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**town of suffield
town hall
space planning update
additional scope**

**suffield
ct**

tos-2456a

august 2, 2017

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executive summary

The project objectives of the Space Planning Update for the Town Hall, Suffield, CT, were:

- Meet with Town Hall staff to review and quantify the program areas for current departments and create a new program for the Space Planning Update.
- Develop additional planning concept layouts based on the program for the Space Planning Update.
- Develop a planning budget for the concept layouts.

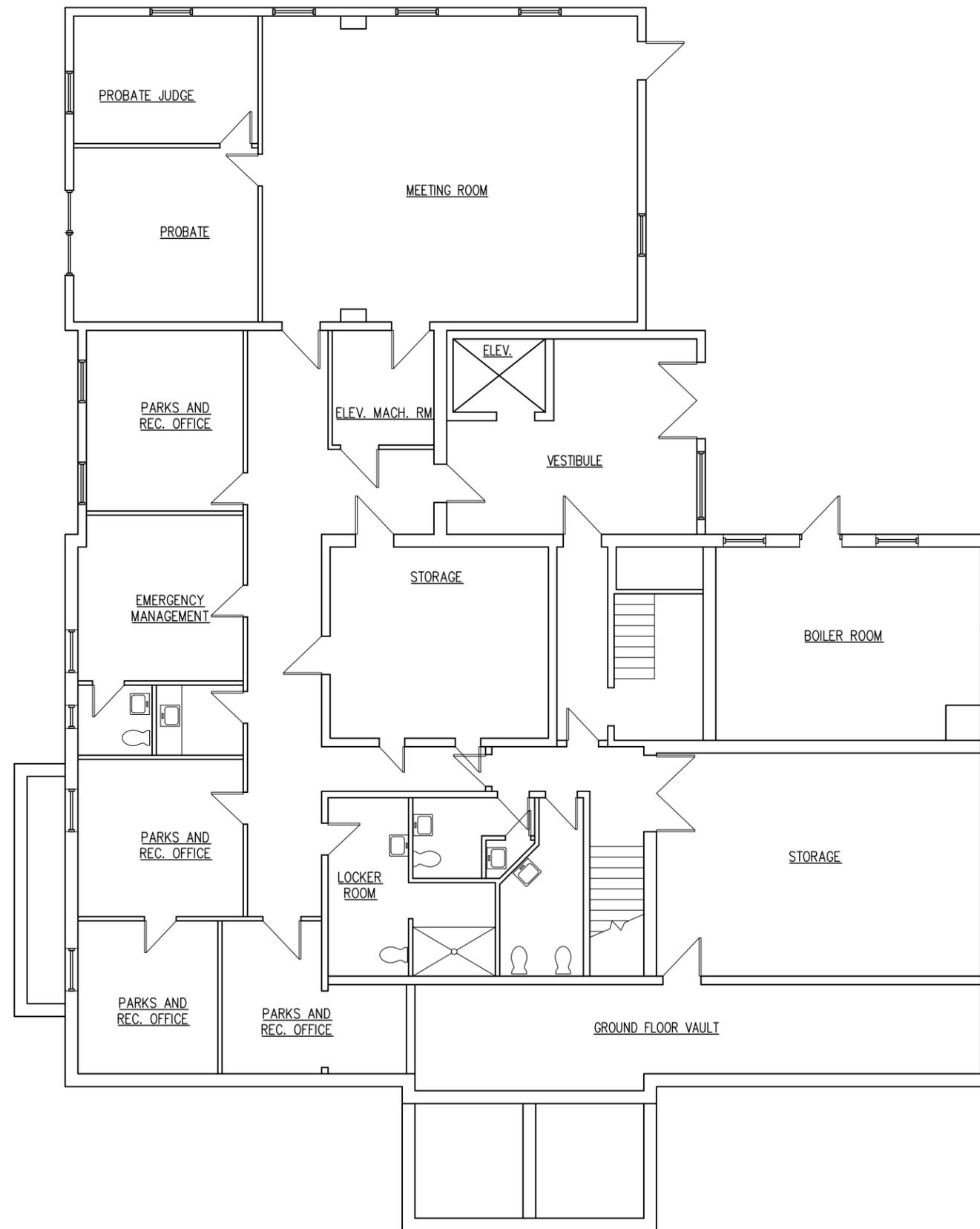
conclusions

Our Team and the Space Needs Committee concluded that the Town's space needs, within the Town Hall facility, are best met by the construction of a new 5,800 sf addition on the west side of the existing Town Hall on the ground floor (and wrapping around to the south entrance front). The existing facility will be renovated (approx. 11,000 sf) for reconfigured or relocated departments. The proposed concept plans accomplish the following goals and/or benefits:

- Provide a new 600 sf. Vault in the Town Clerk's office on the Main Floor.
- Locate the Registrar nearby the Town Clerk (but in separate offices) and also near a sizeable conference room to meet with voters during heavy registration periods.
- Group the Land-Use offices (comprised of Building Department, Planning & Zoning, Town Engineer, Conservation and Public Works) together into one shared suite on the ground level, within the new addition at the rear of the building.
- Maintain the Assessor and Tax Collector on the Second Floor in reconfigured space.
- Maintain a Server Closet on the third floor (in its current location) and relocated the IT department to the ground floor.
- Locate the First Selectman, Human Resources, Economics and Finance departments adjacent to each other on the third floor.
- Provide additional meeting rooms within the facility.
- Provide separate Men's & Women's rooms on each level.
- The existing Boiler Room on the ground level will be left in place on the ground floor.
- Provide a new egress stair in the new addition to rectify existing egress issues, thus eliminating an existing stairwell in the center of the building and freeing up additional space for program area.
- Centralize filing and storage in a shared area for the various departments.
- Plan the new addition location behind the existing building to maintain the integrity of the symmetrical front image of the original Suffield Town Hall design.
- Provide code complaint accessibility at the front entrance with new steps and accessible ramp.

opinion of probable construction cost

Based on the studies prepared and documented herein this Master Plan report, the opinion of probable construction cost for this project is \$6,870,000 (not including Add/Deduct Alternates), escalated to a midpoint of construction occurring in the second quarter of 2019.



preliminary



town of suffield

town hall
space needs study - update

existing ground level plan

tos-2456
7/18/16

TH-1



preliminary



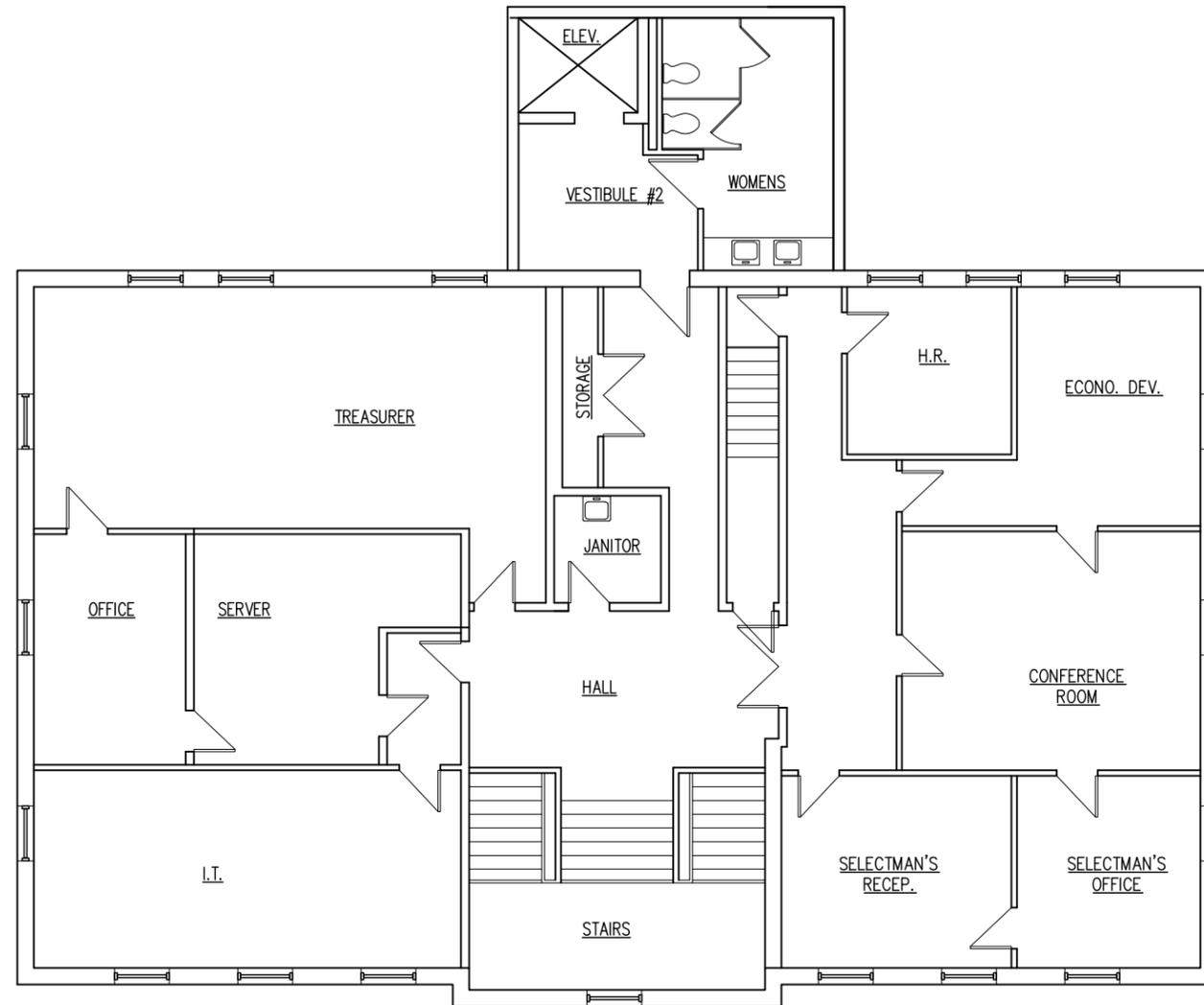
town of suffield

town hall
space needs study - update

existing main level plan

tos-2456
7/18/16

TH-2



preliminary



town of suffield

town hall
space needs study - update

existing upper level plan

tos-2456
7/18/16

TH-3

Town Hall Space Needs Study

Town of Suffield
tos-2456a
December 1, 2016



program

	Proposed Program Area			Remarks
	No.	Net Area	Total Area	
Selectman's Office				Second floor location. Must be in close proximity to Finance & HR. Close proximity to Economic Development is preferred as well.
Selectman's Office	1	160	160	1 desk, table with 4 chairs
Selectman's Assistant	1	165	165	1 workstation, files
Conference Room	0	0	0	shared conference rooms
Copier/Fax Room	0	0	0	shared copier, needs own fax
Storage/Files	1	20	20	part of seletman's assistant space
subtotal			345	
Economic Development				Second floor location preferred. Close proximity to First Selectman, HR & Finance is preferred, but not necessary.
Office	1	120	120	1 desk, 2 guest chairs
Conference Room	0	0	0	shared conference rooms
Copier/Fax Room	0	0	0	shared copier, needs own fax
Storage/Files	1	50	50	in central storage area
subtotal			170	
Human Resources				Second floor location. Possibly becomes a shared office for 2 people. Must be in close proximity to First Selectman and Finance. Close proximity to Economic Development is preferred as well.
Office	1	160	160	1 desk, table with 4 chairs
Conference Room	0	0	0	shared conference rooms
Copier/Fax Room	0	0	0	shared copier, needs own fax
Storage/Files	1	40	40	part of office
subtotal			200	

	Proposed Program Area			Remarks
	No.	Net Area	Total Area	
Finance Department				Second floor location. Must be in close proximity to First Selectman & HR. Close proximity to Economic Development is preferred as well.
Office	1	160	160	1 desk, 2 guest chairs
Open Office	1	500	500	4 workstations, 7 fireproof files, bookcases
Conference Room	0	0	0	shared conference rooms
Copier/Fax Room	0	0	0	shared copier, needs own fax
Storage/Files	1	50	50	in central storage area
subtotal			710	
Information Technology				Consider either keeping location in place, on second floor, or moving to a ground floor location. Reduce size from current space.
Open Office	1	400	400	3 workstations with "shop/assembly" workstation, 3 supply cabinets
Server Room	1	200	200	dedicated a/c
Copier/Fax Room	0	0	0	shared copier, needs own fax
Supply Closet	1	50	50	room for consumables, printer cartridges, etc...
Hardware Storage	1	100	100	room for 15 computers, 12 monitors, 5 printers, cables, etc...
subtotal			750	
Tax Collector				Must remain in close proximity to the Assessor and Town Clerk. Must be on same floor at Assessor. Preference is for Main Floor location.
Office	1	120	120	1 desk, 2 guest chairs, with view window to open office, safe
Open Office	1	360	360	bank teller type reception counter (room for 3-4 people to wait in line) 2 workstations, copier
Storage/Files	1	50	50	in central storage area
subtotal			530	
Assessor				Must remain in close proximity to the Tax Collector and Town Clerk. Must be on same floor at Tax Collector. Preference is for Main Floor location.
Office	1	120	120	1 desk, 2 guest chairs
Open Office	1	360	360	reception counter, 3 public access computers in "library" cubicle, 1 table for public, 1 workstation (assistant assessor), files, map file storage, copier, need own fax
Storage/Files	1	50	50	in central storage area
subtotal			530	

	Proposed Program Area			Remarks
	No.	Net Area	Total Area	
Town Clerk				Must remain in close proximity to the Tax Collector and Assessor. Preference is for main floor location, with adjacency to Registrar.
Office	1	120	120	1 desk, 2 guest chairs
Open Office	1	500	500	current reception counter OK but need to get public access computers off it, 2 workstations, increase fire file storage from 4 to 10, safe, printer, copier, need own fax
Vault	1	600	600	Double size of current vault. Consider using amodular vault for ease of construction. Consider either ground floor or main floor locations.
subtotal			1,220	
Registrar				Mus tbe located on the ground floor or main floor, possibly adjacent to Town Clerk. Needs to be located near large conference room for voter registration
Office	1	200	200	1 desk and 2 small computer workstations (4 part-time people), double file storage from 2 to 4, locked election equipment cabinet
subtotal			200	
Town Engineer/Conservation				Locate either in a land-use suite or in close proximity to other land-use offices.
Town Engineer Office	1	120	120	1 desk, plan table, files
Conservation	1	150	150	1 workstation in open office, reception, files
Future Workstation	1	100	100	1 workstation (1/2 engineer, 1/2 conservation)
Conference Room	0	0	0	shared conference rooms
Copier Room	0	0	0	shared room with copier/blueprint machine, suite needs a fax
Storage	1	80	80	in central storage area
subtotal			450	
Zoning & Planning				Locate either in a land-use suite or in close proximity to other land-use offices. GIS workstation eliminated
Town Planner Office	1	120	120	1 desk, plan table, files
Zoning Enforcement Officer	1	100	100	1 workstation in open office
Administrative Assistant	1	150	150	1 workstation in open office, reception, files
Conference Room	0	0	0	shared conference rooms
Copier Room	0	0	0	shared room with copier/blueprint machine, suite needs a fax
Storage	1	100	100	in central storage area
subtotal			470	

	Proposed Program Area			Remarks
	No.	Net Area	Total Area	
Building Department				Locate either in a land-use suite or in close proximity to other land-use offices. Ground floor location strongly preferred., due to contractor traffic in work boots.
Building Inspector Office	1	120	120	1 desk, plan table, files
Assistant Building Inspector	1	100	100	1 workstation in open office
Administrative Assistant	1	150	150	1 workstation in open office, reception, files
File Room	1	400	400	40 files, rolled plan storage, table
Copier Room	0	0	0	shared room with copier/blueprint machine, need own fax
Storage	1	100	100	in central storage area
subtotal			870	
Public Works				Locate either in a land-use suite or in close proximity to other land-use offices.
Director's Office	1	120	120	1 desk, plan table, files
Facilities Manager	1	100	100	1 workstation in open office
Contractor Specialist	1	100	100	1 workstation in open office
Administrative Assistant	1	150	150	1 workstation in open office, reception, files
Open Office Table	1	120	120	1 informal meeting place in open office for 6-8 people
Conference Room	0	0	0	shared conference rooms
Copier Room	0	0	0	shared room with copier/blueprint machine, need own fax
Storage	1	120	120	in central storage area
subtotal			710	
Common Space				
Meeting Room	1	1000	1,000	meeting room to accommodate 70 people
Large Conference Room	1	320	320	table with seating for 12-14 people, 20 total in room
Medium Conference Room	1	240	240	table with seating for 10-12 people
Small Conference Room	2	120	240	table with seating for 4-6
Break Room	1	180	180	kitchenette, two tables with seating for 4
Copier Room	1	60	60	common copier for second floor, paper storage
Land Use Suite Copier Room	1	150	150	common copier for ground level, large format printers, paper storage
Mail Room	1	75	75	near Tax Collector & Town Clerk
Mechanical Room	1	-	-	To remain in close proximity to its existing location.
Central Storage/Files	1	tbd	tbd	long term storage, area total of quantities listed in departments above, plus 20 bankers boxes for WPCA files
subtotal			2,265	

Proposed
Program Area

No. Net Total
Area Area Remarks

Proposed
Program Area

No. Net Total
Area Area Remarks

proposed town hall master plan concept renovations and addition to town hall

code evaluation

The building will be required to meet the requirements of the Connecticut State Building Code at the time of construction. Currently the requirements are the 2012 International Building Code, the 2012 International Building Code and the 2012 NFPA 101. Basic code requirements are as follows:

Building Use: Non-separated, mixed-use.
Business Use (B), Assembly Use (A-3) and Storage Use (S)

Construction Type: Existing - Based on the building construction viewed, we would consider the construction type to 3B.
New Addition – Assume 2B or 3B

Building Area: Proposed – 3,600 (exist) + 4,200 (add) = 7,800 SF (largest floor)
Allowable – 9,500 (table) + 19,000 (sprinklers) = 28,500 SF

Building Height: Proposed - 3 stories in height, plus the non-occupied attic.
Allowable – 2 + 1 (sprinklers) = 3 stories.

The building will be fully sprinklered.

Means of egress components will be brought up to code. Each story will have a minimum of 2 exits. The existing main stair enclosure will be improved.

The building will meet current accessibility requirements.

proposed building alterations:

To meet requirements of the Space Planning Update some departments currently located within the Town Hall will be relocated to other locations within the facility and others will expand in place. The existing Meeting Room will be demolished to accommodate a new two story building addition accommodating the Land Use Suite on the ground level and an expanded Town Clerk's Vault and office, Registrar and Conference Rooms on the street level. A new three story stair tower will be constructed on the west side of the existing of the existing elevator core. A new restroom addition will be constructed on the east side of the existing elevator core.

The Town Hall will be completely renovated with new finishes consistent with a mid-level office building. Interior finishes will in general, be as follows:

Features of the concept plan include:

- A new rear entrance will be created on the ground level.

- A new egress stair is provided (at the new ground level entrance) to rectify existing egress issues, eliminating the existing stairwell in the center of the building and freeing up additional space for program area.
- Due to code issues, storage use will be eliminated in the attic. A new LaPeyre stair will be located in a upper level closet and will provide general access to the attic.
- The design intent sizes the addition to fit within the existing roadways to the east, south and west of the building. A site survey will need to be developed in order to verify that roads or parking spaces will not need to be modified.
- New walks, landscaping and parking spaces will be added at the area to the south and west of the new rear entrance.
- The existing cooling tower (across the access road, to the west) will be removed. The generator will be relocated to that approximate location.
- During construction, the Town Hall will be vacated.

proposed site alterations:

The proposed scheme will include the following:

- New accessible ramp at street level entrance.
- New front step at street level entrance in order to raise the surface of front stoop to same level as front door.
- New sidewalks as needed per sketch site plan
- Removal of existing cooling tower.
- Relocation of existing electrical generator
- Re-striping existing parking spaces.

proposed architectural systems:

The proposed addition will be constructed as follows:

- Exterior walls at addition: Steel studs with brick veneer (to match existing neoclassical detailing), cast concrete sills and keystone, cast stone coping atop parapet, architectural trim to match profiles of existing cornice (painted wood or wood substitute). At rear entrance façade, expanses of painted aluminum storefront will be used with architectural columns and gabled pediment frontispiece at entrance portico. Additional brick detailing/patterning will occur at the stair tower.
- Exterior walls at existing building addition: Existing exterior walls will need to be modified in order for new electrical systems to be installed. Interior cavity insulation will be added wherever possible. Fully cavity insulation will be costed out as an alternate. (Add Alternate #1)
- Interior walls and structure at addition: Steel framing with gypsum wall board. Steel construction with concrete on metal deck.
- Windows at addition: At new brick façade, insulated glazing will be in operable window frames (either wood, thermally broken aluminum or fiberglass to match profiles of existing wood framed windows). At rear entrance façade at ground level, windows will be painted aluminum storefront with insulated glazing.
- Windows at existing building: New insulated replacement windows will be costed out as an alternate. (Add Alternate #2)

- Roof at addition (at pitched roof sections): Architectural shingles (to match existing) on steel framing and plywood roof deck with rigid insulation at gable and shed/hipped roof areas. Gutters and downspouts as needed.
- Roof at addition (at low slope roof sections): Steel construction with concrete on metal deck. Membrane roofing on sloped rigid insulation and internal drainage.
- Foundation at addition: Reinforced concrete.
- Interior finishes at addition and renovated space will be consistent with a mid-grade commercial office building and will include: porcelain tile floors at public corridors, carpet at office areas, carpet mat at vestibules, ceramic mosaic tile floors at restrooms, painted gypsum board at typical walls, glazed ceramic tile (up to 7' a.f.f.) at restrooms, 2' X 2' acoustical panel ceiling system, and limited use of painted gypsum board soffits.
- Existing stairs to remain will be updated as needed to meet current code and accessibility requirements including new code compliant handrails and guardrails. New stairs will have painted steel guardrails and handrails and rubber treads and risers.

structural existing conditions review

Based on information obtained from a non-destructive field investigation, edm determined that the original Suffield Town Hall structure is a two (2) story building with a fully developed basement area. The structure consists of a masonry foundation, masonry exterior walls, precast concrete floors, a wood framed attic floor, and wood framed roof structure supported by a series of steel members.

Interior load bearing elements are as follows:

Interior load bearing masonry partitions.

Interior steel beams/joists and steel columns.

Based on the proposed scope of work, the structural modifications necessary for the renovation of this structure include, but are not limited to, the removal of approximately 40 lineal feet of interior load-bearing walls on the first floor, relocating existing door openings, sealing existing door openings, demolition of the newest addition, demolition of a portion of the elevator addition, adding a new three (3) story stair tower on the West side of the existing elevator addition, adding a new three story addition on the East side of the existing elevator addition, and adding a new two (2) story addition on the South side of the existing elevator addition.

code requirements

This schematic review has been performed in compliance with the minimum design load requirements for business office building as defined as part of the ASCE/SEI 7-10. The minimum allowable design live load parameters for buildings associated with business uses are as follows:

- a. Design loads for snow, wind, and seismic have been developed from the “2009 International Building Code” and “ASCE 7(05) – Minimum Design Loads for Buildings and Other Structures” based upon the following criteria:

General for Snow, Wind & Seismic

Nature of Occupancy: Business

Occupancy Category: II

Surface Roughness: B

Site Exposure Category: B

Snow loads/Roof Live Load

Ground Snow Load: P_g : 35psf
 P_f : 35psf

Minimum Roof Design

Live Load: 20.0psf (reducible)

Importance Factor: 1.00

Wind Loads

Basic Wind Speed: 90mph

Importance Factor: 1.00

Seismic Analysis (values to be to be verified by geotechnical investigation & report)

Spectral Response
Acceleration S_s : 0.16
 S_1 : 0.064

Site Classification: D

- b. Design loads for floors have been developed from the “2009 International Building Code” and “ASCE 7(05) – Minimum Design Loads for Buildings and Other Structures” based upon occupancy and/or usage.

Minimum Allowable Floor Live Loads

Assembly: (Lobbies) 100psf

Offices: 50psf

Corridors 100psf

Stairs & Exits:

100psf

Mechanical Equip:

As per equipment specifications

proposed structural systems

existing structure

The renovation of the existing structure shall consist of removal approximately 40 lineal feet of bearing walls at two (2) adjoining beam locations in the first-floor ceiling (supporting the second-floor system), enlarging existing door openings, and sealing existing door openings.

At the two (2) locations where the bearing walls are being removed, create the first-floor meeting room. The removed walls form a 'T' shape. The shorter segment, spanning approximately 16 feet, will require the installation of a W12x50 beam to replace the removed bearing wall. The longer segment, spanning approximately 26 feet, will require the installation of a W21x101 beam to replace the removed bearing wall.

Adjacent to the above described area, a stair is being removed and is to be infilled on both the first and second floor with a reinforced concrete slab with a thickness to match the existing slab.

Where new openings are being installed in existing bearing walls, the bearing wall above the new openings shall be supported by installing new lintel members, consisting of four (4) L4x3x $\frac{3}{8}$, shall be installed for seven (7) foot wide openings, and a W12x30 beam with a $\frac{3}{8}$ inch by 12 inches wide plate shall be installed for 11-foot-wide openings. The lintels shall be supported on both ends by bearing a minimum of 12 inches on the existing masonry bearing wall. The existing masonry bearing wall where the lintels bear, shall be grouted solid for a minimum three (3) courses below the bearing locations.

The wall openings that are closed shall be sealed with a construction similar to the existing building construction.

The floor openings where the stair is to be removed, shall be sealed by installing W8x31 beams at four (4) feet on center between existing load bearing elements and sealing the opening with a reinforced concrete deck with a 1½ inch 20 gage steel deck.

elevator addition east

The elevator East addition is a three (3) story addition consisting of light gage steel roof framing with a plywood sheathing, and reinforced concrete floors on steel joists supported with light gage steel stud walls, and a reinforced concrete foundation.

The roof framing shall consist of ten (10) inch light gage steel joist (1000S162-54) spaced at 16 inches on center, spanning between the existing elevator addition structure and the new East exterior wall.

The two elevated floor areas shall consist of a four (4) inch reinforced concrete deck supported with 14K3 steel joists spaced at 2'-8" on center, spanning between the East

exterior wall and the existing elevator addition structure. The joist shall be supported by installing two (2) light gage six (6) inches stud members (600S200-54) below each joist member in the East bearing wall and modifying the existing elevator addition masonry wall for the joist bearing.

At the ground floor level, the upper floor framing levels shall be supported by installing a W6x16 beam above the window wall with a four (4) inch diameter schedule 40 steel columns extending between the foundation wall and the beam. The foundation shall consist of 12-inch reinforced concrete walls with a ten (10) inch deep by 24-inch-wide reinforced concrete footing. The first-floor shall consist of a four (4) inch thick reinforced slab on grade.

entrance stair tower addition

The entrance stair tower is a three (3) story addition, located West of the existing elevator, and shall consist of light gage steel frame enclosure and a stair consisting of concrete filled steel pans and reinforced concrete landings.

The stair landings shall consist of 4" thick reinforced concrete slab installed on a 1½ 18 gage steel deck, supported by the exterior bearing walls and W10x33 steel beams along the interior edges. The stair shall consist of concrete filled steel pans supported by C12x20.7 stringers.

The roof framing shall consist of eight (8) inch light gage steel joists (800S162-43) spaced at 16 inches on center, spanning between the existing elevator addition structure and the new East exterior wall.

The bearing walls shall consist of six (6) inch light gage six stud members (600S200-54) with two (2) stud members installed below each landing beam member. At the ground floor level, the upper floor framing levels shall be supported by installing a W6x16 beam above the window wall with a four (4) inch diameter schedule 40 steel columns, extending between the foundation wall and the beam.

The foundation shall consist of 12-inch reinforced concrete wall with a ten (10) inches deep by 24 inches wide reinforced concrete footing. The first floor shall consist of a four (4) inch thick reinforced slab on grade.

south addition

The South addition is a two (2) story structure consisting of light gage framing, a reinforced elevated concrete deck, two (2) center column lines consisting of steel beams and columns, and a reinforced concrete foundation.

The roof framing of the South addition shall consist of a plywood roof sheathing and ten (10) inch light gage steel rafters (1000S162-54) spaced at 16 inches on center along the South side of the roof, manufactured light gage steel truss members (with a utility space with a 100 pounds per square foot allowable loading) spaced at 16 inches on center in the center area, and six (6) inch light gage steel rafters (600S162-54) spaced at 16 inches on center along the North side of the roof.

The second-floor ceiling shall be supported by light gage framing on the South and North sides and the light gage truss members in the center area. The ceiling support members on the South side shall be eight (8) inch light gage steel joists (800S162-43) spaced at 16 inches on center. The ceiling joists on the North side shall be six (6) inch light gage steel joists (600S162-43) spaced at 16 inches on center. The second-floor area shall consist of a four (4) inch thick reinforced concrete deck supported by a 1½ inch 20 gage steel deck. The joist framing shall consist of 22K10 steel joists spaced at 2'-8" on center under the vault area and spaced at 4'-0" on center under the office area.

The second floor and roof structure shall be supported by two (2) interior column lines. The column lines shall consist of (indicated from East to West) the following:

Span 1 - W14x90
Span 2 - W10x33
Span 3 - W16x45
Span 4 - W12x40
Span 5 - W14x68

The beams shall be supported by six (6) inch schedule 40 pipe columns installed at four interior locations and four (4) inch schedule 80 columns at both ends bearing on the foundation wall below. The interior column foundations (indicated from East to West) shall be as follows:

Reinforced concrete footing 5'-0" square by 12 inches deep.
Reinforced concrete footing 4'-6" square by 12 inches deep.
Reinforced concrete footing 4'-6" square by 12 inches deep.
Reinforced concrete footing 4'-9" square by 12 inches deep.

The bearing walls shall consist of six (6) inch light gage six stud members (600S200-54).

The foundation shall consist of a 12-inch reinforced concrete wall with a ten (10) inch deep by 24-inch-wide reinforced concrete footing. The first-floor shall consist of a four (4) inch thick reinforced slab on grade.

entrance porch

On the West side of the new South addition, an entrance porch shall be installed.

The porch structure shall consist of plywood sheathing supported by six (6) inch rafters spaced at 16 inches on center. The rafters shall be supported by the South addition structure and new beam line on the West side. The beam line shall consist of W6x16 steel beams with a maximum span of 10'-0". Four (4) inch schedule 40 pipe columns shall be installed at a maximum spacing of 10'-0" on 16-inch diameter reinforced concrete footings. The floor for the porch shall consist of a four (4) inch thick reinforced slab on grade.

proposed mechanical systems

The proposed renovations and addition will include:

basis of design

- The project is located in Suffield, CT, Hartford County. Systems will be designed based on ASHRAE 99.6% heating DB of 2 degrees F, and 0.4% cooling of 92 degrees FDB and 73 DMWB.
- All spaces will be designed to be conditioned to an average temperature of 72 degrees F +/- 3 degrees Fahrenheit.
- LEED certification and net-zero energy measures will not be incorporated into this project as a design objective. However, good design practices for high efficiency systems will be implemented where practical.
- Energy incentives and rebates will be pursued where applicable.
- The vault will have humidification and dehumidification control. No other areas will have humidity control.
- The IT Server room will have year around cooling with low ambient controls

design conditions

- Area: 18,500 square feet (9,000 SF new space, 9,500 SF existing spaces)
- The existing building will be renovated and the general envelope will be improved where possible and where work will be performed. Insulation will be improved where possible.
- Number of people: 174 (maximum occupancy) x 250 btu/hr/person = 43,500 btu/hr
- Lights: LED Lighting @ 0.3 watts per square foot = 5,550 watts
- Equipment: 35 PCs x 100 watts/PC = 3,500 watts
- Maximum outside air load: 174 people @ 20 CFM/person = 3,480 CFM
- HVAC system will be designed assuming a diversity of 80%.
- HVAC system will be designed assuming a safety factor of 20%.

general information

- All existing heating and cooling systems will be removed and properly disposed of.
- The Boiler Room / Mechanical Room will be utilized for boiler(s), pumps, hot water heating equipment, the main HVAC control cabinet and other mechanical equipment as space permits.
- The boiler(s) or heating systems will be high efficiency, condensing, sealed combustion with sidewall terminations.
- Nominal heating capacity (single boiler or multiple furnaces) sizing for budgetary purposes is 600,000 btu/hr input rating, based upon an average heat loss of 30 btu/SF.
- A redundant boiler will not be provided
- System Option #1 has redundant heating capacity with the air source heat pumps should the hydronic boiler fail.
- System Option #2 has partial redundant heating capacity should a single furnace fail. Having multiple furnaces offers flexibility in the event of a localized system failure.
- System Option #3 would have no backup heating.
- Heat pump condensing units for DX systems (if selected) will be located at grade level and on stands at the perimeter of the building on the east or west side of the existing portion of the building.

- If an air-cooled chiller is used, it will be remotely located across the access driveway with underground piping connecting the chiller to the mechanical room.
- Nominal cooling capacity (DX or chilled water) sizing for budgetary purposes is 40 tons, based upon an average heat gain of 25 btu/SF.
- Fire dampers shall be provided when penetrating any fire rated assemblies.
- Duct smoke detectors will not be provided because no system capacities trigger the requirement
- Piping and ductwork will be concealed in walls and ceilings. Chases (if required) will be located in closets or storage areas.
- Condensate drains will be routed to an approved indirect waste location.

system option #1 – perimeter baseboard and mini-split heat pumps

- Zoning – each office or area will have independent heating control via a wall mounted thermostat.
- The exterior rooms of the building will receive perimeter baseboard that will “wash” the exterior walls during the winter making the spaces more comfortable. The temperature of the baseboard will be automatically adjusted based on outdoor temperature, saving energy.
- Wall mounted mini-split head units will be provided for areas less than 250 square feet (nominal). Ducted units will be provided for areas greater than 250 square feet.

system option #2 – conventional furnaces and heat pump air conditioning

- Zoning – the building will be divided into approximately 10 zones.
- Four – six gas fired furnaces will be located in the ceilings, mechanical spaces or attic.
- The furnaces will be fitted with DX coils connected to air source heat pumps to provide base heating load and air conditioning.
- Some ceiling areas may need soffits to accommodate duct routing.

system option #3 – air handlers & console units with remote chiller

- Zoning – the zoning for this option will be similar to Option #1
- Perimeter baseboard could be provided for comfort, or a hydronic heated forced air system could be provided.
- A combination of ceiling mounted air handlers located in the ceiling and console units located on walls will provide heating and cooling.
- A chiller will be located away from the building eliminating the need for several smaller outdoor units to be located along the perimeter of the building.
- Piping will be extensive and contain antifreeze to accommodate the outside chiller installation. Additional circulating pumps will be required to move the heating and chilled water throughout the building.

ventilation

- Code required ventilation will be provided using a series of Energy Recovery Ventilators (ERVs) located throughout the building in ceilings or in mechanical areas.
- Equipment sizing will be based upon ventilation needs for that area of the building.
- Ventilation is based on a total occupancy of 175 people.

- Exhaust will be provided for bathrooms and the janitor closet as required. Additional exhaust will be provided for the Break Room, Meeting Room, and the Large Conference Room.
- Fresh air will be redistributed as needed to offices and meeting rooms using a ducted system
- Fresh air and exhaust will be communicated to the outdoors via side wall grills
- Reheat during the winter will be provided by hot water coils or electric duct heaters, depending on the system heating configuration.
- The fresh air will not be directly cooled, humidified or dehumidified.
- Fresh air will be provided to the elevator machine room. An approved vent relief assembly will be specified to meet safety requirements.

hvac @ vault

- The vault will be conditioned to 72 degrees F +/- 3 degrees F, and 50% RH +/- 5% RH using an air handler and ductwork system. The overall system configuration (Option) that is selected for the rest of the building will determine what infrastructure is needed to accomplish this.
- The vault will have continuous airflow at approximately 1 CFM / Square Foot
- The air handler and controls will be located outside of the vault with a remote temperature and humidity sensor located inside the vault. Alternatively, the return air conditions may be monitored based on the actual construction of the vault.
- Humidity will be introduced to the ductwork with a high humidity alarm and automatic humidifier shutoff.
- Dehumidification will be accomplished using cooling and a reheat coil or a dedicated dehumidifier, depending on system selection.
- This system will have a duct smoke detector to shut down the air handler in the event of a fire.
- Fire dampers will be installed at the plane of the vault.
- The duct sizes will be small so no security bars or additional measures will be required.

hvac @ data room

- The data room will have year around air conditioning to maintain the temperature of the space at 75 degrees F +/- 3 degrees F.
- One dedicated system (no backup) will have 30,000 Btu/hr cooling capacity.

controls information

- All controls will be managed by a centrally controlled building management system (BMS) with remote access for monitoring and troubleshooting.
- BMS software shall be loaded on a customer provided computer or on a designated interface panel located in the mechanical room, or both. Basic programming adjustments shall be available to maintenance staff without special software and/or a service call from the controls supplier.
- Thermostats in each zone will allow for local temperature adjustment within a predetermined range.
- Users will not be able to turn the system off, only increase or decrease the temperature.

- The system shall have automatic changeover from heating to cooling.
- Subsystems may have independent controls (ERV reheat for example) but all systems will be enabled or disabled through the central controller.
- The controller shall provide an occupancy schedule for Monday – Friday 7:30 AM – 5:00 PM. A local override button for each zone will be provided to allow after hours operation of heating, cooling and ventilation.

system options

- A general snowmelt budget for the upper level entrance stairs and handicap should be provided. The budget should include automatic snowmelt sensor with warm weather shutdown. Design should accommodate a Class 1 installation having at least 150 Btu/SF melting capacity.
- A general budget to provide Humidification during winter months, based on the selected Option, should be provided.

proposed plumbing systems:

The proposed renovations and addition will include:

- Restrooms will be renovated/relocated per plan. Plumbing fixtures count and fixtures to comply with code requirements (see code summary narrative).

electrical existing conditions systems:

electrical power distribution

- There is an existing 400 Amp, 120/208 V Main Switch in the electrical room which provides normal utility power to the building. This switch is old and not in good condition. There is also a 600 A Main Circuit Breaker tied to the onsite generator, an ASCO, 600 A automatic transfer switch (ATS) and a 600 A Main Distribution Panel (MDP) all newer and in good condition.
- The emergency side of this ATS is fed from an existing 150 KW, diesel generator located outside in a weather protective enclosure. The generator and its belly diesel fuel tank appear to be newer and in good condition.
- Branch power throughout the building is fed from a mix of newer and a few older panelboards. These panels are at 120/208V. The newer panels appear to be in good condition. The older panels are in fair condition.
- Lighting and receptacle circuits are fed at 120 V from these panels.
- HVAC power is generally fed at 208V, 3 phase from these panels and the MDP.

lighting

- Lighting fixtures are a mix of recessed fluorescent type, 2x4 and 1x4 and some surface mounted. There are also a few incandescent chandeliers and recessed downlights. These fixtures appear to be in good condition but the lighting power density should be verified based on actual fixture wattage.
- Lighting is controlled locally by wall mounted switches with a limited number of occupancy sensing devices.

exit signs

- Most areas on the floors have illuminated exit signage.

means of egress lighting

- Means of Egress lighting operating at line voltage is located in the corridors or stairs and is fed from the 120 V panels.
- Emergency lighting is provided by twin head, battery/ charger units which appear to be located to provide code required levels. The units appear to be in good condition.

tele-data system wiring

- CAT 6 cabling is installed above hung ceilings and run down in walls or surface raceway to outlets. It appears to be in good condition.
- Home runs terminate at the existing MDF room on the Upper Level.
- The existing incoming tele/data service is a fiber optic line entering the basement and run up to the upper Level MDF room.

fire alarm system & wiring

- Fire Alarm system consists of an older, Simplex 4001, analog, zoned, control panel, Horn/strobes in occupied spaces, and what appears to be full area smoke detector coverage.
- Building is presently not sprinklered.

lightning protection system

- An existing lightning protection system was evident with grounding conductors welded to the existing building steel structure.

proposed electrical systems:

general

- The electrical systems for the buildings will be designed in accordance with:
 1. NFPA 70, 2014 National Electrical Code
 2. NFPA 101 Life Safety Code
 3. Connecticut State Building Code,
 4. Connecticut Energy Conservation Code (IECC 2012)
 5. ANSI C2 National Electrical Safety Code
 6. Telecommunications Industry Association and Electronic Alliance Standards Association (EIA/TIA) 568 and/or 569A, Communications Cabling Circuits and Equipment
 7. NFPA 72 – National Fire Alarm Code

electrical power distribution

- The existing 400 A incoming service needs to be replaced due to condition and be upgraded to handle the proposed “addition” loads. Base on present building maximum utility demand and load estimates for the addition, a new 600 A, 120/208 V, 3 phase service will be sufficient. This service should be run in underground from a new utility transformer pad on site. It should terminate in a new 600 A, Main Switch / CT cabinet and then be extended to the existing ATS for tie in to a new MDP (600 A), and the existing MDP (600 A). Branch circuit breaker in the existing MDP can be reused where appropriate to feed existing panels and elevator loads. New circuit breakers should be installed for new panels and HVAC feeders.
- The emergency side of this ATS is to remain fed from the existing 150 KW, diesel generator. However, due to the addition, this generator must be relocated and the 600 A feeder extended to the exiting ATS from new gen set site location.
- Branch power throughout the existing building is presently fed from a mix of newer and a few older panelboards. These panels are at 120/208V. The newer panels appear to be in good condition and may be reused to serve the renovated spaces. The older panels are in fair condition and should be removed. New Panels should be provided in each floor (3) of the existing building and on each floor of the addition. These panels will be fed from the existing or new MDP as breaker space allows.
- Lighting and receptacle circuits are fed at 120 V from these panels.
- HVAC power will be fed at 208V, 3 phase from these panels for Air Handlers, and the and the MDP’s for Condensing units.
- Mechanical, HVAC and Refrigeration, equipment rated below ½ HP will be supplied by 120V single-phase power. Mechanical & Refrigeration equipment rated ½ HP and above will be supplied 208V three phase.
- The distribution of power will be concealed in finished areas - offices, meeting rooms etc., and exposed in Storage, Mechanical and Electrical rooms. MC type cable will be used for branch circuits where run above hung ceilings or concealed in walls. No conduits or cable will be exposed in finished areas.
- Metallic raceways where required for feeders will be EMT in locations where exposure to physical damage is minimal and threaded rigid galvanized conduit in locations where the raceway will be exposed to physical damage or prolonged wetness.
- All wiring will be designed with less than a 3% voltage drop for all feeders and less than a 2% voltage drop for all branch circuits.
- General purpose convenience power will be provided throughout the renovated area using commercial grade duplex receptacles. Ground fault protected receptacles will be provided within 6 ft. of a sink and exterior locations per NEC requirements.
- No more than eight duplex receptacles will be included on a general receptacle circuit. In general, a 4-wire system with 3 circuits and common neutral will be used to feed power into the integral wiring harness in the modular furniture- one 4 wire feed per 6-8 work stations. (No more than 3 modular work stations will be tied to a circuit) Where a circuit is designed for shop type equipment, maintenance equipment, appliances, etc., as few as one or two receptacles per circuit might be appropriate.
- Wiring devices will all be heavy-duty specification grade. The standard will be white devices and cover plates. In abusive locations, gray devices with stainless steel cover plates.

grounding and bonding

- A separate, insulated equipment grounding conductor, sized per NEC, shall be provided within each raceway and cable, with each end terminated on a suitable lug, bus, enclosure, or bushing.

- local disconnect switches
- Local disconnect safety switches will be provided for all permanently connected mechanical, equipment to allow a lockout point for zero energy state compliance per OSHA requirements.

lighting

- All Lighting fixtures are to be replaced by new, energy efficient LED types, generally recessed where lay in ceiling are to be installed otherwise surface mounted. There are also a few incandescent chandeliers and recessed downlights which may be reused if appropriate. With this LED system, lighting power density will be in compliance with the requirements of the IEEC. All new lighting will controlled locally by wall mounted switches, and occupancy sensors per IEEC. Dimming switched will be provide for all LED fixtures.
- The interior lighting for will be designed with luminance foot-candle levels recommended by the IESNA and US EPA Energy Star, as follows:
 1. 5 fc: Corridors
 2. 50 fc: Office and Meeting areas
 3. 20 fc: Storage
- These luminance levels will provide lighting that complies with the energy code interior lighting power allowance in the Connecticut energy code.
- Egress lighting will typically be on continuously, unless requested to be controlled by occupancy sensor controls or manual control.

exit signs

- All means of egress should be provided with new LED type exits signs per code.

means of egress lighting

- Means of Egress lighting will be provided with new LED fixtures in the corridors and stairs and fed from the 120 V panels.
- Emergency lighting will be provided by using some of the LED fixtures in the means of egress tied to a Central Emergency Lighting Inverter.

tele-data system wiring

- New data/telephone cable will be extended from the main tele / data room on the first floor to all outlets. The structured cabling system shall include standard Category 6 (100/1000 maps) voice and data cable, plenum rated as necessary.
- Cable distribution shall be above drop ceiling spaces utilizing Caddy clips for support and routing, with conduits or nonmetallic tubing stubbed above the ceiling from outlet locations. All necessary jacks, plates, blanks, grounding, conduit and accessories to provide a complete installation will be specified work area outlets. Spare capacity for future growth will be provided at all cable termination points and where cable is run in conduit.
- Existing Service Fiber Optic cable should be routed to the new MDF room on the Lower Level.

general wiring configurations for offices

- Each office / work station will have a minimum of one tel/data device plate with 1 Cat 6 voice jack and 1 Cat 6 data jack.

testing

- All copper cables and termination hardware shall be 100% tested according to the requirements of ANSI/TIA/EIA-568-A Addendum 5, TSB-67 and TSB-95.
- identification and labeling
- All telecommunications cables and terminals shall be clearly and permanently labeled. There shall be no duplicate jack numbers throughout the building. The labels shall be applied at both the room jack and patch panel or 110 block.

fire alarm system & wiring

- A new fire alarm system including Control Panel, initiating and indicating devices and Central Station Tie will be provided per code.
- The fire alarm system will include duct-mounted smoke detectors, and alarm horn/strobe units per Code.
- Wiring for the fire alarm system detection circuits will be Class B and for the notification circuits will be Class B.
- Locations for devices will be in accordance with NFPA, ADA and AAB requirements and will include:
- Smoke detectors in all storage rooms, Elevator lobbies (recall) , electric closets and telecommunication rooms
- Notification appliances (audio / visual) in all occupied spaces.
- Duct Smoke detectors in air units over 2,000 CFM.
- Water Flow / tamper devices for Fire Protection Sprinkler system

lightning protection system

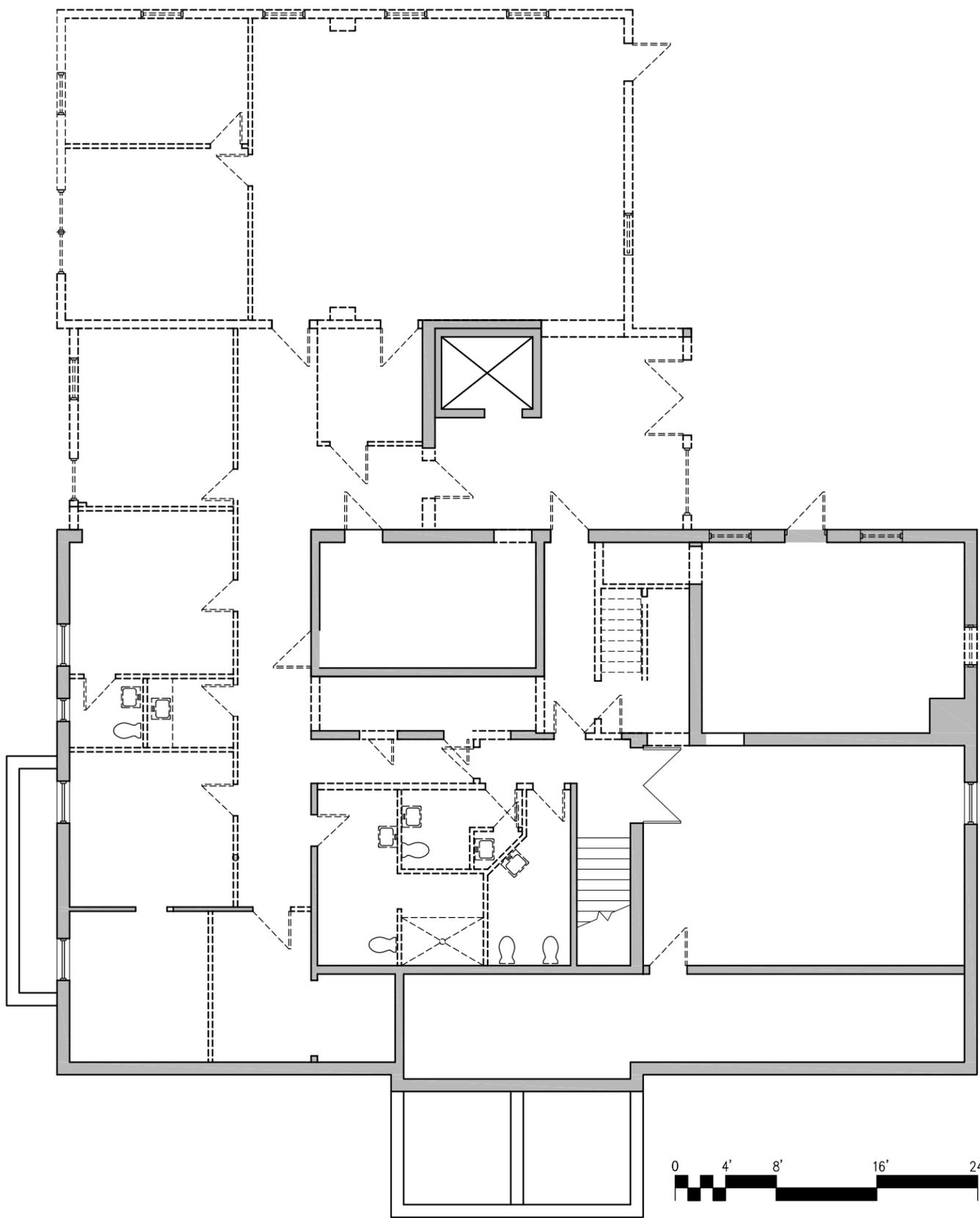
- An existing lightning protection system shall remain and be tied in to a system installed on the new addition. was evident with grounding conductors welded to the existing building steel structure.

access control and security system

- An access control and security system will be provided per Town of Suffield direction.

fire protection systems:

- An automatic fire suppression system will be installed through the existing building and new addition.



floor area: 8162 s.f.



preliminary



town of suffield

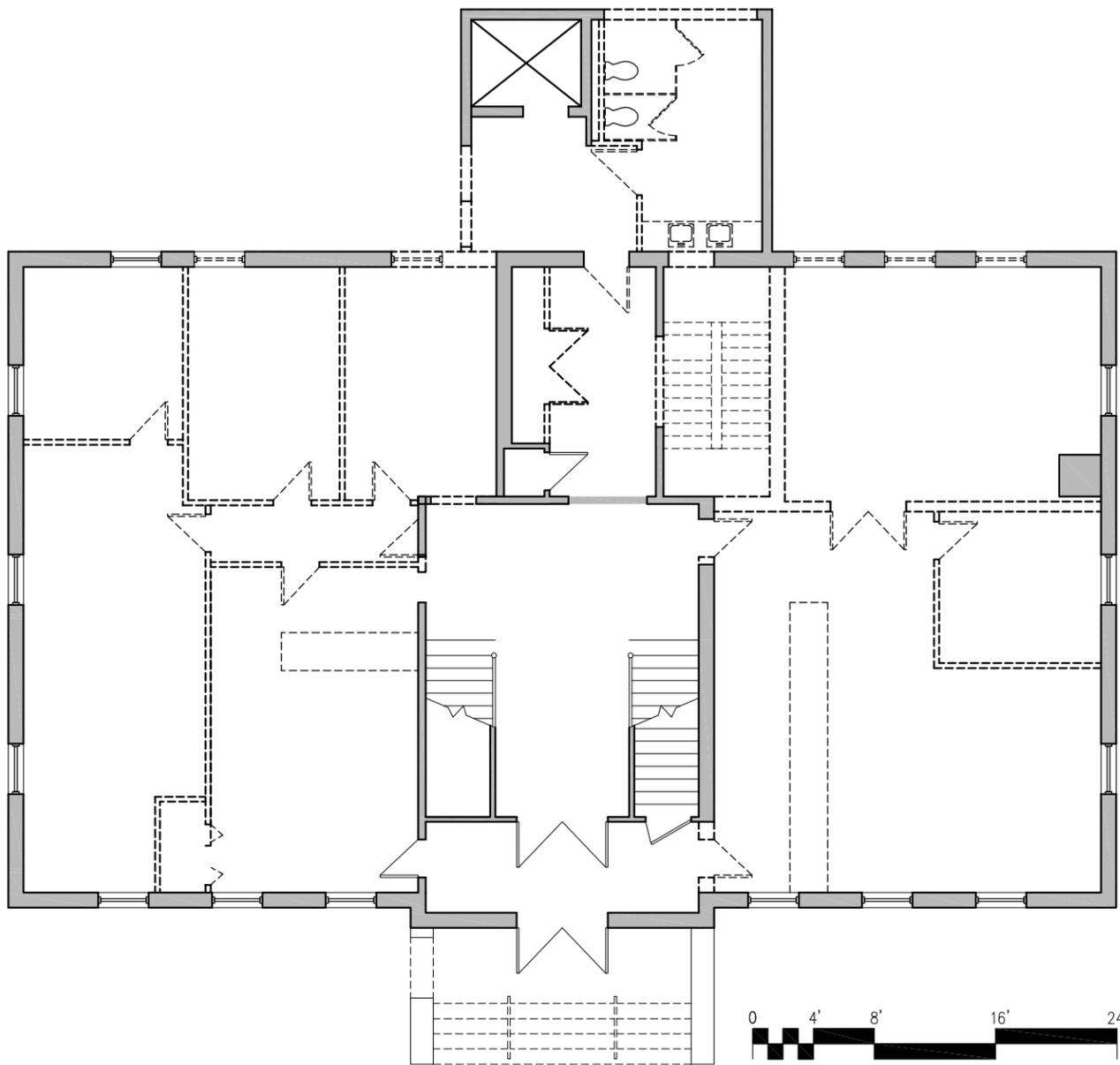
suffield, ct

town hall
space needs study update
architectural development

ground level demo

tos-2456a
6/14/17

dm-1.0



floor area: 6887 s.f.



preliminary



town of suffield

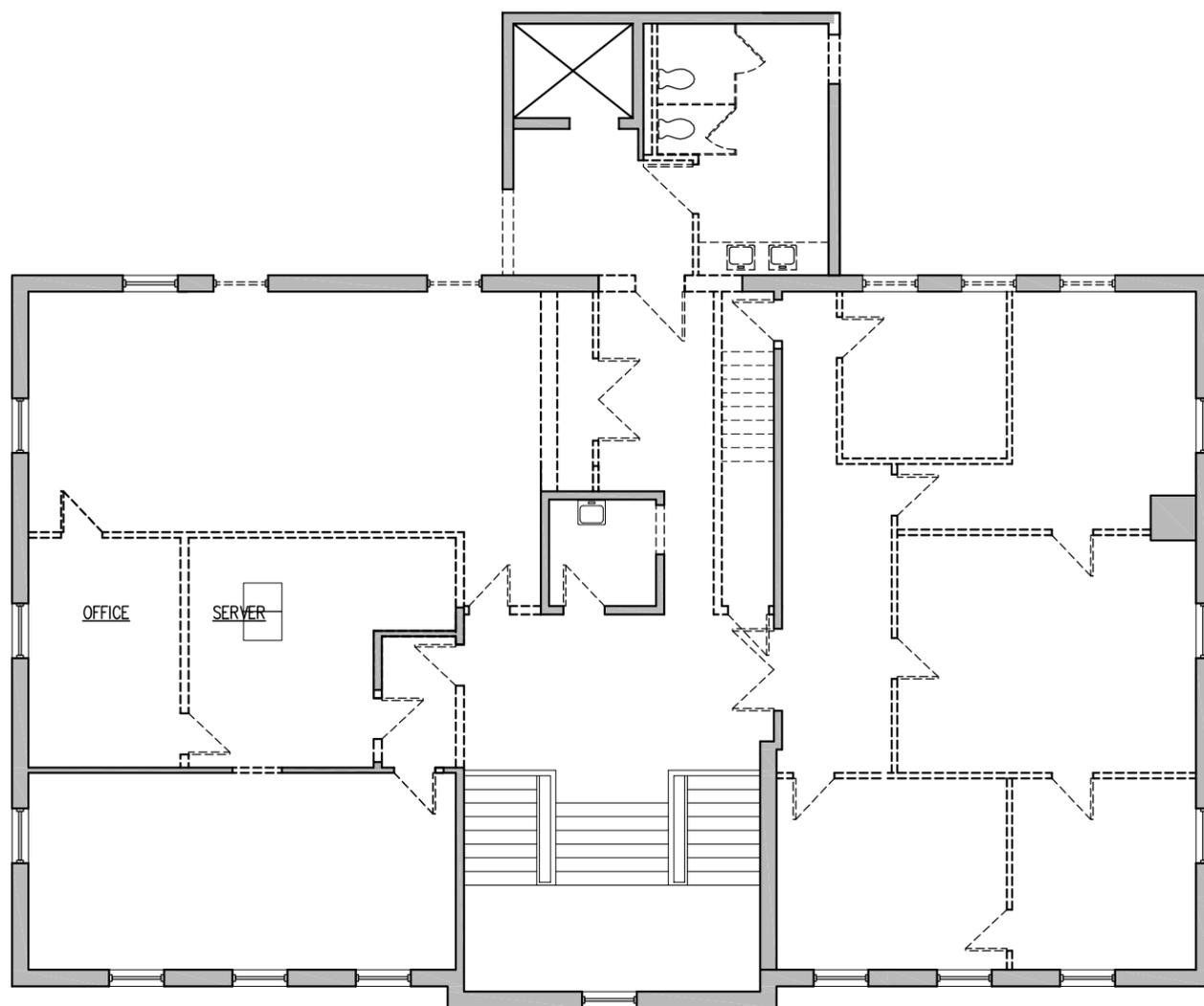
suffield, ct

town hall
space needs study update
architectural development

street level demo

tos-2456a
6/14/17

dm-1.1



preliminary



floor area: 4150 s.f.



project north



town of suffield

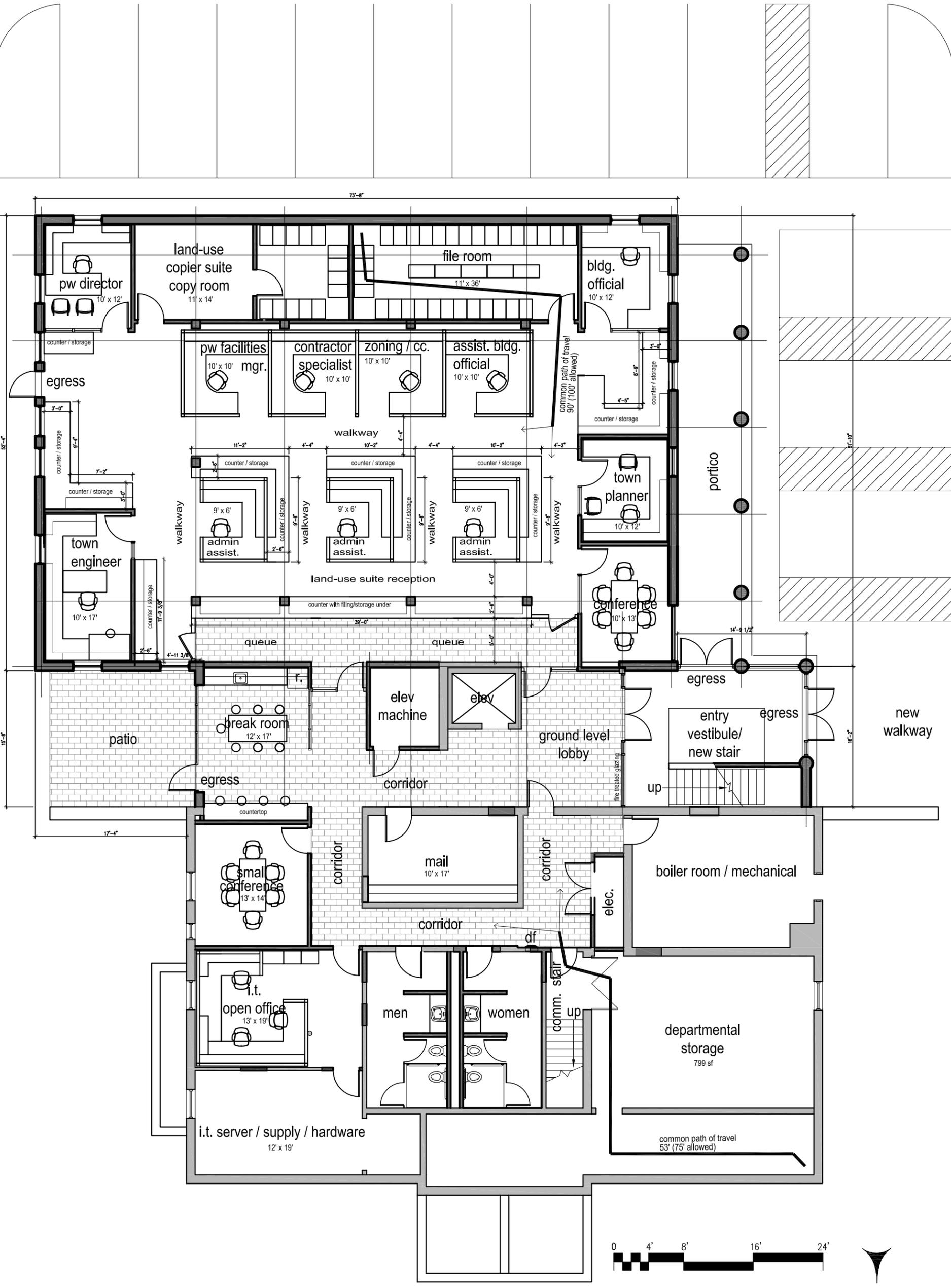
suffield, ct

town hall
space needs study update
architectural development

upper level demo

tos-2456a
6/14/17

dm-1.2



floor area: 8162 s.f.



preliminary

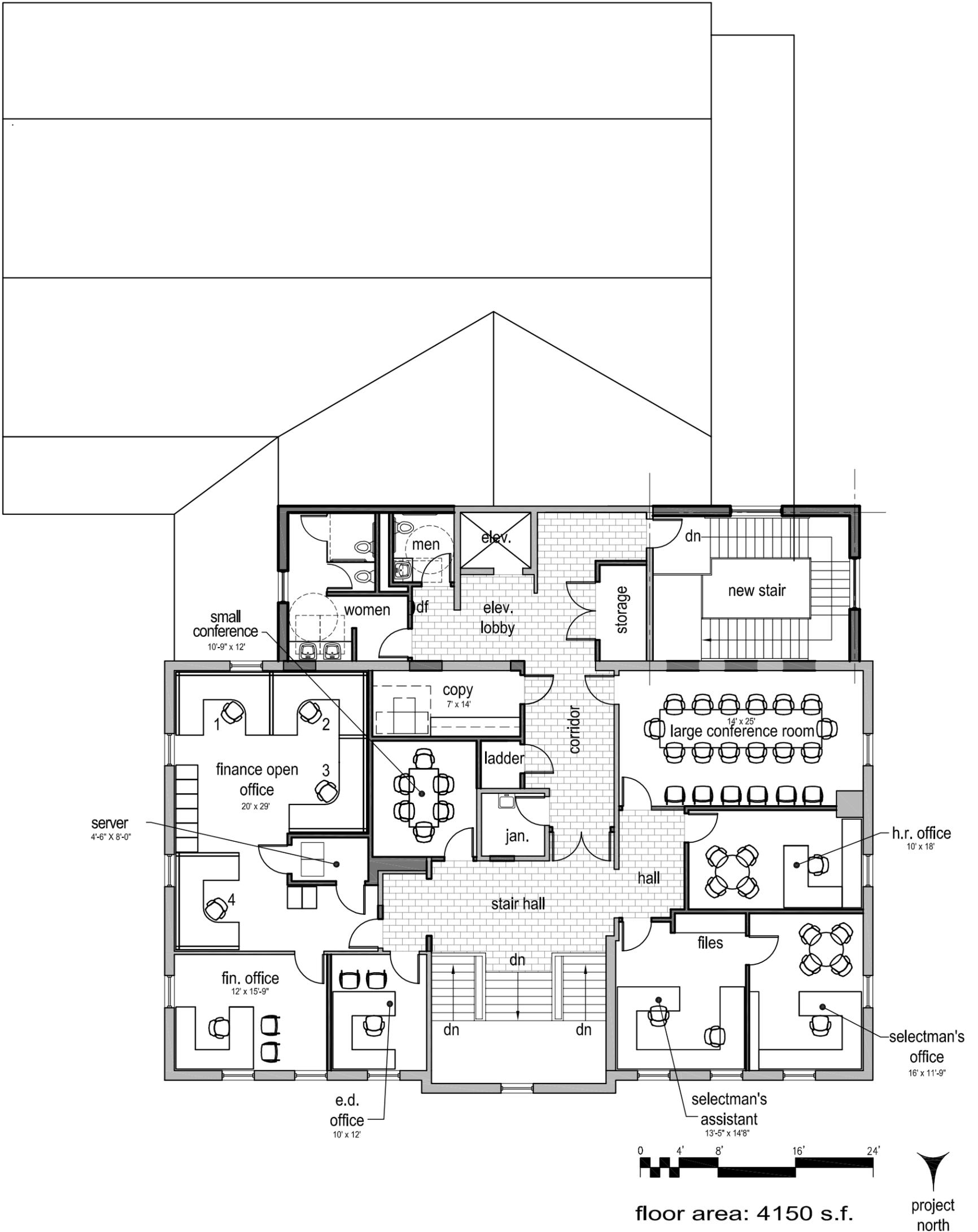


town of suffield
suffield, ct

town hall
space needs study update
architectural development

ground level plan
tos-2456a
6/13/17

mp-1.0



preliminary



town of suffield

suffield, ct

town hall
 space needs study update
 architectural development

upper level plan

tos-2456a
 06/13/17

mp-1.2

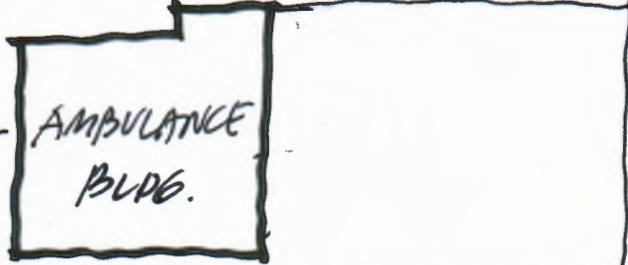
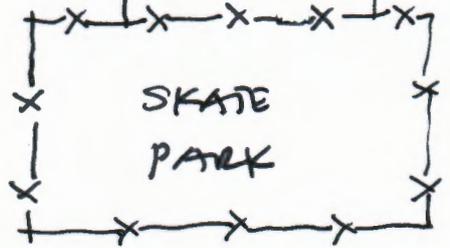
NEW SIDEWALK
TOWN HALL ADDITION

TOWN
HALL

PARKING

Remove existing cooling tower. Relocate generator to this location.

RELOCATE EXISTG GENERATOR
NEW PORTICO, ENTRY WALKWAYS
AND LANDSCAPING





SUFFIELD TOWN HALL

View from Mountain Road

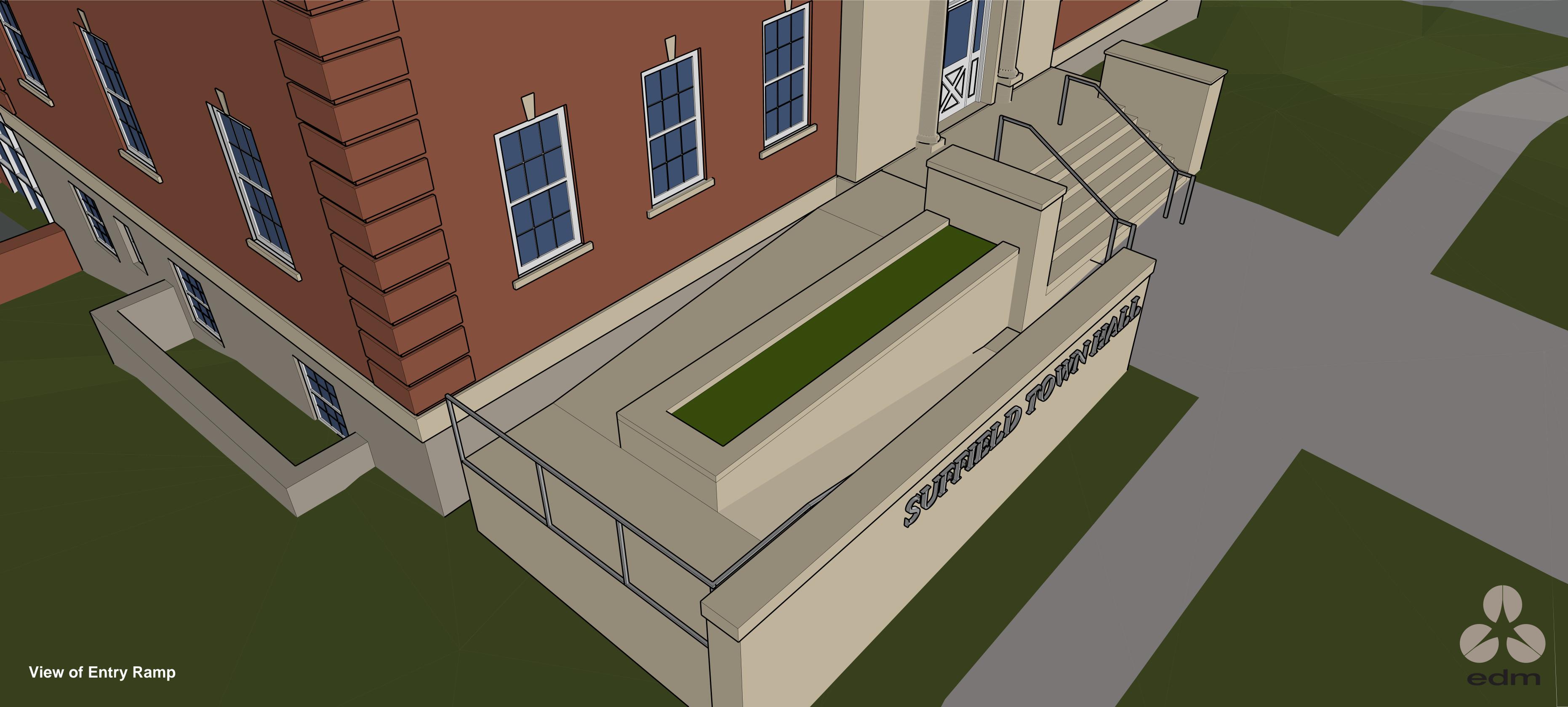




SUFFIELD TOWN HALL

View at Front Entrance





View of Entry Ramp



Birdseye View from Northwest



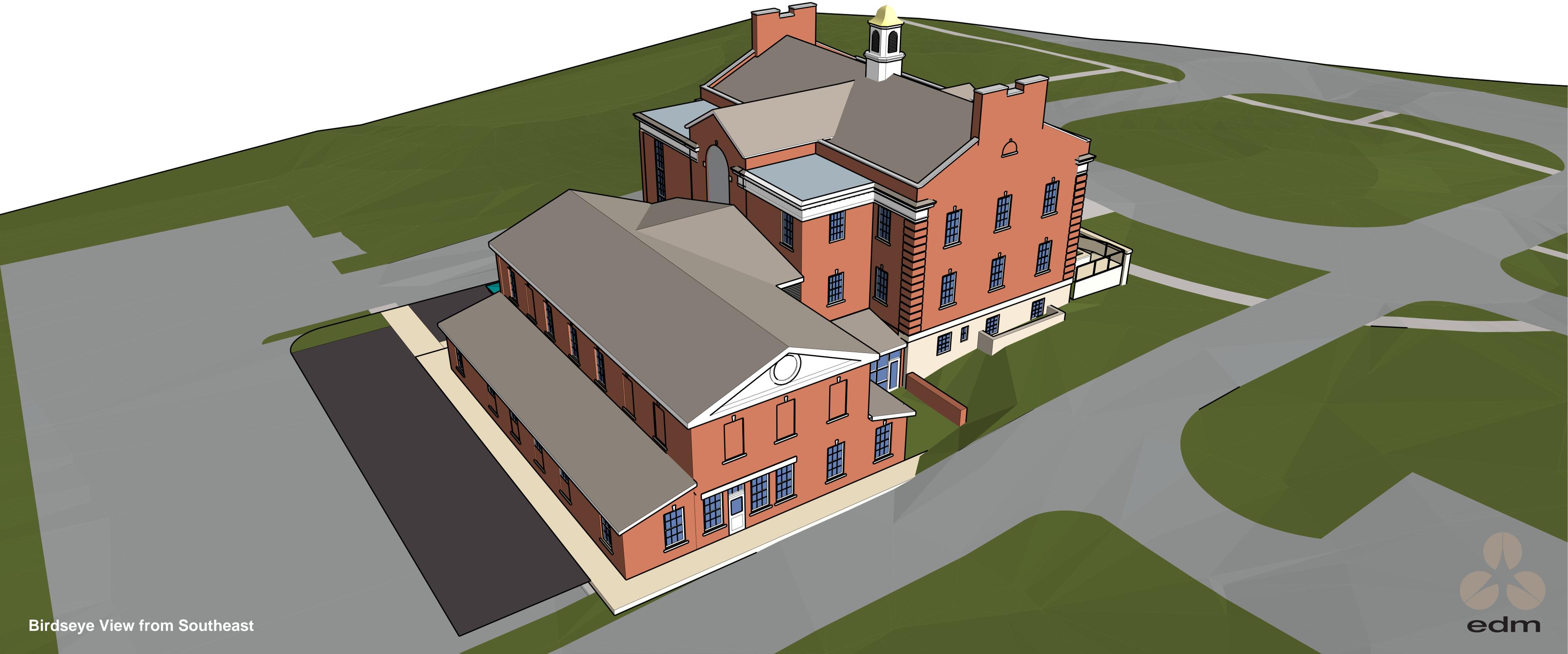
View from West



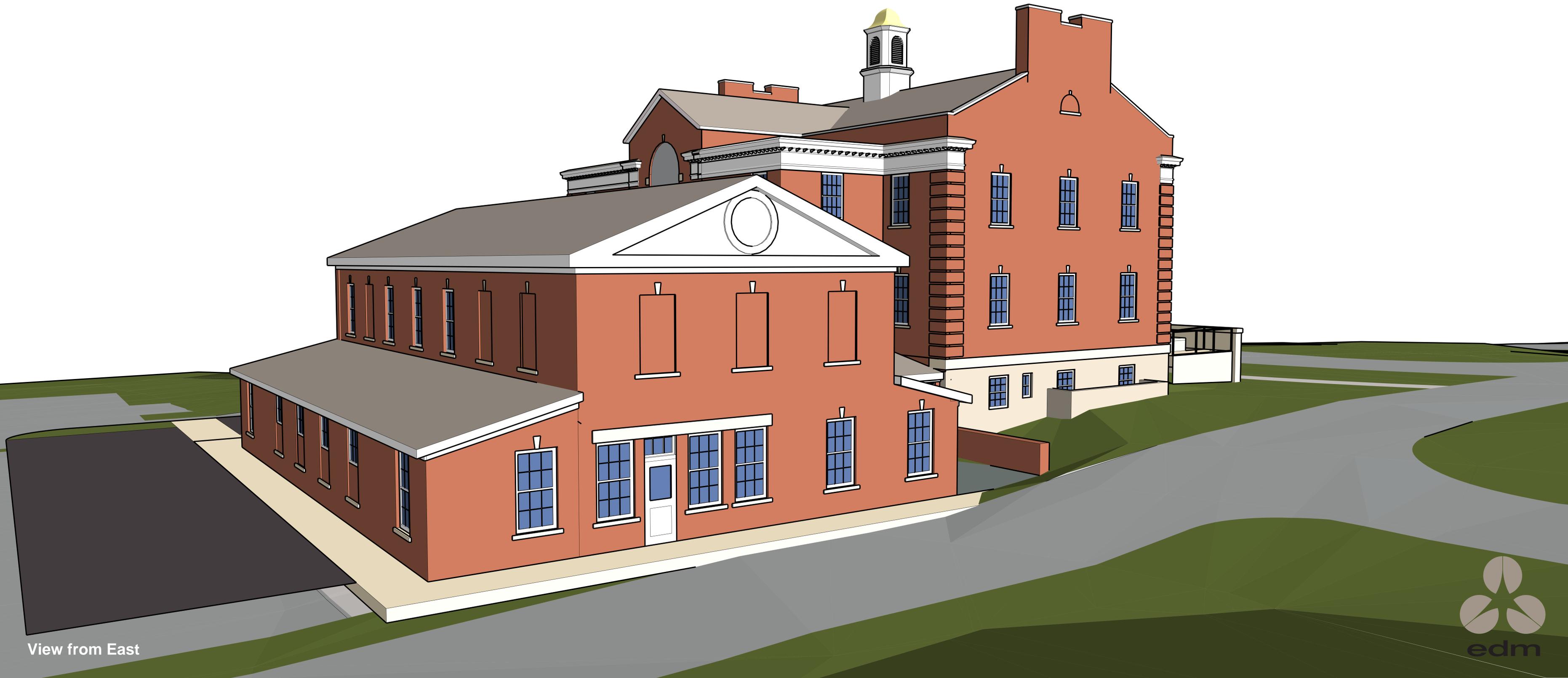
View from Southwest



Birdseye View from Southwest



Birdseye View from Southeast



View from East



Birdseye View from Northeast



View from Southwest



Birdseye View from Southwest



**Suffield Town Hall
Suffield, CT**

**Master Plan Concept Cost Estimate
Update #1**



Prepared for:

edm

Unionville, CT

Prepared by:

D G Jones International, Inc.

3 Baldwin Green Common, #202

Woburn, MA 01801

email : boston@dgjonesboston.com

Tel: 781-932-3131

June 26, 2017

SUMMARY

	Gross Floor Area (sf)	Consolidated			Renovation			New Addition		
		19,291	10,609	8,682	Elements (\$)	\$/sf	%	Elements (\$)	\$/sf	%
<i>A Substructure</i>		197,306	10.23	4.42%	0	0.00	0.00%	197,306	22.73	6.84%
A10 Foundations		197,306	10.23	4.42%	0	0.00	0.00%	197,306	22.73	6.84%
A20 Basement Construction		0	0.00	0.00%	0	0.00	0.00%	0	0.00	0.00%
<i>B Shell</i>		1,128,460	58.50	25.30%	136,547	12.87	8.66%	991,913	114.25	34.39%
B10 Superstructure		343,689	17.82	7.70%	77,606	7.32	4.92%	266,083	30.65	9.22%
B20 Exterior Enclosure		637,168	33.03	14.28%	51,892	4.89	3.29%	585,276	67.41	20.29%
B30 Roofing		147,603	7.65	3.31%	7,049	0.66	0.45%	140,555	16.19	4.87%
<i>C Interiors</i>		952,513	49.38	21.35%	479,503	45.20	30.43%	473,010	54.48	16.40%
C10 Interior Construction		415,946	21.56	9.32%	197,443	18.61	12.53%	218,503	25.17	7.57%
C20 Stairs		60,122	3.12	1.35%	15,198	1.43	0.96%	44,924	5.17	1.56%
C30 Interior Finishes		476,445	24.70	10.68%	266,862	25.15	16.93%	209,583	24.14	7.27%
<i>D Services</i>		1,491,879	77.34	33.45%	815,506	76.87	51.75%	676,373	77.91	23.45%
D10 Conveying Systems		20,400	1.06	0.46%	20,400	1.92	1.29%	0	0.00	0.00%
D20 Plumbing		153,776	7.97	3.45%	68,629	6.47	4.35%	85,147	9.81	2.95%
D30 Heating, Ventilating and Air Conditioning (HVAC)		619,366	32.11	13.89%	341,383	32.18	21.66%	277,982	32.02	9.64%
D40 Fire Protection Systems		124,021	6.43	2.78%	69,441	6.55	4.41%	54,579	6.29	1.89%
D 50 Electrical Systems		574,316	29.77	12.88%	315,652	29.75	20.03%	258,665	29.79	8.97%
<i>E Equipment and Furnishings</i>		108,608	5.63	2.43%	38,911	3.67	2.47%	69,697	8.03	2.42%
E10 Equipment		15,425	0.80	0.35%	8,750	0.82	0.56%	6,675	0.77	0.23%
E 20 Furnishings		93,183	4.83	2.09%	30,161	2.84	1.91%	63,022	7.26	2.18%
<i>F Special Construction and Demolition</i>		105,518	5.47	2.37%	105,518	9.95	6.70%	0	0.00	0.00%
F10 Special Construction		0	0.00	0.00%	0	0.00	0.00%	0	0.00	0.00%
F20 Selective Demolition		105,518	5.47	2.37%	105,518	9.95	6.70%	0	0.00	0.00%
<i>G Building Sitework</i>		476,349	24.69	10.68%	0	0.00	0.00%	476,349	54.87	16.51%
G10 Site Preparation		64,821	3.36	1.45%	0	0.00	0.00%	64,821	7.47	2.25%
G20 Site Improvements		277,506	14.39	6.22%	0	0.00	0.00%	277,506	31.96	9.62%
G30 Site Civil/Mechanical Utilities		76,450	3.96	1.71%	0	0.00	0.00%	76,450	8.81	2.65%
G40 Site Electrical Utilities		57,572	2.98	1.29%	0	0.00	0.00%	57,572	6.63	2.00%
G90 Other Site Construction		0	0.00	0.00%	0	0.00	0.00%	0	0.00	0.00%
Sub Total Construction		4,460,633	231.23	100.00%	1,575,984	148.55	100.00%	2,884,649	332.26	100.00%
General Conditions/Requirements		446,063	23.12							
GC's Payment & Performance Bond	1.00%	49,067	2.54							
Builders Risk Insurance		By Owner								
GC's Gen'l & Excess liability Insurance	1.25%	61,947	3.21							
GC's Fee	5.00%	250,885	13.01							
Building Permit Fee		Excluded								
Escalation to mid-point of construction (2Q2019)	10.25%	540,031	27.99							
Design Contingency	10.00%	580,863	30.11							
Construction Contingency	7.50%	479,212	24.84							
Total Construction Cost		6,868,701	356.06							

Alternates

Alt#1 - Cavity insulation to existing exterior walls	\$54,973
Alt#2 - Replace windows in existing building	\$117,553
Alt#3 - HVAC Option 2	(\$40,404)
Alt#4 - HVAC Option 3	\$376,944

Notes

1. Brief project description:-
 - 3 storey addition and renovation of existing Town Hall Building complete with Site Work/Utilities.
2. The estimate is based on the following:-
 - Prevailing wage rates.
 - GC type project.
 - Receipt of 4# bona fide bids.
 - Single contract.
 - Bid date of 4Q2018.
 - 12 month construction period.
3. The gross floor areas are based on the following:-
 - Measurement is taken to the outside face of the exterior wall, measured through all stair wells, elevator shafts and ducts.
4. Story heights:-
 - Varies.
5. General Conditions/Requirements area calculated later in this document.
6. Special Conditions for this project are included with General Conditions/Requirements.
7. Escalation is based on the following:-
 - Escalation is taken at 5% per annum to mid-point of construction (2Q2019).
8. Estimating Contingency is an allowance for future design modifications/additions, which alter the cost of the building as the design progresses, this percentage reduces as the design develops. It is based on a percentage of the sum of Sub-Total Construction, General Conditions/Requirements and Escalation. For this level of estimate the following has been included:-
 - 10.00%
9. Construction Contingency is an allowance for scope/design modifications made by the owner during construction and also for any unforeseen circumstances. It is based on a percentage of the sum of Sub-Total Construction, General Conditions/Requirements , Escalation and Design Contingency. The following has been included:-
 - 7.50%

Notes (Cont'd)

10. This estimate has been prepared from the following design information:-
 - Drawing set dated 06/14/2017.
 - Narrative dated 06/14/2017.
 - Telephone conversations and emails with/from edm.

11. The estimate includes the following:-
 - See estimate.

12. The estimate excludes the following:-
 - Utility company backcharges.
 - Design consultants' fees.
 - Loose furniture, fittings and equipment.
 - Fire Pump.
 - Sales Tax.
 - Building Permit Fee.
 - Communications systems - Headend Equipment.
 - Fixed furniture, fittings and equipment (except as detailed in the estimate).
 - Hazardous material abatement.
 - Decontamination of soil
 - Removal of Contaminated Soil Material

13. Allowances:-
 - See Estimate.

14. Assumptions:-
 - None.

15. Estimates by other firms:-
 - None.

Notes (Cont'd)

16. Common abbreviations included in this estimate:-
 - cd = construction documents.
 - cf = cubic foot.
 - cte = connect to existing.
 - cy = cubic yard.
 - dd = design development.
 - ea = each.
 - eo = extra over
 - extg = existing
 - flr = floor.
 - gfa = gross floor area
 - lb = pound.
 - lf = linear foot.
 - ls = lump sum.
 - ly = linear yard.
 - mg = make good.
 - opg = opening.
 - rsr = riser.
 - sd = schematic design.
 - sf = square foot.
 - sy = square yard.
 - tn = ton.

17. Builders work in connection (BWIC) with conveying, mechanical and electrical systems includes the following:-
 - Drilling and coring.
 - Chasing.
 - Cutting and patching.

Description	Qty	Unit	Rate	Amount	Total
Summary					
A Substructure					
A10 Foundations				0	
A20 Basement Construction				0	
B Shell					
B10 Superstructure				77,606	
B20 Exterior Enclosure				51,892	
B30 Roofing				7,049	
C Interiors					
C10 Interior Construction				197,443	
C20 Stairs				15,198	
C30 Interior Finishes				266,862	
D Services					
D10 Conveying Systems				20,400	
D20 Plumbing				68,629	
D30 Heating, Ventilating and Air Conditioning (HVAC)				341,383	
D40 Fire Protection Systems				69,441	
D 50 Electrical Systems				315,652	
E Equipment and Furnishings					
E10 Equipment				8,750	
E 20 Furnishings				30,161	
F Special Construction and Demolition					
F10 Special Construction				0	
F20 Selective Demolition				105,518	
G Building Sitework					
G10 Site Preparation				0	
G20 Site Improvements				0	
G30 Site Civil/Mechanical Utilities				0	
G40 Site Electrical Utilities				0	
Sub-Total Building				1,575,984	

A10 Foundations

Selective Demolition

General Site Clearing at building footprint Included with Site Demolition

Removal of Hazardous Material

Removal of Hazardous Material Not Required

Special Foundations

Underpinning, existing foundation at junction of new building Not Required

A10 Foundations	Total			0	0
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A20 Basement Construction

No work in this element

A20 Basement Construction	Total			0	0
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B10 Superstructure

Description	Qty	Unit	Rate	Amount	Total
B1010 Structural Framing					
Structural Steel members					
Structural steel frame	5	ton	5,775.00	28,875	
Wind bracing, allow				Not Required	
Allow for structural steel connections, fittings, etc. allow 7.5% of structural steel				Included with allowances above	
Shear studs (assume 20 shear connectors per 100 sf)				Not Required	
Moment connection				Not Required	
Base plate				Not Required	
EO for shop paint and field touch-up paint after steel installation	1	ls	187.69	188	
Miscellaneous Structural Items					
Steel supports for mechanical equipment	1	ton	4,100.00	4,100	
Allow, for recreating feature column at main entrance				Included with ext wall	
Miscellaneous steel frames, assemblies, etc				Included with allowances above	
Relieving angles at exterior wall				Included with allowances above	
Lintels over windows including installation in existing wall, allow	2	ton	5,775.00	11,550	44,713
B1020 Floor and Roof Framing					
Suspended Floor					
Steel stairs w/ 1 1/2" metal deck and 5 1/2" concrete	185	sf	29.67	5,489	
Finish - slab on metal deck	185	sf	2.00	370	
Floor deck edge closure pour stop	92	lf	8.00	736	
Extra over for 4" x 4" x 1/8" angle bolted to wall	92	lf	29.70	2,732	
Allow for general bracing/reinforcing of existing concrete floors	7,053	sf	1.25	8,816	
Roof structure					
Allow for bracing/reinforcing of existing roof structure	3,556	sf	1.25	4,445	
Allow for structural work to bell tower	1	ls	5,000.00	5,000	27,589
B1030 Structural Fireproofing					
Structural Fireproofing					
Fire protection (adapt/amend existing, gfa)				Not Required	
Intumescent paint to exposed steel, allow				Not Required	
Firestopping (adapt/amend existing, gfa)	10,609	sf	0.50	5,305	5,305
B10 Superstructure	Total			77,606	77,606
B20 Exterior Enclosure					
B2010 Exterior Wall					
Exterior wall backup system					
Remove part of external wall				See Demo	
Repair to wall structure along perimeter after removal	60	lf	20.00	1,200	
Pump all exterior walls with cavity insulation	6,160	sf		See Alt1	
GWB to exterior wall	6,160	sf		Existing	
Extra over for replacemnt due to works, allow 10%	616	sf	3.85	2,372	
Allow for sundry repair to wall structure	6,160	sf	0.75	4,620	
Exterior Finish					
Cleandown existing exterior wall					
Brick exterior wall	6,160	sf		Not Required	
Brick chimney	336	sf		Not Required	
Quoins	120	lf		Not Required	
Freize at roof level	268	sf		Not Required	
Entrance portico	1	ls		Not Required	
Extra over for repointing/repairs, allow 5%	308	sf		Not Required	
Brick exterior wall	308	sf		Not Required	
Brick chimney	17	sf		Not Required	
Quoins	6	lf		Not Required	
Freize at roof level	13	lf		Not Required	
Entrance portico	1	ls		Not Required	8,192

Description	Qty	Unit	Rate	Amount	Total
Roof Screen					
Mechanical equipment roof screen system				Not Required	
B2020 Exterior Window					
Double Hung Wood Window System - ETR, service and paint (See Alt2 for replacement)					
3' 6" x 6' 6"	31	ea	364.00	11,284	
2' 0" x 6' 6"	1	ea	208.00	208	
3' 0" x 6' 0", louver to bell tower, etr, paint	4	ea	180.00	720	12,212
B2030 Exterior Doors					
Main entrance, door, DL, etr, service, add power operation	1	ea	9,500.00	9,500	9,500
General Items					
Hardwood window sill and apron, internal	123	lf		Not Required	
Hardwood window sill and apron, internal, etr, protect/repair	123	lf	3.50	429	
Staging/Scaffolding	6,160	sf	3.50	21,560	
Exterior wall flashings	745	lf		Not Required	
Exterior wall caulking and sealant	745	lf		Not Required	
Exterior wall wood blocking	2,235	lf		Not Required	
Expansion, control & isolation joints				Not Required	21,989
B20 Exterior Enclosure	Total			51,892	51,892
B30 Roofing					
B3000 Roof Coverings					
Main Pitched Roof					
Existing slate roof, survey/inspect	4,418	sf	0.25	1,105	
Extra over for replacemnt in isolated locations, allow 5%	221	lf	9.00	1,989	
Parapet valley flashing, clean out and inspect	269	lf	5.00	1,345	
Extra over for replacemnt of flashings, allow 5%	13	lf	50.00	650	
Ridge, replacemnt, allow 5%	5	lf	20.00	100	
Valley, replacemnt, allow 5%	2	lf	20.00	40	5,229
Cupola					
Allow for repairs/reflashing/redecoration				Not Required	
General Items					
Staging/Scaffolding to cupola				Not Required	
Roof accessories, allow					
Gutters, existing cleanout	269	lf		Existing	
Rainwater leaders	210	lf		Existing	
Miscellaneous flashings	1	ls	1,500.00	1,500	
Sealant	40	lf	2.00	80	
Blocking	60	lf	4.00	240	1,820
B30 Roofing	Total			7,049	7,049
C10 Interior Construction					
Partitions					
Interior drywall partitions					
Metal stud partition, plasterboard b.s.	5,656	sf	9.65	54,580	
Partition System - MEP Shaft	266	sf	12.06	3,208	
GWB partition, infill door ope, SL	7	ea	324.24	2,270	

Description	Qty	Unit	Rate	Amount	Total
GWB partition, infill door ope, DL	1	ea	648.48	648	
Extra over for wet wall	763	sf	1.20	916	
Partition, etr, strip and refinish old ext wall	448	sf	8.50	3,808	
Partition, etr, allow minor patching	7,364	sf	1.50	11,046	
Partition, old ext wall, etr, allow minor patching	1,540	sf	1.50	2,310	
GWB to exterior wall (stud measured in exterior const)			Included in Div.B2010		
Block up old exterior wall					
Window, 3' 6" x 6' 6"	11	ea	411.55	4,527	
Door, SL, ext, block up ope	1	ea	379.89	380	
Allow for repairs due to access for structural upgrades	1	ls	1,750.00	1,750	
Interior glazing					
Interior Glazing				Not required	
Transaction counter/window, 9' wide	1	ea	4,925.00	4,925	
Sealant	1,820	lf	1.25	2,275	
Blocking	910	lf	2.65	2,412	95,055
C1020 Doors					
Interior doors complete w/frame, hardware, paint, etc					
WD, SL	31	ea	1,739.60	53,928	
WD, DL	4	ea	2,275.00	9,100	
WD, SL, ETR, service	2	ea	289.93	580	
WD, DL, ETR, service	3	ea	580.89	1,743	
EO 1 hr, allow	6	ea	325.00	1,950	
EO fully glazed, allow	6	ea	468.00	2,808	
EO 1/2 glazed, allow	6	ea	258.00	1,548	
Sealant at openings	1,359	lf	1.25	1,699	
Blocking at openings	1,359	lf	2.65	3,601	76,956
Fittings					
Visual Display Surfaces, allow					
Porcelain enamel marker boards, allow	6	ea	1,200.00	7,200	
Aluminum framed tack boards, allow	6	ea	480.00	2,880	
Toilet Enclosures					
Toilet cubicle (ADA)	2	ea	1,250.00	2,500	
Toilet cubicle (Regular)	2	ea	900.00	1,800	
Toilet Accessories					
Toilet Room (Multiple)	2	sf	1,575.00	3,150	
Building Signage, allow					
Door signage	40	ea	100.00	4,000	
Building directory sign, 2' 0" x 2' 6"	1	ea	650.00	650	
Interior Directional Signage	1	ls	2,652.25	2,652	
Exterior Building Signage				See Ext Walls	
Metal lockers				Excluded	
Fire extinguisher complete w/cabinet & mounting hardware, allow	3	ea	115.00	345	
Fire extinguisher complete w/ mounting hardware, allow	3	ea	85.00	255	25,432
C10 Interior Construction	Total			197,443	197,443
C20 Stairs					
Stair Construction					
New attic access ladder including framing opening	1	ea	1,235.00	1,235	
Existing stairs, treads, landing complete					
Refinish feature stairs, 18' 0" wide x 24# risers	1	flight	3,456.00	3,456	
Refinish stairs to mezz, GL to ML 4 3" wide x 24# risers	1	flight	831.36	831	
Rubber Stair Treads and Landings at Fire Stair					
Stair treads	536	lf	16.00	8,576	
Stair landing and stair floor	110	sf	10.00	1,100	15,198

Description	Qty	Unit	Rate	Amount	Total
C20 Stairs	Total			15,198	15,198
C30 Interior Finishes					
C3010 Interior Wall Finish					
Interior Wall Finish					
Paint wall	31,445	sf	1.10	34,590	
Ceramic tile	763	sf	15.00	11,445	
Allow for miscellaneous/specialty wall finish	1,610	sf	6.00	9,660	55,695
C3020 Interior Floor Finish					
Interior Floor Finish					
Carpet	5,414	sf	6.85	37,086	
Ceramic tile	328	sf	15.50	5,084	
Porcelain/stone tile	2,318	sf	20.00	46,360	
VCT	1,468	sf	5.20	7,634	
Concrete sealant	342	sf	1.65	564	
Moisture mitigation, allow				Not Required	
Floor Surface prep & protection - leveling & patching compounds	9,870	sf	1.00	9,870	106,598
Interior Base Finish					
Wood base w/finish	1,067	lf	7.40	7,896	
Ceramic tile base	110	lf	16.00	1,760	
Porcelain/stone tile	778	lf	18.50	14,393	
VCB/VB	456	lf	4.00	3,356	
None	99	lf		None	27,405
C3030 Interior Ceiling Finish					
Ceiling finish					
Acoustic ceiling tile w/suspension system	9,870	sf	5.75	56,753	
Extra over for feature ceiling, allow	987	sf	10.00	9,870	
Soffits					
GWB soffit w/paint, allow	502	lf	21.00	10,542	77,165
C30 Interior Finishes	Total			266,862	266,862
D10 Conveying Systems					
Conveying Systems					
Protect or remove/reinstall Machine Room equipment, allow	1	ls	8,000.00	8,000	
Elevator, etr, protect during demo, service and commission	1	ls	12,000.00	12,000	20,000
Sub-Contractor Bid	Total			20,000	20,000
Builders work in connection with Conveying	1	ls	400.00	400	
General Contractor's overhead and profit				Included on Summary page	400
D10 Conveying Systems	Total			20,400	20,400
D20 Plumbing					
Demolition					

Description	Qty	Unit	Rate	Amount	Total
Allow for Plumbing demolition Disconnect utilities and make safe prior to commencement of work	1	ls	Included w/Selective Demolition 750.00	750	750
Plumbing Fixtures					
WC - Wall-Hung Water Closet	2	ea	1,100.00	2,200	
WC - Wall-Hung Water Closet (HC)	2	ea	1,150.00	2,300	
LAV - Lavatory	2	ea	1,025.00	2,050	
Mop Sink and Janitors, allow	1	ea	900.00	900	
Sink	1	ea	1,200.00	1,200	
EWC - Electric Water Cooler, allow	2	ea	925.00	1,850	
Hose bibb	2	ea	1,150.00	2,300	
Floor Drain, 3", allow	2	ea	450.00	900	13,700
Plumbing Equipment, allow					
Water heatating	1	ea	3,713.15	3,713	
Backflow preventer	1	ea	2,850.00	2,850	
Allow for boiler breaching drain/piping	1	ls	1,250.00	1,250	
Thermostatically actuated mixing valve	1	ea	3,850.00	3,850	
Domestic hot water pumping	1	ea	1,113.95	1,114	12,777
Plumbing Piping					
Plumbing piping	600	lf	35.00	21,000	
Gas pipework, allow	1	ls	3,500.00	3,500	
Piping Fittings	1	ls	4,900.00	4,900	
Piping Valves & Accessories	1	ls	980.00	980	
Premium for piping in existing building	1	ls	4,557.00	4,557	
Piping Insulation	300	lf	8.50	2,550	
Special waste system, allow				Not Required	37,487
Storm Water System					
See roof finishes					
General					
Allow for seismic restraint & vibration isolation	1	ls	1,250.00	1,250	
Permit fees				Not Required	
Test & balance	1	ls	1,319.28	1,319	2,569
Sub Bid					
Total				67,283	67,283
Builders work in connection with Plumbing @ 2%	1	ls	1,345.67	1,346	
General Contractor's overhead and profit				GC Fee Carried in Summary	1,346
D20 Plumbing				Total	68,629
					68,629
D 30 Heating, Ventilating, and Air Conditioning (HVAC)					
Demolition					
Allow for HVAC demolition Disconnect utilities and make safe prior to commencement of work	1	ls	Included w/Selective Demolition 750.00	750	750
Equipment (Option 1)					
Mini split units	10,609	sf	10.00	106,090	
Mini split units, ducted to areas greater than 250 sf	10,609	sf	}	Included	
Hot water boiler	10,609	sf	}	Included	
Hot Water Pumps	10,609	sf	}	Included	
Split System to vault and date room	10,609	sf	}	Included	

Description	Qty	Unit	Rate	Amount	Total
Exhaust Fans	10,609	sf	}	Included	
Fin tube radiation with enclosure	10,609	sf	}	Included	106,090
Ductwork					
Galvanized steel ductwork w/accessories, fittings, hangers, etc (22ga):-					
Supply/Return/Exhaust System	3,713	lb	9.25	34,345	
Duct Fittings/Waste	557	lb	9.25	5,152	
Insulation to supply/return duct	2,641	sf	4.50	11,884	
Accoustic liner to supply/return duct	264	sf	10.00	2,641	
EO for stainless steel ductwork				Not Required	
EO for black steel to Kitchen ductwork				Not Required	
8" flue to boiler	15	lf	80.00	1,200	
Diffusers/grilles/registers	24	ea	225.00	5,400	
Dampers, allow					
Volume	24	ea	105.00	2,520	
Fire	3	ea	250.00	750	
Smoke	2	ea	850.00	1,700	65,593
Pipework					
HVAC Piping System					
Refrigerant piping					
Supply and return	530	lf	25.00	13,250	
Hot water piping					
Supply and return	1,591	lf	25.00	39,775	
Allow for: -					
Pipe Fittings	1	ls	11,135.25	11,135	
Piping Accessories	1	ls	10,074.75	10,075	
Piping Insulation	2,121	lf	10.00	21,210	95,445
Automatic Control System					
Automatic Temperature Control System	10,609	sf	5.50	58,350	58,350
General					
Commissioning by Third Party	1	ls	813.69	814	
Allow for seismic restraint & vibration isolation	1	ls	1,101.00	1,101	
Test & balance	1	ls	6,547.84	6,548	8,463
Sub Bid	Total			334,690	334,690
Builders work in connection with HVAC @ 2%	1	ls	6,693.79	6,694	
General Contractor's overhead and profit				GC Fee Carried in Summary	6,694
D 30 Heating, Ventilating, and Air Conditioning (HVAC)	Total			341,383	341,383

D40 Fire Protection Systems

Demolition

Allow for					
Fire Protection demolition			Included w/Selective Demolition		
Disconnect utilities and make safe prior to commencement of work	1	ls	750.00	750	750

Fire Protection Systems

Wet sprinkler system (gfa)	10,609	sf	5.00	53,045	
Dry sprinkler system to attic (gfa)				Not required	
Fire Pump				Excluded	
New 6" fire service				Existing	
Connect to existing 4" fire main in building				Included w/rate above	
Dry valve assembly	1	ea	4,500.00	4,500	

Description	Qty	Unit	Rate	Amount	Total
Fire dept connection	1	ea	2,250.00	2,250	
Standpipes will be located within each egress stairwell			Included w/rate above		
Fire Hose Valve Cabinet	2	ea	2,850.00	5,700	
Allow for seismic restraint	1	ls	500.00	500	
Permit fees			Not Required		
Test and balance	1	ls	1,334.90	1,335	67,330
Sub Bid	Total			68,080	68,080
Builders work in connection with F. Protection @ 2%	1	ls	1,361.60	1,362	
General Contractor's overhead and profit @ 5%			GC Fee Carried in Summary		1,362
D40 Fire Protection Systems	Total			69,441	69,441
D50 Electrical Systems					
Demolition					
Allow for					
Electrical demolition			Included w/Selective Demolition		
Disconnect utilities and make safe prior to commencement of work	1	ls	750.00	750	750
Equipment, Panelboards, etc.					
Emergency Generator, relocate existing	1	ea	6,500.00	6,500	
Main distribution panel	1	ea	8,487.20	8,487	
Panelboard	3	ea	3,350.00	10,050	
Allow for additional distribution equipment	10,609	sf	0.25	2,652	27,689
Feeders					
Main feeder	75	lf	100.00	7,500	
Emergency feeder	75	lf	100.00	7,500	
Distribution feeders	225	lf	35.00	7,875	
Allow for additional feeders	10,609	sf	0.25	2,652	25,527
Small Power					
Small Power	10,609	sf	3.00	31,827	
Electrical power to					
HVAC & Plumbing Equipment	10,609	sf	1.10	11,670	
Other Miscellaneous Equipment	1	ls	750.00	750	44,247
Lighting					
Lighting System, LED					
Lighting complete with wiring	10,609	sf	10.50	111,395	
Lighting controls	10,609	sf	1.25	13,261	124,656
Fire Alarm					
Fire Alarm System,	10,609	sf	2.50	26,523	26,523
Security System					
Security panel/equipment, sensors, wiring, etc.	10,609	sf	1.50	15,914	15,914
Technology					
Wiring, points/outlets	10,609	sf	3.00	31,827	31,827
General					
Allow for:-					
Lightning protection (gfa), update extg	10,609	sf	0.30	3,183	
Grounding (gfa)	10,609	sf	0.15	1,591	
Seismic bracing	1	ls	750.00	750	

Description	Qty	Unit	Rate	Amount	Total
Commissioning by Third Party	1	ls	752.89	753	
Permit fees				Not Required	
Testing	1	ls	6,053.19	6,053	12,330
Sub Bid	Total			309,462	309,462
Builders work in connection with Electrical @ 2%	1	ls	6,189.25	6,189	
General Contractor's overhead and profit @ 5%			GC Fee Carried in Summary		6,189
D50 Electrical Systems	Total			315,652	315,652

E10 Equipment

Commercial Equipment

Food Service Equipment Not Required

Other Equipment

Install Owners Equipment 1 ls 750.00 750
 Miscellaneous Equipment 1 ls 1,250.00 1,250 2,000

Residential Appliances

Dishwasher 1 ea Not Required
 Electric range 1 ea Not Required
 Oven 1 ea Not Required
 Range hood 1 ea Not Required
 Microwave oven 1 ea Included w/New
 Refrigerator/freezer 1 ea Included w/New 0

Projector Screens

Allowance - Small Room 1 ea 2,250.00 2,250
 Allowance - Large Conference Room 1 ea 2,250.00 2,250
 Allowance - Meeting Room 1 ea 2,250.00 2,250 6,750

Audio Visual

Audio Visual Equipment By Owner

E10 Equipment Total 8,750 8,750

E20 Furnishings

Roller Shades

Mechoshades - manual 790 sf 7.50 5,925 5,925

Casework

Casework Systems
 Break room countertop w/backsplash, solid surface, 2' 0" wide 12 lf 145.00 1,740
 Copy room base cabinet w/solid surface countertop & backsplash 9 lf 395.00 3,555
 Copy room wall cabinet 9 lf 185.00 1,665
 Mail room base cabinet w/countertop & backsplash 18 lf 395.00 7,110
 Mail room wall cabinet 18 lf 185.00 3,330
 Vanity, solid surface w/backsplash 9 lf 145.00 1,305
 Office work stations, excluded 1 ls By Owner
 Additional casework 1 ea 1,870.50 1,871
 Other Furniture shown on drawings By Owner 20,576

Entry Mats

Description	Qty	Unit	Rate	Amount	Total
Walk off grill w/Pedigrd drainage pan	61	sf	60.00	3,660	3,660
E20 Furnishings	Total			30,161	30,161
F10 Special Construction					
No work in this Element					
F10 Special Construction	Total			0	0
F20 Selective Demolition					
Selective Demolition					
Remove and Dispose - Exterior					
Structural					
Single storey addition at rear	24,015	cf	0.50	12,008	
Floors, Roof & Stairs					
Stairs	2	flt	335.00	670	
Main entrance steps and landing	159	sf	4.00	636	
Guardrail	12	lf	5.00	60	
Cut out floor for reinforcing, 18" wide	29	lf	42.50	1,233	
Walls, partitions, windows & doors					
Partition, structural	1,610	sf	3.25	5,233	
Partition	6,846	sf	2.00	13,692	
External wall	812	sf	5.50	4,466	
External wall at entrance for ramp	84	sf	7.50	630	
Door, DL, ext	1	ea	55.00	55	
Door, DL	7	ea	55.00	385	
Door, SL	46	ea	45.00	2,070	
Door, SL, ext	2	ea	45.00	90	
Partition, ope for door, SL	3	ea	126.00	378	
Partition, ope for door, DL	1	ea	252.00	252	
External wall, ope for door, SL	1	ea	462.00	462	
Window, 3, 6" x 6' 6"	12	ea	125.13	1,502	
Window, 3, 6" x 6' 6", modify ope for door, SL	1	ea	450.00	450	
Window, 3, 6" x 6' 6", modify ope for door, DL	1	ea	650.00	650	
Toilet partition	4	ea	75.00	300	
FF&E					
Vanity	22	lf	15.00	330	
MEP Demolition					
Plumbing (pipework only)	10,609	sf	0.65	6,896	
Fire Protection	10,609	sf	0.45	4,774	
HVAC	10,609	sf	1.00	10,609	
Electrical, incl generator	10,609	sf	0.85	9,018	
Remove plumbing fixture & seal pipe					
WC	9	ea	160.00	1,440	
Lav	10	ea	160.00	1,600	
Sink	1	ea	160.00	160	
Shower	1	ea	160.00	160	
Allow for					
General gut of building, incl finishes	10,609	sf	1.50	15,914	
Miscellaneous demolition	1	ls	2,403.00	2,403	
Terminating & capping extg utilities			Included w/Trades		
Temporary screen and barriers	1	ls	1,970.46	1,970	
Removal of rubbish off site	1	ls	5,024.68	5,025	105,518

Description	Qty	Unit	Rate	Amount	Total
Hazardous Material Removal					
Removal of Hazardous Material				Not Required	
F20 Selective Demolition					
	Total			105,518	105,518
G10 Site Preparation					
Included with New Addition					
G10 Site Preparation					
	Total			0	0
G20 Site Improvements					
Included with New Addition					
G20 Site Improvements					
	Total			0	0
G30 Site Civil/Mechanical Utilities					
Included with New Addition					
G30 Site Civil/Mechanical Utilities					
	Total			0	0
G40 Site Electrical Utilities					
Included with New Addition					
G40 Site Electrical Utilities					
	Total			0	0

Description	Qty	Unit	Rate	Amount	Total
Summary					
A Substructure					
A10 Foundations				197,306	
A20 Basement Construction				0	
B Shell					
B10 Superstructure				266,083	
B20 Exterior Enclosure				585,276	
B30 Roofing				140,555	
C Interiors					
C10 Interior Construction				218,503	
C20 Stairs				44,924	
C30 Interior Finishes				209,583	
D Services					
D10 Conveying Systems				0	
D20 Plumbing				85,147	
D30 Heating, Ventilating and Air Conditioning (HVAC)				277,982	
D40 Fire Protection Systems				54,579	
D 50 Electrical Systems				258,665	
E Equipment and Furnishings					
E10 Equipment				6,675	
E 20 Furnishings				63,022	
F Special Construction and Demolition					
F10 Special Construction				0	
F20 Selective Demolition				0	
G Building Sitework					
G10 Site Preparation				64,821	
G20 Site Improvements				277,506	
G30 Site Civil/Mechanical Utilities				76,450	
G40 Site Electrical Utilities				57,572	
Sub-Total Building				2,884,649	

A10 Foundations

Selective Demolition

General Site Clearing at building footprint Included with Site Demolition

Removal of Hazardous Material

Not required Not Required

Excavation

Excavate & stockpile material on site for:-

Foundation Footing: -

Reduce level for addition, allow	908	cy	10.25	9,307	
Extra over for being adjacent to existing basement	416	sf	15.00	6,240	
Underpinning/temporary supports to existing foundation			0.00	See Reno	
Retaining wall footing, 6' 0" x 1' 2"	264	cy	10.25	2,706	
Retaining wall footing, 6' 0" x 1' 2", step	15	cy	10.25	154	
Wall footing, 2' 0" x 1' 0"	66	cy	10.25	677	
Wall footing, internal, 2' 0" x 1' 0"	66	cy	10.25	677	
Column footing, F5' 0" x 5' 0" x 12"	16	cy	10.25	164	
Column footing, F5' 0" x 5' 0" x 12", portico	7	cy	10.25	72	
EO for rock, allow 5% of excavated material	67	cy	45.00	3,015	
Water removal during excavation work	1	ls	999.78	1,000	
Temporary support to basement excavation	1,026	sf	1.75	1,796	
Filling around foundations with excavated material	379	cy	8.50	3,222	
Remove surplus excavated material off site	963	cy	15.00	14,443	

Description	Qty	Unit	Rate	Amount	Total
Imported structural fill	161	cy	30.00	4,833	
Compacted sand/gravel below sog	4,655	sf	1.11	5,167	
Perimeter drainage system	245	lf	21.00	5,145	58,617
Cast-In-Place Concrete					
Foundation Footing					
Retaining wall footing, 6' 0" x 1' 2"	44	cy	165.00	7,260	
Retaining wall footing, 6' 0" x 1' 2", step	3	cy	165.00	495	
Wall footing, 2' 0" x 1' 0"	5	cy	165.00	825	
Wall footing, internal, 2' 0" x 1' 0"	5	cy	165.00	825	
Column footing, F5' 0" x 5' 0" x 12"	2	cy	165.00	330	
Column footing, F5' 0" x 5' 0" x 12", portico	1	cy	165.00	165	
Foundation Wall					
Retaining wall, 10" thick	32	cy	170.00	5,362	
Foundation wall, 8" thick	7	cy	170.00	1,249	
Foundation wall, 8" thick, internal	7	cy	170.00	1,249	
Pier/Pilaster, 1' 4" x 1' 4"	6	cy	175.00	975	
Slab on grade					
5" Slab on Grade	72	cy	155.20	11,149	
Slab edge detail	349	lf	10.00	3,490	
Sog thickening at int wall, allow	6	cy	155.20	990	
Saw cut control joint (1.25" deep)	4,655	sf	0.75	3,491	
Connection between new and existing foundationsincl #4 dowel at 12"c/c	25	lf	85.00	2,125	
Connection between new and existing wall incl #4 dowel at 12"c/c	12	lf	85.00	1,020	
Trowel top of concrete slab	4,655	sf	0.85	3,957	44,956
Concrete Formwork					
Foundation Footing: -					
Retaining wall footing, 6' 0" x 1' 2"	400	sf	9.20	3,681	
Retaining wall footing, 6' 0" x 1' 2", step	23	sf	9.20	215	
Wall footing, 2' 0" x 1' 0"	148	sf	9.20	1,362	
Wall footing, internal, 2' 0" x 1' 0"	148	sf	9.20	1,362	
Column footing, F5' 0" x 5' 0" x 12"	24	sf	9.20	221	
Column footing, F5' 0" x 5' 0" x 12", portico	10	sf	9.20	92	
Foundation Wall					
Retaining wall, 10" thick	2,052	sf	10.00	20,520	
Foundation wall, 8" thick	592	sf	10.00	5,920	
Foundation wall, 8" thick, internal	592	sf	10.00	5,920	
Extra over for forming rebate/step to top of wall	319	lf	5.50	1,755	
Pier/Pilaster					
Pier/Pilaster, 1' 4" x 1' 4"	452	sf	10.50	4,748	45,795
Concrete Reinforcement (Re-bar)					
Foundation Footing					
Retaining wall footing, 6' 0" x 1' 2"	5,113	lb	1.45	7,414	
Retaining wall footing, 6' 0" x 1' 2", step	299	lb	1.45	434	
Wall footing, 2' 0" x 1' 0"	630	lb	1.45	914	
Wall footing, internal, 2' 0" x 1' 0"	630	lb	1.45	914	
Column footing, F5' 0" x 5' 0" x 12"	256	lb	1.45	371	
Column footing, F5' 0" x 5' 0" x 12", portico	106	lb	1.45	154	
Foundation Wall					
Retaining wall, 10" thick	3,469	lb	1.45	5,031	
Foundation wall, 8" thick	808	lb	1.45	1,172	
Foundation wall, 8" thick, internal	808	lb	1.45	1,172	
Pier/Pilaster					
Pier/Pilaster, 1' 4" x 1' 4"	696	lb	1.45	1,009	
5" Slab on Grade	4,655	sf	1.20	5,586	24,168
Other Items					
Holding down bolt assembly set into pier/pilaster	17	nr	250.00	4,250	
Foundation, joint with extg	12	lf	75.00	900	

Description	Qty	Unit	Rate	Amount	Total
Foundation wall, joint with extg	8	lf	75.00	600	
Expansion joint with existing building	104	lf	15.00	1,560	
Moisture mitigation			Included with interior finish		
Waterproofing to exterior face for Retaining wall	1,026	sf	7.75	7,952	
Waterproofing to foundation wall	296	sf	7.75	2,294	
2" Rigid insulation to face of foundation/retaining wall	1,026	sf	1.85	1,898	
Vapor barrier under sog (10mil)	4,655	sf	0.65	3,026	
Rigid insulation under sog (R-5) - 2' around perimeter	698	sf	1.85	1,291	23,771
A10 Foundations	Total			197,306	197,306
A20 Basement Construction					
No work in this element				See Foundations	
A20 Basement Construction	Total			0	0
B10 Superstructure					
B1010 Structural Framing					
Structural Steel members					
Structural steel frame and roof	27	ton	3,850.00	103,950	
Wind bracing, allow			Included with allowances above		
Allow for structural steel connections, fittings, etc. allow 7.5% of structural steel			Included with allowances above		
Shear studs (assume 20 shear connectors per 100 sf)	805	ea	3.00	2,415	
Moment connection	14	ea	475.00	6,650	
Base plate	17	ea	525.00	8,925	
EO for shop paint and field touch-up paint after steel installation	1	ls	792.61	793	
Miscellaneous Structural Items					
Decorative columns to portico	60	lf	112.50	6,750	
Loose steel to elevator hoistway, allow	1	ls	6,063.75	6,064	
Steel supports for mechanical equipment	2	ton	6,150.00	12,300	
Miscellaneous steel frames, assemblies, etc			Included with allowances above		
Relieving angles at exterior wall			Included with allowances above		
Lintels over windows			Included with allowances above		147,846
B1020 Floor and Roof Framing					
Suspended floor deck					
3" deep 18ga composite metal deck	4,027	sf	4.65	18,726	
4 1/2" Normal weight concrete topping to metal deck	4,027	sf	2.57	10,349	
Re-Bar - #3 @ 15" TOP x 6' 0" long additional bar at girders	2,618	lb	1.45	3,795	
6x6-W2.9 wwf	4,027	sf	0.95	3,826	
Temporary prop to previous item	1	ls	1,643.52	1,644	
Floor deck edge closure pour stop	466	lf	8.00	3,728	
Finish concrete slab	4,027	sf	1.00	4,027	
Roof structure					
Roof framing - pitched, wood rafters with light guage steel (Plan Area)	2,729	sf	7.50	20,468	
Roof framing - mono pitch, wood rafters with light guage steel (Plan Area)	1,283	sf	5.50	7,057	
Roof framing - portico, mono pitch, wood rafters with light guage steel (Plan A)	397	sf	5.50	2,184	
Roof framing - flat, Light gauge steel joists	637	sf	5.50	3,504	
1/2 inch plywood sheathing, pitched	5,092	sf	1.80	9,166	
1/2 inch plywood sheathing, flat	637	sf	1.75	1,115	89,586
B1030 Structural Fireproofing					
Structural Fireproofing					
Fire protection (allow, gfa)	8,682	sf	2.15	18,666	

Description	Qty	Unit	Rate	Amount	Total
Intumescent paint to exposed steel, allow Firestopping (allow, gfa)	8,682	sf	1.15	9,984	28,651
B10 Superstructure	Total			266,083	266,083
B20 Exterior Enclosure					
B2010 Exterior Wall					
Exterior wall backup system				Not Required	
Steel stud back-up exterior wall	6,956	sf	3.30	22,955	
1/2" plywood sheathing	6,956	sf	1.85	12,869	
Air/vapor barrier	6,956	sf	4.25	29,563	
4" open foam cell spray insulation	6,956	sf	3.85	26,781	
1/2" GWB	6,956	sf	2.35	16,347	
Exterior Finish					
Brick Veneer	6,956	sf	30.00	208,680	
Allow for brick features to stair tower	1	ls	12,000.00	12,000	
Brick, joint w/extg	70	lf	25.00	1,750	
Cast stone to gables	320	sf	65.00	20,800	
Cast stone features and bands					
Window cill	85	lf	95.00	8,075	
Window surround	436	lf	60.00	26,160	
Corbel	23	ea	450.00	10,350	
Cast limestone coping	72	lf	165.00	11,880	
Steel lintels	85	lf	55.00	4,675	412,884
Roof Screen					
Mechanical equipment roof screen system				Not Required	
B2020 Exterior Window					
Double Hung Fiberglass Window System, profile to match existing					
3' 6" x 6' 6"	18	ea	1,820.00	32,760	
4' 0" x 6' 6"	3	ea	2,080.00	6,240	
5' 0" x 19' 6"	2	ea	7,800.00	15,600	
Storefront	728	sf	70.00	50,960	
Extra for SL door	2	ea	1,250.00	2,500	
Extra for DL doors	1	ea	1,500.00	1,500	
Louver System, allow	25	sf	80.00	2,000	
Exterior Sun Shade system				Not Required	111,560
B2030 Exterior Doors					
Exterior SL door - 2' 10" x 6' 8", SL, type N-B, external	1	ea	2,126.18	2,126	2,126
General Items					
Hardwood window sill and apron, internal	85	lf	25.00	2,125	
Hardwood window trim to reveal and head, internal	436	lf	15.00	6,540	
Staging/Scaffolding	7,684	sf	3.50	26,894	
Exterior wall flashings	1,045	lf	9.00	9,405	
Exterior wall caulking and sealant	1,045	lf	2.65	2,769	
Exterior wall wood blocking	3,135	lf	3.50	10,973	
Expansion, control & isolation joints				Not Required	58,706
B20 Exterior Enclosure	Total			585,276	585,276
B30 Roofing					

Description	Qty	Unit	Rate	Amount	Total
B3000 Roof Coverings					
Asphalt Shingle Roof System					
Glass-mat roof sheathing	5,092	sf	1.65	8,402	
Continuous air-barrier membrane	5,092	sf	4.25	21,641	
Rigid roof insulation (2" polyisocyanurate)	5,092	sf	2.35	11,966	
Vented nail base insulation (5" thick)				Not Required	
Roof underlayment	5,092	sf	1.25	6,365	
Asphalt shingle roof, sloped	5,092	sf	4.85	24,696	
EPDM Roofing System					
EPDM roofing	637	sf	3.85	2,452	
Air/vapor barrier membrane	637	sf	4.25	2,707	
Tapered roofing insulation	637	sf	4.85	3,089	
Exterior roof sheathing	637	sf	1.85	1,178	
Flashings, etc.					
Perimeter detail at pitched roof	281	lf	25.00	7,025	
Perimeter detail at flat roof, feature parapet to match extg	135	lf	150.00	20,250	
Ridge	93	lf	15.00	1,395	
Hip	83	lf	15.00	1,245	
Flashing at wall	167	lf	20.00	3,340	
Flashing at existing wall	24	lf	30.00	720	116,473
B3020 Roof Openings					
None				Not Required	
General Items					
Roof accessories, allow					
Exterior soffit to portico	397	sf	15.00	5,955	
Aluminum gutter	160	lf	15.00	2,400	
Aluminum rainwater leader	98	lf	13.00	1,274	
Cast iron boot	5	ea	85.00	425	
3" rd to flat roof				See plumb	
3" rainwater leader, internal				See plumb	
Roof Hatch System				Not Required	
Miscellaneous flashings	1	ls	1,500.00	1,500	
Sealant	1,566	lf	2.00	3,132	
Blocking	2,349	lf	4.00	9,396	24,082
B30 Roofing	Total			140,555	140,555
C10 Interior Construction					
Partitions					
Interior drywall partitions					
Metal stud partition, plasterboard b.s.	6,944	sf	9.65	67,010	
Partition System - MEP Shaft	238	sf	12.06	2,870	
Extra over for wet wall	1,393	sf	1.20	1,672	
EO for loading bearing partition	1,389	sf	3.00	4,166	
GWB to exterior wall (stud measured in exterior const)				Included in Div.B2010	
Sliding/folding partition				Not Required	
Interior glazing					
Wood framed Glazing	552	sf	80.00	44,160	
Storefront System at main entrance	192	sf	65.00	12,480	
Glazed screen, storefront at stairs, eo door, DL	1	ea	1,200.00	1,200	
Window sill detail	85	lf	25.00	2,125	
Sealant	2,392	lf	1.25	2,990	
Blocking	1,196	lf	2.65	3,169	141,842

Description	Qty	Unit	Rate	Amount	Total
C1020 Doors					
Interior doors complete w/frame, hardware, paint, etc					
WD, SL	25	ea	1,739.60	43,490	
EO 1 hr, allow	5	ea	325.00	1,625	
EO fully glazed, allow	5	ea	468.00	2,340	
EO 1/2 glazed, allow	5	ea	258.00	1,290	
Sealant at openings	825	lf	1.25	1,031	
Blocking at openings	825	lf	2.65	2,185	51,961
Fittings					
Visual Display Surfaces, allow					
Porcelain enamel marker boards, allow	6	ea	1,200.00	7,200	
Aluminum framed tack boards, allow	6	ea	480.00	2,880	
Toilet Enclosures					
Toilet cubicle (ADA)	2	ea	1,250.00	2,500	
Toilet cubicle (Regular)	2	ea	900.00	1,800	
Toilet Accessories					
Toilet Room (Multiple)	2	ea	1,575.00	3,150	
Toilet Room (Single)	2	ea	950.00	1,900	
Building Signage, allow					
Door signage	25	ea	100.00	2,500	
Interior Directional Signage	1	ls	2,170.50	2,171	
Exterior Building Signage				Excluded	
Metal lockers				Excluded	
Fire extinguisher complete w/cabinet & mounting hardware, allow	3	ea	115.00	345	
Fire extinguisher complete w/ mounting hardware, allow	3	ea	85.00	255	24,701
C10 Interior Construction	Total			218,503	218,503
C20 Stairs					
Stair Construction					
Steel stairs with concrete filled treads, railings, landing complete w/concrete topping					
Stairs #1 - 4' 4" x 24# risers, main feature stairs	2	flight	20,880.00	41,760	
Rubber Stair Treads and Landings at Fire Stair					
Stair treads	104	lf	16.00	1,664	
Stair landing and stair floor	150	sf	10.00	1,500	44,924
C20 Stairs	Total			44,924	44,924
C30 Interior Finishes					
C3010 Interior Wall Finish					
Interior Wall Finish					
Paint wall	22,187	sf	1.10	24,406	
Ceramic tile	1,393	sf	15.00	20,895	
Allow for miscellaneous/specialty wall finish	1,179	sf	6.00	7,074	52,375
C3020 Interior Floor Finish					
Interior Floor Finish					
Carpet	4,221	sf	6.85	28,914	
Ceramic Tile	403	sf	15.50	6,247	
Porcelain/stone tile	1,054	sf	20.00	21,080	
VCT	1,127	sf	5.20	5,860	
Concrete Sealant	274	sf	1.65	452	
Moisture mitigation, allow	5,348	sf	3.55	18,985	81,538

Description	Qty	Unit	Rate	Amount	Total
Interior Base Finish					
Wood base w/finish	829	lf	7.40	6,135	
Ceramic tile base	199	lf	16.00	3,184	
Porcelain/stone tile	415	lf	18.50	7,678	
VCB/VB	252	lf	4.00	3,356	
None	99	lf		None	20,352
C3030 Interior Ceiling Finish					
Ceiling finish					
Acoustic Ceiling Tile	7,079	sf	5.75	40,704	
Extra over for feature ceiling, allow	708	sf	10.00	7,079	
Soffits					
GWB soffit, allow	359	lf	21.00	7,535	55,318
C30 Interior Finishes	Total			209,583	209,583
D10 Conveying Systems					
No work in this Element					
D10 Conveying Systems	Total			0	0
D20 Plumbing					
Plumbing Fixtures					
WC - Wall-Hung Water Closet	2	ea	1,100.00	2,200	
WC - Wall-Hung Water Closet (HC)	4	ea	1,150.00	4,600	
LAV - Lavatory	6	ea	1,025.00	6,150	
Mop Sink and Janitors, allow	1	ea	900.00	900	
Sink, jutschen	1	ea	1,200.00	1,200	
EWC - Electric Water Cooler, allow	2	ea	925.00	1,850	
Hose bibb	2	ea	1,150.00	2,300	
Floor Drain, 3", allow	2	ea	450.00	900	20,100
Plumbing Equipment, allow					
Water heatating	1	ea	3,038.70	3,039	
Backflow preventer	1	ea		See Reno	
Allow for boiler breaching drain/piping	1	ls		See Reno	
Thermostatically actuated mixing valve	1	ea		See Reno	
Domestic hot water pumping	1	ea	911.61	912	3,950
Plumbing Piping					
Plumbing piping	900	lf	35.00	31,500	
Gas pipework, allow	1	ls	3,500.00	3,500	
Piping Fittings	1	ls	7,000.00	7,000	
Piping Valves & Accessories	1	ls	1,400.00	1,400	
Piping Insulation	450	lf	8.50	3,825	
Special waste system, allow				Not Required	47,225
Storm Water System					
Roof Drain, 4"	2	ea	450.00	900	
Roof drain RD-1, 4"	1	ea	450.00	450	
4" RW	84	lf	62.50	5,250	
4" RWL, connect to storm	4	ea	75.00	300	
Piping Fittings	1	ls	1,380.00	1,380	

Description	Qty	Unit	Rate	Amount	Total
Piping Valves & Accessories	1	ls	1,035.00	1,035	9,315
General					
Allow for seismic restraint & vibration isolation	1	ls	1,250.00	1,250	
Permit fees				Not Required	
Test & balance	1	ls	1,636.81	1,637	2,887
Sub Bid					
Total				83,477	83,477
Builders work in connection with Plumbing @ 2%	1	ls	1,669.54	1,670	
General Contractor's overhead and profit				GC Fee Carried in Summary	1,670
D20 Plumbing				Total	85,147
					85,147
D 30 Heating, Ventilating, and Air Conditioning (HVAC)					
Equipment (Option 1)					
Mini split units	8,682	sf	10.00	86,820	
Mini split units, ducted to areas greater than 250 sf	8,682	sf	}	Included	
Hot Water Pumps	8,682	sf	}	Included	
Split System to vault and date room	8,682	sf	}	Included	
Chillers	8,682	sf	}	Included	
Exhaust Fans	8,682	sf	}	Included	
VAV units	8,682	sf	}	Included	
Fin tube radiation with enclosure	8,682	sf	}	Included	86,820
Ductwork					
Galvanized steel ductwork w/accessories, fittings, hangers, etc (22ga):-					
Supply/Return/Exhaust System	3,039	lb	9.25	28,111	
Duct Fittings/Waste	456	lb	9.25	4,218	
Insulation to supply/return duct	2,161	sf	4.50	9,726	
Accoustic liner to supply/return duct	216	sf	10.00	2,161	
EO for stainless steel ductwork				Not Required	
EO for black steel to Kitchen ductwork				Not Required	
8" flue to boiler				See reno	
Diffusers/grilles/registers	19	ea	225.00	4,275	
Dampers, allow					
Volume	19	ea	105.00	1,995	
Fire	3	ea	250.00	750	
Smoke	2	ea	850.00	1,700	52,936
Pipework					
HVAC Piping System					
Refrigerant piping					
Supply and return	434	lf	25.00	10,850	
Hot water piping					
Supply and return	1,302	lf	25.00	32,550	
Allow for: -					
Pipe Fittings	1	ls	9,114.00	9,114	
Piping Accessories	1	ls	8,246.00	8,246	
Piping Insulation	1,736	lf	10.00	17,360	78,120
Automatic Control System					
Automatic Temperature Control System	8,682	sf	5.50	47,751	47,751
General					
Commissioning by Third Party	1	ls	664.07	664	
Allow for seismic restraint & vibration isolation	1	ls	897.35	897	

Description	Qty	Unit	Rate	Amount	Total
Test & balance	1	ls	5,343.76	5,344	6,905
Sub Bid	Total			272,532	272,532
Builders work in connection with HVAC @ 2% General Contractor's overhead and profit	1	ls	5,450.63	5,451	5,451
				GC Fee Carried in Summary	
D 30 Heating, Ventilating, and Air Conditioning (HVAC)	Total			277,982	277,982
D40 Fire Protection Systems					
Fire Protection Systems					
Wet sprinkler system (gfa)	8,682	sf	5.00	43,410	
Dry sprinkler system to attic				Not Required	
Fire Pump				Excluded	
Standpipes will be located within each egress stairwell				Included w/rate above	
Fire Hose Valve Cabinet	3	ea	2,850.00	8,550	
Allow for seismic restraint	1	ls	500.00	500	
Permit fees				Not Required	
Test and balance	1	ls	1,049.20	1,049	53,509
Sub Bid	Total			53,509	53,509
Builders work in connection with F. Protection @ 2% General Contractor's overhead and profit @ 5%	1	ls	1,070.18	1,070	1,070
				GC Fee Carried in Summary	
D40 Fire Protection Systems	Total			54,579	54,579
D50 Electrical Systems					
Equipment, Panelboards, etc.					
Emergency Generator, relocate existing	1	ea		See Reno	
Main distribution panel	1	ea	6,945.60	6,946	
Panelboards	3	ea	3,350.00	10,050	
Allow for additional distribution equipment	8,682	sf	0.25	2,171	19,166
Feeders					
Main feeder	75	lf	100.00	7,500	
Emergency feeder	75	lf	100.00	7,500	
Distribution feeders	225	lf	35.00	7,875	
Allow for additional feeders	8,682	sf	0.25	2,171	25,046
Small Power					
Small Power	8,682	sf	3.00	26,046	
Electrical power to					
HVAC & Plumbing Equipment	8,682	sf	1.10	9,550	
Other Miscellaneous Equipment	1	ls	750.00	750	36,346
Lighting					
Lighting System, LED					
Lighting complete with wiring	8,682	sf	10.50	91,161	
Lighting controls	8,682	sf	1.25	10,853	102,014
Fire Alarm					
Fire Alarm System,	8,682	sf	2.50	21,705	21,705

Description	Qty	Unit	Rate	Amount	Total
Security System					
Security panel/equipment, sensors, wiring, etc.	8,682	sf	1.50	13,023	13,023
Technology					
Wiring, points/outlets	8,682	sf	3.00	26,046	26,046
General					
Allow for:-					
Lightning protection (gfa)	8,682	sf	0.30	2,605	
Grounding (gfa)	8,682	sf	0.15	1,302	
Seismic bracing	1	ls	750.00	750	
Commissioning by Third Party	1	ls	618.13	618	
Permit fees				Not Required	
Testing	1	ls	4,972.41	4,972	10,247
Sub Bid	Total			253,593	253,593
Builders work in connection with Electrical @ 2%	1	ls	5,071.85	5,072	
General Contractor's overhead and profit @ 5%				GC Fee Carried in Summary	5,072
D50 Electrical Systems	Total			258,665	258,665
E10 Equipment					
Commercial Equipment					
Food Service Equipment				Not Required	
Other Equipment					
Install Owners Equipment	1	ls	750.00	750	
Miscellaneous Equipment	1	ls	1,250.00	1,250	2,000
Residential Appliances					
Dishwasher	1	ea		Not Required	
Electric range	1	ea		Not Required	
Oven	1	ea		Not Required	
Range hood	1	ea		Not Required	
Microwave oven	1	ea	475.00	475	
Refrigerator/freezer	1	ea	1,950.00	1,950	2,425
Projector Screens					
Allowance - Medium Conference Room	1	ea	2,250.00	2,250	2,250
Audio Visual					
Audio Visual Equipment				By Owner	
E10 Equipment	Total			6,675	6,675
E20 Furnishings					
Roller Shades					
Mechoshades - manual	1,411	sf	7.50	10,583	10,583
Casework					
Casework Systems					
Break room countertop w/backsplash, solid surface, 2' 0" wide	12	lf	145.00	1,740	

Description	Qty	Unit	Rate	Amount	Total
Break room wall cabinet	12	lf	185.00	2,220	
Break room countertop w/backsplash, solid surface, 2' 0" wide	10	lf	185.00	1,850	
Copier counter, 2' 6" wide	5	lf	145.00	725	
Landuse countertop, 2' 6" wide, w/storage below	50	lf	220.00	11,000	
Landuse countertop, 3' 0" wide, w/storage below	49	lf	245.00	12,005	
Tax Collector/Assessor, counter & storage	15	lf	220.00	3,300	
Tax Collector/Assessor, counter w/gate	15	lf	165.00	2,475	
Public computers counter, 2' 0" wide	20	lf	145.00	2,900	
Town clerk service counter, 2' 6" wide	22	lf	160.00	3,520	
Vanity, solid surface w/backsplash	18	lf	145.00	2,610	
Additional casework	1	ls	4,434.50	4,435	
Office work stations				By Owner	
Other Furniture shown on drawings				By Owner	48,780
Entry Mats					
Walk off grill w/Pedigrid drainage pan	61	sf	60.00	3,660	3,660
E20 Furnishings	Total			63,022	63,022
F10 Special Construction					
No work in this Element					
F10 Special Construction	Total			0	0
F20 Selective Demolition					
Included with Renovation					
F20 Selective Demolition	Total			0	0
G10 Site Preparation					
Remove and dispose					
General Site Clearing	53,972	sf	0.35	18,890	
Allow for					
Hazardous Material Removal				Not Required	
Miscellaneous demolition	1	ls	2,500.00	2,500	
Terminating & capping extg utilities	1	ls	3,700.00	3,700	
Protecting & maintaining in operation extg fire main & hydrants serving				Not Required	
Removal of rubbish off site	1	ls	2,509.02	2,509	27,599
Earthwork					
Strip topsoil & store on site	8,049	sf	0.10	805	
Cut Site to achieve new proposed grade levels and store for reuse	298	cy	7.00	2,086	
Fill required areas with previously excavated material				Not Required	
Import fill to achieve proposed grade levels, ramp and stair areas	40	cy	30.00	1,200	
EO for excavating rock	15	cy	48.00	720	
Remove excavated material off site	298	cy	20.00	5,960	
Grade over entire site to achieve final levels	53,972	sf	0.10	5,397	
Proof Roll/Compact Building Slab-On-Grade area	4,655	sf	0.30	1,397	
Water removal during excavation works	1	ls	526.94	527	18,092
Temporary work					

Description	Qty	Unit	Rate	Amount	Total
Tree, protect extg	5	ea	250.00	1,250	
Construction fence	995	lf	9.00	8,955	
EO DL gate	1	ea	450.00	450	
Site Entrance and access road during construction	1	ls	3,500.00	3,500	
Sediment & erosion control along temporary swale	995	lf	5.00	4,975	19,130
G10 Site Preparation	Total			64,821	64,821

G20 Site Improvements

Site Paving

Roads, etr, allow for resurfacing	10,573	sf	2.40	25,375	
Parking, etr, allow for resurfacing	9,493	sf	2.40	22,783	
Sidewalk etr, repair where damaged by works	942	sf	0.70	659	
Parking, new including asphalt, sub base, etc	432	sf	4.25	1,836	
Patio	260	sf	30.00	7,800	
Portico, paving	929	sf	30.00	27,870	
Ramp	202	sf	30.00	6,060	
Entrance landing	101	sf	20.00	2,020	
Snow melt to ramp and landing	303	sf	15.00	4,545	
Curb, etr, repair where damaged by works, allow	1,363	sf	2.80	3,816	
Curb, new	215	sf	28.00	6,020	
Sidewalk around addition	783	sf	7.00	5,481	
Pavement Marking & Signage					
4" Wide white pavement stripe	80	lf	1.03	82	
Stop stripe	20	lf	2.06	41	
Handicap parking symbol	2	ea	36.05	72	
Striping	150	sf	0.55	83	
STOP symbol	1	ea	36.05	36	
Allow for relining ar resurfaced roads and parking	1	ls	1,500.00	1,500	
Wheel stop	2	ea	128.75	258	116,338

Site Improvements

Entrance steps, allow stone, 17' 0" wide, 6 riser	1	ea	8,160.00	8,160	
Guardrail, ramp	102	lf	150.00	15,300	
Guardrail, steps	22	lf	150.00	3,300	
Retaining wall to patio	16	lf	650.00	10,400	
Retaining wall to entrance ramp	41	lf	850.00	34,850	
Planter, walls	51	lf	650.00	33,150	
Retaining wall to new entrance	14	lf	650.00	9,100	
Generator pad	200	sf	18.00	3,600	
Cooling tower pad	300	sf	18.00	5,400	
Site furniture, bollards, etc, allow	1	ls	2,500.00	2,500	
Signage, allow	1	ls	15,000.00	15,000	
Traffic and Pedestrian signage, allow	1	ls	1,750.00	1,750	142,510

Site Landscaping

Landscaping					
Seeding/Loam, disturbed areas	12,543	sf	0.84	10,536	
Planter, gravel & soil (walls above, planting below)	113	sf	5.50	622	
Planting					
Allow for planting	1	ls	7,500.00	7,500	18,658

G20 Site Improvements	Total			277,506	277,506
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G30 Site Civil/Mechanical Utilities

Description	Qty	Unit	Rate	Amount	Total
Storm System					
Allow for connecting new building/paving into existing system	1	ea	7,500.00	7,500	
Maintain all existing systems	1	ea	3,500.00	3,500	11,000
Fire /Water Service					
Fire Line - Service					
Fire Line - Service from street	175	lf	125.00	21,875	
Connect to existing municipal fire service	1	ea	3,250.00	3,250	
Water Line - Service					
Water Line - Service from street	175	lf	125.00	21,875	
Connect to existing municipal water service	1	ea	1,550.00	1,550	48,550
Sanitary Service					
Allow for connecting into existitng system on site	1	ls	7,500.00	7,500	
Maintain all existing systems	1	ea	3,500.00	3,500	11,000
Gas Service					
Gas Service - Piping by Gas Company					by Gas Company
General Items					
Connect to existing services	2	ea	1,250.00	2,500	
Police detail for utility connections	40	hour	85.00	3,400	5,900
G30 Site Civil/Mechanical Utilities	Total			76,450	76,450
G40 Site Electrical Utilities					
Site Electrical					
Transformer					By Electrical Utility
Primary Service - Conduit and Ductbank Only, allow	200	lf	110.44	22,089	
Secondary Service - Conduit and Ductbank Only	75	lf	110.44	8,283	
Tel/data service - Conduit and Ductbank Only, allow	200	lf			Existing
Primary Service - Wiring					By Electrical Utility
Secondary Service - Wiring					Included with Electrical
Tel/data service - Wiring	200	lf			By Utility
Connect to extg utility lines	2	ea	1,250.00	2,500	
Police detail for utility connections	20	hour	85.00	1,700	34,572
Site Lighting					
Site Lighting					
Pole Light, allow	4	ea	4,500.00	18,000	
Bollard Light, allow	4	ea	1,250.00	5,000	23,000
G40 Site Electrical Utilities	Total			57,572	57,572

Gross Floor Areas

	<u>GFA (sf)</u>	<u>Perimeter (lf)</u>
<u>Renovation</u>		
Ground Level	3,556	269
Main Level	3,527	268
Upper Level	3,526	268
Total	10,609	
<u>New Addition</u>		
Ground Level	4,655	349
Main Level	3,390	323
Upper Level	637	143
Total	8,682	
Total GFA	19,291	

Description	Qty	Unit	Rate	Amount	Total
<u>Cost Summary</u>					
Alternates					
Alt#1 - Cavity insulation to existing exterior walls					\$54,973
Alt#2 - Replace windows in existing building					\$117,553
Alt#3 - HVAC Option 2					(\$40,404)
Alt#4 - HVAC Option 3					\$376,944
Alt#1 - Cavity insulation to existing exterior walls					
Deduct					
None					
Add					
Pump all exterior walls with cavity insulation	6,160	sf	4.75	29,260	
Repairs to plasterboard	6,160	sf	1.50	9,240	38,500
Net Add					
					38,500
General Conditions/Requirements	2.00%				770
GC's Payment & Performance Bond	1.00%				393
Builders Risk Insurance					By Owner
GC's Gen'l & Excess liability Insurance	1.25%				496
GC's Fee	5.00%				2,008
Building Permit Fee					Excluded
Escalation to mid-point of construction (2Q2019)	10.25%				4,322
Design Contingency	10.00%				4,649
Construction Contingency	7.50%				3,835
Alt#1 - Cavity insulation to existing exterior walls	Total - Gross Add				54,973
Alt#2 - Replace windows in existing building					
Deduct					
Double Hung Wood Window System - ETR, service and paint (See Alt2 for replacement)					
3' 6" x 6' 6"	-31	ea	364.00	-11,284	
2' 0" x 6' 6"	-1	ea	208.00	-208	-11,492
Add					
Remove existing windows					
3' 6" x 6' 6"	31	ea	140.00	4,340	
2' 0" x 6' 6"	1	ea	140.00	140	
Double Hung Fiberglass Window System, profile to match existing					
3' 6" x 6' 6"	31	ea	1,820.00	56,420	
2' 0" x 6' 6"	1	ea	1,040.00	1,040	
5' 0" x 19' 6"	2	ea	7,800.00	15,600	
Exterior wall flashings	735	lf	9.00	6,615	
Exterior wall caulking and sealant	735	lf	2.65	1,948	
Exterior wall wood blocking	2,205	lf	3.50	7,718	93,820
Net Add					
					82,328
General Conditions/Requirements	2.00%				1,647
GC's Payment & Performance Bond	1.00%				840
Builders Risk Insurance					By Owner

Description	Qty	Unit	Rate	Amount	Total
GC's Gen'l & Excess liability Insurance	1.25%				1,060
GC's Fee	5.00%				4,294
Building Permit Fee					Excluded
Escalation to mid-point of construction (2Q2019)	10.25%				9,242
Design Contingency	10.00%				9,941
Construction Contingency	7.50%				8,201
Alt#2 - Replace windows in existing building	Total - Gross Add				117,553
Alt#3 - HVAC Option 2					
Deduct					
HVAC Option 1	-1	ls	619,365.82	-619,366	-619,366
Add					
Demolition					
Allow for					
HVAC demolition			Included w/Selective Demolition		
Disconnect utilities and make safe prior to commencement of work	1	ls	750.00	750	
Equipment (Option 2)					
Gas fired furnaces w/dx coils	19,291	sf	8.00	154,328	
Air source heat pumps	19,291	sf		Included	
Hot water boiler	19,291	sf		Included	
Hot Water Pumps	19,291	sf		Included	
Split System to vault and date room	19,291	sf		Included	
Exhaust Fans	19,291	sf		Included	
Fin tube radiation with enclosure	19,291	sf		Not required	
Ductwork					
Galvanized steel ductwork w/accessories, fittings, hangers, etc (22ga):-					
Supply/Return/Exhaust System	15,433	lb	9.25	142,755	
Duct Fittings/Waste	2,315	lb	9.25	21,414	
Insulation to supply/return duct	10,976	sf	4.50	49,394	
Accoustic liner to supply/return duct	1,098	sf	10.00	10,976	
EO for stainless steel ductwork				Not Required	
EO for black steel to Kitchen ductwork				Not Required	
8" flue to boiler	15	lf	80.00	1,200	
Diffusers/grilles/registers	43	ea	225.00	9,675	
Dampers, allow					
Volume	43	ea	105.00	4,515	
Fire	6	ea	250.00	1,500	
Smoke	4	ea	850.00	3,400	
Pipework					
HVAC Piping System					
Refrigerant piping					
Supply and return	1,929	lf	25.00	48,228	
Hot water piping					
Supply and return				Not Required	
Allow for: -					
Pipe Fittings	1	ls	10,127.78	10,128	
Piping Accessories	1	ls	9,163.23	9,163	
Piping Insulation	1,929	lf	10.00	19,291	
Automatic Control System					
Automatic Temperature Control System	19,291	sf	4.00	77,164	

Description	Qty	Unit	Rate	Amount	Total
General					
Commissioning by Third Party	1	ls	1,409.70	1,410	
Allow for seismic restraint & vibration isolation	1	ls	2,826.45	2,826	
Test & balance	1	ls	11,362.34	11,362	
Sub Bid	Total			579,479	579,479
Builders work in connection with HVAC @ 2%	1	ls	11,589.58	11,590	
General Contractor's overhead and profit			GC Fee Carried in Summary		11,590
Net Add					-28,297
General Conditions/Requirements	2.00%				-566
GC's Payment & Performance Bond	1.00%				-289
Builders Risk Insurance					By Owner
GC's Gen'l & Excess liability Insurance	1.25%				-364
GC's Fee	5.00%				-1,476
Building Permit Fee					Excluded
Escalation to mid-point of construction (2Q2019)	10.25%				-3,177
Design Contingency	10.00%				-3,417
Construction Contingency	7.50%				-2,819
Alt#3 - HVAC Option 2	Total - Gross Deduct				-40,404
Alt#4 - HVAC Option 3					
Deduct					
HVAC Option 1	-1	ls	619,365.82	-619,366	-619,366
Add					
Demolition					
Allow for HVAC demolition			Included w/Selective Demolition		
Disconnect utilities and make safe prior to commencement of work	1		750.00	750	
Equipment (Option 3)					
Ceiling mounted air handlers	19,291	sf	12.00	231,492	
Remote chillers	19,291	sf		Included	
Hot water boiler	19,291	sf		Included	
Hot Water Pumps	19,291	sf		Included	
Split System to vault and date room	19,291	sf		Included	
Exhaust Fans	19,291	sf		Included	
Fin tube radiation with enclosure	19,291	sf		Included	
Ductwork					
Galvanized steel ductwork w/accessories, fittings, hangers, etc (22ga):-					
Supply/Return/Exhaust System	17,362	lb	9.25	160,598	
Duct Fittings/Waste	2,604	lb	9.25	24,087	
Insulation to supply/return duct	12,348	sf	4.50	55,568	
Accoustic liner to supply/return duct	1,235	sf	10.00	12,348	
EO for stainless steel ductwork				Not Required	
EO for black steel to Kitchen ductwork				Not Required	
8" flue to boiler	15	lf	80.00	1,200	
Diffusers/grilles/registers	43	ea	225.00	9,675	
Dampers, allow					
Volume	43	ea	105.00	4,515	
Fire	6	ea	250.00	1,500	
Smoke	4	ea	850.00	3,400	

Description	Qty	Unit	Rate	Amount	Total
Pipework					
HVAC Piping System					
Refrigerant piping					
Supply and return	2,894	lf	25.00	72,341	
Hot water piping					
Supply and return	2,894	lf	25.00	72,341	
Allow for: -					
Pipe Fittings	1	ls	30,383.33	30,383	
Piping Accessories	1	ls	27,489.68	27,490	
Piping Insulation	5,787	lf	10.00	57,873	
Automatic Control System					
Automatic Temperature Control System	19,291	sf	4.00	77,164	
General					
Commissioning by Third Party	1	ls	2,106.81	2,107	
Allow for seismic restraint & vibration isolation	1	ls	4,224.16	4,224	
Test & balance	1	ls	16,981.13	16,981	
Sub Bid	Total			866,038	866,038
Builders work in connection with HVAC @ 2%	1	ls	17,320.75	17,321	
General Contractor's overhead and profit				GC Fee Carried in Summary	17,321
Net Add					263,993
General Conditions/Requirements	2.00%				5,280
GC's Payment & Performance Bond	1.00%				2,693
Builders Risk Insurance					By Owner
GC's Gen'l & Excess liability Insurance	1.25%				3,400
GC's Fee	5.00%				13,768
Building Permit Fee					Excluded
Escalation to mid-point of construction (2Q2019)	10.25%				29,636
Design Contingency	10.00%				31,877
Construction Contingency	7.50%				26,298
Alt#4 - HVAC Option 3	Total - Gross Add				376,944