



To: Town of Amherst Historic Commission and Town CPA Committee  
From: Bruce Coldham FAIA  
Date: November 2019  
Subject: CPA FY-20; Grant to NACF— SGF Farmhouse window restoration;  
1089 North Pleasant Street, Amherst, MA  
First Progress Report

Pursuant to Article 7 of the Grant Agreement, which requires NACF to make semi-annual progress reports of the restoration work, the following reports on progress since the beginning of work in August.

NACF received CPA funding for historic restoration work on the farmhouse in the FY-19 funding cycle. This was to conduct extensive, exterior restoration work involving replacement of the siding, roofing, reconstruction of the masonry chimney above the roofline, re-painting, and some stiffening of the first floor structure. The window restoration (for reasons previously stated) was intentional not included in the FY-19 CPA funding Application and was the subject of a supplementary request.

Due to the special skill level required to properly execute the window restoration work we have resorted to engaging skilled trades-people to do this work. But we did work creatively to find people and organizations whom we thought were especially well suited to the work, and whose participation would have positive social benefit. Accordingly, we broke the scope of work into TWO portions, and awarded the window sash restoration for a women's work cooperative in Springfield (The Old Window Workshop) that provides employment and training in this specialist restoration field to disadvantaged women in the Springfield area. The task of removing the window sashes for shipment to Springfield, installing new combination screen/storm windows, and then reinstalling the restored windows sashes was awarded to two experienced, local carpenters (both "friends-of-the-farm") for whom this work represented an opportunity to expand their trade experience.

We have taken the opportunity of incorporating a high level of air-sealing into the sash re-installation. Comments and questions by members of the CPA Committee inspired this additional level of work. The Committee was concerned that retaining the original windows (a fundamental requirement of receiving CPA funds for historic preservation) would result in a lower standard of energy efficiency than if new windows were to have been installed — something that it was noted could have been achieved for a lesser expense than the sum we were requesting for restoration of the existing. After some research into the state-of-the-art in improving the energy efficiency and air-tightness of historic wood sash double-hung windows, we determined a practical approach to achieving this from an Article published in 'The Journal of Light Construction' — [see attached](#). We have used this method (fixing and sealing the top sash, and installing various type of let-in gasket stripping around the perimeter of the lower sash) to greatly improve air sealing — and to do so in a manner that will last a long time.

The summary table on the following page shows the progress of work to date.

**SUMMARY TABLE**

<i>Construction Activity</i>	<i>Contractor</i>	<i>Estimated Cost (or actual if known)</i>	<i>% Complete</i>	<i>% Remain</i>
<b><i>CPA funded restoration activity</i></b>				
Removal of the top and bottom sashes of the <b>first</b> batch (16) window sashes (for shipment to OWW in Springfield, MA), and installing new storm windows	Carpenters (Roberts and Faulkner-Duncan)	\$1,840 (Actual and billed)	100%	0
Supply of storm windows	Cowls Building Supply	\$4,684 (Actual and billed)	100%	0
Restoration of first batch (16) window sashes	Old Window Workshop (OWW)	\$11,000 (First payment made)	100%	0
Re-installation of first batch of restored window sashes — including installation of air-sealing gaskets on lower sashes.	Carpenters (Roberts and Faulkner-Duncan)	\$2,443 (Actual and billed)	100%	0
Removal of the top and bottom sashes of the <b>second</b> batch (16) window sashes (for shipment to OWW in Springfield, MA),	Carpenters (Roberts and Faulkner-Duncan)	(In above	100%	
Supply of materials — new sash cord; air-sealing gaskets.	Killen Hardware; Conservation Technology	\$353 (Actual and billed)	100%	
Miscellaneous sealant, painting supplies, etc.	Cowls Building Supply	\$177 (Actual-not yet billed)		
Restoration of second batch (16) window sashes	Old Window Workshop (OWW)	Billing pending (but expected to be \$11,000 when all work completed)	50%	50%
Re-installation of second batch of restored window sashes — including installation of air-sealing gaskets on lower sashes.	Carpenters (Roberts and Faulkner-Duncan)	\$ TBD	0%	100%
Supply of six new basement awning windows (to fill boarded up openings)	Cowls Building Supply	\$ 1,700 (estimated)	0%	100%
Installation of new awning basement windows in six (6) openings	Carpenters (Roberts and Faulkner-Duncan)	\$TBD	0%	100%

Expense to date (billed to Town CPA) — \$20,110  
 Projected to completion (portion as yet unbilled) \$12,700 plus carpenters re-installation costs

The following pages have a selection of captioned images showing the progress of work.



We visited the Old Window Workshop (OWW) and inspected progress with our sash restoration. It allowed the carpenters to see exactly what was being done and what a finished, restored sash would look like.

We also reviewed the work involved in cutting the routed kerfs to receive the air-sealing gaskets, and decided that this portion of the work was best done by our carpenters.





Fitting a newly restored lower sash; the top sash has been fixed permanently inoperable, and sealed tight.



Fitting a newly restored lower sash



# “Weather Stripping Double Hung Windows”

by Tom O’Brien

(Published by ‘Journal of Light Construction’ magazine; August 2012)

(See following pages)