



CMLP Solar & Battery Construction Updates

Concord Middle School Building Committee
Meeting

4/11/2024

Overview

Solar: 1.1MW

- Canopy solar – 713kW (DC)
- Rooftop solar – 406kW (DC)

Battery storage

- 2MW / 4MWh

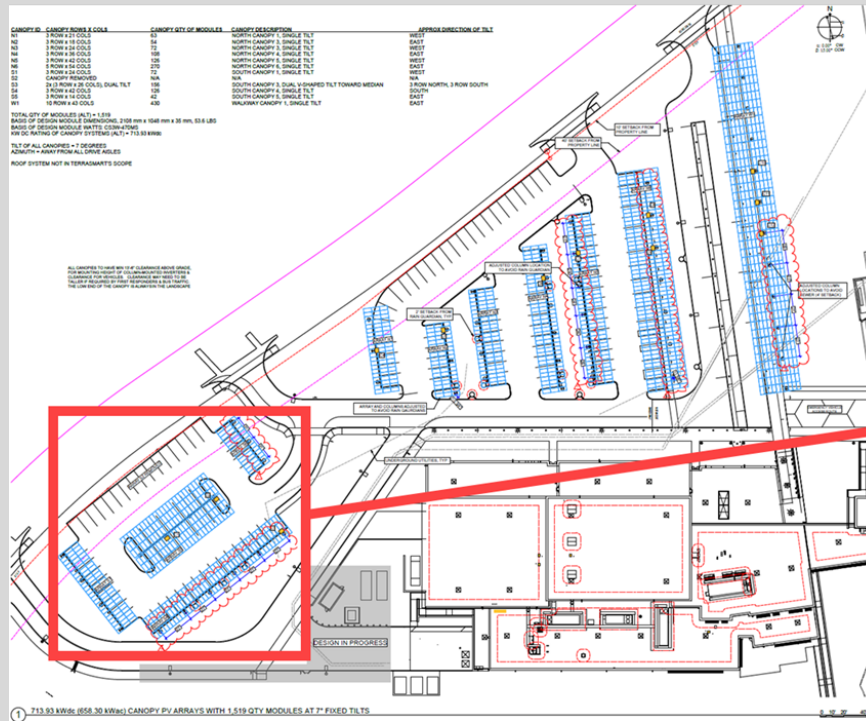
Location of work

- Canopy lines tied together in one vault
- Canopy, rooftop, battery, school, and transformer lines arrive in 6'x12'x7' manhole
- External structure for switchboard adjacent to manhole

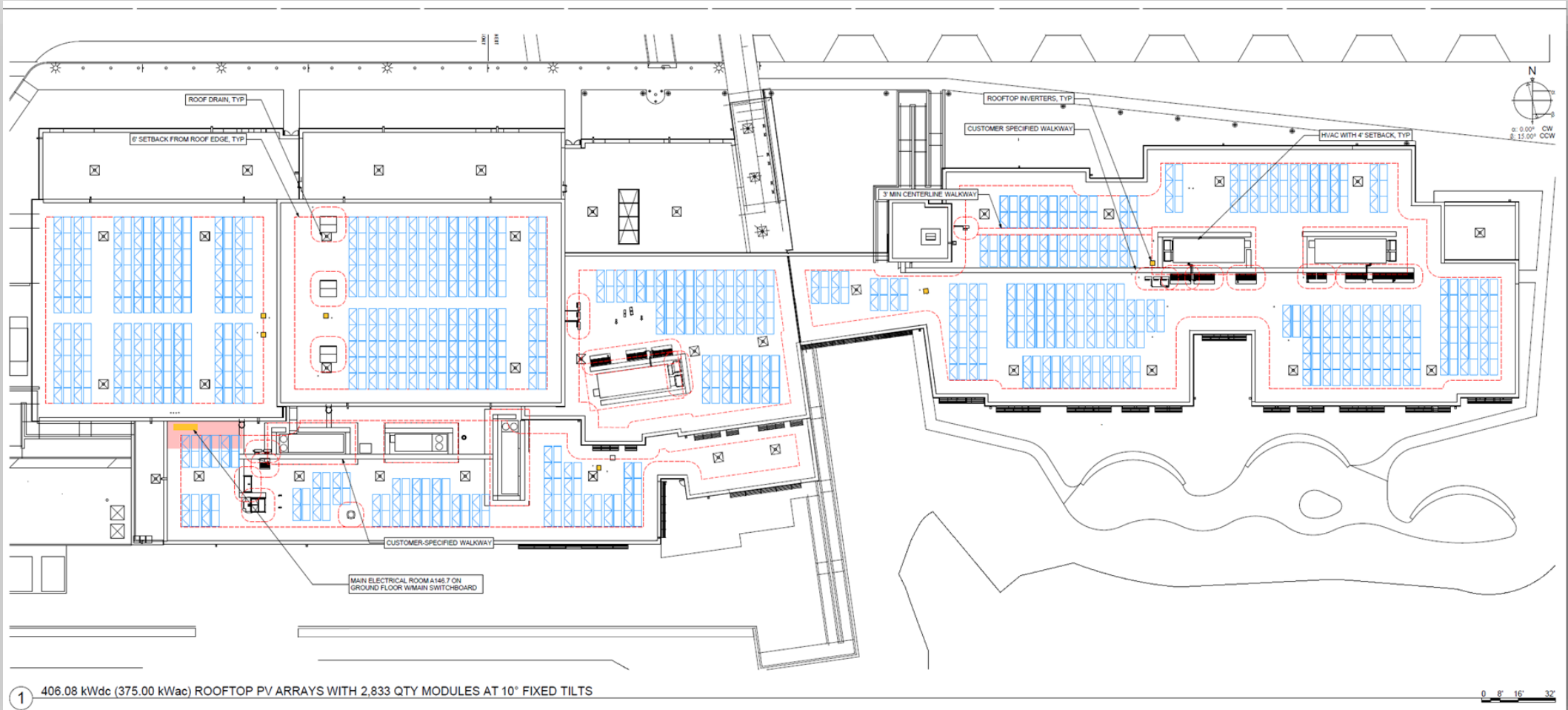
Battery,
switchboard
and manhole
location



Canopy Design (100% drawings)



Rooftop design (bid drawings)



Battery Storage

- 2 megawatts and 4 megawatt-hours
- Can absorb the rooftop solar for 4 hours
- Can push back up to 2 megawatts of power (for 2 hours) or 1 megawatt of power (for 4 hours)



**BATTERY
ENERGY
STORAGE**



Concerns

- Switchboard design is dependent on:
 - Solar design, which is dependent on:
 - Battery size and power, which is dependent on:
 - Financials and total solar volume, which is dependent on:
 - Variances, canopy design, and more...
- Other concerns:
 - Lack of vendors interested in building the switchboard
 - Supply chain shortages
 - Coordination of staff to get work done and continue planning

Solutions

- 8-19 hour-per-week project manager added to CMLP's staff, focusing exclusively on this project
- New manhole design that allows CTA and Griffin to continue their work without waiting for the final switchboard specifications
- Working with SMMA to design drainage for the canopies
- Pursuing variance



Objectives



Allowing Griffin and CTA to complete their work while minimizing schedule impact



Keeping people up-to-date and following up with vendors



Starting procurement on the battery and PV modules