

WESTWOOD ELEMENTARY SCHOOLS BUILDING PROJECT COMMITTEE
Westwood, Massachusetts

SUSTAINABILITY SUBCOMMITTEE MEETING MINUTES

October 22, 2020

Attendance and Call to Order

The meeting, held remotely¹, was called to order at 9:32am by Chair Maya Plotkin. Also present on the videoconference were: Ken Aries, Brian Bayer, John Cummings, and Nancy Hyde. Lemma Jn-baptiste and Anthony Mullin were absent. Ex-officio members Julie Gervais and Tom Philbin were also present. John Cianciarulo recorded the minutes.

Tim Bonfatti and Chin Lin of Compass Project Management; and Don Walter and Rob Fitzgerald of Dore and Whittier were also present.

Mrs. Plotkin recognized the live stream of the meeting which was provided for real-time, public access to the activities of the Sustainability Subcommittee. Members of the public were able to view a live stream of the meeting via the Internet at www.westwood.k12.ma.us/live.

Discussion Items

Mrs. Plotkin recognized Rob Fitzgerald of Dore and Whittier. Mr. Fitzgerald noted that Matt DiSalvo, Mechanical Engineer at GGD (Garcia, Galuska & DeSousa), Dominick Puniello, Principal at GGD, and Erik Ruoff from The Green Engineer were also in attendance to answer any questions.

Mrs. Plotkin chose to facilitate discussion items out of the order presented on the agenda.

HVAC System

Mr. Fitzgerald stated that he, Mr. Aries, Mr. Cummings, and engineers participated in a conference call last week regarding the HVAC system. They discussed the pros and cons of filter ratings and ultraviolet light in ductwork, energy use ramifications of upgraded MERV filters, the design of the system, and the emergency generator.

- MERV-14 filters were recommended both by the Centers for Disease Control and ASHRAE; MERV-16 goes further than that, allowing fewer particles to passthrough. More energy is also consumed. The recommendation is to use MERV-14 filters and include an ultraviolet system to increase the effectiveness of filtration
- Three-degree "Design Day" for peak load
- Consensus is to use a natural gas generator
 - Engineers confirmed that it is possible to extend the gas line from Laura Lane
- Stubs will be added to the line which will enable supplemental boilers if/when necessary in the future

Net-Zero Energy

Mr. Ruoff provided an overview of Net-Zero Energy:

- Currently, practitioners and policy-makers do not have a consensus-based definition of net-zero energy, near net-zero energy, or energy-positive buildings.

¹ Remote meeting held in accordance with Executive Order of Massachusetts Governor, March 12, 2020

- Most commonly referenced definition was developed by the United States Department of Energy in 2015.
- Although the Department of Energy and the MA DOER Zero Net Energy Buildings Task Force’s definitions emphasize the use of renewable energy on-site, many stakeholders view off-site renewables as essential to achieving net-zero energy given limited roof and open space
- Emissions-based targets can be more feasible for existing facilities that have already made significant energy efficiency investments and/or have a mix of on- and off-site renewable power.

Westwood Hanlon Net-Zero Energy Classification

- National Renewable Energy Laboratory Net-Zero Energy (NZE) Classifications: In general, a project can claim to be NZE with either on or off-site PV (photovoltaic) (assuming RECs are retained or repurchased). They would be considered different “classes” or approaches, but all would be NZE.
- NZE Classifications:
 - Class A: Renewables within building footprint (e.g., PV on the roof)
 - Class B: Renewables on building site (e.g., parking canopies)
 - Class C: Off-site renewables (e.g., community solar, where SRECs are retained)
 - Class D: RECs or renewable energy purchased (e.g., buy RECs and carbon offsets)

Westwood-Hanlon Energy Performance Requirements

- MSBA Requirement: The Project is subject to the MSBA requirements of Project Advisory 41— Sustainable Building Design Policy for Green Schools. Since the Project is seeking an additional 2% reimbursement from the MSBA, the building will need to demonstrate at least a 20% reduction compared to the base energy code. Compliance for this requirement is enforced through the point total under the LEED for Schools v4 EAc Optimize Energy Performance credit which uses ASHRAE 90.1-2010 as the baseline. The understanding is that projects seeking the additional reimbursement will be required to show at least 14 points under the EAc Optimize Energy Performance credit to show equivalency.
- Stretch Energy Code Requirement: Since Westwood is a Stretch Code Community, the Project will be subject to ASHRAE 90.1-2013 with updated Massachusetts Amendments and must demonstrate at least a 10% EUI reduction, either in site or course energy, to demonstrate energy code compliance.

LEED Checklist and Sustainability

The MSBA requires a minimum level of LEED certification. The project is currently comfortably above the threshold. The design team is refining as the project progresses, but sees no issue in meeting the minimum requirement. There are additional incentives around the energy performance of the building.

Mr. Lin suggested the a slide be prepared for the next community meeting which outlines points in explaining how great the building is relative to sustainability.

Action Items

HVAC System

Mr. Aries made a motion to recommend to the School Building Committee using three-degrees as the “Design Degree Day.” Seconded by Mr. Cummings.

Roll-Call Vote:

Mr. Aries	Yes
Mr. Bayer	Yes
Mr. Cummings	Yes
Mrs. Hyde	Yes
Mrs. Plotkin	Yes

Vote: 5-0-0.

Result: Approved

Mr. Cummings made a motion to recommend to the School Building Committee using a natural gas generator (as opposed to diesel) as the emergency generator. Seconded by Mr. Aries.

Roll-Call Vote:

Mr. Aries	Yes
Mr. Bayer	Yes
Mr. Cummings	Yes
Mrs. Hyde	Yes
Mrs. Plotkin	Yes

Vote: 5-0-0.

Result: Approved

Mr. Aries made a motion to recommend to the School Building Committee to install MERV-14 filters and put a UV system in as an alternate. Seconded by Mr. Cummings.

Roll-Call Vote:

Mr. Aries	Yes
Mr. Bayer	Yes

Mr. Cummings	Yes
Mrs. Hyde	Yes
Mrs. Plotkin	Yes

Vote: 5-0-0.

Result: Approved

Approval of Subcommittee meeting minutes of October 8, 2020

Mr. Cummings made a motion to approve the meeting minutes of October 8, 2020. Seconded by Mr. Aries

Roll-Call Vote:

Mr. Aries	Yes
Mr. Bayer	Yes
Mr. Cummings	Yes
Mrs. Hyde	Yes
Mrs. Plotkin	Yes

Vote: 5-0-0.

Result: Approved

New Business

There was no new business.

Adjournment

Mr. Cummings made a motion to adjourn the meeting. Seconded by Mr. Aries.

Roll-Call Vote:

Mr. Aries	Yes
Mr. Bayer	Yes

Mr. Cummings	Yes
Mrs. Hyde	Yes
Mrs. Plotkin	Yes

Vote: 5-0-0.

Result: Approved

The meeting adjourned at 10:30am.

Documents and Exhibits Used at Meeting

- Draft Sustainability Subcommittee meeting minutes of October 8, 2020 for the Subcommittee's review and approval
- LEED and NZE Review and HVAC System Follow-Up slideshow presentation, drafted by Dore and Whittier; Garcia, Galuska, and DeSousa; and The Green Engineer, dated October 22, 2020