

MINUTES OF THE WBOE FACILITIES COMMITTEE

Tuesday, June 7, 2022

Conducted as a hybrid meeting: Superintendent's Conference Room & Webex

I. CALL TO ORDER: Jeff Hughes, Chair, called the meeting to order at 7:31 a.m.

PRESENT: Jonathan S. Budd, Ph.D., Superintendent (in person); Richard Huot, Interim Director of Business Services & Operations (in person); Vito Esparro, Facilities Manager (in person); Jeff Hughes, Facilities Committee Chair (in person); Brooke Hopkins, BOE (via Webex); Lynn Piasyck, BOE Chair, ex officio (in person)

II. PUBLIC COMMENT: There was no Public Comment.

III. JUNE 2022 FACILITIES REPORT

Mr. Esparro reviewed the attached report.

IV. FY23 WBOE CAPITAL BUDGET AS APPROVED, AND OTHER CAPITAL NEEDS

A. Solar Initiative

Committee members reviewed the attached document and attached solar initiative report, which was commended by Committee members.

IV. ADJOURNMENT

Meeting Adjourned: 7:58 a.m.

June 2022

Beecher Road School

Facilities Department Monthly Report

CLEAN

SAFE

HEALTHY

SCHOOLS

Vito Esparo

Facilities Manager

Beecher Road School

40 Beecher Road

Woodbridge, CT 06525

Phone: 203-389-2195

Fax: 203-389-2196



Completed Projects:

- On 4/1 a leak was detected from a hose valve servicing the HW loop. A comparable part was in stock at a local vendor. The item was picked up and replaced that evening.
- On 4/7 a failing exterior door closer servicing one of the main K-wing exit doors was replaced.
- In early April a power supply issue on AHU3 servicing the North Gym was detected. Upon inspection on 4/11, blown fuses were observed. After troubleshooting with our controls vendor we tried swapping the malfunctioning TRI50 drive with the TRI50 drive salvaged from our recent AHU6 repair. AHU3 powered up with the salvaged drive and the unit has been online since the drive swap.
- During April break installation of the *Sensory Pathway in Memory of Nicole* was completed.
- Over the week of April 11th, a failing processor board in the elevator servicing the kitchen was replaced.
- On 4/12 the back-up batteries for our fire alarm panel were replaced upon recommendation.
- On 5/14 the HWP4 servicing the micro turbine was replaced. The pump is online.
- Late evening on Tuesday, 5/3, multiple fire alarms were reported in the South school area. Upon investigation a faulty pull station in the pool area was identified. The pull station was replaced that evening. The alarm was back online around 3am on 5/4.
- During May, multiple plumbing issues effecting classroom in S22 were reported. A plumbing back-up in a sanitary line was the culprit. In both cases the line was snaked that evening. We are working with the 5th and 6th grade team to raise awareness about non-flushable items.
- On 5/26 our micro turbine was in alarm. Our service vendor sent a technician that day. As part of our service agreement the repairs and other preventative maintenance from the visit were covered. Parts arrived the following morning and the repair was complete that day.
- During the months of April and May, 78 "fix-it" tickets were closed. This number is not inclusive of time-sensitive maintenance issues reported outside of fix-it. This number is also non-inclusive of the majority of HVAC repairs.

Projects in process:

- Our chiller service vendor is scheduled to be onsite during the week of 5/31/22 to drain the glycol protecting the chiller barrel and put the unit back into service. They seem to be experiencing staffing issues. We are hopeful it will be completed on time.
- We are in the process of preparing for summer cleaning. Supplies including floor stripper and wax will be purchased shortly.
- Test results from our water treatment program for our Dual Temp and Hot Water loops have remained within PH benchmarks. We have held off our May visit until the chiller is online.

Outstanding issues to be addressed:

- Persistent roof leaks above the K-wing and North entrance continue to be monitored.



WOODBRIDGE SCHOOL DISTRICT

40 Beecher Road – South
Woodbridge, Connecticut 06525

Jonathan S. Budd, Ph.D. – Superintendent

MEMORANDUM

TO: Woodbridge Board of Education Facilities Committee

FROM: Jonathan S. Budd, Ph.D., Superintendent

DATE: June 2, 2022

RE: June 7 Special Meeting:
Update on BRS Capital Needs: Solar Initiative

Please find attached information from Richard Huot, Interim Director of Business Services & Operations, in relation to a proposed solar initiative to reduce energy consumption at Beecher Road School. Following discussion at the June 7 Facilities Committee meeting, the initiative will also be discussed at a June meeting of the Board's Finance Committee, for ultimate proposed approval by the Board of Education at its June Regular Meeting.

To: Jonathan Budd, PhD, Superintendent
From: Richard Huot, Interim Director of Finance and Operations
Re: Solar Initiative
Date: May 8, 2022
CC: Facilities and Finance Committees

Titan Energy, a firm the Town and Board of Education has used for several years to reduce energy consumption, has proposed Woodbridge apply for a solar installation to augment that which has already been installed. Their proposal and energy savings calculation is attached. And am recommending the application be brought forward to the Facilities and Finance Committees for their review and the Board of Education's ultimate approval.

Per Stage 3 of the suggested project timeline (copy attached), I have submitted an initial application through Titan to Greenskies Clean Energy. The proposal has significant advantages:

1. It is a power purchase agreement which means there is no investment, but provides for the purchase per kWh at \$0.0403 cents. We are currently paying through UI for delivery and generation \$0.2263/kWh.
2. Given the output of the proposed new solar array, that is a total savings of \$71,488 annually. This is a different amount than shown in the proposal because the proposal does not take into account the savings in the cost of generation.
3. With the completion of this project, nearly all of the electric usage at Beecher Road School will be provided by renewal energy.
4. The new solar panels would not be installed until the roof replacement project is completed, which will likely be the summer of 2023.

In my experience, this proposal is very exciting as the lowest cost per kWh experienced was \$0.08, and the savings can be accrued without negatively impacting instruction.

Let me know if there is any other information you would like provided on this topic.



Solar Development Proposal

Woodbridge School District

March 7th 2022



Onsite Generation Consulting

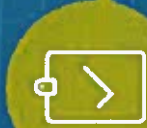
STEP 1



Utility Bill Review

Discovering project feasibility requires a thorough review of utility data to guide all future action

STEP 2



Building Audit

Each facility is unique, so we take the time to uncover every important detail before a proposal is created for the client

STEP 3



Proposal Delivery

Whether it's one proposal or many, we walk our clients through the options that best suit their energy management needs

STEP 4



Project Implementation

The road from proposal to finished product can have many twists and turns; we'll be your guide along the way

STEP 5



Measurement & Verification

Peace of mind comes from knowing your project is performing as intended, once commissioned we provide reports on production and savings

Project Overview

- The Town of Woodbridge and Titan Energy have worked together since 2009 on issues related to energy management and procurement.
- Titan has identified a very attractive solar project for the Beecher Road School and contacted Greenskies to obtain pricing for this project opportunity.
- Greenskies has put together the attached design and pricing for the Town and Board of Education's consideration.
- Greenskies and Titan have co-developed a number of municipal solar projects, including Region 15.
- The current incentive mechanism for this project, called the Non-Residential Energy Solutions (NRES) program, is currently accepting applications until

March 14th.

SYSTEM INFORMATION	
SYSTEM SIZE (DC)	270 kW
SYSTEM SIZE (AC)	200 kW
PANEL SIZE	450W MT72-1500A 450WP
PANEL QUANTITY	600
PANEL TILT	5°
PANEL AZIMUTH	22°
ROW SPACING	6.9'
INVERTER SIZE	(1) CANADIAN SOLAR 100K
ESTIMATED ANNUAL PRODUCTION	315.0 MWH

*Preliminary equipment selection, equivalent alternative may be used in actual installation



RACKING CROSS-SECTION
(NOT TO SCALE)



PROGRESS SET
NOT FOR CONSTRUCTION

PV.01

PROPOSED SITE PLAN
BEECHER ROAD ELEMENTARY SCHOOL
PV SOLAR ARRAY
40 BEECHER RD
WOODBIDGE, CT 06525

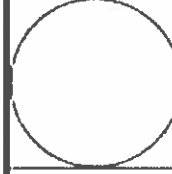
REVISIONS

NO.	DATE	DESCRIPTION



127 Washington Street
North Haven, CT 06473
PH - 860.398.6408
FAX - 860.398.6423

BATCH NO.	PROPOSAL
DRAWN BY	ZS
SCALE	AS NOTED
DATE	23 FEB 2022



SOLAR SAVINGS DASHBOARD

Year	Solar production	Eversource \$/kWh	Solar \$/kWh	Annual Savings	Total Savings
1	315,898	\$.1450	\$.0403	\$33,074.52	\$33,075
2	314,319	\$.1479	\$.0403	\$33,820.67	\$66,895
3	312,747	\$.1509	\$.0403	\$34,576.67	\$101,472
4	311,183	\$.1539	\$.0403	\$35,342.68	\$136,815
5	309,627	\$.1570	\$.0403	\$36,118.85	\$172,933
6	308,079	\$.1601	\$.0403	\$36,905.33	\$209,839
7	306,539	\$.1633	\$.0403	\$37,702.29	\$247,541
8	305,006	\$.1666	\$.0403	\$38,509.89	\$286,051
9	303,481	\$.1699	\$.0403	\$39,328.29	\$325,379
10	301,964	\$.1733	\$.0403	\$40,157.66	\$365,537
11	300,454	\$.1768	\$.0403	\$40,998.18	\$406,535
12	298,952	\$.1803	\$.0403	\$41,850.01	\$448,385
13	297,457	\$.1839	\$.0403	\$42,713.32	\$491,098
14	295,969	\$.1876	\$.0403	\$43,588.30	\$534,687
15	294,490	\$.1913	\$.0403	\$44,475.13	\$579,162
16	293,017	\$.1952	\$.0403	\$45,373.98	\$624,536
17	291,552	\$.1991	\$.0403	\$46,285.04	\$670,821
18	290,094	\$.2030	\$.0403	\$47,208.50	\$718,029
19	288,644	\$.2071	\$.0403	\$48,144.56	\$766,174
20	287,201	\$.2112	\$.0403	\$49,093.39	\$815,267
Total				6,026,672	\$815,267

270 kW DC
Rooftop Solar System

315,898
Kilowatt-hours

\$33,075
Year-1 Savings

\$815,267
Cumulative Savings

