

To: SHPC
From: Kristi Chase, Preservation Planner and
Brandon Wilson, Executive Director,
RE: Staff Recommendations 10/18/11

HPC 11.98 – 50 Bow Street, 1874 Bow Street Police Station (continued)

9/26/11

Applicant: Danielle Bennett, Condo Owner, Urbanica 50 Condominium Trust, Owners

Historic and Architectural Significance

See attached survey form.

Existing Conditions

The Old Police Station was built in 1874 as one of the first municipal building projects of the newly chartered City of Somerville. It was designed by George A. Clough who was one of the most influential architects in Boston during the late 19th century, and who designed approximately twenty-five public schools in Boston, as well as numerous other service/institutional



structures. This Second Empire structure was originally capped with a mansard roof enclosing a full third story which has been replaced. Archival photographs of Union Square show similar designs for many of the surrounding three and four story retail establishments.



The Old Police Station exhibits many of the elaborate masonry details typical to institutional structures of the era. These details include an entrance arch with contrasting colors of red brick, light granite, paired windows with stilted segmental arched lintels and carved detail, string course granite sills on the second floor, and corbelled and detailed brickwork below the eaves. The mansard roof was removed by the City in the early 1940's due to fire and engineering hazards caused by deterioration.

In an effort to halt the deterioration of Union Square and this important building, the Bow Street Police Station underwent extensive

stabilization and restoration from 2001-2005. The City received a grant of \$90,000 from the MHC that was matched by an additional \$292,000 from the City for the stabilization in 2001-2002.

In 2003, Urbanica bought the building and began the rehabilitation of the Police Station which wasn't completed until 2005 and turned into condominiums. The Historic Preservation Commission gave the developers a Preservation Award in 2006 for the replication of the mansard roof, the chimneys, the cresting, the brackets and the windows, all of which was based on documentary and physical evidence.



The current owner purchased the unit in September 2005. The windows on the building are all new construction replicating exactly the historic casings and sash. Because modern wood is not as dense as the historic old growth wood from which windows were constructed, a few windows have been replaced with identical windows by the same manufacturer. The windows are insulated double-pane construction. Due to the nature of the brick mold casing, there are no exterior storm windows and are considered unnecessary with double glazing.

The condo owner states that the unit is cold and drafty, that the use of space-heaters is unsafe when there are small children present. Some rooms are as much as 10 degrees cooler than others. The window facing Bow Street has a gap along the left side of the lower sash that would allow the passage of cold air in the winter if not addressed.

The owners have clarified that they intend to replace 5 windows within their unit not the 4 originally noticed. These are: the rightmost when facing the building from Bow street, the leftmost & rightmost when facing the building from the west driveway (leaving the center two existing windows in-place on this wall), and the leftmost two windows when facing the building from the back. They have ordered and received 5 Marvin Ultimate Magnum insulated 2/2 double-hung windows with Lo-E coating without the prior review and approval of the Commission. Four of the five windows are visible from either Bow Street or Somerville Avenue.

One of the two rear windows does not appear to be at all visible from a public way. The other rear window, while technically visible from Somerville Ave, requires looking between the altered brick mansard and the Indian grocery. The Guidelines and Ordinance do not consider fences or plantings to be considered as permanent obstructions to a view shed. The windows along the driveway are, of course, visible from Bow street albeit very obliquely, while the front window is completely visible.



Proposed Work and Recommendations

The Applicant seeks a **Certificate of Appropriate (C/A)** for the following:

1. Remove 5 existing 2/2 double-hung insulated windows on ground floor south and east side rear (C/A);
2. Install 5 Marvin Ultimate Magnum insulated 2/2 double-hung windows within rough opening and reinstall casing (C/A).

While these windows are visible either obliquely and from a distance, they are among over 60 windows visible from the street. Staff believes that altering only a few windows within the larger context of all the windows on the building would not meet the general *HPC Guidelines*.

I. GENERAL APPROACH

The primary purpose of Somerville's Preservation Ordinance is to *encourage preservation and high design standards in Somerville's Historic Districts, in order to safeguard the City's architectural heritage*. The following guidelines have been developed to ensure that rehabilitation efforts, alterations, and new construction all *respect the design fabric of the districts and do not adversely effect their present architectural integrity*.

- A. The design approach to each property should begin with the premise that the features of historic and architectural significance described in the Study Committee report must be preserved. In general, this tends to *minimize the exterior alterations* that will be allowed.
- B. Changes and additions to the property and its environment that have taken place over the course of time are evidence of the history of the property and the neighborhood. These changes to the property may have developed significance in their own right, and this significance should be recognized and respected (LATER IMPORTANT FEATURES will be the term used hereafter to convey this concept).
- C. *Whenever possible, deteriorated material or architectural features should be repaired rather than replaced or removed.*
- D. *When replacement of architectural features is necessary, it should be based on physical or documentary evidence of the original or later important features.*

- E. *Whenever possible, new materials should match the material being replaced with respect to their physical properties, design, color, texture and other visual qualities. The use of imitation replacement materials is discouraged.*
- F. *The Commission will give design review priority to those portions of the property which are visible from public ways or those portions which it can be reasonably inferred may be visible in the future.*

or those for windows and doors which state that one should:

1. *Retain original and later important door and window openings where they exist. Do not enlarge or reduce door and window openings for the purpose of fitting stock window sash or doors, or air conditioners.*
2. *Whenever possible, repair and retain original or later important window elements such as sash, lintels, sill, architraves, glass, shutters and other decorative elements and hardware. When replacement of materials or elements is necessary, it should be based on physical or documentary evidence. If aluminum windows must be installed, select a baked finish that matches as closely as possible the color of the existing trim. Investigate weather-stripping and storm windows with a baked enamel finish as an alternative to the replacement of historic sash.*

The Commission has occasionally reviewed and approved insulated glass windows with the following qualifications:

1. The windows are *not on the main façade and far enough from the street* to not be recognizable as insulated glass;
2. *No Low E coating is preferred* because it is reflective in an entirely different manner from older windows. ...
3. *The sash and panes of glass should have the same measurements as the existing windows.* If a mullion or muntin is used, it should have the same profile as the existing and have a spacer between the panes to draw the eye.”

The proposed window replacement on the wall facing Bow Street would be very obvious. The front window is part of the main façade and is grouped with other windows that will be remaining. The existing window should be either repaired or replaced with a JB Sash unit identical to the unit that is in place. It is most important that the one window along Bow Street be either kept or replaced with a match of the existing JB Sash window. A commission member suggested that the owners contact Kim Cleary of Cleary Window Restoration about corrective weather stripping options for this window that might solve the air infiltration problem prior to buying a new JB Sash window.

The extreme oblique angle from which the public will view the windows along the driveway may keep most of the dimensional differences from being obvious. At this angle, the most likely "noticed" difference would be the difference in new / existing shadow lines on the window sash that result from the thicker glass and shallower recess of the glazing in the new sash and a difference in the height of the lower rail.

Only one of the two windows on the back wall is visible. The other is visible at a distance between 2 buildings.

While 4 of the proposed windows meet the location qualification, various dimensional differences are found between the existing JB Sash windows and the proposed Marvin windows. These differences are (from the exterior): the existing windows have wider side rails and top rail (about 2 1/2" vs. 1 1/2" for the Marvin) and meeting rail (about 1 5/8" vs. 2 3/8"), deeper casings (3/4" vs. 3/8"), thinner glass (3/8" vs. 3/4" - not measured, though), and deeper reveal of the glass (not measured) within the sash. Also, the J.B. Sash window has a simulated putty bead around the glass while the Marvin windows use a flatter convex w/ filet profile similar to what one sees on the interior of a window. At last month's hearing the contractor had proposed adding trim to the exterior of the muntins to make them resemble a true putty bead. This is actually not feasible, as it would need to be carried out around the entire perimeter of the sash as well and would result in the trim projecting forward of the exterior of the sash. If nothing else, the windows would no longer operate.

One of the issues raised was the reflectivity of the proposed Low e 272 glazing. According to the manufacturer, Cardinal CG Company, their LoE²-272® glass is "the clearest, highest performing glass one can buy – without haze or a bluish cast." Despite manufacturer's claims, the LoE² coating might be visible depending on lighting conditions, and time of year.

The Staff does **not recommend** granting a **Certificate of Appropriateness**, because while the Applicants have demonstrated need to replace or repair the relatively new insulated glass windows which were constructed to match the historic windows because of poor installation techniques, the proposed windows do not meet the Commission's Guidelines noted above especially with regard to dimensional differences, and would adversely affect the historic character especially on the main facade. Because this is a 'ground' floor unit, the windows are only slightly above eye level and are in close proximity to other windows. The disparity in sash size and configuration would be noticeable.

The window contractor told Staff that he found a void in the wall next to the window on the rear when measuring the space. This could be an additional cause of the cold and drafts may be due to lack of insulation in the walls. This is unexpected as the building has very recently been rehabilitated. Staff **recommends an energy audit** to find other unexpected areas where insulation is lacking and hopes that this is an isolated case.

Weatherization of the building using proper insulation with vapor barriers in the side walls and roof, tightening and maintaining the historic windows, caulking of the window frames, and new properly fitted storm windows are always recommended.





