FACILITY CONDITION ASSESSMENT

prepared for

City of McMinnville
231 Northeast Fifth Street
McMinnville, Oregon 97128
Mike Bisset

FACILITY CONDITION ASSESSMENT

OF

LIBRARY AND CARNEGIE BUILDING
225 NORTHWEST ADAMS STREET
MCMINNVILLE, OREGON 97128

PREPARED BY:

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EMG PROJECT #:

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DATE OF REPORT:

December 26, 2018

ON SITE DATE:

October 12, 2018

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1. Executive Summary

Campus Overview & Assessment Details

General Information	
Property Type	Public Library
Main Address	225 Northwest Adams Street, McMinnville Oregon 97128
Site Developed	Library - Constructed 1983 Carnegie Building - Constructed 1912
Site Area	0.68 acres
Parking Spaces	79 total spaces all in open lots; 4 of which are accessible
Building Area	22,000 SF
Number of Buildings	Two
Number of Stories	Two
Current Occupants	Library Staff, Public
Percent Utilization	100%
Date(s) of Visit	October 12, 2018
Management Point of Contact	Mike Bisset, City Engineer 503.434.7312 phone Mike.bisset@mcminnvilleoregon.gov email
On-site Point of Contact (POC)	Jenny Berg
Assessment and Report Prepared By	David Easdon
Reviewed By	Alex Israel, Technical Report Reviewer for Matthew Anderson Program Manager manderson@emgcorp.com 800.733.0660 x7613

Campus Findings & Deficiencies

Historical Summary

The Carnegie building was constructed in 1912, and the Library was constructed in 1983. It appears the Carnegie building was renovated during the 1983 construction of the Library.

Architectural

Both buildings have been well maintained since construction, with periodic lifecycle replacements. Lifecycle interior finish, exterior finish, and roof replacements are budgeted and anticipated.

Mechanical, Electrical, Plumbing & Fire (MEPF)

Although the architectural finishes have had periodic lifecycle replacements, most of the MEPF infrastructure has not. Other than the cooling tower and a few minor components, the mechanical, electrical, and plumbing equipment date to the 1983 construction.

Site

The parking lots and sidewalks have been replaced as-needed over the years. Landscaping features include an irrigation system throughout various locations. The plaza has planters and bike art. Beyond the plaza in the square there is a concrete water fountain. Lifecycle replacements are budgeted and anticipated.

Recommended Additional Studies

The HVAC equipment is original to the construction and will require replacement. Due to the complexity and reported balancing issues, a professional engineer must be retained to analyze the existing condition, provide recommendations and, if necessary, estimate the scope and cost of any required repairs. The cost of this study is included in the cost tables. A budgetary cost allowance to replace the equipment is also included.

Facility Condition Index (FCI)

One of the major goals of the FCA is to calculate each building's Facility Condition Index (FCI), which provides a theoretical objective indication of a building's overall condition. By definition, the FCI is defined as the ratio of the cost of current needs divided by current replacement value (CRV) of the facility. The chart below presents the industry standard ranges and cut-off points.

FCI Ranges and Description	
0 – 5%	In new or well-maintained condition, with little or no visual evidence of wear or other deficiencies.
5 – 10%	Subjected to wear but is still in a serviceable and functioning condition.
10 – 30%	Subjected to hard or long-term wear. Nearing the end of its useful or serviceable life.
30% and above	Has reached the end of its useful or serviceable life. Renewal is now necessary.

The deficiencies and lifecycle needs identified in this assessment provide the basis for a portfolio-wide capital improvement funding strategy. In addition to the current FCI, extended FCIs have been developed to provide owners the intelligence needed to plan and budget for the "keep-up costs" for their facilities. As such the 3-year, 5-year, and 10-year FCIs are calculated by dividing the anticipated needs of those respective time periods by current replacement value. As a final point, the FCIs ultimately provide more value when used to relatively compare facilities across a portfolio instead of being over-analyzed and scrutinized as stand-alone values. The table below summarizes the individual findings for this FCA:

Facility (year built)	Cost/SF	Total SF	Replacement Value	Current	3-Year	5-Year	10-Year
Library & Carnegie Building / Carnegie Building (1924)	$324	4,620	$1,386,000	0.0%	0.0%	10.0%	32.0%
Library & Carnegie Building / Library (1981)	$324	15,161	$4,548,300	1.0%	1.0%	13.0%	20.0%

Immediate Needs

Facility/Building	Total Cost	Total Items
Library & Carnegie	$46,819	2
Total :	**$46,819**	**2**

Library & Carnegie

ID	Location	UF Code	Description	Condition	Plan Type	Cost
1075286	Library & Carnegie / Library-Carnegie Boulevard	Z108X	ADA, Restroom, Lavatory Hardware, Modify	NA	Accessibility	$949
1076949	Library & Carnegie / Library	D5037	Fire Alarm System, Office Building, Install	Failed	Performance/Integrity	$45,871

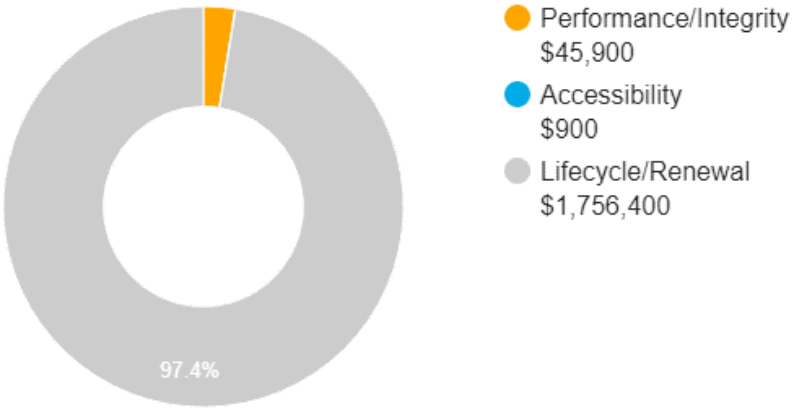
Plan Types

Each line item in the cost database is assigned a Plan Type, which is the primary reason or rationale for the recommended replacement, repair, or other corrective action. This is the “why” part of the equation. A cost or line item may commonly have more than one applicable Plan Type; however, only one Plan Type will be assigned based on the “best” fit, typically the one with the greatest significance.

Plan Type Descriptions

Safety	■	An observed or reported unsafe condition that if left unaddressed could result in injury; a system or component that presents potential liability risk.
Performance/Integrity	■	Component or system has failed, is almost failing, performs unreliably, does not perform as intended, and/or poses risk to overall system stability.
Accessibility	■	Does not meet ADA, UFAS, and/or other handicap accessibility requirements.
Environmental	■	Improvements to air or water quality, including removal of hazardous materials from the building or site.
Retrofit/Adaptation	■	Components, systems, or spaces recommended for upgrades in in order to meet current standards, facility usage, or client/occupant needs.
Lifecycle/Renewal	■	Any component or system that is not currently deficient or problematic but for which future replacement or repair is anticipated and budgeted.

Plan Type Distribution (by Cost)



Ten year total: $1,803,200

2. Library

Library: Systems Summary		
Address	225 Northwest Adams Street, McMinnville Oregon	
Constructed/ Renovated	1983	
Building Size	17,158 SF	
System	*Description*	*Condition*
Structure	Conventional wood-framed structure on concrete slabs	Good
Façade	Stucco with steel-framed windows	Fair
Roof	Primary: Crossed hip construction with asphalt shingles Secondary: Flat construction with modified bituminous finish	Fair
Interiors	Walls: Painted gypsum board Floors: Carpet, VCT, ceramic tile Ceilings: Painted gypsum board, exposed	Fair
Elevators	Hydraulic: One car serving both floors	Excellent
Plumbing	Copper supply, cast iron waste and vent Electric water heaters	Fair
HVAC	Central system with a chiller, a cooling tower, air handlers, and duct heaters. Supplemental components: unit heaters	Fair
Fire Suppression	Wet-pipe sprinkler system, hydrants, fire extinguishers	Fair

Library: Systems Summary

Electrical	Source and Distribution: Main switchboard, and panels with copper wiring fed from exterior pad mounted transformer. Interior Lighting: T-8, LED, CFL Emergency: None	Fair
Fire Alarm	Alarm panel, smoke detectors, alarms, pull stations, back-up emergency lights, and exit signs	Failed
Equipment/Special	None	--
Accessibility	Presently it does not appear an accessibility study is needed for this building. See Appendix C.	
Key Issues and Findings	The fire alarm panel is new but the fire alarm system appears to be somewhat antiquated, lacking in strobes, and has a compatibility issue with the new fire panel. Although well maintained, most of the mechanical, plumbing, and electrical equipment dates to the 1983 construction.	

Library: Systems Expenditure Forecast

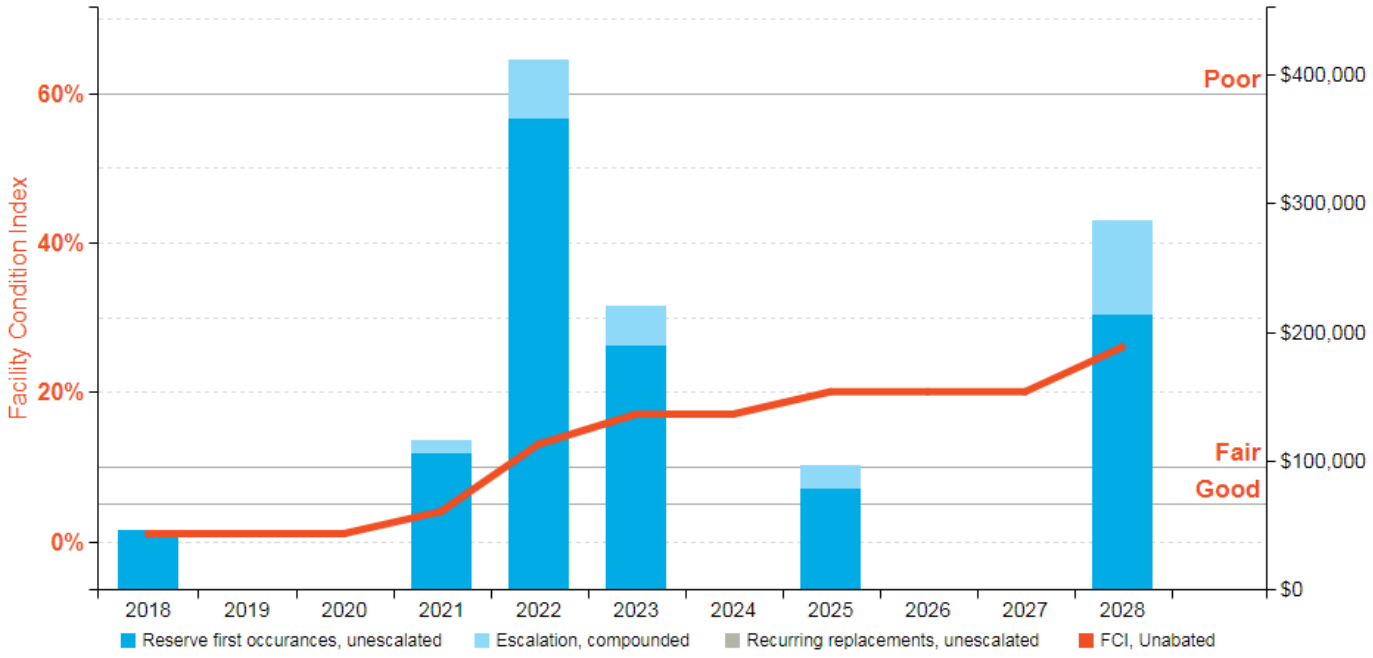
System	Immediate	Short Term (3 yr)	Near Term (5 yr)	Med Term (10 yr)	Long Term (20 yr)	TOTAL
Facade	-	-	$196,400	$14,800	$65,900	$277,100
Roofing	-	-	-	$93,400	$4,900	$98,300
Interiors	-	-	$188,000	$23,400	$269,200	$480,600
Plumbing	-	$8,700	$1,400	$9,600	$19,100	$38,800
Fire Suppression	-	-	$29,000	-	-	$29,000
HVAC	-	$105,800	$107,600	$1,700	$56,200	$271,200
Electrical	-	-	$96,900	$240,700	-	$337,600
Fire Alarm & Comm	$45,900	$1,800	-	-	$9,900	$57,600
Equipment/Special	-	-	$10,000	-	$1,100	$11,100
Site Development	-	-	$1,600	-	$2,100	$3,700
TOTALS	**$45,900**	**$116,300**	**$630,900**	**$383,600**	**$428,400**	**$1,605,000**

The graph below indicates the capital expenditure needs of each year (reference left axis). The purple line forecasts what would happen to the FCI over time, assuming zero capital expenditures (reference right axis).

Needs by Year with Unaddressed FCI Over Time

Library

Replacement Value: $ 4,548,300; Inflation rate: 3.0%



3. Carnegie Building

Carnegie Building: Systems Summary		
Address	225 Northwest Adams Street, McMinnville Oregon	
Constructed/ Renovated	1912/1983	
Building Size	4,842 SF	
System	*Description*	*Condition*
Structure	Masonry bearing walls and wood-framed roofs	Good
Façade	Brick with wood-framed windows	Good
Roof	Primary: Hip construction with asphalt shingles Secondary: Flat construction with single-ply TPO/PVC membrane	Fair
Interiors	Walls: Painted gypsum board Floors: Carpet, VCT, ceramic tile Ceilings: Painted gypsum board, exposed	Fair
Elevators	None	--
Plumbing	Copper supply, cast iron waste and vent Electric water heaters	Fair
HVAC	Central system with chilled water air handlers and duct heaters fed from the Library chiller.	Fair
Fire Suppression	Wet-pipe sprinkler system, hydrants, fire extinguishers	Fair

Carnegie Building: Systems Summary

Electrical	Source and Distribution: Distribution panels with copper wiring fed from the Library. Interior Lighting: T-8, LED, CFL Emergency: None	Fair
Fire Alarm	Smoke detectors, alarms, back-up emergency lights, and exit signs	Fair
Equipment/Special	None	--
Accessibility	Presently it does not appear an accessibility study is needed for this building. See Appendix C.	
Key Issues and Findings	Although well maintained, most of the mechanical, plumbing, and electrical equipment dates to 1983.	

Carnegie Building: Systems Expenditure Forecast

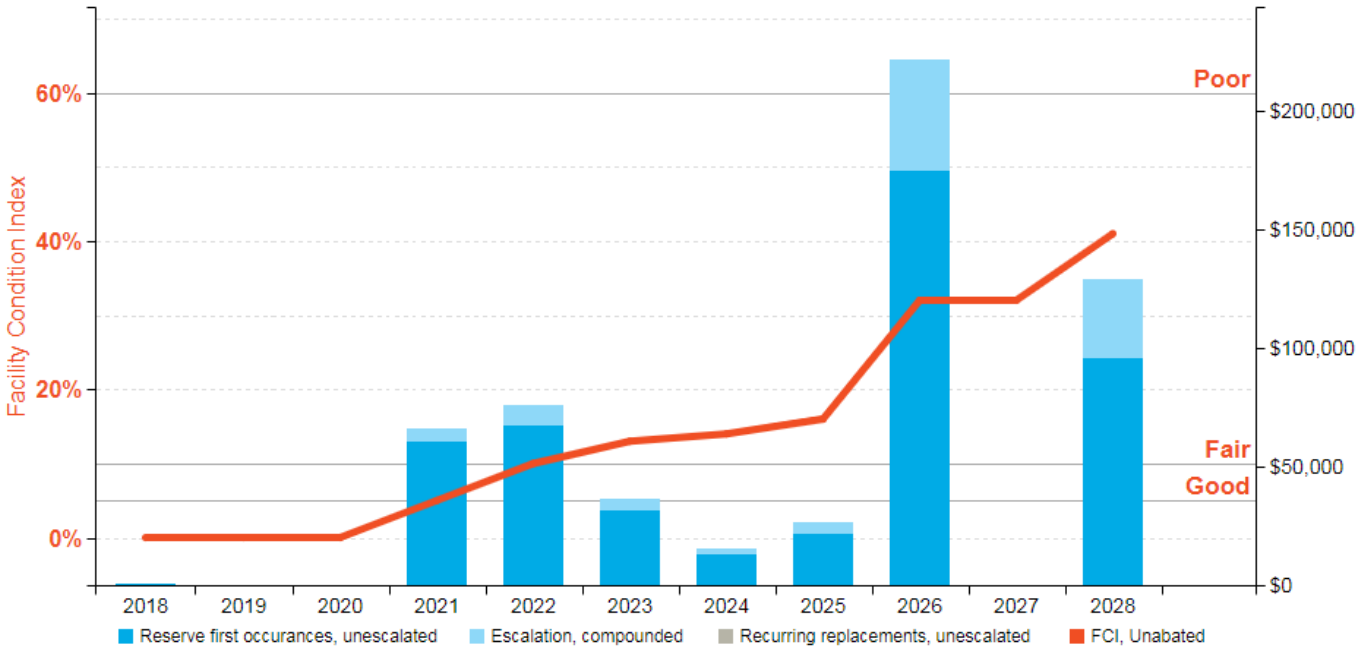
System	Immediate	Short Term (3 yr)	Near Term (5 yr)	Med Term (10 yr)	Long Term (20 yr)	TOTAL
Facade	-	-	$6,800	$229,900	$9,100	$245,800
Roofing	-	-	-	$22,800	$29,800	$52,500
Interiors	-	-	$66,200	$18,700	$88,900	$173,700
Plumbing	-	$2,200	$10,300	-	$6,700	$19,100
Fire Suppression	-	-	$8,200	-	-	$8,200
HVAC	-	$64,200	-	-	$14,500	$78,600
Electrical	-	-	$20,300	$113,200	-	$133,500
Equipment/Special	-	-	$900	$8,100	-	$9,000
Accessibility	$900	-	-	-	-	$900
TOTALS	**$900**	**$66,400**	**$112,700**	**$392,700**	**$149,000**	**$721,300**

The graph below indicates the capital expenditure needs of each year (reference left axis). The purple line forecasts what would happen to the FCI over time, assuming zero capital expenditures (reference right axis).

Needs by Year with Unaddressed FCI Over Time

Carnegie Building

Replacement Value: $ 1,386,000; Inflation rate: 3.0%



4. Site Summary

Site Information		
Lot Size	0.68 acres (estimated)	
Parking Spaces	79 total spaces all in open lots; 4 of which are accessible	
System	*Description*	*Condition*
Pavement/Flatwork	Asphalt lots with areas of concrete and concrete sidewalks, curbs	Fair
Site Development	Property entrance signage, Lightly furnished with bike art, and concrete water fountain	Good
Landscaping and Topography	No significant landscaping features Irrigation present Low site slopes throughout	Fair
Utilities	Municipal water and sewer Local utility-provided electric	Good
Site Lighting	Pole-mounted: metal halide Building-mounted: CFL, metal halide	Fair
Ancillary Structures	None	--
Accessibility	Presently it does not appear an accessibility study is needed for the exterior site areas. See Appendix C.	
Key Issues and Findings	None	

Site: Systems Expenditure Forecast

System	Immediate	Short Term (3 yr)	Near Term (5 yr)	Med Term (10 yr)	Long Term (20 yr)	TOTAL
Facade	-	-	$203,200	$244,700	$75,100	$523,000
Roofing	-	-	-	$116,200	$34,700	$150,900
Interiors	-	-	$254,200	$42,100	$358,100	$654,400
Plumbing	-	$10,800	$11,600	$9,600	$25,800	$57,900
Fire Suppression	-	-	$37,200	-	-	$37,200
HVAC	-	$169,900	$107,600	$1,700	$70,600	$349,800
Electrical	-	-	$117,200	$354,000	-	$471,100
Fire Alarm & Comm	$45,900	$1,800	-	-	$9,900	$57,600
Equipment/Special	-	-	$11,000	$8,100	$1,100	$20,100
Pavement	-	-	$22,800	$19,500	$255,700	$298,000
Site Development	-	-	$1,600	-	$177,500	$179,100
Site Lighting	-	-	$11,800	-	$15,900	$27,700
Accessibility	$900	-	-	-	-	$900
TOTALS	**$46,800**	**$182,500**	**$778,200**	**$795,900**	**$1,024,400**	**$2,827,700**

5. Property Space Use & Observed Areas

Unit Allocation

All 22,000 square feet of the property are occupied by the city of McMinnville and used as a public library. The spaces are mostly a combination of offices, open library space, and supporting restrooms.

Areas Observed

The interior spaces were observed in order to gain a clear understanding of the property's overall condition. Other areas accessed included the site within the property boundaries, the exterior of the property, and the roofs.

Key Spaces Not Observed

All key areas of the property were accessible and observed.

6. ADA Accessibility

Generally, Title III of the Americans with Disabilities Act (ADA) prohibits discrimination by entities to access and use of “areas of public accommodations” and “commercial facilities” on the basis of disability. Regardless of its age, these areas and facilities must be maintained and operated to comply with the Americans with Disabilities Act Accessibility Guidelines (ADAAG).

Buildings completed and occupied after January 26, 1992 are required to comply fully with the ADAAG. Existing facilities constructed prior to this date are held to the lesser standard of compliance to the extent allowed by structural feasibility and the financial resources available. As an alternative, a reasonable accommodation pertaining to barrier removal must be made.

During the FCA, EMG performed a limited high-level accessibility review of the facility non-specific to any local regulations or codes. The scope of the visual observation was limited to those areas and categories set forth in the tables throughout this report. It is understood by the Client that the limited observations described herein do not comprise a full ADA Compliance Survey, and that such a survey is beyond the scope of EMG’s undertaking. Only a representative sample of areas was observed and actual measurements were not taken to verify compliance.

The facility was originally constructed in 1912. The facility was significantly renovated in 1983. Complaints about accessibility issues have not been received by the property management. The property does not have litigation related to existing barriers or previously removed barriers.

An accessibility study has not been performed at the site. Although no significant issues were identified, a comprehensive ADA Compliance Survey would reveal specific aspects of the property that are not in full compliance.

Removal of barriers to accessibility should be addressed from a liability standpoint in order to comply with federal law, but the barriers may or may not be building code violations. The Americans with Disabilities Act Accessibility Guidelines are part of the ADA federal civil rights law pertaining to the disabled and are not a construction code. State and local jurisdictions have adopted the ADA Guidelines or have adopted other standards for accessibility as part of their construction codes.

7. Purpose and Scope

Purpose

EMG was retained by the client to render an opinion as to the Property's current general physical condition on the day of the site visit.

Based on the observations, interviews and document review outlined below, this report identifies significant deferred maintenance issues, existing deficiencies, and material code violations of record, which affect the Property's use. Opinions are rendered as to its structural integrity, building system condition and the Property's overall condition. The report also notes building systems or components that have realized or exceeded their typical expected useful lives.

The physical condition of building systems and related components are typically defined as being in one of five condition ratings. For the purposes of this report, the following definitions are used:

Condition Ratings	
Excellent	New or very close to new; component or system typically has been installed within the past year, sound and performing its function. Eventual repair or replacement will be required when the component or system either reaches the end of its useful life or fails in service.
Good	Satisfactory as-is. Component or system is sound and performing its function, typically within the first third of its lifecycle. However, it may show minor signs of normal wear and tear. Repair or replacement will be required when the component or system either reaches the end of its useful life or fails in service.
Fair	Showing signs of wear and use but still satisfactory as-is, typically near the median of its estimated useful life. Component or system is performing adequately at this time but may exhibit some signs of wear, deferred maintenance, or evidence of previous repairs. Repair or replacement will be required due to the component or system's condition and/or its estimated remaining useful life.
Poor	Component or system is significantly aged, flawed, functioning intermittently or unreliably; displays obvious signs of deferred maintenance; shows evidence of previous repair or workmanship not in compliance with commonly accepted standards; has become obsolete; or exhibits an inherent deficiency. The present condition could contribute to or cause the deterioration of contiguous elements or systems. Either full component replacement is needed or repairs are required to restore to good condition, prevent premature failure, and/or prolong useful life.
Failed	Component or system has ceased functioning or performing as intended. Replacement, repair, or other significant corrective action is recommended or required.
Not Applicable	Assigning a condition does not apply or make logical sense, most commonly due to the item in question not being present.

Definition of Exceedingly Aged

A fairly common scenario encountered during the assessment process, and a frequent source of debate, occurs when classifying and describing “very old” systems or components that are still functioning adequately and do not appear nor were reported to be in any way deficient. To help provide some additional intelligence on these items, such components will be tagged in the database as *Exceedingly Aged*. This designation will be reserved for mechanical or electrical systems or components that have aged well beyond their industry standard lifecycles, typically at least 15 years beyond and/or twice their Estimated Useful Life (EUL). In tandem with this designation, these items will be assigned a Remaining Useful Life (RUL) not less than two years but not greater than 1/3 of their standard EUL. As such the recommended replacement time for these components will reside outside the typical *Immediate Repair* window but will not be pushed ‘irresponsibly’ (too far) into the future.

Scope

The standard scope of the Facility Condition Assessment includes the following:

- Visit the Property to evaluate the general condition of the building and site improvements, review available construction documents in order to familiarize ourselves with, and be able to comment on, the in-place construction systems, life safety, mechanical, electrical, and plumbing systems, and the general built environment.
- Identify those components that are exhibiting deferred maintenance issues and provide cost estimates for Immediate Costs and Replacement Reserves based on observed conditions, maintenance history and industry standard useful life estimates. This will include the review of documented capital improvements completed within the last five-year period and work currently contracted for, if applicable.
- Provide a full description of the Property with descriptions of in-place systems and commentary on observed conditions.
- Provide a high-level categorical general statement regarding the subject Property’s compliance to Title III of the Americans with Disabilities Act. This will not constitute a full ADA survey, but will help identify exposure to issues and the need for further review.
- Obtain background and historical information about the facility from a building engineer, property manager, maintenance staff, or other knowledgeable source. The preferred methodology is to have the client representative or building occupant complete a Pre-Survey Questionnaire (PSQ) in advance of the site visit. Common alternatives include a verbal interview just prior to or during the walk-through portion of the assessment.
- Review maintenance records and procedures with the in-place maintenance personnel.
- Observe a representative sample of the interior spaces/units, including vacant spaces/units, to gain a clear understanding of the property’s overall condition. Other areas to be observed include the exterior of the property, the roofs, interior common areas, and the significant mechanical, electrical and elevator equipment rooms.
- Provide recommendations for additional studies, if required, with related budgetary information.
- Provide an Executive Summary at the beginning of this report, which highlights key findings and includes a Facility Condition Index as a basis for comparing the relative conditions of the buildings within the portfolio.

8. Opinions of Probable Costs

Cost estimates are attached throughout this report, with the Replacement Reserves in the appendix.

These estimates are based on Invoice or Bid Document/s provided either by the Owner/facility and construction costs developed by construction resources such as *R.S. Means, CBRE Whitestone,* and *Marshall & Swift,* EMG's experience with past costs for similar properties, city cost indexes, and assumptions regarding future economic conditions.

Opinions of probable costs should only be construed as preliminary, order of magnitude budgets. Actual costs most probably will vary from the consultant's opinions of probable costs depending on such matters as type and design of suggested remedy, quality of materials and installation, manufacturer and type of equipment or system selected, field conditions, whether a physical deficiency is repaired or replaced in whole, phasing or bundling of the work (if applicable), quality of contractor, quality of project management exercised, market conditions, use of subcontractors, and whether competitive pricing is solicited, etc. Certain opinions of probable costs cannot be developed within the scope of this guide without further study. Opinions of probable cost for further study should be included in the FCA.

Methodology

Based upon site observations, research, and judgment, along with referencing Expected Useful Life (EUL) tables from various industry sources, EMG opines as to when a system or component will most probably necessitate replacement. Accurate historical replacement records, if provided, are typically the best source of information. Exposure to the elements, initial quality and installation, extent of use, the quality and amount of preventive maintenance exercised, etc., are all factors that impact the effective age of a system or component. As a result, a system or component may have an effective age that is greater or less than its actual chronological age. The Remaining Useful Life (RUL) of a component or system equals the EUL less its *effective age*, whether explicitly or implicitly stated. Projections of Remaining Useful Life (RUL) are based primarily on age and condition with the presumption of continued use and maintenance of the Property similar to the observed and reported past use and maintenance practices, in conjunction with the professional judgment of EMG's assessors. Significant changes in occupants and/or usage may affect the service life of some systems or components.

Where quantities could not be or were not derived from an actual construction document take-off or facility walk-through, and/or where systemic costs are more applicable or provide more intrinsic value, budgetary square foot and gross square foot costs are used. Estimated costs are based on professional judgment and the probable or actual extent of the observed defect, inclusive of the cost to design, procure, construct and manage the corrections.

Immediate Repairs

Immediate repairs are opinions of probable costs that require immediate action as a result of: (1) material existing or potential unsafe conditions, (2) failed or imminent failure of mission critical building systems or components, or (3) conditions that, if not addressed, have the potential to result in, or contribute to, critical element or system failure within one year or will most probably result in a significant escalation of its remedial cost.

Replacement Reserves

Cost line items traditionally called Replacement Reserves (equivalently referred to as Lifecycle/Renewals) are for recurring probable renewals or expenditures, which are not classified as operation or maintenance expenses. The replacement reserves should be budgeted for in advance on an annual basis. Replacement Reserves are reasonably predictable both in terms of frequency and cost. However, Replacement Reserves may also include components or systems that have an indeterminable life but, nonetheless, have a potential for failure within an estimated time period.

Replacement Reserves generally exclude systems or components that are estimated to expire after the reserve term and are not considered material to the structural and mechanical integrity of the subject property. Furthermore, systems and components that are not deemed to have a material effect on the use of the Property are also excluded. Costs that are caused by acts of God, accidents, or other occurrences that are typically covered by insurance, rather than reserved for, are also excluded.

Replacement costs are solicited from ownership/property management, EMG's discussions with service companies, manufacturers' representatives, and previous experience in preparing such schedules for other similar facilities. Costs for work performed by the ownership's or property management's maintenance staff are also considered.

EMG's reserve methodology involves identification and quantification of those systems or components requiring capital reserve funds within the assessment period. The assessment period is defined as the effective age plus the reserve term. Additional information concerning system's or component's respective replacement costs (in today's dollars), typical expected useful lives, and remaining useful lives were estimated so that a funding schedule could be prepared. The Replacement Reserves Schedule presupposes that all required remedial work has been performed or that monies for remediation have been budgeted for items defined in the Immediate Repair Cost Estimate.

9. Certification

The City of McMinnville (the Client) retained EMG to perform this Facility Condition Assessment in connection with its continued operation of Library and Carnegie Building, 225 Northwest Adams Street, McMinnville, Oregon 97128, the "Property". It is our understanding that the primary interest of the Client is to locate and evaluate materials and building system defects that might significantly affect the value of the property and to determine if the present Property has conditions that will have a significant impact on its continued operations.

The conclusions and recommendations presented in this report are based on the brief review of the plans and records made available to our Project Manager during the site visit, interviews of available property management personnel and maintenance contractors familiar with the Property, appropriate inquiry of municipal authorities, our Project Manager's walk-through observations during the site visit, and our experience with similar properties.

No testing, exploratory probing, dismantling or operating of equipment or in-depth studies were performed unless specifically required under the *Purpose and Scope* section of this report. This assessment did not include engineering calculations to determine the adequacy of the Property's original design or existing systems. Although walk-through observations were performed, not all areas may have been observed (see Section 1 for specific details). There may be defects in the Property, which were in areas not observed or readily accessible, may not have been visible, or were not disclosed by management personnel when questioned. The report describes property conditions at the time that the observations and research were conducted.

This report has been prepared on behalf of and exclusively for the use of the Client for the purpose stated within the *Purpose and Scope* section of this report. The report, or any excerpt thereof, shall not be used by any party other than the Client or for any other purpose than that specifically stated in our agreement or within the *Purpose and Scope* section of this report without the express written consent of EMG.

Any reuse or distribution of this report without such consent shall be at the Client and the recipient's sole risk, without liability to EMG.

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10. Appendices

Appendix A: Photographic Record
Appendix B: Site Plan
Appendix C: Accessibility Review
Appendix D: Pre-Survey Questionnaire
Appendix E: Replacement Reserves
Appendix F: Equipment Inventory List

Appendix A:
Photographic Record

#1	LIBRARY FRONT ELEVATION

#2	LIBRARY RIGHT ELEVATION

#3	LIBRARY REAR ELEVATION

#4	LIBRARY LEFT ELEVATION

#5	LIBRARY ROOF, ASPHALT SHINGLE

#6	LIBRARY ROOF, MODIFIED BITUMINOUS

#7	LIBRARY EXTERIOR WALL, STUCCO

#8	LIBRARY RETRACTING DOORS

#9	WINDOW, STEEL FIXED

#10	WINDOW, STEEL FIXED

#11	WINDOW, STEEL FIXED

#12	ELEVATOR

#13	ELEVATOR FINISHES

#14	ELEVATOR MACHINE ROOM

#15	FIRE ALARM SYSTEM

#16	FIRE SUPPRESSION BACKFLOW PREVENTER

#17	LIBRARY

#18	LIBRARY CHILDREN'S ROOM

#19	LIBRARY LOBBY

#20	LIBRARY MECHANICAL ROOM

#21	CARNEGIE NORTH ELEVATION

#22	CARNEGIE EAST ELEVATION

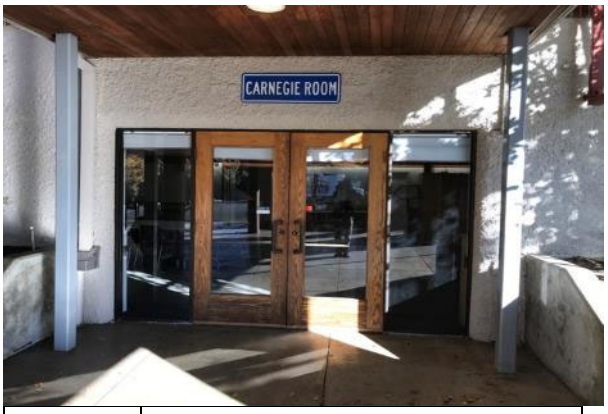
#23	CARNEGIE ROOF, ASPHALT SHINGLE

#24	CARNEGIE ROOF, SINGLE-PLY TPO/PVC MEMBRANE

#25	CARNEGIE EXTERIOR WALL

#26	CARNEGIE EXTERIOR DOOR

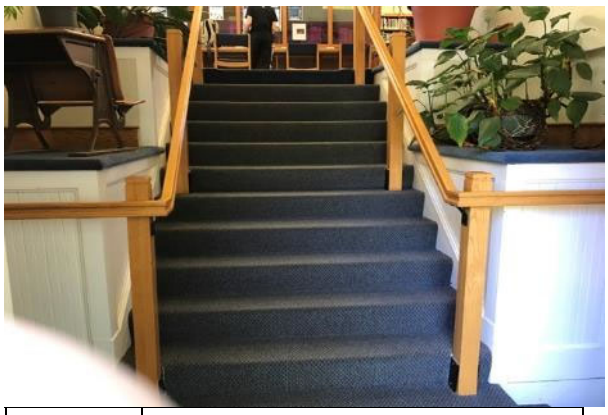
#27	CARNEGIE WINDOWS



#28	CARNEGIE EXTERIOR DOOR

#29	CARNEGIE WINDOW, WOOD HISTORICAL

#30	CARNEGIE LIBRARY



#31	CARNEGIE INTERIOR STAIRS

#32	CARNEGIE ROOM

#33	INTERIOR FLOOR FINISH, CARPET

#34	INTERIOR FLOOR FINISH, CARPET

#35	INTERIOR CEILING FINISH

#36	INTERIOR CEILING FINISH

#37	ELEVATOR EQUIPMENT

#38	TOILET, FLUSH TANK (WATER CLOSET)

#39	TOILET, TANKLESS (WATER CLOSET)

#40	URINAL, VITREOUS CHINA

#41	SINK/LAVATORY, VITREOUS CHINA

#42	DRINKING FOUNTAIN, VITREOUS CHINA

#43	SINK/LAVATORY, STAINLESS STEEL

#44	BACKFLOW PREVENTER

#45	WATER HEATER, ELECTRIC

#46	WATER HEATER, ELECTRIC

#47	WATER COOLED CHILLER

#48	COOLING TOWER

#49	CHILLED WATER AND CONDENSER WATER PUMPS

#50	AIR HANDLER

#51	AIR HANDLER

#52	PNEUMATIC CONTROLS

#53	ELECTRIC HEATER, DUCT

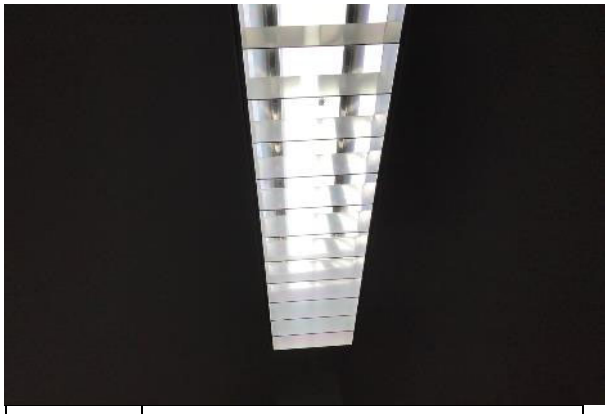
#54	SECONDARY TRANSFORMER

#55	DISTRIBUTION PANELS

#56	SWITCHBOARD

#57	DISTRIBUTION PANELS

#58	LIGHTING SYSTEM



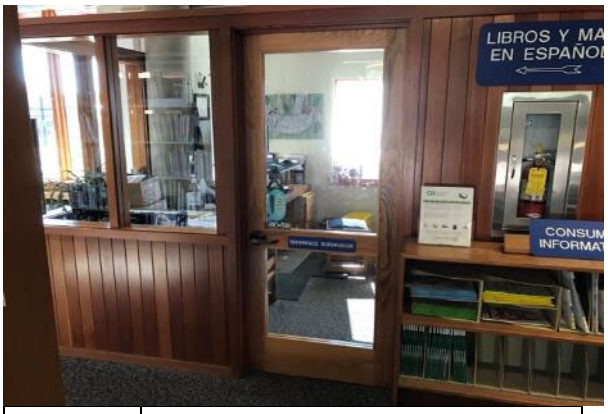
#59	LIGHTING SYSTEM

#60	FIRE ALARM CONTROL PANEL

#61	FIRE EXTINGUISHER

#62	SPRINKLER HEADS

#63	ANNUNCIATOR ALARM PANEL

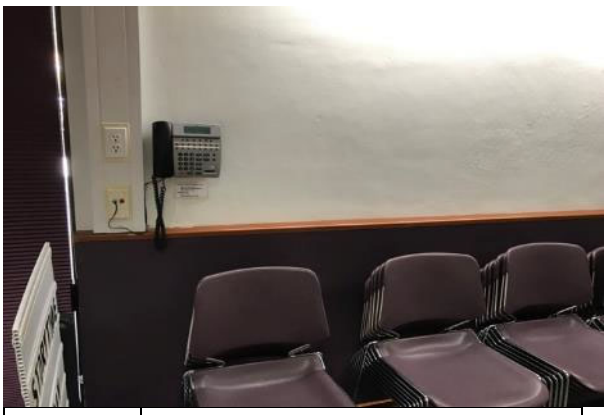


#64	INTERIOR DOOR

#65	TOILET PARTITIONS

#66	INTERIOR WALL FINISH, WOOD PANELING

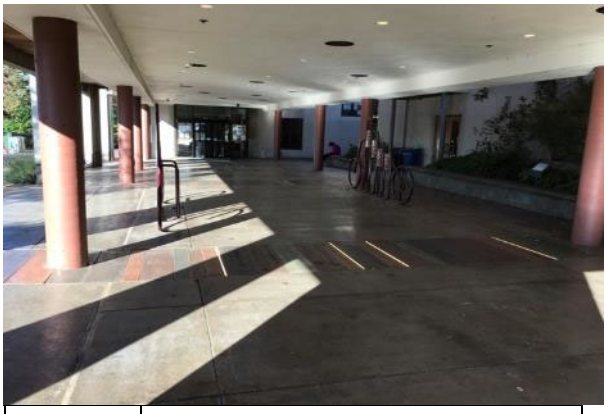
#67	INTERIOR WALL FINISH



#68	INTERIOR WALL FINISH

#69	INTERIOR FLOOR FINISH, VINYL SHEETING

#70	INTERIOR FLOOR FINISH, CERAMIC TILE



#71	EXTERIOR PATIO

#72	SKY BRIDGE DECKING

#73	EXTERIOR METAL STAIRS

#74	FLATWORK

#75	FLATWORK

#76	FLAT WORK

#77	PARKING LOTS

#78	LANDSCAPING

#79	LANDSCAPING

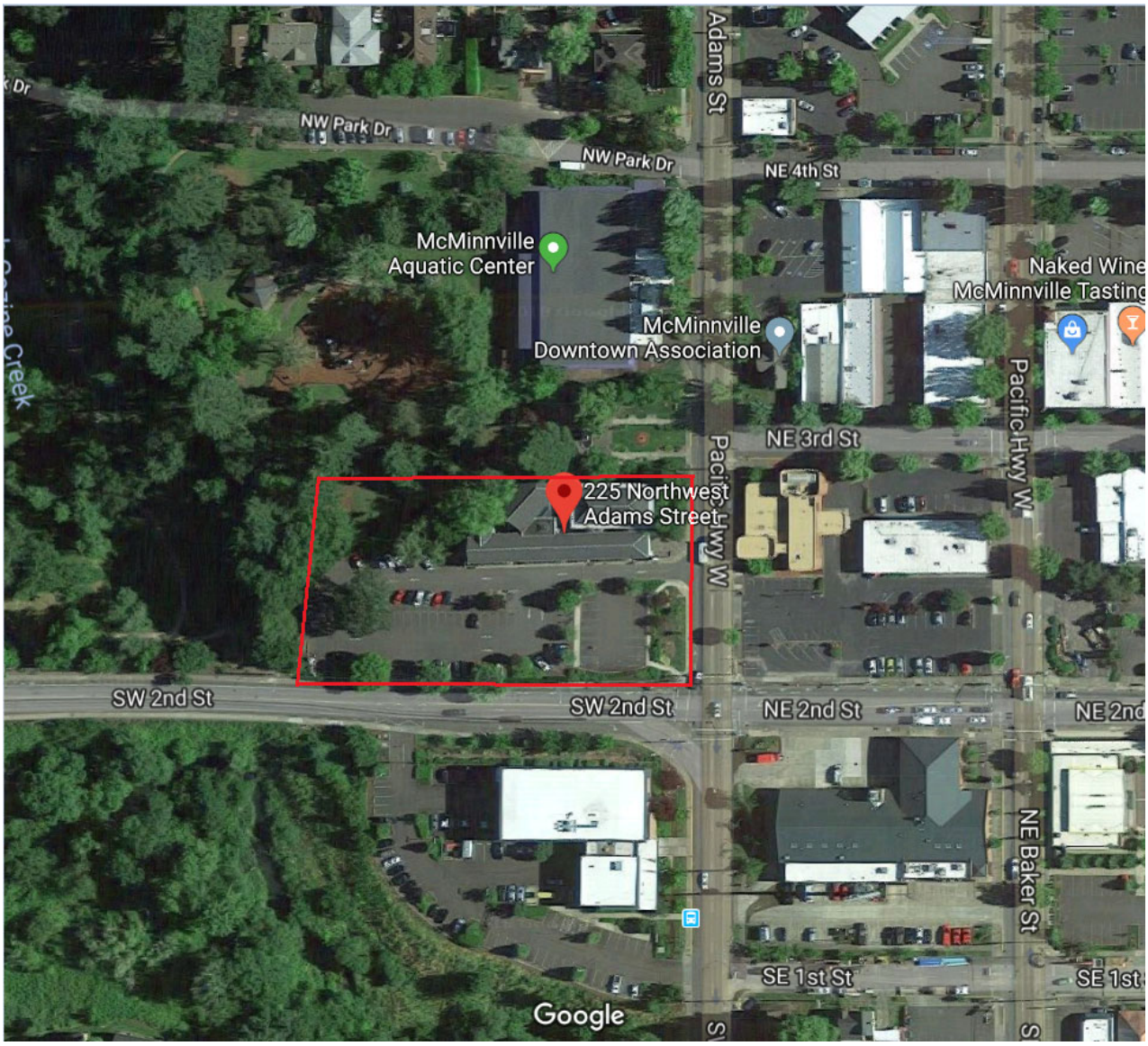
#80	POLE LIGHTS

#81	SIGNAGE

#82	SIGNAGE

Appendix B:
Site Plan

SITE PLAN



SOURCE:
Google Maps

ON-SITE DATE:
October 12, 2018

Appendix C:
Accessibility Review

Library Accessibility Issues

	Major Issues *(ADA study recommended)*	Moderate Issues *(ADA study recommended)*	Minor/No Issues
Exterior Accessible Route	☐	☐	☒
Interior Accessible Route	☐	☐	☒
Public Use Restrooms	☐	☐	☒
Elevators	☐	☐	☒
Kitchens/Kitchenettes	☐	☐	☒

Carnegie Accessibility Issues

	Major Issues *(ADA study recommended)*	Moderate Issues *(ADA study recommended)*	Minor/No Issues
Exterior Accessible Route	☐	☐	☒
Interior Accessible Route	☐	☐	☒
Public Use Restrooms	☐	☐	☒
Elevators	☐	☐	☒
Kitchens/Kitchenettes	☐	☐	☒

Site Accessibility Issues

	Major Issues *(ADA study recommended)*	Moderate Issues *(ADA study recommended)*	Minor/No Issues
Parking	☐	☐	☒
Exterior Accessible Route	☐	☐	☒

Appendix D:
Pre-Survey Questionnaire

FACILITY CONDITION ASSESSMENT: PRE-SURVEY QUESTIONNAIRE

This questionnaire must be completed by the property owner, the owner's designated representative, or someone knowledgeable about the subject property. ***The completed form must be presented to EMG's Field Observer on the day of the site visit.*** If the form is not completed, EMG's Project Manager will require ***additional time*** during the on-site visit with such a knowledgeable person in order to complete the questionnaire. During the site visit, EMG's Field Observer may ask for details associated with selected questions. This questionnaire will be utilized as an exhibit in EMG's final Property Condition Report.

Name of person completing form: Jenny Berg

Title / Association with property: Library Director

Length of time associated w/ property: 6 years as Library Director (17 years total)

Date Completed: October

Phone Number: 503-435-5550 (work), 503-929-3141 (cell)

Building / Station Name: Library

Directions: Please answer all questions to the best of your knowledge and in good faith. Please provide additional details in the Comments column, or backup documentation for any ***Yes*** responses.

DATA OVERVIEW		RESPONSE
1	Year constructed	1912 Carnegie Library, 1983 addition
2	Building size in SF	22,000
3	Acreage	
4	Number of parking spaces	79, shared with City Park and Aquatic Center
5	Age of roof (known or estimated); active warranty w/ expiration date?	Repaired flashing and membrane of Carnegie building in 2012, roof replaced on library 1995
QUESTION		**RESPONSE**
6	List all major renovations or rehabilitations since construction (with estimated dates).	2018 – elevator modernization 2013 & 2006 – stucco and window sealant reseal 1995/1996 – replacement of roofing and flashing, drain tile system, repair and reseal of stucco joints and windows, seismic upgrades
7	List other somewhat lesser but still significant capital improvements, focused within recent years (provide approximate year completed).	2018 - Children's Room update (carpet, lighting, paint, furniture) 2017 – new drinking fountain in lobby 2016 – Plaza remodel (paving, lighting, painting, bike racks, frog and mosaic) 2014 – ~~HVAC chiller~~ Cooling tower replaced
8	List any major capital expenditures planned/requested for the next few years. Have they been budgeted?	Fire alarm upgrade, not budgeted Lobby upgrade/remodel
9	Describe any extremely problematic, historically chronic, or immediate facility needs.	HVAC is ~35 years old and needs regular repair
10	Describe any shared building or site elements or unique arrangements with neighboring properties.	The library is officially "in the park", on City Park property.
11	Does the building have an indoor exhaust removal system.	no

Mark the column corresponding to the appropriate response. Please provide additional details in the Comments column, or backup documentation for any **Yes** responses. (**NA** indicates "*Not Applicable*", **Unk** indicates *"Unknown"*)						
QUESTION		RESPONSE				COMMENTS
		Yes	No	Unk	NA	
11	Are there any unusable or "down" areas, units, or spaces within the building?		x			There are spaces not available to the public, but all areas are usable for the purpose they were meant.
12	Is the station served by a private water well, septic system or other special waste treatment system?		x			
13	Are there any problems with the utilities, such as inadequate pressure or capacities?		x			
14	Have there been any leaks or pressure problems with natural gas service?		x			
15	Are there any problems with erosion or areas with storm water drainage issues?		x			
16	Are there any problems with the landscape irrigation systems?		x			
17	Are there any problems or inadequacies with exterior lighting?	x				Lighting could be improved on the west side and southeast side at the corner of Second and Adams St. (recent removal of light in order to expand Second St.) Lighted Library sign on Adams St. does not work
18	Are there any problems with foundations or structures, like excessive settlement?		x			
19	Are there any known issues with termites or other wood-boring pests?		x			
20	Are there any wall, window, basement or roof leaks?	x				Signs of window leak damage
21	Are there any plumbing leaks or water pressure problems?		x			
22	Are any areas of the building inadequately heated, cooled or ventilated?	x				Some areas are too warm and some areas are too cool.
23	Are there any poorly insulated areas?		x			
24	Do any of the HVAC systems use older R-11, 12, or 22 refrigerants?			x		
25	Has any part of the building ever contained visible suspect mold growth?	x				Air quality study and improvements made
26	Have there been indoor air quality or mold related complaints from building occupants?	x				

Mark the column corresponding to the appropriate response. Please provide additional details in the Comments column, or backup documentation for any **Yes** responses. (**NA** indicates "*Not Applicable*", **Unk** indicates *"Unknown"*)						
QUESTION		RESPONSE				COMMENTS
		Yes	No	Unk	NA	
27	Are there any known unresolved building, fire, or zoning code issues with the governing municipality?	x				Fire alarm system additional work needs to be done
28	Is there any pending litigation concerning the property?		x			
29	Are there outstanding accessibility issues at the building?		x			
30	Are there any other unresolved construction defects or significant issues/hazards at the property that have not yet been identified?		x			

Signature of person interviewed or completing form Date

Appendix E:
Replacement Reserves

Replacement Reserves Report

12/26/2018

Location	2018	2019	2020	2021	2022	2023	2024	2025	2026	2027	2028	2029	2030	2031	2032	2033	2034	2035	2036	2037	2038	Total Escalated Estimate
Library & Carnegie Building	$0	$0	$0	$0	$0	$0	$0	$0	$0	$0	$0	$0	$0	$0	$0	$0	$0	$0	$0	$0	$0	
Library & Carnegie Building / Carnegie Building	$949	$0	$0	$66,336	$76,054	$36,604	$15,777	$26,722	$221,133	$0	$128,927	$0	$0	$0	$86,584	$44,564	$0	$0	$17,808	$0	$5,366	**$726,825**
Library & Carnegie Building / Library	$45,880	$0	$0	$116,244	$410,881	$220,049	$0	$96,624	$0	$0	$286,870	$4,940	$40,262	$9,934	$198,665	$102,328	$41,068	$0	$31,429	$0	$167,229	**$1,772,403**
Library & Carnegie Building / Site	$0	$0	$0	$0	$45,037	$11,805	$0	$0	$0	$19,494	$0	$175,389	$0	$0	$22,599	$15,865	$210,905	$0	$0	$26,198	$0	**$527,292**
GrandTotal	**$46,829**	**$0**	**$0**	**$182,580**	**$531,972**	**$268,459**	**$15,777**	**$123,346**	**$221,133**	**$19,494**	**$415,798**	**$180,329**	**$40,262**	**$9,934**	**$307,848**	**$162,758**	**$251,973**	**$0**	**$49,237**	**$26,198**	**$172,595**	**$3,026,521**

Library & Carnegie Building

* Markup/LocationFactor (1.054) has been included in unit costs. Markup includes a and 7.5% Design and Permitting factors applied to the location adjusted unit cost.

Library & Carnegie Building / Carnegie Building

Uniformat Code	ID	Cost Description	Lifespan (EUL)	EAge	RUL	Quantity	Unit	Unit Cost	w/ Markup *	Subtotal	2018	2019	2020	2021	2022	2023	2024	2025	2026	2027	2028	2029	2030	2031	2032	2033	2034	2035	2036	2037	2038	Deficiency Repair Estimate
B2011	1075216	Exterior Wall, Painted Surface, 1-2 Stories, Prep & Paint	10	5	5	1800	SF	$2.87	$3.25	$5,853						$5,853									$5,853							**$11,707**
B2021	1075249	Window, Wood Historical 24 SF,	30	22	8	45	EA	$3,300.00	$3,739.07	$168,258									$168,258													**$168,258**
B2031	1075319	Exterior Door, Fully-Glazed Aluminum-Framed Swinging, Replace	30	20	10	4	EA	$2,106.57	$2,386.85	$9,547											$9,547											**$9,547**
B2032	1075258	Exterior Door, Wood Solid-Core, Replace	25	18	7	2	EA	$1,423.11	$1,612.45	$3,225								$3,225														**$3,225**
B3011	1075292	Roof, Asphalt Shingle Premium Grade, Replace	30	23	7	3240	SF	$5.04	$5.71	$18,502								$18,502														**$18,502**
B3011	1075236	Roof, Single-Ply TPO/PVC Membrane, Replace	20	6	14	1090	SF	$15.93	$18.05	$19,674															$19,674							**$19,674**
C1021	1075276	Interior Door, Wood Solid-Core, Replace	20	14	6	7	EA	$1,423.11	$1,612.45	$11,287							$11,287															**$11,287**
C1021	1075256	Interior Door, Steel, Replace	25	15	10	2	EA	$950.12	$1,076.53	$2,153											$2,153											**$2,153**
C1031	1075297	Toilet Partitions, Metal Overhead-Braced, Replace	20	14	6	2	EA	$850.00	$963.09	$1,926							$1,926															**$1,926**
C3012	1075248	Interior Wall Finish, Wood Paneling, Refinish	10	5	5	750	SF	$1.53	$1.73	$1,300						$1,300									$1,300							**$2,600**
C3025	1075210	Interior Floor Finish, Carpet Standard-Commercial Medium-Traffic, Replace	10	6	4	4300	SF	$7.26	$8.23	$35,372					$35,372										$35,372							**$70,743**
C3031	1075279	Interior Ceiling and Wall Finish, Exposed/Generic, Prep & Paint	10	5	5	8340	SF	$2.27	$2.57	$21,451						$21,451										$21,451						**$42,901**
D2011	1075309	Toilet, Flush Tank (Water Closet), Replace	20	16	4	2	EA	$1,055.15	$1,195.54	$2,391					$2,391																	**$2,391**
D2012	1075260	Urinal, Vitreous China, Replace	20	16	4	1	EA	$1,193.44	$1,352.23	$1,352					$1,352																	**$1,352**
D2014	1075295	Sink/Lavatory, Vitreous China, Replace	20	16	4	2	EA	$861.51	$976.13	$1,952					$1,952																	**$1,952**
D2014	1075311	Sink/Lavatory, Stainless Steel, Replace	20	16	4	1	EA	$1,054.05	$1,194.29	$1,194					$1,194																	**$1,194**
D2018	1075245	Drinking Fountain, Stainless, Replace	15	1	14	1	EA	$1,938.99	$2,196.97	$2,197															$2,197							**$2,197**
D2023	1075226	Water Heater, 30 GAL, Replace	15	12	3	1	EA	$1,738.90	$1,970.26	$1,970				$1,970															$1,970			**$3,941**
D2023	1075228	Water Heater, Instant Hot, Electric, Replace	15	10	5	1	EA	$1,907.74	$2,161.56	$2,162						$2,162														$2,162		**$4,323**
D3041	1075267	Air Handler, Interior, 5,201 to 6,500 CFM, Replace	30	27	3	1	EA	$22,172.97	$25,123.08	$25,123				$25,123																		**$25,123**
D3041	1075321	Electric Heater, 7 kW, Replace	15	12	3	1	EA	$2,497.72	$2,830.04	$2,830				$2,830															$2,830			**$5,660**
D3041	1075229	Air Handler, Interior, 5,201 to 6,500 CFM, Replace	30	27	3	1	EA	$22,172.97	$25,123.08	$25,123				$25,123																		**$25,123**
D3041	1075274	Electric Heater, 7 kW, Replace	15	12	3	2	EA	$2,497.72	$2,830.04	$5,660				$5,660															$5,660			**$11,320**
D4019	1075232	Sprinkler Heads (per SF), , Replace	20	16	4	4840	SF	$1.33	$1.51	$7,294					$7,294																	**$7,294**
D5012	1075250	Distribution Panel, 225 AMP, Replace	30	26	4	1	EA	$7,951.00	$9,008.88	$9,009					$9,009																	**$9,009**
D5012	1075254	Distribution Panel, 225 AMP, Replace	30	26	4	1	EA	$7,951.00	$9,008.88	$9,009					$9,009																	**$9,009**
D5029	1075269	Lighting System, Interior, School, Upgrade	25	15	10	4840	SF	$15.36	$17.40	$84,234											$84,234											**$84,234**
E1094	1075270	Residential Appliances, Range, Gas, Replace	15	10	5	1	EA	$768.11	$809.59	$810						$810														$810		**$1,619**
E1094	1075230	Residential Appliances, Refrigerator, 14-18 CF, Replace	15	7	8	1	EA	$956.04	$1,007.67	$1,008									$1,008													**$1,008**
E2012	1075225	Kitchen Cabinet, Base and Wall Section, Wood, Replace	20	12	8	10	LF	$467.63	$529.85	$5,298									$5,298													**$5,298**
Z108X	1075286	ADA, Restroom, Lavatory Hardware, Modify	0	0	0	2	EA	$450.00	$474.30	$949	$949																					**$949**
Totals, Unescalated											**$949**	**$0**	**$0**	**$60,707**	**$67,573**	**$31,575**	**$13,213**	**$21,727**	**$174,564**	**$0**	**$95,934**	**$0**	**$0**	**$0**	**$57,242**	**$28,604**	**$0**	**$0**	**$10,460**	**$0**	**$2,971**	**$565,520**
Totals, Escalated (3.0% inflation, compounded annually)											**$949**	**$0**	**$0**	**$66,336**	**$76,054**	**$36,604**	**$15,777**	**$26,722**	**$221,133**	**$0**	**$128,927**	**$0**	**$0**	**$0**	**$86,584**	**$44,564**	**$0**	**$0**	**$17,808**	**$0**	**$5,366**	**$726,825**

* Markup/LocationFactor (1.054) has been included in unit costs. Markup includes a and 7.5% Design and Permitting factors applied to the location adjusted unit cost.

Library & Carnegie Building / Library

Uniformat Code	ID	Cost Description	Lifespan (EUL)	EAge	RUL	Quantity	Unit	Unit Cost	w/ Markup *	Subtotal	2018	2019	2020	2021	2022	2023	2024	2025	2026	2027	2028	2029	2030	2031	2032	2033	2034	2035	2036	2037	2038	Deficiency Repair Estimate
B2011	1075299	Exterior Wall, Painted Surface, Prep & Paint	10	6	4	3400	SF	$3.83	$4.34	$14,755					$14,755										$14,755							**$29,509**
B2011	1075243	Exterior Wall, Painted Surface, 1-2 Stories, Prep & Paint	10	5	5	7800	SF	$2.87	$3.25	$25,364						$25,364										$25,364						**$50,729**
B2021	1075302	Window, SF, Replace	30	25	5	38	EA	$804.61	$911.66	$34,643						$34,643																**$34,643**
B2021	1075240	Window, SF, Replace	30	25	5	64	EA	$1,311.24	$1,485.70	$95,085						$95,085																**$95,085**
B2023	1075272	Storefront, Metal-Framed 3' x 7', Replace	30	20	10	4	EA	$2,106.57	$2,386.85	$9,547												$9,547										**$9,547**

Uniformat Code	ID	Cost Description	Lifespan (EUL)	EAge	RUL	Quantity	Unit	Unit Cost	w/ Markup *	Subtotal	2018	2019	2020	2021	2022	2023	2024	2025	2026	2027	2028	2029	2030	2031	2032	2033	2034	2035	2036	2037	2038	Deficiency Repair Estimate
B2031	1075289	Interior Door, Fully-Glazed Aluminum-Framed Sliding, Replace	25	10	15	1	EA	$2,334.31	$2,644.89	$2,645																$2,645							**$2,645**
B2032	1075266	Exterior Door, Wood Solid-Core, Replace	25	18	7	1	EA	$1,423.11	$1,612.45	$1,612								$1,612															**$1,612**
B3011	1075313	Roof, Asphalt Shingle Premium Grade, Replace	30	23	7	13300	SF	$5.04	$5.71	$75,951								$75,951															**$75,951**
B3011	1075203	Roof, Modified Bituminous, Replace	20	9	11	350	SF	$9.00	$10.20	$3,569												$3,569											**$3,569**
C1021	1075291	Interior Door, Steel, Replace	25	18	7	1	EA	$950.12	$1,001.43	$1,001								$1,001															**$1,001**
C1021	1075296	Interior Door, Wood Solid-Core, Replace	20	5	15	4	EA	$1,423.11	$1,612.45	$6,450																$6,450							**$6,450**
C1021	1075207	Interior Door, Fully-Glazed Aluminum-Framed Swinging, Replace	30	15	15	2	EA	$2,106.57	$2,386.85	$4,774																$4,774							**$4,774**
C1021	1075268	Interior Door, Wood Solid-Core, Replace	20	5	15	3	EA	$1,423.11	$1,612.45	$4,837																$4,837							**$4,837**
C3012	1075239	Interior Ceiling and Wall Finish, Generic Surface, Prep & Paint	8	4	4	16000	SF	$1.45	$1.64	$26,287					$26,287								$26,287								$26,287		**$78,860**
C3021	1075255	Interior Floor Finish, Concrete, Prep & Seal	10	5	5	2000	SF	$9.23	$10.46	$20,916						$20,916										$20,916							**$41,832**
C3024	1075219	Interior Floor Finish, Vinyl Sheeting, Replace	15	10	5	500	SF	$7.01	$7.94	$3,971						$3,971															$3,971		**$7,943**
C3025	1075257	Interior Floor Finish, Carpet Standard-Commercial Medium-Traffic, Replace	10	6	4	14000	SF	$7.26	$8.23	$115,163					$115,163										$115,163								**$230,326**
C3025	1075263	Interior Floor Finish, Carpet Standard-Commercial Medium-Traffic, Replace	10	0	10	2000	SF	$7.26	$8.23	$16,452											$16,452											$16,452	**$32,904**
D2011	1075316	Toilet, Tankless (Water Closet), Replace	20	7	13	2	EA	$842.97	$955.13	$1,910														$1,910									**$1,910**
D2014	1075304	Sink/Lavatory, Stainless Steel, Replace	20	15	5	1	EA	$1,054.05	$1,194.29	$1,194						$1,194																	**$1,194**
D2014	1075317	Service Sink, Floor, Replace	35	25	10	1	EA	$1,599.51	$1,812.32	$1,812											$1,812												**$1,812**
D2014	1075307	Sink/Lavatory, Vitreous China, Replace	20	8	12	2	EA	$861.51	$976.13	$1,952													$1,952										**$1,952**
D2021	1075310	Backflow Preventer, 4 INCH, Replace	15	12	3	1	EA	$6,001.42	$6,799.91	$6,800				$6,800																$6,800			**$13,600**
D2023	1075293	Water Heater, 12 GAL, Replace	15	12	3	1	EA	$1,014.17	$1,149.11	$1,149				$1,149																$1,149			**$2,298**
D2091	1075308	Air Compressor, .75 HP, Replace	20	10	10	1	EA	$4,696.77	$5,321.68	$5,322											$5,322												**$5,322**
D3031	1075244	Chiller, Reciprocal Water-Cooled, 70 Ton, Replace	25	21	4	1	EA	$84,349.85	$95,572.60	$95,573					$95,573																			**$95,573**
D3031	1075208	Cooling Tower, 51 to 75 Ton, Replace	20	4	16	1	EA	$22,586.75	$25,591.92	$25,592																	$25,592						**$25,592**
D3041	1075246	Air Handler, Interior, 4,701 to 5,200 CFM, Replace	30	27	3	1	EA	$19,551.33	$22,152.63	$22,153				$22,153																				**$22,153**
D3041	1075341	Air Handler, Interior, 4,701 to 5,200 CFM, Replace	30	27	3	1	EA	$19,551.33	$22,152.63	$22,153				$22,153																				**$22,153**
D3041	1075238	Electric Heater, 27.5 kW, Replace	15	12	3	2	EA	$3,914.70	$4,435.55	$8,871				$8,871																$8,871			**$17,742**
D3041	1075215	Air Handler, Interior, 6,501 to 8,000 CFM, Replace	30	27	3	1	EA	$26,016.62	$29,478.13	$29,478				$29,478																				**$29,478**
D3045	1075290	Distribution Pump, Chiller & Condenser Water, 10 HP, Replace	20	17	3	2	EA	$6,237.69	$7,067.61	$14,135				$14,135																				**$14,135**
D3051	1075282	Unit Heater, 1 - 2 kW, Replace	20	10	10	1	EA	$1,095.84	$1,241.64	$1,242											$1,242												**$1,242**
D4019	1075278	Sprinkler Heads (per SF), , Replace	20	16	4	17100	SF	$1.33	$1.51	$25,769					$25,769																			**$25,769**
D5012	1075241	Distribution Panel, 100 AMP, Replace	30	26	4	1	EA	$5,079.93	$5,755.81	$5,756					$5,756																			**$5,756**
D5012	1075235	Distribution Panel, 400 AMP, Replace	30	26	4	1	EA	$9,487.85	$10,750.21	$10,750					$10,750																			**$10,750**
D5012	1075214	Secondary Transformer, 112 kVA, Replace	30	26	4	1	EA	$11,920.05	$13,506.01	$13,506					$13,506																			**$13,506**
D5012	1075227	Distribution Panel, 400 AMP, Replace	30	26	4	1	EA	$9,487.85	$10,750.21	$10,750					$10,750																			**$10,750**
D5012	1075252	Distribution Panel, 100 AMP, Replace	30	26	4	1	EA	$5,079.93	$5,755.81	$5,756					$5,756																			**$5,756**
D5012	1075242	Switchboard, 600 AMP, Replace	30	26	4	1	EA	$24,768.06	$28,063.45	$28,063					$28,063																			**$28,063**
D5012	1075233	Distribution Panel, 100 AMP, Replace	30	26	4	1	EA	$5,079.93	$5,755.81	$5,756					$5,756																			**$5,756**
D5012	1075275	Distribution Panel, 100 AMP, Replace	30	26	4	1	EA	$5,079.93	$5,755.81	$5,756					$5,756																			**$5,756**
D5029	1075261	Lighting System, Interior, School, Upgrade	25	15	10	10290	SF	$15.36	$17.40	$179,084											$179,084												**$179,084**
D5037	1076949	Fire Alarm System, Office Building, Install	20	20	0	17158	SF	$2.36	$2.67	$45,880	$45,880																				$45,880		**$91,761**
D5037	1075285	Annunciator Alarm Panel, , Replace	15	12	3	1	EA	$1,448.32	$1,641.02	$1,641				$1,641																$1,641			**$3,282**
D5037	1075212	Fire Alarm Control Panel, Multiplex, Replace	15	2	13	1	EA	$4,284.35	$4,854.38	$4,854														$4,854									**$4,854**
E2012	1075300	Kitchen Cabinet, Base and Wall Section, Wood, Replace	20	15	5	15	LF	$467.63	$529.85	$7,948						$7,948																	**$7,948**
E2012	1075211	Kitchen Counter, Plastic Laminate, Postformed, Replace	10	5	5	15	LF	$43.90	$46.27	$694						$694											$694							**$1,388**
G2041	1075280	Decking, Wood Board, Refinish	10	6	4	800	SF	$1.57	$1.78	$1,423					$1,423										$1,423								**$2,846**
Totals, Unescalated											**$45,880**	**$0**	**$0**	**$106,380**	**$365,062**	**$189,816**	**$0**	**$78,564**	**$0**	**$0**	**$213,458**	**$3,569**	**$28,239**	**$6,765**	**$131,341**	**$65,680**	**$25,592**	**$0**	**$18,461**	**$0**	**$92,590**	**$1,371,399**
Totals, Escalated (3.0% inflation, compounded annually)											**$45,880**	**$0**	**$0**	**$116,244**	**$410,881**	**$220,049**	**$0**	**$96,624**	**$0**	**$0**	**$286,870**	**$4,940**	**$40,262**	**$9,934**	**$198,665**	**$102,328**	**$41,068**	**$0**	**$31,429**	**$0**	**$167,229**	**$1,772,403**

* Markup/LocationFactor (1.054) has been included in unit costs. Markup includes a and 7.5% Design and Permitting factors applied to the location adjusted unit cost.

Library & Carnegie Building / Site

Uniformat Code	ID	Cost Description	Lifespan (EUL)	EAge	RUL	Quantity	Unit	Unit Cost	w/ Markup *	Subtotal	2018	2019	2020	2021	2022	2023	2024	2025	2026	2027	2028	2029	2030	2031	2032	2033	2034	2035	2036	2037	2038	Deficiency Repair Estimate
G2022	1075231	Parking Lots, Asphalt Pavement, Seal & Stripe	5	1	4	34700	SF	$0.38	$0.43	$14,940					$14,940					$14,940					$14,940					$14,940			**$59,762**
G2022	1075234	Parking Lots, Asphalt Pavement, Mill & Overlay	25	9	16	34700	SF	$3.28	$3.72	$128,959																	$128,959						**$128,959**
G2031	1075315	Pedestrian Pavement, Sidewalk, Concrete Sections/Small Areas, Replace	30	26	4	250	SF	$19.00	$21.53	$5,382					$5,382																		**$5,382**
G2044	1075294	Signage, Property, Monument/Pylon, Replace/Install	20	9	11	1	EA	$8,602.00	$9,746.50	$9,746												$9,746											**$9,746**
G2044	1075206	Signage, Property, Monument/Pylon, Replace/Install	20	9	11	12	EA	$8,602.00	$9,746.50	$116,958												$116,958											**$116,958**
G2045	1114419	Site Furnishings, Bike Rack, Replace	25	9	16	2	EA	$1,090.00	$1,235.02	$2,470																	$2,470						**$2,470**
G2057	1113606	Irrigation System, , Replace	25	21	4	5500	SF	$3.16	$3.58	$19,692					$19,692																		**$19,692**

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Uniformat Code	ID	Cost Description	Lifespan (EUL)	EAge	RUL	Quantity	Unit	Unit Cost	w/ Markup *	Subtotal	2018	2019	2020	2021	2022	2023	2024	2025	2026	2027	2028	2029	2030	2031	2032	2033	2034	2035	2036	2037	2038	Deficiency Repair Estimate
G4021	1075224	Pole Light, 135 - 1000 WATT, Replace	10	5	5	2	EA	$2,246.90	$2,545.85	$5,092						$5,092										$5,092						**$10,183**
G4021	1075322	Pole Light, 135 - 1000 WATT, Replace	10	5	5	2	EA	$2,246.90	$2,545.85	$5,092						$5,092										$5,092						**$10,183**
Totals, Unescalated											**$0**	**$0**	**$0**	**$0**	**$40,015**	**$10,183**	**$0**	**$0**	**$0**	**$14,940**	**$0**	**$126,704**	**$0**	**$0**	**$14,940**	**$10,183**	**$131,429**	**$0**	**$0**	**$14,940**	**$0**	**$363,337**
Totals, Escalated (3.0% inflation, compounded annually)											**$0**	**$0**	**$0**	**$0**	**$45,037**	**$11,805**	**$0**	**$0**	**$0**	**$19,494**	**$0**	**$175,389**	**$0**	**$0**	**$22,599**	**$15,865**	**$210,905**	**$0**	**$0**	**$26,198**	**$0**	**$527,292**

* Markup/LocationFactor (1.054) has been included in unit costs. Markup includes a and 7.5% Design and Permitting factors applied to the location adjusted unit cost.

Appendix F:
Equipment Inventory List

Equipment Inventory Report

12/26/2018

ID	Location	Description	Manufacturer	Model	Details	Barcode	Asset Tag	Quantity	Unit	Year Installed/In Service	Replacement Year	Total Cost
1075260	Library & Carnegie Building / Carnegie Building	D2012 - Urinal, Vitreous China, Replace; Lifespan:20						1	EA		2022	$1,283
1075295	Library & Carnegie Building / Carnegie Building	D2014 - Sink/Lavatory, Vitreous China, Replace; Lifespan:20						2	EA		2022	$1,852
1075311	Library & Carnegie Building / Carnegie Building	D2014 - Sink/Lavatory, Stainless Steel, Replace; Lifespan:20						1	EA		2022	$1,133
1075317	Library & Carnegie Building / Library	D2014 - Service Sink, Floor, Replace; Lifespan:35						1	EA		2028	$1,719
1075307	Library & Carnegie Building / Library	D2014 - Sink/Lavatory, Vitreous China, Replace; Lifespan:20						2	EA		2030	$1,852
1075304	Library & Carnegie Building / Library	D2014 - Sink/Lavatory, Stainless Steel, Replace; Lifespan:20						1	EA		2023	$1,133
1075245	Library & Carnegie Building / Carnegie Building	D2018 - Drinking Fountain, Stainless, Replace; Lifespan:15						1	EA		2032	$2,084
1075310	Library & Carnegie Building / Library	D2021 - Backflow Preventer, 4 INCH, Replace; Lifespan:15	Beeco	NO 2	92780			1	EA		2021	$6,452
1075226	Library & Carnegie Building / Carnegie Building	D2023 - Water Heater, 30 GAL, Replace; Lifespan:15	AO Smith	EES30	NB8101721-000			1	EA		2021	$1,869
1075228	Library & Carnegie Building / Carnegie Building	D2023 - Water Heater, Instant Hot, Electric, Replace; Lifespan:15						1	EA		2023	$2,051
1075293	Library & Carnegie Building / Library	D2023 - Water Heater, 12 GAL, Replace; Lifespan:15	Bradford White	RE112T6	MH36601868			1	EA		2021	$1,090
1075308	Library & Carnegie Building / Library	D2091 - Air Compressor, .75 HP, Replace; Lifespan:20	Simplex	5Z696A	7297780-41			1	EA	2008	2028	$5,049
1075208	Library & Carnegie Building / Library	D3031 - Cooling Tower, 51 to 75 Ton, Replace; Lifespan:20	Evapco	LSW18A	14674835			1	EA	2014	2034	$24,281
1075244	Library & Carnegie Building / Library	D3031 - Chiller, Reciprocal Water-Cooled, 70 Ton, Replace; Lifespan:25	Carrier	30HS070D600-1	Illegible			1	EA		2022	$90,676
1075267	Library & Carnegie Building / Carnegie Building	D3041 - Air Handler, Interior, 5,201 to 6,500 CFM, Replace; Lifespan:30	Carrier	40RS014560	U1948653			1	EA	1991	2021	$23,836
1075321	Library & Carnegie Building / Carnegie Building	D3041 - Electric Heater, 7 kW, Replace; Lifespan:15	Warren					1	EA		2021	$2,685
1075229	Library & Carnegie Building / Carnegie Building	D3041 - Air Handler, Interior, 5,201 to 6,500 CFM, Replace; Lifespan:30	Carrier	Illegible	Illegible			1	EA	1991	2021	$23,836
1075274	Library & Carnegie Building / Carnegie Building	D3041 - Electric Heater, 7 kW, Replace; Lifespan:15	Warren					2	EA		2021	$5,370
1075246	Library & Carnegie Building / Library	D3041 - Air Handler, Interior, 4,701 to 5,200 CFM, Replace; Lifespan:30	Carrier	39ED12	4581D31112			1	EA	1983	2021	$21,018
1075341	Library & Carnegie Building / Library	D3041 - Air Handler, Interior, 4,701 to 5,200 CFM, Replace; Lifespan:30	Carrier	39ED12	4581D31112			1	EA	1983	2021	$21,018
1075238	Library & Carnegie Building / Library	D3041 - Electric Heater, 27.5 kW, Replace; Lifespan:15	Warren	CBK				2	EA		2021	$8,417
1075215	Library & Carnegie Building / Library	D3041 - Air Handler, Interior, 6,501 to 8,000 CFM, Replace; Lifespan:30	Carrier	39ED18	4581D31114			1	EA	1983	2021	$27,968
1075290	Library & Carnegie Building / Library	D3045 - Distribution Pump, Chiller & Condenser Water, 10 HP, Replace; Lifespan:20	Bell & Gossett	Illegible	Illegible			2	EA		2021	$13,411
1075282	Library & Carnegie Building / Library	D3051 - Unit Heater, 1 - 2 kW, Replace; Lifespan:20						1	EA		2028	$1,178
1075232	Library & Carnegie Building / Carnegie Building	D4019 - Sprinkler Heads (per SF), , Replace; Lifespan:20						4840	SF		2022	$6,920
1075278	Library & Carnegie Building / Library	D4019 - Sprinkler Heads (per SF), , Replace; Lifespan:20						17100	SF		2022	$24,449
1075250	Library & Carnegie Building / Carnegie Building	D5012 - Distribution Panel, 225 AMP, Replace; Lifespan:30	GE					1	EA		2022	$8,547
1075254	Library & Carnegie Building / Carnegie Building	D5012 - Distribution Panel, 225 AMP, Replace; Lifespan:30	GE					1	EA		2022	$8,547
1075241	Library & Carnegie Building / Library	D5012 - Distribution Panel, 100 AMP, Replace; Lifespan:30	GE					1	EA	1983	2022	$5,461
1075235	Library & Carnegie Building / Library	D5012 - Distribution Panel, 400 AMP, Replace; Lifespan:30	GE					1	EA	1983	2022	$10,199
1075214	Library & Carnegie Building / Library	D5012 - Secondary Transformer, 112 kVA, Replace; Lifespan:30		9T23L1575	No tag/plate found			1	EA	1983	2022	$12,814
1075227	Library & Carnegie Building / Library	D5012 - Distribution Panel, 400 AMP, Replace; Lifespan:30	GE					1	EA	1983	2022	$10,199
1075252	Library & Carnegie Building / Library	D5012 - Distribution Panel, 100 AMP, Replace; Lifespan:30	GE					1	EA	1983	2022	$5,461
1075242	Library & Carnegie Building / Library	D5012 - Switchboard, 600 AMP, Replace; Lifespan:30	GE					1	EA	1983	2022	$26,626
1075233	Library & Carnegie Building / Library	D5012 - Distribution Panel, 100 AMP, Replace; Lifespan:30	GE					1	EA	1983	2022	$5,461
1075275	Library & Carnegie Building / Library	D5012 - Distribution Panel, 100 AMP, Replace; Lifespan:30	GE					1	EA	1983	2022	$5,461
1075269	Library & Carnegie Building / Carnegie Building	D5029 - Lighting System, Interior, School, Upgrade; Lifespan:25						4840	SF		2028	$79,918
1075261	Library & Carnegie Building / Library	D5029 - Lighting System, Interior, School, Upgrade; Lifespan:25						10290	SF		2028	$169,908
1076949	Library & Carnegie Building / Library	D5037 - Fire Alarm System, Office Building, Install; Lifespan:20						17158	SF		2018	$43,530
1075285	Library & Carnegie Building / Library	D5037 - Annunciator Alarm Panel, , Replace; Lifespan:15	Kidde					1	EA		2021	$1,557
1075212	Library & Carnegie Building / Library	D5037 - Fire Alarm Control Panel, Multiplex, Replace; Lifespan:15	Kidde					1	EA		2031	$4,606
1075230	Library & Carnegie Building / Carnegie Building	E1094 - Residential Appliances, Refrigerator, 14-18 CF, Replace; Lifespan:15						1	EA		2026	$956
1075270	Library & Carnegie Building / Carnegie Building	E1094 - Residential Appliances, Range, Gas, Replace; Lifespan:15						1	EA		2023	$768
Total												**$722,650**