

CITY OF NEWTON

IN BOARD OF ALDERMEN

PUBLIC FACILITIES COMMITTEE BUDGET & C.I.P. REPORT

THURSDAY, APRIL 23, 2009

Present: Ald. Schnipper (Chairman), Lennon, Mansfield, and Lappin

Absent: Ald. Albright, Salvucci, Gentile, and Yates

Also present: Ald. Baker

City personnel: A. Nicholas Parnell (Public Buildings Commissioner), Arthur Cabral (Budget and Project Specialist; Public Buildings Department), Joshua Morse (HVAC Technician; Public Buildings Department), Susan Burstein (Chief Budget Officer), and Shawna Sullivan (Committee Clerk)

PUBLIC BUILDINGS BUDGET & CIP

REFERRED TO FINANCE AND APPROPRIATE COMMITTEES

#70-09 HIS HONOR THE MAYOR submitting the FY10-14 Capital Improvement Program, totaling \$192,908,572, and the FY09 Supplemental Capital budget, which require Board of Aldermen approval to finance new capital projects over the next five years.

ACTION: **HELD 4-0**

NOTE: Public Buildings Commissioner Parnell, Budget and Project Specialist Arthur Cabral and HVAC Technician Josh Morse joined the Committee for the discussion of the Public Buildings Department's budget. Several Committee members were unable to attend the meeting due to prior obligations. The Chair felt that there might need to be a brief additional budget meeting to answer any questions those Aldermen may have. The Commissioner stated that he would be more than happy to answer any questions.

The Commissioner began with a PowerPoint presentation, which is attached. The budget is level funded. The Public Buildings Department maintains 85 city buildings, which includes 21 schools. The total budget for the fiscal year for the department is \$2,425,761. The department currently spends \$.97 per square foot to maintain the municipal buildings and \$2.50 per square foot to maintain school buildings. The spending is low and it is estimated that the city should be spending between \$3.50 and \$4 per school foot on maintenance. The presentation included the department's accomplishments for the past year. Accomplishments include energy conservation through reductions in fuel consumption, an aggressive boiler preventive maintenance program, new windows, and boiler conversions. Twelve municipal and school buildings have been converted to natural gas, with dual fuel capability. The conversions allow the flexibility in the future to balance against rising costs in either natural gas or oil. Due to the efforts of the department, fuel consumption was reduced by approximately 25%. In addition, the city entered into a contract with Noresco, an energy service company, for the energy improvements at F.A. Day Middle School and the construction phase of the project is 20% complete. Noresco will also be performing energy audits of Bigelow Middle School, Brown Middle School, Oak Hill Middle School, the Education Center, Police Headquarters, and City Hall.

The presentation also included updates on construction and renovation projects on city buildings. The design phase for the new Newton North High School facility is completed and the construction is 50% complete. The project is on schedule and within budget. The new Newton North High School construction website is online to provide citizens with up-to-date information on the construction. The design and replacement of the windows at the Brown Middle School is complete. The renovation of Fire Station #4 is expected to be 50% complete by July 1, 2009. The architect for Fire Station #7 has been selected and the completed design is expected by July 1, 2009. The Commissioner expects to provide a more complete update on the renovations at the fire stations to the Committee in the near future.

The Public Buildings Department has many goals and objectives for the upcoming fiscal year, which are included in the attached presentation. The Commissioner reviewed many of the goals with the Committee. In FY'10, the department looks to substantially complete the new Newton North construction and prepare to move the current school. The department will prepare to purchase the necessary furnishings, equipment, fixtures, and technology for the new school. Furthermore, the new school should obtain its Leed Certification in the upcoming year. The department will continue to strive to communicate with all of the involved parties to keep everyone up to date with the progress of the project. The department will also be working on further energy conservation measures such as developing a comprehensive maintenance plan to address all HVAC issues within the city.

The department's objectives also include the engineering and construction of several energy conservation projects funded through federal and state stimulus funds. The department is in the process of applying for many of the federal and state stimulus programs. In addition, it is determining the city's eligibility for other stimulus programs as the funds become available. There are several "shovel ready" energy related projects, such as boiler replacement at Cabot and Zervas Elementary Schools and the Emerson Community Center.

The presentation also addressed the goals and objectives of the department as they relate to the recommendations of the Citizen Advisory Group. The department is eliminating the purchase of incandescent light bulbs wherever possible. In addition, it is the intention of the department to ensure that any appliances purchased directly or indirectly through the Public Buildings Department be Energy Star rated. The Department will send a memo to all of the departments within the city reinforcing that intention. The department is working on establishing a formal documented method of life-cycle analysis and setting a level at which the analysis will be performed. They are also looking at developing an energy-training program for key personnel throughout the city on building operations, which will emphasize energy efficiency. The training will be on a recurring basis to ensure that everyone is proficient. The department will also look at the feasibility of LEED certifying key building administrators.

The Commissioner concluded the presentation with a comparison of using in-house staff for projects versus outsourcing projects. A comparison of the hourly rates with benefits for the craftspeople employed by the City versus outsourced craftspeople showed a marked difference between hourly rates. The Public Buildings staff was much less expensive per hour. Slides

depicting the typical cost of outsourced projects versus in-house projects displayed significant saving in employing in-house craftspeople.

Ald. Lennon asked Commissioner Parnell to provide a job description for the city hall custodian detailing the responsibility of the positions. He also requested that the Public Buildings Department begin to develop a policies and procedures manual. Each year, the auditor's management letter asks for policies and procedures for each department, such as job responsibilities, job description, and cross-training programs. It would strengthen internal controls and minimize risk to the department. It is the hope that sometime during the next fiscal year that each department can begin to address this issue. Commissioner Parnell stated that he and Arthur Cabral would begin the process this year. He explained that he has reviewed the Citizen Advisory Group's Report and has looked internally at the department and other departments and how they operate to determine where efficiencies could be created. The department can certainly begin to pull together some of the required information.

Ald. Mansfield apologized for arriving late but he was at the Conservation Commission meeting for an item related to his Ward. He stated that there did not seem to be any new initiatives within the budget. Arthur Cabral responded that the department is pursuing the Noresco projects, stimulus projects and energy projects. At some point in time, the department will need to address the initial funds for design for the stimulus projects. Ald. Mansfield recognizes that it is hard to create new initiatives without additional funding but he just wanted to be sure that there was nothing new that warranted further scrutiny. Josh Morse stated that the School Department has some additional funding for energy related projects on a slightly smaller scale than the Public Buildings Department will be undertaking throughout the year. Ald. Mansfield asked if any of the projects that are stimulus funded would free up any of the department's staff to undertake a higher level of maintenance of city buildings. Arthur Cabral stated that the stimulus funds would not directly effect the department; however, some of the departments where the work is performed will see energy savings.

Ald. Lappin was hoping to see a construction database as part of the Public Buildings Department's accomplishments. Not only is it not listed in the accomplishments but also it is not included in the goals and objectives for the department. The Commissioner responded that the database has been set up and he thinks from the Law Department's perspective and the department's ability to find staff time to input data into the database; it is very difficult to populate. Josh Morse stated that a database is only as good as the ability to maintain it and if you do not have the staffing to maintain the database, it becomes an administrative burden. Ald. Lappin explained that the database did not have a lot of maintenance involved. It was more to keep a record of institutional knowledge of a project. It would not be every little thing in the project but the main things that cost the city money and lessons that were learned. Ald. Schnipper thought that the Commissioner might have an exaggerated sense of what the Board and Ald. Lappin are looking for in terms of the amount of information contained in the database. It is her understanding that it would be a simple database depicting whether a product was a good choice or a change order that could be avoided. Commissioner Parnell responded that this type of information has already been entered into the database. Arthur Cabral explained that it is very difficult to find the time to enter all of the information into the database. The Chair requested a copy of the information currently contained in the database. It is not the intent to place blame on

a vendor or an architect but to avoid repeat mistakes that cost the city a large amount of money. The Commissioner stated that he will enter those types of things and issues that the Aldermen want recorded. Arthur Cabral said that he would gather information from all of the available sources, block some time out of his schedule, and enter that information into the database.

Ald. Lappin asked why there was not an increase in funds for building maintenance in this budget. It was one of the Citizen Advisory Groups strongest recommendations and it seems like it would be appropriate to increase maintenance spending. Ms. Burstein pointed out that departments were originally asked to cut their budgets and the administration worked to get things back to close to level funded. The administration does not disagree that building maintenance is a priority. Ald. Lappin asked what the department would need to increase building maintenance in city buildings. It would require more supplies and more trades people. The department went from 19 craftspeople to 13 craftspeople requiring the department to contract projects. There is no longer a painter on staff and it is more expensive to contract out the painting. Ald. Lappin would be happy to fight for additional money if it would allow more work to be done in building maintenance. Ald. Schnipper stated that if the department can make a case of hiring painters because it would have a cost benefit, the Committee should be aware of that. The Commissioner agreed to provide that information. The money for the additional craftspeople must come from somewhere within the budget and would create a deficit in another account. Ald. Lennon pointed out that there is a very small discrepancy in the figures related to the municipal building maintenance account as it is reported in the department summary and the classification details. Ms. Burstein will look into the error and get back to the Committee with the correct information.

Ms. Burstein stated that the grants, gifts, and revolving funds located at the back of the budget book would most likely be amended to reflect stimulus funds and other funds. She also asked for Committee members thoughts on whether the new revolving funds for the branch libraries should fall under the Library's budget or within the Public Building Department's budget. The Chair pointed out that the Committee had a discussion regarding fuel costs for the closed Auburndale Branch Library. Ms. Burstein explained that the revolving funds relate to funds garnered from the reuse of the branch libraries. Essentially, the maintenance of the branch libraries is being done by the Building department. The Executive Office is open and believes it would be more efficient for the revolving funds to fall under the Building Department's budget. If the Board feels that it is appropriate to move the revolving funds under the Public Buildings Department, the Executive Officer will submit an amendment to reflect that change.

It is the Chair's sense that there are more questions and people would like some additional time to reflect on the presentation and suggested that the Public Buildings Department's budget be held for further discussion. The Committee held the item until the next scheduled meeting of the Public Facilities Committee on May 6, 2009.

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ACTION: **HELD 4-0**

NOTE: Public Buildings Commissioner Parnell, Budget and Project Specialist Arthur Cabral and HVAC Technician Josh Morse joined the Committee to discuss the Public Buildings Department's capital projects funded through the Capital Improvement Program (CIP.) Arthur Cabral stated that when the CIP for the department is prepared it is done with the intention that if money is available this is how it would be spent. The department makes every effort to put together a reasonable CIP. From the department's standpoint, they are including what they need to keep the buildings maintained. Unfortunately, the department is restricted due to the amount of funds available but the department does what it can. Ald. Schnipper asked what the highest priority projects would be. The Commissioner and Mr. Cabral both responded that the building envelopes, which include windows, roofs, masonry and doors. The Commissioner would also like a facilities study of all the city's largest buildings.

Ald. Lennon asked Ms. Burstein how much capital funding would be available for the CIP. Ms. Burstein stated that the City has a plan to bond \$3.5 million for capital projects. The Executive Office does not have the figure for anything in cash except for what is in the actual operating budget, which is not building capital. Ald. Lennon asked Mr. Cabral what he thought was the department's number one priority in terms of CIP projects. Arthur Cabral responded that there are certain things that the department must do, such as the environmental clean-ups and they would like to replace several roofs. The Committee requested a prioritized list of capital improvements, which are not yet funded. Mr. Cabral agreed to provide the Committee with a list of priorities. Ald. Lennon asked if the Public Buildings Department could look into painting the rusted flagpoles located throughout the city, especially the flagpole at Walnut and Washington Streets. Commissioner Parnell agreed to come up with some estimates for flagpole painting. The CIP was held until the CIP public hearing.

All other items will be held without discussion.

Respectfully submitted,

Sydra Schnipper, Chairman

Public Buildings Department

FY10 Budget Presentation

Mission Statement

The Public Buildings Department is responsible for planning, designing, constructing and maintaining all public buildings within the City of Newton. To ensure the sustainability of our buildings we are committed to preserving and renovating all public buildings through environmentally and fiscally responsible design, construction and maintenance.

Public Buildings At a Glance

- 85 buildings, (21 schools), 2.6 million sq. ft
- 7,500 work requests are processed each year for all municipal and school buildings
- 20-50 work orders per day are received
- Team of 24 employees
- Total Budget \$2,425,761
- Completed over 200 summer school projects
- \$0.97 per Sq Ft to maintain municipal buildings
- \$2.50 per Sq Ft to maintain school buildings

Impact Statement

- The budget was level funded, and therefore has little to no impact on our ability to operate and provide the required services.

Accomplishments

- It should come as no surprise that we are facing some of the toughest economic times in many years. As a result the Public Building Department has placed additional emphasis on any, and all, cost saving measures. We have the unique ability to reduce operating expenses in both the municipal and school departments, and have successfully done so in FY09.
- There have been many ways in which we have responded to the tough economy. Fuel consumption was drastically reduced in FY09 as a result of a new aggressive boiler preventive maintenance program, the conversion of 12 buildings to natural gas with dual fuel capability, and the installation of high efficiency boiler controls. We pursued many different electrical improvements both operationally and from a purchasing standpoint. New windows installed at the Brown Middle School have, and will have a profound impact on the fuel consumption at one of Newton's largest consumers of fuel.

Fuel Conversions

- As many people are aware, this past heating season was one of the most challenging for Newton in a number of years. Prior to the start of the heating season Newton was predominantly oil heated. It became clear last summer that oil prices had the potential to cripple our operating budget. As a result we charged forward with a multi-point attack on reducing our fuel consumption, as well as our dependency on oil. 66% of municipal and school buildings were heated by oil only. Now only 32% are limited to oil, 34% are limited to natural gas, and the remaining 34% can use either oil or natural gas.
- We converted 12 municipal and school buildings to natural gas, with dual fuel capability. This not only saved money this fiscal year, by enabling the consumption of natural gas at appx half the cost of oil, but it also addressed many capital needs, and allows the flexibility in the future to hedge against rising costs in either natural gas or oil. We also reduced our annual carbon emissions by 28%, or 2,340,000 pounds.

Energy Related Accomplishments

- We commenced a very aggressive boiler preventive maintenance program, with a focus on drastic increases in boiler efficiencies.
- We installed new high efficiency boiler controls at many of our buildings.
- We pushed our building operators to focus on efficient building and heating system operation.

Energy Related Results

- As a result of the efforts made by the Building Department we were able to reduce the fuel consumption in the City by approximately 25% from the levels seen last year, when adjusted for degree days.
- This drastic reduction in fuel consumption saved the City from a projected million dollar fuel budget shortfall.
- The examples go on and on, but the most important improvement made this year was changing the way people think about building operations. We would like to thank everyone in all of our municipal and school buildings for their efforts in maximizing building efficiency in Newton. This change will benefit the City of Newton both fiscally and operationally for years to come.

Energy Related Results

- Specific examples of reductions include the Bigelow School, where we installed boiler efficiency controls, resulting in approximately a 40% reduction in fuel consumption.
- Our own building on Elliot Street had a 32% reduction in fuel consumption from last year, as a result of installing a programmable thermostat, and a combined effort to keep the building temperatures as low as reasonably comfortable.

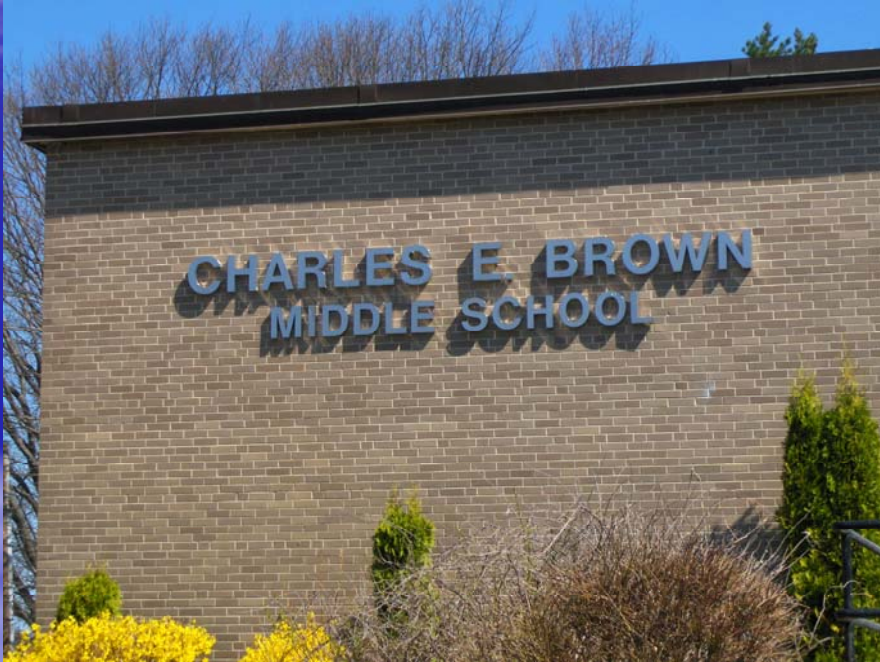
NNHS



NNHS

- Completed the design phase for the new sustainable state-of-the-art high school facility.
- We are 50% complete with the construction phase.
- We are operating the project on schedule and within budget.
- We have a NNHS construction site up and online at www.newnnhs.com, to provide the general public with up to date information on construction alert details and project status.

Completed the design and replacement of the Brown School windows.



Fire Station #4 Renovation

- Selected the architect, designed, and completed 50% of the construction phase, for the renovation of Fire Station #4. Estimated as of July 1st, 2009.



Fire Station #7 Renovation

- Selected the architect, and completed design of Fire Station #7. Estimated as of July 1st, 2009.



Noresco Projects

- Entered into a contracted agreement with Noresco for the energy improvements to the F.A. Day Middle School.
- 20% complete with the construction phase at the F.A. Day Middle School.
- Signed a contract for the energy audits of Bigelow, Brown, and Oak Hill Middle Schools, the Ed Center, City Hall, and Police HQ.



New Boilers



Fire Station #3



Underwood School



Carr School



City Hall

Elliot Street Gas Tanks

- Completed design phase for the removal of old, and subsequent installation of new, fuel storage tanks.
- 75% complete with the construction phase.



21E Cleanup

- 21E is the removal of free oil product and/or vapors from the ground, that are there as a result of overfills or tank/piping leaks.
- Continued removing free oil product from the ground at the Cabot and Horace Mann Schools as a continuation of the 21E clean-up.
- Continued removing oil and gasoline vapors from the ground at the Elliot Street DPW Yard as a continuation of the 21E clean-up.



Cabot Remediation Hut

Additional Accomplishments

- Completed the HVAC, plumbing, lighting, and fire safety improvements (M.E.P.) to Fire Stations 1, 2, 3, 7, and 10.
- Completed the HVAC retrofit, and building improvements to the Police Annex.
- Completed the HVAC retrofit, and space reconfigurations to the City Hall retirement office area.
- Completed the design of the Main Library electrical improvements.
- Applied for stimulus funding for Cabot, Zervas, and Emerson CC boiler replacement, and Craft and Elliot street garage air handler replacement.
- We have also installed waterless urinals in the 1st floor bathroom at City Hall, and will expand this to other facilities throughout the City.

FY 10 Goals and Objectives

Newton North High School Project

1. To substantially complete the construction, and prepare for the moving of the existing school.
2. To prepare for the purchasing of new Furnishings, Equipment, Fixtures and Technology for the new Newton North High School.
4. To obtain Leed Certification for the new Newton North High School.
4. To continue to communicate the planning and progress of the many different facets of this project back to the Administration and the Board of Aldermen.
5. To continue the dialogue with the many different stakeholders, including abutters, involved with the design, planning and construction for the educational and community use of this new state-of-the-art high school facility.

FY 10 Goals and Objectives cont.

Energy Conservation Measures

1. Complete the energy conservation measures through Noresco at the F.A. Day Middle School.
2. Commence Noresco Energy audits of Bigelow Middle School, Brown Middle School, Oak Hill Middle School, Education Center, City Hall and Police Headquarters.
3. Continue to develop a comprehensive maintenance plan to address all heating, ventilation, and air conditioning issues within the City.

FY 10 Goals and Objectives cont.

Energy Conservation Measures cont.

4. Engineer and complete construction of numerous energy conservation projects through use of federal and state stimulus funds.
5. Continue with the “Solar on Schools” campaign at two middle schools.
6. Partner with other departments on utility conservation measures.

FY 10 Goals and Objectives cont.

Schooldude Products

To aid energy conservation and equipment longevity, we will continue to utilize the following products; Preventive Maintenance Direct (PM Direct), Inventory Direct, and Planning Direct. There will be increased emphasis placed on the following items with respect to the Schooldude program:

- work order response times
- documentation of preventative maintenance
- root cause evaluation

Newton South High School will be used a pilot for the Preventive Maintenance Direct program. This program will have the capability of automatically generating work orders at the required periodicities. We are limiting this program at NSHS for the start of this project, to ensure proper operation before expanding to other school and municipal buildings.

FY 10 Goals and Objectives cont.

Other Objectives

- Complete the construction/renovations to Fire Station #4, 195 Crafts Street.
- Complete the design/construction/renovation to Fire Station #7, 144 Elliot Street
- Complete installation of new boilers at Angier, Cabot, Zervas, and Emerson Community Center.
- Complete installation of above ground fuel storage tanks at the Elliot Street DPW yard.
- Complete installation of new air handling units at the Craft street, and Elliot Street garage.
- Commence and complete the roof replacement at the Bowen School.
- Utilize the HVAC standard to reduce operating costs throughout the city.
- Improve upon the documentation and completion of preventative maintenance.

Stimulus Funds Goals and Objectives

- There are many federal and state stimulus programs available to the City of Newton at this time. Information and applications for these programs have just recently been made available. We are in the process of applying for many of these programs, as well as continuing to determine Newton's eligibility for additional programs as they become evident.
- An example of the programs that Newton is eligible for is the Block Grant Program. This is a stimulus program which targets cities and towns with a population of 35,000 or more. The target projects are "shovel ready," and ones that will improve energy efficiencies. Through this program we are eligible for \$799,600.00.

Stimulus Funds Goals and Objectives Cont

- At this time we are pursuing the following energy related projects. However, additional energy saving projects are “shovel ready,” and will be included if possible.
- Boiler replacement at the Cabot School
- Boiler replacement at the Zervas School
- Boiler replacement at the Emerson Community Center
- Air handler replacement at the Craft Street garage
- Air handler replacement at the Elliot Street garage

CAG Related Goals and Objectives

- We are planning to eliminate the purchasing of incandescent light bulbs whenever possible, and we plan to ensure that any appliances purchased directly, or indirectly, through our department are Energy Star rated. We will release a directive stating our intentions in this area, that will be distributed to all of the departments.
- We are going to establish a formal documented method of life cycle analysis, as well as set a level at which these analysis will be performed.
- We intend to develop a energy training program which trains key personnel throughout the city on building operations with an emphasis on energy efficiency. This program will be utilized on a recurring basis to ensure operator proficiency. We will also look at the possibility of LEED certifying key building administrators.

Thank You!

The Public Buildings Department Team

