

Town Hall Accessibility & Building Renovation Study



Sharon, Massachusetts
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KAESTLE BOOS
associates, inc

ARCHITECTURE

LANDSCAPE ARCHITECTURE

INTERIOR DESIGN

STRUCTURAL ENGINEERING

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INTRODUCTION

Kaestle Boos Associates was retained by the Town primarily to determine the scope and cost of making the current facility Handicap Accessible. Option 1 was developed to address this goal. It deals only with making the current facility accessible; it does not include any improvements to the facility not directly relating to resolving this issue. The cost of this Option has been calculated at \$2,730,000.

As part of the study, we were also asked to develop conceptual approaches to meeting the other needs of the Town Hall facility on this site for the foreseeable future, including space, systems and environmental improvements.

In order to develop said options it was first necessary to develop a determination of the space required based on current services housed in the building and their predicted growth in terms of personnel, work areas, storage and meeting space. Our staff met with all department heads and developed a Space Needs Program based on these interviews and standard planning guidelines.

It was determined that the total of 7,780 net square feet was required to meet current needs with some anticipated growth. This was calculated by using a net to gross ratio of 150% that translates into a building of approximately 11,670 gross square feet. The existing facility has an area of 9,457 square feet on its three levels.

The Study Team developed four additional Options for meeting these goals including renovation and additions to the current facility, a new facility and a new facility combined with a partial renovation of the adjacent Fire Station.

Working Study Group

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KBA Study Team

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BUILDING CODE ANALYSIS

APPLICABILITY

This analysis reviews the existing Sharon Town Hall in Sharon, MA, with regard to the Massachusetts State Building Codes (“Code”) for new construction. The 8th Edition of the State Building Code consists, in part, of the 2009 International Building Code (IBC) and the 2009 International Existing Building Code (IEBC) with Massachusetts Amendments to these codes.

Codes used in this analysis are:

- International Building Code (IBC, 2009)
- International Existing Building Code (IEBC, 2009)
- International Energy Conservation Code (IECC, 2012)
- Massachusetts State Building Code Amendments (780 CMR 8th Edition)
- Architectural Access Board Rules and Regulations (AAB, 521 CMR, 2006)
- Uniform State Plumbing Code (248 CMR)

Code compliance with regard to mechanical systems, including electrical, plumbing, and fire protection systems, are not reviewed as part of this study as these are to be assumed to be replaced during any renovation project. Sitework is reviewed in a separate section of this study.

Upgrades and corrections to existing structures undergoing renovations are limited to specific items under the IEBC. During renovations, not all existing safety issues and non-compliant conditions are required to be corrected; typically only items within each renovated area are required to be corrected. However, non-compliant conditions at stairs and egress elements, fire rating separations, accessibility, and fire protection (sprinklers) are required to be corrected or provided anew as required by the IBC. Because this building was constructed almost twenty years ago, existing conditions which may be allowed to remain under the requirements of the IEBC may also be in conflict with current life safety codes and standards. Over time, since the original construction of these buildings, life safety standards have been improved in reaction to tragic events. *In order to evaluate life safety conditions in accordance with the most current intent of these codes, the current IBC and Fire Safety codes and regulations are used as a basis for judging compliance.*

Correcting existing conditions to comply with current Accessibility and Fire Protection requirements is required when the value of the work exceeds the cost or scope triggers stated in the AAB and the Fire Code.

Accessibility in public buildings is regulated by 521 CMR, which is enforced by the Massachusetts Architectural Access Board (MA AAB) and the Building Inspector of the municipality. 521 CMR, as issued in 2006, is used for this review. MA AAB 5.1 Definitions states:

“Public Buildings: A building privately or publicly financed that is open to and used by the public”,

MA AAB 11.1 Commercial Buildings states:

“The design of commercial *buildings* shall comply with 521 CMR, except as specified or modified in 521 CMR 11.00. Commercial *buildings* are *public buildings* ... as well as city and town ... *facilities*.”

The Town Hall is considered a public, commercial building and so is required to be accessible in accordance with 521 CMR.

Currently, the AAB regulates only areas and conditions accessed by the “public”; areas occupied solely by staff are not included in the regulation. Staff areas are included in the ADA Accessibility Guidelines as part of federal law, but these are not directly enforceable as part of the Building Code. However, in an effort to unify compliance requirements with the recently adopted IBC as the State Building Code, the AAB will be revising the regulation to include staff areas as well as public areas. In anticipation of the release of the revised AAB regulations, all discussions below regarding accessibility will include compliance of staff areas.

Applicability of the AAB Regulations for renovations of existing buildings is based on the value of the renovations as a percentage of the current assessed value of the building (100% valuation). According to AAB 3.3, partial compliance is required when the value of the renovations exceeds \$100,000 and full compliance of the entire facility is required when the value of the renovations exceeds 30% of the assessed value of the building. An exception to this rule is for maintenance work on MEP systems, sprinkler systems, roofs, replacement windows, masonry repair, site utilities, landscaping, and septic system which in aggregate is less than \$500,000.

As stated in AAB 3.3 (paraphrased):

“3.3 EXISTING BUILDINGS

All additions to, reconstruction, remodeling, and alterations or repairs of existing public buildings or facilities ...shall be governed by all applicable subsections in 521 CMR.

3.3.1...,

a. if the work costs less than \$100,000, then only the work being performed is required to comply with 521 CMR...,

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...,

3.3.2 If the work performed, including the exempted work, amounts to 30% or more of the full and fair cash value (see 521 CMR 5.00) of the building the entire building is required to comply with 521 CMR. “

Also, according to AAB 3.5, any work performed, even if under separate contracts or building permits, within a 3 year period must be included in the aggregate construction cost. This includes sitework and building renovations, whether done separately or together.

- Future Change Orders and other unanticipated costs could also trigger full compliance if the aggregate value exceeds the 30% limit.
- Cost of future building projects requested for permit within 3 years of the permit date for this project will be considered part of the project costs and may trigger compliance.

The building and site must be reviewed together and may affect compliance in areas not anticipated to be updated to comply.

- If a building's renovation cost exceeds 30% of the building assessed value, then the entire building and site must be made to comply;

Compliance with MA General Laws Chapter 148 Section 26G (State Fire Code) is required in all existing buildings in which renovations will exceed 7,500 square feet in area or in which major alterations' are planned, as defined by the statute. Under these conditions, an existing building must provide a full sprinkler fire suppression system if sufficient water flow and pressure is available. A major alteration is defined as a reconfiguration of walls, doors, windows, mechanical systems, etc., which effectively makes installation of sprinkler systems easier and which affects more than 33% of the building area or more than 33% of the assessed value of the building. Buildings for which sufficient water flow and pressure *does not exist* are exempt, however, it is assumed that sufficient flow and pressure is available and all code discussions below are based on this building being fully sprinklered.

Also, according to this section of the Fire Code, any work performed, even if under separate contracts or building permits, within a 5 year period must be included in the aggregate construction cost to determine applicability of the Code. This includes site work and building renovations, whether done separately or together.

- Future Change Orders and other unanticipated costs could also trigger full compliance if the aggregate value exceeds the 33% limit.
- Cost of future building projects requested for permit within 5 years, before or after the permit date for this project, will be considered part of the project costs and may trigger compliance.

Energy conservation, as required by the IECC for new construction, is not required for renovations to existing structures under the IEBC. However, any new elements or alterations to the exterior building envelope, such as new windows or new roofing, must comply to the greatest degree possible. As stated in the IEBC Alteration Level 3 Section 808 Energy Conservation "*Essentially, the entire building is not require to meet the energy provisions, but only improvement in the energy performance of the building is intended to be achieved by making the new elements meet the IECC...*". Overall upgrade of the exterior envelope of this building is not required or recommended and so is not reviewed as part of this study, except for elements recommended to be replaced.

General Information

According to the Sharon Assessors Department, the Town Hall Building is located at 90 South Main Street and the building was constructed in 1964. The area of the building is listed on the Assessor's Card as 9,457 total gross square feet (GSF) divided between a basement, first floor, and second floor.

The current assessed value of the Town Hall building (structure only) is \$1,090,600.

- The threshold value of the cost trigger for accessibility (full compliance) is 30% of this value less the cost of permitted work within the last 3 years.
- The threshold value of the cost trigger for fire protection (full compliance) is 33% of this value less the cost of permitted work within the last 5 years.

These cost thresholds are shown below. The cause of the renovation or the source of the funding is not relevant, only the total value of cost for renovations, including demolition. Any work within these time limits which exceed these cost triggers will require that the entire structure and site be modified to be compliant. Because each threshold is based on the aggregate value of recent work (requiring a building permit) over the most recent 3 or 5 years, this threshold value is dynamic and will change based on the aggregate value of recent projects over time. The values below are based on current information and are only a guide; these costs should be recalculated when a new renovation project is considered.

COST THRESHOLDS FOR ACCESSIBILITY AND FIRE SUPPRESSION COMPLIANCE	
Assessed Value (Structure Only)	\$1,090,600
A. 30% Cost Trigger for Accessibility Compliance	\$ 327,180
B. 33% Cost Trigger for Fire Protection	\$ 359,898

AGGREGATE TOTAL VALUE OF RECENTLY COMPLETED WORK		
Date	Description	Approximate Value
May 2011	Window and Storefront Replacement	\$ 79,900
July 2011	HVAC wall units	\$ 78,975
10/31/2013	Electrical Repairs	\$ 21,400
C. 3 year aggregate total value for accessibility compliance		\$ 21,400
D. 5 year aggregate total value for fire protection compliance		\$ 180,275

ACCESSIBILITY AND FIRE SUPPRESSION UPGRADE REQUIREMENT	
Renovation Cost for Full Accessibility Compliance (A. – C.)	\$ 305,780
Renovation Cost for Full Fire Protection Compliance (B. – D.)	\$ 179,623

In summary, in the event that the existing Town Hall is renovated or has an addition constructed, if the value of that work exceeds \$305,780 then the entire building and site must be modified to be compliant with the AAB Accessibility Code if the value of that work exceeds \$179,623 then the entire building must be sprinklered.

BUILDING CODE COMPLIANCE ANALYSIS (IEBC / 780 CMR - IBC)

Although the Town Hall would be regulated under the IEBC for the purposes of a renovation of the existing building, this analysis reviews compliance with regard to requirements of the new IBC. This is to ensure that existing conditions which do not meet the current intent for life safety, and which may be allowed to remain as part of a renovation under the IEBC, are identified for correction. In the discussion below, references to specific code sections are noted before each paragraph with parentheses.

(IEBC 101.4.2) Applicability: Under this definition, as a building that has been previously occupied prior to the issuance of the Code, this building is considered an existing building and regulated under the IEBC.

(IEBC 101.5.2) IEBC offers three methods for compliance analysis and four levels of work classification. For the purposes of this study, the *Work Area Compliance* method will be used and future renovations will be considered as an *Alteration Level 3* work classification.

(IEBC 701.3) Compliance: All new elements must comply with IBC.

**The following discussions regarding Type of Construction, Use Group Classification, and Height and Area Limitations are provided to document the existing facility classification only. These characteristics are not regulated by the IEBC and existing buildings are not required to be modified to comply as a result of renovations. Additions to an existing building, however, must conform to current limitations of allowable height and area and are regulated by the IBC. Determination of the allowable height and area of the existing structure provides guidance for the extent of any new additions that may be planned.*

(IBC Ch. 3 – Use and Occupancy)

(IBC 305.1) Primary Use Group: Group B - Business

(IBC 305.1) Mixed Use Areas: Group S-2 Storage (Mechanical, Storage)
Group A-3 Assembly (Selectmen's Meeting Room)

(IBC Ch. 5 – General Building Limitations)

Height and area limitations for the existing building are presented below to show the allowable area for the uses within the building and possible expansion of the existing building. Because the existing building exceeds 7,500 GSF, it is assumed that any Level 3 renovation will require this building to be fully sprinklered and that any addition to the existing building will require sprinklers to be installed throughout the new structure. The allowable floor area calculations below include increases permitted for existing sprinklers and building frontage accessible to emergency vehicles; however, this allowable increase in area for accessible frontage may be affected by additions to the building.

According to information from the Sharon Assessing Department, the current building area is listed at 9,457 gross square feet (occupied space) for all floors combined. Storage uses and Assembly uses are calculated from the original construction documents as occupying less than 10% of the gross area of the relative floor levels and so are considered to be accessory to the Business Use on each floor.

(Table 503) Because of the low cost thresholds stated above, it is presumed that any renovation or new additions for this building will require installation of a sprinkler system and so the allowable height may be increased by one story and the allowable area may be increased by 200% from that stated in the Code. Additionally, as the building perimeter is accessible for fire and rescue vehicles from the road or parking areas on all sides of the building, the maximum allowable area may be increased by an additional 75% for this accessible frontage.

- The accessible street frontage combined with the allowable area increase for a sprinkler system will allow a total increase in area of 275% in addition to the limitations stated in Table 503. This total allowable area is shown in the last column of the table below.
- The total area of the building cannot exceed the allowable area used for the primary Business (“B”) Use Group. Other uses within the mixed use building cannot exceed an area proportional to the percentage of the area that Use Group occupies in the building. Because this ratio of allowable areas between uses may vary based of differing layouts, it is impossible to provide an allowable area for all uses in every possible combination. As such, the allowable area for Use Group B is calculated as a baseline and further calculation will be required to confirm if future renovations are within Code requirements.

(Table 503) The allowable height & area for each Use Group under Type II-B (2-B) Construction is:

USE GROUP	Total Allowable Height (+1 Story Increase for Sprinkler System)	Allowable Area per Story Plus Increase for Sprinkler System and Accessible Perimeter			
		Allowable Area (Table 503)	Sprinkler System Area Increase (+200%)	Accessible Perimeter +75%	Total Allowable Area per Floor with Allowable Increases
B	4 Stories	23,000 sf.	+ 46,000 sf.	+ 17,250 sf.	86,250 sf.
A-3	3 Stories	9,500 sf.	+ 19,000 sf.	+ 7,125 sf.	35,625 sf

(IBC 508.3 & 508.4) Buildings with multiple Use Groups are called mixed-use buildings. In this case, the Business (Use Group B) and Assembly (Use Group A-3) are the mixed uses. Buildings are further classified as a ‘separated’ mixed use or a ‘non-separated’ mixed use.

- If classified as a ‘separated’ mixed-use building, the different use groups within the building must be separated by fire rated construction as required in Table 508.4.
- If classified as a ‘non-separated’ mixed-use building, then fire rated separations are not required BUT the most restrictive use group is used to calculate the allowable height and area.

When this building was originally constructed, the separation requirement was not the same as today and this is not indicated in the original construction documents available from the town and is not indicated on the Assessor’s Property Card. Without this information, the building may be classified as a ‘separated’ or ‘non-separated’ mixed use; both have benefits and concerns.

- If classified as a ‘separated’ mixed-use building, the walls, floors, and doors separating the Assembly space from the Business space must be fire rated for 2 hours (if non-sprinklered, as is existing) or for 1 hour (if sprinklered, as in a renovation).
 - As shown in the table above, using the B Use as primary allows the largest floor area build-out at approximately 86,000 GSF.
 - The fire rating of the floors and walls in the existing building do not seem to comply with this requirement. Reconstruction of the structure and walls to provide this fire rating may be difficult and very expensive.

- If classified as a ‘non-separated’ mixed-use building, then fire rated separations are not required BUT the most restrictive Assembly A-3 use group must be used to calculate the allowable height and area.
 - As shown in the table above, using the A-3 Use as primary allows the restricts the allowable floor area build-out to approximately 35,000 GSF.
 - Because a fire rating of the floors and walls in the existing building is NOT required in this condition, the existing floors, walls, and doors already comply and do not require expensive reconstruction.

Because the existing walls and floor around the Selectmen’s Meeting Room are not 2 hour fire rated and the size of the building is far below the allowable area permitted for an A-3 use shown in the table above, it is recommended to consider the existing building as a non-separated mixed use with A-3 as the primary use. This classification is only used for the purposes of calculating allowable height and area and does not change the business occupancy of the building for any other aspect of the Code such as occupancy load.

(IBC 508.2.4 and Table 508.4) In table 508.2.4, rooms used for storage and assembly may be considered to be accessory to the primary Use Group if the aggregate area of these rooms is less than 10% of each floor area and smaller than the area allowed by Table 503. Spaces considered to be accessory to the primary use are not required to be separated from the primary use by fire rated partitions. This report assumes that all Storage is considered to be accessory and so not separated. However, the Assembly uses are greater than 10% of the Second Floor area and must be treated as a mixed use as discussed above.

ALLOWABLE INCREASES IN AREA PER FLOOR (BASED ON A-3 USE GROUP)			
Floor	Allowable Area	Current Floor Area	Increase in Area Allowed
Second Floor:	35,625 GSF	2,880 GSF	32,745 GSF
First Floor:	35,625 GSF	3,697 GSF	31,928 GSF
Basement:	35,625 GSF	2,880 GSF	32,745 GSF

IBC Ch. 6 – Types of Construction

(IBC Table 601) No information is provided by the Sharon Assessing Department with regard to the type of construction of the building. As shown on the original construction documents, the building is constructed of skeletal steel frame and masonry bearing wall construction with aluminum curtain wall and masonry veneer.

As the existing construction system is skeletal steel framing with non-fire rated structural members, this generally conforms to the requirements for Type II-B (Roman numeral 2 - B, unprotected) construction in the current IBC. Where visible, the structure does not appear to be protected with spray fireproofing or other rated construction. Interior partitions are non-load bearing metal stud with drywall/plaster construction.

Type II-B Construction Type Min. Fire Resistance Rating Requirements (780 CMR Table 601)

Building Elements	Required Fire Resistance Rating (Hrs)
Structural Frame (including columns, girders, and trusses)	0
Exterior Bearing Walls	0
Interior Bearing Walls	0
Exterior Non-Bearing Walls and Partitions (See Table 602)	0
Interior Non-Bearing Walls and Partitions	0
Floor Construction (including support beams and joist)	0
Roof Construction (including support beams and joist)	0

Table 601 establishes the required minimum fire rating of construction elements and is related to the allowable height and area discussed in Table 503 below. Type II-B (2-B) construction allows the building structural members to be unprotected (not fire rated). The tradeoff for not incurring additional costs to protect the building structure is a reduction in the allowable height and area that can be built; essentially, the greater the fire protection of building structural elements, the larger the building height and area which is allowed.

(IBC Chapter 10 - Means of Egress)

Occupancy load in the existing facility is determined by the functions in each area of the building and not the primary use group. According to the IBC Table 1004.1.1, Business functions require an occupant load calculated at 100 GSF per person, Mechanical/Storage areas are calculated at 300 GSF per person, and Assembly spaces are calculated at 5, 7, or 15 GSF per person dependent upon whether the persons are standing, sitting, or at tables. As the functions and areas for each may change over time, areas with lesser occupancy rates may be renovated for a use with a higher occupancy rate. This summary will not break out each function separately; as a preliminary determination of occupancy, a rate of 100 GSF per person will be used as an overall general occupancy rate for this building as this will be the predominant occupancy for any renovation of the building:

- 2,880 GSF (Second Floor) / 100 sf. per occupant = 29 occupants on the Second Floor, and
- 3,697 GSF (First Floor) / 100 sf. per occupant = 37 occupants on the First Floor, and
- 2,880 GSF (Basement) / 100 sf. per occupant = 29 occupants on the Basement.

The egress capacity (0.2"/ per occupant for sprinklered buildings) for a minimum 44-inch wide stairway is approximately 220 occupants. The egress capacity (0.15"/ per occupant for sprinklered buildings) for a typical single 36-inch wide egress doorway is approximately 240 occupants.

- As the First Floor has 2 exit doors (480 occupant capacity) and 2 exit stairs (440 occupant capacity) are provided to egress from the Basement and Second Floors, egress capacity provided is sufficient for the occupant load of the existing stated above.

- However, if an addition is constructed onto the existing building, additional exit doors and stairs may be needed if the occupant load exceeds the capability of the existing stair and door egress elements.

IEBC 102.2.2.1 is an amendment by the State of Massachusetts and supersedes other less restrictive paragraphs in the IEBC. This amendment requires that all existing stairs comply with current requirements of the IBC with regard to the quantity of exit ways on each floor, the width of all exit ways, fire rating, handrails, continuity, etc., to “provide safe and adequate means of egress”.

- Existing egress stairs in the building do not provide compliant guards and guardrails. Guards have horizontal rails and are required to have vertical balusters spaced no more than 4” apart. Also, guardrails must be a minimum of 42” above the stair or floor; in the front and rear egress stairs, the guards are not 42” high. All stair conditions must be corrected in accordance with current egress requirements as part of any renovation project.

(IEBC 703.2.1 Existing Vertical Openings)

All existing vertical openings connecting 2 or more floors must have an enclosure with a fire-resistive rating of 1 hour minimum. Shafts connecting all floors, such as the stairs and elevator shafts, must be separated by fire rated construction.

- The front exit stair is open to the main lobby and is not compliant.
 - 1016.1 Exception 3: If the stair to the Basement is closed with a fire rated enclosure, then the stair may remain open to the Main Lobby.
- Opening protectives, doors, frames, and glazing, on these stairwells are not compliant because these are not fire rated and do not latch. All door systems at stairwells must be replaced.

(IBC 1014.3) In buildings of a Business Use without a sprinkler system, the allowable length of a common path of travel is 75 feet.

- All existing conditions are compliant.

(IBC 1015.2) When multiple exits are required, the exits must be separated by a minimum distance equal to 1/3 of the longest diagonal distance of the floor plate. The longest diagonal distance across the building is on the First Floor and is approximately 100 feet, so the separation between each exit is required to be a minimum of 30 feet.

- Existing exits are separated by a minimum distance of 40 feet and are compliant.

(IBC Table 1016.1 Exit Access Travel Distance) The allowable travel distance for a Business Use non-sprinklered building is 200 feet.

- All existing conditions are compliant.

(IBC 1018.1) In buildings of a Business without a sprinkler system, the minimum fire rating of exit access corridors when serving more than 30 persons is 1 hour. The First Floor exceeds this occupancy and Second Floor with the Selectmen’s Assembly Room in use will exceed the minimum occupancy of 30 persons.

- Corridor doors and transaction counters throughout the building are not fire rated and do not have automatic closing devices.

- All corridor doors on the first and second floor, and recommended throughout the building, should be replaced with 1 hour fire rated doors with automatic closing devices.
- Transaction windows in corridors are open and do not provide a fire rating. Fire shutters should be provided at transaction windows on the first and second floors.

If the building is sprinkered as a result of a renovation or addition, there is no fire rating required for exit access corridors for this occupancy load (0 hours).

(IBC 1018.4) In buildings of a Business without a sprinkler system, the allowable length of a dead end corridor is 20 feet.

- There are no dead end corridors and all existing locations are compliant.

(IBC 1021.1) All stories are required to provide a minimum of 2 means of egress, except when serving less than 10 occupants and not in an “I – Institutional” use group. As this building is classified as a Business B Use Group with more than 10 occupants per floor, but not more than 500 occupants per floor, a minimum of 2 means of egress must be provided.

- Two means of egress are provided from each floor and the building is compliant.

(248 CMR 2.10 Plumbing Fixtures) Based on a calculated current occupancy of 95 persons, the plumbing code requires a total of 3 water closets/2 sinks for females and 2 water closets/2 sinks for males in this building. Currently, there is total of 3 water closet/3 sinks for females and 2 water closets/2 sinks for males. A unisex toilet on the First Floor is assumed to be a single water closet and sink for males. In this condition, the number of toilet fixtures complies. However, this number of toilet fixtures may be reduced as a result of modifications for handicapped accessibility.

Use Group	Occupants	Rate for	Fixtures Required
B (Business)	45 (Actual) (23M / 23 W)	Men: 1 / 25; Women: 1/20	Men: 1 Fixture Women: 2 Fixtures
A-3, Assembly	50 (Worst Case) (25M / 25 W)	Men: 1 / 100; Women: 1/50	Men: 1 Fixture Women: 1 Fixture
Total fixtures :			Men: 2 Fixtures Women: 3 Fixtures

ACCESSIBILITY CODE COMPLIANCE ANALYSIS (521 CMR AAB)

Accessibility in public buildings is regulated by 521 CMR, which is enforced by the Massachusetts Architectural Access Board (MA AAB) and the Building Inspector of the municipality. 521 CMR, as issued in 2006, is used for this review. MA AAB 5.1 Definitions states:

“Public Buildings: A building privately or publicly financed that is open to and used by the public, including but not limited to transportation terminals, institutional buildings, educational buildings, commercial buildings, buildings having places of assembly, [etc.]...”

and MA AAB 11.1 Commercial Buildings states:

“Commercial buildings are public buildings as defined in 521 CMR and shall include but not be limited to: [...] city and town halls and facilities.”

- Sharon Town Hall is a public, commercial building and is required to be accessible in accordance with 521 CMR.

AAB 11 – Commercial Buildings (Municipal Facilities)

(AAB 11.5) Toilet rooms are required to be accessible.

- Accessible male and female toilet rooms are not provided for public use near the First Floor Lobby. Refer to discussion below in Section AAB 30 Public Toilet Rooms.

(AAB 11.6) Transaction counters and other work areas are required to be accessible.

- Accessible transaction counters are not provided. At all teller windows and areas serviced across counters, a transaction counter shall be provided which is not more than 36” high and is at least 36” wide and on an accessible route. All transaction counters in the building do not comply and must be modified or replaced.

AAB 14 – Places of Assembly

(AAB 14.2) Places of assembly are provided in the Second Floor Selectmen’s Meeting Room. The Selectmen’s Meeting Room has loose seating and tables. Loose seating may be removed to create an accessible location as desired. Based on the number of seats (26 – 50), two accessible locations must be provided. According to 14.1.1, distribution of these accessible seats may be provided in one location in the room (non-disbursed) because the room has an occupancy of less than 150.

- Because the Selectmen’s Meeting Room may accommodate 50 persons, it is required to have an assistive listening system.

AAB 20 - Accessible Routes

(AAB 20.1) Accessible routes within the building generally comply with requirements for width, passing space, protruding objects, headroom, etc.

(AAB 20.6.1) Objects projecting from walls with their leading edges between 27 inches and 80 inches above the finished floor must not protrude more than 4 inches into walks, halls, corridors, passageways or aisle and must not have sharp edges.

- Existing water coolers are mounted on the corridor wall surface and not in a wall recess. These project fully into the corridor accessible route.

(AAB 20.12) Areas of rescue assistance at stairways and means of egress are not required in accordance with Exception a. Existing Buildings.

AAB 24.00 - Ramps

Interior ramps are not provided within the building. Ramps on the exterior of the building are reviewed in the Landscape portion of this study.

AAB 25.00 – Entrances

(AAB 25.1) All public entrances to the building must be accessible and be on an accessible route.

- Access to the building from the exterior is not compliant at the Ground Level public entrances. The Front entrance is elevated by stairs and is not accessible. Doors are 42” wide and are accessible.

The Side entrance to the Main Lobby is elevated by sloped grade and is not accessible. A sloped walk is provided that is too steep and not compliant as a ramp. Doors are 36" wide and are accessible.

The Rear entrance vestibule is at grade and accessible to the interior stairs. The interior stair prevents accessibility to the interior of the building; a chair lift is provided but this is not allowed for compliance to buildings.

AAB 26.00 – Doors and Doorways

(AAB 26.5 – Door Width) All doors on an accessible route must provide a clear opening that is a minimum of 32" wide.

- All doorways to toilet rooms are less than 32" clear width. These must be changed to 36" wide doors if the existing toilet rooms will continue to be used.
- Connecting doors between offices are less than 32" wide. These must be changed to 36" wide doors.
- Doors to offices within the Health Department and the Collector's Office are less than 32" wide. These must be changed to 36" wide doors.

(AAB 26.6 – Maneuvering Clearances)

Doors must have 18" on the pull side of the door and 12" on the push side of the door lever.

- Most doors in the building appear to provide required pull and push clearances for accessible doors, except that all toilet room doors do not provide accessible clearances.
- Doors at the Town Clerks Office and the Accountant do not provide clearance on the office pull side of the door.
- Because of the lack of space in the building, many doors do not have accessible clearances because of furniture located adjacent to the door opening. This furniture must be moved.

(AAB 26.11 - Door Hardware)

Existing hardware throughout building is knobs and is not compliant.

- All door hardware must be changed to leversets.

AAB 27.00 – Stairs

(AAB 27.3 – Nosings)

Stair nosings are required to be angled or radiused and not abrupt.

- Existing stair nosings appear to be compliant.

AAB 28.00 – Elevator

(AAB 28.1) Multistory buildings are required to be served by an elevator.

- The building does not provide an elevator to all floors and is not compliant.

AAB 30.00 – Public Toilet Rooms

All public toilet rooms must provide an accessible toilet and sink on an accessible route. All toilet rooms in the building are not fully compliant. However, First Floor toilet rooms may be modified to comply with renovation which deletes the Janitor's Closet and Second Floor toilet rooms may be modified to comply

with renovation which deletes the Janitor's Closet and the IT Office. Without these renovations, continued use will require a variance from the AAB; because renovation is available to make these rooms compliant, the probability is low that this variance will be approved.

➤ **First Floor Men's Toilet Room:**

- Sign on the door states that this is a Unisex Accessible toilet room, not a Men's Toilet Room.
- Dimensions of toilet room complies with AAB: 90" long by 72" wide required.
- Door is 32" wide and does not provide 32" of clear width. Door must be replaced with a 36" wide door.
- Door swings in. Door must swing out for toilet room this size.
- Door hardware does not comply with AAB.
- Toilet flush valve on wrong (corner) side of toilet.
- Toilet clearance from wall does not comply with AAB: 14" provided, 18" required.
- Grab bars mounting height and location complies.
- Mirror mounting height complies with AAB.
- Lavatory and faucet complies with AAB for knee clearance.
- Piping below sink does not comply with AAB or plumbing code: provide insulation on exposed piping.

➤ **First Floor Women's Toilet Room:**

- Accessible toilet and sink not provided within this room.
- Dimensions of toilet room do not comply with AAB for existing 2 stalls and will not comply if modified for 1 stall. Renovation utilizing space from adjacent Janitor's Closet needed to provide compliant room dimensions for a 1 fixture toilet room.
- Door is 28" wide and does not provide 32" of clear width. Door must be replaced with a 36" wide door.
- Door swings in. Door must swing out for toilet room this size.
- Door hardware does not comply with AAB.
- Toilet clearance from wall does not comply with AAB: 14" provided, 18" required.
- Toilet flush valve on wrong (corner) side of toilet.
- Grab bars are not provided.
- Mirror mounting height is too high and does not comply with AAB.
- Lavatories and faucets do not comply with AAB for knee clearance.
- Piping below sink does not comply with AAB or plumbing code: provide insulation on exposed piping.

➤ **Second Floor Men's Toilet Room:**

- Accessible toilet and sink not provided within this room.
- Dimensions of toilet room (60" x 60") do not comply with AAB. Renovation utilizing space from adjacent Janitor's Closet will not provide compliant room dimensions for a 1 fixture toilet room. Additional space from IT Office will be necessary for compliance.
- Door is 28" wide and does not provide 32" of clear width. Door must be replaced with a 36" wide door.
- Door swings in. Door must swing out for toilet room this size.
- Door hardware does not comply with AAB.
- Toilet clearance from wall does not comply with AAB: 14" provided, 18" required.
- Toilet flush valve on wrong (corner) side of toilet.
- Grab bars are not provided.
- Mirror mounting height is too high and does not comply with AAB.
- Lavatories and faucets do not comply with AAB for knee clearance.
- Piping below sink does not comply with AAB: provide insulation on exposed piping.

➤ Second Floor Women's Toilet Room:

- Accessible toilet and sink not provided within this room.
- Dimensions of toilet room (60" x 60") do not comply with AAB. Renovation utilizing additional space from IT Office will be necessary for compliance.
- Door is 28" wide and does not provide 32" of clear width. Door must be replaced with a 36" wide door.
- Door swings in. Door must swing out for toilet room this size.
- Door hardware does not comply with AAB.
- Toilet stall is provided (32" x 60") but dimensions do not comply with minimum size required by AAB (60" x 108").
- Toilet clearance from wall does not comply with AAB: 14" provided, 18" required.
- Toilet flush valve on wrong (corner) side of toilet.
- Grab bars are provided but not compliant.
- Mirror mounting height is too high and does not comply with AAB.
- Lavatories and faucets do not comply with AAB for knee clearance.
- Piping below sink does not comply with AAB or plumbing code: provide insulation on exposed piping.

AAB 32.00 - Kitchens

(AAB 32.1) Non-commercial kitchens must provide a 60" diameter accessible space in front of kitchen equipment and knee space under sinks and cooktops.

- Break room on the Basement Level does not provide required knee space access to the sink.
- Turning radius clearance not provided in front of countertop.
- Counter in Break room on the Basement Level is 36" high; 34" maximum height allowed by AAB.

AAB 36.00 – Drinking Fountains

(AAB 36.1.1)

Drinking fountains are provided within the building; however, these are only single level units and not accessible.

- Bi-level drinking fountains set at accessible heights must be provided.

AAB 41.00 – Signage

(AAB 41.00)

Room signage with braille must be provided at all 'permanent rooms and spaces' as well as code required egress signage.

- Compliant signage and Symbols of Accessibility are missing throughout the building. Where exit signs indicate an accessible route, if all routes are not accessible, these signs shall include the symbol of accessibility.

EXISTING CONDITIONS REPORT

- a. SITE ANALYSIS
- b. ARCHITECTURAL ANALYSIS
- c. STRUCTURAL ANALYSIS
- d. HAZARDOUS MATERIALS ANALYSIS



The Sharon Town Hall shares a 1.38 Acre site sandwiched between South Main Street and Bradford Ave., with East Chestnut Street forming its northern property line. The site is zoned Business District A, but falls outside of all of the groundwater, surface water, and historic protection districts.

Business District A Requirements

Minimum lot area: No minimum lot size for all uses other than residential

Minimum Lot Frontage: No minimum frontage or width for all uses other than residential

Maximum Lot Coverage: Sixty (60%) for all uses other than residential.

Minimum Landscaped Open Space coverage including Natural Vegetation Areas: 20%

Buffer Strips shall be provided on side and rear lot lines adjacent to residential districts.

Minimum width: 15'

Minimum buffer strip width adjacent to lots of existing residences: 25' along lot lines with residential structures existing at the time of the Building Permit issuance.

Maximum Yard setback: 10' from property line or street sideline for front side and rear.

Maximum height: Three stories or 45'

SITE AMENITIES

The town hall site provides space for parking for the town hall and the fire station, several War Memorials, lawn and vegetation and access paths from the surrounding streets to the buildings. Since the site is relatively flat, there are no natural impediments to providing full access throughout the landscape and the parking areas. The fire department has some storage around the building. Some specimen trees (Redbuds, Holly and Dogwoods) are located in the east lawn behind the town hall.

PARKING

Parking is provided in three locations; the front town hall lot, the front fire lot and the rear lot, shared by both the town hall and the fire department. Total parking on the site is 44 spaces, of which four (4) are stripped for reserved ADA parking. Per code, only two spaces are required for this number of parking spaces. None of the spaces are marked for van accessibility. The asphalt and concrete walks on the site are in relatively good condition and do not contribute to the inaccessibility of the town hall.

None of the four spaces meets current code, however, missing either loading zones, curb cuts to sidewalks or accessible ways. The parking space in the town hall lot has a slope of between 3.7 and 4.1%, no curb cut to the sidewalk, and no striped accessible lane that is discernable from the actual parking space. Code currently requires all parking spaces and loading zones to be under 2%.



No curb cut to side walk
No separate loading zone
Slope over 2%

HC parking at front town hall lot

The two spaces on the south side of the town hall have no loading zone, with a curb cut for access to the sidewalks, and abut an entrance ramp to the building that has a 15.6% slope. These spaces are 8' wide x 22'. Two signs call out the HC parking with one additional sign directing the disabled to the rear door for access to the building.



HC parking on south side of town hall



Ramp to building at 15.6% slope

The final ADA space is located south east of the Town Hall. This space is 18' x 10'-3" but does not have a specific loading zone. The curb cut for the space is located at the end of the sidewalk to the rear of the space. There is a 5% slope within the parking space.



Curb cut to side walk
Slope over 2%
No separate loading zone

HC parking on southeast of town hall.

PEDESTRIAN ACCESS

The sidewalks surrounding the site and providing access to the building are asphalt, concrete or brick. Curb cuts on South Main and at the intersection of South Main and East Chestnut meet current codes. There is no curb cut for the sidewalk running along East Chestnut Street that ends at Bradford Street. A curb cut is provided in front of the main entrance to the Sharon town offices but is not signed as either a pedestrian drop off or as a point to cross the road to the sidewalk that runs to South Main Street, (which has a curb cut as well). There is no curb cut for access to the flagpole. The concrete path to the flagpole is too narrow for accessibility in any case. Apart from this sidewalk, all other sidewalks are either 5' or 6' wide.

Pedestrian access to the Town Hall building is either through exterior stairs at the front entrance, a steep ramp on the south side of the building or to a vestibule on the east side of the building. Only one of these entrances could be considered accessible. Access to the Fire station is directly from the parking areas or driveway. There is not adequate clearance on any of the doors for ADA accessibility.



Sidewalk & Curb cut at South Main Street



Curb cut at South Main and E. Chestnut



Curb cut at front of Town Hall

- Stairs to front entrance
- Curb cut from sidewalk to drive
- No crosswalk to opposite sidewalk



- Narrow walk with no curb cut
- Curb cut from sidewalk to drive
- No crosswalk to opposite sidewalk

Curb cut opposite the Main Entrance



- Inadequate clearance for door use
- Threshold too high for accessibility

Fire Department door



- No Curb cut to roadway

Sidewalk at Bradford and East Chestnut Street

Recommendations:

1. Modify ADA parking spaces to provide correct slopes, signage and access paths.
2. Remove access ramp to south door and build an accessible ramp to the door.
3. Provide the necessary clearances to Town Hall office door that is accessible from the outside.
4. Provide curb cut and ramp at corner of Bradford and East Chestnut Street.
5. Provide concrete stoops at fire department building accesses and widen the doors to provide clearance.
6. Provide crosswalk at front entrance and/or passenger loading zone striping and signage.



Sharon Town Hall was built in 1964, according to the property card on the town Assessor's website, at the same time as an addition to the existing Fire Station on the same site. There is a main entrance facing the primary parking lot on South Main Street that provides the civic face to the building; however, this entrance is set above grade with five steps and is inaccessible. A second entrance is provided at the rear of the building through a small vestibule that was added to the building in 1994. This entrance leads to an internal stair with a chairlift.

According to the Assessor's website, the building is 9,457 gross square feet on three floors: a basement of 2,880 gross square feet, a first floor of 3,697 gross square feet including the rear vestibule, and a second floor of 2,880 gross square feet. The Town Hall is not listed on the State or National Historic Building Register and is not included in an historic district.

EXTERIOR ENVELOPE

Please refer to the Structural Evaluation in another chapter of this study for additional information about the exterior envelope.

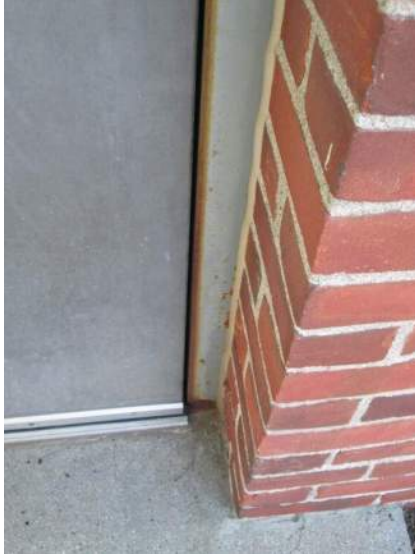
Windows and Doors

According to the original construction documents, the exterior face of the building is constructed of 4-inch brick veneer with a backup wall of 8-inch masonry and concrete. This masonry construction is the full thickness of the exterior walls; there is no insulation in the minimal masonry cavity of the exterior walls. Dark and light brick are set in alternating vertical sections with punched windows made of aluminum storefront. The exterior brick veneer wall is in very good condition despite a lack of expansion joints in the walls. There is some degradation of the exterior walls where brick faces have spalled and mortar joints require repointing, especially at the boiler chimney. The concrete cap at the boiler chimney and the concrete entrance canopy at the side of the building are in poor condition with visible degradation and exposed rebar. The windows and entrance storefront were replaced in 2011 and are in very good condition.



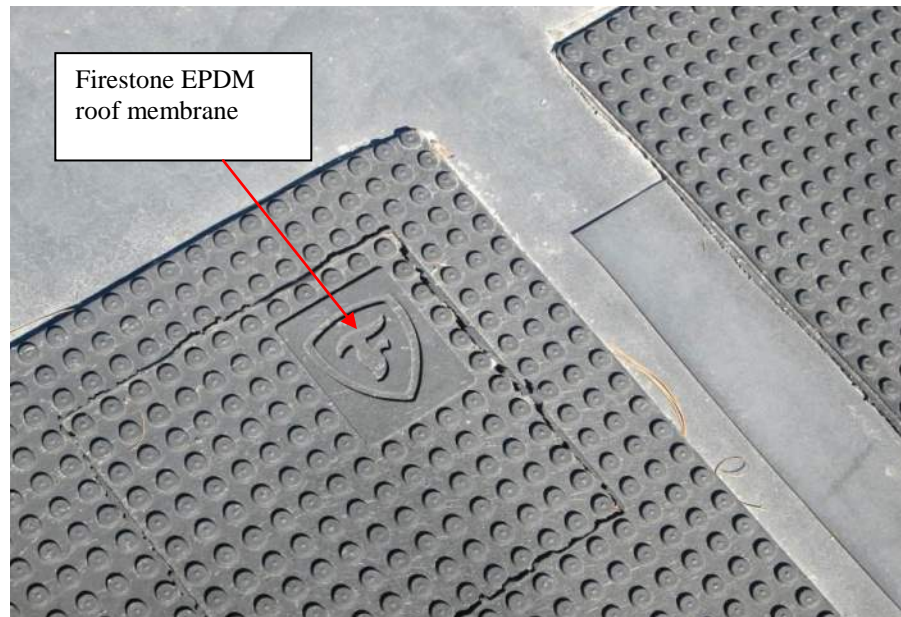


Exterior steel doors and frames show rust and wear. The exterior door to the basement areaway is rusted and has spray foam insulation inserted into the frame and below the threshold.



Roofing:

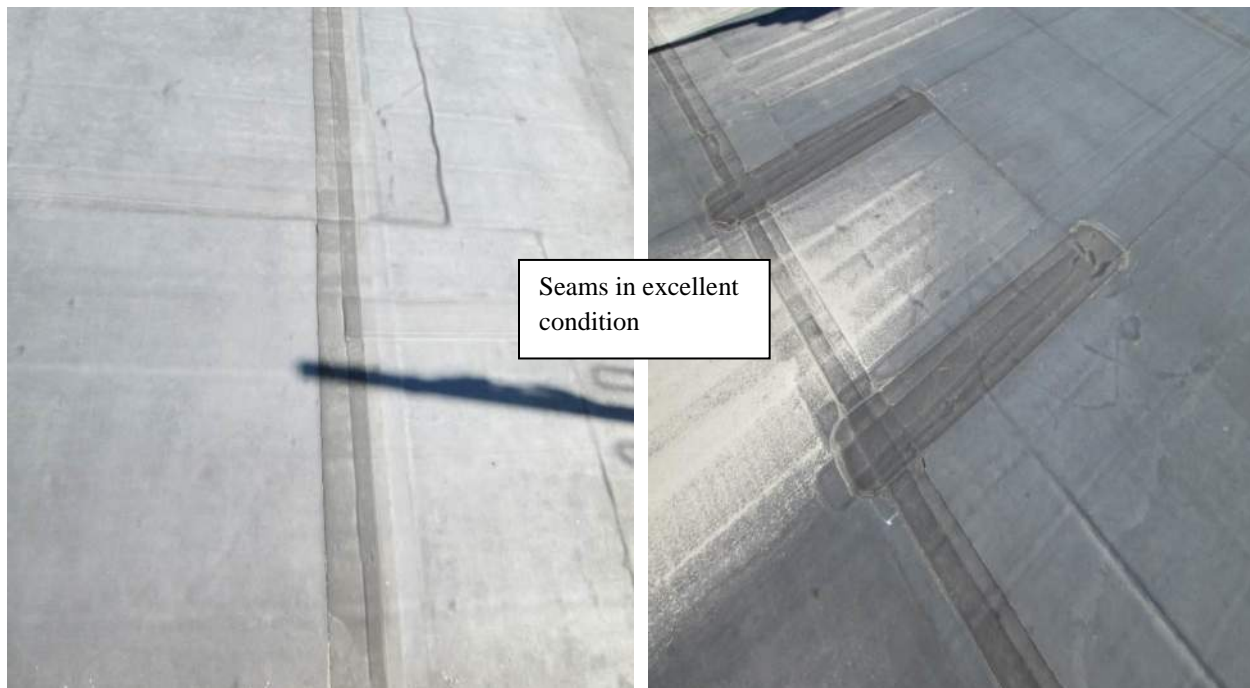
The Sharon Town Hall facility consists of an original two story building and a lower single story addition. The existing roofs on both levels consist of a fully adhered Firestone EPDM rubber membrane. Both roofs are totally flat with no pitch to the drains. This condition does not conform to building code which requires a minimum of $\frac{1}{4}$ " per foot slope.



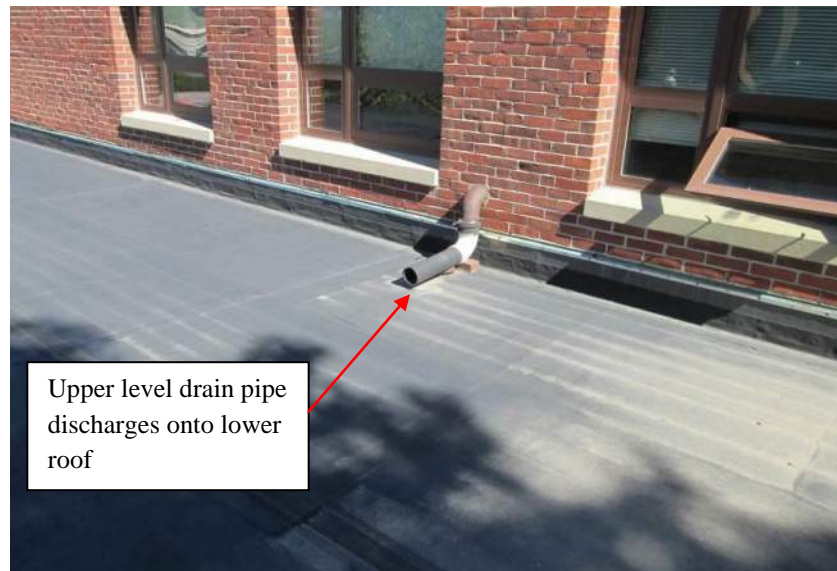
The upper roof membrane appears to be in good condition. The curb heights for the mechanical units and the heights of the vent stack comply with industry guidelines.



It was noted that all the seams show no evidence of deterioration and appear to be in excellent condition.

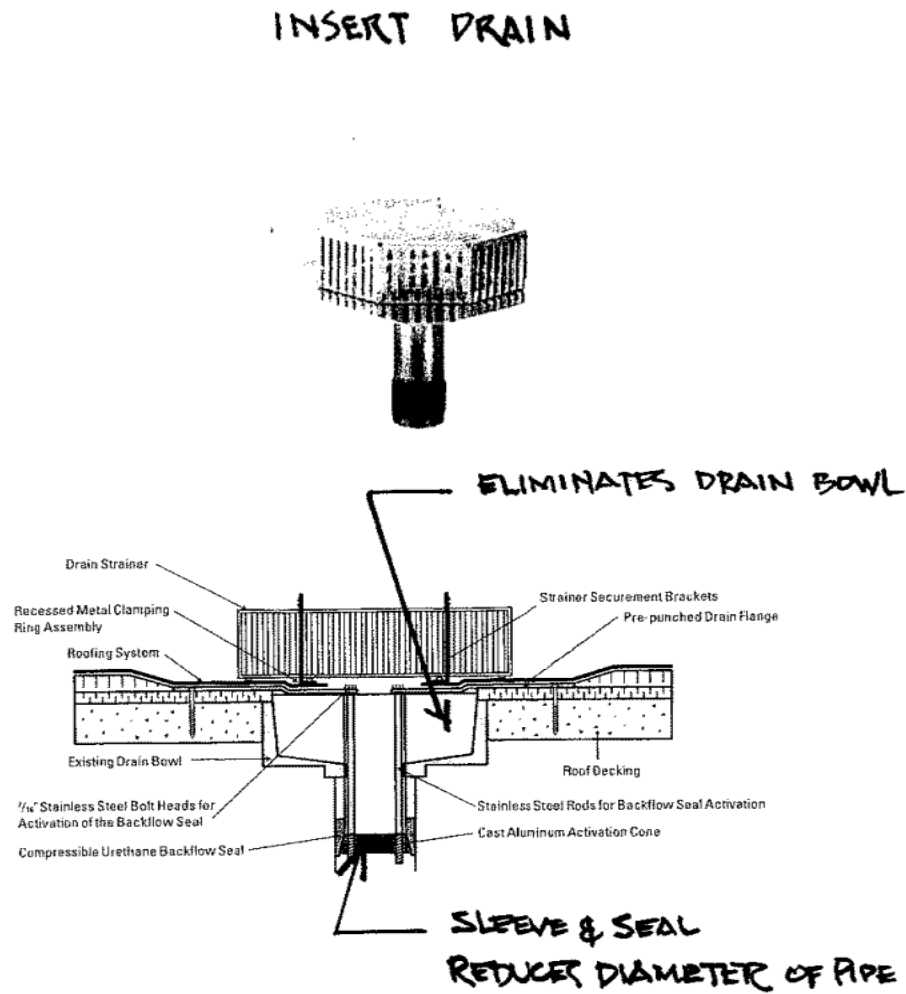


There is only one drain on each level; typically the industry recommends a minimum of 2 drains per roof level in order to have an alternative outlet in case of an emergency. In this facility however, the upper level drain is more like a scupper since it only pipes the water out onto the roof below.



The drains on both levels are insert replacement products that do not meet the Massachusetts plumbing code because they eliminate the drain bowls and are installed by inserting a sleeve into the drain pipe which reduces both the diameter and capacity of the vertical leader pipe.





The concrete chimney cap is cracked and deteriorated allowing water to enter the facility.



Masonry around chimney is cracked; water most likely migrates into the bricks causing further deterioration due to repeated freeze thaw cycles.



Painted wood fascia board beneath the metal fascia is in need of maintenance, wood should be clad in aluminum and color to match metal fascia to eliminate maintenance issues.

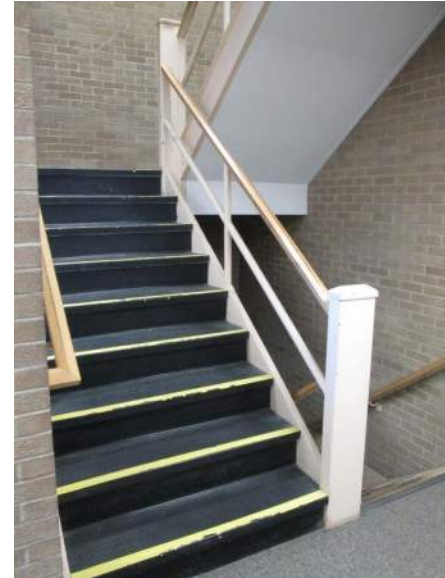


INTERIOR BUILDING ELEMENTS

Interior Finishes

Interior wall finishes are durable and in fair condition throughout the building. In the main lobby and front and rear stairs, walls are finished with light colored brick matching the brick accent panels on the exterior of the building. Walls of interior corridors are finished with the original mosaic tile from floor to ceiling; this has been damaged at several locations, particularly at exposed corners. Toilet rooms and janitor closets are finished with glazed structural clay tile over masonry partitions. The interior surface of the exterior walls is painted CMU. Over the years, painted drywall partitions have been erected to

subdivide rooms and to create offices. Ceilings are typically suspended acoustical tile throughout and are in poor condition. Flooring on the first and second floors is carpeted throughout except in the toilet rooms where 1" mosaic tile is used, the same mosaic tile used on the corridor walls. In the basement, flooring is vinyl asbestos floor tile and must be abated during renovation work.



There are two stairs, one in the front of the building and one in the back of the building, and both connect the three floors in the building. There is no elevator for access between floors within the building but a chair lift is provided at the rear stair. The front stair is not enclosed and there is a roof access ladder located in a chase within the rear stair enclosure.

Recommendations:

1. In order for any space on the basement level of the building to be used for occupancy or storage, the existing foundation walls must be excavated and provided with sheet waterproofing, insulation, drainage board, and new perimeter drainage piping to control water infiltration. Also, the basement floor slab must be protected with a topical vapor barrier to mitigate moisture migration through the floor slab, which could delaminate finish flooring and create mold issues.
2. The building does not provide an accessible route between occupied floors. Please refer to the Code Analysis in another section of this report for accessibility requirements. An elevator is necessary to accessibility between floors.
3. All interior flooring and ceilings and flooring should be replaced as part of an abatement plan. Please refer to the Hazardous Materials recommendations in another section of this report.
4. The existing EPDM membrane roofs are in good condition and will not require replacement for a number of years. At that time it will be important to provide a ¼" per ft. tapered insulation assembly to provide proper slopes to the drains per the current building code. The replacement drains should also be replaced with code compliant drain bowls that provide the maximum capacity to evacuate the water from the roof surfaces.
5. Clad the exposed wood trim below the roof gravel stop in aluminum sheet metal to eliminate maintenance and increase life expectancy.

SHARON TOWN HALL ENTRANCE



DESCRIPTION

The Sharon Town Hall facility consists of an original two story rectangular shaped building and a single story rectangular shaped addition. The structure of the original building consists of masonry bearing walls supporting steel joists and wide flange beams. The steel framing supports a reinforced concrete floor slab and roof deck. The roof deck is gypsum panels spanning between steel joists and beams. Foundations for the building are 12" thick reinforced concrete walls supported on reinforced concrete spread footings. The lower level floor is a concrete slab on grade with perimeter underslab drains located adjacent to the wall footings.



Floor Framing with Steel Joists and slab viewed from the underside



View of steel joists bearing on interior masonry bearing wall



Roof deck adjacent to hatch access to roof



Gypsum prefabricated roof panels supported by steel beam

The building appears to be structurally sound. This conclusion is based on the exposed portions of the structure. I observed that the supported slabs showed no signs of movement or excessive deflection. The foundation walls do not exhibit any settlement or lateral movement and the masonry walls contained few cracks. The following is list of items observed which will require repairs to correct the individual issues.

- The masonry walls both interior and exterior are stable with only one location where a diagonal crack developed in the exterior brick. This is located on the east face of the single story structure where it is attached to the south wall of the multi-story building. The crack developed due to differential movement at the intersection of the two brick faces.



The south east corner where a diagonal crack developed in the brick wythe



Close up of the crack.

- The concrete chimney cap has spalled and cracked exposing reinforcing steel. In addition the first 2 feet of brick directly below the cap has spalled and cracked allowing the intrusion of water.



Cracked and Spalled concrete cap and brick



Vertical Cracks in the concrete cap on the north side of the chimney

- A concrete cantilevered canopy on the south face of the single story wing has spalled the concrete surface on the underside of the canopy exposing the reinforcing steel. The top surface of the canopy is not protected with roofing material so is as able to absorb water through the slab.



Exposed corroded rebar and spalled concrete surface

- Repointing of the brick mortar joints is necessary on a limited basis. Small areas have spalled but typically the brick joints are acceptable.



Spalled mortar joint

Recommendations

The following are recommendations to correct the items noted above in the report.

- The first involves the repair of the exterior brick at the intersection of the east wall of the single story wing and the south wall of the multi-story building. This work will involve the removal and replacement of all damaged brick, construction of a brick expansion joint and installation of a vertical brick expansion joint to allow differential movement between the two walls and possible helical anchors to tie the brick to the inner wythe block at the new vertical joint.
- The second item will require the removal and replacement of the chimney cap and repairs to any damaged brick below the chimney cap.
- The canopy repairs will require the removal of all loose concrete, cleaning rust from the reinforcing steel, reattaching the reinforcing steel to the concrete slab and covering the damaged area with a cementitious repair product. The top of the canopy must be covered with a waterproof roofing material to seal the concrete from water intrusion.
- Repoint the mortar joints to prevent further water damage to the mortar joints and brick.

Summary

Our structural review of the building is based only on the areas which were not concealed by exterior grades, slabs, interior finishes or other obstructions. Other recommended repairs and maintenance procedures should be implemented to eliminate possible future damage to the structure.

**REPORT
FOR
HAZARDOUS MATERIALS IDENTIFICATION
SURVEY
AT THE
SHARON TOWN HALL
SHARON, MA**

Project Number:
215 358.00

Survey Dates:
October 1-2, 2015

STUDY CONDUCTED BY:

**Universal Environmental Consultants
12 Brewster Road
Framingham, Massachusetts**



October 7, 2015

Mr. Mike McKeon
Kaestle Boos Associates, Inc.
325 Sharon Boulevard, Suite 100
Sharon, MA 02035

Reference: **Hazardous Materials Study**
Sharon Town Hall, Sharon, MA

Dear Mr. McKeon:

Thank you for the opportunity for Universal Environmental Consultants (UEC) to provide professional services.

Enclosed please find the final report for the Identification Survey for accessible Asbestos Containing Materials and other hazardous materials at the Sharon Town Hall, Sharon, MA.

Please do not hesitate to contact me at (508) 628-5486 if you have any questions.

Very truly yours,

Universal Environmental Consultants

A handwritten signature in blue ink, appearing to read "Ammar Dieb", is written over a horizontal line.

Ammar Dieb
President

UEC:\215 358\Report.DOC

Enclosure

1.0 INTRODUCTION:

Universal Environmental Consultants (UEC) has been providing comprehensive asbestos services since 2001 and has completed projects throughout New England. We have completed projects for a variety of clients including commercial, industrial, municipal, and public and private schools. We maintain appropriate asbestos licenses and staff with a minimum of fifteen years of experience.

UEC was contracted by Kaestle Boos Associates, Inc. to conduct a determination survey for accessible Asbestos Containing Materials (ACM) and other hazardous materials at the Sharon Town Hall, Sharon, MA. The survey was not comprehensive and should not be used to demolish the town hall. Additional testing including destructive sampling would be required.

The scope of work under this scope included the inspection of accessible ACM, collection of bulk samples from materials suspected to contain asbestos, determination of types of ACM found and cost estimates for remediation.

Bulk samples analyses for asbestos were performed using the standard Polarized Light Microscopy (PLM) in accordance with EPA standard. Bulk samples were collected by a Massachusetts licensed asbestos inspector Leonard J. Busa (AI-030673) and analyzed by a Massachusetts licensed laboratory Asbestos Identification Laboratory, Woburn, MA.

Samples results are attached.

2.0 SAMPLING:

The regulations for asbestos inspection are based on representative sampling. It would be impractical and costly to sample all materials in all areas. Therefore, representative samples of each homogenous area were collected and analyzed or assumed.

All suspect materials were grouped into homogenous areas. By definition a homogenous area is one in which the materials are evenly mixed and similar in appearance and texture throughout. A homogeneous area shall be determined to contain asbestos based on findings that the results of at least one sample collected from that area shows that asbestos is present in an amount greater than 1 percent in accordance with Environmental Protection Agency (EPA) regulations. However, all suspect materials that contain any amount of asbestos must be considered asbestos if it is scheduled to be removed per the Department of Environmental Protection (DEP) regulations.

Number of Samples Collected

Sixty three (63) bulk samples were collected from materials suspected of containing asbestos, including:

Type and Location of Material

1. Grey sink damproofing at kitchen
2. Grey sink damproofing at kitchen
3. Hard joint insulation at boiler room
4. Hard joint insulation at boiler room
5. Hard joint insulation above ceiling at committee room
6. Hard joint insulation above ceiling at basement hallway
7. Hard joint insulation above ceiling at basement hallway
8. Hard joint insulation above ceiling at basement hallway
9. Black glue in fiberglass insulated pipe above ceiling at basement hallway
10. Black glue in fiberglass insulated pipe above ceiling at basement hallway

11. Joint compound at committee room
12. Joint compound at committee room
13. Rough ceiling plaster at boiler room
14. Rough ceiling plaster at boiler room
15. Rough ceiling plaster at boiler room
16. Concrete ceiling deck at basement hallway
17. Paper blanket for concrete ceiling deck at basement hallway
18. Concrete ceiling deck at basement civil defense
19. Paper blanket for concrete ceiling deck at basement civil defense
20. White ceiling deck at second floor hallway
21. White ceiling deck at second floor hallway
22. 2' x 4' Suspended acoustical ceiling tile at town administrator
23. 2' x 4' Suspended acoustical ceiling tile at lobby
24. 2' x 4' Suspended acoustical ceiling tile at payroll
25. 2' x 4' Suspended acoustical ceiling tile type II at hallway by IT
26. 2' x 4' Suspended acoustical ceiling tile type II at second floor
27. Smooth hard ceiling plaster at second floor janitor closet
28. Smooth hard ceiling plaster at first floor bathroom
29. Smooth hard wall plaster at computer room
30. Linoleum floor covering type I at lobby
31. Adhesive for linoleum floor covering type I at lobby
32. Linoleum floor covering type I at lobby
33. Adhesive for linoleum floor covering type I at lobby
34. Glazing caulking for interior window within door at basement stairwell
35. Glazing caulking for interior window within door at basement stairwell
36. Interior window glazing caulking at stairwell
37. Interior window glazing caulking at stairwell
38. Linoleum floor covering type II at side entrance hallway
39. Linoleum floor covering type II at side entrance hallway
40. Adhesive for linoleum floor covering type II at side entrance hallway
41. Adhesive for linoleum floor covering type II at side entrance hallway
42. 9"x 9" Vinyl floor tile at first floor computer room
43. Mastic for 9"x 9" vinyl floor tile at first floor computer room
44. 9"x 9" Vinyl floor tile at basement custodian room
45. Mastic for 9"x 9" vinyl floor tile at basement custodian room
46. Mastic for 9"x 9" vinyl floor tile at second floor hallway
47. Mastic for 9"x 9" vinyl floor tile at tax collector hallway
48. Mastic for 9"x 9" vinyl floor tile at second floor landing
49. Tan 12" x 12" vinyl floor tile at first floor lobby
50. Mastic for tan 12" x 12" vinyl floor tile at first floor lobby
51. Tan 12" x 12" vinyl floor tile at first floor lobby
52. Mastic for tan 12" x 12" vinyl floor tile at first floor lobby
53. Exterior window framing caulking
54. Exterior window framing caulking
55. Exterior door framing caulking
56. Exterior door framing caulking
57. Exterior unit vent grille caulking
58. Exterior unit vent grille caulking
59. Exterior assumed dampproofing on foundation walls
60. Exterior assumed dampproofing on foundation walls
61. Exterior flashing protruding from interior wall
62. Exterior flashing protruding from interior wall
63. Exterior flashing protruding from interior wall

Sample Results

Type and Location of Material	Sample Result
1. Grey sink damproofing at kitchen	No Asbestos Detected
2. Grey sink damproofing at kitchen	No Asbestos Detected
3. Hard joint insulation at boiler room	30% Asbestos
4. Hard joint insulation at boiler room	30% Asbestos
5. Hard joint insulation above ceiling at committee room	No Asbestos Detected
6. Hard joint insulation above ceiling at basement hallway	No Asbestos Detected
7. Hard joint insulation above ceiling at basement hallway	No Asbestos Detected
8. Hard joint insulation above ceiling at basement hallway	No Asbestos Detected
9. Black glue in fiberglass insulated pipe above ceiling at basement hallway	No Asbestos Detected
10. Black glue in fiberglass insulated pipe above ceiling at basement hallway	No Asbestos Detected
11. Joint compound at committee room	No Asbestos Detected
12. Joint compound at committee room	No Asbestos Detected
13. Rough ceiling plaster at boiler room	No Asbestos Detected
14. Rough ceiling plaster at boiler room	No Asbestos Detected
15. Rough ceiling plaster at boiler room	No Asbestos Detected
16. Concrete ceiling deck at basement hallway	No Asbestos Detected
17. Paper blanket for concrete ceiling deck at basement hallway	No Asbestos Detected
18. Concrete ceiling deck at basement civil defense	No Asbestos Detected
19. Paper blanket for concrete ceiling deck at basement civil defense	No Asbestos Detected
20. White ceiling deck at second floor hallway	No Asbestos Detected
21. White ceiling deck at second floor hallway	No Asbestos Detected
22. 2' x 4' Suspended acoustical ceiling tile at town administrator	No Asbestos Detected
23. 2' x 4' Suspended acoustical ceiling tile at lobby	No Asbestos Detected
24. 2' x 4' Suspended acoustical ceiling tile at payroll	No Asbestos Detected
25. 2' x 4' Suspended acoustical ceiling tile type II at hallway by IT	No Asbestos Detected
26. 2' x 4' Suspended acoustical ceiling tile type II at second floor	No Asbestos Detected
27. Smooth hard ceiling plaster at second floor janitor closet	No Asbestos Detected
28. Smooth hard ceiling plaster at first floor bathroom	No Asbestos Detected
29. Smooth hard wall plaster at computer room	No Asbestos Detected
30. Linoleum floor covering type I at lobby	No Asbestos Detected
31. Adhesive for linoleum floor covering type I at lobby	No Asbestos Detected
32. Linoleum floor covering type I at lobby	No Asbestos Detected
33. Adhesive for linoleum floor covering type I at lobby	No Asbestos Detected
34. Glazing caulking for interior window within door at basement stairwell	2% Asbestos
35. Glazing caulking for interior window within door at basement stairwell	2% Asbestos
36. Interior window glazing caulking at stairwell	5% Asbestos
37. Interior window glazing caulking at stairwell	5% Asbestos
38. Linoleum floor covering type II at side entrance hallway	20% Asbestos
39. Linoleum floor covering type II at side entrance hallway	30% Asbestos
40. Adhesive for linoleum floor covering type II at side entrance hallway	No Asbestos Detected
41. Adhesive for linoleum floor covering type II at side entrance hallway	No Asbestos Detected
42. 9"x 9" Vinyl floor tile at first floor computer room	10% Asbestos
43. Mastic for 9"x 9" vinyl floor tile at first floor computer room	No Asbestos Detected
44. 9"x 9" Vinyl floor tile at basement custodian room	15% Asbestos
45. Mastic for 9"x 9" vinyl floor tile at basement custodian room	No Asbestos Detected
46. Mastic for 9"x 9" vinyl floor tile at second floor hallway	No Asbestos Detected
47. Mastic for 9"x 9" vinyl floor tile at tax collector hallway	No Asbestos Detected
48. Mastic for 9"x 9" vinyl floor tile at second floor landing	No Asbestos Detected
49. Tan 12" x 12" vinyl floor tile at first floor lobby	2% Asbestos
50. Mastic for tan 12" x 12" vinyl floor tile at first floor lobby	No Asbestos Detected

51. Tan 12" x 12" vinyl floor tile at first floor lobby	2% Asbestos
52. Mastic for tan 12" x 12" vinyl floor tile at first floor lobby	No Asbestos Detected
53. Exterior window framing caulking	No Asbestos Detected
54. Exterior window framing caulking	No Asbestos Detected
55. Exterior door framing caulking	No Asbestos Detected
56. Exterior door framing caulking	No Asbestos Detected
57. Exterior unit vent grille caulking	No Asbestos Detected
58. Exterior unit vent grille caulking	No Asbestos Detected
59. Exterior assumed damproofing on foundation walls	No Asbestos Detected
60. Exterior assumed damproofing on foundation walls	No Asbestos Detected
61. Exterior flashing protruding from interior wall	10% Asbestos
62. Exterior flashing protruding from interior wall	10% Asbestos
63. Exterior flashing protruding from interior wall	5% Asbestos

Observations and Conclusions:

The condition of ACM is very important. ACM in good condition does not present a health issue unless it is disturbed. Therefore, it is not necessary to remediate ACM in good condition unless it will be disturbed through renovation, demolition or other activity.

1. Hard joint insulation was found to contain asbestos.
2. Glazing caulking for interior window within door was found to contain asbestos.
3. Interior window glazing caulking was found to contain asbestos.
4. Linoleum floor covering type II was found to contain asbestos.
5. 9"x 9" Vinyl floor tile was found to contain asbestos. Most of the ACM was found under carpet.
6. Tan 12" x 12" vinyl floor tile was found to contain asbestos.
7. Thru-wall flashing was found to contain asbestos. The demolition contractor will have to segregate the ACM from non-ACM building surfaces for proper disposal in an EPA approved landfill that does not recycle. A non-traditional abatement plan would have to be prepared and submitted to the DEP for approval.
8. Transite panels were found above select doors.
9. All remaining suspect materials were found not to contain asbestos.
10. Underground sewer pipes were assumed to contain asbestos.
11. Damproofing on foundation walls at the original building was assumed to contain asbestos. The demolition contractor will have to segregate the ACM from non-ACM building surfaces for proper disposal in an EPA approved landfill that does not recycle. A non-traditional abatement plan would have to be prepared and submitted to the DEP for approval.
12. Roofing was assumed to contain asbestos. However, roofing does not have to be removed by a licensed asbestos abatement contractor. Roofing material does not have to be removed by a licensed asbestos contractor. However, the General Contractor must comply with OSHA regulation during demolition and with state regulations for proper disposal. A non-traditional abatement plan would have to be prepared and submitted to the DEP for approval.
13. All other suspect materials were found not to contain asbestos. Hidden ACM may be found during renovation and demolition activities.

Polychlorinated Biphenyls (PCB's)-Electrical Equipment and Light Fixtures:

Observations and Conclusions

Visual inspection of various equipments such as light fixtures, thermostats, exit signs and switches was performed for the presence of PCB's and mercury. Ballasts in light fixtures were assumed not to contain PCB's since there were labels indicating that "No PCB's" was found. Tubes in light fixtures, thermostats, signs and switches were assumed to contain mercury. It would be very costly to test those equipments and dismantling would be required to access. Therefore, the above mentioned equipments should be disposed in an EPA approved landfill as part of the demolition project.

PCB's in Caulking:

PCB's are manmade chemicals that were widely produced and distributed across the country from the 1950s to 1977 until the production of PCB's was banned by the US Environmental Protection Agency (EPA) law which became effective in 1978. PCB's are a class of chemicals made up of more than 200 different compounds. PCB's are non-flammable, stable, and good insulators so they were widely used in a variety of products including: electrical transformers and capacitors, cable and wire coverings, sealants and caulking, and household products such as television sets and fluorescent light fixtures. Because of their chemical properties, PCB's are not very soluble in water and they do not break down easily in the environment. PCB's also do not readily evaporate into air but tend to remain as solids or thick liquids. Even though PCB's have not been produced or used in the country for more than 30 years, they are still present in the environment in the air, soil, and water and in our food. EPA requires that all construction waste including caulking be disposed as PCB's if PCB's level exceed 50 mg/kg (ppm). An abatement plan might also be required.

Observations and Conclusions:

Building materials and caulking were assumed to contain PCB's.

Lead Based Paint (LBP):

Observations and Conclusions

LBP was assumed to exit on painted surfaces. A town hall is not considered a regulated facility. All LBP activities performed, including waste disposal, should be in accordance with applicable Federal, State, or local laws, ordinances, codes or regulations governing evaluation and hazard reduction. In the event of discrepancies, the most protective requirements prevail. These requirements can be found in OSHA 29 CFR 1926-Construction Industry Standards, 29 CFR 1926.62-Construction Industry Lead Standards, 29 CFR 1910.1200-Hazards Communication, 40 CFR 261-EPA Regulations. According to OSHA, any amount of LBP triggers compliance.

3.0 COST ESTIMATES:

The cost includes removal and disposal of all accessible ACM, other hazardous material and an allowance for removal of inaccessible or hidden ACM that may be found during renovation or demolition projects.

Location	Material	Approximate Quantity	Cost Estimate (\$)
Various Locations	9"x 9" Vinyl Floor Tile Under Carpet	7,500 SF	37,500.00
	Interior Windows	35 Total	3,500.00
	Interior Doors	22 Total	2,200.00
	Transite Panels over Doors	6 Total	600.00
	Hard Joint Insulation	200 Total	6,000.00
	Hidden Hard Joint Insulation	Unknown	5,000.00
	Miscellaneous Hazardous Materials	Unknown	15,000.00
	Tubes in Light Fixtures	Unknown	10,000.00
Boiler Room	Hard Joint Insulation	30 Total	1,500.00
Main Entrance Lobby	Tan 12" x 12 Vinyl Floor Tile	350 SF	3,500.00
Side Entrance Hallway	Linoleum Floor Covering	35 SF	350.00
Exterior	Roofing Materials	Unknown	25,000.00
	Transite Sewer Pipes	Unknown ¹	10,000.00
	Thru-Wall Flashing	Unknown ¹	25,000.00
	Damproofing on Foundation Walls	Unknown ¹	100,000.00

Location	Material	Approximate Quantity	Cost Estimate (\$)
Estimated costs for PCB's Remediation			10,000.00
Estimated costs for NESHAP Inspection and Testing Services			7,500.00
Estimated costs for Design, Construction Monitoring and Air Sampling Services			32,350.00
Total:			295,000.00

¹: Part of total demolition.

4.0 DESCRIPTION OF SURVEY METHODS AND LABORATORY ANALYSES:

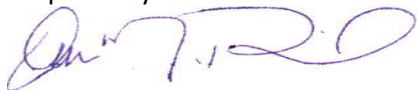
Asbestos samples were collected using a method that prevents fiber release. Homogeneous sample areas were determined by criteria outlined in EPA document 560/5-85-030a. Bulk material samples were analyzed using PLM and dispersion staining techniques with EPA method 600/M4-82-020.

Inspected By:



Leonard J. Busa
Asbestos Inspector

Prepared by:



Ammar M, Dieb
President

5.0 LIMITATIONS AND CONDITIONS:

This report has been completed based on visual and physical observations made and information available at the time of the site visits, as well as an interview with the Owner's representatives. This report is intended to be used as a summary of available information on existing conditions with conclusions based on a reasonable and knowledgeable review of evidence found in accordance with normally accepted industry standards, state and federal protocols, and within the scope and budget established by the client. Any additional data obtained by further review must be reviewed by UEC and the conclusions presented herein may be modified accordingly.

This report and attachments, prepared for the exclusive use of Owner for use in an environmental evaluation of the subject site, are an integral part of the inspections and opinions should not be formulated without reading the report in its entirety. No part of this report may be altered, used, copied or relied upon without prior written permission from UEC, except that this report may be conveyed in its entirety to parties associated with Owner for this subject study.

PROGRAMMING & SPACE NEEDS

Introduction

Kristen Smith, Interior Space Planner for Kaestle Boos Associates, Inc. met with Town staff over two days in order to discuss operations and adjacencies as well as to assess space needs for individual Town Departments to be housed in the facility. The draft Space Needs Program was then circulated for comments and discussed with the Study Work Group. Specific meeting dates and staff members interviewed were as follows;

September 24, 2015

- Marlene Chused, Town Clerk
- Don Hillegass, IT director
- Fred Turkington, Town Administrator
- Lauren Barnes, Assistant to the Town Administrator
- Alicia McOsker, Treasurer
- Cindy Doherty, Finance Director
- Mark Mazur, Town Assessor

October 7, 2015

- Beverly Anderson, Health Administrator
- Sheila Miller, Public Health Nurse



Sharon Town Hall

December 3, 2015

Preliminary Space Needs Program

Area/Room Title	Rm.Type	Occup's	No.Rms.	Area	Subtotal	Total
Public Area						
Vestibule		0	1	70 sf	70 sf	
Lobby		0	1	600 sf	600 sf	
Public Toilets	7.1	1	2	65 sf	130 sf	
Public Area Subtotal:						800 sf
Accounting Department						
Window Station (Public)		0	1	25 sf	25 sf	
Accounting Department Office	2.4	4	1	400 sf	400 sf	
Window Station (Staff)		1	1	25 sf	25 sf	
File Storage Area (8 lateral files)	6.3	0	1	80 sf	80 sf	
Work Area	6.2	0	1	60 sf	60 sf	
Small Meeting Room/ Auditor's Room	1.2	1	1	120 sf	120 sf	
Archival Storage	6.6	0	1	150 sf	150 sf	
Supply Closet		0	1	25 sf	25 sf	
Coat Closet		0	1	10 sf	10 sf	
Department Subtotal:						895 sf
Assessing Department						
Window Station (Public)		0	1	25 sf	25 sf	
Assessing Department Office	2.4	2	1	200 sf	200 sf	
Window Station (Staff)		1	1	25 sf	25 sf	
File Storage Area (8 vertical files)	6.3	0	1	50 sf	50 sf	
Work Area	6.2	0	1	60 sf	60 sf	
Director of Assessing's Office	1.4	1	1	150 sf	150 sf	
Archival Storage	6.7	1	1	200 sf	200 sf	
Supply Closet		0	1	25 sf	25 sf	
Coat Closet		0	1	10 sf	10 sf	
Department Subtotal:						745 sf
Treasurer & Tax Collection Departments						
Window Station (Public)		0	1	40 sf	40 sf	
Treasurer & Tax Collector Dept. Office	2.4	3	1	300 sf	300 sf	
Window Station (Staff)		1	2	25 sf	50 sf	
File Storage Area (8 vertical files)	6.3	0	1	50 sf	50 sf	
Work Area	6.2	0	1	60 sf	60 sf	
Treasurer/Tax Collector's Office	1.4	1	1	150 sf	150 sf	
Assistant Treasurer/Tax Collector's Office	1.2	1	1	120 sf	120 sf	
Payroll Office	2.4	2	1	200 sf	200 sf	
Archival Storage	6.6	0	1	150 sf	150 sf	
Vault Storage	6.4	0	1	100 sf	100 sf	
Supply Closet		0	1	25 sf	25 sf	
Coat Closet		0	1	10 sf	10 sf	
Department Subtotal:						1255 sf



Sharon Town Hall

December 3, 2015

Preliminary Space Needs Program

Area/Room Title	Rm.Type	Occup's	No.Rms.	Area	Subtotal	Total
Town Clerk						
Window Station (Public)		0	1	25 sf	25 sf	
Town Clerk Department Office	2.5	2	1	240 sf	240 sf	
Window Station (Staff)		2	1	50 sf	50 sf	
File Storage Area (8 lateral files)	6.3	0	1	80 sf	80 sf	
Town Clerk's Office	1.4	1	1	150 sf	150 sf	
Work/Project Room	5.6	0	1	140 sf	140 sf	
Vault Storage (current & archival files)	6.6	0	1	150 sf	150 sf	
Election Equipment Storage	4.4	0	1	200 sf	200 sf	
Supply Closet		0	1	25 sf	25 sf	
Coat Closet		0	1	10 sf	10 sf	
Department Subtotal:						1070 sf
Information Technology						
Network Room/ Work Room		0	1	210 sf	210 sf	
IT Office	2.5	2	1	240 sf	240 sf	
Supplies/ Equipment Storage		0	1	80 sf	80 sf	
Information Technology Subtotal:						530 sf
Town Administration						
Town Administration Department Office	2.4	2	1	240 sf	240 sf	
Reception/ Waiting Area		3	1	40 sf	40 sf	
File Storage Area (10 lateral files)	6.4	0	1	100 sf	100 sf	
Town Manager's Office	1.5	1	1	175 sf	175 sf	
Large Conference Room	3.1	14	1	280 sf	280 sf	
Archival Storage	6.6	0	1	150 sf	150 sf	
Supply Closet		0	1	25 sf	25 sf	
Coat Closet		0	1	10 sf	10 sf	
Department Subtotal:						1020 sf
Board of Health/ Public Nurse						
Reception/ Waiting Area		6	1	80 sf	80 sf	
Board of Health Office	2.4	1	1	100 sf	100 sf	
File Storage Area (4 vertical files)	6.1	0	1	40 sf	40 sf	
Work Area	6.2	0	1	60 sf	60 sf	
Director of Health Office	1.4	1	1	150 sf	150 sf	
Plan Review Area	3.1	2	1	40 sf	40 sf	
Public Nurse Office	1.1	1	1	100 sf	100 sf	
Exam Area	13.4	0	1	100 sf	100 sf	
Archival Storage	6.4	0	1	100 sf	100 sf	
Equipment Storage	6.3	0	1	100 sf	100 sf	
Supply Closet		0	1	25 sf	25 sf	
Coat Closet		0	1	10 sf	10 sf	
BoH-Nurse Subtotal:						905 sf



Sharon Town Hall

December 3, 2015

Preliminary Space Needs Program

Area/Room Title	Rm.Type	Occup's	No.Rms.	Area	Subtotal	Total
Staff Services						
Break Room	3.2	4	1	100 sf	100 sf	
Kitchen Area		0	1	80 sf	80 sf	
Central Copy Room	6.4	0	1	100 sf	100 sf	
Central Storage Room	4.3	0	1	150 sf	150 sf	
Staff Toilets	7.1	1	2	65 sf	130 sf	
Staff Services Subtotal:						560 sf
Net to Gross Adjustment						
Total Net Area:						7,780 sf
Net to Gross Adjustment (Net Area x 0.50)						3,890 sf
Gross Area Total:						11,670 sf

Sharon Town Hall

Addition & Renovation Option

Conceptual Finish Schedule

October 13, 2015

Area/Room	Floor	Base	Walls	Ceiling	Comments
Public Area					
Vestibule	MAT	RB	P	GYP	wood trim; wainscot
Lobby	RT-2	RB	P	ACT/GYP	Gyp. at soffits; wood trim; wainscot
Public Toilet	CT-1	CTB-1	EP/ CWT-1	ACT	full ht CWT at wet wall
Accounting Department					
Window Station(Public)	RT-1	RB	P	ACT/GYP	Gyp. at soffits
Window Station(Private)	CPTT	RB	P	ACT	Plastic Laminate Countertop w/ sliding transaction window
Accounting Department Office	CPTT	RB	P	ACT	
File Storage Area	CPTT	RB	P	ACT	
Work Area	CPTT	RB	P	ACT	
Meeting Room/Auditors Room	CPTT	RB	P	ACT	
Archival Storage	CC-S	RB	P	ACT	
Supply Closet	CPTT	RB	P	ACT	
Coat Closet	CPTT	RB	P	ACT	
Assessing Department					
Window Station(Public)	RT-1	RB	P	ACT/GYP	Gyp. at soffits
Window Station(Private)	CPTT	RB	P	ACT	Plastic Laminate Countertop w/ sliding transaction window
Assessing Department Office	CPTT	RB	P	ACT	
File Storage Area	CPTT	RB	P	ACT	
Work Area	CPTT	RB	P	ACT	
Director of Assessing Office	CPTT	RB	P	ACT	
Archival Storage	CC-S	RB	P	ACT	
Supply Closet	CPTT	RB	P	ACT	
Coat Closet	CPTT	RB	P	ACT	
Treasurer & Tax Collection Department					
Window Station(Public)	RT-1	RB	P	ACT/GYP	Gyp. at soffits
Window Station(Private)	CPTT	RB	P	ACT	Plastic Laminate Countertop w/ sliding transaction window
Assessing Department Office	CPTT	RB	P	ACT	
File Storage Area	CPTT	RB	P	ACT	
Work Area	CPTT	RB	P	ACT	
Treasurer & Tax Collection Office	CPTT	RB	P	ACT	
Assistant Treasurer & Tax Collection Office	CPTT	RB	P	ACT	
Payroll	CPTT	RB	P	ACT	
Vault Storage	RT-1	RB	P	ACT	
Archival Storage	CC-S	RB	P	ACT	
Supply Closet	CPTT	RB	P	ACT	

Sharon Town Hall

Addition & Renovation Option

Conceptual Finish Schedule

October 13, 2015

Area/Room	Floor	Base	Walls	Ceiling	Comments
Coat Closet	CPTT	RB	P	ACT	

Town Clerk

Window Station(Public)	RT-1	RB	P	ACT/GYP	Gyp. at soffits
Window Station(Private)	CPTT	RB	P	ACT	Plastic Laminate Countertop w/ sliding transaction window
Town Clerk Department Office	CPTT	RB	P	ACT	
File Storage Area	CPTT	RB	P	ACT	
Work /Project Room	CPTT	RB	P	ACT	
Town Clerks Office	CPTT	RB	P	ACT	
Vault Storage	RT-1	RB	P	ACT	
Election Equipment Storage	CPTT	RB	P	ACT	
Archival Storage	CC-S	RB	P	ACT	
Supply Closet	RT-1	RB	P	ACT	
Coat Closet	RT-1	RB	P	ACT	

Information Technology

Network Room/Work Room	CPTT	RB	P	ACT	
IT Office	CPTT	RB	P	ACT	
Supplies/Equipment Storage	CC-S	RB	P	ACT	

Town Administration

Waiting Area	CPTT	RB	P	ACT	
Town Administration Department Office	CPTT	RB	P	ACT	
File Storage Area	CPTT	RB	P	ACT	
Town Managers Office	CPTT	RB	P	ACT	
Large Conference Room	CPTT	WDB	P	ACT/GYP	wood trim; wainscot; Gyp. at soffits
Town Selectman's Room	CPTT	WDB	P	ACT/GYP	wood trim; wainscot; Gyp. at soffits
Archival Storage	CC-S	RB	P	ACT	
Supply Closet	CPTT	RB	P	ACT	
Coat Closet	CPTT	RB	P	ACT	

Board of Health/Public Nurse

Window Station(Public)	RT-1	RB	P	ACT/GYP	Gyp. at soffits
Window Station(Private)	CPTT	RB	P	ACT	Plastic Laminate Countertop w/ sliding transaction window
Department of Health Office	CPTT	RB	P	ACT	
File Storage Area	CPTT	RB	P	ACT	
Work Area	CPTT	RB	P	ACT	
Director of Health Office	CPTT	RB	P	ACT	
Public Nurse Office	RT-1	RB	P	ACT	
Exam Room	RT-1	RB	P	ACT	
Archival Storage	CC-S	RB	P	ACT	

Sharon Town Hall

Addition & Renovation Option

Conceptual Finish Schedule

October 13, 2015

Area/Room	Floor	Base	Walls	Ceiling	Comments
Equipment Storage	CC-S	RB	P	ACT	
Supply Closet	CPTT	RB	P	ACT	
Coat Closet	CPTT	RB	P	ACT	

Circulation

Vestibule	MAT	RB	P	GYP	
Stairs	RT-3	RB	P	ACT/GYP	handrails plastic crashrails; corner guards; wainscot
Corridors	RT-1	RB	P	ACT	

Building Support

Janitorial	CT-2	CTB	CT/ EP	ACT	CWT wainscot at sink
Mechanical/ Electrical	CC-S	RB	P	ACT	
Breakroom/ Copy Room	RT-1	RB	P/CWT-2	ACT/GYP	Gyp. at soffits; Solid Surface Countertop; Ceramic Tile at Backsplash Only
Staff Toilets	CT-1	CTB-1	EP/ CWT-1	ACT	full ht CWT at wet wall
Unfinished Area	CC-S	RB	-	-	

Legend

Floor	Walls
CC-S Sealed Concrete	CWT-1 Ceramic Wall Tile
CPTT Carpet Tile	American Olean Bright & Matte Profiles
CT-1 Unglazed Ceramic Tile	CWT-2 Ceramic Wall Tile
American Olean Mosaic Tile	American Olean Color Appeal
MAT Entrance Mat	EP Epoxy Paint
Mats Inc. Journey Tile	Sherwin Williams
RT-1 Rubber Tile	P Paint
Nora Nornament Satura	Sherwin Williams
RT-2 Rubber Tile	
Nora Nornament Grano	Ceilings
RT-3 Stair Treads & Risers	ACT Acoustic Ceiling Tile
Nora Nornament Round	Armstrong Optima
	GYP Gypsum Board Ceiling

Floor Base

CTB Ceramic Tile Base
American Olean Bright & Matte Profiles
RB Rubber Base Cove
Nora
WDB Wood Base

BUILDING AND SITE OPTIONS

Option 1

Handicap Accessibility Only

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ISSUE DATE	
DATE	DESCRIPTION
07/13/10	

REVISIONS	
DATE	DESCRIPTION

FOR ALL ABBREVIATIONS, SYMBOL LEGENDS,
AND GENERAL NOTES SEE SHEET R0.01

KEY PLAN

0' 4' 8' 16'

SCALE: 1/8" = 1'-0"

PROJECT TRUE

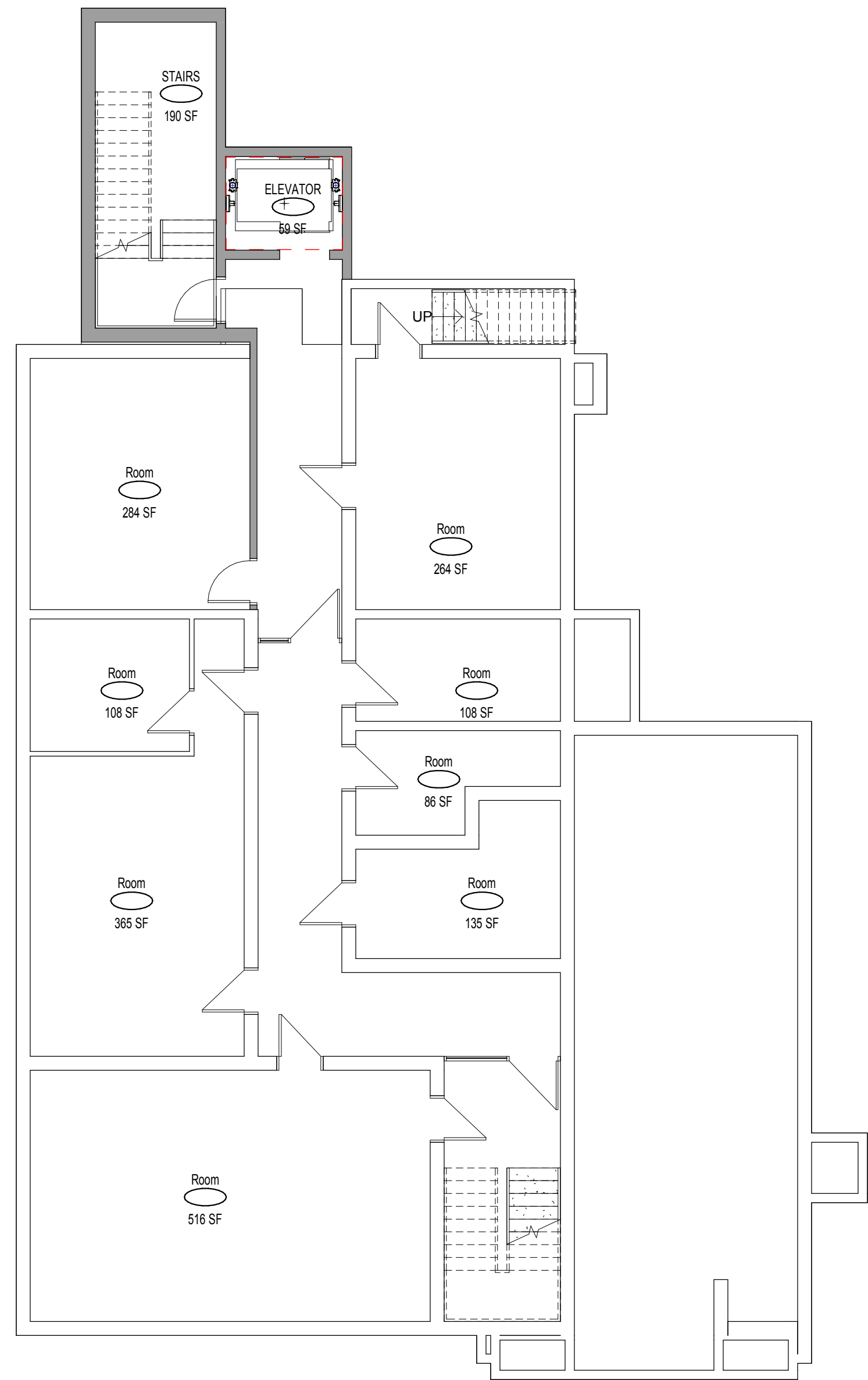
SHARON TOWN HALL OPTION 1

PROJECT ADDRESS

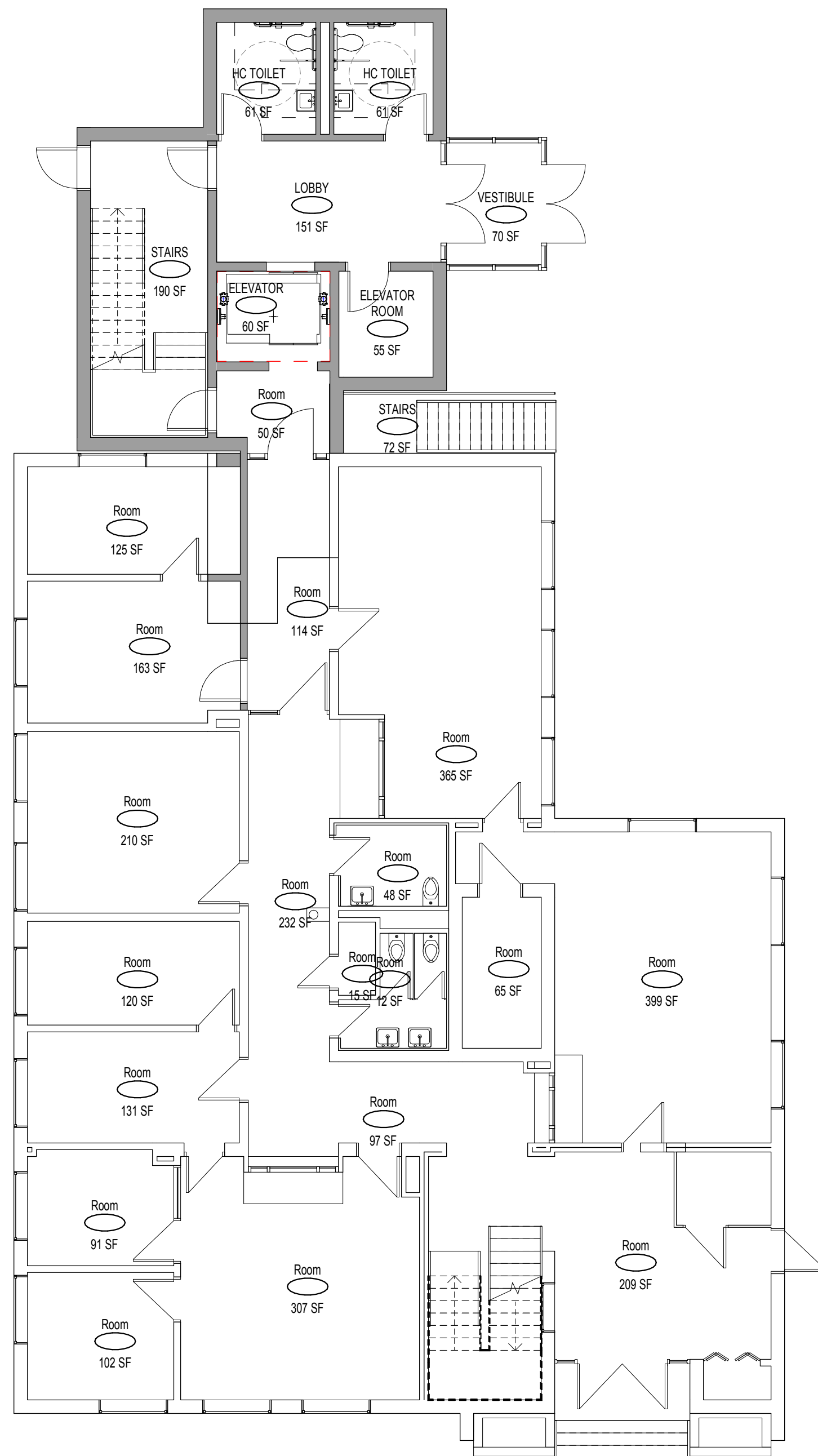
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FLOOR PLANS

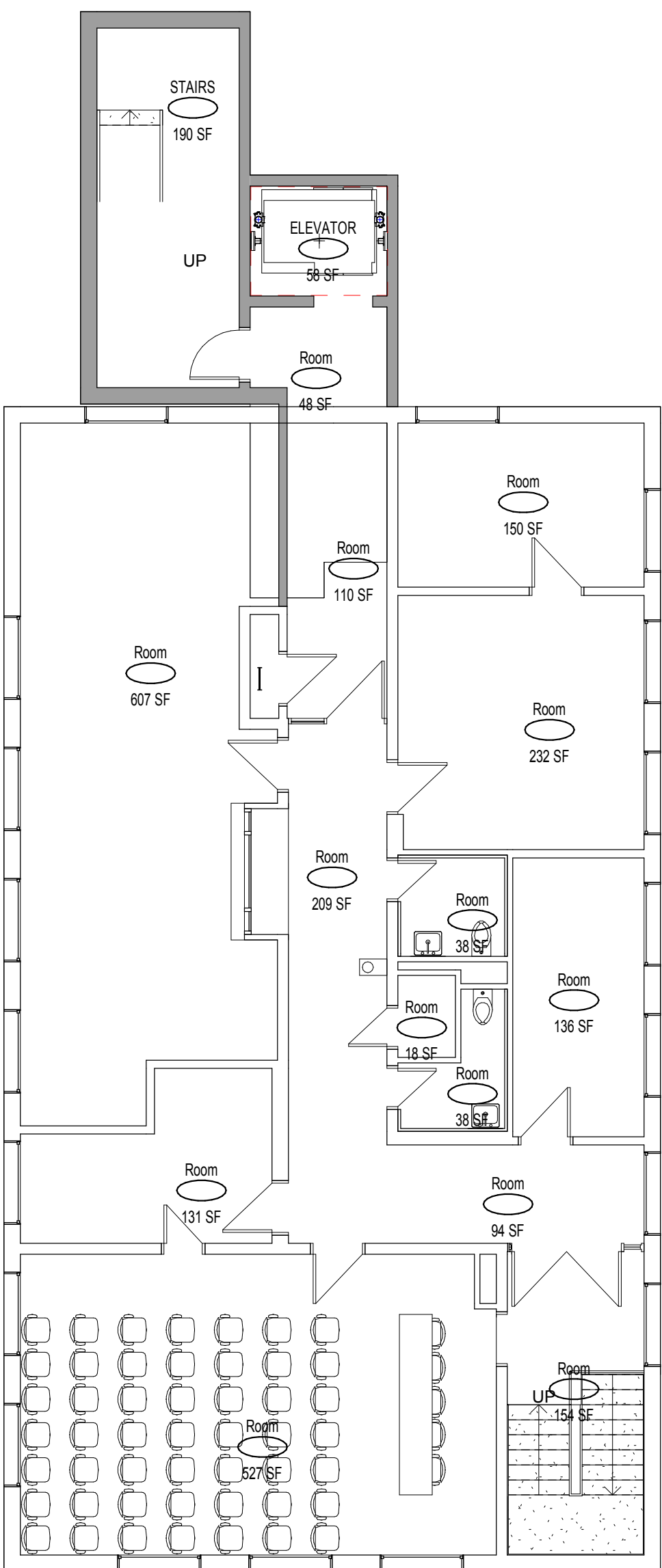
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1 LOWER LEVEL NEW CONSTRUCTION
1/8" = 1'-0"



2 FIRST FLOOR NEW CONSTRUCTION
1/8" = 1'-0"



3 SECOND FLOOR NEW CONSTRUCTION
1/8" = 1'-0"

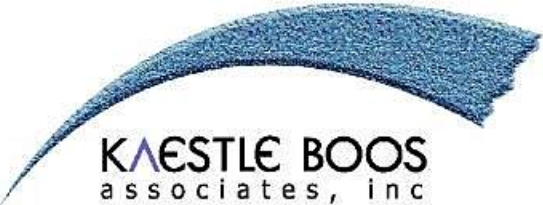


SITE PLAN - OPTION 1 (ACCESSIBILITY ONLY)

SCALE: 1" = 40'

SHARON TOWN HALL STUDY

SHARON, MA
OCTOBER 30, 2015





Opinion of Probable Cost Option 1: HC Accessibility Only

Description		Subtotals	Tot.	Comments
Construction Costs				
Site Work		\$66,900		Daedalus Estimate
New Construction (Stair/Elev./Lobby/Toilets)	2,163 SF	\$1,098,700		Daedalus Estimate
Renovation	9,457 SF	incl.above		Daedalus Estimate
Hazmat Abatement Allowance		\$10,000		UEC Placeholder
HC Signage Allowance		\$10,000		Allowance
Min. Repairs at Fire Station for Temp use.		\$30,000		Allowance
Concept Level Estimating Contingency	@ 15.0%	\$177,800		
Subtotal Direct Construction Costs:			\$1,393,400	
General Conditions & Overhead	12 months @ \$40,000	\$480,000		
Insurance	@ 1.40%	\$26,200		
Bonds	@ 0.85%	\$16,100		
GC Fee (Profit)	@ 5.00%	\$95,800		
Permit Fee	@ 1.5%	Waived		
Escalation (bid 3rd Quarter of 2016)	@ 5.42%	\$109,000		
Subtotal Construction Cost:			\$2,120,500	
Owner's Indirect Costs				
Land Survey		\$7,000		
Geotech (2 Borings)		\$7,200		
Arch.& Eng.Fees		\$212,000		
Project Management		\$95,000		
Moving		\$20,000		
Reproduction /Miscellaneous		\$5,000		
Legal/Advertising		\$5,000		
Material Testing		\$10,000		
Owner's Contingency (10% of all costs)		\$248,300		
Subtotal Indirect Costs:			\$609,500	
Total Project Cost:			\$2,730,000	

Note: This cost includes all recommended upgrades identified in the Existing Conditions report.

Option 2

Addition and Renovation

- Floor Plans
- Site Plans
- Perspective
- Opinion of Probable Cost

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REVISIONS	
DATE	DESCRIPTION

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AND GENERAL NOTES SEE SHEET R0.01

KEY PLAN

0' 4' 8' 16'

SCALE: 1/8" = 1'-0"

PROJECT TRUE

SHARON TOWN HALL ADDITION OPTION 2

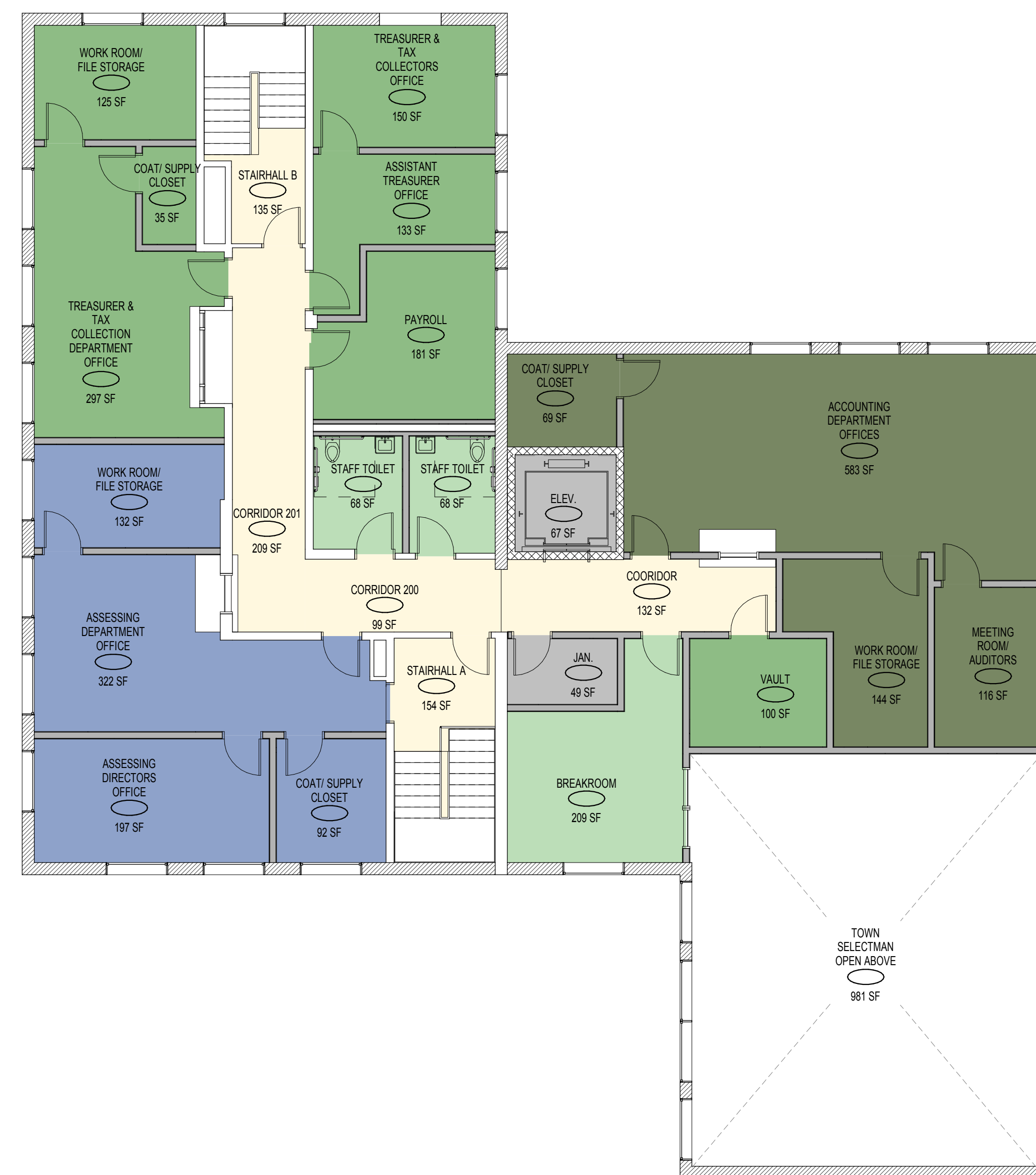
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STREET SHARON,
MA 02067

PROJECT NO.: 15047.00 DRAWN BY: HM, YM

FLOOR PLANS

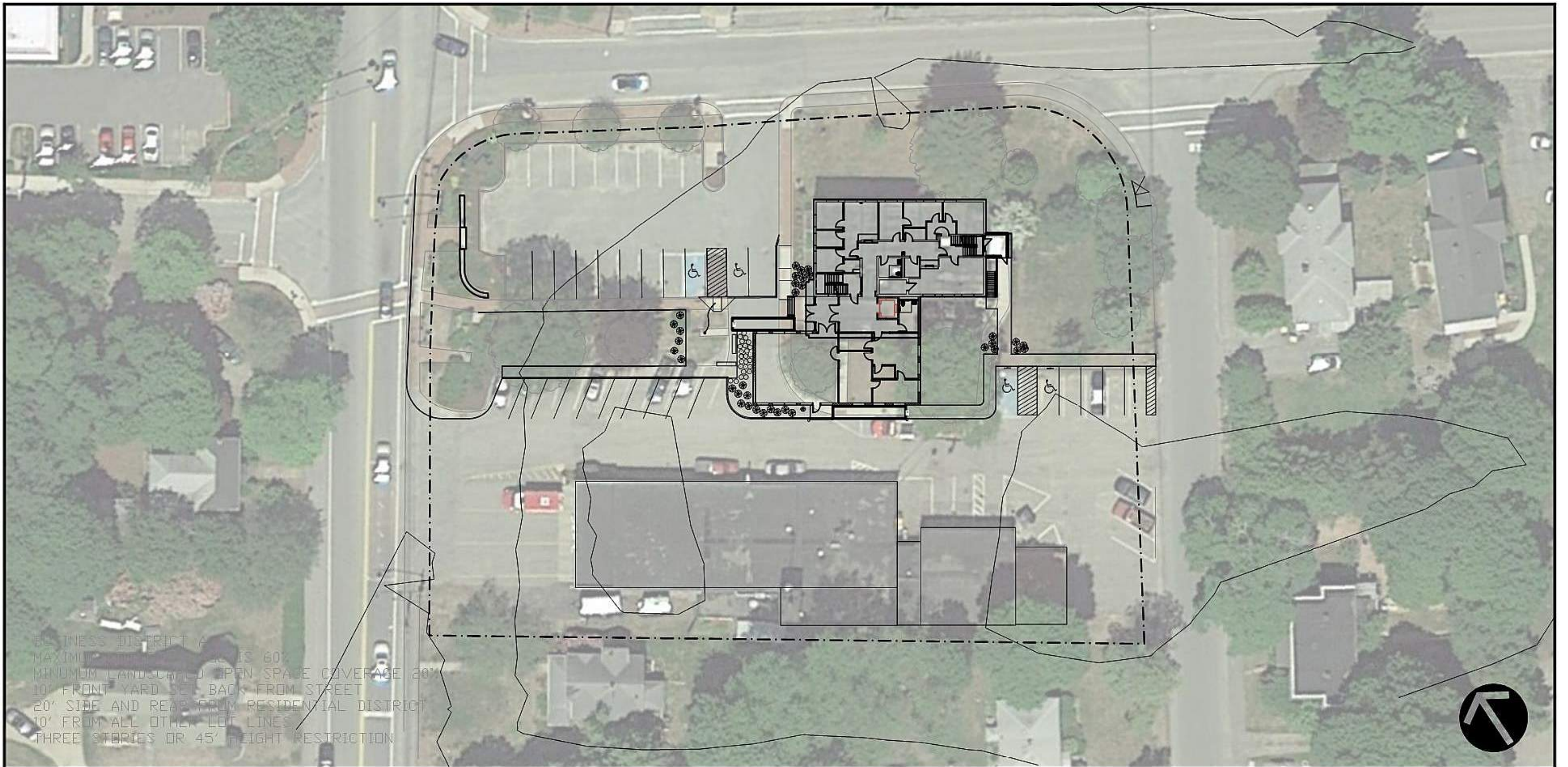
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3 UPPER LEVEL FLOOR PLAN
1/8" = 1'-0"

1 LOWER LEVEL FLOOR PLAN
1/8" = 1'-0"



SITE PLAN - OPTION 2 (ADD/RENO)

SCALE: 1" = 40'

SHARON TOWN HALL STUDY

SHARON, MA
 OCTOBER 30, 2015





Sharon Town Hall Accessibility
& Building Renovation Study
Option 2 New Addition



Opinion of Probable Cost Option 2: Addition-Renovation

Description		Subtotals	Totals Comments
Construction Costs			
Site Work		\$188,900	Daedalus Estimate
Add/Reno Work (Construction)	13,638 SF	\$3,298,500	Daedalus Estimate
Hazmat Abatement Allowance		\$195,000	UEC Estimate
Repairs at Fire Station for Temp use and CD relocation		\$200,000	Allowance
Concept Level Estimating Contingency	@ 15.0%	\$552,400	
Subtotal Direct Construction Costs:		\$4,434,800	
General Conditions & Overhead	12 months @ 8.5%	\$377,000	
Insurance	@ 1.40%	\$67,400	
Bonds	@ 0.85%	\$41,500	
GC Fee (Profit)	@ 5.00%	\$246,000	
Permit Fee	@ 1.5%	Waived	
Escalation (bid 3rd Quarter of 2016)	@ 5.42%	\$280,000	
Subtotal Construction Cost:		\$5,446,700	
Owner's Indirect Costs			
Land Survey		\$7,000	
Geotech (6 Borings)		\$9,000	
Utility Backcharge		\$20,000	
Arch. & Eng. Fees		\$545,000	
Project Management		\$245,000	
Furniture & Equipment Allowance		\$75,000	
Moving		\$20,000	
Reproduction /Miscellaneous		\$5,000	
Legal/Advertising		\$5,000	
Material Testing		\$15,000	
Owner's Contingency (10% of all costs)		\$639,300	
Subtotal Indirect Costs:		\$1,585,300	
Total Project Cost:		\$7,032,000	

Note: This cost includes all recommended upgrades identified in the Existing Conditions report.

Option 3

New Town Hall

- Floor Plans
- Site Plans
- Perspective
- Opinion of Probable Cost

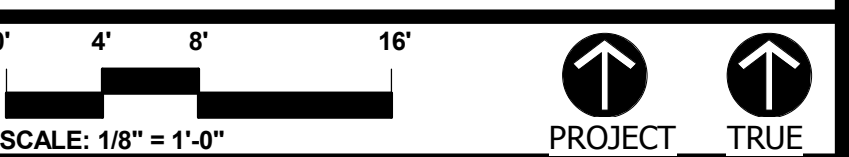


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10		

REVISIONS	
DATE	DESCRIPTION

FOR ALL ABBREVIATIONS, SYMBOL LEGENDS,
AND GENERAL NOTES SEE SHEET R0.01

PLAN

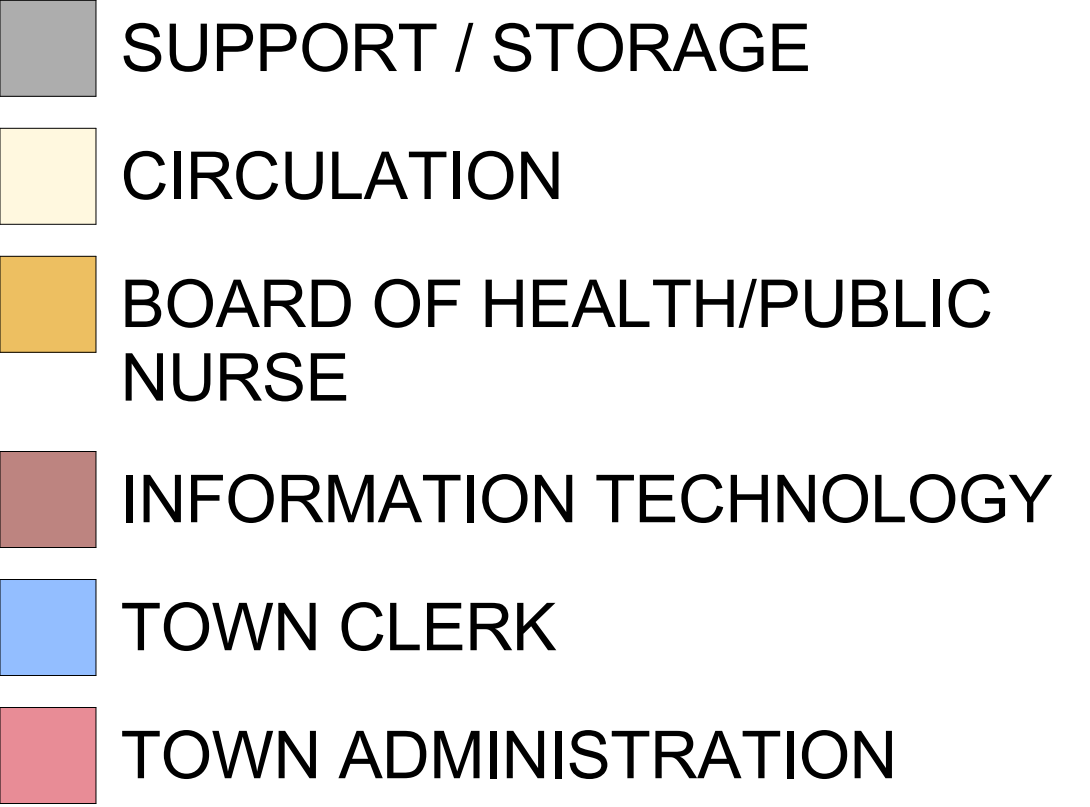


HARON, MA

PROJECT NO.: #####.## DRAWN BY: HM, YM

DRAWING NO.:

A1.01



1 MAIN LEVEL
1/8" = 1'-0"

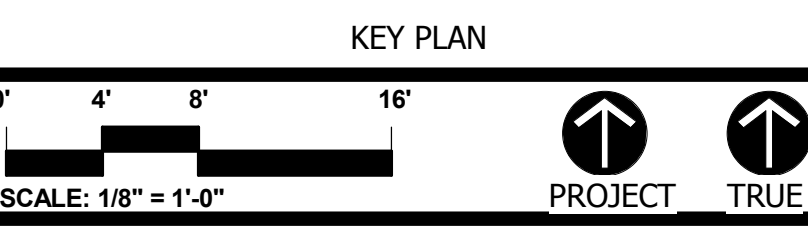
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DATE	DESCRIPTION

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AND GENERAL NOTES SEE SHEET R0.01



NEW SHARON

TOWN HALL

OPTION 3

SHARON, MA

PROJECT NO.: #####

DRAWN BY: HM, YM

UPPER LEVEL

FLOOR PLAN

DRAWING NO.:

A1.02



- LEGEND
- SUPPORT / STORAGE

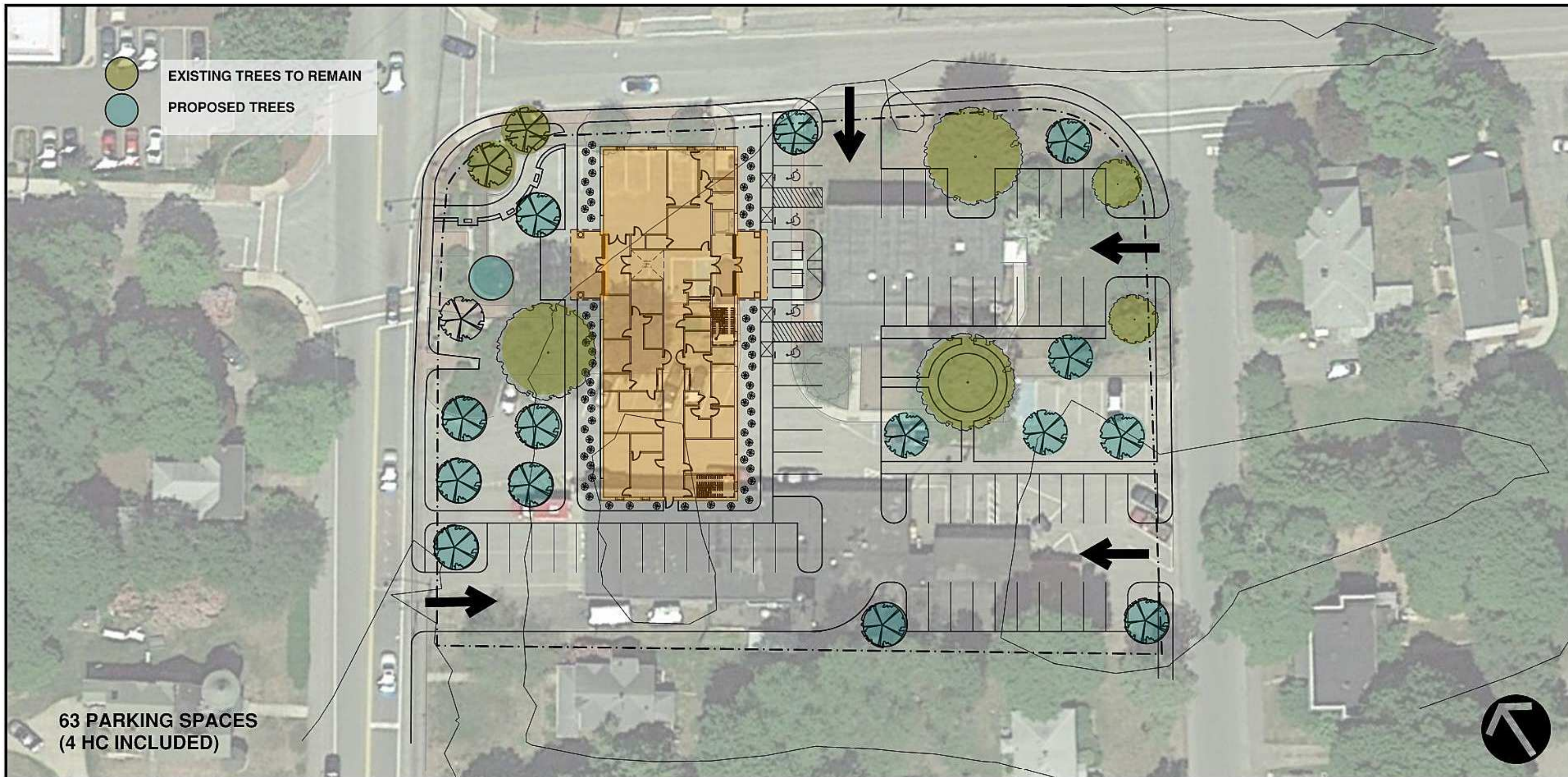
CIRCULATION

STAFF SERVICES

ASSESSING DEPARTMENT

TREASURER/TAX COLLECTION

ACCOUNTING DEPARTMENT



SITE PLAN - OPTION 3 (NEW BUILDING)

SCALE: 1" = 40'

SHARON TOWN HALL STUDY

SHARON, MA

OCTOBER 30, 2015

KAESTLE BOOS
associates, inc



Sharon Town Hall Accessibility
& Building Renovation Study
Option 3



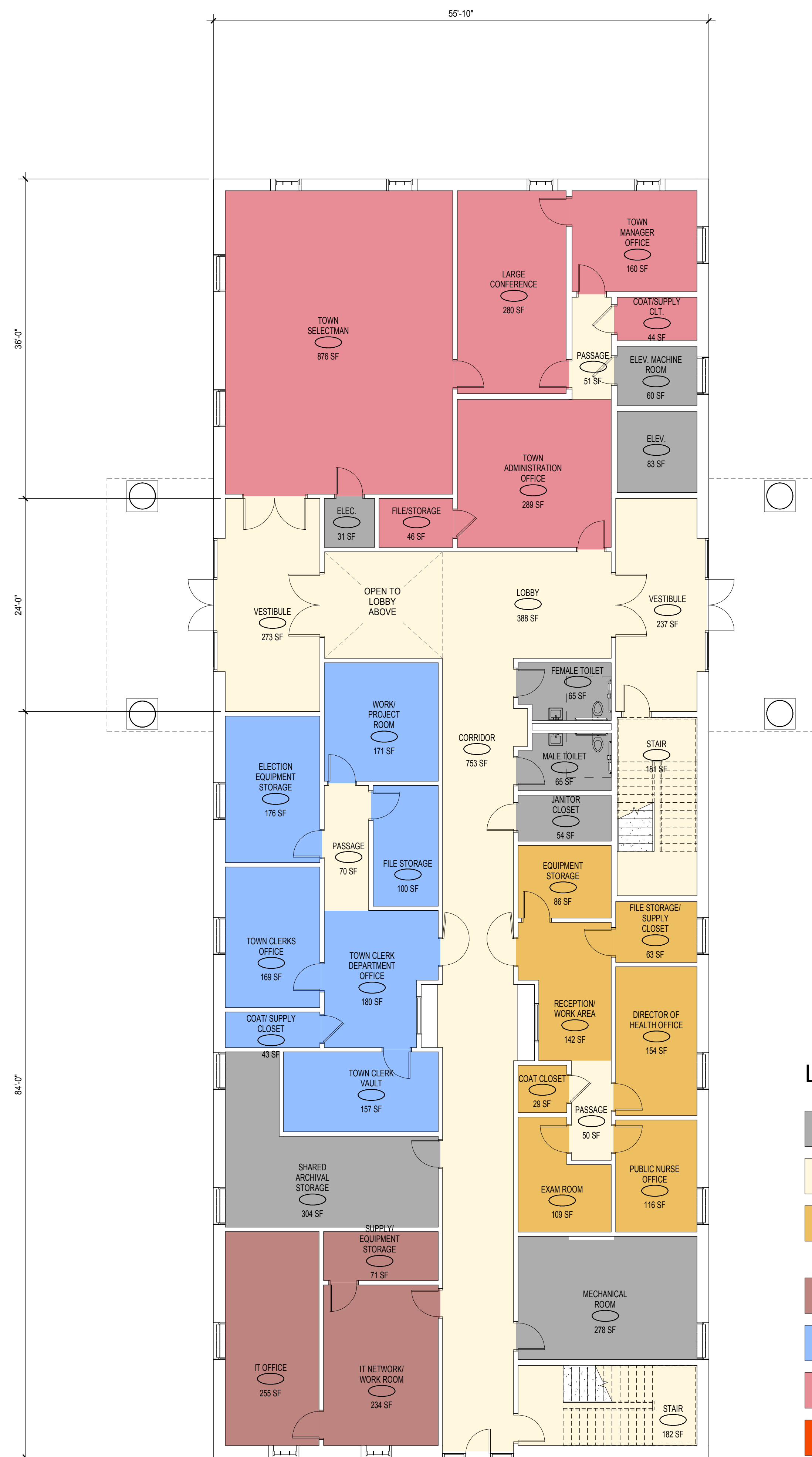
Opinion of Probable Cost Option 3: New Town Hall

Description	Subtotals	Totals	Comments
Construction Costs			
Site Work Allowance (inc Bldg. Demo)	\$851,700		Daedalus Estimate
New Building Construction 16,128 SF	\$4,478,000		Daedalus Estimate
Hazmat Abatement Allowance	\$295,000		UEC Estimate
Concept Level Estimating Contingency @ 12.5%	\$703,100		
Subtotal Direct Construction Costs:	\$6,327,800		
General Conditions & Overhead 12 months @ 8.5%	\$537,900		
Insurance @ 1.40%	\$96,100		
Bonds @ 0.85%	\$59,200		
GC Fee (Profit) @ 5.00%	\$351,100		
Permit Fee @ 1.5%	Waived		
Escalation (bid 3rd Quarter of 2015) @ 5.42%	\$399,600		
Subtotal Construction Cost:	\$7,771,700		
Owner's Indirect Costs			
Land Survey	\$7,000		
Geotech (10 Borings)	\$12,000		
Utility Backcharge	\$25,000		Allowance
Arch. & Eng. Fees	\$663,900		
Project Management	\$311,000		
Furniture & Equipment Allowance	\$100,000		
Moving	\$25,000		
Reproduction /Miscellaneous	\$5,000		
Legal/Advertising	\$5,000		
Material Testing	\$20,000		
Owner's Contingency (10% of all costs)	\$894,400		
Subtotal Indirect Costs:	\$2,068,300		
Total Project Cost:	\$9,840,000		

Option 4

New Town Hall & Civil Defense Facility

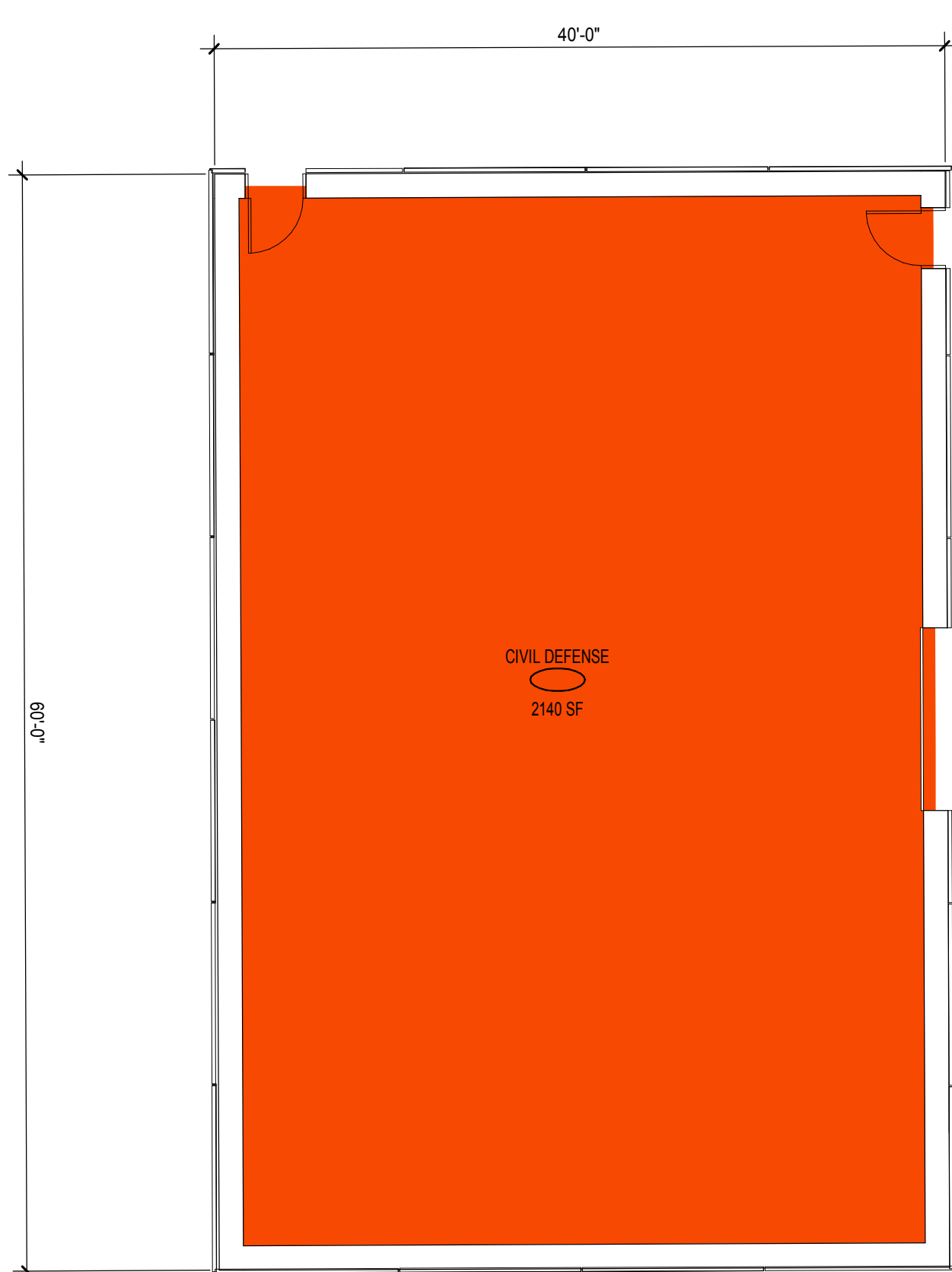
- Floor Plans
- Site Plans
- Perspective
- Opinion of Probable Cost



1 MAIN LEVEL
1/8" = 1'-0"

LEGEND

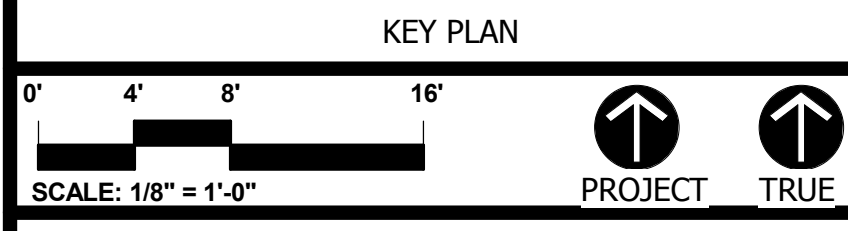
- SUPPORT / STORAGE
- CIRCULATION
- BOARD OF HEALTH/PUBLIC NURSE
- INFORMATION TECHNOLOGY
- TOWN CLERK
- TOWN ADMINISTRATION
- CIVIL DEFENSE



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DATE	DESCRIPTION

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AND GENERAL NOTES SEE SHEET R0.01



NEW SHARON TOWN HALL OPTION 4

SHARON, MA

PROJECT NO.: #####
DRAWN BY: HM, YM

MAIN LEVEL FLOOR PLANS

DRAWING NO.:
A1.01

PROGRESS PRINT

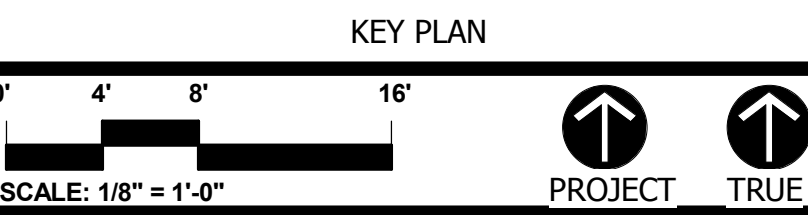
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AND GENERAL NOTES SEE SHEET R0.01



NEW SHARON

TOWN HALL

OPTION 4

SHARON, MA

PROJECT NO.: #####

DRAWN BY: HM, YM

UPPER LEVEL

FLOOR PLAN

DRAWING NO.:

A1.02



- LEGEND
- SUPPORT / STORAGE

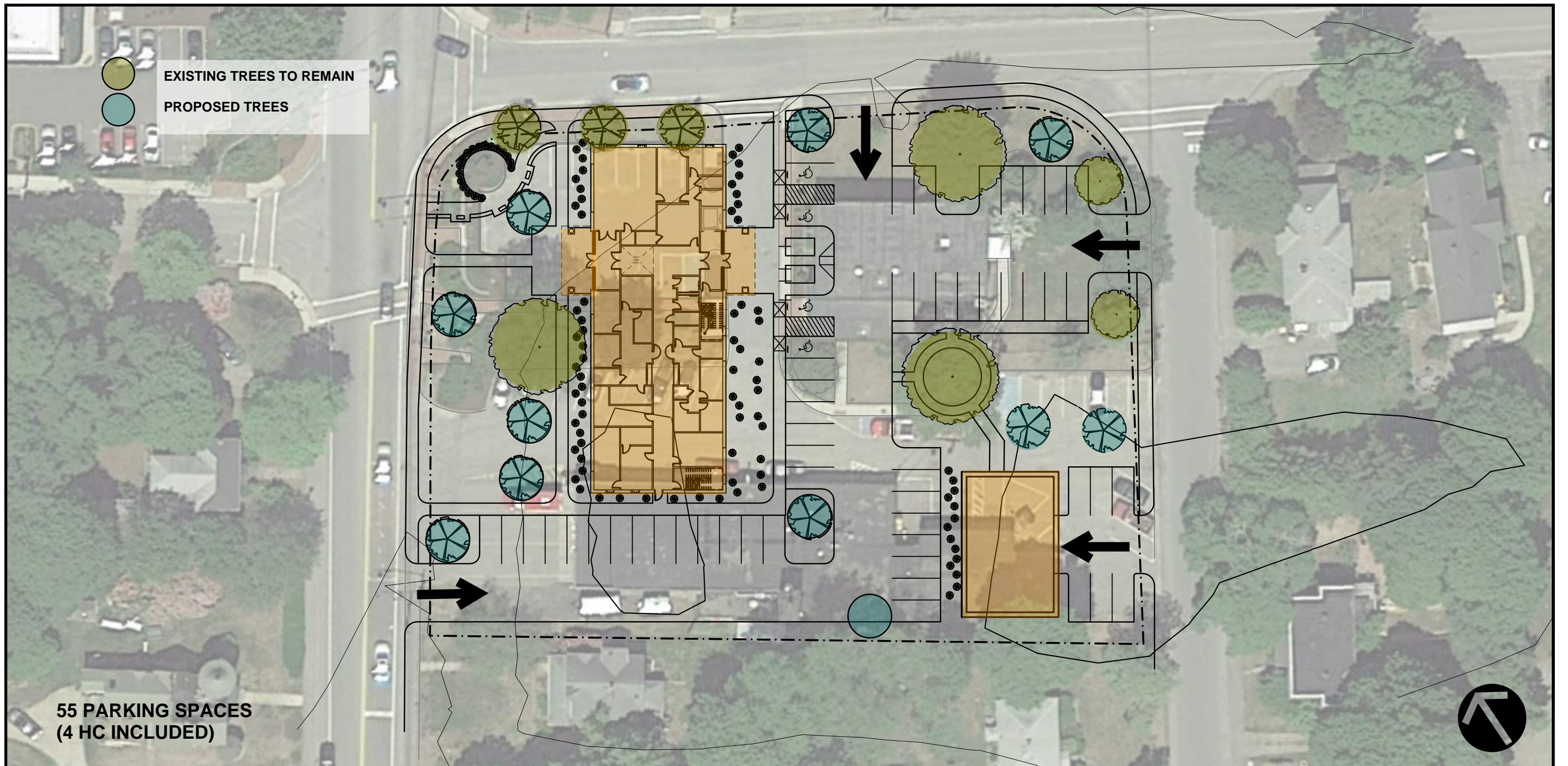
CIRCULATION

STAFF SERVICES

ASSESSING DEPARTMENT

TREASURER/TAX COLLECTION

ACCOUNTING DEPARTMENT



SITE PLAN - OPTION 4 (NEW BUILDING & CIVIL DEFENSE)

SHARON TOWN HALL STUDY

SHARON, MA

NOVEMBER 18, 2015

KAESTLE BOOS
associates, inc



Sharon Town Hall Accessibility
& Building Renovation Study
Option 4



Sharon Town Hall

November 24, 2015

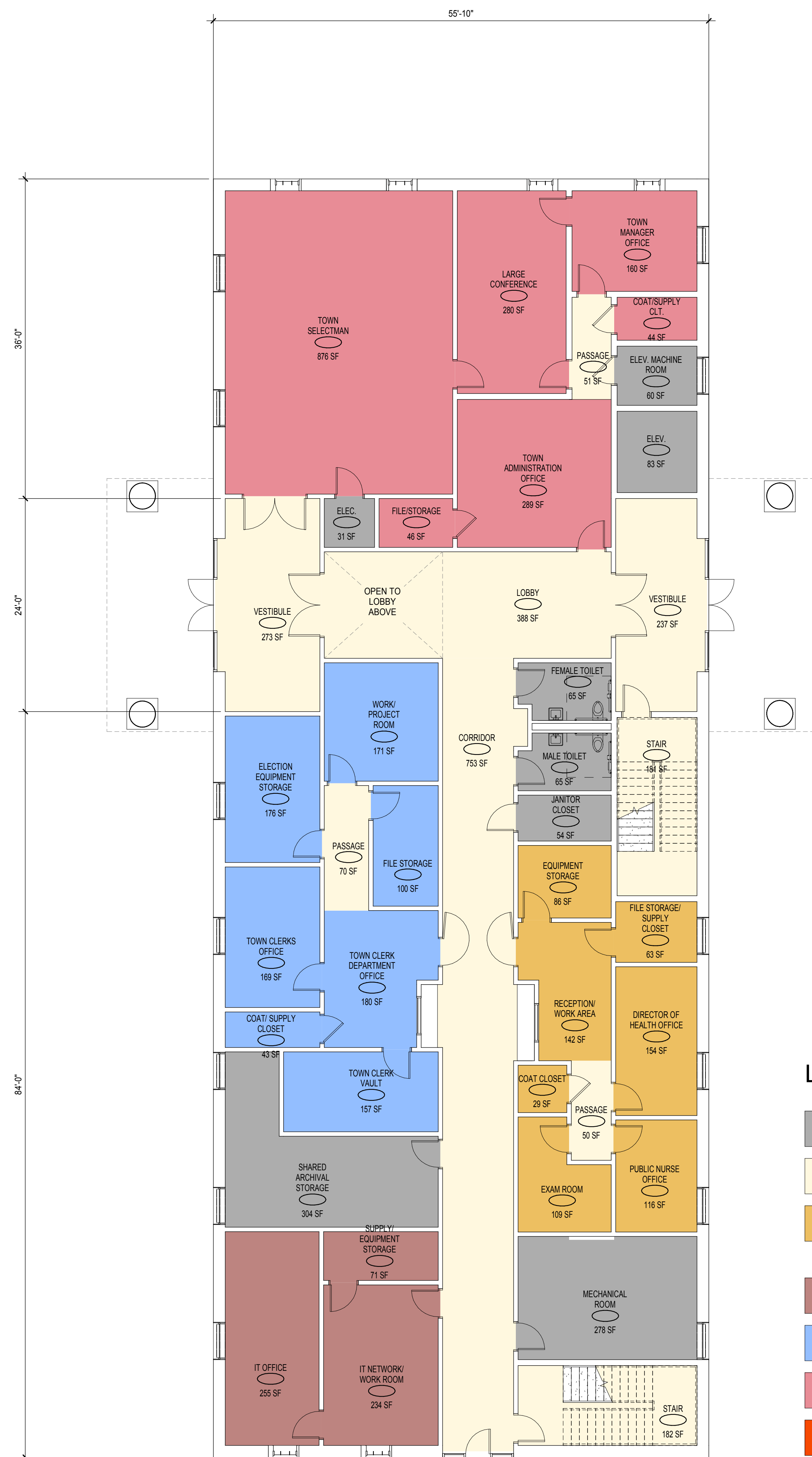
Opinion of Probable Cost Option 4: New Town Hall & CD

Description		Subtotals	Totals Comments
Construction Costs			
Site Work Allowance (inc Bldg. Demo)		\$926,700	Daedalus Estimate
New Building Construction	16,128 SF	\$4,478,000	Daedalus Estimate
Hazmat Abatement Allowance		\$295,000	UEC Estimate
New Civil Defense facility	2,400 SF	\$720,000	KBA Estimate
Concept Level Estimating Contingency	@ 12.5%	\$712,500	
Subtotal Direct Construction Costs:		\$7,132,200	
General Conditions & Overhead	12 months @ 8.5%	\$606,200	
Insurance	@ 1.40%	\$108,300	
Bonds	@ 0.85%	\$66,700	
GC Fee (Profit)	@ 5.00%	\$395,700	
Permit Fee	@ 1.5%	Waived	
Escalation (bid 3rd Quarter of 2015)	@ 5.42%	\$450,400	
Subtotal Construction Cost:		\$8,759,500	
Owner's Indirect Costs			
Land Survey		\$7,000	
Geotech (14 Borings)		\$18,000	
Utility Backcharge		\$35,000	Allowance
Arch. & Eng. Fees		\$772,000	
Project Management		\$350,000	
Furniture & Equipment Allowance		\$120,000	
Moving		\$35,000	
Reproduction /Miscellaneous		\$7,500	
Legal/Advertising		\$7,500	
Material Testing		\$25,000	
Owner's Contingency (10% of all costs)		\$1,013,500	
Subtotal Indirect Costs:		\$2,390,500	
Total Project Cost:		\$11,150,000	

Option 4A

New Town Hall & Renovation of Fire Department for Civil Defense Facility

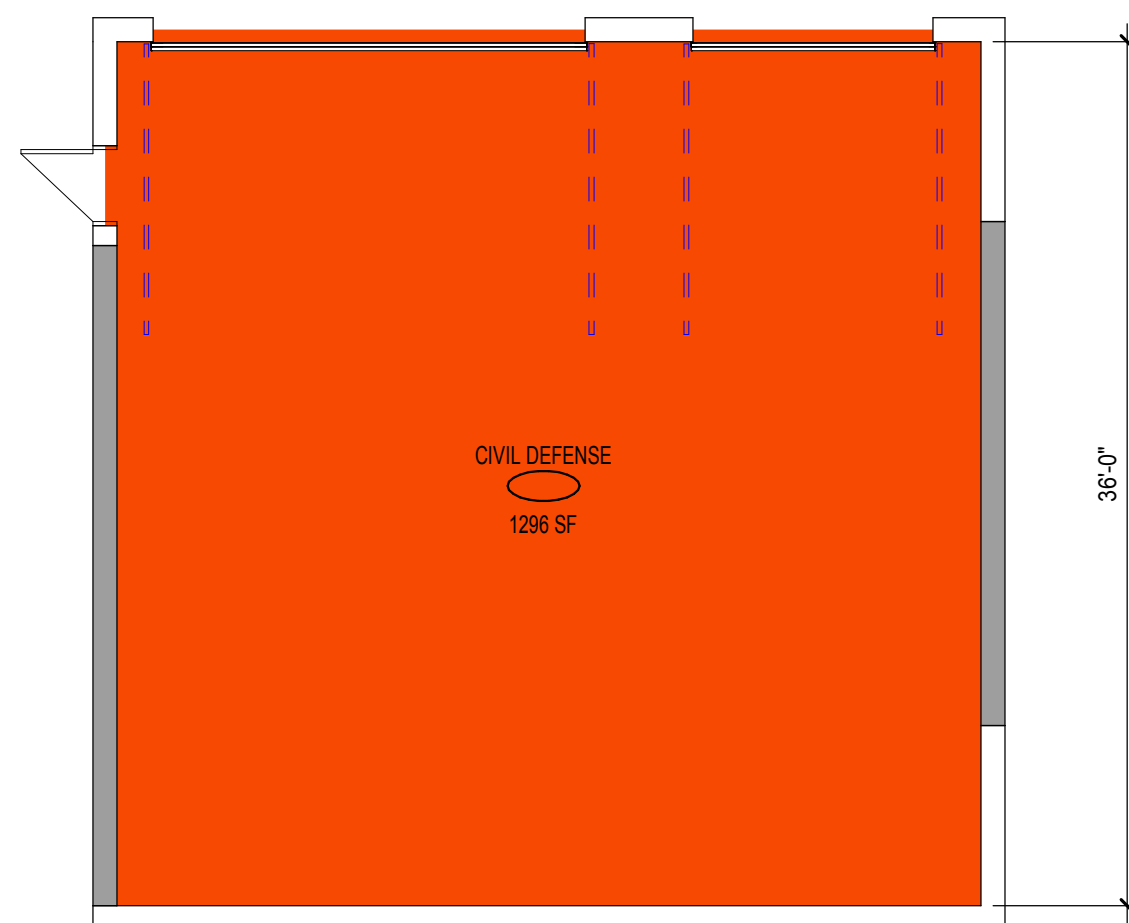
- Floor Plans
- Site Plans
- Perspective
- Opinion of Probable Cost



1 MAIN LEVEL
1/8" = 1'-0"

LEGEND

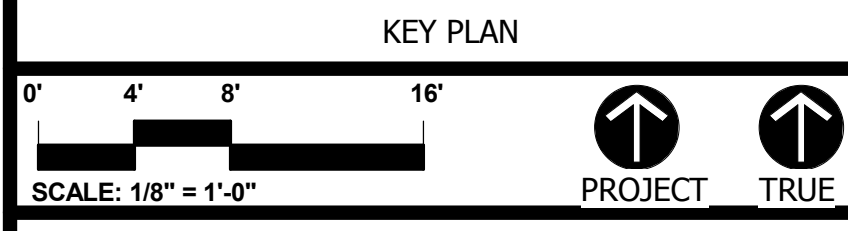
- SUPPORT / STORAGE
- CIRCULATION
- BOARD OF HEALTH/PUBLIC NURSE
- INFORMATION TECHNOLOGY
- TOWN CLERK
- TOWN ADMINISTRATION
- CIVIL DEFENSE



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DATE	DESCRIPTION

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AND GENERAL NOTES SEE SHEET R0.01



**NEW SHARON
TOWN HALL
OPTION 4A**

SHARON, MA

PROJECT NO.: ##### DRAWN BY: HM, YM

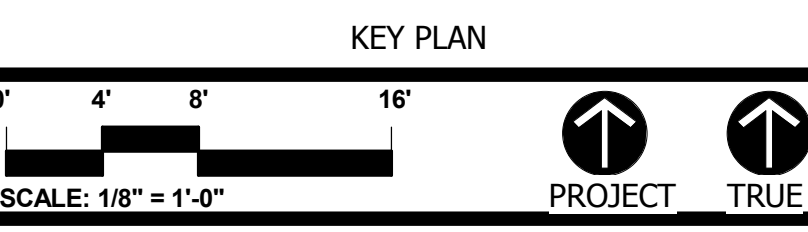
**MAIN LEVEL FLOOR
PLANS**

DRAWING NO.:
A1.01

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REVISIONS	
DATE	DESCRIPTION

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AND GENERAL NOTES SEE SHEET R0.01



NEW SHARON
TOWN HALL
OPTION 4A

SHARON, MA

PROJECT NO.: #####
DRAWN BY: HM, YM

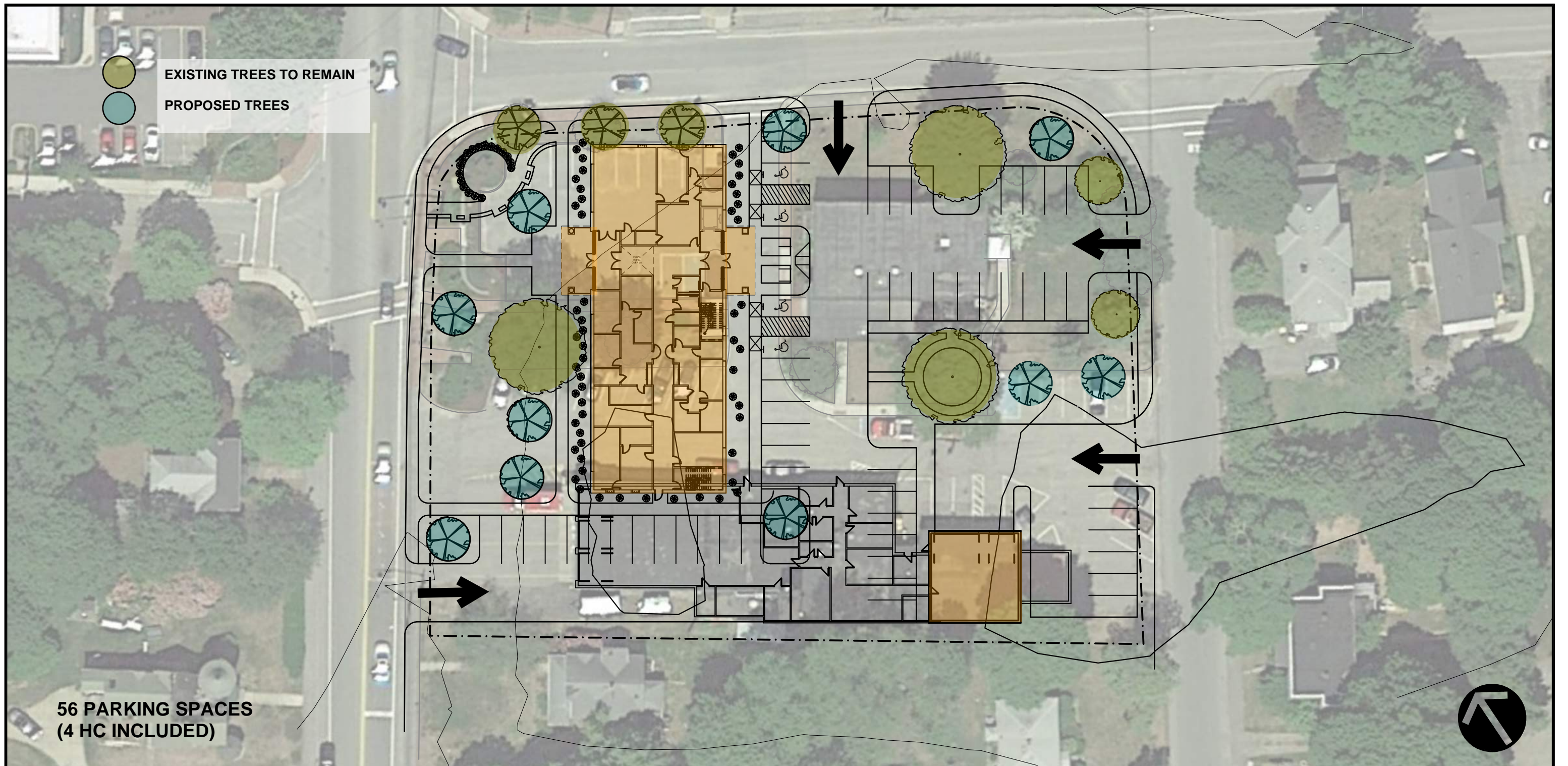
UPPER LEVEL
FLOOR PLAN

DRAWING NO.:
A1.02



- LEGEND
- SUPPORT / STORAGE
 - CIRCULATION
 - STAFF SERVICES
 - ASSESSING DEPARTMENT
 - TREASURER/TAX COLLECTION
 - ACCOUNTING DEPARTMENT

1 UPPER LEVEL
1/8" = 1'-0"



SITE PLAN - OPTION 4A (NEW TOWN HALL BUILDING & RENOVATED SPACE FOR CIVIL DEFENSE)

SHARON TOWN HALL STUDY

SHARON, MA

DECEMBER 2, 2015

KAESTLE BOOS
associates, inc



Sharon Town Hall Accessibility
& Building Renovation Study
Option 4A



Sharon Town Hall

December 3, 2015

Opinion of Probable Cost Option 4a: New TH, CD Reno

Description		Subtotals	Totals Comments
Construction Costs			
Site Work Allowance (inc Bldg. Demo)		\$946,700	Daedalus Estimate
New Building Construction	16,128 SF	\$4,478,000	Daedalus Estimate
Hazmat Abatement Allowance		\$295,000	UEC Estimate
Reno partial FD as Civil Defense facility	1,500 SF	\$375,000	KBA Estimate
Concept Level Estimating Contingency	@ 12.5%	\$715,000	
Subtotal Direct Construction Costs:		\$6,809,700	
General Conditions & Overhead	12 months @ 8.5%	\$578,800	
Insurance	@ 1.40%	\$103,400	
Bonds	@ 0.85%	\$63,700	
GC Fee (Profit)	@ 5.00%	\$377,800	
Permit Fee	@ 1.5%	Waived	
Escalation (bid 3rd Quarter of 2016)	@ 5.42%	\$430,000	
Subtotal Construction Cost:		\$8,363,400	
Owner's Indirect Costs			
Land Survey		\$7,000	
Geotech (14 Borings)		\$18,000	
Utility Backcharge		\$35,000	Allowance
Arch. & Eng. Fees		\$737,300	
Project Management		\$335,000	
Furniture & Equipment Allowance		\$120,000	
Moving		\$35,000	
Reproduction /Miscellaneous		\$7,500	
Legal/Advertising		\$7,500	
Material Testing		\$25,000	
Owner's Contingency (10% of all costs)		\$969,300	
Subtotal Indirect Costs:		\$2,296,600	
Total Project Cost:		\$10,660,000	

COMPARATIVE COSTS



Sharon Town Hall

December 3, 2015

Cost Comparison - Options 1-4

OPTION 1: HC Accessibility Only

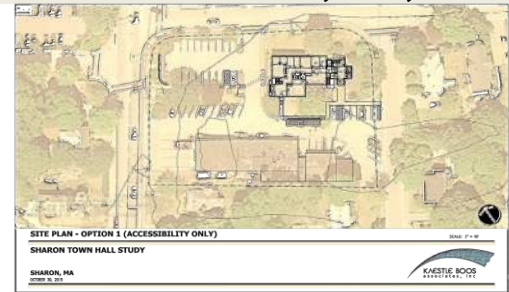
\$ 2,730,000

Pros:

- Brings Town Hall into ADA/AAB Compliance
- Minimum Site Impact
- Minimal temporary use of FD bldg

Cons:

- High Cost to Benefit ratio
- Does Not address Space Needs
- Does Not address Fire Station Reuse



OPTION 2: Add/Reno to Town Hall

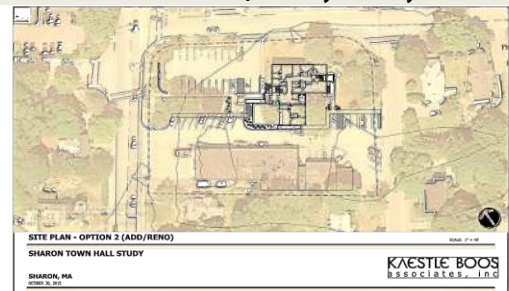
\$ 7,032,000

Pros:

- Brings Town Hall into ADA/AAB Compliance
- Meets Space Needs requirements
- Opportunity for limited Building Appearance updates

Cons:

- Minimal Improvement to Parking / Site Use
- Does Not address Fire Station Reuse (or permanent CD site)



OPTION 3: New Town Hall (Demolish Existing TH and Fire Station)

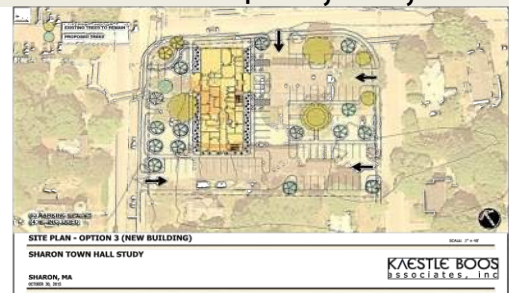
\$ 9,840,000

Pros:

- New Facility between Existing and saves Large Tree
- Meets Space Needs requirements
- Updates Building Appearance (Town Character)

Cons:

- More Costly
- Does Not address permanent location for Civil Defense



OPTION 4: New Town Hall & Civil Defense (Demolish sim.to Opt3)

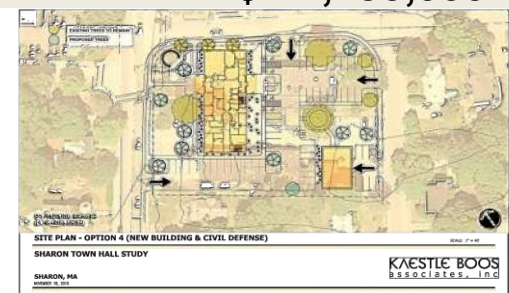
\$ 11,150,000

Pros:

- Same as Option 3, plus
- Provides a permanent home for Civil Defense
- 2400 SF CD Bldg could provide some Town storage space

Cons:

- Most Costly Option
- Mixed use of CD on this site may not be best



OPTION 4a : New Town Hall & CD Reno (Demo.sim.to Opt3-part of FD)

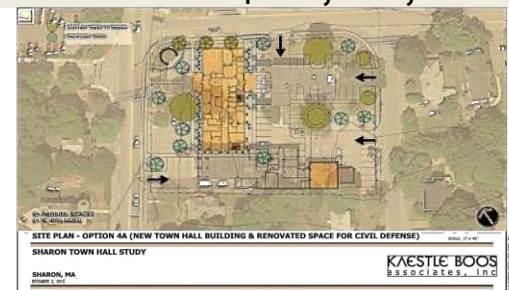
\$ 10,660,000

Pros:

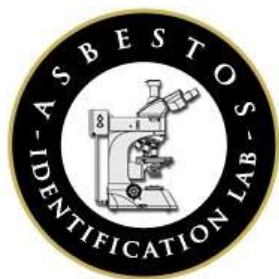
- Same as Option 3, plus
- Provides a permanent home for Civil Defense

Cons:

- Costly Renovation work for Civil Defense
- Renovated Building may be not be an aesthetic plus
- Mixed use of CD on this site may not be best



APPENDIX



Asbestos Identification Laboratory

165 New Boston St., Ste 271
Woburn, MA 01801
781-932-9600

Web: www.asbestosidentificationlab.com
Email: mikemanning@asbestosidentificationlab.com

Batch: 8970



October 07, 2015

Ammar Dieb
Universal Environmental Consultants
12 Brewster Road
Framingham, MA 01702

Project Number:

Project Name: Sharon Town Hall, Sharon, MA

Date Sampled: 2015-10-02

Work Received: 2015-10-05

Analysis Method: BULK PLM ANALYSIS EPA/600/R-93/116

Dear Ammar Dieb,

Asbestos Identification Laboratory has completed the analysis of the samples from your office for the above referenced project.

The information and analysis contained in this report have been generated using the EPA /600/R-93/116 Method for the Determination of Asbestos in Bulk Building Materials. Materials or products that contain more than 1% of any kind or combination of asbestos are considered an asbestos containing building material as determined by the EPA. This Polarized Light Microscope (PLM) technique may be performed either by visual estimation or point counting. Point counting provides a determination of the area percentage of asbestos in a sample. If the asbestos is estimated to be less than 10% by visual estimation of friable material, the determination may be repeated using the point counting technique. The results of the point counting supersede visual PLM results. Results in this report only relate to the items tested. This report may not be used by the customer to claim product endorsement by NVLAP or any other U.S. Government Agency.

Laboratory results represent the analysis of samples as submitted by the customer. Information regarding sample location, description, area, volume, etc., was provided by the customer. Asbestos Identification Laboratory is not responsible for sample collection activities or analytical method limitations. Unless notified in writing to return samples, Asbestos Identification Laboratory discards customer samples after 30 days. This report shall not be reproduced, except in full, without the written consent of Asbestos Identification Laboratory.

- NVLAP Lab Code: 200919-0
- Massachusetts Certification License: AA000208
- State of Connecticut, Department of Public Health Approved Environmental Laboratory Registration Number: PH-0142
- State of Maine, Department of Environmental Protection Asbestos Analytical Laboratory License Number: LB-0078(Bulk) LA-0087(Air)
- State of Rhode Island and Providence Plantations Department of Health Certification: AAL-121

Thank you Ammar Dieb for your business.

Michael Manning
Owner/Director

October 07, 2015

Ammar Dieb
Universal Environmental Consultants
12 Brewster Road
Framingham, MA 01702

Project Number:

Project Name: Sharon Town Hall, Sharon, MA

Date Sampled: 2015-10-02


Work Received: 2015-10-05

Analysis Method: BULK PLM ANALYSIS EPA/600/R-93/116

FieldID	Material	Location	Color	Non-Asbestos %	Asbestos %
LabID					
1	Grey Sink DP	Kitchen	white	Cellulose Non-Fibrous	20 None Detected 80
95733					
2	Grey Sink DP	Kitchen	white	Cellulose Non-Fibrous	20 None Detected 80
95734					
3	E Off FR	Boiler Rm	white	Cellulose Non-Fibrous	5 Detected 65 Chrysotile 10 Amosite 20
95735					
4	E	Boiler Rm	white	Cellulose Non-Fibrous	5 Detected 65 Chrysotile 10 Amosite 20
95736					
5	E	Committee Rm (AC) Bsmt	gray	Mineral Wool Non-Fibrous	35 None Detected 65
95737					
6	E	Bsmt Hall (AC)	gray	Mineral Wool Non-Fibrous	40 None Detected 60
95738					
7	E	Bsmt Hall (AC)	gray	Mineral Wool Non-Fibrous	30 None Detected 70
95739					
8	E	Bsmt Hall (AC)	white	Mineral Wool Non-Fibrous	30 None Detected 70
95740					
9	Black in FG PI	Bsmt Hall (AC)	black	Non-Fibrous	100 None Detected
95741					
10	Black in FG PI	Bsmt Hall (AC)	black	Non-Fibrous	100 None Detected
95742					
11	Joint Compound (JC)	Committee Rm- Bsmt	white	Non-Fibrous	100 None Detected
95743					
12	JC	Committee Rm- Bsmt	white	Non-Fibrous	100 None Detected
95744					
13	Rough CP	Boiler Rm Side	multi	Non-Fibrous	100 None Detected
95745					
14	Rough CP	Boiler Rm Side	multi	Non-Fibrous	100 None Detected
95746					
Wednesday 07					Page 1 of 4

FieldID	Material	Location	Color	Non-Asbestos %	Asbestos %
LabID					
15	Rough CP	Boiler Rm Ctr	multi	Non-Fibrous	100 None Detected
95747					
16	Concrete Clg Deck	Bsmt Hall	gray	Non-Fibrous	100 None Detected
95748					
17	Paper Blanket for #16	Bsmt Hall	brown	Cellulose Non-Fibrous	95 None 5 Detected
95749					
18	Concrete Clg Deck	Bsmt Civil Defence	gray	Non-Fibrous	100 None Detected
95750					
19	Paper Blanket for #18	Bsmt Civil Defence	brown	Cellulose Non-Fibrous	95 None 5 Detected
95751					
20	White Clg Deck	2nd FL Hall	white	Non-Fibrous	100 None Detected
95752					
21	White Clg Deck	2nd FL SW by IT	white	Non-Fibrous	100 None Detected
95753					
22	2x4 SAT-I (Pink)	Town Administrator	multi	Mineral Wool Cellulose Non-Fibrous	50 None 30 20 Detected
95754					
23	SAT-I	Lobby Paper Closet	multi	Mineral Wool Cellulose Non-Fibrous	50 None 30 20 Detected
95755					
24	SAT-I	Payroll	multi	Mineral Wool Cellulose Non-Fibrous	50 None 30 20 Detected
95756					
25	SAT-II (Hash Marks)	Hall by IT	multi	Mineral Wool Cellulose Non-Fibrous	30 None 50 20 Detected
95757					
26	SAT-II	2nd FL Landing (Veterans)	multi	Mineral Wool Cellulose Non-Fibrous	30 None 50 20 Detected
95758					
27	Smooth Hard CP	2nd FL Jan Closet	multi	Non-Fibrous	100 None Detected
95759					
28	Smooth Hard CP	1st FL Bathrm	multi	Non-Fibrous	100 None Detected
95760					
29	Smooth Hard WP	Computer Rm	multi	Non-Fibrous	100 None Detected
95761					
30	(Grey) Lino-I	Lobby SW Landing	gray	Cellulose Non-Fibrous	35 None 65 Detected
95762					
31	Adhesive #30	Lobby SW Landing	red	Non-Fibrous	100 None Detected
95763					
32	Lino-I	Lobby @ Stairs	gray	Cellulose Non-Fibrous	35 None 65 Detected
95764					
Wednesday 07					Page 2 of 4

FieldID	Material	Location	Color	Non-Asbestos %	Asbestos %
LabID					
33	Adh #32	Lobby @ Stairs	red	Non-Fibrous	100 None Detected
95765					
34	Glazing for Interior Door Window	SW Bsmt by Civil Defence	gray	Non-Fibrous	98 Detected Chrysotile 2
95766					
35	GL for Int Door Window	SW Bsmt by Boiler Rm	gray	Non-Fibrous	98 Detected Chrysotile 2
95767					
36	Interior Window Glaze	SW by Veterans	gray	Non-Fibrous	95 Detected Chrysotile 5
95768					
37	Int Win GL	SW by IT	gray	Non-Fibrous	95 Detected Chrysotile 5
95769					
38	(Red Square) Lino-II	Side Entrance Hall	red	Cellulose Non-Fibrous	2 Detected Chrysotile 78 20
95770					
39	Lino-II	Side Entrance Hall	red	Cellulose Non-Fibrous	2 Detected Chrysotile 68 30
95771					
40	Adhesive #38	Side Entrance Hall	yellow	Non-Fibrous	100 None Detected
95772					
41	Adhesive #39	Side Entrance Hall	yellow	Non-Fibrous	100 None Detected
95773					
42	9" VT	Computer Rm- 1st FL	green	Non-Fibrous	90 Detected Chrysotile 10
95774					
43	Mastic #42	Computer Rm- 1st FL	black	Non-Fibrous	100 None Detected
95775					
44	9" VT	Bsmt Cust Rm	brown	Non-Fibrous	85 Detected Chrysotile 15
95776					
45	Mastic #44	Bsmt Cust Rm	black	Non-Fibrous	100 None Detected
95777					
46	Mastic for 9" VT	2nd FL Hall by IT	black	Non-Fibrous	100 None Detected
95778					
47	Mastic for 9" VT	Tax Collector, Hall	black	Non-Fibrous	100 None Detected
95779					
48	Mastic for 9" VT	2nd FL Landing	multi	Non-Fibrous	100 None Detected
95780					
49	12" Tan w/ Red Streaks	1st FL Lobby UC	brown	Non-Fibrous	98 Detected Chrysotile 2
95781					
50	Mastic #49	1st FL Lobby UC	black	Non-Fibrous	100 None Detected
95782					

FieldID	Material	Location	Color	Non-Asbestos %	Asbestos %
LabID					
51	12" Tan w/ Red Streaks	1st FL Lobby UC	tan	Non-Fibrous	98 Detected Chrysotile 2
95783					
52	Mastic #51	1st FL Lobby UC	black	Non-Fibrous	100 None Detected
95784					
53	Window Frame Caulk	Fire Sta Side, Exterior	gray	Non-Fibrous	100 None Detected
95785					
54	Win FR Caulk	Street Side, Exterior	gray	Non-Fibrous	100 None Detected
95786					
55	Door FR Caulk	Boiler Rm, Exterior	gray	Non-Fibrous	100 None Detected
95787					
56	Door FR Caulk	Boiler Rm, Exterior	gray	Non-Fibrous	100 None Detected
95788					
57	Grey Grille Caulk	Exterior	gray	Non-Fibrous	100 None Detected
95789					
58	Grey Grille Caulk	Exterior	gray	Non-Fibrous	100 None Detected
95790					
59	Assumed DP on Foundation	Side Street Side, Exterior	black	Non-Fibrous	100 None Detected
95791					
60	Assumed DP on Foundation	Side Street Side, Exterior	black	Non-Fibrous	100 None Detected
95792					
61	Flashing Protruding From Interior Wall	Bsmt- Kitchen	black	Cellulose Non-Fibrous	20 Detected 70 Chrysotile 10
95793					
62	Flashing Protruding From Interior Wall	Bsmt- Committee Room	black	Cellulose Non-Fibrous	20 Detected 70 Chrysotile 10
95794					
63	Flashing Protruding From Interior Wall	2nd FL Stairwell by IT	black	Cellulose Non-Fibrous	35 Detected 60 Chrysotile 5
95795					
Wednesday 07		End of Report	Page 4 of 4		
Analyzed by:		Batch: 8970			

CHAIN OF CUSTODY

104

Universal Environmental Consultants
12 Brewster Road
Framingham, MA 01702
Tel: (508) 628-5486 - Fax: (508) 628-5488
adieb@uec-env.com

Town/City: Sharon, MA Building Name: Sharon Town Hall

Sample	Result	Description of Material	Sample Location
1		grey sink dp	Kitchen
2		grey sink dp	Kitchen
3		(E) OFF FG	Boiler rm
4		(E)	Boiler rm
5		(E)	Committee rm (AC) Bsm
6		(E)	Bsm hall
7		(E)	Bsm hall
8		(E)	Bsm hall
9		Black in FG (PI)	Bsm hall (AC)
10		Black in FG (PI)	Bsm hall (AC)
11		Joint Compound (JC)	Committee Rm ~ Bsm
12		JC	" " " "
13		rough CP	Boiler rm side
14		rough CP	side
15		rough CP	err
16		concrete ckg deck	Bsm hall
17		paper blanket for #16	Bsm hall
18		concrete ckg deck	Bsm Civil Defense
19		paper blanket for #18	" " "
20		white ckg deck	2 nd FL hall

Reported By: Lena D. Bura Date: 10-2-15

Due Date: 48-hr

Received By: Aubrey Date: 10/05/15

204

CHAIN OF CUSTODY

Universal Environmental Consultants
12 Brewster Road
Framingham, MA 01702
Tel: (508) 628-5486 - Fax: (508) 628-5488
adieb@uec-env.com

Town/City: Sharon, MA Building Name Sharon Town Hall

Sample	Result	Description of Material	Sample Location
21		white cty deck	2 nd FL s.w. by I.T.
22		2x4 SAT-I (pink)	Town Administrator
23		SAT-I	lobby paper closet
24		SAT-I	Payroll
25		SAT-II (hashmarks)	hall by I.T.
26		SAT-II	2 nd FL Landing (Veterans)
27		smooth hard CP	2 nd FL Jan closet
28		smooth hard CP	1 st FL bathrm
29		smooth hard WP	Computer rm
30		(Grey) Lino-I	Lobby s.w. Landing
31		adhesive #30	" " "
32		Lino-I	Lobby e. stairs
33		adh. #32	" " "
34		glazing for interior door window	3 rd SW Bsm't by Civil Defense
35		gl. for int. door window	Bsm't SW by Boiler rm
36		interior window glaze	SW by Veterans
37		int. window	SW by I.T.
38		(red square) Lino-II	side entrance hall
39		Lino-II	side entrance
40		Adhesive #38	" " "

Reported By: James R. Burr Date: 10-2-15

Due Date: _____

Received By: _____ Date: _____

CHAIN OF CUSTODY

Universal Environmental Consultants
12 Brewster Road
Framingham, MA 01702
Tel: (508) 628-5486 - Fax: (508) 628-5488
adieb@uec-env.com

Town/City: Sharon, MA Building Name: Sharon Town Hall

Sample	Result	Description of Material	Sample Location
41		adhesive #39	side entrance hall
42		9" vt	computer rm - 1st FL
43		MASTIC # 42	" " " "
44		9" vt	Bgmt cust rm
45		MASTIC # 44	" " "
46		MASTIC for 9" vt	2 nd FL hall by I.T.
47		MASTIC for 9" vt	Tax Collector's hall
48		MASTIC for 9" vt	2 nd FL Landing
49		12" tan w/ red streaks	1st FL lobby v.c.
50		MASTIC # 49	
51		12" tan w/ red streaks	
52		MASTIC # 51	
53		window frame caulk	Fire STA. side Exterior
54		win fr caulk	street side
55		Door fr caulk	Boiler rm
56		Door fr caulk	Boiler rm
57		grey grille caulk	
58		grey grille caulk	
59		assumed dp on foundation	side street side
60		assumed dp on foundation	" " "

Reported By: Amal B. Date: 10/2/15

Due Date: 48-hr

Received By: _____ Date: _____

CHAIN OF CUSTODY

Universal Environmental Consultants
12 Brewster Road
Framingham, MA 01702
Tel: (508) 628-5486 - Fax: (508) 628-5488
adieb@uec-env.com

Town/City: Sharon, MA Building Name Sharon Town Hall

[illegible]

Reported By: James W. Burns Date: 10/2/15

Due Date: 48-hr

Received By: _____ Date: _____



Sharon Town Hall
Option 1: Accessibility Addition
Sharon, MA

November 11, 2015

Conceptual Estimate

Architect:

Kaestle Boos
325 Foxborough Boulevard, Suite 100
Foxborough, MA 02035
(508) 549 9906

Cost Consultant:

Daedalus Projects, Inc.
112 South Street
Boston, MA 02111
(617) 451 2717

INTRODUCTION

Project Description:

- Construction of new addition to the existing Town Hall for accessibility
- Renovation to the existing Town Hall only at removed staircase
- An allowance has been carried for sitework

Project Particulars:

- Estimate is based off the following information:
 - Drawings received from KBA at their office on September 21, 2015
- Daedalus Projects, Inc. experience with similar projects of this nature.

Project Assumptions:

- Our costs assume that there will be at least three subcontractors submitting unrestricted bids in each sub-trade, and at least four General Contractors.
- Unit rates are based on current dollars.
- An escalation allowance to the start of construction has been included in the summary
- Subcontractor's markups have been included in each unit rate. Markups cover the cost of field overhead, home office overhead and subcontractor's profit.
- Design and Pricing Contingency markup is an allowance for unforeseen design issues, design detail development and specification clarifications.
- General Conditions and Requirements value covers Sub-Contractor's bond, site office overheads, and building permit applications.
- Fee markup is calculated on a percentage basis of direct construction costs. The value covers Contractor's bond, insurance and profit.
- Labor will be at prevailing wages.

MAIN SUMMARY

DESCRIPTION				TOTAL	COST/GSF
Town Hall Addition	10,715 GSF			\$1,098,718	\$102.54
Sitework				\$66,854	
	Total	10,715 GSF		\$1,165,572	\$108.78
Design Contingency	15.00%	\$1,165,572		\$174,836	\$16.32
Total Direct Cost				\$1,340,408	\$125.10
<u>Markup</u>					
General Conditions & Requirements	12 MTHS	\$40,000		\$480,000	\$44.80
Insurance	1.40%	\$1,820,408		\$25,486	\$2.38
Bond	0.85%	\$1,845,894		\$15,690	\$1.46
Permit	1.50%			Waived	
Fee	5.00%	\$1,861,584		\$93,079	\$8.69
Total Construction				\$1,954,663	\$182.42
Escalation to 4th Quarter 2016	5.42%	\$1,954,663		\$105,878	\$9.88
Total Construction				\$2,674,795	\$249.63

TOWN HALL BUILDING SUMMARY ADDITION (CSI FORMAT)

Sharon Town Hall
Option 1: Accessibility Addition
Sharon, MA
10,715 GSF

ELEMENT	COST	COST/SF
02-Existing Conditions	\$40,499	\$3.78
03-Concrete	\$57,944	\$5.41
04-Masonry	\$87,840	\$8.20
05-Metals	\$101,406	\$9.46
06-Woods & Plastics	\$16,248	\$1.52
07-Thermal & Moisture	\$55,682	\$5.20
08-Doors & Windows	\$154,175	\$14.39
09-Finishes	\$166,895	\$15.58
10-Specialties	\$6,905	\$0.64
11-Equipment		
12-Furnishings	\$6,995	\$0.65
14-Conveying System	\$110,000	\$10.27
21 00 00 - Fire Suppression	\$48,962	\$4.57
22 00 00 - Plumbing	\$25,750	\$2.40
23 00 00 - HVAC	\$91,395	\$8.53
26-Electrical	\$77,178	\$7.20
31-Earthwork	\$50,845	\$4.75
Subtotal Carried to Main Summary	\$1,098,718	\$102.54

BUILDING DETAIL ADDITION (CSI FORMAT)

ELEMENT	QUANTITY	UNIT	UNIT RATE	COST
02-Existing Conditions				
02 41 00 - Demolition				
Remove existing stair case	2	FLT	\$3,500.00	\$7,000
Demolish portion of existing exterior wall	405	SF	\$3.00	\$1,215
Sawcut existing exterior wall	186	LF	\$15.00	\$2,790
Scaffolding	720	SF	\$3.50	\$2,520
Demolish existing interior wall	672	SF	\$2.50	\$1,680
Sawcut for new door at existing	27	LOC	\$500.00	\$13,500
Ditto at pair doors	1	LOC	\$650.00	\$650
Miscellaneous interior demolition	768	SF	\$8.00	\$6,144
Allow for cutting and patching	1	AL	\$5,000.00	\$5,000
02 41 00 - Demolition Total				\$40,499
02-Existing Conditions Total				\$40,499
03-Concrete				
03 00 00 - Concrete				
<i>Concrete:</i>	90	<i>If</i>		
Strip footing	7	CY	\$125.00	\$875
Isolated footings	6	CY	\$125.00	\$750
Foundation/Basement walls	29	CY	\$125.00	\$3,625
Piers	1	CY	\$125.00	\$125
Slab on Grade	14	CY	\$130.00	\$1,820
Upper decks	11	CY	\$140.00	\$1,540
Place concrete	68	CY	\$85.00	\$5,780
<i>Reinforcing:</i>				
Strip footing	455	LBS	\$1.05	\$198
Isolated footings	900	LBS	\$1.05	\$945
Foundation/Basement walls	4,350	LBS	\$1.05	\$4,568
Piers	65	LBS	\$1.05	\$68
WWF for sog	855	SF	\$1.00	\$855
WWF for slab on deck	780	SF	\$1.00	\$780
<i>Formwork:</i>				
Strip footing	189	SF	\$10.00	\$1,890
Isolated footings	135	SF	\$12.00	\$1,620
Foundation/Basement walls	1,554	SF	\$9.00	\$13,986

BUILDING DETAIL ADDITION (CSI FORMAT)

ELEMENT		QUANTITY	UNIT	UNIT RATE	COST
48	Piers	43	SF	\$12.00	\$516
49	Cure screed and protect sog	855	SF	\$2.50	\$2,138
50	Cure screed and protect slab on deck	780	SF	\$2.50	\$1,950
51	<i>Miscellaneous:</i>				
52	Elevator pit	1	EA	\$5,000.00	\$5,000
53	Allow for concrete pads and bases	1	LS	\$3,000.00	\$3,000
54	Perimeter drainage	90	LF	\$15.00	\$1,350
55	Vapor barrier for slab on grade	855	SF	\$0.50	\$428
56	Rigid insulation to slab on grade	855	SF	\$2.50	\$2,138
57	General concrete requirements	1	AL	\$2,000.00	\$2,000
58	(Note: earthwork included in the sitework allowance)				
59	03 00 00 - Concrete Total				\$57,944
60					
61	03-Concrete Total				\$57,944
62					
63					
64	04-Masonry				
65					
66	04 20 00 - Unit Masonry				
67	Exterior brick to exterior	2,745	SF	\$32.00	\$87,840
68	Allow for brick detail to exterior				
69	04 20 00 - Unit Masonry Total				\$87,840
70					
71	04-Masonry Total				\$87,840
72					
73					
74	05-Metals				
75					
76	05 12 00 Structural Steel				
77	Structural steel	12	TNS	\$5,000.00	\$61,313
78	Allow for brick detail to exterior				
79	05 12 00 Structural Steel Total				\$61,313
80					
81	05 50 00 - Metal Fabrications				
82	Elevator pit and sills	1	SET	\$2,800.00	\$2,800
83	Elevator ladder	1	SET	\$1,200.00	\$1,200
84	Stairs	2	FLT	\$15,000.00	\$30,000
85	Other misc metals	2,031	SF	\$3.00	\$6,093
86	05 50 00 - Metal Fabrications Total				\$40,093

BUILDING DETAIL ADDITION (CSI FORMAT)

ELEMENT	QUANTITY	UNIT	UNIT RATE	COST
87				
88 05-Metals Total				\$101,406
89				
90				
91				
92 06-Woods & Plastics				
93				
94 06 10 00 - Rough Carpentry				
95 Allowance for rough carpentry and blocking internally	2,031	SF	\$3.00	\$6,093
96 06 10 00 - Rough Carpentry Total				\$6,093
97				
98 06 20 00 - Finish Carpentry				
99 Miscellaneous finish carpentry	2,031	SF	\$5.00	\$10,155
100 06 20 00 - Finish Carpentry Total				\$10,155
101				
102 06-Woods & Plastics Total				\$16,248
103				
104				
105 07-Thermal & Moisture				
106				
107 07 12 00 - Built-Up Bituminous Waterproofing				
108 Dampproofing to foundation walls	777	SF	\$3.50	\$2,720
109 Waterproofing to elevator pit	1	EA	\$2,500.00	\$2,500
110 07 12 00 - Built-Up Bituminous Waterproofing Total				\$5,220
111				
112 07 20 00 - Thermal Protection				
113 Exterior rigid insulation on addition	2,745	SF	\$2.35	\$6,451
114 07 20 00 - Thermal Protection Total				\$6,451
115				
116 07 27 00 - Air Barrier				
117 Air / vapor barrier to walls	2,745	SF	\$6.50	\$17,843
118 07 27 00 - Air Barrier Total				\$17,843
119				
120 07 40 00 - Roofing and Siding Panels				
121 Sarnafil roof; complete	855	SF	\$16.50	\$14,108
122 07 40 00 - Roofing and Siding Panels Total				\$14,108
123				
124 07 62 00 - Sheet Metal Flashing and Trim				
125 Metal flashings	1	AL	\$5,000.00	\$5,000

BUILDING DETAIL ADDITION (CSI FORMAT)

ELEMENT	QUANTITY	UNIT	UNIT RATE	COST
126 07 62 00 - Sheet Metal Flashing and Trim Total				\$5,000
127				
128 07 72 00 - Roof Accessories				
129 Misc. roof accessories	1	LS	\$3,000.00	\$3,000
130 07 72 00 - Roof Accessories Total				\$3,000
131				
132 07 84 00 - Firestopping				
133 Firestopping measures - based on floor area	2,031	GSF	\$0.50	\$1,016
134 07 84 00 - Firestopping Total				\$1,016
135				
136 07 92 00 - Joint Sealants				
137 Caulking and sealing - based on floor area	2,031	GSF	\$1.50	\$3,047
138 07 92 00 - Joint Sealants Total				\$3,047
139				
140 07-Thermal & Moisture Total				\$55,682
141				
142				
143 08-Doors & Windows				
144				
145 08 10 00 - Doors and Frames				
146 Door frames	9	EA	\$250.00	\$2,250
147 Door frames in renovated areas	27	EA	\$250.00	\$6,750
148 Ditto; pair	1	EA	\$300.00	\$300
149 Doors	9	EA	\$300.00	\$2,700
150 New doors and existing space	27	EA	\$300.00	\$8,100
151 Ditto; pair	1	PR	\$600.00	\$600
152 Exterior egress doors; complete	1	EA	\$1,500.00	\$1,500
153 08 10 00 - Doors and Frames Total				\$22,200
154				
155 08 31 00 - Access Doors and Panels				
156 Allow for access doors to MEP installation	2	EA	\$300.00	\$600
157 08 31 00 - Access Doors and Panels Total				\$600
158				
159 08 40 00 - Entrances, Storefront and Curtainwall				
160 Interior vestibule doors	1	PR	\$7,000.00	\$7,000
161 Exterior vestibule doors	1	PR	\$7,000.00	\$7,000
162 Exterior storefront	360	SF	\$95.00	\$34,200
163 Interior storefront	140	SF	\$80.00	\$11,200
164 08 40 00 - Entrances, Storefront and Curtainwall Total				\$59,400

BUILDING DETAIL ADDITION (CSI FORMAT)

ELEMENT	QUANTITY	UNIT	UNIT RATE	COST
165				
166 08 50 00 - Windows				
167 Windows	549	SF	\$75.00	\$41,175
168 08 50 00 - Windows Total				\$41,175
169				
170 08 70 00 - Door Hardware				
171 Door hardware	38	EA	\$650.00	\$24,700
172 Automatic door openers		EA	\$2,500.00	NIC
173 08 70 00 - Door Hardware Total				\$24,700
174				
175 08 80 00 - Glazing				
176 Interior glazing	72	SF	\$50.00	\$3,600
177 08 80 00 - Glazing Total				\$3,600
178				
179 08 91 00 - Louvers				
180 Architectural louvers	50	SF	\$50.00	\$2,500
181 08 91 00 - Louvers Total				\$2,500
182				
183 08-Doors & Windows Total				\$154,175
184				
185				
186 09-Finishes				
187				
188 09 21 16 - Gypsum Wallboard				
189 Light gage metal framing with Gypsum sheathing	2,745	SF	\$11.00	\$30,195
190 Drywall to interior of exterior	2,745	SF	\$3.25	\$8,921
191 Partitions	1,610	SF	\$7.50	\$12,075
192 Chase walls	112	SF	\$12.00	\$1,344
193 Elevator walls	1,512	SF	\$13.50	\$20,412
194 Backerboard	576	SF	\$3.00	\$1,728
195 Ceiling; allowance (assume 65% GWB & 35% ACT)	2,031	SF	\$7.00	\$14,207
196 Allow for drywall soffits and new ceiling due to FP	9,080	SF	\$2.00	\$18,160
197 GWB Ceiling at bathroom	134	SF	\$9.00	\$1,208
198 09 21 16 - Gypsum Wallboard Total				\$108,250
199				
200 09 30 00 - Tile				
201 Ceramic tile floors	134	SF	\$18.00	\$2,416
202 Ceramic Wall tile at bathroom	576	SF	\$18.00	\$10,368
203 Ceramic tile Base	64	LF	\$13.00	\$832
204 Marble thresholds	2	EA	\$150.00	\$300

BUILDING DETAIL ADDITION (CSI FORMAT)

ELEMENT	QUANTITY	UNIT	UNIT RATE	COST
205 09 30 00 - Tile Total				\$13,916
206				
207 09 51 00 - ACT Ceilings				
208 ACT Included with GWB ceilings				
209 09 51 00 - ACT Ceilings Total				
210				
211 09 65 00 - Flooring				
212 Flooring	1,637	SF	\$6.00	\$9,821
213 Rubber treads and risers	220	LFR	\$15.50	\$3,410
214 Rubber flooring	40	SF	\$6.50	\$260
215 09 65 00 - Flooring Total				\$13,491
216				
217 09 90 00 - Painting				
218 Paint GWB walls	7,701	SF	\$0.75	\$5,776
219 Paint GWB ceilings	1,454	SF	\$1.00	\$1,454
220 Paint doors	9	EA	\$60.00	\$540
221 Paint frames	9	EA	\$40.00	\$360
222 Miscellaneous painting	1,635	SF	\$0.25	\$409
223 Miscellaneous painting at existing space	9,080	SF	\$2.50	\$22,700
224 09 90 00 - Painting Total				\$31,239
225				
226 09-Finishes Total				\$166,895
227				
228				
229 10-Specialties				
230				
231 10 11 00 - Visual Display Surfaces				
232 Allow for visual display surfaces	1	AL	\$1,500.00	\$1,500
233 10 11 00 - Visual Display Surfaces Total				\$1,500
234				
235 10 14 00 - Signage				
236 Interior building signage	1,635	SF	\$1.00	\$1,635
237 10 14 00 - Signage Total				\$1,635
238				
239 10 28 00 - Toilet Accessories				
240 Sanitary napkin dispenser, recessed mounted	1	EA	\$350.00	\$350
241 Sanitary napkin disposal, recessed mounted	1	EA	\$75.00	\$75
242 Toilet tissue dispenser	2	EA	\$150.00	\$300
243 Standard mirror	2	EA	\$150.00	\$300

BUILDING DETAIL ADDITION (CSI FORMAT)

ELEMENT	QUANTITY	UNIT	UNIT RATE	COST
244 Soap dispenser	2	EA	\$35.00	\$70
245 Grab bars	4	EA	\$150.00	\$600
246 Robe hook	2	EA	\$25.00	\$50
247 Utility shelf/ mop & broom holders	1	EA	\$150.00	\$150
248 Install	15	EA	\$35.00	\$525
249 10 28 00 - Toilet Accessories Total				\$2,420
250				
251 10 44 13 - Fire Extinguisher Cabinets				
252 Allow recessed fire extinguishers and cabinets	3	EA	\$450.00	\$1,350
253 10 44 13 - Fire Extinguisher Cabinets Total				\$1,350
254				
255 10-Specialties Total				\$6,905
256				
257				
258 11-Equipment				
259				
260 11 52 00 - Audio-Visual Equipment				
261 Projection screen		EA	\$5,000.00	NIC
262 11 52 00 - Audio-Visual Equipment Total				
263				
264 11-Equipment Total				
265				
266				
267 12-Furnishings				
268				
269 12 20 00 - Window Treatment				
270 Window treatment	909	SF	\$5.00	\$4,545
271 12 20 00 - Window Treatment Total				\$4,545
272				
273 12 48 13 - Entrance Mats				
274 Entrance mat	70	SF	\$35.00	\$2,450
275 12 48 13 - Entrance Mats Total				\$2,450
276				
277 12-Furnishings Total				\$6,995
278				
279				
280 14-Conveying System				
281				
282 14 20 00 - Elevators				

BUILDING DETAIL ADDITION (CSI FORMAT)

ELEMENT	QUANTITY	UNIT	UNIT RATE	COST
283 Elevator	1	EA	\$110,000.00	\$110,000
284 14 20 00 - Elevators Total				\$110,000
285				
286 14-Conveying System Total				\$110,000
287				
288				
289 21,22,23-Mechanical				
290				
291 21 00 00 - Fire Suppression				
292 Sprinkler Coverage	9,080	SF	\$4.35	\$39,498
293 Sprinkler Coverage within new	1,635	SF	\$3.25	\$5,314
294 Seismic Restraints	1	LS	\$1,500.00	\$1,500
295 Permits & Fees	1	LS	\$1,000.00	\$1,000
296 Testing	1	LS	\$900.00	\$900
297 Drawings & Calculations	1	LS	\$750.00	\$750
298 21 00 00 - Fire Suppression Total				\$48,962
299				
300 22 00 00 - Plumbing				
301 Water Heater	1	EA	\$5,000.00	\$5,000
302 Elevator Sump Pump	1	EA	\$2,500.00	\$2,500
303 Fixtures				
304 Water Closet	2	EA	\$3,800.00	\$7,600
305 Lavatory	2	EA	\$3,800.00	\$7,600
306 Coring & Cutting	1	LS	\$600.00	\$600
307 Test and balance	1	LS	\$700.00	\$700
308 Permits & Fees	1	LS	\$1,000.00	\$1,000
309 Shop drawings	1	LS	\$750.00	\$750
310 22 00 00 - Plumbing Total				\$25,750
311				
312 23 00 00 - HVAC				
313 Allow for HVAC	2,031	LS	\$45.00	\$91,395
314 23 00 00 - HVAC Total				\$91,395
315				
316 21,22,23-Mechanical Total				\$166,107
317				
318				
319 26-Electrical				
320				
321 26 00 00 - Electrical				

BUILDING DETAIL ADDITION (CSI FORMAT)

ELEMENT	QUANTITY	UNIT	UNIT RATE	COST
322 Electrical	2,031	SF	\$38.00	\$77,178
323 26 00 00 - Electrical Total				\$77,178
324				
325 26-Electrical Total				\$77,178
326				
327				
328 31-Earthwork				
329				
330 31 48 00 Underpinning				
331 Excavation	792	CY	\$15.00	\$11,880
332 Trench excavation	45	CY	\$22.00	\$990
333 Elevator pit excavation	1	EA	\$10,000.00	\$10,000
334 Backfill	430	CY	\$9.00	\$3,870
335 Disposal	407	CY	\$15.00	\$6,105
336 Underpinning	9	CY	\$2,000.00	\$18,000
337 31 48 00 Underpinning Total				\$50,845
338				
339 31-Earthwork Total				\$50,845
340				
341				

TOWN HALL SITEWORK (CSI FORMAT)

Sharon Town Hall
Option 1: Accessibility Addition
Sharon, MA

ELEMENT	QUANTITY	UNIT	UNIT RATE	COST
02 41 00 Demolition				\$6,042
31 10 00 Site Clearing				\$17,616
31 20 00 Earth Moving				\$4,662
31 25 00 Erosion and Sedimentation Controls				\$2,340
32 00 00 Paving				\$11,755
32 30 00 Site Improvements				\$7,364
32 90 00 Plants				\$2,075
33 10 00 Water Distribution				\$0
33 30 00 Sanitary Sewerage				\$0
33 40 00 Storm Drainage				\$0
33 70 00 Electrical Utilities				\$15,000
Subtotal: carried to Main Summary				\$66,854

TOWN HALL SITEWORK (CSI FORMAT)

Option 1: Accessibility Addition

Sharon, MA

ELEMENT	QUANTITY	UNIT	UNIT RATE	COST
02-BUILDING SITEWORK				
02 41 00 Demolition				
Saw cut existing pavement allowance	9	LF	\$10.00	\$90
R & D existing sidewalk allowance	878	SF	\$2.00	\$1,756
Remove existing pavement marking	1,830	SF	\$1.20	\$2,196
Trees protection	2	EA	\$250.00	\$500
Misc. demolition other than above	1	LS	\$1,500.00	\$1,500
02 41 00 DemolitionTotal				\$6,042
31-EARTHWORK				
31 10 00 Site Clearing				
Site clearing allowance	1	LS	\$1,500.00	\$1,500
Construction fence, install & maintain allowance	468	LF	\$12.00	\$5,616
Double construction gate allowance	1	EA	\$2,500.00	\$2,500
Temporary construction entrance	1	AL	\$6,500.00	\$6,500
Temp signs	1	LS	\$1,500.00	\$1,500
31 10 00 Site ClearingTotal				\$17,616
31 20 00 Earth Moving				
Building pad excavation and fill				See Building
Remove & stockpile topsoil	1	LS	\$300.00	\$300
Fine grade	1,370	SF	\$0.50	\$685
Cuts and fills - site grade	29	CY	\$8.00	\$233
Cuts and fills of concrete pavement	53	CY	\$9.00	\$476
Gravel base to parking lot & sidewalk	30	CY	\$30.00	\$900
Export soil	115	CY	\$18.00	\$2,068
31 20 00 Earth Moving Total				\$4,662
31 25 00 Erosion and Sedimentation Controls				
Hay bales and silt fence allowance	234	LF	\$10.00	\$2,340
31 25 00 Erosion and Sedimentation Controls Total				\$2,340
32-EXTERIOR IMPROVEMENTS				
32 00 00 Paving				
32 13 13 Concrete Paving				
Concrete sidewalk	1,137	SF	\$6.00	\$6,822
Flush handicap accessible entrance	25	SF	\$8.00	\$200

TOWN HALL SITEWORK (CSI FORMAT)

Sharon Town Hall
Option 1: Accessibility Addition
Sharon, MA

ELEMENT	QUANTITY	UNIT	UNIT RATE	COST
68 Curb cut	4	EA	\$350.00	\$1,400
69 Concrete ramp with Detectable waring strips	208	SF	\$12.00	\$2,496
70 32 17 23 Pavement Markings				
71 Pavement marking	86	SF	\$2.00	\$172
72 Parking stall painting	4	EA	\$35.00	\$140
73 Parking stall painting; HC	3	EA	\$75.00	\$225
74 Misc. marking	1	LS	\$300.00	\$300
75 32 00 00 Paving Total				\$11,755
76				
77 32 30 00 Site Improvements				
78 Concrete landing	32	SF	\$12.00	\$384
79 Concrete steps per riser	24	LFR	\$75.00	\$1,800
80 Handrail	14	LF	\$120.00	\$1,680
81 Allow for benches	1	LS		NIC
82 Allow for Trash / Recycle receptacles	1	EA		NIC
83 Misc. site improvement other than above	1	LS	\$3,500.00	\$3,500
84 32 30 00 Site Improvements Total				\$7,364
85				
86 32 90 00 Plants				
87 32 92 10 Soil Preparation for Lawn Establishment				
88 Respread stockpiled topsoil	1	LS	\$300.00	\$300
89 Imported topsoil for new lawn	1	LS	\$200.00	\$200
90 32 92 20 Turf and Grasses				
91 Lawn	1,575	SF	\$1.00	\$1,575
92 32 90 00 Plants Total				\$2,075
93				
94				
95 33-UTILITIES				
96				
97 33 10 00 Water Distribution				
98 No work shown in this section				\$0
99 33 10 00 Water Distribution Total				\$0
100				
101 33 30 00 Sanitary Sewerage				
102 No work shown in this section				\$0
103 33 30 00 Sanitary Sewerage Total				\$0
104				
105 33 40 00 Storm Drainage				
106 No work shown in this section				\$0
107 33 40 00 Storm Drainage Total				\$0
108				
109				
110				

TOWN HALL SITEWORK (CSI FORMAT)

Sharon Town Hall
Option 1: Accessibility Addition
Sharon, MA

ELEMENT	QUANTITY	UNIT	UNIT RATE	COST
111 33 70 00 Electrical Utilities				
112 Site electrical; allow	1	AL	\$15,000.00	\$15,000
113 33 70 00 Electrical Utilities Total				\$15,000



Sharon Town Hall
Option 2: Renovation and Addition
Sharon, MA

November 11, 2015

Conceptual Estimate

Architect:

Kaestle Boos
325 Foxborough Boulevard, Suite 100
Foxborough, MA 02035
(508) 549 9906

Cost Consultant:

Daedalus Projects, Inc.
112 South Street
Boston, MA 02111
(617) 451 2717

INTRODUCTION

Project Description:

- Construction of a new addition and renovation to the existing Town Hall

Project Particulars:

- Estimate is based off the following information:
 - Drawings received from KBA at their office on September 21, 2015
- Daedalus Projects, Inc. experience with similar projects of this nature.

Project Assumptions:

- Our costs assume that there will be at least three subcontractors submitting unrestricted bids in each sub-trade, and at least four General Contractors.
- Unit rates are based on current dollars.
- An escalation allowance to the start of construction has been included in the summary
- Subcontractor's markups have been included in each unit rate. Markups cover the cost of field overhead, home office overhead and subcontractor's profit.
- Design and Pricing Contingency markup is an allowance for unforeseen design issues, design detail development and specification clarifications.
- General Conditions and Requirements value covers Sub-Contractor's bond, site office overheads, and building permit applications.
- Fee markup is calculated on a percentage basis of direct construction costs. The value covers Contractor's bond, insurance and profit.
- Labor will be at prevailing wages.

MAIN SUMMARY

DESCRIPTION			TOTAL	COST/GSF
Town Hall Addition and Renovation	13,638 GSF		\$3,298,493	\$241.86
Sitework			\$163,853	
	Total	13,638 GSF	\$3,462,346	\$253.87
Design Contingency	15.00%	\$3,462,346	\$519,352	\$38.08
Total Direct Cost			\$3,981,698	\$291.96
<u>Markup</u>				
General Conditions & Requirements	8.50%	\$3,981,698	\$338,444	\$24.82
Insurance	1.40%	\$4,320,142	\$60,482	\$4.43
Bond	0.85%	\$4,380,624	\$37,235	\$2.73
Permit	1.50%		Waived	
Fee	5.00%	\$4,417,860	\$220,893	\$16.20
Total Construction			\$4,638,752	\$340.13
Escalation to 4th Quarter 2016	5.42%	\$4,638,752	\$251,266	\$18.42
Total Construction			\$4,890,018	\$358.56

TOWN HALL BUILDING SUMMARY ADDITION (CSI FORMAT)

13,638 GSF

ELEMENT	COST	COST/SF
02-Existing Conditions	\$66,296	\$4.86
03-Concrete	\$152,350	\$11.17
04-Masonry	\$203,392	\$14.91
05-Metals	\$257,629	\$18.89
06-Woods & Plastics	\$245,484	\$18.00
07-Thermal & Moisture	\$204,042	\$14.96
08-Doors & Windows	\$241,940	\$17.74
09-Finishes	\$561,265	\$41.15
10-Specialties	\$31,178	\$2.29
11-Equipment		
12-Furnishings	\$12,741	\$0.93
14-Conveying System	\$110,000	\$8.07
21 00 00 - Fire Suppression	\$55,527	\$4.07
22 00 00 - Plumbing	\$43,100	\$3.16
23 00 00 - HVAC	\$518,244	\$38.00
26-Electrical	\$490,968	\$36.00
31-Earthwork	\$104,337	\$7.65
Subtotal Carried to Main Summary	\$3,298,493	\$241.86

BUILDING DETAIL ADDITION (CSI FORMAT)

ELEMENT	QUANTITY	UNIT	UNIT RATE	COST
9 02-Existing Conditions				
10				
11 02 41 00 - Demolition				
12 Interior demolition of existing	6,412	SF	\$8.00	\$51,296
13 Allow for cutting and patching Hazardous abatement	1	AL	\$15,000.00	\$15,000 NIC
15 02 41 00 - Demolition Total				\$66,296
16				
17 02-Existing Conditions Total				\$66,296
18				
19				
20 03-Concrete				
21				
22 03 00 00 - Concrete				
23 <i>Concrete:</i>	227	<i>lf</i>		
24 Strip footing	18	CY	\$125.00	\$2,250
25 Isolated footings	18	CY	\$125.00	\$2,250
26 Foundation/Basement walls	106	CY	\$125.00	\$13,250
27 Piers	2	CY	\$125.00	\$250
28 Slab on Grade	47	CY	\$130.00	\$6,110
29 Upper decks	60	CY	\$140.00	\$8,400
30 Place concrete	251	CY	\$85.00	\$21,335
31 <i>Reinforcing:</i>				
32 Strip footing	1,170	LBS	\$1.05	\$501
33 Isolated footings	2,700	LBS	\$1.05	\$2,835
34 Foundation/Basement walls	15,900	LBS	\$1.05	\$16,695
35 Piers	130	LBS	\$1.05	\$137
36 WWF for sog	2,850	SF	\$1.00	\$2,850
37 WWF for slab on deck	4,376	SF	\$1.00	\$4,376
38 <i>Formwork:</i>				
39 Strip footing	477	SF	\$10.00	\$4,770
40 Isolated footings	384	SF	\$12.00	\$4,608
41 Foundation/Basement walls	1,554	SF	\$9.00	\$13,986
42 Piers	144	SF	\$12.00	\$1,728
43 Cure screed and protect sog	2,850	SF	\$2.50	\$7,125
44 Cure screed and protect slab on deck	4,376	SF	\$2.50	\$10,940
45 <i>Miscellaneous:</i>				
46 Elevator pit	1	EA	\$5,000.00	\$5,000
47 Allow for concrete pads and bases	1	LS	\$3,000.00	\$3,000

BUILDING DETAIL ADDITION (CSI FORMAT)

ELEMENT		QUANTITY	UNIT	UNIT RATE	COST
48	Perimeter drainage	227	LF	\$15.00	\$3,405
49	Vapor barrier for slab on grade	2,850	SF	\$0.50	\$1,425
50	Rigid insulation to slab on grade	2,850	SF	\$2.50	\$7,125
51	General concrete requirements	1	AL	\$8,000.00	\$8,000
52	(Note: earthwork included in the sitework allowance)				
53	03 00 00 - Concrete Total				\$152,350
54					
55	03-Concrete Total				\$152,350
56					
57					
58	04-Masonry				
59					
60	04 20 00 - Unit Masonry				
61	Exterior brick to exterior	6,356	SF	\$32.00	\$203,392
62	Allow for brick detail to exterior				
63	04 20 00 - Unit Masonry Total				\$203,392
64					
65	04-Masonry Total				\$203,392
66					
67					
68	05-Metals				
69					
70	05 12 00 Structural Steel				
71	Structural steel	54	TNS	\$3,600.00	\$195,102
72	Allow for brick detail to exterior				
73	05 12 00 Structural Steel Total				\$195,102
74					
75	05 50 00 - Metal Fabrications				
76	Elevator pit and sills	1	SET	\$2,800.00	\$2,800
77	Elevator ladder	1	SET	\$1,200.00	\$1,200
78	Add railings to existing stairs	4	FLT	\$3,500.00	\$14,000
79	Other misc metals	7,226	SF	\$3.50	\$25,291
80	Miscellaneous metals to existing	6,412	SF	\$3.00	\$19,236
81	05 50 00 - Metal Fabrications Total				\$62,527
82					
83	05-Metals Total				\$257,629
84					
85					
86					

BUILDING DETAIL ADDITION (CSI FORMAT)

ELEMENT	QUANTITY	UNIT	UNIT RATE	COST
87 06-Woods & Plastics				
88				
89 06 10 00 - Rough Carpentry				
90 Allowance for rough carpentry and blocking internally	13,638	SF	\$3.00	\$40,914
91 06 10 00 - Rough Carpentry Total				\$40,914
92				
93 06 20 00 - Finish Carpentry				
94 Miscellaneous finish carpentry	13,638	SF	\$15.00	\$204,570
95 06 20 00 - Finish Carpentry Total				\$204,570
96				
97 06-Woods & Plastics Total				\$245,484
98				
99				
100 07-Thermal & Moisture				
101				
102 07 12 00 - Built-Up Bituminous Waterproofing				
103 Dampproofing to foundation walls	777	SF	\$3.50	\$2,720
104 Waterproofing to elevator pit	1	EA	\$2,500.00	\$2,500
105 07 12 00 - Built-Up Bituminous Waterproofing Total				\$5,220
106				
107 07 20 00 - Thermal Protection				
108 Exterior rigid insulation on addition	6,356	SF	\$2.35	\$14,937
109 07 20 00 - Thermal Protection Total				\$14,937
110				
111 07 27 00 - Air Barrier				
112 Air / vapor barrier to walls	6,356	SF	\$6.50	\$41,314
113 07 27 00 - Air Barrier Total				\$41,314
114				
115 07 40 00 - Roofing and Siding Panels				
116 Sarnafil roof; complete	5,624	SF	\$16.50	\$92,796
117 07 40 00 - Roofing and Siding Panels Total				\$92,796
118				
119 07 62 00 - Sheet Metal Flashing and Trim				
120 Metal flashings	1	AL	\$15,000.00	\$15,000
121 07 62 00 - Sheet Metal Flashing and Trim Total				\$15,000
122				
123 07 72 00 - Roof Accessories				
124 Misc. roof accessories	1	LS	\$7,500.00	\$7,500
125 07 72 00 - Roof Accessories Total				\$7,500

BUILDING DETAIL ADDITION (CSI FORMAT)

ELEMENT	QUANTITY	UNIT	UNIT RATE	COST
126				
127 07 84 00 - Firestopping				
128 Firestopping measures - based on floor area	13,638	GSF	\$0.50	\$6,819
129 07 84 00 - Firestopping Total				\$6,819
130				
131 07 92 00 - Joint Sealants				
132 Caulking and sealing - based on floor area	13,638	GSF	\$1.50	\$20,457
133 07 92 00 - Joint Sealants Total				\$20,457
134				
135 07-Thermal & Moisture Total				\$204,042
136				
137				
138 08-Doors & Windows				
139				
140 08 10 00 - Doors and Frames				
141 Door frames	42	EA	\$250.00	\$10,500
142 Ditto; pair	1	EA	\$300.00	\$300
143 Doors	42	EA	\$300.00	\$12,600
144 Ditto; pair	1	PR	\$600.00	\$600
145 Exterior egress doors; complete	1	EA	\$1,500.00	\$1,500
146 08 10 00 - Doors and Frames Total				\$25,500
147				
148 08 31 00 - Access Doors and Panels				
149 Allow for access doors to MEP installation	1	LS	\$2,500.00	\$2,500
150 08 31 00 - Access Doors and Panels Total				\$2,500
151				
152 08 40 00 - Entrances, Storefront and Curtainwall				
153 Interior vestibule doors	1	PR	\$7,000.00	\$7,000
154 Exterior vestibule doors	1	PR	\$7,000.00	\$7,000
155 Exterior storefront	360	SF	\$95.00	\$34,200
156 Interior storefront	210	SF	\$80.00	\$16,800
157 08 40 00 - Entrances, Storefront and Curtainwall Total				\$65,000
158				
159 08 50 00 - Windows				
160 Windows	1,271	SF	\$75.00	\$95,340
161 08 50 00 - Windows Total				\$95,340
162				
163 08 70 00 - Door Hardware				
164 Door hardware	44	EA	\$650.00	\$28,600

BUILDING DETAIL ADDITION (CSI FORMAT)

ELEMENT	QUANTITY	UNIT	UNIT RATE	COST
165 Automatic door openers	2	EA	\$2,500.00	\$5,000
166 08 70 00 - Door Hardware Total				\$33,600
167				
168 08 80 00 - Glazing				
169 Interior glazing	1	LS	\$15,000.00	\$15,000
170 08 80 00 - Glazing Total				\$15,000
171				
172 08 91 00 - Louvers				
173 Architectural louvers	100	SF	\$50.00	\$5,000
174 08 91 00 - Louvers Total				\$5,000
175				
176 08-Doors & Windows Total				\$241,940
177				
178				
179 09-Finishes				
180				
181 09 21 16 - Gypsum Wallboard				
182 Light gage metal framing with Gypsum sheathing	6,356	SF	\$11.00	\$69,916
183 Drywall to interior of exterior	6,356	SF	\$3.25	\$20,657
184 Partitions	8,762	SF	\$7.50	\$65,715
185 Chase walls	360	SF	\$12.00	\$4,320
186 Elevator walls	1,512	SF	\$13.50	\$20,412
187 Backerboard	1,188	SF	\$3.00	\$3,564
188 Ceiling; allowance (assume 65% GWB & 35% ACT)	14,034	SF	\$7.00	\$98,168
189 Allow for drywall soffits and new ceiling due to FP	6,412	SF	\$2.00	\$12,824
190 09 21 16 - Gypsum Wallboard Total				\$295,576
191				
192 09 30 00 - Tile				
193 Ceramic tile floors	312	SF	\$18.00	\$5,616
194 Ceramic Wall tile at bathroom	1,188	SF	\$18.00	\$21,384
195 Ceramic tile Base	132	LF	\$13.00	\$1,716
196 Marble thresholds	4	EA	\$150.00	\$600
197 09 30 00 - Tile Total				\$29,316
198				
199 09 51 00 - ACT Ceilings				
200 ACT Included with GWB ceilings				
201 09 51 00 - ACT Ceilings Total				
202				
203 09 65 00 - Flooring				
204 Flooring	12,956	SF	\$12.00	\$155,473

BUILDING DETAIL ADDITION (CSI FORMAT)

ELEMENT	QUANTITY	UNIT	UNIT RATE	COST
205 Rubber treads and risers	440	LFR	\$15.50	\$6,820
206 Rubber flooring	40	SF	\$6.50	\$260
207 09 65 00 - Flooring Total				\$162,553
208				
209 09 90 00 - Painting				
210 Paint GWB walls	26,112	SF	\$0.75	\$19,584
211 Paint GWB ceilings	9,122	SF	\$1.00	\$9,122
212 Paint doors	42	EA	\$60.00	\$2,520
213 Paint frames	42	EA	\$40.00	\$1,680
214 Miscellaneous painting at existing space	13,638	SF	\$3.00	\$40,914
215 09 90 00 - Painting Total				\$73,820
216				
217 09-Finishes Total				\$561,265
218				
219				
220 10-Specialties				
221				
222 10 11 00 - Visual Display Surfaces				
223 Allow for visual display surfaces	1	AL	\$10,000.00	\$10,000
224 10 11 00 - Visual Display Surfaces Total				\$10,000
225				
226 10 14 00 - Signage				
227 Interior building signage	13,638	SF	\$1.00	\$13,638
228 10 14 00 - Signage Total				\$13,638
229				
230 10 28 00 - Toilet Accessories				
231 Sanitary napkin dispenser, recessed mounted	2	EA	\$350.00	\$700
232 Sanitary napkin disposal, recessed mounted	2	EA	\$75.00	\$150
233 Toilet tissue dispenser	4	EA	\$150.00	\$600
234 Standard mirror	4	EA	\$150.00	\$600
235 Soap dispenser	4	EA	\$35.00	\$140
236 Grab bars	8	EA	\$150.00	\$1,200
237 Robe hook	4	EA	\$25.00	\$100
238 Utility shelf/ mop & broom holders	2	EA	\$150.00	\$300
239 Install	30	EA	\$35.00	\$1,050
240 10 28 00 - Toilet Accessories Total				\$4,840
241				
242 10 44 13 - Fire Extinguisher Cabinets				
243 Allow recessed fire extinguishers and cabinets	6	EA	\$450.00	\$2,700

BUILDING DETAIL ADDITION (CSI FORMAT)

ELEMENT	QUANTITY	UNIT	UNIT RATE	COST
244 10 44 13 - Fire Extinguisher Cabinets Total				\$2,700
245				
246 10-Specialties Total				\$31,178
247				
248				
249 11-Equipment				
250				
251 11 52 00 - Audio-Visual Equipment				
252 Projection screen		EA	\$5,000.00	NIC
253 11 52 00 - Audio-Visual Equipment Total				
254				
255 11-Equipment Total				
256				
257				
258 12-Furnishings				
259				
260 12 20 00 - Window Treatment				
261 Window treatment	1,631	SF	\$5.00	\$8,156
262 12 20 00 - Window Treatment Total				\$8,156
263				
264 12 48 13 - Entrance Mats				
265 Entrance mat	131	SF	\$35.00	\$4,585
266 12 48 13 - Entrance Mats Total				\$4,585
267				
268 12-Furnishings Total				\$12,741
269				
270				
271 14-Conveying System				
272				
273 14 20 00 - Elevators				
274 Elevator	1	EA	\$110,000.00	\$110,000
275 14 20 00 - Elevators Total				\$110,000
276				
277 14-Conveying System Total				\$110,000
278				
279				
280 21,22,23-Mechanical				
281				
282 21 00 00 - Fire Suppression				

BUILDING DETAIL ADDITION (CSI FORMAT)

ELEMENT	QUANTITY	UNIT	UNIT RATE	COST
283 Sprinkler Coverage	6,412	SF	\$4.35	\$27,892
284 Sprinkler Coverage within new	7,226	SF	\$3.25	\$23,485
285 Seismic Restraints	1	LS	\$1,500.00	\$1,500
286 Permits & Fees	1	LS	\$1,000.00	\$1,000
287 Testing	1	LS	\$900.00	\$900
288 Drawings & Calculations	1	LS	\$750.00	\$750
289 21 00 00 - Fire Suppression Total				\$55,527
290				
291 22 00 00 - Plumbing				
292 Water Heater	1	EA	\$5,000.00	\$5,000
293 Elevator Sump Pump	1	EA	\$2,500.00	\$2,500
294 Fixtures				
295 Water Closet	4	EA	\$3,800.00	\$15,200
296 Lavatory	4	EA	\$3,800.00	\$15,200
297 Coring & Cutting	1	LS	\$1,500.00	\$1,500
298 Test and balance	1	LS	\$1,000.00	\$1,000
299 Permits & Fees	1	LS	\$1,500.00	\$1,500
300 Shop drawings	1	LS	\$1,200.00	\$1,200
301 22 00 00 - Plumbing Total				\$43,100
302				
303 23 00 00 - HVAC				
304 Allow for HVAC	13,638	LS	\$38.00	\$518,244
305 23 00 00 - HVAC Total				\$518,244
306				
307 21,22,23-Mechanical Total				\$616,871
308				
309				
310 26-Electrical				
311				
312 26 00 00 - Electrical				
313 Electrical	13,638	SF	\$36.00	\$490,968
314 26 00 00 - Electrical Total				\$490,968
315				
316 26-Electrical Total				\$490,968
317				
318				
319 31-Earthwork				
320				
321 31 48 00 Underpinning				

BUILDING DETAIL ADDITION (CSI FORMAT)

13,638 GSF

ELEMENT	QUANTITY	UNIT	UNIT RATE	COST
322 Excavation	2,639	CY	\$15.00	\$39,585
323 Trench excavation	155	CY	\$22.00	\$3,410
324 Elevator pit excavation	1	EA	\$10,000.00	\$10,000
325 Backfill	1,428	CY	\$9.00	\$12,852
326 Disposal	1,366	CY	\$15.00	\$20,490
327 Underpinning	9	CY	\$2,000.00	\$18,000
328 31 48 00 Underpinning Total				\$104,337
329				
330 31-Earthwork Total				\$104,337
331				
332				
333				
334				

TOWN HALL SITEWORK (CSI FORMAT)

Option 2: Renovation and Addition

Sharon, MA

ELEMENT	QUANTITY	UNIT	UNIT RATE	COST
02 41 00 Demolition				\$11,216
31 10 00 Site Clearing				\$21,012
31 20 00 Earth Moving				\$10,674
31 25 00 Erosion and Sedimentation Controls				\$3,130
32 00 00 Paving				\$50,883
32 30 00 Site Improvements				\$7,700
32 90 00 Plants				\$9,239
33 10 00 Water Distribution				\$0
33 30 00 Sanitary Sewerage				\$0
33 40 00 Storm Drainage				\$0
33 70 00 Electrical Utilities				\$50,000
Subtotal: carried to Main Summary				\$163,853

TOWN HALL SITEWORK (CSI FORMAT)

Option 2: Renovation and Addition

Sharon, MA

ELEMENT	QUANTITY	UNIT	UNIT RATE	COST
02-BUILDING SITEWORK				
02 41 00 Demolition				
Saw cut existing pavement allowance	144	LF	\$8.00	\$1,152
R & D existing sidewalk allowance	1,328	SF	\$1.50	\$1,992
Remove existing pavement marking	3,034	SF	\$1.00	\$3,034
Remove existing pavement	2,030	SF	\$1.25	\$2,538
Trees removal	2	EA	\$250.00	\$500
Misc. demolition other than above	1	LS	\$2,000.00	\$2,000
02 41 00 DemolitionTotal				\$11,216
31-EARTHWORK				
31 10 00 Site Clearing				
Site Clearing allowance	1	LS	\$1,500.00	\$1,500
8' Construction fence, install & maintain allowance	626	LF	\$12.00	\$7,512
Double construction gate allowance	1	EA	\$2,500.00	\$2,500
Temporary construction entrance	1	AL	\$6,500.00	\$6,500
Temp signs	1	LS	\$1,500.00	\$1,500
Allow for wash down/re-fueling	1,000	SF	\$1.50	\$1,500
31 10 00 Site ClearingTotal				\$21,012
31 20 00 Earth Moving				
Building pad excavation and fill				See Building
Remove & stockpile topsoil	1	LS	\$400.00	\$400
Cuts and fills - site grade	76	CY	\$8.00	\$608
Cuts and fills of asphalt pavement	67	CY	\$9.00	\$603
Cuts and fills of concrete pavement	89	CY	\$9.00	\$805
Fine grade	3,963	SF	\$0.50	\$1,982
Gravel base to parking lot & sidewalk	91	CY	\$25.00	\$2,272
Export soil	200	CY	\$20.00	\$4,004
31 20 00 Earth Moving Total				\$10,674
31 25 00 Erosion and Sedimentation Controls				
Hay bales and silt fence allowance	313	LF	\$10.00	\$3,130
31 25 00 Erosion and Sedimentation Controls Total				\$3,130
32-EXTERIOR IMPROVEMENTS				
32 00 00 Paving				

TOWN HALL SITEWORK (CSI FORMAT)

Option 2: Renovation and Addition

Sharon, MA

ELEMENT	QUANTITY	UNIT	UNIT RATE	COST
67 32 00 00 Asphalt Paving				
68 Asphalt concrete paving at parking lot	1,000	SF	\$3.00	\$3,000
69 32 13 13 Concrete Paving				
70 Concrete sidewalk	2,245	SF	\$6.00	\$13,470
71 Reinforced concrete pad	195	SF	\$0.50	\$98
72 Curb cut	2	EA	\$350.00	\$700
73 Concrete ramp with (With Foundation)	1	LS	\$10,000.00	\$10,000
74 32 16 00 Curbs and Gutters				
75 Vertical granite curb	287	LF	\$34.00	\$9,758
76 32 14 00 Unit Pavers				
77 Unit pavers	824	SF	\$15.00	\$12,360
78 32 17 23 Pavement Markings				
79 Pavement marking	86	SF	\$2.00	\$172
80 Parking stall painting	15	EA	\$35.00	\$525
81 Parking stall painting; HC	4	EA	\$75.00	\$300
82 Misc. marking	1	LS	\$500.00	\$500
83 32 00 00 Paving Total				\$50,883
84				
85 32 30 00 Site Improvements				
86 Allow for benches	1	LS	\$3,600.00	\$3,600
87 Allow for Trash / Recycle receptacles	1	EA	\$600.00	\$600
88 Misc. site improvement other than above	1	LS	\$3,500.00	\$3,500
89 32 30 00 Site Improvements Total				\$7,700
90				
91 32 90 00 Plants				
92 32 92 10 Soil Preparation for Lawn Establishment				
93 Respread stockpiled topsoil	1	LS	\$600.00	\$600
94 Imported topsoil for plant bed	37	CY	\$25.00	\$925
95 Mulch	4	CY	\$45.00	\$180
96 32 92 20 Turf and Grasses				
97 Lawn	2,134	SF	\$1.00	\$2,134
98 32 93 00 Plants				
99 Shrubs	36	EA	\$150.00	\$5,400
100 32 90 00 Plants Total				\$9,239
101				
102 33-UTILITIES				
103				
104 33 10 00 Water Distribution				
105 No work shown in this section				\$0
106 33 10 00 Water Distribution Total				\$0
107				
108 33 30 00 Sanitary Sewerage				
109 No work shown in this section				

TOWN HALL SITEWORK (CSI FORMAT)Sharon Town Hall
Option 2: Renovation and Addition
Sharon, MA

ELEMENT		QUANTITY	UNIT	UNIT RATE	COST
110	33 30 00 Sanitary Sewerage Total				\$0
111					
112	33 40 00 Storm Drainage				
113	No work shown in this section				
114	33 40 00 Storm Drainage Total				\$0
115					
116	33 70 00 Electrical Utilities				
117	Site electrical	1	AL	\$50,000.00	\$50,000
118	33 70 00 Electrical Utilities Total				\$50,000



Sharon Town Hall
Option 3: New Construction
Sharon, MA

November 11, 2015

Conceptual Estimate

Architect:

Kaestle Boos
325 Foxborough Boulevard, Suite 100
Foxborough, MA 02035
(508) 549 9906

Cost Consultant:

Daedalus Projects, Inc.
112 South Street
Boston, MA 02111
(617) 451 2717

INTRODUCTION

Project Description:

- Construction of new addition to the existing Town Hall
- Renovation to the existing Town Hall only at removed staircase
- An allowance has been carried for sitework

Project Particulars:

- Estimate is based off the following information:
 - Drawings received from KBA at their office on September 21, 2015
- Daedalus Projects, Inc. experience with similar projects of this nature.

Project Assumptions:

- Our costs assume that there will be at least three subcontractors submitting unrestricted bids in each sub-trade, and at least four General Contractors.
- Unit rates are based on current dollars.
- An escalation allowance to the start of construction has been included in the summary
- Subcontractor's markups have been included in each unit rate. Markups cover the cost of field overhead, home office overhead and subcontractor's profit.
- Design and Pricing Contingency markup is an allowance for unforeseen design issues, design detail development and specification clarifications.
- General Conditions and Requirements value covers Sub-Contractor's bond, site office overheads, and building permit applications.
- Fee markup is calculated on a percentage basis of direct construction costs. The value covers Contractor's bond, insurance and profit.
- Labor will be at prevailing wages.

MAIN SUMMARY

DESCRIPTION				TOTAL	COST/GSF
Town Hall Addition	16,128 GSF			\$4,530,848	\$280.93
Sitework				\$851,695	
	Total	16,128 GSF		\$5,382,543	\$333.74
Design Contingency	15.00%	\$5,382,543		\$807,381	\$50.06
Total Direct Cost				\$6,189,924	\$383.80
<u>Markup</u>					
General Conditions & Requirements	8.50%	\$6,189,924		\$526,144	\$32.62
Insurance	1.40%	\$6,716,068		\$94,025	\$5.83
Bond	0.85%	\$6,810,093		\$57,886	\$3.59
Permit	1.50%			Waived	
Fee	5.00%	\$6,867,979		\$343,399	\$21.29
Total Construction				\$7,211,378	\$447.13
Escalation to 4th Quarter 2016	5.42%	\$7,211,378		\$390,616	\$24.22
Total Construction				\$7,601,994	\$471.35

TOWN HALL BUILDING SUMMARY ADDITION (CSI FORMAT)

Sharon Town Hall
Option 3: New Construction
Sharon, MA
16,128 GSF

ELEMENT	COST	COST/SF
02-Existing Conditions	\$48,663	\$3.02
03-Concrete	\$233,307	\$14.47
04-Masonry	\$297,360	\$18.44
05-Metals	\$539,605	\$33.46
06-Woods & Plastics	\$324,737	\$20.13
07-Thermal & Moisture	\$295,493	\$18.32
08-Doors & Windows	\$327,169	\$20.29
09-Finishes	\$760,001	\$47.12
10-Specialties	\$32,768	\$2.03
11-Equipment		
12-Furnishings	\$27,126	\$1.68
14-Conveying System	\$90,000	\$5.58
21 00 00 - Fire Suppression	\$72,694	\$4.51
22 00 00 - Plumbing	\$43,100	\$2.67
23 00 00 - HVAC	\$677,376	\$42.00
26-Electrical	\$645,120	\$40.00
31-Earthwork	\$116,331	\$7.21
32-Exterior Improvements		
Subtotal Carried to Main Summary	\$4,530,848	\$280.93

BUILDING DETAIL ADDITION (CSI FORMAT)

ELEMENT	QUANTITY	UNIT	UNIT RATE	COST
9 02-Existing Conditions				
10				
11 02 41 00 - Demolition				
12 Demolition of existing building	96,180	CF	\$0.35	\$33,663
13 Allow for cutting and patching	1	AL	\$15,000.00	\$15,000
14 Hazardous abatement				NIC
15 02 41 00 - Demolition Total				\$48,663
16				
17 02-Existing Conditions Total				\$48,663
18				
19				
20 03-Concrete				
21				
22 03 00 00 - Concrete				
23 <i>Concrete:</i>	400	<i>If</i>		
24 Strip footing	31	CY	\$125.00	\$3,875
25 Isolated footings	42	CY	\$125.00	\$5,250
26 Foundation walls	68	CY	\$125.00	\$8,500
27 Piers	6	CY	\$125.00	\$750
28 Slab on Grade	132	CY	\$130.00	\$17,160
29 Upper decks	60	CY	\$140.00	\$8,400
30 Place concrete	339	CY	\$85.00	\$28,815
31 <i>Reinforcing:</i>				
32 Strip footing	2,015	LBS	\$1.05	\$970
33 Isolated footings	6,300	LBS	\$1.05	\$6,615
34 Foundation walls	10,200	LBS	\$1.05	\$10,710
35 Piers	390	LBS	\$1.05	\$410
36 WWF for sog	8,064	SF	\$1.00	\$8,064
37 WWF for slab on deck	4,376	SF	\$1.00	\$4,376
38 <i>Formwork:</i>				
39 Strip footing	924	SF	\$10.00	\$9,240
40 Isolated footings	904	SF	\$12.00	\$10,848
41 Foundation walls	1,840	SF	\$9.00	\$16,560
42 Piers	406	SF	\$12.00	\$4,872
43 Cure screed and protect sog	8,064	SF	\$2.50	\$20,160
44 Cure screed and protect slab on deck	4,376	SF	\$2.50	\$10,940
45 <i>Miscellaneous:</i>				
46 Elevator pit	1	EA	\$5,000.00	\$5,000
47 Concrete to metal pan stairs	2	FLT	\$2,500.00	\$5,000

BUILDING DETAIL ADDITION (CSI FORMAT)

ELEMENT		QUANTITY	UNIT	UNIT RATE	COST
48	Sonotubes	2	EA	\$500.00	\$1,000
49	Allow for concrete pads and bases	1	LS	\$3,000.00	\$3,000
50	Perimeter drainage	440	LF	\$15.00	\$6,600
51	Vapor barrier for slab on grade	8,064	SF	\$0.50	\$4,032
52	Rigid insulation to slab on grade	8,064	SF	\$2.50	\$20,160
53	General concrete requirements	1	AL	\$12,000.00	\$12,000
54	(Note: earthwork included in the sitework allowance)				
55	03 00 00 - Concrete Total				\$233,307
56					
57	03-Concrete Total				\$233,307
58					
59					
60	04-Masonry				
61					
62	04 20 00 - Unit Masonry				
63	Exterior brick to exterior	8,496	SF	\$34.00	\$288,864
64	Allow for brick detail to exterior	8,496	SF	\$1.00	\$8,496
65	04 20 00 - Unit Masonry Total				\$297,360
66					
67	04-Masonry Total				\$297,360
68					
69					
70	05-Metals				
71					
72	05 12 00 Structural Steel				
73	Framing	121	TNS	\$3,400.00	\$411,264
74	Allow for brick detail to exterior				
75	05 12 00 Structural Steel Total				\$411,264
76					
77	05 30 00 Decking				
78	Roof decking	9,838	SF	\$3.75	\$36,893
79	05 30 00 Decking Total				\$36,893
80					
81	05 50 00 - Metal Fabrications				
82	Elevator pit and sills	1	SET	\$2,800.00	\$2,800
83	Elevator ladder	1	SET	\$1,200.00	\$1,200
84	Metal pan stairs	2	FLT	\$15,500.00	\$31,000
85	Other misc metals	16,128	SF	\$3.50	\$56,448
86	05 50 00 - Metal Fabrications Total				\$91,448

BUILDING DETAIL ADDITION (CSI FORMAT)

ELEMENT	QUANTITY	UNIT	UNIT RATE	COST
87				
88	05-Metals Total			\$539,605
89				
90				
91				
92	06-Woods & Plastics			
93				
94	06 10 00 - Rough Carpentry			
95	Plywood	9,838	SF	\$34,433
96	Allowance for rough carpentry and blocking internally	16,128	SF	\$48,384
97	06 10 00 - Rough Carpentry Total			\$82,817
98				
99	06 20 00 - Finish Carpentry			
100	Miscellaneous finish carpentry	16,128	SF	\$241,920
101	06 20 00 - Finish Carpentry Total			\$241,920
102				
103	06-Woods & Plastics Total			\$324,737
104				
105				
106	07-Thermal & Moisture			
107				
108	07 12 00 - Built-Up Bituminous Waterproofing			
109	Dampproofing to foundation walls	920	SF	\$3,220
110	Waterproofing to elevator pit	1	EA	\$2,500
111	07 12 00 - Built-Up Bituminous Waterproofing Total			\$5,720
112				
113	07 20 00 - Thermal Protection			
114	Exterior rigid insulation	8,496	SF	\$19,966
115	07 20 00 - Thermal Protection Total			\$19,966
116				
117	07 27 00 - Air Barrier			
118	Air / vapor barrier to walls	8,496	SF	\$55,224
119	07 27 00 - Air Barrier Total			\$55,224
120				
121	07 40 00 - Roofing and Siding Panels			
122	Cedar shingle roof	9,838	SF	\$162,327
123	07 40 00 - Roofing and Siding Panels Total			\$162,327
124				
125	07 62 00 - Sheet Metal Flashing and Trim			

BUILDING DETAIL ADDITION (CSI FORMAT)

ELEMENT	QUANTITY	UNIT	UNIT RATE	COST
126 Metal flashings	1	AL	\$15,000.00	\$15,000
127 07 62 00 - Sheet Metal Flashing and Trim Total				\$15,000
128				
129 07 72 00 - Roof Accessories				
130 Misc. roof accessories	1	LS	\$5,000.00	\$5,000
131 07 72 00 - Roof Accessories Total				\$5,000
132				
133 07 84 00 - Firestopping				
134 Firestopping measures - based on floor area	16,128	GSF	\$0.50	\$8,064
135 07 84 00 - Firestopping Total				\$8,064
136				
137 07 92 00 - Joint Sealants				
138 Caulking and sealing - based on floor area	16,128	GSF	\$1.50	\$24,192
139 07 92 00 - Joint Sealants Total				\$24,192
140				
141 07-Thermal & Moisture Total				\$295,493
142				
143				
144 08-Doors & Windows				
145				
146 08 10 00 - Doors and Frames				
147 Door frames	60	EA	\$250.00	\$15,000
148 Ditto; pair	1	EA	\$300.00	\$300
149 Doors	60	EA	\$300.00	\$18,000
150 Ditto; pair	1	PR	\$600.00	\$600
151 Exterior egress doors; complete	1	EA	\$1,500.00	\$1,500
152 08 10 00 - Doors and Frames Total				\$35,400
153				
154 08 31 00 - Access Doors and Panels				
155 Allow for access doors to MEP installation	1	LS	\$2,500.00	\$2,500
156 08 31 00 - Access Doors and Panels Total				\$2,500
157				
158 08 40 00 - Entrances, Storefront and Curtainwall				
159 Interior vestibule doors	3	PR	\$7,000.00	\$21,000
160 Exterior vestibule doors	2	PR	\$7,000.00	\$14,000
161 Exterior curtainwall	1,104	SF	\$95.00	\$104,880
162 08 40 00 - Entrances, Storefront and Curtainwall Total				\$139,880
163				
164 08 50 00 - Windows				

Delete 474sf. Ch to
brick (-\$28,440)

BUILDING DETAIL ADDITION (CSI FORMAT)

ELEMENT	QUANTITY	UNIT	UNIT RATE	COST
165 Windows	989	SF	\$85.00	\$84,089
166 08 50 00 - Windows Total				\$84,089
167				
168 08 70 00 - Door Hardware				
169 Door hardware	62	EA	\$650.00	\$40,300
170 Automatic door openers	2	EA	\$2,500.00	\$5,000
171 08 70 00 - Door Hardware Total				\$45,300
172				
173 08 80 00 - Glazing				
174 Interior glazing	1	LS	\$15,000.00	\$15,000
175 08 80 00 - Glazing Total				\$15,000
176				
177 08 91 00 - Louvers				
178 Architectural louvers	100	SF	\$50.00	\$5,000
179 08 91 00 - Louvers Total				\$5,000
180				
181 08-Doors & Windows Total				\$327,169
182				
183				
184 09-Finishes				
185				
186 09 21 16 - Gypsum Wallboard				
187 Light gage metal framing with Gypsum sheathing	8,496	SF	\$11.00	\$93,456
188 Drywall to interior of exterior	8,496	SF	\$3.25	\$27,612
189 Partitions	20,784	SF	\$8.50	\$176,664
190 Chase walls	1	LS	\$10,000.00	\$10,000
191 Elevator walls	1,008	SF	\$13.50	\$13,608
192 Backerboard	1,152	SF	\$3.00	\$3,456
193 Ceiling; allowance (assume 65% GWB & 35% ACT)	16,524	SF	\$7.00	\$115,585
194 09 21 16 - Gypsum Wallboard Total				\$440,381
195				
196 09 30 00 - Tile				
197 Ceramic tile floors	300	SF	\$18.00	\$5,400
198 Ceramic Wall tile at bathroom	1,152	SF	\$18.00	\$20,736
199 Ceramic tile Base	128	LF	\$13.00	\$1,664
200 Marble thresholds	4	EA	\$150.00	\$600
201 09 30 00 - Tile Total				\$28,400
202				
203 09 51 00 - ACT Ceilings				

Assume 40% gwb,
60% act. -\$24,800)



BUILDING DETAIL ADDITION (CSI FORMAT)

ELEMENT	QUANTITY	UNIT	UNIT RATE	COST
204 ACT Included with GWB ceilings				
205 09 51 00 - ACT Ceilings Total				
206				
207 09 65 00 - Flooring				
208 Flooring	15,322	SF	\$12.00	\$183,859
209 Rubber treads and risers	220	LFR	\$15.50	\$3,410
210 Rubber floor landing	80	SF	\$6.50	\$520
211 09 65 00 - Flooring Total				\$187,789
212				
213 09 90 00 - Painting				
214 Paint GWB walls	51,074	SF	\$0.75	\$38,306
215 Paint GWB ceilings	10,741	SF	\$1.00	\$10,741
216 Paint doors	60	EA	\$60.00	\$3,600
217 Paint frames	60	EA	\$40.00	\$2,400
218 Miscellaneous painting at existing space	16,128	SF	\$3.00	\$48,384
219 09 90 00 - Painting Total				\$103,430
220				
221 09-Finishes Total				\$760,001
222				
223				
224 10-Specialties				
225				
226 10 11 00 - Visual Display Surfaces				
227 Allow for visual display surfaces	1	AL	\$10,000.00	\$10,000
228 10 11 00 - Visual Display Surfaces Total				\$10,000
229				
230 10 14 00 - Signage				
231 Interior building signage	16,128	SF	\$1.00	\$16,128
232 10 14 00 - Signage Total				\$16,128
233				
234 10 28 00 - Toilet Accessories				
235 Sanitary napkin dispenser, recessed mounted	2	EA	\$350.00	\$700
236 Sanitary napkin disposal, recessed mounted	2	EA	\$75.00	\$150
237 Toilet tissue dispenser	4	EA	\$150.00	\$600
238 Standard mirror	4	EA	\$150.00	\$600
239 Soap dispenser	4	EA	\$35.00	\$140
240 Grab bars	8	EA	\$150.00	\$1,200
241 Robe hook	4	EA	\$25.00	\$100
242 Utility shelf/ mop & broom holders	2	EA	\$150.00	\$300

BUILDING DETAIL ADDITION (CSI FORMAT)

ELEMENT	QUANTITY	UNIT	UNIT RATE	COST
243 Install	30	EA	\$35.00	\$1,050
244 10 28 00 - Toilet Accessories Total				\$4,840
245				
246 10 44 13 - Fire Extinguisher Cabinets				
247 Allow recessed fire extinguishers and cabinets	4	EA	\$450.00	\$1,800
248 10 44 13 - Fire Extinguisher Cabinets Total				\$1,800
249				
250 10-Specialties Total				\$32,768
251				
252				
253 11-Equipment				
254				
255 11 52 00 - Audio-Visual Equipment				
256 Projection screen		EA	\$5,000.00	NIC
257 11 52 00 - Audio-Visual Equipment Total				
258				
259 11-Equipment Total				
260				
261				
262 12-Furnishings				
263				
264 12 20 00 - Window Treatment				
265 Window treatment	2,093	SF	\$5.00	\$10,466
266 12 20 00 - Window Treatment Total				\$10,466
267				
268 12 48 13 - Entrance Mats				
269 Entrance mat	476	SF	\$35.00	\$16,660
270 12 48 13 - Entrance Mats Total				\$16,660
271				
272 12-Furnishings Total				\$27,126
273				
274				
275 14-Conveying System				
276				
277 14 20 00 - Elevators				
278 Elevator	1	EA	\$90,000.00	\$90,000
279 14 20 00 - Elevators Total				\$90,000
280				
281 14-Conveying System Total				\$90,000

BUILDING DETAIL ADDITION (CSI FORMAT)

ELEMENT	QUANTITY	UNIT	UNIT RATE	COST
282				
283				
284 21,22,23-Mechanical				
285				
286 21 00 00 - Fire Suppression				
287 Sprinkler Coverage within new	16,128	SF	\$4.25	\$68,544
288 Seismic Restraints	1	LS	\$1,500.00	\$1,500
289 Permits & Fees	1	LS	\$1,000.00	\$1,000
290 Testing	1	LS	\$900.00	\$900
291 Drawings & Calculations	1	LS	\$750.00	\$750
292 21 00 00 - Fire Suppression Total				\$72,694
293				
294 22 00 00 - Plumbing				
295 Water Heater	1	EA	\$5,000.00	\$5,000
296 Elevator Sump Pump	1	EA	\$2,500.00	\$2,500
297 Fixtures				
298 Water Closet	4	EA	\$3,800.00	\$15,200
299 Lavatory	4	EA	\$3,800.00	\$15,200
300 Coring & Cutting	1	LS	\$1,500.00	\$1,500
301 Test and balance	1	LS	\$1,000.00	\$1,000
302 Permits & Fees	1	LS	\$1,500.00	\$1,500
303 Shop drawings	1	LS	\$1,200.00	\$1,200
304 22 00 00 - Plumbing Total				\$43,100
305				
306 23 00 00 - HVAC				
307 Allow for HVAC	16,128	LS	\$42.00	\$677,376
308 23 00 00 - HVAC Total				\$677,376
309				
310 21,22,23-Mechanical Total				\$793,170
311				
312				
313 26-Electrical				
314				
315 26 00 00 - Electrical				
316 Electrical	16,128	SF	\$40.00	\$645,120
317 26 00 00 - Electrical Total				\$645,120
318				
319 26-Electrical Total				\$645,120
320				

BUILDING DETAIL ADDITION (CSI FORMAT)

ELEMENT	QUANTITY	UNIT	UNIT RATE	COST
321				
322 31-Earthwork				
323				
324 31 00 00 Earthwork				
325 Excavation	3,733	CY	\$15.00	\$55,995
326 Trench excavation	124	CY	\$22.00	\$2,723
327 Elevator pit excavation	1	EA	\$3,500.00	\$3,500
328 Backfill	623	CY	\$9.00	\$5,607
329 Disposal	3,234	CY	\$15.00	\$48,506
330 31 00 00 Earthwork Total				\$116,331
331				
332 31-Earthwork Total				\$116,331
333				
334				
335 32-Exterior Improvements				
336				
337 32 00 00 Exterior Improvements				
338 Allowance for exterior improvements				See Site Estimate
339 32 00 00 Exterior Improvements Total				
340				
341 32-Exterior Improvements Total				
342				
343				
344				

TOWN HALL SITEWORK (CSI FORMAT)

Option 3: New Construction

Sharon, MA

ELEMENT	QUANTITY	UNIT	UNIT RATE	COST
02 30 00 Building Demolition				\$70,008
02 41 00 Demolition				\$57,732
31 10 00 Site Clearing				\$45,000
31 20 00 Earth Moving				\$73,051
31 25 00 Erosion and Sedimentation Controls				\$4,875
32 00 00 Paving				\$178,811
32 30 00 Site Improvements				\$52,900
32 31 13 Fences and Gates				\$2,350
32 90 00 Plants				\$37,968
33 10 00 Water Distribution				\$45,000
33 30 00 Sanitary Sewerage				\$55,000
33 40 00 Storm Drainage				\$75,000
33 50 00 Gas Service				\$4,000
33 70 00 Electrical Utilities				\$150,000

Subtotal: carried to Main Summary **\$851,695**

TOWN HALL SITEWORK (CSI FORMAT)

ELEMENT	QUANTITY	UNIT	UNIT RATE	COST
02-BUILDING SITEWORK				
02 30 00 Building Demolition				
Building demolition and removal	200,024	CFT	\$0.35	\$70,008
02 30 00 Building DemolitionTotal				\$70,008
02 41 00 Demolition				
Saw cut existing pavement allowance	198	LF	\$8.00	\$1,581
R & D existing sidewalk allowance	2,048	SF	\$1.50	\$3,072
Remove existing pavement	31,754	SF	\$1.25	\$39,693
Remove sign	1	EA	\$1,500.00	\$1,500
Remove walls	47	LF	\$25.00	\$1,175
R & D curb	816	LF	\$7.00	\$5,712
Misc. demolition other than above	1	LS	\$5,000.00	\$5,000
02 41 00 DemolitionTotal				\$57,732
31-EARTHWORK				
31 10 00 Site Clearing				
Site clearing allowance	1	LS	\$4,900.00	\$4,900
Construction fence, install & maintain allowance	975	LF	\$12.00	\$11,700
Double construction gate allowance	2	EA	\$2,500.00	\$5,000
Temporary construction entrance	2	AL	\$7,000.00	\$14,000
R & D existing trees	9	EA	\$350.00	\$3,150
Trees protection	7	EA	\$250.00	\$1,750
Temp signs	1	LS	\$1,500.00	\$1,500
Allow for wash down/re-fueling	2,000	SF	\$1.50	\$3,000
31 10 00 Site ClearingTotal				\$45,000
31 20 00 Earth Moving				
Building pad excavation and fill				See Building
Remove & stockpile topsoil	1	LS	\$2,700.00	\$2,700
Cuts and fills - site grade	544	CY	\$8.00	\$4,355
Cuts and fills of asphalt pavement	1,471	CY	\$9.00	\$13,240
Cuts and fills of concrete pavement	178	CY	\$9.00	\$1,604
Fine grade	28,778	SF	\$0.50	\$14,389
Gravel base to parking lot & sidewalk	1,011	CY	\$25.00	\$25,286
Structural fill existing building footprint; allow	522	CY	\$22.00	\$11,477
31 20 00 Earth Moving Total				\$73,051
31 25 00 Erosion and Sedimentation Controls				
Hay bales and silt fence allowance	488	LF	\$10.00	\$4,875

TOWN HALL SITEWORK (CSI FORMAT)

ELEMENT	QUANTITY	UNIT	UNIT RATE	COST
74 31 25 00 Erosion and Sedimentation Controls Total				\$4,875
75				
76				
77 32-EXTERIOR IMPROVEMENTS				
78				
79 32 00 00 Paving				
80 32 00 00 Asphalt Paving				
81 Asphalt concrete paving at parking lot	26,480	SF	\$2.75	\$72,820
82 Patching existing pavement at street; allow	300	SF	\$3.00	\$900
83 32 13 13 Concrete Paving				
84 Concrete sidewalk	3,742	SF	\$6.00	\$22,452
85 Curb cut	1	EA	\$350.00	\$350
86 Concrete ramp with Detectable waring strips	220	SF	\$12.00	\$2,640
87 32 16 00 Curbs and Gutters				
88 Vertical granite curb	1,521	LF	\$34.00	\$51,714
89 32 14 00 Unit Pavers				
90 Unit pavers -granite curb edge	1,378	SF	\$15.00	\$20,670
91 32 17 23 Pavement Markings				
92 Crosswalk; allow	700	SF	\$2.00	\$1,400
93 Parking stall painting	59	EA	\$35.00	\$2,065
94 Parking stall painting; HC	4	EA	\$75.00	\$300
95 Misc. marking	1	LS	\$3,500.00	\$3,500
96 32 00 00 Paving Total				\$178,811
97				
98 32 30 00 Site Improvements				
99 Flagpole and foundation	1	EA	\$7,500.00	\$7,500
100 Decorative site sign	1	EA	\$15,000.00	\$15,000
101 Transformer pad		SF		Div 26
102 Generator pad		SF	\$7.50	Div 26
103 Site pipe bollard; allow	1	AL	\$4,000.00	\$4,000
104 Allow for bike rack	1	LS	\$2,500.00	\$2,500
105 Allow for benches	1	LS	\$3,600.00	\$3,600
106 Allow for Trash / Recycle receptacles	3	EA	\$600.00	\$1,800
107 Traffic signs	1	LS	\$3,500.00	\$3,500
108 Misc. site improvement other than above	1	LS	\$15,000.00	\$15,000
109 32 30 00 Site Improvements Total				\$52,900
110				
111 32 31 13 Fences and Gates				
112 Chain link fence at dumpster; allow	45	LF	\$30.00	\$1,350
113 Double chain link fence gate at dumpster; allow	1	EA	\$1,000.00	\$1,000
114 32 31 13 Fences and Gates Total				\$2,350
115				
116 32 90 00 Plants				
117 32 92 10 Soil Preparation for Lawn Establishment				

TOWN HALL SITEWORK (CSI FORMAT)

ELEMENT	QUANTITY	UNIT	UNIT RATE	COST
118 Respread stockpiled topsoil	1	LS	\$2,400.00	\$2,400
119 Imported topsoil for new lawn	1	LS	\$1,325.00	\$1,325
120 Imported topsoil for plant bed	148	CY	\$25.00	\$3,689
121 Mulch	16	CY	\$45.00	\$720
122 32 92 20 Turf and Grasses				
123 Lawn	21,428	SF	\$0.50	\$10,714
124 32 93 00 Plants				
125 New trees	16	EA	\$700.00	\$11,200
126 Small shrubs	66	EA	\$120.00	\$7,920
127 32 90 00 Plants Total				\$37,968
128				
129 33-UTILITIES				
130				
131 33 10 00 Water Distribution				
132 Water distribution; allow	1	AL	\$45,000.00	\$45,000
133 33 10 00 Water Distribution Total				\$45,000
134				
135 33 30 00 Sanitary Sewerage				
136 Sanitary sewerage; allow	1	AL	\$55,000.00	\$55,000
137 33 30 00 Sanitary Sewerage Total				\$55,000
138				
139 33 40 00 Storm Drainage				
140 Storm drainage; allow	1	AL	\$75,000.00	\$75,000
141 33 40 00 Storm Drainage Total				\$75,000
142				
143 33 50 00 Gas Service				
144 Trenching and backfill for new service line; allow	100	LF	\$40.00	\$4,000
145 33 50 00 Gas Service Total				\$4,000
146				
147 33 70 00 Electrical Utilities				
148 Site electrical	1	AL	\$150,000.00	\$150,000
149 33 70 00 Electrical Utilities Total				\$150,000
150				
151				
152				
153				
154				
155				
156				



Town of Sharon, Massachusetts

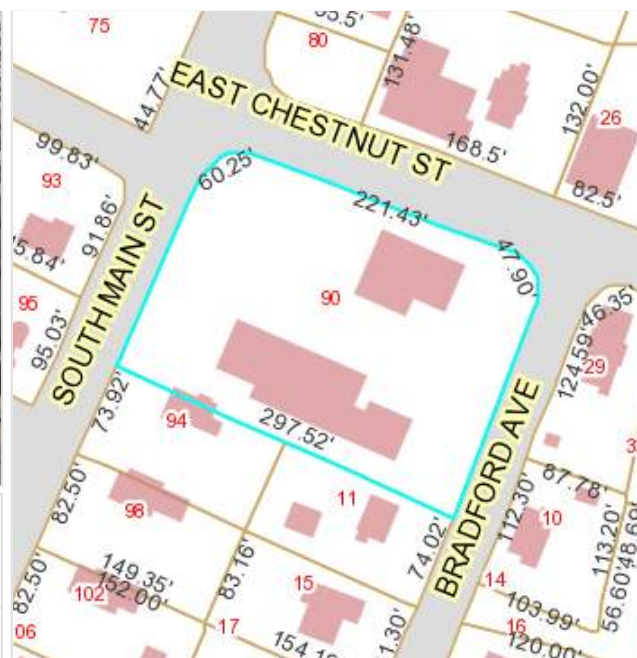
Property Record Card

Card 1 of 1

90 SOUTH MAIN STID: **091076000** Account #: **2400**

Owner: TOWN OFFICE BUILDING
Co-Owner:
Address: 90 SOUTH MAIN ST
SHARON MA 02067

Assessment: Total: 1055900
Building: 767800 Land: 265300 Yard: 22800

**Sales History**

Grantor	Book / Page	Sale Date	Sale Price
TOWN OFFICE BUILDING	0000/ 000	1984-10-10	0



MainStreetGIS, LLC
www.mainstreetgis.com

Land Information

Land Area: 1.38 AC Zoning:
Land Use: 931C - IMPR SELCTM COM
Neighborhood:

Building Information

Style:
Year Built: 1964
Rooms: Bedrooms:
Baths: Half Baths:
Living Area:
Gross Area:

Stories:
Heat Fuel:
Heat Type:
AC Type:
Roof Structure:
Roof Covering:

Extra Features

Description	Area / Units	Assessment
Sub Areas		
Description	Living Area	Gross Area
BAS	3616	3616
FBM	864	1440
FEP	0	81
FUS	2736	2880
UBM	0	1440

Property information last updated: 12/1/2012 - Printed from: <http://www.mainstreetmaps.com/MA/Sharon/>



MEETING NOTES

SHARON TOWN HALL STUDY

Sharon, Massachusetts

KBA # 15047.00

Prepared by: M.J.McKeon

Date: August 25, 2015

Page: 1 of 1

Present:

Fred Turkington: Town Administrator

Peter O'Cain: Town Engineer

Eric Hooper: DPW Director

Matthew Baldassari: Facilities Supervisor

Lance Delpriore: Asst. Town Engineer

Michael McKeon: KBA

The following items were discussed:

1. The Town accepts KBA's add service fee for programming (\$2,750) and wishes to have the following staff interviewed as part of this process:
 - a. Fred Turkington: Town Administrator (Board of Selectmen's office), (781) 784-1500 ext.1208
 - b. Marlene Chused: Town Clerk, (781) 784-1500 ext.1201
 - c. Beverly Anderson: Director of Health, (781) 784-1500 ext. 1206
 - d. Sheila Miller: Town Nurse, (781) 784-1500 ext. 1206
 - e. Mark Mazur, Town Assessor, (781) 784-1507 ext. 1207
 - f. Finance Director: Cindy Doherty, (781) 784-1500 ext. 1209
 - g. Elisha McOske: Treasurer/Collector (781) 784-1500 ext.1200
 - h. Don Hillegess: I.T. Director, (781) 784-1500 ext.1203
2. The Administrator wants KBA to concentrate on filing and storage needs as well as adjacencies and work flow. He mentioned that the Town Clerk is currently across the corridor from their vault and ideally they should be contiguous. He also mentioned that some preferred department adjacencies are not possible within the current layout.
3. The Administrator asked KBA to consult with Mr. Hillegess first regarding their electronic storage system.
4. The Administrator will address the staff next Tuesday (9/1) and advise them to expect calls or emails from KBA (Kristen Smith) to schedule the interviews next week.
5. Thursdays tend to be slow in the late afternoon as they work until 7:00pm – but are off Friday afternoons.
6. McKeon met with Mr. Hillegess after the meeting and reviewed the Headend Room layout. He informed KBA that, assuming proper cooling equipment, the current space is adequate for the network equipment.
7. Mr. Hillegess noted that there is one document scanner per floor for the DocStar electronic filing system.
8. Joe Milani, KBA's accessibility reviewer, is to contact Mr. Baldassari so he can accompany him on his walkthrough this Friday (8/28).
9. Mr. Baldassari's contact information is as follows
 - a. Email: mbadassari@townofsharon.org
 - b. Phone (781) 784-1525 ext. 2325
 - c. Cell; 781-201-0636

90 SOUTH MAIN ST

Location

90 SOUTH MAIN ST

Assessment

\$1,311,200

Mblu

91/ 76/ / /

PID

3453

Acct#

2400

Building Count

2

Owner

TOWN OFFICE BUILDING

Current Value

Assessment			
Valuation Year	Improvements	Land	Total
2015	\$1,090,600	\$220,600	\$1,311,200

Owner of Record

Owner

TOWN OFFICE BUILDING

Co-Owner

Address

90 SOUTH MAIN ST
SHARON, MA 02067

Sale Price

\$0

Certificate

Book & Page

0000/ 000

Sale Date

10/10/1984

Ownership History

Ownership History				
Owner	Sale Price	Certificate	Book & Page	Sale Date
TOWN OFFICE BUILDING	\$0		0000/ 000	10/10/1984

Building Information

Building 1 : Section 1

Year Built:

1964

Living Area:

7216

Replacement Cost:

\$799,633

Building Percent

65

Good:

Replacement Cost

Less Depreciation:

\$519,800

Building Attributes	
Field	Description
STYLE	Municipal Off.
MODEL	Commercial
Stories:	2
Occupancy	1
Exterior Wall 1	Brick/Masonry

Building Photo



(<http://images.vgsi.com/photos/SharonMAPhotos//\00\00\39\3>)

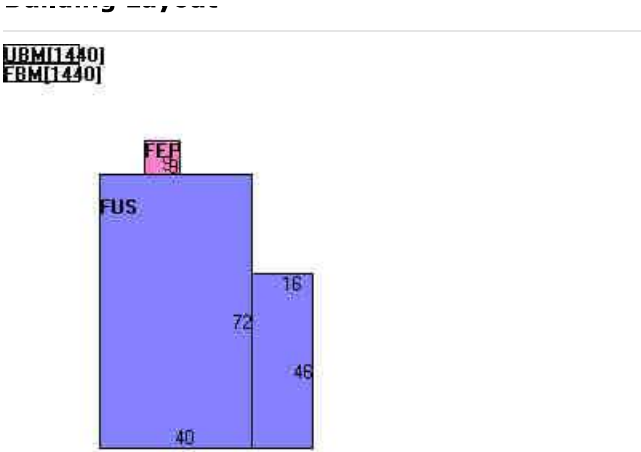
Building Lavout

Exterior Wall 2	
Roof Structure	Flat
Roof Cover	Rolled Compos
Interior Wall 1	Plastered
Interior Wall 2	Plywood Panel
Interior Floor 1	Pine/Soft Wood
Interior Floor 2	Tile A V R
Heating Fuel	Oil
Heating Type	Hot Water
AC Type	None
Bldg Use	MUNICIPAL MDL-94
Total Rooms	
Total Bedrms	00
Total Baths	0
1st Floor Use:	903C
Heat/AC	NONE
Frame Type	MASONRY
Baths/Plumbing	AVERAGE
Ceiling/Wall	CEIL & WALLS
Rooms/Prtns	AVERAGE
Wall Height	12
% Comn Wall	0

Building 2 : Section 1

Year Built: 1964
Living Area: 5780
Replacement Cost: \$741,320
Building Percent Good: 73
Replacement Cost Less Depreciation: \$541,200

Building Attributes : Bldg 2 of 2	
Field	Description
STYLE	Fire Station
MODEL	Ind/Com
Stories:	1
Occupancy	1
Exterior Wall 1	Brick/Masonry
Exterior Wall 2	
Roof Structure	Flat
Roof Cover	Rolled Compos
Interior Wall 1	Drywall
Interior Wall 2	Plastered



Building Sub-Areas			Legend
Code	Description	Gross Area	Living Area
BAS	First Floor	3616	3616
FUS	Upper Story, Finished	2880	2736
FBM	Basement, Finished	1440	864
FEP	Porch, Enclosed, Finished	81	0
UBM	Basement, Unfinished	1440	0
		9457	7216

Building Photo



(<http://images.vgsi.com/photos/SharonMAPhotos//\00\00\39\3>)

Interior Floor 1	Tile A V R
Interior Floor 2	Carpet
Heating Fuel	Oil
Heating Type	Hot Water
AC Type	None
Bldg Use	MUNICIPAL MDL-96
Total Rooms	
Total Bedrms	00
Total Baths	0
1st Floor Use:	903I
Heat/AC	NONE
Frame Type	MASONRY
Baths/Plumbing	AVERAGE
Ceiling/Wall	CEIL & WALLS
Rooms/Prtns	AVERAGE
Wall Height	14
% Comn Wall	0

Building Layout



Building Sub-Areas			<u>Legend</u>
Code	Description	Gross Area	Living Area
BAS	First Floor	5780	5780
FGR	Garage, Finished	1444	0
UST	Utility, Storage, Unfinished	120	0
		7344	5780

Extra Features

Extra Features					<u>Legend</u>
Code	Description	Size	Value	Bldg #	
A/C	AIR CONDITION	3700 UNITS	\$6,800	2	

Land

Land Use

Use Code 903C
Description MUNICIPAL MDL-94
Zone
Neighborhood CB2
Alt Land Appr No
Category

Land Line Valuation

Size (Acres) 1.38
Frontage 0
Depth 0
Assessed Value \$220,600

Outbuildings

Outbuildings							<u>Legend</u>
Code	Description	Sub Code	Sub Description	Size	Value	Bldg #	
PAV1	PAVING-ASPHALT			20000 S.F.	\$20,000	2	
PMP1	PUMP-SING HSE			1 UNITS	\$1,500	2	
TNK1	TANK-UNDERGRND			2000 GALS	\$1,300	2	