



Public Facilities Committee Report

City of Newton In City Council

Wednesday, June 21, 2023

Present: Councilors Leary (Chair), Gentile, Crossley, Kelley, Norton, Kalis and Danberg

Absent: Councilor Laredo

City Staff: Josh Morse Commissioner of Public Buildings, Lou Taverna City Engineer, Andrew Lee Assistant City Solicitor, Eric Highers Environmental Engineer and Bill Ferguson Co-Director of Sustainability

#237-23 Eversource petition for Grant of Location in Nevada Street

EVERSOURCE ENERGY petitioning for a grant of location to install 154'± of conduit in a westerly direction from new pole #308/30 to the property at #323 Nevada Street. (Ward 1)

Action: Public Facilities Approved 6-0 (Councilor Norton not voting)

Note: Joanna Callender, Eversource Representative joined the Committee to discuss the petition for a grant of location in Nevada Street. She noted that this project is to bringing electricity to a renovated home at #323 Nevada Street.

The public hearing was opened and with no member of the public wishing to speak the public hearing was closed.

Councilor Leary motioned to approve which passed 6-0 with Councilor Norton not voting.

#211-23 Appointment of Jon K Slote to the Citizens Commission on Energy

PRESIDENT ALBRIGHT appointing Jon K Slote, 117 Garland Road, Newton Centre to the Citizens Commission on Energy for a term of office to expire June 5, 2026. (60 days: 08/04/23)

Action: Public Facilities Approved 6-0 (Councilor Norton not voting)

Note: Jon K Slote joined the Committee to discuss his appointment to the Citizens Commission on Energy. Mr. Slote explained his experience in this field and his interest in the work that the Commission does. He explained he has been sitting in on commission meetings and working with the city's Sustainability Team.

Councilors thanked Mr. Slote for his willingness to serve.

Councilor Danberg motioned to approve which passed unanimously.

#181-23 Appointment of Vincent McKay to the Sustainable Materials Management Commission

HER HONOR THE MAYOR appointing Vincent McKay, 67 Canterbury Road, Newton 02461 to the Sustainable Materials Management Commission for a term of office to expire June 12, 2026. (60 days: 07/14/23)

Action: **Public Facilities Approved 6-0 (Councilor Norton not voting)**

Note: Vincent McKay joined the Committee to discuss his appointment to the Sustainable Materials Management Commission. He noted his experience in the field and his interest in the work that the commission does.

Councilors thanked Mr. McKay for his willingness to serve.

Councilor Crossley motioned to approve which passed unanimously.

Referred to Public Facilities and Finance Committees

#217-23 Appropriate \$1,000,000 for Wash Bay Project at the Crafts Street yard

HER HONOR THE MAYOR requesting authorization to appropriate and expend the sum of one million dollars (\$1,000,000) from both the Sewer and Water funds to complete the Wash Bay Project at the Crafts Street yard. The total project cost will be \$1,500,000 which includes the \$500,000 that the City Council approved in 2018.

Action: **Public Facilities Approved 5-0 (Councilor Norton and Kelley not voting)**

Note: Josh Morse, Commissioner of Public Buildings presented the request to appropriate and expend the sum of one million dollars from both the Sewer and Water funds to complete the Wash Bay Project at the Crafts Street yard. Commissioner Morse explained that this project has added to the CIP in 2014. The scope of work has increased since that time. The stormwater feed, sewage feed and the electrical services to the building need to be replaced. The project was paused during Covid and now was recently put out to bid for \$1.5 million. He noted that since Covid a lot of materials have increased in price which does add to the cost along with the expanded scope of the project.

Commissioner Morse provided the attached image of the Wash Bay at the Crafts Street yard.

It was questioned where the additional \$1 million dollars is coming from and does this include the \$200,000 in contingency.

Commissioner Morse explained that the million dollars will be split between the water and sewer accounts and this does include the contingency.

Councilor Danberg motioned to approve which passed 5-0 with Councilor Kelley and Norton not voting.

#218-23 Request for temporary construction easements

HER HONOR THE MAYOR requesting the approval of the taking of temporary construction easements for the Commonwealth Avenue Carriageway construction project in Auburndale.

Action: **Public Facilities Approved Subject to Second Call 4-0-1 (Councilor Norton and Kelley not voting and Councilor Gentile abstaining)**

Note: Lou Taverna, City Engineer and Andrew Lee, Assistant City Solicitor joined the Committee to discuss the request to approve the taking of temporary construction easements for the Commonwealth Avenue Carriageway construction project in Auburndale. Mr. Taverna explained that this is the City's project from the Marriot Hotel to Higgins Avenue which is connected to the MassDOT bridge/intersection project. MassDOT requires that the City takes these easements for 3 years. The easements need to be in place before construction begins. There are approximately 18 properties effected by this and the easements are approximately 1 to 2 feet wide. It was noted that the abutters have all been notified of the taking of the easements and tonight's meeting.

Mr. Taverna explained that this project is time sensitivity because the project cannot start without these easements and this is holding it from going out to bid.

Councilors asked the following questions:

Q: Why was this not discussed when the Commonwealth Carriageway project was first brought to the City Council?

A: It was noted that this is a question for the Planning Department.

Q: Are the abutters compensated for the easement?

A: Atty. Lee explained it is a federal requirement that the abutters are offered compensation based on the City's appraisal. He noted that to his knowledge the City has not done a federal project that requires takings.

Q: Who conducted the appraisals?

A: Mr. Taverna explained that the appraisals were done by NA Appraisers who were a sub consultant to Howard Stein Hudson, who is working on the MassDOT project.

Q: What will these easements be used for?

A: Mr. Taverna explained that the contractor will need to occupy these slivers of land to be able to construct the sidewalks.

Q: Have there been other projects that the City has taken federal funding that would have required Newton to do this?

A: Atty. Lee explained in the early 2010s there was a project like this but it only involved city property, so easements were not necessary.

Councilors made the following comments:

A councilor noted that he would like to have more information on how much the appraisals costs and what the payments would be to each homeowner. Mr. Taverna explained that it would be approximately \$229,000 for all 18 properties. It was also noted that the City does not usually compensate abutters when work is happening in front of their property. It was also requested that the Council receives an up-to-date timeline on when the project will begin.

After the conclusion of the meeting Atty. Lee explained that the appraisal cost \$39,500 and the easement plan costs \$14,500.

Additionally, after the conclusion of the meeting the Chief Operating Officer explained that the appraisal was paid through the City's operating budget and the compensation for the abutters will be paid through ARPA funds.

Councilors discussed approving this item subject to second call, so that all outstanding questions can be answered.

Councilor Crossley motioned to approve subject to second call which passed 4-0-1 with Councilors Kelley and Norton not voting and Councilor Gentile abstaining.

#180-23 Discussion regarding the Stormwater Ordinance

COUNCILORS NORTON, LEARY, AND LAREDO requesting a discussion regarding the new stormwater ordinance and how the provisions are being enforced which were not finalized when the City Council approved the law, rather the Public Facilities Committee requested that the City Engineer come back to the Committee in a year and provide details on how the new ordinance would be enforced.

Action: Public Facilities Held 6-0 (Councilor Kelley not voting)

Note: Lou Taverna, City Engineer and Eric Highers, Environmental Engineer joined the Committee to discuss an update on the implementation of the Stormwater Ordinance. Mr. Taverna explained that the purpose of ordinance was to comply with Newton's NEPDES MS4 permits, establish stormwater rules and regulations, support phosphorous load reduction targets, maintain safety, codifying an existence policy and ensure that new/existing development

control and treat stormwater runoff before it leaves private property. This stormwater ordinance created a permit process that does have a fee based on the type of project.

This was implemented at the end of June 2022. There have been 96 major permits issued for a revenue of \$2,800. There have been 22 minor permits issued for a revenue of \$2,200. The goal for 2023 is to work on a phosphorus reduction plan as a part of the NEPES permit. There are several projects in the CIP that will involve phosphorus reduction. In the last year they have completed the library parking lot, Crafts/ Walnut intersection project and the Pearl Street parking lot will be worked on this summer. It was also noted that they will be meeting with the Stormwater Working Group.

Councilors asked the following questions:

Q: What are the challenges with meeting the targets?

A: Mr. Taverna explained that they are working on their own schedule because the current timelines are a challenge. This is a challenge that many communities are working on in the state.

Q: Are there any federal funds available to help with the reduction costs?

A: Mr. Taverna explained that there are grants that the consulting engineers are pursuing. These are competitive grants.

Q: How is the ordinance being enforced?

A: Mr. Taverna explained that with each permit they are required to submit an operation and maintenance plan. The owner should be updating these records to close out their stormwater process with the City. The City does remind the owner or developer that these records need to be submitted. It will be more structured as this permit moves forwards.

Q: A councilor asked for an update on the City Hall Pond sediment removal project?

A: Mr. Taverna explained that they are going out to bid for that project but it is extremely expensive. He noted that these ponds are meant to collect sediment that goes into the catch basin before it goes into Bullough's Pond. The sediment needs to be removed every 10 years.

Councilors made the following comments:

Councilors requested a copy of the annual report for phosphorus control that is due on September 30th.

Councilor Norton motioned to hold which passed 6-0 with Councilor Kelley not voting.

Referred to Zoning & Planning and Public Facilities Committees

#48-22

Requesting an update on the status of implementing the Climate Action Plan

PUBLIC FACILITIES and ZONING & PLANNING COMMITTEES requesting an update from the Sustainability Team and appropriate staff on the status of implementing Climate Action Plan measures, expanding municipal energy efficiency and renewable energy programs as follows:

Newton Power Choice participation rates, municipal power purchasing contracts for gas and electricity; Solar Power Purchase Agreement including operational and PV installations under construction, municipal energy consumption (DOER report) Green Communities grant funded efficiency projects to date, Energy Coach/ "4 our Future" program and zoning ordinances both to increase building energy efficiency/renewables in the private sector and foster sustainable development patterns. (formerly #324-21)

Zoning & Planning Held 6-0 (Councilor Albright not voting) on 10/11/22

Action:

Public Facilities Held 6-0 (Councilor Kelley not voting)

Note: Bill Ferguson, Co-director of Sustainability joined the committee to give an update on municipal clean energy, energy efficiency and solar projects. Mr. Ferguson provided the attached presentation. The presentation went through the electricity use and natural gas use at a number of different city properties, along with the solar projects.

Councilors asked the following questions:

Q: Is the electricity use costing the city more or less money than fossil fuels would?

A: Mr. Ferguson explained energy costs have changed over the past few years but using the numbers from 2 years ago it costs slightly less with the electricity than to remain with fossil fuels.

Q: How many total electric vehicle chargers are there in Newton?

A: Mr. Ferguson explained that he has seen 19 installed within the projects he has done. The Planning Department has also been apart of installing 6 chargers.

Q: When is the start date for the Pleasant Street Solar project?

A: Mr. Ferguson explained that there are at the beginning of this project with Ameresco. They believe they will be able to start construction in the next calendar year.

Q: Regarding the EV chargers, is there data on how much gas the city is using for municipal vehicles and the cost?

A: Mr. Ferguson explained that he will try to look into making this into some type of report.

Q: Why is there an increase in electricity use at the Albemarle Library?

A: Mr. Ferguson explained that is because they have removed fossil fuels from this property and are now using heat pumps.

Q: What is the new system for the Newton Free Library?

A: Mr. Ferguson explained that he believes it is a reverse chiller but he is meeting with the consultant to further review the project.

Q: Is there a timeframe for when the Phase 3 solar projects will be up and running?

A: Ameresco has explained that they will start construction next year and once this begins the construction does not take a much time. There is also still a supply-chain issue and connecting the solar panels to electricity.

Councilors thanked Mr. Ferguson for this work.

Councilor motioned to hold which passed 6-0 with Councilor Kelley not voting.

The Committee Adjourned at 10:00 pm.

Respectfully Submitted,

Alison Leary, Chair



217-23

CITY OF NEWTONIN CITY COUNCIL

, 2023

ORDER OF TAKING**TEMPORARY EASEMENTS FOR CONSTRUCTION PURPOSES**

WHEREAS, in the opinion of the City Council of the City of Newton, the public necessity and convenience require that the City of Newton acquire temporary easements forthwith for the purposes of performing the work necessary to rehabilitate and reconstruct Commonwealth Avenue and the Carriage Way, it is therefore,

ORDERED: that Temporary Easements be and are hereby taken over through and under, including the rights of ingress and egress, the areas shown as Parcels TE-1, TE-2, TE-3, TE-4, TE-25, TE-6, TE-24, TE-23, TE-8, TE-9, TE-11, TE-12, TE-13, TE-16, TE-17, TE-19, TE-22 (collectively the "Temporary Easement Area"), on a plan of land titled "Easement Plan, Commonwealth Avenue, Newton, Mass, Middlesex County (Middlesex County Registry), Showing Location of Temporary Easements" dated April 7, 2023 and recorded with the Middlesex South Registry of Deeds herewith.

The above described Temporary Easements are taken and to be used for the purpose of allowing the City and its authorized agents, servants, employees and contractors to enter upon the Temporary Easement Area in connection with the reconstruction and rehabilitation of Commonwealth Avenue and the Carriage Way for the purpose of locating, constructing, installing, placing and inspecting improvements thereof, including but not limited to the operation and storage of equipment, and otherwise performing construction work related to the reconstruction and rehabilitation of Commonwealth Avenue and the Carriage Way.

The term of the Temporary Easements shall commence upon the date this Order is recorded with the Middlesex South Registry of Deeds and shall expire upon the earlier of the completion of the City of Newton's reconstruction and rehabilitation project for Commonwealth Avenue and the Carriage Way or three years from the date of recording of this Order. Upon the expiration of these Temporary Easements, all rights of the City under this Temporary Easement shall terminate. The City shall leave the Temporary Easement Area in substantially the same condition that it was at the commencement of these Temporary Easements.

The following are the names of the owners and mortgagees of parcels over which an easement is taken for the purposes described hereinabove so far as known to the Council.

The references to the parcels are as they appear in the records of the Middlesex South District Registry of Deeds.

<u>OWNER/PROPERTY ADDRESS</u>	<u>TITLE REFERENCE</u>	<u>APPROXIMATE EASEMENT AREA</u>	<u>AWARD</u>
CHSP NEWTON LLC 2135 Commonwealth Avenue	Book 55107, Page 408	Parcel TE-1 1,225 sq/ft	\$8,700
The Twenty Three Hundred Trust	Book 12908, Page 562	Parcel TE-2 1,129 sq/ft	\$8,300
Chatham Properties, LLC	Book 30600, Page 5	Parcel TE-3 1,156 sq/ft	\$11,000
Maureen A. Codyer and Paul M. Codyer	Book 54641, Page 429	Parcel TE-4 1,024 sq/ft	\$37,300
Douglas Harrison and Allison Page	Book 77379, Page 166	Parcel TE-25 197 sq/ft	5,400
Mortgagee: Mortgage Electronic Registration Systems, Inc., nominee of Quicken Loans, LLC	Book 77379, Page 172		
Chatham Village Condominium	Book 13819, Page 49	Parcel TE-6 563 sq/ft Parcel TE-24 294 sq/ft	\$3,600
Whynot Properties Trust	Book 12982, Page 158	Parcel TE-23 342 sq/ft	\$14,100
Mortgagees: The Federal Savings Bank	Book 27449, Page 463		
Newton South Cooperative Bank	Book 33718, Page 228 Book 34533, Page 514		
Wellesley Cooperative Bank	Book 51970, Page 487		

Peter H. Goddard and Natasha Fadilla-Goddard	Book 47745, Page 71	Parcel TE-8 1,018 sq/ft	\$30,100
Mortgagees: Newrez LLC d/b/a Shellpoint Mortgage Servicing	Book 79359, Page 545		
US Alliance Federal Credit Union	Book 62082, Page 119		
RBS Citizens	Book 64273, Page 183 Book 68247, Page 297		
2234-2236 Commonwealth Avenue Condominium	Book 50177, Page 131	Parcel TE-9 484 sq/ft	\$25,300
Lyons Park Condominium	Book 16787, Page 282	Parcel TE-11 509 sq/ft	\$13,900
Kruszewski Realty Trust	Book 76525, Page 338	Parcel TE-12 477 sq/ft	\$8,400
Mortgagees: Mortgage Electronic Registration Systems, Inc., nominee of Finance of America Reverse, LLC	Book 75652, Page 412		
USA Housing and Urban Development	Book 75652, Page 412 Book 75652, Page 430		
2202 Commonwealth Avenue, LLC	Book 80918, Page 376	Parcel TE-13 718 sq/ft	\$11,000
Mortgagee: Bluestone Bank	Book 80918, Page 381		
Roman Catholic Archdiocese of Boston	Book 4512, Page 561 Book 5751, Page 449 Book 6498, Page 205	Parcel TE-16 823 sq/ft	\$14,000

2158-2160 Commonwealth Avenue Condominium	Book 66978, Page 416 Book 67076, Page 352	Parcel TE-17 670 sq/ft	\$23,200
---	--	---------------------------	----------

Nicholas Ventouris and Angelina Ventouris	Book 66628, Page 562	Parcel TE-19 142 sq/ft	\$1,400
--	----------------------	---------------------------	---------

Mortgagees:

Brookline Bank	Book 73412, Page 122
----------------	----------------------

Mortgage Electronic Registration Systems, Inc., nominee of Bluestone Bank	Book 77358, Page 131
--	----------------------

Bruce Kwong and Helen Chan Kwong	Book 35319, Page 363	Parcel TE-22 649 sq/ft	\$13,900
-------------------------------------	----------------------	---------------------------	----------

Mortgagees:

First Federal Bank	Book 61699, Page 140
--------------------	----------------------

Direct Federal Credit Union	Book 63763, Page 165
-----------------------------	----------------------

The monetary damages which are awarded to the respective owners of the parcels on which the Temporary Easements have been taken for the purposes described herein are set forth above.

There shall be no betterment assessments to the abutters.

The trees upon and the structures affixed to said parcels are not taken.

City of Newton Municipal Energy Report

FY 22/23

Prepared Feb. 2023

Rev. June 15, 2023

Criterion 3 - TABLE 2 PROGRESS

Table 2 Instructions:

- 1) If you haven't already, enter your communities name on the **General Instructions** tab. If you have already entered your communities name on the **General Instructions** tab and your Baseline year hasn't updated then please manually enter your community's baseline year (including whether it's a **Fiscal Year or Calendar Year**)
- 2) Enter total MMBtus per category (Rows 10-15) for the baseline year and the current reporting year. In **MassEnergyInsight**, this information is available in the top table on "Annual Report Table 2" report
- 3) If this is your community's first Annual Report, enter the energy consumption for past years as needed
- 4) If your community did not submit an Annual Report last year, enter energy data for 2020 and 2021
- 5) If your baseline includes a proportion of energy consumed by a regional school district, provide the pro-rated energy use in Row 18 for non weather-normalized use and Row 22 for weather-normalized use. Attach a worksheet (add a tab to this workbook) listing the buildings, their total energy use, and calculations on how you arrived at their prorated use
- 6) If your community needs to pro-rate energy use due to building stock changes, use the calculator provided on the tab to the left and enter the resulting numbers in Row 17 for non weather-normalized data, and in Row 21 for weather-normalized data.

Weather Normalized Data Instructions

DOER is requiring Green Communities to assess their progress using weather-normalized data through a DOER-approved weather normalization methodology. Qualifying methods include use of **MassEnergyInsight** or **Energy Star Portfolio Manager**. Enter **weather-normalized Grand Total energy consumption in Row 20 on this tab**. In **MassEnergyInsight**, this information is available within the bottom report of the "Annual Report Table 2" report page.

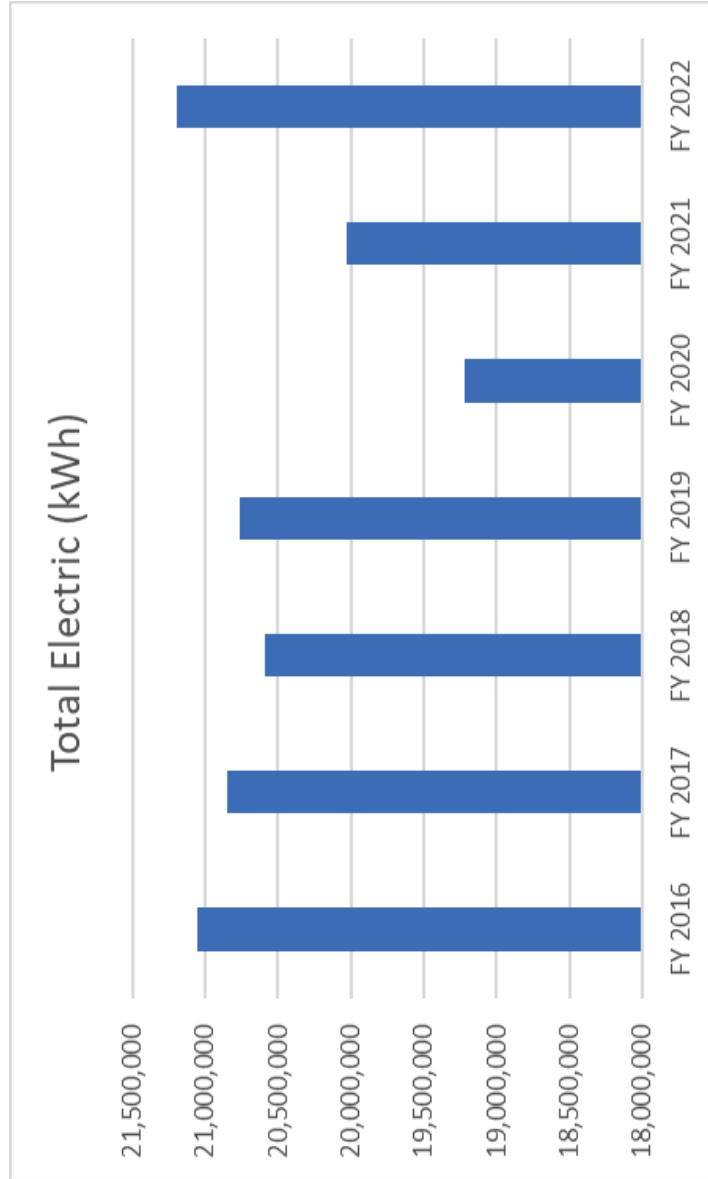
Please contact your Regional Coordinator for assistance if you use a different energy-tracking tool.

Does the Community use Calendar Year (CY) or Fiscal Year (FY)?

FY

Table 2: Timeline of Annual Municipal Energy Use

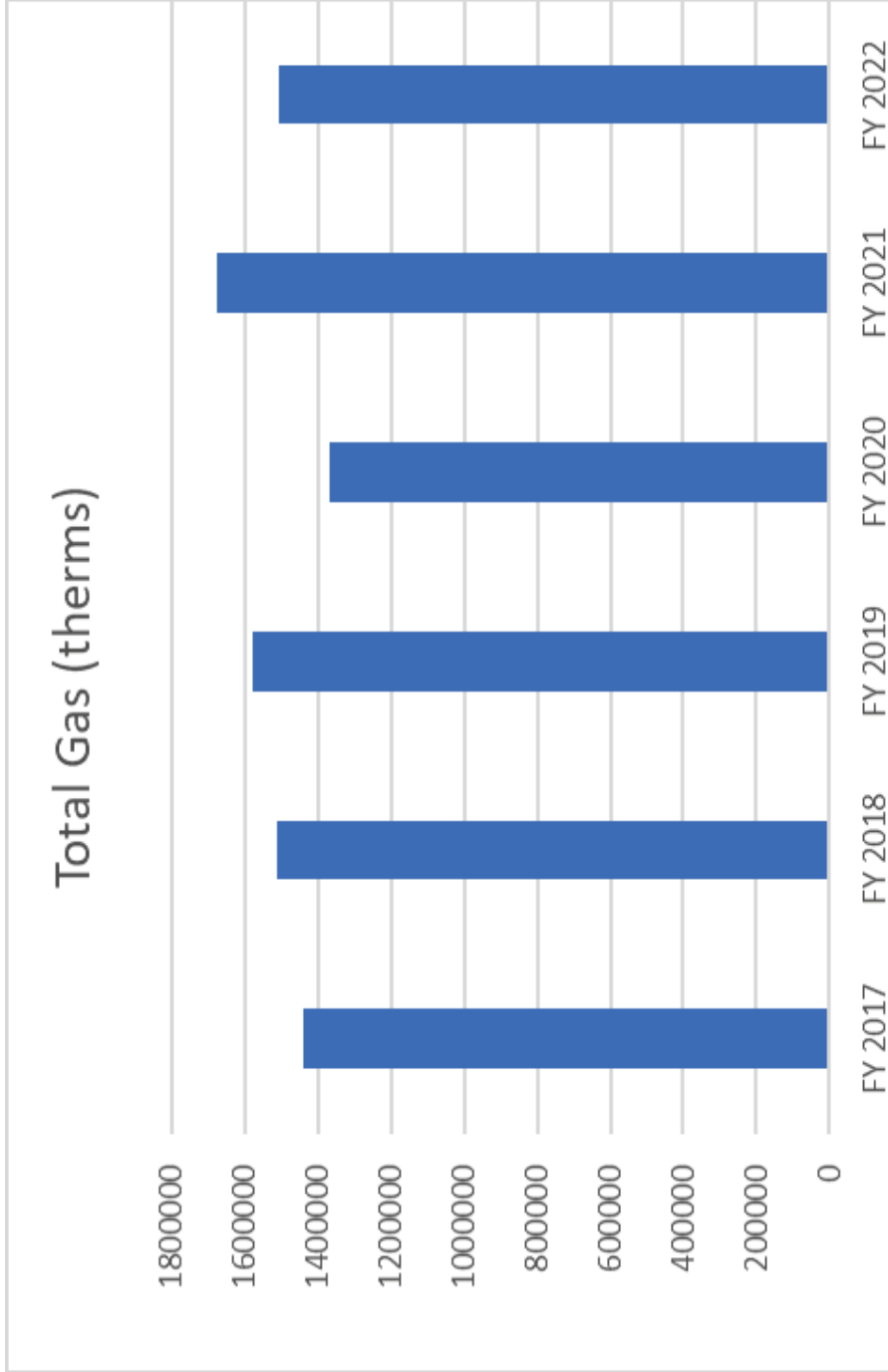
Category	Baseline				MMBtu	MMBtu	MMBtu	MMBtu	For Most Recent Year: Change vs. Baseline (%)
	2008	2020	2021	2022					
Null									Enter baseline year consumption in column D
Buildings	245,870			217,906					-11.4%
Open Space	547			597					9.1%
Street & Traffic Lights	15,192			5,046					-66.8%
Vehicles	34,753			33,862					-2.6%
Water/Sewer	3,469			3,658					5.4%
Adjustments									
<i>Building Stock Change [see previous tab]</i>				(6,567)					
<i>Regional School [see Crit 3 - Overview tab for information Regional School %]</i>									
TOTAL ENERGY CONSUMPTION (No Weather Normalization)	299,831			254,502					-15.1%
Weather Normalized Consumption [see instructions above]	303,211			271,329					-10.5%
Adjustments									
<i>Building Stock Change (weather normalized)</i>				(6,731)					
<i>Regional School (weather normalized)</i>									
TOTAL ENERGY CONSUMPTION (Weather Normalized)	303,211			264,598					-12.7%



	FY 2016	FY 2017	FY 2018	FY 2019	FY 2020	FY 2021	FY 2022
Total Electric (kWh)	21,056,000	20,848,146	20,584,315	20,766,353	19,220,291	20,031,152	21,192,123

Electricity-Change in kWh use

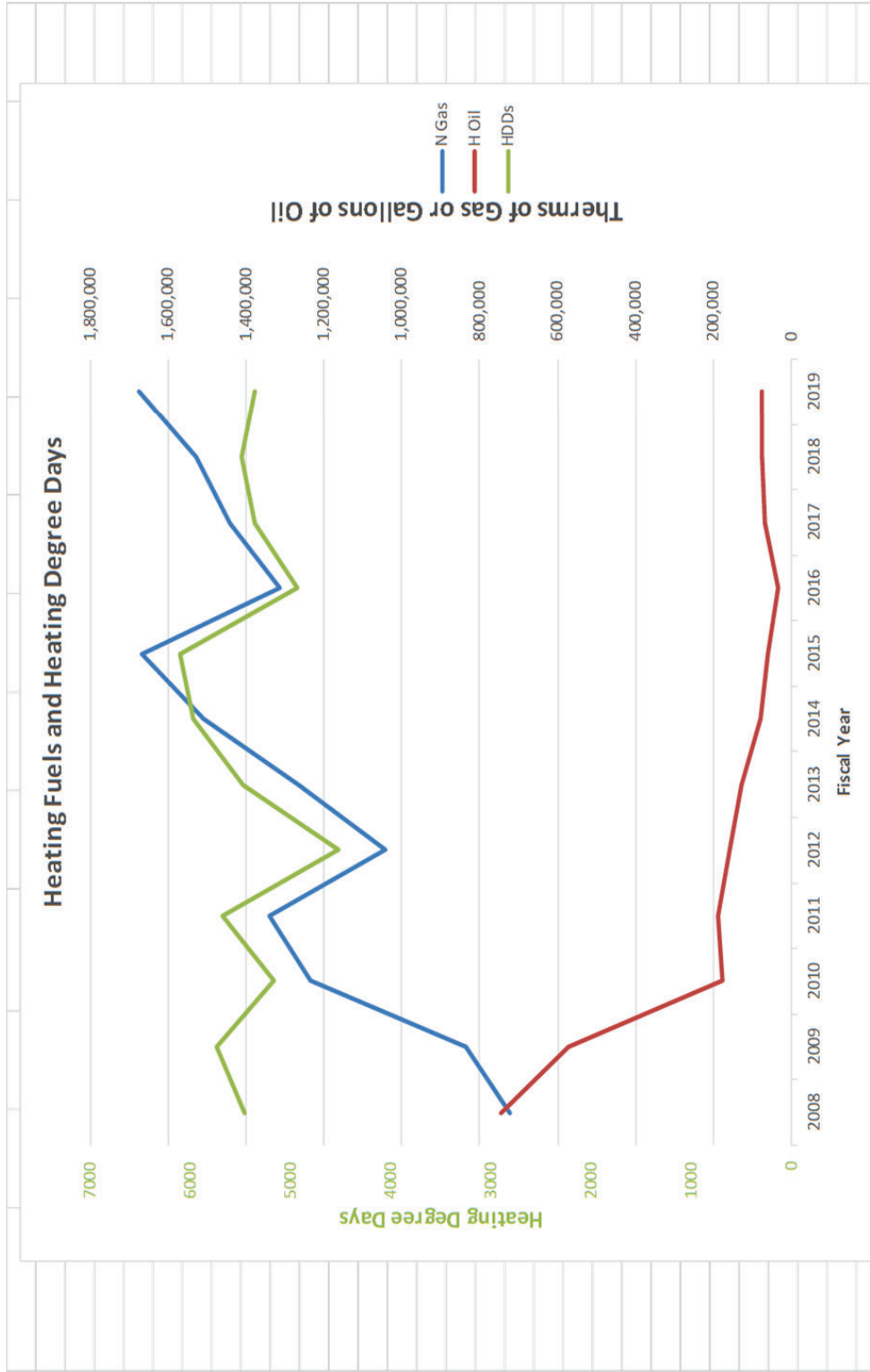
	FY 2019	FY 2022	kWh change	% Change
Main Library	856,360	1,169,889	313,529	37%
Horace Mann (formerly Newton Cultural Ctr/Carr School)	282,240	431,600	149,360	53%
Oak Hill MS	620,228	759,716	139,488	22%
Newton Education Center	746,029	860,414	114,385	15%
Countryside ES	203,786	281,022	77,236	38%
Angier Elementary School (NEW)	474,312	550,008	75,696	16%
Police Department Headquarters	383,628	430,956	47,328	12%
EV Charging Stations	13,594	55,112	41,518	305%
Auburndale Library	7,047	41,759	34,712	493%
Franklin ES	215,836	246,235	30,399	14%
Bowen ES	212,760	240,360	27,600	13%
Underwood ES	135,301	162,176	26,875	20%
C C Burr ES	158,848	185,531	26,683	17%
FD #3 and HQ New	476,400	502,685	26,285	6%
Lincoln Elliot (formerly Aquinas School)	248,400	273,240	24,840	10%
Mason-Rice ES	232,440	255,600	23,160	10%
Peirce ES	128,040	149,560	21,520	17%
90 Crafts St	64,508	85,520	21,012	33%
Newton City Hall	606,400	594,000	(12,400)	-2%
Police Headquarters Garage	57,710	43,392	(14,318)	-25%
110 Crafts St- Garage/Stable	176,520	159,480	(17,040)	-10%
Newton Senior Center	111,360	84,520	(26,840)	-24%
Bigelow MS	400,800	351,600	(49,200)	-12%
74 Elliot Street - Operations Center (Water/Utilities)	122,480	67,240	(55,240)	-45%
F A Day MS	1,210,228	1,067,794	(142,434)	-12%
Newton North HS (2010)	3,907,887	3,540,695	(367,192)	-9%
Newton South HS	2,947,714	2,436,101	(511,613)	-17%



	FY 2017	FY 2018	FY 2019	FY 2020	FY 2021	FY 2022
Gas (therms)	1442381	1513016	1579870	1368288	1677089	1504288

Natural Gas -Change in therm use

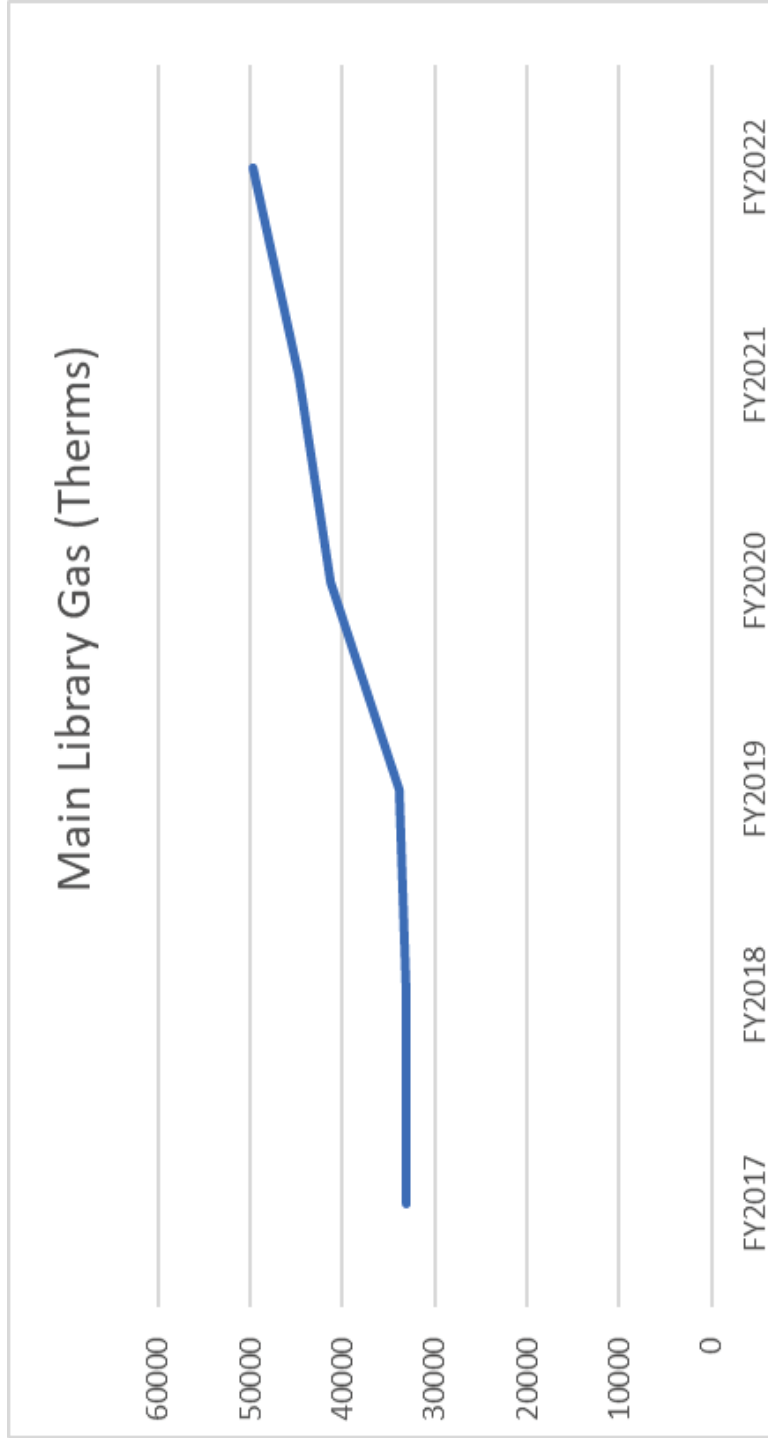
Facility	Fuel (units)	FY 2019		FY 2022		Change	
		Use	Use	Use	therms	therms	%
Bowen ES	Gas (therms)	46,981	70,656	23675	50%		
Main Library	Gas (therms)	33,883	49,718	15835	47%		
Oak Hill MS	Gas (therms)	41,900	50,396	8496	20%		
Mason-Rice ES	Gas (therms)	26,323	33,986	7663	29%		
Franklin ES	Gas (therms)	57,609	64,530	6921	12%		
John Ward ES	Gas (therms)	45,626	52,253	6627	15%		
C C Burr ES	Gas (therms)	17,097	21,471	4374	26%		
Angier Elementray School (NEW)	Gas (therms)	25,082	20,485	-4597	-18%		
Countryside ES	Gas (therms)	45,647	39,930	-5717	-13%		
Zervas New School	Gas (therms)	20,370	13,582	-6788	-33%		
Memorial Spaulding ES	Gas (therms)	61,245	52,398	-8847	-14%		
Newton South HS	Gas (therms)	178,840	164,090	-14750	-8%		
Bigelow MS	Gas (therms)	55,407	40,513	-14894	-27%		
Charles E Brown MS	Gas (therms)	152,552	125,302	-27250	-18%		
Newton North HS (2010)	Gas (therms)	179,368	141,908	-37460	-21%		
New Cabot School	Gas (therms)	61,618	23,852	-37766	-61%		



FY	2008	2009	2010	2011	2012	2013	2014	2015	2016	2017	2018	2019
N Gas (Therms)	723,203	836,899	1,232,457	1,341,240	1,040,524	1,263,525	1,507,969	1,667,039	1,312,175	1,442,381	1,526,114	1,676,224
Htg Oil (gals)	744,052	571,139	176,201	189,119	159,659	128,924	78,218	60,337	32,546	67,230	75,043	76,621
HDDs	5465	5743	5171	5683	4526	5476	5966	6107	4925	5359	5493	5354



FY17	FY18	FY19	FY20	FY21	FY22
876,320	839,940	856,360	1,024,840	1,285,300	1,169,889



	FY2017	FY2018	FY2019	FY2020	FY2021	FY2022
Gas (therms)	33,020	33,019	33,883	41,396	44,831	49,718

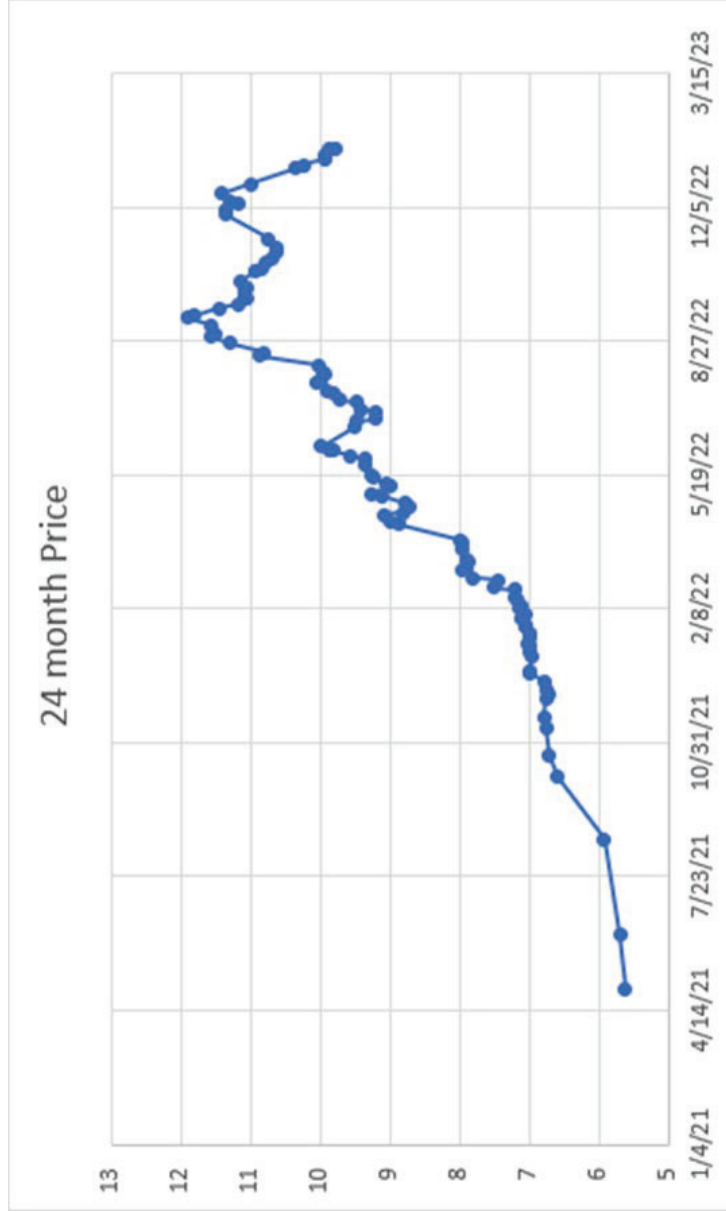
Electricity Contract-Cost Savings Compared to Eversource Basic Service						
		use in kWh	Eversource Supply rate \$/kWh	Newton supply rate\$/kWh	Savings per kWh	Savings \$
Small Bus. B2	July-Dec. 2022	4,333,138	\$ 0.18	\$ 0.09	\$ 0.09	\$ 368,750
	Jan.-June 2023	5,350,000	\$ 0.26	\$ 0.09	\$ 0.17	\$ 899,335
Large Bus. B7	July-Sept. 2022	2,562,682	\$ 0.22	\$ 0.09	\$ 0.13	\$ 323,154
	Oct.-Dec. 2022	2,379,681	\$ 0.31	\$ 0.09	\$ 0.21	\$ 507,110
	Jan.-March 2023	2,617,000	\$ 0.40	\$ 0.09	\$ 0.31	\$ 801,064
	estimated April-June 2023	2,816,824	\$ 0.18	\$ 0.09	\$ 0.09	\$ 239,712
TOTAL SAVINGS						\$ 3,139,125
B7=(NHS,SHS,Library,FA Day, Police HQ,Oak Hill, Angier, Zervas, Cabot)						

Gas Contract - Natural Gas Savings						
Period	NGrid supply rate \$/therm	Newton supply rate \$/therm	Savings \$/therm	use in therms	Savings	
July 1-July 31, 2022	\$ 1.04	\$ 0.53	\$ 0.51	4,054	\$ 2,068	
Aug 1-Aug 31,2022	\$ 0.67	\$ 0.53	\$ 0.14	3,406	\$ 477	
Sept 1 -Oct. 31, 2022	\$ 1.03	\$ 0.53	\$ 0.50	9,995	\$ 4,998	
Nov 1-Nov 30, 2022	\$ 1.04	\$ 0.53	\$ 0.51	74,679	\$ 38,086	
Dec 1,2022-Jan 31, 2023	\$ 0.99	\$ 0.53	\$ 0.46	498,997	\$ 228,042	
Feb 1, 2023-Apr 30, 2023	\$ 0.89	\$ 0.53	\$ 0.36	797,182	\$ 286,986	
May 1,2023-Apr 30, 2023	\$ 0.67	\$ 0.53	\$ 0.14	115,975	\$ 16,237	
				TOTAL SAVINGS	\$ 576,892	

Energy Supply Contracts

- Natural Gas Contract: Mass OSD (Operational Services Division)
Nov. 1, 2019- Oct. 31, 2023 @ \$.539/therm
Extension: Nov. 1, 2023- Oct. 31, 2025 @ \$.98/therm
- Electricity Contract: Energy Broker (Freedom Energy Logistics)
Nov. 1, 2020-Nov. 30, 2024 @ \$.0929/kWh
Jan. 1, 2023- Clean Energy Standard bump to \$.0945/kWh
- RECs Contract: Energy Broker FEL
Jan. 1, 2021-Dec. 31, 2024 @ \$38.50/REC
2,100 RECs cost \$80,850 per year

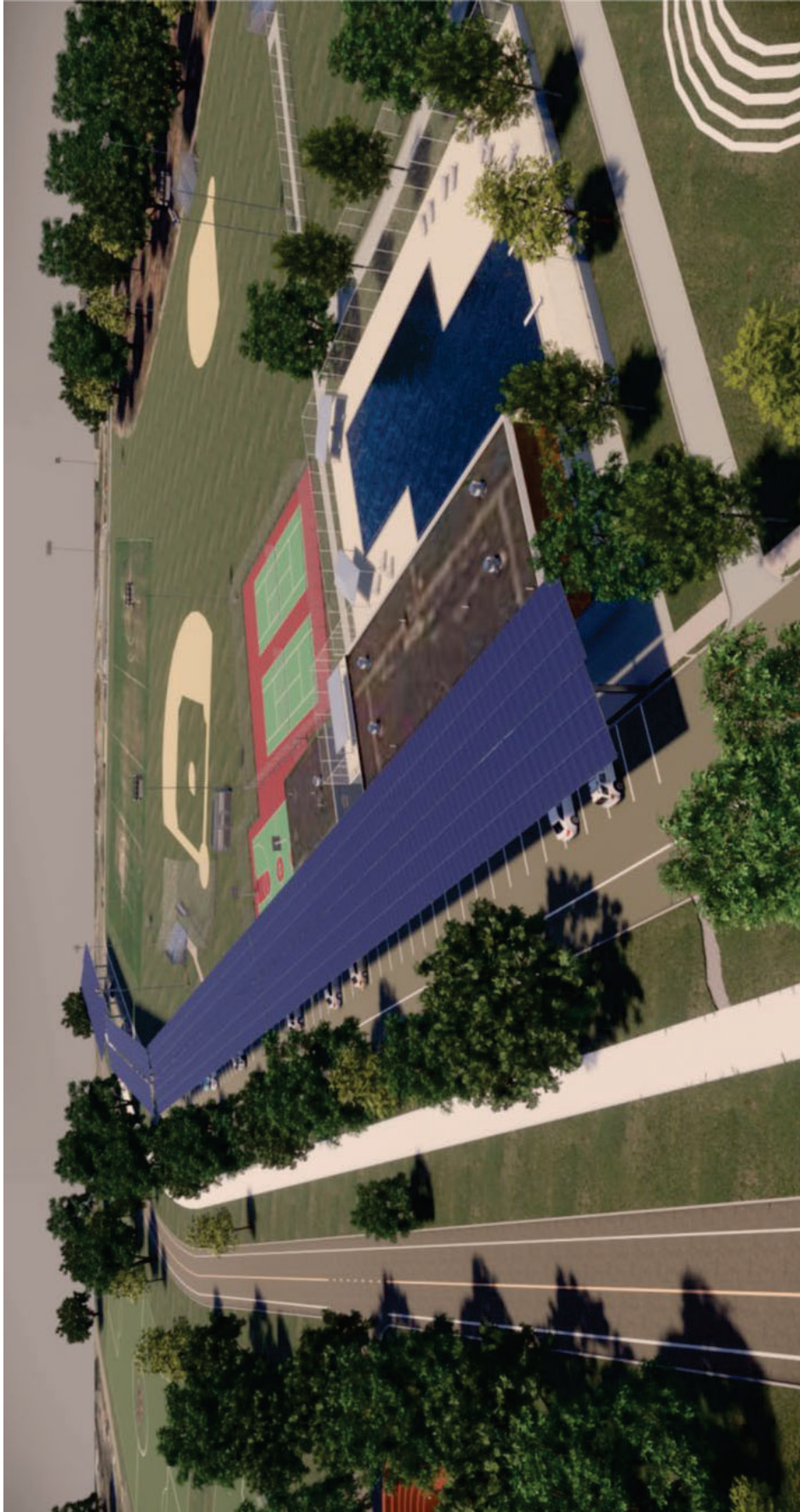
OSD Price Tracking



Solar Project Savings Phases 1 and 2 and 3				rev. 5.31.23
FY 2018	Total NMC	Cost	Net Savings	kWh
Phase 1	\$ 128,403	\$ 68,892	\$ 59,511	622,475
Phase 2	\$ 291,413	\$ 168,455	\$ 122,958	1,097,129
Rumford	\$ 621,819	\$ 249,986	\$ 371,833	2,396,870
FY 2019	Total NMC	Cost	Net Savings	kWh
Phase 1	\$ 160,297	\$ 78,295	\$ 82,002	734,813
Phase 2	\$ 353,129	\$ 185,365	\$ 167,764	1,169,869
Rumford	\$ 713,204	\$ 255,209	\$ 457,995	2,518,530
			\$ 707,761	4,423,212
FY 2020	Total NMC	Cost	Net Savings	kWh
Phase 1	\$ 158,293	\$ 89,316	\$ 68,977	761,117
Phase 2	\$ 343,346	\$ 217,035	\$ 126,311	1,330,357
Rumford	\$ 727,677	\$ 343,725	\$ 383,952	2,843,120
			\$ 579,240	4,934,594
FY 2021	Total NMC	Cost	Net Savings	kWh
Phase 1	\$ 141,917	\$ 75,985	\$ 65,932	729,053
Phase 2	\$ 337,595	\$ 210,356	\$ 127,239	1,285,919
Rumford	\$ 681,699	\$ 336,374	\$ 345,325	2,650,900
Phase 3	\$ 31,614	\$ 31,614	\$ 51,800	395,150
	\$ 1,161,211	\$ 654,329	\$ 538,496	5,061,022
FY 2022-actual	Total NMC	Cost	Net Savings	kWh
Phase 1	\$ 135,910	\$ 86,775	\$ 49,135	731,066
Phase 2	\$ 375,597	\$ 213,945	\$ 161,652	1,273,322
Rumford	\$ 787,758	\$ 341,632	\$ 446,126	2,667,579
Phase 3			\$ 115,493	1,062,742
Total	\$ 1,299,265	\$ 642,352	\$ 772,406	5,734,709
FY 2023-estimated	Total NMC	Cost	Net Savings	kWh
Phase 1	\$ 206,308	\$ 89,378	\$ 116,929	736,813
Phase 2	\$ 419,690	\$ 218,224	\$ 201,466	1,311,530
Rumford	\$ 901,306	\$ 349,964	\$ 551,342	2,650,900
Phase 3		\$ 154,000	\$ 138,000	1,579,017
Total	\$ 1,527,303	\$ 811,566	\$ 1,007,738	6,278,260

Solar Phase 4

- New schools and new roofs:
 - Lincoln Eliot School renovation
 - Bigelow new roof
 - Countryside School
 - Franklin School
- Parking lot Canopies:
 - Revisit Phase 3 canopies at Auburndale Cove and Albermarle

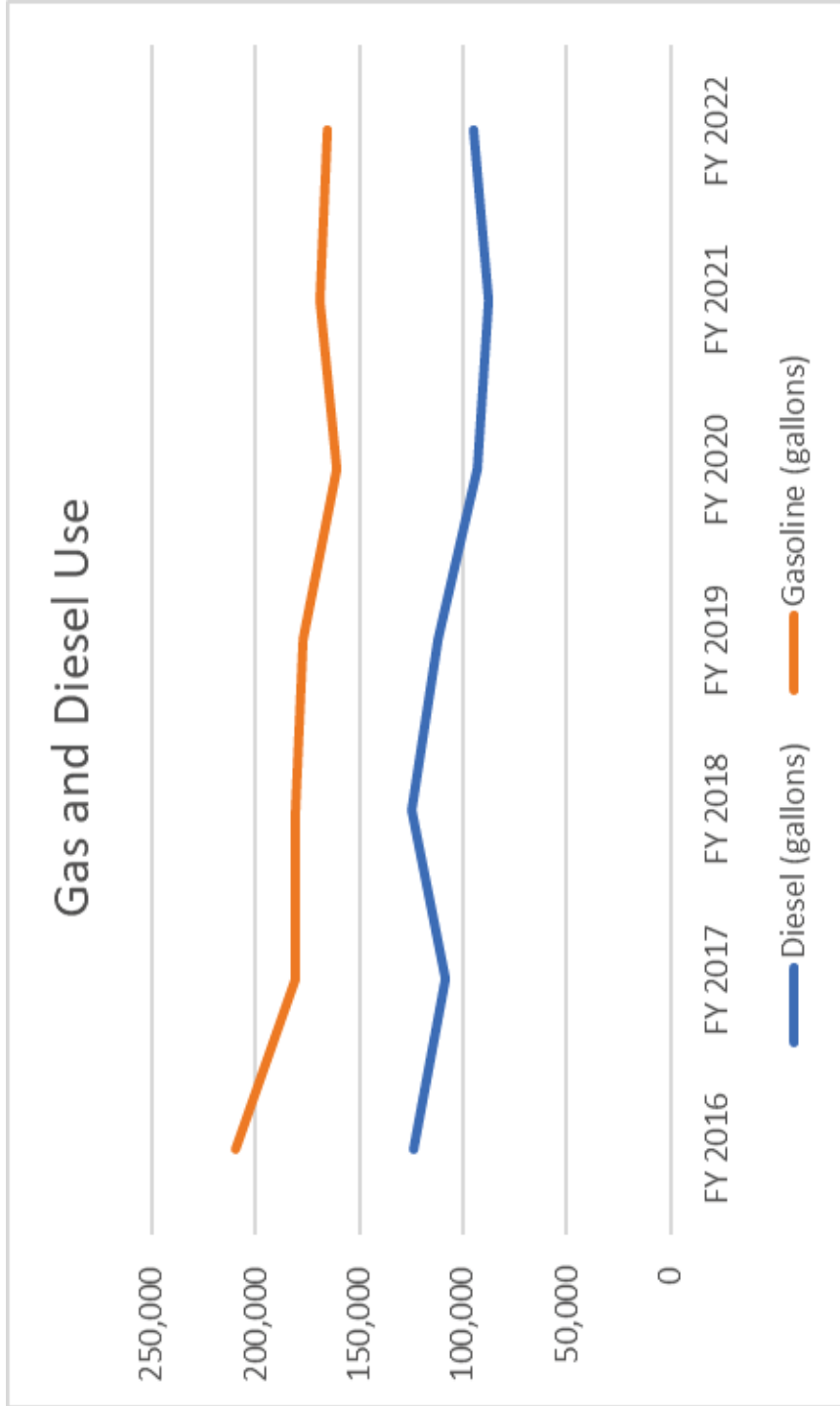




2/27/2023		Request		Request		Request	
2022 Green Communities Grant		City Energy Stabilization Funds		City Energy Stabilization Funds		City Energy Stabilization Funds	
	Total Project Cost	Green Comm. Grant	Utility Rebates	City Funds	City Energy Stabilization Funds	City Energy Stabilization Funds	Annual Cost Savings
South High School LED lighting and controls-Goodwin	\$ 99,232.00	\$ 50,000.00	\$ 27,520.00		\$ 21,712.00	\$ 21,712.00	\$ 12,897.00
Fire Station #1-insulation	\$ 8,090.00	\$ 2,093.00	\$ 1,005.00		\$ 5,000.00	\$ 5,000.00	\$ 838.00
Fire Station #1-weatherstripping	\$ 4,500.00	\$ 1,912.00	\$ 1,011.00		\$ 1,577.00	\$ 1,577.00	\$ 843.00
Fire Station #1- T-stats and control valves	\$ 12,800.00	\$ 6,544.00	\$ 1,256.00		\$ 5,000.00	\$ 5,000.00	\$ 1,046.00
Fire Station #1- Hyper Heat Pumps	\$ 96,550.00	\$ 39,451.00	\$ 17,500.00	\$ 39,599.00		\$ (1,204.00)	
Total	\$ 221,172.00	\$ 100,000.00	\$ 48,292.00		\$ 33,289.00	\$ 33,289.00	\$ 14,420.00

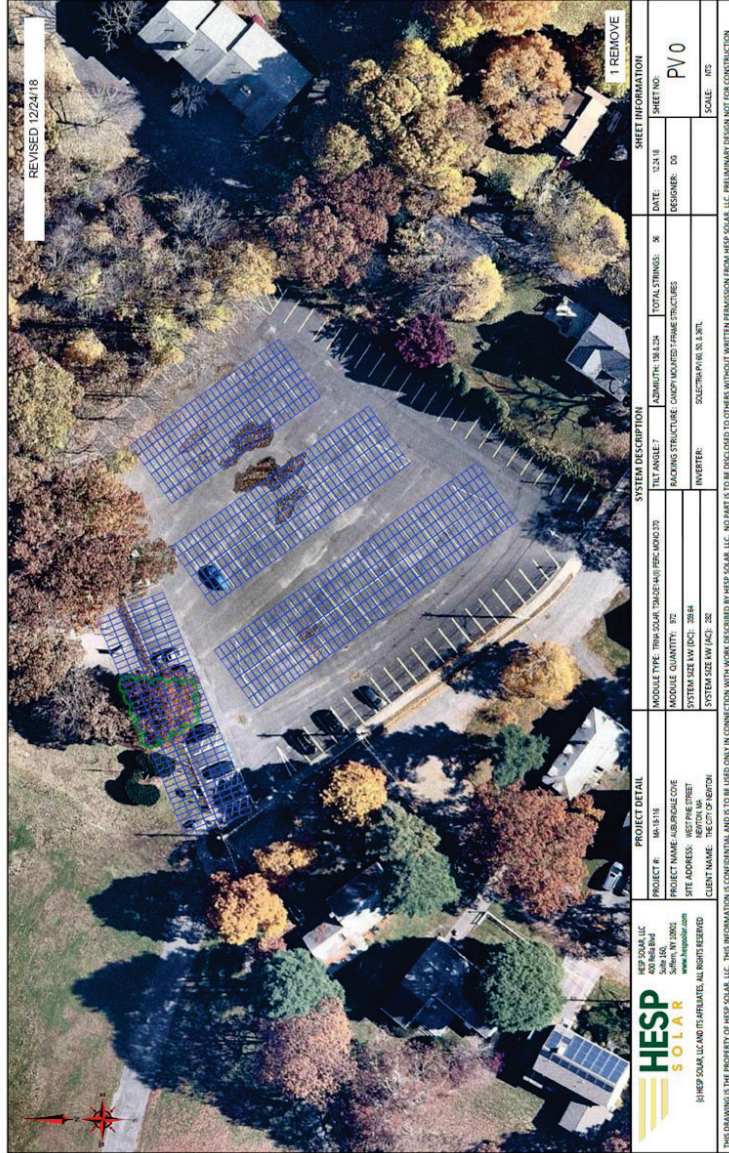
Grants and Rebates

Category	Total to Date	latest
Green Communities Grants since 2010	\$ 1,783,486	\$ 100,000
Utility Rebates to date since 2013	\$ 2,458,466	\$ 48,292
Demand Response payments since 2017	\$ 236,494	\$ 42,017
EV Charger grants since 2018	\$ 49,000	\$ 28,000
Grand Total	\$ 4,527,446	\$ 218,309



	FY 2016	FY 2017	FY 2018	FY 2019	FY 2020	FY 2021	FY 2022
Fuel (units)	Use	Use	Use	Use	Use	Use	Use
Diesel (gallons)	123,698	108,715	125,150	112,345	93,546	87,696	94,702
Gasoline (gallons)	209,277	181,229	180,927	177,057	161,154	168,764	165,404

Auburndale Cove



<p>HESP SOLAR, LLC 401 ADA BLVD SUITE 100 ROSELAND, NJ 07068 www.hespsolar.com</p> <p>© HESP SOLAR, LLC AND ITS AFFILIATES. ALL RIGHTS RESERVED</p> <p>THIS DRAWING IS THE PROPERTY OF HESP SOLAR, LLC. THIS INFORMATION IS CONFIDENTIAL AND IS TO BE USED ONLY IN CONNECTION WITH WORK DESCRIBED BY HESP SOLAR, LLC. NO PART IS TO BE DISCLOSED TO OTHERS WITHOUT WRITTEN PERMISSION FROM HESP SOLAR, LLC. PRELIMINARY DESIGN NOT FOR CONSTRUCTION.</p>	PROJECT DETAIL PROJECT # : 16-01516 PROJECT NAME : AUBURNDALE COVE SITE ADDRESS : ROSELAND, NJ CLIENT NAME : THE CITY OF ROSELAND		SYSTEM DESCRIPTION MODULE TYPE : TRIPOLAR THIN FILM PERKINS 275 MODULE QUANTITY : 292 SYSTEM SIZE (KW DC) : 28.84 SYSTEM SIZE (KW AC) : 28		SHEET INFORMATION DATE : 03/18/16 SHEET NO. : P/0 DESIGNER : DO SCALE : NTS	
	PROJECT DETAIL PROJECT # : 16-01516 PROJECT NAME : AUBURNDALE COVE SITE ADDRESS : ROSELAND, NJ CLIENT NAME : THE CITY OF ROSELAND		SYSTEM DESCRIPTION MODULE TYPE : TRIPOLAR THIN FILM PERKINS 275 MODULE QUANTITY : 292 SYSTEM SIZE (KW DC) : 28.84 SYSTEM SIZE (KW AC) : 28		SHEET INFORMATION DATE : 03/18/16 SHEET NO. : P/0 DESIGNER : DO SCALE : NTS	

