Date: 10/8/08

Committee members present: Martin Honigberg, Chair, Laura Bonk, Megan DeVorsey, Kass Ardinger (special designee)

Other School Board members present: Chris Casko, Betty Hoadley

Administrators Present: Chris Rath and Matt Cashman

Public attendee: Eric Weiner

Guest Speaker: Steve Caulfield, Turner Building Science

Topic: HVAC Mechanical Design Options for Rundlett Middle School

Matt Cashman, Director of Facilities and Planning opened the meet at 6:32 p.m. by introducing Steve Caulfield from Turner Building Science. Mr. Cashman explained that Turner Building Science was retained after the School Board authorized the administrative team to contract with Turner Building Design in April 2008. It was explained that Turners scope of work, was to evaluate Rundlett Middle School’s (RMS) mechanical ventilation design, and come up with a variety of solutions to improve the costly and dated heating, ventilation system.

Steve Caulfield explained that in the initial meeting with Matt Cashman in July, the scope of work was to evaluate all options from fuel source infrastructure to delivery systems for RMS. The other task, Mr. Cashman identified was to evaluate a “campus” style option, which would incorporate Conant Elementary as part of the consolidation plan with Rundlett due to the close proximity of both schools.

Mr. Caulfield handed out the study to all in attendance, and explained the various options that Turner studied, along with providing detail in graph form, showing capital costs, operation cost, fuel cost and payback incorporating all elements to each design.

The first system was a natural gas boiler, converting the #2 fuel oil over to natural gas as a heat source. This system was the least desirable, but had a capital cost of $3,400,000. This system was used as the baseline study model for the following options.
The second system was a steam system, based off of Concord Steam’s new biomass facility, which will be built in the southern tier of Concord in the next few years. Concord Steam offered to run all steam lines to the RMS site. The current oil-fired system would be converted over from generating steam as a primary heat source, and convert it to hot water. The steam would be converted to hot water as its heat source, a system which is more efficient than steam. This system would cost $3,200,000 with a $20,000 annual cost savings.

The third option was a geothermal system. This system would cost $5,800,000 with a $122,000 annual savings. The wells would be dug in the surrounding property, where a closed loop system would be implemented. This closed loop system would run water through the wells, where core earth temperature for New Hampshire would deliver incoming water at a range of 45-60 degrees F. This incoming “warmed” water would be further warmed by electric driven heat pumps, raising the water temperature to 130-150 degrees F.

The forth option was biomass/wood chip heat generation, similar to Merrimack Valley HS and MS. This cost was $6,650,000 and had a $252,000 annual savings. There is further investigation needed with the EPA and City, as this would have a visual impact on the community. A tall exhaust stack and loading operation would be necessary to operate this system.

The fifth system was a hybrid geothermal/solar system priced at $6,450,000 with first year operational savings of $179,000. Solar panels would be located on the roof, designed to have water flow through them, warming the water, and would be stored in a solar heat tank. This would operate under the same principle of geothermal systems, where the solar energy helps preheat the incoming water from a closed loop system.

More detail was provided in the 36 page study.

The committee chose to review the study and discuss at the next meeting what options the district would pursue. It was suggested to wait and see how consolidation plans with regard to Conant take shape so that a “global” plan could be evaluated to a campus-style solution.

The second agenda item was a follow up on security at RMS. Matt Cashman observed that there appear to be two stages to the security issues. One is to be more disciplined at the local school level at RMS to lock all doors and points of entry from the exterior during the school hours. The front entry should be the entry for all incoming students, staff and parents. It was requested that Matt Cashman, George Rogers, Peter Johnson and Bob Patton tour the facility and look for ways to tighten up the security. These seem like more of a behavioral change and will not be costly. The second issue regards looking to the future at creating a double vestibule entry, with one (1) exterior pass-through door, and a second with a buzzer entry system. Relocation of administrative offices would have to occur as well, to allow visual recognition before entry. This renovation project would require capital planning and formal bidding by subcontractors.

The last agenda item dealt with the status of the Vo Tech renovation that was completed in fall 2007. Matt Cashman reported that three remaining “punch list” items are scheduled for completion, and the cost to fix will not come from the Concord School District. Betty Hoadley
inquired about surplus funds left over from this job. It was noted by Chris Rath and confirmed by Matt Cashman that a balance of $180,000 - $190,000 remains. These monies were state monies granted back in 1996 initially for the CHS renovation. Clarification of where and how those monies were to be used will be determined, reviewed and updated at the next Finance Committee meeting.

The meeting adjourned at 7:46 p.m.

Matt Cashman, Recorder

TMC/jmm