

**BETHLEHEM AREA SCHOOL DISTRICT
BOARD FACILITIES COMMITTEE
MEETING MINUTES
MONDAY, NOVEMBER 8, 2010**

Mrs. Michele Cann, Facilities Chairperson of the Board of School Directors, called the meeting of the Board Facilities Committee to order at 7:25 p.m. on Monday, November 8, 2010, in the Dining Room of the Education Center. Present were School Board members Loretta Leeson, William Burkhardt, Benjamin Tenaglia, Michele Cann, Rosario Amato, Irene Follweiler, Michael Faccineto, Aurea Ortiz, and Eugene McKeon. Also present were Dr. Joseph J. Roy, superintendent of schools; Dr. Jack Silva, assistant superintendent for education; Stacy Gober, assistant to the superintendent for finance and administration; Arif Fazil, D'Huy Engineering, Inc.; Ann Behers, operations manager; and representatives from the press.

The following items were discussed:

COURTESY OF THE FLOOR TO VISITORS –

None.

DISCUSSION ITEMS –

Ms. Rodriguez reviewed item number five on the agenda, Infectious Disease Plan. She stated that herself, the City of Bethlehem Health Bureau, Mrs. Kathy Halkins, Bethlehem Area School District (BASD) Health Services Department Chair, and other nurses from surrounding non-public schools that participate with the Readiness and Emergency Management for Schools (REMS) grant, have put this plan in place in order to be grant compliant, and also to make sure that the district is adhering to the Pennsylvania Emergency Management Code as it pertains to emergency preparedness and emergency response. The pandemic influenza plan's checklist was used to create a plan that was more simplistic and organized based on BASD's activities. Ms. Rodriguez explained the disease of concern algorithm, the critical personnel record, and the accidental blood borne pathogen section of the plan.

Mr. Fazil then introduced number two on the agenda, Energy Update. He showed a PowerPoint presentation to the board and explained that D'Huy Engineering, Inc. (DEI) is on target with their schedule. Mr. Fazil said that in January 2011, he will submit a final report of recommendations. He said that the entry of all utility bill information has been completed in a live working database called UtilityDirect, facility surveys are complete, and DEI has coordinated with partners for HVAC and lighting surveys. Mr. Fazil then reviewed utility cost breakdown for all district facilities by utility type. With the lighting surveys complete, there were a number of areas identified in which by installing energy saving lighting, the projects would have a short payback time of five to seven years. Mr. Fazil said that before a lighting project is implemented on a larger scale, he is recommending that prototypes be installed to verify the parameters. There will be an action item for recommending the prototype lighting be installed once a source of funding is found. This lighting would be monitored for a two month period; this time would be long enough to verify the payback period. Mr. Fazil stated that for the solar projects, construction has started at East Hills Middle School and James Buchanan Elementary

School, and the final permit for Freedom High School will hopefully be obtained soon. Mr. Fazil stated that by analyzing the utility bills, it was found that there were additional schools that can be switched to commodity pricing for gas. This could translate to approximately \$40,000 in savings and he is working with Mrs. Gober to implement this. Energy Star data has been uploaded, and nine of BASD's schools have obtained the Energy Star rating. Mr. Fazil then presented one of the Energy Star plaques to the board stating that they will be displayed at the schools. Mr. Fazil noted that each plaque is dated with the year; the Energy Star rating is only valid for one school year. Full lesson plans and guidebooks for energy education have been provided to the district and we are waiting for the curriculum department to review how they will be implemented into the elementary, middle, and high school curriculums.

Mrs. Ortiz said that she has received some concerns regarding the solar panel installation at Spring Garden Elementary School. She said that it was believed that the solar panels will be taking up space that is needed and used by the students. Mrs. Ortiz asked if a meeting with district parents was held to inform them that these projects were taking place at the schools.

Mr. Fazil said that he was aware of this concern, and has met with the individual teacher and principal to discuss it. The teacher believed that no "green space" should be taken away by the solar panels. Mr. Fazil said that Spring Garden has approximately sixteen acres; only one acre of land that is not located within the detention pond will be used for the panels. Mr. Fazil noted that approximately fifty-seven percent of the energy that Spring Garden currently uses is being offset by the solar panels. Yes, green space was used, but it is not commonly used as a playing area. He said that a meeting with parents was not held, but everyone was informed and the plan was reviewed at a number of Facilities Committee meetings.

Dr. Roy noted that the principal of the school was informed, and this information regarding the solar panels was announced and discussed at many public meetings. Dr. Roy also said that an area approximately the size of a football field still remains open at the school for students' use.

Mrs. Ortiz requested that parents be included in the planning of these projects.

Mr. Fazil said that in the past, parent meetings were held to discuss school projects. He said that very few people attended these meetings, but if the board wishes, he will hold parent meetings.

Mrs. Leeson stated that the district depends on the principals to share if there is a need for parent input. She then asked if the \$40,000 for the lighting prototype project will be paid out of the estimated \$40,000 commodity gas savings.

Mr. Fazil said that the district needs to come up with the capital to invest in the prototypes. Once he verifies the prototype, the district will need to look at the most economic way to borrow money for the projects. Mr. Fazil stated that if he can verify that the prototype will substantiate the savings in five to seven years, the district will need to decide if these projects should be paid from the savings. The funds for the lighting prototype projects may be identified either through the energy budget or the maintenance department budget.

Mrs. Leeson said that the district does not have the capital available to invest in the projects.

Dr. Roy suggested making a decision after the winter months have passed to determine how much money is left in the energy budget.

Mr. Fazil said that the lighting equipment could be purchased through a COSTARS contract, installed, and then monitored. After that point, a decision would need to be made if the district wanted to install the energy saving lighting in the remainder of the schools.

Mr. Faccinetto thanked Mr. Fazil for taking the time to address the concerns of the individual who raised concerns at Spring Garden.

Dr. Roy said that he met with Mr. Smith to draft a letter to address parent concerns. It will explain more of the details and facts of the project to parents.

Mr. Fazil asked the board if his approach to the proposed energy projects was on the right path.

Mrs. Leeson said that she would like to see energy conservation and savings, but was not sure how to fund it.

Mrs. Cann said that she would like to consider funding improvements through energy savings.

Mr. Fazil then reviewed agenda item 3, Capital Improvement Plan Update. He reviewed the various tabs in the plan, and noted that the entire plan will be posted on the district's website for public viewing. Mr. Fazil said that in the past, it has been discussed that money be built into the budget to maintain the district's 2,525,800 square feet of facilities. Mr. Fazil said that if you figure 2,525,800 square feet multiplied by \$150 per square foot, one percent of that figure should be invested back into the district's facilities. Mr. Fazil noted that for any building that has a figure of sixty percent or more [improvements as a percent of renovation, tab seven], major renovations need to be considered. Mr. Fazil also said that on tab ten, it is noted at the bottom of the page that \$2 million be budgeted each year for capital improvements. This money has never been included in the budget; money that was left over from the bond projects was used to fund capital improvement projects in previous years. Mr. Fazil then asked the board to review the page included in the agenda packet; this was the same as tab ten in the Capital Improvement Plan, but was listed in priority order. This first item on the list was Nitschmann Middle School grease trap replacement. This is on tonight's agenda as agenda item 4. The kitchen will be back online as of tomorrow, and the project cost approximately \$13,700 to complete. Mr. Fazil then explained the remainder of the six projects.

Mrs. Leeson asked what the costs were for the seven top priority projects recommended.

Mr. Fazil answered that the cost was approximately \$648,000 including fees and contingency.

Mrs. Leeson said that there may still be some bond money available, and the Northeast Middle School demolition project will also be coming in under what was originally budgeted. Normally, when projects are completed for less than what was budgeted, the remaining money is used to complete capital projects. Is the district going to have the funds to complete these projects?

Dr. Roy stated that he believed the district was no longer going to be able to avoid budgeting for capital improvement projects. He said there has been construction going for years, but now, the projects are complete. There will not be anymore bond funds available to complete capital improvement projects.

Mrs. Leeson asked if the Broughal Middle School project has been completed and if any of the contingency money has been released.

Mr. Fazil said that this project had zero change orders, but some of the money was used for other district purposes.

Mrs. Gober confirmed that there was still a contingency being retained for Broughal as well as for some of the other high school projects. These projects will be settled with the contractors, and then the district can determine exactly how much money is remaining from the bond funds used to finance these projects. Mrs. Gober also confirmed that some of the bond money was used to purchase school buses, as well as finance the Freemansburg Elementary School mold remediation project.

Mr. Fazil said that once it is outlined where the funds can be allocated from, self certifications will be brought to the board for approval for the summer projects. He said he would also like to have the board include the line items listed as “various” on tab ten in the maintenance budget. These funds would pay for various repairs such as sinkhole and roof repairs.

Dr. Roy said that the district needs to identify a number that can be put into the budget. In order to complete the capital improvement projects over the summer, the certifications need to be approved by the board soon. He said that this is a difficult task as the district must commit to certain projects before the budget is approved.

Mrs. Leeson asked if the district can afford to put a line item in for the capital improvement projects as the district is facing another difficult year of budgeting.

Mrs. Cann said that every year, the board has said that they will include a line item for the capital improvement projects, but never have. The board must come up with a plan to tackle these projects.

Mr. Fazil then explained agenda item B, Bid Award for Excavating Services – Unit Price Work for Sinkhole Repair, Storm, Sanitary, and Other Site Work Repairs. He said that the administration is recommending that Senick and Imperial Excavating be awarded the bid; these companies will be used on an as needed basis. Mr. Fazil said that the prices were competitive this year.

Mr. Fazil said that item C [Amend the Earth Engineering Inc. Maximum Cost for Construction Testing at Broughal Middle School] was an item that was an accounting oversight during the project. There were two testing companies, Certified Testing Laboratories, and Earth Engineering Inc., performing required construction testing. Earth work testing that is required to be code compliant was assigned to Earth Engineering, Inc., but monies were accounted for in

Certified Testing Laboratories' contract. The administration is requesting that money be transferred from Certified Testing Laboratories to Earth Engineering, Inc in order to close out these contracts.

Mrs. Leeson requested that the wording be changed in the recommendation to provide further clarity.

Mr. Fazil then explained that agenda item A, Approval of Pennsylvania Department of Education Self-Certifications – Various Summer Projects, for the December 13, 2010, Regular Board Meeting agenda was pending discussion of the Capital Improvement Plan. He said that if the board decides on the projects to be completed, the self certifications would appear on the December agenda. This item is presented on this month's agenda as there is no Board Facilities Committee meeting scheduled for the month of December.

Dr. Roy stated that it would be better to have this item appear on the January agenda so further discussion could take place.

AGENDA ITEMS FOR THE NOVEMBER 15, 2010, REGULAR BOARD MEETING –

After discussion, the board committee agreed to bring the following agenda items to the November 15, 2010, Regular Board Meeting:

- A. Approval of the Infectious Disease Plan
- B. Bid Award for Excavating Services – Unit Price Work for Sinkhole Repair, Storm, Sanitary and Other Site Work Repairs
- C. Amend Earth Engineering, Inc. Maximum Cost for Construction Testing at Broughal Middle School

COURTESY OF THE FLOOR TO VISITORS –

None.

OPEN FORUM –

Mr. Tenaglia said that there was an incident that occurred at Liberty High School that was discussed in an expulsion hearing. It was regarding the fire alarm notification system ringing at the same time as the bell system that used to designate the time for class changes.

Dr. Roy explained the incident occurred on November 2, 2010. In the morning, the alarm system was placed on test as a smoke detector was being changed. It was not called in correctly to the monitoring company, Altronics, so therefore, the police were called. In the afternoon, the alarm was activated as it was not reset properly. The alarm went off during the change of classes, and the building was evacuated. The issue is not that the bell system is overriding the fire alarm

system, but rather that when there is a fire alarm during the change of classes, the students were unsure if it was a real fire alarm or not. The alarm created confusion among the students. The fire alarm does override the bell system as they are two independent systems.

Mr. Burkhardt said that the fire alarm does not activate in all four buildings, but the bell system does ring throughout the entire complex. If a fire alarm is activated at the same time as the bell system, students become confused. He suggested that if a fire alarm is activated at the same time as the bell system that the bell system is shut down.

Mr. Fazil said that it is possible that there may be a type of override that could be installed, but it would be complicated. He assured the board that the fire alarm system works the way that it should, and recommended that the front office control the bell system or provide announcement over the public address system.

Mrs. Follweiler said that at the most recent Bethlehem City Council Meeting, pedestrian safety on Elizabeth Avenue during stadium events was discussed. She asked if the district was working with someone from the city on this issue. Secondly, she said a citizen stated during courtesy of the floor that \$27 million dollars that was approved in a previous agreement came up in conversation with the Redevelopment Authority as \$27.6 million. Mrs. Follweiler said that the district should look into this item as the district approved the bond and has stake in that item.

Mrs. Leeson said that an executive session will be held immediately following the facilities meeting to discuss discipline.

The meeting was adjourned at approximately 8:45 p.m.

Minutes prepared by:

Kristen M. Snyder, Secretary to the Director of Facilities and Operations

Ann Marie Behers, Operations Manager



BASD Energy Plan Update

Facilities Committee Meeting

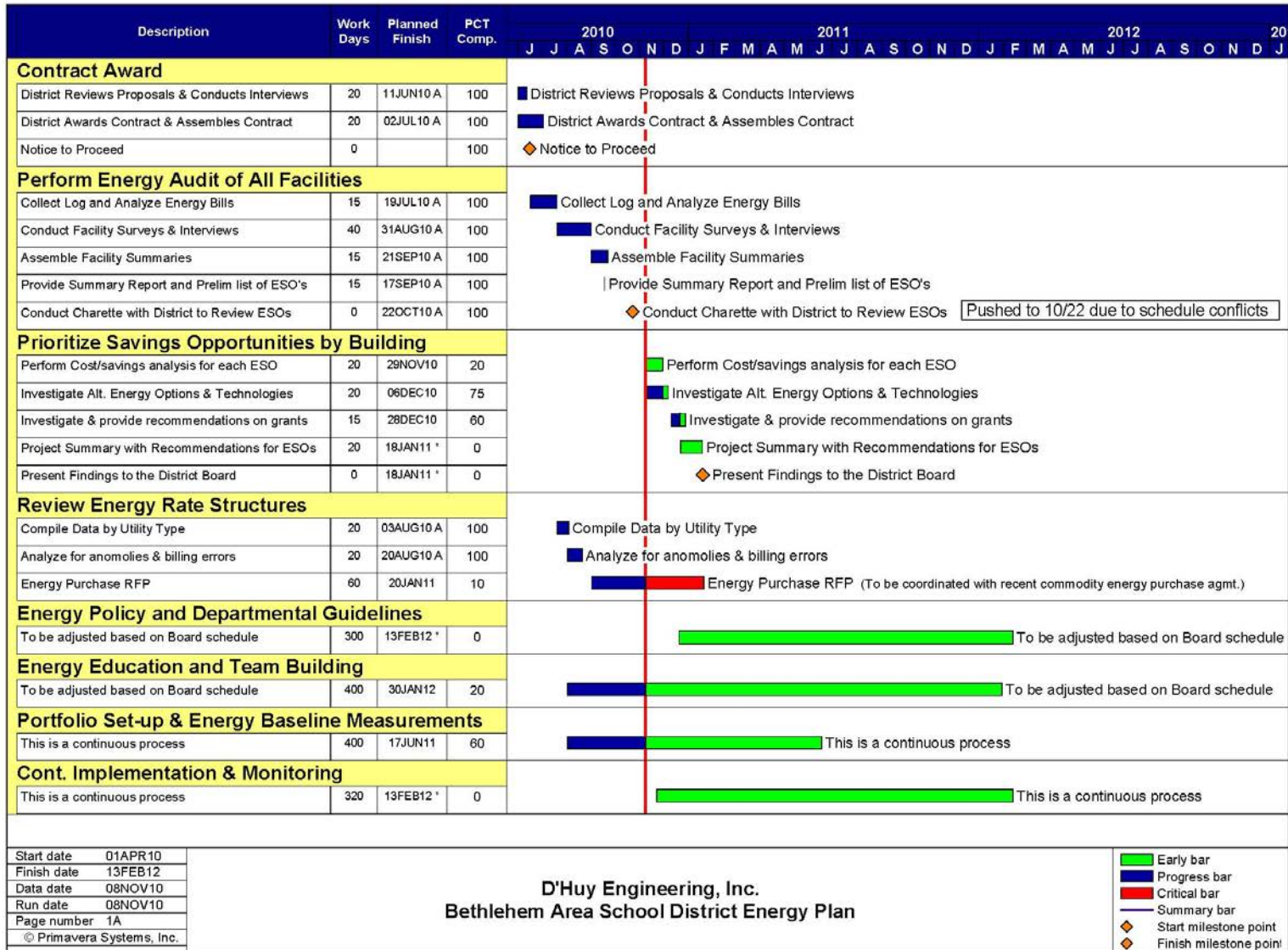
11.8.10

D'Huy Engineering, Inc.



D'HUY Engineering, Inc.

Schedule



Progress



- **Perform Energy Audit**
 - Utility Direct Implementation – Complete
 - Facility Surveys – Complete
 - Coordinating Data Collection with Partners:
 - **Lutron** – Lighting Surveys - Complete
 - **Comverge** – Primary Evaluations - Complete
 - **JCI** – HVAC systems study - Complete
 - Charette was held on Oct 22nd.
 - Outcome was positive and preliminary list of Energy Savings Opportunities was developed.

Charette - Energy Savings Focus

- Typical Energy Use in Schools

- For Schools in Climate Zone C

Climate Zone C = 5500-9500 DD - Allentown avg DD= 5729

Energy Consumer	Range	Norm
HVAC	45-80%	65%
Lighting	10-20%	15%
Food Service	5-10%	7%
Domestic Hot Water	2-5%	3%
Other/Misc.	0-20%	10%

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Charette - Energy Savings Focus

- BASD Usage and Cost by Utility Type

Utility Cost Breakdown

	08-09		09-10	
Electric	\$2,341,800	61%	\$2,483,800	67%
Gas	\$1,151,800	30%	\$905,000	24%
Oil	\$89,732	2%	\$62,588	2%
Water	\$278,262	7%	\$273,919	7%
Totals	\$3,861,594		\$3,725,307	

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Progress

- **Lutron – Lighting Surveys**
 - Results indicate potential for short term (5-7 yr) payback for lighting and control upgrades in many spaces.
 - DEI recommends several prototype retrofits to verify overall costs and payback assumptions.
 - East Hills Gymnasium
 - Miller Heights Multi Purpose Room
 - Typical Classroom
 - Action Item is required to approve prototypes

Progress

- **Comverge – Demand Response**
 - Currently exploring Demand Management and Load Response Plans
 - An Overall Load Control Plan may be more beneficial to the school district than simply signing up for a DR program because a load control plan often enables more significant demand reductions.

Progress

- Alternative Energy Options
 - Tangent – Solar Installations:
 - (Buchanan, Spring Garden, East Hills, Farmersville, Freedom)
 - Groundbreaking Ceremony conducted on October 7th
 - Construction has begun at East Hills, Buchanan and Spring Garden



Progress

- **Utility Bill Analysis:**
 - Discovered potential for savings by adding additional schools to commodity gas pricing.
 - Working with the business office to explore extent of potential savings at \$45,000/year.
 - Reviewing additional minor anomalies.
 - Developing reporting structure for schools to set standards of goals for them to meet.

Progress

- Utility Bill Analysis ENERGY STAR Portfolio Manager:
 - All Energy data has been uploaded for Analysis regarding requirements for the ENERGY STAR Label!
 - This information will also be used to establish targets for each school to try and meet.



Energy Star Snapshot

- Facilities are compared with other K-12 schools having similar characteristics.
- To achieve label, facility must perform better than 75% of similar buildings.
 - 28,713 K-12 facilities currently in system
 - Over 3 Billion SF measured
 - 4,310 received the Energy Star Label for 2010
 - 108 Energy Star schools are in PA

Energy Star Facilities 2010

- **9 BASD Facilities Have Been Awarded the ENERGY STAR Label!**
- **Press release should be scheduled**
 - Asa Packer
 - Broughal
 - Buchanan
 - Calypso
 - Governor Wolf
 - Hanover
 - Liberty
 - Lincoln
 - Miller Heights



Progress

- Energy Education & Team Building
 - Academy of Energy Education modules with lesson plans, guidebooks and classroom materials have been forwarded to the Administration for review to determine potential for inclusion into district curriculum or special programs.
 - Probable Benefits:
 - Conservation/Environmental Clubs
 - HS Electives and ES Science Units
 - Existing program enhancements
 - Integration with future district-wide energy policy



Other Tasks – future work

- **Prioritize Energy Savings Opportunities (ESO's)**
 - Perform Cost/Benefit analysis for applicable ESO's
 - Calculate Simple Payback
 - On Schedule for Mid-January Presentation to Board
- **Energy Policy & Departmental Guidelines**
 - On schedule for February start based on Board direction.
 - Sample policies will be provided for review and discussion.

Targets and goals for schools

- Establish benchmarks based on usage from 08/09 school year.
- Use weather data to normalize usage information.
- Use 09/10 data to verify benchmark and weather normalization calculations.
- Set energy reduction targets for all facilities.
- Use future usage and weather data to verify progress.



BASD Energy Plan Update

QUESTIONS/COMMENTS



D'HUY Engineering, Inc.

Gas Savings by Account with Totals (Accounts Currently Buying through UGI Directly)

Bill Account	Facility	TTL use 08-10 (ccf)	Avg use/yr (ccf)	Projected UGI Costs= .8155/ccf	Projected Compass Costs= .5994/ccf	Savings
521 316 4844 02-G	BUCHANAN	23438	11719	\$9,556.84	\$7,024.37	\$2,532.48
521 316 4848 06-G	BUCHANAN	355	177.5	\$144.75	\$106.39	\$38.36
520 308 1033 07-G	CALYPSO	23750	11875	\$9,684.06	\$7,117.88	\$2,566.19
501 200 1204 07-G	CLEARVIEW	42378	21189	\$17,279.63	\$12,700.69	\$4,578.94
501 200 1000 05-G	CLEARVIEW	3157	1578.5	\$1,287.27	\$946.15	\$341.11
506 262 1496 03-G	DONEGAN	4748	2374	\$1,936.00	\$1,422.98	\$513.02
507 771 8000 04-G	FARMERSVILLE	383	191.5	\$156.17	\$114.79	\$41.38
507 375 1100 00-G	FREEMANSBURG	5132	2566	\$2,092.57	\$1,538.06	\$554.51
509 390 8693 05-G	GOVERNOR WOLF	25928	12964	\$10,572.14	\$7,770.62	\$2,801.52
512 322 7005 00-G	GOVERNOR WOLF	580	290	\$236.50	\$173.83	\$62.67
504 346 6905 01-G	HANOVER	20236	10118	\$8,251.23	\$6,064.73	\$2,186.50
504 346 6865 04-G	HANOVER	351	175.5	\$143.12	\$105.19	\$37.93
505 352 6980 14-G	LINCOLN	32275	16137.5	\$13,160.13	\$9,672.82	\$3,487.31
505 352 6985 00-G	LINCOLN	2832	1416	\$1,154.75	\$848.75	\$306.00
501 200 2695 03-G	MAINTENANCE	13145	6572.5	\$5,359.87	\$3,939.56	\$1,420.32
501 200 4364 01-G	MARVINE	3157	1578.5	\$1,287.27	\$946.15	\$341.11
515 352 5545 04-G	MILLER HTS	27747	13873.5	\$11,313.84	\$8,315.78	\$2,998.06
515 352 7664 08-G	MILLER HTS	419	209.5	\$170.85	\$125.57	\$45.27
515 354 5855 07-G	MILLER HTS GARAGE	4866	2433	\$1,984.11	\$1,458.34	\$525.77
501 200 2970 01-G	NORTHEAST	18186	9093	\$7,415.34	\$5,450.34	\$1,965.00
505 305 5305 00-G	SPARK	10097	5048.5	\$4,117.05	\$3,026.07	\$1,090.98
501 200 2852 00-G	SPRING GARDEN	4614	2307	\$1,881.36	\$1,382.82	\$498.54
513 335 8010 05-G	THOS JEFFERSON	31609	15804.5	\$12,888.57	\$9,473.22	\$3,415.35
512 322 9007 04-G	TRANSPORTATION	17713	8856.5	\$7,222.48	\$5,308.59	\$1,913.89
503 332 7500 02-G	WILLIAM PENN	17268	8634	\$7,041.03	\$5,175.22	\$1,865.81
517 273 7306 04-G	BROUGHAL	14086	7043	\$5,743.57	\$4,221.57	\$1,521.99
501 200 2134 05-G	NITSCHMANN	6202	3101	\$2,528.87	\$1,858.74	\$670.13
501 200 2323 00-G	NITSCHMANN	2936	1468	\$1,197.15	\$879.92	\$317.23
505 305 6750 02-G	FREEDOM	3415	1707.5	\$1,392.47	\$1,023.48	\$368.99
501 200 2830 04-G	LIBERTY	33930	16965	\$13,834.96	\$10,168.82	\$3,666.14
501 200 2795 02-G	LIBERTY	4729	2364.5	\$1,928.25	\$1,417.28	\$510.97
501 200 2820 02-G	LIBERTY	3871	1935.5	\$1,578.40	\$1,160.14	\$418.26
501 200 3995 01-G	LIBERTY	90	45	\$36.70	\$26.97	\$9.72
515 353 7940 09-G	ED CENTER	23404	11702	\$9,542.98	\$7,014.18	\$2,528.80
Totals		427027	213513.5	\$174,120.26	\$127,979.99	\$46,140.27