Williamsburg Energy Committee Minutes for August 4, 2021

Members Present: Neal Anderson, Adin Maynard, Jim Piermarini (Chair), Dick Guzowski

Others Present: Mimi Kaplan

Called to Order: 5:00 PM.

Energy Considerations for Public Safety Complex: Continued discussion of energy efficiency considerations for the Public Safety Complex.

Anderson provided the following account of the Energy Committee's discussion with the Public Safety Complex Committee at their July 28 meeting:

Architect Kevin Chorback gave a brief overview of the current plan. He indicated that he considered some aspects of the plan—radiant slab heating in the vehicle bays and wood-frame construction—to be somewhat fixed, but was interested in the Energy Committee's recommendations on envelope considerations, insulation strategies, and the economics of making the building PV ready (e.g. how realistic is purchase of PV in the next 4-5 years, and how does that weigh against the cost of making the building PV ready now).

Anderson explained that the Energy Committee will work to provide such recommendations, but had just taken this up and were at the meeting primarily to introduce ourselves, express our willingness to engage, and hear from their committee about how they think we can be most helpful in ensuring that the building is built for the future in terms of energy efficiency, economics, and resiliency.

Discussion followed. The building committee's engineering consultant discussed briefly what could be done to make the building PV ready (e.g. installing the necessary conduits, ensuring that the electrical room would be large enough to accommodate what would be required). Chorbak wondered about alternatives for heating and cooling in the administrative suites, including variable refrigerant flow (VRF) which would require indoor and outdoor components. He asked fire and police for a brief narrative of how they see themselves using the building, as this is relevant to planning climate control systems. Daryl Springman from the Williamsburg Fire Department had two specific suggestions: that the Town might look into pellets/wood chips as a potential renewable emergency energy source and be sure that, with radiant slab heating, the ventilation will be sufficient to mitigate risk of carcinogens outgassing from equipment. There was a brief discussion of air conditioning, and it was clear that all assumed that the building would be air conditioned. Dick Guzowski mentioned the possibility of using SIP panels for insulation in the wood-frame structure, and there seemed to be interest in this as a possibility. Finally,

the Public Safety Complex Committee agreed to releasing building plans to National Grid for their input.

Chorbak stated that he has an August 15 deadline to have information and documents together for the next design, development, and construction cost estimate, and would need the Energy Committee's recommendations before then if they are to influence this phase of the process. Specifically, he requested input on:

- 1) Evaluation of options for PV readiness with tradeoffs
- 2) Building envelope considerations
- 3) Insulation strategies

He mentioned that the committee will meet one more time before this August 15 deadline, i.e. within the next couple of weeks, and the Energy Committee could attend that meeting to present and discuss pending recommendations. He requested that, if questions arise in the mean time, the Energy Committee contact him with copies to Robert Todisca and Nick Caccamo.

The committee discussed a variety of potential recommendations, including (1) pricing out both full solar installation vs making the complex solar ready, (2) exploration of the use of VRF heat pump through the apparatus bays, and (3) evaluation of heat loss through the exterior doors and non-south-facing floor-to-ceiling windows. The committee also discussed the need for clarity on the planned building envelope and insulation between the apparatus bays and administrative offices

Adjourned: 6:05PM.

Next Meeting: Tuesday, August 24, 5:00PM, Zoom