

Quakertown Community School District

Board Facilities Committee Meeting
April 7, 2016 – 6:00 p.m.

MINUTES

Present were Steve Ripper, Chairperson, Bob Smith, Paul Stepanoff, Mitch Anderson, Kelly Harper, Bob Riegel, George Moore, Norm Long, Barry Moore, Roman Hryhorchuk, Tony Carty, Jason Magditch, Kim Pacella, Becky Smith, and Zane Stauffer. Dr. Harner and Joe Kuzo joined the meeting when the Communications Committee meeting finished.

Utility Usage/Cost Analysis –

Kelly Harper

Kelly presented an analysis of energy usage and costs for the senior high school (attached). For electricity purchased from the grid, the composite cost per kBtu over the past 12 months averaged .0424. For electricity generated from the solar installation, the cost per kwh is .1175, or .0344 per kBtu per the PPA Agreement.

Solar Project Options for Phase II –

Barry Moore, Moore Energy

Barry Moore shared an illustration of the solar monitoring homescreen that will be operational at the high school shortly. Moore Energy has identified additional roof surfaces appropriate to include in the second phase of installation, which would expand the total system to 642 kW. A majority of the Facilities Committee directed Bob Riegel to have the solicitor review the draft PPA for Phase II and bring it to the Board for approval at the April 28th Board meeting.

High School Renovation Update –

George Moore, Norm Long

George and Norm presented an update on high school construction (attached) and George presented a number of change orders (attached) and reviewed each one for the committee. The change orders will be placed on the April 28th Board agenda for approval. The Change Orders fall into three categories – additional work required by uncovered existing conditions, work directed by the Fire Marshall, and work required for Owner directed changes. These change orders increase the % of original contact amount from 1.37% to 1.51%. Additional change orders will be presented in May for changes to the Art and Technology Education spaces, and for the renovation of the old boiler room and addition of the Dance Studio. Those change orders should represent the last major changes to the project.

Phase III Furniture Selections –

Joe Kuzo, Tony Carty, Jason Magditch

Joe, Tony, and Jason shared information about the process of selecting furniture for the current high school phase. A committee including them and teachers researched best practices for 21st century space and have selected furniture models that represent a modest and incremental improvement in flexibility and ability to foster a collaborative classroom environment.

Community Facilities Study Committee Update -

Nancianne Edwards, Kim Pacella, Becky Smith

Kim and Becky presented an overview of the committee's work and draft recommendations (attached). Board members asked a number of questions about needs, the concept of parity, and other aspects of the committee's work. The presentation to the full Board will be on Thursday, April 28, 2016.

Review of Capital Maintenance Items for 2016-17 Budget -

Kelly Harper, Nancianne Edwards

Nancianne reviewed a list of priority 1 "Poor" capital projects (attached) that are tentatively intended to be completed in 2016-17, contingent on approval of the final budget containing funding. The tentative list contains \$1.5 million in priority projects, and represents the first installment of a substantial number of capital maintenance and repair needs.

Custodial Contract Options/Next Steps –

Nancianne Edwards

After a brief discussion, the Facilities Committee directed the Administration to put out an RFP for custodial services. Although GCA's performance has risen to an adequate level, the committee determined it was prudent to re-advertise to consider other proposals prior to committing to an extension with GCA. The committee also discussed the desirability of more specific performance incentives in the new agreement with whatever vendor.

There being no further business, the meeting was adjourned.

Analysis of Senior High School Energy Use
Board Facilities Committee
April 7, 2016

Key Information:

All usage has been converted to a standard unit (kBtu).

As expected, natural gas use continues to decline relative to electric as additional high school construction phases are completed.

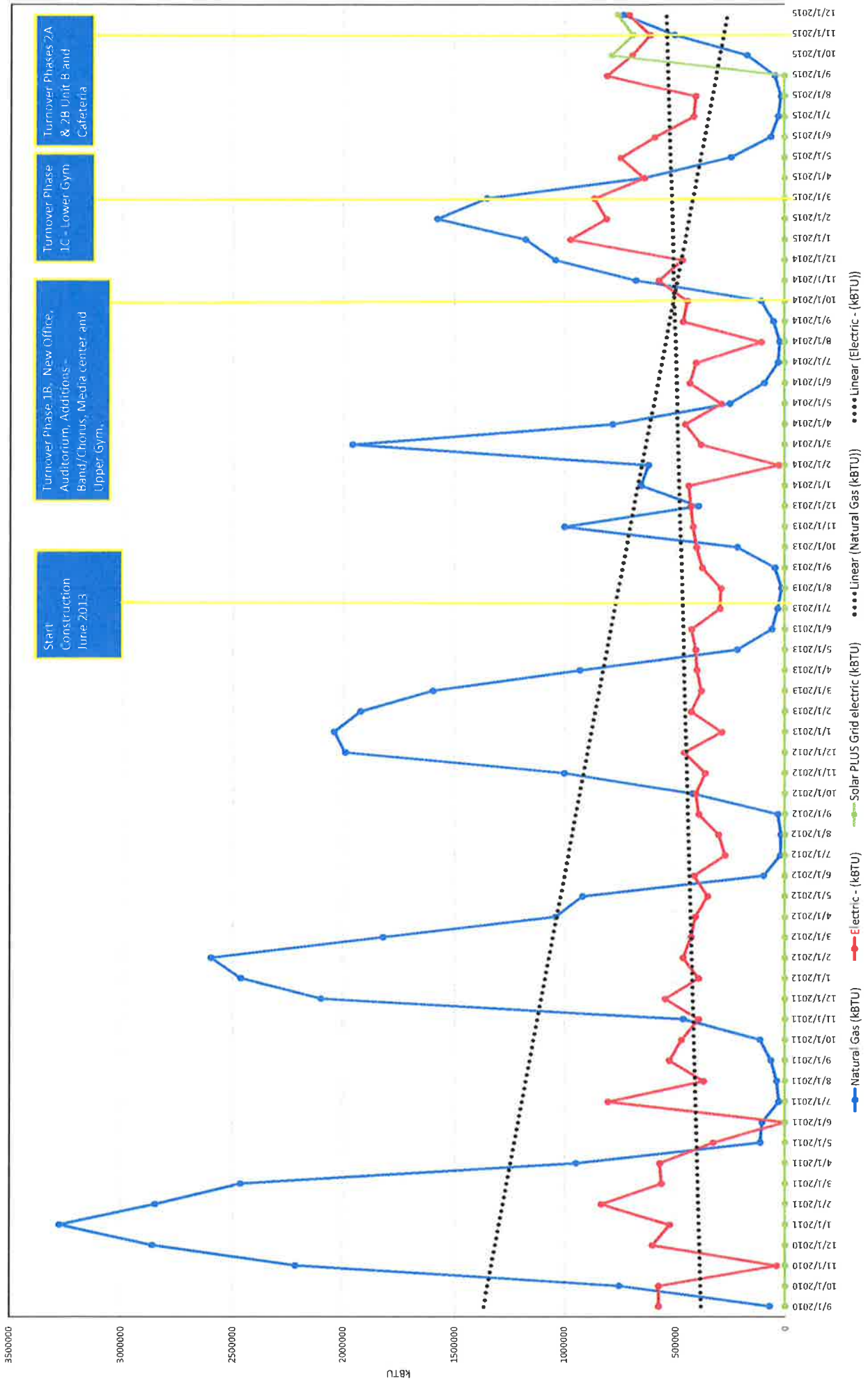
SHS electric use is captured by 8 different meters, each with a different Borough billing tier depending on the specific use.

Cost data for electricity purchased from Quakertown Borough is calculated on the composite rate per unit across all 8 meters.

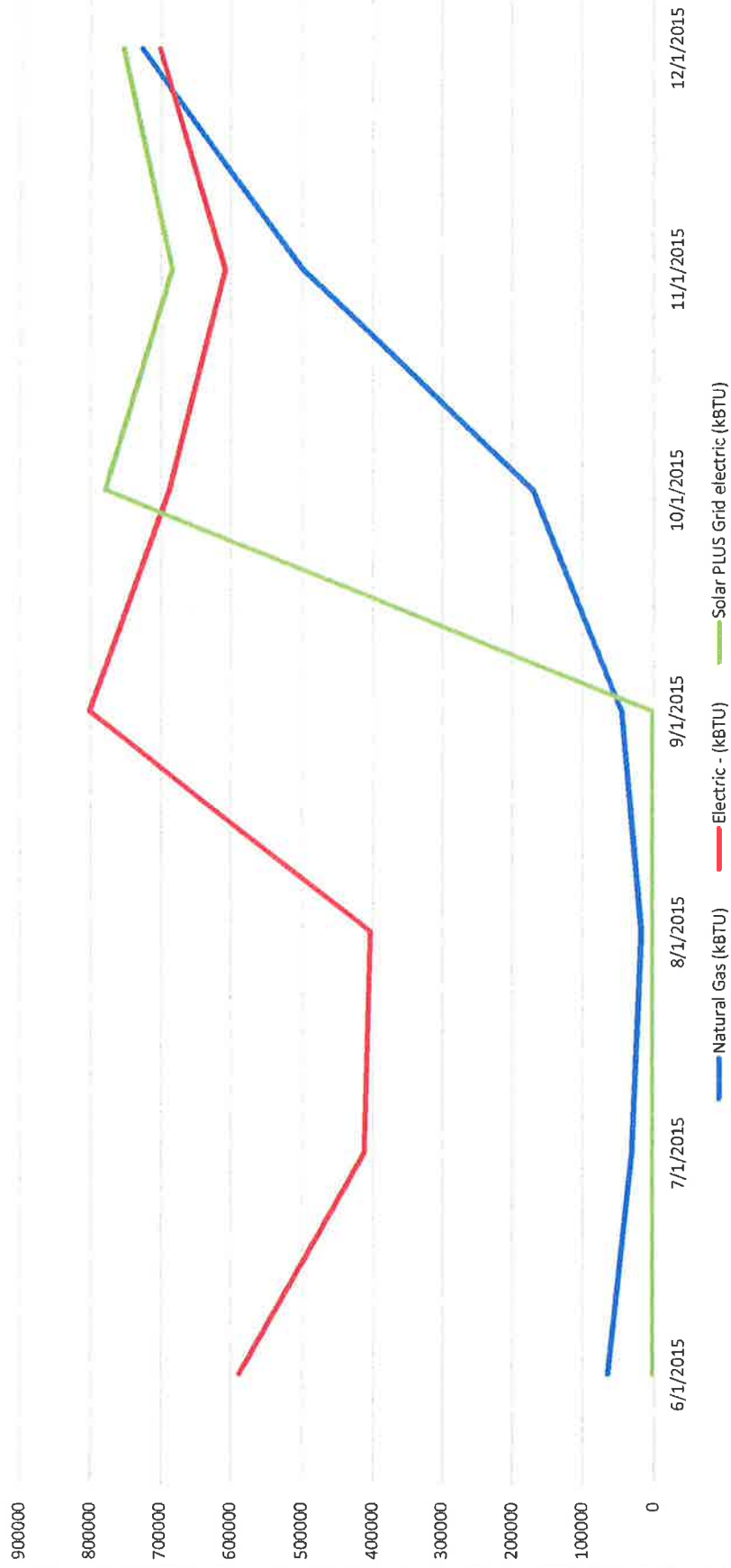
For electricity purchased from the grid (Quakertown Borough) the composite cost per kBtu over the last 12 months has ranged from **.0326** to **.0479**, with an average cost of **.0424** over the past 12 months.

For electricity generated from the solar installation, the cost per kwh is .1175, or **.0344** per kBtu per the PPA Agreement.

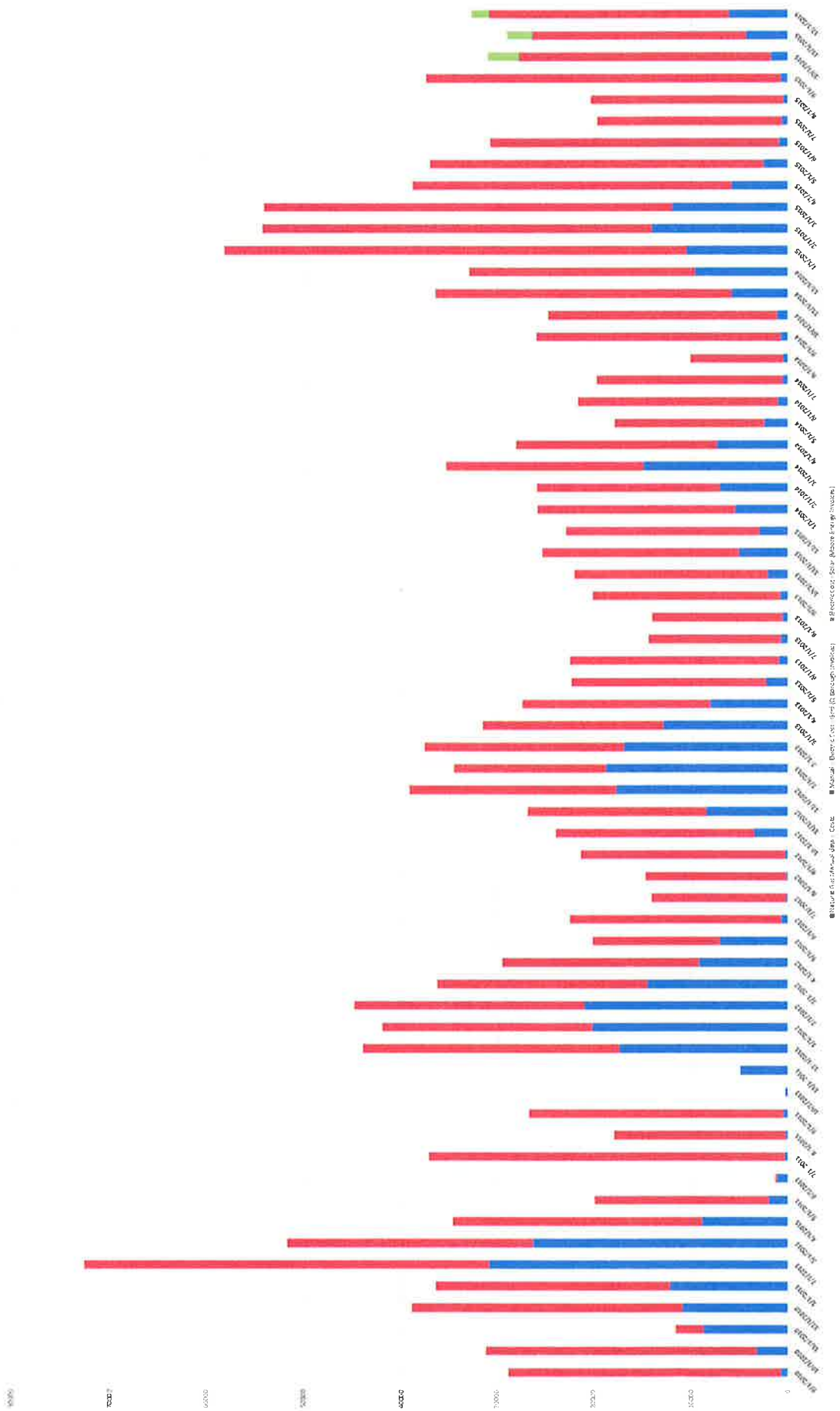
SHS - Energy Usage



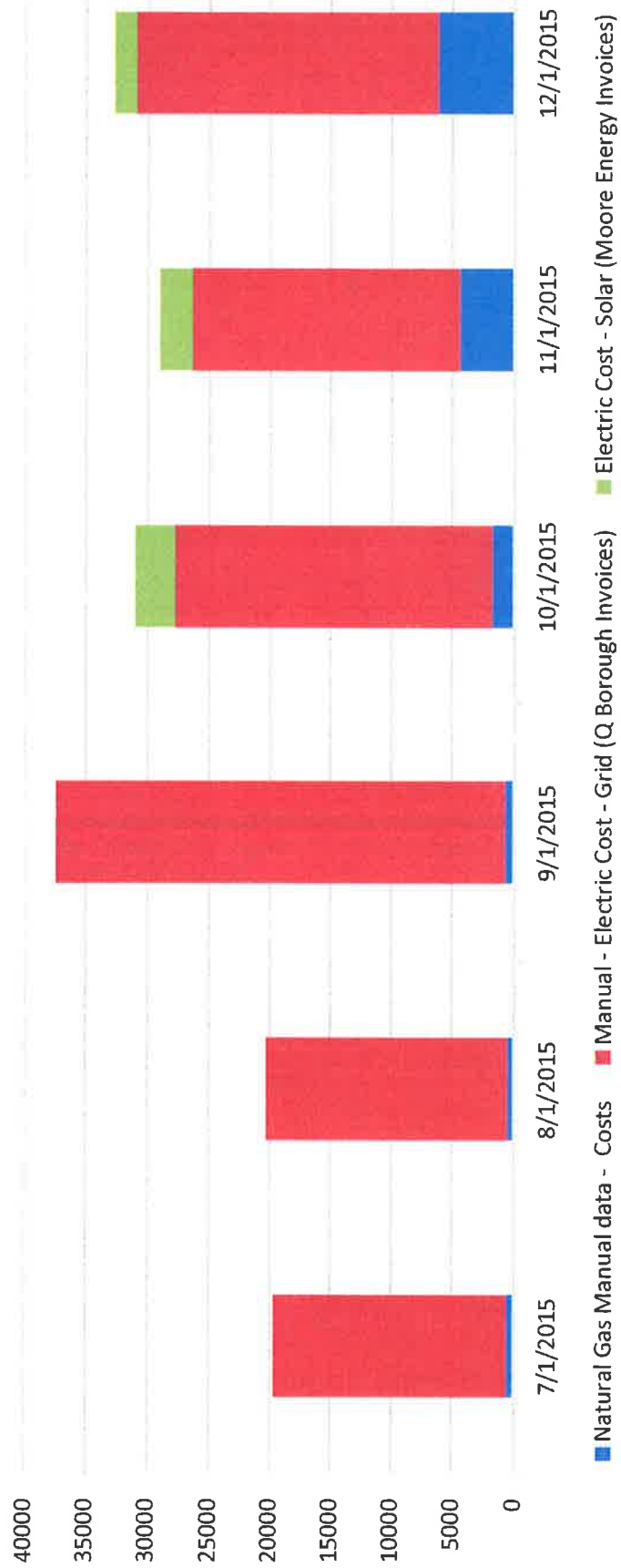
SHS Energy Usage



SHS Energy Costs by Source
2010-2016



SHS Energy Costs by Source Last Six Months



SHS Gas and Electric												
Date Generated: 02/29/2016 01:14 PM EST												
Number of properties in report: 1												
Month Ending	Natural Gas - covered to kBtu	Electric - covered to kBtu	Solar Production (kBtu)	Total Electric use including Solar production (kBtu)	Total Energy Use (kBtu)	Natural Gas Costs	Natural Gas Cost per kBtu	Electric Cost - Grid (Q Borough Invoices)	Electric Cost - Grid per kBtu	Electric Cost - Solar (Moore Energy Invoices)	Electric Cost - Solar per kBtu	Total Energy Cost
12/31/2015	725342.1	759821.69	52,303	812,124	1,537,466	6,126.20	0.00845	24,743.84	0.03257	1,801.18	0.03444	32,671.22
11/30/2015	497212.8	657441.22	75,985	733,426	1,230,639	4,346.93	0.00874	22,016.49	0.03349	2,616.75	0.03444	28,980.17
10/31/2015	168653.1	745057.97	92,216	837,274	1,005,927	1,745.73	0.01035	26,012.43	0.03491	3,175.62	0.03444	30,933.78
9/30/2015	43938.3	869343.48	-	869,343	913,282	737.27	0.01678	36,619.16	0.04212	-	-	37,356.43
8/31/2015	16052.4	435838.64	-	435,839	451,891	488.51	0.03043	19,750.19	0.04532	-	-	20,238.70
7/31/2015	29429.4	446385.14	-	446,385	475,815	621.44	0.02112	18,974.94	0.04251	-	-	19,596.38
6/30/2015	62871.9	636327.76	-	636,328	699,200	929.58	0.01479	29,772.00	0.04679	-	-	30,701.58
5/31/2015	242535.3	802120.26	-	802,120	1,044,656	2,575.65	0.01062	34,365.12	0.04284	-	-	36,940.77
4/30/2015	631394.4	687030.08	-	687,030	1,318,424	5,833.19	0.00924	32,913.48	0.04791	-	-	38,746.67
3/31/2015	1349121.9	931810.38	-	931,810	2,280,932	11,990.94	0.00889	42,073.72	0.04515	-	-	54,064.66
2/28/2015	1574678.7	872755.48	-	872,755	2,447,434	14,054.54	0.00893	40,134.08	0.04599	-	-	54,188.62
1/31/2015	1172339.7	1049456.14	-	1,049,456	2,221,796	10,536.81	0.00899	47,619.17	0.04538	-	-	58,155.98
12/31/2014	1036511.7	502915.15	-	502,915	1,539,427	9,616.48	0.00928	23,238.74	0.04621	-	-	32,855.22
11/30/2014	670805.1	616033.19	-	616,033	1,286,838	5,864.17	0.00874	30,531.92	0.04956	-	-	36,396.09
10/31/2014	106913.1	477697.06	-	477,697	584,610	1,129.13	0.01056	23,505.77	0.04921	-	-	24,634.90
9/30/2014	51141.3	499182.42	-	499,182	550,324	722.62	0.01413	25,137.31	0.05036	-	-	25,859.93
8/31/2014	22843.8	113855.03	-	113,855	136,699	534.66	0.02341	9,506.08	0.08349	-	-	10,040.74
7/31/2014	30355.5	435545.21	-	435,545	465,901	574.15	0.01891	19,058.72	0.04376	-	-	19,632.87
6/30/2014	92918.7	466195.21	-	466,195	559,114	1,020.11	0.01098	20,549.99	0.04408	-	-	21,570.10
5/31/2014	249429.6	311437.12	-	311,437	560,867	2,471.00	0.00991	15,339.25	0.04925	-	-	17,810.25
4/30/2014	776277.6	488786.06	-	488,786	1,255,064	7,363.14	0.00949	20,635.51	0.04222	-	-	27,998.65

QCSD CASH FLOW-SOLAR POWER PURCHASE AGREEMENT

	2015-16	Year 1	Year 2	Year 3	Year 4	Year 5	Year 6	Year 7	Year 8	Year 9	Year 10	Year 11	Year 12	Year 13
QCSD Power Cost	\$83,188	\$85,268	\$87,399	\$89,584	\$91,824	\$94,120	\$96,473	\$98,884	\$101,357	\$103,890	\$106,488	\$109,150	\$111,879	
*Assumes 2.5% annual incr														
Payment to PVS owner	\$80,370	\$81,174	\$81,985	\$82,805	\$83,633	\$84,470	\$85,314	\$86,168	\$87,029	\$87,899	\$88,778	\$89,666	\$0	
*Assumes 1% annual incr														
QCSD Annual savings	\$2,818	\$4,094	\$5,414	\$6,779	\$8,191	\$9,650	\$11,158	\$12,717	\$14,327	\$15,991	\$17,709	\$19,484	\$111,879	
QCSD Purchase Option														(\$248,435)
Net Cumulative Savings	\$2,818	\$6,912	\$12,326	\$19,105	\$27,296	\$36,946	\$48,104	\$60,821	\$75,148	\$91,139	\$108,848	\$128,332		(\$8,225)

	Year 14	Year 15	Year 16	Year 17	Year 18	Year 19	Year 20	Year 21	Year 22	Year 23	Year 24	Year 25
QCSD Current Power Cost	\$115,235	\$118,692	\$122,253	\$125,920	\$129,698	\$133,589	\$137,597	\$141,724	\$145,976	\$150,355	\$154,866	\$159,512
*Assumes 2.5% annual incr												
Payment to PVS owner	\$0	\$0	\$0	\$0	\$0	\$0	\$0	\$0	\$0	\$0	\$0	\$0
*Assumes 1% annual incr												
QCSD Annual savings	\$115,235	\$118,692	\$122,253	\$125,920	\$129,698	\$133,589	\$137,597	\$141,724	\$145,976	\$150,355	\$154,866	\$159,512
QCSD Purchase Option												
QCSD Annual savings	\$107,010	\$225,702	\$347,955	\$473,875	\$603,573	\$737,162	\$874,759	\$1,016,483	\$1,162,460	\$1,312,815	\$1,467,681	\$1,627,193

Cash Flows for Investor, PPA Provider, and Host (QCSD)

Year	Year 1 2014	Year 2 2015	Year 3 2016	Year 4 2017	Year 5 2018	Year 6 2019	Year 7 2020	Year 8 2021	Year 9 2022	Year 10 2023
System Cost	\$4,485,063									
Federal Tax Credit (30%)	\$439,516									
PA/NJ Rebate	\$0									
Depreciation (5 year MACRS) @45%	\$112,077	\$179,323	\$107,594	\$64,444	\$64,444	\$32,502	\$89,075	\$89,965	\$90,865	\$91,774
Electric Sales Income (1% escalator)	\$83,912	\$84,751	\$85,599	\$86,455	\$87,320	\$88,193	\$89,075	\$89,965	\$90,865	\$91,774
AEC Sales / SRFC	\$38,460	\$40,998	\$43,704	\$46,589	\$49,663	\$53,041	\$56,835	\$0	\$0	\$0
Insurance and Profess. Services	\$30,000	\$3,300	\$37,500	\$7,500	\$8,000	\$8,000	\$8,000	\$8,000	\$8,000	\$8,000
Cash Balance for "Investor"	(\$811,089)	(\$511,502)	(\$280,088)	(\$88,085)	\$107,860	\$278,516	\$421,045	\$508,032	\$595,919	\$684,716
Interest on Cash Balance @ 8.75%	\$76,978	\$44,786	\$24,338	\$17,059						
Net Cash Balance of PPA Entity	(\$82,060)	(\$529,244)	(\$242,353)	(\$48,148)	\$120,489	\$260,399	\$345,964	\$431,829	\$518,603	\$606,350

PPA Power Cost \$/KWH	2014	2015	2016	2017	2018	2019	2020	2021	2022	2023
QCSD 2% annual escalation	\$101,800	\$103,896	\$105,912	\$107,938	\$109,974	\$112,019	\$114,064	\$116,109	\$118,154	\$120,200
QCSD Current Power Cost	\$17,887	\$19,084	\$20,313	\$21,576	\$22,872	\$24,202	\$25,568	\$26,970	\$28,409	\$29,886
QCSD PPA Cumulative Savings	\$17,887	\$36,971	\$57,285	\$78,860	\$101,792	\$125,984	\$151,502	\$178,473	\$206,882	\$236,788

QCSD System Purchase Option (=2%) (\$1,600,844) (\$1,497,781) (\$1,387,778) (\$1,270,472) (\$1,145,479) (\$1,009,846) (\$865,643) (\$773,782) (\$677,657) (\$577,258)

Investor Annual Cash Flow (Ind. Int.):	2014	2015	2016	2017	2018	2019	2020	2021	2022	2023
Investor Annual Cash Flow (Ind. Int.):	\$754,933	\$305,664	\$245,327	\$194,997	\$159,927	\$98,069	\$67,755	\$39,983	\$40,483	\$40,887
Investor Cumulative Cash Flow:	(\$764,959)	(\$438,295)	(\$191,968)	\$2,090	\$195,967	\$294,026	\$361,781	\$401,764	\$442,196	\$483,083

Investor IRR on Cash Flow 20.49%

Year	Year 11 2024	Year 12 2025	Year 13 2026	Year 14 2027	Year 15 2028	Year 16 2029	Year 17 2030	Year 18 2031	Year 19 2032	Year 20 2033
Investor Annual Cash Flow (Ind. Int.):	\$92,691	\$93,618	\$94,555	\$95,500	\$96,455	\$97,420	\$98,394	\$99,378	\$100,372	\$101,375
Investor Cumulative Cash Flow:	\$0	\$0	\$0	\$0	\$0	\$0	\$0	\$0	\$0	\$0
Investor IRR on Cash Flow:	\$53,036	\$55,000	\$57,000	\$59,000	\$61,000	\$63,000	\$65,000	\$67,000	\$69,000	\$71,000
Net Cash Balance of PPA Entity:	\$606,294	\$694,913	\$784,467	\$874,967	\$966,422	\$1,058,842	\$1,152,236	\$1,246,614	\$1,341,985	\$1,438,350

Year	2024	2025	2026	2027	2028	2029	2030	2031	2032	2033
Investor Annual Cash Flow (Ind. Int.):	\$124,093	\$126,575	\$129,107	\$131,689	\$134,322	\$137,009	\$139,749	\$142,544	\$145,395	\$148,303
Investor Cumulative Cash Flow:	\$31,402	\$32,952	\$34,552	\$36,189	\$37,867	\$39,589	\$41,355	\$43,166	\$45,023	\$46,928
Investor IRR on Cash Flow:	\$268,170	\$301,127	\$335,679	\$371,867	\$409,735	\$449,304	\$490,679	\$533,845	\$578,869	\$625,796
Net Cash Balance of PPA Entity:	(\$472,328)	(\$362,788)	(\$246,335)	(\$129,181)	(\$4,856)	\$122,153	\$251,902	\$384,446	\$519,841	\$658,144
Investor Annual Cash Flow (Ind. Int.):	\$41,346	\$41,809	\$42,277	\$42,750	\$43,228	\$43,710	\$44,197	\$44,689	\$45,186	\$45,688
Investor Cumulative Cash Flow:	\$504,429	\$566,238	\$608,515	\$651,265	\$694,493	\$738,205	\$782,599	\$827,686	\$873,474	\$919,963



Additions and Alterations to: Quakertown Community High School Quakertown Community School District



Sequence of Work for Construction:

Phase 3A

June 2015 to
August 2016

Phase 3B

June 2016 to
August 2016

CONSTRUCTION: WORK COMPLETED TO DATE

Project meetings were held with the contractors on March 4, March 18 and April 1, 2016. The meetings were held at the project trailer behind the High School.

Continuing to review Contractor work and providing support to the Architect. Attended scheduled End User Meetings. Attached a coordination meeting with the Contractors and the Abatement Contractor for planning of the Phase 4 work.

The General Contractor continues to hold weekly coordination meetings at the project trailer.

The following major materials were received at the job site:

- Casework
- Additional Lighting Fixtures
- Additional Exterior Doors and Glazing

The General Contractor performed the following work:

- Misc demo area I-complete
- Misc Framing I1-complete
- Hanging doors I2
- Finishing painting on I2
- Drywall and spackle I1
- Form/pour locker bases-complete
- Tile I1 corridors
- Primary bead caulking and interior caulk
- Installation of rain screen
- Sidewalks I/H courtyard
- Acoustical tile I2, grid I1
- VCT install I2
- Science casework/countertop install I2
- Install of bathroom accessories
- Shade casing install I2
- Install bathroom partitions I1-complete
- Install base I2





Unit I Locker Lobby

**CONSTRUCTION:
WORK COMPLETED TO DATE (CONT'D.)**

Plumbing Contractor performed the following:

- Continue with casework connections
- Relocated rain water in H to allow door to open
- Working on sprinkler heads I first floor
- Installed pre-action for elevator equipment room



Unit I Ramp at Stairwell

HVAC Contractor performed the following:

- Continue coordination with GC, EC & PC
- Continued Daily Clean-up
- CX Activities – Area I
- Completed Level 1 Area I:
 - Duct Installation
 - Piping Branches
 - Pipe Insulation
 - ATC Rough In
- Continued Level 2 GRD Installation



**Second Floor—Unit I
Corridor**

The Electrical Contractor performed the following:

- Installing fixtures and devices -1 1st and 2nd floor and basement

The Balancing Contractor:

- Continues to perform air and water balancing.
- Supporting Commissioning activities

Abatement Contractor:

- Next planned activity is in the Phase 4



**Second Floor
Unit I Classroom**



Second Floor Restroom

WORK TO COMPLETE NEXT 30 DAYS

General Contractor

- Continue with work listed above
- Install roofing on I canopies
- Install panels for undulating ceiling I locker lobby
- Terrazzo flooring I1
- VCT floor prep I1
- Elevator modernization
- Demo non-operational boiler stack-coordinate.



First Floor Plumbing Rough In

Plumbing Contractor:

- Continue with the above
- FM-200 system in elevator equipment room

HVAC Contractor:

- Continue all above

Electrical Contractor:

- Installing fixtures and devices -1 1st and 2nd floor and basement



Second Floor Lab

DECISIONS REQUIRED

None at present.

CRITICAL ISSUES

None at present.



First Floor Classroom

MAJOR SCHEDULE EVENTS

Phase 3A—Major Rooms Completion August 14, 2016

First Floor Unit I

- Conference Room
- 1 Special Ed Room
- Locker Lobby
- 1 Computer Room
- 6 Classrooms
- 2 FCS Classrooms
- Restrooms

Second Floor

- 5 Science Labs
- 4 Science Classrooms
- 1 Faculty Room
- Restrooms



1st Floor IT Room



2nd Floor Science Prep Room



1st Floor Corridor



Exterior—Upper Gym
Courtyard



Exterior Entrance

4/28/16
Agenda

Additions and Alterations to Quakertown Community High School

GENERAL CONSTRUCTION

G-075	Provide parging and furring of existing masonry in Lower Level Locker Room areas, as per ASI G-73 dated 7/25/15, to correct existing masonry conditions to allow for the installation of scheduled finishes, and provide acoustic panel ceiling Type 3 in P. E. Instructor G-009 and G-032 in lieu of scheduled synthetic plaster ceilings. Work to be done on a T&M basis.	\$12,259.00
G-076	Remove and reinstall rain screen system as required for dryer vent duct and hood by MC at Mechanical G-039, to allow re-location of Drying Room. Provide 20 ga. trim at hood perimeter.	1,906.50
G-077	Remove existing door leaves and remove and modify existing hollow metal frames as per sketch modifications of Dwgs. AD-013, AD-017, and AD-021, revision dated 9/15/2015, as requested by the District. Work to be performed on a T&M basis.	1,955.70
G-078	Provide masonry infill in Stair I-1, as directed in the field by the Structural Engineer on 12/21/15. Work to be done on a T&M basis.	3,228.75
G-079	Provide steel and bridging modification of the existing structure at the Second Floor of Unit "I" pursuant the Structural Engineer's site visit on 12/10/15 and Sketch "Bar Joist Bridging Modification - Unit I Second Floor, dated 12/23/15. Work to be performed on a T&M basis.	5,964.48
G-080	Remove epoxy mastic from existing floor slab, encountered under the existing sheet flooring, in Chemistry Lab I-208 and Science Lab(s) I-214, 216, 218 and 221 to allow installation of scheduled floor finish.	6,783.71
G-081	Provide metal stud framing and gypsum board soffit and fascia in Computer I-133, as per Dwg. RA-166 Revised Reflected Ceiling Plan at Computer I-133, dated 10/12/15. Work to be performed on a T&M basis.	3,754.19

G-082 Provide metal stud framing and gypsum board soffit and fascia in Locker Lobby I-104 along column line I/8, between columns ID and IE as per ASI dated 2/27/16. Work to be performed on a T&M basis. 2,513.12

PLUMBING CONSTRUCTION

P-038 Disconnect natural gas from existing Kitchen MUA Unit serving the kitchen hood, and provide gas to the new MUA Unit (by others). 965.00

P-039 Provide one (1) additional ASCO Master Control Station and solenoid valve in Corridor I-101, as directed by the Fire Marshall for Emergency Services gas shut-down. 3,604.00

P-040 Provide three (3) explosion-proof EXM200 exhaust fans at each of the flammable storage cabinets in Storage F-124, Science Prep I-210, and Biology Prep I-217, as directed by the Fire Marshall. 10,797.00

HVAC CONSTRUCTION

M-007 Provide a purge button (5 total) in each of Chemistry Lab I-208 and Science Lab(s) I-214, 216, 281, and 221 to allow activation of a purge cycle through the rooftop units, in accordance with work description in RFP letter dated 10/27/15 and associated Drawings issued therewith. Provide interconnection through the BAS and all required programming. 5,026.00

M-008 Provide wiring, relays, and programming required for the monitoring of Sump Pump #3 (replaced by Change Order) through the Building Automation System. 396.00

M-009 Provide cleaning of the additional grease duct system serving found to serve the existing Kitchen Hood and grease duct fire blanket insulation for same. 4,184.00

M-010 Provide an exhaust system as indicated on Dwg. RM-21 Rev'd. Unit "G" Mechanical G-039, dated 12/22/14, to allow the re-location of the athletic drying racks from Drying H-009, and the incorporation of that area into the relocated Aerobics Room. 7,740.00

ELECTRICAL CONSTRUCTION

E-040	Provide power and fire alarm monitor module for gas emergency control in FCS I-119 (Cooking Lab).	1,607.00
E-041	Provide floor boxes in Computer I-133 as indicated on Dwg. SKE-005 Floor Outlet locations at Computer I-133, dated 10/13/15, including all concrete slab demolition and patching required.	7,172.05
E-042	Provide two (2) additional duplex receptacles at the District's new TV location in Cafeteria A-103 and remove three (3) existing TVs and mounting brackets (2 in A-103 and 1 in A-106). Coordinate new TV location with District IT. Turn over removed equipment to the District.	1,130.00
E-043	Provide power for exhaust system added in Mechanical G-039 in accordance with manufacturer's electrical requirements.	1,571.66
E-044	Provide power, data, video projector outlet, portable device connection outlet, and HDMI passthrough for "smartboard" projector by District above projection screen as indicated on Dwg. RA-52 - Revised TV and Clock locations in Cafeteria A-103, dated 4/16/15.	2,138.00

TOTAL OF CHANGE ORDERS

\$84,696.16

NARRATIVE OF CHANGE ORDERS

The Change Orders above fall into three categories: additional work required by uncovered existing conditions, work directed by the Fire Marshall, and work required for Owner directed changes.

G-075, G-078 through G-082, and M-009 fall into the category of additional work required by existing conditions. P-039 and P-040 are work directed by the Fire Marshall. All other Change Orders represent Owner directed Changes.

Prior to these Change Orders, the total amount of Change Orders represented 1.37% of the original Contract Amounts. With the Change Orders above, the total amount of Change Orders will represent 1.51% of the original Contract Amounts.

QUAKERTOWN COMMUNITY SCHOOL DISTRICT



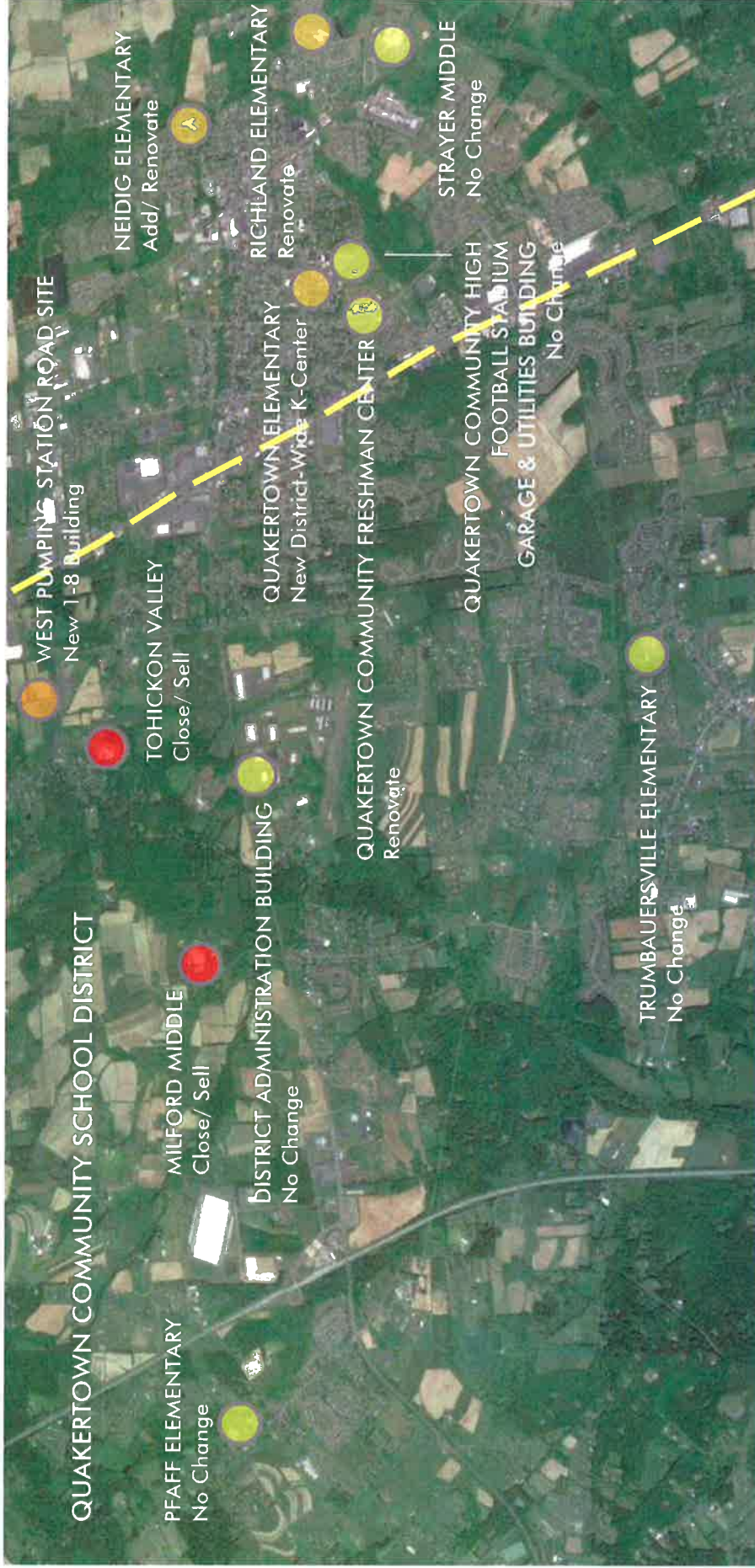
FEASIBILITY STUDY AND
DISTRICT MASTER PLANNING

SUMMARY PRESENTATION

March 29, 2016



OPTION 15 - DISTRICT CONFIGURATION





OPTION 15 – CONCEPTUAL BUDGET

OPTION 15

CONCEPTUAL BUDGET ESTIMATE

BUILDING	RENOVATION/ ADDITION BUDGET PROJECT COST	NEW CONSTRUCTION BUDGET PROJECT COST	SOFT COSTS	TOTAL COSTS
NEIDIG ELEMENTARY	\$9,730,119	\$0	\$2,919,036	\$12,649,155 *
PF AFF ELEMENTARY	\$764,978	\$0	\$229,493	\$994,471
QUAKERTOWN ELEMENTARY	\$10,452,200	\$0	\$3,135,660	\$13,587,860
RICHLAND ELEMENTARY	\$926,624	\$0	\$277,987	\$1,204,611 *
TOHICKON VALLY ELEMENTARY	\$0	\$0	\$0	\$0
TRUMB AUERSVILLE ELEMENTARY	\$3,239,134	\$0	\$971,740	\$4,210,874
MILFORD MIDDLE SCHOOL	\$0	\$0	\$0	\$0
STRAYER MIDDLE SCHOOL	\$935,959	\$0	\$71,740	\$1,907,699
FRESHMAN CENTER	\$4,649,032	\$0	\$1,394,710	\$6,043,742
HIGH SCHOOL	\$0	\$0	\$0	\$0
EXISTING ADMIN BLDG	\$385,900	\$0	\$115,770	\$501,670
STADIUM & GARAGE	\$1,331,996	\$0	\$399,599	\$1,731,595
NEW BUILDING(S)	\$0	\$55,660,156	\$10,748,373	\$66,408,530
TOTAL OPTION 15	\$32,415,942	\$55,660,156	\$21,164,109	\$109,240,207

* Determine whether a gym or cafeteria must be added for parity

Program Area	Item	Condition (poor, fair, good)	Ranking for Short Term Improvement Items	Description	Recommendations	# Units	Unit	Base unit Price	Estimated Costs	2016-17 from Capital Reserve	2016-17 from Maintenance Budget	2017-18 and 2018-19
EXISTING FACILITIES SURVEY: Neidig Elementary School												
Exterior	Plumbing	poor	1	Check all roof drains and gutters for back pitched splash blocks and disconnections. Check canopies for proper drainage. Wall hydrants were located at various locations around the building.	Replace wall hydrants.	1	l.s.	20,000.00	\$ 20,000		\$	20,000
Site	Playground	poor	1	Playground restoration.	Playground equipment replacement, edging, mulch, and drainage	1	l.s.	239,000.00	\$ 239,000	\$ 239,000		
HVAC	Packaged terminal air conditioner at Principal's Office	poor	1	A packaged terminal air conditioner provides heating and cooling to the building.	replace packaged terminal unit. Future ductless splits unit possible.	1	l.s.	25,000.00	\$ 25,000		\$	25,000
Interior	Kitchen ceilings	poor	1	Painted GWB.	prep and repair for smooth and washable finish. (epoxy paint)	755	s.f.	3.00	\$ 2,265		\$	2,265
				Subtotal		20%			\$ 286,265	\$ 47,800		\$ 9,453
				Contingency					\$ 57,253			\$ 1,891
				Subtotal					\$ 343,518			
				Escalation Assumes 1 year @ 4%/year		4%			\$ 13,741			
				Total Estimated Costs - Neidig Elementary School					\$ 357,259			
EXISTING FACILITIES SURVEY: Pfaff Elementary School												
Site	Geothermal Vault. Glycol leaks	poor	1		Vault repairs require further investigation	1	l.s.	20,000.00	\$ 20,000	\$ 20,000		
Site	Playground	poor	1	Playground restoration.	Playground equipment replacement, edging, mulch, and drainage.	1	l.s.	202,000.00	\$ 202,000		\$	202,000
HVAC	Building Automation System	poor	1		Upgrade system in entirety and tie to BMS system.	1	l.s.	220,000.00	\$ 220,000		\$	220,000
Interior	Art Room casework	poor	1	Casework is showing signs of wear.	remove and replace base cabinets and countertop.	50	l.f.	350.00	\$ 17,500		\$	17,500
				Subtotal					\$ 459,500	\$ 4,000		\$ 87,900
				Contingency		20%			\$ 91,900			
				Subtotal					\$ 551,400		\$	17,580
				Escalation Assumes 1 year @ 4%/year		4%			\$ 22,056			
				Total Estimated Costs - Pfaff Elementary School					\$ 573,456			
EXISTING FACILITIES SURVEY: Quakertown Elementary School												
Site	Playground	poor	1	Existing playground equipment is worn and in some disrepair due to extensive use by surrounding community as well as during school.	Playground equipment replacement, edging, mulch, and drainage	1.00	l.s.	300,000.00	\$ 300,000	\$ 300,000		
				Subtotal					\$ 300,000		\$	60,000
				Contingency		20%			\$ 60,000		\$	60,000
				Subtotal					\$ 360,000		\$	14,400
				Escalation Assumes 1 year @ 4%/year		4%			\$ 14,400		\$	
				Total Estimated Costs - Quakertown Elementary School					\$ 374,400			

Program Area	Item	Condition (poor, fair, good)	Ranking for Short Term Improvement Items	Description	Recommendations	# Units	Unit	Base unit Price	Estimated Costs	2016-17 from Capital Reserve	2016-17 from Maintenance Budget	2017-18 and 2018-19
EXISTING FACILITIES SURVEY: Milford Middle School												
General Systems	General building upgrades not indicated elsewhere	poor	1	Approximately (5) roof mounted exhaust fans showed signs of damage and need to be repaired.	Repair exhaust fans.	5	each	5,000.00	\$ 25,000			
Fire Alarm	Fire Alarm at Gymnasium	poor	1	No Fire alarm in this space	Add fire alarm coverage	1	ea	15,000.00	\$ 15,000			
				Subtotal Contingency		20%	s.f.		\$ 40,000			
				Subtotal Escalation Assume 1 year @ 4%/year		4%			\$ 8,000			
				Total Estimated Costs - Milford Middle School			s.f.		\$ 48,000			
									\$ 1,920			
									\$ 49,920			\$ 49,920
EXISTING FACILITIES SURVEY: Strayer Middle School												
HVAC	Tech Edu-Manuf E153	poor	1		Service dust collector	1	ea.	10,000.00	\$ 10,000			10,000
HVAC	Art Room (Ceramic and Graphic Arts)	poor	1		Provide heat capture hood over kiln	1	ea.	15,000.00	\$ 15,000			15,000
HVAC	Building Automation System	poor	1		Upgrade system in entirety and tie to BMS system	1	i.s.	475,000.00	\$ 475,000	\$ 475,000		
				Subtotal Contingency		20%	s.f.		\$ 500,000			
				Subtotal Escalation Assume 1 year @ 4%/year		4%			\$ 100,000			5,000
				Total Estimated Costs - Strayer Middle School			s.f.		\$ 600,000			1,000
									\$ 24,000			
									\$ 624,000			

Program Area	Item	Condition (poor, fair, good)	Ranking for Short Term Improvement Items	Description	Recommendations	# Units	Unit	Base unit Price	Estimated Costs	2016-17 from Capital Reserve	2016-17 from Maintenance Budget	2017-18 and 2018-19
EXISTING FACILITIES SURVEY: Alumni Field												
Site	Ticket Booth reconstruction	poor	1	brick masonry construction at Ticket Booth locations has failed. Iron gates and brick pier supports are deteriorating.	demolish and reconstruct in entirety.	4	i.s.	35,000.00	\$ 140,000			
Site	Visitor side bleacher	poor	1	Visitor Side Bleachers is constructed of exposed steel pan supported by structural steel column and framework. 10" CMU masonry wall systems. Some failing welds observed at connection points to the steel plates	Strip upper side of bleacher area in entirety and repaint with heavy traffic sealer product. Miscellaneous masonry repairs and resecure/replace at connection points.	1	i.s.	75,000.00	\$ 75,000			
				Subtotal			s.f.		\$ 215,000			
				Contingency		20%			\$ 43,000			
				Subtotal Escalation					\$ 258,000			
					Assume 1 year @ 4%/year	4%			\$ 10,320			
				Total Estimated Costs - Alumni Field			s.f.		\$ 268,320			\$ 268,320
EXISTING FACILITIES SURVEY: Garage & Utilities Building												
Exterior	roof	poor	1	Single-ply rubber roof. Reports of roof leak locations.	Remove existing roof system in entirety down to the existing roof deck. Replace in entirety with new multi-ply modified bitumen roof system.	9,800	s.f.	30.00	\$ 294,000			
				Subtotal			s.f.		\$ 294,000			
				Contingency		20%			\$ 58,800			
				Subtotal Escalation					\$ 352,800			
					Assume 1 year @ 4%/year	4%			\$ 14,112			
				Total Estimated Costs - Garage & Utilities Building			s.f.		\$ 366,912			\$ 366,912
GRAND TOTALS - ALL BUILDINGS												
				Grand Total			s.f.		\$ 3,961,686			
				Contingency		20%			\$ 792,337			
				Subtotal Escalation					\$ 4,754,023			
					Assume 1 year @ 4%/year	4%			\$ 190,151			
				Grand Total Estimated Costs - All District Facilities			s.f.		\$ 4,944,154	\$ 1,648,650	\$ 99,055	\$ 2,962,541