

# 1 LEVEL 1 - EXISTING

SCALE: 3/16" = 1'-0"

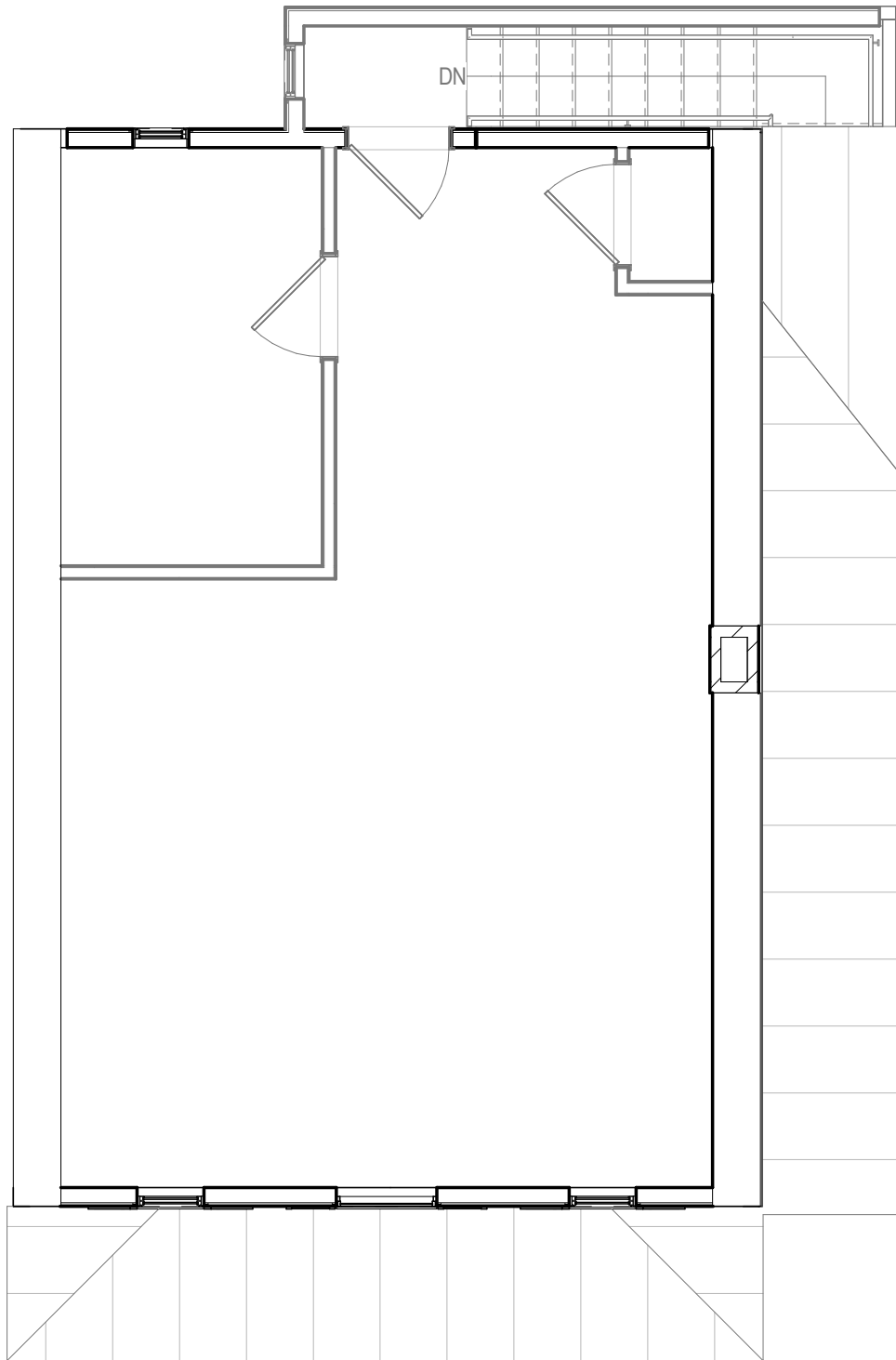
## Strafford Town Office

Strafford, Vermont

3/16" = 1'-0"

LEVEL 1 - EXISTING

November 2022



# 1 LEVEL 2 - EXISTING

SCALE: 3/16" = 1'-0"



85 granite shed lane  
montpelier, vermont 05602  
802.229.1664 • 802.229.4822 FAX

[www.gbarchitecture.com](http://www.gbarchitecture.com)

## Strafford Town Office

Strafford, Vermont

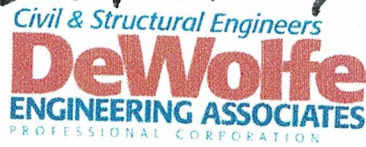
3/16" = 1'-0"

2ND LEVEL - EXISTING

NOVEMBER 2022

NOV. 30, 2022.

TOM: THIS FROM 2019 STUDY - DEWOLFE'S  
EVALUATION OF  
EXISTING FRAMING



July 19, 2019

Tom Bachman, AIA  
GBA Architecture & Planning  
85 Granite Shed Lane  
Montpelier, VT 05602

Reference: Structural Inspection of Strafford Town Hall Building

Dear Tom,

As requested, on July 2, 2019, I visited the above referenced site to complete an initial structural inspection of the building. The purpose of the inspection was to determine if there were any significant structural issues with a planned renovation to the building. Based upon the results of the inspection, it appears that there are no significant structural related road blocks to the proposed renovation.

The planned renovation appears to include the following modifications to the structure:

- Remove the existing front porch sidewalk and piers and replace with a frost protected slab system with frost walls
- Remove exterior stair that provides access to the second floor
- Remove sideporch system including foundations
- Reorganize interior walls
- Cut opening through second floor system for new interior stairs
- Create new accessible restroom addition

Overall the planned modifications to the structure appear to improve the current foundation and first floor conditions but provide some minor challenges for the roof and second floor framing. The existing foundation of the main building is a stone foundation that appears to be in good to excellent condition given its age. At the time of inspection, the crawlspace had a significant amount of silt resting on top of the vapor barrier floor. In addition, standing water was noted above the vapor barrier. The water and silt appeared to be coming from the access hole into the crawl space. At the southwest corner of the main building a cast in place vault foundation has been added. This foundation is in good to excellent condition. Along the north and east sides of the building a concrete walk has been added. The concrete walk has separated from the foundation of the main building and has severe cracks and damage.

The first floor framing was partially exposed in the basement and the framing direction is shown in the attached SSK-1. The second floor framing was not exposed, but based upon nail patterns in the flooring and based upon visible columns in the first floor, we estimate the framing to be as shown in the attached sketch SSK-2. The roof framing could not be observed but based upon the shape of the second floor ceiling and roof, it appears that the roof is comprised of a tied rafter system that relies on the second floor framing to resist the outward thrust caused by the gambrel walls.

19168 Strafford Town Hall - Structural Assessment

Surveying  
Permitting  
Site Design  
Subdivisions  
Timber Design  
Expert Testimony  
Site Development  
Act 250 Permitting  
Forensic Engineering  
Environmental Permitting  
Transportation Engineering  
Structural Inspection Services  
Commercial Building Design  
Construction Oversight  
Building Assessment  
Pedestrian Bridges  
Stream Alterations  
Sewer Design  
Water Supply  
Storm Water  
Hydrology  
Grading

317 River Street  
P.O. Box 1576  
Montpelier, VT  
05601-1576  
phone: 802.223.4727  
fax: 802.223.4740  
www.dirtsteel.com



The planned renovation will remove the damaged concrete from the north and east sides of the building. The removal of the side porch should improve the condition along the north wall of the existing foundation by allowing proper drainage of surface water away from the foundation. The removal and replacement of the front/east porch will improve the entrance significantly. The details of the interface between the existing foundation and the new frost protected slab and foundation should be carefully coordinated to provide proper flashing and proper protection for the existing sill beams.

The first floor framing appears to be adequate for the expected floor loading but some rot was noted in the joists during the inspection. We recommend that a thorough inspection of the first floor framing be completed once adequate access is provided. Rotten members should be reinforced by sistering or replacement. Based upon our estimated thickness of the second floor framing and the estimated size and location of beams, we suspect that the existing second floor joists will be adequate for the expected use. The second floor beam will likely need to be reinforced especially if the existing post is relocated to create even longer spans. The addition of the stair opening will require reframing a portion of the floor to include the installation of new headers and trimmers around the opening. The installation of the stair will also require reinforcement of the interface between the roof and floor at the new opening. Preliminary assessment of the loads indicates that the reinforcements can be achieved with conventional or engineered lumber with some minor steel joinery. None of this reinforcement is beyond that expected in typical renovation work.

The bathroom addition appears to be able to be built using conventional construction techniques and no major structural hurdles are apparent. Overall it appears that the planned renovation is appropriate for the structure and will likely improve the condition of the structure.

If you have any questions concerning this report, please call or write.

Sincerely,



Christopher J. Temple, P.E.

Enclosures:

---

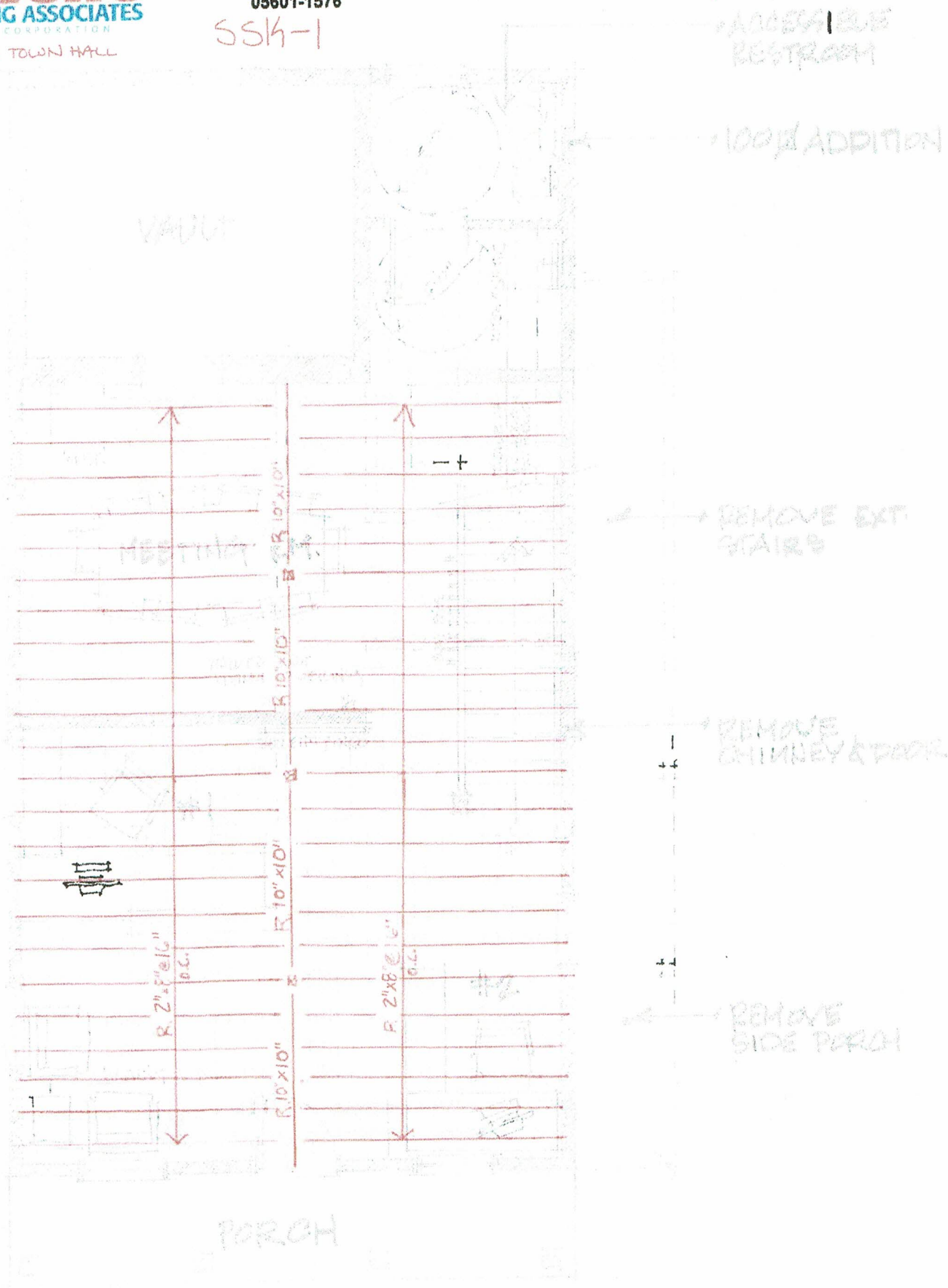


SSK-1

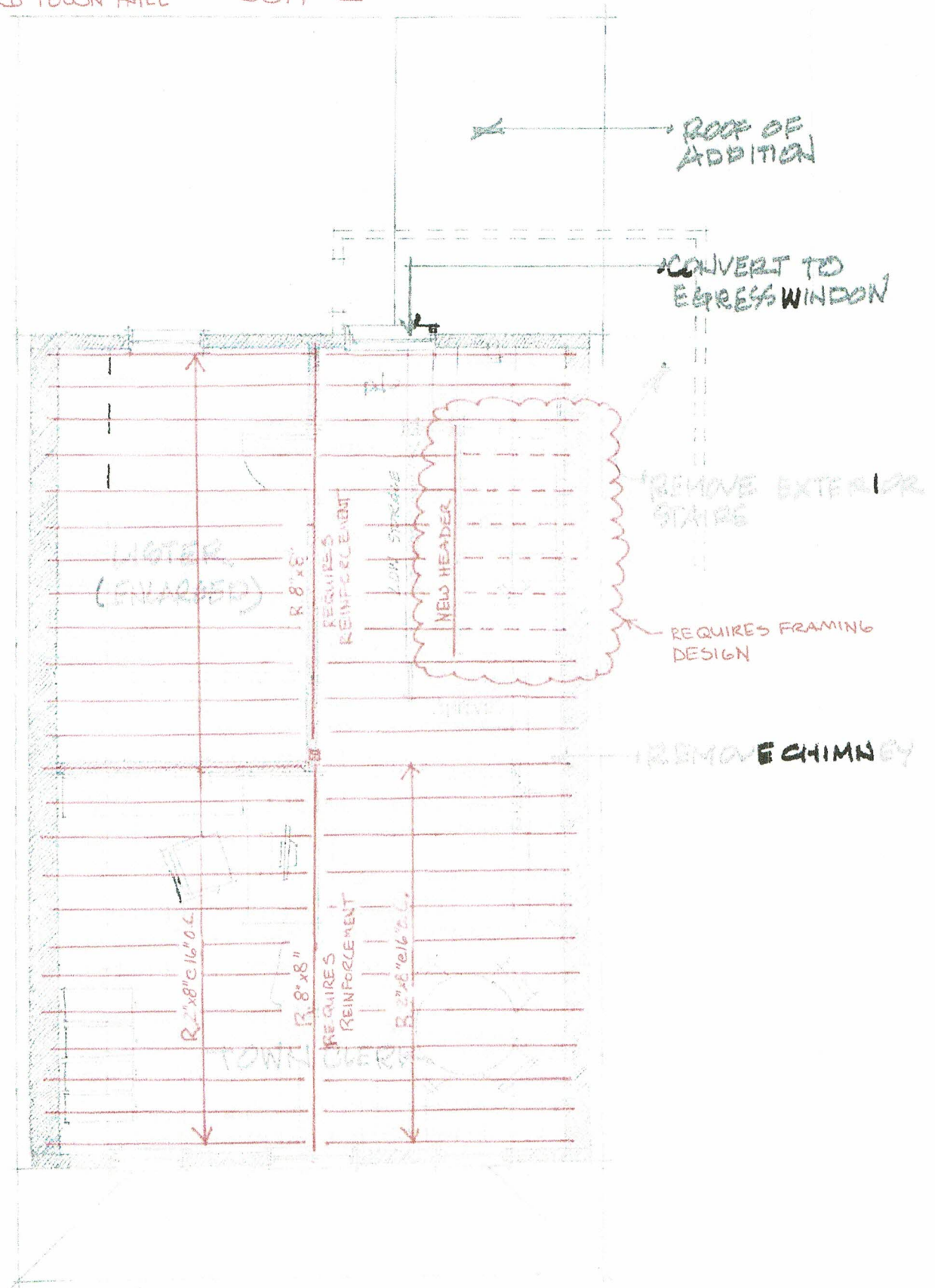
STRAFFORD TOWN HALL

7/19/2019

FIRST FLOOR FRAMING PLAN  
- EXISTING CONDITION



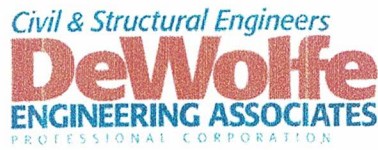
SECOND FLOOR FRAMING PLAN  
-EXISTING CONDITION





11.30.22

MOST RECENT VISIT BY DEWOLFE  
TO INVESTIGATE DAMAGE & FURTHER  
DETERIORATION.



November 9, 2021

Lisa M. Bragg  
Town of Strafford  
PO Box 27  
Strafford, VT 05072  
[selectboard@straffordvt.org](mailto:selectboard@straffordvt.org)

Reference: Structural Inspection of Strafford Town office Roof Damage  
227 Justin Morrill Highway, Strafford, Vermont

Dear Lisa,

As requested, on September 29, 2021, I met with you and Jeffery Solsaa at the above referenced site to complete a structural review of damage caused by a recent telephone pole failure at the northwest corner of the building. Reportedly, a telephone pole failed and landed on the roof of the upstairs access stair. Although the roof of the stair received extensive damage, at the time of the site visit, I verbally indicated that continued use of the stair was acceptable.

The damage to the stair and stair roof structure was isolated to the northwest corner of the structure (see photographs #1 thru #4). The pole damaged approximately 16 square feet of roofing, the roof sheathing in the corner of the building and the adjacent siding. In addition, the pole damaged one rafter and two supporting posts. As a result of the damage, we recommend that the repairs shown in the attached sketch SSK-1 be made to the building.

The recommended repairs include:

- Installation of three new 4x4 posts from foundation to roof structure
- Installation of new rafters
- Replace the existing T&G siding with new siding to match existing (we understand that future renovations are planned in this area. If desired a temporary sheathing such as T1-11 or a rail system could be installed in lieu of the T&G siding.)
- Replace existing T&G roofing with new T&G roofing (we understand that future renovations are planned in this area. If desired a less expensive sheathing such as 5/8" plywood could be installed in lieu of the T&G roofing.
- Repair the existing roofing.
- Replace any rotten framing discovered during installation of the new work in kind.
- Paint and finish the materials.

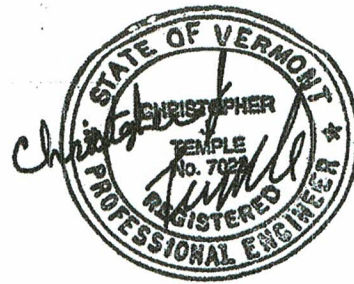
With the repairs recommended in SSK-1, it is my opinion that the damage caused by the pole collapse will be corrected. If you have any questions concerning this report, please call or write.

Sincerely,

Christopher J. Temple, P.E.

Enclosures:

Cc: Jeffery Solsaa via email



Surveying

Permitting

Site Design

Subdivisions

Timber Design

Expert Testimony

Site Development

Act 250 Permitting

Forensic Engineering

Environmental Permitting

Transportation Engineering

Structural Inspection Services

Commercial Building Design

Construction Oversight

Building Assessment

Pedestrian Bridges

Stream Alterations

Sewer Design

Water Supply

Storm Water

Hydrology

Grading

317 River Street

P.O. Box 1576

Montpelier, VT

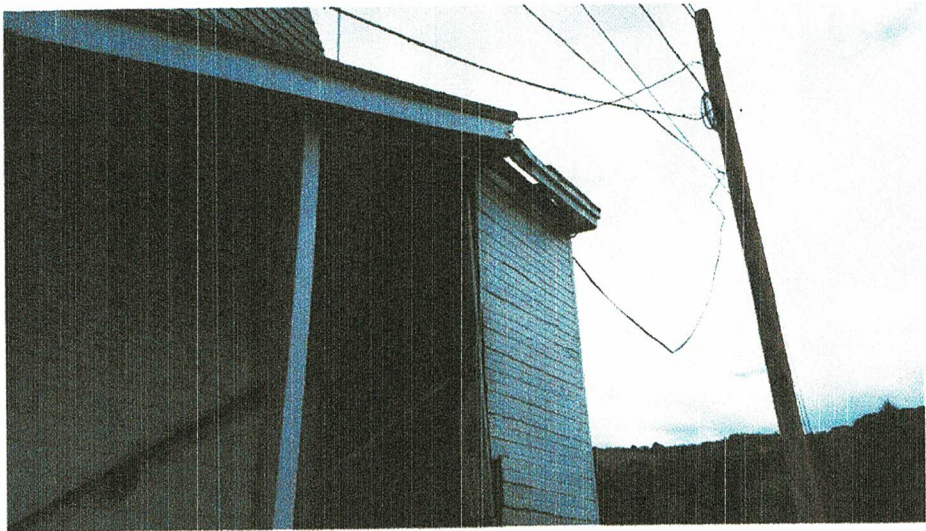
05601-1576

phone: 802.223.4727

fax: 802.223.4740

[www.dirtsteel.com](http://www.dirtsteel.com)





Photograph #1 – Roof damage

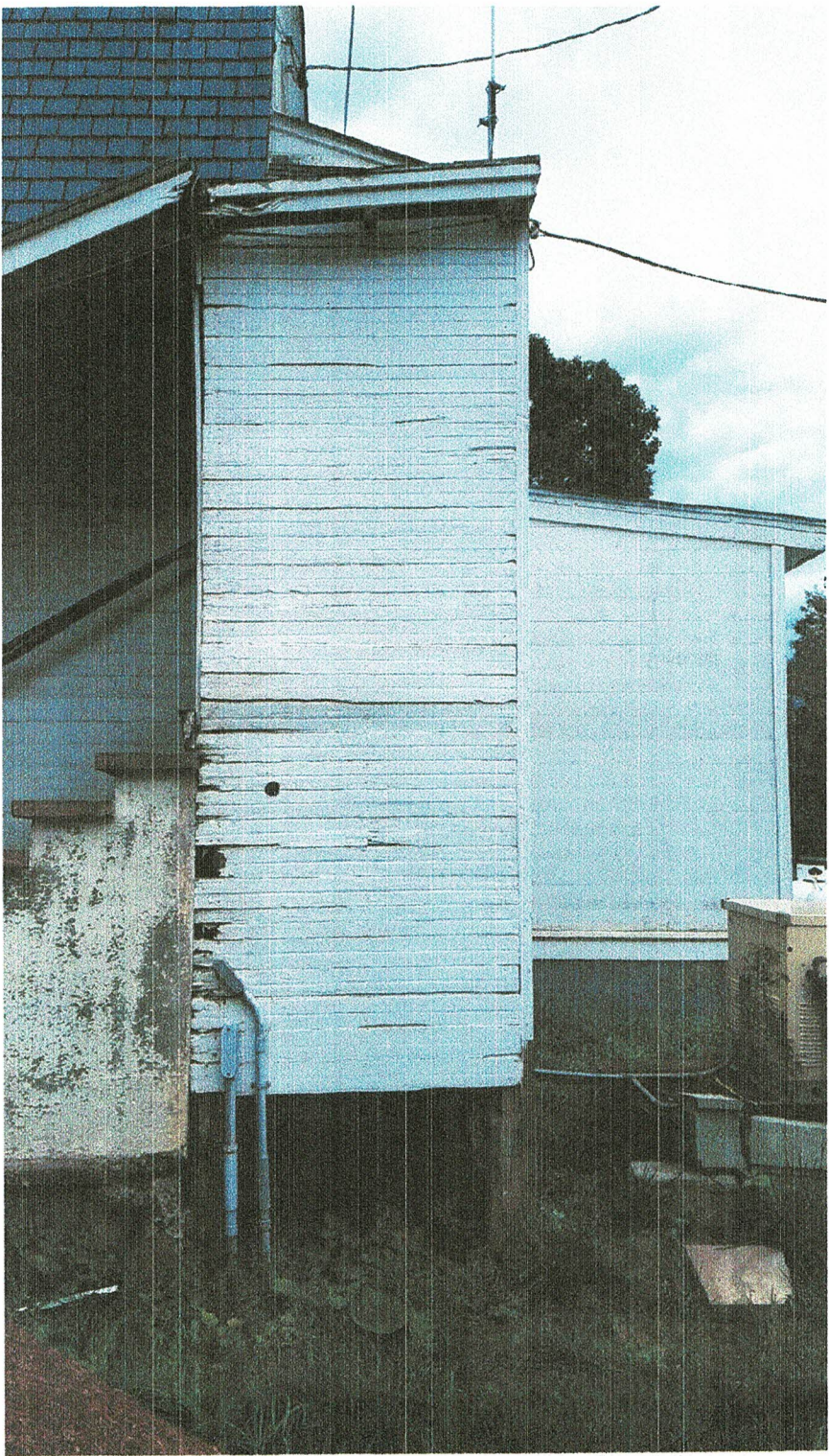


Photograph #2 – Broken rafter and damaged sheathing



Photograph #3 – Roof sheathing damage





Photograph #4 – Siding damage, post damage, and roof damage





November 9, 2021

Lisa M. Bragg  
Town of Strafford  
PO Box 27  
Strafford, VT 05072  
[selectboard@straffordvt.org](mailto:selectboard@straffordvt.org)

Reference: Structural Inspection of Strafford Town office  
227 Justin Morrill Highway, Strafford, Vermont

Dear Lisa,

As requested, on September 29, 2021, I met with you and Jeffery Solsaa at the above referenced site to complete a structural review of damage caused by a recent telephone pole failure at the northwest corner of the building. During the site visit, I noticed several conditions that had worsened since my previous visit in July of 2019. As requested, this report is provided to summarize the conditions and reiterate the desperate need for building maintenance and repairs.

During review of the back-stair damage, I discovered that the north porch roof and the slab supporting it had both visibly degraded since my 2019 inspection. In my July 19, 2019 report concerning the building, the north porch was already in poor condition but at that time the porch was planned to be removed. The porch has continued to degrade and several of the posts are damaged and the exterior stair has continued to settle. In addition, grade against the building has been changed and as a result, water from a significant surface area is directed into the crawlspace. In our 2019 report we had recommended that the northern slab be removed and proper drainage provided to prevent further rot and water infiltration into the crawlspace. The current condition has made the crawlspace infiltration worse and has likely exacerbated rot and moisture conditions that already existing in the crawlspace.

In addition to the north porch issues, the eastern entry porch has also degraded since my 2019 visit. Currently the porch posts have severe base rot and the front porch slab is heavily cracked. Furthermore, the sills and siding are buried below the front porch slab. Based upon the insertion of probes along the entry, it appears that sill rot has gotten significantly worse since the 2019 condition. In addition, it appears that regrading of the road shoulder to the northeast has directed additional water towards the porch, sill, and crawlspace.

Surveying  
Permitting  
Site Design  
Subdivisions  
Timber Design  
Expert Testimony  
Site Development  
Act 250 Permitting  
Forensic Engineering  
Environmental Permitting  
Transportation Engineering  
Structural Inspection Services  
Commercial Building Design  
Construction Oversight  
Building Assessment  
Pedestrian Bridges  
Stream Alterations  
Sewer Design  
Water Supply  
Storm Water  
Hydrology  
Grading

317 River Street  
P.O. Box 1576  
Montpelier, VT  
05601-1576  
phone: 802.223.4727  
fax: 802.223.4740  
[www.dirtsteel.com](http://www.dirtsteel.com)



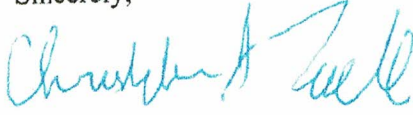
Based upon the conditions viewed at the site (see photographs 1 through 7), it is my professional opinion that the building is degrading rapidly and repairs are necessary to limit future exposure to significant repair costs and potential isolated member failures. Currently the following immediate needs should be addressed:

- Regrade the site to direct surface water away from the building.
- Repair/replace the existing damaged/rotten porch posts.
- Replace the existing foundation of both the eastern and northern porches.
  - The base slab at the bottom of the northern porch stair requires immediate attention.
- Repair/replace/reinforce the existing sills along the north and east walls of the building.

We understand that potential renovations to the building may negate the need for the repairs mentioned above. However, if the building is allowed to continue to decay, serious structural issues and potentially even safety issues will result.

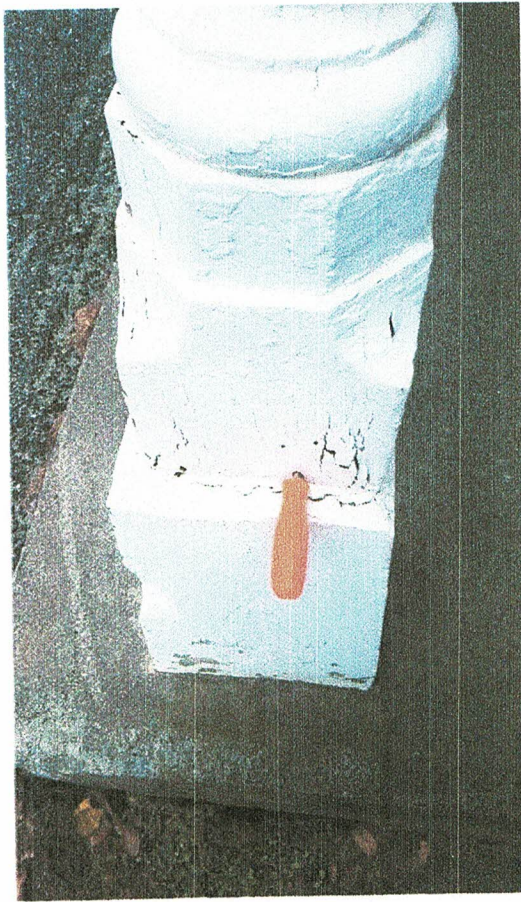
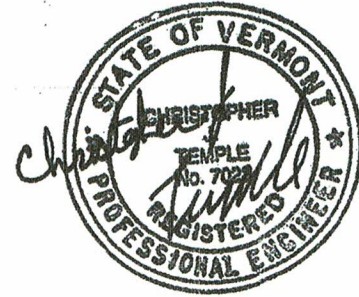
If you have any questions concerning this report, please call or write.

Sincerely,



Christopher J. Temple, P.E.

Cc: Jeffery Solsaa via email



Photograph #1 – Porch post base rot





Photograph #2 – Post damage at north porch



Photograph #3 – Post damage at north porch



Photograph #4 – Eastern porch slope, pier movement, sill buried in concrete.

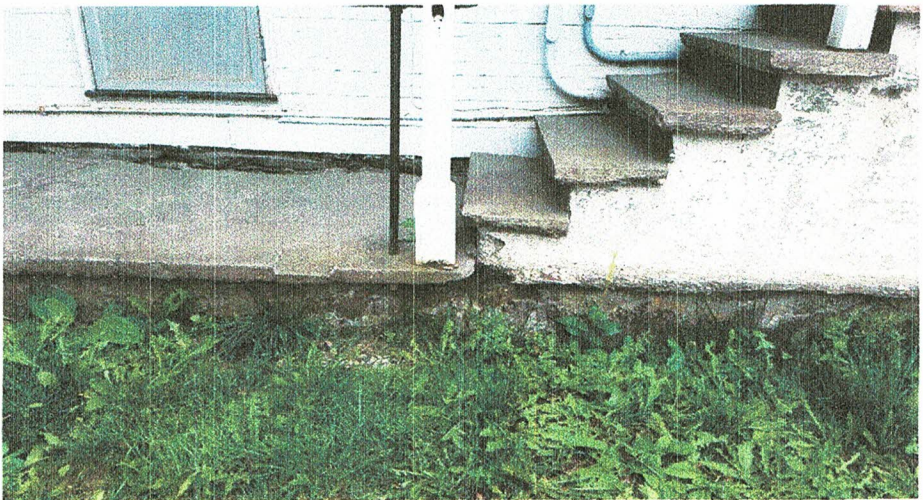




Photograph #5 – Eastern porch movement, eastern sill below grade, drainage towards building/crawlspace.



Photograph #6 – Drainage issues directed towards crawlspace access.

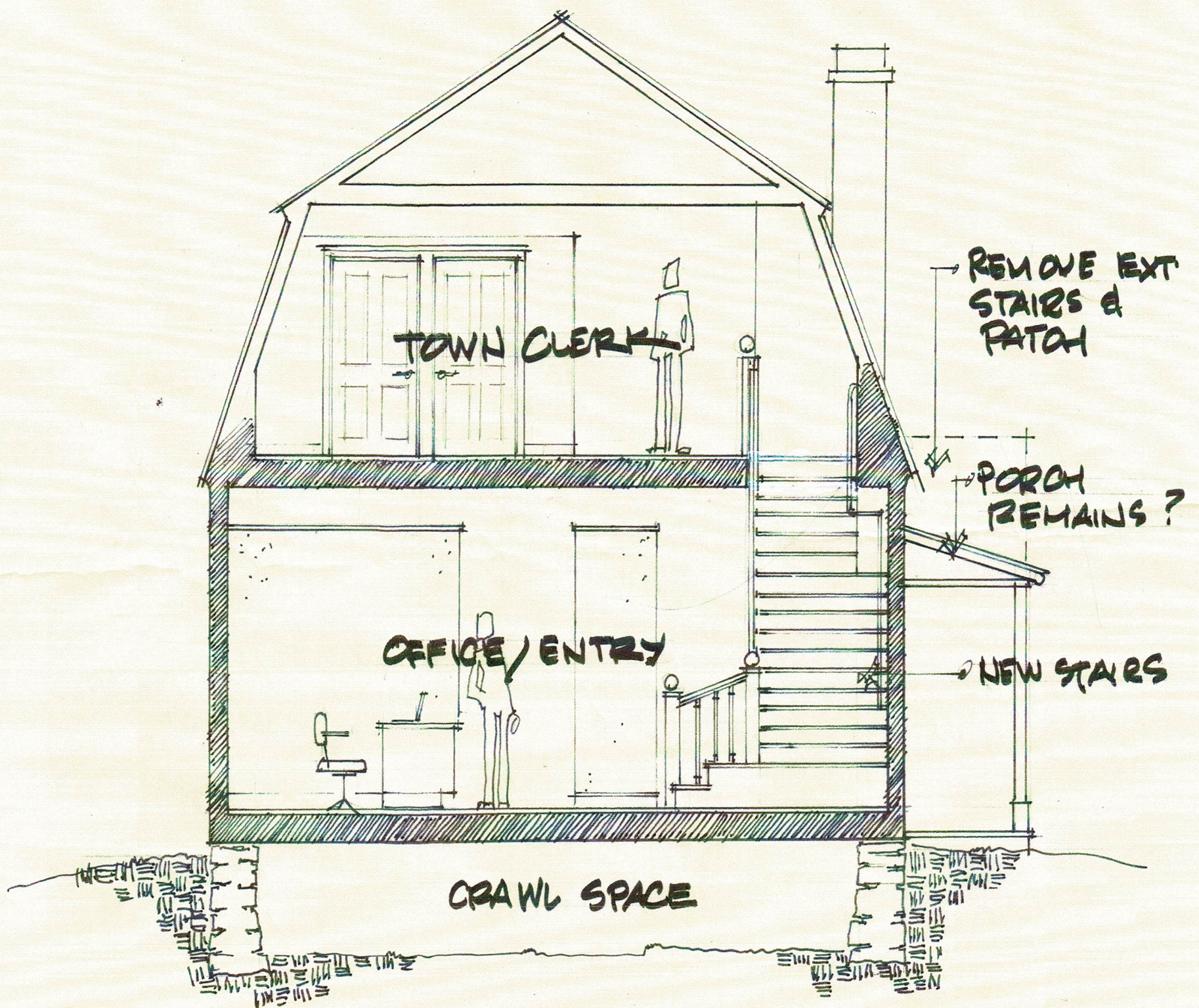


Photograph #7 – Column and north porch support issues



11.30.2022

TDM: THIS IS FROM 2019 STUDY AND SHOWS  
SECTION THRU BUILDING. DISREGARD  
STAIR - STAIR IS NOW ANTICIPATED IN  
ADDITION



85 granite shed lane  
montpelier, vermont 05602  
802.229.1664 • 802.229.4822 FAX

[www.gbarchitecture.com](http://www.gbarchitecture.com)

## CORRESPONDS TO "B" Strafford Town Hall

Strafford, Vermont

Scale: 1/4" = 1'

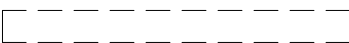
Building Section

February 28, 2019

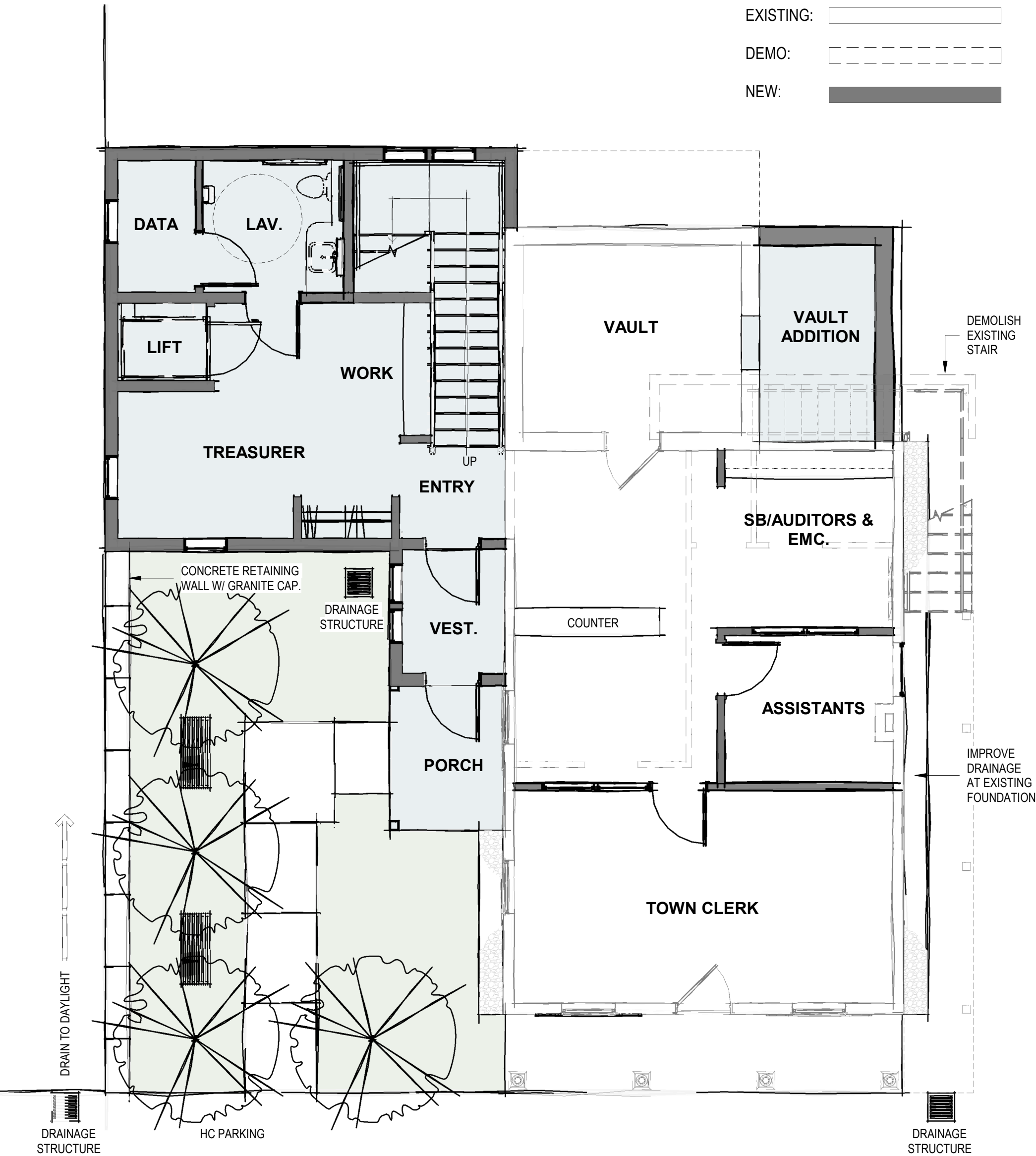


WALL LEGEND:

EXISTING: 

DEMO: 

NEW: 



1

LEVEL 1 - NEW WORK

SCALE: 3/16" = 1'-0"



85 granite shed lane  
montpelier, vermont 05602  
802.229.1664 • 802.229.4822 FAX

www.gbarchitecture.com

Strafford Town Office

Strafford, Vermont

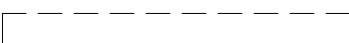
As indicated

LEVEL 1 - NEW WORK

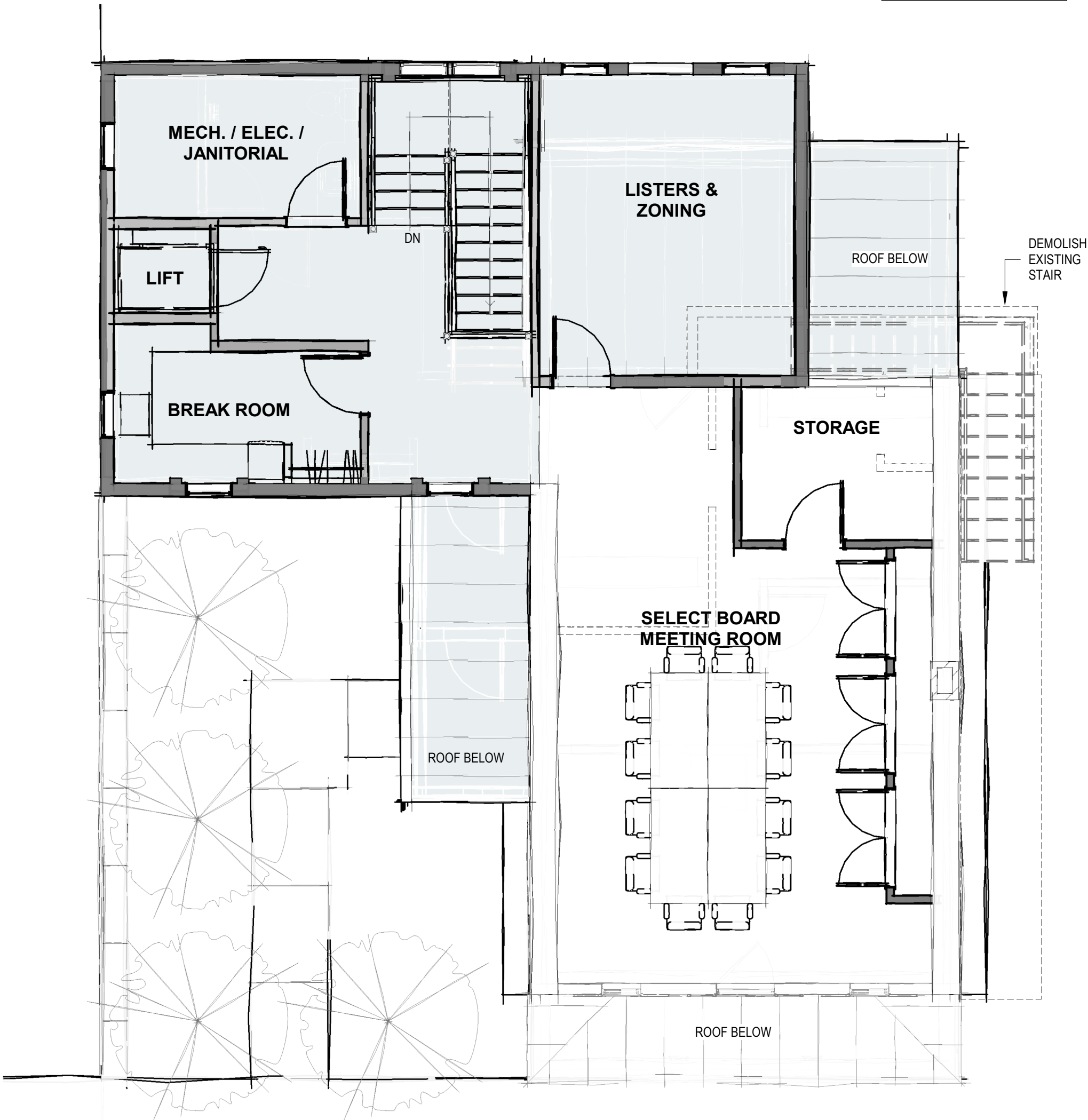
NOVEMBER 2022

WALL LEGEND:

EXISTING: 

DEMO: 

NEW: 



**1** LEVEL 2 - NEW WORK

SCALE: 3/16" = 1'-0"



85 granite shed lane  
montpelier, vermont 05602  
802.229.1664 • 802.229.4822 FAX

www.gbarchitecture.com

**Strafford Town Office**

Strafford, Vermont

LEVEL 2 - NEW WORK

NOVEMBER 2022

As indicated



## Existing Building Scope

**EXTERIOR**

- North elevation - remove exterior stairs, slab and side porch. Patch all siding/trim in kind.
- North elevation – remove existing exterior door and replace with window to match other first floor windows.
- North elevation – remove chimney, add roof decking patch slate roofing in kind.
- West elevation – relocate existing generator to facilitate vault expansion.
- Replace all rotten/deteriorated portions of porch columns in kind.
- Replace all windows with historically appropriate new insulated sash. Provide **alternate** price for refurbishing windows, weatherstripping and adding storm panels.
- Excavate front porch slab, subgrade and dispose of. Reframe floor with PT and new wood decking. Provide drainage at front to divert water away from building. Provide (3) new catch basins (interconnected and draining to daylight on south side of building). Replace all rotten sections of decorative post in kind.
- Scrape prime and paint all exterior surfaces.
- Reseed all disturbed areas.
- Provide stone drip edge on south and north elevations.

**CRAWL SPACE**

- Repoint crawl space foundation, spray foam sills and walls and pour rat slab with appropriate vapor barrier and insulation. Provide ignition barrier per code.
- Provide insulated door at exterior for access to crawl space.
- Add piers footings and framing repairs per Chris Temple (structural engineer) report.

**INTERIOR FIRST FLOOR**

- Remove necessary walls and dispose of.
- Remove all paneling and dropped ceilings and dispose of.
- Demo chimney, patch floor and ceiling in kind.
- Demo portion of concrete wall at Vault for access to Vault expansion.
- Demo existing South wall at entry for access from addition.
- Demo all plaster walls at exterior. Seal and add spray foam. Add new 5/8" gyp. tape to Level IV and prime with two finish coats.
- Demo all mechanical, electrical and plumbing systems.
- Patch and finish wood floors where walls removed.
- Frame walls for new layout with 5/8" gyp. tape to Level IV and prime with two finish coats.
- Insulate ceiling/floor for acoustic separation from above and add new finish.
- New LED lighting and power/data distribution throughout to accommodate new layout.
- New HVAC equipment (cold weather air source heat pumps) to provide heating and AC.
- New ERV ventilation system.
- Doors to Assistant and Town Clerk to be wood panel doors to match profile and finish of main entry door.

**INTERIOR SECOND FLOOR**

- Remove necessary walls and dispose of.
- Demo chimney, patch floor and ceiling in kind.
- Demo existing South wall for access from addition.
- Demo all plaster walls at exterior. Seal and add spray foam. Add new 5/8" gyp. tape to Level IV and prime with two finish coats.
- Relocate all data equipment to addition.
- Patch and finish wood floors where walls removed.

- Frame walls for new layout with 5/8" gyp. tape to Level IV and prime with two finish coats.
- Upgrade ceiling insulation to minimum R50.
- New LED lighting and power/data distribution throughout to accommodate new layout.
- New HVAC equipment (cold weather air source heat pumps) to provide heating and AC
- New ERV ventilation system.
- Doors to Selectboard, Listers, Treasures and Storage to be wood panel doors to match profile and finish of main entry door.

END OF DOCUMENT



## Outline Specification

**BIDDING REQUIREMENTS**

01. General Contractors will be prequalified by the Owner prior to bidding.

**CONTRACTING REQUIREMENTS**

01. A 100% performance and payment bond will be required as well as bid bond.  
02. This project is tax exempt

**Division 1 GENERAL**

01. Location: 227 Justin Morrill Highway, Strafford, Vermont 05702  
02. Scope:
  - Complete renovation of existing 1140SF two level building with crawl space; Two story addition of approximately 1200SF with first floor slab on grade. See attached Scope of Work for existing historic 1140SF two level building.
03. Schedule:
  - To be determined
04. Permits & Fees:
  - Local zoning, State regulatory permits and impact fees by Owner.
  - Public Safety and any local building permits and fees by Owner.
  - Subcontractor: Fees specifically related to their sub-trade by Subcontractor.
  - Power Company Charges: By Owner including power usage during construction.
05. Codes & References:
  - Work will be performed under appropriate AIA contract for general construction administered under the terms of AIA 201, General Conditions of the Contract.
  - Vermont Fire & Building Safety Code 2015 applies.
  - 2015 International Building Code applies.
  - 2015 NFPA 101, Life Safety Code applies.
  - Vermont Access Rules for New Construction, 2012 incorporating ADAAG, and ANSI 117.1 1986 applies.
06. Typical General Conditions
  - Project Management, Job Super, Office Overhead, Secretarial and Miscellaneous Labor.
  - Scaffolding, Temporary Sanitary Facilities, Temporary Fencing, Equipment.
  - Project Record Documents, Operating, Maintenance & Warranty Data.
  - Daily and Final Cleaning.
  - Disposal of all waste materials including separation and recycling of materials.
  - Insurance (Builder's Risk and property insurance by Owner). Workers' Compensation Employer's Liability of \$500,000 and General Insurance of \$1,000,000 per occurrence required.
  - Temporary Heat: No moisture producing equipment allowed.
  - Job Sign: Installed by Contractor, provided by Owner.
  - Project meetings shall be held once every two weeks during construction.
  - Provide submittals for all manufactured products installed.
  - Provide fire extinguishers.
07. Alternates:
  - Base Price include - Replace all historic windows with historically appropriate insulated sash (wood interior, aluminum clad exterior) with screens. **Alternate #1** - In lieu of replacement sash, rebuild, weatherstrip and add aluminum storms to existing windows.
  - Base Price include – Replace all historic windows with historically appropriate insulated sash (wood interior, aluminum clad exterior) with screens. **Alternate #2:** In lieu of insulated sash provide triple glazing.

- Base Price include – Standing seam metal roof for addition. **Alternate #3:** In lieu of standing seam metal roof provide slate roof to match existing.
08. Project Closeout
- Provide owner's manual including maintenance instructions, warranties, as built drawings and safety procedures, training for maintenance staff.
  - Clean all surfaces and remove all stains, dust, labels, and dirt.
09. Project Requirements
- Assume Historic Preservation Standards will be required on the exterior of the building only – Section 106 review.

#### Division 2 SITEWORK

01. Layout: Contractor responsible for all layout based on survey control provided by Owner.
02. Demolition, Clearing & Grubbing.
- Separate materials for recycling & salvage, provide waste management plan and tracking documents.
  - Provide protection for public during demolition. Assume safe public access to vault must be maintained two days a week.
03. Earthwork –
- Granular backfill under slab, sidewalk and foundation.
  - Provide all necessary materials and removal of excess materials, restoration of site.
  - Provide fill as required at south side of building to provide level lawn area and accessible path to new porch.
  - Stormwater management – Provide (3) new interconnected catch basins. These catch basins drain to daylight on the south side of the building.
  - Provide temporary and permanent erosion controls.
  - Provide seeding and mulching of all disturbed areas.
04. Utilities
- Sanitary: Tie into existing septic system
  - Water: Tie into existing well system.
  - Phone & Cable TV: Relocated and connect to relocated systems.
05. Site Lighting:
- Building lighting under porches.
06. Retaining
- Provide concrete retaining wall at level lawn area. Provide granite cap at top of wall.
07. Landscaping:
- Assume (4) 3" caliper single stem River Birch in lawn area. Assume (10) salt resistant Karl Forester grasses and (30) mixed color day lilies for planting beds.
  - Assume (2) wooden benches in lawn area.
  - No Trash Enclosure included in project.

#### Division 3 CONCRETE

01. Site
- Entry Walks: 4" Concrete on 12" crushed stone and Mirafi 500x geotextile fabric
02. Building
- Foundation - Footings and Walls: 3000 psi.
  - Slab on Grade – 4" with thickened footings when required.
  - Under slab Vapor Barrier – Reinforced Polyethylene (2 outer layers laminated to polyester scrim)
03. Radon Mitigation
- Include full Radon mitigation system under new slab at addition.

#### Division 4 MASONRY



01. Chimney

- Remove chimney on existing building.

Division 5 METALS

01. Cold Formed Metal Framing: Metal studs – wood studs can be used in lieu of metal studs – Contractor's choice.

Division 6 WOOD, PLASTICS, AND COMPOSITES

Rough Carpentry

01. Framing Lumber

- Material: Spruce/Pine/Fir 1050 psi , #No1./No. 2 NLGA grade eastern.
- Blocking: Interior and exterior for fire blocking, to support finishes, accessories and other building systems.

02. Engineered Lumber

- Manufacturer/Material: Trussjoist Macmillan LVL or PSL.

03. Pressure Treated Lumber

- Material: .060 ACQ preservative #1 or #2 southern yellow pine.
- Locations: Bottom plates of walls and all wood in contact with concrete.

04. Sheathing

- Wall: 1/2" Air Barrier Sheathing (Zip System) PA rated Plywood.
- Floor: 3/4" structural grade sheathing.
- Roof: 5/8" Plywood "Air Barrier" with clips.

05. Air Barrier Tape

- Zip System Air Barrier Tape: Pressure sensitive, self-adhering, cold applied, proprietary seam tape consisting of polyolefin film with acrylic adhesive, meeting ICC-ES AC 148.
- Air Barrier tape over 6" wide: Grace Vycor Plus or pre-approved equal.

06. Miscellaneous

- Fasteners: Nails, screws, metal connectors as required. Galvanized where exposed to moisture.
- Pressure Treated Material: Use fasteners compatible with ACQ.
- Construction Adhesive: under all floor sheathing and complying with VOC content requirements.
- Connectors: Simpson or equivalent.

Exterior Finish Carpentry

01. Trim:

- Material: Wood trim to match size of historic profiles on the existing building.
- Installation: Seal all cut edges per manufacturer's instructions. All six side to be primed.

02. Siding:

- New Wood Siding.

03. Porch Ceiling:

- Wood Bead Board.

04. New Porch Flooring

- Concrete

05. Exterior Existing Porch

- Perennialwood on new PT framing: Acetylized tongue and groove wood: 7/8" x 3 1/8" painted

Interior Finish Carpentry

01. Trim

- Door and Window Casing including apron: 1x4 clear painted wood in addition.
- Match species and profile of existing trim in existing building.
- Window Sills: 3/4" solid wood maple with clear finish in addition.
- Base: 1x4 clear painted wood in addition.

- Match species and profile of existing in existing building.
- 02. Shelving
  - MDO softwood ply with 3/4" solid-wood edge for painted finish.
- 03. Wood Stairs
  - Full carriage, wood risers and tread, carpet grade, site or shop built – GC's choice.
- 04. Second level underlayment in addition: Fully sanded underlayment screwed and glued. Scheduled at all second level new construction floors.
- 05. Countertops
  - Kitchen, Break area, Work Area: Wilsonart, Formica, or equivalent plastic laminate.
  - Type: 4" Semi curve backsplash with D90 front edge on formaldehyde free and water-resistant fiberboard.
  - Size: 25" x 1 1/2".
  - Color: To be selected from range of manufacturer's standard line.
  - Top to be 34" above finish floor.
- 06. Bathroom Vanity Top:
  - Manufacturer/Material: Corian Solid Surface one piece vanity top- single integral ADA bowl.
  - Color: White.
- 07 Casework
  - AWI Custom Grade Cabinetry – Type A frameless construction with flush overlay doors.
  - Locally harvested hard maple.
  - Provide wood finished back and sides where exposed to view.
  - Provide 32 1/2" height with 4" toe kick for 34" finished counter height.
  - Doors and drawers to have ADA compliant pulls equal to 4" D pulls.
  - All plywood and solid wood construction – no particle board.

## Division 7 THERMAL & MOISTURE PROTECTION

- 01 Dampproofing
  - ASTM D1227 compliant cold applied, emulsified-asphalt dampproofing on addition foundation.
- 02 Existing Stone Walls at crawl space
  - Continuous Reinforced Vapor Barrier from first floor finish floor to under new crawl space rat slab.
  - 3" continuous closed cell spray foam with ignition barrier.
- 03 New slab at existing crawl space
  - Excavate as needed to provide a level surface. Add gravel subbase.
  - 3" concrete slab over vapor barrier and 3" extruded Polystyrene continuous under added slab.
- 05 Rigid insulation (EPS): Foundation walls and sub-slab at addition.
  - Foundations: 3" extruded polystyrene foam under entire slab and down foundation walls for a minimum R15.
- 06 Vapor Barriers:
  - Reinforced Polyethylene (2 outer layers laminated to polyester scrim).
- 07 Typical Exterior Above Grade Walls at addition
  - Exterior wall assembly:
    - Type: Painted Quarter Sawn Clear Spruce Siding, primed all 6 sides, exposure to match existing.
    - Rainscreen: 5/4" PT plywood strips to align with studs.
    - 3" High Density Mineral Wool- Rockwool ComfortBoard.
    - Continuous sheet air barrier and drainage plane adhered to existing board sheathing.
    - Dense Pak cellulose insulation in wall cavity.
    - New 5/8" gypsum wallboard thru-out.
- 08 Typical Exterior Above Grade Walls at Existing
  - Spray foam insulation in wall cavity.
  - New 5/8" gypsum wallboard thru-out.



- 09 Misc. insulation:
  - Rim Joists: 6" closed cell spray foam for a minimum of R30.
  - Headers: 3 1/4" closed cell spray foam for a minimum of R15.
  - Roof: Achieve R50 with either dens pak or spray foam. Spray foam = Corbond or equivalent, R7/inch
- 10 Air Sealing:
  - Maximum air leakage through the envelope of the building is not to exceed 0.10 cfm/sq. ft. of building surface area at 0.2" water pressure (50Pa) difference inside to outside of building.
  - Preliminary and final testing will be required. If final testing does not meet target, contractor will be required to pay for re-testing.
- 07. Acoustical Sealing:
  - Ceiling/ Floor Framing: 12" unfaced fiberglass batt, full width.
- 08. Flashing
  - Misc. Flashing- .032 Prefinished metal flashing
- 09. Typical Roof for addition
  - Adhered Ice and Water Shield at all eaves, valleys, perimeter and penetrations.
  - Breathable synthetic roof underlayment equal to Deck Armor by GAF.
  - Standing seam metal roof – 24 gauge with baked on finish with color selected from manufacturer's standard colors. Finish sheet width is 20" – assume 1 1/2" mechanically locked standing seam.
- 10. Typical Low Slope Porch Roofs
  - Adhered EPDM membrane over 1/2" cover board
  - 2" Polyisocyanurate insulation
  - Roof deck
- 11. Sealants and Caulking
  - Sealants - Exterior: Tremco Dymonic polyurethane ASTM C-920, Class 12.5.
  - Sealants - Interior: Baths, Showers, Countertops - Color Caulk Pro Line Class A, ASTM C-920.
  - Caulking: Interior joints at dissimilar materials - DAP latex acrylic ASTM C-834.
  - Sealants and Caulking must meet VHFA Green Standards

## Division 8 DOORS, WINDOWS & GLASS

- 01. Doors & Frames
  - Exterior Door: Solid weather resistant Wood with full glass.
  - Interior Doors Addition: Solid core doors with maple veneer facing. Flush AWI Premium Grade with A faces. Cut: Plain sliced/plain sawn – book match. Assume 5 plies. Factory finish faces, all four edges.
  - Interior Doors Existing: Match existing in kind.
- 02. Special Access Panels
  - Crawlspace access hatch, R-28 insulated, 24" x 36"
- 03. Windows:
  - Aluminum Clad exterior/ Painted wood interior similar to Marvin Clad Ultimate Double Hung. 5/8" simulated divided lites with spacer bars to match existing window layout.
  - Provide dual pane insulated glazing with Low e / argon filled glazing.
  - Glazing to be Performance tweaked for different elevations
- 04. Finish Hardware:
  - General: Entry doors grade 1, other grade 2. Sargent 10 Line is the basis of design. Levers on all doors.
  - Provide weather-stripping on exterior door and thermally broken threshold.
  - Common/Public: Passage, privacy, storeroom or office lever.
  - Other: All other miscellaneous hardware including door/floor bumpers, thermally broken thresholds.

## Division 9 FINISHES

01. Gypsum Wallboard
  - Typical Finish: Level IV.
  - Typical Walls: 5/8" type X. Use MR in Lavatory.
02. Finish Flooring & Accessories
  - Addition first floor: Sealed and polished concrete.
  - Addition second floor: Marmoleum Composition Tile Plank.
  - Floor Prep: As required. provide underlayment for all resilient flooring.
04. Existing wood flooring: Refinish and blend where walls removed.
05. Paint
  - Highest Quality, latex, paint or stain, Green Seal or SCAQMD rule compliant.
06. Exterior
  - Siding: Provided primed clapboards. Scrape & paint existing fascia trim, window trim, & soffit, porch, porch ceiling, columns. Paint existing porch columns after repair, trim, and roof.
  - Trim: Prime and two coats latex paint.
  - Doors: 2 coats paint over factory primed base.
  - Windows: Factory finished aluminum cladding.
07. Interior
  - Addition Interior Doors: Clear finish.
  - Addition Door, Window Frames and Baseboard: 2 coats semi-gloss paint over factory prime.
  - Addition Misc. Hardwood including sills: 3 coats semi-gloss polyurethane.
  - Existing New Interior Doors: Match profile of panels at main entry door.
  - Existing New Door, Window Frames and baseboard: Match existing trim in profile and finish.
  - Gypsum Board: Primer and two coats eggshell finish.
  - Handrails and banister at stairs: Three coats semi-gloss polyurethane.

#### Division 10 SPECIALTIES

- 01 Signage and Graphics: Room signs 6" x 9 1/4" thermoformed acrylic room signs with Braille. Square corners and straight edges. Mount with double edge tape. Provide signs with the following messages: Town Clerk, Meeting, Unisex, Data, Mechanical/Electrical/Janitorial, SB/Auditors/EMC, Lists & Zoning, Treasurer, Meeting Room
- 02 Fire Extinguishers: Multi-Purpose Dry Chemical, 5#, (1 on each level)
03. Specialty Items
  - Toilet Paper Holder: Equal to Tork T-1 Jumbo Toilet Bath Tissue Dispenser
  - Soap Dispenser: Equal to Stokovario Dispenser, Black
  - Surface Mounted Sanitary Napkin Dispenser: Equal to Bobrick Contura Series
  - Toilet Grab Bars: Equal to Bobrick Series B-5806 Series in stainless steel.
  - Mirror: Equal to 1/4" thick with #18 ga. Stainless steel frame with #4 satin finish
  - Surface mounted Paper Towel Dispenser. Equal to Tork Elevation Dispenser Hand Towel Centerfeed Mini Pro Black MI System
  - Waste and Supply piping covers: Equal to Lav Guard 2E-Z Series.
  - Emergency Access Box: Knox box, recessed. Confirm with fire department number and location.
  - Recessed walk off mat.

#### Division 11 EQUIPMENT

01. Residential Appliances - in contract, Installed by Contractor
  - Refrigerator: Provide 10.8 cu. FT bottom freezer equal to LG model LRBNC1104S
  - Microwave: Reuse existing

#### Division 12 FURNISHING



## 01. Kitchen &amp; Bath Cabinets

- Manufacturer/Type; Equal to Armstrong cabinets Maple Extreme Series with hardwood plywood box.
- KCMA A161.1.
- No added Urea Formaldehyde. no Particleboard or MDF permitted.
- Provide wood finished back and sides where exposed to view.
- Provide at 32 ½" height with 4" toe kick for 34" finish height.
- Countertops: Medium density formaldehyde free and water-resistant ply with Wilsonart, Formica or equivalent plastic laminate finish. Finish is 25 ½" wide.

## 02. Window Treatments: Equal to Draper Infinity 2 – 5% PG2 Almond clutch operated with stainless steel chain at all windows.

**Division 13 SPECIALTIES**

NA

**Division 14 CONVEYING SYSTEMS**

## 01. Vertical Platform Lift

- Two stop Garaventa Lift –Garaventa Genesis Enclosure. Assume recessed slab for flush entrance to cab.

**Division 21 FIRE PROTECTION**

## 01. Sprinkler System

- NA

**Division 22 PLUMBING**

## 01. Piping

- Water: Aquapex or Copper.
- Waste: Cast iron or PVC with required assemblies for rated penetrations.
- Metering: Single meter for building.

## 02. Fixtures

- Toilet: Toto Drake II, 1.28gpf, elongated for accessibility.
- Bathroom Lavatory: Equal to Cera Style Model 068300-U with wall carrier
- Kitchen Sink: Single bowl 22-gauge stainless steel, undercoated
- Kitchen Faucet: Moen Chateau with retractable spray.
- Frost Free Hose Bib: Woodford, key operated
- Floor Drain Restroom: Include trap primer.
- Slope sink with FRP surround in second floor mechanical/electrical/janitorial room

**Division 23 MECHANICAL**

## 01. Heating and AC

- Provide complete mechanical system in accordance with all applicable codes.
- Ductless cold climate mini-split heat pumps.
- Vestibule: Electric cabinet unit heater.
- Under slab mitigation system: Typical radon system activated and vented through the roof.
- Controls: programmable thermostats.

## 02. Ventilation

- Ventilation system will be heat recovery system providing 10)% outdoor air/exhaust air unit with a minimum MERV 11 filtration. Air source heat pump for tempering air.

**Division 26 ELECTRICAL**

## 01. General

- Provide complete electrical system in accordance with all applicable codes.
- Provide complete telephone and CATV systems.
- Power connections shall be provided to all new mechanical and building equipment.
- Services: Underground: Power, Phone, and CATV from the existing utility poles.
- Relocate existing emergency generator.
- Assume all LED fixtures. Area light levels shall be as per Illuminating Engineering Society, North America (IESNA)

02. Devices

- Color: All duplexes, switches and plates to be white.
- Exterior Duplex: GFIs with separate hinged cover, lockable as required.
- GFI in restroom, mechanical spaces, and as required in kitchen and exterior.

03. Light Fixtures

- Interior Lights: All LED – Historic style in existing building – recessed cans in addition.
- Exterior Building (Porch): recessed LED can lights, with timeclock and photocell control.

04. Phone/Data/CATV

- Provide complete phone data system with Cat 5e wiring and outlets in each BR and Living area. DSL option.

05. Alarm & Detection Systems

- Detectors: Smoke and carbon monoxide detectors hardwired on non-dedicated circuits;
- All systems upgradeable to visual strobe.
- Provide horns and strobes as required by code.
- Provide exterior alarm bell as required by code.
- Acquire all permits, testing, and inspections

END OF DOCUMENT





1 **MASSING**  
SCALE: NTS



85 granite shed lane  
montpelier, vermont 05602  
802.229.1664 • 802.229.4822 FAX

[www.gbarchitecture.com](http://www.gbarchitecture.com)

## Strafford Town Office

Strafford, Vermont

SKETCH - NEW WORK

NOVEMBER 2022

12/1/2022 1:18:49 PM



# 1 MASSING - COURTYARD

SCALE: NTS



85 granite shed lane  
montpelier, vermont 05602  
802.229.1664 • 802.229.4822 FAX

[www.gbarchitecture.com](http://www.gbarchitecture.com)

## Strafford Town Office

Strafford, Vermont

SKETCH - COURTYARD

NOVEMBER 2022

12/1/2022 1:23:03 PM