#### CITY OF NEWTON

## IN BOARD OF ALDERMEN

## PUBLIC FACILITIES COMMITTEE AGENDA

WEDNESDAY, MAY 23, 2012

Room 209 7 PM

#### ITEMS SCHEDULED FOR DISCUSSION:

Appointment by His Honor the Mayor

#150-12 <u>JAMES POWERS</u>, 11 Star Road, West Newton, appointed as a member of the DESIGNER SELECTION COMMITTEE for a term of office to expire on December 31, 2013. (60 days 7/21/12) [04-30-12 @ 5:07 PM]

## Appointment by His Honor the Mayor

- #151-12 <u>BENJAMIN TUCKER</u>, 12 Nathan Road, Newton Centre, appointed as a member of the DESIGNER SELECTION COMMITTEE for a term of office to expire on December 31, 2013. (60 days 7/21/12) [04-30-12 @ 5:07 PM]
- #152-12 <u>ALD. RICE DANBERG, BLAZER & SCHWARTZ</u> requesting the City of Newton name the expanded sidewalk in front of 4 Hartford Street at the corner of Lincoln Street in Newton Highlands as *Rodney Barker Square* to recognize Rodney Barker's decades of public service to Newton Highlands. [05/14/12 @ 3:22 PM]
- #153-12 <u>COMMISSIONER OF PUBLIC WORKS</u> requesting that the Board of Aldermen approve the City's acquisition of a public way easement from Boston College. The parcel of land is 12.1' x 8.2' or 100 square feet in area and will be used to place a traffic signal. [05/14/12 @ 4:05 PM]

# REFERRED TO PUBLIC FACILITIES AND FINANCE COMMITTEES

#114-12 <u>HIS HONOR THE MAYOR</u> requesting authorization to appropriate the sum of three hundred thousand dollars (\$300,000) from bonded indebtedness for the purpose of funding Phase I of a multi-phase project for energy efficiency upgrades at multiple buildings. [04-09-12 @ 7:04 PM]

# REFERRED TO PUBLIC FACILITIES AND FINANCE COMMITTEES

#112-12 <u>HIS HONOR THE MAYOR</u> requesting authorization to appropriate the sum of two hundred fifty thousand dollars (\$250,000) from bonded indebtedness for the purpose of funding the design and construction of mechanical upgrades at the Burr Elementary School. [04-09-12 @ 7:04 PM]

The location of this meeting is handicap accessible, and reasonable accommodations will be provided to persons requiring assistance. If you have a special accommodation need, please contact the Newton ADA Coordinator Trisha Guditz, 617-796-1156, via email at <a href="mailto:TGuditz@newtonma.gov">TGuditz@newtonma.gov</a> or via TDD/TTY at (617) 796-1089 at least two days in advance of the meeting date.

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# REFERRED TO PUBLIC FACILITIES AND FINANCE COMMITTEES

#111-12 <u>HIS HONOR THE MAYOR</u> requesting authorization to appropriate the sum of sixty thousand dollars (\$60,000) from bonded indebtedness for the purpose of funding the repair of masonry and related surfaces at the Bowen Elementary School. [04-09-12 @ 3:40 PM]

## REFERRED TO PUBLIC FACILITIES AND FINANCE COMMITTEES

#110-12 <u>HIS HONOR THE MAYOR</u> requesting authorization to appropriate the sum of two hundred fifty thousand dollars (\$250,000) from bonded indebtedness for the purpose of upgrading mechanical systems at Lincoln-Eliot elementary School. . [04-09-12 @ 3:40 PM]

## REFERRED TO PUBLIC FACILITIES AND FINANCE COMMITTEES

#161-12 <u>HIS HONOR THE MAYOR</u> requesting authorization to transfer the sum of one hundred forty-eight thousand four hundred eighty one dollars (\$148,481) from the Energy Stabilization Account to fund the energy audit conducted by NORESCO. [05/14/12 @4:05 PM]

## REFERRED TO PUBLIC FACILITIES AND FINANCE COMMITTEES

#109-12 <u>HIS HONOR THE MAYOR</u> requesting authorization to appropriate the sum of ninety thousand dollars (\$90,000) from bonded indebtedness for the purpose of repairing and replacing windows at Fire Station #4. [04-09-12 @ 3:40]

# ITEMS NOT SCHEDULED FOR DISCUSSION: REFERRED TO PUBLIC FACILITIES AND FINANCE COMMITTEES

#160-12 <u>HIS HONOR THE MAYOR</u> requesting authorization to appropriate the sum of four million two hundred thirty-nine thousand eight hundred seventy-eight dollars (\$4,239,878) from bonded indebtedness for the purpose of funding Phase 1 (Project Area 1) of the proposed 11-year Underground Infrastructure Strategic Improvement Plan as prepared by the Utilities Division. [05/14/12 @4:05 PM]

*Public hearing assigned for June 6, 2012:* 

#149-12 <u>JANE MADDOX</u> petitioning for a sewer main extension to be constructed in DUFFIELD ROAD from an existing sewer manhole located in Duffield Road 195'+ southerly to a proposed sewer manhole in Duffield Road. (Ward 4) [05-15-12 @ 4:22 PM]

# PETITIONER TO PAY ENTIRE COST

*Public hearing assigned for June 20, 2012:* 

#148-12 NATIONAL GRID petitioning for a grant of location to install and maintain a 50" H x 36" W x 17" D utility box (traffic box) to be located on OAK STREET at the proposed regulator station at 81 Oak Street. (Ward 5) [05/11/12 @ 2:14 PM]

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Public hearing assigned for June 20, 2012:

#147-12 <u>NATIONAL GRID</u> petitioning for a grant of location to install and maintain a 50" H x 36" W x 17" D utility box (traffic box) at the HOMER STREET and GRAFTON STREET intersection at the existing regulator station. (Ward 6) [05/11/12 @ 2:14 PM]

# REFERRED TO PUBLIC FACILITIES AND FINANCE COMMITTEES

#115-12 <u>HIS HONOR THE MAYOR</u> requesting authorization to appropriate the sum of six million seven hundred fifty thousand dollars (\$6,750,000) from bonded indebtedness for the purpose of funding construction and administration of renovations and additions to F.A. Day Middle School. [04-09-12 @ 3:40 PM]

# REFERRED TO PUBLIC FACILITIES AND FINANCE COMMITTEES

#144-05(3) COMMUNITY PRESERVATION COMMITTEE recommending the appropriation of one hundred thirty-four thousand dollars (\$134,000) to the Department of Public Works for specifications and construction to restore the City-owned Civil War Monument located in Newton Cemetery, as described in the proposal submitted by the Department of Public Works Engineering Division and the Planning and Development Department. [04/30/12 @ 11:53 AM]

## REFERRED TO PUBLIC FACILITIES AND FINANCE COMMITTEES

- #133-12 <u>HIS HONOR THE MAYOR</u> requesting authorization to transfer the sum of sixty-seven thousand one hundred thirty-six dollars (\$67,136) from the Water Enterprise Funds to the Mass Water Resource Authority Assessment as follows:
  - \$40,000 from Work by Other Departments
  - \$20,000 from Hydrants & Hydrant Parts
  - \$7,136 from Current Year Reserve [04/30/12 @ 5:08 PM]

Public Hearing to be assigned for June 6, 2012:

#126-12 <u>HIS HONOR THE MAYOR</u> requesting that a portion of CHRISTINA STREET be laid out, graded, and accepted as a PUBLIC WAY from Needham Street to the property line at 90 Christina Street, (a distance of 1,020') to be the width of 40'. (Ward 8) [04-30-12 @ 5:09 PM]

## REFERRED TO PUBLIC FACILITIES AND FINANCE COMMITTEES

#108-12 <u>HIS HONOR THE MAYOR</u> requesting authorization to appropriate the sum of three hundred twenty thousand dollars (\$320,000) from bonded indebtedness for the purpose of funding design and Phase I construction and administration for replacement of a portion of the roof and repair of exterior masonry at the welding shop at the Crafts Street Garage. [04-09-12 @ 3:40]

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## REFERRED TO PUBLIC FACILITIES AND FINANCE COMMITTEES

#107-12 <u>HIS HONOR THE MAYOR</u> requesting authorization to appropriate the sum of two hundred fifty-two thousand dollars (\$252,000) from bonded indebtedness for the purpose of funding the design and repair of masonry and related surfaces at the Public Works Utilities Building. [04-09-12 @ 3:40]

## REFERRED TO PUBLIC FACILITIES AND FINANCE COMMITTEES

#106-12 <u>HIS HONOR THE MAYOR</u> requesting authorization to appropriate the sum of one hundred sixty thousand dollars (\$160,000) from bonded indebtedness for the purpose of purchasing a street sweeper. [04-09-12 @ 3:39]

# REFERRED TO PUBLIC FACILITIES AND FINANCE COMMITTEES

- #104-12 <u>HIS HONOR THE MAYOR</u> requesting authorization to appropriate the sum of three hundred thousand dollars (\$300,000) from bonded indebtedness for the purpose of design and installation of an accessible ramp and renovations to the City Hall Veterans' Wing. [04-09-12 @ 2:48 PM]
- #99-12

  ALD. LAREDO, ALBRIGHT, CROSSLEY & KALIS requesting a discussion with His Honor the Mayor regarding the creation of a long-range master plan (20-25 years) regarding the means, methods, timing, and coordination to address the City's complete infrastructure needs, including but not limited to school buildings, fire stations, other municipal buildings, streets, sidewalks, trees, playgrounds and other recreational facilities, water, stormwater, and sewer systems, and all other facilities and infrastructure identified in the city's recent capital assessment. The master plan should be comprised of specific plans from individual departments and at a minimum, the master plan should (a) identify those infrastructure needs and (b) present a phased plan, with identifiable funding sources for meeting those needs. [04-04-12 @ 10:30 PM]
- #98-12 <u>ALD. SALVUCCI AND CICCONE</u> requesting an update on the new water meter installation project and information on how the meters and related equipment are functioning. [03-27-12 @ 9:06 AM]

## REFERRED TO PUBLIC FACILITIES AND FINANCE COMMITTEES

#54-12 <u>ALD. SALVUCCI, BLAZAR AND FULLER</u> requesting the creation of a revolving fund into which 50% of all betterment income shall be deposited to be used exclusively for individual requests for betterments. [02/02/12 @ 10:21 AM]

# REFERRED TO PROG. & SERV AND PUBLIC FACILITIES COMMITTEES

- #36-12 <u>ALD. CROSSLEY & FULLER</u> requesting Home Rule legislation or an ordinance to require inspections of private sewer lines and storm water drainage connections prior to settling a change in property ownership, to assure that private sewer lines are functioning properly and that there are no illegal storm water connections to the city sewer mains.
  - A) Sewer lines found to be compromised or of inferior construction would have to be repaired or replaced as a condition of sale;

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- B) Illegal connections would have to be removed, corrected, and re-inspected in accordance with current city ordinances and codes, as a condition of sale. [01/24/12 @ 8:07 AM]
- #418-11 ALD. CROSSLEY, HESS-MAHAN, LINSKY AND SALVUCCI requesting a report from the administration on the status of a strategy to meet the City's obligation as a Department of Energy Resources Green Community to reduce municipal energy consumption by 20% over five years, and how that strategy is incorporated into the capital improvement plan. [12/08/11 @ 4:09 PM]

#### REFERRED TO PS&T AND PUBLIC FACILITIES COMMITTEES

#413-11 <u>ALD. CICCONE, SALVUCCI, GENTILE & LENNON</u> updating the Public Facilities and Public Safety & Transportation Committees on the progress of renovations to the city's fire stations. [11-17-11 @11:07 AM]

## REFERRED TO PUBLIC FACILITIES AND FINANCE COMMITTEES

- #383-11(4) HIS HONOR THE MAYOR recommending that Section 29-80 (b)(1) of the City of Newton Revised Ordinances, 2007 be amended by revising the stormwater rates as follows: single-family residences \$25 per year, two-family residences \$37.50 per year, and multi-family (3 units or more), commercial, industrial, and institutional properties (to include non-profits) would be charged at a rate of \$25 per Equivalent Residential Unit of 2,600 square feet of impervious surface on the property to take effect on July 1, 2012. [04-09-12 @ 2:39 PM]
- #352-11 <u>ALD. JOHNSON & SCHNIPPER</u> requesting a discussion with the Utilities Department regarding the City of Newton's current water billing practices. [10/14/11 @ 2:31 PM]
- #174-11 <u>ALD. DANBERG AND BLAZAR</u> requesting a raised device on Cypress Street near Bow Road recommended by the Traffic Engineer and approved by the Traffic Council (TC22-11) on May 26, 2011. [05-27-11 @ 10:53 AM]
- #173-11 <u>ALD. DANBERG AND BLAZAR</u> requesting a raised crosswalk on Cypress Street in the vicinity of 280 Cypress Street, in association with modifications to the Bowen Elementary School entrance, as approved on May 26, 2011 in Traffic Council (TC20-11), and to be paid for through MassDOT's Safe Routes to School Infrastructure Program. [05-27-11 @ 10:53 AM]
- #172-11 <u>ALD. CROSSLEY, FULLER AND SCHNIPPER</u> requesting discussion with the Utilities Division of the Public Works Department regarding the identification of storm water inflow connections to the sewer system, so as to begin the process of systematically eliminating such illegal connections, including notifications to property owners, educational materials, requirements for corrective actions and technical and financial assistance that may be available from the City in order to facilitate removal of inflow connections. [05/26/11 @3:33 PM]

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- #139-11

  ALD. LINSKY, DANBERG & SALVUCCI proposing that §26-71, 26-72 and 26-73, Sidewalk construction requested by owners, Materials for sidewalk construction, and New curbing installation, respectively, be amended to extend participation in the betterment program to property owners who voluntarily pay the residual 50% of the costs over time in addition to the 50% initial payment provided under the ordinance. [04-27-11 @9:38 AM]
- #138-11 <u>ALD. CROSSLEY AND SCHNIPPER</u> requesting a report from the Department of Public Works regarding the energy use and maintenance costs for the City's streetlights and gaslights and costs/payback associated with recommended energy efficiency measures. [04-21-11 9:08 AM]

# REFERRED TO PS&T AND PUBLIC FACILITIES COMMITTEE

#41-11 <u>ALD. JOHNSON, LENNON AND DANBERG</u> requesting discussion of the elimination, except during snow emergencies, of the overnight parking ban which is in effect from November 15 through April 15. [01/18/11 @ 9:00 PM]

# REFERRED TO PUBLIC FACILITIES AND FINANCE COMMITTEES

#311-10(A) <u>HIS HONOR THE MAYOR</u> requesting an appropriation in the amount of three million three hundred thirty-five thousand dollars (\$3,035,000) from bonded indebtedness for the purpose of funding the FY 2011 Capital Improvement Plan projects as follows: [11/29/ 10 @ 3:23 PM]

Architectural Design and Engineering/ Next Scheduled Fire Station \$400,000 A-2 - HELD 6-0 \$270,000 for final design bidding and construction admin on 12/08/10

## REFERRED TO PROG & SERV AND PUBLIC FACILITIES COMMITTEES

- #245-10 <u>ALD. SCHNIPPER AND SANGIOLO</u> requesting discussion with National Grid regarding the possible damage to trees as a result of gas leaks. [09/01/10 4:00 PM]
- #244-10 <u>ALD. SALVUCCI</u> requesting discussion with the Utilities Director and the Public Works Commissioner regarding the possibility of installing second water meters for outside irrigation. [08/17/10 @12:18 PM]
- #223-10 <u>ALD. YATES & ALBRIGHT</u> requesting updates on the status of the reconstruction of the Needham/Newton Street corridor, which include details on the reconstruction funding, plans for the revitalization of the area, and plans for the implementation of transportation improvements. [07/15/10 @ 1:02 PM]
- #367-09 <u>PUBLIC FACILITIES COMMITTEE</u> requesting discussion with the Law Department on how to resolve the dispute with NStar regarding whose responsibility it is to repair the streetlight connection between the manhole and the base of the streetlight. [10/21/09 @ 9:00 PM]

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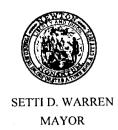
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- #175-09 <u>PUBLIC FACILITIES COMMITTEE</u> requesting monthly updates from the Department of Public Works on the Commonwealth Avenue project. [06-03-09 @10:30 PM]
- #253-07

  ALD. LINSKY ALBRIGHT, JOHNSON, HARNEY, SANGIOLO, SALVUCCI, MANSFIELD, BURG, SCHNIPPER requesting (1) a review as to how provisions of applicable ordinances, specifically 5-58, were implemented during the course of the Newton North project, and (2) consider proposed revisions of 5-58 including, but not limited to:
  - (a) timely provision of documentation by the public building department to the Board of Aldermen and Design Review Committee;
  - (b) establishment of liaison committees to facilitate communications and input from neighborhoods affected by projects subject to this ordinance;
  - (c) approval of final design plans by the Board of Aldermen of projects subject to this ordinance;
  - (d) oversight during the construction phase of projects subject to this ordinance by appropriate Board committee(s) both in respect to approval of change orders as well as design changes; and
  - (e) generation of a required record detailing the entire construction process by the public building department to guide present and future oversight of projects subject to this ordinance. [08/07/07 @ 3:12 PM]
  - (f) establishment of a committee to provide oversight for public building construction and renovation during all phases of planning, design and construction.
- #385-07 <u>ALD. SCHNIPPER AND GENTILE</u> updating the Public Facilities Committee on the progress of the Newton North High School Project. [11/21/07 @ 10:23 AM]

Respectfully submitted,

Anthony J. Salvucci, Chairman



# City of Newton, Massachusetts Office of the Mayor

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David A. Olson, CM

2012 APR 30 PM 5: 0

Newton City Clark

April 23, 2012

Honorable Board of Aldermen Newton City Hall 1000 Commonwealth Avenue Newton, MA 02459

Re: Appointments to the Designer Selection Committee

## Ladies and Gentlemen:

In accordance with Sec. 5-35 of our City Ordinances, this letter is to ask for your confirmation for two appointments to the Designer Selection Committee. The Committee has nine (9) voting members authorized and currently there are two vacancies to be filled by Mayoral appointment. As you are aware, the current planning timeline for the Angier Elementary School improvements will require significant input and review by the Designer Selection Committee in the process to select the Owners Project Manager (OPM) and facility design firm.

The attached resumes illustrate the tremendous expertise and competence of these two individuals who I am convinced will greatly assist us in the process ahead and lend their professional expertise to the tasks ahead. Thank you for your consideration of this matter.

Very traly yours,

Setti D. Warren

Mayor

Cc: Stephanie Gilman, Commissioner of Public Buildings Department

# JAMES POWERS, P.E.

2012 MAY 945-2588 4: 57

#### SUMMARY OF OUALIFICATIONS

David A. Olson, CMC

Newton, MA Oracle A civil engineering professional with broad experience in many aspects of waterworks engineering locally 150 nationally and internationally. Career includes positions with Metcalf & Eddy (now AECOM), a large international consulting firm and with the Massachusetts Water Resources Authority (MWRA), a large water and wastewater utility. Focus at Metcalf & Eddy was on planning and designing facilities while the focus at the MWRA was on implementing portions of a major capital improvement program. Areas of specialization include infrastructure analysis and master planning, financial analysis, hydraulics and hydrology, and the design and construction management of water transmission, distribution, pumping and storage facilities.

#### PROFESSIONAL EXPERIENCE

# MASSACHUSETTS WATER RESOURCES AUTHORITY (MWRA)

1987-2004

# Assistant Director, Capital Engineering and Construction Department

- Recruited staff of fifteen engineers forming a section within the department responsible for developing and implementing the water transmission and distribution storage aspects of the Capital Improvement Program
- Oversaw analysis and planning function
- Developed concepts for new facilities and the rehabilitation of existing infrastructure
- Prepared capital budgets for Board of Directors approval
- Developed scopes of work to procure consulting engineering firms for each project
- Managed engineering contracts, coordinating activities of the consultants with system operating staff and with adjoining projects
- Reviewed and approved design submittals
- Reviewed change orders related to designs
- Assisted with start-up of facilities including preparation of operation and maintenance manuals and training of in-house operating staff

# Summary of Work and Projects

Distribution System Model Study

Developed computer hydraulic model of the Metropolitan Area pipe network and storage facilities. Used model to analyze system, tested the efficacy of proposed improvement plans and developed infrastructure needs. Twelve years after the model was developed it was upgraded to GIS-based, to operate on real time and to have enhanced water quality analysis capability.

#### Aqueduct & Tunnel Study

Analyzed 129 miles of existing major transmission conduits and a variety of improvements proposed to increase redundancy as necessary to insure continued delivery of water with any conduit out of service.

#### Distribution Storage Study

As the existing 10-day supply of distribution storage was virtually all in open reservoirs, which then current regulations mandated must be replaced by covered facilities, this study developed the capacity, location and cost of supply equal to one maximum day of demand.

#### Master Plan

• The alternatives presented in the above three consultant studies were analyzed and a master plan was prepared by in-house staff which recommended three major transmission projects at a cost in current dollars of \$1.2 billion, a 30-year \$25 million per year water main rehabilitation and replacement program, a \$40 million distribution reservoir program, and upgrades to ten pumping stations. After acceptance of these recommendations, a series of high-priority projects were conceptualized in greater detail to form a 10-year capital improvement program.

## Metro West Water Supply Tunnel

- Managed staff and consultants through the design, permitting and regulatory review aspects of this 18-mile long 14-foot diameter deep rock tunnel.
- Bid four construction contracts with a value of over \$500 million.
- Assisted during construction and start-up.
- Completed project on time and under budget with less than 1% change orders.

## Distribution Main Program

- Managed more than 20 construction contracts for new mains up to 6-foot diameter and rehabilitation of older mains up to 5-foot diameter for a total length of 67 miles.
- Several projects were designed in-house; the majority by seven prime consulting firms.
- Much of the work was located in intensely-developed urban areas and involved detailed traffic planning and other design efforts to minimize impacts to the public.

#### In-house Hydraulic Analyses

Managed numerous hydraulic analyses for system shutdowns and planning studies.

#### Distribution Reservoir Program

• Five distribution reservoirs, with a combined capacity of 225 million gallons, were designed, permitted and constructed. One of these used design-build method. A sixth reservoir using the design-build method had completed the preliminary design and regulatory review process.

## METCALF & EDDY (now AECOM)

1968-1987

#### Project Manager

Progressed from Staff Engineer to Project Manager working under the direction of several nationally prominent engineers on numerous waterworks projects for public and private clients throughout the world.

#### Select Domestic Projects

# St. Paul, MN: District Heating Development Company

Project Manager from concept development through construction, start-up and testing of the first large-scale hot water district heating system in the U.S. Turbines in two electric-generating plants were converted so that steam could be extracted from their final stages. The steam was put through heat exchangers to produce 250 degree, 250 psi hot water. A distribution system, 13 miles in length, of triple composite supply and return mains was constructed to heat 200 downtown buildings, the state capitol complex and an area of public housing. The \$72 million project was privately financed with some support from the Department of Housing and Urban Development (HUD). The technology and many materials were imported from Sweden and in many cases there were no applicable U.S. codes. The project won seven major awards including the Grand Conceptor Award in New England and the National Award for Engineering Excellence from the National Society of Professional Engineers. The project was an immediate financial success even with bonds used at a time of record-high interest rates.

## Plymouth, MA

Designed two steel and one pre-stressed concrete water tank, three well pump stations, a pressure filter treatment plant and many miles of water mains over a 15-year period.

## U.S. Navy, Kings Bay, GA

This old army depot was converted into the Atlantic Fleet Trident Submarine base. Developed the concepts for an entirely new water system to be designed by the firm's Atlanta office, including cathodic protection of pipelines on docks and piers.

## Exxon Terminal, Everett, MA

Designed the fire suppression system to permit this terminal to receive large liquefied natural gas tanker ships. Very heavy-walled, high-pressure fiberglass pipe imported from Switzerland was used. Monitors, mist generators and similar devices were designed for fire suppression or containment.

## Prudhoe Bay, North Slope, AK

Project Engineer on the design of the water distribution system which is above ground, insulated and heated. It is supported on timber beams and designed so as not to transmit heat which could melt the permafrost.

#### Chino Hills, CA

Located at the junction of Los Angeles, San Bernardino and Riverside counties, this area is astride of three of the aqueducts which supply southern California. Developed a concept to use water from all three aqueducts, which operate at different pressures, to supply an area with significant changes in land elevation over short distances. Pump stations, pressure reduction and regulating stations, transmission mains and distribution storage reservoirs were sited to maximize supply by gravity and to simplify the layout of pressure zones.

## Lower Cape Fear Water Authority, Wilmington, NC

Project Engineer on four contracts (electrical, mechanical, architectural and hydraulic) to repair the water treatment plant.

#### Gloucester, MA

Performed the design to raise the embankment of the Dykes Meadow Reservoir dam by 17 feet and of new spillway as well as several water mains. Designed a raw water pump station to transfer water between reservoirs.

## Presque Isle, ME

Project Engineer on design of a 1,700-foot long flood control dam for the soil conservation service.

#### **Select International Projects**

#### Canal Cities, Egypt

After the Camp David Accord U.S.A.I.D. had a survey team analyze the war damage to these cities which had been abandoned for a decade and develop a plan and budget for restoring and upgrading the infrastructure. Served as Project Manager for the potable and irrigation water systems, spending nine months in Egypt. Developed hydraulic models together with local engineers to analyze needs, recommend upgrades and develop conceptual plans, outline specifications and cost estimates for three treatment plants, four storage facilities, numerous pipelines and two pump stations.

## Safwa, Saudi Arabia

Developed master plan of a water system to supply a traditional rural town of 25,000 people, including hydraulic analyses, conceptual design of a blending station to mix desalinated water from a regional transmission main with brackish water from local wells, a pipe network layout, and ground level elevated storage tanks.

## Quatif Oasis Villages, Saudi Arabia

Developed concepts for a rudimentary water system to service numerous small villages.

## Damman and Al Khobar, Saudi Arabia

Assisted on development of hydraulic model and provided advice and technical review of system master plan. Bangkok, Thailand

Performed hydraulic study of the Klong Prapa Canal and recommended channel improvements to increase flow so that the canal could serve as a raw water conduit to the treatment plant.

## Tehran-Boston Engineers, Beirut, Lebanon

Miscellaneous work over many years on Middle East projects generally consisting of research and technology transfer as assistant to the Sr. Vice President who was the liaison to this joint-venture company.

## Rangoon, Burma

Working with a senior Burmese engineer assigned to the Boston office, developed a hydraulic model of the Rangoon water distribution system and identified improvement projects to be funded by the Asian Development Bank

#### Panama City, Panama

Served on the technical review committee for a water transmission main crossing of the Panama Canal.

# Large Regional Master Plans

#### Houston, TX

The fourth largest city in the U.S. was largely supplied by hundreds of small groundwater systems built by local developers as part of their subdivisions. This massive withdrawal of groundwater was resulting in subsidence of the ground causing portions of the city to fall below sea level. The city was ordered by the courts to construct a new transmission system and treatment plants to supply the city with surface water purchased from the Corps of Engineers and Soil Conservation Service Reservoirs and eliminate the groundwater systems. This water was released down the Brazos, San Jacinto and Trinity Rivers to Houston.

Developed the concepts for how this was to be done with a new transmission system, pumping stations and large ground level concrete storage tanks. Conducted computer hydraulic analyses.

## Chicago Northwest Suburban Water System, IL

Similar to Houston, seventeen suburbs northwest of Chicago were withdrawing so much groundwater that the water level in an aquifer that also supplied the neighboring state of Wisconsin was drawn down to 1500 feet below ground level. As a result of a suit filed by Wisconsin, these suburbs were forced to convert to surface water. Hydraulic modeling was done which showed that the City of Chicago system had spare capacity at night to convey treated Lake Michigan water to large new storage tanks located at the boundary of the city and suburbs. A large capacity pumping station was designed to supply a new aqueduct to the seventeen suburbs. Worked on the basic concepts and layout of the new system as well as the hydraulic design. Planning was done for several of the suburbs to make modifications to receive the new supply.

## Metropolitan Water District of Southern California (MWD)

The Chino Hills area, located at the boundary of Orange, Riverside and Los Angeles counties, was being developed to provide new housing for 250,000 residents. Three aqueducts, all operating at different pressures, are adjacent to Chino Hills. Laid out a new transmission system and storage tanks to expand the MWD system to this area. Four overlapping pressure areas, three supplied by gravity and one by pumping, were developed to a conceptual design level.

Annapolis and Anne Arundel Counties, MD

Annapolis and seven other municipalities joined together to form a regional authority in order to receive supplemental water from the City of Baltimore. A conceptual layout for a new transmission system, cost estimates and hydraulic modeling were completed.

#### Allentown, PA

Completed a master plan for a three-city area with development.

#### Additional Areas of Focus

### Hydrology

- Developed system operating rules to maximize the yield of seven supply reservoirs in Bristol, CT and seven reservoirs in Gloucester, MA.
- Performed flood routing for the design of new or rehabilitated spillways on five reservoirs.
- Calculated the safe yield of numerous potential emergency suppliers for New York City as part of the Corps of Engineers Northeast Water Supply Study (NEWS).
- Studied effects on water quality of Cork Harbor in Ireland from an ocean outfall to be constructed by Pfizer Chemical Company in Ringaskiddy. Physical modeling with aerial photograph of floats.
- As part of the master planning of the Wachung Reservation in New Jersey, performed hydrologic studies for the design of hydraulic control structures on bodies of water.

#### Financial Analysis

- Bay City, MI Developed a complete water rate structure including analysis of cost of service by category of user, fire protection costs, operating and maintenance costs, and renewal and replacement schedule.
- Allentown, PA Developed complete water rate structure.
- Woonsocket, RI Developed annual reports for bond holders.
- Connecticut Water Company Performed valuation of assets of new acquisitions for inclusion in rate base.

U.S. NAVY 1969-1971

Civil Engineering Department of Naval Station, Adak, Alaska Operations Department of the 21<sup>st</sup> Naval Construction Regiment, Davis, RI

#### Engineer

On loan from Metcalf & Eddy, work included design, construction quality control and inspection, material procurement, expediting and scheduling.

#### **EDUCATION**

Worcester Polytechnic Institute, Worcester, MA Bachelor of Science, Civil Engineering

Graduate coursework in a variety of subjects at University of Alaska, Clark University, MIT, Utah State and Northeastern University

References Available Upon Request

## Benjamin B. Tucker, LEED AP

#### SUMMARY

Senior Construction Professional with extensive knowledge of real estate development, design and construction processes. LEED Accredited Professional with experience in LEED rating systems and sustainable development strategies. Nearly twenty years of industry experience including fifteen years managing commercial real estate developments and construction projects as well as three years of residential architecture, design and construction. A strong contributor, adept leader, and key resource for all aspects of development, design and construction.

#### **EXPERIENCE**

### CHAPMAN CONSTRUCTION / DESIGN, Newton, MA (2009 - Present)

Director of Building Performance and Renewable Energy Services for construction management firm that provides industry leading sustainable construction management and consulting services to forward-looking corporate, education and medical / biotech clients in the Greater Boston area.

#### JONES LANG LASALLE, Boston, MA (2007 - 2009)

Senior Project manager for international financial and professional services firm specializing in real estate. Project & Development Services group provides services that span all aspects of Project Management including at-risk development, multi-site program management, corporate interiors, renovations, construction and relocation services.

#### SKANSKA USA BUILDING, Inc., Boston, MA (1997 - 2007)

Project Manager for industry leading construction services firm with \$4 billion in annual revenues. Broad client base including: healthcare, education, cultural institutions, government agencies, pharmaceuticals, retail and transportation.

#### CLASSIC RESTORATIONS, Watertown, MA (1995)

Architectural intern for design-build firm specializing in high end residential renovations.

## BERLIN ARCHITECTS, Jackson, WY (1992 - 1994)

Architectural draftsman for architecture firm focused on high-end residential and small-scale commercial construction.

#### **EDUCATION**

Master of Architecture, WASHINGTON UNIVERSITY, St. Louis, MO Master of Construction Management, WASHINGTON UNIVERSITY, St. Louis, MO Bachelor of Arts, HOBART COLLEGE, Geneva, NY

#### **TECHNOLOGY SKILLS**

Experienced in: AutoCAD, Revit, Primavera SureTrak & P3, Prolog, Microsoft Project, MS Office, FastTrak, Adobe Pagemaker & Photoshop, WinEst, Timberline Estimating, CATIA/CADAM.

## PROFESSIONAL ORGANIZATIONS / ACHIEVEMENTS

LEED Accredited Professional
Licensed Massachusetts Construction Supervisor
Certified Infrared Thermographer
NABCEP Photovoltaic Certificate
Newton High Performance Building Coalition
USGBC – National and Massachusetts Chapter
Boston Architectural Center – Faculty member: furniture design studio

Massachusetts Home for Little Wanderers - Volunteer construction supervisor for "Extreme Makeover"

## **BOARD OF ALDERMEN**

RECEIVED Newton City Clerk

## **CITY OF NEWTON**

2012 HAY 14 PH 3: 22

# DOCKET REQUEST FORM

DEADLINE NOTICE: Aldermanic Rules require items to be docketed with the Clerk of the Board NO LATER THAN 7:45 P.M.ON THE MONDAY PRIOR TO A FULL BOARD MEETING.

To:	Clerk of the Board of Aldermen Date: 05-14-12
Fro	om (Docketer): Ald. Rice
Add	dress:
Pho	one:E-mail:
Ado	ditional sponsors:
1.	Please docket the following item (it will be edited for length if necessary):
	Alderman Rice, Danberg, Blazer, Schwartz requesting the City of Newton name the expanded sidewalk in front of 4 Hartford Street at the corner of Lincoln Street in Newton Highlands as Rodney Barker Square. The Newton Highlands Community would like to honor and recognize Rodney Barkers decades of public service to Newton Highlands which included:  On the first Newton Highlands Area Council; as president of the Hyde School PTO; 8 years as a member of the School Committee; 12 years on the Board of Alderman; as a current member of the
	Newton Highlands Area Council
2.	The purpose and intended outcome of this item is:
	☐ Fact-finding & discussion       ☐ Ordinance change         ☐ Appropriation, transfer,       ☐ Resolution         ☐ Expenditure, or bond authorization       ☐ License or renewal         ☐ Special permit, site plan approval,       ☐ Appointment confirmation         ☐ Zone change (public hearing required)       ☒ Other:
3.	I recommend that this item be assigned to the following committees:
	☐ Programs & Services       ☐ Finance       ☐ Real Property         ☐ Zoning & Planning       ☐ Public Safety       ☐ Special Committee         ☐ Public Facilities       ☐ Land Use       ☐ No Opinion         ☐ Post Audit & Oversight       ☐ Committee on Community Preservation
4.	This item should be taken up in committee:
	Immediately (Emergency only, please). Please state nature of emergency:  As soon as possible, preferably within a month In due course, at discretion of Committee Chair
	<ul><li>When certain materials are made available, as noted in 7 &amp; 8 on reverse</li><li>☐ Following public hearing</li></ul>

## City of Newton



Setti D. Warren Mayor

# DEPARTMENT OF PUBLIC WORKS

OFFICE OF THE COMMISSIONER 1000 Commonwealth Avenue Newton Centre, MA 02459-1449

April 19, 2012

To:

Mayor Setti D. Warren

From: David F. Turocy, Commissioner of Public Works

Via:

Robert R. Rooney, Chief Operating officer

Re:

Request to Accept a Grant of Easement For Pedestrian Activated Warning Signal Trustees of Boston College to the City

Traffic Council recently voted to approve Docket Item TC29-10, a request to install, at the expense of the Trustees of Boston College, a pedestrian activated warning signal (hawk signal) at the site of an existing crosswalk at Beacon Street and their driveway entrance between Campion Hall and McGuinn Hall, across from Lawrence Avenue. See sketch attached, and memo from Boston College. Installation of this improvement will require that one utility pole supporting the signal arm be sited on Boston College property. Operation and maintenance of the pedestrian signal will be undertaken by the City.

Due to site issues, the location of the pedestrian signal pole will be on the property of the Trustees of Boston College, not within the public way. The Trustees of Boston College propose to grant the City a permanent easement for the land around the proposed pole, for the construction and maintenance of the pole and signal. The easement is approximately 12.1 ft by 8.2 ft, or approximately 100 sq ft in area.

The Law Department is currently preparing the grant of easement language with representatives of the Trustees of Boston College.

The DPW supports the acceptance of this permanent easement and asks that it be docketed with the Public Facilities Committee of the Board of Aldermen for a public hearing, and the the consideration, at the next available meeting date.

cc:

R. Waddick, Law Department

L. Taverna, City Engineer

C. Schuckel, Director of Transportation



# BOSTON COLLEGE

OFFICE OF THE GENERAL COUNSEL

2 April 2012

David Turocy, Commissioner Department of Public Works City Hall, Room 102 1000 Commonwealth Avenue Newton, Massachusetts 04060

> Re: Request for Authorization from Public Facilities Committee Regarding Easement on Boston College Property at Beacon Street

Dear Commissioner Turocy:

I am writing to request that the Public Facilities Committee take action to approve the grant of an easement from Trustees of Boston College ("Boston College") to the City intended to improve pedestrian safety at Beacon Street between Hammond Street and Reservoir Avenue in Chestnut Hill, as described below.

As you are aware, the Traffic Council of the Board of Alderman has recently voted to approve Docket Item TC29-10, a request to install, at Boston College's expense, a pedestrian activated warning light at the site of an existing crosswalk at Beacon Street near McGuinn Hall on the University's Middle Campus. Installation of this improvement will require that one pole supporting the signal arm be sited on Boston College property. Attached to this letter is a plan prepared by Vanasse Hangen Brustlin, Inc. showing the proposed location of the pole.

Boston College is willing to provide the City with a permanent easement on approximately 100 square feet of its land, as shown on the attached plan, for the construction and maintenance of the pole, and hereby requests that you kindly ask the City Clerk to place this matter on the docket of the Public Facilities Committee for a public hearing on the next available date.

Thank you for your assistance in this matter.

Sincerely,

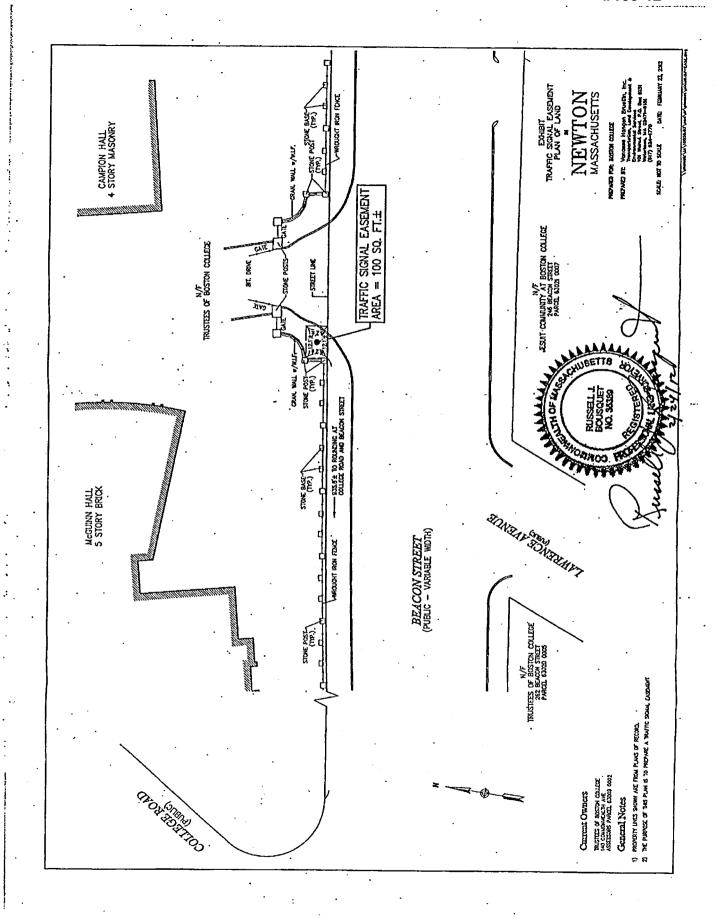
Joseph M. Herlihy General Counsel

Enc.

cc: Robert D. Waddick, Esq.
Legal Department, City of Newton
Jeanne Levesque, Director
Government Relations, Boston College

DONALDSON HOUSE, 90 COLLEGE ROAD, CHESTNUT HILL, MA 02467–3847

TEL: 617-552-0960 FAX: 617-552-0961



RECEIVED Newton City Clerk

2012 APR -9 PM 7: 04

City of Newton



Setti D. Warren Mayor

# PUBLIC BUILDINGS DEPARTMENT

**52 ELLIOT STREET** 

Stephanie Kane Gilman, Commissioner Telephone (617) 796-1600 FAX (617) 796-1601 TTY: (617) 796-1089

NEWTON HIGHLANDS, MA 02461-1605

David A. Olson, CMC Newton, MA 02459

April 9, 2012

Mayor Setti D. Warren Newton City Hall 1000 Commonwealth Avenue Newton Centre, MA 02459

RE: Request for Design and Construction Funds for **Energy Efficiency Upgrades at Multiple Buildings** (Phase I- Cabot Elementary School), FY13 CIP Priority #33

## Dear Mayor Warren:

The Public Buildings Department requests the sum of \$300,000 from bonded indebtedness for Phase I of a \$1,500,000 multi-phase project for the purpose of funding design and construction of Energy Efficiency Upgrades at Cabot Elementary School. Future FY13 phases will address similar energy efficiency upgrades at Underwood ES, Franklin ES, City Hall, Main Library, and the Education Center, as outline below:

**Project Description:** Using NSTAR's Preferred Vendor Program, the Building Department will complete energy efficiency upgrades across multiple buildings. Each project will have a goal of a blended eight (8) year payback where the energy savings will pay for the project over the term of the bond. An exception to this is Cabot School which is planned for major renovations as early as 2016 so only energy efficiency measures with a payback of five (5) years or less will be chosen.

Project Justification: Each project completed through this program will address two very important deficiencies prevalent in many Newton buildings: (1) increased energy efficiency and (2) improved environmental comfort that then positively impacts behavioral modification. In addition, the added benefit is these same retrofits will reduce the backlog of deferred maintenance for these energy systems. The scope of work at each building will include a comprehensive energy audit that will clearly identify work to be completed. The types of energy conservation measures that will be considered are:

- 1. Lighting and lighting controls install highly efficient lamps and controls to reduce run-time.
- 2. Water conservation include replacement of water fixtures with low flow devices.
- 3. Steam Trap Replacement allow for a more efficient steam heating system function.
- 4. Thermostatic radiator control valves and programmable thermostats allow for local space temperature control.
- 5. Weatherization and Insulation includes pipes, attics, windows, doors, etc.
- 6. Heating, Ventilation, and Air Conditioning system evaluation and upgrade as needed.
- 7. Energy Management System allows for more accurate/efficient control of buildings' systems.
- 8. Improved O & M protocols to improve efficiency and extend equipment life.
- 9. Review additional alternative energy opportunities.

## **Project Cost Estimate:**

Construction: \$ 1,330,000
Advanced Building Commissioning Services: \$ 100,000
5% Project Contingency: \$ 70,000
Total Project Cost: \$ 1,500,000

## **Anticipated Project Schedule:**

Design:

Ongoing

Construction:

July 2, 2012 - June 30, 2013

Should you have any questions regarding the above, please feel free to contact my office.

Sincerely,

Stephanie Kane Gilman

Commissioner of Public Buildings

Stephanie Kane Thean

#### SKG:dla

CC:

Energy Conservation projects across multiple city buildings.

April 10, 2012

#### Summary:

City of Newton is a Green Community and has committed to reducing its energy consumption by 20% over a five year period. In addition, the City has deferred preventative maintenance of its buildings over many years, creating a backlog of maintenance requirements. Over the years this has led to a portfolio of buildings that requires significant and immediate investment. The juxtaposition of the energy reduction commitment and the backlog of maintenance create an opportunity to use the utility based **Preferred Vendor Program** to begin to address both. Buildings such as Cabot, which underperforms 96% of school buildings in the US as measured by its Energy Use Intensity (EUI - kBtu/sq. ft.), are key buildings to address immediately. The City can reduce its energy consumption and update its buildings' infrastructure by proceeding with utility based Preferred Vendor Program to implement Energy Conservation Measures (ECMs) across various municipal buildings.

#### Implementation Plan:

All projects will aim to meet a blended simple payback of 10 years or less with a goal for most projects not to exceed 8 years. It is imperative that a blended approach be used and that the projects not take advantage of the quick payback items only. Using a longer blended payback to complete these projects will allow the City to concurrently address deferred maintenance items that may, by themselves, have a significantly longer payback.

The Public Buildings Department recommends moving forward with preferred vendor projects by systematically and continuously addressing the largest buildings in the City. The following buildings were selected because they are above 30,000 sq. ft. and are the biggest energy consumers in the city. Together, these 22 buildings comprise approximately 60% of ALL energy consumption in the City. They are prioritized by the highest annual cost per square foot cost or EUI:

Building	Gross Square	Energy Use Index	Estimated Project Budget
	Feet	(kBtu/Sq Ft)	– Year 1
Underwood	41,940	138.37	\$231,000
Zervas (reduced scope)	30,646	139.87	
Franklin School	56,764	132.38	\$314,000
Cabot School (reduced scope)	41,000	124.74	\$300,000
Mason Rice	39,000	109.48	
Ed Center	70,000	102.41	\$190,000
City Hall	81,000	98.60	\$220,000
Lincoln Elliot	51,074	98.17	
Ward	38,000	97.82	

Williams	41,237	97.09	
Pierce	31,022	91.86	
Bigelow MS	92,500	89.47	
Main Library	90,921	86.91	\$245,000
Horace Mann School	35,000	83.36	
Brown MS	146,000	83.05	
Memorial Spaulding	65,380	74.00	
Oak Hill	91,000	70.44	
NSHS	389,550	69.51	
Countryside	60,700	69.40	
Burr School	42,322	65.55	
Bowen School	63,915	65.07	
Day MS	145,000	63.98	

YEAR 1 TOTAL INVESTMENT:

\$1,500,000

The NSTAR program also offers an opportunity to complete advanced commissioning work on buildings in addition to the ones listed above.

The Preferred Vendor projects will proceed at a rate of 1-2 buildings per quarter and will generally be cost neutral. The savings will cover most if not the entire debt service. In instances where the savings are somewhat smaller than the annual debt service creating a negative cash flow in the first years of repayment, we recommend bridging the gap with funds from the existing Energy Stabilization Fund (ESF). Once the net cash flow is positive, we recommend that all net savings remaining after the debt service is paid be returned to the Energy Stabilization Fund. In addition all utility incentives should be deposited in the ESF to be reinvested into future energy conservation projects.

In the case of the Cabot School, the blended payback would be approximately 5 years. This shorter payback approach would be required since the school is scheduled for a major renovation in approximately 6 years.

## Specific Project Example - Cabot:

In February of 2012, the Public Buildings Department completed an audit of the Cabot School. The report was completed by an NSTAR Preferred Vendor, RISE Engineering, who recommended the following actions:

- Steam Trap Survey (No Cost)
- Steam Trap Repairs
- Boiler Water Treatment
- Energy Management System (reduced scope)
- Attic Air Sealing & Insulation
- New Efficient Lighting & Occupancy Sensors

These measures will immediately improve the conditions at the school by providing quality lighting and lighting controls, significantly better space temperature control, significant level of insulation, and controlled fresh make-up air to occupied spaces. These improvements will result in a significant reduction in energy consumption and will make this project cash flow positive over the term of the bond payments. With approximately a net 5 year payback, these enhancements will provide improved conditions for students and teachers with no additional burden to the operational budget.

The tables on the following page describe the Cabot project in detail. Cabot is scheduled to be renovated in the coming years, therefore we asked the Vendor to reduce the scope. The table below is an estimate of what the final cost will be.

DETAILED PR	DETAILED PROJECT EXAMPLE - CASH FLOW:	PLE - CASH	FLOW: CABOT	CABOT ELEMENTARY SCHOOL	Y SCHOOL			
PRINCIPAL	TERM	INTEREST	ANNUALSAVINGS	UTILITY	NATURAL GAS	ELECTRIC RATE	<b>NSTAR INCENTIVE</b>	NGRID INCENTIVE
\$ 187,079	10	4.00%	\$ 28,131	2.0%	\$ 1.2722	\$ 0.15	\$ 0.25	\$ 1.50
Voor	Annual	Loan	Annuel	Annual	Annual Project	Net	Fsceleted Annual	Feralated Net
10m	Principal	Balance	Interest	Debt Service	Savings	Cash Flow	Savings	Cash Flow
1	18,708	187,079	7,483	26,191	28,131	1,940	28,131	1,940
2	18,708	168,371	6,735	25,443	28,131	2,688	28,693	3,251
3	18,708	149,663	5,987	24,695	28,131	3,436	29,267	4,573
4	18,708	130,955	5,238	23,946	28,131	4,185	29,853	5,906
5	18,708	112,247	4,490	23,198	28,131	4,933	30,450	7,252
9	18,708	93,539	3,742	22,450	28,131	5,681	31,059	8,609
7	18,708	74,831	2,993	21,701	28,131	6,430	31,680	626'6
8	18,708	56,123	2,245	20,953	28,131	7,178	32,313	11,361
6	18,708	37,415	1,497	20,205	28,131	7,926	32,960	12,755
10	18,708	18,707	748	19,456	28,131	8,675	33,619	14,163
11	ı	(1)	1	1	ı	ı		1
	\$ 187,080		\$ 41,157	\$ 228,237	\$ 281,308	\$ 53,071	\$ 308,025	\$ 79,788

	DETAILED ENENGT CONSERVATION MEASONE BREAKDOWN, CABOT ELEMENTANT SCHOOL		NEAR OF			OC INVI	TOOL		
			NSTAR						
		PROJECT	ELECTRIC	NGRID GAS	CUSTOMER	kWh	THERM	ANNUAL	PAYBACK IN
FACILITY	ECM	COST	INCENTIVE	INCENTIVE	NET COST	REDUCTION	REDUCTION	SAVINGS	YEARS
Cabot ES	Steam Trap Survey (No Cost)	- \$	- \$	- \$	- \$	0	-	- \$	
Cabot ES	Steam Trap Repairs	\$ 18,688	- \$	\$ 3,269	\$ 15,420	0	2,179	\$ 2,772	5.6
Cabot ES	Boiler Water Treatment	\$ 4,368	· •		\$ 4,368	0	800	\$ 1,018	4.3
Cabot ES	Energy Management System	\$ 76,065	\$ 2,808	\$ 5,018	\$ 68,239	15,316	4,562	\$ 8,035	8.5
Cabot ES	Attic Air Sealing & Insulation	\$ 21,104	- \$	\$ 4,998	\$ 16,106	0	3,332	\$ 4,239	3.8
Cabot ES	New Efficient Lighting & Occupancy Sensors	\$ 66,854	\$ 20,705	-	\$ 46,150	82,818	-	\$ 12,067	3.8
		8 187,079	\$ 23,512	\$ 13,285	\$ 150,282	98,134	10,873	\$ 28,131	5.3

Explanation of Energy Conservation Measures (ECMs) recommended for the Cabot School:

Steam Trap Survey – This service is provided to the City at no cost. It allows the City and the vendor to have a clear understanding of the existing condition of the buildings steam heating distribution system

Steam Trap Repairs – Steam traps are mechanical devices that allow for the efficient function of the steam distribution system. Broken traps contribute to poor control of local temperature and higher consumption of energy. Replacing these will significantly improve occupant comfort level and reduce energy consumption at the building.

Boiler Water Treatment – Steam systems operate at high temperatures where untreated water that contains various minerals and whose pH (acidity) is not neutral can damage equipment at a high rate and significantly reduce equipment life. Treating water will extend the life of the equipment and contribute to lower energy consumption

Energy Management System (EMS) – This is a centralized, computer based system that allows control of various building sub-systems including mechanical and lighting. At the Cabot school this will be a minimal system that will provide minimal control and monitoring capabilities.

Attic Air Sealing and Insulation – Currently, the attic space (~15,000 square feet) is completely devoid of any insulation. Temperatures in this <u>unoccupied</u> space are 65 degrees in the middle of winter. Insulating the attic floor will significantly reduce energy consumption during the winter months.

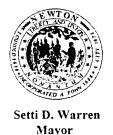
New Efficient Lighting and Occupancy Sensors – Existing lighting fixtures are outdated and often not functioning. Installing modern fixtures and occupancy sensors will provide better lighting levels for the students and reduce energy consumption. The new fixtures will be more efficient and the occupancy sensors will assure that the lights are off when the rooms are unoccupied.

#### **Future Projects:**

Each future project would evaluate a building for energy saving opportunities. These would include energy conservation measures such as:

- Lighting and Lighting Controls
- High efficiency Electric Motors
- Energy Management Systems and controls (including DDC conversions and pneumatic repairs)
- Domestic Water and Sewer Conservation
- Process Water Conservation (water treatment)
- Steam Heating Repairs
- Variable Frequency Drives for fans & pumps
- Building envelope Improvements (insulation)
- Vending machine and plug load controllers
- Windows and doors: replacements and/or weather-stripping, Low-E film

- HVAC improvements/upgrades: boilers, cooling towers, chillers, ventilation systems, humidification or dehumidification systems, heat recovery
- Retro-Commissioning
- Roof improvements
- Real Time Metering
- Miscellaneous Specialty Equipment



RECEIVED Newton City Clerk

Stephanie Kane Gilman, Commissioner Telephone (617) 796-1600 FAX (617) 796-1601 TTY: (617) 796-1089 52 ELLIOT STREET NEWTON HIGHLANDS, MA 02461-1605

2012 APR -9 PM 7: 04

David A. Olson, CIAC Newton, MA 02459

April 9, 2012

Mayor Setti D. Warren Newton City Hall 1000 Commonwealth Avenue Newton Centre, MA 02459 4-9-12

RE: Request for Design and Construction Funds to **Upgrade Mechanical Systems at Burr Elementary School**, (FY13 CIP Priority #37)

Dear Mayor Warren:

The Public Buildings Department requests the sum of \$250,000 from bonded indebtedness for the purpose of funding the design and construction of mechanical upgrades at the Burr Elementary School, as outlined below:

**Project Description:** Replacement of the existing Pneumatic Heating Control System with a Direct Digital Heating Control System.

**Project Justification:** The existing 45 year old pneumatic control system has failed (typical useful life is 25 years), resulting in overheating of classrooms and the needless waste of energy. Thermostats are repeatedly replaced due to the failed pneumatics. This project will also help the City meet targets for the Green Community Program by reducing gas consumption at the Burr School by an estimated 15%.

## **Project Cost Estimate:**

Construction:\$ 220,500Design Services:\$17,6005% Project Contingency:\$11,900Total Project Cost:\$250,000

#### **Anticipated Project Schedule:**

Design:

July 2, 2012 – August 3, 2012

**Bidding and Construction** 

August 15, 2012 - November 30, 2012

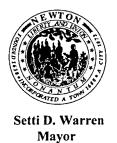
Should you have any questions regarding the above, please feel free to contact my office.

Sincerely.

Stephanie Kane Gilman

Commissioner of Public Buildings

SKG:dla



Stephanie Kane Gilman, Commissioner Telephone (617) 796-1600 FAX (617) 796-1601 TTY: (617) 796-1089 **52 ELLIOT STREET** 

NEWTON HIGHLANDS, MA 02461-1605

April 9, 2012

Mayor Setti D. Warren **Newton City Hall** 1000 Commonwealth Avenue Newton Centre, MA 02459

RE: Request for Construction Funds to Repair Masonry and Related Surfaces at Bowen Elementary School, CIP Priority No. 24

Dear Mayor Warren:

The Public Buildings Department requests the sum of \$ 60,000.00 for the purpose of funding the repair of masonry and related surfaces at the Bowen Elementary School as outlined below:

Repair of exterior masonry in various areas of the building, including but not limited to the chimney, window wells and exterior stairwell leading to the basement in the rear of the building.

Project Justification: The chimney has extensive cracks in the masonry that are allowing water to enter the building, the window wells are crumbling and the stairwell leading to the basement in the rear of the building has large cracks that is also allowing water to enter the building.

## **Project Cost Estimate:**

Construction Cost: 5% Project Contingency:

\$ 57,140 \$2,860

**Total Project Cost:** 

\$60,000

#### **Anticipated Project Schedule:**

Construction:

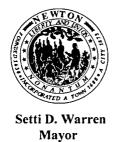
July 1 - August 31, 2012

Should you have any questions regarding the above, please feel free to contact my office.

Sincerely,

Hiphanie Kene Glucan Stephanie Kane Gilman

Commissioner of Public Buildings



Stephanie Kane Gilman, Commissioner Telephone (617) 796-1600 FAX (617) 796-1601

TTY: (617) 796-1089 52 ELLIOT STREET

NEWTON HIGHLANDS, MA 02461-1605

April 9, 2012

Mayor Setti D. Warren Newton City Hall 1000 Commonwealth Avenue Newton Centre, MA 02459

RE: Request for Design and Construction Funds to Upgrade Mechanical Systems at Lincoln-Eliot Elementary School, (FY13 CIP Priority #56)

#### Dear Mayor Warren:

The Public Buildings Department requests the sum of \$250,000 from bonded indebtedness for the purpose of funding the design and construction of mechanical system upgrades at the Lincoln-Eliot Elementary School, as outlined below:

**Project Description:** Replacement of existing unit ventilators throughout the school and repair of pumps, valves, and control devices in the heating distribution system. This project will drastically improve the learning environment and will improve operational reliability.

**Project Justification:** Ongoing problems with the heating distribution system are getting beyond the City's ability to correct with maintenance. Equipment is beyond its useful life and needs to be replaced. Classrooms have had to be moved due to failed equipment, and this project will prevent that from happening in the future.

## **Project Cost Estimate:**

Construction:\$218,000Design & Testing Services:\$20,0005% Project Contingency:\$12,000Total Project Cost:\$250,000

#### **Anticipated Project Schedule:**

Design: July 2, 2012 – August 1, 2012
Bidding and Construction: August 15 – December 31, 2012

Should you have any questions regarding the above, please feel free to contact my office.

Sincerely,

Stephanie Lave Fluan
Stephanie Kane Gilman

Commissioner of Public Buildings

SKG:dla



# City of Newton, Massachusetts Office of the Mayor

#161-12

Telephone (617) 796-1100

Facsimile (617) 796-1113
TDD TTY (617) 796-1089

E-mail swarren@newtonma.gov

May 14, 2012

Honorable Board of Aldermen Newton City Hall 1000 Commonwealth Avenue Newton, MA 02459

Ladies and Gentlemen:

I write to request that your Honorable Board docket for consideration a request to transfer the sum of \$148,481 from the Energy Stabilization Account to Fund the Energy Audit conducted by NORESCO. The City has decided to pursue other methods for the implementation of the Phase III energy improvements, and therefore, must pay for the value of the audit.

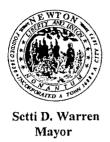
Thank you for your consideration of this matter.

Very truly fours,

Setti D. Warren

Mayor

David A. Olson, CIAC Newton, MA 02459 RECEIVED Newton City Clari



Stephanie Kane Gilman, Commissioner Telephone (617) 796-1600 FAX (617) 796-1601 TTY: (617) 796-1089 52 ELLIOT STREET NEWTON HIGHLANDS, MA 02461-1605

May 14, 2012

The Honorable Setti D. Warren Mayor Newton City Hall 1000 Commonwealth Avenue Newton Centre, MA 02459

RE: Phase III Noresco Audit Funding

Dear Mayor Warren:

The Public Buildings Department, in conjunction with the School Department, is requesting funds in the amount of \$ 148,481.00 for the cost of performing Energy Audits on the remaining municipal and school buildings.

The contract with Noresco stipulated that should the energy improvement measures determined as a result of the audit not be implemented by Noresco, they would be compensated for the cost of the audit.

Should you have any questions, please feel free to contact my office.

Sincerely,

Budget & Project Specialist

AFC:dla

CC: Stephanie Kane Gilman, Commissioner of Public Buildings Maureen Lemieux, Chief Financial Officer



# Setti D. Warren Mayor

# PUBLIC BUILDINGS DEPARTMENT

Stephanie Kane Gilman, Commissioner Telephone (617) 796-1600 FAX (617) 796-1601 TTY: (617) 796-1089

**52 ELLIOT STREET** NEWTON HIGHLANDS, MA 02461-1605

April 9, 2012

Mayor Setti D. Warren Newton City Hall 1000 Commonwealth Avenue Newton Centre, MA 02459

RE: Request for Funds to Repair & Replace Windows at Fire Station #4, (FY13 CIP Priority #34)

Dear Mayor Warren:

The Public Buildings Department requests the sum of \$90,000 from bonded indebtedness for the purpose of th replacement of selected windows at Fire Station #4, as outlined below: Repair of components on twelve selected windows on all sides of the building. Repairs include re-sealing Project Description:

neoprene window gasket unit within the frame, addition of end caps and window receptors, as well as cleaning of the window weep system. Replacement of nine 2<sup>nd</sup> floor windows on the north side of the building with awning style windows to match as best possible the existing windows. Interior surfaces will be assessed and water damage from the leaking windows will be repaired.

The station windows have leaked since they were installed 4 years ago, causing interior damage to window **Project Justification:** sills and walls. During rainstorms from the northeast direction the rear 2<sup>nd</sup> floor bunk rooms leak severely with water pooling on the floor, causing safety problems as well as deterioration to furnishings and metal objects. A report completed by Thompson & Lichtner identified the causes of the leaks and remedies. While this condition is an active legal claim from a recent project (2007), it is prudent to seek repairs

**Project Cost Estimate:** 

Construction: \$73,000 Clerk of the Works: 5,000 **Design Services:** 7,750 **Project Contingency:** 

> **Total Project Cost:** \$ 90,000

and if judged in favor of the City, the cost will be documented. See attached engineering assessment of condition.

Anticipated Project Schedule (6 weeks for window fabrication included):

Design & Bid:

May 7 – August 1, 2012

Construction:

August 13 - December 14, 2012

Should you have any questions regarding this project, please feel free to contact me directly.

Sincerely.

phanie Lave Jihuan Stephanie Kane Gilman

Commissioner of Public Buildings