

CITY OF NEWTON

IN BOARD OF ALDERMEN

PUBLIC FACILITIES COMMITTEE REPORT

WEDNESDAY, JANUARY 7, 2015

Present: Ald. Crossley (Chairman), Lennon, Albright, Brousal-Glaser, Gentile, Danberg, Laredo, and Lappin

Also present: Ald. Ciccone, Cote, Fuller, Lipof, Schwartz, and Yates

City staff present: Maureen Lemieux (Chief of Staff), Joshua Morse (Commissioner of Public Buildings), Bruce Proia (Chief of Police), Rob Garrity (Director of Sustainability), and David Turocy (Commissioner of Public Works)

REFERRED TO PS&T AND PUBLIC FACILITIES COMMITTEES

#413-11 **ALD. CICCONE, SALVUCCI, GENTILE & LENNON** 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]

PUBLIC SAFETY HELD 6-0 on 01/07/15

ACTION: HELD 8-0

NOTE: The Committee met jointly with the Public Safety and Transportation Committee on the above item. Public Buildings Commissioner Josh Morse and Fire Chief Bruce Proia provided the Committees with an update on Fire Station #3 and Fire Headquarters in Newton Centre. Mr. Morse provided a PowerPoint presentation (attached) on the proposed replacement of Station #3 and the renovation of Fire Headquarters. The presentation is a preview of what is to be presented to the Design Review Committee as part of the City's site plan and schematic design approval process.

The estimate for the proposed project has grown by three million dollars since the project planning began three years ago. It was suggested that Commissioner Morse and Chief of Staff Maureen Lemieux highlight the reasons for the increase in the estimate during the presentation. It is important that the Aldermen be able to explain why the project costs have escalated to constituents and other interested parties. The funding for the project is part of the general override and not a debt exclusion override.

The project team of Schwartz/Silver with Mitchell Associates, the Public Buildings Department and the Fire Department identified eight site options by looking at all possible building orientations with fire vehicle discharge onto Willow Street or Centre Street. The project team took into consideration a number of possibilities including acquiring the Dallaria Salon site, relocating an underground Verizon vault that is located on Centre Street in the corner of the property next to the Dallaria Salon, obtaining an easement from the Massachusetts Water Resources Authority for its aqueduct, and/or moving the headquarters building across the street or elsewhere on its current site. The project team ranked all options and after careful evaluation

narrowed the options down to the best four. Details on each of the options and the evaluation matrixes of the eight and the four options are included in the presentation.

It was determined that the costs and impacts to the schedule for the project to either relocate the Verizon vault, move Fire Headquarters, or acquire Dellaria Salon were too prohibitive. After careful consideration of the four options, it was determined that Option #7 is the preferred site option to develop. The project team chose Option #7, as it supports the programming needs of both the station and headquarters, allows for discharge of fire vehicles onto Centre Street at an intersection, avoids the Verizon vault, and does not require any acquisition of property. The project team has reached an agreement to use a portion of the MWRA aqueduct land to provide a driveway from the bay doors of the new fire station to the Centre Street/Tyler Terrace intersection. A memorandum of understanding between the City and the MWRA should be submitted to the Law Department next week. In order to use the MWRA land, a retaining wall along the aqueduct is required. Approximately \$1 million of the increase in the cost estimate for the project is associated with the cost of the retaining wall.

The plan is to attach Fire Headquarters and the new station with a connector wing between the two buildings. The new facility will be the same height or shorter than the existing station. The headquarters building is listed on the National Register of historic buildings and the City has designated the building as historically significant. A number of critical emergency functions are located in the headquarters building including the emergency operations center, the emergency communication center, and the alarm transmitting equipment. Much of this equipment is required by building code to be housed in a seismically reinforced building. Therefore, the Administration is looking to preserve the headquarters building but move those functions from headquarters to the new station and/or connector, which are to be seismically reinforced.

Commissioner Morse reviewed the floor plans for the buildings with the Committees. The plans eliminate any duplications of use between the two buildings like bathrooms and kitchens. Space for the City's Emergency Operations Center has been moved to the connector wing and the space expanded to 40 seats. An expanded backup emergency dispatch center, which is required to include the ability to accommodate the same staffing levels and equipment as the regular dispatch center, is included in the connector wing. The new building will also include a server room allowing the City to move the servers in City Hall to a better-protected location that is more suitable and a mezzanine level that will house the mechanicals for the building. The expansion of the dispatch center, emergency operations center, server room, and the inclusion of additional other specialized space is estimated to cost approximately \$1 million. The addition of the server room in the new station is listed as a separate project in the Capital Improvement Plan at an estimated cost of \$300,000. The premium cost of renovating an older, historical building has resulted in additional costs of approximately \$1 million.

It was pointed out that in order to stay within the original estimated budget for the project, a number of cuts would need to be made to the programming for a public safety building. The Administration recognizes that they will need to provide detailed explanations on the budget and continue to look for ways to decrease costs throughout the project.

The project team is still reviewing exterior material options to meet the design challenge of connecting the historic headquarters to the new station. It makes sense to use different materials to break up the mass of the building. The team is looking at options that include metal panels and brick, frosted glass and brick, and different colored and sized bricks for the new building and connector wing. It is important to the project team that the new building “pays homage” to the historic headquarters. The project team will continue to look at exterior material options. The Design Review Committee has not yet seen any of the exterior material options but will weigh in on what they feel is the best option. Commissioner Morse suggested that the Board of Aldermen add a condition to the site plan/schematic design board order to require the project team to come back to the Board of Aldermen.

Option #7 has been well received by the City’s Design Review Team and a number of other interested parties. Everyone that has reviewed preliminary design options has been supportive of the design direction.

Questions, Comments and Requests for Information

1. Has there been any consideration to moving the City’s information technology storage to the Cloud instead of creating a new storage room?

The City has been moving a number of its applications to the Cloud but it is likely that the city will always have a need for a server room. The proposed server room at the fire station is smaller than the current room at City Hall because the City is using virtual storage.

2. Please ask the Chief Information Officer to provide a comparison of servers versus virtual storage.

3. What are the benefits of emergency vehicles entering onto Centre Street versus Willow Street?

By entering onto Centre Street, the Fire Station will improve its response time and it will be safer for the firefighters. Vehicles often queue on Willow Street, as they attempt to merge with traffic on Centre Street. The entrance onto Centre Street would be signaled and synced with nearby intersections on Centre Street.

4. Do the plans meet the needs of the Fire Department?

Fire Chief Bruce Proia responded that the planning process included looking at the current and future needs of Fire Headquarters and Fire Station #3 to determine what the needs are now and in the future. Mitchell Associates has a lot of experience with firehouse design. When design of the Emergency Operations Center began, it became evident that the current Emergency Operations Center does not meet the needs of the City. The City has been doing more in terms of emergency management training of

personnel and needs a larger space. The design team looked at efficiencies that would work for the Fire Department like creating a dispatch center that will include the City's Call Center. The design team also worked with the City's contracted ambulance service to ensure that their space and equipment needs were met. The current ambulance contract requires the ambulance company to pay a set rent for the space within the fire station.

5. **Please provide the current and future programming needs of Fire Headquarters and Fire Station #3.**
6. **Investigate the possibility of getting additional funds from the ambulance company for their new state of the art space.**
7. **Where will the City find the additional funds for the cost increases in the project?**

Chief of Staff Maureen Lemieux explained that the project team would continue to collaborate to determine what the final cost of the project will be. She explained that if the increase is \$3 million and the City bonded the project over 30 years, it would be an increase to the annual bond payment of \$100,000 plus the interest. The Administration would determine if that is the best use of funding and if so, the Administration would then have to determine what other need would not be deferred. The funds could come from the removal of a capital improvement project or an operational reduction. A portion of the needed funds could be generated through the upcoming financing of the City's issued bonds. The Administration is constantly looking at creative ways to generate additional funding.

8. **Please provide a comparison of the current functional needs of Fire Headquarters and Fire Station #3 compared to what they were three years ago.**
9. **Did the City build an inflation rate into the project budget?**

Yes, but it did not anticipate the retaining wall need and the other additions to the project.

10. **How will the project team deal with the Fire Museum component of the project?**

There will be display cases throughout Fire Headquarters and the fire station that will give a history and information on the Fire Department. It should make the space feel somewhat like a museum. The project team will consult with the Newton History Museum Director regarding the best ways to display the materials.

11. **What will happen with the memorials located on the property?**

The 911 Memorial and the Powder House Training Memorial will remain in their current location and the Fire Memorial location will be moved slightly.

- 12. Could the Fire Chief and Commissioner of Public Buildings comment on the value engineering that has occurred and what impact it has on the project. In addition, it would be helpful to understand what has been given up because of value engineering and how the decisions were made on value engineering and program changes. Please provide a list of cost avoidances and cost saving already implemented within the project budget.**

Chief Proia responded that he thinks the current program for the project addresses the programming needs and incorporates Fire Department History. Although, it would be nice to have a 50-seat Emergency Operations Center, the Chief can live with a 40-seat center because if the center becomes too full there is the option to use the emergency dispatch center.

The presentation and discussion concluded with the understanding that the project would be before the Board of Aldermen as part of the schematic design/site plan approval process in the near future. Ald. Danberg moved hold in the Public Facilities Committee, which carried unanimously. Ald. Fuller moved hold in the Public Safety and Transportation Committee, which carried unanimously.

REFERRED TO PUBLIC FACILITIES AND FINANCE COMMITTEES

#16-15 HIS HONOR THE MAYOR proposing amendments to the City of Newton Revised Ordinances, 2012 Section 11-15. **White goods.** by striking the fee of twelve dollars (\$12) and replacing it with eighteen dollars (\$18) wherever the fee is mentioned. [12/30/14 @ 11:48 AM]

ACTION: **APPROVED 8-0**

NOTE: The Mayor is requesting an increase in the “White Goods” fee to cover the cost increase in the new contract for the per item fee for pick-up and disposal of products that contain cathode ray tubes. The new contract began July 1, 2014. Residents will pay a fee of \$18 per pick-up of one product containing a cathode ray tube and all other white goods. If there are additional items that contain a cathode ray tube, the resident will be charged an additional \$18 for each cathode ray tube item. The current ordinance requires a payment of \$12 per collection of one cathode ray tube item and all other white goods. Committee members understood the need to increase the fee and Ald. Danberg moved approval, which carried unanimously.

REFERRED TO FINANCE AND APPROPRIATE COMMITTEES

#375-14 HIS HONOR THE MAYOR submitting the FY16-FY20 Capital Improvement Plan pursuant to section 5-3 of the Newton City Charter. [10/15/14 @ 3:01 PM]

ACTION: **HELD 8-0**

NOTE: Public Buildings Commissioner Josh Morse provided the attached summary of the Public Buildings Department’s Capital Improvement Plan projects for Fiscal Years 15 and 16. The Commissioner provided updates on the following projects:

Angier Elementary School

The project is going well; it is on schedule and within budget. The steel for the project is being erected. The site work, foundations, and the MBTA work are complete. The Administration is continuing with neighborhood outreach as the project proceeds. Transportation Director Bill Paille will be providing a presentation to the Board of Aldermen on the proposed traffic improvements in the area of the school.

Zervas Elementary School

The school is in the design development phase. The design team is working on addressing the conditions in the schematic design/site plan approval board order. Commissioner Morse expects that the 50% design development meeting will occur in the near future.

The culvert is sited and the design team continues to work with the Engineering division and Conservation Commission. The next phase of the project is systems analysis with the Design Review Committee. As the design moves forward, the Transportation Division and the design team will be looking at the traffic issues around the site. The City is in full possession of 1638 Beacon Street and the other two properties are expected to be signed over this spring.

Fire Station 10/Wires Division Building

The project is going extremely well. It remains under budget and ahead of the schedule. Both buildings are on track for occupation this summer.

Police Annex

The building envelope work is complete. The Public buildings Department is working with Peter Barrer and RDK Engineering to review the mechanical options for the building before moving forward with install. The project is going well.

Senior Center HVAC

The funding for the project was approved by the Board of Aldermen at its meeting in December and it became available for expenditure last week. The Public Buildings Department has received the proposals from contractors. The next step is to meet with Jayne Colino to develop a communications plan for the community during the construction phase of the project.

F.A. Day Middle School Water Heater

The funding for the project was approved by the Board of Aldermen at its meeting in December and it became available for expenditure last week. The project will move forward once engineering for the heater is complete.

Fire Station #1 Emergency Generator and Transfer Switch Replacement

Commissioner Morse is working with Wires Division Superintendent Jeff Knight regarding the appropriate loads for the generator and transfer switch. Once the loads have been determined, the generator and transfer switch will be installed.

City Hall Lighting Project

The lights for the War Memorial section of the project are installed and operational. The lights for the front area of City Hall should be installed and operation by the end of February. Three of the streetlights on Homer Street along the side of City Hall will be upgrades to provide a better lit sidewalk.

Newton South High School Project

The School department is evaluating where to reuse the Zervas modular classrooms. It is possible that they will be used at Newton South High School to house a program. Commissioner Morse will let the Committee know as soon as a final decision has been made and a proposal available, which should be within the next couple of months. If no decision has been made regarding the modular classroom before demolition of the Zervas School begins, the modular classrooms would be moved off site.

Main Library Mechanicals

The feasibility study for the project is complete. The work is expected to proceed in Fiscal Year 2016. The Design Review Committee is aware that a review of the proposed library mechanicals is on the horizon.

Angino Farm Renovation

The project was completed successfully.

Jackson Homestead Archives Project

The construction documents should be completed by the end of January. Once complete, it will be reviewed by the Design Review Committee and sent out to bid in February. The Board of Aldermen will also review the project once the Design Review Committee has completed its review. The scope of the project has increased, therefore, it is expected that there will be an increase to the cost estimate. The City needs to bid out the project before there will be a good sense of the costs for the project. The project is using Community Preservation Act funds.

City Hall/War Memorial Access Project

Commissioner Morse provided a handout outlining the City Hall/War Memorial Elevator and Accessibility project scope, which is attached. The new elevator will be a fully accessible elevator that will provide access to all three levels of City Hall and the War Memorial. The project includes necessary exterior and interior ramps and accessible paths to the new elevator from Homer Street and the War Memorial Circle as well as the expansion of the public bathrooms to make them accessible. The Design Review Committee has not reviewed the project but the expectation is that the review will occur over its next two meetings. Once their review is complete, the request for funding will be discussed by the Board of Aldermen in February or March.

Preferred Vendor and Energy Projects

Sustainability Director Rob Garrity provided the Committee with an update on the Capital Improvement Plan projects related to energy efficiency and sustainability. The LED

streetlight replacement program is complete. At this point, the City has saved approximately 1.8 million kilowatt hours due to the conversion.

Phase I of the preferred vendor program is underway. Further information regarding the Preferred Vendor Program is attached. Phase I encompassed energy conservation measures in 16 buildings with a payback of fewer than 6 years and expected savings of \$250,000. Ninety-nine percent of the lighting/electrical work in Phase I is complete and about 25% of the heating system related work is done. The heating work was started this past November and is more complicated than the lighting work. Phase I will reduce the City's energy usage by 53,000 therms and by 940,000-kilowatt hours.

Chief of Staff Maureen Lemieux explained that the Administration needs to wait for energy rebates and incentive to accrue in order to begin funding Phase II of the Preferred Vendor Program. There is only \$147,000 in the Energy Stabilization fund but Ms. Lemieux expects a rebate/incentive payment of close to \$500,000 in the near future. The City may have to create additional phases for the remaining projects in order to fund the projects. The Administration hopes to bring some projects to the Board of Aldermen in early spring for Fiscal Year 2016.

The Administration needs to consider purchase agreements that determine utility rates to decide the best mix of energy efficiency projects to undertake. Currently, the buildings included in Phase II of the project are being audited and looked at holistically.

The Capital Improvement Plan (CIP) section sorted by asset type has incorrect funding source information due to a sorting error. The Administration will provide an updated section. With that, Ald. Laredo moved hold, which carried unanimously.

REFERRED TO PUBLIC FACILITIES AND FINANCE COMMITTEES

#468-14 HIS HONOR THE MAYOR requesting authorization to reallocate the Carr Elementary School Renovation Project Budget to replenish funds for the Mayor's Contingency Budget Line, as well as to cover the costs of various project related expenses. [11/24/14 @ 4:23 PM]

ACTION: NO ACTION NECESSARY 8-0

NOTE: Commissioner of Public Buildings Josh Morse explained that there are only two change order items that are outstanding that relate to acoustic panels to address a noisy area of the school and an area around the oil burner that needed to be sealed. The costs for both change order will be under \$50,000; therefore will only require discussion and recommendation by the Finance Committee. Commissioner Morse suggested that the above item be moved no action necessary and a new item be docketed and referred to the Finance Committee once the change orders are negotiated with the contractor.

Commissioner Morse added that the Mayor's Contingency was used to fund the added renovation of the little league field that abuts the Carr School property. There should be enough funding within that contingency to cover the cost but if not, there will be an additional docket

item. The Project Manager, Paul Ferrilito, did a fantastic job monitoring the costs of the project ensuring that the original scope of the project came in within the budget.

It was pointed out that there should have been a landscape buffer along the Nevada Street parking lot included in the project. It is something to think about including when designing the next City project in a residential neighborhood. With that, Ald. Albright moved no action necessary, which carried unanimously.

#301-12(2) PUBLIC FACILITIES COMMITTEE requesting updates on the progress of the Carr School Renovation Project.

ACTION: **NO ACTION NECESSARY 8-0**

NOTE: The Carr School Renovation Project is complete; therefore, there will be no further updates on the project. Ald. Laredo moved no action necessary on the item, which carried by a vote of eight in favor and none opposed. Ald. Lennon added that the Little League Portion of the project was done very quickly in order to meet the project deadline and those involved still did a beautiful job on the field.

Respectfully submitted,

Deborah Crossley, Chairman



NEWTON FIRE STATION #3 and HEADQUARTERS

SCHWARTZ / SILVER with MITCHELL ASSOCIATES
January 07, 2015

#413-11

PROJECT TEAM

Compass Project Management, Inc.
Owner's Project Managers

Schwartz / Silver Architects
Architecture, Interiors, Specifications, Sustainability, Accessibility

Mitchell Associates
Fire Station Programming, Public Safety

BVH Integrated Services
HVAC / Energy Modeling: Paul Ricci, PE
Electrical: Dan Marchand, PE
Plumbing / FP: Tony Monaco, PE
Technology: Felix Zayas, PE

Becker Structural Engineers
Structural: Paul Becker, PE + Dan Burne, PE

Nitsch Engineering
Civil, Environmental: Sandra Brock, PE, LEED AP

Rolf Jensen Associates
Code: Jeremy Lebowitz, PE

VJ Associates
Cost: Clive Tysoe, CCC, MRICS

Ground Inc.
Landscape: Shauna Giles-Smith

PROJECT & SITE CHALLENGES

Existing historic headquarters building constrains the use of the site.

Moving the headquarters building affects limited financial resources.

MWRA property line limits access to Centre Street from the site

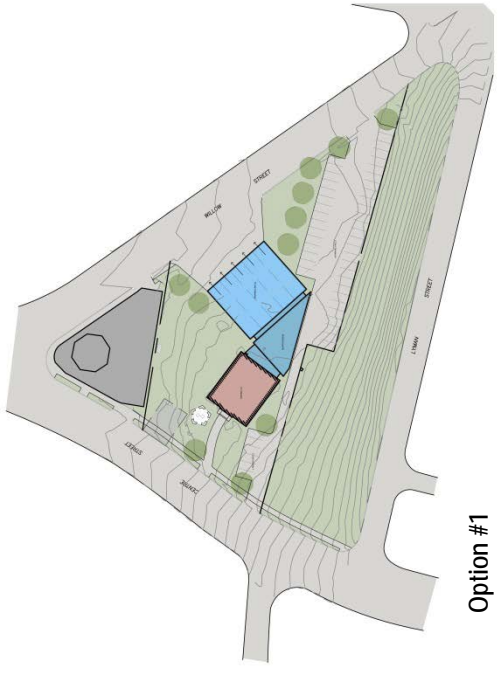
Verizon vault limits access to Centre Street from the site

Vehicle access to Centre Street would improve response times and is desirable.



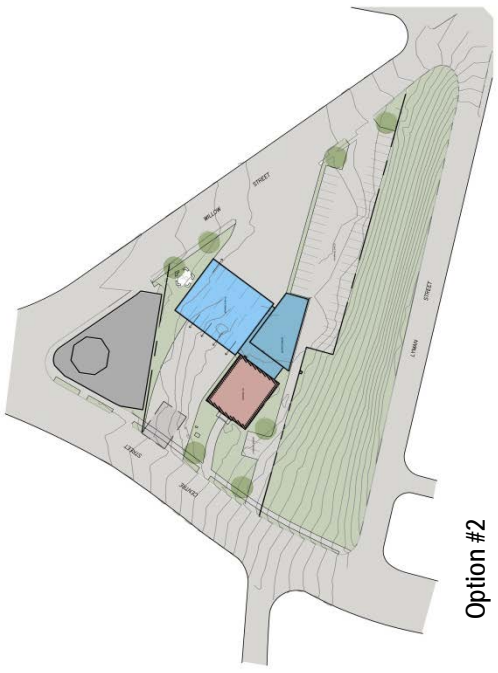
SITE OPTIONS

Option #1:
 Existing HQ stays
 Verizon vault stays
 MWRA easement not required
 No vehicle access onto Centre St



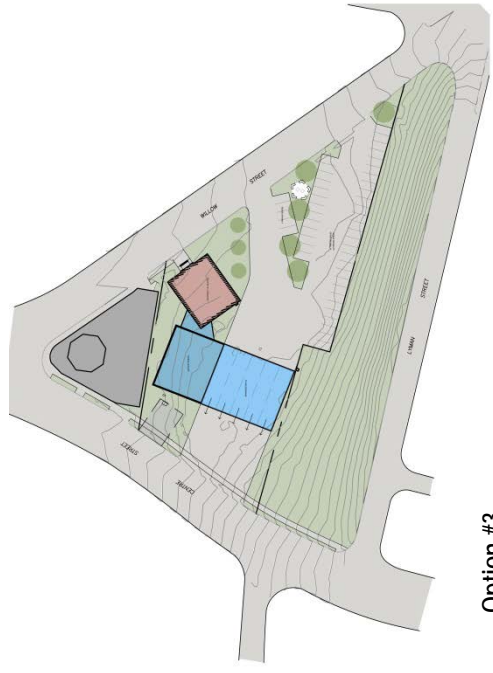
Option #1

Option #2:
 Existing HQ stays
 Verizon vault access moves
 MWRA easement not required
 Four drive-through bays



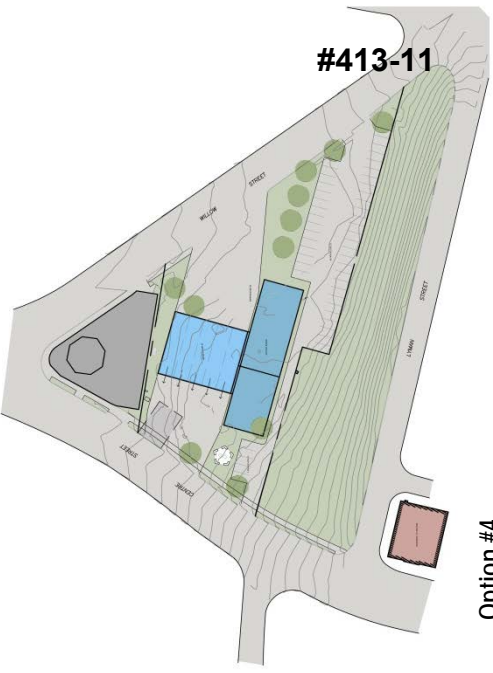
Option #2

Option #3:
 Existing HQ moves on-site
 Verizon vault access moves
 MWRA easement not required
 Five drive-through bays



Option #3

Option #4:
 Existing HQ moves off-site
 Verizon vault access moves
 MWRA easement not required
 Five drive-through bays



Option #4

#413-11

SITE OPTIONS

Option #5:

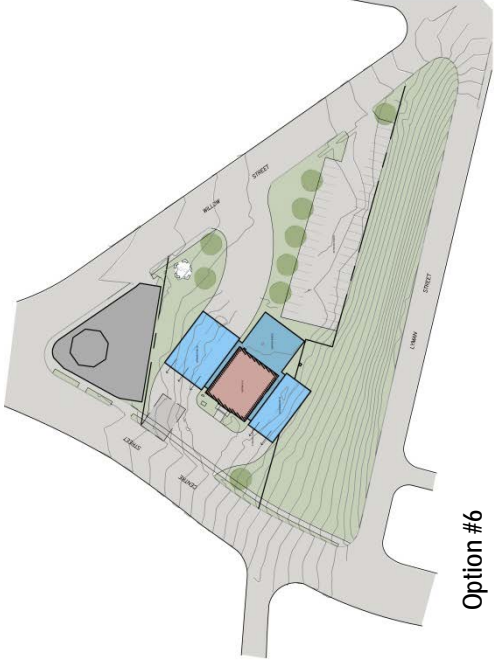
- Existing HQ moves off-site
- Verizon vault stays
- MWRA easement not required
- Five drive-through bays



Option #5

Option #6:

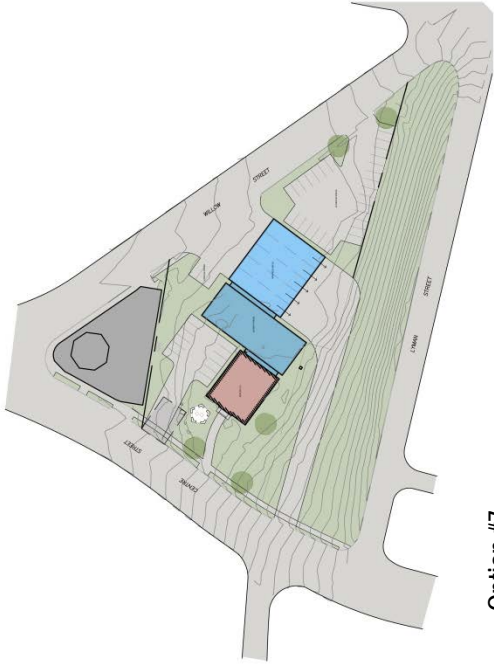
- Existing HQ stays
- Verizon vault access moves
- MWRA land required
- Three drive-through bays



Option #6

Option #7:

- Existing HQ stays
- Verizon vault access moves
- MWRA easement for driveway
- Five drive-through bays



Option #7

Option #8:

- Existing HQ stays
- Verizon vault stays
- MWRA easement not required
- Five drive-through bays
- Dallaria Salon site required



Option #8

#413-11

Updated:
7/22/2014

EVALUATION MATRIX

Options #1 through #8

Option Number	1	2	3	4	5	6	7	8
Option Description	Existing HQ Stays Verizon vault stays	Existing HQ stays Verizon Vault access moves	Existing HQ moves on-site; Verizon vault stays	Existing HQ moves off-site; Verizon vault access moves	Existing HQ moves off-site; Verizon vault stays	Existing HQ stays; Verizon vault access moves; MWRA Easement	Existing HQ Stays; Verizon vault stays; MWRA Easement	Existing HQ stays; Verizon Vault stays; Acquire Dellaria's parcel
Evaluation Criteria								
Service Delivery; Operationally Desirable?	No discharge to Centre; No drive-thru bays	4 bay discharge to Centre, converging driveway;	5 drive-thru bays with discharge to Centre; possible grade issue	5 drive-thru bays with discharge to Centre	5 drive-thru bays with 5 drive-thru bays with discharge to Centre; possible grade issue	5 bay, split discharge to Centre, converging driveway; poor entry to HQ	5 drive-thru bays discharge to intersection on Centre	5 drive-thru bays discharge to intersection on Centre
Option supports Program sq. footage requirements	Irregular layout could limit ideal programming adjacencies	Irregular layout could limit ideal programming adjacencies	Regular footprint for new space	Ideal; no constraints; larger new space due to relocation of HQ	Regular footprint for new space	Disconnected programming; less admin space to get drive-thru bays	Regular footprint for new space	Regular footprint for new space
Parking	Not ideal access to HQ	Not ideal access to HQ	Adequate	Adequate	Adequate	Poor access to HQ	Adequate	Adequate
Project Costs - not including acquisition costs	Typical; temp facilities	Modification to Verizon Vault; temp facilities	Move HQ; temp facilities	Move HQ; Modification to Verizon vault; temp facilities; larger new space	Move HQ; temp facilities; larger new space	Modification to Verizon Vault; temp facilities	Typical; Retaining wall; added site costs? Temp facilities.	Typical
Acquisition Cost(s)	NO	NO	NO	Relocation site for HQ?	Relocation site for HQ?	NO	NO	Acquisition of Dellaria's
Timeline/Schedule	Typical	Verizon vault modification	Move of HQ	Move of HQ; Verizon vault modification	Move of HQ	Verizon vault modification; MWRA easement	MWRA easement	Acquisition of Dellaria's
Temporary Operations	Yes - FSH3	Yes - FSH3	Yes - FSH3, Possibly only partial?	Yes - only HQ?	Yes - FSH3, Possibly only partial?	NO	Yes - FSH3	NO
Public Acceptance	HQ remains; lots of green space along Centre	HQ remains; less green space on Centre	HQ moved to Willow; less green space on Centre	Relocation of HQ; less green space on Centre	Relocation of HQ; less green space on Centre	HQ remains; no green space on Centre; poor access to HQ	HQ remains; lots of green space along Centre	HQ remains; lots of green space along Centre
Long Range Planning	Future expansion is possible	Future expansion limited.	Future expansion limited.	Future expansion is possible	Future expansion is possible	Future expansion limited.	Future expansion is possible	Future expansion is possible
	More Desirable		Neutral		Less Desirable			

TOP FOUR OPTIONS

Option #8:

- Existing HQ stays
- Verizon vault stays
- MWRA easement not required
- Five drive-through bays
- Dallaria Salon site required

Option #7:

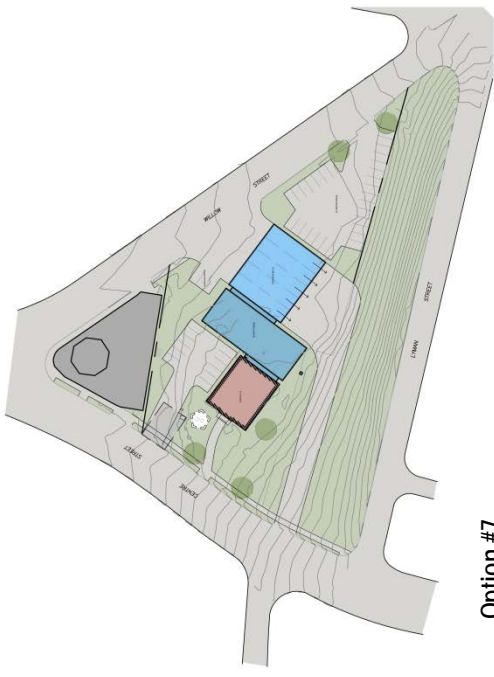
- Existing HQ stays
- Verizon vault access moves
- MWRA easement for driveway
- Five drive-through bays

Option #3:

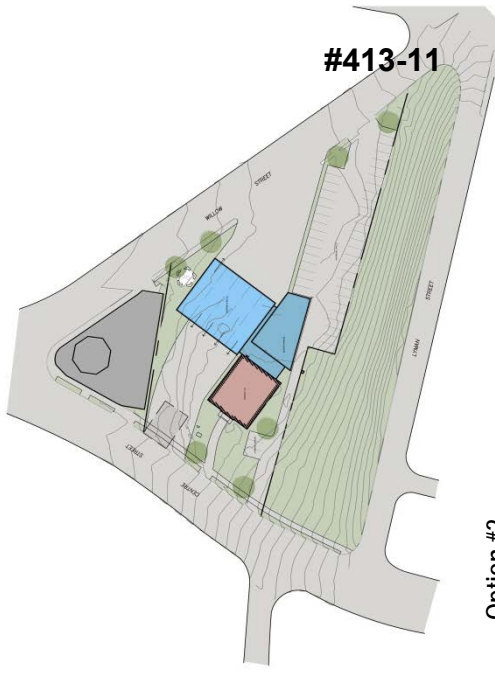
- Existing HQ moves on-site
- Verizon vault access moves
- MWRA easement not required
- Five drive-through bays

Option #2:

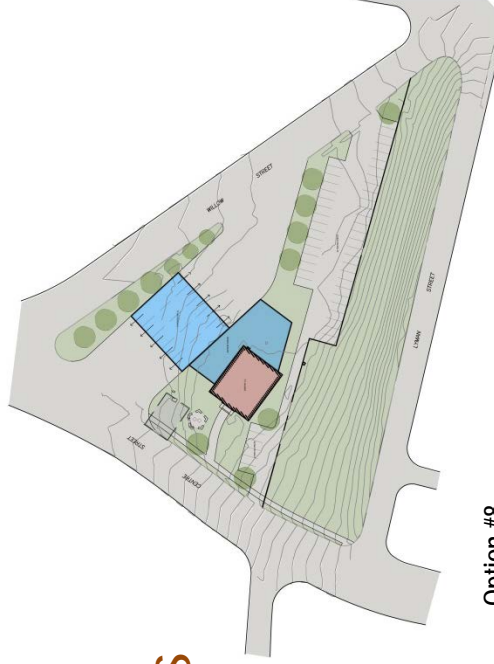
- Existing HQ stays
- Verizon vault access moves
- MWRA easement not required
- Four drive-through bays



Option #7



Option #2



Option #8



Option #3

#413-11

Updated:
7/22/2014

EVALUATION MATRIX

#413-11

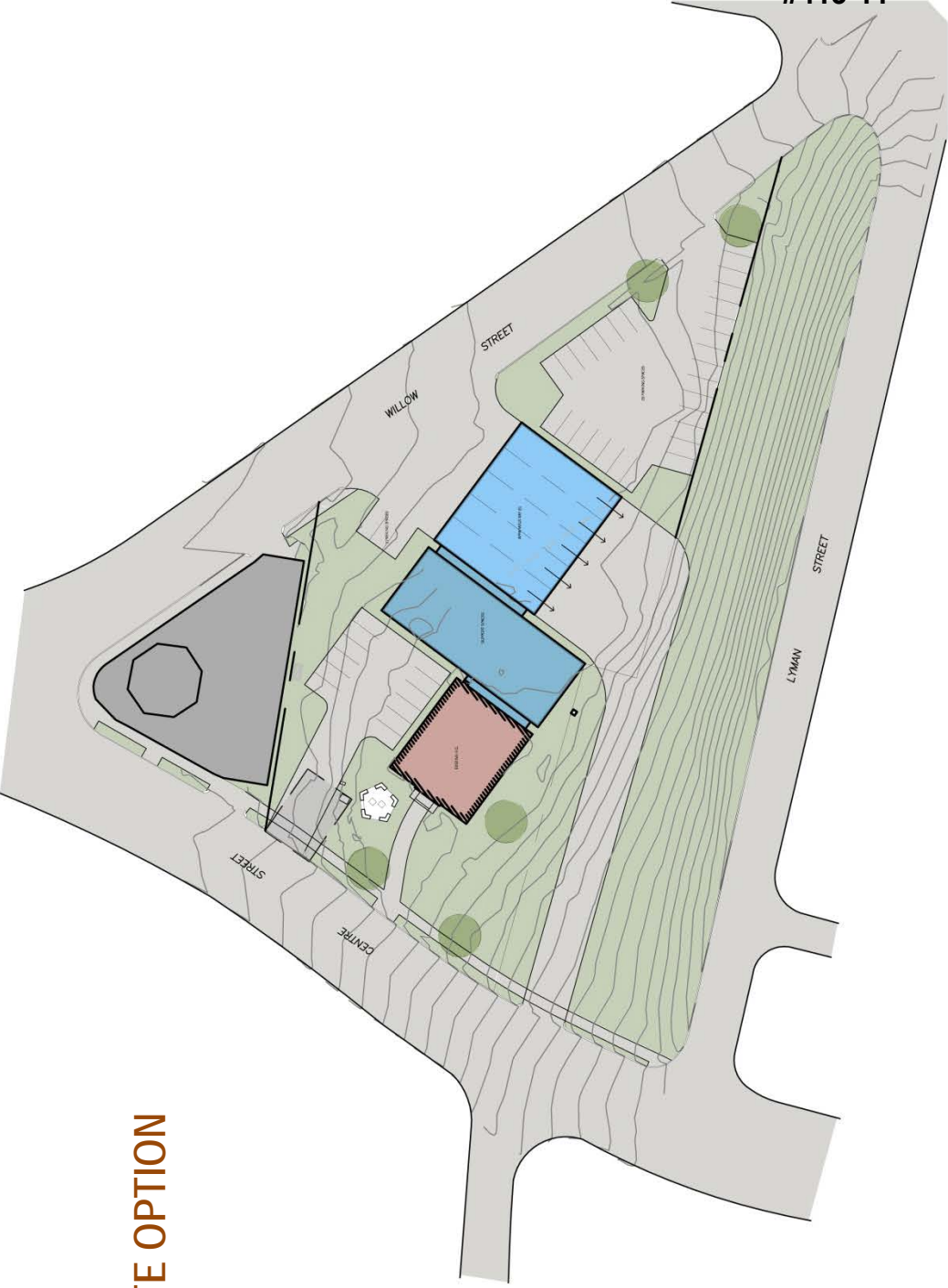
Option Number	1	2	3	4	5	6	7	8
Option Description	Existing HQ Stays Verizon vault stays	Existing HQ stays Verizon Vault access moves	Existing HQ moves on-site; Verizon vault stays	Existing HQ moves off-site; Verizon vault access moves	Existing HQ moves off-site; Verizon vault stays	Existing HQ stays; Verizon vault access moves; MWRA Easement	Existing HQ Stays; Verizon vault stays; MWRA Easement	Existing HQ stays; Verizon Vault stays; Acquire Dellaria's parcel
Evaluation Criteria								
Service Delivery; Operationally Desirable?	No discharge to Centre; No drive-thru bays	4 bay discharge to Centre, converging driveway;	5 drive-thru bays with discharge to Centre; possible grade issue	5 drive-thru bays with discharge to Centre	5 drive-thru bays with discharge to Centre; possible grade issue	5 bay, split discharge to Centre, converging driveway; poor entry to HQ	5 drive-thru bays discharge to intersection on Centre	5 drive-thru bays discharge to intersection on Centre
Option supports Program sq. footage requirements	Irregular layout could limit ideal programming adjacencies	Irregular layout could limit ideal programming adjacencies	Regular footprint for new space	Ideal; no constraints; larger new space due to relocation of HQ	Regular footprint for new space	Disconnected programming; less admin space to get drive-thru bays	Regular footprint for new space	Regular footprint for new space
Parking	Not ideal access to HQ	Not ideal access to HQ	Adequate	Adequate	Adequate	Poor access to HQ	Adequate	Adequate
Project Costs - not including acquisition costs	Typical; temp facilities	Modification to Verizon Vault; temp facilities	Move HQ; temp facilities	Move HQ; Modification to Verizon vault; temp facilities; larger new space	Move HQ; temp facilities; larger new space	Modification to Verizon Vault; temp facilities	Typical; Retaining wall; added site costs? Temp facilities.	Typical
Acquisition Cost(s)	NO	NO	NO	Relocation site for HQ?	Relocation site for HQ?	NO	NO	Acquisition of Dellaria's
Timeline/Schedule	Typical	Verizon vault modification	Move of HQ	Move of HQ; Verizon vault modification	Move of HQ	Verizon vault modification; MWRA easement	MWRA easement	Acquisition of Dellaria's
Temporary Operations	Yes - FSH3	Yes - FSH3	Yes - FSH3, Possibly only partial?	Yes - only HQ?	Yes - FSH3, Possibly only partial?	NO	Yes - FSH3	NO
Public Acceptance	HQ remains; lots of green space along Centre	HQ remains; less green space on Centre	HQ moved to Willow; less green space on Centre	Relocation of HQ; less green space on Centre	Relocation of HQ; less green space on Centre	HQ remains; no green space on Centre; poor access to HQ	HQ remains; lots of green space along Centre	HQ remains; lots of green space along Centre
Long Range Planning	Future expansion is possible	Future expansion is limited.	Future expansion limited.	Future expansion is possible	Future expansion is possible	Future expansion limited.	Future expansion is possible	Future expansion is possible
	More Desirable	More Desirable	Neutral	Neutral	Less Desirable	Less Desirable	Eliminated	Eliminated

PREFERRED SITE OPTION

Preferred Option #7

Site Plan

#413-11



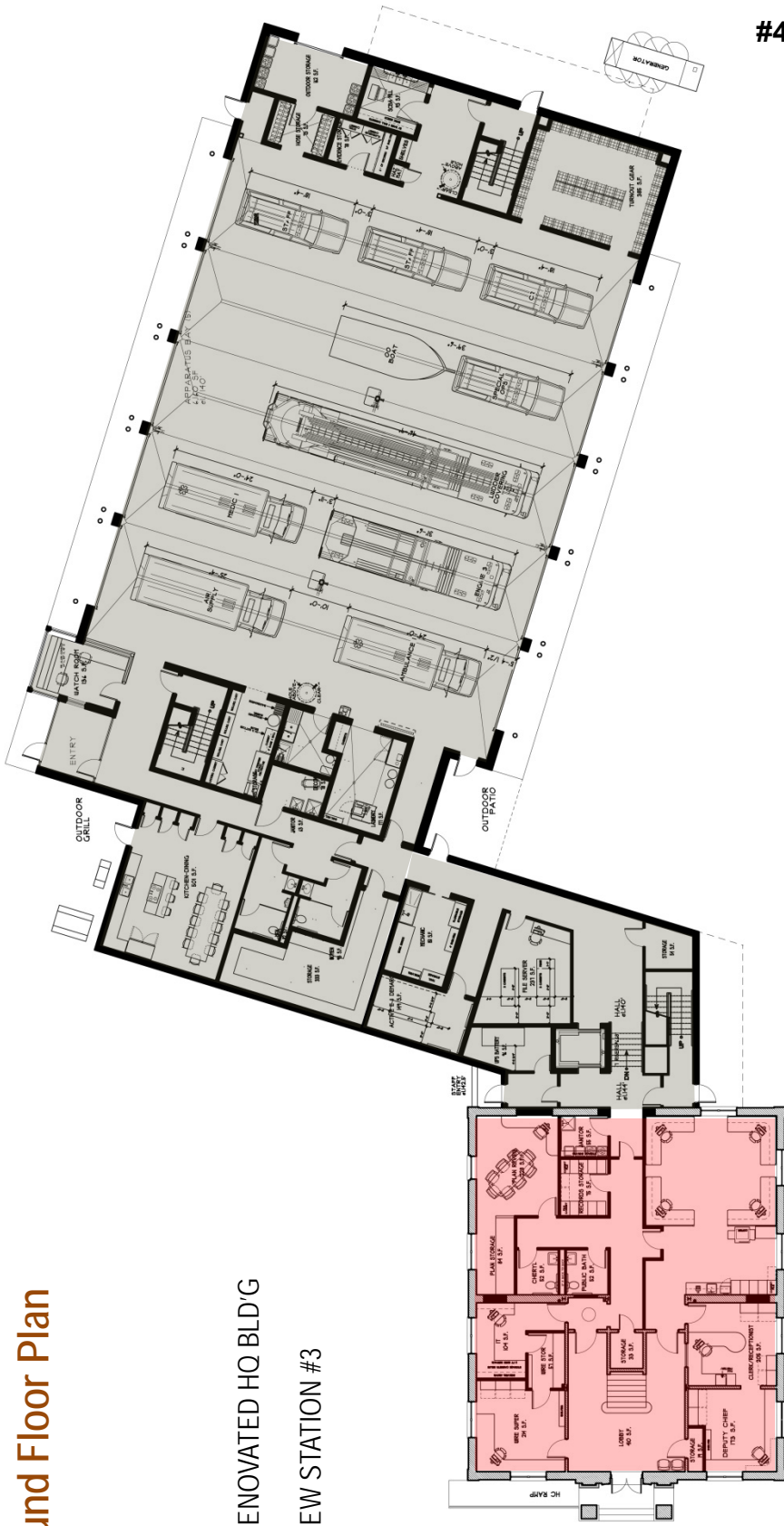
Refined Site Plan for Preferred Option #7



#413-11

Ground Floor Plan

- RENOVATED HQ BLD'G
- NEW STATION #3



#413-11

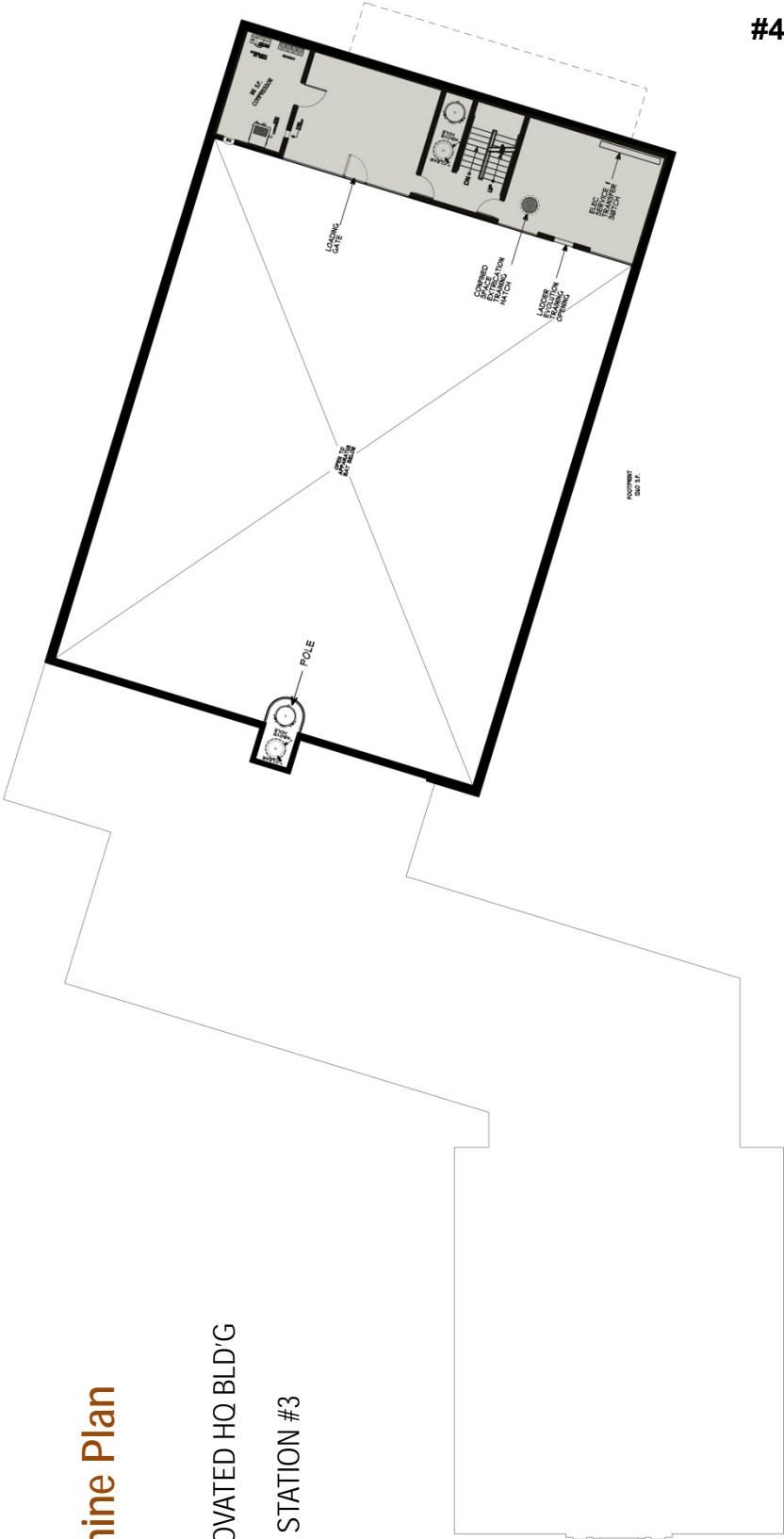
SCHWARTZ / SILVER with MITCHELL ASSOCIATES

NEWTON FIRE STATION #3 and HEADQUARTERS



Mezzanine Plan

- RENOVATED HQ BLD'G
- NEW STATION #3

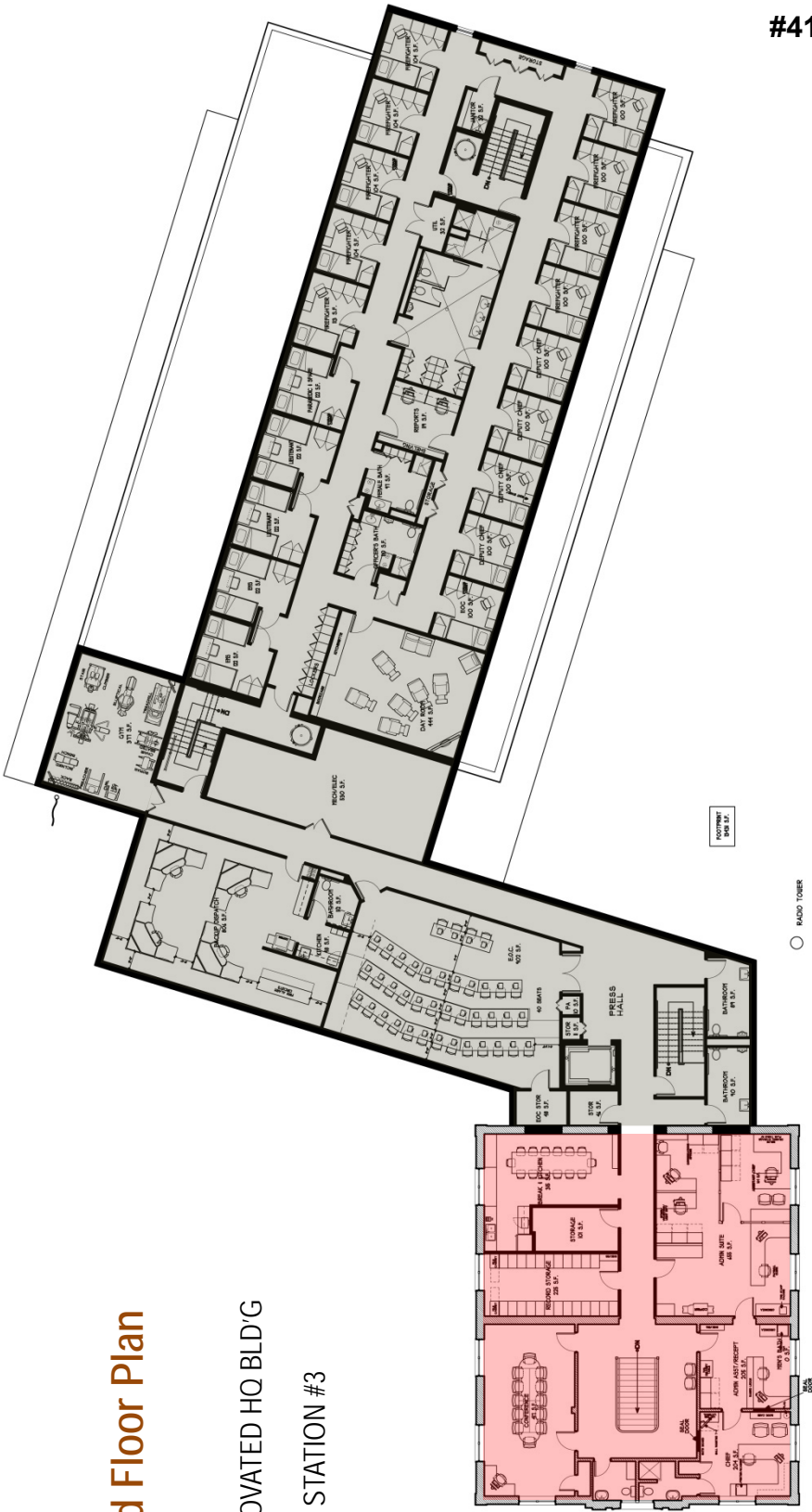


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Second Floor Plan

-  RENOVATED HQ BLD'G
-  NEW STATION #3



#413-11



Northeast Aerial View – Existing Conditions



NEWTON FIRE STATION #3 and HEADQUARTERS

SCHWARTZ / SILVER with MITCHELL ASSOCIATES

Northeast Aerial View – Option 01



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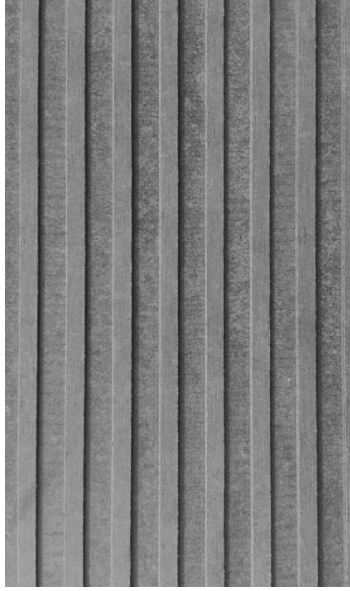
NEWTON FIRE STATION #3 and HEADQUARTERS

SCHWARTZ / SILVER with MITCHELL ASSOCIATES

Materials – Option 01



HISTORIC REPLACEMENT WINDOWS



FIBER CEMENT PANELS



BRICK TO MATCH EXISTING HQ



FIBER CEMENT PANELS WITH WINDOWS



#413-11

Willow Street Elevation – Option 01



#413-11

NEWTON FIRE STATION #3 and HEADQUARTERS

SCHWARTZ / SILVER with MITCHELL ASSOCIATES

Centre Street Elevation – Option 01



#413-11

NEWTON FIRE STATION #3 and HEADQUARTERS

SCHWARTZ / SILVER with MITCHELL ASSOCIATES

Lyman Street Elevation – Option 01



#413-11

NEWTON FIRE STATION #3 and HEADQUARTERS

SCHWARTZ / SILVER with MITCHELL ASSOCIATES

Northeast Aerial View – Option 02



United States • MA • Middlesex Co. • Newton • Newton Centre

10 m

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NEWTON FIRE STATION #3 and HEADQUARTERS

SCHWARTZ / SILVER with MITCHELL ASSOCIATES

Materials – Option 02



HISTORIC REPLACEMENT WINDOWS



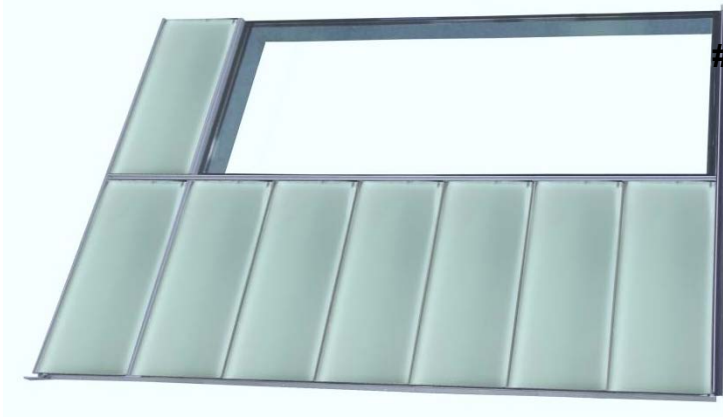
FROSTED GLASS PANELS



RED BRICK SIMILAR TO EXISTING HQ



ANODIZED ALUM. SUNSCREEN AND WINDOWS



#413-11

Willow Street Elevation – Option 02



#413-11

NEWTON FIRE STATION #3 and HEADQUARTERS

SCHWARTZ / SILVER with MITCHELL ASSOCIATES

Centre Street Elevation – Option 02



#413-11

NEWTON FIRE STATION #3 and HEADQUARTERS

SCHWARTZ / SILVER with MITCHELL ASSOCIATES

Lyman Street Elevation – Option 02



#413-11

NEWTON FIRE STATION #3 and HEADQUARTERS

SCHWARTZ / SILVER with MITCHELL ASSOCIATES

Site Section through Willow Street at Apparatus Bay



#413-11

NEWTON FIRE STATION #3 and HEADQUARTERS

SCHWARTZ / SILVER with MITCHELL ASSOCIATES

SW Aerial View of the Site

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NEWTON FIRE STATION #3 and HEADQUARTERS

SCHWARTZ / SILVER with MITCHELL ASSOCIATES

NE Aerial View of the Site



United States • MA • Middlesex Co. • Newton • Newton Centre

10 m

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NEWTON FIRE STATION #3 and HEADQUARTERS

SCHWARTZ / SILVER with MITCHELL ASSOCIATES

ADDITIONAL SLIDES...

#413-11

NEWTON FIRE STATION #3 and HEADQUARTERS

SCHWARTZ / SILVER with MITCHELL ASSOCIATES

SITE SURVEY

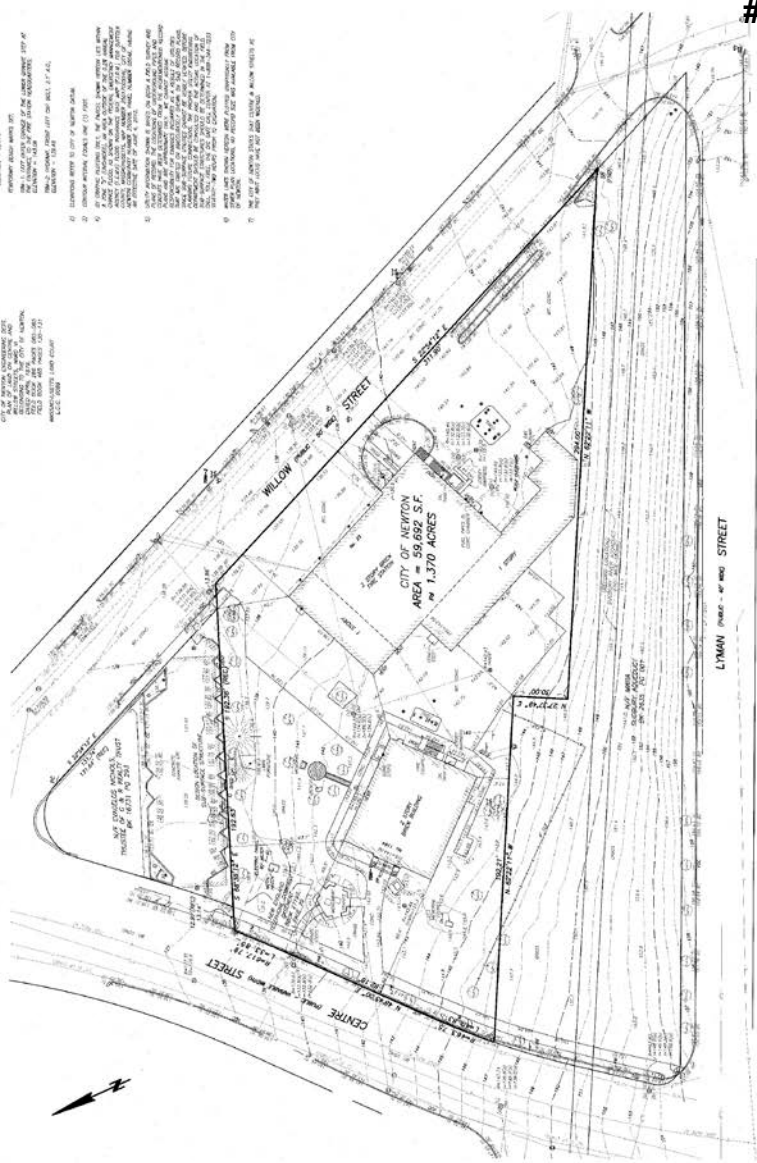


ATTENDANCE

ALL WORK SHALL BE DONE IN ACCORDANCE WITH THE CITY OF NEWTON, MASS. ORDINANCES AND REGULATIONS. THE SURVEYOR SHALL BE RESPONSIBLE FOR THE ACCURACY OF THE SURVEY. THE SURVEYOR SHALL BE RESPONSIBLE FOR THE ACCURACY OF THE SURVEY. THE SURVEYOR SHALL BE RESPONSIBLE FOR THE ACCURACY OF THE SURVEY.

NOTES

- 1) ALL WORK SHALL BE DONE IN ACCORDANCE WITH THE CITY OF NEWTON, MASS. ORDINANCES AND REGULATIONS.
- 2) THE SURVEYOR SHALL BE RESPONSIBLE FOR THE ACCURACY OF THE SURVEY.
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#413.11

EXISTING CONDITIONS PLAN
 25 WILLOW STREET
 NEWTON, MASS.
 FELDMAN LAND SURVEYORS
 112 SHIMMOT AVENUE
 BOSTON, MASS.
 PHONE: (617) 552-1740
 WWW.FELDMANLANDSURVEYORS.COM

SCALE: 1"=50'

ROBERT J. FELDMAN
 PROFESSIONAL ENGINEER
 No. 10101
 State of Massachusetts

SECTION THROUGH MWRA AQUADUCT



SUBJECT: LYMAN ST.
 CALCULATED BY: KESSMAN
 CHECKED BY: TAVENNA

ENGINEERING DIVISION

PAGE 1 OF 1
 DATE: 2/28/07

PROJECT: _____
 LOCATION: _____

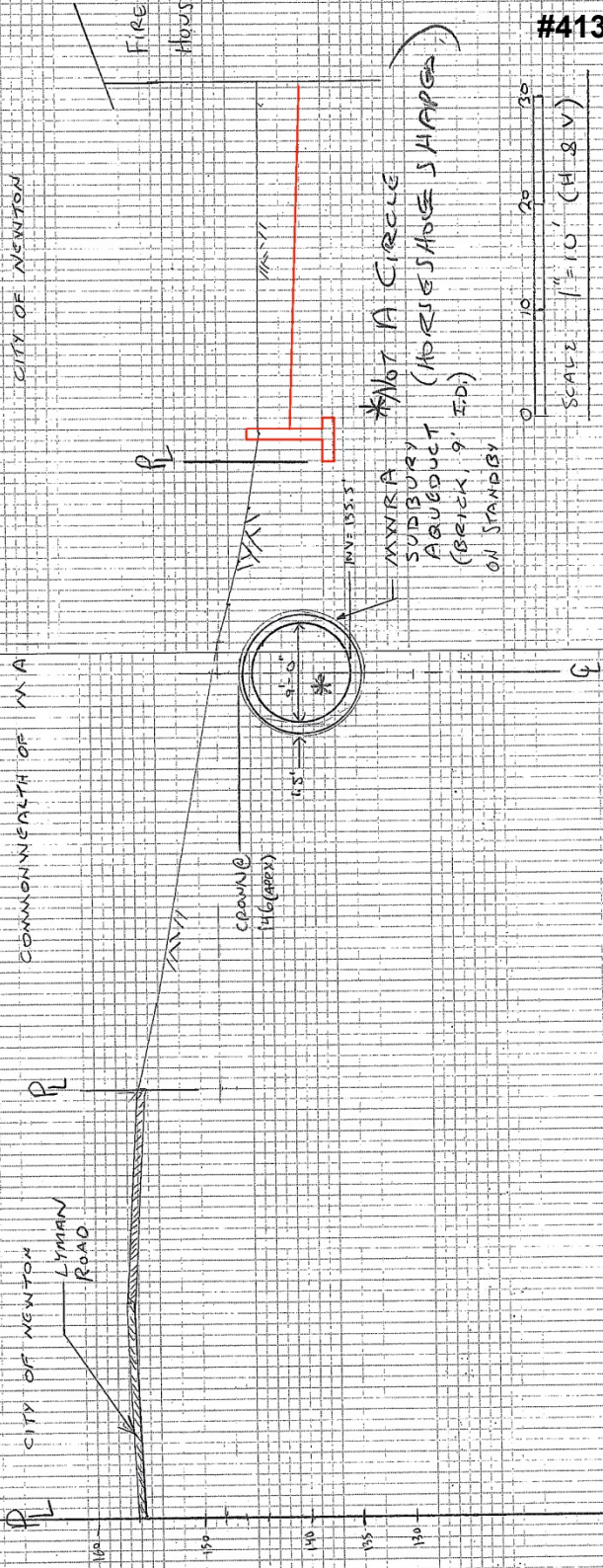
CITY OF NEWTON

COMMONWEALTH OF MASSACHUSETTS

CITY OF NEWTON

LYMAN ROAD

FIRE HOUSE



#413-11

PUBLIC BUILDINGS DEPARTMENT FY 15-16 CIP SUMMARY

1/7/2015

#375-14

FACILITY	PROJECT	FY 15 ESTIMATE	FY 15 & PRIOR	FY 16	FY 17	FY 18	FY 19	FY 20	COMMENTS
ANGIER SCHOOL	REPLACEMENT	\$ 37,500,000	\$ 15,000,000	\$ 17,500,000					CONSTRUCTION UNDERWAY & ON TIME
FIRE STA #3 & HDQTRS	REPLACEMENT / RENOVATE	\$ 15,386,000	\$ 1,000,000	\$ 7,500,000	\$ 7,127,010				5-58 Review in Feb
FIRE STA #10 / WIRES DIV	REPLACEMENT	\$ 6,534,126	\$ 6,118,126						CONSTRUCTION UNDERWAY & ON TIME
CABOT SCHOOL	RENOVATION	\$ 45,000,000	\$ 1,000,000	\$ 1,000,000	\$ 10,350,000	\$ 21,424,500	\$ 21,424,500	\$ 13,304,615	MSBA Pipeline
ZERVAS SCHOOL	RENOVATION/REPLACEMENT	\$ 40,000,000	\$ 3,415,000	\$ 10,000,000	\$ 25,585,000				Design Development
POLICE ANNEX	BUILDING IMPROVEMENTS	\$ 335,000	\$ 335,000						APPROVED - WORK IS UNDERWAY
CITY HALL	WAR MEMORIAL ELEVATOR & ACCESSIBILITY	\$ 1,000,000	\$ 1,000,000						DRC TO REVIEW PLANS
VARIOUS FACILITIES	ENERGY EFFICIENCY IMPROVEMENTS - PHASE II	\$ 4,110,000	\$ 2,610,000						Lighting complete
SENIOR CENTER	HVAC IMPROVEMENTS	\$ 150,000	\$ 150,000						APPROVED
FA DAY	REPLACEMENT OF HOT WATER HEATER	\$ 150,000	\$ 150,000						APPROVED
FIRE STATION #1	REPLACE EMERGENCY GENERATOR	\$ 127,500	\$ 127,500						APPROVED
CITY HALL	EXTERIOR LIGHTING IMPROVEMENTS	\$ 65,000	\$ 65,000						APPROVED - WORK IS UNDERWAY
NEWTON SOUTH	RELOCATE MODULARS FROM ZERVAS/RENOVATE former AUTO SHED TO HOUSE SCHOOL PROGRAMS	\$ 400,000	\$ 400,000						
NEWTON MAIN LIBRARY	MECHANICAL UPGRADES	\$ 1,000,000	\$ -	\$ 500,000	\$ 517,500				Complete 12/15/14
Angino Farm	Renovation Project								
Jackson Homestead Arhives	Archives, Accessibility, Fire Protection								DRC Review and bid in Feb
FA DAY	REPLACE EMERGENCY GENERATOR/ELECTRICAL IMPR.	\$ 150,000	\$ -	\$ 150,000					

The City Hall Elevator and Accessibility Project scope is as follows:

- Installation of a fully accessible 3 stop elevator to serve the War Memorial Auditorium and other areas on that end of the building.
- Site work on the Homer Street side of City Hall to make an accessible path from the War Memorial circle to the Homer Street entrance
- Installation of a new handicapped ramp to allow travel from the Homer Street entrance to the new elevator
- Renovation of the existing bathrooms beneath the War Memorial Auditorium to provide a fully compliant bathroom and to meet the plumbing fixture count requirements.
- As an alternate, we are proposing the installation of a vertical chair lift for the War Memorial stage.

The elevator will be sited in the back right portion of the hallway behind the auditorium, beneath the balcony. It will travel down to in between the existing men's room and the DAV room. It will land in the basement vault that currently holds the plans for Inspection Services.

If we did not provide an accessible path and ramp to allow access through the Homer Street entrance, people would have to park by the old elevator, take that to the 1st floor, travel to the other end of City Hall, and take the new elevator up to the auditorium. Although this may be permitted, we did not feel that it would be fair or equitable for those individuals with disabilities.

The architect, John Lojek, and I looked at many options for placement of the elevator with the following major criteria in mind:

- Minimize impact on historical features
- Minimize impact on city operations
- Provide the most user-friendly accessible route
- Provide a cost effective solution while still meeting all project needs

Based on the above, we came up with the current proposed elevator location, but we did look at the following options.

- We looked at placing the elevator in the auditorium itself, and traveling down through the newly renovated Health Dept. The cost for this option was comparable to the preferred option but had a significant impact on the Health Dept, and put the elevator in a very awkward position within the auditorium.
- We also looked at an exterior elevator which would require an addition to the building, but this not only proved to be extremely expensive, it also appeared to be an option that the Massachusetts Historical Commission would likely not approve when interior options were available.
- We looked at eliminating one of the rotundas in the Veteran's Wing which was feasible from a construction standpoint, but would have an extremely negative impact on the interior historical features and would eliminate the marble wraparound stairwell leading up to the auditorium.

Josh Morse, Commissioner of Public Buildings

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 Feet	Energy Use Index (kBtu/Sq Ft)	Estimated Project Budget – 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 PROJECT EXAMPLE - CASH FLOW: CABOT ELEMENTARY SCHOOL								
PRINCIPAL	TERM	INTEREST	ANNUAL SAVINGS	UTILITY	NATURAL GAS	ELECTRIC RATE	NSTAR INCENTIVE	NGRID INCENTIVE
\$ 187,079	10	4.00%	\$ 28,131	2.0%	\$ 1.2722	\$ 0.15	\$ 0.25	\$ 1.50
<u>Year</u>	Annual Principal	Loan Balance	Annual Interest	Annual Debt Service	Annual Project Savings	Net Cash Flow	Escalated Annual Savings	Escalated Net 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
6	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	9,979
8	18,708	56,123	2,245	20,953	28,131	7,178	32,313	11,361
9	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	-	(1)	-	-	-	-	-	-
	\$ 187,080		\$ 41,157	\$ 228,237	\$ 281,308	\$ 53,071	\$ 308,025	\$ 79,788

DETAILED ENERGY CONSERVATION MEASURE BREAKDOWN: CABOT ELEMENTARY SCHOOL										
FACILITY	ECM	PROJECT COST	NSTAR ELECTRIC INCENTIVE	NGRID GAS INCENTIVE	CUSTOMER NET COST	kWh REDUCTION	THERM REDUCTION	ANNUAL SAVINGS	PAYBACK IN 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	
		\$ 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 unoccupied 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