

B&E Committee Minutes – 10-13-2014 5 p.m. Municipal Building

The meeting was convened at 5 p.m. Present were Matt Gadbois, Jim Wilson and Chairman Brad Denny. Also present were Town Manager Jeff Schulz and Highway Foreman Ray Hudson.

Ray reported that a town work crew had completed a temporary repair to the shed roof over the exterior stairway to the rear of the original BPL building and determined that the cause of leaks in the flat section of the BPL roof has already been repaired by Nate Donahue. Ray outlined plans to reset the steps to the library and grout between them in order to prevent water infiltration and also to address the sticking door in the exterior entry-way to the community room.

Jeff reported that he and Ray had met with a representative from Control Technology to gain a better understanding of how the heating and ventilating control system in the BPL, Community Room and Paine House complex works and to seek recommendations and cost estimates for changes. In the meantime, Ray Hudson reported that progress has been made in one area of that effort, as Town employee Steve Reed was able to provide crucial assistance with one control.

Jeff also reported that DeWolfe Engineering has been engaged to do the structural engineering review of the BPL roof supporting system and that we could have at least a preliminary report within a couple of weeks.

Jeff and Ray explained the fix they are proposing for the sidewall leaking problem in the Municipal Building. The intention is cut the asphalt 16" from the building, dig a trench long enough to expose all damage, remove the siding, repair the damage, cover the sidewall to a point below the top of the foundation ice and water shield and aluminum flashing, reinstall the siding, refill the trench and replace the asphalt.

Brad reported on his tour of the Paine House and information obtained about the heating system (see attached report). Jeff, Ray and Matt will tour the Paine House to get further information on the heating system, energy efficiency and the possibility of mold. Brad added that he believes that it should be the committee's intention to support all efforts to apply for and obtain a Historic Preservation Grant through the state to help with the cost of repairs at both the BPL and the Paine House.

Ray reported that the Fire Alarm Control panel at town highway garage has been updated to meet all safety standards prior to a state inspection which is due this week.

The meeting was adjourned at 6 p.m. The next committee meeting is 11-10-14 at 5 p.m. in the Municipal Building.

Respectfully submitted

Brad Denny

Paine House Heating - Prepared for B&E Committee by Brad Denny 10/9/14

I met with Northfield Historical Collections Cataloguer Kay Schlueter on 9-30-14 to learn about the heating needs for the Paine House which houses the Historical Society. Kay provided me with a guided tour of all four floors (basement storage, ground floor exhibit space, 2nd floor office and working space, and 3rd floor attic storage) and provided a lot of background information. The following report reflects the time and thought that Kay provided as well as my concern for the Town's investment in the entire BPL, Community Room and Paine House complex.

The big picture. The Paine House is probably not a major contributor to the heating load of the BPL complex. The Historical Society Exhibit space on the ground floor is only open between June 1 and early October. The Paine House's main use of heat reflects Kay's working hours between 8:30 a.m. and 4 p.m. one day a week (Tuesday) during the heating season. Kay is often joined by volunteers during this time. During the winter of 2013-14 additional hours outside the usual Tuesday hours were devoted to the preparation of the Historical Society's latest picture publication and this probably resulted in higher than normal use of the heating system in 2013-14. The Paine House is not served by the central air conditioning or ventilating systems that serve the Library and Community Room.

Zone. It seems clear that the Paine House is a distinct heating zone within the BPL complex and is heated entirely by the central heating system.

Thermostats. One thermostat in the ground-floor exhibit space controls the heating demand of the top three floors. During the heating season, the thermostat is set at 62 degrees when there are no people using the building. When people are present, the thermostat is set at 68. In other words, during the heating season, the thermostat is raised from 62 degrees to 68 on Tuesdays from approximately 8:30 a.m. to 4:00 p.m. and is turned down to 62 at all other times, except on the rare occasion when some special need requires occupancy and the need for heat. The ground floor thermostat was replaced several years ago in order to allow the temperature to be easily reset between 62 and 68 degrees using the digital display.

A second, older thermostat controls the heat level in the basement. It is set at 60 degrees and is never adjusted by the historical society. It probably activates the baseboard heating units in the basement during the heating season.

Heat distribution. The main heat distribution system consists of baseboard hot water units on the ground floor and six individual hot water heating units on the second floor. There are no heating units in the attic. Since warm rises, the 2nd floor working space is generally warmer than the 1st floor exhibit space. Warm air flow also means the attic remains reasonably warm despite lacking heating units.

Energy Conservation. Following a study of the Library and Paine House complex several years ago, substantial progress was made in conserving energy in the Paine House. Much of the necessary work was done by former Town employee Darrell

Chamberlin, and insulation above the attic ceiling was blown-in by a contractor. Darrell installed rigid foam insulation over the windows in the basement. Two windows on the ground floor were sealed and covered, but it is not clear whether insulation was installed over these two windows at the same time. Daryl also used expanding foam insulation to seal cracks in the laid-up stone foundation on the south side of the basement.

Kay reports that the walls of the building are cold during the winter and she doubts that they are insulated. Ground floor, single pane windows have outside storm windows, but 2nd and 3rd floor, single pane windows do not. As a result these windows may represent a significant energy loss. Kay uses plastic film on the inside of four of the windows on the 2nd floor to save energy and allow people to work comfortably.

Heating Hot Water. The basement of the Paine House includes an electric hot water heater with a capacity I would estimate at 40 gallons. I do not know if this heater is functional or not. I also do not know whether it might provide hot water to just the Paine House or perhaps to both the Paine House and the Community Room bathrooms and kitchen.

Concerns. Concerns about the possible presence of mold in the basement of the Paine House have been raised in the past, both within the Historical Society and the Town (selectboard minutes 5/23/11), but it appears that no testing has ever been done to determine whether or not mold actually exists in the basement. It may be appropriate to have tests done at this time. The basement is used only for storage and the space is accessed only when necessary.

Recommendations. The Buildings and Energy Committee should alert the Selectboard to the possibility of an application for a grant under the state and/or federal Historic Preservation Program to address problems in both the Brown Public Library and the Paine House.

In the Library those problems might include:

- Repairing the roof structure;
- Either repairing or replacing the slate roof;
- Replacing the windows with historically accurate double pane windows;
- Repainting and/or replacing exterior woodwork, eliminating all lead paint.

In the Paine House those problems might include:

- Removing vinyl and wood siding and insulating all walls with blown-in insulation. Replacing the existing siding with wood siding and a solid or penetrating stain or other low-maintenance finish.
- Eliminating mold (if it exists) from the basement. Insulating and allowing heating of the basement to a temperature sufficient to prevent mold from developing.