Canterbury Historic District Commission

P0 Box 500

Canterbury, New Hampshire 03224

Application for Certificate of Approval

Please see the Historic District ordinance for purpose, criteria and procedure. The HDC will render a decision on your application within ten days of the public hearing.

Property Address 288 SHAKER RD - HORSE BARN Map# 228 Lot# 2

Property Owner <u>CANTERBURY SHAKER VILLAGE</u> Ap Address <u>288 SHAKER</u> RD <u>CANTERBURY NH 0322Y</u> Phone (603) 783-9511 x 201	Address (SAME)	
	Phone (8/4) 571-2444	
Type of Project		
	Fees	
New Construction	\$100	
Addition to existing Building	\$100	
Accessory Building	\$100	
Repair to an existing affecting exterior features	\$50	
Demolition of an existing building Construction or removal of fences or stone walls Change in Natural Features Solar Panels rooftop or ground mount	\$50	
Construction or removal of fences or stone walls	\$50	
Change in Natural Features	\$50	
Solar Panels rooftop or ground mount	\$50	
Work in proximity to a known archeological site	\$50	
Jse back of application if needed) REPUBLE ROOF IN KIND (SEE		PUBLIC
Jse back of application if needed) REPLACE ROOF IN KIND (SEE) BECAUSE OF LIMITED IMPACT, WILL HEAPING, PLEASE, butters *Include Owner/ Agent		PUBLIC
Jse back of application if needed) REPLACE ROOF IN KIND (SEE) BECAUSE OF LIMITED IMPACT, WILL HEAPING, PLEASE, butters *Include Owner/ Agent		<i>PuBL10</i> Fee \$10p
BECAUSE OF LIMITED IMPACT, WIND WHEARING, PLEASE, butters *Include Owner/ Agent	E REQUESTA WAIVER OF	
BECAUSE OF LIMITED IMPACT, WIND WHEARING, PLEASE, butters *Include Owner/ Agent	E REQUESTA WAIVER OF	
BECAUSE OF LIMITED IMPACT, WIND WHEAPING, PLEASE, butters *Include Owner/Agent	E REQUESTA WAIVER OF	
BECAUSE OF LIMITED IMPACT, WIND WHEARING, PLEASE, butters *Include Owner/ Agent	E REQUESTA WAIVER OF	
BECAUSE OF LIMITED IMPACT, WIND WHEARING, PLEASE, butters *Include Owner/ Agent	E REQUESTA WAIVER OF	
BECAUSE OF LIMITED IMPACT, WIND WHEARING, PLEASE, butters *Include Owner/ Agent	E REQUESTA WAIVER OF	
BECAUSE OF LIMITED IMPACT, WIE HEAPING, PLEASE, butters *Include Owner/ Agent	E REQUESTA WAIVER OF	
Jse back of application if needed) REPLACE ROOF IN KIND (SEE) BECAUSE OF LIMITED IMPACT, WILL HEAPING, PLEASE, butters *Include Owner/ Agent	E REQUESTA WAIVER OF	
Jse back of application if needed) REPLACE ROOF IN KIND (SEE) BECAUSE OF LIMITED IMPACT, WILL HEAPING, PLEASE. butters *Include Owner/ Agent	E REQUESTA WAIVER OF	
Jse back of application if needed) REPUACE ROOF IN KIND (SEE) BECAUSE OF LIMITED IMPACT, WILL HEARING, PLEASE. butters *Include Owner/ Agent ame Address	E REQUESTA WAIVER OF	
BECAUSE OF UMITED IMPACT, WIND HEARING, PLEASE. Abutters *Include Owner/ Agent	E REQUESTA WAIVER OF	

Project Background

In 2021, Canterbury Shaker Village hired DBVW to conduct conditions assessments of several buildings at Canterbury Shaker Village, including the Horse Barn. That assessment noted that "The Horse Barn has a wood shingled, gable roof that is in poor condition. There is a small entry canopy on the east elevation with a wood shingled roof in similar condition. A small copula with a wood shingled, hipped roof is present and in poor condition." "There are copper gutters and downspouts in fair to poor condition. Some of the downspouts are damaged near grade. The southwest downspout is detached from its boot. All downspouts discharge to a below grade drainage system." Other features of the Horse Barn were also assessed and determined to be lower priorities for work.

In alignment with the DBVW assessment, we propose to replace the wood shingled roof with a new wood roof, and replace copper flashing, and damaged copper downspouts, where/as necessary. Canterbury Shaker Village intended to replace the Horse Barn's actively leaning in 2022-2023. However, because the Dwelling House roof was actively leaking, focus was turned to replacing the Dwelling House roof. So, the Horse Barn roof replacement was put on hold. Not surprisingly, its condition has gotten worse. The west slope of the roof is covered by its third generation of tarps, and yet it is leaking severely. Water in the building is managed to the extent possible by using buckets and kiddie pools to catch the water to minimize damage to the building and museum collection. But damage is being done. This project is now Canterbury Shaker Village's highest priority for funding and completion.

Utilizing the same scope established for the Dwelling House's cedar roof, we propose to remove the existing wood shingles, repair the roof deck as needed, install strapping (over moisture barrier and with screening at the eaves) to allow the roof to breathe, and then install the new cedar shingles and ridge boards. Copper flashing, gutters, and downspouts will be reused where possible, and replaced in kind where necessary. We expect to work with Davis Construction Company again, who did the work on the Dwelling House.

Scope of Work

General Conditions

- All work areas will be netted to protect wall and window surfaces.
- Pipe staging will be used around perimeter to provide work surface if needed.
 - A lull or other equipment may be used on site to unload and transport shingles.
 - o Care will be taken to minimize damage to existing planting and garden areas.
- A dumpster will be placed on site during work and removed from the site for disposal promptly when work is complete.
- The contractor will provide constant on-site supervision when work is in progress.

Surface Preparation

All existing cedar shake shingles will be removed to expose existing underlayment. This
will include the main roof, the roof of the ell, the cupola, and the gabled hood over the
single door left/south of the large double doors on the east side of the building.

- The roof deck will be inspected.
 - o All existing decking in good condition will be re-fastened to the rafters.
 - Any rotted or compromised boards will be replaced with compatible wood of the same thickness, fastened to the rafters.
- Rooftop guard membrane will be applied to all roof planes (extending up the cupola, as appropriate).
- Insect screens will be attached on gables and eaves to prevent insect infestation into airspace.
- On the main roof and the roof of the ell, but not the cupola or gabled hood, $1'' \times 4''$ hemlock strapping will be installed vertically 16'' O.C. from peak to eave
- On the main roof and the roof of the ell, but not the cupola or gabled hood, 1" x 4" hemlock strapping will be installed and horizontally from gable to gable to allow for 7 ½" cedar shake reveal.

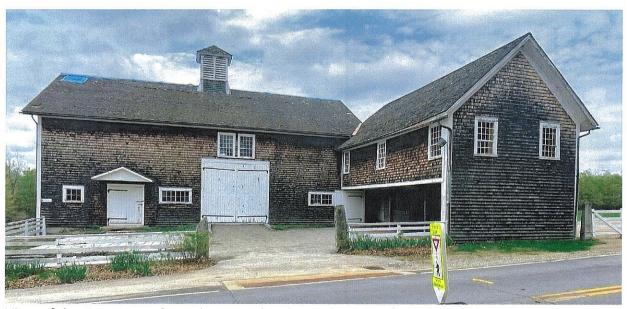
Roof Installation

- New 18" Alaskan Yellow Cedar shingles with a 5/8" butt, ranging from 3" to 10" width will be installed with stainless steel ring shank nails on all roof surfaces and up the base of the cupola. This includes the main gable, the gable of the ell, the pyramidal cupola, and the gabled hood.
 - o Pneumatic nailing will be used with calibrated air compressors as to not overdrive or underdrive the nails.
 - o The shingles will not be treated for fire protection or painted.
- Rolled lead flashing will be installed along the perimeter where strapping is used (on the main gable and the ell) to conceal the screened 1 1/2" vertical face.
- Copper flashing at valleys will be re-fastened or replaced, as necessary.
- All metal flashings will be attached with copper nails.
- Alaskan yellow cedar board ridge caps with zinc wash strip will be installed using stainless steel ring shank nails.

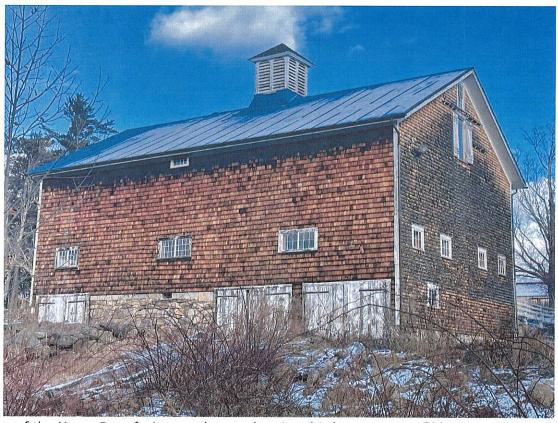
The contractor will perform all work in accordance with the recommendations of the National Park Service's *Preservation Brief #19: The Repair and Replacement of Historic Wooden Shingle Roofs,* and the approval granted by NH DHR in response to our recent Alteration Request.

Canterbury Shaker Village currently has enough Alaskan yellow cedar shakes on hand to complete this project. In addition to replacing the roof, the project team may utilize wood shingles to replace damaged wall siding shingles, where necessary.

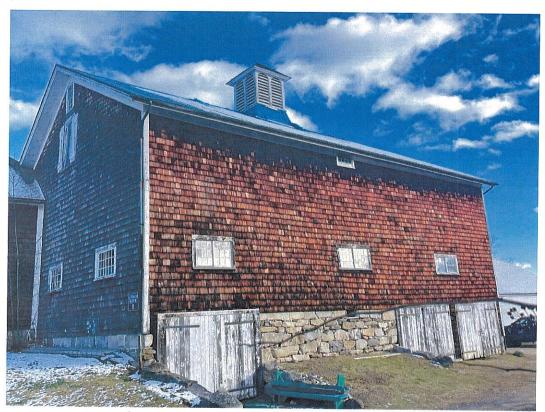
Photographs of Existing Conditions



View of the Horse Barn from the east, showing current condition. Note blue tarp on the south end near the peak.



View of the Horse Barn facing northeast, showing third generation of blue tarp. The roof has failed and is actively leaking.



View of the Horse Barn with tarped roof, facing southeast.



View of the recently restored Horse Barn, facing west, in 1992.