fabricated in the HPTC shop during the next two weeks.

VISITORS TO THE SITE

None

SAFETY

The Project Leader reviewed the fall protection plan with the crew.

WEATHER

Mild and warm with temperatures in the 80's.

PERSONNEL ASSIGNED TO THE PROJECT

Two exhibits specialists
Two maintenance workers

RECAP

Start Date:	July 16, 2012
Completion Date:	September 2012
Percentage Complete:	60%
Starting Balance:	\$82,747

/s/ Dean Wigfield
Project Leader

Cc: (electronically)

STMA: David Dahlen, Superintendent
Roger Anderson, Cultural Resources Training Manager

HAFE: Peter Dessauer, Historic Architect
Michael Castagnetto, Facility Manager
Mia Parsons, Chief of Resource Management

HPTC: McGrath, Robinson, McGuigan, Wigfield, Owens, Project file

**NATIONAL PARK SERVICE
HISTORIC PRESERVATION TRAINING CENTER (HPTC)
FINAL FIELD REPORT #4
FY – 12**

SITE: Stephen T. Mather Training Center

PROJECT: Reconstruct Historic Wirth Hall Porch - WC **PMIS#:** 161111

DATE: September 24, 2012 **WEEK ENDING:** September 20, 2012

GENERAL

The HPTC crew worked in the HPTC shop the weeks of Sept. 4- Sept. 13 fabricating the mahogany columns, abacus, and components for the flat seam roof. The crew returned to the site on Wednesday Sept. 19.

WORK PERFORMED

HPTC SHOP

Mahogany lumber was milled, cut on a bevel, glued with tight bond III glue and clamped together. The rough laminated columns were then turned on the lathe and machined to a smooth round column. The columns were then sanded, and primed with oil based primer on the inside and outside.

20 oz. lead coated copper pans were cut to 18" x 24" for the flat seam roof, the edges were folded ¾" for each pan to lock together.

ON SITE WORK

The crew installed the double beaded ceiling boards with ¼" spacing between the boards. The nail holes were filled with painters putty and given a second application of latex paint.

The scaffold was erected to OSHA standards for the application of the flat seam roof next week.

The site was cleaned of all debris.

PROJECTED WORK TO BE COMPLETED NEXT WEEK

The flat seam roof will be installed.

VISITORS TO THE SITE

None

SAFETY

The Project Leader reviewed the shop safety plan with the crew.

PERSONNEL ASSIGNED TO THE PROJECT

Two Exhibits Specialists

Two Maintenance Workers

RECAP

Start Date:	July 16, 2012
Completion Date:	September 2012
Percentage Complete:	70%
Starting Balance:	\$82,747

/s/ Dean Wigfield

Project Leader

Cc: (electronically)

STMA: David Dahlen, Superintendent
Roger Anderson, Cultural Resources Training Manager

HAFE: Peter Dessauer, Historic Architect
Michael Castagnetto, Facility Manager
Mia Parsons, Chief of Resource Management

HPTC: McGrath, Robinson, McGuigan, Wigfield, Owens, Project file

**NATIONAL PARK SERVICE
HISTORIC PRESERVATION TRAINING CENTER (HPTC)
FINAL FIELD REPORT #5
FY – 12**

SITE: Stephen T. Mather Training Center

PROJECT: Reconstruct Historic Wirth Hall Porch - WC **PMIS#:** 161111

DATE: October 1, 2012 **WEEK ENDING:** September 27, 2012

GENERAL

Heritage Roofing provided a metal roofing specialist to train the HPTC crew in soldiering flat seam lead coated copper on a 4/12 pitch roof. The craftsman provided training in metal pan fabrication, soldiering, and flashing details.

WORK PERFORMED

HPTC SHOP

20 oz. lead coated copper pans were cut to 18" x 24" for the flat seam roof; the edges were folded 3/4" for each pan to lock together.

Lead coated copper starter strip was fabricated for the eaves and rakes on the roof.

ON SITE WORK

The starter strip was attached to the eaves and rake edges with copper nails. The lead coated copper pans were fitted together and nailed with clips on the two edges that were not mechanically locked. The pans were then soldiered together, with the ridge being folded over and soldiered. The masonry riglets were gouged out with hand tools and counter flashings installed in the riglets and tuck-pointed with matching mortar.

The site was cleaned of all debris.

PROJECTED WORK TO BE COMPLETED NEXT WEEK

None

VISITORS TO THE SITE

None

Reconstruct Historic Wirth Hall Porch
Historic Structure Treatment Record

SAFETY

The Project Leader reviewed the fall protection plan with the crew.

WEATHER

Cool mornings with lows in the 40's, highs in the 70's by afternoon.

PERSONNEL ASSIGNED TO THE PROJECT

Two Exhibits Specialists
Four Maintenance Workers

RECAP

Start Date:	July 16, 2012
Completion Date:	September 2012
Percentage Complete:	85%
Starting Balance:	\$82,747

/s/ Dean Wigfield
Project Leader

Cc: (electronically)

STMA: David Dahlen, Superintendent
Roger Anderson, Cultural Resources Training Manager

HAFE: Peter Dessauer, Historic Architect
Michael Castagnetto, Facility Manager
Mia Parsons, Chief of Resource Management

HPTC: McGrath, Robinson, McGuigan, Wigfield, Owens, Project file

**NATIONAL PARK SERVICE
HISTORIC PRESERVATION TRAINING CENTER (HPTC)
FINAL FIELD REPORT #6
FY – 12**

SITE: Stephen T. Mather Training Center

PROJECT: Reconstruct Historic Wirth Hall Porch - WC **PMIS#:** 161111

DATE: December 3, 2012 **WEEK ENDING:** November 29, 2012

GENERAL

The wood crafting team returned to the site and removed the scaffolding that surrounded the porch pediment. The support posts were removed as the new columns were installed. A final inspection is scheduled for December 5, 2012.

WORK PERFORMED

The soffit boards were attached to the framing of the porch ceiling with stainless steel finish screws and filled with painters putty. The 4 mahogany columns were cut to length and installed on the cast aluminum plinths anchored to the stone base. The columns rest under the abacus and wood capital moldings. Hurricane straps connect the corner columns to the stone and structural 8" steel screws connect the tops of the columns to the porch framing. The paint on the columns was touched up as needed.

All tools, scaffolding, and equipment was loaded and transported back to the HPTC. The site was cleaned of all debris.

PROJECTED WORK TO BE COMPLETED NEXT WEEK

None

VISITORS TO THE SITE

None

SAFETY

The Project Leader reviewed the MSDS book with the crew.

WEATHER

Cool mornings with lows in the 30's, highs in the 40's and 50's by afternoon.

PERSONNEL ASSIGNED TO THE PROJECT

One Exhibits Specialist
Two Maintenance Workers

RECAP

Start Date: July 16, 2012
Completion Date: September 2012
Percentage Complete: 99%
Starting Balance: \$82,747

/s/ Dean Wigfield
Project Leader

Cc: (electronically)

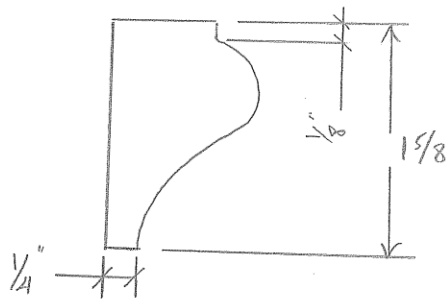
STMA: David Dahlen, Superintendent
Roger Anderson, Cultural Resources Training Manager

HAFE: Peter Dessauer, Historic Architect
Michael Castagnetto, Facility Manager
Mia Parsons, Chief of Resource Management

HPTC: McGrath, Robinson, McGuigan, Wigfield, Owens, Project file

Drawings

Reconstruct Historic Wirth Hall Porch
Stephen T. Mather Training Center
Historic Preservation Training Center, n.d.
A1 – Frieze Casing
A2 – Ceiling Boards Full Scale



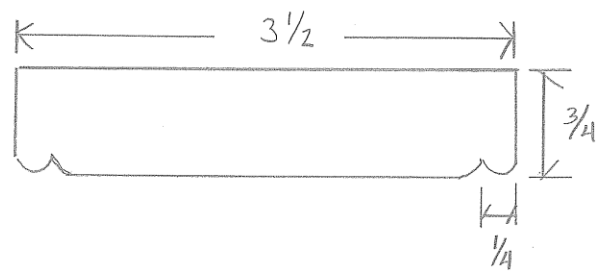
Frieze Casing

Full size

need 180 L.F. / 12 ea 15' long
Mahogany

A1: Frieze Casing

Ceiling Boards Full Scale



Need 48 ea total

A2: Ceiling Boards Full Scale