

**Concord Middle School Building Committee**  
**Sustainability Subcommittee**  
**Meeting Minutes**  
**October 9, 2019**

**PRESENT:** Frank Cannon, Kate Hanley, Russ Hughes, Laurie Hunter, Charlie Parker, Matt Root, Jared Stanton

**Call to Order**

Mr. Root called the meeting to order at 8:04 AM in Conference Room 3 of the Ripley Building.

**Review draft slides for the sustainability presentation to the full building committee on 10/17**

Ms. Hanley reviewed several changes she felt were important to make to the draft slides, including: recapping the town's goals and defining terms being used, listing the benefits of having a sustainable building and stating the subcommittee's recommendations for the project. She shared the town of Concord's greenhouse gas production goals and an inventory of municipal emissions from 2016, noting that emissions dropped 10% from 2008, due in large part to the new high school. Ms. Hanley reviewed the ZNE buildings and districts slides, noting that K12 is leading in the education sector. The Subcommittee discussed what level of detail they want to present in the slides. Mr. Root stated that they need to communicate not just about energy consumption, but also about other components, including: occupant comfort, indoor air quality, and inspiring spaces for kids to grow and learn. Mr. Cannon stated that they should pursue ZNE if they can afford it. Mr. Parker stated that this will be a town building, noting that the Subcommittee needs to integrate CMLP with their efforts. The Subcommittee discussed paneling and Mr. Hughes noted that there are also insulation and maintenance costs.

Ms. Hanley continued to review the slides, including how sustainability supports 21<sup>st</sup> century learning and the results from the USBGC MA report 2019 that looked into the costs of net zero construction in MA. She reviewed the goals for the school, including: super energy and water efficient, healthy indoor air quality, all-electric, solar-ready and low embodied carbon. Mr. Root shared his concern with focusing on net zero energy, stating that the primary work should be around reducing and minimizing the loads, noting that they don't have a roadmap to get to the EUI. He noted that Passive House gives the design team specific protocols and metrics to get to an efficient EUI. He stated that with net zero energy, they would be retiring the renewable energy credits for the school and Mr. Parker stated that this isn't true and is tied up in policy and how the CMLP operates. Mr. Parker stated that the presentation around energy should be around having a super-efficient building. Mr. Cannon noted his concern for working on the building by piece mail, referencing one of the school buildings that installed air conditioning after the building was built. Dr. Hunter suggested providing more detail of all of the jargon they were referencing, such as EUI, and the Subcommittee agreed this was important to provide. Mr. Root also suggested showing visual pictures with possible solar panel placement to help describe EUI numbers. Mr. Stanton recommended adding what happens if there is a shortfall with the EUI number. Mr. Parker stated that they would have a goal EUI number set and would manage to that number overtime, once the building was in operation and suggested having policies around energy use. Ms. Hanley stated that for the next full committee meeting, they need to be focused on the design of the school. Mr. Cannon noted that the temperatures are rising, which will lead to higher energy consumption, stating that they should be designing above standard.

Mr. Hughes confirmed that they are aiming for an EUI of 25 and suggested that the subcommittee provide evidence that this is an achievable goal and Mr. Root stated that New Buildings Institute has

collected information on net zero energy. Mr. Hughes questioned if any other public schools in the northeast have been able to achieve net zero. Mr. Parker stated that there are schools in the area with a planned EUI number of 25. Ms. Hanley pointed out that net zero is producing as much electricity as the building is using over the course of a year. Mr. Parker stated that they need to have storage to build out to the solar capacity that they will need, noting that they need to consider the goals of the town.

Ms. Hanley stated that she would update the slides based on their conversation and will bring to the next meeting.

### **Public Comments**

None

### **Adjournment**

A motion was made by Ms. Hanley, seconded by Mr. Cannon, to adjourn. The motion was unanimously approved and the meeting adjourned at 9:00 AM.

Respectfully Submitted,

Erin Higgins  
Recording Secretary

Approved: 1.16.20

### Abbreviations:

CMLP	Concord Municipal Light Plant
CMS	Concord Middle School
EUI	Energy Use Intensity
LEED	Leadership in Energy and Environmental Design
MSBA	Massachusetts School Building Authority
RFS	Request for Services
USGBC	U.S. Green Building Council
ZNE	Zero Net Energy