

Property Condition Assessment

**Millers Falls Library
23 Bridge Street**

Millers Falls, MA



Prepared for:

Town of Montague

1Avenue A

Montague, MA 01376

January 15, 2021

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1 EXECUTIVE SUMMARY

1.1 Building Description

Originally constructed in 1900, the Millers Falls Library located at 23 Bridge Street (the "Property") is a one (1) story building with a partially below grade basement containing a total area of +/- 1,886 sq. ft. The Property is situated on a 0.051 acre (+/-2,222 sq. ft.) parcel of land. The Millers Falls Library is bounded to the north by King Avenue, to the east by adjacent residential buildings with Franklin Street beyond, to the south by a residential property with E. Main Street beyond and to the west by Bridge Street. The site is generally level

1.2 Condition

In general, based on our visual observations, interviews and research, the building appears to be in FAIR condition.

The Property appears to have been constructed in two phases, the front portion on Bridge Street and an addition behind. The building has two roof areas, one over the front portion and one over the rear portion. These roofs were not accessible during the walk-through inspection and were viewed from adjacent exterior stairs. The roofs are shed style covered with asphalt shingle. Storm water at the roofs by sheet action to the site at grade. The roof at the front section was replaced within the past 10-15 years and appeared in good condition while the roof over the rear section was replaced prior to the front section. The asphalt shingles at the rear section were observed to be cupping and curling. It is anticipated that the rear roof will require replacement earlier in the evaluation term while the front roof will require replacement late in the evaluation term.

The façade of the Property is brick masonry consisting of traditional brick at the front section and a combination of rusticated block and concrete masonry unit ("CMU") block at the rear section. There is wood siding above the masonry walls under the pitch of the shed roof. The exterior of the Property was painted in 2019. Generally, the exterior walls appeared in good condition and will require normal painting throughout the evaluation term.

Windows located on the north elevation are single pane glass set in a steel frame. These windows have an interior plexi-glass storm window. The main entrance on Bridge Street is an aluminum frame storefront system. The windows and storefront were observed to be in fair condition and will require a combination of repairs and replacement over the evaluation term.

The building appears to be masonry bearing wall construction with wood framing for floors, interior walls and roof. At the basement, it was observed that there were several structural repairs made to address rotting of wood timber beams at the beam pockets in the foundation wall and also below the main entrance. Steel lally columns installed to support the wood timber beams were observed. The bases of the lally columns were observed to be heavily corroded due to the damp environment. The observed structural repairs at the wood timber beams did not appear to be adequate and will require evaluation and additional reinforcement. Corroded lally columns will also require replacement during the evaluation term.

The heating system is a combination of hot water baseboard radiation in the front section and forced hot air by hot water in the rear section. A single oil fired boiler located in the basement generates hot water for heating. The Property does not have central air conditioning, however there is a single window mounted air conditioner located in the front section of the building. The boiler appears to have been installed in 1974 and is forty-six (46) years old. The basement is a damp environment and the boiler was observed to have heavy corrosion on the exterior of the front boiler section. It is anticipated the boiler will require replacement in the near term.

The electrical service is provided by the utility company, Eversource via a pole mounted transformer located at the on Bridge Street. The utility company transformer feeds a 100-amp main disconnect. The main disconnect in turn feeds a 120/208, single (1) phase, three wire "Stab-Lok" load center manufactured by Federal Pacific. In addition to the advanced age of the electrical systems, the Stab-Lok panels manufactured by Federal Pacific are recognized as a potential hazard. The electrical systems should be replaced early in the evaluation term.

The Property is served with a one inch (1") incoming domestic water service from King Avenue provided by the Town of Montague. Domestic hot water is provided by the boiler via a thermostatic valve.

The Property does not have a fire protection (sprinkler) system or fire alarm system.

The Property has elements of handicapped accessibility including an accessible entrance and restroom. Minor issues were observed regarding insulation on the sink drain and the mounting height of the mirror in the restroom.

The major capital items identified in the report relate to replacement of the roofs, replacement of the windows and storefront systems and replacement of the hot water boiler during the fifteen (15) year evaluation period. Anticipated capital and repair costs are summarized in Section 1.3.

1.3 Summary of Costs

Costs associated with the correction of present observed issues, deficiencies, deferred maintenance and component and systems replacements are as follows (in thousands of dollars):

MILLERS FALLS LIBRARY

Millers Falls Library																		
Summary of Costs by Building System and Priority																		
Cost per Year (\$1,000's)																		
Building System Summary	Immediate	2022	2023	2024	2025	2026	2027	2028	2029	2030	2031	2032	2033	2034	2035	2036	Total	
5.1	Site & Features at Grade	\$0.0	\$2.3	\$0.0	\$0.0	\$0.0	\$0.0	\$0.0	\$0.0	\$0.0	\$0.0	\$0.0	\$0.0	\$0.0	\$0.0	\$0.0	\$2.3	
5.2	Roofing	\$0.0	\$1.7	\$0.0	\$0.0	\$0.0	\$8.2	\$0.0	\$0.0	\$0.0	\$0.0	\$0.0	\$0.0	\$0.0	\$0.0	\$0.0	\$6.3	
5.3	Exterior Walls	\$0.0	\$5.0	\$0.0	\$3.3	\$0.0	\$0.0	\$11.2	\$0.0	\$0.0	\$19.8	\$0.0	\$8.5	\$0.0	\$0.0	\$0.0	\$47.7	
5.4	Structural Systems	\$0.0	\$2.0	\$5.5	\$5.5	\$0.0	\$5.0	\$0.0	\$0.0	\$0.0	\$1.1	\$0.0	\$0.0	\$0.0	\$0.0	\$0.0	\$19.1	
5.5	Interior Elements	\$0.0	\$0.0	\$0.0	\$0.0	\$0.0	\$2.2	\$0.0	\$3.9	\$0.0	\$0.0	\$0.0	\$0.0	\$0.0	\$0.0	\$0.0	\$6.1	
5.6	Specialties, Equipment, etc.	\$0.0	\$0.0	\$0.0	\$0.0	\$0.0	\$0.0	\$0.0	\$0.0	\$0.0	\$0.0	\$0.0	\$0.0	\$0.0	\$0.0	\$0.0	\$0.0	
5.7	Vertical Transportation	\$0.0	\$0.0	\$0.0	\$0.0	\$0.0	\$0.0	\$0.0	\$0.0	\$0.0	\$0.0	\$0.0	\$0.0	\$0.0	\$0.0	\$0.0	\$0.0	
5.8	HVAC	\$0.0	\$1.8	\$0.2	\$0.2	\$8.4	\$0.2	\$0.2	\$0.2	\$0.2	\$1.8	\$0.2	\$0.2	\$0.2	\$0.2	\$0.2	\$14.0	
5.9	Plumbing	\$0.0	\$0.0	\$0.0	\$0.0	\$0.0	\$0.0	\$0.0	\$0.0	\$0.0	\$0.0	\$0.0	\$0.0	\$0.0	\$0.0	\$0.0	\$0.0	
5.10	Fire Protection	\$0.0	\$0.0	\$0.0	\$0.0	\$0.0	\$0.0	\$0.0	\$0.0	\$0.0	\$0.0	\$0.0	\$0.0	\$0.0	\$0.0	\$0.0	\$0.0	
5.11	Electrical System, Telephone	\$0.0	\$0.0	\$3.9	\$0.0	\$0.0	\$0.0	\$0.0	\$0.0	\$0.0	\$0.0	\$0.0	\$0.0	\$0.0	\$0.0	\$0.0	\$3.9	
5.12	Lighting	\$0.0	\$0.0	\$0.0	\$0.0	\$0.0	\$0.0	\$0.0	\$0.0	\$0.0	\$0.0	\$0.0	\$0.0	\$0.0	\$0.0	\$0.0	\$0.0	
5.13	Fire Alarm & Life Safety	\$0.0	\$1.7	\$0.0	\$0.0	\$0.0	\$0.3	\$0.0	\$0.0	\$0.0	\$0.3	\$0.0	\$0.0	\$0.0	\$0.0	\$0.3	\$2.6	
5.14	Accessibility	\$0.0	\$0.4	\$0.0	\$0.0	\$0.0	\$0.0	\$0.0	\$0.0	\$0.0	\$0.0	\$0.0	\$0.0	\$0.0	\$0.0	\$0.0	\$0.4	
5.15	Environmental, IAQ	\$0.0	\$0.0	\$0.0	\$0.0	\$0.0	\$0.0	\$0.0	\$0.0	\$0.0	\$0.0	\$0.0	\$0.0	\$0.0	\$0.0	\$0.0	\$0.0	
	LEED																	
	TOTAL	\$0.0	\$14.8	\$9.5	\$9.0	\$8.4	\$15.9	\$11.4	\$4.0	\$0.2	\$0.2	\$23.0	\$0.2	\$8.6	\$0.2	\$0.2	\$6.8	\$112.3
	CUMMULATIVE	\$0.0	\$14.8	\$24.3	\$33.3	\$41.7	\$57.6	\$68.9	\$73.0	\$73.1	\$73.3	\$96.3	\$96.5	\$105.1	\$105.3	\$105.5	\$112.3	

MILLERS FALLS LIBRARY

Millers Falls Library																	
Summary of Costs by Building System and Priority																	
Broken Out By R&M and CE																	
SUMMARY OF COST BY YEAR FOR REPAIR & MAINTENANCE																	
Cost per Year (\$1,000's)																	
Building System Summary	Immediate	2022	2021	2022	2023	2024	2025	2026	2027	2028	2029	2030	2031	2032	2033	2034	Total
5.1 Site & Features at Grade	\$0.0	\$2.3	\$0.0	\$0.0	\$0.0	\$0.0	\$0.0	\$0.0	\$0.0	\$0.0	\$0.0	\$0.0	\$0.0	\$0.0	\$0.0	\$0.0	\$2.3
5.2 Roofing	\$0.0	\$1.5	\$0.0	\$0.0	\$0.0	\$0.0	\$0.0	\$0.0	\$0.0	\$0.0	\$0.0	\$0.0	\$0.0	\$0.0	\$0.0	\$0.0	\$1.5
5.3 Exterior Walls	\$0.0	\$4.5	\$0.0	\$3.0	\$0.0	\$0.0	\$10.2	\$0.0	\$0.0	\$0.0	\$0.0	\$0.0	\$7.7	\$0.0	\$0.0	\$0.0	\$25.4
5.4 Structural Systems	\$0.0	\$2.0	\$0.0	\$0.0	\$0.0	\$0.0	\$0.0	\$0.0	\$0.0	\$0.0	\$1.0	\$0.0	\$0.0	\$0.0	\$0.0	\$0.0	\$3.0
5.5 Interior Elements	\$0.0	\$0.0	\$0.0	\$0.0	\$0.0	\$2.0	\$0.0	\$3.5	\$0.0	\$0.0	\$0.0	\$0.0	\$0.0	\$0.0	\$0.0	\$0.0	\$5.5
5.6 Specialties, Equipment, etc.	\$0.0	\$0.0	\$0.0	\$0.0	\$0.0	\$0.0	\$0.0	\$0.0	\$0.0	\$0.0	\$0.0	\$0.0	\$0.0	\$0.0	\$0.0	\$0.0	\$0.0
5.7 Vertical Transportation	\$0.0	\$0.0	\$0.0	\$0.0	\$0.0	\$0.0	\$0.0	\$0.0	\$0.0	\$0.0	\$0.0	\$0.0	\$0.0	\$0.0	\$0.0	\$0.0	\$0.0
5.8 HVAC	\$0.0	\$1.7	\$0.2	\$0.2	\$0.2	\$0.2	\$0.2	\$0.2	\$0.2	\$0.2	\$0.2	\$0.2	\$0.2	\$0.2	\$0.2	\$0.2	\$3.8
5.9 Plumbing	\$0.0	\$0.0	\$0.0	\$0.0	\$0.0	\$0.0	\$0.0	\$0.0	\$0.0	\$0.0	\$0.0	\$0.0	\$0.0	\$0.0	\$0.0	\$0.0	\$0.0
5.10 Fire Protection	\$0.0	\$0.0	\$0.0	\$0.0	\$0.0	\$0.0	\$0.0	\$0.0	\$0.0	\$0.0	\$0.0	\$0.0	\$0.0	\$0.0	\$0.0	\$0.0	\$0.0
5.11 Electrical System, Telephone	\$0.0	\$0.0	\$0.0	\$0.0	\$0.0	\$0.0	\$0.0	\$0.0	\$0.0	\$0.0	\$0.0	\$0.0	\$0.0	\$0.0	\$0.0	\$0.0	\$0.0
5.12 Lighting	\$0.0	\$0.0	\$0.0	\$0.0	\$0.0	\$0.0	\$0.0	\$0.0	\$0.0	\$0.0	\$0.0	\$0.0	\$0.0	\$0.0	\$0.0	\$0.0	\$0.0
5.13 Fire Alarm & Life Safety	\$0.0	\$1.7	\$0.0	\$0.0	\$0.0	\$0.3	\$0.0	\$0.0	\$0.0	\$0.0	\$0.3	\$0.0	\$0.0	\$0.0	\$0.0	\$0.3	\$2.6
5.14 Accessibility	\$0.0	\$0.4	\$0.0	\$0.0	\$0.0	\$0.0	\$0.0	\$0.0	\$0.0	\$0.0	\$0.0	\$0.0	\$0.0	\$0.0	\$0.0	\$0.0	\$0.4
5.15 Environmental, IAQ	\$0.0	\$0.0	\$0.0	\$0.0	\$0.0	\$0.0	\$0.0	\$0.0	\$0.0	\$0.0	\$0.0	\$0.0	\$0.0	\$0.0	\$0.0	\$0.0	\$0.0
LEED																	
TOTAL	\$0.0	\$14.0	\$0.2	\$3.2	\$0.2	\$2.5	\$10.4	\$3.7	\$0.2	\$0.2	\$1.5	\$0.2	\$7.9	\$0.2	\$0.2	\$0.5	\$44.5
CUMMULATIVE	\$0.0	\$14.0	\$14.2	\$17.3	\$17.5	\$20.0	\$30.3	\$34.0	\$34.1	\$34.3	\$35.7	\$35.9	\$43.7	\$43.9	\$44.0	\$44.5	

MILLERS FALLS LIBRARY

MILLERS FALLS LIBRARY																		
Summary of Costs by Building System and Priority																		
Broken Out By R&M and CE																		
SUMMARY OF COST BY YEAR FOR CAPITAL EXPENDITURE																		
Cost per Year (\$1,000's)																		
Building System Summary	Immediate	2022	2021	2022	2023	2024	2025	2026	2027	2028	2029	2030	2031	2032	2033	2034	Total	
5.1 Site & Features at Grade	\$0.0	\$0.0	\$0.0	\$0.0	\$0.0	\$0.0	\$0.0	\$0.0	\$0.0	\$0.0	\$0.0	\$0.0	\$0.0	\$0.0	\$0.0	\$0.0	\$0.0	
5.2 Roofing	\$0.0	\$0.2	\$0.0	\$0.0	\$0.0	\$8.2	\$0.0	\$0.0	\$0.0	\$0.0	\$0.0	\$0.0	\$0.0	\$0.0	\$0.0	\$0.0	\$6.3	\$14.7
5.3 Exterior Walls	\$0.0	\$0.5	\$0.0	\$0.3	\$0.0	\$0.0	\$1.0	\$0.0	\$0.0	\$0.0	\$19.8	\$0.0	\$0.8	\$0.0	\$0.0	\$0.0	\$0.0	\$22.3
5.4 Structural Systems	\$0.0	\$0.0	\$5.5	\$5.5	\$0.0	\$5.0	\$0.0	\$0.0	\$0.0	\$0.0	\$0.1	\$0.0	\$0.0	\$0.0	\$0.0	\$0.0	\$0.0	\$16.1
5.5 Interior Elements	\$0.0	\$0.0	\$0.0	\$0.0	\$0.0	\$10.1	\$0.0	\$0.4	\$0.0	\$0.0	\$0.0	\$0.0	\$0.0	\$0.0	\$0.0	\$0.0	\$0.0	\$10.5
5.6 Specialties, Equipment, etc.	\$0.0	\$0.0	\$0.0	\$0.0	\$0.0	\$0.0	\$0.0	\$0.0	\$0.0	\$0.0	\$0.0	\$0.0	\$0.0	\$0.0	\$0.0	\$0.0	\$0.0	\$0.0
5.7 Vertical Transportation	\$0.0	\$0.0	\$0.0	\$0.0	\$0.0	\$0.0	\$0.0	\$0.0	\$0.0	\$0.0	\$0.0	\$0.0	\$0.0	\$0.0	\$0.0	\$0.0	\$0.0	\$0.0
5.8 HVAC	\$0.0	\$0.2	\$0.0	\$0.0	\$8.3	\$0.0	\$0.0	\$0.0	\$0.0	\$0.0	\$1.7	\$0.0	\$0.0	\$0.0	\$0.0	\$0.0	\$0.0	\$10.3
5.9 Plumbing	\$0.0	\$0.0	\$0.0	\$0.0	\$0.0	\$0.0	\$0.0	\$0.0	\$0.0	\$0.0	\$0.0	\$0.0	\$0.0	\$0.0	\$0.0	\$0.0	\$0.0	\$0.0
5.10 Fire Protection	\$0.0	\$0.0	\$0.0	\$0.0	\$0.0	\$0.0	\$0.0	\$0.0	\$0.0	\$0.0	\$0.0	\$0.0	\$0.0	\$0.0	\$0.0	\$0.0	\$0.0	\$0.0
5.11 Electrical System, Telephone	\$0.0	\$0.0	\$3.9	\$0.0	\$0.0	\$0.0	\$0.0	\$0.0	\$0.0	\$0.0	\$0.0	\$0.0	\$0.0	\$0.0	\$0.0	\$0.0	\$0.0	\$3.9
5.12 Lighting	\$0.0	\$0.0	\$0.0	\$0.0	\$0.0	\$8.8	\$0.0	\$0.0	\$0.0	\$0.0	\$0.0	\$0.0	\$0.0	\$0.0	\$0.0	\$0.0	\$0.0	\$8.8
5.13 Fire Alarm & Life Safety	\$0.0	\$0.0	\$0.0	\$0.0	\$0.0	\$0.0	\$0.0	\$0.0	\$0.0	\$0.0	\$0.0	\$0.0	\$0.0	\$0.0	\$0.0	\$0.0	\$0.0	\$0.0
5.14 Accessibility	\$0.0	\$0.0	\$0.0	\$0.0	\$0.0	\$0.0	\$0.0	\$0.0	\$0.0	\$0.0	\$0.0	\$0.0	\$0.0	\$0.0	\$0.0	\$0.0	\$0.0	\$0.0
5.15 Environmental, IAQ	\$0.0	\$0.0	\$0.0	\$0.0	\$0.0	\$0.0	\$0.0	\$0.0	\$0.0	\$0.0	\$0.0	\$0.0	\$0.0	\$0.0	\$0.0	\$0.0	\$0.0	\$0.0
LEED																		
TOTAL	\$0.0	\$0.8	\$9.4	\$5.8	\$8.3	\$32.0	\$1.0	\$0.4	\$0.0	\$0.0	\$21.6	\$0.0	\$0.8	\$0.0	\$0.0	\$6.3	\$86.4	
CUMMULATIVE	\$0.0	\$0.8	\$10.1	\$15.9	\$24.2	\$56.3	\$57.3	\$57.7	\$57.7	\$57.7	\$79.2	\$79.3	\$80.0	\$80.1	\$80.1	\$86.4		

2 PROJECT INFORMATION

Building Name: Millers Falls Library

Building Location: 23 Bridge Street, Millers Falls, MA

Building Type: Library

Building Area: +/- 1,886 square feet

Building Height: One (1) story plus partially basement

Site Area: 0.051 acres (+/-2,222 sq. ft.)

Parking: None

Year Built: 1900

Age: One Hundred and Twenty (120) years

Present Owner: Town of Montague

Building Manager: Linda Hickman

This PCA Carried Out for: Town of Montague
1 Avenue A
Montague, MA

Date of Site Visit: November 30, 2020

Weather During Site Visit: Overcast, 40 degrees F, raining

Report Date: January 15, 2020

Site Visit Conducted By: Gregory J. Walsh
Brian P. Laroche

Personnel at Site: Linda Hickman – Library Director
Mark Nelson – Montague DPW
Jim Whiteman – Montague DPW

Municipality of Jurisdiction: Montague, MA

Applicable Building Codes: Massachusetts State Building Code 9th Edition
Existing Building Code (IEBC 2015)
Massachusetts Comprehensive Fire Safety Code, 527 CMR 1.0
Massachusetts Architectural Access Board Regulations 521 CMR
Americans with Disabilities Act 2010 Standards for Accessible Design
National Fire Protection Association (as referenced by 780 CMR and 527 CMR)

3 OBJECTIVE

3.1. Objective

The objective of this Property Condition Assessment (APCA) is to assess the general condition of the property and document obvious problems or visible defects based on visual observations, review of available documentation and discussions with property management. The building components and systems assessed include pavement and site improvements, building envelope, mechanical and electrical plumbing, fire protection and alarm systems.

The following is an abbreviated form of the standard Property Condition Assessment (“PCA”) report which would contain significantly more detailed information on all of the building systems resulting from a more complete assessment as performed by licensed engineers and consultants specializing in each of the specific disciplines. This report is a summary of observations by a PCA360, LLC. representative and does not strictly conform to the requirements of ASTM – E2018-99 (Standard Guide for Property Condition Assessment Procedures).

Regardless of its scope, an APCA cannot completely eliminate the potential for physical deficiencies or predict the performance of the Property’s systems. This survey was conducted as a visual walk through of the property and did not include any testing or destructive testing of the building or any systems. As such it is not the intent of this survey to uncover every defect in the property, and this report will serve to reduce, but not eliminate uncertainty with regard to potential deficiencies

THIS REPORT IS THE PROPERTY OF PCA360, LLC. AND THE TOWN OF MONTAGUE, AND WAS PREPARED FOR A SPECIFIC USE AND PURPOSE. THIS REPORT MAY NOT BE USED OR RELIED UPON BY ANY OTHER PARTY WITHOUT THE EXPRESSED WRITTEN PERMISSION OF PCA360, LLC. AND THERE SHALL BE NO THIRD PARTY BENEFICIARIES, INTENDED OR IMPLIED UNLESS SPECIFICALLY IDENTIFIED HEREIN.

3.2. Scope of Report

To accomplish the APCA objectives, the Scope of Work includes the following tasks:

1. Review of available documentation such as construction documents, base building certificate of occupancy, reports of building code violations or previous PCA reports;
2. Interviews with property management or maintenance personnel knowledgeable of the physical characteristics, maintenance and repair of the property;
3. A Walk-Through Survey of the property to visually observe the property so as to obtain information on material systems and components for the purpose of providing a brief description, identifying physical deficiencies to the extent that they are observable, and for obtaining information needed to develop the Property Condition Assessment;
4. Preparation of Opinions of Probable Costs to Remedy observed physical deficiencies; and,
5. Preparation of the Property Condition Assessment documenting the findings and results of the preceding tasks.
6. No measurements or counts of systems, components, floor areas, rooms, etc. or calculations were prepared
7. A survey for the presence of mold or fungus, or to opine on indoor air quality is explicitly excluded.

4 METHODOLOGY

4.1. Guide Specification

In general, this is an abbreviated form of Property Condition Assessment. This is the standard form that PCA360 uses for reports of this type, while this form generally follows the ASTM guidelines it does not strictly conform to ASTM E 2018-99 standards for PCA reporting.

4.2. Documentation Review

Any documentation provided by the Owner or on-site personnel which was available was reviewed if it would augment the walk-through survey and assist the assessor in understanding the subject project and identifying physical deficiencies. Such documentation is generally limited to construction drawings, specification, base building Certificate of Occupancy and recorded code violations. Other documents thought to be helpful, if available, may have been reviewed. Documents reviewed are listed in Section 2.0 of this report.

4.3. Interviews

On site interviews with property management or maintenance personnel familiar with the building were conducted to develop an understanding of the maintenance and service information and history of the building. Any documentation provided by those individuals was reviewed and the information included in this report. The names of those interviewed, documents reviewed, and applicable codes are listed in Section 2.0 of this report.

4.4. Walk-Through Survey

A visit to the property was conducted to visually observe the property to obtain information on material systems and components for the purposes of providing a brief description, identifying physical deficiencies to the extent that they are observable, and obtaining information needed to address such issues in the Property Condition Assessment. This investigation was strictly a visual inspection of the property and building systems and explicitly excludes any operation, testing or destructive testing of the building or any systems.

A Property Condition Assessment of this type cannot eliminate the uncertainty regarding the presence of, or potential for physical deficiencies or predict the continued performance of the Property's systems. The preparation of a PCA is not intended to uncover every defect in the Property and may reduce, but will not eliminate, the uncertainty regarding the potential for component or system failure.

A Registered Architect has observed the pavement, exterior walls, roofing, mechanical, electrical systems and has reviewed generally the building for requirements of the Americans with Disabilities Act. In addition, components and systems have been evaluated for their expected useful life and effective age, with replacement recommendations noted for those systems or components that will reach the end of their remaining useful life during the analysis term.

Physical deficiencies identified as significant are deemed to be present if they represent either of the following:

1. The physical deficiency represents a cited or apparent code violation, an immediate life safety or health hazard to the occupants or users of the property, or a fire safety hazard to the property itself, or;
2. The physical deficiency, if left uncorrected, could result in accelerating deterioration of the system in question and significantly increase the cost to correct.

Other physical deficiencies of a lesser nature and/or items of deferred maintenance have also been observed and noted for inclusion in aggregate cost estimate.

Other observations consist of one or a combination of the following activities:

1. Walk- through observations on a complete or sample basis to determine the overall condition of the property;
2. Observation of a representative sample of improvements, building, equipment and fixtures and systems to determine serviceability and operating characteristics;
3. Non- invasive and detailed observations to determine representative conditions;
4. Recording of physical deficiencies; and
5. Photos taken of building exteriors, roofs, site features and common areas, sufficient to give a general idea of the character and condition of the building, where it would help illustrate various points to the reader, specific deficiencies have also been photographed.

4.5. Opinion of Probable Costs

Based upon our observations during our site visit, as well as information gathered from the Documentation Review and Interviews, we have prepared a list of recommended repairs to address present observed physical deficiencies, along with general scope and preliminary budget cost estimates for these repairs. These estimates are for components or systems exhibiting patent or significant deferred maintenance requiring major repairs or replacement. Repairs or replacements that could be classified as cosmetic, decorative, part or parcel of a building renovation program, normal preventative maintenance, or that are the responsibility of tenants, were not included.

These preliminary budget cost estimates were prioritized as follows:

Immediate (I):

Expenditures that require immediate action as a result of existing or potentially unsafe conditions, building code violations, poor or deteriorated condition of critical element or system, or a condition that if left “as is” with an extensive delay in correction, would result in or contribute to critical element or system failure within one year or would lead to significantly escalated repair costs.

Years 1 though n (1,2,3 etc.):

Deficiencies which may not warrant immediate attention, but which require repairs or replacements that should be undertaken on a priority basis taking precedence over routine preventative maintenance. Deferred maintenance or deficiency resulting from improper design, installation and/or quality of original material or systems. Repairs that fall into the category of an ongoing maintenance/replacement problem, components or systems that have realized or exceeded their expected useful life.

In general, where multiple years are shown on a line item, the total line item cost will be recognized in full for each of the years shown, as a repeated project/ cost.

Accessibility Compliance:

Expenditures that need to be incorporated into a plan for bringing the building into compliance with the Americans with Disabilities Act and the City of New York Local Law 58 accessibility requirements.

In addition, the budget items were categorized as follows:

Repair & Maintenance	RM
Capital Expenditures	CE

Cost information used is generally obtained from consultants and our recent experience with projects that are similar, where applicable industry recognized databases, such as R.S. Means, F. W. Dodge or similar are consulted. Where appropriate, PCA360, LLC. and its consultants use their own database of construction cost information or obtain cost information from contractors.

Estimated costs are preliminary and require refinement. They are not to be construed as final nor are the work scopes provided necessarily all-inclusive. Such costs and work scopes are “order of magnitude”, and are to be used to assist the reader in the overall assessment of the property. The quantities and areas used in the preparation of this report are estimates only and did not entail a detailed field survey or measurements. The purpose of this report is to identify issues requiring action, not to design the necessary repairs or replacement.

The estimated costs are net of construction management fees, design fees and customary budgeting for contingency beyond that included in this report. Final and actual costs may vary depending on such matters as material, equipment or system selected, field conditions and unknowns. Materials or procedures recommended in this report are suggestions only and need to be researched further and refined. In order to obtain the best prices, we recommend that competitive bids be secured. Given the preliminary nature of the costs in this report, budgeting for contingencies is advised.

5 DESCRIPTIONS & OBSERVATIONS

5.1. Site & Features at Grade

Description

The Property is situated on a 0.051 acre (+/-2,222 sq. ft.) parcel of land. The Millers Falls Library is bounded to the north by King Avenue, to the east by adjacent residential buildings with Franklin Street beyond, to the south by a residential property with E. Main Street beyond and to the west by Bridge Street. The site is generally level

The Property contains approximately 1,886 sq. ft. and therefore occupies significantly all of the site. Adjacent site conditions include cast in place concrete sidewalks with granite curbing along the west elevation, bituminous pavement at the north elevation and unpaved surfaces at the east and south elevations. Site storm water drains by sheet action to adjacent sidewalks, driveways and streets.

Observations/Comments

In general, the site and features at grade are in good condition consistent with their expected age. The existing cast in place concrete sidewalks were observed to generally be in good condition.

The bituminous paving at the north elevation is flush with the adjacent paving in King Avenue with no street curb or separation between the Property and the municipal street. Similarly, the unpaved surfaces at the driveway to the east and the adjacent yard on the south are not visibly defined.

On site personnel state that the basement has experienced water infiltration during periods of heavy rain and that there are more general issues with groundwater which are believed to be linked to moisture issues in the basement. It was reported that basement window wells along the north elevation had been recently infilled and capped with cast in place concrete to mitigate past issues with water infiltration at those locations. On site personnel stated that the mitigation measures appeared to reduce water infiltration at these locations.

It was observed that at the base of the exterior walls along the north elevation of the rear section of the building and at the west elevation the joint between the exterior wall and the adjacent bituminous paving and cast in place concrete sidewalks was open. This condition will allow water to infiltrate the pave surfaces at the foundation wall. While the rear portion of the north elevation is adjacent to an unfinished crawl space, it was reported by onsite personnel that at the west elevation which is adjacent to the full basement there is an ongoing issue with water infiltration.

Recommendations.

Clean and prepare the joint at the base of the rear section of the north exterior wall and install a caulk joint to seal the exterior wall to the adjacent bituminous paving.

Clean and prepare the joint at the base of the west exterior wall and install a caulk joint to seal the exterior wall to the adjacent cast in place concrete paving.

Observed issues, recommended corrections, estimated costs to correct and priority are as follows:

5.1 Site & Features at Grade						
Observation/Issue/Recommended Correction			Estimated Cost, Category and Year			
Item	Qty	Unit	Unit Cost	Total Cost	Cat	Year
1. Clean and caulk pavement to base of exterior wall rear section North	100	LF	\$15.00	\$1,500	RM	1

5.1 Site & Features at Grade							
Observation/Issue/Recommended Correction		Estimated Cost, Category and Year					
Item	Qty	Unit	Unit Cost	Total Cost	Cat	Year	
2. Clean and caulk pavement to base of exterior wall West elevation	40	LF	\$15.00	\$600	RM	1	
3. Contingency		10.0%		\$210	RM		
Total				\$2,310			

5.2. Roofing

Description

The Property appears to have been constructed in two phases and has two roof areas. The front (west) section of the building and the rear (east) section of the building are both shed style roofs covered with asphalt shingles. The front and rear roofs are independent and there is a +/- 10" transition between the front roof which is higher and the rear roof which is lower. Additionally, the roof over the rear section is larger than the front. On site personnel state that the front section of roof was replaced approximately 10 to 15 years ago. The rear section was replaced before the front section; however, the exact age is unknown.

Observations/Comments

These roofs were not accessible and could not be observed closely. The roofs were observed from exterior stairs on the adjacent property which allowed them to be viewed from above, although from afar.

The roof over the front section of the Property appeared in good condition, consistent with its reported age. The asphalt shingles roof over the rear section were observed to exhibit early signs of cupping and/or curling. Cupped and/or curled shingles are most often an indication of the advanced age of an asphalt shingle roof, although it can also be caused by extreme weather or issues with attic ventilation.

At the interior, it was observed that there were water stains on the acoustic ceiling tile located just beneath the transition of the two roofs. On site personnel stated that there had been a leak at the transition, however it repairs were made to the flashing of the transition and they were not aware of any active leaking.

Recommendations

Given the prior history of leaks at the transition between the front and rear roofs, it is recommended that the flashing and sealants at the transition be inspected and repairs made as required.

The roof over the rear section was observed to be cupping and/or curling which is an indication of age and potential failure. The roof over the rear section will require replacement in early in the evaluation period.

The roof over the front section was reported to be 10-15 years old and appeared in good condition. Asphalt shingle roof systems have an expected useful life ("EUL") of 20-25 years. At the end of the evaluation period the roof on the front section will be 25-30 years old and should be replaced.

Observed issues, recommended corrections, estimated costs to correct and priority are as follows:

5.2 Roofing							
Observation/Issue/Recommended Correction		Estimated Cost, Category and Year					
Item	Qty	Unit	Unit Cost	Total Cost	Cat	Year	
1. Inspect transition between roofs and make required flashing repairs	1	LS	\$1,500	\$1,500	RM	1	

5.2 Roofing						
Observation/Issue/Recommended Correction			Estimated Cost, Category and Year			
Item	Qty	Unit	Unit Cost	Total Cost	Cat	Year
2. Replace roof at rear section	13	SQ	\$575	\$7,475	CE	5
3. Replace roof at front section	10	SQ	\$575	\$5,750	CE	15
4. Contingency		10.0%		\$1,473	CE	
Total				\$16,198		

5.3. Exterior Walls

Description

The façade of the Property is primarily masonry with wood siding at the sloped walls under the shed roof. The front section of the Property is traditional brick, while the rear section is a combination of rusticated concrete block and concrete masonry units (“CMU”) block. The entire façade has been painted. On site personnel state that the façade was recently repainted in 2019.

There are five (5) windows on the north elevation which are fixed single pane windows in steel frames. These windows are equipped with interior plexi-glass storm windows. At the main entrance on the west elevation there are aluminum frame storefront windows flanking an aluminum frame glass entry door with a glass sidelight and glass transom.

Observations/Comments

The exterior walls were viewed from grade. It was observed that the brick and block walls were in good condition. There were limited areas of the wood siding which appeared to have some deterioration, although the siding was cleaned and painted.

The existing single pane windows at the north elevation appeared to be in fair condition for their age. The storefront windows and entrance at the west elevation was observed to be in fair to poor condition with some open gaps between the aluminum frame and at the masonry opening. It was observed that there was evidence of water damage at the interior wood sills indication prior water infiltration or potentially condensation.

Recommendations

There were limited areas where the wood siding was observed to be deteriorated or had prior damage due to rotting. These areas should be repaired or replaced as required when the exterior is next repainted at the midpoint of the evaluation period.

The exterior was recently repainted in 2019. Painted exterior masonry walls typically last for ten (10) years, however painted exterior wood will last for five (5) to seven (7) years. It is anticipated that the exterior will need to be repainted during the midpoint of the evaluation period and again late in the evaluation period.

The existing single pane windows in steel frames were observed to be in fair condition and should be replaced early in the evaluation period.

The aluminum frame storefront windows and entry were observed to be in fair condition, however there were open joints between the aluminum frames and adjacent masonry openings. There was also visible evidence of water damage at the interior wood window sills. The storefront system should be fully caulked, masonry to aluminum frame, aluminum frame to aluminum frame and aluminum frame to glass (wet glazing).

Aluminum storefront systems have an expected useful life (“EUL”) of approximately thirty (30) years. The exact age of the existing storefront is not known; however, it appears to be older and of a lesser quality. While

recaulking and wet glazing, the system will extend its useful life it is anticipated that the system will require replacement at the end of the midpoint of the evaluation period.

Observed issues, recommended corrections, estimated costs to correct and priority are as follows:

5.3 Exterior Walls						
Observation/Issue/Recommended Correction			Estimated Cost, Category and Year			
Item	Qty	Unit	Unit Cost	Total Cost	Cat	Year
1. Miscellaneous repairs to damage/rotted wood siding	1	LS	\$2,500	\$2,500	RM	6
2. Repaint exterior	2200	SF	\$3.50	\$7,700	RM	6
3. Repaint Exterior	2200	SF	\$3.50	\$7,700	RM	12
4. Replace exterior windows	4.5	EA	\$667	\$3,000	RM	3
5. Caulk & wet seal brick to metal and metal to glass at storefront windows	300	LF	\$15.00	\$4,500	RM	1
6. Replace storefront	180	SF	\$100	\$18,000	CE	10
7. Contingency		10.0%		\$4,340	CE	
Total				\$47,740		

5.4. Structural Systems

Description

The Property was originally constructed in 1900. The structural components of the building were largely concealed by interior finishes, and could not be completely observed or verified. At the basement, it was possible to observe the interior of the foundation walls and the exposed framing of the first floor. The foundation walls are rough fieldstone that has been heavily pointed. Heavy wood timbers set into beam pockets in the foundation walls support wood framed floor joists. The wood timber beams are supported by a steel column at the midspan. The full basement has a cast in place concrete floor slab while the crawl space below the rear section of the Property is exposed earth.

Observations/Comments

In general, the building structural systems appeared to be in fair condition, with no apparent indications of deflection or settlement. It was observed that several of the wood timber beams supporting the floor joists above had been recently reinforced by the addition of sister joists and the installation of new additional steel lally columns.

It was observed that some of the wood timber beams were completely rotted away at the beam pockets and that some of the wood timber beams exhibited evidence of past pest infestation and/or rot. It appears that the addition of the sister joists and new lally columns were a remedial effort to address these conditions.

The sister joists were observed to be face nailed into the wood timbers and that the sister joists are not continuous for the full length of the beams. A repair using glue and face nailing is acceptable method of sistering a structural member in this condition. The existing repairs should be evaluated to ensure that they are adequate.

It was reported that the basement has had issues with water infiltration at the foundation walls and possibly through the floor slab. Several of the steel lally columns exhibited advanced corrosion at the base of the columns.

Below the main entrance, new wood shoring was installed to support perpendicular floor framing under the door. The framing is pressure treated lumber, however it bears on the floor slab which has moisture issue that will cause the framing to deteriorate over time

Recommendations

While face nailing sister joists to the original beam using construction adhesive between the two structural members is acceptable it is unknown if adhesive was used in the repair. Sister joists should be continuous for the length of the beam. The existing repairs should be inspected and revised as required to provide proper structural performance.

Past evidence of pest damage and areas of rot were observed that several of the wood timber beams. It is recommended that all wood timber beams be inspected and any additional repairs made as required.

The bases of the steel lally columns were observed to have advanced corrosion. The steel lally columns should be replaced with new columns set on a cast in place concrete footing that will keep the columns up off the wet basement floor.

The base of the chimney was observed to have heavy efflorescence and some deterioration to the brick. It is anticipated that the brick will need to be repaired at the midpoint of the evaluation term.

Replace wood shoring below main entry door with steel lally columns on a formed concrete base.

Observed issues, recommended corrections, estimated costs to correct and priority are as follows:

5.4 Structural						
Observation/Issue/Recommended Correction				Estimated Cost, Category and Year		
Item	Qty	Unit	Unit Cost	Total Cost	Cat	Year
1. Review existing floor joist repairs, confirm sister joists glued to original and full length bearing	1	LS	\$5,000	\$5,000	CE	2
2. Inspect floor joints for pest/rot and repair as required	1	LS	\$5,000	\$5,000	CE	3
3. Replace corroded lally columns and add cast concrete footing underneath	6	EA	\$750	\$4,500	CE	5
4. Repairs to masonry at base of chimney	1	LS	\$1,000	\$1,000	RM	10
5. Revise shoring below entrance install steel lally columns on footing	1	LS	\$2,000	\$2,000	RM	1
6. Contingency		10.0%		\$1,550	CE	
Total				\$19,050		

5.5. Interior Elements

Description

The Property has a variety of interior finishes and elements, most of which date to the original construction and others which have been replaced or upgraded over time.

Interior floor finishes of the consist of vinyl composite tile or asbestos containing ("ACT") floor tile and carpet. Ceilings 2' x 4' acoustic ceiling tile ("ACT") in a suspended grid. Walls were painted plaster or painted gypsum wall board and wood paneling. Light fixtures were 2'x4' lay-in fluorescent fixtures.

Observations/Comments

Generally, the interior finishes appear in good condition and well maintained. Routine maintenance, repairs and replacement are anticipated throughout the term.

Recommendations

The wood door to the basement was observed to be in fair condition and should be replaced at the beginning of the midpoint of the evaluation term.

The exterior door at the rear section was observed to be in fair condition and should be replaced at the beginning of the midpoint of the evaluation term.

There is water stained acoustic ceiling tiles located beneath the roof transition. Replace stained ACT tiles.

The ACT tiles are in fair condition and should be replaced during the midpoint of the evaluation term.

The interior walls at the front section are wood panel while the walls in the rear section are painted gypsum wallboard or plaster. The walls at the rear section will require repainting at the midpoint of the evaluation term. Estimate assumes that there is no lead paint.

Observed issues, recommended corrections, estimated costs to correct and priority are as follows:

5.5 Interior Finishes						
Observation/Issue/Recommended Correction			Estimated Cost, Category and Year			
Item	Qty	Unit	Unit Cost	Total Cost	Cat	Year
1. Replace basement door	1	EA	\$750	\$750	RM	5
2. Replace exterior egress door	1	EA	\$1,250	\$1,250	RM	5
3. Replace water stained ACT tiles	10	SF	\$2.75	\$28	RM	1
3. Replace all ACT tiles	2000	SF	\$4.50	\$9,000	CE	5
4. Paint the walls in the rear section	1000	SF	\$3.50	\$3,500	RM	7
5. Contingency		10.0%		\$1,453	CE	
Total				\$15,980		

5.6. Specialties, Equipment and Special Construction

Description

Items under this category include metal toilet partitions, toilet accessories, horizontal window blinds, fire extinguishers and cabinets, building directory and signage. Also included are items such as kitchen equipment, public address systems or any other unique systems not generally captured elsewhere in this report.

Observations/Comments

The Property does not have any unique equipment or systems not covered elsewhere in this report

Recommendations

There were no identified specialties, equipment or special construction. As such there are no anticipated costs associated with these items.

Observed issues, recommended corrections, estimated costs to correct and priority are as follows:

5.6 Special Systems & Components						
Observation/Issue/Recommended Correction			Estimated Cost, Category and Year			
Item	Qty	Unit	Unit Cost	Total Cost	Cat	Year
1. No Noted Issues				\$0		
2. Contingency		10.0%		\$0		
Total				\$0		

5.7. Vertical Transportation

Description

Vertical transportation systems consist of elevators, limited use, limited application (“LULA”) elevators, handicapped lifts and escalators. The Property does not have any vertical transportation systems.

Observations/Comments

None.

Recommendations

There are no vertical transportation systems. As such there are no anticipated costs associated with these items.

Observed issues, recommended corrections, estimated costs to correct and priority are as follows:

5.7. Vertical Transportation						
Observation/Issue/Recommended Correction			Estimated Cost, Category and Year			
Item	Qty	Unit	Unit Cost	Total Cost	Cat	Year
1. No Noted Issues				\$0		
2. Contingency		10.0%		\$0		
Total				\$0		

5.8. Heating, Ventilation and Air Conditioning

Description

The Property is heated by a combination of hot water baseboard radiation in the front section and a ceiling mounted forced hot air by hot water heating system in the rear section. The restroom, located in the center of the building is heated with electric resistance baseboard heat. Air conditioning is provided at the front section by an electric window mounted air conditioner.

Heating & Ventilation

Heating is provided by hot water radiation and forced hot air. Hot water for heating is generated by a single (1) oil fired hot water boiler manufactured by Winkler located in the basement. The faceplate on the boiler was heavily corroded and not fully legible. It appears that the boiler is rated at 123,000 BTU and a Certificate of Inspection indicates that it was installed in 1974.

Building Management System

The Property does not have a building management system. Temperature control is provided by local thermostats.

Observations/Comments

The primary HVAC system for the Property is the hot water boiler. The Winkler Econo Section oil fired boiler was observed to be in fair to poor condition. The exterior cast iron section of the boiler was heavily corroded. The basement where the boiler is located is a damp and/or wet environment as observed by the corrosion on the boiler, the steel lally columns and some copper pipe. These environmental conditions will reduce the useful life expectancy of systems.

The Property is cooled by a single electric window mounted air conditioner located in the front section. The air conditioner appeared to be in fair condition. There is no cooling available in the rear section of the Property. The existing unit does not appear to be adequately sized to address the cooling loads for the entire building. Operating an undersized unit will result in the air conditioner running longer and harder which will reduce its useful life.

Recommendations

The boiler and the oil burner require regular annual inspections and maintenance. A program to ensure regular annual maintenance should be implemented to maintain system performance and enhance system longevity. The cost for boiler and burner maintenance is anticipated throughout the evaluation period.

It appears based on the Certificate of Inspection that the oiler was installed in 1974 and is currently forty-six (46) years old. Oil fired cast iron hot water boilers have an expected useful life ("EUL") of thirty (30) years. The boiler has exceeded its EUL and was observed to be in fair to poor condition with visible corrosion on the exterior of the unit. The boiler should be replaced in the early term of the evaluation period.

The rear section of the Property is heated via forced hot air generated by a ceiling mounted "Modine" style hot water space heater. While the age of the heater is unknown, it appeared to be in fair condition. Forced hot air units have an expected useful life of between twenty (20) and twenty-five (25) years. It is anticipated that the unit will require replacement towards the end of the midterm of the evaluation period.

The existing window air conditioner appeared to be in fair condition. It is recommended that the existing unit be replaced and that an additional unit be installed at the rear of the building to ensure that the air conditioners can adequately address the cooling loads for the Property.

Observed issues, recommended corrections, estimated costs to correct and priority are as follows:

5.8 Heating, Ventilation & Air Conditioning							
Observation/Issue/Recommended Correction				Estimated Cost, Category and Year			
Item	Qty	Unit	Unit Cost	Total Cost	Cat	Year	
1. Annual allowance for boiler & burner maintenance	15	EA	\$150	\$2,250	RM	1-15	
2. Replace boiler	1	EA	\$7,500	\$7,500	CE	4	
3. Replace Modine Heating Unit	1	EA	\$1,500	\$1,500	CE	10	

5.8 Heating, Ventilation & Air Conditioning						
Observation/Issue/Recommended Correction			Estimated Cost, Category and Year			
Item	Qty	Unit	Unit Cost	Total Cost	Cat	Year
4. Replace window AC & Add Window	2	EA	\$750	\$1,500	RM	1
5. Contingency		10.0%		\$1,275	CE	
Total				\$14,025		

5.9. Plumbing Systems

Description

The incoming water service is provided to the building by street pressure from the Town of Montague via a one inch (1") incoming water service fed from King Avenue which is located in the basement. The incoming water service is not equipped with a backflow preventor.

Domestic hot water is provided by a thermostatic mixing valve off the boiler.

Domestic water service was reported to be all copper pipe which was consistent with areas or pipe that was observed. Sanitary service was reported to be cast iron and exits the building to the Town of Montague sewer system.

Observations/Comments

The plumbing systems appeared to be in good condition and suitable for long term use.

Recommendations

None.

Observed issues, recommended corrections, estimated costs to correct and priority are as follows:

5.9 Plumbing						
Observation/Issue/Recommended Correction			Estimated Cost, Category and Year			
Item	Qty	Unit	Unit Cost	Total Cost	Cat	Year
1. No Noted Issues				\$0		
2. Contingency		10.0%		\$0		
Total				\$0		

5.10. Fire Protection

Description

The Property is not equipped with a fire sprinkler system

Observations/Comments

None.

Recommendations

There are no fire protection systems. As such there are no anticipated costs associated with these items.

Observed issues, recommended corrections, estimated costs to correct and priority are as follows:

5.10 Fire Protection						
Observation/Issue/Recommended Correction			Estimated Cost, Category and Year			
Item	Qty	Unit	Unit Cost	Total Cost	Cat	Year
1. No Noted Issues				\$0		
2. Contingency		10.0%		\$0		
Total				\$0		

5.11. Electrical System, Telephone & Security

Description

Electrical service is provided by the utility company, Eversource via a service feed from a utility pole located on Bridge Street that enters at an externally mounted weatherhead at the northwest corner of the Property. The incoming service connects to a 100-amp main breaker located in the basement that feeds a 120/208V, single (1) phase, three (3) wire main electrical load center manufactured by Federal Pacific. The load center is equipped with individual breakers which feed distributed loads throughout the building.

Electrical distribution throughout the Property is via a combination of Romex and BX type wiring.

Observations/Comments

The existing electrical systems appear to have been installed in the 1950's or 1960's and are approximately sixty or seventy years old. Furthermore, the main load center is a "Stab-Lok" panel manufactured by Federal Pacific. The Stab-Lok panels have a well acknowledged reputation as being potentially hazardous related to the failure of breakers tripping when overloaded. In addition to concerns about the Federal Pacific Stab-Lok panel, the overall age of the electrical service and distribution warrants replacement of the service in the near term.

Recommendations

The electrical service main and load center are approximately sixty to seventy years old and in fair to poor condition. The expected useful life ("EUL") of electrical service distribution gear is 30 years. It is recommended that the electrical services be replace in the near term.

Observed issues, recommended corrections, estimated costs to correct and priority are as follows:

5.11 Electrical, Telephone & Security						
Observation/Issue/Recommended Correction			Estimated Cost, Category and Year			
Item	Qty	Unit	Unit Cost	Total Cost	Cat	Year
1. Upgrade electrical service	1	LS	\$3,500	\$3,500	CE	2
2. Contingency		10.0%		\$350	CE	
Total				\$3,850		

5.12. Lighting

Description

The lighting systems in the building are predominantly 2' x 4' lay in fluorescent light fixtures suspended in a metal grid acoustic ceiling tile ceiling.

Observations/Comments

Generally, the lighting systems appeared to be in good condition and should provide adequate service for a minimum of ten years with continued repairs and maintenance.

Recommendations

The existing fluorescent 2' x 4' light fixtures are in fair condition. The acrylic lenses are discolored and in poor condition. The light fixtures should be replaced with energy efficient LED fixtures and clear acrylic lenses.

Observed issues, recommended corrections, estimated costs to correct and priority are as follows:

5.12 Lighting						
Observation/Issue/Recommended Correction			Estimated Cost, Category and Year			
Item	Qty	Unit	Unit Cost	Total Cost	Cat	Year
1. Replace existing fluorescent light fixtures with LED	50	EA	\$175	\$8,750	CE	5
2. Contingency		10.0%		\$875		
Total				\$9,625		

5.13. Fire Alarm & Life Safety

Description

The Property not equipped with a fire alarm system

Illuminated exit signage and emergency lighting is provided by battery back-up.

Observations/Comments

There are two emergency exit doors, the main entrance and a door located in the rear section of the Property. Only the main entrance is provided with an illuminated exit sign which appeared to be in fair condition.

There are emergency lighting fixtures, however it does not appear that there are a sufficient number of fixtures to provide the code required light levels at one (1) foot candle per square measured at the floor.

Recommendations

To meet the requirements of NFPA 101 all exit doors are required to have illuminated exit signs with emergency power or battery back-up that will operate during the loss of power. NFPA 101 also requires that emergency lighting provide a minimum of one (1) foot candle per square foot measured at the floor. Emergency exit signs and lighting must operate for 90 minutes after the loss of power. New exit signs and emergency lighting are necessary to meet code.

Battery operated emergency exit signs and lights have an expected useful life ("EUL") of four (4) years due to degradation of the batteries, resulting in loss of brightness and duration of operation. Replace the battery-operated fixtures periodically throughout the evaluation period.

Observed issues, recommended corrections, estimated costs to correct and priority are as follows:

5.13 Fire Alarm, Life Safety & Code						
Observation/Issue/Recommended Correction		Estimated Cost, Category and Year				
Item	Qty	Unit	Unit Cost	Total Cost	Cat	Year
1. Install emergency lighting and exit sign batteries and/or fixtures	6	EA	\$250	\$1,500	RM	1
2. Replace emergency lighting and exit sign batteries and/or fixtures	6	EA	\$50	\$300	RM	5
3. Replace emergency lighting and exit sign batteries and/or fixtures	6	EA	\$50	\$300	RM	10
4. Replace emergency lighting and exit sign batteries and/or fixtures	6	EA	\$50	\$300	RM	15
5. Contingency		10.0%		\$240	RM	
Total				\$2,640		

5.14. Accessibility Review

Description

The Property was constructed before July 26, 1990 when the Americans With Disabilities Act went into effect. It also precedes 521 CMR – Massachusetts Architectural Access Board which was enacted on September 1, 1996. The Property does achieve a level of accessibility as the main entrance is accessible and there is an accessible restroom. Attention should be paid to the layout of the book stacks to ensure that a minimum clear aisle of 36” be maintained.

Observations/Comments

The Property is generally considered to be accessible, with an accessible entrance and restroom. There is no accessible drinking fountain.

It was observed that the drain and trap on the sink in the restroom is not covered with protective insulation as required by code and that the mirror above the sink is mounted too high (maximum 40” above the floor).

Recommendations

The drain and trap at the restroom sink does not have code required insulation. Install insulation as required by code.

The mirror above the sink in the restroom is mounted at the incorrect height. Install ADA compliant mirror at the proper height (maximum 40” above floor)

MILLERS FALLS LIBRARY

Observed issues, recommended corrections, estimated costs to correct and priority are as follows:

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Observation/Issue/Recommended Correction			Estimated Cost, Category and Year			
<u>Item</u>	<u>Qty</u>	<u>Unit</u>	<u>Unit Cost</u>	<u>Total Cost</u>	<u>Cat</u>	<u>Year</u>
1. Install insulation on sink trap	1	EA	\$100	\$100	RM	1
2. Install ADA compliant mirror at proper height	1	EA	\$250	\$250	RM	1
3. Contingency		10.0%		\$35	RM	
Total				\$385		