Window Survey Submission Requirements

Purpose

The windows on many historic buildings are an important aspect of the architectural character of those buildings. Their design, craftsmanship, or other qualities may make them worthy of preservation.... Evaluating the significance of these windows and planning for their repair or replacement can be a complex process involving both objective and subjective considerations. The Secretary of the Interior's <u>Standards for Rehabilitation</u> and the accompanying guidelines, call for respecting the significance of original materials and features, repairing and retaining them wherever possible, and when necessary, replacing them in kind.

Overview

Before windows can be replaced in a rehabilitation project, the existing condition of each window should be documented. This should be undertaken in the form of a window survey. The survey is intended to identify the extent of deterioration in each window and to provide a decision base as to whether the windows should be repaired or replaced.

Physical Evaluation

The key to successful planning for window treatments is a careful evaluation of existing physical conditions on a unit-by-unit basis. A graphic or photographic system may be devised to record existing conditions and illustrate the scope of any necessary repairs.

Clear, colored, detailed photographs, including at least one of each:

- full-frame shot of the entire house
- full-frame shot of individual windows from the exterior
- full-frame shot of individual windows from the interior
- close-up views of intersection of sills and frames
- close-up views of sash, focusing on bottom rail and muntins (if existing)
- close-up view of sills and bottom rails from the interior

Survey

		Type Config.	Existing Conditions						Proposed		
Window#	Existing Type		Repair Class			Sash		Window Type	Config.	Remarks	
		,	sash	frame	sill	orig	repl	unk.			
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The survey form documents the existing condition of the windows and identifies which windows will be repaired, which windows will possibly be replaced, and what the proposed new window treatment will be. The form indicates what the number on the drawing is and its corresponding photograph number. The existing type denotes the material of the window/door

and the type of window/door that it is. For example, WD DH would be wooden, double hung and MTL CASE would indicate that the window would be a metal casement. The configuration would be the number of lights in the sash. Possible examples could include, twelve over twelve (12/12), six over six (6/6, or one over one (1/1). There is also space for additional remarks when necessary.

A four level classification system is used to document the existing condition of each of the windows. This classification is based upon the system identified in the National Park Service publication, Preservation Brief #9, "The Repair of Historic Wooden Windows."

Class One (I), "Routine Maintenance," is associated with small repairs, which are usually performed as a part of a building's annual maintenance program. This may include paint removal, re-glazing, weather-stripping, caulking, and repainting.

Class Two (II), "Stabilization," shows a small degree of physical deterioration but can be repaired in place by patching, waterproofing, consolidating, and re-gluing the existing material. Class Three (III), "Partial Replacement," has localized deterioration in specific areas. These members are totally removed and new ones are spliced into the existing fabric.

In **Class Four (IV)**, "Total Replacement," if the entire fabric of the window has deteriorated, then the only feasible alternative is total replacement.

On the survey form under "Existing Conditions," each sill, frame and sash is rated as to whether it is Class I, II, III, or IV. After all the windows have been rated, they are totaled by class for each of the window elements: sill, frame, and sash are compared. Those windows in Class I, II, and III, should be repaired and those in Class IV should be repaired with exact duplicates. If the number of Class IV windows exceeds 75%, then total replacement may be approved.

Replacement

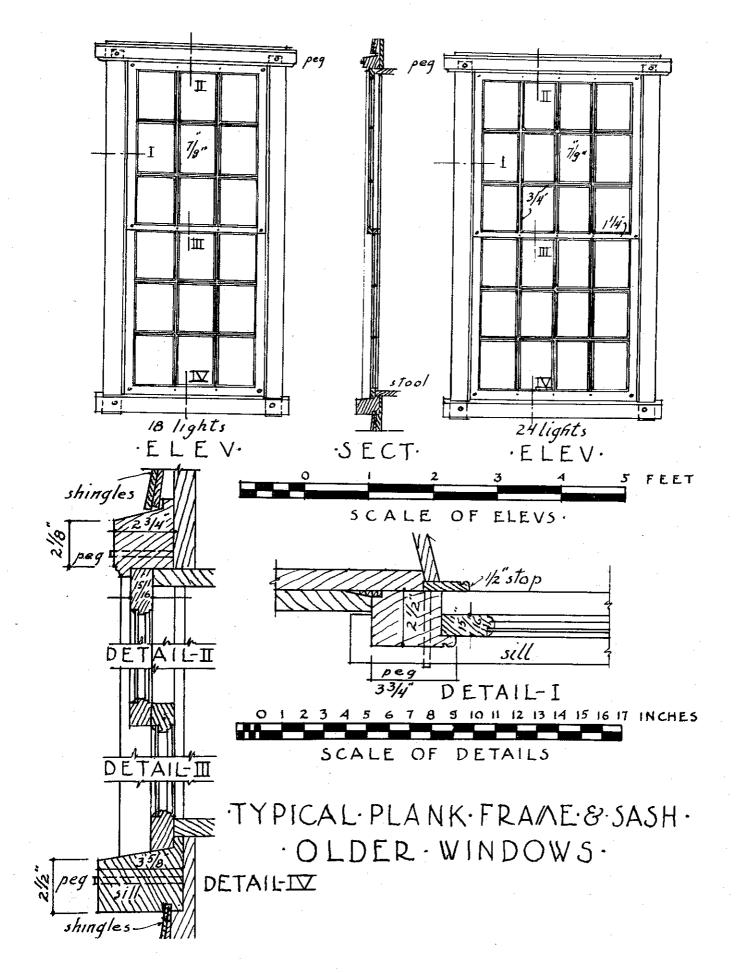
The selection of replacement windows should not begin with what is commercially available, but rather with what is being replaced. A major concern with most replacement windows is that they do not accurately replicate the historic appearance of the existing windows. Replacement sash should match the historic sash in pane size and configuration, glazing, muntin detailing and profile and historic color and trim. Frequently, the profiles of replacement elements, such as muntins, sash, frames, and moldings, are flatter and wider or narrower and thinner than the historic profiles. A stock window may duplicate the exact number of original panes, but a change in relief affects the character of the historic window, which in turn alters the overall appearance of the entire building.

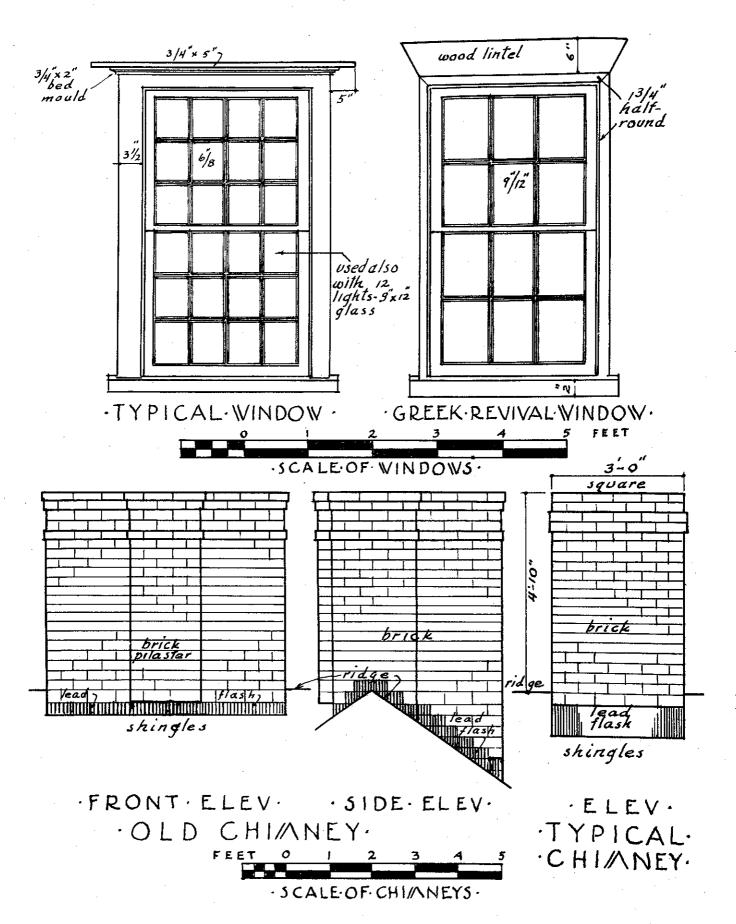
Therefore, window sections will be required for all projects involving total window replacement. This can be done either by submitting section drawings of both the existing and proposed window(s) or by submitting by a list of measurements comparing the individual elements of the existing window(s) to the proposed one(s) (A/K/A a window schedule).

For windows of particular concern (i.e., in historic structures such as the Unitarian-Universalist Church, or the Athenaeum) section drawings should be submitted. In order to compare the original and new profiles, the following information is needed:

- Full horizontal and vertical sections of the existing windows (3"=1'0")
- Full horizontal and vertical sections of the proposed replacement windows (3'=1'0"). If historic windows do not exist in the building and no evidence of the historic appearance can be located, then only proposed sections are required.

Window sections must be carefully detailed so that all parts of the window are shown and materials are specified. A section must show the profiles of muntins, meeting rails, sash, frames, and moldings. It should also show the window's relationship to the existing wall. Below are examples of vertical window sections of historic windows: the originals may be found in Building With Nantucket In Mind.





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