



Town Hall
17 Main Street
Lunenburg, MA 01462

Property Condition Assessment

February 6, 2018

PREPARED FOR:

Town of Lunenburg
17 Main Street, P.O. Box 135
Lunenburg, MA 01462

PREPARED BY:

The Vertex Companies, Inc.
400 Libbey Parkway
Weymouth, MA 02189

PHONE 781.952.6000

VERTEX Project No: 48237



February 6, 2018

Town of Lunenburg
17 Main Street, P.O. Box 135
Lunenburg, MA 01462
Attn: Heather R. Lemieux

Re: Property Condition Assessment
Town Hall
17 Main Street
Lunenburg, MA 01462
VERTEX Project No. 48237

Dear Ms. Lemieux:

The Vertex Companies, Inc. (VERTEX) is pleased to submit this Property Condition Assessment (PCA) report for the above referenced property (the site).

Our work was conducted in general conformance with P.2489.17, dated September 29, 2017, and in general accordance with the provisions of ASTM E2018-15 (Standard Guide for Property Condition Assessments: Baseline Property Condition Assessment Process) for commercial real estate.

Please do not hesitate to contact us at your convenience should you have any questions or comments regarding this report.

Sincerely,
The Vertex Companies, Inc.

Philip Russo, R.A.
Field Observer & Report Author
Project Manager

Matthew Quigley, PE
Field Observer & Report Author
Forensic Structural Engineer

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TABLE OF CONTENTS

| | | |
|------|---|----|
| 1.0 | EXECUTIVE SUMMARY..... | 1 |
| 2.0 | PURPOSE AND SCOPE OF SERVICES..... | 4 |
| 2.1 | PURPOSE..... | 4 |
| 2.2 | SCOPE OF SERVICES..... | 4 |
| 2.3 | REPORT RELIANCE..... | 5 |
| 2.4 | DEVIATIONS FROM THE GUIDE..... | 5 |
| 2.5 | INACCESSIBLE AREAS / OBSERVATION LIMITATIONS..... | 5 |
| 2.6 | AREAS REVIEWED..... | 6 |
| 3.0 | REPORT INFORMATION..... | 7 |
| 3.1 | ASSESSMENT DEFINITIONS..... | 7 |
| 3.2 | COMMON ABBREVIATIONS/ACRONYMS..... | 7 |
| 3.3 | REPORT TENSE..... | 8 |
| 3.4 | OPINIONS OF COST..... | 8 |
| 3.5 | ACTIVE CONSTRUCTION..... | 10 |
| 4.0 | ASSESSMENT INFORMATION..... | 11 |
| 4.1 | GENERAL SUMMARY..... | 11 |
| 4.2 | SITE RECONNAISSANCE..... | 11 |
| 4.3 | BUILDING HISTORY..... | 11 |
| 4.4 | INTERVIEWS..... | 12 |
| 4.5 | PRE-SURVEY QUESTIONNAIRE AND REQUEST FOR DOCUMENTATION..... | 12 |
| 4.6 | DOCUMENTS..... | 12 |
| 4.7 | MUNICIPAL RESEARCH & CODE COMPLIANCE..... | 13 |
| 4.8 | SITE CHARACTERISTICS..... | 13 |
| 4.9 | CLIENT SPECIFIC INFORMATION..... | 15 |
| 5.0 | SYSTEM DESCRIPTION AND CONDITION..... | 16 |
| 5.1 | SITE IMPROVEMENTS..... | 16 |
| 5.2 | BUILDING STRUCTURE..... | 18 |
| 5.3 | BUILDING EXTERIOR..... | 21 |
| 5.4 | ROOF..... | 23 |
| 5.5 | BUILDING INTERIOR..... | 25 |
| 5.6 | MECHANICAL SYSTEMS..... | 27 |
| 5.7 | ELECTRICAL SYSTEMS..... | 30 |
| 5.8 | PLUMBING SYSTEMS..... | 32 |
| 5.9 | CONVEYANCE SYSTEM..... | 34 |
| 5.10 | LIFE AND FIRE SAFETY..... | 35 |
| 6.0 | ANCILLARY STRUCTURES..... | 38 |
| 7.0 | ACCESSIBILITY (ADA)..... | 39 |
| 8.0 | REPORT QUALIFICATIONS & LIMITATIONS..... | 44 |

TABLES & CHARTS

No.

1. Table 1: Immediate Repairs, Short-Term Repairs & Summary of Capital Needs
2. Table 2: General ADA Improvements

APPENDICES

- A Photographic Documentation
- B Relevant Documents
- C Staff Statements of Qualifications

1.0 EXECUTIVE SUMMARY

The VERTEX Companies, Inc. (VERTEX) performed a Property Condition Assessment (PCA) of the Town Hall located at 17 Main Street in Lunenburg, MA, on December 19, 2017. Overall, the property and improvements appeared to be in good to fair condition with respect to age, use and location.

A table of salient information associated with the project is presented below and utilized throughout this report.

| SALIENT PROPERTY INFORMATION | |
|--|---|
| Property Name: | Town Hall |
| Location/Address: | 17 Main Street, Lunenburg, MA 01462 |
| Construction Year(s): | 1820 |
| Property Type: | Municipal Offices |
| Number of Units: | Not Applicable |
| Reported/provided Building Area (SF): | 6,534 (Property Record Card) |
| Reported/provided Site Area (Acres): | 0.15 (Property Record Card) |
| Surrounding Property Usage: | Retail, vacant land, agriculture, commercial, residential, recreational |
| Utility Service: | |
| | Gas: National Grid |
| | Electric: Unitil |
| | Water: Lunenburg Water District |
| | Sanitary: Town of Lunenburg |
| | Storm: Town of Lunenburg |

The “Quick Look Summary Checklist” presented on the following page, is intended to provide a general, objective* evaluation based on the issues identified at the property and their associated projected costs. Recognizing that the evaluation is general in nature, and subject to the limitations of the assessment as well as cost estimating accuracies, the Summary is simply calculated utilizing a modification of the recognized Facility Condition Index (FCI) utilized by many professionals to evaluate the condition of buildings or groups of buildings. For this assessment, issues identified (Immediate, ADA and Capital Needs) were categorized by building system in appropriate sections of the report and Cost Table 1. The sum of dollar values for these issues was

then divided by an estimated value for building replacement costs, weighted each building category. The following definitions were utilized for these ratings.

- **Good:** Aggregate of identified issues is less than 5% of total replacement costs estimated for the associated system.
- **Fair:** Aggregate of identified issues is greater than 5% and less than 10% of total replacement costs estimated for the associated system.
- **Poor:** Aggregate of identified issues is greater than 10% of total replacement costs estimated for the associated system.

**It is important to note that the ratings assigned in the Quick Look Summary are objective measures based solely on projected dollar amounts relative to total system replacement costs. These ratings may differ from our overall subjective opinion of the condition of the same system or category identified in the text descriptions and discussions in Section 5 of this report.*

"QUICK LOOK" PROJECT SUMMARY AND ESTIMATE OF PROJECTED COSTS

| | | | |
|--------------------|-----------------------|----------------------|-------|
| Site Name: | Town Hall | # Buildings: | 1 |
| Site Location: | Lunenburg , MA | Est. Bldg Area, SF: | 6,534 |
| Building Age, yrs: | 198 | Eval. Term, Yrs: | 5 |
| Building Type: | Municipal/Residential | Per SF replace cost: | \$214 |

| GENERAL CATEGORY | SUMMARY RATING | | | | # Items | Immediate Needs Estimate | # Items | Capital Needs Est., Uninflated |
|--------------------------------|----------------|---|---|----|----------|--------------------------|----------|--------------------------------|
| | G | F | P | NA | | | | |
| SITE DEVELOPMENT | X | | | | 0 | \$0 | 0 | \$0 |
| BUILDING STRUCTURE | X | | | | 1 | \$10,744 | 0 | \$0 |
| BUILDING EXTERIOR | | X | | | 0 | \$0 | 2 | \$12,306 |
| ROOF | | | X | | 2 | \$13,698 | 1 | \$27,404 |
| BUILDING INTERIOR | | | X | | 0 | \$0 | 5 | \$79,284 |
| MECHANICAL SYSTEMS | | | X | | 2 | \$10,475 | 1 | \$25,792 |
| ELECTRICAL SYSTEMS | X | | | | 1 | \$672 | 0 | \$0 |
| PLUMBING SYSTEMS | X | | | | 1 | \$470 | 0 | \$0 |
| CONVEYANCE | | | | X | 0 | \$0 | 0 | \$0 |
| LIFE SAFETY / FIRE PROTECT | X | | | | 1 | \$1,007 | 0 | \$0 |
| ANCILLARY STRUCTURES | | | | X | 0 | \$0 | 0 | \$0 |
| OVERALL RATING / TOTALS | | | X | | 8 | \$37,066 | 9 | \$144,786 |
| ADA IMPROVEMENTS | | | | | 2 | \$3,092 | | |

This "Quick Look" Summary is intended to provide an overall picture of the number of identified and quantified issues at the subject property. The summary ratings above are objective, and are based on the aggregate estimated dollar amount for identified repairs associated with each category. The definitions used for these summary ratings are based on a modified Facility Condition Index (FCI) which is calculated by dividing aggregate costs for Immediate and Short Term Needs by a simply modeled replacement cost value weighted for each category and based on building type.

FCI = $\frac{(\text{Immediate Needs} + \text{Short Term Needs}^*)}{\text{Replacement Cost}^{}}$**

GOOD: 0 to 5 percent
FAIR: 5 to 10 percent
POOR: 10 to 100 percent

*Capital Needs identified in Years 1 and 2
 ** For each individual building category

Overall Property FCI = 12%



2.0 PURPOSE AND SCOPE OF SERVICES

2.1 PURPOSE

The purpose of the Property Condition Assessment (PCA) was to observe and document readily visible material and building system defects that might significantly affect the value of the property. The PCA also assessed existing conditions that might have a significant impact on the continued operation of the facility during the requested term of assessment. The requested term of assessment for this report was five years.

It is understood that the Client is considering the appropriate renovation or re-use of the property described in this report. The report will be utilized to assist with planning decisions, as well as provide information for future capital planning.

Observations performed during the PCA were made without operational testing and/or removing or damaging components of the building systems. Consequently, some system specific assumptions were made regarding the existing conditions and operating performance of each system. Furthermore, recommendations developed for this report were based on information discovered during the PCA. If additional information is discovered concerning the facility, the assumptions, conclusions, and recommendations presented herein may require re-assessment.

The recommendations and opinions of cost provided in this report were also based on the understanding that the facility will continue to operate under similar use and occupancy as observed on the date of the site reconnaissance.

2.2 SCOPE OF SERVICES

The PCA included the following: site reconnaissance; limited interviews with property management and maintenance personnel; and a review of available construction documents as provided by the building management. Operational testing of building systems or components was not conducted. Although the building was visually reviewed for suspected hazardous materials, sampling was not conducted and thus, this PCA does not confirm the presence or absence of asbestos, polychlorinated biphenyls (PCBs), mold, or contaminated soils or groundwater on the property.

During the PCA, unless noted otherwise, VERTEX made visual observations of the following facility features: site development systems; building structure systems; building exterior systems;

building interior systems; roof systems; mechanical systems; electrical systems; plumbing systems; conveyance systems; and, life and fire safety systems.

VERTEX utilized ASTM E2018-15 as a guideline for the evaluation of the building. This recognized assessment protocol gives specific guidance for the condition assessment of buildings, and provides a framework for an objective and repeatable methodology from an independent assessor.

2.3 REPORT RELIANCE

This report is intended for review as a complete document. Therefore, interpretations and conclusions drawn from the review of any individual section are the sole responsibility of the user.

2.4 DEVIATIONS FROM THE GUIDE

ASTM E2018-15 “Standard Guide for Property Condition Assessments: Baseline Property Condition Assessment Process,” was utilized as a guideline for the site visit and associated report preparation. ASTM requires that deviations from the guidelines be stated in the report.

The following items were not required by the ASTM standard but were provided as part of this PCA at the request of the client or as value added considerations.

- ★ The field observations were performed by registered professional staff
 - ★ Determination of USGS Seismic Hazard and IRC Termite Zone
 - ★ A Capital Needs Assessment with a term length of five-years was performed
- A visual review of specific accessibility related issues and general compliance was performed

2.5 INACCESSIBLE AREAS / OBSERVATION LIMITATIONS

Representative observations were made at the facility in accordance with ASTM E2018-15. The following areas were not accessed, or access was limited during the site visit.

- ★ Roof (roof was assessed from the clock tower)
- ★ Landscaping (limited due to snow cover)

2.6 AREAS REVIEWED

Observations of the various systems, materials and building areas were performed as part of the site walk-through. Site observations of similar portions of the building or similar systems or materials were performed until, in VERTEX's professional opinion, a representative sampling was adequate for extrapolation to the remainder of the building.

3.0 REPORT INFORMATION

3.1 ASSESSMENT DEFINITIONS

- GOOD:** Material or building system was in average to above-average condition. Opinion is rendered with consideration to the item's type, age, design, and location. Generally, other than normal maintenance, no work is recommended or required.
- FAIR:** Material or building system was in average condition. Some work is required or recommended, primarily due to normal aging and wear of the building system, to return the system or material to a good condition.
- POOR:** Material or building system was in below average condition. Significant work is anticipated to return the building system or material to an acceptable condition.

Unless stated otherwise in this report, the material and building systems reviewed were considered to be in good condition and their performance appeared to be satisfactory.

3.2 COMMON ABBREVIATIONS/ACRONYMS

| | | | |
|---------------|---|--------------|--|
| ALEC | Aluminized Emulsion Coating | HP | Horse Power |
| AC | Alternating Current | HVAC | Heating Ventilation & Air Conditioning |
| ASHRAE | American Society of Heating, Refrigeration & Air Conditioning Engineers | IN | Inches |
| A/V | Audio Visual Device | IRMA | Inverted Roof Membrane Assembly |
| BLDG | Building | KVA | Kilo-volt Amp |
| BOCA | Building Officials & Code Administrators (Building Code) | KW | Kilowatt |
| BTU | British Thermal Unit (HVAC/ MEP) | LF | Linear Feet |
| BUR | Built-Up-Roof | LS | Lump Sum |
| CF | Cubic Feet | MBH | 1,000 BTUs per Hour |
| CIP | Cast Iron Pipe | MEP | Mechanical, Electrical, Plumbing |
| CMP | Corrugated Metal Pipe | MIL | 1/1000 th of an inch |
| CMU | Concrete Masonry Unit | MP | Manual Pull Station (fire alarm) |
| CY | Cubic Yard | PSI | Pounds per square inch |
| DC | Direct Current | PVC | Poly-Vinyl-Chloride (pipe) |
| DIP | Ductile Iron Pipe | QA/QC | Quality Assurance/Quality Control |
| DM | Deferred Maintenance | RCP | Reinforced Concrete Pipe |
| DX | Direct Expansion (air conditioning) | RUL | Remaining Useful Life |
| EIFS | Exterior Insulation & Finish System | SOG | Slab-on-grade |
| EMS | Energy Management System | SF | Square feet |
| EPDM | Ethylene-Propylene-Diene-polymer-Monomer ("rubber" roofing) | SY | Square Yard |
| EUL | Estimated Useful life | TN | Ton (12,000 BTU cooling, HVAC) |
| FT | Feet | UBC | Uniform Building Code |
| HID | High Intensity Discharge (lighting) | VAT | Vinyl Asbestos Tile |
| | | VAV | Variable Air Volume (HVAC) |
| | | VCT | Vinyl Composition Tile |
| | | VWC | Vinyl Wall Covering |

3.3 REPORT TENSE

This report was prepared in the past tense as it is intended to only describe observed conditions at the time of the site reconnaissance.

3.4 OPINIONS OF COST

The cost tables associated with the PCA include total amounts for *Immediate Repair* items, *Short-Term Repair* items, and *Capital Needs*. A separate cost table (Table 2) is provided to address accessibility issues.

Immediate Repair items are defined as physical deficiencies that cannot be remedied with routine maintenance, normal operating maintenance, etc., excluding de minimis conditions that generally do not present a material physical deficiency to the subject property. Immediate Repair items are typically considered to be: (1) material existing or potential unsafe conditions resultant from damage or deterioration (2) material building or fire code violations as revealed by municipal agencies; or (3) conditions that if left unremedied, have the potential to result in or contribute to critical element or system failure within one year, or will result most probably in a significant escalation of its remedial cost.

Short-Term Repairs are defined as physical deficiencies, such as deferred maintenance, that may not warrant immediate attention, but require repairs or replacements that should be undertaken on a priority basis in addition to routine preventative maintenance. In some cases, Short-Term repairs may include recommendations for testing, exploratory probing, and/or further analysis. Generally, the expected time frame for Short-Term Repairs is within one to two years.

Capital Needs are those items of a capital nature which are expected to require repair, renovation or replacement during the requested evaluation term, in this case five years.

ADA/MAAB Items are those items that would be required to upgrade or update existing systems to provide improved accommodations for handicapped persons.

The opinions of cost presented herein were based on readily visible material and building system defects that might significantly affect the value of the property during the requested assessment term. These opinions were based on approximate quantities and values, and do not constitute a warranty or guarantee that all item(s) requiring repair were included. The estimated costs developed in this report were for the aforementioned Immediate Repair items, Short-Term

Repair items, Capital Needs and ADA/MAAB items. Items not incorporated into the cost tables include operational costs, such as landscaping maintenance and utility (gas or electricity) usage, unpredictable (aesthetic) upgrades, or normal operation and maintenance. The availability of parts or qualified personnel for repairs or renovations may be limited and is not factored into cost estimates unless specifically stated.

Estimated costs were developed with published unit price data and industry experience as summarized below.

Estimating/Quantity Take Off: Costs for selected items were estimated based on provided documentation, general calculations of capacity, area, size or other item features, and VERTEX's experience with buildings of similar size, construction and geographic location.

Like-with-Like Replacement: This assessment was not an attempt to design or address future programming needs, but rather an objective, independent assessment of the current condition of the buildings with a focus on repair, renovation or replacement of building materials, components or systems that have reached or are expected to reach the end of their useful lives in the next five (5) years.

Primary Estimating Source: RS Means 2017 Commercial Cost Renovation Data was utilized as the primary resource and some costs were modified based on our local experience. Unit costs were standardized for the geographic area and for prevailing wage rates and a percentage escalation was added for uncertainty.

It is important to understand that actual costs will vary depending on such factors as contractor expertise, previous contractor commitment, seasonal workload, insurance and bonding, and local labor conditions. These factors may cause wide variations in the actual costs as estimated by different bidders. In addition, since some projected projects may not require general contracting or significant design, GC soft costs (overhead & profit, bond and insurance, general conditions), design fees, owners project management fees and other potential fees are not included in these estimates. In view of these limitations, the costs presented herein should be considered "order of magnitude" estimates and used for preliminary budgeting purposes only. Preparation of scopes of work and contractor bidding are recommended to forecast actual costs.

3.5 ACTIVE CONSTRUCTION

The building was complete, and areas of active construction were not observed during the on-site visit.

The basement level was observed to have plastic sheeting on the earth and walls and reportedly had recently completed remediation work.

4.0 ASSESSMENT INFORMATION

4.1 GENERAL SUMMARY

The VERTEX Companies, Inc. (VERTEX) performed a Property Condition Assessment (PCA) of the Town Hall located at 17 Main Street in Lunenburg, MA, on December 19, 2017. Overall, the property and improvements appeared to be in good to fair condition with respect to age, use and location.

In our opinion, the Site Contact (Owner's Representative) was fully familiar with the building's operation, condition and associated systems. Our conclusions are based on our visual observations, statements by on-site personnel, review of available records, and limited documentation obtained during the course of follow-up research.

4.2 SITE RECONNAISSANCE

The site reconnaissance portion of the PCA was performed on December 13, 2017, by Philip Russo, R.A., Matthew Quigley, PE, and Brian Dunn, AIA, NCARB and Scott Katzer, PE., CFEI all of VERTEX. Weather conditions during the site reconnaissance were as follows:

| On-site Date | Weather Description | Average Temp. |
|-------------------|---------------------|---------------|
| December 19, 2017 | Sunny | 30° F |

The following building features were assessed, if applicable.

- Exterior Site Elements
- Building Structure System
- Building Exterior System
- Roof System
- Mechanical System
- Electrical System
- Plumbing System
- Building Interior System
- Life & Fire Safety System
- Conveyance System

4.3 BUILDING HISTORY

According to the Site Staff and the property record card, the building was originally constructed in 1820 approximately and moved to its current location in 1867. Reportedly the building has been used as a Town Hall since 1867.

It is our understanding that significant capital improvements and/or major repairs at the site have been generally limited to exterior painting, reportedly completed in November 2017 at a cost of approximately \$85,000.

4.4 INTERVIEWS

Interviews were conducted with personnel familiar with the facility to obtain information relative to the condition of the various building systems. Information obtained during the interviews has been incorporated into this report in the applicable sections. The following individuals or agencies were interviewed or contacted.

- Jack Rodriquenz, DPW Director, Town of Lunenburg (Site Contact)
- Adam Burney, Land Use Director, Town of Lunenburg
- John Londa, Director of Facilities, Town of Lunenburg
- Jim Breault, Facilities Manager, Town of Lunenburg
- Elaine Peterson, Executive Assistant to Town Manager, Town of Lunenburg
- Louise Paquette, Administrative Assessor, Town of Lunenburg

4.5 PRE-SURVEY QUESTIONNAIRE AND REQUEST FOR DOCUMENTATION

Due to ownership of the building and property by the municipality, VERTEX opted not to issue a Pre-Survey Questionnaire and Request for Documentation (PSQ). Information relating to the property history was obtained from other sources as documented in this report.

4.6 DOCUMENTS

The following documents were provided or discovered during VERTEX's research of the property history.

| Description | Author | Date | Reviewed | |
|--|-------------------------------------|------------------|------------------|---------------|
| | | | No copy obtained | Copy obtained |
| Flood Insurance Rate Map (Community Panel # 2503150005B) | Federal Emergency Management Agency | June 15, 1982 | | ✓ |
| Building Assessment & Space Needs Study | Tappe Architects | January 11, 2016 | | ✓ |

| Description | Author | Date | Reviewed | |
|----------------------|-------------------|------------------|------------------|---------------|
| | | | No copy obtained | Copy obtained |
| Property Record Card | Town of Lunenburg | January 24, 2018 | | ✓ |

4.7 MUNICIPAL RESEARCH & CODE COMPLIANCE

A detailed analysis of whether or not the building and site is compliance with current codes was not performed as part of this assessment. Code compliance research and evaluation was limited to the following.

- a) Visual observation of materials, components or systems that due to obvious deterioration or damage have resulted in an unsafe condition. Such conditions must have been visible without probing, dismantling or uncovering or unblocking access, and must not have required specialized knowledge of any particular code or any measurement or calculation for dimensional, clearance, or other compliance.

Issues of unsafe conditions related to visual deterioration or damage, if observed, are identified and discussed in the various sections of this report specific to the material, component or system.

4.8 SITE CHARACTERISTICS

General site characteristics including site topography, flood zone, seismic considerations, and termite considerations are tabulated and discussed below.

Topography

In general, the property sloped downward from the east to the west. A stone retaining wall was observed on the east side of the building.

Flood Zone

VERTEX visually plotted the general property location on FEMA Flood Insurance Rate Map. This should not be considered a flood zone certification. Actual determination of flood zones should be performed by a registered surveyor.

Subject Property Flood Zone: Zone C, defined as an area of minimal flooding.

Seismic Considerations

The probability of ground damaging motion within each Seismic Zone is defined below based on the Seismic Zone Map in Figure A, (1997 Uniform Building Code).



- (0 or 1) low probability
- (2A) low to moderate probability
- (2B) moderate probability
- (3) moderate to high probability
- (4) high probability

While there are more recent seismic risk maps, they generally require specific information on the seismic response characteristics of the site and structure. For ease and consistency, and

comparison with previous standards, the ASTM standards associated with Probable Maximum Loss (PML) seismic studies, rely on this 1997 map.

The subject property for this evaluation was located in Seismic Zone:

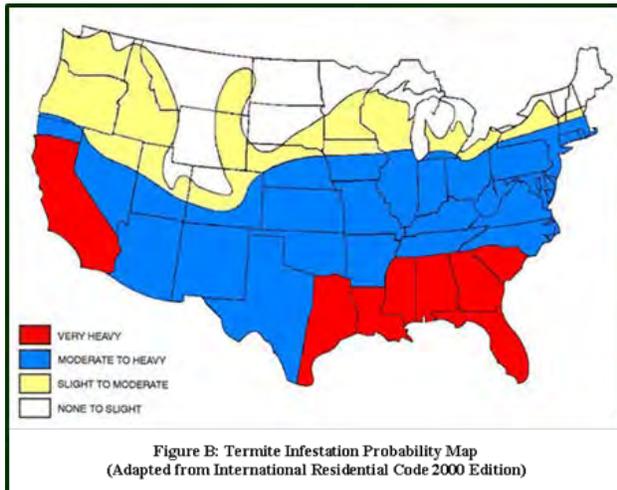
2A

In general terms, those properties located in Zones 3 and 4 have a greater risk of ground damaging motion, and PML studies are typically recommended in these zones. Based on the property location, a PML is not recommended for this site.

Termite Considerations

Termite Zones identified in the 2000 International Residential Code (IRC) are shown in Figure B. Based on the general location, the subject property is located in the following Termite Infestation Region:

Moderate to Heavy



The foundation and exterior walls of the building are constructed with concrete, steel, masonry and glass, which may serve to minimize the risk of building damage due to wood destroying insects.

We did not observe evidence of wood destroying insect activity, and none was reported; however, in the event that certification of the absence or present of termite activity is required, a licensed pest

inspection professional should be engaged to perform a formal survey.

4.9 CLIENT SPECIFIC INFORMATION

This assessment was performed in accordance with ASTM E2018-15 and no specific client concerns or protocols were addressed that are not already discussed elsewhere in this report.

5.0 SYSTEM DESCRIPTION AND CONDITION

The following sub-sections describe the major building systems as observed during the PCA. Comments and/or recommendations offered by VERTEX regarding each system are presented immediately after each description in italic print. Each deficiency is assigned an item number and is cross-referenced in Table 1. Numbered photographs are presented in Appendix A and cross-referenced in Table 1.

5.1 SITE IMPROVEMENTS

Site development systems are those that relate to geographic features of the property and surrounding area, and improvements that serve ancillary roles for the facility. Components of the observed site development systems included paving and parking, sidewalks, retaining walls and fencing, signage, loading docks and dumpster areas, irrigation systems, site lighting and utilities, landscaping, and surface drainage. Operational testing of site development components was not conducted. Clear lines of property demarcation were not provided and as such, our observations relating to the site grounds and surrounding amenities are to be considered approximate.

| SITE IMPROVEMENTS | | | |
|--------------------|--|--------------------|----------------|
| Item | Description of System or Component | Overall G, F, P | Cost Item # |
| Site Access | The site was accessed from the west side of Main Street. The site was easily accessible from major area roadways. The site was located within five miles of Route 2. | G | |
| Parking | The property was not furnished with parking spaces. Public parking was observed on the public street (Main Street) adjacent to the building. | N/A | |
| Asphalt Pavements | Not Applicable. | N/A | |
| Concrete Pavements | Not Applicable. | N/A | |

| SITE IMPROVEMENTS | | | |
|-------------------|---|--------------------|----------------|
| Item | Description of System or Component | Overall G, F, P | Cost Item # |
| Sidewalks | The property was not furnished with sidewalks. There were concrete-paved public sidewalks at the east side of the building facing Main Street. | N/A | |
| Curbs | Not Applicable. | N/A | |
| Fencing | Not Applicable. | N/A | |
| Retaining Walls | <p>A stone retaining wall was observed at the east side of the site at the grade change between east and west sides of the property.</p> <p><i>The retaining wall appeared to be in good condition. Regular inspections of the retaining structure should be performed in order to monitor potential movement. This is considered to be a routine maintenance item.</i></p> | G | |
| Drainage | <p>The building roof areas and landscaped areas drained to an underground, on-site storm drainage collection system that discharged to the municipal storm water management system.</p> <p><i>Rooftop drain discharges, inlets and drainage collection structures were visible, free from debris, and appeared to be in good overall condition. Regular inspection and maintenance of drainage components and clearing of the inlets and drainage paths will be required during the evaluation term as part of routine maintenance.</i></p> | G | |
| Utilities | <p>Electric, water, natural gas, sanitary and storm sewer services were provided to the site.</p> <ul style="list-style-type: none"> Water provider: Lunenburg Water District | G | |

| SITE IMPROVEMENTS | | | |
|-------------------------|--|--------------------|----------------|
| Item | Description of System or Component | Overall G, F, P | Cost Item # |
| | <ul style="list-style-type: none"> • Electric provider: Unitil • Natural gas provider: National Grid • Sanitary sewer provider: Town of Lunenburg • Storm sewer provider: Town of Lunenburg | | |
| Exterior Lighting | <p>Lighting was provided at the sides and rear of the building. Observed fixtures consisted of wall-mounted units located above the secondary entrance doors.</p> <p><i>The site lighting fixtures appeared to be in good overall condition. VERTEX did not visit the site at night to observe the operation of the site lighting.</i></p> | G | |
| Landscaping | Not Applicable. | N/A | |
| Recreational Facilities | Not Applicable. | N/A | |

5.2 BUILDING STRUCTURE

Structural issues are related to those building components that transfer loads within a building and to the underlying ground. Loads may be the result of constant forces such as the weight of the building or other stationary objects within the building (dead loads), or variable forces such as people, operational equipment, vehicular activity or wind (live loads). The building structure assessment included the review of available geotechnical reports and drawings depicting the foundation, floor slab, and framing systems. Visual observations of exposed features were also performed when possible.

| BUILDING STRUCTURE & SHELL | | | |
|----------------------------|---|--------------------|----------------|
| Item | Description of System or Component | Overall G, F, P | Cost Item # |
| Foundations | <p>Foundation drawings or information relating to the building foundations were not provided for our review. Based on our experience with buildings of similar type, size, geographical locations, and visual observations the building was founded on a field stone foundation. The building was constructed on a hill with a walk-out basement located on the rear (west) elevation.</p> <p>In the basement, the stone foundation was exposed. At the time of our inspection, plastic sheeting was in-place on the foundation walls and floor. Interior wood posts were supported by either concrete blocks or stones.</p> <p>On the north side of the building was a handicap ramp supported by the building framing on one side and concrete sonotube foundations on the opposite. On the south side of the building, a fire escape was founded on concrete sonotube foundations.</p> <p><i>No visual indications of significant foundation failure or visual evidence of significant settlement were observed. We did not observe bowing or displacement of the foundation walls within the basement. The wood posts in the basement were not equipped with mechanical connections to the concrete and stone blocks supporting them.</i></p> | F | |
| Floors | <p>The upper floors consisted of wood plank floor decks supported by wood joists. On the first floor of the building (ground level accessed from east (front) elevation), we noted the floor was not level.</p> <p><i>The floor slabs appeared to be in good condition with no evidence of significant deterioration or failure. In most areas, the floor surfaces were concealed by flooring finishes. On the first floor, we observed a slope along the floor with the high point located along the main hallway running north-south. We did not observe visual evidence of distress within the basement indicative of a significant structural</i></p> | F | |

5.3 BUILDING EXTERIOR

Building exteriors are typically composed of various systems and materials intended to serve three main purposes: (1) aesthetic appeal; (2) weather resistance; and, (3) structural support. Items included in the building exterior assessment include wall assembly, glass and glazing, doors, and sealant.

| BUILDING EXTERIOR | | | |
|-------------------|--|--------------------|----------------|
| Item | Description of System or Component | Overall G, F, P | Cost Item # |
| Wall Assembly | <p>The building was clad primarily with painted wood clapboard siding on timber framing. The building was set on a natural stone foundation. The front entry and gable ends contained a cornice with a decorative dentil moulding. At the east end of the roof there was a clock tower that housed a clock, bell and various antennae. (Photos 1-6)</p> <p><i>The observed wall assemblies and trim elements appeared to be in good condition. We did not observe significant areas of damage or deterioration and evidence of wall leakage was not reported or observed at the interior. According to the Site Contact, the building was scraped and painted within the past year.</i></p> <p><i>At the north side of the building underneath the accessible entrance the stone foundation wall was observed to have deteriorated mortar. (Photo 28). The mortar will need to be repaired as soon as practical. Due to the minimal aggregate quantity and associated cost, this item is considered to be routine maintenance.</i></p> | F | |
| Sealants | <p>Caulking was observed around window and door penetrations.</p> <p><i>Observed caulk joints at wall penetrations (window and door openings) appeared to be flexible and smooth; however, the caulk appeared to be somewhat discolored and chalky in texture. Due to the estimated RUL of the sealants, replacement should be anticipated</i></p> | F | 2 |

| BUILDING EXTERIOR | | | |
|--------------------|---|--------------------|----------------|
| Item | Description of System or Component | Overall G, F, P | Cost Item # |
| | <i>during the evaluation term. A budgetary estimate of cost is included in Table 1.</i> | | |
| Windows | <p>The building windows typically were operable, double-hung style units with insulated glass set in PVC frames. The windows appeared to be in generally good condition with no leaks reported or observed at the time of the site visit.</p> <p><i>The basement window units appeared to be in fair to poor overall condition and have surpassed their useful lives. Based on the age, apparent condition and estimated RUL of the windows, replacements are recommended during the evaluation term. A budgetary allowance for replacement of windows with insulated glass alternatives is presented in Table 1.</i></p> | F-P | 3 |
| Exterior Doors | <p>The main entrance doors to the building typically were painted solid core wood style swing doors set in painted wood frames.</p> <p><i>The exterior entrance doors and secondary egress doors appeared to be in good to fair condition requiring routine maintenance during the evaluation term. The second-story egress door at the south façade will require new weather-stripping during the evaluation term. Due to the minimal aggregate quantity and associated cost, this item is considered to be routine maintenance.</i></p> | G to F | |
| Porches | <p>There was an open porch on the north side of the building with wood railings. The porch served the accessible ramp and accessible entrance.</p> <p><i>The condition of the porch is discussed above in Section 5.2, Building Structure, Superstructure.</i></p> | P | |
| Exterior Stairs | <p>Exterior stairs were observed on the south facade and were constructed of wrought iron assemblies with open risers and railings.</p> | G | |

| BUILDING EXTERIOR | | | |
|-------------------|---|--------------------|----------------|
| Item | Description of System or Component | Overall G, F, P | Cost Item # |
| | <i>The exterior stairs appeared to be in good condition requiring routine repairs and maintenance during the evaluation term.</i> | | |

5.4 ROOF

The purpose of roof system(s) is to protect the building components and occupants from adverse moisture, temperature, collapse, and other unwanted elements. The selection, design, and installation of a roof are critical to a building’s financial performance and can be one of the most expensive building systems to repair, maintain, and replace. Items included in the roof assessment include roof type, age, drainage, warranty status, ancillary roofs, skylights, and roof accessories.

| ROOF | | | |
|------------------|--|--------------------|----------------|
| Item | Description of System or Component | Overall G, F, P | Cost Item # |
| Roof Covering | Pitched roofs were not accessed by VERTEX. As a result, we used information gained from aerial photographs, observations from the ground, the clock tower, and information provided from the Site Contact to assess the roof conditions. Pitched roofs at the building were supported with timber rafters. (Photos 37-38, 40). The roof covering consisted of asphalt composition shingles. (Photos 31-35). The roof generally had metal roof flashing and counter-flashing at roof projections and at material interfaces. (Photos 33-35). We requested a copy of the warranty, but none had been provided at the time of this report. Any active warranties should be provided, so that transfer provisions and warranty limitations can be reviewed. The roof shingles were reported by the Site Contact, to have been installed in 2000. | F | |

| ROOF | | | |
|------------------------------------|--|--------------------|----------------|
| Item | Description of System or Component | Overall G, F, P | Cost Item # |
| | <p><i>We observed evidence of an active leak in the attic. (Photo 39-40). Immediate repair of active roof leaks is recommended. A budgetary allowance for leak investigation and repair is included in Table 1 as an item of Immediate Repair.</i></p> <p><i>The asphalt roofing shingles appeared to be in fair overall condition. We did observe evidence of staining in the attic on the timber members and decking attributable to former (historical) roof leaks. Based on the age, observed condition and estimated RUL of the roof covering, replacement should be expected during the evaluation term. An estimated cost for this item is included in Table 1.</i></p> | | 4 |
| | <p><i>The asphalt roofing shingles appeared to be in fair overall condition. We did observe evidence of staining in the attic on the timber members and decking attributable to former (historical) roof leaks. Based on the age, observed condition and estimated RUL of the roof covering, replacement should be expected during the evaluation term. An estimated cost for this item is included in Table 1.</i></p> | | 5 |
| Roof Drainage | <p>The roof was equipped with perimeter gutters and downspouts, which discharged to the landscaped areas at the base of the exterior walls. The downspout at the northwest corner of the building was discharging at grade next to the foundation wall. We observed ice backing up into the downspout and on the foundation. (Photo 24).</p> <p><i>The discharge should be directed away from the structure at this location. Due to the minimal aggregate quantity and associated cost, this item is considered to be routine maintenance.</i></p> | G | |
| Skylights & Roof Accessories | <p>Cellular telephone equipment was located in and attached to the clock tower on the building roof and provided additional income to the property through a leasing arrangement.</p> <p><i>The masonry chimneys appeared to be in poor condition exhibiting loose bricks and deteriorated mortar. (Photos 32-36). Due to the potential for failure of the masonry this repair should be performed Immediately. As such, an estimated cost for this item is included in Table 1, as an item of Immediate Repair.</i></p> | P | 6 |
| Roof Access | Fixed roof access was not provided at the building. | N/A | |

| ROOF | | | |
|--|------------------------------------|-----------------|-------------|
| Item | Description of System or Component | Overall G, F, P | Cost Item # |
| Ancillary Roofs | Not Applicable. | N/A | |
| <p><i>Roof evaluations should be conducted by a professional roofing inspector on an annual basis and corrective or preventative repairs should be made accordingly. A qualified inspector will be the best judge of the need to recover/replace the roofs and the specific timing associated with such actions.</i></p> | | | |

5.5 BUILDING INTERIOR

Building interior systems are those that relate to the visible features of finished rooms, hallways, common areas, service areas, tenant spaces, stairwells and restrooms. Items included in the interior assessment are the floor, wall, ceiling, stair and restroom finishes.

| BUILDING INTERIOR | | | |
|-------------------|--|-----------------|-------------|
| Item | Description of System or Component | Overall G, F, P | Cost Item # |
| Public Areas | <p>Public areas at the building included entrance vestibule, corridors, meeting room and administration offices. Public area interior finishes at the building included a mixture of the following.</p> <p>Floor Coverings: Carpet, resilient tile, ceramic tile and stained strip wood</p> <p>Wall Coverings: Painted drywall/plaster, wood paneling</p> <p>Ceiling Coverings: Painted plaster/drywall, suspended grid with drop-in tiles</p> | G to F | |

| BUILDING INTERIOR | | | |
|---------------------------|---|--------------------|-----------------------|
| Item | Description of System or Component | Overall G, F, P | Cost Item # |
| | <i>The interior components within the public areas appeared to be in generally good to fair overall condition. However, based on the age and condition of the finishes, renovation should be expected during the evaluation term including replacement of carpet flooring and suspended ceiling systems, re-painting of drywall/plaster wall/ceiling finishes and re-staining of wood paneling.</i> | | 7, 8, 9, 10, 11 |
| Administrative Offices | <p>Finishes in the offices typically were carpet floors, painted drywall/plaster walls/ceilings with some stained wood paneling, and some suspended acoustical ceiling system.</p> <p><i>The interior components within the office areas appeared to be in generally good to fair overall condition. However, based on the age and condition of the finishes, renovation should be expected during the evaluation term including replacement of carpet flooring and suspended ceiling systems, re-painting of drywall/plaster wall/ceiling finishes and re-staining of wood paneling.</i></p> | G to F | 7, 8, 9, 10, 11 |
| Meeting Room | <p>Finishes in the Meeting Room typically were carpet flooring, painted drywall/plaster walls, and painted decorative tin ceiling.</p> <p><i>The interior components within the Meeting Room appeared to be in generally good to fair overall condition. However, based on the age and condition of the finishes, renovation should be expected during the evaluation term including replacement of carpet flooring and re-painting of drywall/plaster wall finishes.</i></p> | G to F | 7, 8, 9 |
| Corridors | <p>Finishes in the corridors typically were carpet flooring, painted drywall/plaster walls and suspended acoustical ceiling system and/or painted drywall/plaster ceilings.</p> <p><i>The interior components within the corridors appeared to be in generally good to fair overall condition. However, based on the</i></p> | G to F | |

| BUILDING INTERIOR | | | |
|-------------------|---|--------------------|--------------------|
| Item | Description of System or Component | Overall G, F, P | Cost Item # |
| | <i>age and condition of the finishes, renovation should be expected during the evaluation term including replacement of carpet flooring and suspended ceiling systems and re-painting of drywall/plaster walls/ceilings.</i> | | 7, 8, 9, 10, 11 |
| Stairs | <p>Observed stairs were constructed with wood assemblies with closed risers and wood handrails/railings. The stairwell typically had painted drywall/plaster walls, suspended acoustical ceiling system and wood treads/risers with carpet.</p> <p><i>The interior components within the stairway appeared to be in generally good to fair condition. However, based on the age and condition of the finishes, renovation should be expected during the evaluation term including re-painting of walls, replacement of the suspended ceiling system and re-staining of the wood components.</i></p> | G to F | 7, 8, 9, 11 |
| Restrooms | <p>Typical restroom finishes at the building included ceramic and resilient tile flooring, painted drywall/plaster walls with some ceramic tile wainscot and suspended acoustical ceiling system.</p> <p><i>The restrooms appeared to be in good to fair condition. However, based on the age and condition of the finishes, renovation should be expected during the evaluation term including re-painting of walls and replacement of the ceiling system.</i></p> | G to F | 8, 11 |

5.6 MECHANICAL SYSTEMS

The mechanical systems evaluated include the readily visible components of the heating, ventilation, and air conditioning (HVAC) equipment. The evaluation was intended to be a general overview of the component type, equipment capacity, and distribution methods. Operational testing of mechanical systems was not conducted. Specific equipment included air conditioning

and heating units, distribution and ventilation mechanisms, boilers (where applicable), and facility controls.

| MECHANICAL SYSTEMS | | | |
|--------------------|--|-----------------|-------------|
| Item | Description of System or Component | Overall G, F, P | Cost Item # |
| Air Conditioning | <p>The building was air-conditioned by four (4) split system interior air handling units (AHUs) with ground-mounted air-cooled condensing units. Two (2) of the condensing units were manufactured by Trane in 2003 and 2004 and each had an estimated rated cooling capacity of 5 tons. The other two (2) condensing units were manufactured by York in 2000 and 2002 and had a rated cooling capacity of 2 tons and 5 tons, respectively.</p> <p>The air handling units were gas-fired furnace units with DX coils manufactured by Trane and York respectively. The Trane units were vertical units located in the basement mechanical room and served the first floor via floor grilles. The York units were horizontal units located in the 2nd floor attic space and served the 2nd floor.</p> <p>Condensate generated by the indoor AHUs were collected in a pan under the evaporator coil and discharged via a condensate pump to the exterior of the building.</p> <p>A standalone portable dehumidifier unit, manufactured by GE, was located in the basement.</p> <p><i>Condensate from the AHUs was not appropriately managed as secondary lines or alarms were not provided to shut down the unit or divert overflow to appropriate drain systems. Renovation of condensate is required, and a budgetary allowance is included in Table 1 as an Immediate Repair.</i></p> <p><i>The observed interior furnace units and associated condensing units we observed appeared to be in good to fair condition. Replacement of equipment should be anticipated as the various equipment reaches the end of their useful life. The split systems utilize R-22</i></p> | G to F | |
| | | | |
| | | | 13 |

| MECHANICAL SYSTEMS | | | |
|--------------------|--|--------------------|----------------|
| Item | Description of System or Component | Overall G, F, P | Cost Item # |
| | <p><i>refrigerants, which will cease production in January 2020. Replacement of the condensing units will also require replacement of the evaporator coil within the interior air handler and possibly the line sets connecting the indoor and outdoor components. Based on the observed conditions, types of refrigerant and anticipated system modifications, we have budgeted for replacement of both the AHUs and condensing units during the evaluation term. Allowances for replacement are included in Table 1, recognizing that costs may vary depending on refrigerant types chosen and line set sizes, piping types and configuration.</i></p> | | |
| Heating | <p>The primary heating source for the building included a series of conventional gas fired furnace units.</p> <p>In addition, the building included electric baseboard radiators located at the perimeter of the various spaces.</p> <p><i>The condition of the furnaces is discussed above in Section 5.6, Mechanical Systems, Air-Conditioning.</i></p> <p><i>The observed electric baseboard heaters appeared to be in good overall condition requiring routine inspection and maintenance during the evaluation term.</i></p> | G | |
| Ventilation | <p>Bathrooms were provided with exhaust by individual ceiling mounted fans exhausted to the exterior.</p> <p>Passive ventilation was provided by operable windows and doors, through wall louvered vents and natural air infiltration.</p> <p><i>Indoor air quality was not studied as part of this assessment. Observed exhaust and air movement equipment appeared to be in good to fair condition. Renovation of selected ventilation equipment including fan motor replacement, lubrication and</i></p> | G to F | |

| MECHANICAL SYSTEMS | | | |
|--------------------|--|-----------------|-------------|
| Item | Description of System or Component | Overall G, F, P | Cost Item # |
| | <p><i>general repairs should be expected throughout the evaluation term as part of Routine Maintenance.</i></p> <p><i>No direct outdoor air ventilation was observed to the individual furnace units serving the building. Louvered vents were observed in the mechanical spaces where the basement furnace units were installed; however, these outdoor air vents were not connected directly to the HVAC system. Therefore, interior space comfort level conditions, particularly during the warmer months may be affected. We also question whether the outdoor air ventilation is adequate to meet the current codes and requirements for a commercial office space. We recommend having a qualified licensed engineer review the building and associated requirements to determine if the current ventilation is adequate for this type of facility. A budget cost is included in Table 1 as an item of Immediate Repair. It should be noted that following the inspection, recommended actions may result in required shutdown and/or upgrade of selected equipment. Associated costs for these types of issues cannot be predicted, and no budget is included for them Table 1.</i></p> | | 14 |
| Control Systems | <p>The heating and cooling equipment was generally controlled by a mixture of analog and digital thermostats with programmable controls for night and weekend setbacks.</p> <p><i>The observed control systems appeared to be in good overall condition.</i></p> | G | |

5.7 ELECTRICAL SYSTEMS

Electrical items are related to the readily visible components of the electrical systems installed at the facility. This assessment is intended to be a general overview of the component type, equipment capacity, and distribution methods. Operational testing of electrical systems was not

conducted. Items included in the electrical assessment are service distribution, transformers, switchgear, panelboards, conductors, and lighting.

| ELECTRICAL SYSTEMS | | | |
|---------------------------------|--|-----------------|-------------|
| Item | Description of System or Component | Overall G, F, P | Cost Item # |
| Transformers and Power Delivery | Electrical service to the building was supplied via overhead lines from a pole-mounted transformer located across the street outside the building. | G | |
| Main Switchgear | <p>Two (2) main electrical panels were located in the basement. The main electrical service panels provided two (2) 200-amp, 208/120-volt, alternating current (AC). An additional 200-amp panel was located in the 2nd floor office area.</p> <p><i>The electrical equipment generally appeared to be in good condition. We observed exposed wiring and other general electrical safety issues particularly in the basement area. Engagement of a qualified electrician is recommended to review these conditions and make needed repairs. An allowance for this item is included in Table 1 as an Immediate Repair.</i></p> <p><i>The electrical equipment appeared to be in good condition, but has not been inspected, tested or serviced in recent years. As such, a thermographic inspection and associated repairs should be performed by a qualified electrician. This is considered to be an item of routine maintenance. It should be noted that following the inspection, recommended actions may result in required shutdown of selected equipment for repairs, tightening of lugs or other maintenance related procedures. Associated costs for these types of issues cannot be predicted, and no budget is included for them Table 1.</i></p> | G to F | 15 |
| Electrical Distribution | Electrical panels were observed at various locations in the building. Electrical panels were equipped with circuit breaker overload protection. | G to F | |

| ELECTRICAL SYSTEMS | | | |
|--------------------|--|--------------------|----------------|
| Item | Description of System or Component | Overall G, F, P | Cost Item # |
| | <p>It was reported that the distribution wiring providing power to the branch circuits within the tenant spaces and common areas consisted of copper. Where observed, wiring was located in a mixture of rigid/flexible metal conduit and Romex.</p> <p><i>It was reported that electrical problems or interruptions in tenant operations are minimal. According to the October 26, 2015 HVAC report by Bala/TMP, reports of nuisance tripping of branch circuits due to the use of portable electric heaters was noted. VERTEX inquired about this condition with on-site staff however nothing was reported during our site visit. Observed conduit and circuit breaker panels appeared to be in good condition.</i></p> | | |
| Interior Lighting | <p>Lighting fixtures within building common areas and in office spaces typically were fluorescent fixtures recessed in the suspended ceilings. Observed fluorescent units included T-8 lamps with electronic ballasts. The 2nd floor Assembly area utilized hanging pendant and chandelier light fixtures.</p> <p><i>Lighting fixtures appeared to be in good overall condition requiring routine inspection, repairs and maintenance during the evaluation term, but some observed older fixtures and lamps are considered to be very inefficient with regard to energy use. Consideration should be given to performing an energy audit of the building.</i></p> | G to F | |
| Emergency Power | Not Applicable. | N/A | |

5.8 PLUMBING SYSTEMS

Plumbing items are related to the readily visible components of the plumbing systems installed at the facility. This assessment was intended to be a general overview of the component type, system capacity, and distribution methods. Operational testing of plumbing systems was not

conducted. Items included in the plumbing assessment were sanitary sewers, roof drains, domestic water supply, natural gas distribution, and insulation.

| PLUMBING SYSTEMS | | | |
|-----------------------------|---|--------------------|----------------|
| Item | Description of System or Component | Overall G, F, P | Cost Item # |
| Water Supply | The building was supplied with water underground from Lunenburg Water District's main line. | G | |
| Domestic Water Distribution | <p>Two (2) 1-inch diameter water service lines entered the building in the basement. One was utilized for the building and the other was utilized for the irrigation. The domestic water meter was observed at the service connection in the basement.</p> <p>In exposed locations, observed distribution piping for domestic water systems was constructed of copper.</p> <p><i>It was not determined if the domestic water supply main contained a backflow prevention device. It was reported that backflow prevention was provided in a vault outside of the building. The presence of backflow prevention devices should be confirmed.</i></p> <p><i>Where exposed, observed domestic water piping appeared to be in good condition and free from damage or deterioration. Active piping leaks were not reported or observed during the on-site visit.</i></p> <p><i>The piping at the water meter connections were not supported properly to the building structure causing the piping to lean inward. This piping should be anchored properly to prevent potential damage. An allowance for this item is included in Table 1 as an Immediate Repair.</i></p> | G | 16 |
| Hot Water Systems | A 30-gallon electric water heater located in the basement provided domestic hot water for the building. According to the nameplate data, the water heater was manufactured by Bradford White in 1996. This water heater was covered in plastic at the time of our site visit. | G | |

| PLUMBING SYSTEMS | | | |
|------------------|--|--------------------|----------------|
| Item | Description of System or Component | Overall G, F, P | Cost Item # |
| | <i>The water heater appeared to be in good condition. Water pressure and volume were reported to be adequate for the building needs. Based on the estimated RUL of the unit, replacement should be expected during the evaluation term. Due to the minimal aggregate quantity and associated cost, this item is considered to be routine maintenance.</i> | | |
| Sanitary Sewer | <p>The sanitary wastes generated at the building were conveyed to underground piping, which discharged to the municipal sewer system owned and maintained by the Town of Lunenburg.</p> <p><i>Sanitary sewer systems and waste piping were not observed due to hidden (underground) conditions. No evidence of odor or problems with the wastewater systems were observed or reported.</i></p> <p><i>Some of the exposed sanitary drain piping observed in the basement was broken or not connected properly. The piping in question appears to be abandoned in place. Abandoned piping should be removed from the basement area. This is considered an item of Routine Maintenance.</i></p> | G | |
| Natural Gas | The building's gas service line entered the front of the building. The gas piping within the building was observed to be steel. | G | |

5.9 CONVEYANCE SYSTEM

Conveyance systems include readily visible and accessible equipment installed at the facility. This evaluation was intended to be a general overview of the systems observed. No operational testing was conducted. These systems included equipment used to transport people or objects vertically or horizontally within the building and include elevators, escalators, conveyors, and platform lifts.

| CONVEYANCE SYSTEM | | | |
|-------------------|---|--------------------|----------------|
| Item | Description of System or Component | Overall G, F, P | Cost Item # |
| Elevators | Not Applicable. | N/A | |
| Escalators | Not Applicable. | N/A | |
| Platform Lifts | <p>The building was equipped with an electric platform lift. The lift was manufactured by Giant Lift Group, was rated for 750-pound capacity, and had a speed of 15 feet per minute. The lift was finished with painted metal walls, ceiling and floor. The lift served the first and second floor levels and was located on the north side of the building. Exterior access was by means of a ramp and door adjacent to the unit.</p> <p><i>The lift was last inspected on February 4, 2016. Inspection Certificates were displayed in the lift cab and were not due to expire until January 31, 2018.</i></p> <p><i>Lift certificates and inspections appeared to be up to date. A detailed evaluation of the lift equipment, floor-to-floor times, and other response and performance characteristics was not performed as part of this PCA.</i></p> | G | |

5.10 LIFE AND FIRE SAFETY

Life and Fire Safety Systems were observed to the extent that components were visually accessible. This evaluation was intended to be a general overview of the systems observed and not an opinion of safety or adequacy. Operational testing was not conducted. These systems include sprinklers and standpipes, emergency lighting, alarm and annunciation components, smoke evacuation, and fire separation.

| LIFE & FIRE SAFETY SYSTEMS | | | |
|-------------------------------|--|--------------------|----------------|
| Item | Description of System or Component | Overall G, F, P | Cost Item # |
| Sprinkler Systems | Not Applicable. | N/A | |
| Sprinkler Heads | Not Applicable. | N/A | |
| Specialty Suppression Systems | Not Applicable. | N/A | |
| Fire Hydrants | Municipal fire hydrants were located along the public roads bordering the property. | G | |
| Fire Pump | Not Applicable. | N/A | |
| Standpipes & Hose Connections | Not Applicable. | N/A | |
| Emergency Lighting | Emergency lighting fixtures were provided throughout the building. The office areas and corridors contained emergency lighting fixtures with battery backup power. <i>Emergency lighting units appeared to be in good condition; however, the emergency lighting units were not operated or tested as part of this PCA.</i> | G | |
| Illuminated Exit Signs | Illuminated exit signs were provided throughout the building. The common spaces, corridors, stairwells and selected office areas contained exit light fixtures with battery backup power. <i>Exit signs appeared to be in good condition; however, exit signs were not operated or tested as part of this PCA.</i> | G | |

| LIFE & FIRE SAFETY SYSTEMS | | | |
|-----------------------------|--|--------------------|----------------|
| Item | Description of System or Component | Overall G, F, P | Cost Item # |
| Alarm Systems | <p>The building was provided with a fire alarm system with battery backup consisting of smoke detectors and pull stations. The building was equipped with audible alarms, which included visual strobe components.</p> <p>A Honeywell Silent Knight Model 5207 central alarm panel located at the top of the stairwell leading to the basement monitored the system. In the event of an emergency, the panel notified a central monitoring station, which notified the fire department.</p> <p><i>The alarm panel was functioning in the "Normal" mode at the time of our visit. VERTEX did not test the system or observe its operation as part of this assessment. A fire equipment vendor, Milenium Alarm Technologies, reportedly performs inspections on the equipment on a regular basis.</i></p> <p><i>Inspection tags were not located for the alarm system. Immediate engagement of a fire protection vendor is required to inspect the system. A budgetary allowance for this item is included in Table 1 as an Immediate Repair. In the event that current documentation can be provided showing that the system has been tested and inspected within the past 12 months, this item is not necessary.</i></p> | G | 17 |
| Smoke Detection and Control | <p>Hard-wired smoke detectors were observed in various building locations.</p> <p><i>Smoke detectors appeared to be in good condition; however, smoke detectors were not operated or tested as part of this PCA.</i></p> | G | |
| Fire Extinguishers | <p>Fire extinguishers were provided at various locations throughout the building.</p> <p><i>According to equipment tags, observed fire extinguishers were serviced or re-charged in March 2017 by O'Connell Fire Protection, Inc.</i></p> | G | |

6.0 ANCILLARY STRUCTURES

Ancillary structures are those elements contained within a property, which are considered to be physical plants subject to the provisions of building codes, which may or may not be considered occupied structures, and may or may not include associated mechanical, electrical or plumbing systems. Typical ancillary structures might include parking garages, annex buildings or storage sheds.

| ANCILLARY STRUCTURES | | | |
|----------------------|------------------------------------|-----------------|-------------|
| Item | Description of System or Component | Overall G, F, P | Cost Item # |
| Parking Garage | Not Applicable. | N/A | |
| Annex Building | Not Applicable. | N/A | |
| Storage Shed | Not Applicable. | N/A | |

7.0 Accessibility (ADA)

The Americans with Disabilities Act (ADA) is not a building code; it is a civil rights law that was enacted in 1990 to provide persons with disabilities with accommodations and access equal to, or similar to, that available to the general public. Title II of the ADA requires that owners of public buildings considered to be places of public accommodations remove those architectural barriers and communications barriers that are considered readily achievable in accordance with the resources available to the building ownership to allow use of the facility by the disabled. The Massachusetts Architectural Access Board (MAAB) Section 521 CMR is the standard designed to make public buildings and facilities accessible to, functional for, and safe for use by persons with disabilities.

As part of this PCA, VERTEX performed a “Baseline Evaluation” of ADA and MAAB requirements consisting of a limited scope visual survey and completion of a checklist extracted from ASTM E2018-15 X2 (Figure X3). This visual review most closely resembles what was previously known as a “Tier I ADA survey.”

Our survey was limited to visual observations unless specifically stated. Measurements were not taken, and compliance with dimensional tolerances stated by the guidelines was only visually assessed. While opinions of cost to correct noted barriers have been provided, they do not constitute a recommendation that removal of the barriers are “readily achievable” and not an “undue burden” as stated in the ADA.

In addition, we have attempted to evaluate the total cost of projected renovations identified in our assessment for calculation of MAAB ‘trigger’ requirements as outlined in CMR 521 Section 3 for Existing Buildings.

If the work being performed amounts to less than 30% of the full and fair cash value of the building and:

- a. if the work costs less than \$100,000, then only the work being performed is required to comply with 521 CMR, or
- b. if the work costs \$100,000 or more, then the work being performed is required to comply with 521 CMR. In addition, an accessible public entrance and an accessible toilet room, telephone, drinking fountain (if toilets, telephones and drinking fountains are provided) shall also be provided in compliance with 521 CMR.

The value for full and fair cash value of the building will need to be provided by the Town of Lunenburg to appropriately calculate threshold values.

Representative areas of the following portions of the site were surveyed:

- 1) **Parking** – Comparison of the number of provided parking stalls designated for handicapped use to the number required for the reported parking stall total for the site.
- 2) **Exterior Accessible Route and Building Entrances** - Visual identification of physical barriers from parking to the building entrances.
- 3) **Building Entrances** - Review of the building entrance access to the interior.
- 4) **Interior Accessible Routes and Amenities** – Review of the interior route, obstructions, path of travel and access to public features and equipment.
- 5) **Interior Doors** – Review of doors, clear width, hardware and apparent opening force.
- 6) **Elevators** – Observation of elevator floor area, signals, signs, safety devices, and emergency call systems.
- 7) **Toilet Rooms** - Visual review of common area restrooms available for public use (toilet stalls designed with accessible features, sinks at lower heights with adequate clearances, appropriate sink fixtures and accessories).

|  ASTM E2018-15 - Uniform Abbreviated Screening Checklist - 2010 Americans with Disabilities Act | | | | |
|---|-----|----|----|----------|
| Item | Yes | No | NA | Comments |
| A. History | | | | |
| 1. | | ✓ | | |
| 2. | ✓ | | | |
| 3. | | ✓ | | |
| B. Parking | | | | |
| 1. | | | ✓ | |
| 2. | | | ✓ | |
| 3. | | | ✓ | |

|  ASTM E2018-15 - Uniform Abbreviated Screening Checklist - 2010 Americans with Disabilities Act | | | | | |
|---|--|---|---|---|--------------|
| 4. | Is a sign with the International Symbol of Accessibility at the head of each space? | | | ✓ | |
| 5. | Does each accessible space have an adjacent access aisle? | | | ✓ | |
| 6. | Do parking spaces and access aisles appear to be relatively level and without obstruction? | | | ✓ | |
| C. Exterior Accessible Route | | | | | |
| 1. | Is an accessible route present from public transportation stops and municipal sidewalks on the property? | ✓ | | | |
| 2. | Are curb cut ramps present at transitions through curbs on an accessible route? | | | ✓ | |
| 3. | Do the curb cut ramps appear to have the proper slope for all components? | | | ✓ | |
| 4. | Do ramps on an accessible route appear to have a compliant slope? | ✓ | | | |
| 5. | Do ramps on an accessible route appear to have a compliant length and width? | ✓ | | | |
| 6. | Do ramps on an accessible route appear to have compliant end and intermediate landings? | ✓ | | | |
| 7. | Do ramps on an accessible route appear to have compliant handrails? | | ✓ | | ADA-1 |
| D. Building Entrances | | | | | |
| 1. | Do a sufficient number of accessible entrances appear to be provided? | ✓ | | | |
| 2. | If the main entrance is not accessible, is an alternate accessible entrance provided? | ✓ | | | |
| 3. | Is signage provided indicating the location of alternate accessible entrances? | ✓ | | | |
| 4. | Do doors at accessible entrances appear to have compliant clear floor area on each side? | ✓ | | | |
| 5. | Do doors at accessible entrances appear to have compliant hardware? | ✓ | | | |
| 6. | Do doors at accessible entrances appear to have a compliant clear opening width? | ✓ | | | |
| 7. | Do pairs of accessible entrance doors in series appear to have the minimum clear space between them? | | | ✓ | |
| 8. | Do thresholds at accessible entrances appear to have a compliant height? | ✓ | | | |
| E. Interior Accessible Routes and Amenities | | | | | |
| 1. | Does an accessible route appear to connect with all public areas inside | ✓ | | | |



ASTM E2018-15 - Uniform Abbreviated Screening Checklist - 2010 Americans with Disabilities Act

| | | | | | |
|--------------------------|---|---|--|---|---|
| | the building? | | | | |
| 2. | Do accessible routes appear free of obstructions and/or protruding objects? | ✓ | | | |
| 3. | Do ramps on accessible routes appear to have a compliant slope? | | | ✓ | |
| 4. | Do ramps on accessible routes appear to have a compliant length and width? | | | ✓ | |
| 5. | Do ramps on accessible routes appear to have compliant end and intermediate landings? | | | ✓ | |
| 6. | Do ramps on accessible routes appear to have compliant handrails? | | | ✓ | |
| 7. | Are adjoining public areas and areas of egress identified with accessible signage? | ✓ | | | |
| 8. | Do public transaction areas have an accessible, lowered counter section? | | | ✓ | |
| 9. | Do public telephones appear mounted with an accessible height and location? | | | ✓ | |
| 10. | Are publicly-accessible swimming pools equipped with an entrance lift? | | | ✓ | |
| F. Interior Doors | | | | | |
| 1. | Do doors at interior accessible routes appear to have compliant clear floor area on each side? | ✓ | | | |
| 2. | Do doors at interior accessible routes appear to have compliant hardware? | ✓ | | | |
| 3. | Do doors at interior accessible routes appear to have compliant opening force? | ✓ | | | |
| 4. | Do doors at interior accessible routes appear to have a compliant clear opening width? | ✓ | | | |
| G. Elevators | | | | | |
| 1. | Are hallway call buttons configured with the "UP" button above the "DOWN" button? | | | ✓ | <i>The building is less than 3 stories in height.</i> |
| 2. | Is accessible floor identification signage present on the hoistway sidewalls? | | | ✓ | <i>Unless the future use of the facility is changed to a facility that houses a shopping center, a shopping mall, the professional office of a health care provider, a terminal, depot, or other station used for</i> |
| 3. | Do the elevators have audible and visual arrival indicators at the entrances? | | | ✓ | |
| 4. | Do the elevator hoistway and car interior appear to have a minimum compliant clear floor area? | | | ✓ | |
| 5. | Do the elevator car doors have automatic re-opening devices to prevent closure on obstructions? | | | ✓ | |
| 6. | Do elevator car control buttons appear to be mounted at a compliant | | | ✓ | |

|  ASTM E2018-15 - Uniform Abbreviated Screening Checklist - 2010 Americans with Disabilities Act | | | | | |
|---|--|---|---|---|--|
| | height? | | | | <i>specified public transportation, an elevator is not required.</i> |
| 7. | Are tactile and Braille characters mounted to the left of each elevator car control button? | | | ✓ | |
| 8. | Are audible and visual floor position indicators provided in the elevator car? | | | ✓ | |
| 9. | Is the emergency call system at the base of the control panel and not require voice communication? | | | ✓ | |
| H. Toilet Rooms | | | | | |
| 1. | Do publicly-accessible toilet rooms appear to have a minimum compliant floor area? | ✓ | | | |
| 2. | Does the lavatory appear to be mounted at a compliant height and with compliant knee area? | ✓ | | | |
| 3. | Does the lavatory faucet have compliant handles? | ✓ | | | |
| 4. | Is the plumbing piping under lavatories configured to protect against contact? | | ✓ | | ADA-2 |
| 5. | Are grab bars provided at compliant locations around the toilet? | ✓ | | | |
| 6. | Do toilet stall doors appear to provide the minimum compliant clear width? | | | ✓ | <i>They are single user toilet rooms.</i> |
| 7. | Do toilet stalls appear to provide the minimum compliant clear floor area? | ✓ | | | |
| 8. | Do urinals appear to be mounted at a compliant height and with compliant approach width? | | | ✓ | |
| 9. | Do accessories and mirrors appear to be mounted at a compliant height? | ✓ | | | |
| I. Hospitality Guestrooms | | | | | |
| 1. | Does property management report the minimum required accessible guestrooms? | | | ✓ | |
| 2. | Does property management report the minimum required accessible guestrooms with roll-in showers? | | | ✓ | |

8.0 REPORT QUALIFICATIONS & LIMITATIONS

This report was prepared in accordance with the scope of work, and terms and conditions associated with VERTEX Proposal No. P.2489.17, dated September 29, 2017.

This report was prepared in general conformance with the guidelines of ASTM E2018-15 for Property Condition Assessments. This report was intended to provide a general overview of the building systems at the facility and the general conditions of such. The evaluation was performed using that degree of skill and care normally exercised by reputable consultants performing similar work. The activities of this evaluation included observations of visible and readily accessible areas. In some cases, additional study may be warranted to more fully assess concerns noted.

The opinions and recommendations presented in this report are based on VERTEX's observations, evaluation of the information provided, and interviews with personnel possessing knowledge of the facility. No calculations were made to determine the adequacy of the facility's original or existing design. The possibility exists that defects and deficiencies are present at the subject facility, which were not readily visible or accessible. The development of future problems not identified in this report, on any observed system, at the subject property should be anticipated.

The opinions and recommendations in this report should not be construed in any way to constitute a warranty or guarantee regarding the current or future performance of any system identified.

The following paragraphs are intended to summarize VERTEX's Definition of Property Condition Assessment (PCAs).

A Property Condition Assessment ("PCA") is the process by which VERTEX observes, researches and documents in a written report (the PCA Report) the current physical condition of commercial property and, in addition, provides required estimated expenditures to remedy physical deficiencies. A physical deficiency is defined to be a patent, conspicuous defect, or significant deferred maintenance of the subject property's material systems, components or equipment. It could also include material systems, components or equipment that are approaching, have realized, or have exceeded their typical expected useful life ("EUL") or whose remaining useful life ("RUL") should not be relied upon as a result of actual age, abuse, excessive wear and tear, exposure to the elements, lack of proper maintenance, or other factors. This definition specifically excludes routine maintenance, miscellaneous repairs, operating maintenance, etc. It should be noted that items considered as routine or operating maintenance may be defined by the current practices of the management or property personnel operating the

site. Specific definitions of categories of physical deficiencies including Immediate Repairs, Short-Term Repairs, and Capital Needs including the time-period associated with each, are presented within the body of the PCA Report.

This assignment was performed as a **Level II PCA**. For the purposes of clarification and comparison, VERTEX's levels of PCA service are defined as follows:

- **Level I PCA:** This assessment will be prepared by a qualified professional, performing a visual survey of the property to assess the general condition of the property, structures and associated mechanical components. This PCA may be escalated to a more thorough Level II or Level III PCA following the initial site visit and evaluation, following discussion with the Client.
- **Level II PCA:** *This assessment includes the Level I PCA, with specific items of concern investigated in more detail by one or more specialist in the respective fields (mechanical, roofing, elevators, etc.). These more detailed visual assessments may be incorporated into a single PCA report discussion, or may be presented in a separate report.*
- **Level III PCA:** This assessment includes the Level I PCA, with specific items of concern investigated in more detail by a team of specialists, including subcontractors where warranted, and including operation, testing, and potentially destructive testing of individual systems or components where warranted and approved. These more detailed assessments may be incorporated into a single PCA report discussion, or may be presented in a separate report, which may include test and evaluation data.

The visual observation portion of the PCA consisted of a walk-through survey of the subject property undertaken to observe readily accessible property components, systems, and elements for the purposes of providing a brief description of same, providing an opinion on their general apparent physical condition, and identifying material physical deficiencies as of the time of VERTEX's site visit. This portion of the PCA was a non-intrusive, visual survey; it is not to be construed as a punch list or detailed survey of the property's major physical deficiencies. It is also not considered to be an inventory of building system or material components.

VERTEX extrapolated representative findings to typical areas and systems of the subject property to provide the Client with a reasonably estimated magnitude of commonly anticipated conditions and to use as a basis for estimating the cost of required expenditures to remedy physical deficiencies at the subject property.

In some cases, where additional study or specific expertise is required to define appropriate repair or renovation methods, an estimated cost for the study is presented. In these cases,

associated repair or renovation costs are typically excluded, unless reasonable order of magnitude budgetary estimates can be assumed without the benefit of a specific scope of work.

Unless specifically requested by Client and included in the agreed upon, written scope of services the following items were excluded from the scope of services for this PCA:

- Removal of materials, furniture or finishes; conducting any exploratory probing or testing; dismantling or operation of any equipment; or disturbing any personal items or property which obstructs access or visibility.
- Preparation of engineering calculations (civil, structural, mechanical, electrical, etc.) to determine any system's components or equipment's adequacy or compliance with any specific or commonly accepted design requirements and building codes, or the preparation of designs or specifications to remedy any physical deficiency.
- Reporting on the condition of subterranean conditions such as underground utilities, separate sewage disposal systems, wastewater treatment plants, wells or systems that are either considered process related or peculiar to a specific tenancy or use, or items or systems that are not permanently installed.
- Entering or accessing any area of the premises deemed to pose a dangerous or adverse condition to the consultant or to perform any procedure which may damage or impair the physical integrity of the property, any system or equipment.
- Providing an opinion on the condition of any system or component which is seasonally shut down.
- Provision of a warranty or guarantee of any systems or component's physical condition or use. A PCA is not to be construed as a substitute for any system's or equipment's warranty transfer inspection.
- Review of compliance with any federal, state, city, trade/design, or insurance industry building codes, local laws, health codes or local zoning ordinances. However, violations of codes, laws and ordinances that are observed by VERTEX and any retroactive or pending requirements contained in such codes, laws, and ordinances that are known to VERTEX, or identified during interviews with code authorities, may be identified in the report.
- Surveying for the presence of any environmental issues such as wetlands, hazardous wastes, hazardous materials, mold, asbestos, lead based paint, or indoor air quality.

TABLE 1

IMMEDIATE AND REPLACEMENT RESERVES COST ESTIMATES

**TABLE 1
IMMEDIATE REPAIRS, SHORT TERM REPAIRS, and CAPITAL NEEDS ESTIMATE**



| | |
|--------------|----------------|
| Site Name: | Town Hall |
| City, ST: | Lunenburg , MA |
| Age, Yrs: | 198 |
| Project No.: | 48237 |

| | |
|-------------------|-------|
| # Buildings: | 1 |
| Est. Building SF: | 6,534 |
| Eval. Term, Yrs: | 5 |
| CPI: | 2.50% |
| # Units: | NA |

| | Total | Per SF | Per SF/YR |
|---------------------------------|-----------|---------|-----------|
| Immediate Repairs \$: | \$37,066 | \$5.67 | |
| Short Term \$ (no inflation): | \$131,890 | \$20.19 | \$10.09 |
| Short Term \$ (inflated): | \$135,026 | \$20.67 | \$10.33 |
| Capital Needs \$ (no inflation) | \$144,786 | \$22.16 | \$4.43 |
| Capital Needs \$ (inflated) | \$148,744 | \$22.76 | \$4.55 |

| ITEM | | | | | | Immediate | Reserves |
|--|------------|---|-------|------|-------------|-----------|-----------|
| ITEM No. | PHOTO No. | DESCRIPTION | QTY | UNIT | UNIT COST | YEARS 0-1 | YEARS 1-5 |
| SITE DEVELOPMENT | | | | | | | |
| No significant SITE DEVELOPMENT costs identified | | | | | | | |
| BUILDING STRUCTURE | | | | | | | |
| 1 | 88, 89, 90 | Remove and replace accessible ramp complete at north side of building | 1 | LS | \$10,744.00 | \$10,744 | |
| BUILDING EXTERIOR | | | | | | | |
| 2 | 16, 17 | Cut out and replace sealants between siding and wall penetrations (windows and doors) | 1,000 | LF | \$4.29 | | \$4,290 |
| 3 | 4 | Replace windows at basement level, operable - sliding - double pane glass - Vinyl | 100 | SF | \$80.16 | | \$8,016 |
| ROOF | | | | | | | |
| 4 | 39, 40 | Repair of active leaks, minimum charge | 4 | EA | \$1,007.25 | \$4,029 | |
| 5 | 31 thru 35 | Remove existing roof and replace with fiberglass composition shingles, laminated | 3,400 | SF | \$8.06 | | \$27,404 |
| 6 | 32 thru 36 | Brick - brick repair and replacement, chimney repairs | 300 | SF | \$32.23 | \$9,669 | |

| SHORT TERM | | | | | RESERVE TOTAL |
|------------|----------|--------|--------|--------|---------------|
| YEAR 1 | YEAR 2 | YEAR 3 | YEAR 4 | YEAR 5 | |
| | | | | | \$0 |
| | | | | | \$0 |
| | \$4,290 | | | | \$4,290 |
| | \$8,016 | | | | \$8,016 |
| | | | | | \$0 |
| | \$27,404 | | | | \$27,404 |
| | | | | | \$0 |

**TABLE 1
IMMEDIATE REPAIRS, SHORT TERM REPAIRS, and CAPITAL NEEDS ESTIMATE**



| | |
|--------------|----------------|
| Site Name: | Town Hall |
| City, ST: | Lunenburg , MA |
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|---------------------------------|-----------|---------|-----------|
| Immediate Repairs \$: | \$37,066 | \$5.67 | |
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| Capital Needs \$ (no inflation) | \$144,786 | \$22.16 | \$4.43 |
| Capital Needs \$ (inflated) | \$148,744 | \$22.76 | \$4.55 |

| ITEM | | | | | | Immediate | Reserves |
|---------------------------|--------------------|---|-------|--------|-------------|-----------|-----------|
| ITEM No. | PHOTO No. | DESCRIPTION | QTY | UNIT | UNIT COST | YEARS 0-1 | YEARS 1-5 |
| BUILDING INTERIOR | | | | | | | |
| 7 | 54, 57, 58, 65, 67 | Replace carpet floor coverings - low pile medium traffic | 4,900 | SF | \$7.68 | | \$37,632 |
| 8 | 53 thru 70 | Painting of interior walls, drywall/plaster | 8,496 | SF | \$1.10 | | \$9,346 |
| 9 | 53, 54 | Interior wall refinishing, wood re-staining | 2,036 | SF | \$4.03 | | \$8,205 |
| 10 | 54 | Drywall ceilings: repaint, minimum charge | 1,470 | SF | \$1.07 | | \$1,573 |
| 11 | 57, 58, | Acoustical tile ceiling including suspended grid | 2,941 | SF | \$7.66 | | \$22,528 |
| MECHANICAL SYSTEMS | | | | | | | |
| 12 | 91, 92, 93 | Provide secondary condensate drainage at AHU/furnace units | 4 | EA | \$100.73 | \$403 | |
| 13 | 91, 92, 93 | Replace existing split systems (R22) with new indoor AHU and outdoor condensing unit | 17 | Ton AC | \$1,517.19 | | \$25,792 |
| 14 | 92, 93 | Engage mechanical engineer or mechanical contractor to investigate and recommend appropriate repair options | 1 | LS | \$10,072.50 | \$10,073 | |
| ELECTRICAL SYSTEMS | | | | | | | |
| 15 | --- | Engage qualified electrician for minor repairs, secure wiring, min charge | 1 | LS | \$671.50 | \$672 | |
| PLUMBING SYSTEMS | | | | | | | |
| 16 | 104 | Engage plumbing contractor to secure interior water meter lines and connections to wall | 1 | LS | \$470.05 | \$470 | |
| CONVEYANCE SYSTEMS | | | | | | | |
| Not Applicable | | | | | | | |

| SHORT TERM | | | | | RESERVE TOTAL |
|---------------------------|----------|---------|---------|--------|---------------|
| YEAR 1 | YEAR 2 | YEAR 3 | YEAR 4 | YEAR 5 | |
| BUILDING INTERIOR | | | | | |
| | \$37,632 | | | | \$37,632 |
| | \$9,346 | | | | \$9,346 |
| | \$8,205 | | | | \$8,205 |
| | \$1,573 | | | | \$1,573 |
| | \$22,528 | | | | \$22,528 |
| MECHANICAL SYSTEMS | | | | | |
| | | | | | \$0 |
| \$6,448 | \$6,448 | \$6,448 | \$6,448 | | \$25,792 |
| | | | | | \$0 |
| ELECTRICAL SYSTEMS | | | | | |
| | | | | | \$0 |
| PLUMBING SYSTEMS | | | | | |
| | | | | | \$0 |
| CONVEYANCE SYSTEMS | | | | | |
| | | | | | \$0 |

TABLE 2
IMPROVED ADA COMPLIANCE
PRIORITIES AND ESTIMATED COSTS

**TABLE 2
GENERAL ADA IMPROVEMENTS**

| Site Name: Town Hall | | | | | | # of ADA Items | | 2 |
|--|---------|--|-----|------|-----------|----------------|----------------|---|
| Site Location: Lunenburg , MA | | | | | | | | |
| Building Age, yrs: 198 | | | | | | | | |
| Project No.: 48237 | | | | | | | | |
| ADA Observations | | | | | | | | |
| Item # | Photo # | Description | QTY | Unit | Unit Cost | Total | | |
| PARKING - EXTERIOR ROUTE - BUILDING ENTRANCES | | | | | | | | |
| ADA- 1 | 46 | Install handrails on both sides of existing ramp | 34 | LF | \$87.00 | \$2,958 | | |
| INTERIOR ACCESSIBLE ROUTES - AMENITIES - INTERIOR DOORS - ELEVATORS | | | | | | | | |
| No significant issues observed for interior routes, amenities, interior doors or elevators | | | | | | | | |
| TOILET ROOMS | | | | | | | | |
| ADA- 2 | 55, 59 | Add insulation under sinks common area restrooms | 2 | EA | \$67.00 | \$134 | | |
| HOSPITALITY GUEST ROOMS | | | | | | | | |
| Not Applicable | | | | | | | | |
| | | | | | | TOTAL | \$3,092 | |

Notes/Abbreviations:

LS = Lump Sum; LF = Linear Foot; SF = Square Feet; SY = Square Yard; EA = Each; TN = Ton; kW = Kilowatt; FL = Floor

Any future alterations are subject to compliance with local, state and federal requirements. In some cases, the tenants do not offer services which interface with the general public, and reasonable accommodations appear to be in place for employee accessibility.

ADA related issues are included on this table regardless of magnitude of cost.

ADA Priorities :

- 1 = Accessible approach and entrance
- 2 = Access to goods and services
- 3 = Access to restrooms
- 4 = Other measures

This is not meant to be a detailed ADA compliance audit. Costs are based on general, 'order of magnitude' estimates to provide improved

APPENDIX A

PHOTOGRAPHIC DOCUMENTATION



Photo #1: East and south facades showing the driveway and main entry.



Photo #2: East façade.



Photo #3: West end of the south façade.



Photo #4: West (rear) façade.



Photo #5: North façade illustrating the accessible entrance.



Photo #6: Northeast corner of the clocktower.



Photo #7: Northeast corner of the front façade.



Photo #8: Detail of the pediment at the front façade.



Photo #9: The cornice at the front entry.



Photo #10: Detail of the front entry cornice.



Photo #11: Southeast corner of the building showing the bump-out.



Photo #12: Detail of the roof wall intersection at the bump-out.



Photo #13: Secondary egress stair located on the south façade.



Photo #14: Detail of the metal framing at the second story landing.

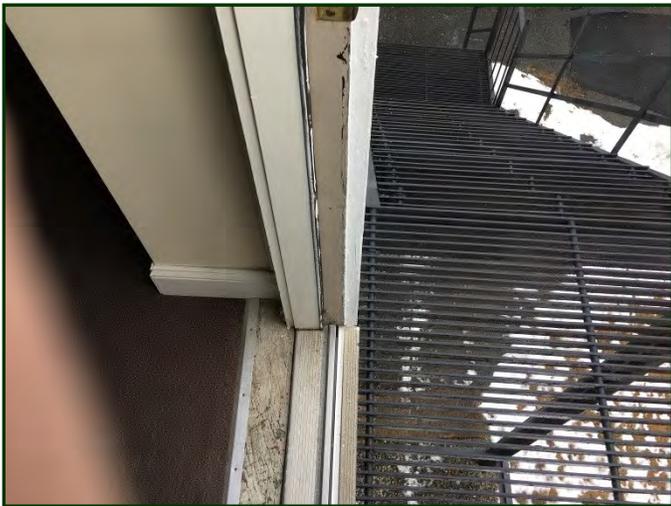


Photo #15: Detail of the sill at the second story landing.



Photo #16: Detail of a PVC window at the south façade.



Photo #17: Wood door trim at the second story door on the south façade.



Photo #18: Detail of the gutter and downspout at the southwest corner.



Photo #19: West façade showing the gable end.



Photo #20: Detail of the mechanical penetrations on the upper portion of the west façade.



Photo #21: Northwest corner of the roof gable.



Photo #22: West end of the accessible entry on the north façade.



Photo #23: Mechanical penetrations at the west façade at the compressors.



Photo #24: Detail of the downspout outflow at the north-west corner. Note the build up of ice on grade at the foundation .



Photo #25: The soffit of the accessible entry canopy on the north side.



Photo #26: Accessible entry at the sidewalk on the north façade.



Photo #27: The framing for the accessible entry. Note the post at the left side is not set on the footing completely.



Photo #28: The stone foundation on the north side. Note the deteriorated mortar.



Photo #29: Detail of the northwest corner of the clocktower.



Photo #30: Detail of the clocktower roof.



Photo #31: South side of the roof.



Photo #32: North side of the roof.



Photo #33: Brick chimney at the north side of the roof.



Photo #34: Detail of the flashing at the north chimney.



Photo #35: Brick chimney at the south side.



Photo #36: Detail of the south chimney. Note the deteriorated mortar and loose bricks.



Photo #37: The roof framing and decking underside at the attic.



Photo #38: West gable end of the attic. Note the small holes in the boards that allowed light to penetrate the wall.



Photo #39: Standing water was observed in the attic.



Photo #40: A potential source of the standing water observed in the attic. Note the staining on the wood members



Photo #41: Interior of the clocktower with bell in the foreground.



Photo #42: The decking in the clocktower.



Photo #43: Overview of Town Hall (from northeast corner of building). Note accessible ramp on right hand side of photo



Photo #44: Overview of Town Hall (from southeast corner of building)



Photo #45: View of covered accessible ramp on north side of building



Photo #46: View of accessible ramp with recessed lighting fixtures above



Photo #47: Main front entrance to the building (east elevation). Note accessible parking sign/space in foreground



Photo #48: Public sidewalk at front of building



Photo #49: Overview of building from the southwest corner. Note egress stairway at south elevation



Photo #50: Close-up view of wrought iron egress stairway from second floor level to grade (south elevation)



Photo #51: View at front of building looking north



Photo #52: View of driveway at south side of building. Note stone retaining wall at side of building



Photo #53: Interior view of main entrance doors at front of building. Note stained wood wainscot

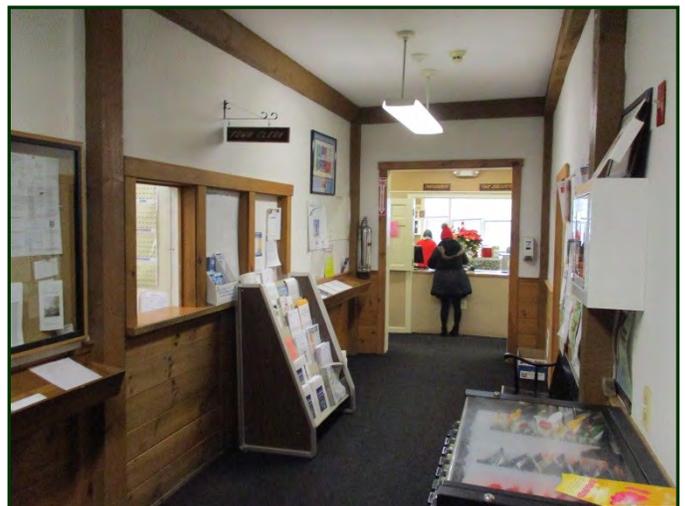


Photo #54: Entrance hallway. Note carpet floor and transaction counter beyond



Photo #55: Public toilet room with ceramic tile floor and wainscot (single use)



Photo #56: Accessible toilet with grab bars at public toilet room (single use)



Photo #57: Office space (first floor level) with carpet floor, suspended acoustical ceiling system & painted GWB walls



Photo #58: Corridor with carpet floor and suspended acoustical ceiling system



Photo #59: Accessible toilet room on first floor level. Note lack of protection at pipes under counter



Photo #60: Posted accessible route at first floor level



Photo #61: Door at chair lift (north side of first floor adjacent to exterior door at accessible ramp)



Photo #62: Interior view of chair lift



Photo #63: Nameplate posted on chairlift wall



Photo #64: Current inspection certificate posted on wall at chairlift

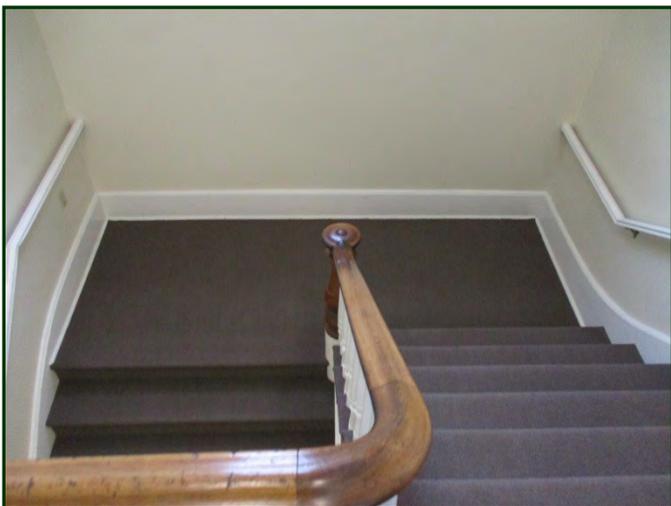


Photo #65: Stairs with carpet at northeast corner of building

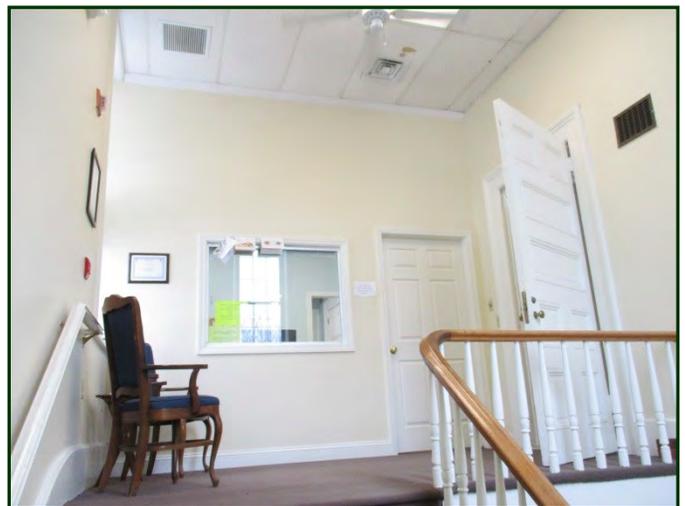


Photo #66: Landing at second floor level. Note suspended acoustical ceiling system



Photo #67: Meeting space with stage at second floor level



Photo #68: Decorative tin ceiling with pendant-mounted chandelier at meeting space



Photo #69: View looking north in meeting space



Photo #70: Small meeting room adjacent to main meeting space. Note decorative tin sheeting at walls



Photo #71: Stained strip wood flooring at stage



Photo #72: Single user toilet room adjacent to meeting space



Photo #73: Wall-mounted certificate of inspection indicating allowable capacity of occupants in building

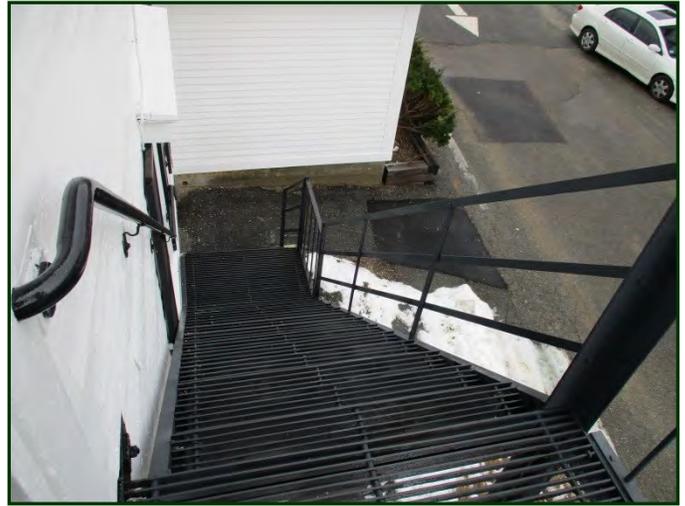


Photo #74: View of exterior wrought iron egress stairway leading from meeting room to grade at south elevation

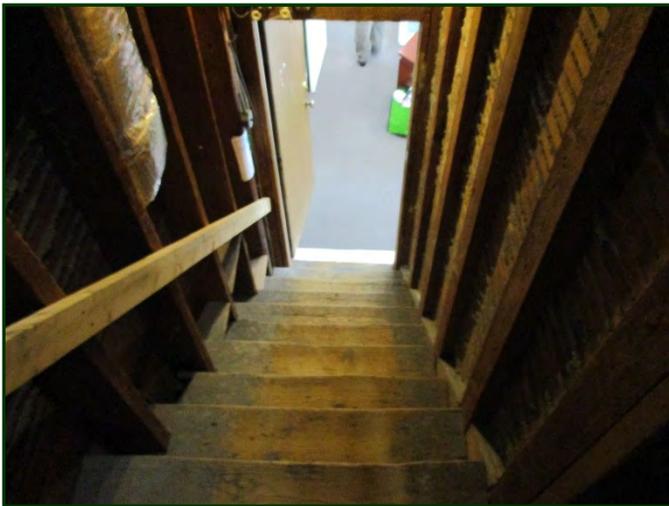


Photo #75: Stairs leading from second floor to attic level



Photo #76: View of attic space. Note post and beam framing



Photo #77: Stairs serving basement with plastic enclosure. Note rough hewn wood posts



Photo #78: Basement level with plastic sheeting on earth



Photo #79: View of the front (east) elevation of the Town Hall.



Photo #80: View of the rear (west) elevation of the Town Hall.



Photo #81: View of the typical stone foundation from the exterior.



Photo #82: View of the stone foundation from inside the basement.



Photo #83: View of typical round wood posts supporting the first floor of the building.



Photo #84: View of a wood post supporting a first floor girder. Note various shims installed at the top of the post.



Photo #85: View of concrete and stone blocks supporting the wood posts.



Photo #86: View of a typical wood truss supporting roof purlins and rafters.



Photo #87: View of a typical purlin supporting wood rafters.



Photo #88: View of the handicap ramp on the north side of the building.



Photo #89: View of a wood post supporting the handicap ramp disconnected from the concrete foundation.



Photo #90: View of rusted joist hangers at the handicap ramp.



Photo #91: Exterior condensing units



Photo #92: Typical air handling units



Photo #93: Typical air handling unit, no direct outdoor ventilation



Photo #94: Standalone portable dehumidifier in basement



Photo #95: Typical thermostat for air handling unit system



Photo #96: Typical baseboard heating in office areas



Photo #97: Main electric meters at exterior of building



Photo #98: Main electrical panels in basement

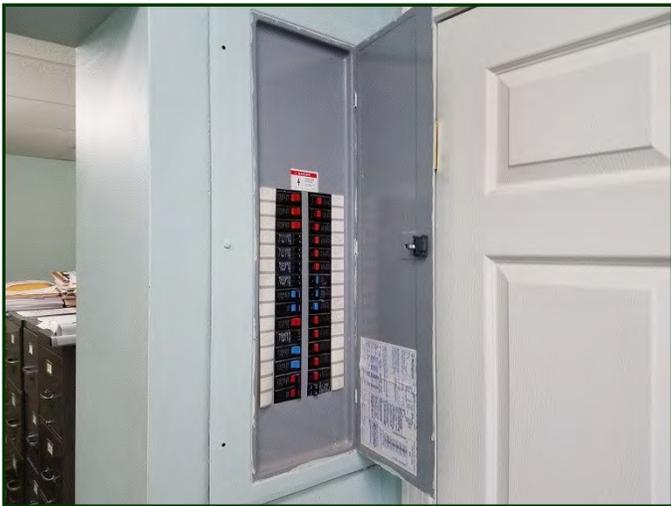


Photo #99: Secondary electrical panel in 2nd floor office



Photo #100: Loose wiring observed around main water meter and associated piping



Photo #101: Loose wiring observed in basement



Photo #102: 2nd floor chandelier lighting



Photo #103: Typical lighting in office area



Photo #104: Domestic water service connections and meters. Piping not secured to wall



Photo #105: Domestic electric hot water heater



Photo #106: Typical domestic water piping under sinks



Photo #107: Typical abandoned sanitary sewer lines in basement



Photo #108: Typical abandoned sanitary sewer lines in basement



Photo #109: Typical exit signage and fire alarm strobe



Photo #110: Exit signage with battery backup



Photo #111: Fire alarm panel at top of stairwell to basement. No documentation observed.



Photo #112: Fire extinguisher and inspection tag



Photo #113: Fire extinguisher and inspection tag

APPENDIX B

RELEVANT SUPPORTING DOCUMENTATION

APPENDIX C
STAFF QUALIFICATIONS



Brian Dunn, AIA
Forensic Architect

[bdunn@vertexeng.com / 203-517-4917]

Expertise:

Loss Control
Construction Defect
Owner's Representation
Architecture
Litigation Support & Expert
Testimony (Construction)
Property Claim - Personal
Property Condition
Assessments
Litigation Support & Expert
Testimony
Consultation
Builder's Risk Claim
Design Plans
Premise Liability Claim

Education/Training:

Architecture, Boston Architectural College, B.Arch, 2008

Biography:

Mr. Dunn possesses over 25 years of experience in the construction and design industries with an emphasis on preventing and solving issues related to the built environment. As a design professional Mr. Dunn has garnered expertise in all phases from the initial concept generation to the delivery of the completed building, including post occupancy analysis. He has been responsible for the successful coordination of the various disciplines that make up the finished product including site work.

Mr. Dunn provides valuable services to clients by performing on site inspections and construction document reviews as it pertains to litigation matters and pre-construction loss prevention reviews. Through his use of modern technology and his knowledge of myriad construction types and materials he is able to deliver accurate analyses and provide forward thinking solutions for clients that encompass their specific needs. He is adept at finding the source of problem and then providing the appropriate response that yields the best outcomes for clients.

Mr. Dunn's background in the construction and utility industries prior to him becoming an architect has given him experience with the technical aspects of construction not typically found in the architecture profession. It is this background that has led him to be proficient in the detailing of buildings and his ability to produce solutions to problems that arise during the course of construction in a timely manner as necessitated once projects have broken ground. In post construction analysis he is able to examine conditions from large scale proportions down to minute details, interpret those findings, and communicate to clients the scope of the issue and how best to remedy that particular situation to the satisfaction of the client.

Licenses/Certifications:

Registered Architect, CT, 13888
Registered Architect, MD, 18019
Registered Architect, NY, pending
NCARB

Associations:

American Institute of Architects- AIA
Chamber of Commerce Ridgfield CT Advisory Council (2016)



Eric Nelson, PE, LEED AP, CEA
Vice President, Property Condition Assessments

[enelson@vertexeng.com / 484-487-2727]

Expertise:

Indoor Air Quality
Construction Due Diligence
Loan Monitoring
Property Condition Assessments
Construction Estimating
LEED Assessment & Certification
Litigation Support & Expert Testimony (Construction)
Civil Engineering
Civil/Structural
Engineering Geology
Structural
Green Building
Energy Certified Efficiency Auditing
Compliance Audits
PCA

Education/Training:

B.S., Civil Engineering, University of Illinois, 1989
Shallow Foundation Design, University of Missouri-Rolla, 1992
Deep Foundation Design, University of Florida, 1994
Environmental Chemistry, Illinois Institute of Technology, 1996
Earth Retaining Structures, University of Delaware, 2004

Biography:

Mr. Nelson is a Vice President directing the Property Condition Assessment and Energy Savings Investigation practices at VERTEX. He has over 27 years of experience with construction-related services such as construction materials testing and inspection, Geotechnical engineering, foundation design and analysis and design of pavement systems. Since 1997, he has been extensively involved in the performance, review and management of Property Condition Assessments (PCAs) for projects of variable size and complexity throughout North America. In addition, he has provided Construction-Monitoring services to evaluate construction progress, and approve or deny contractor payment requests on multiple projects in the northeast. He has also managed a number of large scale projects involving pre- and post-construction condition assessments of structures to monitor and assess damage from construction-related vibration. Mr. Nelson has also directed VERTEX's building analysis program with respect to energy usage and savings strategies for projects at various locations in North America.

Mr. Nelson has been involved in over 3,000 construction and assessment projects during his career, with extensive involvement in new construction, remodeling and re-development, property acquisition, lender due diligence and financial needs assessments and development of replacement reserves for numerous property types.

Licenses/Certifications:

Professional Engineer (PE) – Civil, DE, 10924
Professional Engineer (PE) – Civil, IL, 62.049214
Professional Engineer (PE) – Civil, IN, PE19500266
Professional Engineer (PE) – Civil, MD, 27232
Professional Engineer (PE) – Civil, NJ, 24GE03972000
Professional Engineer (PE) – Civil, NY, 754035
Professional Engineer (PE) – Civil, PA, PE050115E
Professional Engineer (PE) – Civil, WI, 31086-6
Professional Engineer (PE) – Civil, NC, 041964
Professional Engineer (PE) - Civil, AZ, 62072
LEED® AP
Certified Energy Auditor
Certified Building Inspection Engineer (BIECI)
Photovoltaic Entry Level Certificate of Knowledge
40 Hour OSHA Hazardous Waste Op. Training
Ground Source Heat Pump Loop Installer

Associations:

Delaware Valley Green Building Council (DVGBC)

Association of Energy Engineers (AEE)

Publications:

Nelson, Eric, and Shaw, Michael and Crelease, Charles, "Changes to Environmental Due Diligence – EPA's Draft All Appropriate Inquiry Rule" – NJPA Real Estate Journal, April 23, 2004

Nelson, Eric, "Property Condition Assessments – Going Beyond ASTM" – NJPA Real Estate Journal, March 11, 2005

Nelson, Eric, "Evaluating Sustainable Solutions" – Modern Contractor Solutions, October 2011



Matthew Quigley, PE
Forensic Engineer

[mquigley@vertexeng.com / 781.952.6070]

Highlights:

Professional Engineer (PE),
Structural
Passed 16 HR. Structural
Engineering (SE) Exam
B.S. Civil Engineering

Expertise:

Civil/Structural
Structural
Damages
Design Plans
Property Claim - Commercial
Property Claim - Personal

Education/Training:

B.S., Civil Engineering, Northeastern University, 2010

Special Training:

SEAMASS - Wind and Waves
SEAMASS - Structural Forensics: Lessons Learned

Biography:

Mr. Quigley has a strong background in structural engineering analysis and design, building envelope review and design and construction administration services. He is a licensed engineer in 5 states and has experience with consultation and design of concrete, steel, masonry, and wood structural systems in residential and commercial applications. He is experienced in state and federal building codes and implementation through forensic analysis of failures and design of new structures.

He has experience in the evaluation, design and rehabilitation of historic structures including structural reinforcement, building envelope renovation and building code upgrades. His responsibilities include evaluating historic materials, designing to match existing material strengths and aesthetics, coordinating with historic commission requirements, implementing building code upgrades for historic structures and review and approval of construction materials and implementation.

Mr. Quigley uses these skills and experience as an integral member of the forensic engineering division within VERTEX to provide cause and origin investigations, damage assessments, and repair and design recommendations for structural and building envelope components on residential and commercial applications.

Licenses/Certifications:

Professional Engineer (PE) – Structural, MA, 51620
Professional Engineer (PE) – Structural, CT, 31035
Professional Engineer (PE) – Structural, NH, 15152
Professional Engineer (PE) – Structural, VT, 123335
Professional Engineer (PE) – Structural, RI, 11959
Professional Engineer (PE), NY, 097406
OSHA 10
Structural Safety Assessment Program Inspector, CA, 74255

Associations:

- American Concrete Institute (ACI)
- American Society for Testing and Materials (ATM)
- American Institute of Steel Construction (AISC)

Presentations:

Presentation and training: *"Expansion and Control Joints"* as part of



Philip Russo, R.A.
Project Manager

[prusso@vertexeng.com / 617-830-1542]

Highlights:

Registered Architect MA Lic
#9077

Expertise:

PCA
Construction Defect
Civil Engineering
Structural
Architecture
Property Claim - Personal
Civil/Structural
Construction Due Diligence
Property Condition
Assessments
Peer Review
Analysis
PCS
Consultation
Design Plans

Education/Training:

B. Arch, Bachelor of Architecture Degree, Boston Architectural College,
Boston, MA, 1984
Diploma in Architectural and Civil Design, Porter School of Design, Rocky
Hill, CT

Biography:

Mr. Russo is a Massachusetts Registered Architect with over 32 years of experience. He has extensive knowledge related to assessment, architectural design, code review, construction documents, specifications, project costs, project forecasting, and construction administration. He has worked on a wide range of building types, including public governmental buildings such as libraries and K-12 school buildings, as well as hospitals and healthcare facilities and other multi-functional buildings of numerous types. Currently, Mr. Russo serves as Project Manager at VERTEX.

Since 2002, he has been extensively involved in the development and review of Property Condition Assessments (PCAs), Property Condition Screens (PCS's), Mold Investigations, review of construction documents for constructability and other due diligence projects for projects of variable size and complexity throughout North America, Europe, Russia and India.

As Project Manager at VERTEX, Mr. Russo's responsibilities include building/site assessment, technical report writing, coordination of external contractors, ADA compliance, municipal research, cost estimating, capital reserve planning and engineering data analysis. Additional responsibilities include peer review and mentoring of junior staff.

Licenses/Certifications:

Registered Architect, MA, MA#9077
Roofing 101 Module 1 : The Basics
Roofing 101 Module 2 : Roof Systems Basics
Roofing 101 Module 3 : Low-slope Roof Assemblies
Roofing 101 Module 4 : Steep-slope Roof Assemblies
Roofing 101 Module 5 : Roof Flashings and Accessories



Scott Katzer, PE
Division Manager / Senior Forensic Engineer

[skatzer@vertexeng.com / 954-626-8893]

Highlights:

Mechanical Engineering Degree
 Professional Engineer
 Expert with many building related components
 Nationwide Due Diligence Experience
 Registered Professional Engineer in 12 States
 Performed Numerous Forensic Investigations
 Expert Consultant, Litigation Experience
 Construction Defect
 Nationwide Property Condition Assessments Expertise
 Project Management
 Experience Nationwide
 Experience in Hospital Facilities
 MEP Systems

Expertise:

Litigation Support & Expert Testimony (Insurance Support)
 Indoor Air Quality
 Mold
 PCA
 Construction Defect
 Construction Management
 Catastrophe Claim
 Contract Claim
 Owner's Representation
 Electrical Consulting
 Litigation Support & Expert Testimony (Construction)
 Commissioning
 Construction Claim Analysis & Prep
 Property Claim - Personal Reconstruction/Restoration
 Tenant Improvement
 Mechanical
 Feasibility Studies
 Construction Due Diligence
 Property Condition Assessments
 Litigation Support & Expert Testimony (Air Quality)
 Energy Management System Design, Installation & Support
 Peer Review
 Claim Investigation
 Vapor Intrusion Investigations & Remediation

Education/Training:

B.S., Mechanical Engineering, Northeastern University, Boston, MA, 1992

Special Training:

Florida Wind Mitigation Inspection Training
 Water Vapor Diffusion
 Florida Professional Engineering Rules & Ethics
 Concrete Deficiencies, Causes & Evaluation
 Exterior Insulation & Finish Systems (EIFS)
 Property Claim Training
 Seismic Damage
 Building Envelope & Stucco
 Vibration Damage
 Construction Defect Disputes & Litigation
 National Association of Fire Investigators
 Role of Cool Thermal Storage in Sustainable Design
 Florida Wind Mitigation Inspection

Biography:

Mr. Katzer is a Senior Engineer and Florida Division Manager. He earned a B.S. in Mechanical Engineering from Northeastern University and is a licensed professional mechanical engineer, Certified Fire & Explosion Investigator (CFEI) and a Haag certified residential roof inspector.

Mr. Katzer's engineering experience encompasses a wide variety of building issues. He is an experienced mechanical engineer in the evaluation and design of healthcare, institutional, commercial, residential and industrial technically complex projects, as well as the investigation and analysis of building related components including heating, ventilating and air conditioning (HVAC), electrical, plumbing, fire protection, building envelope and indoor air quality (IAQ) issues. He is also experienced in the evaluation of buildings relating to identifying and mitigating the risks associated with hurricanes and similar catastrophic events.

Licenses/Certifications:

Professional Engineer (PE) - Mechanical, FL, 52678
 Professional Engineer (PE) - Mechanical, GA, 26933
 Professional Engineer (PE) - Mechanical, MA, 46899
 Professional Engineer (PE) - Mechanical, CA, 33806
 Professional Engineer (PE) - Mechanical, IL, 062060482
 Professional Engineer (PE) - Mechanical, TX, 101536
 Professional Engineer (PE) - Mechanical, NC, 035481
 Professional Engineer (PE) - Mechanical, NY, 092091-1
 Professional Engineer (PE) - Mechanical, CT, 30928
 Professional Engineer (PE) - Mechanical, NV, 023556
 Professional Engineer (PE) - Mechanical, CO, PE.0050936
 Professional Engineer (PE) - Mechanical, NJ, 24GE05277500
 Certified Fire & Explosion Investigator (CFEI), National, 20278-11429
 Haag Certified Inspector - Residential Roofs, HCI #201302562

Fire and Explosives
Fire - Origin & Cause
Damages
PCS
Other
Invoice Review
Litigation Support & Expert
Testimony
Consultation
Subrogation
Design Plans
Product Liability Claim
Property Claim - Commercial
Infrared Thermography
Survey

OSHA 10, 360training.com

Associations:

American Society of Heating, Refrigeration and Air Conditioning Engineers (ASHRAE), No. 8160171

International Association of Fire Investigators member, No. 1310698

Presentations:

June 2015: Presented "From 5 to 5000 gallons, What to Look for in a Brewery Space" to the American Homebrewers Association, National Conference in San Diego, California.

June 2015/May 2014: Presented "Water Vapor Diffusion" to The Vertex Companies and Engle Martin & Associates in Fort Lauderdale, Florida.

April 2013/October 2012: Presented "Living with Engineers" to North Broward Preparatory School in Coral Springs, Florida and Olympic Heights High School STEM Program Board of Directors in Boca Raton, Florida.

June 2008: Presented "Hurricane Mitigation for Mission Critical Facilities" at the 7x24 Exchange Conference in Boca Raton, Florida.