



Eileen Donoghue
City Manager

Kara Keefe Mullin
Assistant City Manager

December 13, 2018

Mayor William Samaras

And

Members of the Lowell City Council

Dear Mayor Samaras and Members of the Lowell City Council,

RE: C. Kennedy/C. Cirillo – Req. City Mgr. Develop An Action Plan Aimed At Eliminating The Deferred Maintenance In All Of The Schools Throughout The City And That The City Mgr. Seek Funding From The MSBA In Order To Implement The Action Plan.
C. Kennedy – Req. City Mgr. Re-Organize The Way In Which The City Addresses The Deferred Maintenance Of School Buildings In Order To Improve Productivity And Efficiency.

The City engaged EMG Corp. in a city-wide municipal facilities conditions study which will inform our preventative maintenance plan for all municipal facilities going forward. The final reports from this study were delivered to our office just this week, and we are sorting through the vast amount of information contained therein. In parallel, the City is in the process of acquiring and implementing a work-order system. The EMG study will inform the preventative maintenance plans within each building – these plans will need to be loaded into the work-order system so that each time a preventative maintenance item comes due for service, a work-order will automatically be generated and delivered to the appropriate party for completion. This remains a work in progress and is a large undertaking for multiple departments.

The City is also actively working on multiple applications to the Massachusetts School Building Authority's ("MSBA") Accelerated Repair Program (ARP), which is designed to lessen the cost burden of large-scale school repairs on large building systems including: roofs, boilers, windows and doors. Please see the attached memo from Chief Financial Officer Conor Baldwin on the EMG Report and its implications on the City's Capital Improvement Plan ("CIP") going forward. A general timeline of the ARP application process includes a call for applications that is put out in early January, during which time a district must submit any Statements of Interest ("SOI") indicating the desire to apply to the program. The application period ends in mid-February, and the MSBA will then begin reviewing applications shortly thereafter. It should be noted all applications are reviewed at the same time, and there is no priority given to those applications that arrive in the early portion of the application period. If any site visits are required based on the SOI, the MSBA will begin those during the month of April. Once the MSBA has made a determination, they will determine which projects to invite into the grant program at their June board meeting.

RE: C. Kennedy/C. Cirillo – Req. City Mgr. Develop An Action Plan Aimed At Eliminating The Deferred Maintenance In All Of The Schools Throughout The City And That The City Mgr. Seek Funding From The MSBA In Order To Implement The Action Plan.

C. Kennedy – Req. City Mgr. Re-Organize The Way In Which The City Addresses The Deferred Maintenance Of School Buildings In Order To Improve Productivity And Efficiency. **(Page 2/2)**

Applications to the ARP are done on a per-school basis, and systems costs are allowed to be combined within the school to bring a single cost for each school's projects. The combined systems cost needs to be over \$250,000 on qualifying systems work in order to qualify for the ARP program. The city is not limited in how many applications it can submit to the ARP program in any given year as long as the applications meet the program standard, which currently for replacing roofs and boilers is the system being 20 years or older, and for windows and doors is 30 years or older. As in the MSBA's school-building program, the ARP program comes with a reimbursement rate based on a formula the MSBA adjusts annually. If any of these projects that are accepted into the ARP grant program, they should be reimbursed somewhere around 80% of the total costs to the city. A breakdown of the projected costs is contained in the attached memo as well.

Municipal facilities, including fire stations, City Hall, JFK plaza, and all other building in the city's portfolio were included in the EMG report. These items will be addressed in a similar manner to the schools, but without the luxury of significant funding from the Commonwealth. The city will continue to address the needs of the municipal facilities' maintenance and capital needs through a combination of the annual operating and capital budgets. The management of all ongoing capital projects for building improvements, especially those funded with assistance from the MSBA, is another matter needing attention. The Administration is currently exploring options to meet that challenge in the FY2020 operating budget.

Please let me know if you have any questions regarding this issue.

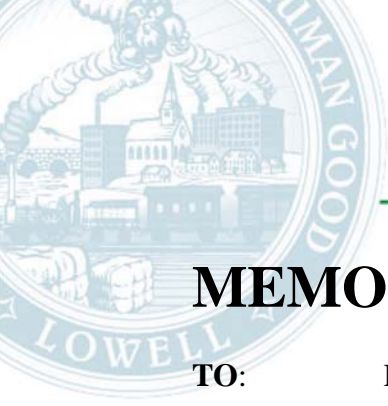
Sincerely,



Eileen M. Donoghue

City Manager

Cc: Conor Baldwin, Chief Financial Officer



Conor Baldwin
 Chief Financial Officer

MEMORANDUM

TO: Eileen M. Donoghue, City Manager

FROM: Conor Baldwin, Chief Financial Officer

DATE: December 7, 2018

SUBJECT: MSBA projects & EMG Report on municipal facilities/ school facilities

The City of Lowell contracted with EMG to perform a facility condition assessment and a preventative maintenance checklist for all of the municipal buildings in the city. The final report, which is near completion, will outline the useful life for various building systems and components resulting in a comprehensive 10 year capital plan, preventative maintenance checklist and an inventory of physical assets. Due to the wish of the City Council and Administration, the team began to walk through each of the public schools prior to the start of the school year. A team was established consisting of the DPW Commissioner, Lands & Buildings Deputy Commissioner, Chief Procurement Officer, Deputy Chief Financial Officer and the School Facility Director to review the draft documents. Based on the preliminary data, the finance team has been able to review and analyze projects that may be reimbursable under the Massachusetts School Building Authority’s (“MSBA”) Accelerated Repair Program. Under this program the city would be eligible to apply for multiple projects within the same year as long as the scope meets certain requirements. Applicable projects include boilers and roofs over 20 years of age, and windows and doors over 30 years of age.

Based on the urgency for certain projects, the team discovered 9 projects that should be submitted in January or February of 2019 by the School Department for Statement of Interest (“SOI”), the first step of the MSBA funding process. Procedurally, the School Committee must first vote to support the projects, as well as the City Council. Previously in the City of Lowell this vote has occurred during a joint meeting of the two bodies. These nine project scopes include nine roof replacements, ten boilers and one window project. Any combination of roof, boilers, windows and doors can be combined for one site, as long as the total project cost is at least \$250,000. The short-term priority projects are outlined as follows:

Recommended	School	Est Amount	Project Scope
2019	Bailey	\$ 289,300	Scope: Roof
2019	Daley	\$ 1,021,312	Scope: Roof & Boiler (x2)
2019	Freshman Academy	\$ 411,290	Scope: Roof & Windows
2019	Greenhalge	\$ 253,886	Scope: Roof & Boiler (x2)
2019	Lincoln	\$ 295,612	Scope: Roof
2019	McAuliffe	\$ 504,371	Scope: Roof & Boiler (x3)
2019	Pawtucket	\$ 872,268	Scope: Roof
2019	Rogers	\$ 850,944	Scope: Roof



Conor Baldwin
 Chief Financial Officer

Recommended	School	Est. Amount	Project Scope
2019	Sullivan	\$ 642,800	Scope: Roof & Boiler (x4)
2020	Butler	\$ 586,945	Scope: Roof, Boilers (x2)
2021	Adult Ed.	\$ 283,460	Scope: Roof, Windows, & Doors
2021	Bartlett	\$ 1,817,620	Scope: Roof, Domestic Boiler, (x2) Boilers, Doors
2021	O'Connell	\$ 274,121	Scope: Windows, Roof, Door, Boiler
2021	Freshman Academy	\$ 4,726,146	Scope: Doors
2021	Pyne	\$ 999,775	Scope: Roof & Boiler (x2)
2021	Shaughnessy	\$ 617,451	Scope: Boiler (x2), Windows & Doors
2021	Wang	\$ 536,520	Scope: Roof
2022	Sullivan	\$ 601,632	Scope: Windows & Doors
2022	Wang	\$ 560,704	Scope: Windows & Doors
2023	Bailey	\$ 229,062	Scope: Windows, Doors, Boiler (x2)
2023	Lincoln	\$ 319,555	Scope: Windows & Doors
2023	McAuliffe	\$ 371,776	Scope: Windows & Doors
2023	Reilly	\$ 271,592	Scope: Doors
2023	Robinson	\$ 781,040	Scope: Roof & Doors
2023	Rogers	\$ 665,736	Scope: Boiler (x2)
2024	Daley	\$ 775,816	Scope : Windows & Doors
2025	Butler	\$ 414,190	Scope: Doors & Door Hardware
2025	Greenhalge	\$ 456,248	Scope: Windows & Doors
2025	Pawtucket	\$ 442,136	Scope: Doors & Boiler (x2)
2026	Rogers	\$ 470,985	Scope: Windows & Doors
2028	Wang	\$ 241,810	Scope: Boiler (x2)
2030	Stoklosa	\$ 490,548	Scope: Roof, Door & Boiler (x2).
Total		\$ 22,076,651	

*NOTE: The estimated cost provided by EMG includes a 4% inflation rate for projects after FY2019, in anticipation of escalation.



Conor Baldwin
Chief Financial Officer

Upon delivery of the report, the finance department extracted all projects for facilities which may be eligible for reimbursement through the Massachusetts School Building Authority's various funding programs. The finance team then discussed the process with representatives of MSBA to coordinate timing for the coming years and detail the required process for submission. If the district is invited to the feasibility study module of the MSBA program for accelerated repair, the MSBA would then assign both an Owner's Project Manager ("OPM") and an Architect & Engineer ("AE"), similar to the Lowell High School project, except that the OPM and AE are assigned to districts based on their needs. During the LHS project, which is funded through the MSBA core program, both the OPM and the AE were procured by the city competitively under Chapter 30B of the Massachusetts General Laws. With the accelerated repair program, the MSBA assigns projects with multiple scopes such as roof, boilers, and windows to one single OPM and then continues to assign each project in a similar manner.

Using the MSBA's estimated construction and total project cost data there will be additional expenses, including contingencies, but the city's share of the cost will be approximately 20% of the total. Additional expenses include an OPM and AE for feasibility study, design development, construction contract documents, bidding, construction contract administration, advertising, construction testing, printing, hazardous materials, construction costs, as well as additional contingencies for OPM (4.5%), design (10%) and construction (10%). These costs are estimated using projects within the last two years approved by the MSBA for similar sized buildings based on the scope of the project.

It is important to note that the Freshman Academy is on the list of MSBA submissions twice in the next three years. This school is currently listed by the Department of Elementary and Secondary Education ("DESE") as a part of the Lowell High School. There may be additional administrative and legislative steps necessary for the facility to become eligible as a stand-alone building. The School Department will need to petition DESE to separate this building from the LHS grouping. According to the MSBA, until this is done, the MSBA will not consider projects at the Freshman Academy. The MSBA will only fund the project if the building is used for K-12 classrooms. Further discussion is required between the City and School department to determine the best utilization for the building.

The MSBA's Accelerated Repair Program application and review process commences when the MSBA sends notification and invitations to the school district to apply to the Accelerated Repair Program in either late December or early January of each year. The School Department, working in coordination with the City Manager's office, will need to submit a Statement of Interest ("SOI") in January or early February to the MSBA for each individual school that requires work (2019 will feature 9 applications). The MSBA closes the application period in late February and will review all of the submissions from around the Commonwealth and, if necessary, will perform site visits to individual schools in April. Once site visits are complete, the MSBA will determine which applications to invite into the Accelerated Repair Program. The MSBA Facilities Assessment Subcommittee would then review the MSBA officials' recommendations and provide the final recommendations at the MSBA Board meeting in June.



Conor Baldwin
Chief Financial Officer

Upon approval to move forward by the MSBA, the city would have 60-90 days to fund the feasibility study and schematic design. This timing falls in line with the capital plan, which will be updated with EMG's recommendations for improvements. In planning for the FY2020 Capital Budget and accompanying loan order, the city should set aside approximately \$700,000 for the feasibility studies for the first nine projects for FY2020, of which the MSBA would reimburse approximately \$560,000 assuming all were accepted into program. As was the case with the LHS project and all other MSBA-funded projects, the district must authorize 100% of the project cost, but the loan order and associated borrowing will be reduced by grants received by the MSBA. Grant funding from the MSBA is appropriated on a pay-as-you-go basis. The cost figures will become more refined in the spring as the capital plan is developed and the MSBA discusses the projects in-depth. For FY2021, the city should plan on \$100,000 for one feasibility study and an additional \$9.2 million for the construction phase of the FY2019 projects, of which the MSBA would reimburse approximately \$7.38 million. These figures are estimates and are not actual prices for each project; once the OPM and AE are on-board, the projects would be procured in accordance with Massachusetts procurement law.

Included with this report are two attachments compiled by the finance department based on the findings of the EMG report. The first summarizes the total short-term and long-term capital costs identified by EMG, separated by school facility. The second more fully details the 3-year cost projections for school projects eligible for submission to the MSBA. Also attached is a selection from the Collins Center report which studied the DPW's facility department and made several recommendations for improvements to make the operation more efficient. The completion of the EMG report specifically addressed several of the recommendations made by the Collins Center and motions passed by the City Council regarding the formulation of a plan to address preventative maintenance, as well as capital improvements. As part of the same recommendations to address these issues, the Collins Center suggested that the city "[c]reate a new Director of Capital Facility Projects position responsible for managing capital projects and strategically moving LBD from a response mode into a proactive preventative maintenance mode, among other duties." Once the final reports are completed and distributed and all preventative maintenance data loaded into a comprehensive system, this recommendation could be considered by the City Council in the FY2020 operating budget. The report further stated that the cost of the position could be shared by the school district and justified by the savings achieved through the significant grant funding from the MSBA.

If you have any questions, please feel free to contact me at any time.

MSBA Requirements

Windows & Doors	Min age requirement	30
Roof	Min age requirement	20
Boiler	Min age requirement	20

	Current Capital Needs	ST Capital	LT Capital	Total
Adult Ed	\$ 1,249	\$ 3,569,499	\$ 633,820	\$ 4,204,568
Bailey	\$ 34,795	\$ 2,605,621	\$ 1,428,935	\$ 4,069,351
Bartlett	\$ 174,874	\$ 5,595,997	\$ 1,364,567	\$ 7,135,438
Butler	\$ 400	\$ 3,190,416	\$ 2,922,242	\$ 6,113,058
Cardinal O'Connell	\$ 59,112	\$ 426,573	\$ 561,614	\$ 1,047,299
Daley	\$ 47,306	\$ 5,949,419	\$ 2,724,579	\$ 8,721,304
Freshman Academy		\$ 9,694,921	\$ 4,785,166	\$ 14,480,087
Greenhalge	\$ 82,569	\$ 2,374,832	\$ 2,351,363	\$ 4,808,764
Leblanc	\$ 2,000	\$ 1,970,827	\$ 682,946	\$ 2,655,773
Lincoln	\$ 334,471	\$ 2,442,349	\$ 1,899,755	\$ 4,676,575
McAuliffe	\$ 111,011	\$ 3,650,477	\$ 1,215,150	\$ 4,976,638
McAvinnue	\$ 86,851	\$ 712,333	\$ 440,157	\$ 1,239,341
Moody	\$ 258,249	\$ 445,020	\$ 757,670	\$ 1,460,939
Morey	\$ 109,788	\$ 290,079	\$ 1,631,156	\$ 2,031,023
Murkland	\$ 42,061	\$ 1,198,353	\$ 866,042	\$ 2,106,456
Pawtucket Memorial	\$ 25,418	\$ 3,923,748	\$ 1,196,841	\$ 5,146,007
Pyne	\$ 1,600	\$ 2,392,338	\$ 2,445,629	\$ 4,839,567
Reilly	\$ 68,200	\$ 1,719,727	\$ 3,645,561	\$ 5,433,488
Robinson	\$ 106,105	\$ 2,248,784	\$ 2,626,732	\$ 4,981,621
Rogers	\$ 796,288	\$ 3,358,316	\$ 8,567,739	\$ 12,722,343
Shaughnessy	\$ 68,200	\$ 1,719,727	\$ 3,645,561	\$ 5,433,488
Sullivan	\$ 65,097	\$ 6,715,847	\$ 930,592	\$ 7,711,536
Stoklosa	\$ 93,442	\$ 659,292	\$ 1,049,865	\$ 1,802,599
Wang	\$ 40,283	\$ 3,697,054	\$ 1,221,281	\$ 4,958,618
Washington	\$ 36,617	\$ 347,095	\$ 247,786	\$ 631,498
Total				\$ 123,387,379

*NOTE: All costs are estimated and for project costs after 2019, prices escalated by 4%/ yr.

Data Source: EMG Report

Recommended	School	Feasibility Study/ SD			Construction									
		Total Est Feasibility	Admin (OPM)	Basic & Reimb Services (A&E)	Est Construction Cost EMG	Est Sub Total	TOTAL EST COST	MSBA Reimb	City Share					
2019	Bailey				\$									
	Single Ply EPDM Membrane	\$ 40,000	\$ 81,850	\$ 126,500	\$ 289,300	\$ 497,650	\$ 659,574	\$ 527,659	\$ 131,915					
2019	Daley				\$									
	Single Ply EPDM Membrane	\$ 97,310	\$ 203,720	\$ 196,542	\$ 355,576	\$ 1,768,472	\$ 2,306,643	\$ 1,845,314	\$ 461,329					
2019	Freshman Academy				\$									
	2x gas boilers	\$ 7,585	\$ 108,510	\$ 238,388	\$ 665,736									
2019	Greenhalge				\$									
	Roof, Single-Ply EPDM Membrane	\$ 97,310	\$ 203,720	\$ 196,542	\$ 374,512	\$ 1,195,977	\$ 1,617,276	\$ 1,293,821	\$ 323,455					
2019	Lincoln				\$									
	Window, Aluminum Double-Glazed	\$ 30,975	\$ 177,558	\$ 213,495	\$ 30,150									
2019	McAuliffe				\$									
	Replace Roof, Single-Ply EPDM Membrane	\$ 40,000	\$ 81,850	\$ 126,500	\$ 160,956	\$ 721,771	\$ 969,190	\$ 775,352	\$ 193,838					
2019	Pawtucket				\$									
	2x gas boilers	\$ 30,585	\$ 101,810	\$ 157,725	\$ 92,930									
2019	Rogers				\$									
	Replace Roof, Single-Ply EPDM Membrane	\$ 40,000	\$ 81,850	\$ 126,500	\$ 295,612	\$ 503,962	\$ 667,433	\$ 533,946	\$ 133,487					
2019	Sullivan				\$									
	Replace Roof, Single-Ply EPDM Membrane	\$ 40,000	\$ 81,850	\$ 126,500	\$ 375,564									
2019	Butler				\$									
	Replace Domestic Boiler, Gas	\$ 30,585	\$ 101,810	\$ 157,725	\$ 20,417	\$ 972,256	\$ 1,281,044	\$ 1,024,835	\$ 256,209					
2019	Butler				\$									
	Replace Boiler, Gas, B-1				\$ 54,195									
2019	Butler				\$									
	Replace Boiler, Gas, B-2				\$ 54,195									
2019	Butler				\$									
	Repair roof leaks at gymnasium (Metal)	\$ 30,036	\$ 164,084	\$ 124,914	\$ 2,490	\$ 1,161,266	\$ 1,475,812	\$ 1,180,650	\$ 295,162					
2019	Butler				\$									
	Repair roof leaks				\$ 1,593									
2019	Butler				\$									
	Replace Roof, Single-Ply TPO/PVC Membrane				\$ 868,185									
2019	Butler				\$									
	Replace Roof, Single-Ply EPDM Membrane	\$ 97,310	\$ 203,720	\$ 196,542	\$ 632,515	\$ 1,251,206	\$ 1,655,061	\$ 1,324,049	\$ 331,012					
2019	Butler				\$									
	Repair Roof, Single-Ply EPDM Membrane - EPDM roof around Gym needs to be replaced ASAP				\$ 218,429									
2019	Butler				\$									
	Roof has multiple leaks, based on its age, recommend replacing	\$ 70,000	\$ 124,500	\$ 93,200	\$ 526,000									
2019	Butler				\$									
	Replace Domestic Boiler, Gas,	\$ 41,500	\$ 83,600	\$ 124,900	\$ 34,559	\$ 1,069,000	\$ 1,442,405	\$ 1,153,924	\$ 288,481					
2019	Butler				\$									
	Replace Domestic Boiler, Gas,				\$ 34,559									
2020	Butler				\$									
	Replace Boiler, Gas, 700 MBH				\$ 23,841									
2020	Butler				\$									
	Boiler is not in service, recommend repairing or replacing				\$ 23,841									
2020	Butler				\$									
	Roof, Single-Ply EPDM Membrane, Ballasted	\$ 51,300	\$ 124,500	\$ 93,200	\$ 478,555	\$ 1,013,145	\$ 1,354,166	\$ 1,083,332	\$ 270,833					
2020	Butler				\$									
	Replace Boiler, Gas 1	\$ 41,500	\$ 83,600	\$ 124,900	\$ 54,195									
2021	Butler				\$									
	Replace Boiler, Gas 2				\$ 54,195									
2021	Butler				\$									
	Roof leaks, well beyond useful life, recommend replacing.				\$ 1,802									
2021	Butler				\$									
	Roof leaks, well beyond useful life, recommend replacing.	\$ 51,850	\$ 81,850	\$ 126,500	\$ 102,773									
2021	Butler				\$									
	Replace Window, Aluminum Single-Glazed	\$ 45,025	\$ 98,750	\$ 196,600	\$ 57,024	\$ 787,160	\$ 1,076,889	\$ 861,511	\$ 215,378					
2021	Butler				\$									
	Replace Storefront, Metal-Framed Windows w/out Door(s)				\$ 3,840									
2021	Butler				\$									
	Replace Interior Door, Wood Solid-Core				\$ 56,924									
2021	Butler				\$									
	Replace Interior Door, Fire 90-Minutes and Over				\$ 11,543									
2021	Butler				\$									
	Replace Interior Door, Steel w/ Safety Glass				\$ 27,054									
2021	Butler				\$									
	Replace Interior Door Hardware				\$ 22,500									
2021	Butler				\$									
	Replace Roof, Built-Up	\$ 70,000	\$ 124,500	\$ 93,200	\$ 516,456									
2021	Butler				\$									
	Replace Domestic Boiler, Gas	\$ 41,500	\$ 83,600	\$ 124,900	\$ 42,853	\$ 2,384,082	\$ 3,141,682	\$ 2,513,346	\$ 628,336					
2021	Butler				\$									
	Replace Boiler, Gas, Boiler 1				\$ 332,868									
2021	Butler				\$									
	Replace Boiler, Gas, Boiler 2				\$ 332,868									
2021	Butler				\$									
	Replace Interior Door, Fire 90-Minutes and Over	\$ 62,000	\$ 224,700	\$ 211,900	\$ 105,540									
2021	Butler				\$									
	Replace Interior Door, Wood Solid-Core				\$ 190,697									
2021	Butler				\$									
	Replace Windows, Aluminum, Hopper				\$ 274,121									
2021	Butler				\$									
	Replace Windows, Aluminum, Hopper	\$ 45,025	\$ 98,750	\$ 196,600	\$ 70,105	\$ 1,003,142	\$ 1,376,372	\$ 1,101,097	\$ 275,274					
2021	Butler				\$									
	Replace Roof Finish, Built-Up w/Ballast	\$ 51,850	\$ 127,400	\$ 87,338	\$ 103,680									
2021	Butler				\$									
	Replace Interior Door Hardware				\$ 35,625									
2021	Butler				\$									
	Replace Boiler, Gas, 2400 MBH (2)	\$ 30,585	\$ 103,510	\$ 115,423	\$ 54,195									
2021	Butler				\$									
	Replace Exterior Door, Steel	\$ 30,975	\$ 177,558	\$ 213,495	\$ 4,726,146									
2021	Butler				\$									
	Replace Interior Door, Fire 90-Minutes and Over				\$ 1,900									
2021	Butler				\$									
	Replace Interior Door, Wood Solid- Core				\$ 59,366									
2021	Butler				\$									
	Replace Interior Door, Wood Solid- Core w/ Safety Glass				\$ 388,509									
2021	Butler				\$									
	Replace Interior Door, Wood Solid- Core w/ Safety Glass				\$ 4,276,371									
2021	Butler				\$									
	Replace Roof, Single-Ply PVC Membrane - Lower Roof	\$ 64,109	\$ 244,750	\$ 266,649	\$ 414,180	\$ 1,770,709	\$ 2,299,227	\$ 1,839,381	\$ 459,845					
2021	Butler				\$									
	Replace Roof, Single-Ply PVC Membrane - Upper Roof				\$ 343,785									
2021	Butler				\$									
	Replace Boiler, Gas 1	\$ 30,585	\$ 101,810	\$ 157,725	\$ 120,905									

	Replace Boiler, Gas 2				\$ 120,905				
	Shaughnessy				\$ 617,451				
	Replace Boiler, Gas 1	\$ 30,585	\$ 101,810	\$ 157,725	\$ 54,195				
	Replace Boiler, Gas 2				\$ 54,195				
	Replace Window, Aluminum Double-Glazed	\$ 48,483	\$ 208,650	\$ 144,300	\$ 22,784				
	Replace Window, Aluminum Double-Glazed, Large				\$ 38,300				
	Replace Exterior Door, Entrance				\$ 37,918	\$ 1,229,936	\$ 1,610,338	\$ 1,288,271	\$ 322,068
	Refinish Exterior Door, Steel				\$ 629				
	Replace Exterior Door, Steel, Service				\$ 8,551				
	Replace Overhead Door				\$ 4,026				
	Replace Interior Door (Fire Rated)				\$ 72,559				
	Replace Interior Door				\$ 258,294				
	Replace Door Hardware				\$ 66,000				
	Wang				\$ 536,520	\$ 754,220	\$ 990,304	\$ 792,243	\$ 198,061
	Replace Roof, Single-Ply EPDM Membrane	\$ 51,300	\$ 124,500	\$ 93,200	\$ 536,520				
		\$ 1,439,868	\$ 3910670	\$ 4609628	\$ 14,983,821	\$ 23,201,153	\$ 30,325,303	\$ 24,260,243	\$ 6,065,061

SUMMARY OF RECOMMENDATIONS

Operational Assessment of Lowell Facilities Maintenance and Custodial Services

Page	Finding/Recommendation	Time Frame	Cost Impact
43	Finding 1: The Land & Buildings Division is understaffed when taking into account the total square footage for which it is responsible.		
	<u>Recommendation 1.1:</u> Over the next two fiscal years, add 3-4 FTE technicians to LBD.	FY2019-FY2020	\$297,000
	<u>Recommendation 1.2:</u> At the earliest feasible date, discontinue in house painting services and create a budget line item for outside painting services.	TBD	
	<u>Recommendation 1.3:</u> Consider dividing staff into at least two geographic teams to increase workers' in-depth knowledge of a smaller portfolio of buildings, and to provide management with greater flexibility in making assignments.	Spring 2019	
	<u>Recommendation 1.4:</u> Perform a salary survey to determine if Lowell salaries are competitive, and take steps to make sure salaries and benefits are competitive.	Fall 2018	~\$9,000 for pay & class study
	<u>Recommendation 1.5:</u> Reconsider LBD's role in holiday lighting and other special events.	Spring 2019	
47	Finding 2: The Land & Buildings Division operates predominantly in a response mode, as opposed to a proactive preventative maintenance mode.		
	<u>Recommendation 2.1:</u> Hire an outside firm to develop multi-year preventative maintenance plans for all city and school buildings and prepare a calendar of activities to be undertaken each month and week.	Summer 2019	\$175,000 (includes Rec 3.4 below)
	<u>Recommendation 2.2:</u> Determine which preventative maintenance work should be done in-house and which should be contracted at the start of each fiscal year.	Fall 2019	
	<u>Recommendation 2.3:</u> In the summer of 2018, perform a comprehensive assessment of all school interior and exterior doors and associated locking mechanisms.	Summer 2019	TBD
	<u>Recommendation 2.4:</u> Prior to the close of each school year, develop a punch list of work to be performed at school sites over the summer and determine if additional staff resources will be needed to complete the work.	Annually	
	<u>Recommendation 2.5:</u> Protect facilities maintenance operating budgets from further cuts until an evaluation can be performed regarding the appropriate level of funding needed.	FY2019	
51	Finding 3: City and school facilities management is not adequately staffed or structured to oversee the hundreds of millions of dollars in capital investment needed in the next five to ten years.		
	<u>Recommendation 3.1:</u> Create a new facilities management department reporting to the Assistant City Manager for Operations.	Spring 2019	
	<u>Recommendation 3.2:</u> Create a new Director of Land & Buildings position responsible for managing capital projects and strategically moving LBD from a response mode into a proactive preventative maintenance mode, among other duties.	Spring 2019	\$115,000
	<u>Recommendation 3.3:</u> Consider transferring the Energy Manager position into the new department.	Spring 2019	
	<u>Recommendation 3.4:</u> Hire a firm to conduct a comprehensive assessment of all City facilities and to update the 2014 Capital Needs Assessment for the schools, as needed.		See Rec 2.1 above

SUMMARY OF RECOMMENDATIONS

Operational Assessment of Lowell Facilities Maintenance and Custodial Services

Page	Finding/Recommendation	Time Frame	Cost Impact
55	Finding 4: More than \$140 million in capital investment will be needed in Lowell schools over the next ten years (excluding the high school project). However, other than the high school project, the School District has not pursued MSBA grant funding in recent years.		
	<u>Recommendation 4.1:</u> Contact the MSBA and ask for a formal meeting to familiarize them with the Lowell school building needs identified in the 2104 study, discuss the types of assistance the MSBA can provide, and consider a potential schedule of projects for submission.	Spring 2019	
	<u>Recommendation 4.2:</u> Assign responsibility for coordinating the MSBA application process to the Assistant Superintendent of Finance/School Business Manager along with the administrative oversight of approved projects	Fall 2018	
	<u>Recommendation 4.3:</u> Identify those projects that qualify for MSBA reimbursement and establish a multi-year schedule of applications to be submitted each year.	Spring 2019	Significant savings anticipated
59	Finding 5: In recent months, periods of low temperatures have produced catastrophic building failures which in turn have resulted in extensive damage and building closures.		
	<u>Recommendation 5.1:</u> Ensure that multiple staff are trained on the remote monitoring systems (EMS) in addition to the LBD Deputy Commissioner.	Fall 2018	
	<u>Recommendation 5.2:</u> Develop written protocols that identify specific areas of at risk city and school buildings to be visually checked during extreme weather conditions, and the process by which the overtime assignment(s) are to be made.	Fall 2018	
	<u>Recommendation 5.3:</u> Utilize the vast experience of the current workforce to train newer employees on the specific vulnerabilities of each building so that this knowledgebase continues when experienced employees cease working for the City.	Ongoing	
61	Finding 6: The Land & Buildings Division lacks an electronic tracking system for work needed and performed at City buildings.		
	<u>Recommendation 6.1:</u> Procure and implement a work order system for City facilities.	Fall 2018	Start-up TBD, ongoing ~\$7,000
	<u>Recommendation 6.2:</u> Ensure that the chosen system allows work orders to be delegated electronically from the LBD Deputy Commissioner to assigned tradesmen as a first step to having staff work directly on the electronic system instead of receiving paper copies of work orders.	Fall 2018	
	<u>Recommendation 6.3:</u> Prepare and distribute regular reports on work order backlog including location, type of work, trade(s) needed, etc.	FY2020	
63	Finding 7: Vehicle shortages have required technicians to double up even when jobs do not require two people. Inefficiencies are exacerbated when vehicles are out of service for preventative maintenance or are otherwise inoperable.		
	<u>Recommendation 7.1:</u> Maintain a fleet that is approximately 60% of the size of the workforce that is deployed every morning.	FY2020-FY2022	\$340,000 (incl. replacing aged veh
	<u>Recommendation 7.2:</u> Engage in regular preventative maintenance of vehicles and replace vehicles on a consistent schedule to ensure a higher level of operability.	Ongoing	