



# Public Facilities Committee Budget Report

## City of Newton In City Council

Wednesday, May 1, 2024

Present: Councilors Albright (Chair), Getz, Kalis, Kelley, Leary and Gentile; absent: Councilors Laredo and Danberg

Also Present: Councilors Bixby, Block, Downs, and Wright

City Staff: Commissioner of Public Buildings Josh Morse, Chief Operating Officer Jonathan Yeo, Manager of Financial Planning & Analysis Perry Rosenfield, and Senior Financial Analyst Connor Roach

**Please Note:** Budget Materials can be found on the City's website at the following link:

<https://www.newtonma.gov/government/comptroller/budget>

### Referred to Finance and Appropriate Committees

- #8-24**      **Submittal of the FY 2025 to FY 2029 Capital Improvement Plan**  
HER HONOR THE MAYOR submitting the Fiscal Years 2025 to 2029 Capital Improvement Plan pursuant to section 5-3 of the Newton City Charter.
- #194-24**    **Submittal of the FY25 – FY29 Supplemental Capital Improvement Plan**  
HER HONOR THE MAYOR submitting the FY25 – FY29 Supplemental Capital Improvement Plan.
- #195-24**    **Submittal of the FY25 Municipal/School Operating Budget**

## **Department of Public Buildings**

**Note:** Joshua Morse, Commissioner of Public Buildings presented the budget for the Department of Public Buildings. Mr. Morse noted that there is a 6% (\$411,000) increase in the budget with a little over a half of that coming from utility cost, contractual maintenance, and small projects. If those are taken out it works out to about a 3% increase in the budget. Mr. Morse stated that Arthur Cabral recently retired, and that Victor Imparato would be joining the department as a Construction Project Manager. He noted there has been a couple of custodians that retired, which they are trying to fill.

Councilors praised Mr. Morse on the number of projects that the department has undertaken, and for his communication concerning those projects.

A councilor asked about solar installations at several sites, and noted there was conversation it would only be on the roof. Mr. Morse noted that was for the Countryside School project, and there will be solar in both the parking lot and on the roof.

A Councilor asked if there are any buildings still using oil. Mr. Morse stated that some of the smaller buildings still use fuel oil.

A councilor inquired about the municipal building maintenance line going down, with Mr. Morse noting that there was a shift in the personnel expense from the municipal building maintenance line to the administrative side.

A councilor asked about the school maintenance line in the budget, with Mr. Morse stating that it mainly water and sewer charges. School maintenance is covered in the school budget.

A councilor asked about the under \$75,000 project list. Mr. Morse noted that the list is made up of projects that are too big for typical maintenance, but not big enough to be a capital project. There is now a line in the budget for capital expense to work on these projects. Each year they are taking off completed projects, and new projects that come up throughout the year are added. At that time anticipated cost are also updated.

Commissioner Morse presented the attached presentation on the large capital projects the department is working on. He noted that on Countryside School, they are working on the interior, as the exterior is mostly done. It is anticipated that construction will start in the early spring of 2025 and finishing in 2027, with the students most likely staying in the current school until it is finished. The Lincoln Eliot School construction is progressing and is on budget and schedule. The Franklin School project is going out for 558 site plan approval on May 15<sup>th</sup>, and the exterior is still being designed with color and materials being contemplated. It is expected construction will happen in summer of 2025 with completion in summer 2027. The department is working with the Design Review Committee on the Horace Mann School project to update the schedule and finish the schematic design and then move into design development. There is ongoing construction at the Cooper Center for Active Living with no issues with the surrounding neighbors to this point. The Gath Pool Project is coming close to completion and should be open in time for the swim season. The police facilities project is in the feasibility stage. Mr. Morse highlighted several smaller capital projects they are working on as well.

Commissioner Morse presented the attached projects lessons learned update. He noted every time a project is complete the team debriefs and looks at what could be done differently or improved.

A councilor inquired where the under \$75,000 project money is reflected in the budget, with Mr. Morse noting that it is under building improvements which is under capital expense. He also noted that free cash, and salary savings can also help fund these projects.

A councilor asked about municipal EV chargers. Mr. Morse noted that they are currently expanding the network of chargers.

A councilor asked where the extra cost of working on weekends to finish the Gath Pool is coming from. Mr. Morse stated it is coming out of the project contingency built into the project.

A councilor asked how far they will get through on the under \$75,000 list. Mr. Morse noted they typically finish about 20-30 projects a year and then add roughly the same amount back to the list each year in new projects.

A Councilor noted a need for buffers on the walls to protect basketball players on the interior of Pellegrini basketball court. Mr. Morse noted they would make a note of that as work progresses on the project.

A councilor asked if the coaches would be coming back once the Gath Pool is complete, with Mr. Morse reporting that they would be coming back.

A councilor asked about the total annual savings and capital savings from the green community energy investments. Mr. Morse noted he would get this information over to the Councilor.

The Committee took a straw vote to accept the Department of Public Building's Budget of \$6,624,659, the supplemental CIP, and the CIP which passed unanimously.

In follow up to this meeting the following information was provided by the Co-Director of Sustainability, William Furguson.

*"The EV charging infrastructure question is a little easier to answer so I will start there. We are currently in the process of installing five level 2 chargers at 60 Elliot St that will be used for charging 9 new RAV 4 plug in hybrid vehicles that DPW is adding to the City fleet. These chargers will not be available to the public. They are being paid for under Eversource and Mass DEP EVIP funding programs.*

*Also, Ann and I have submitted an application to US DOE under a federal block grant program. The Grant is a federal funding allocation to Newton of \$145,080 for sustainability projects. About \$30,000 will be used to hire a consultant to help us determine the best locations for chargers for public use and also to help us engage with property owners who will host these chargers on private property. The balance of the funds will be used to purchase the chargers and support charger operations and maintenance. These funds will be paired with the Eversource Make Ready program and the Mass. DEP EVIP grant program. We estimate that we can install 12 -15 level 2 chargers around the City with this funding at no cost to the City.*

*The best information that I have on hand that answers the question about savings from the Green Communities Grants is the attached. I did a study in 2020 which compared the electricity use of buildings before lighting projects were done(FY 2013) to use at least a year after all projects were*

*completed (FY2019). These are all the accounts where we did LED lighting projects with GC grants (which are matched with utility rebates). We received \$1.3 million in GC grants during this period plus \$.7 million in matching utility rebates. Using our average electricity costs, we save \$627,442 per year. LEDs have a life of 10+ years so these projects would save over \$6 million over their life. Since 2019 we have received funding and completed additional projects that would add to this total. I hope this helps shed some light on this question. Please let me know if you would like to discuss.”*

**Respectfully submitted**

**Susan Albright, Chair**

**Public Buildings Budget  
Comprehensive Capital Project Update**

**April 2024 Edition**

**Josh Morse – Public Buildings Commissioner**

You can also follow us on social media at

<https://www.facebook.com/profile.php?id=100070249892653>,

<https://www.instagram.com/newtonmapbd/>, or <https://twitter.com/NewtonMAPBD>.

**Countryside School Project**

**Design Development | Street Entrance Plaza**



The building design continues to be refined and tweaked in response to feedback from the community and various stakeholders.

Design Development | Library



Design Development | Cafeteria



The Countryside School project is currently in the design development phase in partnership with the Massachusetts School Building Authority, MSBA. On Wednesday, March 27<sup>th</sup>, the Countryside School Building Committee voted to submit the design development package to the Massachusetts School Building Authority, MSBA. You can watch the recording of that meeting [here](#). At that same meeting, the Design Review Committee received an update on the project design which included a

# Public Buildings Budget

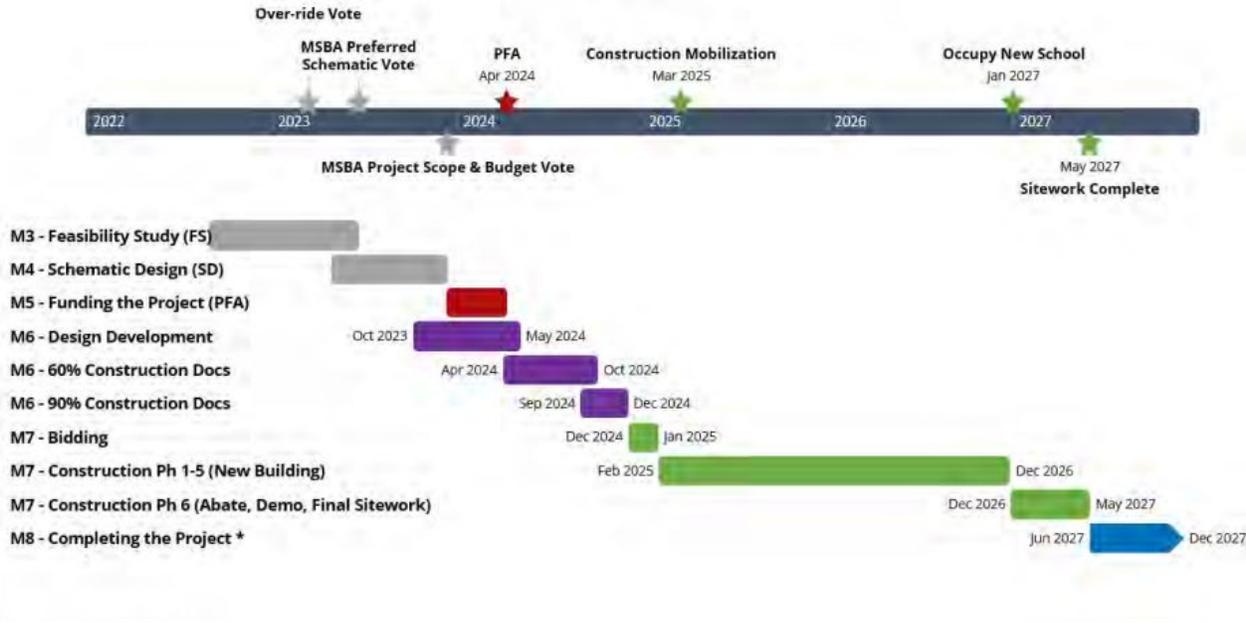
review of the exterior lighting and landscaping plans, as well as updates on the building energy modeling and interior design.

The current design development, DD, phase will last another month. At the end of the DD phase, we will begin construction documents which is that last design phase and it takes roughly 9 months to complete. This means that by this time next year we will have started construction on the project.

We've still got a tremendous amount of design work left to do, but you can review all project information, presentations, and materials at [countrysideelementaryschoolproject.com](http://countrysideelementaryschoolproject.com).

We anticipate the bulk of construction starting in the summer of 2025 and completing construction in the summer of 2027. Based on the latest schedule, we may be able to get started on some of the early construction work ahead of schedule.

## Design Development | Project Timeline



The next Countryside Project presentation to the Design Review Committee will be on Wednesday, April 24<sup>th</sup> at 6:00pm and you can join the meeting when it starts by clicking [here](#). These meetings occur monthly on Wednesday evenings at 6:00pm and the agenda and meeting information are always posted [here](#). Construction won't get started for quite some time, but like all our major projects we will have monthly community construction update meetings once we break ground.

If you have any questions or comments about this project, you can email us at [countryside@newtonma.gov](mailto:countryside@newtonma.gov).

## Public Buildings Budget Lincoln-Eliot School Project



Last week we gave the City Council a tour of the job site. In the above picture I'm showing the councilors the 1<sup>st</sup> floor which has been torn up to install new electrical conduit and plumbing.

**LINCOLN-ELIOT** Lincoln-Eliot  
**ELEMENTARY SCHOOL** Leopards



**Tuesday, March 19, 2024 – 6:00 PM**  
**Virtual via ZOOM, Link to register:**  
<https://newtonma.gov.zoom.us/j/82979255080>

Refer to <https://www.newtonma.gov/government/public-buildings/calendar> for upcoming meeting dates, registration links, and more information!

**Construction Activities**

- Site Grading & Utilities
- Foundations at New Main Entry & Gym
- Interior Construction at Existing Buildings

**Upcoming**

- Steel Erection at New Main Entry & Gym
- Jackson Road Sidewalk Realignment - Sidewalk Closure anticipated Spring & Summer
- Walnut Park Site Work

**Consultant Team**

Hill-Liro - Owner's Project Manager  
 Arrowstreet – Architect  
 CTA Construction Managers – General Contractor

**Contacts**

For general project inquiries:  
 Alex Valcarce – City of Newton Project Manager  
 (617) 796 - 1600

For project updates, please visit:  
<https://www.newtonma.gov/government/public-buildings/capital-projects-investing-now-for-newton-s-future/school-projects/lincoln-eliot>

# SCHOOL PROJECT COMMUNITY UPDATE



**Contacts**

For general project inquiries:  
 Alex Valcarce – City of Newton Project Manager  
 (617) 796 - 1600

**Overall Construction Schedule**

Dec. 2023	Ground Breaking
Summer 2025	Substantial Completion
Fall 2025	Occupy School

For project updates, please visit:  
<https://www.newtonma.gov/government/public-buildings/capital-projects-investing-now-for-newton-s-future/school-projects/lincoln-eliot>

**Save The Dates:**  
 Lincoln-Eliot Community updates will be the 3rd Tuesday of each month at 6:00PM for the project duration, unless otherwise noted.

Our monthly community construction updates are going smooth, and the feedback has been very positive from our neighbors.



In the above picture, one of our electricians is coring holes to make way for the new electrical conduits.



Outside, the crews are making short work of establishing our foundations for the new addition which will include the main entrance and office, the library, and the gymnasium.



In the above image, our team poured the first concrete for the new addition on the Lincoln-Eliot School Project.

All demolition is now complete. At this point our team is working hard on the installation of electrical, plumbing, sprinklers, and HVAC ductwork. The bulk of the sitework is complete, and the foundations for the addition are about 50% complete.

Our last community construction update meeting was on Tuesday, March 19th and you can watch the meeting recording [here](#). Our next community construction update meeting will be on Tuesday, April 16<sup>th</sup> at 6:00pm and you can join the meeting once it starts by clicking [here](#). Our community construction update meetings will continue to be on the 3rd Tuesday of every month.

The schedule for the project remains the same with students moving into the new home for the start of the 2025/2026 school year. To stay up to date on the project, you can check out the project website at <http://lincolneliot-necp-projects.com/>.

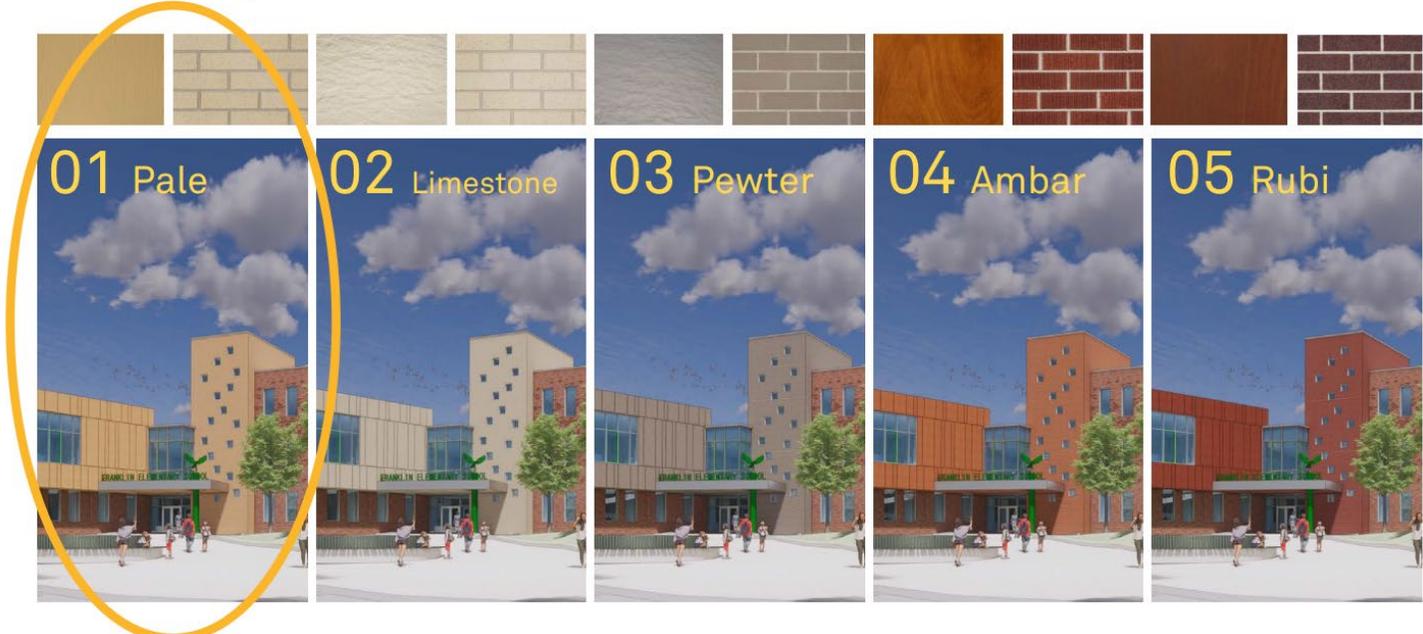
If you have any questions or comments about this project, you can email us at [lincolneliot@newtonma.gov](mailto:lincolneliot@newtonma.gov), or you can check out our project website at [lincolneliot-necp-projects.com](http://lincolneliot-necp-projects.com).

Franklin School Project

Pop Out and Tower Pairings

HM  
FH

Review of Options



In the slide above you can see that the design team is working to explore several approaches to the exterior building materials and colors. Option 1 appears to have some potential.

Exterior Tour of Building

HM  
FH

View from Bus Drop Off



In the above image you can start to see the building massing and appearance take shape. This is the view from the bus loop. Not shown in this image is the new universally accessible playground which will be located on the right behind the landscaping.

# Exterior Tour of Building

View of Gymnasium Entrance



We're also reviewing the rear of the building to ensure that we are studying the design elements with the same careful thought to produce something architecturally sensitive to our neighbors on Clark Road.

# Exterior Tour of Building

View of Cafeteria Entrance



On the west side of the new building will be the parking lot. Just like the rear of the new school, we want the entrance and building design to be appealing to the neighbors, staff, and visitors. This is the view from the staff parking lot.

# Exterior Tour of Building

View from Cherry Street Path



The east side of the school will be facing the new fields. In this image we'll have a soccer field on the right, and a baseball field on the left. Straight ahead will be the basketball court and new playground.

We've got lots of design work left to complete, but the concepts continue to be refined in response to community and stakeholder input.

The next Franklin School Project meeting will be with the Design Review Committee on Wednesday, April 10<sup>th</sup> at 6:00pm and you can join the meeting once it starts by clicking [here](#). These meetings occur monthly on Wednesday evenings at 6:00pm and the agenda and meeting information are always posted [here](#).

The last Franklin School Project meeting was on Wednesday, March 13<sup>th</sup> and the recording of that meeting can be seen [here](#).

We anticipate starting construction in the summer of 2025 and completing construction in the summer of 2027.

To review the presentation, project information, and materials you can go to our project website [here](#). If you have any questions or comments about this project, you can email us at [franklin@newtonma.gov](mailto:franklin@newtonma.gov).

**Horace Mann School Project**

The Horace Mann Project is in the schematic design phase. The exterior designs and interior floor plans are becoming more refined, and the subconsultants are working on things like civil, geotechnical, interior building system engineering designs. Our landscape architect is continuing to develop and refine the plans, but the concept is well established at this point.

We are simultaneously working with our design team and owner’s project manager to develop our construction phasing schedule and logistics plan.

We will be working with the Design Review Committee and City Council in the coming months to start the review and approve the site plan and schematic design package. Once this is complete, we will move into a 3-month design development phase, before the final design phase which will last another 9 months.



The above rendering shows the new 2-story addition to the right of the existing school on Nevada Street.



The above image shows the aerial view of the new addition with solar panels on the roof. In the upper righthand corner you can see the new playground and basketball court.

Rear Entrance to Addition



The above image shows the new addition straight ahead, and the existing building to the right. This is the view from the new playground. (Not all playground equipment is shown in this image.)



This is an aerial image that shows the relationship of the new addition to the existing building as well as the various site improvements.

Over the last few months, the School Committee voted to formally approve the Horace Mann program and space summary, and the Design Review Committee voted unanimously to approve the site plan and schematic design package.

Over the next few months, there will be a lull in the public meetings as we work through a lengthy internal process to move through the site plan review and approval process. During this time there will be no changes to the design.

The last Horace Mann School Project meeting was on Wednesday, March 13<sup>th</sup> and the recording of that meeting can be seen [here](#).

To learn more about this project you check out our website [here](#). If you have any questions or comments about this project, you can email us at [horacemann@newtonma.gov](mailto:horacemann@newtonma.gov).

Cooper Center for Active Living Project



Cooper Center for Active Living
City of Newton
Mayor Ruthanne Fuller



Information: https://www.newcal.projects.nv5.com
Questions: Tom Rooney - City of Newton Project Manager
(617) 796-1600 / trooney@newtonma.gov



J&J CONTRACTORS, INC.

The Cooper Center project is looking great. We've had no surprises as we've completed the demolition and site preparation so everything has been going very smoothly.



A few weeks back the team from J&J Contracting poured the first concrete to establish our foundation for the new Cooper Center.



The bulk of the foundation has been poured now and the footprint of the building is starting to take shape.

# Cooper Center for Active Living

April 2024 Update

Mayor Ruthanne Fuller

### CONSTRUCTION ACTIVITIES

- All demolition and tree removal is complete.
- Excavation for Foundation continues
- Forming and pouring concrete for footings continues
- Forming and pouring concrete for foundation walls has begun
- Installation of utilities and underground storm structures will occur this month

#### Consultant Team

NV5- Owner’s Project Manager  
 Bargmann Hendrie + Archetype, Inc. - Architect  
 J&J Contractors, Inc. - General Contractor

#### Contact

For general project inquiries:  
 Tom Rooney - City of Newton Project Manager  
 (617) 796 - 1600

For project updates, please visit: <https://www.newtonma.gov/government/public-buildings/capital-projects-investing-now-for-newton-s-future/municipal-facilities-projects/newton-center-for-active-living>

Join Us For Our Monthly  
 Community Construction  
 Meeting on April 2,  
 2024 at 6pm.

### Zoom Registration:

[https://newtonma-gov.zoom.us/j/87604182709?](https://newtonma-gov.zoom.us/j/87604182709?pwd=eTd5YndqNGlBZk10OFRGUjNrc1ZpUT09)  
 pwd=eTd5YndqNGlBZk10OFRGUjNrc1ZpUT09



Groundbreaking Ceremony, March 7, 2024



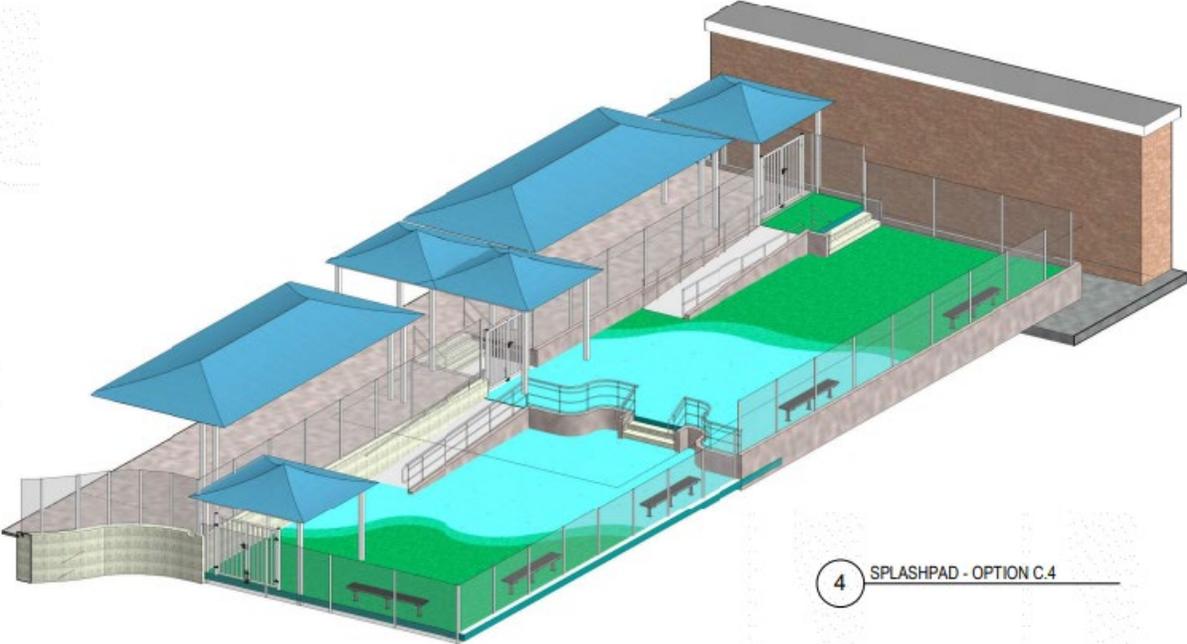
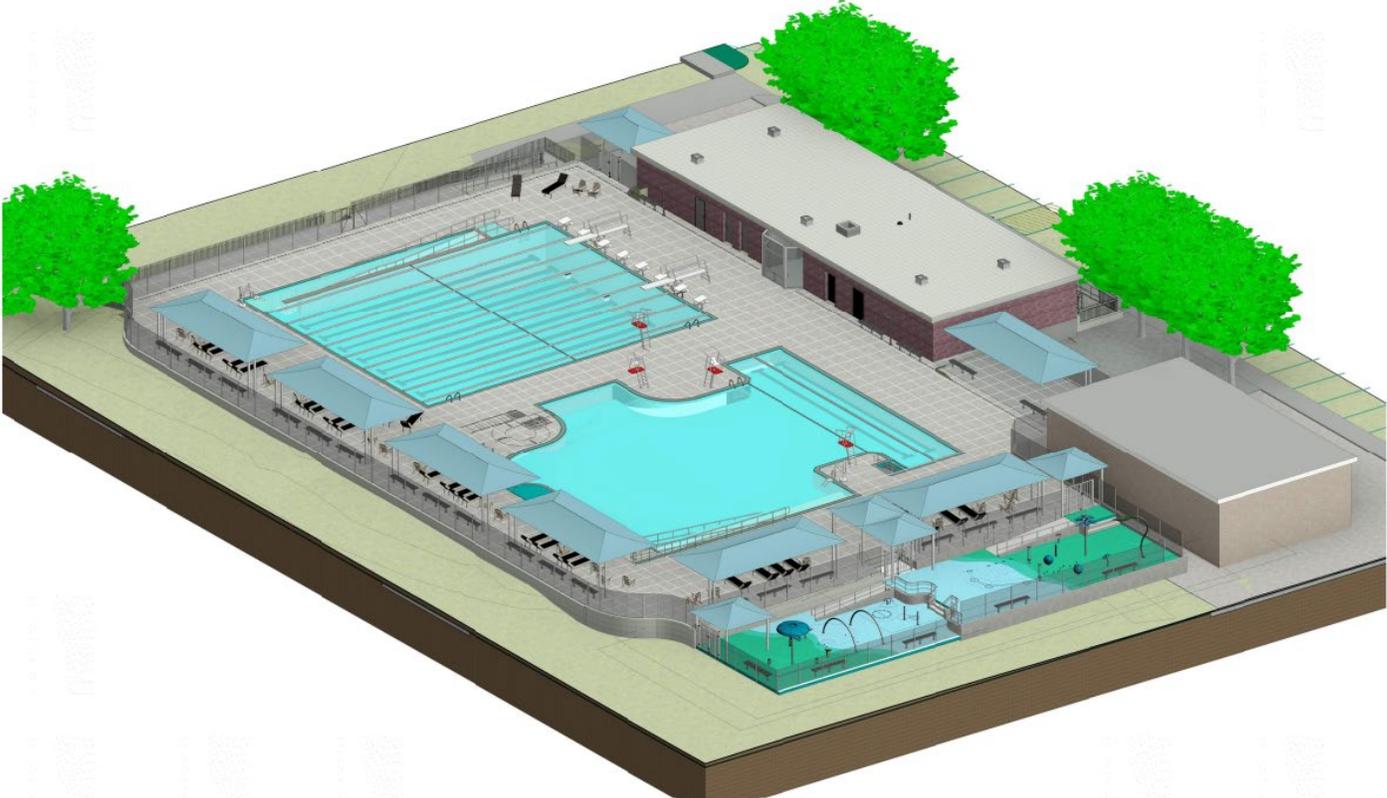
Our last Cooper Center Project community construction update meeting was on Tuesday, April 2<sup>nd</sup> and you can watch the meeting recording [here](#).

Join us for our monthly community construction meeting on the 1<sup>st</sup> Tuesday of the month. Our next meeting is on May 7th, 2024 at 6pm. You can register for the meeting by clicking [here](#).

Over the next month the team will continue to work on the foundations and other site work. Some of the sitework will require temporary use of the secondary site access point off Walnut Place. This will last 1-2 weeks, and construction vehicles will come and go from Walnut Street so that we’re not burdening the very narrow portions of Walnut Place. In another few weeks we’ll start forming and pouring the foundation and elevator walls.

Additional project info, meeting recordings, and presentations can be found at [newcal.projects.nv5.com](http://newcal.projects.nv5.com). If you have any questions or comments about this project, you can email us at [newcal@newtonma.gov](mailto:newcal@newtonma.gov).

Gath Pool Project



4 SPLASHPAD - OPTION C.4



The new fully accessible main entrance to the Gath Pool bathhouse is substantially complete and we just poured the new sidewalks out front.



The two new pools are fully poured, and the new pool gutters are being installed. On the left you can see the ramp that will allow people of all abilities to enjoy the competition and lap pool. The splash pads will be located to the right of this image.



In the rear, the team is assembling the retaining wall. They are also preparing to start work on the retaining wall to the west which will establish the edge of the splash pads.

In the coming weeks the team will be forming and pouring the new pool deck and splash pads.

We are slated to complete construction in the next few months in time for the start of the 2024 swim season.

The new pool design and all previous project materials can be viewed at <http://www.newtonma.gov/gathpoolproject>.

The funding for this project is a share between ARPA funds applied by Mayor Fuller, state funds secured by Representative Khan, and a large amount of funding from the Community Preservation Act with the support and approval of the Community Preservation Committee.

If you have any questions or comments about this project, you can email us at [gathpool@newtonma.gov](mailto:gathpool@newtonma.gov).

## Public Buildings Budget Police Facility Project



Over the last few weeks, we have been giving tours of many of our public buildings to the City Council. In the picture above you can see the group that joined members of Newton Police, the Mayor's Office, and myself as we toured the current police facilities. This was a great opportunity for them to see the current facility challenges and for us to begin to explain the early work and thoughts on the Police Facility Project.

Using ARPA funds previously authorized by Mayor Fuller, we have been working on a comprehensive project to improve the physical conditions of Police Headquarters, and the Police Annex and Garage. While we are still very early on in the process, we know that this project will result in a significant improvement in the Police facility infrastructure.



In the above image our team recently installed a new roof on Police Headquarters.

Complementing the investment of more than \$2M for the replacement of the HVAC system and headquarters roof, and information technology and communications upgrades, the Police Facility Project includes but is not limited to upgrades to the following building systems and areas:

- Security
- Accessibility
- Electrical
- Lighting

## **Public Buildings Budget**

- Plumbing
- Roof
- Masonry
- Finishes

In addition to the improvements to the building systems, this project will evaluate how best to utilize the spaces throughout the existing buildings. We will be evaluating how best to adjust the buildings and the use of the facilities to optimize the adjacencies and functions of the Newton Police Department.

One major priority of this project will be to create a new appropriately sized dispatch center, with the adjacent support spaces needed to train new dispatchers and to ensure that the Dispatch Division has everything they need to support Newton Police, Newton Fire, and the entire community. Although this is a major project priority, the improvements to the facilities will benefit every member of the Newton Police Department.

Our work to date has been focused on evaluating the existing conditions of the building systems in each of the three Police facilities, as well as the development of a program. The program is a document that identifies the space needs for every function in the department both now and in the future. I often refer to this document as the recipe for the cake we're baking.

The design team is working with representatives from the entire Police Department to refine floor plan options to find the best possible solution that will meet the demands of a 21st century Police Facility.

### **Projects come in all shapes and sizes**

Recently approved by the City Council, Mayor Fuller has provided funds for a large package of projects that may be small compared to the ones above, but they are extremely important to the principals, PTO's, parents, and students in the schools, and to the Police and Fire Departments as well. These projects represent a \$6.25M investment of one-time money on one-time needs.

- North High pool air handling unit replacement
- Peirce School roof replacement
- Mason Rice School roof replacement
- Newton South High School chiller replacement
- Williams School auditorium ceiling, restroom, and playground improvements
- Bigelow and Brown Middle School PA system upgrades
- Restroom upgrades at Day, Mason Rice, Bowen, Memorial Spaulding, and Peirce Schools
- Parking lot repaving at Brown Middle School
- Parking lot repaving and fence installation at Police Headquarters
- Fire Station #2 heat pump and building electrification project

While these projects may seem small, they are high priorities for everyone who works or learns in, or uses, these facilities. Sometimes the smallest projects are the most transformative.

**Public Buildings Budget**

We have already begun working on these projects with many of them already well into design. Construction will happen for most of these projects this summer.



Speaking of projects coming in all shapes and sizes, in the above picture you can see the Public Works wash bay. We are wrapping up this project this week. This included a new roof, all new utilities, and a complete replacement of the vehicle wash systems. This may seem like a small project but when you consider that this building will help extend the life of more than \$50M of DPW, Police, Fire, and other vehicles and pieces of construction and snow removal equipment, it's becomes clear that big things come in small packages.

**Public Buildings Budget**

Building	Asset Type	Asset Name	Recommendation	Cost
B010-Police Annex	Accessibility Item	Exterior	Since there is only one accessible parking space, restripe and provide signage for a “van accessible” parking space; Install code-compliant handrail extensions at the bottom of the entry stairs.	\$ 750
B005-Crafts St DPW Operating Ctr (Stable)	Flooring	Flooring group 3 (wood)	Re-nail flooring as required, install safety railing around 5x5 opening in floor (1ea).	\$ 825
B005-Crafts St DPW Operating Ctr (Stable)	Accessibility Item	Parking	Provide a “van accessible” parking space including signage; Restripe accessible space to include a 5ft. access aisle.	\$ 825
B034-Auburndale Cove Fieldhouse	Flooring	Carpet	Remove and replace carpet(100sf).	\$ 1,016
B008-Newton Police Headquarters	Accessibility Item	Locker Rooms	Provide 5 percent or at least one locker that has accessible hardware installed within reach range;	\$ 1,215
Forte Park	Mechanical		Install manual damper in ventilation fans to prevent transfer of cold air and moisture into building.	\$ 1,343
B001-City Hall	Accessibility Item	Corridors	Reposition clock on 1st floor or install a cane-detectable barrier around it because it projects >4” into the circulation route and is therefore a protruding object; Reposition signs in 2nd floor corridor because they reduce headroom to <80” AFF.	\$ 1,500
B033-Albermarle Fieldhouse	Lintels group	Lintels Summary	Clean and repaint steel lintels.	\$ 1,550
B036-Nahanton Park Fieldhouse	Window group	Window Group 1 - Glass Block	Repair glass blocks in glass block exterior windows that are cracked (2ls).	\$ 1,632
B018-Waban Library	Painting group	Painting group 1	Scrape, prepare surface and paint woodwork at gable ends(150sf).	\$ 1,842
B035-Cabot Park Fieldhouse	Int. Wall group	Interior Walls	Repair and patch scattered areas of interior wall damage (10%=200sf).	\$ 1,865
B033-Albermarle Fieldhouse	Column Group Summary	Column Group Summary 1	Clean base of the two exterior steel columns of all corrosion and prepare the exposed surfaces of the steel columns and coat with a high quality paint system. (2 cols. - 32 sq ft).	\$ 1,865
B033-Albermarle Fieldhouse	Ext receptacles group	Ext receptacles group 1	Add Exterior GFI electrical power receptacles at front and rear entrance (2ea).	\$ 1,865
B034-Auburndale Cove Fieldhouse	Ext receptacles group	Ext receptacles group 1	Add (2) all-weather GFI electrical power receptacles adjacent to building entrances.	\$ 1,865
B036-Nahanton Park Fieldhouse	Flooring	Flooring 2 - Concrete	Scrape, prepare surface and recoat bathroom floors with a non-slip epoxy floor finish (200sf).	\$ 1,865
B036-Nahanton Park Fieldhouse	Int receptacles group	Int receptacles group 1	Replace 10% worn power receptacles and add GFI receptacles to the Men's and Women's toilets (2ea).	\$ 1,865
B035-Cabot Park Fieldhouse	Int receptacles group	Int receptacles group 1	Add GFI electrical power receptacles to the men's and women's toilet rooms.	\$ 1,865
B035-Cabot Park Fieldhouse	Ext receptacles group	Ext receptacles group 1	Add (2) all-weather GFI receptacles on the outside perimeter of the building.	\$ 1,865
B040-Forte Park (Allison)	Element group	Element group 1	Repair ornamental portion of columns, prepare surfaces, and repaint (2 EA).	\$ 1,905
B042-Upper Falls Fieldhouse	Door group	Door group 1	Replace single hung door and add security door grill (1 EA).	\$ 1,905
B040-Forte Park (Allison)	Other element group	Ramp	Repair exterior concrete ramp apron (100sf).	\$ 1,974
B015 - Elliot St. Operations Center	Canopy group	Canopy group 1	Scrape, prepare surface and repaint wood trim (30sf).	\$ 2,114
B031-Emmerson Community Center	Fan group	Fan group 1	Clean ventilation fan blades and lubricate fan bearings.	\$ 2,133
B042-Upper Falls Fieldhouse	Wall group	Wall group 1	Repair damaged areas of exterior concrete wall as required (10%=100sf).	\$ 2,150
B040-Forte Park (Allison)	Roofing group	Roofing group 1	Install new drip edge along rear edge of roof (20lf) and repair asphalt shingles in the area which are damaged.	\$ 2,205

## Public Buildings Budget

B036-Nahanton Park Fieldhouse	Painting group	Painting group 1	Scrape, caulk, prepare surface and repaint exterior soffit and trim (250lf).	\$ 2,540
B022-Pelligrini Park Field House	Accessibility Item	Signage	Install tactile and Braille room and exit signage mounted adjacent to latch side door.	\$ 2,550
B011 - Newton Corner Library	Fan group	Ceiling Fans	Install exhaust fan in 2nd floor bathroom at 75 CFM per fixture.	\$ 2,562
B041-Newton Ctr. Metal Storage Building	Door group	Door group 1	Repair and repaint overhead door (1ea).	\$ 2,600
B042-Upper Falls Fieldhouse	Int. Wall group	Int. Wall group 1	Repair areas of minor damage in exterior concrete and interior CMU walls as required and repaint(10%=140sf).	\$ 2,748
B034-Auburndale Cove Fieldhouse	Int. Wall group	Int. Wall group 1	Clean, point, and paint interior CMU walls (20%=300sf).	\$ 2,754
B021-Crystal Lake Bathhouse	Water heater (direct) group	Water heater (direct) group 1	Install drip pan under unit and discharge to safe waste per code requirements.	\$ 2,948
B024-Jeanette Curtis West Rec Ctr (The Hut)	Element group	Exterior Chimney Base	Repoint cracks in stone masonry base of exterior chimney (100sf).	\$ 2,985
B036-Nahanton Park Fieldhouse	Water heater (direct) group	Water heater (direct) 2 - Heater 2	Provide enclosure under the women's room sink to protect water heater from tampering and from a child accidentally hitting the pressure relief valve and getting scalded. Also provide a drip pan and drain under the water heater.	\$ 3,156
B036-Nahanton Park Fieldhouse	Ceiling group	Ceiling group 1	Replace damaged or stained acoustical ceiling tile (20%=200sf).	\$ 3,263
B035-Cabot Park Fieldhouse	Flooring	Concrete Flooring	Clean and perform minor repairs on concrete flooring (260sf).	\$ 3,336
B015 - Elliot St. Operations Center	Water heater (direct) group	Water heater (direct) group 1 - kitchen hw htr	Provide drain pan under unit with discharge piping to safe waste per code requirements.	\$ 3,350
B015 - Elliot St. Operations Center	Door group	Doors	Replace weather stripping at pairs of loft doors (2ea).	\$ 3,350
B022-Pelligrini Park Field House	Fan group	Fan group 2 - kitchen fan	Replace kitchen exhaust fan with a new fan unit.	\$ 3,645
B022-Pelligrini Park Field House	Fan group	Fan group 3 - TV room fan	Replace TV room exhaust fan with a new fan unit.	\$ 3,645
B019 - Nonantum Library	Fan group	Fan group 2 - basement womens room	Provide new exhaust fan, 75 CFM in basement womens room. Interlock controls with light.	\$ 3,645
B030-Elliot Street Yard Garage	Fan group	Fan Group 2 - Garage Office Fan	Replace garage office fan with a code-compliant fan with protected blades.	\$ 3,645
B018-Waban Library	Egress Lighting	Egress Lighting 1	Add egress lighting fixtures (2) units to toilets.	\$ 3,698
B001-City Hall	Column Group Summary	Column Group Summary 1	Clean and repaint corroded areas at bases of two steel comumns in lower basement (boiler room) that are heavily corroded. After cleaning, inspect for loss of section and repair if necessary.	\$ 3,722
B027-Public Buildings Department	Ext receptacles group	Ext receptacles group 1	Install (4) all-weather GFI receptacles along the perimeter of the structure.	\$ 3,731
B017- Newton Free Library	Ext receptacles group	Exterior Receptacles	Install (~4) all-weather GFI receptacles at or near exterior doorways.	\$ 3,731
B024-Jeanette Curtis West Rec Ctr (The Hut)	Ext receptacles group	Ext receptacles group 1	Add (4) Exterior GFI Receptacle front and rear entrance.	\$ 3,731
B026-Burr Park Field House	Ext receptacles group	Ext receptacles group 1	Add (4) Exterior GFI Receptacles at the front and rear entrances.	\$ 3,731
B036-Nahanton Park Fieldhouse	CW service/meter group	CW service/meter group 1	Provide combustion air dampers at openings, or provide heat trace on cold water service piping. Note there is a wall switch for heat trace, but no heat trace line present.	\$ 3,758
B024-Jeanette Curtis West Rec Ctr (The Hut)	Bearing wall group	Bearing wall group 1	Pack 5 SF of gaps in brick with non-shrink grout.	\$ 3,791

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B036-Nahanton Park Fieldhouse	Other element group	Entry Pad	Repair crack in concrete entry pad at door threshold (30sf).	\$ 3,849
B041-Newton Ctr. Metal Storage Building	Wall group	Wall group 2	Repair damaged areas of concrete foundation wall (400sf).	\$ 3,879
Forte Park	Electrical		Add egress lighting to Men's and Women's toilets.	\$ 3,957
B022-Pelligrini Park Field House	Sink group	Sink Group 2 - Janitor's Sink	Replace janitor's sink.	\$ 3,957
B009-Police Headquarters Garage	Specialties group	Bathroom Accessories	Install new bath accessories in bathrooms (2ea).	\$ 3,960
B035-Cabot Park Fieldhouse	Sanitary sump pump group	Sanitary sump pump group 1	Replace sump pump because it is at the end of its useful life (1ea).	\$ 3,995
B020-Auburndale Library	Fan group	Fan group 1 - 1st floor janitor closet	Install 75 CFM fan to exhaust air per code requirements.	\$ 3,995
B035-Cabot Park Fieldhouse	Ceiling group	Concrete Ceiling	Repair damaged areas of concrete ceiling (40%=100sf).	\$ 4,100
B021-Crystal Lake Bathhouse	Roof deck group	Roof deck group 1	Repair 25 SF of concrete slab in room where the slab has deteriorated.	\$ 4,125
B035-Cabot Park Fieldhouse	Lintels group	Lintels group 1	Repair deteriorated lintels at exterior brick masonry walls as required (50lf).	\$ 4,274
B042-Upper Falls Fieldhouse	Ceiling group	Ceiling group 1	Scrape, repair, prepare surface and repaint concrete ceiling (500sf)	\$ 4,338
B029-Crafts Street Garage	Radiation/terminal unit group	Radiation/terminal 2 - office electric baseboard	Replace electric baseboard sections in office area with new baseboard units.	\$ 4,343
B029-Crafts Street Garage	Sanitary sump pump group	Sanitary sump pump group 1	Replace sump pump.	\$ 4,395
B033-Albermarle Fieldhouse	Egress Lighting	Egress Lighting	Replace battery back-up packs in egress lights (2 ea) which failed when tested.	\$ 4,655
B042-Upper Falls Fieldhouse	Ext. lighting group	Ext. lighting group 1	Replace existing exterior lighting fixtures with 2 new outdoor LED fixtures on the entrance patio to improve lighting levels, reduce maintenance and improve energy efficiency.	\$ 4,655
B010-Police Annex	Ext receptacles group	Ext receptacles group 1	Add 5 all-weather GFI receptacles along the perimeter of the structure.	\$ 4,664
B011 - Newton Corner Library	Ext receptacles group	Ext receptacles group 1	Add 5 all-weather GFI receptacles along the perimeter of the structure.	\$ 4,664
B005-Crafts St DPW Operating Ctr (Stable)	Ext receptacles group	Ext receptacles group 1	Install 5 all-weather GFI receptacles along the perimeter of the structure.	\$ 4,664
B022-Pelligrini Park Field House	Ext receptacles group	Exterior Receptacles	Install exterior GFI sockets at exterior doors (Est. 5).	\$ 4,664
B028 - Jackson Homestead Museum	Ext receptacles group	Ext receptacles group 1	Add 5 all-weather GFI receptacles along the perimeter of the structure.	\$ 4,664
B032-Lower Falls Community Center	Ext receptacles group	Ext receptacles group 1	Add 5 all-weather GFI receptacles along the perimeter of the structure.	\$ 4,664
B026-Burr Park Field House	Stair	Stair 1	Install new code-compliant hand railings to basement (35lf).	\$ 4,695
B018-Waban Library	Fan group	Fan group 2 - Basement bathroom 1	Provide 75 CFM exhaust fan and ductwork for basement bathroom and vent to outside. Interlock fan with light switch.	\$ 4,745
B018-Waban Library	Fan group	Fan group 4 - 1st floor bathroom	Provide 75 CFM exhaust fan and ductwork and vent to outside for first floor bathroom.	\$ 4,745
B018-Waban Library	Fan group	Fan group 5 - Janitors closet	Provide 75 CFM exhaust fan and ductwork and vent to outside.	\$ 4,745
B042-Upper Falls Fieldhouse	Int. Door group	Int. Door group 1	Repair minor damage on interior hollow metal doors and repaint (3ea).	\$ 4,895
B027-Public Buildings Department	Int. Door group	Int. Door group 1	Replace door from office to garage with fire rated door and frame (1ea).	\$ 5,040
B033-Albermarle Fieldhouse	Foundation wall group	Foundation wall group 1	Fix large crack on the outside of the perimeter foundation wall at the NW corner of building.	\$ 5,126
B036-Nahanton Park Fieldhouse	Element group	Cupola	Repair minor damage on cupola and refinish (1ea).	\$ 5,198

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B006-Fire Station #1, Newton Corner	Ext. lighting group	Ext. lighting group 1	Replace all exterior lighting (6 wall pack units) to improve safety & security and provide a lighting controller system.	\$ 5,595
B026-Burr Park Field House	Egress Lighting	Egress Lighting	Add (6) egress lighting and lit EXIT signs at exits.	\$ 5,595
B029-Crafts Street Garage	Int. Door group	Int. door group 2 (double hung typical)	Repair, prepare surfaces and paint /seal double hollow metal and wood interior doors (4ea).	\$ 5,868
B036-Nahanton Park Fieldhouse	Ext. lighting group	Ext. lighting group 1	Replace all exterior lighting to improve safety and security and include a lighting controller system to improve energy efficiency.	\$ 5,937
B035-Cabot Park Fieldhouse	Ext. lighting group	Ext. lighting group 1	Replace all exterior lighting to improve safety and security and include a lighting controller system to improve energy efficiency.	\$ 5,937
B019 - Nonantum Library	Door group	Double Hung Exterior Doors	Repair, refinish pair of wood doors as required (1ea).	\$ 6,245
B019 - Nonantum Library	Accessibility Item	Signage	Install tactile and Braille room and exit signage adjacent to latch side of door at all permanent rooms and space; Provide directional signage to the accessible entrance at the main entrance; Provide directional signage to the accessible toilet room.	\$ 6,450
B020-Auburndale Library	Lintels group	Lintels group 1	Scrape, prepare surface and repaint exposed areas of steel lintels(50lf).	\$ 6,524
B013 - Kennard Estate	Ext receptacles group	Ext receptacles group 1	Install all-weather GFI receptacles along the perimeter of the structure (7ea).	\$ 6,528
B031-Emmerson Community Center	Door group	Door group 1	Refurbish single hollow metal doors (3ea minor) and pairs of hollow metal doors (3ea minor) as required.	\$ 6,642
B035-Cabot Park Fieldhouse	Heating piping/insulation group	Heating piping/insulation 1 - hot water piping	Insulate all exposed heating piping that is not insulated.	\$ 6,764
B035-Cabot Park Fieldhouse	Dom. water piping/insulation group	Dom. water piping/insulation group 1	Install insulation on all exposed hot water piping.	\$ 6,764
B033-Albermarle Fieldhouse	Slab on grade group	Slab on grade group 1	Remove all existing exterior concrete slab coatings, seal cracks in slab, and reseal with a concrete sealer.	\$ 6,764
B024-Jeanette Curtis West Rec Ctr (The Hut)	Ceiling group	Plaster and Lathe	Patch, repair, paint plaster ceiling in basement (500sf).	\$ 6,872
B011 - Newton Corner Library	Accessibility Item	Signage	Install tactile and Braille signage adjacent to latch side of door at all permanent rooms and space and at exits; Provide signage to accessible bathroom; relocate kitchen to accessible level unless an elevator is installed to second floor.	\$ 6,900
B019 - Nonantum Library	Egress Lighting	Egress Lighting 1	Add egress lighting fixtures (2) units to toilets.	\$ 7,290
B016-Crafts Street Sand_Salt Shed	Ext receptacles group	Ext receptacles group 1	Install two all-weather GFI exterior power receptacles at each hut (4 total).	\$ 7,395
B018-Waban Library	Ext receptacles group	Ext receptacles group 1	Add (4) exterior all-weather GFI receptacles around the perimeter of the building.	\$ 7,395
B020-Auburndale Library	Ext receptacles group	Ext receptacles group 1	Add (4) exterior all-weather electrical GFI receptacles.	\$ 7,395
B029-Crafts Street Garage	Window group	Window group 2 (store front)	Install and/or repair storefront rubber glazing seals(140sf).	\$ 7,515
B033-Albermarle Fieldhouse	Sink group	Sink group 1 - Janitor's Sink	Replace/fix janitor's sink.	\$ 7,566
B026-Burr Park Field House	Fan group	Fan group 1	Provide exhaust fans at 75 CFM per toilet/urinal. Interlock fans with light switches to bathrooms.	\$ 7,916
B030-Elliot Street Yard Garage	Ext. lighting group	Ext. lighting group 1	Add (4) exterior lighting units with a lighting controller system to corners of building to improve security.	\$ 7,916
B020-Auburndale Library	Egress Lighting	Egress Lighting 1	Add egress lighting fixtures (2) units to toilets and replace battery back-ups in all Egress lighting.	\$ 7,988

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B036-Nahanton Park Fieldhouse	Sink group	Water Fountain at Entry	Replace missing water fountain near entry.	\$ 8,142
B018-Waban Library	Fire/Smoke Alarm System	Fire/Smoke Alarm System 1	Install audible alarms in toilets for fire alarm system to meet ADA requirements (4ea).	\$ 8,790
B027-Public Buildings Department	Stair	Stair 1	Remove carpet at wood stairs between office and garage and replace with rubber treads (3r).	\$ 9,084
B033-Albermarle Fieldhouse	Ext. lighting group	Ext. lighting group 1	Install additional exterior lighting (4 wall pack units) to improve safety & security with a lighting contoller system to improve energy efficiency.	\$ 9,311
B013 - Kennard Estate	Int receptacles group	Int receptacles group 1	Add additional electrical duplex receptacles (~10 locations).	\$ 9,326
B029-Crafts Street Garage	Ext receptacles group	Ext receptacles group 1	Install (10) all-weather GFI receptacles at or near exterior doorways.	\$ 9,326
B030-Elliot Street Yard Garage	Ext receptacles group	Ext receptacles group 1	Add 1 duplex receptacle per exterior door. (est. 10 receptacles)	\$ 9,326
B031-Emmerson Community Center	Int. Wall group	Brick Masonry Walls	Repair damaged areas of interior brick masonry wall as required (5%=900sf).	\$ 9,516
B022-Pelligrini Park Field House	Lintels group	Lintels	Clean and repaint lintels at exterior doors(4ea).	\$ 9,698
B022-Pelligrini Park Field House	Ceiling group	Plaster and Lathe	Repair plaster and lath ceiling in boiler room (300sf).	\$ 10,047
B024-Jeanette Curtis West Rec Ctr (The Hut)	Fire/Smoke Alarm System	Fire/Smoke ALarm	Upgrade Fire/Smoke detectors with audible alarms and strobes to meet ADA requirements	\$ 10,184
B019 - Nonantum Library	Ext receptacles group	Ext receptacles group 1	Install (4) all-weather GFI receptacles around the exterior of the building.	\$ 10,395
B001-City Hall	Stair group (structure)	Stairs	Clean and paint steel egress stairs from Boiler Room to exterior and secure loose grating steps. After steel clean, inspect steel framing for loss of section and repair if necessary.	\$ 10,676
B018-Waban Library	Element group	Window Grates	Remove areaway grates, clean out areaways, paint grates and reinstall grates (100sf).	\$ 10,745
B029-Crafts Street Garage	Stair	Stair group 2	Add handrail to interior metal stair on the wall side(50lf)	\$ 10,773
B019 - Nonantum Library	Door group	Single Hung Exterior Doors	Repair single hung wood doors as required and replace thresholds, door hardware(2ea).	\$ 10,778
B007-Fire Station #2, West Newton	Accessibility Item	Parking	Restripe designated parking space to have an 8 ft. access aisle; Install a new parking sign with the words "Van Accessible"; Install a curb ramp to provide accessible path from designated accessible space to entrance.	\$ 10,875
B017- Newton Free Library	Other element group	Exterior ramp	Repoint open joints in brick pavers of ramp (100 sf). Remove and reset heaving bricks at railing posts (50 sf). Touch-up paint metal railings.	\$ 10,935
B010-Police Annex	Door group	Single Hung Doors	Repair (minor) single hung doors and hardware (3ea).	\$ 10,949
B035-Cabot Park Fieldhouse	Painting group	Painting group 1	Paint Exterior masonry wall (1500sf). Scrape, prepare surface and paint exterior wood trim work (200sf).	\$ 11,009
B001 - City Hall	Flooring	1st Floor Ladies Room	Re-finish flooring	\$ 11,250
B017 - Main Library	Doors	Loading Dock	Replace exterior doors	\$ 11,250
B024-Jeanette Curtis West Rec Ctr (The Hut)	Other element group	Side Entry Steps	Rebuild wood stairs at left and install new handrails(30lf). Repair /replace plywood stair enclosure (200sf).	\$ 11,646
B027-Public Buildings Department	Egress Lighting	Egress Lighting 1	Add (6) egress and EXIT signs per code to office and garage bay.	\$ 11,873
Newton Corner Library			Remove abandoned oil tanks and piping through wall and seal penetrations.	\$ 12,222
B031-Emmerson Community Center	Lintels group	Lintels group 1	Repair/reset lintels in areas with bulging brick as required (20%=60lf).	\$ 12,255

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B029-Crafts Street Garage	Water heater (direct) group	Water heater (direct) group 1	Replace garage sink hot water heater with new electric hot water heater. Install drip pan under office hot water unit and discharge piping to safe waste per code requirements.	\$ 12,257
B020-Auburndale Library	Fire/Smoke Alarm System	Fire/Smoke Alarm System 1	Install audible alarms in toilets for the fire alarm system to meet ADA requirements.	\$ 12,495
B013 - Kennard Estate	Roof beam group	Roof beam group 1	Install collar ties at roof rafters- low attic under.(150sf)	\$ 12,819
B019 - Nonantum Library	Ext. lighting group	Ext. lighting group 1	Replace all exterior lighting (6 wall pack units) to improve safety & security and include lighting controller system.	\$ 12,870
B007-Fire Station #2, West Newton	Door group	Single Hung Doors	Replace exterior single hung doors with panic hardware (3ea).	\$ 12,920
B015 - Elliot St. Operations Center	Ext. lighting group	Ext. lighting group 1	Add four more wall pack lights to exterior of building to improve lighting conditions at night.	\$ 12,975
B015 - Elliot St. Operations Center	Accessibility Item	General Interior	Provide an accessible bench, locker and table in the central locker area; Replace faucets in the kitchenette to be ADA-compliant; Reposition or remove television in kitchenette; Replace door knobs with hardware that is operable without tight grasping, pinching or twisting (lever type).	\$ 13,050
B031-Emmerson Community Center	Int receptacles group	Int receptacles group 1	Add additional GFI receptacles to classroom space.	\$ 13,470
B031-Emmerson Community Center	Ext receptacles group	Ext receptacles group 1	Add GFI receptacles to exterior of building near each entrance.	\$ 13,470
B034-Auburndale Cove Fieldhouse	Ext. lighting group	Ext. lighting group 1	Replace all exterior lighting lighting units to improve safety, security and energy efficiency. Install a lighting control system to improve energy efficiency.	\$ 13,965
B024-Jeanette Curtis West Rec Ctr (The Hut)	Ext. lighting group	Ext. lighting group 1	Add exterior lighting wall pack units (10ea) to improve safety & security.	\$ 14,738
B017- Newton Free Library	Other element group	Exterior loading dock	Install two new rubber bumpers at loading dock. Patch spalled concrete at loading dock knee wall and clean & coat exposed rebar (150 sf).	\$ 14,853
B034-Auburndale Cove Fieldhouse	Door group	Exterior Doors	Replace exterior FRP doors that have corroded metal frames with new (3ea).	\$ 15,120
Elliot street Sand and Salt Shed			Remove salt stock pile. Repair, clean and seal concrete floor (7500sf) to increase the useable life of the floor.	\$ 15,296
B034-Auburndale Cove Fieldhouse	Sink group	Drinking Fountains	Replace missing indoor drinking fountain and non-functioning outdoor drinking fountain with new ADA-compliant fountains.	\$ 16,284
B034-Auburndale Cove Fieldhouse	Int. Door group	Int. Door group 1	Remove and replace doors and hardware(5ea).	\$ 16,301
B041-Newton Ctr. Metal Storage Building	Wall group	Wall Group 1	Repair and clean entire exterior metal siding and get ready for painting 3200sf).	\$ 17,190
B031-Emmerson Community Center	Flooring	Resilient VCT Flooring	Repair/replace areas of VCT flooring that are damaged and worn (20%=1200sf).	\$ 17,487
B011 - Newton Corner Library	Accessibility Item	General Interior	Remove existing drinking fountain and provide a hi-lo drinking fountain in an area that does not interfere with clear maneuvering space or path of travel; Provide door hardware that is operable without tight grasping, pinching or twisting (lever type); Relocate the fire extinguisher so that it does not protrude into the path of travel; Extend the sloped corridor floor so that it does not exceed 5 percent.	\$ 19,200

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B005-Crafts St DPW Operating Ctr (Stable)	Int. Wall group	Int wall group 1 (brick masonry)	Repair & repoint exposed brick wall (5%=300sf).	\$ 19,242
B024-Jeanette Curtis West Rec Ctr (The Hut)	Ceiling group	Linear Wood Ceiling	Repair (5%=150sf) and paint(3100sf) exposed framing of the gym ceiling.	\$ 19,884
B031-Emmerson Community Center	Stair	Stair 1	Scrape, prepare surface and repaint stair treads with non skid epoxy paint (32r).	\$ 20,526
B041-Newton Ctr. Metal Storage Building	Painting group	Painting group 1	Repaint exterior metal wall with a rust inhibiting paint (3200sf).	\$ 20,526
B028 - Jackson Homestead Museum	Dom. water piping/insulation group	Dom. water piping/insulation group 1	Provide pipe insulation on all hot water piping in water heater closet.	\$ 20,663
Nahanton Park Field House	Electrical		Add (2) exterior all-weather GFI receptacles around the perimeter of the building. •Add egress lighting fixtures (2) units to men's and women's bathrooms and replace battery back-up units (4) in all other Egress lighting fixtures. •Install audible fire alarm horns and beacons in toilets to meet ADA requirements (2ea). •Upgrade interior lighting to Super T-8 flourescent fixtures to improve energy efficiency.	\$ 20,819
B042-Upper Falls Fieldhouse	Painting group	Painting group 1	Repaint exterior concrete wall (1400sf) and underside of concrete overhang (500sf) after all repairs are complete.	\$ 21,167
B022-Pelligrini Park Field House	Flooring	Resilient VCT	Remove and replace vct floor in office/restroom areas(1400sf)	\$ 21,230
B026-Burr Park Field House	Fire/Smoke Alarm System	Fire/Smike Alarm	Upgrade Fire/Smoke detectors with audible alarms and strobes to meet ADA requirements	\$ 22,391
B019 - Nonantum Library	Fire/Smoke Alarm System	Fire/Smoke Alarm System 1	Install audible alarms in toilets for fire alarm system to meet ADA requirements (4ea).	\$ 23,049
B013 - Kennard Estate	Dom. water piping/insulation group	Dom. water piping/insulation group 1	Provide insulation on all domestic water piping.	\$ 23,108
B022-Pelligrini Park Field House	Int. Wall group	Walls	Scrape and paint peeling areas of gym walls (10%=800sf). Clean, repair boiler room walls(600sf).	\$ 23,232
B021-Crystal Lake Bathhouse	Ext. lighting group	Ext. lighting group 1	Add exterior lighting (10 wall pack units) to improve safety & security.	\$ 23,276
B019 - Nonantum Library	Int. Door group	Int. Door group 1	Repair, refinish interior doors (50% =9ea).	\$ 23,390
B020-Auburndale Library	Ext. lighting group	Ext. lighting group 1	Replace all exterior lighting (6 wall pack units) to improve safety & security. Include a lighting control system to improve energy efficiency.	\$ 23,490
B027-Public Buildings Department	Fire/Smoke Alarm System	Fire/Smoke Alarm System 1	Update smoke alarm and strobes to ADA-compliant units.	\$ 24,095
B035-Cabot Park Fieldhouse	Accessibility Item	Exterior	Rebuild the curb cut at the ramp to be stable, firm, and slip resistant condition; Extend landing at pullside of door to 18"; Provide accessible path to swings and playground that is ADA compliant.	\$ 24,150
B031-Emmerson Community Center	Ceiling group	Acoustical Tile Ceilings	Repair acoustical ceilings (20%=2400sf)	\$ 24,474
B005-Crafts St DPW Operating Ctr (Stable)	Egress Lighting	Egress Lighting 1	Replace battery packs in all Egress lighting units.	\$ 25,016
B022-Pelligrini Park Field House	Fire/Smoke Alarm System	Fire Alarm System	Upgrade audible fire alarm and strobe to ADA compliance.	\$ 25,091
B007-Fire Station #2, West Newton	Stair	Stair 1	Install new treads on stairs from 1rst floor to attic (35r).	\$ 25,829

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B010-Police Annex	Dom. water piping/insulation group	Dom. water piping/insulation group 1	Provide piping insulation on all heating piping in boiler room.	\$ 26,489
B026-Burr Park Field House	Oil tank group	Oil tank group 1	Remove and properly dispose of two abandoned oil tanks.	\$ 27,000
B015 - Elliot St. Operations Center	Fire/Smoke Alarm System	Fire/Smoke Alarm System	Upgrade fire alarm and horn strobes to be ADA-compliant (30 Units).	\$ 27,977
B015 - Elliot St. Operations Center	Fan group	Bathroom Exhaust Fans	Provide fan at 75 CFM per toilet/urinal.	\$ 30,240
B031-Emmerson Community Center	Wiring group	Wiring group 1	Support communications cables by cable tray system and properly secured per code.	\$ 30,995
Pelligrini pk fieldhouse	finishes		Renovate kitchen cabinets and plumbing, venting, etc. (300sf, 30lf cabinets)•Install grab bars at toilet (1ea).	\$ 31,607
B001-City Hall	Heating piping/insulation group	Heating piping/insulation group 1	Replace damaged insulation on all heating pipes and install insulation on uninsulated heating pipes.	\$ 32,438
B030-Elliot Street Yard Garage	Sprinkler group	Sprinkler group 1	Reconnect disconnected sprinkler pipe serving office space.	\$ 32,508
Fire Station #1	Stairs		Make minor repairs to stairs (45r).	\$ 33,209
Public Buildings	Building Envelope		Repair damaged metal siding and repaint. •Remove and replace entry pad at front overhead door and add bollards to protect door jambs.	\$ 33,608
B011 - Newton Corner Library	Dom. water piping/insulation group	Dom. water piping/insulation group 1	Reroute cold water piping with proper supports and and insulate hot and cold water piping.	\$ 34,379
B007-Fire Station #2, West Newton	Other element group	Rear Door Entry Ramp	Install 3x3 entry pads at rear doors(3ea).	\$ 34,937
B029-Crafts Street Garage	Wiring group	Wiring group 1	Coordinate a cable tray design with IT Department to support main trunk of cabling for TER to TR closets.	\$ 35,877
B021-Crystal Lake Bathhouse	Dom. water piping/insulation group	Dom. water piping/insulation group 1	Provide pipe insulation for hot and cold water piping.	\$ 36,069
B019 - Nonantum Library	Dom. water piping/insulation group	Dom. water piping/insulation group 1	Provide insulation for all domestic hot and cold water piping.	\$ 40,182
B013 - Kennard Estate	Conduit group	Conduit group 1	Tie back flexible conduit to meet electrical codes and replace rigid conduit.	\$ 41,364
B001 - City Hall	Flooring	Boiler Room Floor	Clean out debris from boiler room and stop water infiltration from below	\$ 45,000
B031-Emmerson Community Center	Int. Door group	Int. Door group 1	Repair as required and add panic hardware to single hung doors (50%=10ea) and pairs of doors (50%=4ea).	\$ 47,492
B022-Pelligrini Park Field House	Dom. water piping/insulation group	Dom. water piping/insulation group 1	Install insulation on hot and cold water piping.	\$ 47,904
Newton Free Library		Building Envelope	Clean and stain cedar roof soffit at 2nd floor level (6,000 sf) to match existing stain color. Replace (1) single door w/ frame at loading dock. •Replace (1) double hung door w/ frame at loading dock.	\$ 51,728
Elliot Street Salt Shed	Structural	Walls	Repair/replace rotted and broken structural wall and roof supports	\$ 52,500
Police Headquarters		electrical upgrades	Coordinate a cable tray design with IT Department to support main trunk of cabling for TER to TR closets. •Install (~10) all-weather GFI receptacles at or near exterior doorways. •Convert exterior lighting to LED to reduce frequency of maintenance and improve efficiencies.	\$ 61,214

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Burr Park Field house	interior finishes		Clean up and dispose of all old junk in the basement (1600sf). Repair cracks in foundation wall (1800sf). Remove terra cotta basement walls(1000sf). •Replace damage acoustical ceiling tiles on first floor (10%=200sf). •Remove balance of basement ceiling and replace with new fire rated drywall(1600sf)•Clean, patch concrete floors (1600sf). Install fire rated door to basement(1ea). Repair remaining doors and replace door hardware with ADA-compliant hardware (5 ea).	\$ 63,327
				\$ 2,337,615

Grand Total

\$ 2,337,615

Energy	Maintenance	Construction	Design	Process
<p>Complex energy management systems are not needed, and have little value on public safety buildings that operate 24/7</p>	<p>Lighting ballasts can not be integral to the fixture.</p>	<p>Trade inspections need to be thorough, often, and scheduled at appropriate times. As part of the final inspection protocols the architect should be required to provide information needed to obtain utility rebates as specified in the utility minimum requirements document (MRD)..</p>	<p>Integrated design meetings are essential for a successful project. These should include all sub consultants. It would be helpful to include the utilities in this process for the purposes of streamlining the rebate process and taking advantage of their resources. We should also be including EV charging stations and solar readiness in all designs. We may also want to add a sustainability consultant to the design team. The sustainability consultant would have lead responsibility for including passive house design principals and electrification in the design process and also obtaining Alternative Energy Credits for heat pump equipment.</p>	<p>Never spend money you don't have. In order to ensure this does not happen, replenish the Mayor's contingency as frequently as possible.</p>
<p>Extreme care must be given to the sizing of MEP equipment. This equipment is typically oversized well above what is actually needed.</p>	<p>Walk-out roof access should be provided when possible. If this is not possible, ships ladders are next best, last option is fixed ladders. If you do not provide access to a roof, it, and the equipment on it, will not be maintained.</p>	<p>P-traps have to be verified to have been installed prior to installation of pan-type drains. Trap primers should be specified as much as possible.</p>	<p>Project expectations need to be clearly set, stated, and documented before design begins.</p>	<p>Working groups should involve elected officials when appropriate. This helps keep the CC updated and makes the process smoother.</p>

Energy	Maintenance	Construction	Design	Process
<p>When MEP equipment sizing is reduced, ensure that all other impacted areas are adjusted as well. Structural for example. As we build all electric buildings we should be thinking about emergency generator requirements and sizing.</p>	<p>Avoid gutters and downspouts whenever possible. Interior roof drains are best. Gutters and downspouts get clogged, freeze up, and create water and ice issues wherever they drain to. Can not stress this point enough. Great care and detail need to go into how water comes off of roofs. It would be good practice to visually inspect roofs of existing buildings twice per year to make sure drains are clear and there is no pondng of water.</p>	<p>The site should be secured as soon as the contractor takes control of the property. There should be no delay in this. Site specific safety and logistics plan should be setup and approved and adhered to,</p>	<p>Establish an energy performance target before a designer is brought on board, and then make sure they know what it is, and how we want to achieve it.</p>	<p>For larger projects, and projects that have significant impacts on the community, establish routine community meetings to receive feedback and to provide updates. Make yourself present when working in a neighborhood as you develop a comfort level for Neighbors.</p>
<p>Perimeter radiation is rarely needed with the efficient envelope and window systems we specify.</p>	<p>Avoid low small roofs. These typically do not have easy access which means that they don't get quality maintenance.</p>	<p>The CMP needs to be reviewed with Police, Fire, and Traffic during draft stage.</p>	<p>Utilize the integrated design meetings to meet the energy target.</p>	<p>In cases where night work, or work that severely impacts the neighborhood, over communicate and use every means of communication possible.</p>
<p>Glazing systems are inherently less efficient and therefore no glazing should be specified that is not requested or needed.</p>	<p>Be very careful with trees next to buildings. Roots damage the foundation, the trees can provide climbing access to the roof if tall enough, and trees with leaves that grow above the roof can clog roof drains.</p>	<p>Temperature controls prior to, during, and after concrete pours is crucial. When the building is wrapped, access points should only be open when absolutely needed, and should be closed asap.</p>	<p>Understand that every design change has a ripple effect. These can either drive costs up, or down in other areas. For example, if the rooftop equipment is reduced in size, the structural steel should reflect this change.</p>	<p>For projects requiring site plan approval, there should be at least one meeting with both Public Facilities and the Design Review Committee prior to trying to get site plan approval. This allows for questions, comments, and concerns that can then be responded to prior to trying to get approval.</p>

Energy	Maintenance	Construction	Design	Process
Do not overthink control systems. There is a fine line between smart energy management, and inoperable systems. .I'm not sure there is much value to adding centralized lighting control systems to any building other than for outdoor lighting. I think occupancy sensors for interior spaces serve the same purpose. Occupancy sensors should be set up as vacancy sensors (this mode requires lights to be turned on manually) in classrooms, offices, conference rooms and gathering spaces like auditoriums and cafeterias.	Plantings at the perimeter of the building need to be well thought out. No plantings that attract animals, provide a habitat for animals, or cause a threat to the building or people should be used. Additionally, the plantings need to be able to survive limited watering, snow removal, etc. Think about maintenance, lines of site for foot traffic and automobiles also. don't make landscape design to crazy \$\$\$\$\$	Roof inspection and walkthroughs are critical prior to membrane installation.	Never consider value engineering until the cost estimates are reconciled, and a full scope clarification is performed. Taking something out that we want, before we know if there are things in the design adding to the cost that we don't want, is not appropriate.	Joint meetings, when possible, are very useful and minimize design teams time, and thus costs. They also more effectively utilize everyone's time. The use of remote meetings, when allowed, can actually increase community participation, create more efficient meetings, and increase overall efficiency and productivity by reducing hours of commuting and travel time.
All energy investments should be evaluated using life cycle cost analysis. That said, remember that the insulation in your walls will be there for the life of the building.	Before a final site plan is determined, snow removal and snow storage plans must be in place. Things like benches, bollards, raised planters, curbs, islands, etc. must all be looked at with an eye for snow. If you don't make it easy, either standards are reduced, or items get damaged.	Mockups should be used on every project, and should involve the commissioning agent, design team, and all impacted trades. The construction team should be clear on air sealing expectations. And Application and installation.	Review all narratives in great detail before they go to the cost estimators.	Consider meeting with abutters on location. It tends to much more productive when you meet with residents in an informal setting. This has proven very useful on many occasions. Relationships with retail & residential Neighbors important.

Energy	Maintenance	Construction	Design	Process
Energy modeling should be done throughout the project, but it is extremely important to set energy performance expectations early, and model from the beginning. Important objectives such as air sealing/air changes used in the modelling should be clearly understood by designers and the construction team so that they can be properly executed.	Before a final site plan is determined, landscaping and grass cutting plans must be established. If you don't make it easy, either standards are reduced, or items get damaged. The sidewalks should be eight feet wide where possible so that the plows don't tear up the landscaping on either side.	The HVAC system flush should be done with the construction filters in, and it should be confirmed that normal pleated filters are installed prior to turnover.	Be very sensitive to words like custom, automated, and operable. Often times there are more creative ways to achieve the same end product with a different approach.	Provide routine updates to the CC on the status of change orders and contingencies. This will make funding transfer requests much easier, as they already know what's coming.
Energy modeling needs to be done based on the normal school day, and the actual hours of operation. The normal school day allows for comparison to benchmarks, and the actual operation allows for budgeting and tracking. It is important to monitor post-occupancy energy use and envelope testing in order to evaluate original model and assumptions made. Often modelers do not get building data feedback,	Designers team and their consultants must put themselves in the shoes of the people who maintain the building and grounds. Make sure there's room to turn a wrench on a trap. Make sure there is clearance to open filter access doors. Make sure there are slop sinks in appropriate locations. Make sure there are outlets in hallways for cleaning equipment. Just use common sense, and if you're not sure please ask.	Extreme care should be taken to temperature and humidity controls and monitoring during wood floor acclimation. Follow designers and Manufacturers spec recommendations.	Storefront is very expensive. Consider wall systems with punched windows to achieve a similar design at a fraction of the cost. However delivery schedules of manufactured window units may be longer than delivery of components for on-site built storefront. These factors need to be evaluated as well.	The most important part of a public forum is to provide them the opportunity to speak and ask questions. The presentation should be short enough to ensure we provide this opportunity.
Solar orientation is very important early in the design, as this has serious impacts on lighting, heating/cooling loads, and potential for solar pv.	In areas where caustic or acidic chemicals are used, ensure all exposed materials can stand up to the environment. Along with surrounding structures and finishes.	Glazed stone products should be inspected carefully upon receipt. They tend to be damaged during delivery.	Glass in the envelope is expensive, and less efficient than the wall system. Do not use more than is needed, and there must be value added in every case.	When reviewing exterior building materials, samples should be provided for display. Size of sample also.

Energy	Maintenance	Construction	Design	Process
Deconfliction of the roof plan is important for solar pv. The electrical plan should include conduit runs from the roof to the electrical room for solar readiness.	Make sure rooftop equipment is not set too high on the curb. If the workers can't reach the access handles, they are less likely to maintain the equipment, and are more likely to get hurt while doing so.	We need to follow our noise ordinance, but we also need to make sure that trucks and other equipment is not idling outside the site waiting for the gates to open. They can stage at truck stops if needed.	Be sensitive to windows in gyms. They are often covered up once the building is operational. If glass is desired, translucent panels are a good alternative when trying to break up the massing.	Street views with and without trees are the most valuable slide in a presentation. What people will really see from their perspective is very important.
The lights in the building need to be able to be turned off when not in use. This can be easily accomplished with the use of occupancy sensors and vacancy sensors rather than a central control system. And keep it simple Ceiling mounted,	Do not paint hand rails. These get scratched and look really bad. All exterior hand rails should be hot dipped galvanized and no painted.	Major deliveries should be coordinated with Police and should be communicated out to the public. The neighborhood should receive news letters via e-mail and also in there mail box. Deliveries should be part of site safety and logistics plan	Limit the number of different exterior building materials. Each transition adds a complexity as well as cost. The rain screen should be comforting to the surrounding structures as well as the eye, simple application and less deviations help reduce costs.	Review the General Conditions and General Requirements carefully. The CM can bury a ton of money in this. Every position being carried needs to be value added, has to have realistic timelines, and their % time on the project needs to be on point. Make sure that the CM knows you will be watching to make sure we get every hour from every person we're paying for.
Occupancy sensors should shut the lights off when the space is not in use, but the lights should have to be manually turned on. Often times the lights turn on when they really aren't needed. (I think that this should apply to offices, classrooms and assembly areas but not to hallways and restrooms.)	Use manual equipment when possible and appropriate. It is more reliable and less expensive to maintain.	You can never communicate too much to the public. People will put up with major inconveniences if they know about them in advance, and no when it will end.	Be very careful when specifying proprietary components. This will add cost to the project.	The designer is required by contract to design to our budget. They need to expend their time and resources to redesign as needed to meet the mark.
Variable speed drives need to be tied into the refrigerant and hot water control valves. If an AHU is driven down, the valves, and then boilers chillers should follow suit.	Epoxy floors in bathrooms, quarry tile in kitchens, and no wax floor products like linoleum in hallways and classrooms. Good value low maintenance surfaces can be a key in long term maintenance cost savings.	When you tell the public you will, or will not, do something. Follow through. It only takes one time to break their trust.	Never trust the manufacturer's rep when they quote costs. They will tell you a much lower cost to get you to specify their product, only to find out that the market dictates exponentially higher costs.	During cost estimating, it is important to push back on the estimators that tell you what something should cost, versus what the market bears.

Energy	Maintenance	Construction	Design	Process
Equipment start times should be staggered greater than 15 minutes prior to turning over a building. I think that where we use VRF and heat pump systems there will be less opportunity for set backs and shut downs because of the slow recovery time for heating and cooling.	Specify ceiling systems like act for ease of maintenance. There are other ceiling systems that are pretty, but make access very difficult. The size off the ATC panels should not exceed 2' x 4'.	Ensure that off-hour phones numbers are posted for residents to call in case of emergency or concerns. Make sure that the number that is posted actually works.	Make sure you specify products that have "or equals" There may be three contractors who can install the same product, but this does not mean your getting competitive pricing. If we use equipment and lighting products that comply with the utilities' energy efficiency program standards as a minimum then we will be assured of getting high quality equipment that is efficient and will be eligible for rebates.	Create a project environment where creative problem solving is encouraged. Never discourage anyone from speaking up. Many crazy ideas have turned out to be brilliant solutions. No such thing as stupid question or solution!
Solar PV systems impact the heating and cooling loads of buildings. This should be factored in when sizing mechanical systems.	Glass should never be carried to floor height to prevent damage.	Dust control is extremely important. A plan must be in place ahead of time, and sufficient water must be available, and delivered. Again part of site safety & logistics plan!	Be very careful when specifying Trane or Mcquay HVAC equipment. They will tell you that it is compatible with BMS software, but it rarely is, and it rarely works correctly.	Establish a personal connection with the neighborhood. Treat the job site like your home, and the abutters like your own neighbors. Walk the job site perimeter and the neighborhood daily. Provide community updates at regular intervals. Advise on upcoming activities, adjustments in work hours or days, etc. Most people just want to know what to expect in advance. Let Abutters see you, it develops a comfort level even though you may not speak frequently.

Energy	Maintenance	Construction	Design	Process
Kitchen hood exhaust fans should be variable speed. These not only use a ton of electricity, they also remove vast quantities of treated air. We should look into getting exhaust hoods with heat exchangers if they are available.	Crushed stone should never be placed at the perimeter of buildings. This leads to broken windows during landscaping	A city employee should be on site every day to provide adequate oversight for all major projects.	Engineers will always overdesign their systems. Push back on the sizing of generators, boilers, hot water tanks, electrical services, chillers, ahu's, etc. Make them justify these components. Not only will smaller equipment cost less, but they are less expensive to operate, and will simplify design and save money in other areas.	Time is often wasted trying to solve a design or construction issue inside the construction trailer. Get out of the trailer, and go look at the problem. Most people are better problem solvers when they are looking at it in real life, than on paper.
If a space is unoccupied, there should be no exhaust or fresh air supply running. This is where the use of EMS is beneficial. Schedules included in the EMS should be carefully reviewed with the correct personnel at commissioning.	North facing overhangs can be problematic for mildew and mold growth.	Any time there are unit prices, such as soils, the city employee needs to watch very carefully the amount of material being removed or provided. These costs can add up fast.	Challenge structural engineers to think outside the box. Their solutions are often not only overdesigned, but they tend to be more complicated than necessary.	Encourage and mentor the youth on the job site. They are the future of the industry.
Flow restrictions in both duct and pipe should be minimized as much as possible. Avoid 90 degree bends when possible.	Porcelain tile stands up better than wood veneer. This should be at least 4 feet high in the hallways.	Trench boxes are not a suggestion. When required, they are not optional.	Market conditions and material costs need to be monitored when considering the escalation to bid number that you carry.	Don't ever be afraid to hit the brakes. It is far better to pause and determine the correct path, than to drive the wrong way for a week.
Pump sizing should be reduced as much as possible as they use a great deal of electricity.	The broadcast of epoxy floors needs to be rough enough to prevent slipping, but not so rough that it can't be cleaned.	Utility companies take forever to do anything. Plan accordingly. City should keep an updated contact list of all utility companies contacts for emergencies, construction and maintenance.	Establish early who is authorized to make design decisions and changes. For example, a teacher can make a request, but the decision to include something in the design needs to come from the project team.	The CM contingency is a misnomer. It may be under the control of the CM, but we have to authorize the use of these funds, and contrary to their belief, the money belongs to the taxpayers.

Energy	Maintenance	Construction	Design	Process
<p>There should be no lights without lighting controls. And a simple lighting control system that satisfies energy code.</p>	<p>Chilled water fountains are not necessary, waste electricity, and are more expensive to maintain. Filters are not necessary either.</p>	<p>Vibration monitoring and existing condition surveys are important depending on the project and proximity to other structures. Historically vibration motoring has saved the city in potential claims.</p>	<p>When reviewing the design with public safety, make sure Police, Fire, and the user group are all in the same room. There can be opposing agendas, and this step is necessary to prevent redesign. Meeting minutes should be taken and issued. When construction actually happens one or two years later, these can then be referred to remind everyone what was agreed upon.</p>	<p>All parties should agree to a submittal turnaround timeframe at the beginning of a project. If this starts to slip, correct it quickly or you can be hit with delays from subcontractors.</p>
<p>You can design the best wall system, but if it's not installed properly, all of your work will be for nothing. Great care needs to be taken before the walls and ceilings are closed up to make sure there are no breaks in your thermal envelope.</p>	<p>Solar panel footprints should be marked so that snow removal can occur as needed without damaging the panels. We would not remove snow from panels. Maybe you are referring to lightening roofs due to a heavy snow occurrence?</p>	<p>If behind in schedule, a plan must be developed and implemented immediately to get back on track. Do not wait until the end of the job to try and make up the time.</p>	<p>Ensure the Design Review Committee is involved early and often. It also proves useful to invite them to working group meetings.</p>	<p>During the creation of the IFB, the OPM should be more involved in the overall process. Both the Designer and the OPM should be reviewing the City front end of the IFB. This appears to be an issue with first time designers and OPM's. The City prepares what it feels is the proper template for the particular Project but it the responsibility of both the Designer and OPM to ensure that the template sent to them, for example has the correct Bid dates, Filed Sub Bidders, the correct number of Alternates, if any are listed, Unit Prices shown, if required, as well as ensure the proper documents along with the technical specification are made a part of the IFB.</p>

Energy	Maintenance	Construction	Design	Process
<p>It would be helpful to know when electric and gas accounts are cancelled and when new accounts are assigned to the City during the construction process. This is to maintain our database and for our electric and gas supply contracts.</p>	<p>Pavers should not be used where plowing occurs.</p>	<p>Pay close attention to the number of tradespeople on the job. This can be a precursor to falling behind on specific trades. Find out early on what software CM / GC uses to monitor Onsite staff as well as all documents.</p>	<p>Involve the community early in the design process. Not only is community feedback important, it's critical to squash rumors before they get out of hand.</p>	<p>Construction Drawings and Specifications should be reviewed by multiple members of the Design Team including not limited to the Architect, OPM, various City Departments/Agencies and most importantly the Public Buildings Department to ensure their accuracy and completeness prior to being sent for review by the DRC and more importantly before placing them in the IFB for the Project.</p>
<p>Have PB Project Managers take a lead role in setting up and conducting inspections by utilities for project rebates for new construction.</p>	<p>Stone dust should be used in lieu of concrete where snow removal does not occur.</p>	<p>Trades that do not work M-F, are not entitled to change orders for overtime to catch up.</p>	<p>If the project requires review by the Conservation Commission, and the commission is asking for mitigation, make sure there were actual adverse impacts to mitigate.</p>	<p>The IFB must clearly state the milestone date(s) that the Contractor is required to make and identify the consequences of missed milestones. Construction is fluid and things happen, but the Baseline Schedule milestones must be clear as the basis of bidding and award.</p>
<p>While other types of energy efficient equipment should always be explored, the initial cost of installation plus cost of annual maintenance of such equipment should be taken into consideration when deciding on new technology. Funding and the proper expertise for this maintenance is not always available to the City.</p>	<p>Exposed steel beams need to be designed in a way to prevent bird nesting.</p>	<p>Analyzing change order credits is just as important as change order adds. Guarantee that contractors will ask for more than they deserve, and offer back less than what we deserve.</p>	<p>Make sure you are coordinating building projects with DPW and Parks and Rec. For example, DPW should not pave a street before a large project starts. We will likely need to tear it up for utility work.</p>	<p>Should there be a sudden need to put an active project on hold for an extended period of time, it is critical that documents to date be printed and archived electronically. This will aid in understanding what obligations have been completed, where the project left off and should pick up from, and if there are issues or items that need to be revisited. Inevitably there will be an overwhelming desire to re-start quickly.</p>

Energy	Maintenance	Construction	Design	Process
Embodied carbon analysis should be conducted at least twice. Once in DD and once early in CD's to ensure that we are designing and constructing using low embodied carbon principles, materials, and equipment.	Asphalt curbing should be avoided at all costs. It saves some money up front, but it will not last and will cost more in the long run.	Do not accept an inferior finished product. If it does not meet the design intent, or quality standards. Make the contractor make it right on their dime.	It's never too early to do the site survey. This info can completely reshape a project.	Use certified mail to inform the project neighborhood at the begging of the project and as required for site plan approval. Depending on the project and impacts, consideration should be given to a third mailing in advance of major decisions that will impact the abutters.
Operational and transportation carbon must be considered and managed throughout the design and construction process.	Fencing should not be too close to sidewalks, roadways, or parking lots. Snow gets pushed against the fence causing damage.	Do not wait to perform the punch list until the end of the job. Punch lists should be made, and items addressed, as they arise. Schedule, Punchlists, Commissioning etc. start in the beginning of project.	Perform condition surveys of adjacent properties prior to large projects. If this is not done ahead of time, there is no way to prove that the project did not cause the damage in question.	Engage with the user group and associated staff early and often to ensure their voices are heard and that they are involved in the design process throughout the project.
Develop an air barrier continuity plan to ensure that the construction matches the expected performance of the design and specifications.	Small narrow strips of grass should be avoided. These can not be done with mowers, and therefore do not get adequate landscaping.	Do not install ceilings until all punchlist items above the ceilings are complete. Engineers should be aware of access for filter changing.	Avoid unit prices and allowances when possible. If needed, ensure the specs are crystal clear. This is an area where large change orders are likely, and allowances tend to get eaten up.	When possible remote meetings should be structured as webinars with preregistration to prevent Zoom-bombing. However, promote all attendees to panelists to allow for optimal transparency and participation.
Full and partial wood-framed construction should be considered as it drives the embodied carbon down. However, not all projects are viable for wood framed construction, and there are very few wood framers who do public work.	Pedestrians will take the path of least resistance. If walkways are not direct routes, people will not use them.	Make sure the construction management plan addresses site distribution and traffic issues during the project. This plan needs to be reviewed with public safety, so that they can weigh in and plan their resources accordingly .	When possible, complete hazmat work like oil tank removal ahead of time. The markup in these areas is massive, and the city can, and has, saved hundreds of thousands of dollars by doing it ourselves.	

Energy	Maintenance	Construction	Design	Process
Air leakage has the largest impact on building energy consumption by far.	Fixed trash barrels get emptied by trucks that drive right up to the barrels. Either put the barrels close to a paved surface, or be prepared for damage to site amenities.	Never spend money you don't have. In order to ensure this does not happen, replenish the Mayor's contingency as frequently as possible.	The parameters for traffic studies are critical. The study needs to be broad enough, and data collection needs to be taken at appropriate times.	
	Slab on grade is always preferred. Any structure below grade is not only more expensive on the front end, but it is more likely to have environmental issues and costs.	If site excavation requires undermining of utilities like a duct bank, they must be fully supported to prevent collapse.	Even though the traffic work is separate from the project, it is viewed by the general public as one and the same. Therefore, this work must be tracked just as closely to ensure it meets the project schedule.	
	Crank windows are not preferred. They do not stand up over time.	Contractors will typically seek change orders for winter conditions. This needs to be analyzed carefully. If they are responsible for being behind schedule, and then create the winter condition problem, then we don't owe them anything. Additionally, snow removal is not unexpected for a job that occurs during the winter. They will often ask for money for this, but it should not be awarded unless extreme conditions occur. If it is known that the project is going to happen in the winter, winter conditions should be mentioned in the specs to avoid unexpected change orders.	Site distribution is one of the highest priorities on any project. The goal should be to allow student access to play areas without crossing roads or parking lots when possible.	

Energy	Maintenance	Construction	Design	Process
	Garbage disposals need to have guards to prevent injury and damage.	Monitor the sewer piping installation below grade very carefully. If pipe transitions are not smooth and seamless, the building will experience sewer backups and costly repairs down the road.	Walkability and bikeability are important, so both the traffic work and the site design should take these into consideration.	
	Water fountains should be attached to the building when possible. Free standing fountains are more susceptible to damage from freezing if not properly winterized.	Fall protection is not optional.	Concrete walkways should be 8ft wide. 4ft panels yield large ruts on either side from snow removal, and 6ft panels snap from the weight of the trucks.	
	Always run an extra conduit or increase in size for future expansion.	Soil management is extremely important. Care needs to be taken to ensure stockpiles are covered, protected, and not mixed with unsuitable materials. There is a potential for six figure change orders if this is mismanaged.	Roofs need to be designed to be solar ready. This does not require additional steel, but the roof should be designed as clean as possible, and the roof system warranty needs to be compatible with a ballasted pv system.	
	Plumbing cleanouts are required every 50 feet. However, where they are placed is very important, and if needed more should be provided. Think of the plumber trying to clear a clogged pipe.	The quality control inspector on any job, should have no other responsibilities. They need to be focused on QC and making sure we are always looking ahead to make sure what we are doing now, will set us up for success down the road.	Stained concrete is more sustainable than painted concrete.	
	It is good to have P.B. involved in any ADA retrofit projects and work with the City's office of Disability.	Closely monitor allowances. Contractors like to assume that's their money.	There should be no gates on perimeter emergency access roads. and on dumpster enclosures.	

Energy	Maintenance	Construction	Design	Process
	Project design of materials and equipment should reflect anticipated maintenance in years following warranty period to properly service the equipment. Proper shutoffs for equipment should be installed to allow for easier maintenance as is required.	Tree protection needs to be very carefully thought out, and executed. Roots need to be kept buried, wet, and protected. Be realistic with what can be done. If the opportunity to save more trees presents itself during construction, take it. Plans can change if it benefits the project.	Consider reducing the number of cameras inside the building, even if it means increasing the resolution. You can achieve the same level of coverage for a much smaller cost.	
	Make sure if the specifications call for attic stock that it is actually provided and signed for.	If possible, use design-build approach for small fast track projects.	A single main entry is preferred. This improves security and operations.	
	Make sure that the water quality control structures are maintained by DPW.	Roofing Manufacturer contractor installation oversight appears to be lacking for our membrane roofing system installations as numerous leaks are occurring that are related to poor installation	Exterior lighting can comply with the light ordinance, but still be a nuisance to abutters. Shrouding the lights when possible is preferred.	
		A construction schedule should be submitted and approved by the architect and OPM at the onset of the project. Updates should be submitted monthly. Resumes for the On Site Superintendent and other contractor personnel should be reviewed prior to that person being assigned to work on our project.	Asphalt curbing should not be specified. It yields a savings up front, but it will not hold up, and will cost more down the road.	
		Windows should and need to be tested for air infiltration and water leaks.	Buffering should always be planned for where cars are facing abutters. Headlights are a nuisance.	

Energy	Maintenance	Construction	Design	Process
		Site contractors will try to get away with backfilling in two foot lifts if we let them. We need to watch them and remind them what the specifications call for.	When possible, buses and parents should not mix. The bus loop should be separate from the parent drop off.	
		All materials that arrive on the project should be check against the approved submittal.	Do not specify flooring and ceiling systems where they aren't needed. Storage closets, utility rooms, etc. do not need these finishes.	
		The Site Supervisor is an extremely critical position on every project. Push for the best possible individual and demand continuity if at all possible.	When possible, use the building contours to control acoustics from rooftop equipment. This will reduce the need for acoustic screens which are expensive.	
			Line of site at the main entry is important to efficient operations. Make sure that the administrative staff can easily see the main entrance.	
			Make sure that athletic outdoor areas are designed in a way that prevents negative impacts to abutters via foul balls or other flying objects.	
			Make sure that the full scope of work has been identified before starting design. Scope creep can bust a budget very quickly.	
			Slab moisture mitigation should not be included in the base bid. If needed, it should be priced out and paid for out of contingency.	

Energy	Maintenance	Construction	Design	Process
			Do not specify water based wood floor finish. It does not bond as well. Low voc oil based finish should be specified whenever possible.	
			3 story buildings are appx 10% more energy efficient, less costly to build, and better utilize urban sites, than single or 2 story buildings.	
			For small buildings, consider prefab structures. They are much less expensive and their quality has improved significantly over the years.	
			City water flow tests should be performed early in the design phase. This will determine what fire equipment is needed. Cameraing sewage lines and Fire protection lines also.	
			AED devices should be hard wired into the building fire alarm panel. This will ensure that dispatch is notified when an AED is used.	
			Equipment must be specified and installed in new buildings to ensure police and fire radios work.	
			Whenever traffic improvements are made around a project, we must be sensitive to the ripple effect it has on the broader community.	

Energy	Maintenance	Construction	Design	Process
			Do not assume other departments who review the plans, understand what they're looking at. If they don't fully understand the plans, they will likely require something different during construction, thereby leading to a change order.	
			Do everything you can to verify all existing conditions. If there are items that are either unknown, or if plans do not match actual conditions, expect significant change orders.	
			CMU is much more durable than drywall, but it does not need to be carried up to the ceiling. Use durable wall products where wear is expected. Above that, drywall is perfectly acceptable.	
			Be very sensitive to acoustics in the cafeteria and gym. If not designed correctly, these spaces become very problematic.	
			When specifying floor tile, thin mudset is perfectly acceptable. Thick just costs more with little to no added value for our applications.	
			If the project calls for irrigation, consider both rain water harvesting, as well as irrigation wells, to help reduce long term costs.	

Energy	Maintenance	Construction	Design	Process
			Exterior emergency generators should be sited in locations that minimize the impact to abutters. They are loud when operating.	
			Skylights should be avoided. They leak over time, and are a hazard when navigating roofs in the winter.	
			The landscaping design should be carefully analyzed. There are often ways to achieve a similar outcome for a fraction of the cost.	
			Security cameras are great, but if there is no light in the area they are covering, they are useless.	
			Renovation that is performed to the same standard as new construction is significantly more expensive.	
			Make sure the correct scope of work is assigned to the correct trade. Many trades can perform a variety of work elements, but their costs can vary significantly.	
			Make sure all as built building plans, roof and equipment warranties, and operation and maintenance manuals are put in the Public Buildings file at the end of the project. It seems that this should be done by our Project Managers.	

Energy	Maintenance	Construction	Design	Process
			<p>Make sure that the designers are applying AAB and ADA codes for accessibility whichever is stricter.</p>	
			<p>Do more in-house design for small projects which can save on architects fees.</p>	
			<p>Roofing Systems should be designed to withstand the type of foot traffic / potential additional equipment installations. Membrane roofing while much less expensive than built up systems, do not stand up well to heavy foot traffic and Solar Panel installation. Additional walkway pads should be mandatory. Stronger verbiage should be in the specifications outlining the apparent lack of oversight by both the GC/CM site superintendents as well as manufacturer during the roof installation.</p>	

Energy	Maintenance	Construction	Design	Process
			<p>Any roof design should incorporate the collection of all water to an onsite water treatment system from the roof, whether an interior or exterior roof drainage system is being used. The idea is to keep the water flowing and not standing. Avoiding direct tie in to an existing storm water street system should be discouraged due to the potential over charging of the existing storm system.</p>	
			<p>Construction Drawings and Specifications should be reviewed by multiple members of the Design Team including not limited to the Architect, OPM, various City Departments/Agencies and most importantly the Public Buildings Department to ensure their accuracy and completeness prior to being sent for review by the DRC and more importantly before placing them in the IFB for the Project.</p>	

Energy	Maintenance	Construction	Design	Process
			<p>A minimum of a Two year contractor warranty on all workmanship and materials/equipment should be made mandatory in the project specification. Extended warranties/service on equipment such as HVAC and Elevators with the time line stated in the specifications, such service to be routine monthly maintenance and in the case of an elevator, the first State Re-inspection, a year after the initial State Inspection.</p>	