

Municipal Building Working Group
Thursday August 11, 2014
Steele Block 2nd Floor Conference Room

Present: B. Farr, A. Nelson, A. Murray, T. Wood, M. Kasamatsu, H. Grenier, W. Shepeluk, A. Tuscany, S. Lotspeich, Z. Gordon, L. Pritchett, and C. Lawrence.

The meeting was called to order at 1:05pm.

CULTURAL FACILITIES GRANT

B. Farr stated that word came through Friday that a \$30,000 Cultural Facilities grant for heating and cooling systems for the historical portion of the building was awarded.

FINAL DESIGN REVIEW

A. Nelson stated that the first hour of the meeting will be to talk about building elevations. Liz Pritchett, historic preservation consultant, joined the meeting for this purpose. A. Nelson reviewed some proposed changes to the landscaping plan that included a variety of shrubs that will top out at five feet.

Exterior light fixtures are now shown on the plan. A. Murray reviewed the types of fixtures being used on the property (historic and contemporary). The architects are trying to be sensitive about not over lighting, as building lights will be on during the evening. A discussion was held about lighting placement.

A. Nelson stated their engineers have been talking to Stantec about storm water construction. The Town needs to have a discussion about the construction as it relates to the Main Street project. The bulk of work on the front of the property can be moved to coincide with the Stantec project. T. Wood stated that there definitely has to be a degree of coordination between the projects. A meeting with A. Tuscany, the project engineers, and Stantec will be arranged.

The building elevations were reviewed. The existing Jane's house was discussed and changes that will occur to that building, including the removal of an asymmetrical section. The Jane's house was then shown with the new addition. A. Murray gave an in depth review of the elevations and relationship between sections of the building. The elevations and outside designs of the library section of the complex were reviewed. The roof materials were discussed and included a standing seam metal roofing on the sloped portions of the project. The less sloped roof below will be designed to take the snow load. Drainage was discussed.

Municipal staff requested additional windows in the Municipal Manager's and Public Works Director's offices. L. Pritchett did not have any issues with this concept.

Outside color was discussed. The red and green theme on the Jane's house will remain, and the rest of the building will work with that palette and be fairly neutral. At some point in time, VIA will make a presentation of suggested color schemes and materials.

H. Grenier joined the meeting, along with Craig Simmons and Sheryl Graves of Efficiency Vermont, Karen Walkerman of Second Law, and Derek Seigler of LN Consulting.

MECHANICAL SYSTEMS OPTIONS

B. Farr re-announced the \$30,000 Cultural Facilities grant for heating and cooling systems for the historical portion of the building was awarded.

A. Nelson discussed the heating and ventilating loads and air conditioning. All systems explored have to take into consideration these loads. Efficiency Vermont has been involved in energy modeling.

D. Seigler gave a description of the types of heating and cooling systems under consideration. The systems included a VRV system with propane boiler, a VRV system with pellet boiler, and a geothermal system. The geothermal system was priced with a propane backup, although the backup is not necessary. D. Seigler also described a ventilation system. All systems would have full direct digital controls, with 26 different zones. Zones are based on similar building exposure, and types of rooms.

H. Grenier asked what would happen in the event of a power outage. A. Nelson responded that a generator is currently not included in the project; however the building envelope is high performance. An energy model will be run to see how long it will take for things to start to freeze.

A cost estimate for the three systems was distributed. Estimates were as follows: VRV system with propane boiler \$658,100; VRV system with pellet boiler \$719,600; and Geothermal system \$731,438. A. Nelson reviewed the estimates in more detail. The installation and operation of a geothermal system was discussed in more detail.

The lifespan and replacement cost for each system was discussed. D. Seigel encouraged the use of a geothermal heat pump system due to energy efficiency.

Solar panels were discussed, as well as being net zero ready. W. Shepeluk stated that the goal is to get the most energy efficient building within our budget, without sacrificing other elements of the project.

The original budget carries \$625,000 for HVAC costs, or \$39 per square foot. It was reiterated that the boiler system could be removed from the geothermal system at a cost savings of \$30,000.

Efficiency Vermont will look at cost differentials, energy savings, and length of payback and calculate some incentives.

K. Walkerman explained the energy modeling process and assumptions used. A base building and highly insulated building were modeled. She distributed a spreadsheet showing probably energy use and utility costs under several scenarios.

Geothermal is the most efficient system. It is less expensive to operate and a simpler system. Its longevity is 100 years, however all systems have maintenance costs within 20 to 25 years. The Board needs to discuss the broader issue as to whether or not to use fossil fuels. Modeling also helps with sizing of equipment. K. Walkerman stated that it is important to test the building envelope while under construction.

B. Farr expressed the need to know incentives from Efficiency Vermont. All costs and savings need to be studied before a recommendation can be made to the Select Board. W. Shepeluk stated that the money needs to be found in the construction budget to build the system.

A. Tuscany expressed concern that as buildings get more sophisticated, mechanical contracts need to be set up to maintain the buildings and systems. The cost of the geothermal bore field is 20% percent of budget. D. Seigler feels this is conservative and he is comfortable with the number. D. Seigler offered a tour of a building that has geothermal heat pumps.

Efficiency Vermont will estimate incentives and how tax credits work, and the cost of the system will be determined given additional information. If choosing the geothermal system, funds need to be identified to cover the excess cost over budget.

VIA will move ahead with the Act 250 permit which includes the VRV system with the propane back up.

The next meeting will be Thursday August 21st at 2:00pm.

The meeting ended at 4:05pm.