

BELMONT MIDDLE and HIGH SCHOOL BUILDING COMMITTEE

**Final Meeting Minutes
Thursday, April 28, 2022
Virtual Zoom Meeting
7:00 PM**

**RECEIVED
TOWN CLERK
BELMONT, MA**

DATE: May 19, 2022
TIME: 2:52 PM

Meeting #142

Committee Members Virtually Attending:

Chair Lovallo; Members Joel Mooney, Ellen Schreiber, Kate Bowen, Chris Messer (arrived late and left early), John Phelan, Patrice Garvin, Jamie Shea, Pat Bruschi, Bob McLaughlin, Tom Caputo, Diane Miller, Mike McAllister

From CHA: Tom Gatzunis, Sandra Saccone, Don White, Tony DelGreco

From Perkins+Will: Brian Spangler, Brooke Trivas, Vital Albuquerque, (Shannon Kaplan, AKF)

Solar Design Associates (SDA) Consultants: Steve Coffrin, Haskell Werlin,

From Skanska: Mike Morrison, Paige Matthews, Jim Craft

Members Absent: David Blazon, Joe DeStefano, Emma Thurston

I. Call to Order

The meeting was called to order at 7:00 p.m. by Chair Lovallo. He thanked Matt and the Belmont Media Center for their technical support. He explained the remote meeting protocol, e.g., state your name before speaking, mute computers, and he explained how the Committee will vote via roll call, etc. Meeting materials will be posted on the BMHSBC website, shortly after the meeting. He also advised residents that they can click into the meeting during “public comment” time by “raising their hand” or by pressing #9.

Chair Lovallo took attendance via roll call, reviewed the agenda, and turned to the first item on the agenda.

II. Next Building Committee Meetings

Chair Lovallo indicated that both of these upcoming meetings are business meetings.

Friday	May 13, 2022	at 8:00 AM	Virtual	[143]
Thursday	June 9, 2022	at 8:00 AM	Virtual	[144]

III. Review and Approve Minutes of Previous Meetings

Mr. McLaughlin moved: To approve the Minutes of 4/13/22.

The motion passed unanimously via a roll call vote of 12-0-0. (Yes: Garvin, Phelan, Bruschi, Miller, Caputo, Mooney, Bowen, Shea, McLaughlin, McAllister, Schreiber, Lovallo)

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IV. Getting Belmont Across the ZNE Finish Line

Chair Lovallo noted that he receives comments from the community indicating that the Building Committee needs to make this building ZNE. He stated that the Building Committee cannot “make the building ZNE” on its own – it will take effort and commitment from the entire community. Chair Lovallo noted that the community has been requesting ZNE since the Building Committee was formed and began meeting back in 2016. He stated that he and others learned a lot about ZNE since then.

Ms. Kaplan, AKF Consultant, then introduced herself and noted the work that has taken place to get to tonight’s meeting.

V. How does Belmont Achieve ZNE for this Project?

Mr. Albuquerque discussed ZNE (Zero Net Energy) and defined it: the building receives the renewable energy it needs to use to operate the building. He reviewed several classifications that determine how ZNE is achieved. He summarized the EUI (Energy Usage Intensity) as well as energy reduction strategies, i.e., smart skin to volume/envelope, optimized distribution, central geo-exchange, and building a green culture. He summarized the PV design (energy status). He discussed energy drivers, plug loads, and the fact that this building has a pool and that the Field House will also need a lot of energy. He finished by saying that it takes a community (e.g., Building Committee, School Dept., Building occupants, and the Belmont community) to achieve ZNE goals.

Chair Lovallo reiterated that it has taken efforts of the wider community in order to achieve ZNE. It has taken several years of work to get where we are today, he said. Ms. Kaplan stated that, for this large-sized building, it is challenging to achieve ZNE. She spoke to some of the factors of energy utilization that are required to achieve ZNE.

Committee members offered comments on the ZNE process, thus far, acknowledging the teamwork and the progress. Chair Lovallo emphasized that this has been a good process, with good dialogue throughout.

VI. Review of Different Options for PV Panels

Next, Mr. Coffrin spoke to the process of choosing quality materials. He discussed Q Cell panels and wattage levels. He discussed Mission Solar and then noted that Maxison (formerly SunPower) is now selling panels. Mr. Coffrin then explained that the panels are typically manufactured offshore, although Mission Solar is domestically manufactured. In answer to a question, he discussed how the warranties function and what items are covered. Mr. White, in answer to another question, explained the add alternates, which will be reviewed in more detail as it gets closer to bid time.

VII. Approval of Recommendations for PV Panel Base Bid Options

Mr. Mooney moved: To approve Q Cell as the baseline.

The motion passed unanimously via a roll call vote of 13-0-0. (Yes: Garvin, Phelan, Brusch, Miller, Caputo, Mooney, Bowen, Shea, McLaughlin, Messer, McAllister, Schreiber, Lovallo)

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VIII. Preliminary PV Design for Full Roof Coverage

Mr. Coffrin then described how the panels are placed on the roof (referencing a photo in the Schematic Design package). He discussed the row spacing, array angles, roof maximization, roof setbacks, mechanical setbacks, inverter location, and kilowatts hours. He also discussed the number of modules, the array size and the wattage. He explained how the cost of the equipment is estimated.

Mr. Coffrin explained the difference between rated capacity and production capacity. He explained that the solution to maximize the roof will reach a rated capacity of 1.1 to 1.2 mWdc rated capacity. That will achieve a production capacity of 1.2 to 1.3 mWh/yr.

Committee members asked clarifying questions about the preliminary PV design (e.g., roof access, PV placement/angles, snow removal, roof longevity, and energy gains). Mr. Coffrin provided information on these topic areas.

IX. Estimated PV Construction Cost for Current Design

Chair Lovallo raised the topic of cost: what is this (PV placement) going to cost, he posed? Mr. Coffrin spoke to cost factors, cost per kW, and value. He described the “systems cost” and said we might come in just under \$2.00 per kW. That puts the estimated construction cost at approximately \$2.4M to \$2.5M. Chair Lovallo noted that that estimate is within the budget that the Committee put aside for this scope.

X. PV Schedule for Procurement and Construction

Chair Lovallo began by saying that the sooner we get out the bid package, the better. Mr. White reviewed the proposed timeline and the bid process. The Committee could vote bid approval in June, followed by a vote in August for award recommendation.

Mr. Coffrin spoke about some of the items that are delayed, due to supply chain issues. He noted that it is hard to predict when construction can be done because of supply chain issues, but a reasonable estimate is 6-8 months after award for procurement of all material and 2 months for construction and 1 month for commissioning. Mr. White noted that the schedule was developed with these durations, which is why the schedule shows the completion of PV next summer.

XI. Bidding Options for PV Installation

Chair Lovallo discussed some of the options for PV procurement. It was decided to move this out from under Skanska’s management/scope (in order to save money - \$18,800), as it could be managed under the Town/CHA. However, Chair Lovallo added that there are advantages to keeping it under Skanska’s purview – including their presence on site and their access to the roof. The Committee briefly explored the benefits of keeping this under Skanska’s management/scope.

XII. Approval of Bidding Options for PV Installation

Mr. McLaughlin moved: To approve putting PV installation back under Skanska’s control.

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The motion passed unanimously via a roll call vote of 11-0-0. (Yes: Garvin, Phelan, Brusch, Miller, Caputo, Mooney, Bowen, Shea, McLaughlin, Schreiber, Lovallo)

XIII. Comments from Belmont Residents

Mr. Tenny asked about the warranty and the issue of animals eating wires and living under the panels. Chair Lovallo noted that this risk is small (the roof is very high up and there are no wires) and that the warranty language will be looked at in the bid.

Mr. Iler expressed that he is pleased with tonight's PV conversation, and he asked about the funding. Chair Lovallo noted that the funding has been allocated as noted earlier.

Mr. Kopperl asked SDA about the warranty and the process for eventual panel replacement. Mr. Coffrin noted that other panels could be used in the event that the original ones are not available when replacements are necessary.

Ms. Kitch, BHS Senior, thanked the Committee for their solar panel efforts. The students will work toward ensuring ZNE.

XIV. Committee Vote to Install PV on Project Roof

Chair Lovallo stated that now that the funding is in place, the costs are known, and there is a budget, the Committee can take a vote supporting PV. Committee members expressed support for PV installation, but some wondered if a vote is necessary. Mr. Caputo expressed support for taking a vote and noted that the vote is to re-affirm the Committee's commitment. Select Board Chair Paolillo agreed with Mr. Caputo that a vote will demonstrate to the community that PV is a commitment. Mr. Mooney suggested wording for a potential motion. Ms. Bowen read a policy from 2009 and said she would support a motion/vote. Chair Lovallo read a proposed motion.

Mr. Caputo moved: That the Committee reconfirm its commitment to take all legal steps available to complete the construction of the Middle and High School Building with a photovoltaic array on the roof of the building as an energy design strategy consistent with the design as shown in the original building plans.

The motion passed unanimously via a roll call vote of 11-0-0. (Yes: Garvin, Phelan, Brusch, Miller, Caputo, Mooney, Bowen, Shea, McLaughlin, Schreiber, Lovallo)

XV. Alternate Funding Considerations (for PV)

Chair Lovallo thanked the town's *ad hoc* PV team and noted that savings could be realized. He reaffirmed that full funding is in place in the Project budget to complete the installation based on current market conditions. Alternative funding would be a parallel path to consider.

[Mr. McGaw (who was not recognized earlier) spoke in favor of the motion. However, he offered wording that he would have preferred used.]

Chair Lovallo spoke to ways to offset the costs with tax credits. There are mechanisms that will help non-profits realize tax credits and achieve savings – potentially between \$300-400K for this project.

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This would be taxpayer savings. He explained that it may involve a short-term lease, it would involve both MSBA and School Committee approval, would need to be reviewed with Town Counsel, etc.

Committee members supported exploring this possibility further. Chair Lovallo stated that he will return at a future Building Committee meeting with more information to discuss.

XVI. Site Design Contingency Refresh

Chair Lovallo invited Mr. Morris present a spreadsheet of the Contingency Refresh list. The Committee reviewed the list and identified items that could be adjusted to save costs: remove baseball backstop wall, change certain walkways from concrete to asphalt (but not to stone or grass), eliminate blue lights/phones, do not retain temporary parking, reduce sports netting and related posts, etc. Chair Lovallo noted that the Planning Board advised against certain other possible cuts. He added that the rest of the multimodal path (porous asphalt) around the pond will be available by the start of the next school year.

XVII. Site Design Contingency Refresh

None were taken.

XVIII. Approval of Site Design Options for Contingency Refresh

Ms. Bowen moved: To accept the contingency refresh adjustments as outlined above. The motion passed unanimously via a roll call vote of 11-0-0. (Yes: Garvin, Phelan, Brusch, Miller, Caputo, Mooney, Bowen, Shea, McLaughlin, Schreiber, Lovallo)

Although Chair Lovallo noted that the Committee has affirmed, within the above motion, its commitment to remove the temporary parking, several Committee members requested a specific motion stating explicitly the commitment to remove the temporary parking.

Mr. Caputo moved: That the Committee confirm its intention to remove the temporary parking in front of the High School, as part of the completion of the Phase 2 construction and parking installation. The motion passed unanimously via a roll call vote of 11-0-0. (Yes: Garvin, Phelan, Brusch, Miller, Caputo, Mooney, Bowen, Shea, McLaughlin, Schreiber, Lovallo)

XIX. New Business

There was no new business.

XX. Related Meeting Materials

1. Belmont ZNE and PV
2. Panel Manufacturer Comparison
3. Photovoltaic System Schematic Design Package
4. Bidding Options Comparison
5. Preliminary Schedule for PV Solar Panel Design

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6. Site Plan Update (proposed fencing height changes, proposed swing gate changes, site water fountains/bottle fillers, emergency blue phones)
7. Contingency Refresh List for Site

XXI. End

The Chair ended the meeting at 10:06 p.m., following a motion made by Mr. McLaughlin.

Respectfully submitted by:

Lisa Gibalerio

Approved: 
Chris Messer, Secretary

5/19/2022
Date