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WELLINGTON SCHOOL BUILDING COMMITTEE
MINUTES
May 8, 2013
School Administration Building Conference Room
7:30 AM

Meeting #166

Committee Members Attending: Joe Barrell, John Bowe, Patricia Brusch, Laurie Graham, Mark Haley, Bill Lovallo, Heidi Sawyer, Eric Smith

Liaisons Attending: Amy Spangler

Acentech: Bob Behrens, Alicia Wagner

Clerk: Chris Kochem

Guests: Susan Carey

Mark Haley, Chair, called the meeting to order at 7:37 a.m.

Invoices

John Bowe presented one invoice for approval.

- The invoice from Tech Depot for \$1,187.45 for five printers will be considered at the next WBC meeting.

Ongoing work - Bill Lovallo

- Per Skanska, all tasks for the project have been completed.
- The Commissioning is complete and a Commissioning Report should be sent in to the WBC in the next couple of weeks.
- There is still some internal accounting that needs to be completed by PMA with the MSBA so that the MSBA will release all of the amount due to the town of Belmont.
- The freezer door issue has been resolved – there will be a back charge to Skanska for the repair and the WBC will pay Bedford Mechanical, the company that has a contract with the Belmont Schools and was able to do the repair.

Acoustic Testing

Acentech representatives, Bob Behrens and Alicia Wagner, gave a presentation of the acoustic testing that was done during the night of April 29, 2013.

The Acentech team and Fred Domenici (Belmont Public Schools) began the testing at about midnight. Mr. Domenici turned everything off (100% off) and they measured ambient noise; then Mr. Domenici turned everything back on (100% on) and they again measured the ambient noise. The background noise levels were substantially higher than they were when the testing was done approximately one year ago (it was less than five dBA in March 2012, and 10-15 dBA in April 2013).

Mr. Behrens said that the recorded levels of RTU operation noise were around the same as a year ago. The higher ambient noise masked the decrease in noise that was obtained by putting the shields around

the fans. If you were to subtract the change in the ambient noise from 2012 compared to 2013, there is a slight decrease in the noise. He noted that there is a decrease in noise in the southern cluster of homes (including the Carey's home). Mr. Behrens said that to get better results, there would have to be equipment changes or big structural changes would have to be done on the roof of the building.

Mr. Lovallo said that there are two components to the roof noise. It can be reduced/contained or it can be turned off. Mr. Lovallo summarized that, in 2013, there was only an increase of about 5 dBA over the ambient noise. Joe Barrell asked what the original design was planned to - the design goal was to meet the town noise bylaw.

In addition, Mr. Behrens reported that they were able to identify the source of the low frequency 'train noise/hum' that residents have reported hearing. The source of this noise is the pair of boilers that heat the water that circulates through the fin tube radiation. There are certain operating conditions for the two combustion boilers that are attached to the metal exhaust piping that goes to the roof that seem to create this resonance (humming sound). For the first time, during the acoustic testing, Mr. Domenici was able to create the noise one time before the system reached capacity and then would not turn on again. Mr. Behrens suspects that the humming is due to a resonance from the burner speeds when both boilers are on.

While this low frequency noise does not change the recorded values, from a neighborhood perception, it is a much different noise that the neighborhood is hearing and WBC members agreed that it will be good to be able to address it. Mr. Barrell asked if a monitor with an annunciator card could be placed on the roof to capture the noise – specifically during the heating season.

To find out why this low frequency hum occurred and identify a solution, Mr. Lovallo recommended that the WBC bring in some professionals to work on the controls from the school department side and also go through the proper channels with JLA (architect) and GGD (mechanical engineer). Now that the Commissioning has been completed, Mr. Domenici would like to work with Burnell and have them assist with sequencing/replicating the problem and managing the controls. SBS is the commissioning agent who worked on the validation of the building MEP systems.

Amy Spangler left the meeting at 8:15 a.m.

Susan Carey's questions (with answers in italics):

- What is the hot water source in the building? *The hot water source is a water heater, which is a separate unit from the boilers.*
- Did the low frequency noise that they identified show in the trending report? *No*

Mr. Lovallo noted that finding a solution to the low frequency noise will be an additional service from the design team; Bob Behrens is also providing additional service for the acoustics. There was agreement among the WBC that there is going to be a cost to resolve this issue.

Wellington Site Plan Review

Bill Lovallo will send the acoustic report to the Planning Board. There was agreement that, now that the relocation of the RTU-3 has been addressed, Bill will ask that the Planning Board to conclude the Wellington Site Plan Review.

Screening around the Transformer

Heidi Sawyer reported that 13 shrubs are due in soon and will be planted in the area of the transformer.

Pat made a motion to spend up to \$4,000.00 for the shrubs to screen the transformer. Eric seconded the motion and it was unanimously approved.

Noise within the Building

Mr. Behrens will set up an appointment with Amy Spangler so that he can make some recommendations concerning noise within the building.

Mark Haley, Bob Behrens and Alicia Wagner left the meeting at 8:40 a.m. Pat Brusch chaired the remainder of the meeting.

Minutes of April 3, 2013

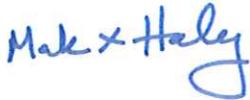
Pat Brusch made a motion to approve the minutes of April 3, 2013. The motion was seconded by Eric Smith and was approved with six in favor and one abstention.

Joe Barrell left the meeting at 8:45 a.m.

The next WBC meeting will be held on June 12, 2013.

Laurie Graham made a motion to adjourn the meeting at 8:50 a.m. The motion was seconded by Pat Brusch and unanimously approved.

Respectfully submitted,



Mark Haley
Chair