



A Bureau Veritas Group Company

FACILITY CONDITION ASSESSMENT

TOWN OF ATKINSON
21 Academy Avenue
Atkinson, New Hampshire 03811
David Cressman



FIRE STATION
1 ACADEMY AVENUE
ATKINSON, NEW HAMPSHIRE 03812

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EMG PROJECT #:

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DATE OF REPORT:

February 3, 2020

ON SITE DATE:

January 16, 2020



engineering | environmental | capital planning | project management

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1. Executive Summary

Property Overview and Assessment Details

General Information	
Property Type	Fire Station
Main Address	1 Academy Avenue, Atkinson, New Hampshire 03812
Site Developed	2000, with exterior renovations completed in 2012
Site Area	9.3 acres (estimated)
Parking Spaces	25 total spaces all in open lots; 1 of which are accessible
Building Area	13,820 SF
Number of Stories	2
Current Occupants	Varies
Percent Utilization	100%
Date(s) of Visit	January 16, 2020
Management Point of Contact	Bill Innes and Dave Weymouth 603.362.4750 phone Bill.innes@myfairpoint.net email
On-site Point of Contact (POC)	same as above
Assessment and Report Prepared By	Chris Ledbetter
Reviewed By	Al Diefert Technical Report Reviewer For Kaustubh Chabukswar Program Manager kaustubh.chabukswar@bvna.com 800.733.0660 x7512

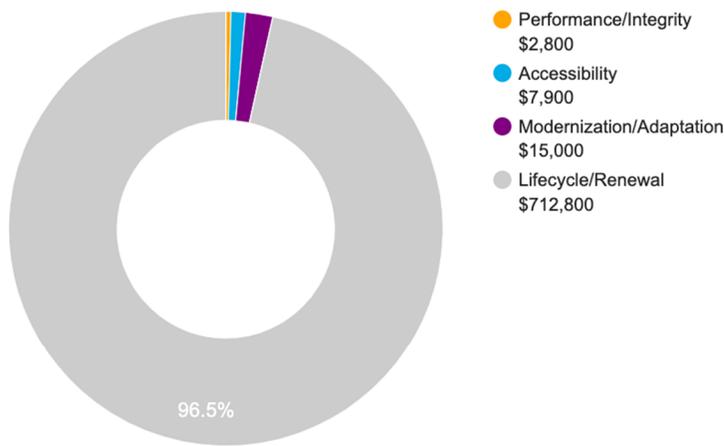
Plan Types

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)



10-YEAR TOTAL: \$738,500

Significant/Systemic Findings and Deficiencies

Historical Summary

Information provided by the point of contact (POC) advised that the building (fire station) was originally built in 2000. The site area is shared by the fire station, garage and Kimball House. The building had a few upgrades since original construction date. The roof, sidewalk and water heater were all replaced in 2012. Kitchen/hall flooring were replaced in 2014 and some furnaces were recently replaced in 2019.

Architectural

The exterior of the building is built with Vinyl/partial aluminum siding and all appears to be in fair condition. There are signs of deterioration to one exterior back door, and one wooden column under the awning. The column is recommended for immediate replacement for safety concerns. In the bay area, excess water runoff from equipment needs to be addressed appropriately. Re-sloping at the drain should help the water reach the drainage area. The building has a pitch roof with a finish of asphalt shingles that was recently updated in 2012. The roof was viewed from the ground and appeared to be in good condition with no reported interior leaks.

Mechanical, Electrical, Plumbing and Fire (MEPF)

The building is heated and cooled by individual (5) kW unit heaters and four split systems. All units are in fair condition and original to the building. The electrical distribution panels and switchboards are all original to the buildings and although the service is adequate replacement should be considered during the reserve period. There is one 100-Gal water heater that was replaced in 2012. There are three furnace. The building has a total of five restrooms throughout the building. The building has a fire alarm system with control panel, LED exit signs, emergency lighting, fire extinguishers, strobes, and pull stations, that are original to the building's construction. The building is also equipped with a (125 kW) backup diesel generator.

Site

There is a 7,000 SF asphalt parking lot with (25) total spaces. The asphalt parking lot has cracks and it will require repairs. The site has (18) parking lot bollards. The sidewalk is in good condition and was replaced in 2012. The landscaping is in good condition.

Recommended Additional Studies

No additional studies recommended at this time.

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 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 FCI’s 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 FCI’s are calculated by dividing the anticipated needs of those respective time periods by current replacement value. As a final point, the FCI’s 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:

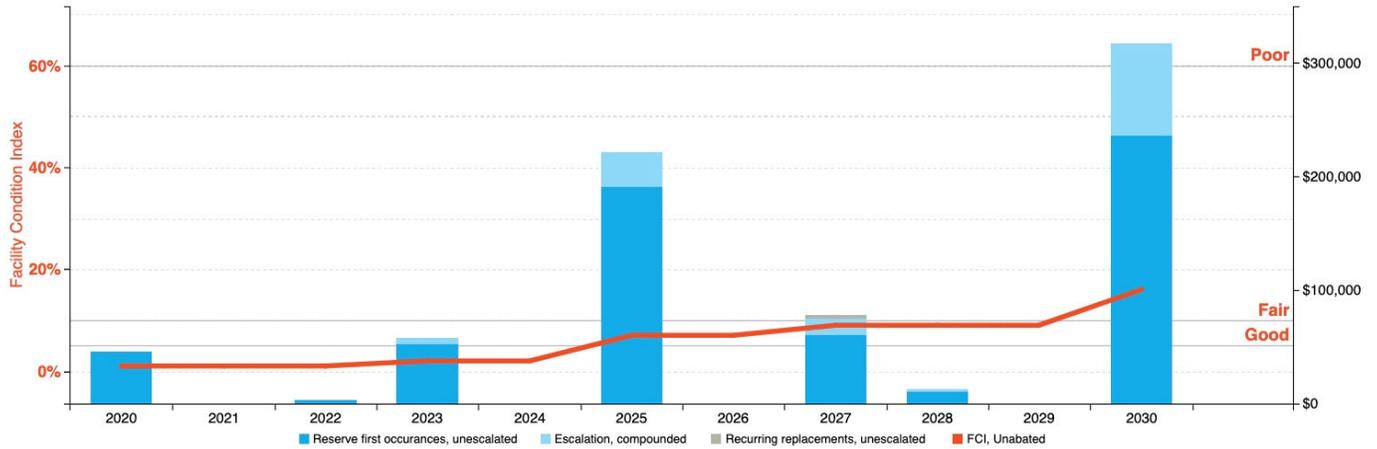
FCI Analysis Fire Station (2000)			
<i>Replacement Value</i> \$ 4,519,200	<i>Total SF</i> 13,820	<i>Cost/SF</i> \$ 327	
Current FCI		\$ 46,300	1.0 %
3-Year		\$ 109,900	2.4 %
5-Year		\$ 338,600	7.5 %
10-Year		\$ 775,100	17.2 %

The orange line in the graph below forecasts what would happen to the FCI (left Y axis) over time, assuming zero capital expenditures. The capital expenditures allocated for each year (blue bars) are associated with the dollar amounts along the right Y axis.

Needs by Year with Unaddressed FCI Over Time

FCI Analysis: Fire Station

Replacement Value: \$ 4,519,140; Inflation rate: 3.0%



Immediate Needs

Facility/Building	Total Items	Total Cost
Total	0	\$0

Key Findings



Interior Floor Finish in Poor condition.

Concrete
Fire Station Bay Area

Uniformat Code: C3021
Recommendation: **Repair in 2020**

Priority Score: **85.0**

Plan Type:
Performance/Integrity

Cost Estimate: \$1,800

\$\$\$\$

Regrade - AssetCALC ID: 1705662



Structural Frame in Poor condition.

Fire Station Building exterior

Uniformat Code: B101X
Recommendation: **in 2020**

Priority Score: **82.0**

Plan Type:
Performance/Integrity

Cost Estimate: \$1,000

\$\$\$\$

Deteriorating - AssetCALC ID: 1692488



Fire Alarm Control Panel

Addressable
Fire Station 1st Floor

Uniformat Code: D5037
Recommendation: **Replace in 2020**

Priority Score: **60.0**

Plan Type:
Modernization/Adaptation

Cost Estimate: \$15,000

\$\$\$\$

original to construction and should be replaced for reliability. - AssetCALC ID: 1701361

2. Building and Site Information



Systems Summary

<i>System</i>	<i>Description</i>	<i>Condition</i>
Structure	Conventional wood frame structure on concrete slab	Good
Façade	Vinyl siding with vinyl windows	Good
Roof	Gable construction with asphalt shingles	Good
Interiors	Walls: Painted gypsum board Floors: Carpet, VCT, Unfinished Ceilings: Painted gypsum board, ACT	Fair
Elevators	Hydraulic: one car serving all floors	Fair
Plumbing	Copper supply and PVC waste and venting Gas water heater Toilets, urinals, and sinks in all restrooms	Fair
HVAC	Individual split-systems with furnace and condensing units Supplemental components: Electric unit heaters	Fair

Systems Summary		
Fire Suppression	Wet-pipe sprinkler system; fire extinguishers	Good
Electrical	Source and Distribution: Main panel with copper wiring Interior Lighting: T-8 Emergency: Diesel generator	Good
Fire Alarm	Alarm panel, smoke detectors, alarms, strobes, pull stations, back-up emergency lights, and exit signs	Fair
Equipment/Special	Residential kitchen equipment	Good
Site Pavement	Asphalt lots with concrete sidewalks	Fair
Site Development	Building-mounted signage, parking lot bollard	Fair
Landscaping and Topography	Limited landscaping features Irrigation not present Cement block retaining wall Low to moderate site slopes throughout	Fair
Utilities	Municipal water and sewer Local utility-provided electric with local propane tanks	Fair
Site Lighting	Building-mounted: LED, CFL, metal halide	Fair
Ancillary Structures	None	--
Accessibility	Presently it does not appear an accessibility study is needed for this property.	
Key Issues and Findings	Chipped cracked concrete in bay area, rusted exterior door, rotted wooden column at canopy,, alligator cracking asphalt throughout parking lot.	

Systems Expenditure Forecast

System	Immediate	Short Term (3 yr)	Near Term (5 yr)	Med Term (10 yr)	Long Term (20 yr)	TOTAL
Structure	\$1,000	-	-	-	-	\$1,000
Facade	-	-	-	\$127,500	\$12,700	\$140,200
Roofing	-	-	-	-	\$44,200	\$44,200
Interiors	\$1,800	-	\$86,300	\$80,800	\$82,200	\$251,100
Elevators	-	-	-	\$73,900	-	\$73,900
Plumbing	\$5,200	\$2,100	-	\$37,100	\$49,200	\$93,500
Fire Suppression	-	-	\$24,200	-	\$200	\$24,400
HVAC	\$25,800	\$11,100	\$1,900	\$400	\$59,400	\$98,700
Electrical	\$28,400	\$1,500	\$67,200	\$16,900	\$51,700	\$165,800
Fire Alarm & Comm	\$15,000	\$1,400	-	\$600	\$25,500	\$42,500
Equipment/Special	-	\$14,400	\$13,400	\$11,900	\$36,900	\$76,500
Site Development	-	-	-	\$12,800	-	\$12,800
Pavement	-	\$3,300	\$28,400	\$28,100	\$9,700	\$69,500
Site Lighting	-	-	-	\$5,400	-	\$5,400
TOTALS	\$77,200	\$33,800	\$221,400	\$395,400	\$371,700	\$1,099,500

3. Property Space Use and Observed Areas

Unit Allocation

All 13,820 square feet of the property is occupied by Town of Atkinson Fire Department.

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, and the exterior of the property. The sloped roofs were observed from ground level.

Key Spaces Not Observed

All key areas of the property were accessible and observed.

4. ADA Accessibility

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

A public entity (i.e. city governments) shall operate each service, program, or activity so that the service, program, or activity, when viewed in its entirety, is readily accessible to and usable by individuals with disabilities.

However, this does not:

1. Necessarily require a public entity to make each of its existing facilities accessible to and usable by individuals with disabilities;
2. Require a public entity to take any action that would threaten or destroy the historic significance of an historic property; or
3. Require a public entity to take any action that it can demonstrate would result in a fundamental alteration in the nature of a service, program, or activity or in undue financial and administrative burdens. In those circumstances where personnel of the public entity believe that the proposed action would fundamentally alter the service, program, or activity or would result in undue financial and administrative burdens, a public entity has the burden of proving that compliance with 35.150(a) of this part would result in such alteration or burdens. The decision that compliance would result in such alteration or burdens must be made by the head of a public entity or his or her designee after considering all resources available for use in the funding and operation of the service, program, or activity, and must be accompanied by a written statement of the reasons for reaching that conclusion. If an action would result in such an alteration or such burdens, a public entity shall take any other action that would not result in such an alteration or such burdens but would nevertheless ensure that individuals with disabilities receive the benefits or services provided by the public entity.

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 2000. The facility was significantly renovated in 2012. Complaints about accessibility issues have not been received by the property management. The property does not have associated pending 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 may 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.

Accessibility Issues			
	Major Issues <i>(ADA study recommended)</i>	Moderate Issues <i>(ADA study recommended)</i>	Minor/No Issues
Parking	<input type="checkbox"/>	<input type="checkbox"/>	<input checked="" type="checkbox"/>
Exterior Path of Travel	<input type="checkbox"/>	<input type="checkbox"/>	<input checked="" type="checkbox"/>
Interior Path of Travel	<input type="checkbox"/>	<input type="checkbox"/>	<input checked="" type="checkbox"/>
Public Use Restrooms	<input type="checkbox"/>	<input type="checkbox"/>	<input checked="" type="checkbox"/>
Elevators	<input type="checkbox"/>	<input type="checkbox"/>	<input checked="" type="checkbox"/>

Accessibility Issues

	Major Issues <i>(ADA study recommended)</i>	Moderate Issues <i>(ADA study recommended)</i>	Minor/No Issues
Kitchens/Kitchenettes	<input type="checkbox"/>	<input type="checkbox"/>	<input checked="" type="checkbox"/>

The table below is intended to be used as a general reference guide to help differentiate the orders of magnitude between some of the more commonly observed accessibility issues. The table is not intended to be all-inclusive, and boxes checked in the tables above do not necessarily mean those specific problems or shortcomings cited as examples below exist at the subject buildings and sites. Reference the photolog (in the appendix) and/or *Key Findings* section for visuals and/or more specifics about the subject site conditions.

Reference Guide

	Major Issues <i>(ADA study recommended)</i>	Moderate Issues <i>(ADA study recommended)</i>	Minor/No Issues
Parking	<ul style="list-style-type: none"> - Needs full reconstruction - Excessive slopes over 3% require major re-grading - No level locations to add required spaces 	<ul style="list-style-type: none"> - No or non-compliant curb cuts - Moderate difficulty to add required accessible spaces - Slopes close to compliant 	<ul style="list-style-type: none"> - Painting of markings needed - Signage height non-compliant - Signage missing
Exterior Path of Travel	<ul style="list-style-type: none"> - Large areas of sidewalks with excessive slopes - No ramp when needed - Ramps with excessive slopes 	<ul style="list-style-type: none"> - Ramps need rails - Ramps need rail extensions - Need significant # of lever handles - All or most entrance door exterior maneuvering clearance areas with excessive slopes 	<ul style="list-style-type: none"> - One entrance door exterior maneuvering clearance area with excessive slope - A few door knobs instead of lever handles - Non-compliant signage
Interior Path of Travel	<ul style="list-style-type: none"> - All or most interior doors appear less than 32" wide - Corridors less than 36" wide - No ramp when needed - Ramps with excessive slopes - Non-compliant treads/risers at means of egress stairways 	<ul style="list-style-type: none"> - Single height drinking fountains - Drinking fountain too high or protrudes into accessible route - Ramps need rails - Ramps need rail extensions - Need significant # of lever handles - Non-compliant rail extensions at egress stairways - All/most door thresholds high 	<ul style="list-style-type: none"> - One door threshold too high - A few door knobs instead of lever handles - Non-compliant door pressures - Non-compliant signage - Switches not within reach range
Public Use Restrooms	<ul style="list-style-type: none"> - No ADA RR on each accessible floor - Restroom(s) too small - Entire restroom(s) requires renovation - Water closet clearance requires moving walls 	<ul style="list-style-type: none"> - Interior doors appear less than 32" wide - Missing or non-compliant grab bars - Easily fixable clearance issues 	<ul style="list-style-type: none"> - Minor height adjustments required - Non-compliant door pressures - Missing a visual strobe (only required if audible fire alarm already present) - Missing lavatory pipe wraps - Signage not compliant
Elevators	<ul style="list-style-type: none"> - No elevator present when required - Elevator cab too small 	<ul style="list-style-type: none"> - Panel control buttons not at compliant height - No hands-free emergency communication system - Elevator only has mechanical stops 	<ul style="list-style-type: none"> - Audible/visual signals at every floor may be lacking - Minor signage / Braille issues

Reference Guide

	Major Issues <i>(ADA study recommended)</i>	Moderate Issues <i>(ADA study recommended)</i>	Minor/No Issues
Kitchens/Kitchenettes	<ul style="list-style-type: none"> - Clear space for each appliance not present - Clearance between opposing counters too narrow 	<ul style="list-style-type: none"> - Sink and counter too high - Sink knee and toe clearance not provided where required (built-in) - Less than 50% of cabinetry within reach range 	<ul style="list-style-type: none"> - Dispensers not within reach range - Switches not within reach range - Missing sink pipe wraps if knee and toe clearance required

5. 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.

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.

6. 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.

Definitions

Immediate Needs

Immediate Needs are line items 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.

For database and reporting purposes the line items with RUL=0, and commonly associated with *Safety* or *Performance/Integrity* Plan Types, are considered Immediate Needs.

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 as Immediate Needs.

For the purposes of 'bucketizing' the System Expenditure Forecasts in this report, the Replacement Reserves have been subdivided and grouped as follows: Short Term (years 1-3), Near Term (years 4-5), Medium Term (years 6-10), and Long Term (years 11-20).

Key Findings

In an effort to highlight the most significant cost items and not be overwhelmed by the Replacement Reserves report in its totality, a subsection of Key Findings is included within the Executive Summary section of this report. Key Findings typically include repairs or replacements of deficient items within the first five-year window, as well as the most significant high-dollar line items that fall anywhere within the ten-year term. Note that while there is some subjectivity associated with identifying the Key Findings, the Immediate Needs are always included as a subset.

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 Short Term window but will not be pushed 'irresponsibly' (too far) into the future.

7. Certification

The Town of Atkinson (the Client) retained EMG to perform this Facility Condition Assessment in connection with its continued operation of the Fire Station, 1 Academy Avenue, Atkinson, New Hampshire 03812, 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.

Prepared by: Chris Ledbetter,
Project Manager

Reviewed by:



Al Diefert
Technical Report Reviewer for
Kaustubh Chabukswar,
Program Manager
kaustubh.chabukswar@bvna.com
800.733.0660 x7512

8. Appendices

Appendix A: Photographic Record

Appendix B: Site Plan

Appendix C: Pre-Survey Questionnaire

Appendix D: Component Condition Report

Appendix E: Replacement Reserves

Appendix F: Equipment Inventory List

Appendix A: Photographic Record



#1	FRONT ELEVATION
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#2	RIGHT ELEVATION
----	-----------------



#3	LEFT ELEVATION
----	----------------



#4	REAR ELEVATION
----	----------------



#5	PRIMARY ROOF OVERVIEW
----	-----------------------



#6	WINDOW, VINYL-CLAD DOUBLE-GLAZED
----	-------------------------------------



#7	WINDOW, VINYL-CLAD SINGLE-GLAZED
----	----------------------------------



#8	ROOF, ASPHALT SHINGLE
----	-----------------------



#9	SIDEWALK
----	----------



#10	PARKING LOT
-----	-------------



#11	SITE HVAC
-----	-----------



#12	CONDENSING UNIT/HEAT PUMP, SPLIT SYSTEM
-----	---



#13	CONDENSING UNIT/HEAT PUMP, SPLIT SYSTEM
-----	---



#14	CONDENSING UNIT/HEAT PUMP, SPLIT SYSTEM
-----	---



#15	WATER HEATER
-----	--------------



#16	FURNACE, GAS
-----	--------------



#17	FURNACE, GAS
-----	--------------



#18	FURNACE, GAS
-----	--------------



#19	UNIT HEATER
-----	-------------



#20	UNIT HEATER
-----	-------------



#21	UNIT HEATER
-----	-------------



#22	UNIT HEATER
-----	-------------



#23	UNIT HEATER
-----	-------------



#24	UNIT HEATER
-----	-------------



#25	AIR COMPRESSOR
-----	----------------



#26	FIRE ALARM CONTROL PANEL, ADDRESSABLE
-----	---------------------------------------



#27	KITCHEN COUNTER
-----	-----------------



#28	KITCHEN SINK, STAINLESS STEEL
-----	-------------------------------



#29	KITCHEN CABINETRY
-----	-------------------



#30	KITCHEN, REFRIGERATOR
-----	-----------------------



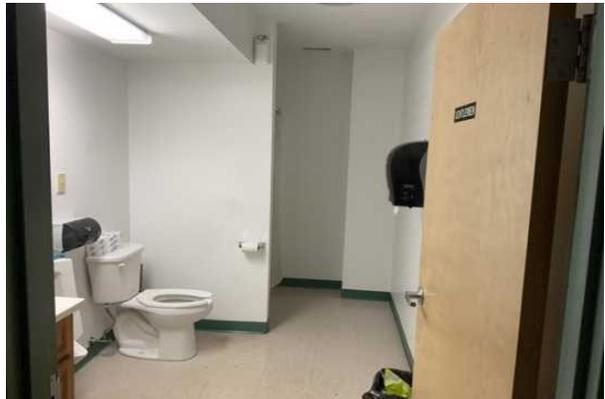
#31	DISHWASHER
-----	------------



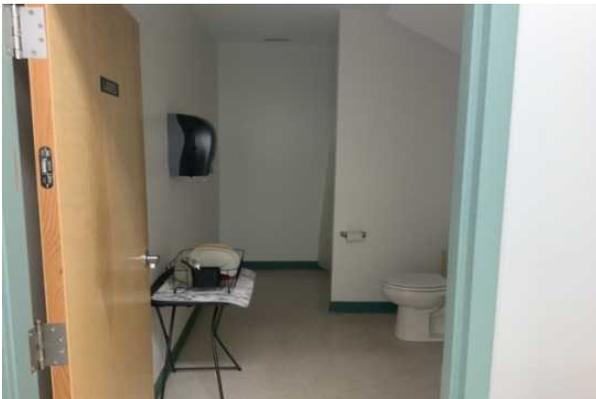
#32	KITCHEN, RANGE
-----	----------------



#33	KITCHEN, EXHAUST HOOD
-----	-----------------------



#34	RESTROOM
-----	----------



#35	RESTROOM
-----	----------



#36	TOILET
-----	--------



#37	URINAL
-----	--------



#38	URINAL
-----	--------



#39	SHOWER, FIBERGLASS
-----	--------------------



#40	SHOWER, FIBERGLASS
-----	--------------------



#41	BATHROOM VANITY
-----	-----------------



#42	SINK/LAVATORY
-----	---------------



#43	SINK/LAVATORY
-----	---------------



#44	BAY CEILING LIGHTING
-----	----------------------



#45	FLUORESCENT LIGHTING
-----	----------------------



#46	LIGHT FIXTURE, EXTERIOR
-----	-------------------------



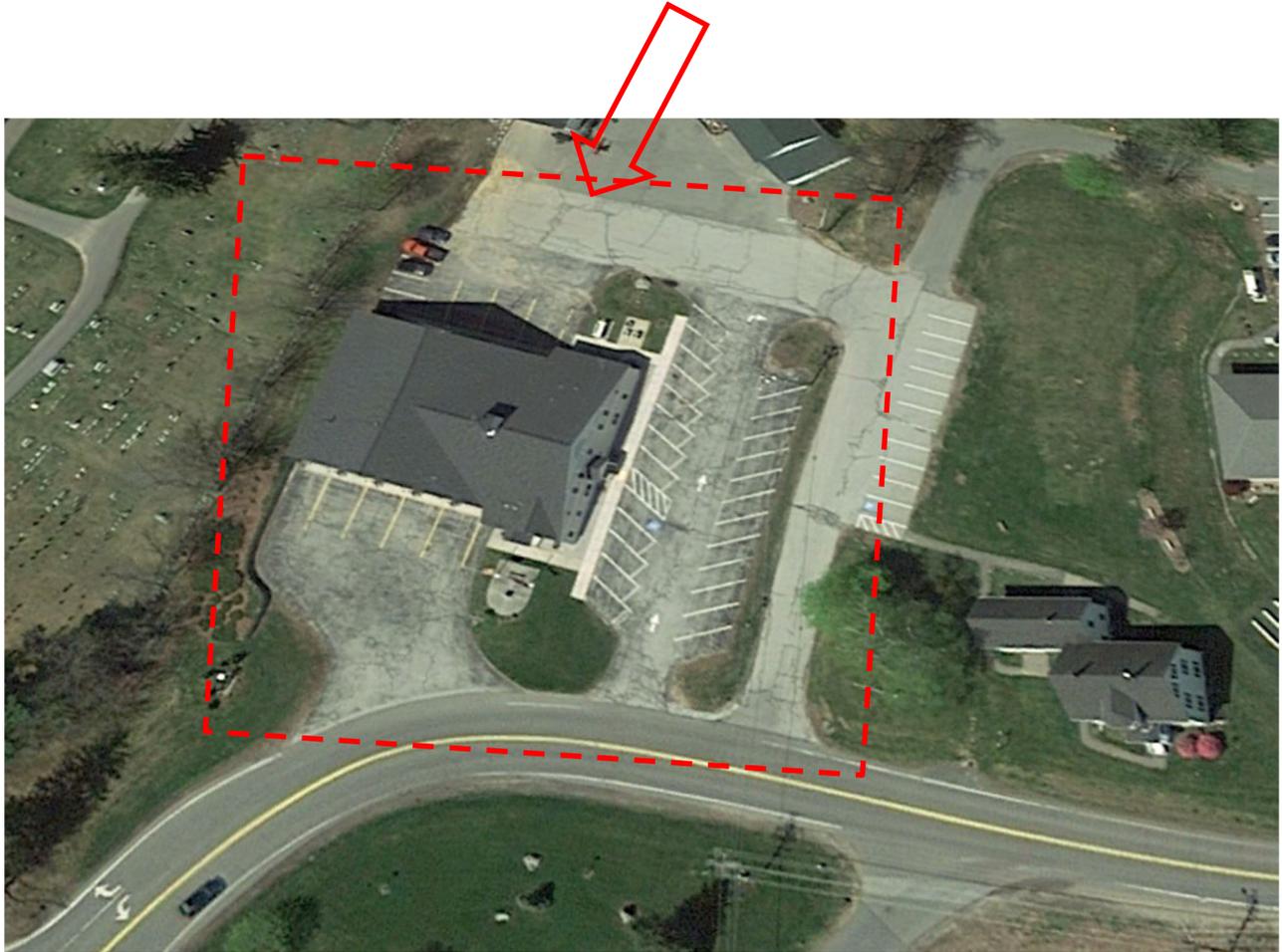
#47	LIGHT FIXTURE
-----	---------------



#48	COMPACT FLUORESCENT LIGHTING FIXTURE
-----	--------------------------------------

Appendix B: Site Plan

Site Plan



Project Name:

Fire Station

Project Number:

141924.19R000-002.017

Source:

Google Earth

On-Site Date:

January 16, 2020

Appendix C: Pre-Survey Questionnaire

Town of Atkinson Pre-Survey Questionnaire



**BUREAU
VERITAS**

This questionnaire must be completed by the property owner, the owner's designated representative, or someone knowledgeable about the subject property. 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 report.

Name of Institution:	Town of Atkinson, New Hampshire		
Name of Building: Fire Station	Building #:141924019R000-002.017		
Name of person completing questionnaire: Bill Innes and Dave Weymouth			
Length of Association with the Property: 14 years	Phone Number: 603-362-4750		

Site Information					
Year of Construction?	2000				
No. of Stories?	2 Floors.				
Total Site Area?	9.3 Acres shared by fire station, garage and Kimball House				
Total Building Area?	13,820 Sqft				
Parking	Open Parking	Enclosed Parking	Partly Enclosed Parking	Is parking Heated?	
Parking Area?	7,000 sqft	Sqft	Sqft	Yes /No	
Area Heated (%)	100%				
Area Cooled (%)	57% Cooling Equipment Redundancy? N // N+1 // N+2 // >2N				
Total Conditioned Area (%)	100%				
Primary Heating System?	Propane				
Secondary Heating System?	None				
<i>If Oil Used For Heating- Tank Capacity</i>	Gallons	_____		No. of Tanks	
Primary Cooling System & Capacity?	Electric				
Do Any HVAC Systems Use R-11, R-12 or R-22 Refrigerants?	Yes				
	Elec.	Natural Gas	Propane	No.2 Oil	Dist. Steam
Primary Heating Fuel?	<input type="checkbox"/>	<input type="checkbox"/>	<input checked="" type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>
Secondary Heating Fuel?	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>
Domestic Water Heater Fuel?	<input type="checkbox"/>	<input type="checkbox"/>	<input checked="" type="checkbox"/>	<input type="checkbox"/>	

Building Occupancy/Schedule		
Facility Occupancy (avg. people ea. day)	4	
After Hours Facility Occupancy (avg. people /day)	2	
Standard Staff Work Timing	<u>24/7</u>	
Maintenance Staff Hours	<u>0</u>	
Number of Computers at Site	5	
Day	Hours open to Public	Hours open to Staff
Monday	<u>8:00 AM- 5:00 PM</u>	<u>24/7</u>
Tuesday	<u>8:00 AM- 5:00 PM</u>	<u>:24/7</u>
Wednesday	<u>8:00 AM- 5:00 PM</u>	<u>24/7</u>
Thursday	<u>8:00 AM- 5:00 PM</u>	<u>:24/7</u>
Friday	<u>8:00 AM- 5:00 PM</u>	<u>24/7</u>
Saturday	<u>8:00 AM- 5:00 PM</u>	<u>:24/7</u>

Town of Atkinson Pre-Survey Questionnaire



**BUREAU
VERITAS**

	Sunday	8:00 AM- 5:00 PM		24/7
Number of Months the Facility Operates in a Year?	12 Months			
Estimated Percentage of Male Staff and Guests	75%			

Inspections	Date of Last Inspection	List of Any Outstanding Repairs Required
1. Elevators	June 2019	1 - LULA
2. HVAC Mechanical, Electric, Plumbing?	February 2019	
3. Life-Safety/Fire?	April 2019	
4. Roofs?	Don't inspect	

Key Questions	Response
Major Capital Improvements in Last 3 yrs.	Replaced all siding
Planned Capital Expenditure For Next Year?	None
Age of the Roof?	7 Years
What bldg. Systems Are Responsibilities of Tenants? (HVAC/Roof/Interior/Exterior/Paving)	None

Unk = Unknown, NA = Not Applicable	Yes	No	NA	Unk	Comments
1. Are the plumbing fixtures Low Flow (<i>Below 2.0GPM, .6GPF</i>)	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input checked="" type="checkbox"/>	
2. Are there any vacant buildings or significant building areas?	<input type="checkbox"/>	<input checked="" type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	
3. Do tenants pay for utilities at leased properties?	<input type="checkbox"/>	<input checked="" type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	
4. Does the owner pay for exterior site lighting electricity?	<input checked="" type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	
5. Any Issues with exterior Lighting?	<input type="checkbox"/>	<input checked="" type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	

Building Structure							
		Y/N		Y/N		Y/N	Additional Comments?
Roof Type:	Pitched?	Y	Flat		Both		
Attic Insulation:	Batt	Y	Cellulose		Fiberglass	Y	
Window Frame:	Wooden	Y	Vinyl		Metal		
Window Glazing:	Single		Double	Y	Triple		
Structure	Wooden	Y	Metal		Conc.		

Building Lighting			
Type of Linear Fluorescent Lamps? (<i>T8/T12</i>)	T8	Exterior Lighting Control (<i>Timer/Photocell</i>)	Yes
Type of Common Lamps? (<i>Incan/CFLs</i>)		Exterior Light Timing	Dusk - Midnight
Lighting Sensors? (<i>Y/N</i>)	Yes	EXIT Lights (<i>Incan/Fluor/LED</i>)	LED

Other Systems				
Item	Qty	Selection	Utility Company / Provider Name	
# of Elevators	1	Hydraulic/Traction		N/A
# of Electric Meters	1	Master/ Direct		
# of Nat. Gas Meters		Resi/Commercial/Indust.		

Town of Atkinson Pre-Survey Questionnaire



**BUREAU
VERITAS**

# of Water Meters	1		
# of Backup Generator	1	Fuel: Propane	

Preventive Maintenance of Mechanical System		
Systems	Annual Professional Maintenance	Seldom or Never Maintained
Tenant Space Heating Systems (<i>Furnace/Boilers/Heat pumps</i>)	X	<input type="checkbox"/>
Tenant Space Cooling Systems (<i>Split /Window AC</i>)	X	<input type="checkbox"/>
Domestic Water Heaters	X	<input type="checkbox"/>

Building Appliances		
	Value	Additional Comments?
Percentage of Energy Star Certified Refrigerators	%	Unknown
Percentage of Refrigerators older than 8 years	100% (2)	Unknown
Cooking Range Type (Electric/Gas/Propane)	2	Propane
Laundry System (Leased/Owned)	1	
No. of Washers	1	
No. of Dryers	0	

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	Y	N	Unk	NA	COMMENTS
ZONING, BUILDING DESIGN & LIFE SAFETY ISSUES					
1		X			
2		X			
3	X				Apparatus floor Drain
4			X		
5	X				
6		X			
7		X			
8		X			

Town of Atkinson Pre-Survey Questionnaire



**BUREAU
VERITAS**

GENERAL SITE						
9	Are there any problems with erosion, storm water drainage or areas of paving that do not drain?		X			
10	Are there any problems with the landscape irrigation systems?		X			
BUILDING STRUCTURE						
11	Are there any problems with foundations or structures?		X			
12	Is there any water infiltration in basements or crawl spaces?		X			
13	Has a termite/wood boring insect inspection been performed within the last year?		X			
BUILDING ENVELOPE						
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		Y	N	Unk	NA	COMMENTS
14	Are there any wall, or window leaks?		X			
15	Are there any roof leaks?		X			
16	Is the roofing covered by a warranty or bond?	X				
17	Are there any poorly insulated areas?		X			
18	Is Fire Retardant Treated (FRT) plywood used?		X			
19	Is exterior insulation and finish system (EIFS) or a synthetic stucco finish used?		X			
UTILITIES						
20	Are there any leaks or pressure problems with natural gas service?		X			
21	Does any part of the electrical system use aluminum wiring?		X			
22	Do Commercial units have less than 200-Amp service?		X			
23	Are there any problems with the utilities, such as inadequate capacities?		X			

Town of Atkinson Pre-Survey Questionnaire



ADA					
25	Has the management previously completed an ADA review?		X		
26	Have any ADA improvements been made to the property?		X		
27	Does a Barrier Removal Plan exist for the property?		X		
28	Has the Barrier Removal Plan been approved by an arms-length third party?		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	Y	N	Unk	NA	COMMENTS
29	Has building ownership or management received any ADA related complaints?		X		
30	Does elevator equipment require upgrades to meet ADA standards?		X		
PLUMBING					
31	Is the property served by private water well?				
32	Is the property served by a private septic system or other waste treatment systems?	X			
33	Is polybutylene piping used?		X		
34	Are there any plumbing leaks or water pressure problems?		X		

Issues or Concerns That EMG Should Know About?	
1.	
2.	
3.	

Items Provided to EMG Auditors				
	Yes	No	N/A	Additional Comments?
Access to All Mechanical Spaces	X	<input type="checkbox"/>	<input type="checkbox"/>	
Access to Roof/Attic Space	X	<input type="checkbox"/>	<input type="checkbox"/>	
Access to Building As-Built Drawings	X	<input type="checkbox"/>	<input type="checkbox"/>	
Site plan with bldg., roads, parking and other features	X	<input type="checkbox"/>	<input type="checkbox"/>	
Access to last 12/24 Months Common Area Utility Data	X	<input type="checkbox"/>	<input type="checkbox"/>	
Contact Details of Mech, Elevator, Roof, Fire Contractors:	X	<input type="checkbox"/>	<input type="checkbox"/>	
Previous reports pertaining to the physical condition of	X	<input type="checkbox"/>	<input type="checkbox"/>	

Town of Atkinson Pre-Survey Questionnaire



property.				
ADA survey and status of improvements implemented.	X	<input type="checkbox"/>	<input type="checkbox"/>	
Current / pending litigation related to property condition.	X	<input type="checkbox"/>	<input type="checkbox"/>	
Any brochures or marketing information.	X	<input type="checkbox"/>	<input type="checkbox"/>	
Appraisal, either current or previously prepared.	X	<input type="checkbox"/>	<input type="checkbox"/>	
Summary of Projects executed in last 5 years	X	<input type="checkbox"/>	<input type="checkbox"/>	

Bill Innes
Signature of person Interviewed or completing form

January 7 2020
Date

Appendix D: Component Condition Report

Component Condition Report

Fire Station

UF Code	Location	Condition	Asset/Component/Repair	Quantity	RUL	ID
Structure						
B101X	Building exterior	Poor	Structural Frame	32 SF	0	1692488
Facade						
B2011	Building exterior	Good	Exterior Wall, Aluminum Siding, 1-2 Stories	550 SF	20	1692441
B2011	Building exterior	Fair	Exterior Wall, Vinyl Siding, 1-2 Stories	1,600 SF	10	1692428
B2021	Building exterior	Fair	Window, 24 SF	12	10	1701362
B2021	Building exterior	Fair	Window, 12 SF	1	10	1701363
B2032	Building exterior	Fair	Exterior Door, Steel	1	20	1692519
B2032	Building exterior	Fair	Exterior Door, Steel	1	20	1692490
B2032	Building exterior	Fair	Exterior Door, Steel	1	20	1692478
B2034	Basement	Fair	Overhead/Dock Door, 144 SF	1	10	1692497
B2034	Building exterior	Fair	Overhead/Dock Door, 144 SF	9	10	1692434
Roofing						
B3011	Roof	Good	Roof, Asphalt Shingle 20-Year	7,900 SF	12	1692500
B3019	Building exterior	Fair	Awning, 24 SF	2	20	1692456
Interiors						
C1021	2nd floor	Fair	Interior Door, Steel Fire, 90-Minutes and Over	2	20	1692461
C1021	Basement	Fair	Interior Door, Steel Fire, 90-Minutes and Over	2	20	1692438
C1021	Throughout building	Fair	Interior Door, Wood Solid-Core	8	20	1692472
C1021	Bay Area	Fair	Interior Door, Steel	10	20	1692532
C1021	Throughout building	Fair	Interior Door, Wood Solid-Core	2	20	1692508
C1033	1st Floor	Fair	Lockers, Steel Baked Enamel, 12" W x 15" D x 72" H	15	10	1692477
C1033	2nd floor	Fair	Lockers, Steel Baked Enamel, 12" W x 15" D x 72" H	4	10	1692429
C2011	Throughout building	Fair	Interior Stair/Ramp Rails, Metal, Refinish	32 LF	5	1701367
C2011	Throughout building	Fair	Interior Stairs, Metal or Pan-Filled	500 SF	30	1701366
C3012	Bay Area	Fair	Interior Wall Finish, Laminated Paneling (FRP)	70 SF	10	1692512
C3012	Throughout building	Fair	Interior Wall Finish, any surface, Prep & Paint	10,820 SF	5	1701365
C3021	Bay Area	Poor	Interior Floor Finish, Concrete, Repair	60 SF	0	1705662
C3024	Throughout building	Fair	Interior Floor Finish, Vinyl Tile (VCT)	10,820 SF	7	1692460
C3025	Throughout building	Fair	Interior Floor Finish, Carpet Commercial Standard	2,705 SF	5	1692529
C3031	Bay Area	Fair	Interior Ceiling Finish, Gypsum Board/Plaster	3,000 SF	30	1701364
C3032	Throughout building	Fair	Interior Ceiling Finish, Suspended Acoustical Tile (ACT)	10,820 SF	5	1692476
Elevators						
D1011	Throughout building	Fair	Elevator, 1400 LB, Renovate	1	10	1692524
Plumbing						
D2011	Basement	Fair	Toilet, GPF	5	10	1692443
D2012	Basement	Fair	Urinal, GPF	3	10	1692509
D2014	2nd floor	Fair	Sink/Lavatory, Wall-Hung, Vitreous China	1	10	1692451
D2014	Kitchen	Fair	Service Sink, Laundry	1	10	1692435

Fire Station						
UF Code	Location	Condition	Asset/Component/Repair	Quantity	RUL	ID
D2014	Bay Area	Fair	Service Sink, Laundry	1	10	1692481
D2014	1st Floor	Fair	Service Sink, Floor	1	15	1692510
D2014	Basement	Fair	Sink/Lavatory, Vanity Top, Stainless Steel	1	10	1692496
D2014	1st Floor	Fair	Sink/Lavatory, Wall-Hung, Vitreous China	1	10	1692448
D2014	Basement	Fair	Sink/Lavatory, Wall-Hung, Vitreous China	1	10	1692462
D2017	Basement	Fair	Shower, GPM	1	10	1692471
D2017	Basement	Fair	Shower, GPM	1	10	1692467
D2017	2nd floor	Fair	Shower, GPM	1	10	1692440
D2017	2nd floor	Fair	Shower, GPM	1	10	1692489
D2018	1st Floor	Fair	Drinking Fountain, Interior	1	3	1692455
D2019	Bay Area	Fair	Emergency Eye Wash	1	10	1692491
D2023	Basement	Good	Water Heater, 100 GAL	1	12	1692484
D2033	Bay Area	Fair	Trench Drain, 12"	27 LF	20	1692526
D2043		Fair	Sump Pump, 3 HP	1	7	1692468
D2091	Basement	Fair	Air Compressor, .75 HP	1	3	1692449
Fire Suppression						
D4019	Throughout building	Fair	Sprinkler Heads (per SF)	13,820 SF	5	1692536
D4031	Throughout building	Fair	Fire Extinguisher, Type ABC, up to 20 LB	1	5	1692487
HVAC						
D3032	Site	Fair	Condensing Unit/Heat Pump, TON	1	3	1692430
D3032	Site	Fair	Condensing Unit/Heat Pump, 3 TON	1	3	1692427
D3032	Site	Fair	Condensing Unit/Heat Pump, TON	1	3	1692482
D3042	1st Floor	Fair	Exhaust Fan, 100 - 1000 CFM	1	5	1692465
D3042	Basement	Fair	Exhaust Fan, Bathroom Residential	1	7	1692534
D3042	Basement	Fair	Exhaust Fan, Bathroom Residential	1	5	1692485
D3051	Basement	Fair	Unit Heater, kW	1	3	1705837
D3051	Basement	Fair	Furnace, 101 - 150 MBH	1	3	1692513
D3051	Basement	Fair	Unit Heater, kW	1	3	1692507
D3051	2nd floor	Fair	Furnace, 101 - 150 MBH	1	3	1692511
D3051	Basement	Fair	Unit Heater, kW	1	3	1705838
D3051	2nd floor	Fair	Furnace, 101 - 150 MBH	1	13	1692445
D3067	2nd floor	Fair	Thermostat, Standard	1	7	1692486
Electrical						
D5012	Bay Area	Fair	Main Distribution Panel, 400 AMP [Panel-A]	1	10	1692520
D5012	2nd floor	Fair	Disconnect Switch or Circuit Breaker, 100 AMP	1	10	1692480
D5012	Bay Area	Fair	Main Distribution Panel, 200 AMP [Panel-C]	1	10	1692506
D5012	Bay Area	Fair	Main Distribution Panel, 200 AMP [Panel-B]	1	10	1692492
D5022	Building exterior	Fair	Light Fixture, 150 WATT	7	3	1692475
D5022	Throughout building	Fair	Fluorescent Lighting Fixture, 32 WATT	122	8	1692466
D5092	Site	Fair	Generator, kW	1	5	1701360

Fire Station						
UF Code	Location	Condition	Asset/Component/Repair	Quantity	RUL	ID
D5092	Throughout building	Fair	Exit Sign Light Fixture, LED	1	3	1692483
Fire Alarm & Comm						
D5032	2nd floor	Fair	Public Address Speaker	1	7	1692452
D5032	Bay Area	Fair	Intercom Speaker	2	3	1692518
D5037	1st Floor	NA	Fire Alarm Control Panel, Addressable	1	0	1701361
Equipment/Special						
E1016	Bay Area	Fair	Commercial Laundry, 81 - 120 LB	1	5	1692464
E1093	Basement	Fair	Commercial Kitchen, 3 - 6 LF	2	3	1692514
E1094	Basement	Fair	Residential Appliances, Range, Gas	2	7	1692436
E1094	1st Floor	Fair	Residential Appliances, Dishwasher	1	5	1692458
E1094	Basement	Fair	Residential Appliances, 3 - 5	1	2	1692531
E2012	1st Floor	Fair	Kitchen Counter, Solid Surface	15 LF	20	1692469
E2012	1st Floor	Fair	Kitchen Cabinetry, Stock Hardwood	24 LF	3	1692535
E2012	Bay Area	Fair	Kitchen Counter, Solid Surface	24 LF	20	1692503
E2012	2nd floor	Fair	Bathroom Vanity Cabinet, Wood, with Solid Surface Sink Top, 24 to 30"	1	10	1692459
E2012	Basement	Fair	Kitchen Cabinetry, Stock Hardwood	20 LF	10	1692501
E2012	1st Floor	Fair	Kitchen Counter, Plastic Laminate, Postformed	35 LF	5	1692470
E2012	Basement	Fair	Kitchen Counter, Plastic Laminate, Postformed	6 LF	5	1692505
E2012	1st Floor	Fair	Kitchen Counter, Plastic Laminate, Postformed	12 LF	5	1692442
E2012	Basement	Fair	Kitchen Counter, Plastic Laminate, Postformed	6 LF	5	1692521
Pavement						
G2022	Site	Fair	Parking Lots, Asphalt Pavement, Mill & Overlay	7,000 SF	5	1701359
G2022	Site	Fair	Parking Lots, Asphalt Pavement, Seal & Stripe	7,000 SF	2	1692515
G2023	Site	Fair	Parking Lots, Bollard	18	10	1692450
G2031	Site	Good	Pedestrian Pavement, Sidewalk, Concrete Large Areas	1,900 SF	42	1692539
Site Development						
G2044	Site	Fair	Signage, Property, Monument/Pylon, Replace/Install	1	10	1692517
Site Lighting						
G4021	Site	Fair	Site Pole Light, 105 - 200 WATT, Replace/Install	1	10	1692538

Appendix E: Replacement Reserves

Replacement Reserves Report

Fire Station

2/3/2020

Location	2020	2021	2022	2023	2024	2025	2026	2027	2028	2029	2030	2031	2032	2033	2034	2035	2036	2037	2038	2039	2040	Total Escalated Estimate
Fire Station	\$46,250	\$0	\$3,978	\$63,737	\$0	\$221,439	\$0	\$78,294	\$0	\$0	\$317,057	\$0	\$70,960	\$9,428	\$0	\$93,814	\$0	\$6,198	\$45,571	\$0	\$122,722	\$1,079,447
Grand Total	\$46,250	\$0	\$3,978	\$63,737	\$0	\$221,439	\$0	\$78,294	\$0	\$0	\$317,057	\$0	\$70,960	\$9,428	\$0	\$93,814	\$0	\$6,198	\$45,571	\$0	\$122,722	\$1,079,447

Uniformat CodeID	Cost Description	Lifespan (EUL)	EAge	RUL	Quantity	Unit	Unit Cost *	Subtotal2020	2021	2022	2023	2024	2025	2026	2027	2028	2029	2030	2031	2032	2033	2034	2035	2036	2037	2038	2039	2040	Deficiency Repair Estimate	
B101X	1692488 Structural Frame, ,	75	79	0	32	SF	\$32.00	\$1,024	\$1,024																				\$1,024	
B2011	1692428 Exterior Wall, Vinyl Siding, 1-2 Stories, Replace	30	20	10	1600	SF	\$8.00	\$12,800													\$12,800								\$12,800	
B2011	1692441 Exterior Wall, Aluminum Siding, 1-2 Stories, Replace	40	20	20	550	SF	\$9.50	\$5,225																		\$5,225			\$5,225	
B2021	1701362 Window, 24 SF, Replace	30	20	10	12	EA	\$900.00	\$10,800													\$10,800								\$10,800	
B2021	1701363 Window, 12 SF, Replace	30	20	10	1	EA	\$600.00	\$600													\$600								\$600	
B2032	1692519 Exterior Door, Steel, Replace	40	20	20	1	EA	\$600.00	\$600																		\$600			\$600	
B2032	1692490 Exterior Door, Steel, Replace	40	20	20	1	EA	\$600.00	\$600																		\$600			\$600	
B2032	1692478 Exterior Door, Steel, Replace	40	20	20	1	EA	\$600.00	\$600																		\$600			\$600	
B2034	1692497 Overhead/Dock Door, 144 SF, Replace	30	20	10	1	EA	\$3,200.00	\$3,200													\$3,200								\$3,200	
B2034	1692434 Overhead/Dock Door, 144 SF, Replace	30	20	10	9	EA	\$7,500.00	\$67,500													\$67,500								\$67,500	
B3011	1692500 Roof, Asphalt Shingle 20-Year, Replace	20	8	12	7900	SF	\$3.80	\$30,020																					\$30,020	
B3019	1692456 Awning, 24 SF, Replace	40	20	20	2	EA	\$400.00	\$800																		\$800			\$800	
C1021	1692461 Interior Door, Steel Fire, 90-Minutes and Over, Replace	40	20	20	2	EA	\$950.00	\$1,900																		\$1,900			\$1,900	
C1021	1692438 Interior Door, Steel Fire, 90-Minutes and Over, Replace	40	20	20	2	EA	\$950.00	\$1,900																		\$1,900			\$1,900	
C1021	1692472 Interior Door, Wood Solid-Core, Replace	40	20	20	8	EA	\$700.00	\$5,600																		\$5,600			\$5,600	
C1021	1692532 Interior Door, Steel, Replace	40	20	20	10	EA	\$600.00	\$6,000																		\$6,000			\$6,000	
C1021	1692508 Interior Door, Wood Solid-Core, Replace	40	20	20	2	EA	\$700.00	\$1,400																		\$1,400			\$1,400	
C1033	1692477 Lockers, Steel Baked Enamel, 12" W x 15" D x 72" H, Replace	20	10	10	15	EA	\$500.00	\$7,500													\$7,500								\$7,500	
C1033	1692429 Lockers, Steel Baked Enamel, 12" W x 15" D x 72" H, Replace	20	10	10	4	EA	\$500.00	\$2,000													\$2,000								\$2,000	
C2011	1701367 Interior Stair/Ramp Rails, Metal, Refinish	10	5	5	32	LF	\$1.50	\$48					\$48																\$48	
C3012	1701365 Interior Wall Finish, any surface, Prep & Paint	10	5	5	10820	SF	\$1.50	\$16,230					\$16,230										\$16,230							\$32,460
C3012	1692512 Interior Wall Finish, Laminated Paneling (FRP), Replace	30	20	10	70	SF	\$16.00	\$1,120													\$1,120								\$1,120	
C3021	1705662 Interior Floor Finish, Concrete, Repair	0	0	0	60	SF	\$30.00	\$1,800	\$1,800																					\$1,800
C3024	1692460 Interior Floor Finish, Vinyl Tile (VCT), Replace	15	8	7	10820	SF	\$5.00	\$54,100							\$54,100															\$54,100
C3025	1692529 Interior Floor Finish, Carpet Commercial Standard, Replace	10	5	5	2705	SF	\$7.50	\$20,288					\$20,288										\$20,288							\$40,575
C3032	1692476 Interior Ceiling Finish, Suspended Acoustical Tile (ACT), Replace	25	20	5	10820	SF	\$3.50	\$37,870					\$37,870																	\$37,870
D1011	1692524 Elevator, 1400 LB, Renovate	30	20	10	1	EA	\$55,000.00	\$55,000															\$55,000							\$55,000
D2011	1692443 Toilet, GPF, Replace	30	20	10	5	EA	\$1,300.00	\$6,500																			\$6,500			\$6,500
D2012	1692509 Urinal, GPF, Replace	30	20	10	3	EA	\$600.00	\$1,800																			\$1,800			\$1,800
D2014	1692451 Sink/Lavatory, Wall-Hung, Vitreous China, Replace	30	20	10	1	EA	\$1,500.00	\$1,500																						\$1,500
D2014	1692435 Service Sink, Laundry, Replace	30	20	10	1	EA	\$900.00	\$900																						\$900
D2014	1692481 Service Sink, Laundry, Replace	30	20	10	1	EA	\$900.00	\$900																						\$900
D2014	1692496 Sink/Lavatory, Vanity Top, Stainless Steel, Replace	30	20	10	1	EA	\$1,200.00	\$1,200																						\$1,200
D2014	1692448 Sink/Lavatory, Wall-Hung, Vitreous China, Replace	30	20	10	1	EA	\$1,500.00	\$1,500																						\$1,500
D2014	1692462 Sink/Lavatory, Wall-Hung, Vitreous China, Replace	30	20	10	1	EA	\$1,500.00	\$1,500																						\$1,500
D2014	1692510 Service Sink, Floor, Replace	35	20	15	1	EA	\$800.00	\$800																\$800						\$800
D2017	1692471 Shower, GPM, Replace	20	10	10	1	EA	\$1,600.00	\$1,600																						\$1,600
D2017	1692467 Shower, GPM, Replace	20	10	10	1	EA	\$1,600.00	\$1,600																						\$1,600
D2017	1692440 Shower, GPM, Replace	20	10	10	1	EA	\$1,600.00	\$1,600																						\$1,600
D2017	1692489 Shower, GPM, Replace	20	10	10	1	EA	\$1,600.00	\$1,600																						\$1,600
D2018	1692455 Drinking Fountain, Interior, Replace	15	12	3	1	EA	\$1,900.00	\$1,900																		\$1,900				\$3,800
D2019	1692491 Emergency Eye Wash, , Replace	20	10	10	1	EA	\$1,500.00	\$1,500																						\$1,500
D2023	1692484 Water Heater, 100 GAL, Replace	20	8	12	1	EA	\$16,600.00	\$16,600																						\$16,600
D2033	1692526 Trench Drain, 12", Replace	40	20	20	27	LF	\$241.00	\$6,507																			\$6,507			\$6,507
D2043	1692468 Sump Pump, 3 HP, Replace	15	8	7	1	EA	\$4,270.00	\$4,270																						\$4,270
D2091	1692449 Air Compressor, .75 HP, Replace	20	17	3	1	EA	\$5,150.00	\$5,150																						\$5,150
D3032	1692430 Condensing Unit/Heat Pump, TON, Replace	15	12	3	1	EA	\$7,100.00	\$7,100																						\$14,200
D3032	1692427 Condensing Unit/Heat Pump, 3 TON, Replace	15	12	3	1	EA	\$4,000.00	\$4,000																						\$8,000
D3032	1692482 Condensing Unit/Heat Pump, TON, Replace	15	12	3	1	EA	\$7,100.00	\$7,100																						\$14,200
D3042	1692465 Exhaust Fan, 100 - 1000 CFM, Replace	25	20	5	1	EA	\$1,400.00	\$1,400																						\$1,400
D3042	1692485 Exhaust Fan, Bathroom Residential, Replace	15	10	5	1	EA	\$250.00																							

Uniformat Code	ID	Cost Description	Lifespan (EUL)	EA	RUL	Quantity	Unit	Unit Cost *	Subtotal	2020	2021	2022	2023	2024	2025	2026	2027	2028	2029	2030	2031	2032	2033	2034	2035	2036	2037	2038	2039	2040	Deficiency Repair Estimate
D3051	1692511	Furnace, 101 - 150 MBH, Replace	20	17	3	1	EA	\$6,200.00	\$6,200				\$6,200																		\$6,200
D3051	1705838	Unit Heater, kW, Replace	20	17	3	1	EA	\$1,800.00	\$1,800				\$1,800																		\$1,800
D3051	1692445	Furnace, 101 - 150 MBH, Replace	20	7	13	1	EA	\$6,200.00	\$6,200													\$6,200									\$6,200
D3067	1692486	Thermostat, Standard, Replace	15	8	7	1	EA	\$100.00	\$100							\$100															\$100
D4019	1692536	Sprinkler Heads (per SF), , Replace	25	20	5	13820	SF	\$1.50	\$20,730					\$20,730																	\$20,730
D4031	1692487	Fire Extinguisher, Type ABC, up to 20 LB, Replace	10	5	5	1	EA	\$150.00	\$150					\$150								\$150									\$300
D5012	1692520	Main Distribution Panel, 400 AMP, Replace	30	20	10	1	EA	\$6,000.00	\$6,000													\$6,000									\$6,000
D5012	1692480	Disconnect Switch or Circuit Breaker, 100 AMP, Replace	30	20	10	1	EA	\$2,100.00	\$2,100													\$2,100									\$2,100
D5012	1692506	Main Distribution Panel, 200 AMP, Replace	30	20	10	1	EA	\$2,000.00	\$2,000													\$2,000									\$2,000
D5012	1692492	Main Distribution Panel, 200 AMP, Replace	30	20	10	1	EA	\$2,500.00	\$2,500													\$2,500									\$2,500
D5022	1692466	Fluorescent Lighting Fixture, 32 WATT, Replace	20	12	* 8	122	EA	\$233.00	\$28,426	\$28,426																			\$28,426	\$56,852	
D5022	1692475	Light Fixture, 150 WATT, Replace	20	17	3	7	EA	\$170.00	\$1,190				\$1,190																		\$1,190
D5032	1692518	Intercom Speaker, , Replace	15	12	3	2	EA	\$634.00	\$1,268				\$1,268														\$1,268				\$2,536
D5032	1692452	Public Address Speaker, , Replace	15	8	7	1	EA	\$450.00	\$450						\$450																\$450
D5037	1701361	Fire Alarm Control Panel, Addressable, Replace	15	20	0	1	EA	\$15,000.00	\$15,000	\$15,000												\$15,000									\$30,000
D5092	1692483	Exit Sign Light Fixture, LED, Replace	10	7	3	1	EA	\$220.00	\$220				\$220									\$220									\$440
D5092	1701360	Generator, kW, Replace	25	20	5	1	EA	\$58,000.00	\$58,000					\$58,000																	\$58,000
E1016	1692464	Commercial Laundry, 81 - 120 LB, Replace	10	5	5	1	EA	\$7,000.00	\$7,000					\$7,000								\$7,000									\$14,000
E1093	1692514	Commercial Kitchen, 3 - 6 LF, Replace	15	12	3	2	EA	\$2,700.00	\$5,400				\$5,400														\$5,400				\$10,800
E1094	1692531	Residential Appliances, 3 - 5, Replace	15	13	2	1	EA	\$600.00	\$600			\$600															\$600				\$1,200
E1094	1692458	Residential Appliances, Dishwasher, Replace	10	5	5	1	EA	\$700.00	\$700					\$700								\$700									\$1,400
E1094	1692436	Residential Appliances, Range, Gas, Replace	15	8	7	2	EA	\$670.00	\$1,340						\$1,340																\$1,340
E2012	1692535	Kitchen Cabinetry, Stock Hardwood, Replace	20	17	3	24	LF	\$300.00	\$7,200				\$7,200																		\$7,200
E2012	1692470	Kitchen Counter, Plastic Laminate, Postformed, Replace	15	10	5	35	LF	\$50.00	\$1,750					\$1,750															\$1,750	\$3,500	
E2012	1692505	Kitchen Counter, Plastic Laminate, Postformed, Replace	15	10	5	6	LF	\$50.00	\$300					\$300															\$300	\$600	
E2012	1692442	Kitchen Counter, Plastic Laminate, Postformed, Replace	15	10	5	12	LF	\$100.00	\$1,200					\$1,200															\$1,200	\$2,400	
E2012	1692521	Kitchen Counter, Plastic Laminate, Postformed, Replace	15	10	5	6	LF	\$100.00	\$600					\$600															\$600	\$1,200	
E2012	1692459	Bathroom Vanity Cabinet, Wood, with Solid Surface Sink Top, 24 to 30", Replace	20	10	10	1	EA	\$1,600.00	\$1,600												\$1,600										\$1,600
E2012	1692501	Kitchen Cabinetry, Stock Hardwood, Replace	20	10	10	20	LF	\$300.00	\$6,000												\$6,000										\$6,000
E2012	1692469	Kitchen Counter, Solid Surface, Replace	40	20	20	15	LF	\$110.00	\$1,650																			\$1,650		\$1,650	
E2012	1692503	Kitchen Counter, Solid Surface, Replace	40	20	20	24	LF	\$110.00	\$2,640																			\$2,640		\$2,640	
G2022	1692515	Parking Lots, Asphalt Pavement, Seal & Stripe	5	3	2	7000	SF	\$0.45	\$3,150			\$3,150				\$3,150					\$3,150					\$3,150				\$12,600	
G2022	1701359	Parking Lots, Asphalt Pavement, Mill & Overlay	25	20	5	7000	SF	\$3.50	\$24,500					\$24,500																	\$24,500
G2023	1692450	Parking Lots, Bollard, Replace	30	20	10	18	EA	\$1,000.00	\$18,000												\$18,000										\$18,000
G2044	1692517	Signage, Property, Monument/Pylon, Replace/Install	20	10	10	1	EA	\$9,500.00	\$9,500												\$9,500										\$9,500
G4021	1692538	Site Pole Light, 105 - 200 WATT, Replace/Install	20	10	10	1	EA	\$4,000.00	\$4,000												\$4,000										\$4,000
Totals, Unescalated									\$46,250	\$0	\$3,750	\$58,328	\$0	\$191,015	\$0	\$63,660	\$0	\$0	\$235,920	\$0	\$49,770	\$6,420	\$0	\$60,215	\$0	\$3,750	\$26,768	\$0	\$67,948	\$813,795	
Totals, Escalated (3.0% inflation, compounded annually)									\$46,250	\$0	\$3,978	\$63,737	\$0	\$221,439	\$0	\$78,294	\$0	\$0	\$317,057	\$0	\$70,960	\$9,428	\$0	\$93,814	\$0	\$6,198	\$45,571	\$0	\$122,722	\$1,079,447	

* Markup/LocationFactor (1) has been included in unit costs.