




Paul St. Cyr
Commissioner of Public Works

MEMORANDUM

TO: Thomas A. Golden, Jr., City Manager 

FROM: Katherine Moses, Energy Manager

CC: Paul St. Cyr, Commissioner of Public Works

DATE: September 12, 2023

SUBJECT: MOTION RESPONSE: C. Gitschier – Req. City Mgr. Update the City Council on the Installation of Solar Panels on the High School

Since the inception of the Lowell High School (LHS) renovation and expansion project through the Massachusetts School Building Authority (MSBA) Core program, the City has expressed a desire to integrate solar panels in the design to help enhance the sustainable design for the facility, avoid greenhouse gas emissions, reduce ongoing utility bill costs, and allow for educational engagement around sustainability issues. The MSBA Core program does not allow for the costs of solar panels to be included as part of construction. Installation of solar panels, therefore, needed to be considered separately. In order to not interfere with ongoing construction of the facility, solar panels cannot be added until the new construction portion of the project is complete. Currently, this is estimated to be around Fall 2024.

Based on the recommendation of the City Council Sub-Committee for Technology and Utilities of February 21, 2023, the City has engaged Power Options and their solar vendor, Solect Energy, to expedite procurement and project development of the LHS and other potential solar projects across the municipal portfolio (see Informational Communication for additional details). Solect Energy has a history of seamlessly and successfully going behind new construction projects to install solar panels on facilities.

Prior to solar installation, a number of other steps are required in order to develop the projects. These steps are being undertaken in parallel with the construction at LHS. On the current pathway, it is anticipated that systems totaling 410 KW will be installed on the new gym and new freshman academy of LHS by summer 2025. If initial estimates for these systems remain unchanged during the design process, over their lifetime, the solar systems at the high school will help the City avoid 9,172,300 kWh in electricity, between \$557K-\$759K in utility costs, and 4,400 tons CO₂e.