LEO A DALY

PLANNING
ARCHITECTURE
ENGINEERING
INTERIORS

memo

To: Kevin Hansen, PE City of Columbia Heights

From: Cindy McCleary, AIA LEED AP

Date: January 3, 2019

Re: Columbia Heights City Hall; facility condition report

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Executive Summary

Leo A Daly performed a building tour to inventory the existing facility conditions of the Columbia Heights City Hall. The facility was reviewed for the purposes of evaluating the building envelope (roof, walls, doors) and infrastructure for the purposes of identifying the condition of the building and developing a rough order of magnitude of costs required to refurbish the building.

Overall, most of all building envelope and systems are beyond their useful life and require full replacement. This includes all windows, doors, roof, elevator, primary mechanical, restrooms, electrical, cabling and plumbing systems. These items have been categorized as Level 1 (1-2-year replacement); Level 2 (2-3-year replacement) and Level 3 (3-7-year replacement), as follows:

Level 1: Exterior Envelope & Elevator Replacement:	$1,455,043
Level 2: HVAC / Electrical / Lighting Restroom Renewal:	$4,761,619
Level 3: Parking Lot & Interior Finish Renewal	$ 429,000
Total Cost of Deferred Maintenance / Renovation:	**$6,645,661**

Typical industry standard for evaluating renovation costs is to review costs relative to the value of the building. Commercial buildings of this era and size appear to be valued at between $1,200,000 – 4,600,000, according to Hennepin County Property Records. Based upon this, post renovation, the value of the building would be less than the value of investment required to bring it up to current performance.

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Additionally, the building possesses inadequate qualities which may not be fully improved through renovation.

- Thirty percent (30%) of the building does not have an elevator or accessible path, and therefore does not meet the Americans with Disabilities Act (ADA) which applies to public and staff accessibility. To do so requires adding a second elevator or ramp. These costs were not included above.
- Fourth percent (40%) of the building is underutilized or inefficiently utilized. This accounts for space the City pays to heat, cool and maintain yet receives no value return from those expenses.
- The building envelope is comprised of brick and concrete block that forms a combination interior and exterior wall, with no insulation, no airspace and no vapor barrier. Not only does this not meet Energy Code, this results in the cracking seen across the mortar joints, the water infiltration across the windows and walls and hot and cold spots within the building offices on outside walls. Though remedial repair was included in the cost, no solutions to correct this condition were priced. The likely solution would consist of constructing an additional inboard wall with airspace, along the entire perimeter of the building on every floor.
- Overall functionality of the building. The building is a split entry with floor at 4 different elevations. The stairs between floors are not consistently meeting building code for egress or ADA. Though handrails and some stair modifications are included in the costs above the stairs will remain. This results in a building difficult or confusing to navigate, and which compartmentalizes staff departments from other departments.

Regardless of whether the City opts to renovate fully, renovate over time, or relocate, we recommend the following activities be commissioned:

1. Conditions were observed that may require additional review for compliance with building code for achieving emergency egress and exit;
2. Conditions were observed that may require Hazardous Materials testing or monitoring;
3. Conditions were observed where electrical or cabling was not fully enclosed, was run unconventionally or has been visibly modified over time. An Arc Fault Review is recommended.

The following documents comprise the full report:

1. Executive Summary
2. City Hall Investigation Tour Narrative w photographs
3. Facility Condition Assessment Cost Matrix

Columbia Heights City Hall Investigation – TOUR 10/30/2018

REPARED BY: LEO A DALY ARCHITECTS & ENGINEERS

Summary:

This building asset summary was performed by Cindy McCleary, Architect, and Riley Olson, EIT of Leo A Daly architects and Engineers. The summary was derived from a visual observation and tour of the existing building. The summary is not fully comprehensive, however, identifies items that became visually apparent during the 3 hour tour.

Existing Building Utilization:

Existing Building Square Footage: 25,700 (about 12, 850 per floor)

3550 GSF is a Leasable Square Footage to a non-government entity.

2800 GSF Underutilized due to being former Fire Bay / Hose tower / showers

3010 GSF Underutilized due to being former Firing Range, police lockers, restrooms, corridor etc.*

1600 GSF Underutilized due to being former jail cells, squad room, garage and investigations* *

9500 GSF Used as Staff Office

5240 GSF Used as Council Chambers, public corridors, restrooms, and public lobbies

*About 300 GSF of the total is being utilized for file storage

** About 200 GSF of the investigations room is being used for elections storage. Jail cells are utilized as storage, however, deemed to be low value items being stored elsewhere

43% of the building is being used for Non-Government or low value (underutilized) uses AND YET even if "mothballed", will still require asset preservation, code compliance updates, window/door replacement yet, will reap no additional effective use.

30% of the building has no Accessible Primary Entry (entry through garages, not considered primary).

Existing Energy Utilization (Note: The building has NO wall or roof insulation)

Gas Utilities: 850 Therms / Mo average Usage or $3.63/square foot.*

Electrical Costs $0.77/square foot

MN Energy Code Building tend to perform between 15-20% than buildings 40+ years old

*City staff have noted that there have been interruptions in meter service, reducing ability to effectively track usage. IT is believed that actual usage is greater than the logged usage noted above.

Functionality:

1. MN Energy Code:
    a. 100% of the building does not meet MN Energy Code, as it includes NO exterior insulation. Replacement of windows, doors and cracks will not change this; WATER

2. Federal Americans with Disabilities Act (Accessibility):
    a. 30% of the building cannot accommodate persons with disabilities; (no elevator to spaces or no access from one staff space to alternative staff space without exiting and re-entering the building.)
    b. 0% of the Entry Vestibules are adequate in size to meet code for egress or accessibility. Replacing doors and improving finishes will not change this;
    c. 100% Refurbishment required on Restrooms. Toilet / Fixture count is believed to be too low. Inadequate number of ADA stalls and sinks. Refurbishment will likely result in less stalls per current space, therefore additional restrooms are assumed to be required.
    d. Drinking fountains do not meet code or accessibility;
    e. Functionality of elevator is inconsistent and declining.

10/30/2018 Asset Review of Building Envelope & Systems

Walking through the Columbia Heights City Hall, we found numerous areas that could prove to be costly in the event of a remodel or upgrade:

1) Electrical service – panels seemed dated and located in public corridors and space.
    a) Random electrical boxes left unfinished or not fully demolished. Not to code.
2) IT wiring.
    a) Communication lines randomly cut and left in place, without labeling. Not to code.
    b) Cabling appears to be antiquated in many cases. Newer cabling could support greater bandwidth.
    c) Staff noted there have been issues with phones or other communications not working. Cut cables could be the issue.
    d) Random conduit boxes are left unfinished or not fully demolished. Not to code.
    e) Some cabling runs appear to not have inadequate support, or run through former plumbing vents or through duct work. Not to code.
3) Mechanical equipment/ductwork – complete system replacement would be invasive, however, likely required to resolve inconsistent heating, cooling and temperature control.
    a) Demo most of ceiling gridwork/tiles to replace above ceiling equipment will be required.
    b) Above ceiling diffuser locations do not provide adequate coverage across facility. Relocation may be necessary.
    c) Return air locations in a number of instances are too close to diffusers, effectively “exhausting heat” before it reaches building occupants.
    d) Some diffuser locations are too close or too far from thermostat resulting in poor reading.
    e) If building is renovated, full distribution replacement recommended. This will result in full ceilings replacement, likely also resulting in full lighting and full cabling replacement as well as

likely and expected refurbishment to fire barriers and removal of above-ceiling vacated equipment.

4) Lighting upgrade – after mechanical upgrades, replacement LED fixtures to be installed.

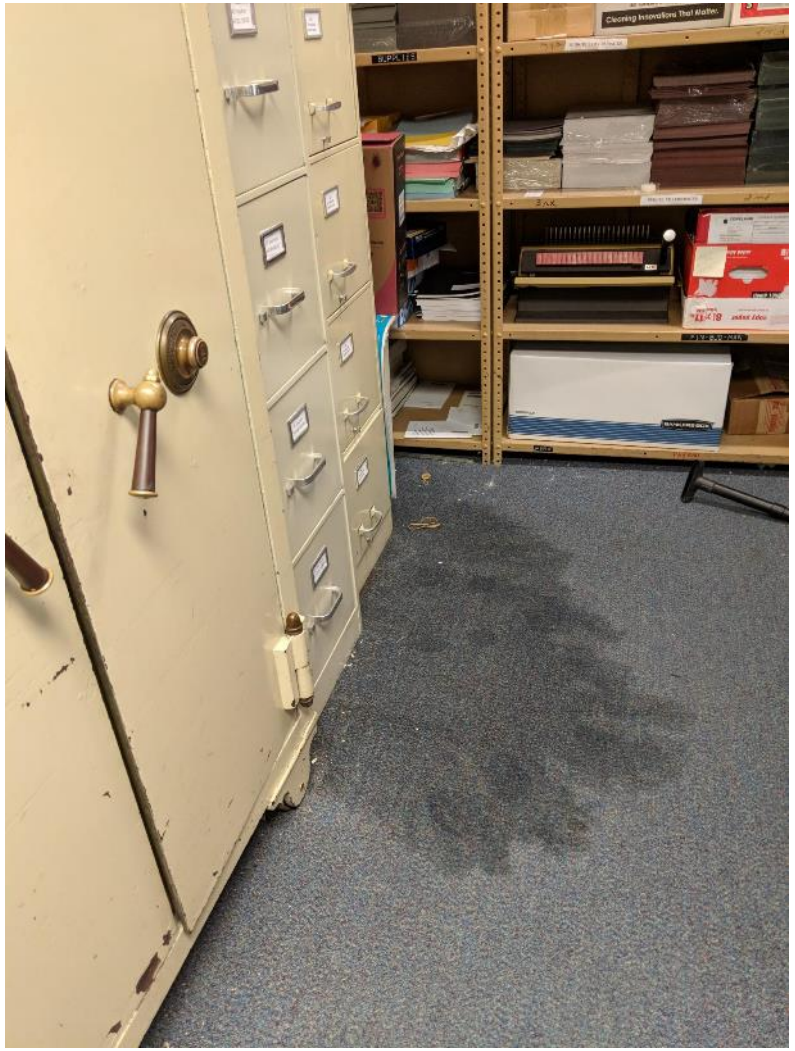
5) Window replacement;
   a) Many windows have completely failed. Failed seals in some instances appear to be due to building movement causing the window frame to no longer be rectangular resulting in milky residue left between window panes.
   b) Leaks on front office equipment (IT and Finance) near windows and in finance directors office was observed.
   c) Interior and Exterior conditions show inadequate, poor wicking away of water, resulting in migrating water to the interior of the building, and water penetration through brick and block which further deteriorates brick and block.
   d) Walls around office windows on second floor deteriorating. Not clear if water is still present, damage is evident.
6) Entryway door replacement – doorframe heaved and door cannot be fully opened. Not code compliant.
   a) Front entrance tiles shifted/breaking and being replaced with concrete.
   b) Inadequate distance between swinging doors will result in exiting individual being struck by door during exit. Not code compliant.
   c) Door seals appear to have failed allowing water into the building.
7) Elevator replacement –
   a) Full elevator replacement is necessary. Equipment is failing and obsolete.
   b) Existing structural shaft is not large enough; barely big enough to get wheelchair in. Best practice is to be sized to wheelchair and personal care assistance in case of emergency.
   c) Elevator shaft size increase is required – structural investigation of the ability of the building structure to accommodate this, should be investigated.
   d) Motor size increase for larger carring capacity will be required – power feeder increase needed.
   e) Did not view hoistway, however, given age of equipment it is anticipated that drain may not be present or functioning, fire suppression may not be present, venting may not be present and control system likely obsolete.
   f) IS office (former public safety) floor levels do not support access by the current elevator. To achieve accessibility a second elevator requires entering through a garage stall. This does not meet ADA guidelines.
8) Unusual travel for outside public to different areas within city hall.
   a) Some areas the public may visit is not adequately accessible (accessibility is currently gained through a conference room).
   b) Some area of the building is not accessible shall a staff person require access
   c) Door locking and controls to still enable adequate egress were not investigated but should be.
   d) Egress analysis to confirm adequate egress width, capacity and functionality was not performed. However, signs on some doors indicated that are not to be used and alternate paths have been identified, however, egress lighting and other support systems may not be in-place adequately.

9) Water damage; prolific throughout.
    a) Difficult to distinguish new from resolved conditions however, many conditions appeared to be currently receiving water.
    b) In basement. Mold growing on sheetrock in multiple areas.
    c) Ceiling tiles. Mold growing on sheetrock in multiple areas.
    d) In office space near IT room. AC wall unit leaks down into first level offices. Walls being wet potential for mold growth. Deterioration was observed.
    e) In former police stairwell over 5-6 electrical junction boxes, water leaks were observed. Some electrical boxes were open.
10) Bricks outside deteriorating and falling from building.
    a) Brick failure is significant on north side of building. Water infiltration is likely. Did not review structural system, however, exterior wall system appears to be composite CMU/Brick construction without air space, vapor barrier or insulation resulting in transfer of heat and cold without thermal break, transfer of water interior to exterior.
    b) IT appears by the wall construction that no exterior wall insulation is present. Not code compliant.
    c) Cinderblocks cracking showing deterioration, movement and water transmission. Due to wall construction, these conditions can be mitigated with products but not resolved due to antiquated exterior wall system, no insultation, vapor barrier or air space.
11) Roof replacement
    a) Staff noted the project to be scheduled in 2020. Roughly $600K estimated.
    b) Water standing on roof, not draining correctly.
    c) Vacated equipment appears to be present (police radio tower and potentially other) and should be removed.
    d) Cabling is inadequately run across the top of the roof with no protection to either.
    e) Mechanical curbs appear to be mounted to roof, are exposed wood and not flashed in. These are likely culprits to water infiltration.
12) Odd egress pathways out of basement for employees. No emergency elevator or ground level egress.
13) Stairs
    a) Seem to vary in height and tread depth. Besides being a Trip hazard for public and personnel, could be not in compliance with code. (some variation is allowable per code. Measurements were not taken but visibly observed).
14) Restrooms
    a) Full replacement required. Inadequate ADA stalls, inadequate ambulatory stalls, sinks do not meet ADA. One condition included a Drain pipe wrapped (appeared to be asbestos wrapped) which drains directly into public restroom sink. Recommend this condition be tested and preventively protected to eliminate erosion or wrap by sink water.
    b) No toilet stall count was performed; however, it appears to be inadequate in quantity. Especially during secured office / public events as restrooms in secured staff areas cannot be counted toward serving the need.

15) Smoke Barriers / Fire Barriers
    a) Visual observation only occurred, however, some ceiling areas had removed ceiling tiles and observed areas where original ceiling material had been removed, exposing steel structure. Possible that the Fire/smoke compartments have been compromised and are not up to code.
    b) Areas of partially demo'd systems, including removal of pipes but the hole through walls still remains open, or conduct without box cover. These conditions could be potential fire pathway or hazards and should preventatively, minimally be covered.
16) Microwaves, space heaters and other high draw equipment were plugged into power strips, appear to over-demand the electrical supply.
    a) Not to electrical code for that many power strips or that equipment supplied from power strip.
    b) Not sufficient number of receptacles.
    c) Prolific instances of inadequate power throughout.
17) Employee wrapped heater register.
    a) Some registers were compromised in order for occupant to control heat (one condition in which staff person self-insulated the radiator to avoid heating during summer.)
    b) Some registers were compromised as staff indicated that particulate blew from register and compromised equipment below, therefore, register was covered.
    c) Ventilation system cleanout. Box in front of register in IT setup room to avoid dust/dirt being blown on to equipment.
18) Sauna placed in boxing area. Building not sufficiently designed for that use.
19) Staff noted that random doors lock and can trap employees in areas where the keys or cell phones don't work.
20) Second floor corridor not ADA width.
21) Showers and drains in old firehouse area not being used. Smells seep into area.
22) Supply and return air duct placements bad for thermostats in Finance department.
    a) Improper location of air supply or return resulting in inability Can't keep room warm or cold because air flow doesn't allow air to hit thermostat.
23) Based upon staff discussion, it has been identified that lower level mechanical room water infiltration had been solved years prior to today with the installation of sump pumps and drain tile. Since that installation, no further water was observed inside, however, the pumps do run continuously and have burned out at a more frequent pace than expected.

<u>IF the City chooses to remain in this building, in addition to resolving the preventative and replacement of items above, Leo A Daly recommends the following additional assessments be commissioned:</u>

1. Conditions observed that may require additional egress and exit review
2. Conditions observed that may require Hazardous Materials testing or monitoring
3. Conditions observed that may require Arc Fault Review
4. Other, as determined through review / discussion.



Evidence of Water Infiltration

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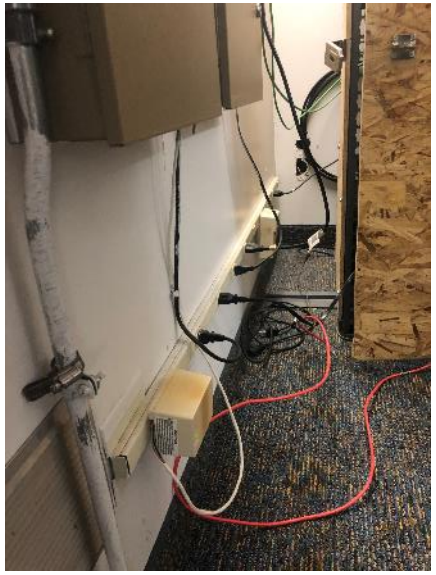
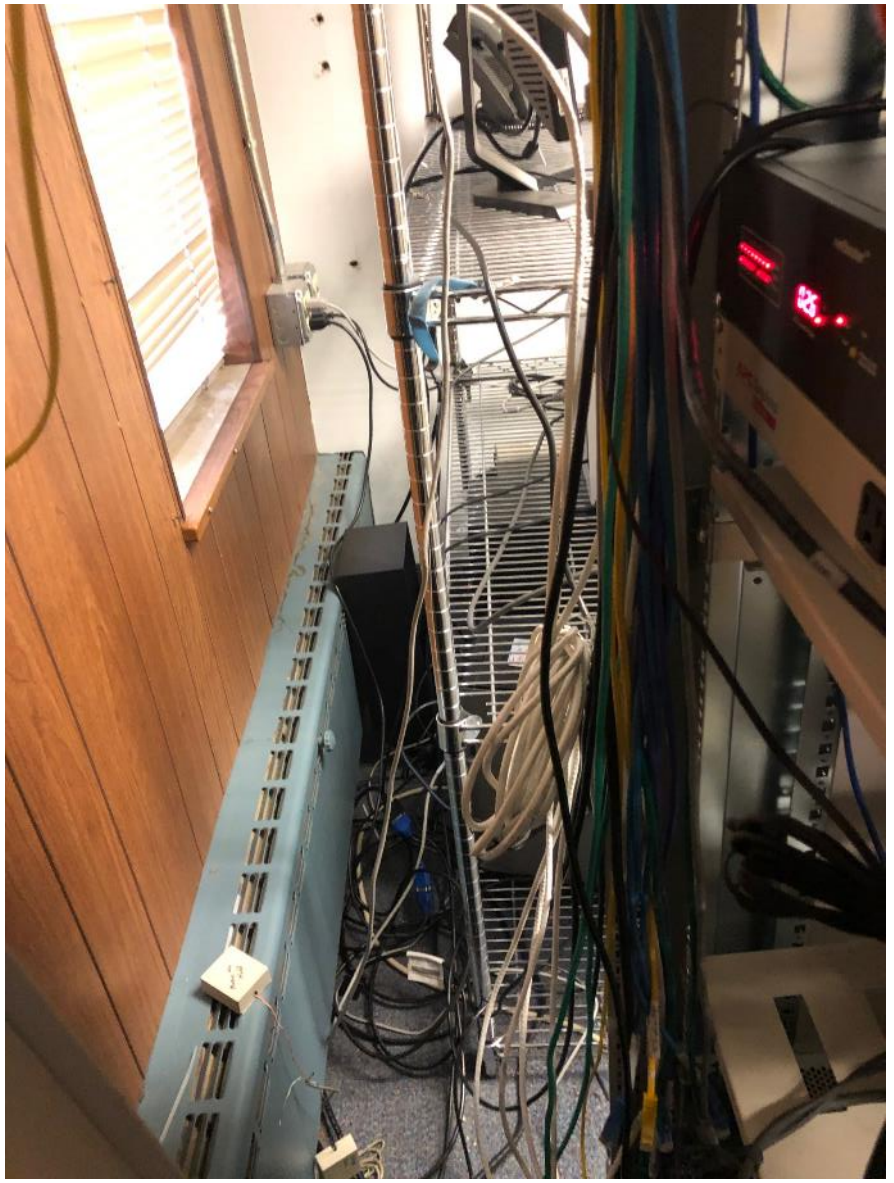
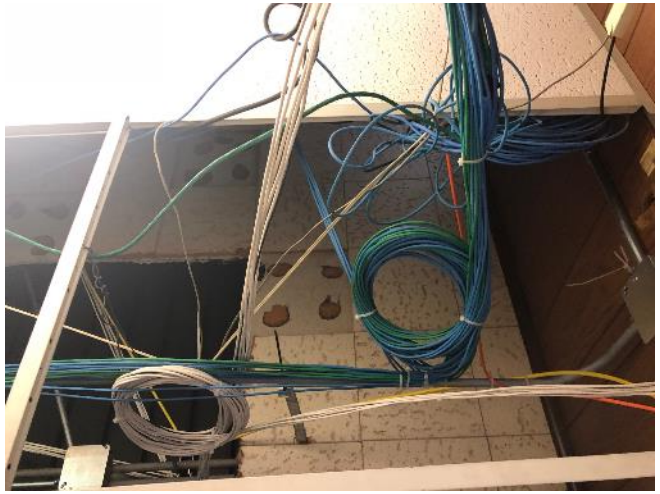
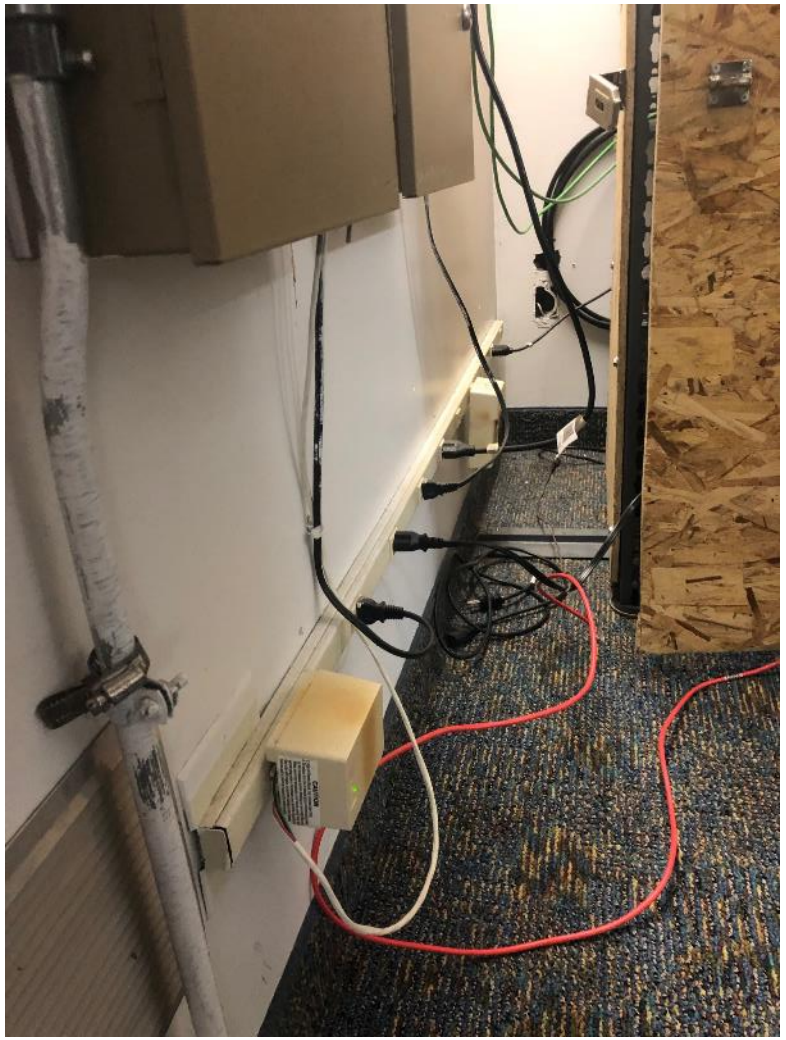




Evidence of Inadequate Power Capacity / Wiring Integrity





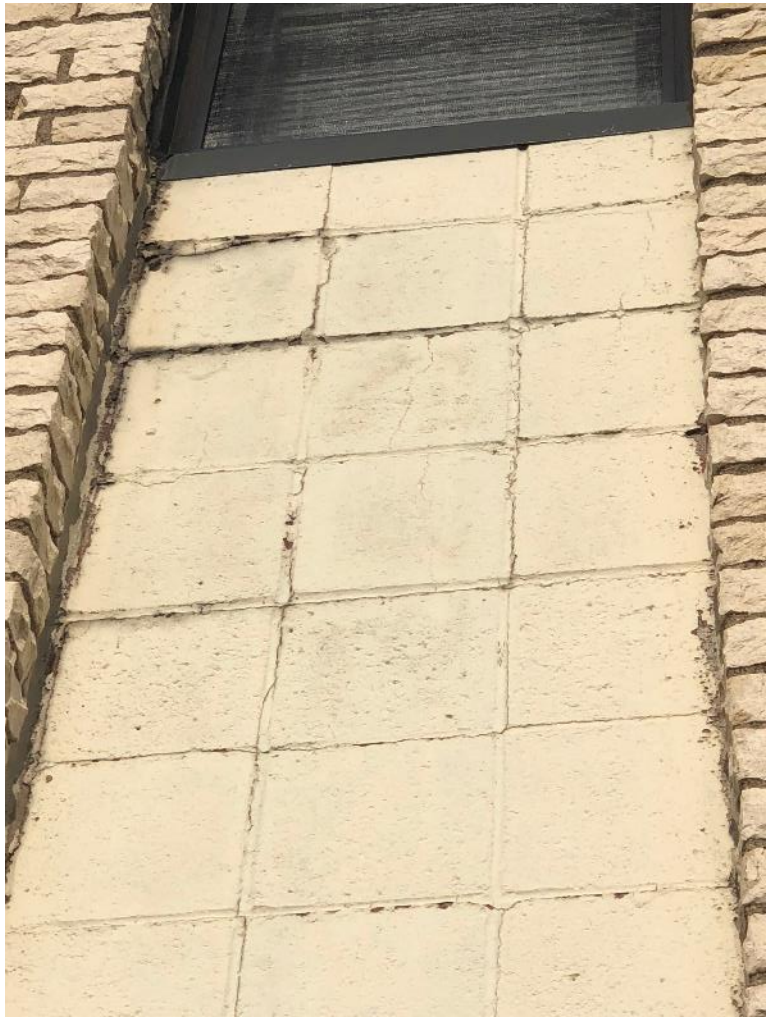
Evidence of Inadequate Power Capacity / Wiring Integrity

Multiple Instances of Incomplete Demo of Antiquated Systems

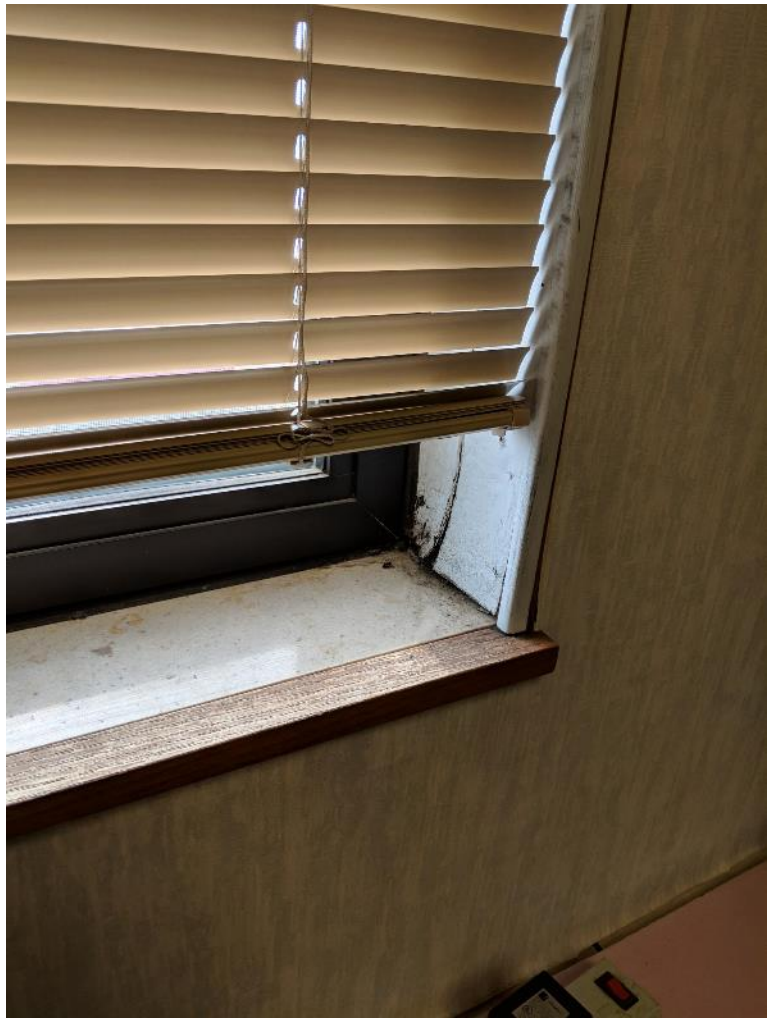
Evidence of Inadequate Accessibility

Evidence of Exterior Wall Failure

Evidence of Roof Inadequacy



Evidence of Exterior Wall Failure / Water Intrusion



Evidence of Exterior Wall Failure / Water Intrusion

FACILITY CONDITION ASSESSMENT - COST SUMMARY FOR CAPITAL MAINTENANCE

CLIENT NAME	**CITY OF COLUMBIA HEIGHTS**	**ISSUE DATE**	:	**13-Jan-19**
DEPARTMENT NAME / SCOPE	**CITY HALL BUILDING ASSESSMENT**	REVISION #1	:	
LOCATION	**COLUMBIA HEIGHTS MN**	REVISION #2	:	
LEO A DLAY PROJECT NUMBER	**PUB-LICINST-000**	REVISION #3	:	

TABLE 1: FIVE YEAR NEEDS

NOTE: ALL COSTS REPRESENT 2020 DOLLARS - ESCALATION TO YEAR OF BIDDING WILL BE NECESSARY. ADDITION OF OWNER SOFT COSTS NOT INLCUDED.

CAPITAL MAINTENANCE IDENTIFIED IS BASED UPON LIMITED CHANGE OF USE AND WORK NECESSARY FOR ASSET PRESERVATION AND / OR MOTHBALLING ONLY. MODERATE TO ADVANCED RENOVATION WILL REQUIRE ADDITIONAL WORK AND FULL REPLACEMENT WITH MODERN SYSTEMS FROM SERVICE THRU DISTRIBUTION

LOW	**PRIORITY 3**	REQUIRES WORK IN 3-7 YEARS
MID	**PRIORITY 2**	REQUIRES WORK 2-3 YEARS
HIGH	**PRIORITY 1**	REQUIRES WORK 1-2 YEARS & ASSET PRESERVATION

DISCIPLINE	LEVEL	REQUIREMENT NAME	CATEGORY		COSTS	DUE DATE
BUILDING #1 - CAPITAL MAINTENANCE NEEDS BY PRIORITY YEAR						
	METRICS	**SQUARE FOOTAGE**	**STORIES**			
	BUILDING #1	28,913	2.25			
A	HIGH	EXTERIOR BRICK TUCKPOINTING - ALLOWANCE	PERFORMANCE BEYOND USEFUL LIVE	$	35,000	2019
A	HIGH	EXTERIOR BRICK - WALL RECONSTRUCTION CORRECT MOVEMENT CONDITIONS - ALLOWANCE	PERFORMANCE BEYOND USEFUL LIVE	$	85,000	2019
A	HIGH	EXTERIOR BRICK - JOINT SEALANTS & CAULKING	PERFORMANCE BEYOND USEFUL LIVE	$	25,000	2019
A	HIGH	EXTERIOR ENTRY DOOR REPLACEMENTS /ALL EGRESS ENTRIES	BEYOND USEFUL LIFE / ADA / CODE EGRESS	$	100,000	2019
A	HIGH	HANDICAP DOOR OPERATOR @ VESTIBULES + CARD ACCESS REPLACEMENT	ADA / BUILDING CODE	$	40,000	2019
A	HIGH	EXTERIOR GARAGE DOORS - 40TH STREET SIDE ONLY	BEYOND USEFUL LIFE	$	20,000	2019
A	HIGH	PUNCHED WINDOW REPLACEMENT - FACILITY WIDE	PERFORMANCE BEYOND USEFUL LIVE	$	175,000	2019
A/E/M	HIGH	ELEVATOR MODERNIZATION - ELEV1 (NO HOISTWAY CHANGE)	PERFORMANCE BEYOND USEFUL LIVE	$	300,000	2019
A	HIGH	ROOF REPLACEMENT & INSULTATION (FULL TEAR OFF & REMOVAL OF VACANT EQUIPMENT & PATCHING	BEYOND USEFUL LIFE	$	665,000	2019
A	HIGH	PARAPET COPING JOINT REPLACEMENT - ROOF REPLACEMENT	BEYOND USEFUL LIFE	$	10,043	2019
		TOTAL COST OF PRIORITY LEVEL 1 (HIGH) CAPITAL MAINTENANCE FOR PRESERVATION		$	1,455,043	
A	MID	RESTROOM REFURBISHMENT - FACILITY WIDE (EXCEPT @ COUNCIL	ADA / BUILDING CODE	$	400,000	2021
A	MID	BUILDING WALL INSUATION - NONE PRESENT. NO IMMEDIATE FIX IDENTIFIED	BUILDING CODE	$	-	2021
A	MID	WINDOW - SILL REPLACEMENT - BUILDING WIDE	PRESERVE ASSET	$	10,000	2021
E	MID	FIRE CONTROL CENTER REPLACEMENT	LIFE SAFETY	$	70,000	2021
E	MID	ELECTRICAL SERVICE PANEL - REPLACEMENT	BUILDING CODE	$	289,104	2021
E	MID	DATA / IT - DEVICE REPLACEMENT, FACILITY WIDE / PARTIAL DEMO FACILITY	BEYOND USEFUL LIVE / CODE	$	55,000	2021
E	MID	LIGHTING - EXTERIOR FACILITY WIDE & THOSE NOT REPLACED W CEILING (ALL WITH LED)	ENERGY	$	55,000	2021
E	MID	EGRESS & EXIT LIGHTING - DEVICE REPLACEMENT, FACILITY WIDE	LIFE SAFETY	$	55,000	2021
E	MID	ELECRICAL DISTRIBUTION SYSTEM AND PANELS - PARTIAL REPLACEMENT	BUILDING CODE	$	360,000	2021
A	MID	(4.5) STAIR TREADS / RISERS / HANDRAILS @ LANDINGS CORRECT TO CODE	ADA / BUILDING CODE	$	135,000	2021
A	MID	WALL & PLASTER REPAIR AT WATER MITIGATION	GEN MAINTENANCE	$	35,000	2021
A	MID	EXTERIOR CURTAINWALL REPLACEMENT - FORMER POLICE ENTRY & CHAMBERS HALLWAY	BEYOND USEFUL LIFE	$	95,000	2021
M	MID	HVAC - BOILERS, HEATERS, PIPING AND COILS REPLACEMENT	ENERGY	$	350,000	2021
M	MID	HVAC - PUMPS, PIPING, AND COILS REPLACEMENT	ENERGY	$	540,000	2021
M	MID	HVAC - AIR HANDLING UNIT REPLACEMENT	ENERGY	$	400,000	2021
M	MID	HVAC - DUCT WORK AND AIR TERMINALS LEAKING / INCONSISTENT - (INCLUDED IN CEILING REPLACEMENT)	PERFORMANCE BEYOND USEFUL LIVE	$	-	2021
M	MID	ABATEMENT - FACILITY WIDE ON PIPES / FLOORS OTHERS	PERFORMANCE BEYOND USEFUL LIVE	$	-	2021
A	MID	CEILING REPLACEMENT - BUILDING WIDE (INCLUDES ALL ABOVE CEILING INFRASTRUCTURE)	PERFORMANCE BEYOND USEFUL LIVE	$	1,841,458	2021
A	MID	SIDEWALK REPLACEMENTS	GEN MAINTENANCE	$	10,000	2021
		TOTAL COST OF PRIORITY LEVEL 2 (MID) CAPITAL MAINTENANCE FOR PRESERVATION		$	4,761,619	
C/L	LOW	MILL AND OVERLAY BITUMINIOUS PARKING	BEYOND USEFUL LIFE	$	30,000	2023
C/L	LOW	PARKING LOT LIGHTING - FIXTURE REPLACEMENT	BEYOND USEFUL LIFE	$	15,000	2023
C/L	LOW	SIDEWALK / RAMP REPLACEMENT FOR ADA ACCESSIBILITY	ADA / BUILDING CODE	$	24,000	2023
A	LOW	INTERIOR PAINT - REFURBISHMENT	RENEWAL	$	-	2023
A	LOW	COUNCIL CHAMBERS REFURBISHMENT	RENEWAL	$	-	2023
A	LOW	FLOOR MATERIAL REPLACEMENT	RENEWAL	$	360,000	2023
		TOTAL COST OF PRIORITY LEVEL 3 (LOW) CAPITAL MAINTENANCE FOR PRESERVATION			$429,000	
		TOTAL COST OF PRIORITY LEVEL 1-3 CAPITAL MAINTENANCE FOR PRESERVATION			$6,645,661	