Municipal Solar Project

26 Baptist Rd. 60kW Solar and Battery

Why put town buildings on renewable energy?

We've been asked numerous times…

"Is solar really worth it?"

- A case study, on an installed NH system, shows a 7.6% ROI average payback on the original investment . Estimates from NREL show 6-20% ROI.
- https://www.des.nh.gov/sites/g/files/ehbemt341/files/documents/2020-wwtfsolarcasestudies.pdf
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- Each year, the system will protect against increasing electric rates, by generating power at the increased rates. Along with being a good investment, each year it will reduce the town electric bill, carbon output, and provide security and resilience.

What is proposed, the cost, and the savings?

- Project proposed is a 60kW solar array, as designed in 2024, with battery backup
- If the town approves a warrant, the system will be paid for with a $180k bond
- Solar generates power that reduces town electric bills

- Part of the existing electric budget will pay for a $180k bond, over 20 years
- The system will generate $12-14k* per year depending on additional demand charges offset
- Over 25 years - without this project - the town will pay **$875k** in electric bills at 3.67% growth
- *- Assumes group net metering between town buildings

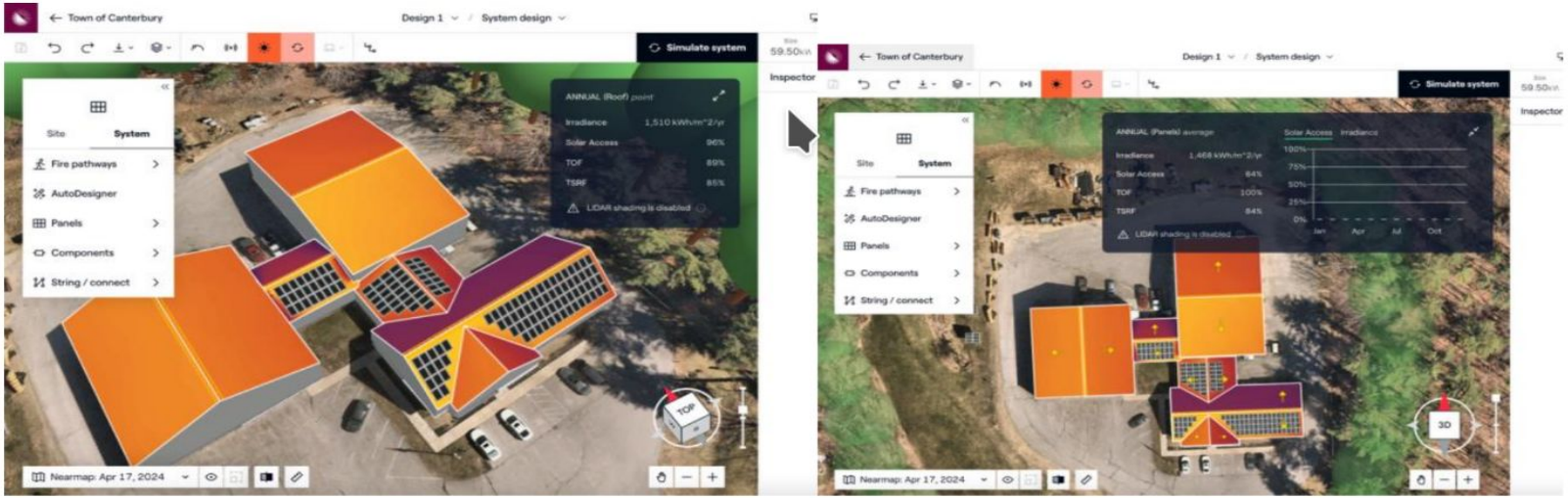
- With Solar - the town will pay less than $500k in electric bills, saving **$375k**
- There is no additional cost to taxpayers, over what would be budgeted anyway, only savings
- $126k cost after rebates with $375k in savings = **7.9%** avg annual ROI over 25 years

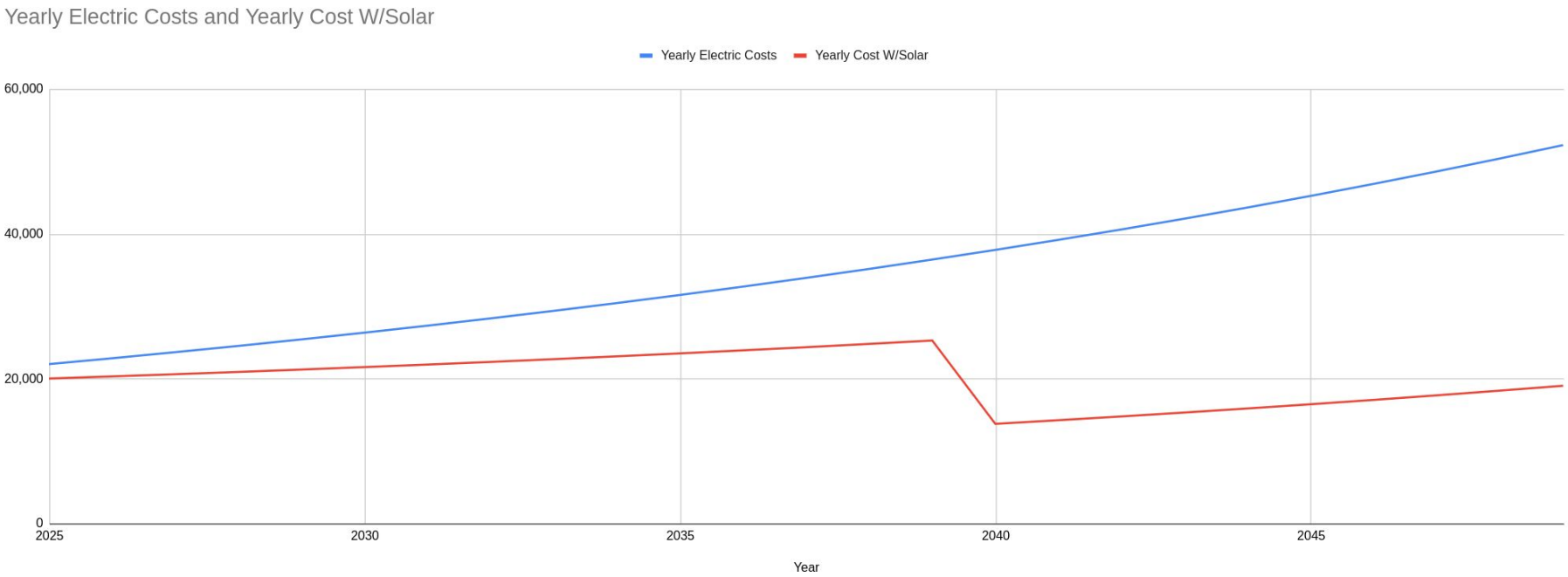
26 Baptist Rd - Municipal Solar site

26 Baptist Rd - one idea of proposed layout of panels

fAttachment Section III Question 5

- 140 Q.Tron 425w Panels
- 140 Enphase IQ8M Microinverters
- 59.5 kW System
- Standing Seam S5 Attachments (0 Penetrations to the roof)
- 65,376 kWh/Annual Production
- TSRF = 84%




Yearly Electric Costs and Yearly Cost W/Solar
Yearly Electric Costs
Yearly Cost W/Solar
60,000
40,000
20,000
0
2025
2030
2035
2040
2045
Year