

Grout-Heard House Museum

November 27, 2023

Community Preservation Committee Town of Wayland 41 Cochituate Road Wayland, MA 01778 <u>sweinstein@wayland.ma.us</u> <u>dstotz@wayland.ma.us</u>

To the Community Preservation Committee,

The Wayland Historical Society will be replacing the heating and cooling system (HVAC) serving the Grout-Heard House at 12 Cochituate Road in the spring/summer of 2024. This application is for Historic Preservation monies of the Community Preservation Fund to replace the existing with a new HVAC system that will provide conditions of consistent temperature and humidity necessary to preserve the 18<sup>th</sup> century building and the Collection.

THE WAYLAND MUSEUM AND HISTORICAL SOCIETY

The proposed design will remove the existing fossil-fuel based heating and obsolete technology cooling system and replace that HVAC system with an electrically-powered heat pump system.

Estimated cost for the HVAC and electrical work of the project are:

New heat pump system:\$	44,000.00
Increased electrical service and wiring new equipment:\$	11,000.00
Project total:\$	55,000.00

Attached please find a) application, b) two requests for proposals (RFP) describing the details of all the required tasks for the new HVAC system and the associated electrical work, c) photographs showing the building as well as the existing HVAC and electrical systems, d) letter of support.

Sincerely, Brad E. Keyes

Brad E. Keyes Board and House & Grounds Member

Grekly Schuler

Gretchen G. Schuler President

Encl: CPA Application signature page, CPA Application, HVAC RFP, Electrical RFP, Site Photographs

## WAYLAND COMMUNITY PRESERVATION ACT PROJECT APPLICATION FORM

Note: The form fields will expand as you type. Use tab or your cursor to advance to the next field. If you prefer, you can download a .pdf version of this Project Application Form to complete by hand from the Community Preservation Committee page on the Town's website (<u>https://www.wayland.ma.us/community-preservation-committee</u>).

Please provide all applicable information to help the CPC evaluate your proposal. If you are using this fillable Word form, please save with a file name referencing your board or committee and the project (e.g., HistComm\_OldBarn\_2022). Submit your signed application and supporting information and materials to the Community Preservation Committee mail slot at Town Building by hand or mail; or by email to BOTH the CPC Chair at <a href="mailto:sweinstein@wayland.ma.us">www.wayland.ma.us</a> and the CPC Vice-Chair at <a href="mailto:dstotz@wayland.ma.us">dstotz@wayland.ma.us</a>. The deadline for submissions is 5:00pm ET on Thursday, November 30, 2023.

## **SECTION 1: PROJECT INFORMATION**

Project Title: Wayland Historical Society HVAC

Project Summary: The Grout-Heard House Museum, owned by the Wayland Historical

Society, is in need of a new HVAC system in order to preserve the building and the collections.

The cooling has failed and cannot be fixed and the heating part of the HVAC is at the end of its

life. Due to the failed cooling system the Society is forced to take a major step to replace the

HVAC with a system that will provide consistent temperature and humidity .

Map # 23 and Parcel # 095 Estimated completion date: Summer 2024

## CPA Program Area (check all that apply):

Open Space Historic Preservation



## SECTION 2: APPLICANT/DEVELOPER INFORMATION

Contact Person and/or Primary Applicant: Gretchen Schuler Property Owner (if applicable): Wayland Historical Society Inc. Organization (if applicable): Wayland Historical Society Mailing Address: P.O. Box 56 Daytime phone #: 508-358-7959 Other phone #: 508-245-4115 (cell) E-mail address: president@waylandmuseum.org or webmaster@waylandmuseum.org Website (if applicable): www.waylandmuseum.org

## SECTION 3: BUDGET SUMMARY

A. Total budget for project: \$55,000B. CPA funding request: \$55,000 or \$27,500CPA request as percentage of total budget: 100% (Calculate as (B/A)\*100)

Applicant Signature: Grekly Schuler

## **Date Submitted:** 11/22/2023

Your application is not complete unless you provide the information requested on the following page. Please make sure you address each of the issues.

### PLEASE ATTACH PAGES TO PROVIDE THE REQUESTED INFORMATION, IN ORDER.

You are welcome to use this form but may address any or all of the issues in one or more separate document(s)

### **PROJECT DESCRIPTION**

**1. Scope or concept of project:** Be specific about the scope of work. Provide photographs of existing conditions and proposed plans, if applicable.

The Wayland Historical Society has known for two years that it would have to replace the HVAC in order to have a consistent heating and cooling system necessary to protect and preserve the 18<sup>th</sup> century Grout-Heard House Museum as well as the Collections of more than 5,000 items. Archival material, stored in file cabinets and acid free boxes, is particularly vulnerable. Our dehumidifer and cooling system has been less than adequate and now the cooling has failed. A modern large-sized dehumidifier was installed last year to address the critical need. It will function well with a new HVAC system. An integrated and modern system will go a long way to preserving the building and its contents - the Collection.

**2. Projected action plan and timeline:** List the steps needed to complete the project along with an estimated timeline. The CPC will rely on this information, plus your periodic updates, to prepare its annual Project Status Report to the Town Meeting.

a) Select contractors for HVAC installation and electrical work - two RFPs attached - May 2024 b) Work to be completed in 4 weeks - June 2024

### FINANCES

**3. Anticipated project cost:** Provide a budget with line itemization (e.g., real property acquisition, preservation consultant, etc.). Also indicate why each type of expense is needed. *This is an example of how it might look. You are encouraged to attach your own spreadsheet.* 

Expense category/description	Justification/explanation	Budgeted amount
1) New heat pump and electrical	Replacement of HVAC system	\$ 24,400
equipment	and electrical to accommodate	
	new system	
2) Removal: asbestos, furnace, oil	To accommodate new heat	\$ 4,900
tanks	pump system	
3) Labor, permits, profit, warranty	Necessary parts of project	\$ 25,700
4) TOTAL		\$ 55,000

**4. Other funding sources:** Include private, public, in-kind, and other, and the anticipated amounts and/or percent of the total cost.

The WHS is applying for a Massachusetts Cultural Council Facilities Grant (a 1:1 matching program). If that application is successful the need for CPA funds will be reduced by 1/2 for a CPA cost of the project, \$27,500. However, the Facilities Grant will not be announced until mid May; therefore the request for the CPA funds is in the full amount of the project. If the Cultural Council grant application is successful only 1/2 of the CPA application (if successful) would be used.

5. CPA funding request amount (should be the same as application 3-B): \$55,000

PURPOSE OF PROJECT

**6. Relevance to community:** Indicate how the project is relevant to the current and/or future needs of Wayland. Does it serve multiple needs?

The mission of the WHS is to preserve Wayland's history and to make it accessible to the residents of and visitors to the Town. Research/reference rooms of the WHS, located in the Grout-Heard House, are regularly used by researchers of family geneaology, Wayland history, and Wayland's important historical figures such as Lydia Maria Child and Mary Sears. In addition, the WHS regularly provides educational programs to the community on topics as diverse as slavery's impact on our town, flooding of the Sudbury River, World War I Yeoman-F (the first females enlisted in the Army) and profiles of dozens of accomplished Women of Wayland. Many of these community programs require research using resources preserved in the GHHM reference rooms. It is essential that these resource materials be carefully protected.

In addition, the House and its contents are both historically significant and important sources of education. Each May Wayland's third-grade classes participate in the Revolution Program, which includes visiting the Grout-Heard House Museum to learn about home and family life during the time of the American Revolution. The museum's historic artifacts are fragile and suseptible to changing temperature conditions. Preserving them requires a consistent temperature. The Grout-Heard House, the only structure owned by the Wayland Historical Society in which to maintain the Collection, is a unique and irreplaceable community asset that is worthy of historic preservation funds.

**7. Support of CPC category:** Explain how the project will meet goals and objectives of the category (or categories) under which you are applying (at least one of these: Community Housing, Historic Preservation, Open Space, and Recreation):

This Historic Preservaton project is necessary to preserve the 18<sup>th</sup> century building and its Collection - the historical and cultural artifacts and archival materials (documents, photographs, videos, slides) that tell the history of our community. Temperature fluctuations must be kept to a minumum in order to safely preserve the house and the Collection.

The significance of the Grout-Heard House Museum (GHHM) is hard to overstate. It is the oldest extant structure in the Wayland Center Historic District - a Local Historic and a National Register Historic District. The GHHM is listed in the National Register and the State Register of Historic Places. It also is the subject of a preservation restriction, which provides additional protection of funds invested in the property due to additional review and approval of changes made to the building.

The GHHM is a resource available to all residents of Wayland and visitors to the Town. Preservation of the GHHM and its Collection provides a long-term contribution and enhancement to the Town; and contributes to the historic character of the Town, the importance of which is noted in the Master Plan (2004 and 2010 Update). An application to the Mass Cultural Council Facilities Fund, if successful, will fund one half of this necessary improvement. Even if the CPC advances this request to the Town and it is approved for the full \$55,000, any funds from other grant awards will reduce the amount of CPA funds used, and the balance will revert to the Uncommitted Fund of the CPA.

**8. Supporting documents:** Applicants are strongly encouraged to seek support from relevant Town entities (e.g., commissions, boards, committees). Report the outcome of such efforts. Provide supporting letters, references, studies, Town plans, maps, and statistics.

Wayland Community Preservation Committee

## WAYLAND HISTORICAL SOCIETY - CPA HVAC APPLICATION - HISTORIC PRESERVATION FUND

## Grout-Heard House Museum – Facilities Grant – Replacement of HVAC

Heat pump equipment and associated materials\$	19,500.00
Electrical equipment and associated materials\$	4,900.00
Fuel oil and storage tank proper removal and disposal\$	2,100.00
Asbestos abatement and proper removal and disposal\$	2,800.00
Labor\$	20,000.00
Permits\$	500.00
Profit and warranty\$	5,200.00
TOTAL\$	55,000.00



## TOWN OF WAYLAND MASSACHUSETTS 01778 WAYLAND HISTORICAL COMMISSION

TOWN BUILDING 41 COCHITUATE ROAD TELEPHONE: (508) 358-7701

November 15, 2023

Susan Weinstein, Chair Community Preservation Committee Town of Wayland 41 Cochituate Road Wayland, MA 01778

Dear Susan and Community Preservation Committee,

The Wayland Historical Commission strongly supports the Wayland Historical Society's request for CPA funds to replace the cooling system and the oil-fired heating system in the Grout Heard House Museum with electric heat pumps, and upgrade the electric service to support the new system. This will support the preservation of both the house and its collections, which require consistent temperature and humidity.

The Grout Heard House Museum, listed in both the State and National Registers of Historic Places, is uniquely able to preserve aspects of Wayland history in the form of the house itself and its contents. It plays a critical role in helping educate the public about Wayland's history and, more broadly, the history of the region and the nation. The Historical Society Board is tasked with protecting and preserving the legacy that the Grout Heard House Museum represents for Wayland. Upgrading the HVAC system will help them achieve that goal.

The Wayland Historical Commission believes this would be a very worthy project for the Community Preservation Committee to fund. At our Nov. 6, 2022 meeting, we voted to support this project, and send this letter of support.

Sincerely,

Jardner-Westcott nerene (

Katherine Gardner-Westcott Chair, Wayland Historical Commission

#### Summary

Replace the existing oil and electrically based HVAC system with a new heat pump-based system while improving the comfort in underserved areas of the building. The intent is for this proposal, along with the associated electrical proposal to create a turn-key installation for the customer.

#### Tasks

Manage, remove and properly dispose of the existing:

- Outdoor condensing unit
- Oil-fired furnace
- Two 4'x4' asbestos boards
- Fuel oil and two fuel oil tanks
- Indoor evaporator coil
- R-22 refrigeration lines
- Condensate pump
- Flue piping
- Near-furnace ductwork
- Cut off underground fuel oil feed line at floor level on both ends
- Remove the two fuel oil fill and one vent lines

Provide, supply and install the following:

- Outdoor heat pump on raised stand
- Indoor blower with a refrigeration coil and electric heating coil
- Metallic stand to support horizontally-mounted air hander
- 5-Inch MERV 8 return air filter
- Ductwork to connect the blower to the existing distribution system
- Indoor ductless head in the second floor office
- Insulated refrigeration lines between the indoor units and outdoor heat pump
- Refrigeration lines
- UV stabilized cover over all exterior refrigerant pipe, electrical and condensate lines
- Condensate pump and piping with discharge at kitchen sink tail pipe for the main unit
- Condensate piping to the exterior for the office unit
- Flue cap at thimble
- Fill the holes in the siding where the existing refrigerant, condensate and electrical lines penetrate the building
- Fill the holes in the foundation where the fuel oil fill and vent pipes penetrate the building
- Two new 7-day programmable Wi-Fi enabled thermostats
- Heat pump manufacturer's start-up and warranty documents and registration processes

#### Notes

We draw your particular attention to asbestos boards that are mounted above the existing furnace. The mechanical contractor shall hire a certified asbestos abatement firm for the proper removal and disposal of these boards and provide the customer with documentation of safe re-occupation after the asbestos abatement.

The mechanical contractor shall include the work to coordinate with the associated electrical work of this project. It shall be the mechanical contractor's responsibility to schedule and direct the electrical contractor to develop a complete project.

# Request for Proposal HVAC

#### **Insurance and Permits**

Provide the customer with proof of general liability and worker's compensation insurance. Purchase, apply and fulfill all of the necessary permits as required by the Commonwealth of Massachusetts and the Town of Wayland.

#### Summary

Upgrade the electrical service for the building from 100 to 200 amperes. Provide wiring for new heat pump system.

#### Tasks

- Add new 200 ampere,1Ø, 32-circuit electrical panel
- Feed the existing 100 ampere panel from the new panel
- Install a new 200 ampere meter socket on the exterior of the house
- Install new service entrance cable from the weather head to the new 200 ampere panel
- Extend (or wholly replace) the existing electrical feed for the cooling-only condensing unit to the new heat pump
- Adapt the existing 120 feed for the oil-fired furnace to power the condensate pump
- Install a new 15 ampere, 230 volt, 1Ø circuit to the new blower unit
- Install a new 60 ampere, 230 volt, 1Ø circuit to the new electric heater at blower unit
- Install a new 15 ampere 230 volt, 1Ø circuit to the new ductless unit in the office
- Provide new thermostat control wiring to the existing first floor location and new second floor office location
- Provide M-Net communication cable between the two indoor units and the new heat pump
- Install two 8-foot ground rods and grounding conductors for the new and existing panels
- Verify the integrity, and repair as required, the grounding conductor at the water main
- Install GFCI 115 volt receptacle near the heat pump for use by refrigeration technicians
- File utility authorization number and electrical permit with the Town of Wayland

#### Notes

Work with the mechanical contractor installing the new heat pump system to create a turn-key installation for the customer.

#### **Insurance and Permits**

Provide the customer with proof of general liability and worker's compensation insurance. Purchase, apply and fulfill all of the necessary permits as required by the Commonwealth of Massachusetts and the Town of Wayland.



Façade of Grout-Heard House Museum – looking east



Rear Elevation of GHHM – looking west



Rear elevation of main block – Willy's shed to left – 1964 addition to right



GHHM – South elevation of 1964 addition – likely site of exterior part of heat pump

## Site Photographs



GHHM – Basement – oil burner and duct work – looking west, southwest



Basement – oil burner and duct work – looking west, northwest



Basement – oil burner rear view – looking east, southeast



Basement - oil burner - north (right) side



Basement – oil tanks along north wall of main block



Exterior – capped pipes to fill oil burners



Basement – oil tank on north wall of main block



Basement – Fuse Box on west wall



Exterior – meter on main façade – lower southwest corner



Basement – Interior view of fuse box on west wall



Main façade – showing placement of meter