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HISTORIC BUILDING ASSESSMENT

FOR

MASONIC HALL

29 OLD PORTLAND ROAD
FREEDOM, NH

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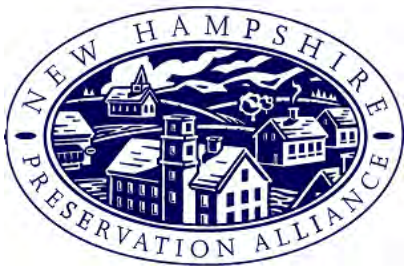

This report was funded in part by a grant from the New Hampshire Preservation Alliance, which receives supports for its grant program from New Hampshire's Land and Community Heritage Investment Program (LCHIP).

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EXECUTIVE SUMMARY

Figure 1: Satellite map indicating Masonic Hall location on Schoolhouse Hill

This Historic Building Assessment of the Masonic Hall in Freedom, NH has been funded in part by a 2024 grant from the New Hampshire Preservation Alliance (NHPA). The grant program receives support from New Hampshire's Land and Community Heritage Investment Program (LCHIP). The purpose of this assessment is to document the building history, evolution, and character-defining features, as well as to document and assess existing conditions, and provide a prioritized outline of recommendations with associated costs.

North Country Architect was engaged in the fall of 2024 to perform the assessment and prepare the report. An introductory site meeting to discuss the project took place on November 11th, 2024. Follow-up visits took place on January 13th and July 7th, 2025. In attendance at all visits were Selectman Alan Fall, Heritage Commission Officers Karrie Buttrick and Brandy Buttrick, Jason Earle, and Beth Miller of North Country Architect. The Masonic Hall, formerly referred to as the old 1830 Church or First Baptist Church, will be referred to in this report as the Masonic Hall, as opposed to Masonic Temple or otherwise, as Masonic Hall is the name adopted by the 2013 NHDHR Inventory Form. The front façade will be referred to as south, sides as east and west, and rear façade as north.

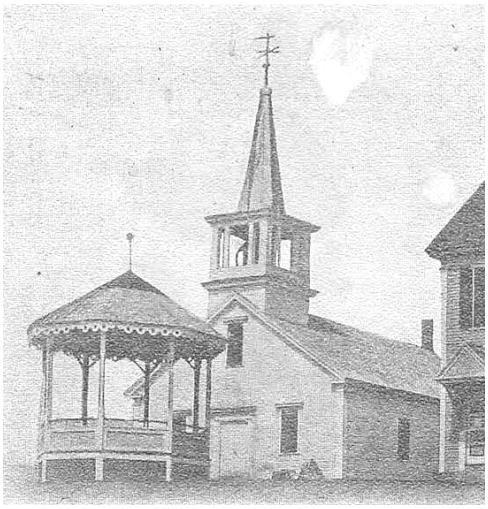


Figure 2: 1830 Church, circa 1900/1901

Figure 3: Masonic Hall, circa 2012

EXECUTIVE SUMMARY

Freedom's Masonic Hall building is in fair condition. The building served as a Church until the late 1800's and then was vacant until 1926, at which time the local Carroll Lodge #57 purchased and extensively renovated the building for its use. It remains in use by the lodge to present-day. Due to the church belfry and steeple having been removed by the Masons in 1926, NHDHR has determined the buildings' historical significance to be in its time serving as a lodge, 1926-1963, and not its earlier time serving as a Church. The building is still regularly used by the Masons, who hold meetings in the second floor Lodge room. The first-floor banquet hall is used rarely for events and is currently used for storage. The Town is exploring better ways to utilize the first-floor spaces, such as housing some programming for the adjacent Town Office.

The last major repair/renovation campaigns were undertaken in the late 1980's and the building is currently due for exterior envelope repairs, as well as interior upgrades so that it can be better utilized by the lodge and Freedom community. Recent assessments undertaken by Bergeron Technical Services (see Appendix E) identified structural deficiencies with the roof trusses stemming from the 1926-1928 renovations, at which time collar ties were cut to accommodate a second floor. Reinforcement of the roof structure is in progress at the time of this assessment. Other recommended upgrades include upgrading of the electrical and HVAC systems, replacement of the damaged ADA ramp, addition of a code-compliant second egress door, and renovation of the bathrooms for accessibility. The Town intends to undertake upgrades in the next few years.

Recommended Preservation tasks include resetting foundation stones and restoring the front entry door. Recommended Restoration tasks include removal of all vinyl siding and coverings from the exterior facades, and rehabilitation of the wood clapboard siding and trim beneath, restoring the building exterior to its 1926 appearance. The Town intends to undertake such restoration when funds allow and also plans to replace the present vinyl window sash with true-divided-lite wood 2/2 sash replicating those that the masons installed in 1926-1928.

Figure 4: Masonic Hall front window with vinyl siding removed to reveal intact wood window head trim

Figure 5: Intact wood cornice / eave trim at northeast corner of building

PART I. HISTORY AND DEVELOPMENT

Site Context

"Once part of Effingham, New Hampshire, the portion of town north of the Ossipee River incorporated as the town of North Effingham in 1831. In 1832, North Effingham submitted a petition to the state legislature to change the name of the town to "Freedom." This was approved and a formal letter was sent to the new town of Freedom by Franklin Pierce, a future president of our country. Four important roads converge in the heart of Freedom, New Hampshire: Moulton Road, Cushing Corner Road (once Andrews Hill Road), Elm Street (once Main Street) and Old Portland Road (once Maple Street)….Just a short distance to the east of the "square" where these roads meet, Schoolhouse Hill rises north from Old Portland Road."[1]

Early History

Freedom was still part of Effingham in 1827 as the high tide of the Protestant 'Second Great Awakening' rolled over New England. Leaders of three religious denominations (Freewill Baptist, Calvin Baptist, and Universalist) worked together to form a "church" (a group of people who signed a charter), meeting in the homes of members. Eventually finding a need for a meetinghouse for their worship, these people turned to Amos Towle, Jr. who owned land with his father, Amos Towle, Sr., on Schoolhouse Hill. In 1830, Amos Towle, Jr. constructed a meetinghouse and began to convey interests in the building and the two square rod lot of land on which it was placed. He also sold interest in the pews…This church structure would be the second church in Effingham. Towle built if for folks who lived north of the Ossipee River enabling them to worship, without excessive travel, in their own place on Schoolhouse Hill.[2]

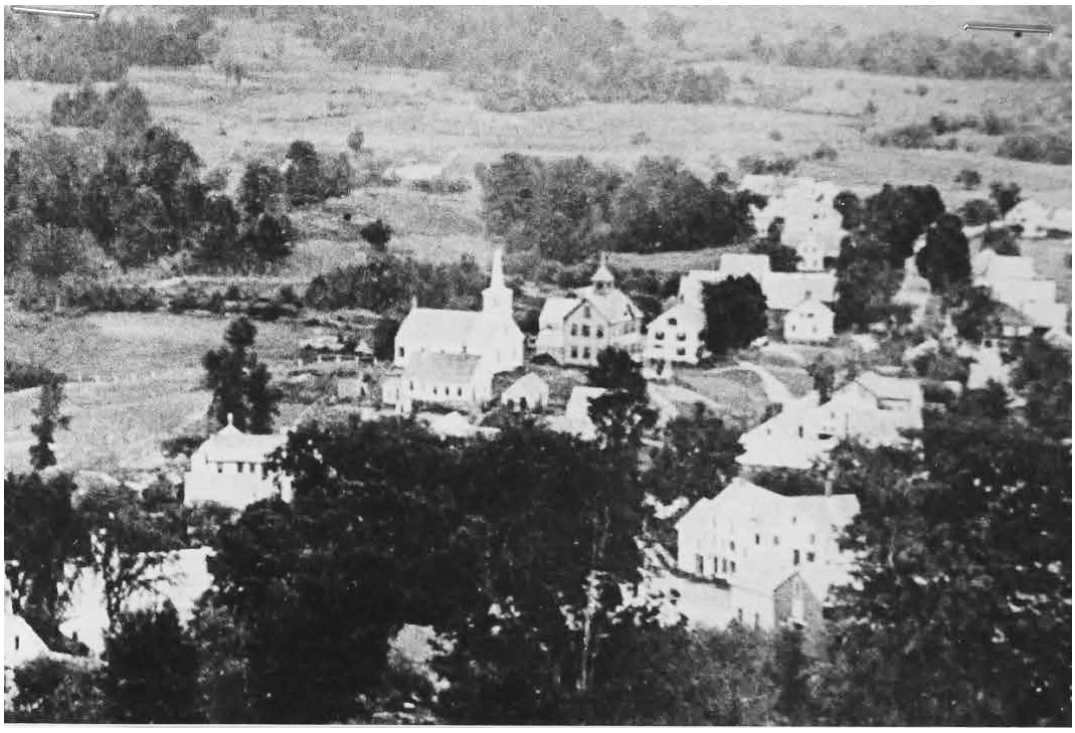
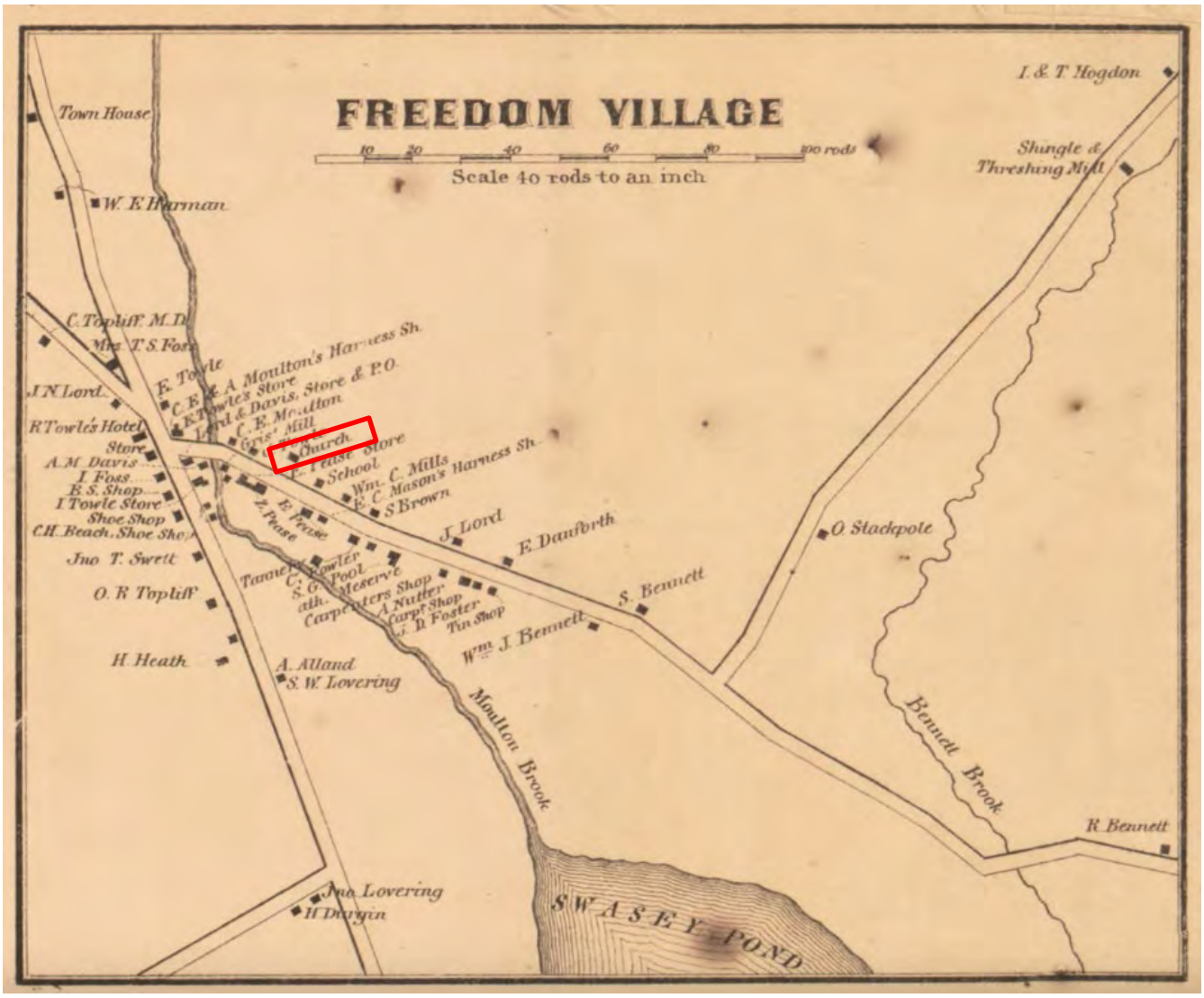


Figure 6: Bird's Eye View of Freedom Village, 1900-1901

[1] *NHDHR Inventory Form 2013*
[2] *Ibid.*

PART I. HISTORY AND DEVELOPMENT



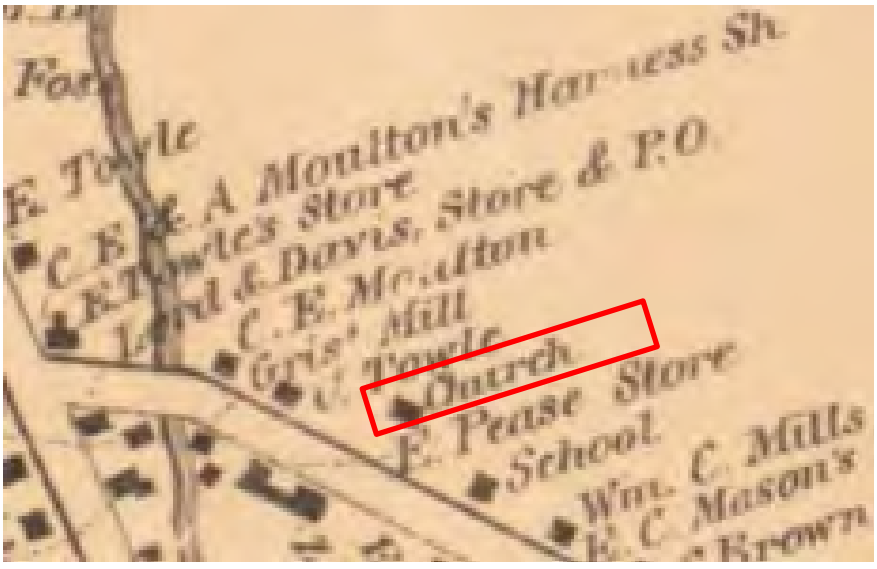


Figure 7: Above, 1861 Map of Freedom, NH

Figure 8: Left, Close-up view

PART I. HISTORY AND DEVELOPMENT

"The structure was substantial, a two-story building open from floor to vaulted ceiling, with plaster and lathe walls and a painted blue ceiling, as was the fashion of the times. Typical of early meetinghouses hereabouts, it did not have a steeple nor belfry. Members gathered in the 1830 Church to worship for 20 years, at which point, in mid March of 1850, Elias Towle, brother to Amos Towle, Jr., offered a group of 25 townspeople this deal: "If you will build a good, respectable belfry and steeple, shingle, clapboard, and paint the house and fix it all up in good shape, I will furnish a bell." Towle held up his part of the bargain and purchased a new bell from a Boston foundry that was hung in the steeple where it remained in use until 1867 when it was removed and hung in the belfry of the new First Christian Church of Freedom at Towle's request. This bell would be at the center of three court cases to determine true ownership. Mr. Towle won all three cases and the bell remains in use to this day in the "new" church on Elm Street."[3] An in-depth history of the bell controversy was compiled for the Freedom Heritage Commission and is available at the Freedom Historical Society.

"Back on Schoolhouse Hill, the 1830 Church membership waned, despite having reorganized in 1857 as the "First Baptist Church." The building fell into disrepair, then disuse as a church, and by the turn into the 20th century, it stood abandoned except for occasional use for town social activities." [4]

Figure 9: Postcard image Freedom Schoolhouse with Church behind, circa 1900-1901

[3] *NHDHR Inventory Form 2013*
[4] *Ibid.*

PART I. HISTORY AND DEVELOPMENT

1926 Carroll Masonic Lodge #57

"In 1926, the building would take on a new life altogether in (the) town's history. In that year Carroll Lodge #57 A.F. & A.M. deliberated about finding a building to purchase outright for meetings and functions. The membership had, from June of 1854 until this point, been meeting on an upper floor of a building near Schoolhouse Hill, down on the south east corner where Old Portland Road intersected with Elm Street, close by what we call the town square. The men of this fraternal Lodge, which was specially chartered on August 18, 1853 and then formally chartered on June 14, 1854, decided to investigate ways and means to buy the long vacant 1830 Church. The Lodge had a large membership, were financially sound, and had enjoyed "A comfortable hall for a lodge-room…" But they did not own the building. They also were dealing with costly maintenance issues and felt that they would be better served by putting such money into a structure owned outright by them. A committee was formed to figure out viability and finances and make an offer in 1926."[5]

"By 1927, The Temple Association [6] held the deed to the 1830 Church, now renamed the Masonic Hall. They paid $25 for the land and $25 for the building. A Building Committee was appointed…charged by their brother Masons to oversee the repairing of the building to make it suitable for Masonic Hall purposes. The changes included creating a banquet hall, which required a kitchen facility, adding a heating plant, and building a second floor to serve as the Lodge space. Work was completed by July 12, 1928, when the Brotherhood was meeting in this building. On September 3, 1928 the dedication of the new Masonic Hall was observed with much formality and feasting."…The Masons permitted the women of Calvin Topliff, Chapter 18, Order of the Eastern Star…to rent space and meet in the hall, and the Carroll Lodge #57's Secretary's Records show that the men built facilities into the old church to accommodate this sisterhood that was to become an active element in Freedom's women's history."[7]

Figure 10: 1830 Church, circa 1900.

Figure 11: Right: Masonic Hall, circa 1990

[5] *NHDHR Inventory Form 2013*

[6] *As quoted from the 2013 NHDHR form. "Temple Association" is a common name taken by other lodges but, in the case of Freedom's Masonic Hall, per the 1926 deed, the property was owned by Carroll Lodge No. 57 A.F. & A.M.*

[7] *Ibid.*

PART I. HISTORY AND DEVELOPMENT

Figure 12: Interior view of Mason's Lodge Room, circa 2012

Figure 13: Interior view of Mason's Banquet Room, circa 2012

PART I. HISTORY AND DEVELOPMENT

Repairs and alterations made to the building by the Masons in 1926-1929 were extensive and included:

- Removal of belfry and steeple, and installation of present corrugated metal roof (original roof is thought to have been wood shingles)
- Adding four small double-hung windows, two the main south façade and two to the north rear façade. Updating of window sash throughout.
- Relocating of the chimney (and presumably removal of wood stove) from north at center to southeast of building at new heating plant
- Dividing the building's height by adding a second floor to create a banquet hall on the main floor and lodge room on the upper level. This included cutting truss collar ties and king posts to create adequate head room on the second floor, and installation of new beams with tension rods and columns throughout the first floor to support the new second floor.
- Dividing of the main floor space by adding a full-length partition, east of which was housed a men's bathroom, heating plant, kitchen, and northeast room that today houses a second bathroom
- Addition of the present paved looped driveway

In the 1960's – 1990's the next repairs and alterations were made to the exterior of the building, which included cladding of the exterior wood clapboard siding and trim with vinyl siding, addition of a rear metal fire escape and second floor egress door, and conversion of a west facade window fenestration to a first-floor egress door served by a new wooden wheelchair-accessible ramp. On the interior, the kitchen was renovated with new cabinets and countertops, and installation of a new oven, fans, refrigerator, freezer, and dishwasher. The soapstone sink was moved to the historical society. A wooden stair chairlift was installed at the interior stair. The plumbing and electrical systems were also reportedly updated. The following decades have seen a succession of studies and assessments exploring the repair, restoration, and potential reuse of both the Masonic Hall and adjacent Schoolhouse, which now houses Town Offices.

Figure 14: Remnant of blue-painted 1830 Church coved ceiling is visible in attic

Figures 15 & 16: Top: Example of an intact double-height meetinghouse/church space at Guildhall, VT; Bottom: Example of an intact double-height meetinghouse/church with intact coved ceiling at Newbury, VT

PART I. HISTORY AND DEVELOPMENT

1830 Church / 1926-Present Masonic Hall – Views over Time

Figure 17: Circa 1900

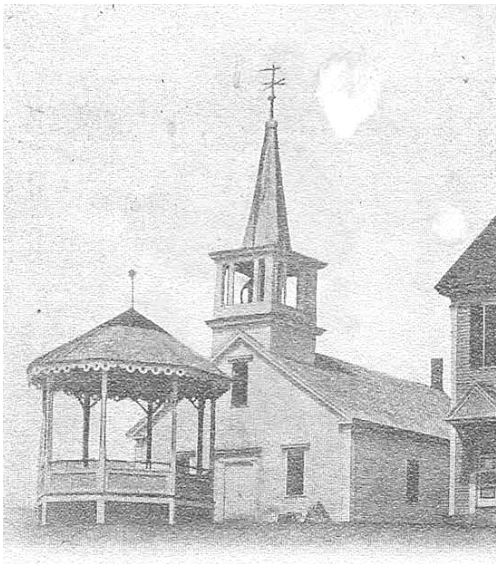


Figure 18: 1900-01

Figure 19: 1900-01

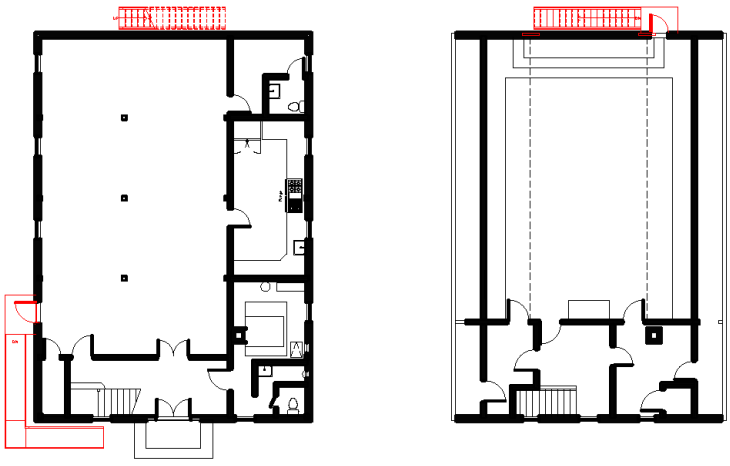
Figure 20: 1989

Figure 21: 2012

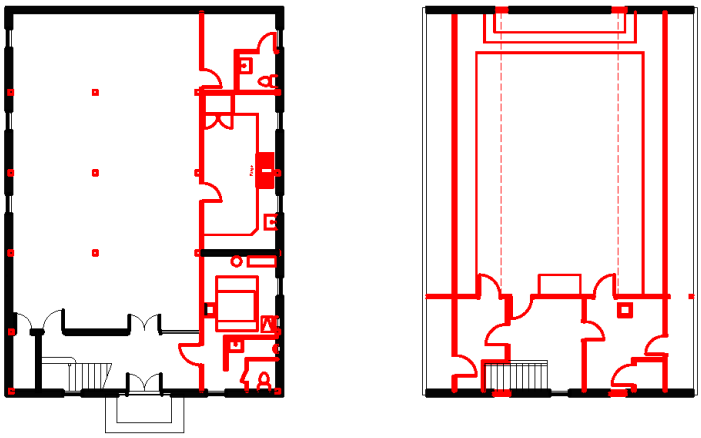
Figure 22: 2025

PART I. HISTORY AND DEVELOPMENT

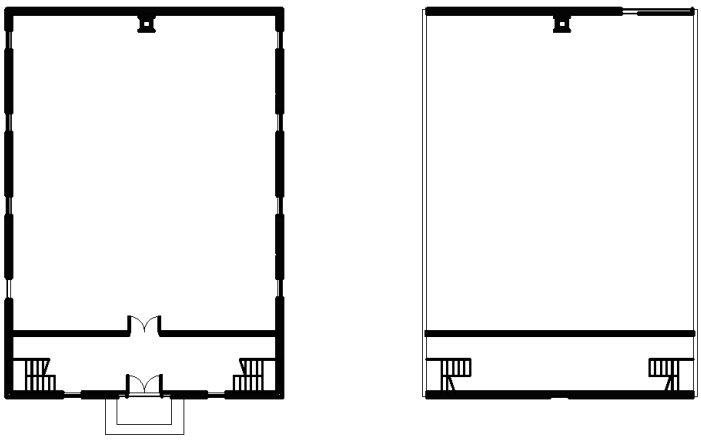
1830 Church / 1926-Present Masonic Hall – Alterations over Time



1980's to PRESENT



1926-1980's



1830-1926

Note: 1830 Church interior layout is not known other than the main hall was a double-height space with coved ceiling. It is presumed that the church had front flanking stairs to a gallery as is typical in churches of that era. There appears to be evidence of windows having originally existed in the conjectural stair locations as well.

PART I. HISTORY AND DEVELOPMENT

Timeline of Important Dates and Alterations

1778 – Effingham incorporated
1827 – Church group formed, meeting in homes of congregants
1830 – Church constructed by Amos Towle Jr. on Schoolhouse Hill to serve those living north of Ossipee
1831 – North Effingham separated and incorporated
1832 – North Effingham changes name to 'Freedom'
1850 – Elias Towle offers a bell if the Town constructs a belfry and steeple
1850 – Construction of belfry and steeple, and hanging of bell
1853 – Carroll Lodge #57 specially chartered
1854 – Carroll Lodge #57 formally chartered
1857 – Congregation reorganizes as the "First Baptist Church"
1867 – Bell removed and relocated to First Christian Church at Towle's request
1894 – Order of the Eastern Star instituted
1890's – Last Church services held in building
1898 – First Freedom Old Home Week, aimed to rebolster population
1926 – July, Carroll Lodge No. 57 A.F. & A.M. is deeded the former Church/Meetinghouse for $25[8]
1926-1928 – Repairs and alterations to the building were extensive and included: removal of steeple, present corrugated metal roof installed, dividing of the building's height by adding a second floor to create a banquet hall on the main floor and a Lodge on the upper level, cutting collar ties and king posts to allow head room at new second floor space, dividing of the main floor space by adding a full length partition, adding a kitchen facility, adding a heating plant, adding a bathroom, addition of four small windows at front and rear facades, relocation of chimney from centered on roof ridge at north end of building to east of the roof ridge at the south end of the building, likely also updating of window sash, alterations to accommodate Order of the Eastern Star (women's bathroom at rear and/or toilet room at second floor)
1928 – Dedication of new Masonic Hall with formal feast
1929 – Looped driveway and adjacent parking area installed and paved by Masons
1989 – First documented NHDHR survey. NHDHR describes that at the time of the survey only the rear façade had vinyl siding, which covered over two 2/2 wood double-hung windows. The west egress door, west ADA ramp, and rear metal fire escape had been added. Photos included with this survey indicate that the1920's 2/2 sash and exterior shutters were still extant.
1990's – Kitchen renovated to include new ovens, fans, refrigerator, freezer, and dishwasher; Soapstone sink moved to historical society; Plumbing and electrical updated.
2013 – NHDHR Inventory listing. By 2013 the south, east, and west facades were cladded with vinyl siding, windows on these facades had been replaced with vinyl replicas, and exterior shutters had been removed.
2020 – Powder post beetle treatment
2021 – Masonic Hall and property transferred to Town for $1
2022 – Warrant Article 23 to lease upstairs of Masonic Hall to Carroll Masonic Temple, Inc. (a non-profit), including shared use of hallway and restrooms for 50 years; Warrant Article 24 to fund repair of chimney, metal roof, electrical service.
2022 – Bergeron Assessment & Feasibility Study
2022 – Horizons Engineering Structural Review of Masonic Temple
2025 - Ongoing - Structural reinforcing of roof trusses

[8] *1926 Deed, Carroll County Registry of Deeds*

PART II. ARCHITECTURAL DESCRIPTION & CHARACTER-DEFINING FEATURES

Architectural Description

The Secretary of the Interior's Standards prescribe the categorization of various spaces and elements of an historic property into those of primary, secondary, and non-historic. Such categorization helps determine the appropriate scope of work. The first documented NHDHR survey of the building was undertaken in 1989. Per the Statement of Historical Significance:

> *"The Masonic Temple has presumably been too altered to retain its historical integrity for its period of use as a church and would therefore be ineligible for the National Register for any historical significance associated with its early years as a church. The building might have historical significance for its later career as a Masonic lodge, as the meeting place of an important local organization. However, a study of that aspect of the building's history was beyond the scope of this survey, limited as it was to religious architecture. Further study will be needed to determine the building's eligibility for the National Register for its historical significance."*

The building was surveyed for NHDHR again in 2013 and was determined to be eligible for listing on the state register for its use as a Masonic Hall. Per the Statement of Significance:

> *"The Masonic Hall is primarily significant for its associations with the Masons because this is the period to which the building retains integrity. The building has a long tradition of supporting community activities, first as a center of religious and community life and later as home to the Masons. Constructed in 1830 as a church, the building was purchased and altered in 1926-28 by the Masons who infused a new purpose for gathering in the building after it had sat vacant for a number of years in the early twentieth century. The women of Calvin Topliff, Chapter 18, Order of the Eastern Star also assembled here. The building has been open to the community for ice cream socials, community breakfasts, Old Home week and many other activities in its 180 years of existence. It is a key resource located at Freedom's core, Schoolhouse Hill."*

Per the 2013 NHDHR Determination of Eligibility, the Period of Significance for the building is identified as spanning the years 1926 to 1963.

Primary spaces and elements are essential in conveying the historic and architectural character of a building. They are most often associated with the primary use or purpose for which the building was designed or used during its period of significance and can vary greatly from building to building.[9] These should not be removed but repaired wherever possible. If truly beyond repair they may be replaced, matching form, material, texture and color.

Secondary spaces and elements are less critical in defining a building's importance within its period of significance. They often still help define the building's significance and character, but because of their size, location, or the function their impact is not felt as strongly when progressing through the building.[10] These spaces and elements may be altered if needed to improve the functionality of the building.

[9] https://www.nps.gov/subjects/taxincentives/interiors-identifying-primary-secondary.htm
[10] Ibid.

PART II. ARCHITECTURAL DESCRIPTION & CHARACTER-DEFINING FEATURES

Site

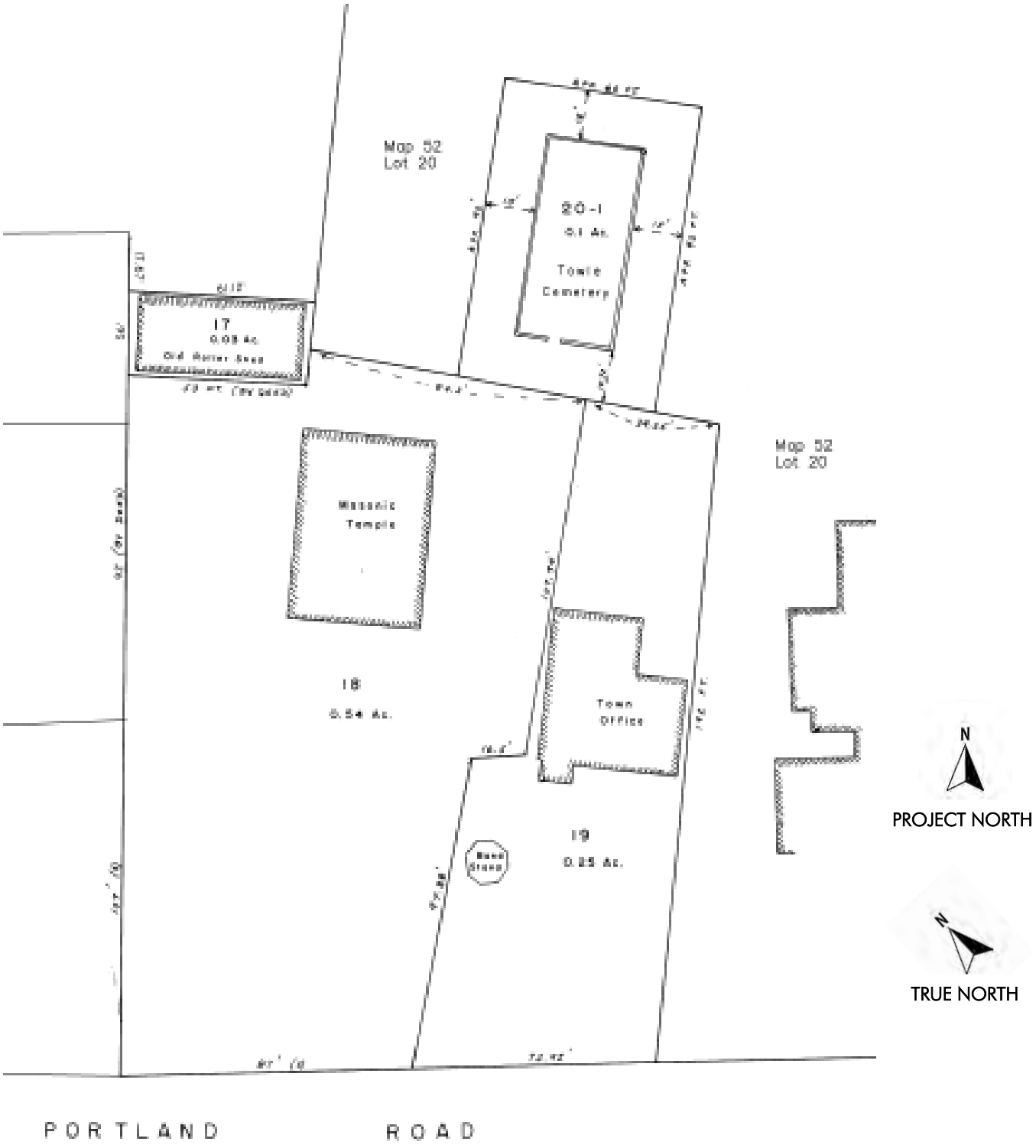
Freedom's Masonic Hall is sited atop steeply-sloped Schoolhouse Hill on Old Portland Road in the center of town. The Schoolhouse Hill site is approximately .92-acres in size, and the Masonic Hall lot occupies (owns) .54 acres of that site. The buildings on Schoolhouse Hill include the bandstand at front center, Masonic Hall directly behind and a bit to the west, the Roller Shed (FRE0008 on State Register) behind and further west of the Masonic Hall, and the Schoolhouse (FRE0009 on State Register), which now houses Town Offices, to the east. All buildings are connected with a paved looping driveway that was installed by the Masons in 1929. Behind the Masonic Hall and Town Office is the Town Cemetery. Just to the west is the original village schoolhouse (1802), now a private residence, and just to the east is the home of Amos Towle, Jr., who built the 1830 Church.

Note:
The rear façade of the hall is oriented at North-Northeast but will be referred to as North for the purposes of this report. Following, the main entry façade will be called South, and side facades East and West.

Figure 23: Satellite image of Freedom's Schoolhouse Hill

PART II. ARCHITECTURAL DESCRIPTION & CHARACTER-DEFINING FEATURES

SITE PLAN



PART II. ARCHITECTURAL DESCRIPTION & CHARACTER-DEFINING FEATURES

Figure 24: View from Old Portland Rd looking up towards Bandstand, Masonic Hall (left), and Schoolhouse / Town Office (right); Circa 1990

Figure 25: Bronze plaque mounted to stone at bottom of Schoolhouse Hill reads "THE BOYS OF THE TOWN OF FREEDOM WHO SERVED IN THE WORLD WAR"

PART II. ARCHITECTURAL DESCRIPTION & CHARACTER-DEFINING FEATURES

Figure 26: View of Masonic Hall (left) and Town Office building (right)

Figure 27: View of Masonic Hall (left) and Town Office building (right), parking area is in between

PART II. ARCHITECTURAL DESCRIPTION & CHARACTER-DEFINING FEATURES

Figure 28: View of Masonic Hall from southwest with ADA ramp

Figure 29: View of Masonic Hall from northeast with rear metal fire escape and propane tank

PART II. ARCHITECTURAL DESCRIPTION & CHARACTER-DEFINING FEATURES

Figure 30: View of Masonic Hall main entry with granite steps and metal pipe railing

PART II. ARCHITECTURAL DESCRIPTION & CHARACTER-DEFINING FEATURES

Figure 31: View of Masonic Hall west yard

Figure 32: View of Masonic Hall from northwest showing ADA ramp, west exit door, and rear fire escape

PART II. ARCHITECTURAL DESCRIPTION & CHARACTER-DEFINING FEATURES

Figure 33: View of historic Roller Shed behind and to the west of Masonic Hall

Figure 34: Close-up view of propane tank and fire escape in rear yard

PART II. ARCHITECTURAL DESCRIPTION & CHARACTER-DEFINING FEATURES

Figure 35: Baptismal font behind Masonic Hall

PART II. ARCHITECTURAL DESCRIPTION & CHARACTER-DEFINING FEATURES

Figure 36: View of Towle Cemetery, behind and to northeast of Masonic Hall

Character-Defining Features - Site		
Primary Features (1926-1963)	Secondary Features	Non-Historic Features
• Location on top of Schoolhouse Hill • Adjacencies to and views of Bandstand, Schoolhouse, Rolling Shed, Towle Cemetery, Rear Baptismal Font • Looping driveway • Stone entry steps • World War I veteran's memorial stone	• Rear Baptismal Font (predates period of significance)	• ADA ramp • Rear metal fire escape • Rear propane tank • Metal pipe railing

PART II. ARCHITECTURAL DESCRIPTION & CHARACTER-DEFINING FEATURES

Exterior

Freedom's Masonic Hall, formerly known as the old 1830 Church, is a 1-1/2-story rectangular, vernacular building with gable roof and Greek Revival styling. The wood-framed and clad building sits on a split granite foundation. The rear façade was clad with vinyl siding by 1989, and the remaining facades clad with vinyl by 2013. Some portions of box cornice with mouldings, frieze, and returns remain exposed. The present corrugated metal roof was installed when the 1850 belfry and steeple were removed in 1926-28. It was re-screwed and re-painted in 2022. There are five window fenestrations on the main façade, three dating to the original 1830 church and two smaller flanking fenestrations added by the masons in 1926. The masons installed new 2/2 wood double-hung sash in 1926-1928. All but two of these were replaced with vinyl by 2013.

Figure 37: Masonic Hall front (south) façade. Inset left: Window shutters; Inset right: 1830 church

PART II. ARCHITECTURAL DESCRIPTION & CHARACTER-DEFINING FEATURES

Figure 38: Masonic Hall main entry; Inset top right: Entry door circa 1900s; Inset lower right: Entry door circa 1900s

The main entry way and four-panel doors appear to be original to the 1926 lodge at least, and possibly to the 1830 church, save the addition of raised lettering of 'MASONIC TEMPLE' at the frieze. The entry is flanked by simple pilasters and capped with a cornice. The now vinyl-clad cornice was described in the 1989 NHDHR survey as including mouldings, dentils, and frieze.

PART II. ARCHITECTURAL DESCRIPTION & CHARACTER-DEFINING FEATURES

East and west facades each feature four large double-hung windows, one having been replaced in recent decades by an exit door. The masons likely replaced the sash in 1926. The sash are described in a 1990 survey as being "2/2" however present-day sash are 1/1. As shown on the following page, the trim at the side façade windows is less ornate than that at the main façade.

Figure 39: Masonic Hall west façade.

Figure 40: Masonic Hall east & rear façades.

PART II. ARCHITECTURAL DESCRIPTION & CHARACTER-DEFINING FEATURES

Figure 41: Front façade 1830 window trim

Figure 42: Side façade 1830 window trim; Inset: Windows prior to 1990's were 2/2 double-hung sash (front window pictured). These are thought to have been installed by the Masons in the 1920's.

Figure 43: 1830 cornice/eave trim and return

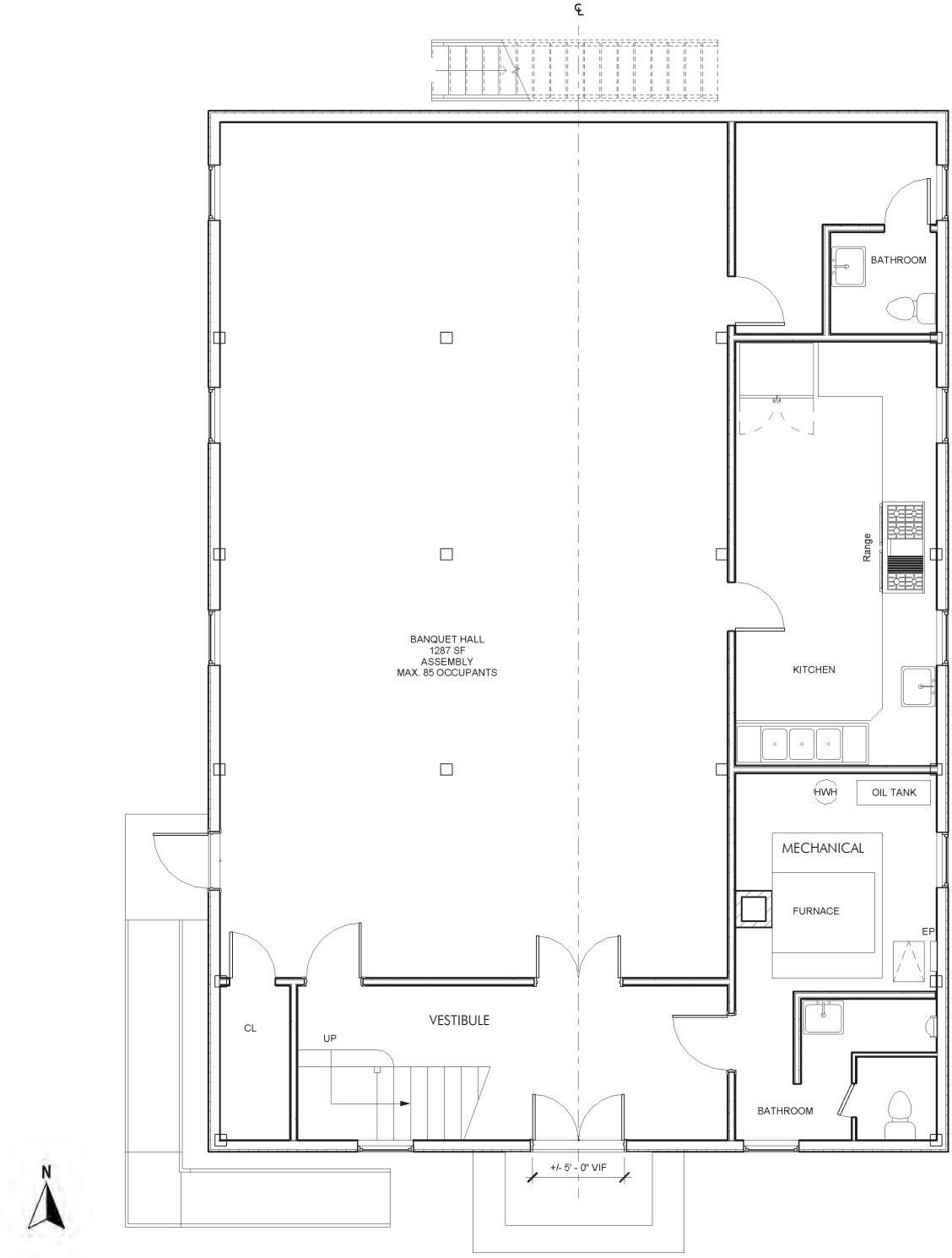
Figure 44: 1830 cornice/eave trim and return

PART II. ARCHITECTURAL DESCRIPTION & CHARACTER-DEFINING FEATURES

Character-Defining Features - Exterior		
Primary Features (1926-1963)	Secondary Features	Non-Historic Features
• Rectangular plan with gable roof • Corrugated metal roofing • Main entry doorway w pilasters and cornice, four-panel doors, knob, granite steps, 'Masonic Temple' relief • Split granite foundation stones • Wood clapboard siding and flat corner boards • Exterior wood trim throughout • Brick chimney and chimney location • Attic vents • Window fenestrations / openings • Wood window trim • Intact rear 2/2 sash		• Vinyl window sash • Vinyl siding & trim • Accessibility ramp and side door • Fire escape and rear door • Lantern lights • Sheathing over rear 2/2 windows

PART II. ARCHITECTURAL DESCRIPTION & CHARACTER-DEFINING FEATURES

Interior – First Floor



PART II. ARCHITECTURAL DESCRIPTION & CHARACTER-DEFINING FEATURES

Figure 45: View from main hall toward vestibule and entry door

Figure 46: View from entry vestibule toward east side bathroom

PART II. ARCHITECTURAL DESCRIPTION & CHARACTER-DEFINING FEATURES

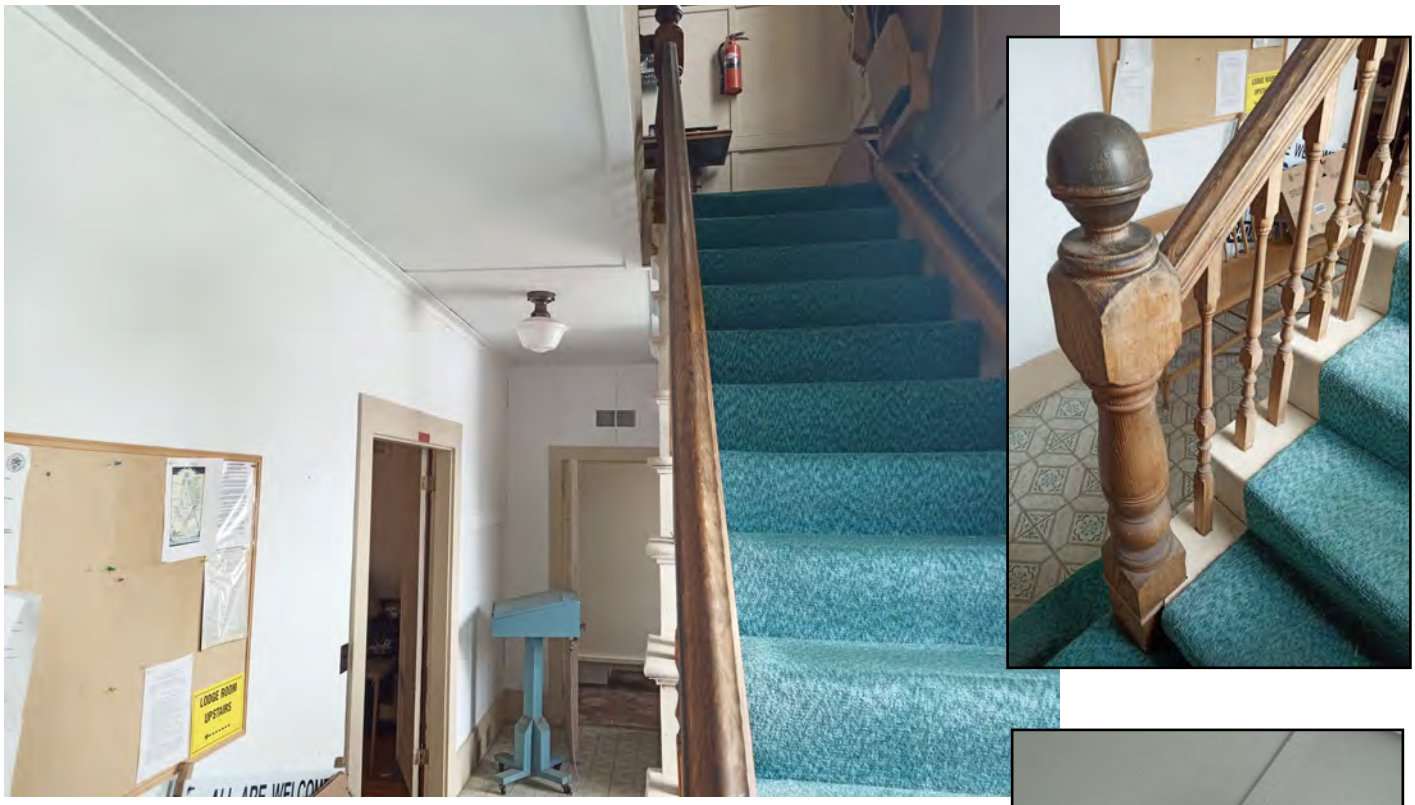


Figure 47: View of vestibule stairwell; Inset: Newel post

Figure 48: View of vestibule from stair landing; Inset top: Vestibule light fixture; Inset bottom: View of stair to main hall from landing

PART II. ARCHITECTURAL DESCRIPTION & CHARACTER-DEFINING FEATURES

Figure 48: View of southeast bathroom toilet stall; Inset from top to bottom: View of bathroom ceiling with duct and heat register, toilet, vanity, urinal.

PART II. ARCHITECTURAL DESCRIPTION & CHARACTER-DEFINING FEATURES

Figure 49: View of mechanical room; Inset from top to bottom: Ductwork, flooring, Juxtaposition of mechanical room flooring (wood), bathroom flooring (vinyl or linoleum), and vestibule flooring (vinyl or linoleum).

PART II. ARCHITECTURAL DESCRIPTION & CHARACTER-DEFINING FEATURES

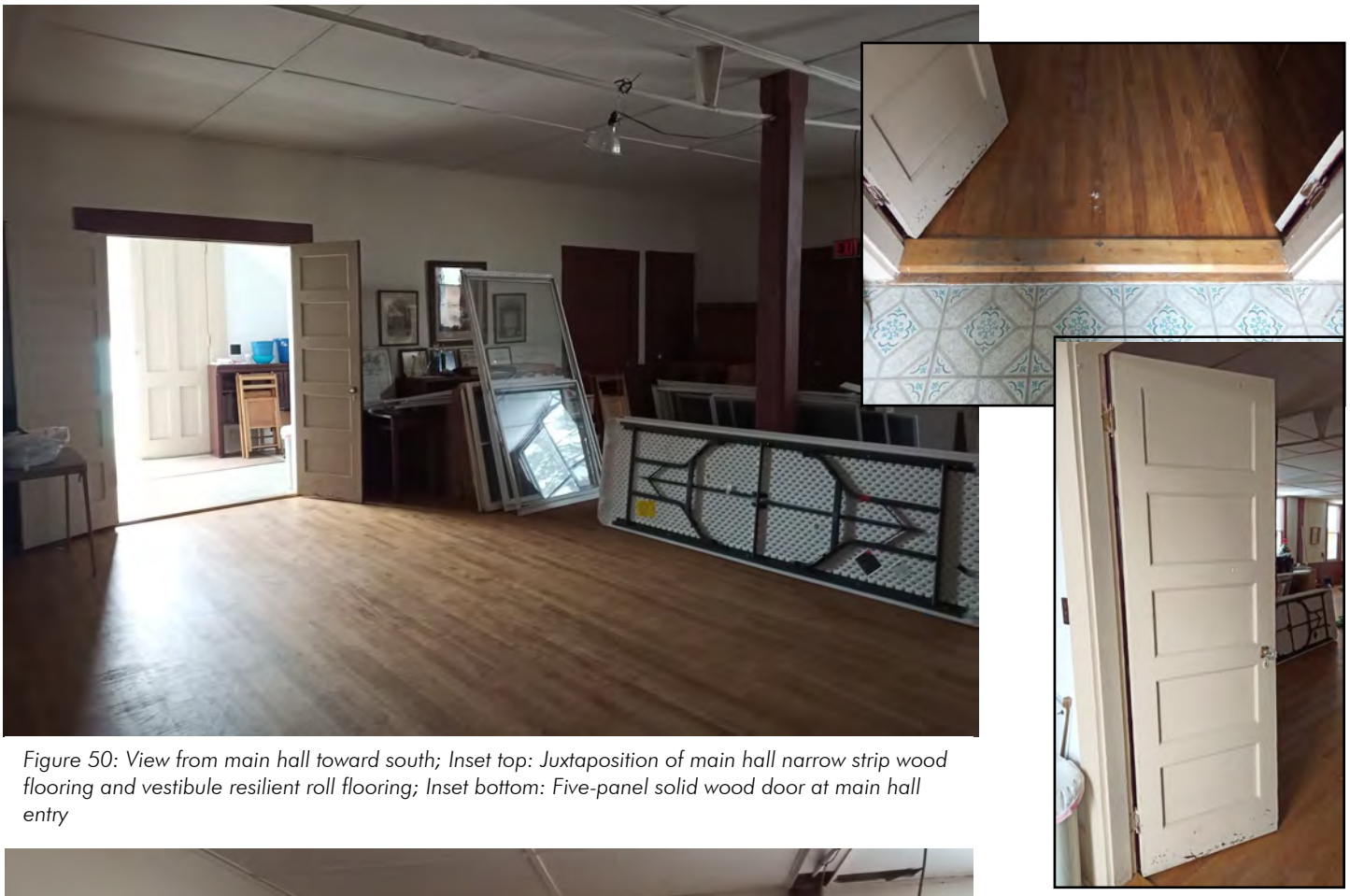


Figure 50: View from main hall toward south; Inset top: Juxtaposition of main hall narrow strip wood flooring and vestibule resilient roll flooring; Inset bottom: Five-panel solid wood door at main hall entry

Figure 51: View from main hall toward west side egress door

PART II. ARCHITECTURAL DESCRIPTION & CHARACTER-DEFINING FEATURES

Figure 52: View of main hall toward kitchen and vestibule, facing southeast; Inset: Juxtaposition of main hall narrow strip flooring and kitchen linoleum.

Figure 53: View of main hall facing north

PART II. ARCHITECTURAL DESCRIPTION & CHARACTER-DEFINING FEATURES

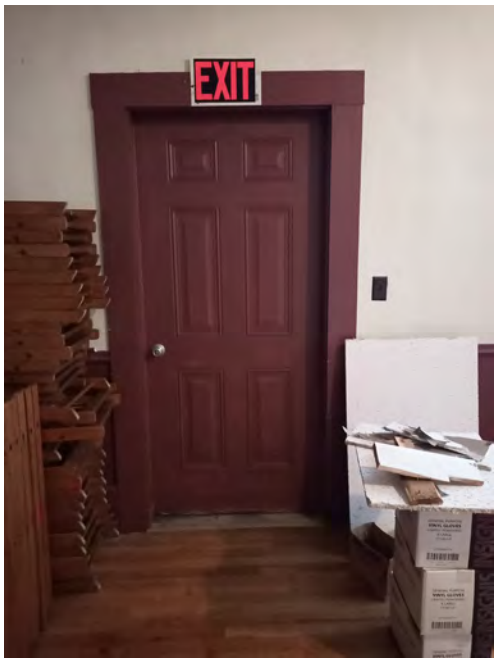


Figure 54: West egress door

Figure 55: Main hall southwest doors to stairwell and closet

Figure 56: Main hall facing west

PART II. ARCHITECTURAL DESCRIPTION & CHARACTER-DEFINING FEATURES

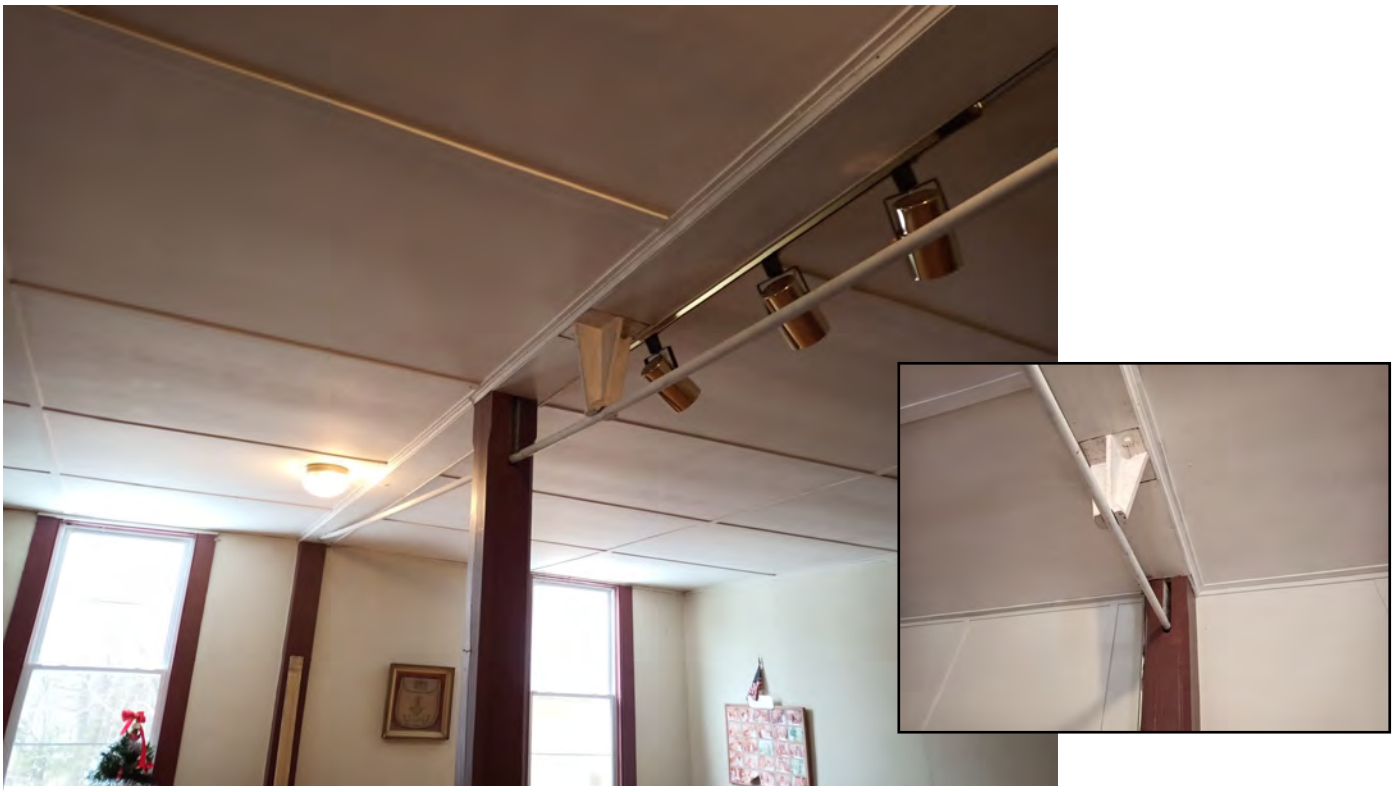


Figure 57: Main Hall ceiling; Inset: Tension rods

Figure 58: Main hall facing kitchen and service window

PART II. ARCHITECTURAL DESCRIPTION & CHARACTER-DEFINING FEATURES

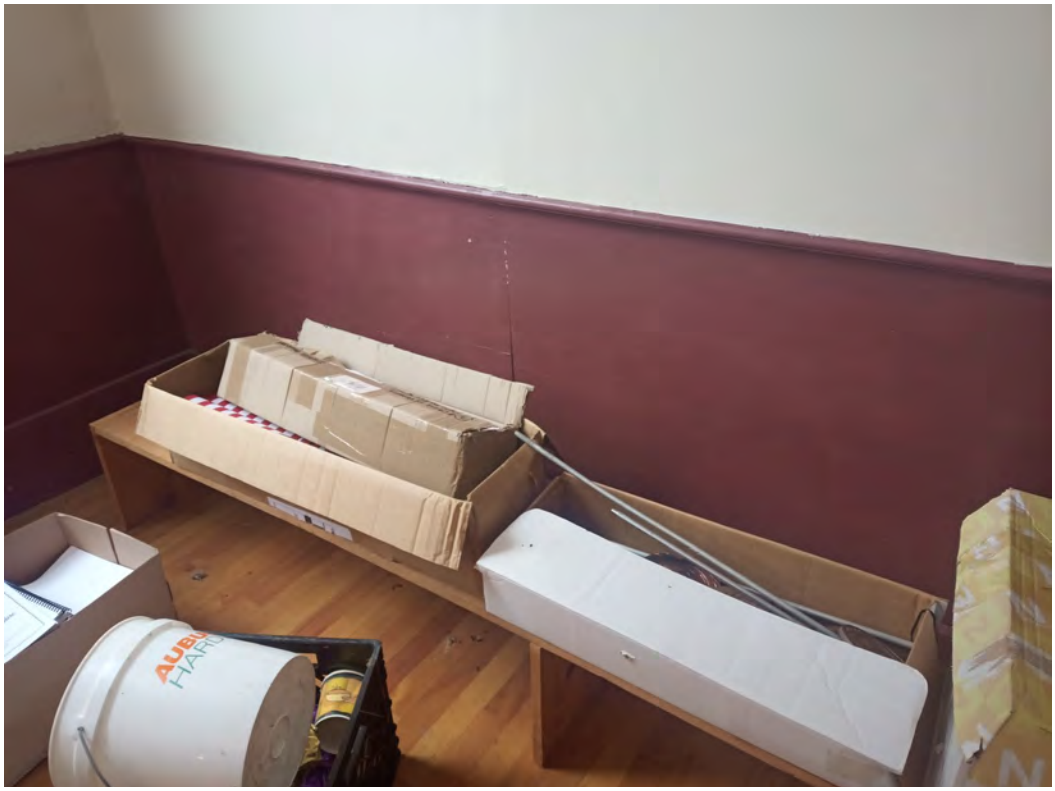


Figure 59: Main hall rear wainscot, large panels

Figure 60: Main hall rear wainscot, wide plank boards

PART II. ARCHITECTURAL DESCRIPTION & CHARACTER-DEFINING FEATURES

Figure 61: Kitchen range; Inset: Kitchen sinks

Figure 62: Kitchen toward refrigerator; Inset: View out toward service window

PART II. ARCHITECTURAL DESCRIPTION & CHARACTER-DEFINING FEATURES

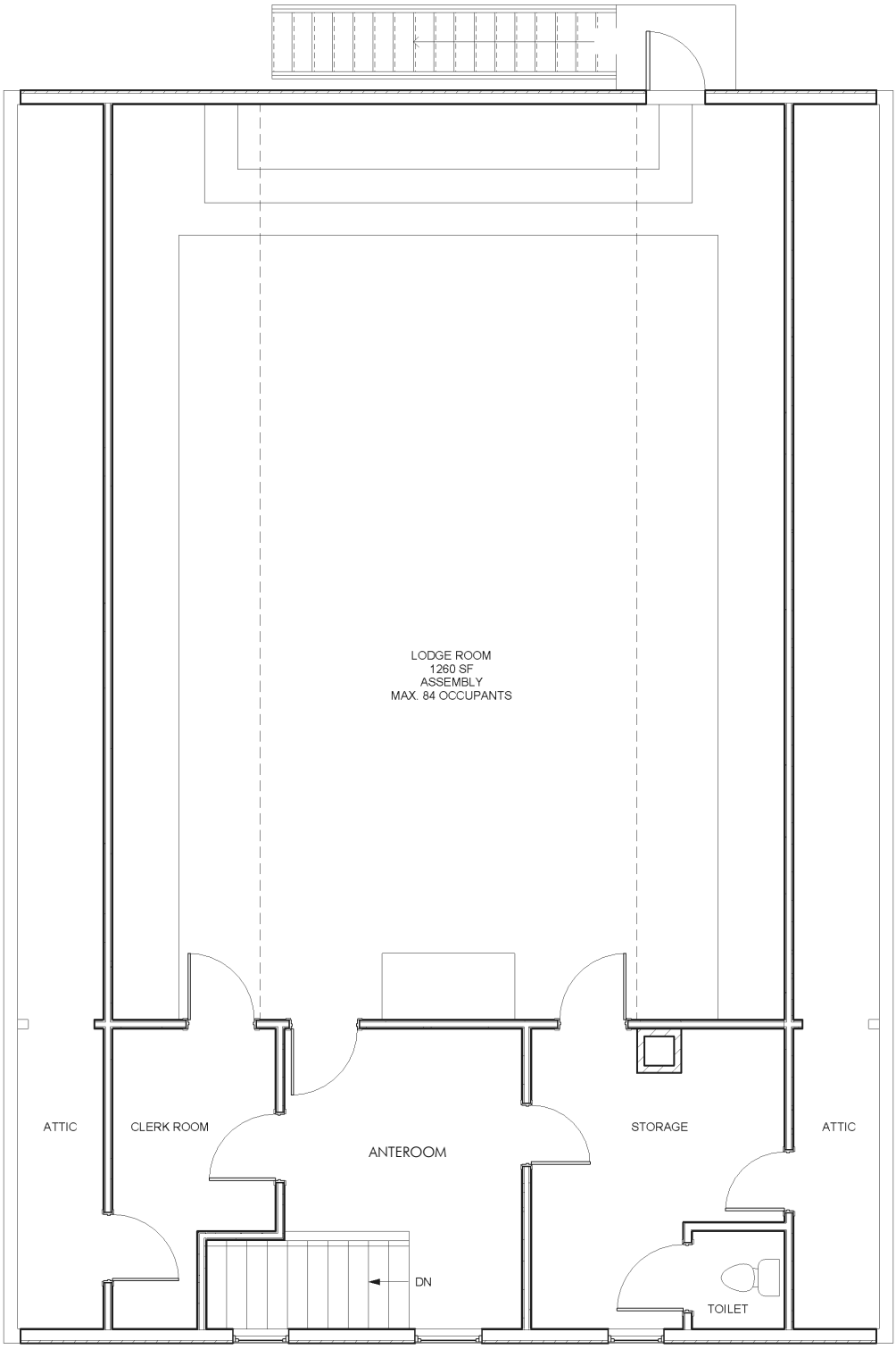
Figure 63: Rear northeast restroom anteroom; Inset from top to bottom: Five-panel door, restroom interior, View out toward hall.

PART II. ARCHITECTURAL DESCRIPTION & CHARACTER-DEFINING FEATURES

Character-Defining Features – Interior – First Floor		
Primary Features (1926-1963)	Secondary Features	Non-Historic Features
• All anteroom four and five panel doors & trim • Interior window trim, cornice trim, base trim throughout • Entry Vestibule – in entirety • Stair newel and balustrade • Entry vestibule flush-mount ceiling light fixture • Southeast bathroom – all except flooring, toilet, and vanity • Mechanical room – wood flooring • Banquet room - in entirety • Wood flooring in mechanical room • Room layout • Tension rods (1926) • Posts		• Exit signage • Track lighting • Kitchen flooring and appliances • Rear northeast bathroom fixtures and vanity • Kitchen cabinetry, fluorescent lights

PART II. ARCHITECTURAL DESCRIPTION & CHARACTER-DEFINING FEATURES

Interior – Second Floor



PART II. ARCHITECTURAL DESCRIPTION & CHARACTER-DEFINING FEATURES

Figure 64: Stairwell; Inset: Chair lift with wooden chair

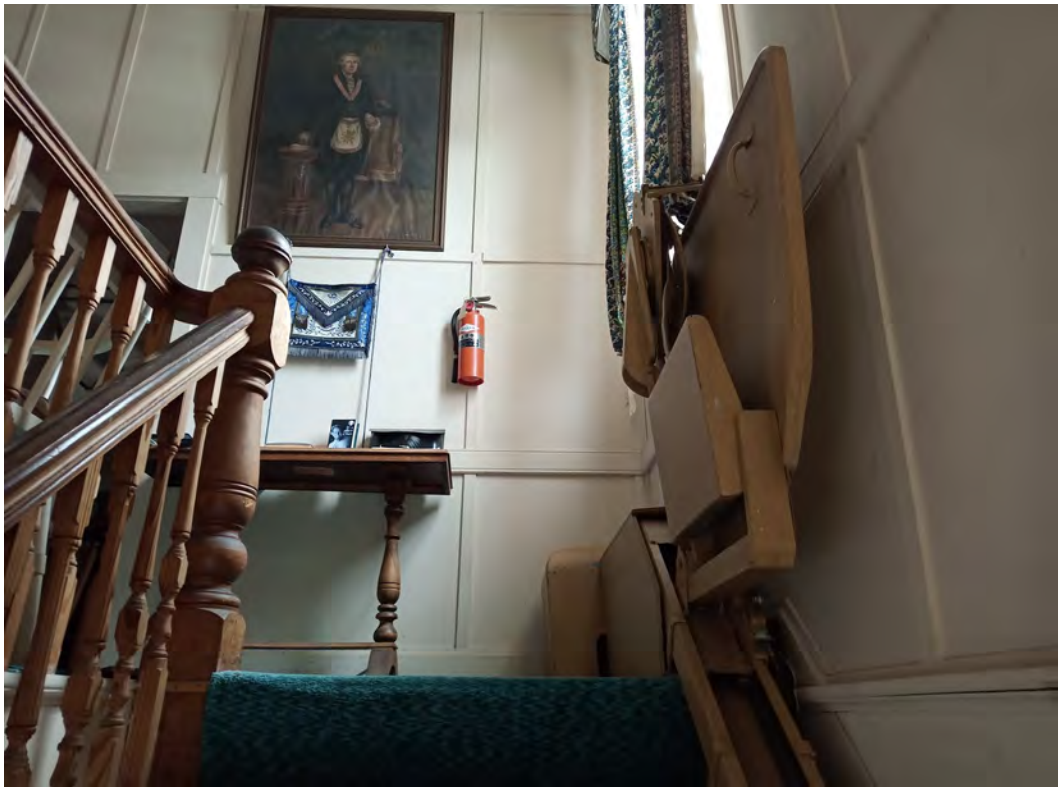


Figure 65: Stairwell

PART II. ARCHITECTURAL DESCRIPTION & CHARACTER-DEFINING FEATURES

Figure 66: Second floor anteroom, facing east

Figure 67: Second floor anteroom, facing west

PART II. ARCHITECTURAL DESCRIPTION & CHARACTER-DEFINING FEATURES

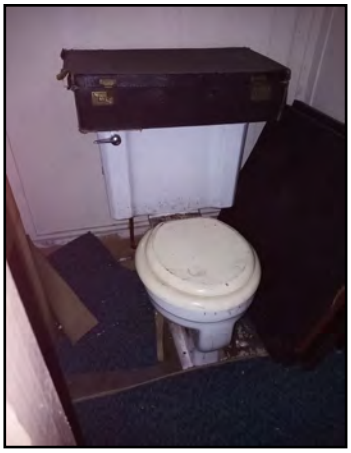
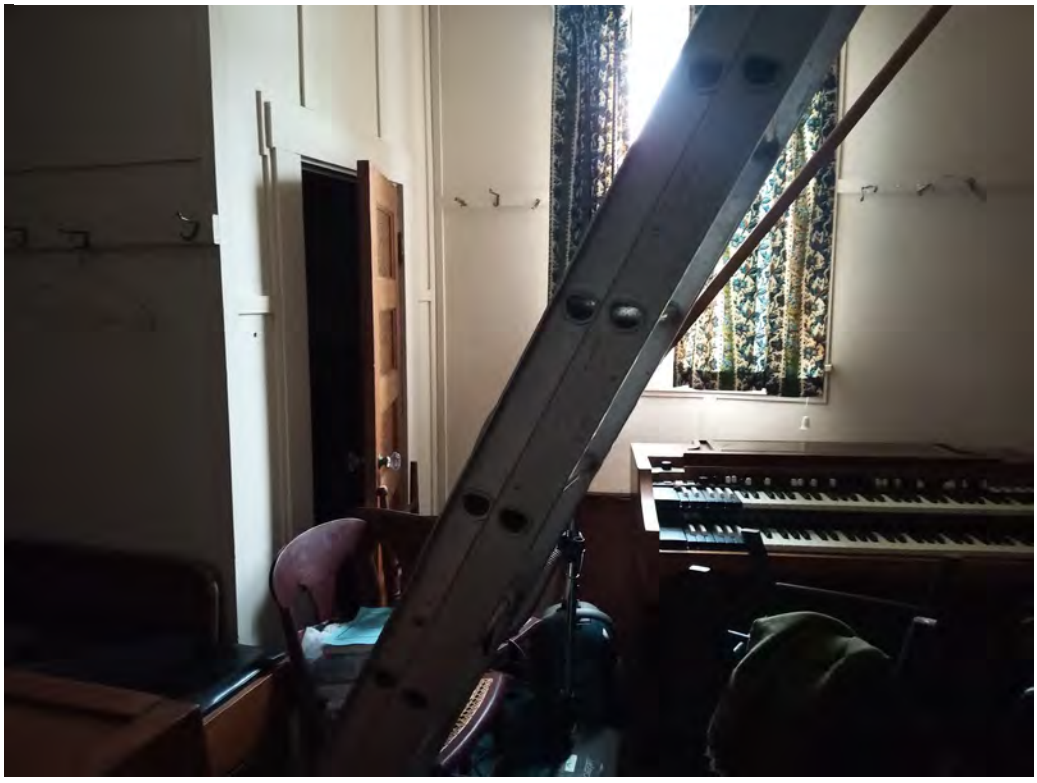


Figure 68: East anteroom; Inset from top to bottom: Chimney with former stovepipe connection, toilet room, ladder access to attic.



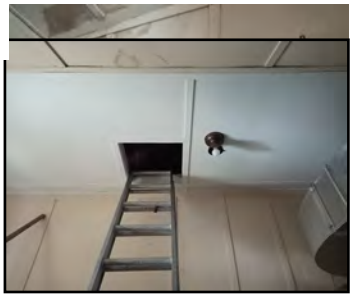


Figure 69: East anteroom

PART II. ARCHITECTURAL DESCRIPTION & CHARACTER-DEFINING FEATURES

Figure 70: View inside roof eave / attic, note remnant of former blue-painted cove ceiling

Figure 71: View inside roof eave / attic, note remnant of former blue-painted cove ceiling

PART II. ARCHITECTURAL DESCRIPTION & CHARACTER-DEFINING FEATURES

Figure 72: View of upstairs lodge room, facing north; Inset: 5-panel entry door

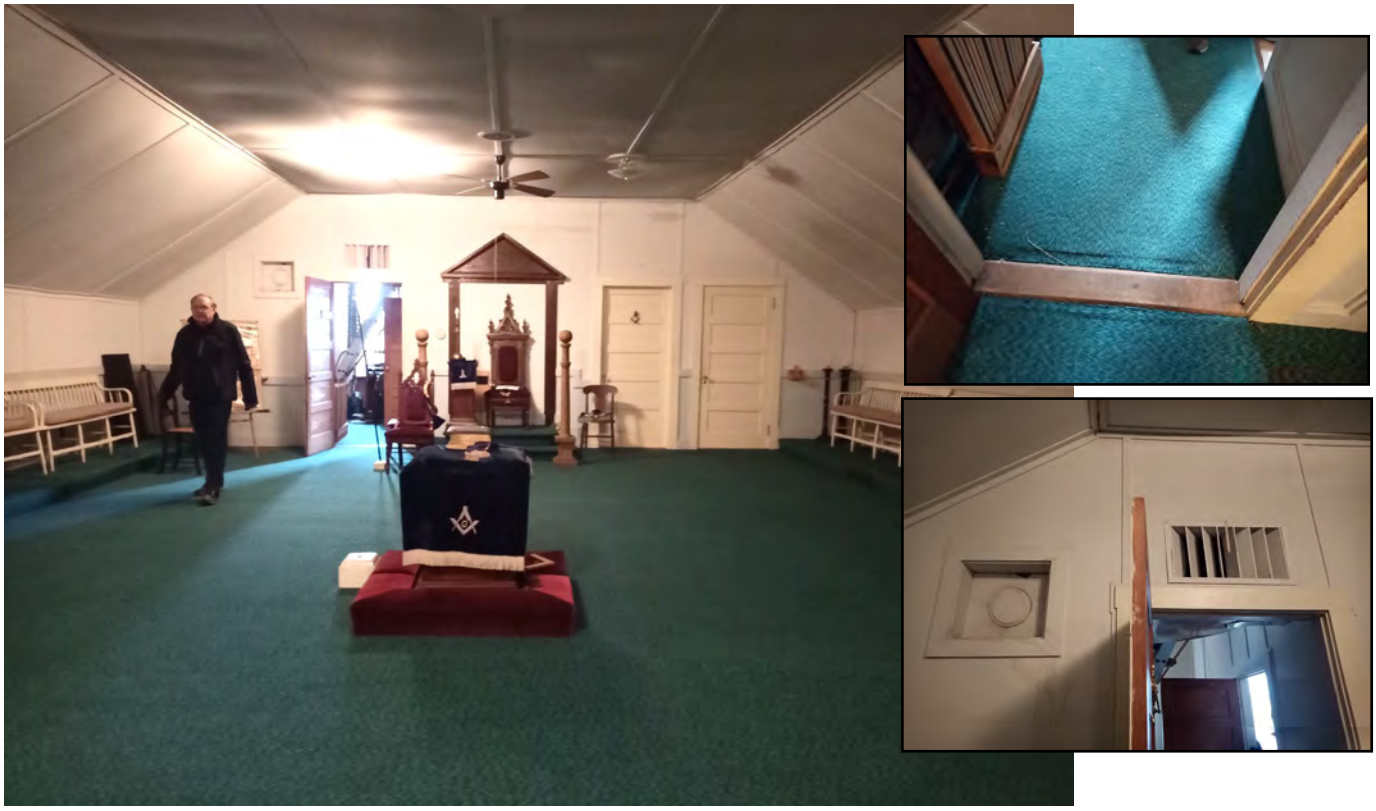


Figure 73: View of upstairs lodge room, facing south; Insets: Threshold with green carpeting, heat register above door, former stovepipe opening.

PART II. ARCHITECTURAL DESCRIPTION & CHARACTER-DEFINING FEATURES

Figure 74: West clerk room: Sloped ceiling with light fixture, desk, and 5-panel door to lodge room.

PART II. ARCHITECTURAL DESCRIPTION & CHARACTER-DEFINING FEATURES

Character-Defining Features – Interior – Second Floor		
Primary Features (1926-1963)	Secondary Features	Non-Historic Features
• Stairwell – Location, finishes, fixtures, balustrade, newel posts • Five panel doors, knobs, and trim throughout • Second floor anteroom – Location, finishes, fixtures • Lodge Room – Location, finishes, fixtures, raised platforms, sloped ceilings • East storage room – Location, finishes, fixtures • West clerk room – Location, finishes, fixtures	• Attic eaves – remnant of blue-painted cove ceiling • Carpeting	• Chair-lift and track

PART III. CONDITIONS ASSESSMENT

CONDITIONS ASSESSMENT – OBSERVED CONDITIONS & RECOMMENDED REPAIRS

Beth Miller, RA, LEED AP of NORTH COUNTRY ARCHITECT conducted visual inspections of the exterior envelope and interior of the building on November 11th, 2024, January 13th, 2025, and July 7th, 2025. Access was provided by Selectman Alan Fall. The assessment includes Exterior Facades, Roofs, Windows & Doors, Interiors, and brief descriptions of Mechanical, Electrical, Plumbing, Structural, Life Safety, and Code Compliance. The assessment excludes Fire Detection and Suppression, Hazardous-Material Identification and Sampling, Building Security, and Security Systems Testing.

EXTERIOR ENVELOPE

SITE & DRAINAGE, FOUNDATIONS – OBSERVATIONS & RECOMMENDATIONS

The Masonic Hall is sited atop the steep Schoolhouse Hill and the site appears to be generally well-graded away from the building with no signs of accumulated moisture observed. The exceptions are the front entry granite steps, which pitch back toward the building, and the seam where the wood accessibility ramp meets the building wall. The entry stones should be reset to be level, with slight pitch (1/8-1/4" per 1'-0") away from building to direct rainwater, and cleaned with a soft hose wash (<300psi), mild PH-neutral, non- ionic detergent, and scrubbed with a soft bristle brush. The parking lot asphalt will soon be due for a new tack coat, or the Town may consider re-paving the site after the upcoming major renovations are completed.

The accessibility ramp is in poor condition and is due for replacement. The new ramp should be kept at least 1-foot off the building wall and should be set atop a gravel (crushed stone) pad of generous size to allow for better stormwater drainage and prevent weed growth around perimeter. This will protect both the building and the ramp. Reorienting or relocating the ramp in entirety should be considered to avoid continued damage from roof snow runoff.

Figure 75: View of Masonic Hall site from southwest

The building has no basement but a crawl-space of about 18" in height. The perimeter split-granite stones are displaced throughout and some are cracked. The first- floor framing beams are set on dry-laid stone and joists are reinforced with wood posts. Joists were reportedly recently treated for powder post beetles. The first floor has significant rolls toward the rear of the building. When work is next undertaken, posts propping joists should be checked, installed more uniformly, and supplemented. The crawlspace should be cleared of debris, wood posts repaired and reset as needed. All split granite perimeter stones should be reset to be vertical with full bearing of sill beams.

PART III. CONDITIONS ASSESSMENT

Clean steps with a soft hose wash (<300psi), mild PH-neutral, non- ionic detergent, and scrub with a soft bristle brush. Always try a small test area first and select cleaners carefully, as chemicals may permanently stain.

Figure 76: Stone entry steps have sunk with pitch toward building; Stones exhibit staining and biological growth due to moisture accumulation

Figure 77: Accessible ramp butts up against building wall resulting in moisture accumulation along joint

PART III. CONDITIONS ASSESSMENT

New ramp should be held at least 1-foot off of building and set atop a pad of crushed stone to allow drainage and prevent plant growth. Snow fences and/or an awning roof should be installed above to prevent damage from snow melt. Alternatively the ramp could be set further off the building to remove the issue of roof snow slide damage.

Figure 78: Ramp railing blown off due to snow sliding off roof

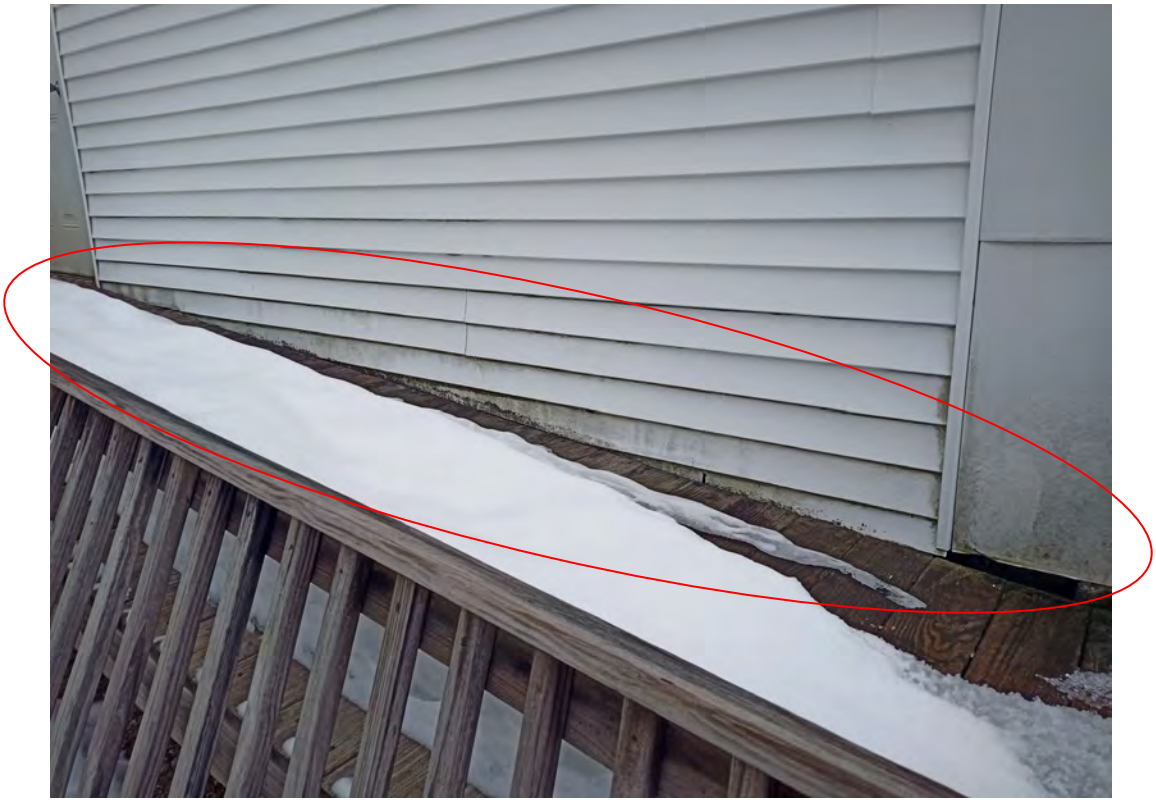


Figure 79: Accessible ramp butts up against building wall resulting in moisture accumulation, note staining

PART III. CONDITIONS ASSESSMENT

Figure 80: Displacement and cracking at split-granite stones, typical

Figure 81: Displacement and cracking at split-granite stones, typical

PART III. CONDITIONS ASSESSMENT

Figure 82: Displacement at split-granite stones, typical

PART III. CONDITIONS ASSESSMENT

Figure 83: Displacement and cracking at split-granite stones, typical

Figure 84: Displacement and cracking at split-granite stones, typical

PART III. CONDITIONS ASSESSMENT

Figure 85: Debris accumulation in crawlspace. First-floor beams supported on dry-laid stone, joists reinforced with wood posts throughout. Check and supplement posts regularly, and as needed.

Figure 86: Split granite stone – Reset for full bearing

PART III. CONDITIONS ASSESSMENT

Figure 87: Cracking through split-granite foundation stone

Figure 88: Displacement and cracking at split-granite stones, typical

PART III. CONDITIONS ASSESSMENT

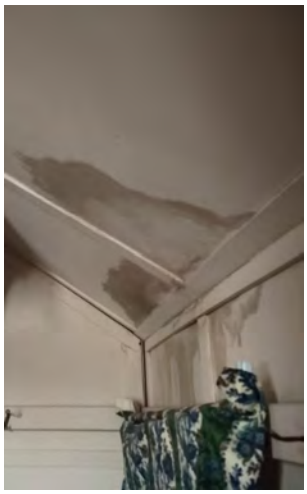
ROOFS – OBSERVATIONS & RECOMMENDATIONS

The existing corrugated steel roofing is reportedly 'old' but was re-screwed and re-painted in 2022/23. It may be the original metal roof installed in 1926-28 when the steeple was removed (the roof prior that is thought to have been wood shingles) or it may be a later replacement in-kind but, due to lack of detailing, is not likely to have been installed after the last big renovation when the vinyl siding installation was completed (circa 1990's). There is significant staining at the second-floor ceiling finishes, but most is in the vicinity of the chimney likely having resulted from a leak that has since been remedied by a flashing repair. The roof eaves have little to no drip edge, the ridge metal has minimal coverage, and the roof at rakes is essentially open to the elements. Roof replacement or repair, when undertaken (not recommended until all roof structural repair, currently in progress, is completed and proven), should include more substantial coverage at eave drip edges, at ridge, and a flashing detail at rake edges. Further, if upgrading the heating system is planned and is to include winter heating, insulation of the roof should be undertaken.

Figure 89: East roof plane, corrugated metal

Figure 90: North roof rake, no drip or coverage

Figure 91: East roof plane, corrugated metal



Figures 92 & 93: Staining due to water leaks at second floor ceiling

PART III. CONDITIONS ASSESSMENT

Figure 94: Chimney and step flashing

The chimney flashing is relatively new, installed to address leaks the result of which are still evident in bubbled, peeled interior paint and staining at interior finishes. The flashing appears well-installed and intact. Chimney brick masonry and mortar joints appear in good condition and intact, as does the vent cap.

Figure 95: Interior view of chimney & former stove pipe connection

PART III. CONDITIONS ASSESSMENT

EXTERIOR WALLS – OBSERVATIONS & RECOMMENDATIONS

The exterior walls are clad with vinyl siding atop original wood clapboards. The exterior wood trim that has remained exposed exhibits paint-loss, cracking, and material loss. Where vinyl-clad, the original wood clapboards and trim behind appear to be intact and restorable. It is recommended to remove all vinyl siding and restore facades to their 1926 appearance. It is further recommended, once exposed, to undertake paint sample analysis and implement a circa-1926 scheme if discovered.

Figure 96: Front (south) facade

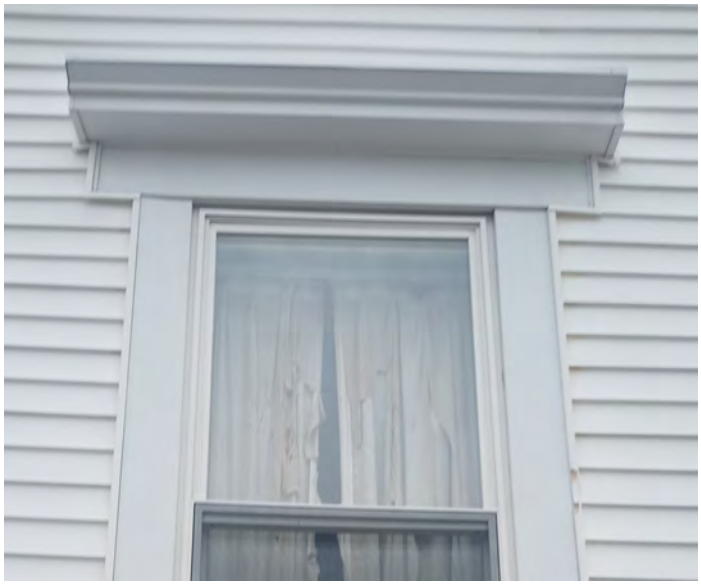


Figure 97: Window head trim with vinyl covering

Figure 98: Window head trim with vinyl removed, intact wood trim revealed

PART III. CONDITIONS ASSESSMENT

Figure 99: East side window with flat wood trim exposed

PART III. CONDITIONS ASSESSMENT

Figure 100: Vinyl siding lifted to reveal intact wood corner board and clapboards

PART III. CONDITIONS ASSESSMENT

Figure 101: Intact wood cornice / eave trim

Figure 102: Intact wood cornice / eave trim; Cracking and worn paint observed, typical.

Figure 103: Intact wood cornice / eave trim; Cracking, material loss (hole likely due to squirrel entry), and worn paint observed, typical.

PART III. CONDITIONS ASSESSMENT

Figure 104: West façade window trim, wood window trim exposed and intact

Figure 105: West façade vinyl-covered clapboards exhibit waving. Upon removal of vinyl, portions of clapboards may need to be resecured to framing. Remove tree growth at building perimeter.

PART III. CONDITIONS ASSESSMENT

Figure 106: Damage at southeast vinyl corner trim

Figure 107: Missing vinyl siding, large opening at rear (north) attic ridge

PART III. CONDITIONS ASSESSMENT
WINDOWS & EXTERIOR DOORS – OBSERVATIONS & RECOMMENDATIONS

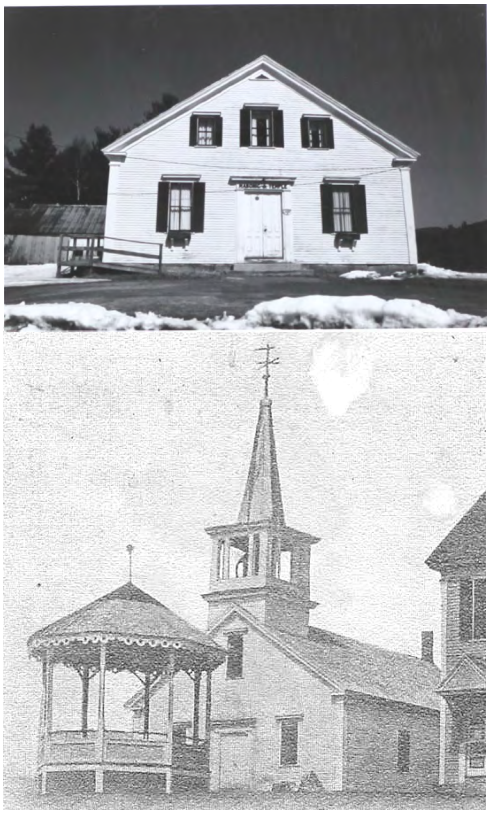


Figure 108: Front faced 2025; Top right: Front façade circa 1989, note 2/2 windows and shutters; Bottom right: front façade circa 1930, windows appear to be shuttered.

The present vinyl window sash were installed between 1989 and 2013. They are in acceptable working condition. Prior to these existsed 2/2 double-hung wood sash, which are believed to have been installed by the Masons in the major 1926-1928 renovation. As part of the planned full exterior restoration, the Town intends to replace all vinyl sash with 2/2 true divided-lite wood sash, as well as to restore the louvered shutters and window boxes.

The following is applicable to existing wood sash at the rear façade, and to future restored wood sash & units: It is recommended to undertake inspection and repair of all windows annually or biannually, such as before and after winter, checking for paint loss, operation, and deterioration of wood. As full window restoration is a large endeavor, restoring groups of windows in phases or on rotation may be an option. It is recommended to number each window and keep a log of conditions observed and repairs performed.

Example Maintenance Schedule

Close-up inspection & Condition log	Annual or Biannual
Routine Maintenance	Annual
Replace glazing putty	As needed
Full scrape, prime, and paint.	Every 5-10 years
Remove & Restore / Replace-in-kind	As needed, expected 20 years or less; Alternate: Fully restore a manageable group of windows every 5-10 years.

PART III. CONDITIONS ASSESSMENT

Figure 109: Typical side façade window

Figure 110: Typical side façade windows

Figure 111: Typical side façade window

Figure 112: Sheathed over rear window with 1926-era 2/2 sash intact

Window Rehabilitation per NPS Preservation Brief #9

Repair Class 1 – Routine Maintenance

Sash remain in place
Minor repairs are made to voids and checking. No consolidation, filler only.
Minor glazing infills are made to cracks and small voids with quick cure putty.
Glass repair or replacement is not included.

Repair Class II – Stabilization

Sash can remain in place or be removed to perform repairs.
Glass remains in place if bed bond is in good condition.
Broken glass is replaced.
Repairs are generally non-structural, limited to epoxy consolidant and fillers.
Replace/patch glazing - Up to 50%
Rehabilitate coatings. Removal to bare wood may be required depending on coating type.

Repair Class III – Structural Repairs (Splices & Part Replacement)

Remove sash and transport to a shop for repair. Openings are boarded with exterior grade plywood.
All glass is removed and 100% reglazing is performed.
Broken glass is repaired using epoxy adhesive.
Structural repairs are performed including replacement of rotted/deformed elements or Dutchman type if damage is localized.
Full removal of coating to bare wood and application of new coating.
Removal and rehabilitation/replacement of all hardware.

PART III. CONDITIONS ASSESSMENT

EXTERIOR DOORS

The four-panel front entry doors, reportedly original to the 1830 Church, but certainly dating to the 1926 Masonic Lodge, should be restored in full by a qualified restoration specialist including leafs, frame, sill, sill fascia, and all hardware. The front doors currently swing in. It is recommended to re-hang the restored doors with an outswing for improved egress safety.

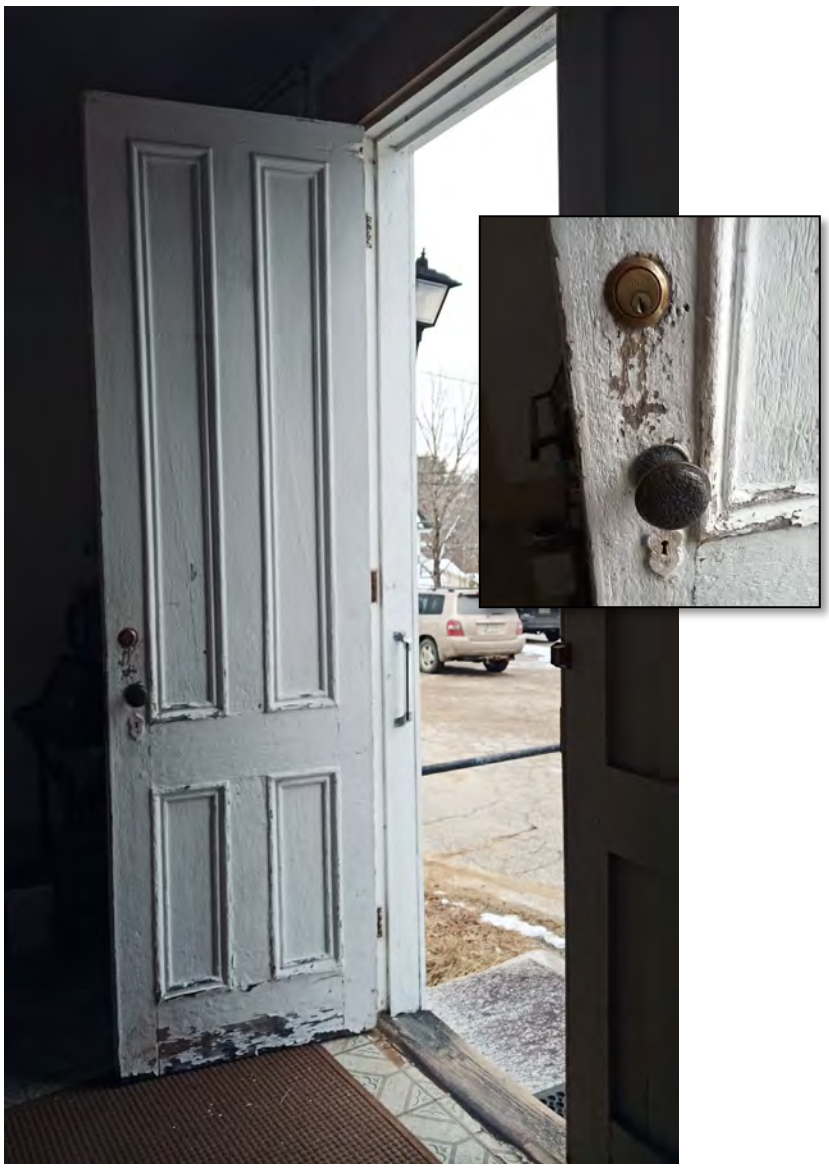


Figure 113: Front entry door – Paint loss and wood loss throughout, most severe at bottom rail. Sill and fascia also exhibit severe wear and deterioration. Restoration of all elements is recommended.

PART III. CONDITIONS ASSESSMENT

Figures 114 & 115: Rear second floor 6-panel wood egress door (Dates to 1960's or 70s)

Figure 116: West facade, first floor egress door is a modern 6-panel fiberglass door

PART III. CONDITIONS ASSESSMENT

INTERIORS – OBSERVATIONS & RECOMMENDATIONS

Interiors are in fair condition with localized areas of staining and damage. When all structural and exterior repair and restoration is complete an interior repair campaign is recommended.

Figure 117: Northeast bathroom – Staining and floor damage

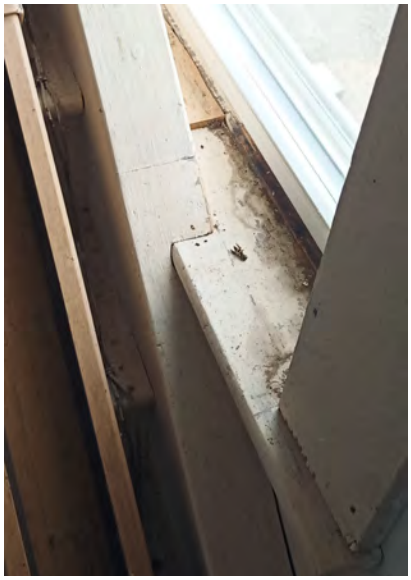


Figure 118: Staining at window sill due to water leak

Figure 119: Fluorescent lighting and loose light cover (unsafe) in kitchen

PART III. CONDITIONS ASSESSMENT

Figure 120: Cupping and bubbling at second floor ceiling, possibly due to moisture or water infiltration

Figure 121: Cracked second floor ceiling finishes

PART III. CONDITIONS ASSESSMENT

Figure 122: Severe cracked, peeling, bubbling paint due to water infiltration at southeast chimney

Figure 123: Staining due to water infiltration at second floor ceiling

PART III. CONDITIONS ASSESSMENT

Figure 124: Staining due to water infiltration at second floor ceiling

Figure 125: Staining due to water infiltration at second floor ceiling and wall

PART III. CONDITIONS ASSESSMENT
STRUCTURAL

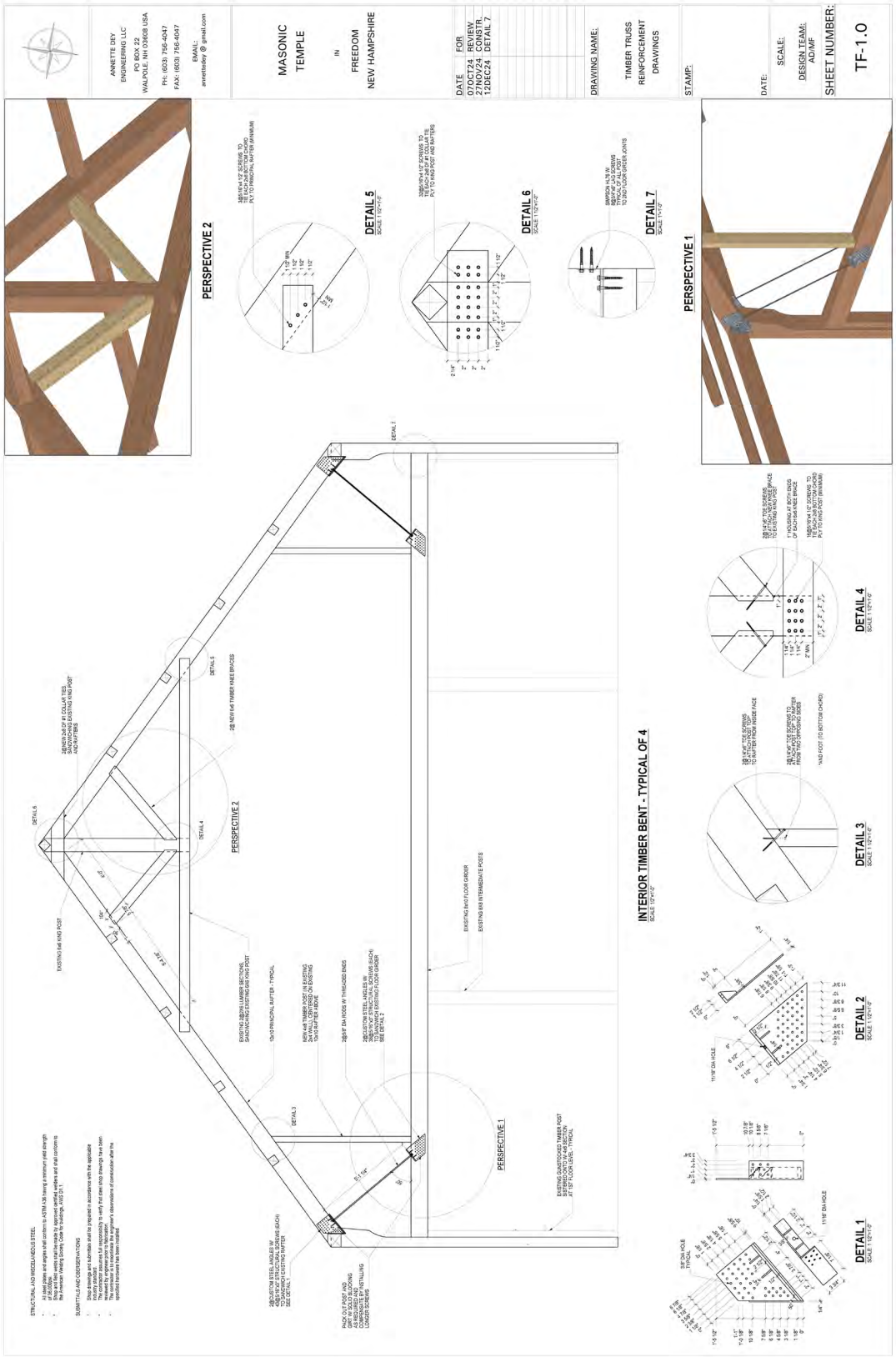




Figures 126-130: First floor tension rods, attic roof timbers, cut collar ties.

Structural deficiencies of the roof framing were identified by Bergeron Technical Services in 2022. In 2024/25, Annette Dey Engineering LLC was contracted to design reinforcement and that remediation work is currently underway. Scope includes installation of new knee braces at roof trusses, installation of custom angles tying rafters to second floor girders, and additional screws to reinforce all joints. All relevant documents are included in the Appendix of this report.

PART III. CONDITIONS ASSESSMENT



Structural reinforcement project underway, per design by Annette Dey Engineering, LLC

PART III. CONDITIONS ASSESSMENT
ACCESSIBILITY - OBSERVATIONS & RECOMMENDATIONS

Figure 131: Accessible ramp at west façade requires repair or replacement

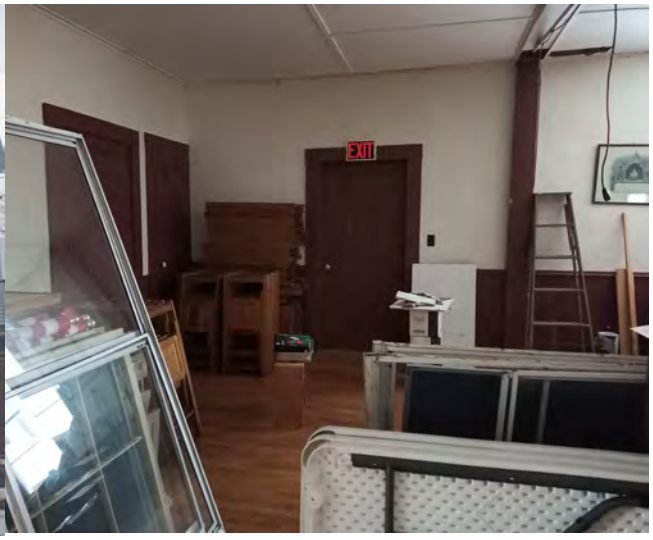
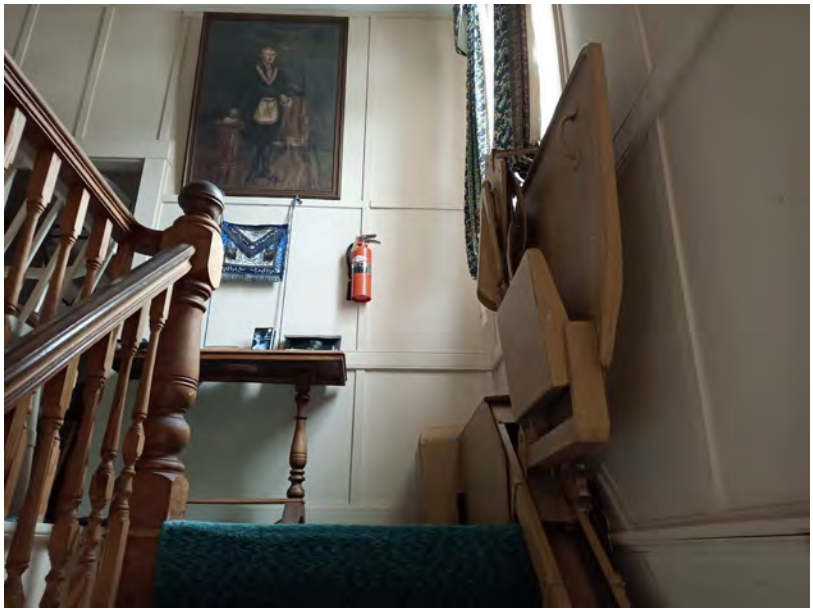
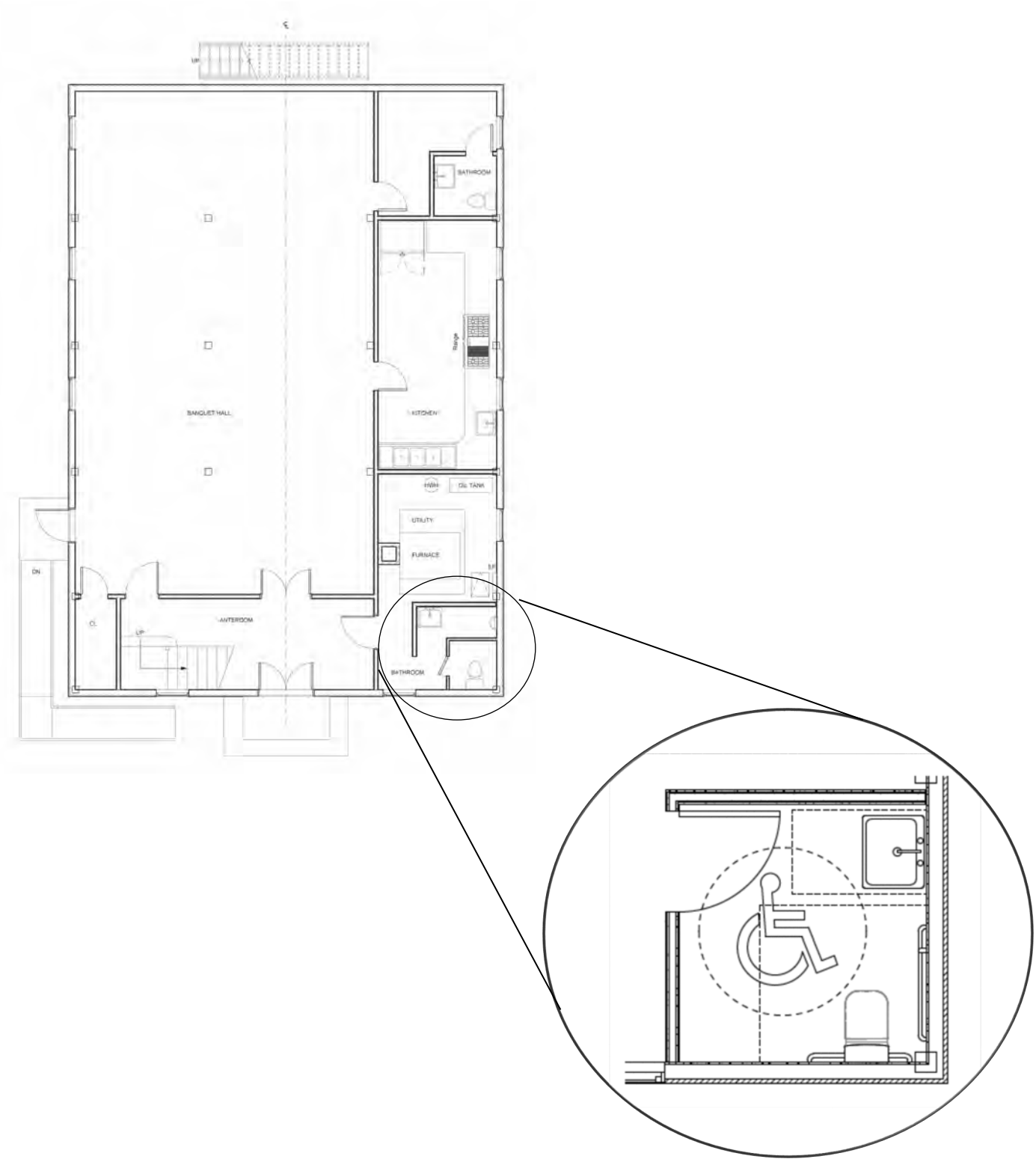


Figure 132: West egress door, access to ADA ramp



Figures 133 & 134: Access to the second floor is via a wooden stair chairlift that is no longer functional. If replaced in-kind, standby power must be maintained for this to be considered a code-compliant accessible means of egress.

PART III. CONDITIONS ASSESSMENT
ACCESSIBILITY - OBSERVATIONS & RECOMMENDATIONS



Figures 135: Front southeast bathroom can be reconfigured for ADA-compliant access.

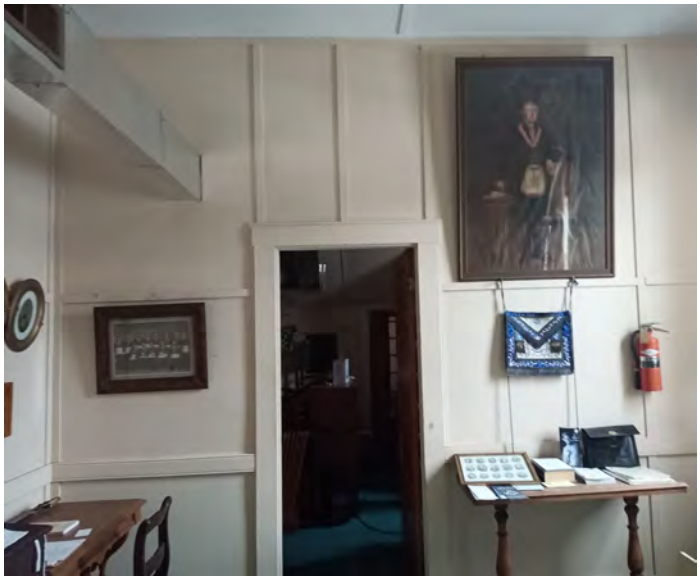
PART III. CONDITIONS ASSESSMENT

MECHANICAL, ELECTRICAL, PLUMBING, LIFE SAFETY – OBSERVATIONS & RECOMMENDATIONS

The building is heated via an oil-fired furnace supplying forced hot air with large metal ductwork. A single duct register serves the banquet hall. There has been interest expressed in upgrading the heating system for improved thermal comfort and zoning-type controls, as well as adding cooling since the building is currently cooled by a single in-window air conditioner unit in the upstairs Lodge room. If the heating system is updated and cooling capacity added, replacing ductwork would be recommended as modern ductwork offers smaller diameters and flexible options. If the building is to remain in use primarily as storage space with only occasional meetings, as is the consensus as of submission of this report, minimal modifications to the existing system should be sufficient. However, if the building is to be renovated to house offices in the future, whether temporarily or permanently, replacement of the heating system and/or installation of supplementary heat pumps may be needed.

Figures 136-141: From top left to bottom right: Thatcher furnace, oil tank, hot water heater, large rigid metal ductwork, sole main hall heat supply register

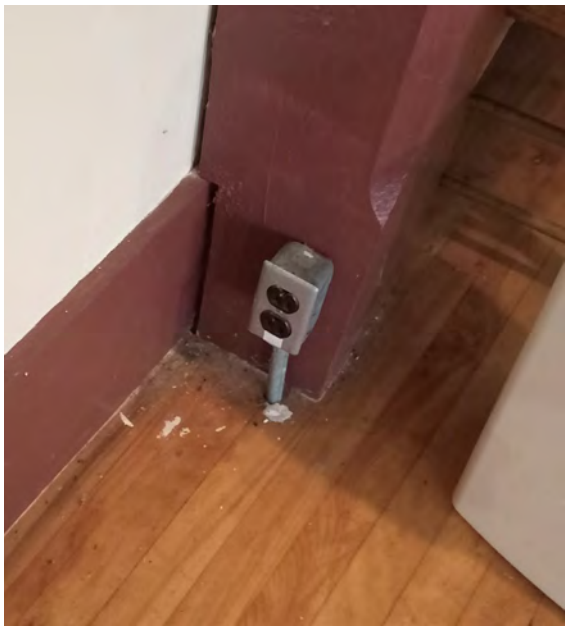
PART III. CONDITIONS ASSESSMENT



Figures 142-145 From top left to bottom right: Lodge heat supply register, large fixed metal ductwork.

PART III. CONDITIONS ASSESSMENT

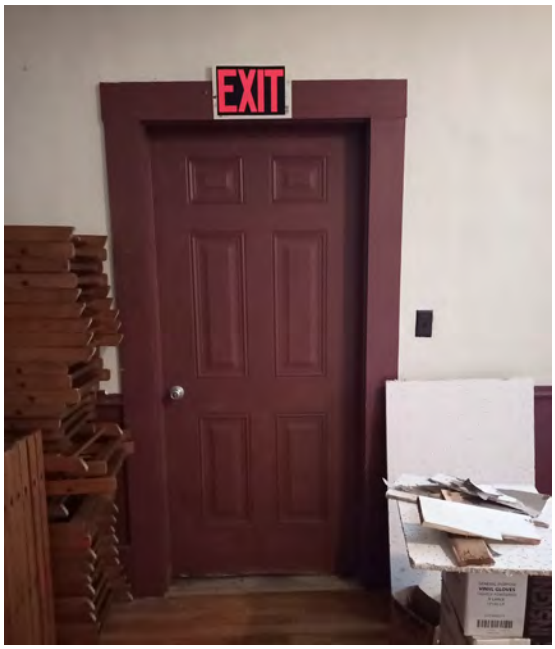

Figures 146-147: Blocked up rear second floor window (2/2 double-hung) with air conditioner unit. AC supports are not safe and should be repaired as soon as possible.

Figures 148-149: Electrical panel, surface-mounted conduit and outlets, typical.

The electrical system was reportedly updated in the 1960's / 70's and again in 2022. There is a 200 Amp panel in the utility room. Most rooms have in-wall wiring. The Banquet room is an exception with surface-mounted conduit and surface-mounted outlets throughout. If this room is to be used for anything other than occasional events and/or storage, additional and code-compliant outlets and wiring should be installed.

PART III. CONDITIONS ASSESSMENT
LIFE SAFETY



Figures 150-151: West egress door and west ADA ramp

LIFE SAFETY – GENERAL RECOMMENDATIONS

No lightning protection system was observed. It is recommended to have one installed.

No smoke or carbon monoxide detectors were observed, and there is no fire alarm system. It is recommended to install all required code-compliant detectors throughout the building.

While the rear metal fire escape appears to be intact, it should be inspected biannually. If the second-floor lodge room is to allow a maximum occupancy of 84 persons, the fire escape must be able to sustain a load of at least 100 psf. The fire escape was reportedly recently inspected and accepted by the local Fire Chief, as well as engineer Annette Dey, who recommended installing vertical posts for added stability.

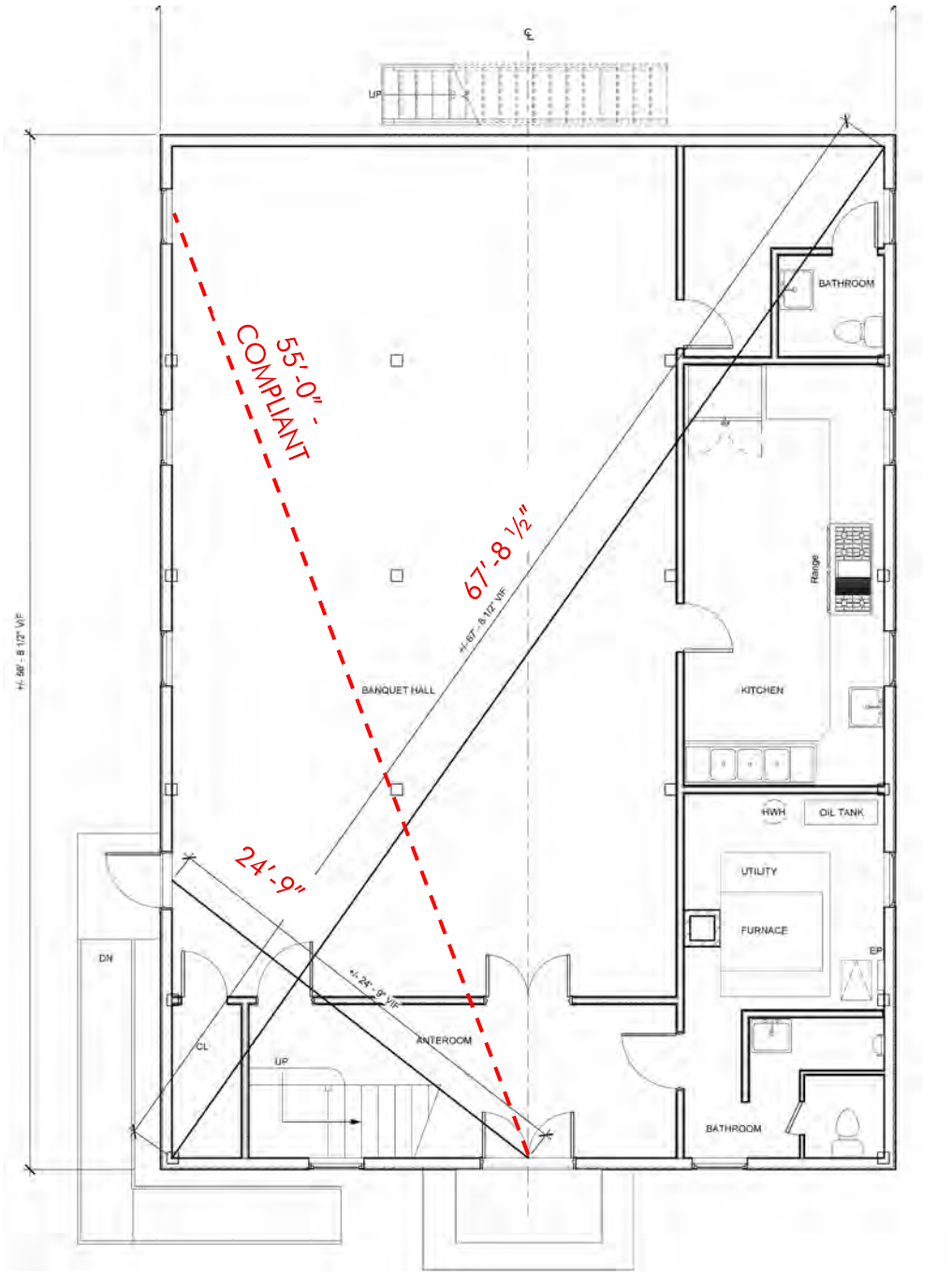
Figures 152-153: Rear fire escape

PART III. CONDITIONS ASSESSMENT

FIRE SAFETY AND EGRESS

At approximately 24.75-feet apart, the distance between first-floor exits is approximately 36.5% of the 67.75-foot diagonal, so does not meet the one-half length requirement and therefore is not code-compliant. Per IBC 1007.1.1, the two exits must be located at a distance apart that is *"equal to not less than one-half of the length of the maximum overall diagonal dimension of the building or area to be served."*

It is recommended to swap the existing west exit door location with the northwest window location if the building is to be used for anything other than occasional events and storage. However, the local code authority may accept the large windows with sills only a few feet above grade as acceptable egress.



PART III. CONDITIONS ASSESSMENT

FIRE SAFETY AND EGRESS

In the 2022 Bergeron assessment, the question arose as to whether the building, and second floor lodge room in particular, must be equipped with an automatic fire-extinguishing system because of the building height. The second-floor lodge room, if calculated as an Assembly space, can have a maximum occupant load of 84 and is compliant in terms of exit width. The alternate solution proposed by Bergeron was to limit occupancy to that of an office, at 49 maximum occupancy. The current Lodge has approximately 32 members and meetings typically have less than 10 attendees. In the future, if attendance grows, a maximum occupancy should be implemented and signage posted throughout building.

Another question is whether the front interior stairway counts as a compliant exit because it has no smoke separation. Also, at the first-floor, the two exits are not compliant in separation distance. This should be remedied by relocating the exit door to the rear west corner of the building.

The building is otherwise compliant in terms of fire safety. Therefore, due to the historic listing of the building, it must be up to the Local Code Official to make a determination as to the need for automatic fire suppression at the second-floor and code-compliance of second first-floor egress. For the first floor, the Local Code Official should take into consideration the operable double-hung windows with sills only a few feet above grade.

Per IEBC *1203.2, "an automatic fire-extinguishing system shall not be used to substitute for, or act as an alternative to, the required number of exits from any facility."*

Per IBC 2021, Table 1006.2.1, Assembly spaces with an occupant load between 50 and 500 must have two exits. The exit width requirement for a non-sprinklered space is 0.2" per occupant.

Per IBC 1007.1.1, the two exits must be located at a distance apart that is "equal to not less than one-half of the length of the maximum overall diagonal dimension of the building or area to be served."

OCCUPANCY & CODE COMPLIANCE

Per IEBC 2021 Chapter 12 – Historic Buildings, "a historic building undergoing alteration of change of occupancy shall be investigated and evaluated." The work discussed in this report is mostly classified as Alteration Level 1, while accessibility upgrades may be classified as Alteration Level 2. In either case, the work under consideration is not quantitatively or qualitatively the type of work that would be considered "substantial" and trigger extensive upgrades for full code compliance. Regardless, as the building is an historic structure listed on the National Register of Historic Places, per IEBC 2021, the structure is exempt from all code requirements save the repair of all "unsafe conditions." Determinations as to unsafe conditions and the need for any other code-related upgrades are, per IEBC 2021, up to the Local Code Official.

The IEBC, NFPA, and ADA all grant leniency for historic properties in order to prevent modifications that "threaten or destroy" architecturally and historically significant building elements.

Note: The site is not in a flood hazard area and is seismic category B, where only those in D, E, or F require structural evaluation.

PART III. CONDITIONS ASSESSMENT
IEBC 2021 – Relevant Excerpts

Section 507 – Historic Buildings
507. Historic Buildings. The provisions of this code that require improvements relative to ta building's existing condition, or, in the case of repairs, that require improvements relative to a building's pre-damage conditions, shall not be mandatory for historic buildings unless specifically required by this section.

Section 804 – Means of Egress
804.2 General. Exceptions: 2. Means of egress complying with the requirements of the building code under which the building was constructed shall be considered to be compliant…if, in the opinion of the code official, they do not constitute a distinct hazard to life.

Chapter 12 – Historic Buildings
1201.2 – A historic building undergoing alteration or change of occupancy shall be investigated and evaluated. If it is intended that the building meet the requirements of this chapter, a written report shall be prepared and filed with the code official by a registered design professional. Such report…shall identify each required safety feature that is in compliance with this chapter and where compliance with other chapters of these provisions would be damaging to the contributing historic features.

1201.5 – Unsafe Conditions. Conditions determined by the code official to be unsafe shall be remedied. Work shall not be required beyond what is required to remedy the unsafe conditions.

Section 1203 Fire Safety
1203.2 General. Every historic building that does not conform to the construction requirements specified in this code for the occupancy or use and that constitutes a distinct fire hazard as defined herein shall be provided with an approved automatic sprinkler system as determined by the code official. However, an automatic fire-extinguishing system shall not be used to substitute for, or act as an alternative to, the required number of exits from any facility.

1203.3 Means of Egress. Existing door openings and corridor and stairway widths less than those specified elsewhere in this code may be approved, provided that, in the opinion of the code official, there is sufficient width and height for a person to pass through the opening or traverse the means of egress. Where approved by the code official, the front or main exit doors need not swing in the direction of the path of exit travel, provided that other approved means of egress having sufficient capacity to serve the total occupant load are provided.

1203.6 Stairway Enclosures. In buildings of three stories or less, exit enclosure construction shall limit the spread of smoke by the use of tight-fitting doors and solid elements. Such elements are not required to have a fire-resistance rating.

1203.9 Stairway railings. Grand stairways shall be accepted without complying with the handrail and guard requirements. Existing handrails and guards at all stairways shall be permitted to remain, provided they are not structurally dangerous.

1203.11 Exit signs. Where exit signs or egress path marking location would damage the historic character of the building, alternative exit signs are permitted with approval of the code official. Alternative signs shall identify the exits and egress path.

1203.12 Automatic fire-extinguishing systems. Every historic building that cannot be made to conform to the construction requirements specific in the IBC for the occupancy or use and that constitutes a distinct fire hazard shall be deemed to be in compliance if provided with an approved automatic fire-extinguishing system.

Exception: Where the code official approves an alternate life-safety system.

PART IV. RECOMMENDATIONS
GENERAL RECOMMENDATIONS

It is recommended that all work be undertaken in accordance with the *Secretary of the Interior's Standards for Preservation* (Appendix A). These *Standards* focus on ongoing maintenance and repair of historic materials and features rather than extensive renovations.

At the time of this Assessment, the codes applicable to the building, as adopted and amended by the State of New Hampshire, are: 2018 International Building Code (IBC); 2018 International Existing Building Code (IEBC); 2018 International Energy Conservation Code (IEC); 2018 International Mechanical Code (IMC); 2018 International Plumbing Code (IPC); 2018 NFPA 1 Fire Code; 2018 NFPA 101 Life Safety Code; 2020 NFPA 70 National Electric Code (NEC); 2015 NFPA 914 Code for Fire Protection of Historic Structures; ICCA-117.1-2009 Edition, Accessible and Useable Buildings and Facilities. The IEBC, NFPA, and ADA all grant leniency for historic properties to prevent modifications that "threaten or destroy" architecturally and historically significant building elements.

Per IEBC 2021 Sections 507 & 1201.2 – Historic Buildings, as the building is an historic structure listed on the National Register of Historic Places, the structure is exempt from all code requirements save the repair of all "*unsafe conditions*." Determinations as to unsafe conditions and the need for any other code-related upgrades are, per IEBC 2021, up to the Local Code Official or Authority Having Jurisdiction (AHJ).

> *IEBC 2021 Section 507 – Historic Buildings*
> *507. Historic Buildings. The provisions of this code that require improvements relative to a building's existing condition, or, in the case of repairs, that require improvements relative to a building's pre-damage conditions, shall not be mandatory for historic buildings unless specifically required by this section.*

> *IEBC 2021 Chapter 12 – Historic Buildings*
> *1201.2 – A historic building undergoing alteration or change of occupancy shall be investigated and evaluated. If it is intended that the building meet the requirements of this chapter, a written report shall be prepared and filed with the code official by a registered design professional. Such report…shall identify each required safety feature that is in compliance with this chapter and where compliance with other chapters of these provisions would be damaging to the contributing historic features.*

The following preliminary cost estimate is provided for the purposes of planning, budgeting, and obtaining funding. Prices are based on 2025 Q1 price books. The recommended scope is based on preliminary visual inspections. Upon further inspection, new or enlarged scope items and associated costs may be discovered. As market forces are always changing, when scope is decided upon, up-to-date quotes should be obtained from contractors and manufacturers. A design contingency of 20% is always recommended when budgeting. Sensitive, complex, or large-scale repair work should be undertaken by a Contractor with specialized experience in historic preservation, such as those recommended by NHPA.

PART IV. RECOMMENDATIONS

RECOMMENDATIONS	
HIGH PRIORITY / IMMEDIATE	**ESTIMATED COST**
H0. STRUCTURAL REMEDIATION PROJECT *(In progress)* – Installation of new knee braces at roof trusses, installation of custom angles tying rafters to second floor girders, and additional screws to reinforce all joints.	N/A
H1. FOUNDATION REPAIR *(Preservation)* Reset front entry stones to be level. Clean steps with a soft hose wash (<300psi), mild PH-neutral, non-ionic detergent, and scrub with a soft bristle brush. Always try a small test area first and select cleaners carefully, as chemicals may permanently stain or bleach stone. Remove debris from crawlspace. Inspect all stone supports, joist posts, and framing members. Add supplemental joist support posts at rear to address roll in floor. Repair/replace/reinforce all members as needed. Remove and reset all perimeter split-granite stones. Clear away biological growth. *Preservation Brief 1: Assessing Cleaning and Water-Repellant Treatments for Historic Masonry*	$20,000
H2. RELOCATE FIRST FLOOR EGRESS DOOR for CODE COMPLIANCE *(Modernization)* Remove existing southwest egress door and relocate to another fenestration. Restore double-hung window unit in place of current egress door and patch siding. Relocate ADA ramp (in conjunction with scope item H4.)	$10,000
H3. FRONT ENTRY FOUR-PANEL DOORS TO BE RESTORED BY QUALIFIED SPECIALIST *(Preservation)*	$15,000
H4. REPLACE WEST ACCESSIBILITY RAMP *(Modernization)* Remove existing damaged accessibility ramp. Construct new ADA-compliant ramp to access new northwest egress door with new ADA-compliant landing with required approach clearances. Door to be ADA-compliant with lever handle, automatic opener/closer, panic bar at interior. Set ramp at least 1-foot off building wall on bed of crushed stone to allow adequate drainage. To address snow melt consider awning roof, snow fences above ramp, and/or metal pipe railings in lieu of wood. *Preservation Brief 32: Making Historic Properties Accessible*	$25,000
H5. CONSTRUCT ADA-COMPLIANT BATHROOM *(Modernization)* *Preservation Brief 32: Making Historic Properties Accessible*	$25,000
H6. INSTALL LIGHTNING PROTECTION SYSTEM *(Modernization)*	$15,000
Total HIGH PRIORITY Recommendations (Materials & Labor)	$110,000

PART IV. RECOMMENDATIONS

MEDIUM PRIORITY RECOMMENDATIONS (2-5 YEARS)	ESTIMATED COST
M1. ELECTRICAL SYSTEM UPGRADE *(Modernization)* Add outlets, update lighting.	$35,000
M2. HEATING SYSTEM UPGRADE *(Modernization)* Add zoning, and replace large rigid ducts with smaller, flexible ductwork. Add heat pump at rear façade for cooling. Heating system upgrade estimate assumes that the Masonic Hall will continue to be used only for occasional meetings and storage (as is the consensus at the time of submitting this report). If the Hall is to be renovated to house offices in the future, whether temporary or permanent, assume double the estimate provided for a new heating/cooling system. *Preservation Brief 24: HVAC in Historic Buildings*	$50,000
M3. STAIR WHEELCHAIR LIFT REPLACEMENT *(Modernization)* Replace existing stair wheelchair lift with modern unit, including standby power. *Preservation Brief 32: Making Historic Properties Accessible*	$25,000
Total Medium Priority Recommendations (Materials & Labor)	**$110,000**

LOW PRIORITY / LONGER TERM RECOMMENDATIONS (5-10 YEARS)	ESTIMATED COST
L1. REMOVE VINYL AND RESTORE ALL WOOD CLAPBOARDS AND TRIM *(Preservation/Restoration)* Remove vinyl siding & coverings throughout. Perform paint sample analysis. Repair / patch / replace all deteriorated or damaged wood elements in-kind as needed. Mechanically (by hand) scrape all loose paint using lead-safe practices and compliant disposal. Prime and re-paint per Secretary of the Interior's Standards for Rehabilitation and Guidelines for Rehabilitating Historic Buildings. *Preservation Brief 10: Exterior Paint Problems on Historic Woodwork*	$75,000
L2. ROOF REPLACEMENT *(Preservation)* Remove existing corrugated steel roofing and replace in-kind with more generous drip edges and ridge cap. *Preservation Brief 4: Roofing for Historic Buildings*	$75,000
L3. RENOVATE REAR BATHROOM *(Modernization)*	$30,000
L4. INTERIOR FINISH REPAIR CAMPAIGN Localized repair of damaged interior finishes per Secretary of the Interior's Standards for Rehabilitation and Guidelines for Rehabilitating Historic Buildings.	$50,000
Total Low Priority / Long Term Recommendations (Materials & Labor)	**$230,000**

PART IV. RECOMMENDATIONS

SUMMARY OF COSTS	
HIGH PRIORITY / IMMEDIATE	**ESTIMATED COST**
H0. Structural Remediation Project (In Progress)	n/a
H1. Foundation Repair	$20,000
H2. Relocate First Floor Egress Door for Code Compliance	$30,000
H3. Restore Front Entry Doors	$15,000
H4. Replace West Accessibility Ramp	$20,000
H5. Renovate Bathroom for ADA Compliance	$25,000
H6. Install lightning protection system	$15,000
Materials & Labor Sub-total High Priority	$110,000
Contingency (+20%) General Conditions / Overhead & Profit (+20%)	$44,000
Total Project Construction Cost for Short-Range Recommendations	$154,000
MID-RANGE RECOMMENDATIONS (1-5 YEARS)	**ESTIMATED COST**
M1. Electrical System Upgrade	$35,000
M2. Heating System Upgrade	$50,000
M3. Stair Wheelchair Lift Replacement	$25,000
Materials & Labor Medium Priority	$110,000
Contingency (+20%) General Conditions / Overhead & Profit (+20%)	$44,000
Total Project Construction Cost for Mid-Range Recommendations	$154,000
LONG-RANGE RECOMMENDATIONS (5-10 YEARS)	**ESTIMATED COST**
L1. Remove Vinyl Siding and Restore all Wood Clapboards and Trim	$75,000
L2. Roof Replacement	$75,000
L3. Renovate Rear Bathroom	$30,000
L4. Interior Finish Repair Campaign	$50,000
Materials & Labor Low Priority / Long Term	$230,000
Contingency (+20%) General Conditions / Overhead & Profit (+20%)	$92,000
Total Project Construction Cost for Long-Range Recommendations	$322,000
Grand Total Project Construction Cost	$630,000

PART IV. RECOMMENDATIONS

CONCLUSION

Freedom's Masonic Hall is a valuable landmark, and it has been an honor to prepare this report. It would be a great benefit to the community to repair the building, maintain it well, and make it accessible to all. A comprehensive plan for periodic inspection and maintenance of the building should be developed in order to ensure that it survives and thrives well into the future.

North Country Architect is pleased to have had this opportunity to assist in the ongoing stewardship of this significant historic and community resource. Please do not hesitate to contact us with questions or concerns regarding the building or project.

Respectfully submitted,

Beth Miller, RA, LEED AP
Principal, North Country Architect, PLLC
603-412-4480
info@northcountryarchitect.com

BIBLIOGRAPHY

1989 NHSHRS Building Survey

2011 NHDHR Inventory – Schoolhouse / Town Offices

2013 NHDHR Inventory – Masonic Hall

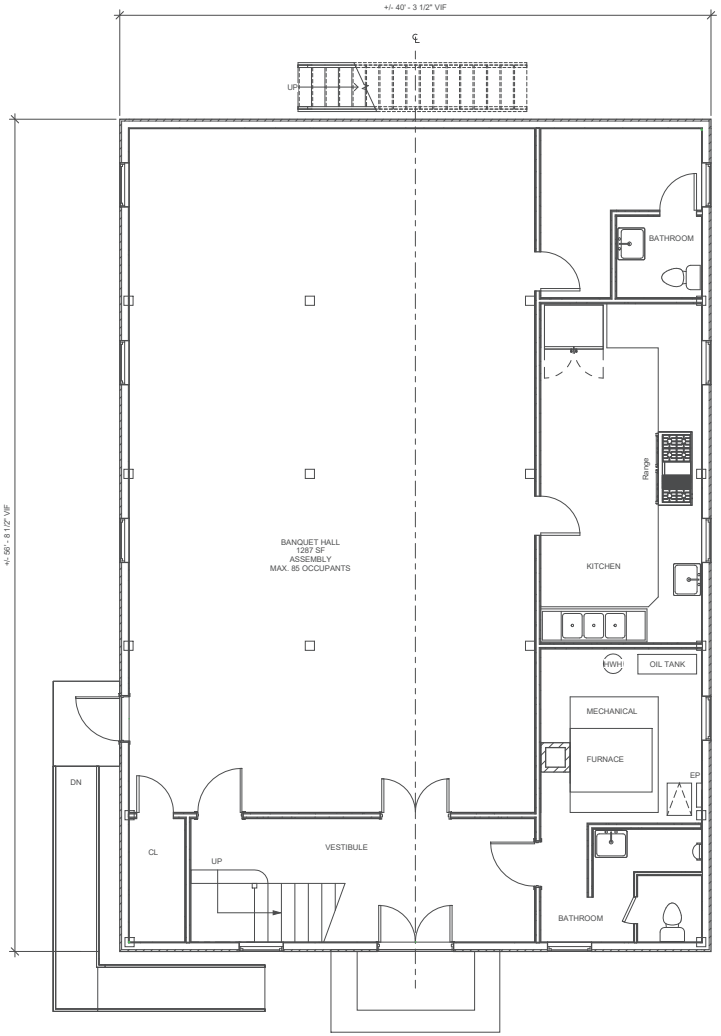
2022 Assessment Synopsis, Bergeron Technical Services, LLC

2022 Town Office Feasibility Study, Bergeron Technical Services, LLC

2022 Structural Review, Horizons Engineering

PART V. SUPPLEMENTAL INFORMATION

APPENDIX A – Drawings



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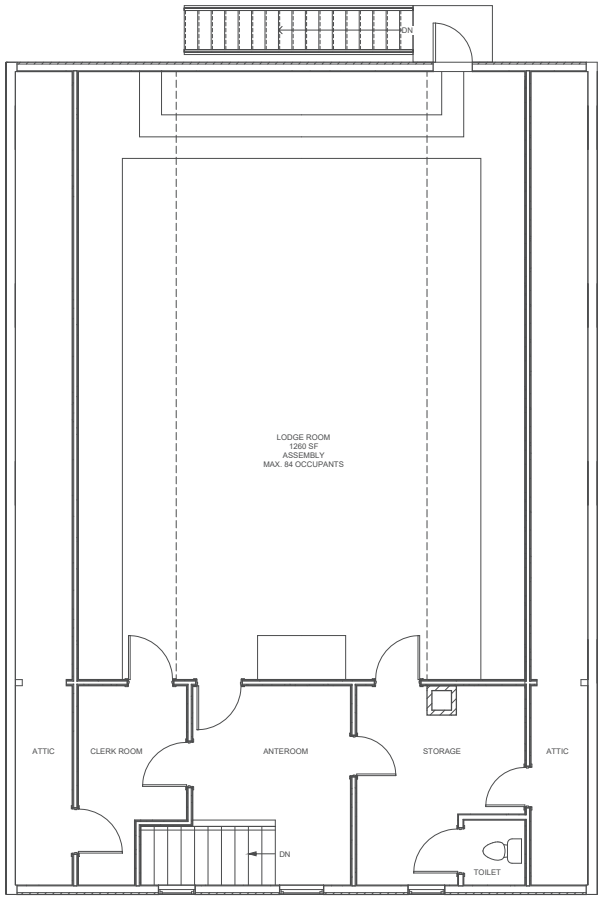


2 Level 2
1/4" = 1'-0"

NORTH COUNTRY ARCHITECT

NOTES:
-PRINT FULL-SCALE AT 24"X36"
-PRINT HALF-SCALE AT 11"X17"
-VERIFY ALL DIMENSIONS IN THE FIELD

ENSURE PRINT SETTINGS ARE SET TO PRINT 'ACTUAL SIZE' OR 'CUSTOM SCALE 100%' AND NOT 'FIT' OR 'FIT TO PAGE'. OUTER PERIMETER PAGE MARGINS SHOULD BE LESS THAN 1/2".

NOTES:
ALL DIMENSIONS TO BE VERIFIED IN FIELD.

No.	Description	Date

FREEDOM, NH

MASONIC HALL

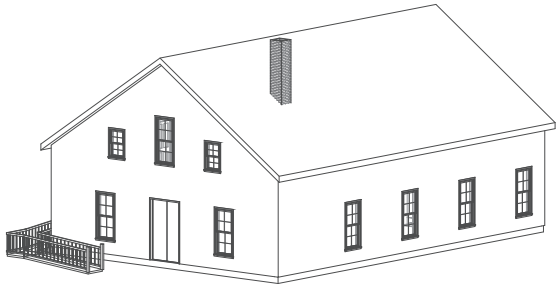
HISTORIC BUILDING ASSESSMENT

FLOOR PLANS

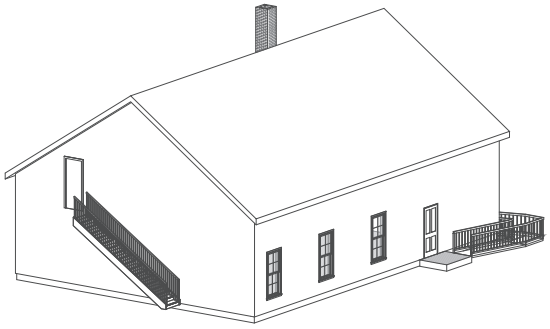
Project Phase	-
Date	-
Drawn by	-
Checked by	-

A101

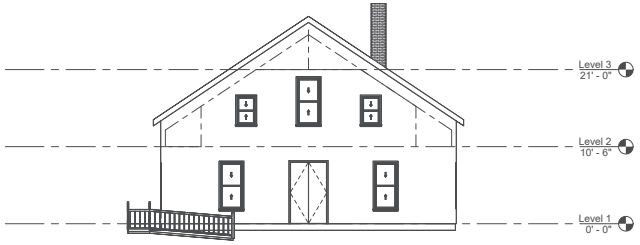
Scale 1/4" = 1'-0"



5 SOUTHWEST



6 NORTHEAST



1 South
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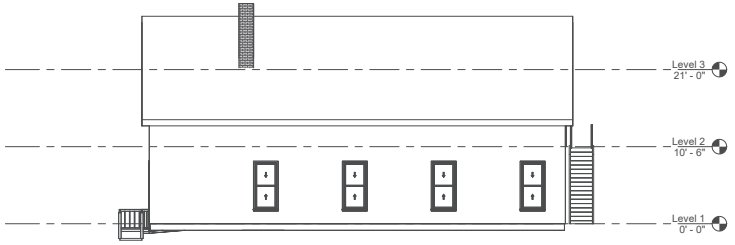

2 East
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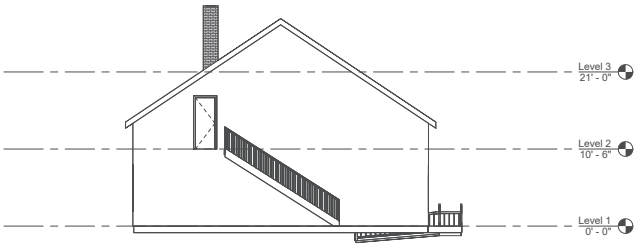
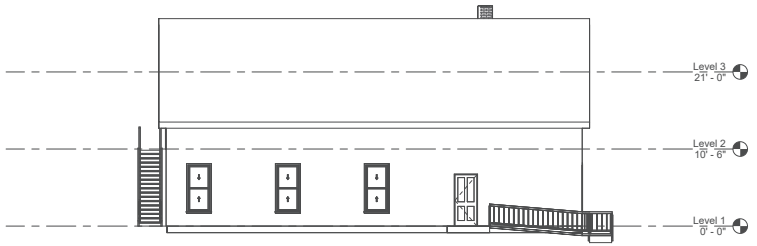


3 North
1/8" = 1'-0"



4 West
1/8" = 1'-0"

NORTH COUNTRY ARCHITECT

NOTES:
-PRINT FULL-SCALE AT 24"X36"
-PRINT HALF-SCALE AT 11"X17"
-VERIFY ALL DIMENSIONS IN THE FIELD

ENSURE PRINT SETTINGS ARE SET TO PRINT 'ACTUAL SIZE' OR 'CUSTOM SCALE 100%' AND NOT 'FIT' OR 'FIT TO PAGE'. OUTER PERIMETER PAGE MARGINS SHOULD BE LESS THAN 1/2".

NOTES:
ALL DIMENSIONS TO BE VERIFIED IN FIELD.

No.	Description	Date

FREEDOM, NH

MASONIC HALL

HISTORIC BUILDING ASSESSMENT

ELEVATIONS

Project Phase	.
Date	.
Drawn by	
Checked by	

A102

Scale 1/8" = 1'-0"

APPENDIX B – Secretary of the Interior's Standards

The Secretary of the Interior's Standards for the Treatment of Historic Properties

National Park Service, U.S. Department of the Interior

The Standards are a series of concepts about maintaining, repairing, and replacing historic materials, as well as designing new additions or making alterations. They provide practical guidance for decision-making about work or changes to a historic property. Applicants to the Land and Community Heritage Investment Program (LCHIP) and some other preservation grant programs must be willing to adhere to these Standards. The Standards are to be applied to specific rehabilitation projects in a reasonable manner, taking into consideration economic and technical feasibility. Of the four treatment approaches, the Standards for Rehabilitation apply to most buildings in current use.

Standards for Rehabilitation

1. A property will be used as it was historically or be given a new use that requires minimal change to its distinctive materials, features, spaces and spatial relationships.
2. The historic character of a property will be retained and preserved. The removal of distinctive materials or alteration of features, spaces and spatial relationships that characterize a property will be avoided.
3. Each property will be recognized as a physical record of its time, place and use. Changes that create a false sense of historical development, such as adding conjectural features or elements from other historic properties, will not be undertaken.
4. Changes to a property that have acquired historic significance in their own right will be retained and preserved.
5. Distinctive materials, features, finishes and construction techniques or examples of craftsmanship that characterize a property will be preserved.
6. Deteriorated historic features will be repaired rather than replaced. Where the severity of deterioration requires replacement of a distinctive feature, the new feature will match the old in design, color, texture and, where possible, materials. Replacement of missing features will be substantiated by documentary and physical evidence.
7. Chemical or physical treatments, if appropriate, will be undertaken using the gentlest means possible. Treatments that cause damage to historic materials will not be used.
8. Archeological resources will be protected and preserved in place. If such resources must be disturbed, mitigation measures will be undertaken.
9. New additions, exterior alterations or related new construction will not destroy historic materials, features and spatial relationships that characterize the property. The new work will be differentiated from the old and will be compatible with the historic materials, features, size, scale and proportion, and massing to protect the integrity of the property and its environment.
10. New additions and adjacent or related new construction will be undertaken in such a manner that, if removed in the future, the essential form and integrity of the historic property and its environment would be unimpaired.

More on the Standards and associated Guidelines, which offer general design and technical recommendations to assist in applying the Standards, can be found at: https://www.nps.gov/tps/standards.htm. Together, the Standards and Guidelines provide guidance and a framework for decision-making about work or changes to an historic property.

APPENDIX C – Preservation Briefs

https://www.nps.gov/orgs/1739/preservation-briefs.htm

1. NATIONAL PARK SERVICE PRESERVATION BRIEFS -https://www.nps.gov/orgs/1739/preservation-briefs.htm
   - Roofing for Historic Buildings
     https://www.nps.gov/orgs/1739/upload/preservation-brief-04-roofing.pdf
   - Cleaning and Water-Repellent Treatments
     https://www.nps.gov/orgs/1739/upload/preservation-brief-01-cleaning-masonry.pdf
   - Controlling Water in Historic Buildings
     https://www.nps.gov/orgs/1739/upload/preservation-brief-39-controlling-water.pdf
   - Repair Historic Wood Windows
     https://www.nps.gov/orgs/1739/upload/preservation-brief-09-wood-windows.pdf
   - Paint and Historic Woodwork
     https://www.nps.gov/orgs/1739/upload/preservation-brief-10-paint-problems-exterior-woodwork.pdf
   - Making Historic Properties Accessible
     https://www.nps.gov/orgs/1739/upload/preservation-brief-32-accessibility.pdf

2. WINDOW PRESERVATION STANDARDS - https://windowstandards.org/

3. HISTORIC NEW ENGLAND WHITE PAPERS - https://www.historicnewengland.org/preservation/for-professionals-students/property-care-white-papers/

APPENDIX D – NHDHR Inventory

SR 7/2013

New Hampshire Division of Historical Resources

Determination of Eligibility (DOE)

Inventory #: FRE0006

Review Date: 3/27/2013 ***DOE Date:*** 3/8/2013

☑ Final DOE Approved

Property Name: **Masonic Hall (1830 Church)**

Area:

Address: 29 Old Portland Road

Town: Freedom **County:** Carroll

Reviewed For: SR **DOE Program(s):** State Register

DETERMINATION OF ELIGIBILITY

State Register eligible, individually

Integrity: Partial **Level:** Local

Criteria: ***A:*** Yes ***B:*** No ***C:*** No ***D:*** Unknown ***E:*** N

STATEMENT OF SIGNIFICANCE:

The Masonic Hall is primarily significant for its associations with the Masons because this is the period to which the building retains integrity. The building has a long tradition of supporting community activites, first as a center of religious and community life and later as home to the Masons. Constructed in 1830 as a church, the building was purchased and altered in 1926-28 by the Masons who infused a new purpose for gathering in the building after it had sat vacant for a number of years in the early twentieth century. The women of Calvin Topliff, Chapter 18, Order of the Eastern Star also assembled here. The building has been open to the community for ice cream socials, community breakfasts, Old Home week and many other activities in its 180 years of existence. It is a key resource located at Freedom's core, Schoolhouse Hill.

AREAS OF SIGNIFICANCE(S)
Social History

Period of Significance: 1926
to 1963
☐ Period not applicable

Boundary: tax parcl 52A-18

Follow Up:

6/2013: Additional information received and approved.

3/2013: Please review the text which contains editing directives. Revise the significance statement to focus primarily on the time that the Mason's occupied the building (1926-onward) as the building most reflects their use through changes in architectural features/materials/uses. A photo-location map and site map are also required to be submitted.

Comments:

INDIVIDUAL INVENTORY FORM

NHDHR INVENTORY # FRE0006

Name, Location, Ownership

1. Historic name Masonic Hall, old 1830 Church
2. District area Freedom Village, Schoolhouse Hill (local)
3. Street and number 29 Old Portland Road
4. City or town Freedom
5. County Carroll
6. Current owner Carroll Temple Association

Function or Use

7. Current use(s) Social: Civic, Meeting Hall
8. Historic use(s) Religion: Church

Architectural Information

9. Style Greek Revival
10. Architect/builder Amos Towle, Jr.
11. Source church records, deeds, family documents
12. Construction date 1830
13. Source deeds, court documents
14. Alterations, with dates 1850, 1926-28, 1970s see text
15. Moved? no ☒ yes ☐ date:

Exterior Features

16. Foundation granite
17. Cladding vinyl
18. Roof material metal
19. Chimney material brick
20. Type of roof front gable
21. Chimney location slope
22. Number of stories 2
23. Entry location façade, center, paired
24. Windows 1/1, 2/2, double-hung
    Replacement? no ☐ yes ☒ date:1970s

Site Features

25. Setting rural village
26. Outbuildings none
27. Landscape features monument, other: baptismal pool, driveway loop

35. Photo #1 Direction: s
36. Date 3/2012
37. Reference (file name or frame#): P6080107

28. Acreage .5
29. Tax map/parcel # 52A-18
30 Map reference 19 336341E 4852951N
31. USGS quadrangle and scale Freedom, 1:24000

Form prepared by

32. Name Peg Scully, Gale Morris, Alan Fall
33. Organization Freedom Heritage Commission, subcommittee
34. Date of survey 12/2012

State Plane x 1151280 Y 479395

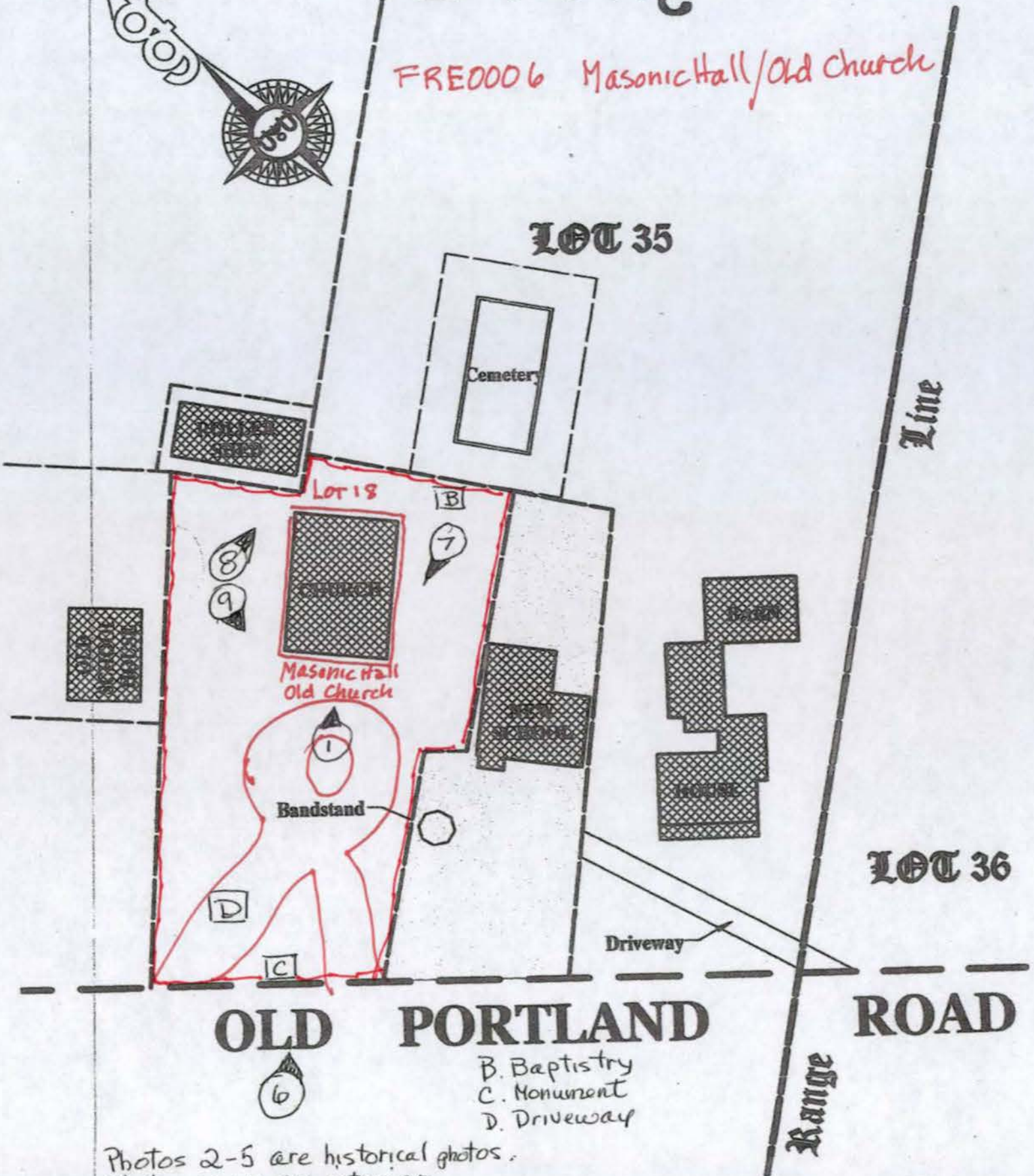
39. LOCATION MAP:

40. PROPERTY MAP:

40. Property Map and Photo Key

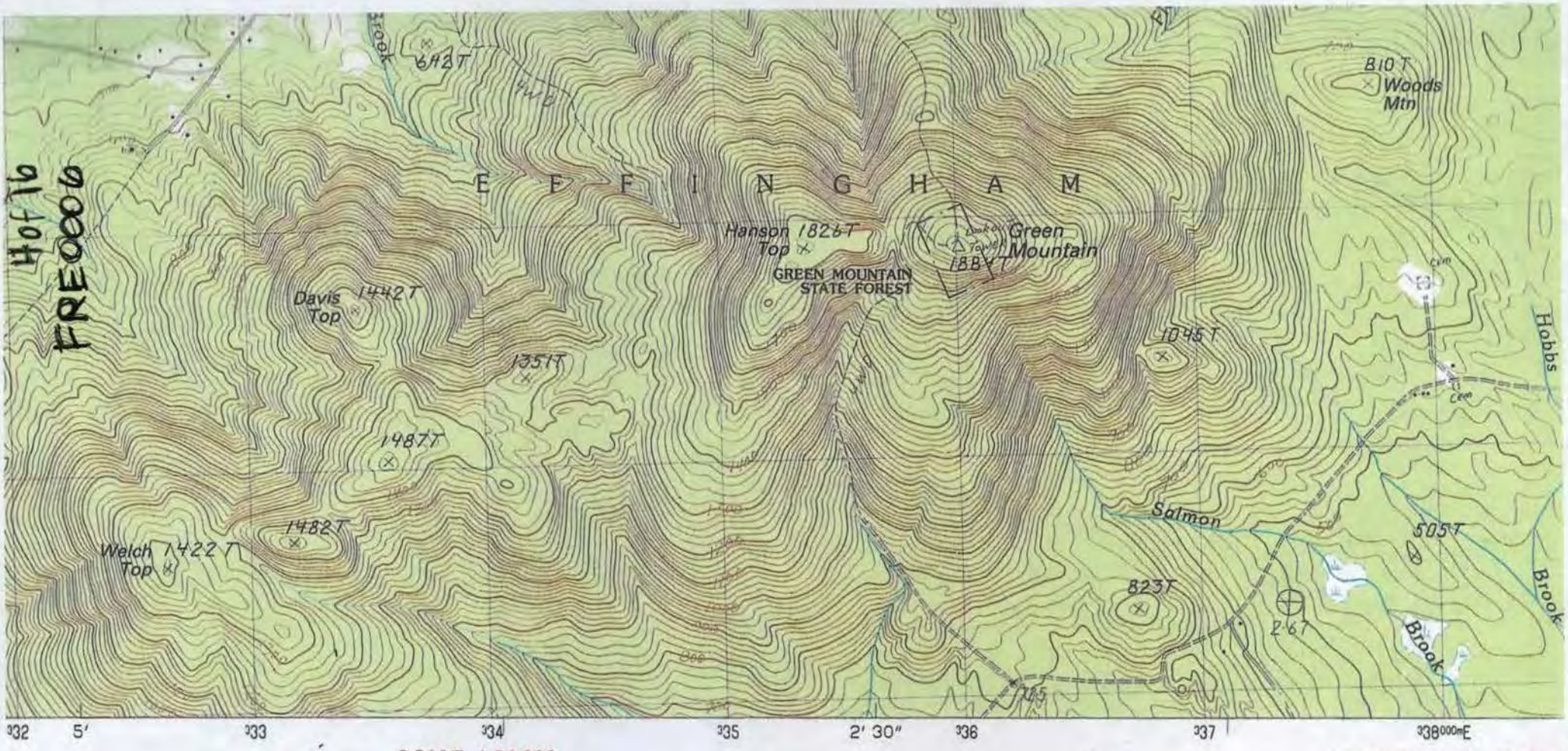
Today

FRE0006 Masonic Hall/Old Church



B. Baptistry
C. Monument
D. Driveway

Photos 2-5 are historical photos.
Photos 10 + 11 are interior



SCALE 1:24 000

1 .5 0 1 MILES

1000 0 1000 2000 3000 4000 5000 6000 7000 8000 9000 10 000 FEET

1 .5 0 KILOMETERS 1 2

1000 0 METERS 1000 2000

CONTOUR INTERVAL 20 FEET

CONTROL ELEVATIONS SHOWN TO THE NEAREST 0.1 FOOT
OTHER ELEVATIONS SHOWN TO THE NEAREST FOOT
To convert feet to meters multiply by .3048
To convert meters to feet multiply by 3.2808

THIS MAP COMPLIES WITH NATIONAL MAP ACCURACY STANDARDS
FOR SALE BY U. S. GEOLOGICAL SURVEY, DENVER, COLORADO 80225, OR RESTON, VIRGINIA 22092

QUADRANGLE LOCATION

1	2	3	1 Silver Lake 2 Conway 3 Brownfield 4 Ossipee Lake 5 Kezar Falls 6 Tuftonboro 7 Ossipee 8 West Newfield
4		5	
6	7	8	

ADJOINING 7.5' QUADRANGLE NAMES

INTERIOR—GEOLOGICAL SURVEY, RESTON

ROAD LEGEND

Improved Road .....
Unimproved Road .....
Trail .....

Interstate Route U. S. Route

FREEDOM, NEW

PROVISIONAL ED

43071-G1-TF-

024

4 of 16 FRE0006

Appendix A FRE0006 (Scale)

41. Historical Background and Role in the Town or City's Development:
Once part of Effingham, New Hampshire, the portion of town north of the Ossipee River incorporated as the town of North Effingham in 1831. In 1832, North Effingham submitted a petition to the state legislature to change the name of the town to "Freedom." This was approved and a formal letter was sent to the new town of Freedom by Franklin Pierce, a future president of our country.[1]

Four important roads converge in the heart of Freedom, New Hampshire: Moulton Road, Cushing Corner Road (once Andrews Hill Road), Elm Street (once Main Street) and Old Portland Road (once Maple Street). These are historic as well as modern conduits of traffic through this primarily residential small rural town in Carroll County. Just a short distance to the east of the "square" where these roads meet, Schoolhouse Hill rises north from Old Portland Road. On the hillside sit six buildings that include two private residences (one having been the first village schoolhouse from at least 1802 and the other the home of Amos Towle, Jr. who built the 1830 Church), the town office building (the second village school, built in 1895, FRE0004, listed on the State Register), the roller shed (FRE0008, listed on the State Register), the bandstand(FRE0009, listed on the State Register) and the Masonic Hall (the old 1830 Church, FRE0006) that is the subject of this document. These buildings date from circa 1802 to 1902, and assumed their current physical placements by the latter date. This historic cluster represents the heart of early Freedom's religious, social, educational, fraternal and civic activities.

Freedom was still part of Effingham in 1827 as the high tide of the Protestant 'Second Great Awakening' rolled over New England. Leaders of three religious denominations (Freewill Baptist, Calvin Baptist, and Universalist) worked together to form a "church" (a group of people who signed a charter), meeting in the homes of members. Eventually finding a need for a meeting house for their worship, these people turned to Amos Towle, Jr. who owned land with his father, Amos Towle, Sr., on Schoolhouse Hill. In 1830, Amos Towle, Jr. constructed a meeting house and began to convey interests in the building and the two square rod lot of land on which it was placed. He also sold interest in the pews. The 56 parts interest (and pews) at $20 per share could amass a fund of $1,120 if all sold, this being a huge amount of money in those days. This church structure would be the second church in Effingham. Towle built it for folks who lived north of the Ossipee River enabling them to worship, without excessive travel, in their own place on Schoolhouse Hill.[2] This building became the focus of important legal issues in Freedom's history.

The structure was substantial, a two-story tall building open from floor to vaulted ceiling, with plaster and lathe walls and a painted blue ceiling, as was the fashion of the times.[3] Typical of early meeting houses hereabouts, it did not have a steeple nor belfry. Members gathered in the 1830 Church to worship for 20 years, at which point, in mid March of 1850, Elias Towle, brother to Amos Towle, Jr., offered a group of 25 townspeople this deal: "If you will build a good, respectable belfry and steeple, shingle, clapboard and paint the house and fix it all up in good shape, I will furnish a bell." Towle held up his part of the bargain and purchased a new bell from a Boston foundry that was hung in the steeple where it remained in use until 1867 when it was removed and hung in the belfry of the new First Christian Church of Freedom at Towle's request. This bell would be at the center of three court cases to determine true ownership. Mr. Towle won all three cases and the bell remains in use to this day in the "new" church on Elm Street.[4]

Back on Schoolhouse Hill, the 1830 Church membership waned, despite having reorganized in 1857 as the "First Baptist Church."[5] The building fell into further disrepair, then disuse as a church, and by the turn into the 20th century, it stood abandoned except for occasional use for town social activities. In History of the Freedom Club of Boston, Angie Harmon Fracker, historian, describes a 1902 Old Home Week galacelebration on Schoolhouse Hill that included a banquet inside the old church that had been decorated with flowers and strung with lanterns for the occasion; this was an annual event for many years in the early 1900s. Freedom's Old Home Week celebrations had begun in 1898, a whole year before the State of New Hampshire declared in 1899 that Old Home Days be a yearly summer period of welcoming back residents who had moved away but still harbored love for their roots in the small rural towns. Initially meant to boost the faltering

[1] A copy of this letter is archived at the Freedom Historical Society.
[2] Copies of the Towle family's documents and the town records of deed conveyance, and writings of Amos Towle, Jr.'s intent to build this church are kept at the Freedom Historical Society.
[3] Observations in the later records of the Secretary of the Carroll Lodge #57 and in family histories both oral and written of Freedom residents
[4] Records of the Towle vs 1830 Church court cases
[5] The original charter of this religious group is part of the Freedom Historical Society collection

economies of such communities as Freedom, these special observances continue to this day in our town for an entire week, with special traditional celebrations held still on Schoolhouse Hill.

In 1926 the building would take on a new life altogether in our town's history. In that year Carroll Lodge #57 A.F. & A.M. deliberated about finding a building to purchase outright for meetings and functions. The membership had, from June of 1854 until this point, been meeting on an upper floor of a building near Schoolhouse Hill, down on the south east corner where Old Portland Road intersected with Elm Street, close by what we call the town square. The men of this fraternal Lodge, which was specially chartered on August 18, 1853 and then formally chartered on June 14, 1854, decided to investigate ways and means to buy the long vacant 1830 Church. The Lodge had a large membership, were financially sound, and had enjoyed "A comfortable hall for a lodge-room..."[6] But they did not own the building. They also were dealing with costly maintenance issues and felt that they would be better served by putting such money into a structure owned outright by them. A committee was formed to figure out viability and finances and make an offer in 1926.

By 1927 The Temple Association held the deed[7] to the 1830 Church, now renamed the Masonic Hall. They paid $25 for the land and $25 for the building. A Building Committee was appointed and E.L. Mills (a Mason who owned the residence to the far east of the crest of the Hill, the Amos Towle, Jr. house), Fred L. Godfrey, and John F. Chick were charged by their brother Masons to oversee the repairing of the building to make it suitable for Masonic Hall purposes. The changes included creating a banquet hall, which required a kitchen facility, adding a heating plant, and building a second floor to serve as the Lodge space. Work was completed by July 12, 1928, when the Brotherhood was meeting in this building. On September 3, 1928 the dedication of the new Masonic Hall was observed with much formality and feasting.[8]

This fraternal order of Masons infused vital new purpose for "gathering" into this building on the hill. The Masons permitted the women of Calvin Topliff, Chapter 18, Order of the Eastern Star, instituted September 11, 1894, to rent space and meet in the Hall, and the Carroll Lodge #57's Secretary's Records show that the men built facilities into the old church to accommodate this sisterhood that was to become an active element in Freedom's women's history. The Eastern Star group has waned in membership and no longer uses the building. But to this day Freedom's Masons meet here and host the annual Old Home Week ice cream social, as well as community breakfasts throughout the year that serve as fundraisers for local programs, including scholarship funds for Freedom youth, school programs, and the Freedom Food Pantry. The Masons and this property sustain the lengthy historic role of this structure in the community life of Freedom, New Hampshire.

42. Applicable NHDHR Historic Contexts (please list names from appendix C):
116, Freemasonry in New Hampshire
120, Religion in New Hampshire
114, Women's Organizations in New Hampshire.

43. Architectural Description and Comparative Evaluation:
The 1830 Church, now known as the Masonic Hall was a two-room building constructed for worship, with an entry anteroom opening onto a large sanctuary space with a vaulted ceiling. The Greek Revival style's simple clean lines were popular for community buildings in New England at the time, with the simple proportions and classical details adding a stately formalism to these simple wooden buildings.

The building stands on the central crest of Schoolhouse Hill, looking out over a scenic valley to Loon Lake and Green Mountain in the distance. A small private cemetery for the Towle family is located northeast of the 1830 Church, not on the same parcel of land. The landscape surrounding this structure has three features significant to Freedom. The driveway that gives access to the buildings on Schoolhouse Hill is on the property owned by the Masons. It was the Carroll Lodge #57 that paid to have the looped drive and adjacent parking area paved in 1929[9], and the Masons continue to allow townspeople the use of these as they conduct business at the town office building, enjoy recreation at the bandstand, or participate in events hosted by the Masons and others. The World War I veteran's memorial stone, with its

[6] Georgia Drew Merrill's History of Carroll County
[7] The deed transfer apparently required an order of a State Superior Court judgement concerning Frank Towle and his sister Emma Towle Perkins as Towle descendants.
[8] Secretary's Records' for Carroll Lodge #57
[9] Town of Freedom Annual Report, 1930, cost $50.

brass plaque, lists Freedom citizens who served in the military and died for their country; it is embedded at the Old Portland roadside edge of the Hill. The outdoor baptismal pool from the church days is still visible behind the Hall, north side of northeast corner, with the edges of the pool and steps down still visible.

In 1926, the Carroll Lodge #57 of Masons bought the old church building and instituted major renovations, including the removal of the steeple, to suit the needs of a meeting place for their fraternal order. The building's current appearance dates to this period of construction, 1926-1928.

The foundation is granite stones that sit on solid ledge. The framing is bent, raised, post-and-beam timbers of pine and hemlock. The walls were originally clad with wood clapboards, 6-foot long, quarter-sawn boards with the joints feathered, overlapped, and painted white; the building is clad in vinyl siding today. The front-gabled roof is metal, installed in 1926 when the roof was altered to remove the steeple, which was constructed circa 1850. It is believed that the original roofing material was wood. A brick chimney is on the eastern slope of the roof, about 15 feet from the front corner. The original brick chimney was centered on the north end ridge. A chimney thimble remains visible in the Masonic dining area.

The main entry is on the south façade, through a centered pair of doors flanked by two double-hung windows on the first floor, with three double-hung windows above on the second floor. On the east wall there are four windows, and on the west side there are three windows and an emergency exit door with railed ramp. On the north or rear façade, there is a steel fire escape on the western end of the wall, providing egress from the second floor lodge room. The windows are double-hung, one-over-one sash on the front façade and two-over-two on the other facades. Originally there were eleven windows: four windows on the east wall, four on the west, with one window above the front entry and one on either side of the door. When the Masons renovated the structure in 1926-1927, two smaller windows were added on the second floor of the south façade, and two small windows on the second floor north side. In further alterations in the 1970s, the north wall was altered – the smaller windows were covered over with vinyl siding and the fire escape was added. On the first floor, the southern-most window of the west wall was altered into an emergency exit door.

The entry doors on the south façade open into a small rectangular wood paneled anteroom. A men's bathroom is off the east side of the anteroom. A small mechanical room with the furnace is accessible next to the men's bathroom. Directly ahead of the entry is the door into the first floor reception and dining room which holds many long tables and sets of chairs for receptions and Masonic banquets. It is decorated with Carroll Lodge #57 regalia on the walls. A well-equipped modern kitchen is to the east of this room. From the anteroom, to the west, a wooden staircase rises to the second floor and has a motorized chair lift attached. At the bottom of the staircase is a casement notice board made from a piece of slate salvaged from the 1895 Schoolhouse.

The original building had only one floor. We have structural evidence that the anteroom existed, but then opened into the one room sanctuary of the 1830 Church. This space had an vaulted plaster and lathe ceiling painted blue to emulate the heavens, as is evident behind the knee-walls on what is now the second floor. Pews were part of the furnishings, and it can be assumed that there was a central altar of some sort on the north wall.

After the Masons purchased the building, renovations were planned, with construction from 1926-1928. On the first floor, turnbuckles and posts were added to help support the structure due to the addition of a second floor. Along the east wall, a partition was erected to create a 10-foot wide space, used for the kitchen in the main hall and a men's restroom and mechanical room in the anteroom. A women's sitting room and restroom were added in the northeast corner of the building, used by the Calvin Topliff Chapter of the Eastern Star during the time that they rented space for meetings. In the 1990,s modern ovens with fans were added, along with a freezer, fridge, dishwasher and plumbing and electrics were updated. The original soapstone sink was removed but is located at the Freedom Historical Society.

The second floor Lodge room is accessed by a staircase from the anteroom. At the top of the staircase there is another anteroom. To the right off this room is a small room for storage, once used by the women of the Calvin Topliff Chapter of the Eastern Star during their tenancy. To the left off the anteroom is a Masonic "candidates' preparation" room for use before ceremonial meetings. The large Lodge Room is directly beyond doors in the anteroom. Within are the ceremonial seats of officers and seating for other members of the Lodge.

Behind the knee-walls on the eastern side of the second floor is evidence of the original framing of the building. It can be seen where the original collar ties were removed to allow a reasonable floor-to-ceiling height on second floor. The old framing, plaster, and lathe can be seen as well as an old collar tie mortise in the rafter timber with peg holes. The new collar ties added by the Masons can be seen up higher. In the access hole to behind the knee-walls, it can be seen that a

timber was cut off for this access along the wall between the anteroom and the old sanctuary of the 1830 Church, showing that the original sanctuary was separate from the anteroom for the full height of the finished interior; this ground floor anteroom was thus part of the original church architecture.

The building retains almost all of its original exterior lines and reminds us of the importance of community gathering spaces, as well as the changing nature of community gathering spaces in its transition from a religious building to a secular fraternal organization.

44. National or State Register Criteria Statement of Significance:

The Masonic Hall in Freedom represents the tradition of village organizations that contribute to town social history in the support of community activities, first as a center of religious and community life, and later as home to the Freemasons, a fraternal assembly group that has supported events in town beyond its own ceremonial meetings, and offered amenities such as meeting space and continued access to the hill via their driveway. As part of this prominent center of town, Schoolhouse Hill, the Masonic Hall, formerly known as the 1830 Church, is eligible for listing in the State Register of Historic Places under criterion A, for its history.

45. Period of Significance:
1926-1963

46. Statement of Integrity:

The Masonic Hall was constructed in 1830 as a church and has never been moved. It retains integrity of location. Despite some changes and rearranging of the buildings on Schoolhouse Hill, the setting remains intact with minimal change since 1902.

Though the property was designed as a church building, the changes made after the purchase of the building by the Masons were significant enough that the property does not retain integrity of design to the period of use as a church. Alterations to the layout made in 1926-1928, as well as to fenestration, are mostly intact, and the building retains integrity of design and workmanship to the era of the Masonic Hall use. Integrity of materials is affected by the application of vinyl siding to the building and replacement of windows as well as covering up of some window openings, but given that the interior is intact and relatively unchanged, the integrity of materials is diminished but not lost.

The Masonic Hall retains integrity of feeling and association, both in its minimal change to physical presence and in its continued use as a center of Freedom's community life. It retains a strong presence and place upon Schoolhouse Hill, an important town center. The fraternal organization's continued use of the building to support the community, up to the modern era, strengthens these connections.

47. Boundary Discussion:

The lot owned by the Masons rises up Schoolhouse Hill from its southern boundary along Old Portland Road. Along the north side there are mature trees that mark the boundary along privately owned land. A paved looped drive runs from Old Portland Road up to the building, and is on the same lot as the Lodge despite continued use by the rest of the visitors to Schoolhouse Hill. The property includes the Hall, a WWI memorial, the driveway, and a baptismal pool

Question 48. Bibliography 1830 Church/Masonic Hall FRE0006

Documents in the possession of the Freedom Historical Society:

Ledger and Records of the 1830 Church, the "old" church inclusive of charter on the reformation of the congregation in 1858

1880 "Summary of the First Baptist Church of Freedom, N.H."

Various survey deeds and maps, some originals, some copies, of parts of Effingham, North Effingham, Freedom related to land on Schoolhouse Hill

Court documents on three legal decisions in cases between Elias Towle and the "old" church relating to the dispute over ownership of the Towle Bell, including the final decision from the N.H. State Supreme Court

Records and deeds from the First Christian Church of Freedom, the "new" church

Articles on the Centennial of 1931 (as North Effingham) and 1932 (as Freedom)

Article from Daily Union paper and letter to the editor from 1965 on "The Freedom Bell - the Facts"

Towle family documents

Town of Freedom Annual Reports, 1910-2000

Town of Freedom, Town Clerk's Records, 1875-1910, copies at Historical Society

Original Records of the Secretary of Carroll Lodge #57 A.F. and A.M., inclusive of years of purchase and renovation of the 1830 Church, 1926 – 1934. Property of Carroll Lodge #57 and preserved in their library at the Masonic Hall. Viewed by special permission from the Lodge Master, 2012.

Carroll County Registry of Deeds and Probate Court

Publications

Bickford, Gail Holmgren. "A Bell for Freedom". Freedom Press, 1994.
Bickford, Gail Holmgren. "Here is Freedom". Freedom Press, 1975.
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Chapman, Dorothy Peck. 125 Years of Freedom. Freedom Old Home Week Committee, 1957.
Davidson, Rev. George, Jr. A Village Pastor Looks Back. Freedom Press Associates, 1993.
Foord, Carol and Jones, Sheila. Ossipee Riverlands. Acadia Press, Charleston, S.C., 2000.
Fracker, Angie Harmon. History of the Freedom Club of Boston, 1902-52. Freedom, 1953.
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Merrill, Georgia Drew. History of Carroll County. W.A. Ferguson & Co., Boston, 1889.

Oral Histories: conversations recorded and stored at Freedom Library and Freedom Historical Society with Linnie Watson Giles(3/21/2003), Velma Watson Hormell(6/8/2004), Mabel Beckwith Davis, (3/21/1989, 2003). Untaped conversations with Alan Fall, (son of Velma Watson Fall Hormell), Surveyor, member of Carroll Lodge #57, (2012-Feb. 2013).

Photograph Log

Photo 1. Page 1. South facing front of Masonic Hall. File P6080107 Taken by Alan Fall, Chair of Freedom Heritage Commission, and retained in electronic files of Commission. June 2012

Photo 2. Page 4. South facing, Town Offices (FRE0004) and Bandstand (FRE0009), both on State Register, to the east March 2012, copy of original taken by Curator (at Freedom Historical Society).

Photo 3. Page 4. South facing, World War I Memorial, lower on Schoolhouse Hill. March 2012, copy of original taken by Curator (at Freedom Historical Society).

Photo 4. Page. 5. Panoramic view taken from top of Cushing Corner Road (Andrews Hill), west and slightly south of Schoolhouse Hill. Church spire visible on 1830 Church/Masonic Hall, 1895 Schoolhouse/Town Office Building to east of church/Masonic Hall,bandstand in front of Town Office Building and slightly to the south and west. Circa 1902. Copy taken from original in Freedom Historical Society. View looks to the east and slightly north of the buildings and surrounding farmlands.

Photo 5. Page 5. Postcard view of top of Schoolhouse Hill with bandstand at lower left, 1830 Church behind bandstand, 1895 Schoolhouse to the right. Original card photo taken from the southeast of Schoolhouse Hill crest, looking north and west. Circa 1902. Postcard collection, 4692, published by Geo. W. Longee, Freedom, N.H. Several copies at Freedom Historical Society.

Photo 6. Page 6. South facing front roof-line of Masonic Hall seen at top of Schoolhouse Hill above the World War I Monument at base of hill. Taken by Curator of Freedom Historical Society. Original retained by Freedom Historical Society. March 2012.

Photo 7. Page 6. East side. File P6080106. Taken by Alan Fall, retained in electronic files of Freedom Heritage Commission. June 2012.

Photo 8. Page 7. West side with windows, corner to north side with fire escape. File P6080109 Taken by Alan Fall, retained in electronic files of Heritage Commission. June 2012.

Photo 9. Page 7. West side, full view with emergency door where window once was. File P6080108. Taken by Alan Fall, retained in electronic files of Heritage Commission. June 2012.

Photo 10. Page 8. Interior of Dining Room/Reception facility on first floor, set up for Lodge banquet. File P6080111. Taken from just inside anteroom, looking to back north wall, windows on west. Taken by Alan Fall, retained in electronic files of Heritage Commission. June 2012.

Photo 11. Page 8. Interior of Lodge Room, second floor, looking towards back north wall, small window with cover to the left rear, emergency exit door to fire escape to the right. File P6080115. Taken by Alan Fall, retained in electronic files of Heritage Commission. June 2012.

PHOTO LOG:

I, the undersigned, confirm that the photos in this inventory form have not been digitally manipulated and that they comform to the standards set forth in the NHDHR Photo Policy. These photos were printed at the following commercial printer OR were printed using the following printer, ink, and paper: HP OFFICEJET 4500 G510g-m; black ink 901 XL, STAPLES PHOTO COPY PAPER
The negatives or digital files are housed at/with: FREEDOM HERITAGE COMMISSION / FREEDOM HISTORICAL SOCIETY.

SIGNED:

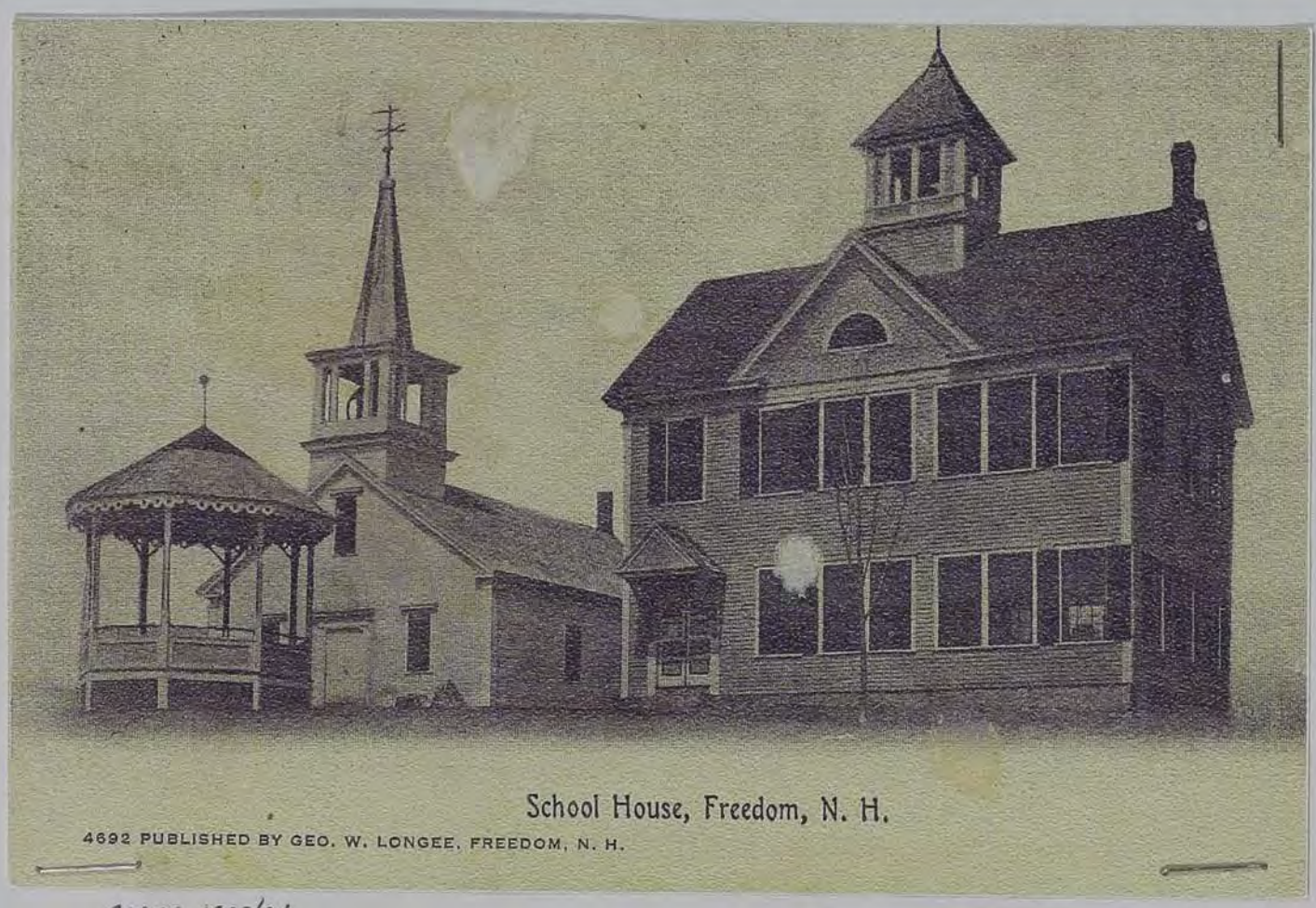
Date photos taken: MARCH 2012

Photo # _____ Description: 1830 CHURCH/MASONIC HALL, BANDSTAND, NEW SCHOOL/TOWN OFFICES
Roll and Frame # OR Digital file name: Direction: FACING SOUTH

Photo # _____ Description: WWI VETERANS' MONUMENT
Roll and Frame # OR Digital file name: Direction: FACING SOUTH

CIRCA 1900/01

Schoolhouse HILL BUILDINGS, 1830 CHURCH, NEW SCHOOL, ANTIQUE JR HOUSE ALL FACE SOUTH.



CIRCA 1900/01

Date photos taken: March 2012

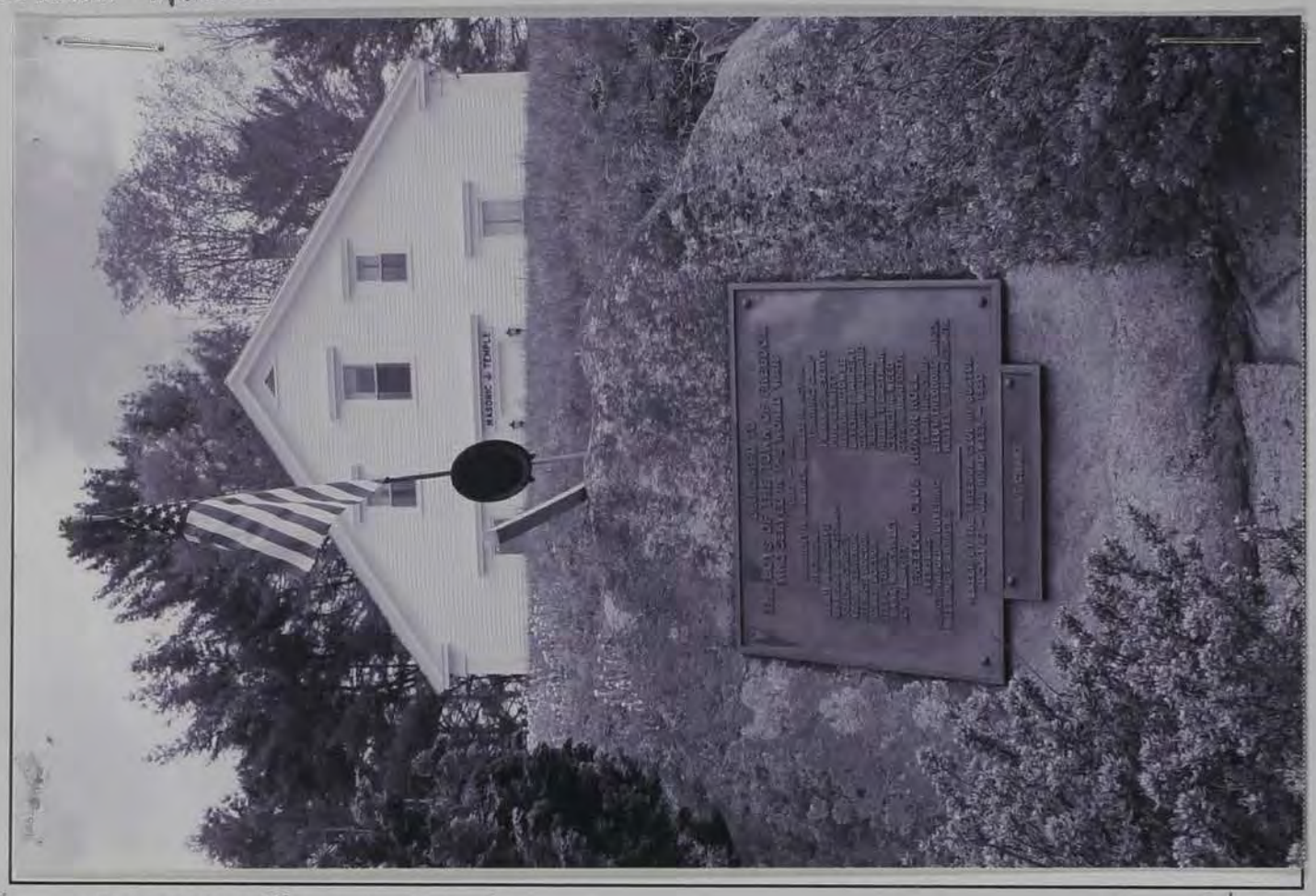


Photo # 6 Description: Front Facade
Roll and Frame # OR Digital file name: P6080106 Direction: South 3/12

Photo # 7 Description: East side
Roll and Frame # OR Digital file name: P6080106 Direction: East 6/12

~~pg 3 of 23~~
pg 15 of 16
FRE0006

Date photos taken: June 2012

Photo # 8 Description: West side w/ windows, corner to Northside w/ Fire escape
Roll and Frame # OR Digital file name: P6080109 Direction: west

Photo # 9 Description: West side, emergency door where window was
Roll and Frame # OR Digital file name: P6080108 Direction: west

~~Pg 4 of 23~~
Pg 16 of 16
FRE0006

Date photos taken: June 2012

Photo # 10 Description: Dining room interior, first floor
Roll and Frame # OR Digital file name: P6080111 Direction: windows west, back wall north

Photo # 11 Description: Interior lodge Room, 2nd floor
Roll and Frame # OR Digital file name: P6080115 Direction: back wall, north

APPENDIX E – Previous Reports

1989 Survey

NHSHRS INTENSIVE SURVEY FORM - 08/87

date 1989

IDENTIFICATION

community Freedom

address Maple Street, Freedom

county Carroll

property name Masonic Temple

survey no. FRE-C-2 FRE0002

owner name/address Carroll Lodge No. 57 of Freedom, Free and Accepted Masonry, c/o Master Hugh Prebe, Freedom, N.H.

tax map/parcel no. map 52, lot 18

USGS quad Freedom

UTM zone 19 E 336340 N 4852950

photographer facing: NE date: 3/14/89
description of view: Southwest facade.

PROGRAM STATUS

NRHP status (code)/date

NHL date HABS no. HAER no.

tax case no.

compliance case no.

CLG no.

archeological site no.

A & D grant ___yes ___no date

ownership (code) private

lead agency (code)

SURVEY

photo codes map code

survey map Church Survey Maps

survey name Southern Carroll County Churches

survey evaluation (code) unknown

surveyor name David Ruell

name of potential district/grouping

prior survey representation ___yes x no

level of prior survey/date

local historic designation

DESCRIPTION

date of construction (source)
1827 (The Freedom Bell)

dates of alterations/additions (source)
1850, late 1920's, late 1960's, late 1970's, c.1985, late 1980's (Freedom Bell, Giles, Jones)

designer type (code)
unknown

designer name (source)
unknown

style or form (code)
vernacular/ Greek Revival

building, structure, object, site type (code)
meeting hall

structural system (code) wooden frame

plan configuration (code) rectangular

entry location (code) center, gable end

dimensions ± 57 l 41 w

building materials (code)

wall clapboard foundation granite

wall vinyl siding roof corrugated metal

wall chimney brick

other

no. of stories 1½

roof shape (code) gable

survey no.: FRE-C-2
address: Maple Street, Freedom
property name: Masonic Temple

JAN. 12 1988

chimney placement (code) irregular
window type(s) (code)/Pane configuration double hung / 2/2
appendages (code)
ornamentation (code) pilasters, box cornice, cornices, dentils, moulded lintels, flowerboxes

notable interior

condition (code) good
building integrity The church has lost its belfry tower and has seen some other exterior changes.
site integrity Probably unchanged.

moved ___yes __x no ___unknown ____date
context (code) residential, public building
related buildings/landscape features (code)

HISTORY

historic name(s) (source) Union Church, Baptist Church (The Freedom Bell, Bickford
original functional type (code) church
subsequent fuctional type (code) lodge/meeting hall

associated individual(s) (dates) (source)

associated event(s) (dates) (source)

historical background (source) Built as a church in 1827, and used for religious services until the 1890's. The local Masonic lodge since 1926. (Deed, The Freedom Bell, Bickford)

BIBLIOGRAPHY see continuation sheet

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"The Freedom Bell,The Facts" (copy of newspaper clipping, Freedom Historical Society, Freedom, N.H.)
postcards, collection of Freedom Historical Society, Freedom, N.H.
Gail H. Bickford, Here is Freedom (North Conway: 1975)
Dorothy P. Chapman, One Hundred Twenty-Five Years of Freedom, 1832-1957 (Freedom: 1957)
Georgia D. Merrill, ed. History of Carroll County, N.H. (1889, reprinted 1971)
Carroll County Independent (Ossipee) Sept. 11, 1931

sketch map (indicate north)

study units (code)

survey no.: FRE-C-2
address: Maple Street, Freedom
property name: Masonic Temple

PROPERTY DESCRIPTION

The Masonic Temple in Freedom is a vernacular former church, showing the strong influence of the Greek Revival, that stands on the northeast side of Maple Street in Freedom village. The one and a half story, gable roofed, wooden building is set on a cut granite block foundation. The three public facades are clapboarded and trimmed by wide corner pilasters with moulded capitals. The rear facade (the northeast gable end) is now sheathed by vinyl clapboarding with narrow vinyl corner and eaves trim. A box cornice with mouldings, frieze, and returns tops the three public facades. A brick chimney with concrete cap breaks the southeast slope of the corrugated metal roof.

The main facade is the three bay wide southwest gable end facing the street. In the central bay is the main entry, double four panel doors with (cont.)

STATEMENT OF ARCHITECTURAL/ENGINEERING/LANDSCAPE SIGNIFICANCE

Becuase of extensive changes, notably the loss of the belfry tower, the Masonic Temple in Freedom is probably no longer eligible for the National Register for its architectural significance. However, further study of the building, including a review of the quality and integrity of the interior, is needed before a final determination of its eligibility can be made.

The building was erected in 1827 as a union church owned by its pew holders. The pews were sold to Free Will Baptists, Universalists, and Calvinist Baptists, with the Free Will Baptists being the largest group of pewowners. By 1850, the building was in need of repair. In March of that year, Elias Towle, then a Baptist, offered a bell for the church, if a belfry was built and the church repaired. The belfry was constructed and the bell was hung in June of 1850. The square belfry tower, seen in old views, had a short closed base, an open belfry, and a tall spire. (In 1867, Towle, who had become a member of the local Christian church and questioned whether the proper repairs had been made to the old church according to the agreement on the bell, decided to move the bell. It was removed on the night of July 5 from the belfry of the old church and placed in the (cont.)

STATEMENT OF HISTORICAL SIGNIFICANCE

The Masonic Temple has presumably been too altered to retain its historical integrity for its period of use as a church and would therefore by ineligible for the National Register for any historical significance associated with its early years as a church. The building might have historical significance for its later career as a Masonic lodge, as the meeting place of an important local organization. However, a study of that aspect of the building's history was beyond the scope of this survey, limited as it was to religious architecture. Further study will be needed to determine the building's eligibility for the National Register for its historical significance.

survey no.: FRE-C-2
address: Maple Street, Freedom
property name: Masonic Temple

JAN. 2 1990

CONTINUATION SHEET (note heading of each section to be continued)

Description tall moulded panels. The entry is framed by simple flanking pilasters and a pronounced cornice with mouldings, dentils , and frieze. A wide granite landing with granite steps on all three sides serves the entry. A electric light is mounted on the cornice, while a sign with the Masonic symbol and the title "MASONIC TEMPLE" in raised letters is mounted on its frieze. A smaller painted sign identifying the lodge is mounted on the east pilaster. The windows of the main facade each have 2/2 sash, louvred shutters, and a pronounced cornice with mouldings and frieze. The two windows in the two side bays of the first story are also graced by plain flowerboxes on simple wooden brackets. The central window of the three gable windows is wider and taller than its two companions. In the apex of the gable is found a small triangular louver. The windows of the four bay long lateral facades, four southeastern windows and three northwestern windows, all have 2/2 sash and moulded lintels. The northwest facade also has, in its south bay, a modern six panel door with simply moulded frame. This side door opens onto a board floored ramp, with simple wooden railings, which is set on wooden posts. The ramp descends from the door southerly along the northwest facade, then turns the building's west corner, and descends easterly along the southwest gable end to the ground near the main entry. The only opening in the rear (northeast) gable end is a plain framed, modern six panel door in the second story, which opens onto a metal fire escape. The fire escape has grate steps, metal railings with diagonal, vertical and horizontal struts, and an upper grate landing, supported by metal wall braces.

Architectural Significance belfry of the new Christian church that Towle and others were then building. A long controversy then followed. But Towle's ownership of the bell was upheld in the courts, incldung the N.H. Supreme Court. And the bell remained in the Christian church. The Baptists soon purchased a new bell for their empty belfry.) By the end of the 19th century, apparently in the 1890's, church services ceased to be held in the building. The remaining members of the Baptist church died off. And, in July 1926, the church building was sold at a court ordered auction to the local Masonic lodge. The Masons altered the building as their meeting hall, apparently in the late 1920's, removing the belfry and inserting a second story into the church auditorium. This second story apparently required the addition of two more windows in the front gable, as only the central window appears in a turn-of-the century postcard view. The modernization of the window sash and the metal roof were probably other early Masonic changes. The second story door and fire escape on the rear gable end probably date from the late 1960's. The late 1970's saw the addition of flowerboxes on the front windows. About 1985, the rear gable end was covered by vinyl siding. And, in the late 1980's, a side door, served by a wheelchair ramp, was installed on the northwest side facade.

These later changes, particularly the removal of the belfry tower, have compromised the architectural integrity of the building. And it may well have lost its architectural integrity and therefore its eligibility for the National Register for its architectural significance as a church. However, a more complete study of the building, including an assessment of the quality and integrity of the interior, should be made before a final judgement is rendered on its eligibility.

survey no.: FRE-C-2
address: Maple Street, Freedom
property name: Masonic Temple

CONTINUATION SHEET (note heading of each section to be continued)

JAN. 12 1990

Bibliography The North Conway Reporter July 22, 1926
Granite State News (Wolfeboro) July 24, 1926

Photographer facing: North Date: June 5, 1989
Description: Southwest and southeast facades.

FRE-C-2   Masonic Temple, Freedom

postcards, collection of Freedom Historical Society

Don't write it.
FREEDOM VILLAGE FROM TOWLE'S LEDGE.
[R. G. Foster, Publisher, Freedom, N. H.]

I do not think you had better write that letter you spoke of

5 Railroad Street, Newmarket, NH 03857 • Ph 603-659-4979 • www.horizonsengineering.com

September 1, 2022

Town of Freedom
PO Box 277
Freedom, NH 03836

RE: Structural review of Masonic Temple building

Dear Mr. Williams;

Per your request, Horizons Engineering (HEI) visited the site at 33 Old Portland Rd. on July 11, 2022. The purpose of the site visit was to investigate the structural integrity of the existing historic building and determine if the original structural report is valid or if other options for the repair of the building exist.

Based on the observations in the field, the measurements we gathered, our initial analysis and our experience with similarly constructed buildings, we generally agree with the current report. I agree that the existing granite foundation and the first floor are in remarkably good shape given the age and conditions. We were not able to determine the size of the joists, however the visual inspection of the small crawl space revealed existing supports and the granite block foundation were not displaced or sagging. Walking on the first floor we did not experience significant movement. I was able to determine the size of the second-floor framing members and the dimensions of the of the tension rods and bridges supporting the second-floor beams. Our analysis of the second floor shows that the joists and beams even, with the tension rods, are not adequate to meeting todays code for assembly loading. The floor joists work for light loading, but the beams and rod system does not work for even light loading in accordance with the current building code. As for the structural integrity of the roof, even using the slippery surface for the metal roofing, the structural integrity is not adequate to meet todays code. Based on discussions at the site and the evidence of the damage to the railing on the accessible ramp at the west side of the building, I do believe the snow slides off the roof even with the current condition of the metal roof. I did witness the splaying of the easterly wall at the roof eve, but I did not witness a large or very noticeable sag in the roof or roof peak. Upon further investigation of the roof framing, I did witness a broken and displaced rafter and beam connection at the eve level directly coincident with the splayed location of the west wall. I do not believe that the roof is experiencing significant overloading and displacement as stated in the original report. However, I agree that it is not structurally adequate to meet today's code, but I believe the broken connection of the rafter/beam at the bent in this specific location is exacerbating the splaying and sagging of the roof and wall.

In conclusion, I would not recommend the use of the building for assembly purposes without significant structural improvements. Unfortunately, I believe that the significant structural improvements required to bring the floor and roof systems up to code would be cost prohibitive given the existing conditions. Especially since this would also lead to significant foundation improvements to support the framing improvements, even though the foundation is in remarkably good shape given the age. It would not be prudent to complete significant structural framing improvements without constructing a new foundation to provide support.

I too believe that the building can be saved, but it is not a small undertaking. This would require the development of a design for code compliance issues and structural improvements that are significant. I think this must be weighed against the construction of a new building to accommodate the intended uses for each building.

If you require additional information or have additional questions, please contact HEI for assistance at 603-659-4979.

Sincerely,

Michael J. Sievert, PE
VP Structural Engineering

2022 BERGERON SYNOPSIS

BERGERON
TECHNICAL SERVICES LLC
P.O. Box 241
North Conway, New Hampshire 03860

Town Office Advisory Committee
Anne B. Cunningham, Committee Chair
Town of Freedom
P.O. Box 227
Freedom, NH 03836

May 12th, 2022

Reference: Masonic Temple

Dear Anne,

Please express our thanks to your committee for taking time to meet with me and Kate last week. From our perspective we felt the meeting was quite productive as both sides were able to bring the other up to speed on their thoughts and findings. This letter is in response to your request to quickly summarize our thoughts about the Masonic Temple.

As we talked about when we met, we inspected the Temple from bottom to top. We started by thoroughly investigating the crawl area beneath the building and completed our efforts up in the attic area.

Beginning beneath the building, we found the floor structure and its supports to be in relatively good condition, particularly when one considers the age of the building. We did note some powder post beetle activity and some vertical supports that need to be improved but nothing that cannot be repaired. Interestingly the crawl area is very dry and appears to have always been that way. In a few concentrated areas beneath the building, we noted piles of wood shavings that may remain from when the building was built. As someone who enjoys working with hand tools, Shawn couldn't help but to think that he may have found the remnants of mortise and tenon joints having been cut by hand tools many years before. It is hard to imagine these shavings would still be as intact as what we found but we have no other explanation! As mentioned, the lowermost floor and its supports are adequate and can be reasonably improved.

Above the lowermost floor, the building's structural abilities deteriorate quickly.

Based on some historical research and conversation with long-term Freedom residents, we learned the original building had been a church and was primarily a single-story of post and beam construction. For the original structure, structural bents were placed perpendicular to the long axis of the building, with the bents being the component that supported the walls and roof. Recall that this had originally been a single-story building – other than the area immediately inside the main (south) entry. Beyond the south entry, to the north, the majority of the building had the main (slightly above grade level) floor, with what was likely a wonderful, vaulted ceiling up to the underside of the gable roof. At the eaves, the transition from the vertical outside walls to the sloped gable roof was transitioned in graceful plaster arches. In its life as a church, there were two components that visually interrupted the floor to ceiling exposure. The first would have been horizontal "collar ties" running laterally from east to west at each structural bent. The second was a "king post" which was a vertical tension member running from the underside of the ridge beam, downward to the center of each collar tie. The king post held the middle of the collar tie from sagging downward as in order for the collar ties to sag, each would have to have pulled the king post, and therefore the roofs ridge beam, downward. The combination of the collar ties and king posts were important as they performed the important function of laterally connecting the eave walls together, holding the two long-axis walls straight and plumb, and also preventing the roof from dropping downward. Unfortunately, when the upper floor was constructed, the collar ties and king posts were likely "in

the way" as their orientation across the narrow dimension of the building and hanging downward from the ridge, probably placed a "head bumper" at each bent. Our belief is that the upper floor was built and then, the collar ties and king posts were removed. With these important structural members removed, there began a slow but likely consistent structural deterioration where the east and west wall splayed outward, and the roof dropped downward. Before the collar ties were removed however, the tradesmen knew that some component was needed to tie the long axis exterior walls together and they attempted to accomplish this task and another, by installing the vertical columns, the lateral support beams (concealed within the floor/ceiling assembly) and lateral tension rods and bridges which can be observed in the main level meeting room. These components were to accomplish two tasks; the first to offset the outward forces on the long axis walls/prevent the roof from dropping downward but also, the beams that are concealed within the ceiling above the tension rods are supporting the second floor's floor joists. These joists represent a more common (by today's standards) "stick built" type of construction as compared to the original post and beam. The floor joists beneath and supporting the Masonic Temple floor are oriented north to south, running parallel to the long axis of the building. These joists are supported at their bearing ends by the concealed beams. Unfortunately, the vertical columns, tension rod ties and concealed beams are either insufficient to offset the structural loads that are applied to them (upper floor live and dead load in addition to splaying forces from roof loads) or their placement is too low which has allowed downward and outward movement despite their presence. The splaying of the long axis (eave) walls and the downward movement of the roof can best be observed from the exterior of the building. The former by viewing down the length of the roof eave from ground level and the latter by viewing up the roof slope from below the eave. In addition to the flawed second-floor construction, various roof related building components from the uppermost roof supporting beam along the east wall to the supportive purlins and roof sheathing have deteriorated with only some having been improved over time. At the east side of the building, the uppermost eave wall support beam has been somewhat repaired and the roofs structural members and sheathing somewhat repaired and replaced. At the west roof slope, the roof sheathing and structural components appear to be original.

What to do from here?

First, please know that Bergeron Technical enjoys the building and its history and we have a long history of helping our clients in saving old structures. Some examples are the Madison Town Hall, the Majestic Theater, the Ossipee Freight House, and the Wolfeboro Freight House. With those examples presented, we have to say we are concerned for the future of this building. The main floor level is structurally adequate for reasonable use however "reasonable" needs to be carefully defined. At the upper floor, from a structural perspective, we are not comfortable with anything more than very light occupancy and any occupancy should be relatively static. A large dance group and observers, for example could be disastrous. Also, the time of year and accumulation of snow and ice on the roof has to be considered. Accumulated snow load will likely be the greatest load the building is normally exposed to and with the moderately rusted and mechanically fastened steel roofing, snow accumulations will likely remain in place longer that what many would expect. Additionally, the building is not heated during the winter which also leads to accumulated snow remaining on the roof. The other structural (roof) condition that has to be considered is unbalanced loads, the transfer of energy laterally across the roof when one side of the roof sheds accumulated snow yet the snow on the opposite side remains.

In addition to structural concerns which are building code items, we also must mention life safety concerns which are fire code related. At the main (grade floor) level there are two exits, the main entry at the south gable and a single door at the southwest corner of the main meeting room. Because these exits are very close to one another it is possible that should one become unavailable for example because of a fire emergency, the other

could be unavailable too. At the Masonic Temple level, should the main (south) stairway become unavailable, upper floor occupants would have to use the steel fire escape that is fastened to the north gable end wall. We have little faith that this egress element would remain structurally sound should a few occupants be moving quickly downward. Additionally, in the event of a loss of electrical power, both building levels would be thrown into total darkness as there are no emergency lights.
Let's consider the ultimate questions as we know they are going to be asked:

1. Can this building be saved?
   - Absolutely, Bergeron Technical can help our clients save almost any building.
2. From the structural perspective, which is the place to begin, what would saving this building entail?
   - First, you would have to identify the use of the building and its configuration. Most importantly we need to know if the people of Freedom want to continue with having the two building levels, which we believe is required however, this should be verified.
   - The second step would require a detailed structural documentation of all building components and a determination of which ones can be saved, which ones need to be improved and which ones will need to be replaced. This will require an in depth and somewhat destructive structural analysis and detailing of the building's structural components which would lead to the development of a structural improvement plan. This plan would be based on the requirements of the International Existing Building Code, not the International Building Code as this would be the rehabilitation of an existing structure.
3. Is it "worth it" to save this building?
   - Only the people of Freedom can answer this question. The more in-depth structural review and plan will cost at least twenty-thousand dollars and perhaps more. When that's complete, you would only have the plan to make the necessary improvements.
   - Implementation of the structural improvement plan, even with us not knowing what that will entail at this time, could cost a lot of money. With approximately 2,200 square feet of building to structurally improve, at $75.00 per square foot for improvements (which may be low in this current construction-cost environment) the cost would be one hundred sixty-five thousand dollars.
4. Then, with the structural improvements having been completed, the building will still need improvements to its electrical, plumbing and heating systems along with improvements to handicap accessibility and means of egress.

Thank you for asking Bergeron Technical to assist in this important study. Please know that we want to help the people of Freedom make informed decisions so don't hesitate to ask questions. We will do the best we can to answer them accurately.

Sincerely,
Bergeron Technical Services, LLC

Shawn G. Bergeron, Sr.
Manager/Owner

ICC Certified Building Inspector
INTERNATIONAL CODE COUNCIL
Shawn G. Bergeron

Katharine M. Richardson
Project Manager/Owner

Certified Fire Protection Specialist
Katharine
NFPA
Richardson
#4223

2022 BERGERON FULL REPORT

Town of Freedom

Town Office Feasibility Study

Masonic Temple & Town Office

29 & 33 Old Portland Road

Freedom, New Hampshire

Prepared by

BERGERON
TECHNICAL SERVICES LLC

BERGERON
TECHNICAL SERVICES LLC
P.O. Box 241
North Conway, New Hampshire 03860

23 August 2022

Freedom Town Office Advisory Committee
P.O. Box 227
Freedom, NH 03836

Town of Freedom Town Office Feasibility Study

Scoping and Background

The following report, information and the referenced supplemental reports, plans and attachments are included as part of the requested Feasibility Report of the Town of Freedom Town Office Building and Masonic Temple. The purpose and intent of this project was to provide information on the existing buildings and options for the renovation and re-use of one or both buildings. In considering options we looked towards optimizing the use of space, accessibility for all patrons and an overall more efficient, modern Town Office.

To that end and with direction from the Freedom Town Office Advisory Committee, Bergeron Technical Services has performed building inspections, photo documentation, and measurements of the two subject buildings. With the information that was collected on site we were able to develop this report, building and fire code analyses, existing conditions floor plans and elevations, and three schematic design options. This information can be used to inform of the feasibility for the renovation and continued use of the Town Office building and the potential future use of the Masonic Temple as an annex for the Town Offices.

For a reference to the specific directives issued to Bergeron Technical Services for this study a copy of the Freedom Advisory Committee's letter to Bergeron Technical Services outlining the description of work for the Town Office Feasibility Study, dated February 2, 2021, is included with this report.

Existing Buildings - Condition and Code Compliance

Town Office Building

Structural

Foundation

The foundation of the original schoolhouse section of the Town Office building consists of granite slabs around the building's perimeter. The slabs were placed standing on edge, with the long axis horizontal and parallel to the wall that is being supported. The foundation is only one slab in depth, with the slabs placed atop random supportive materials. At the interior of the foundation there is an array of stacked granite and stone piers which support the main beams of the first-floor system. A shallow crawl area under the main floor of the building can be accessed from within the existing furnace pit located in the rear addition of the building. The foundation of the building's rear addition is of cast-in-place concrete frost walls with slab-on-grade cast-in-place concrete floors.

The condition of the foundation is fair. The stacked granite slabs around the perimeter have many areas where large gaps have developed between the slabs where mortar has deteriorated, and seasonal movement has allowed the stacked granite and stone piers to move. This movement is normal on shallow

foundations, heaving in some areas and settling in others. In some cases, settling is such that the foundation is no longer properly supporting the floor beams. The exposed earth floor in the crawl space appears to remain dry, as no signs of regular excessive moisture was noted on the ground or in the exposed wood members of the first-floor framing. The crawl space is quite shallow in some locations with some areas having only one to two inches of airspace between the exposed ground and floor framing, while other areas have close to two feet of height between the soil and the wood framing above.

Frame

Areas where the building framing were visible provided insight into how the Town Office building was originally constructed. These areas include the crawl space and the attic. The crawl space provided a view of the first-floor framing. The first floor has three main 8x10 wood beams running the short dimension of the building (north to south), with 2x10 wood floor joists running the long dimension of the building (east to west). The floor joists are spaced approximately 18 inches on-center and half - mortised into the 8 x 10 structural beams. Our time in the attic provided a view of the wall framing above the second-floor ceiling. Exterior walls are framed of 2x4 wood studs at approximately 2 feet center to center spacing.

The original floor-ceiling assembly that is enclosed above the existing acoustic tile drop ceiling of the first floor was found to have the original finish ceiling materials still in place, preventing observation of the encapsulated floor/ceiling framing. At the rear addition, there are finish materials on the walls and ceiling/roof framing, prohibiting viewing or inspection of the framing materials in these areas.

Roof

The roof framing and configuration of the original schoolhouse portion of the Town Office building was inspected from the attic space, which is accessed from a hatch in the second-floor ceiling above the stair landing. The roof framing is of full sawn 2x6 rafters spaced approximately two feet on-center. The roof sheathing applied to the rafters is of ¾ inch native lumber boards, possibly hemlock, of varying widths, between four inches to 8 inches. It appears that more recently the wood boards have been overlaid with (modern) OSB sheathing, likely as an improved base for the installation of the existing roof shingles.

Most of the original structure's roof rafters have 2x6 collar ties, located approximately five feet, ten inches below the roof ridge. Collar ties prevent the gable roof configuration from splaying outward, with the ties on this building being suspended with a 1x6 board from the center of the ridge. Additionally, there are two vertical tension members (also wood boards) connecting the collar ties and rafters to the ceiling joists below. These tension members are common in older buildings, extending down to the upper level ceiling joists, somewhat hanging the upper floor's ceiling from the roof. There are approximately six roof rafters, located at the west gable end of the building that do not have the suspension boards between the collar ties and ceiling joists, this area being above the existing lobby, stairs and tax collector office below. The roof appears in generally good condition, through signs of charring from a previous fire were noted. Many original rafters had been cut and replaced with newer rafters and areas of the roof sheathing have been replaced.

Finishes

Exterior

The building is currently sided with vinyl clapboard siding, which has been applied over existing painted wood clapboards. The front gable dormer, facing the road is sided with painted wood shingles. The exterior trim throughout the structures is painted wood. All roofs, including the vestibule and rear addition roofs are finished with asphalt shingles.

Interior

The interior finishes throughout the building are a mix of older, possibly original finishes, such as the painted wood beadboard wall finish throughout the second story, and contemporary finishes such as the gypsum wall board finish throughout most of the first story. Flooring is generally finished with commercial grade, low nap carpeting. The interior stairs are finished with rubber treads. The ceiling finishes vary throughout, the first-floor ceilings are finished with acoustic tile drop ceiling throughout the areas of the original schoolhouse structure., The rear addition and second floor ceilings have gypsum finishes. A small section of the ceiling within the Tax Collector's office on the second floor is finished with interlocking ceiling tiles, sometimes referred to as Celotex tiles. Finishes range if condition from good to poor.

Windows and Doors

With the exception of the windows installed within the main entry vestibule addition on the roadside of the building, the windows throughout the building are single pane, true divided lite, wood framed windows. Due to age, condition, and lack of energy conservation the windows throughout the building should be replaced with modern energy efficient windows. The building's exterior doors on the first floor are more modern insulted exterior doors, while the exterior door leading to the fire escape on the second floor is an uninsulated solid-core wood door. The doors throughout the building's interior vary in age, style, and condition.

Hazardous Materials

The building was surveyed and tested for hazardous materials by Desmarais Environmental of Barrington, NH. Materials tested for were lead paint, asbestos, and polychlorinated biphenyls (PCBs). All samples tested for asbestos and PCBs were reported as no content or below reportable limits. Lead was detected and reported to be contained in the windows, exterior siding, trim and the horizontal wainscotting on the second floor of the building. Any work that affects these areas and materials will need to be done in a lead-safe manner and any materials disposed of will need to be disposed of as hazardous lead-containing materials in accordance with local and federal laws. For more information on the survey, reports and these hazardous materials, please see the "Asbestos Pb & PCB Survey Report for 33 Old Portland Road, Freedom, NH", dated October 2021 by Desmarais Environmental and included as an attachment to this report.

Building Systems

Mechanical

The building's heat is provided by an oil-fired furnace located within the rear addition on the north side of the building. The furnace is a Thermo-Pride brand and has an input rating of 185,000 Btu. The furnace is supplied oil from an underground oil tank located outside the building to the north of the rear addition.

The furnace heats the building by forced hot air which is distributed throughout the building via metallic and flexible ducts, some of which is exposed and some of which is concealed in areas such as the crawl space and above the drop ceilings. The building is not equipped with central air conditioning and is cooled in the warmer months with in-window A/C units. The building is not provided with mechanical ventilation.

Hot water is provided to the restroom lavatory by a somewhat new Bradford White brand 40-gallon electric water heater which is located in the storage room adjacent to the restroom.

Electrical

The following deficiencies with the building's electrical system were noted:

- The Town Office building electrical system begins with an overhead electrical service to an exterior meter located at the southwest corner of the building, near the main entrance. From the meter, service conductors run to the 100-amp, 20 breaker-space main distribution electrical panel, located within a cabinet at the southwest corner of the lobby, just inside the main entrance to the building. The capacity of the electrical service is likely too small for the existing building both from the perspective of available breaker space and available system ampacity. All available breaker spaces are currently in use.
- There is an insufficient number of outlet/receptacles throughout the building so to allow for powering all equipment and appliances power strips, extension cords and multi adapters have been implemented.
- Branch circuits throughout the building are generally run as nonmetallic (Romex) type cable. In many areas the installations have not been done in compliance with the NEC as the cables are not properly supported and fastened to the structure. Areas where unsupported or poorly supported cabling was noted include above drop ceilings, within the crawl space and in the attic.
- Improperly terminated cables, improperly terminated light fixtures, uncovered and unsupported electric junction boxes were also noted throughout the building during our inspection.

Plumbing

The building is provided domestic water from the Freedom Village water system with the service and water meter located adjacent to the restroom in the main lobby on the first floor of the building. There is currently one restroom in the building, located off the main lobby at the southwest corner of the rear addition. Also noted during the inspection was an abandoned lavatory (sink) in the storage space on the second story.

The Town Office building is served by an onsite subsurface sewage disposal system (septic system). The septic system was inspected by Seth Turner, a State of NH License Septic Evaluator. No major concerns or deficiencies were noted in the report, however, it is important to note that the day before the inspection the septic tank had been pumped, which limits the evaluator's ability to determine the condition of the system as a whole, as they cannot view how well the system is percolating, or how efficiently the system leaches. The inspection also noted that there are trees and shrubs growing on and near the leach field. This vegetation should be removed and a root killing agent applied as the roots can enter and clog the leach field piping, prohibiting the leach field from properly receiving and treating effluent and causing the system to back up and fail. A copy of the Turner septic report is included as part of this report.

Energy Conservation and Efficiency

During our interviews with staff members that regularly work in the building, an inability to reliably regulate temperatures within the building was a common comment. Given the age of the structure and the presence of older, possibly original wall finishes in many areas of the building, the likelihood of significant or properly performing insulation having been installed in these areas is low. Insulation was observed in a few areas that do not have interior finishes. Areas where insulation was noted include spray foam insulation, approximately 6 inches in thickness within the joist bays of the first floor, exposed to the crawlspace. Blown-in cellulose insulation was observed in the ceiling joist bays above the second story ceiling, exposed to the attic area. Insulation within the exterior walls was not noted or viewable, nor was insulation noted or viewable within any walls or rafter bays within the rear addition. The windows throughout the building are quite old and were not constructed with energy conservation in mind. The windows are wood framed, true divided lite, single pane windows, and are quite large and account for a large portion of the exterior wall areas, specifically on the south eave wall. These windows provide poor insulation value with limited ability to keep the heat within the building in the colder months and contribute to heating the building in the warmer months through solar heat gain. Exterior storm windows have been added in what is assumed to be an attempt to provide some thermal value to the windows.

Fire and Life Safety

<u>Means of Egress</u>

The existing Town Office building has three exits on the first-floor level and one exit, and one exit access on the second story. The main entrance/exit is the only legitimate exit from the building. The exit door from the office administrator's office on the first floor is located within a room that is subject to locking and the door is not immediately useable. The stairs leading to grade at the exterior of this door are also rotted and have no exterior landing or legitimate handrails. The third exit door at the first-floor level is from the storage room at the north side of the rear addition. This exit door is not a legitimate exit from any other room or location within the building as means of egress are not permitted to pass through mechanical or storage rooms.

The exit from the second story is located on the easterly gable wall within the Selectmen's office, a wood door leading to an exterior steel fire escape stair. When we first went to open this door it was quite difficult to open from the interior and given the age and condition of the fire escape, we do not have confidence that the fire escape would be structurally sound enough to safely accommodate multiple people exiting the building at once. Additionally, exterior exit stairs are required to be (fire) protected from the interior of the building, and there are multiple unprotected window openings immediately adjacent to the fire escape stair. Should a window in the area of the fire escape become compromised, the fire escape stair would likely become unusable. The exit access from the second floor is by traveling down the existing interior stair, through the lobby and out the main entrance/exit of the building. This is recognized by the building and fire codes as an exit access and not an exit as the stairs are not fully enclosed and separated from the remainder of the building at both building levels and travel through the first story is required prior to reaching the exit itself. It was also noted that there is a metal duct serving the building's heating system installed within the stair's traveled way, along the interior wall. This duct has been wrapped in duct insulation, perhaps to prevent occupants from direct contact with the metal of the duct, however the duct projects into the required stair egress width, which is not permitted by the Life Safety Code.

Protection

The building is equipped throughout with a fire detection and alarm system. The fire alarm system is a relatively new addition to the building as it has been installed since our previous work on this building in 2010. Fire extinguishers are also installed in the building.

The building is not protected by an automatic fire suppression sprinkler system and is not required to be in accordance with NFPA 101 Life Safety Code.

Accessibility

The existing Town Office has limited accessibility for those with disabilities. The upper level of the building is not located on an accessible route as it can only be accessed by the existing set of interior stairs, and so citizens needing to access services from the departments located on the second story need to be assisted on the first floor of the building. The lower level of the building has an accessible entrance with reasonably accessible features. Beginning on the exterior the building entrance is served by a ramp and a level landing at the exterior of the entrance door. The entrance vestibule does not full comply with the requirements for a fully accessible vestibule. Landings outside lockable doors are required to provide a clear turning space (a circular floor space having a diameter of 60 inches, or five feet), which the existing vestibule does, however in addition to the turning space requirement, two doors in a series are required to provide a minimum of 48 inches of space between the swing of such doors. The existing vestibule configuration provides a space between the swing of the doors of just over two feet.

With the exception of the main entrance doors and the restroom door, the doors throughout the first story are equipped with knob-style door hardware. Doors that are on an accessible route within a building are required to be equipped with hardware that is “close-fist operable”. Please note that employee only areas are required to be provided with accessible features as well as areas that are open and useable by the public. Examples of close-fist operable hardware include lever hardware, pull loop hardware, and push paddle hardware.

The restroom located on the first floor meets most accessibility requirements, though it is missing the required 18” vertical grab bar on the sidewall of the water closet (toilet).

Security

The Town Office building does not currently have an active security system of any type. Additionally, beyond the use of doors to provide barriers and privacy between public and staff spaces there are no additional passive safety measures in place. In the event of a person or persons entering the building with the intent to remove or damage Town property or records or attempt to harm a Town employee, there are few deterrents currently in place.

Freedom Masonic Lodge

The Freedom Masonic Lodge is located across the parking area, to the northwest of the Town Office Building. The Masonic Lodge is reported to have been originally constructed as a single-story church, with a choir loft located at the south or roadside end of the building. The second story of this building, which was developed by making substantial modifications to the original single-story church, is currently occupied by the Carroll Lodge #57 Chapter of the Freemasons. The Town of Freedom has recently purchased this building, with the Freemason organization maintaining a lease to occupy the second story of the building and allowing the Town of Freedom the use of the first-floor area of the structure.

The foundation of the Masonic Temple building consists of shallow split granite around the building's perimeter, with 8x8 wood posts and dry-stacked stone supporting the building's floor system at various locations throughout the building's interior.

The first-floor system was inspected from within the crawl space under the building, accessed from an opening through the foundation wall of the north gable end. The first-floor system is constructed of wood members. There are three square milled beams that run the short axis of the building, east to west, spaced at equal intervals. Three-quarter (log) timber joists spaced approximately 3-feet on center span between the beams with the ends of the log joists bearing into mortises that were notched into the tops of the beams. There are multiple locations where original floor system members have been replaced or bolstered using various materials, mostly square milled timbers as either posts or intermediate beams. The floor is sheathed with 1" wood boards of various widths. The condition of the floor system appears sound, with adequate space between the soil and the underside of the wood members. Signs of powder post beetle presence was noted both in the wood members with frass located on the crawl space floor.

Above the first floor the main structure is comprised of heavy-timber bents, six bents in total, spaced along the long axis of the building, including one at each gable end. The interior bents, with the exception of the southernmost, had originally been constructed with a collar tie located approximately 3 feet up the bent's rafters from the eave wall top beam. Evidence of the collar ties, which have been removed, can be seen from within the areas behind the knee walls of the masonic temple. The collar ties were apparently removed to provide sufficient head room for the second story, which was added at some point in the building's history and was not original to the construction on the Masonic Building. Above the ceiling of the second story, in the small attic area, additional alterations to the original bent construction were observed in the removal of the lower sections of the original kingposts which ran as tension members from the roof ridge to support the clear-span collar ties. The sections of the kingposts above the second story ceiling remain, having been cut at the ceiling line. Each post is currently sandwiched between and fastened to two 2x6 ceiling joists on the north and south sides of the posts.

As described earlier, the building was originally designed as a single-story structure with a loft or mezzanine over the entry hall. The second story, where the Masonic Temple room is located, was developed as a later addition or renovation to the building. To create the second story, beams were added at the new upper floor level, running at each of the existing bent locations across the short axis of the building. The underside of these beams can be seen in the community hall on the first story. These beams were installed to support 2 x10 floor/ceiling joists, installed on an approximate 21 inches center to center spacing, running north-south or parallel to the eaves, bearing atop (or over) the beams. Additionally, 1-1/4" steel tension rods were installed at each of the beams, likely in an attempt to offset the splaying of the eave walls/rafters, which had been the purpose of the original collar ties that were removed to

facilitate the installation of the upper, Masonic Lodge level floor. Included as an attachment to this report is a sketch showing the general existing condition of the Masonic Building's structural members.

In addition to the information in this report, please refer to the letter from Bergeron Technical Services addressed to the Freedom Town Office Advisory Committee referencing the Masonic Temple, dated May 12, 2022.

An additional and important item to note regarding the Masonic Temple is the location of the Masonic Temple on the second story of the building. The total area of the main Temple room is 1,253 sq. ft., with a net floor area of the space (actual area where people can occupy) of approximately 1,000 sq. ft. With a code determined occupant load factor of one occupant per 15 square feet the calculated occupant load of the Masonic Temple space is 66 occupants. As the Masonic Lodge is identified by the codes as a space used for gathering of people for civic, social or religious functions and has a calculated occupant load of fifty or more occupants, the Masonic Lodge (upper floor) meets the definition of an assembly use or occupancy (A-2 Occupancy per the International Building Code, and Existing Assembly Occupancy per NFPA 101 Life Safety Code). Both the State Building Code and State Fire Code provide restrictions on which story or level of buildings where assembly occupancies are can be located based on the construction type of the building and whether the building is protected throughout with an automatic fire suppression sprinkler system. As the Masonic Temple is constructed of combustible materials (wood) and the main components of the structure are not protected within fire-resistance rated construction, the construction type of the building is Type V(B) according to the International Building Code and Type V(000) according to NFPA 101 Life Safety Code. Both Codes prohibit non-sprinkler protected assembly occupancies on the second story of buildings of this construction type. As it currently exists and the manner in which this space is used, the second story of the Masonic Temple building is required by both the State of NH Building Code and Fire Code to be protected with an automatic fire suppression sprinkler system, along with the means of egress from the second story. A conversation with the representatives of the Masonic Temple, the Freedom Fire Chief and Building Code Officer may identify a solution to continue the use of the second story as it has historically been used without the need to sprinkler protect the building. One code approved option would be to limit the number of occupants of the Masonic Lodge floor to 49, thus becoming a Group B or Business occupancy, which therefore could remove the requirement for sprinkler protection.

Like the Town Office, this building was also surveyed and tested for hazardous materials by Desmarais Environmental of Barrington, NH. Materials tested for were lead paint, asbestos, and polychlorinated biphenyls (PCBs). All samples tested for PCBs were reported as no content or below reportable limits. The floor tiles located inside the main entry vestibule on the first floor contain asbestos fibers (the tiles contain asbestos, however the adhesive or mastic used to adhere the tiles to the subfloor did not test positive for asbestos). Lead was detected and reported to be contained in the windows, exterior siding, trim, and some interior walls of the building. Any work that affects these areas and materials will need to be done in a lead-safe manner and any materials disposed of will need to be disposed of as hazardous lead-containing materials in accordance with local and federal laws. For more information on the survey, reports and these hazardous materials, please see the "Asbestos Pb & PCB Survey Report for 29 Old Portland Road, Freedom, NH", dated October 2021 by Desmarais Environmental and included as an attachment to this report.

After Bergeron Technical Services inspected the building and noted the roof related structural deficiencies our recommendation is that the Town of Freedom postpone any plans that would renovate the first floor of this building into a use that would include regular occupancy by staff or the public until such time as the structural deficiencies are addressed and corrected. For this reason, the scope of utilizing the first floor of the Masonic building for Town Office uses has been reduced to considering this space in one schematic design for long-term storage only.

Feasibility Study Scoping and Background Information

- Freedom Town Office Advisory Committee Goals and Directives (see attached letter from the Town Office Advisory Committee Chair, dated February 2, 2021).
  - Preserve the first and Second Floor Lobbies
  - Preserve the staircase (existing interior)
  - Maintain the look of the exterior of the building
  - Find alternatives for using the second floor of the Town Office building for more than storage
- Freedom Town Office Advisory Committee Schematic Design Options (as determined at the May 4, 2022, meeting of the Town Office Advisory Committee)
  - Schematic Design Option 1: Maintain all existing offices, storage and uses within the Existing Town Office building, enhancing the safety, useability, and accessibility of the building without expanding the footprint or creating any new foundation systems.
  - Schematic Design Option 2: Maintain all existing offices and uses within the Existing Town Office Building and provide a single location for long-term storage of Town Office documents within the first-floor space of the Freedom Masonic Building.
  - Schematic Design Option 3: Maintain all existing offices, storage and uses within the Town Office Building, while providing the building with a new foundation having a full basement level and replacing the existing rear addition with a newly constructed two-story structure in the same footprint.
- Freedom Town Office Staff Input (see attached document outlining staff interview responses, prepared by Bergeron Technical Services, and dated 11 February 2022)
  - Staff Needs
    - More Space
    - Service Windows/Counters
    - Storage – Expanded, centralized storage and better environmental and security control for files and stored information
  - Staff Wants
    - Single Story Office Area
    - Pest Control
    - Separation of Staff and Public Areas (including separate staff restroom)
    - Staff Break Room
  - Staff Safety Concerns
    - Lack of legitimate emergency exits from both floor levels, specifically the exit through rear of Office Administrators office and the exterior fire escape from the second story
    - Public is easily able to access staff areas making staff and information vulnerable
    - Staff are unable to monitor the Town Office parking area to observe visitors accessing the building

    - The upper floor where multiple staff offices are located is not accessible to disabled individuals unable to navigate stairs.
- Staff Interior Environment Notes
    - The existing building has poor indoor air quality
    - The interior environment is not controllable (temperature, humidity, draftiness, light)
- Other Staff Comments/Concerns with existing Town Office
    - Staff offices do not have sufficient sound attenuation and sensitive conversations between staff or staff and the public can be easily heard in other offices/areas
    - The departments on separate floors do not have easy access to each other, specifically Town Administrative Assistant.
    - Access to the site (specifically the steep driveway) is a concern among many staff members

General Design Notes

It is important to state clearly that the schematic plans presented as part of this study are just that, schematic, meaning they are programmatic and simplified, and do not provide specific details of construction for any of the presented designs. Further, these designs are meant to provide the Town of Freedom with a base from which to plan actual design development plans, should the Town choose to continue the use of the existing building or buildings as Town offices and renovate, rehabilitate or alter them for such purposes. These plans are presented such that they can easily be revised and altered during design development. It is also important to note that while certain rooms or areas are shown as being designated for a specific staff member or department, these notations are symbolic and suggestive to illustrate that space is provided for the required number of staff and departments within the proposed designs, though they are based on input from town staff and current use layouts of the Town Office building.

Throughout each of the three schematic designs presented there are common design features. These features are presented in all three schematic designs due to various reasons such as design requirements, building code and/or fire code compliance, Town Office Advisory Committee directive, and/or structural or site constraints. Common design features include:

- Exit and exit access. As directed by the Town Advisory Committee the existing interior stairway has been left intact in each design. In accordance with Section 1203.6 of the International Existing Building Code and Section 43.10.4.7 of NFPA 101 Life Safety Code existing stairways in historic buildings are permitted to be unenclosed, but any doors shall be tight-fitting to prevent the spread of smoke. These code sections permit the existing stair to remain as is and intact without requiring the building to be sprinkler protected, provided doors and openings around the unenclosed stair are designed to prohibit smoke movement.
- The new interior exit stair exists in the same location and configuration in each of the three design options due to many factors including locations of main carrying beams in floors, remoteness from existing stair, and location of existing exit door. A new, improved exterior exit stair or fire escape stair has not been proposed, solely due to the proximity of the Town Office Building to the property line.
- Public spaces on the west end of the building. The areas of the building open to the public remain on the west end of the building as currently configured as this is the side of the building adjacent

to the parking area and already provides convenient circulation to the public between the first story and second story by way of the existing interior stair.

- Replacement Windows. The three schematic designs leave intact most window locations on the south, east and west building elevations. It is the intent for all three of these designs, with the exception of the existing windows located in the main entry vestibule addition, for all existing windows to be replaced with modern, insulted, multipaned, energy efficient windows.

Building Improvements throughout Schematic Designs

The following improvements to the Town Office Building are intended to be applied to each of the schematic designs presented, though due to the schematic nature of the plans these are not specifically depicted or noted.

- Structural
  - In Schematics 1 & 2 Improvement or replacement of the stacked granite foundation and wood/stone piers.
  - In schematic 3 total replacement of the foundation to install a full-height basement in the entire building footprint. This would require lifting the building, excavating, possibly require blasting if ledge if present, and installing a new full-height, reinforced, cast-in-place concrete foundation.
  - Improvements to the first and second floor system main carrying members to level floors, adding members or providing more substantial vertical structural loading down to grade.
- Finishes
  - Repair of vinyl siding where missing or damaged
  - Removal of finishes on the interior including wall, ceiling, and finish flooring.
  - Retain trim, and interior stair finishes.
  - Lead positive finishes to be remediated using lead-safe practices
  - Provide storage areas with fire-rated construction and finishes to better protect Town files and documents.
  - The asbestos containing tiles at the Masonic Temple can be abated and replaced, encapsulated, or maintained to reduce the risk of asbestos fibers becoming airborne (regular waxing of the floor).
- Building Systems
  - Completely replace the electrical system including upgrading and enlarging service equipment in the Town Office Building.
  - Install new, code compliant electrical system throughout the building including efficient LED lighting and increase the number of electrical receptacles throughout the building.
  - Replace existing water service equipment entering the building, locate to a more secure location.
  - Maintenance to the existing septic system, including removal of trees and shrubs on or within 10 feet of the leach field, and application of root-kill agent.
  - Remove the existing oil-fired hot air furnace and install a new efficient HVAC system capable of providing, heating, cooling, ventilation, and humidity control. (This would apply to both buildings in schematic design 2).

    - Remove the existing 40-gallon water heater and replace with point-of-use, tankless water heater(s) that heat water on demand. These units do not store hot water; therefore they are not using energy unless hot water is being called for.
- Energy Conservation and Efficiency
    - Many of the building systems improvements will provide additional benefits to the building's energy efficiency and conservation
    - Installation of new spray foam insulation in exterior walls to provide insulation and control air leakage, leading to a more energy efficient building. (Applies to the first level of the Masonic Temple in schematic design 2, including walls, floors and the second floor/ceiling assembly).
    - Installation of air barriers and insulation in the attic above the Town Office original structure and in the rafter bays of the rear addition (schematics 1 & 2)
    - Replacement of all existing single-pane windows with new energy efficient windows
- Fire and Life Safety
    - Reconfiguration of the existing fire alarm system, including upgrading devices and equipment as necessary and adding devices and equipment where necessary. Installation of a new fire alarm system to the Masonic Temple in schematic design 2.
    - Construction of fire barrier walls (1-hour fire-resistance rated) at new exit stair enclosures in the Town Office schematics.
    - Renovate and construct walls and ceiling of proposed storage area in the Masonic Temple building to provide fire separation from the remainder of the building.
- Accessibility
    - Removing changes in floor level within the Town Office building to allow to access to all public and employee areas (excepting storage/mechanical area at the northeast corner of the rear addition in schematics 1 &2) and reducing the need for space consuming ramps.
    - Installation of a platform lift or LULA (Limited Use/Limited Application) elevator in the Town Office building to provide an accessible route to the second story (and basement level in schematic 3).
    - Increasing access throughout the buildings through removal of barriers including the use of accessible door hardware (lever action, push/pull loop hardware, or panic/fire hardware), provision of accessible service windows, appropriate maneuvering clearances at doors, doorways and landings, accessible clear floor spaces at features and fixtures and clear turning spaces.
- Security
    - Expansion of the existing fire alarm system throughout the building to include security features, such as door alarms, window contacts and motion detection, and possibly video surveillance in public areas, entries, and/or the parking lot.
    - All proposed service windows to be constructed of bullet-resistant glass installed in bullet resistant wall construction.
    - Access controlled doors between public and staff areas.
    - Within the wall cavities below and 2 feet to each side of the service windows install appropriate materials to provide a secure physical barrier around the service window.

Schematic Plans Option One Narrative

The schematic plan for Option One keeps the existing staff and services in the existing Town Office building without providing additional area, either in the Masonic Building or through expansion of the Town Office building. This schematic design works to provide solutions to the major deficiencies and concerns of the existing Town Office in the most reduced scope.

Code Information: In this schematic, the re-use of the existing Town Office without adding onto the structure defines this project as a "Alteration-Level 3", within the International Existing Building Code (State of NH Building Code), and as a "Reconstruction" within NFPA 101 Life Safety Code (State of NH Fire Code). While changes to the configuration of the building are proposed, the occupancy of the building remains as a Group B occupancy within the State Building Code and an Existing Business Occupancy within the State Fire Code.

As prescribed by the Advisory Committee directive, the lobbies, existing interior stair, and exterior façade of the building remain intact with minimal changes. The uses on the second story of the building remain as is, though the layout of the floor is adjusted to provide safety upgrades and provide greater functionality to staff on this building level.

Included in this design is a legitimate interior exit stair, providing a reliable, safe, interior exit from the second story and a legitimate second exit from the first floor, accessed through a common hallway, instead of an office that may be subject to locking. This stair is remote from the existing interior lobby stair and provides an additional access between the offices located on the first story and second story. The addition of this enclosed stair alleviates a life safety concern for a legitimate exit and secondary means of egress from the second floor of the building.

In order to allow the offices to remain on the second story and the public to access them without barriers this design incorporates a floor-to-floor platform lift to provide an accessible route to the second story, allowing all members of the public to be accommodated to reach the services available on the second floor or attend a Selectmen's meeting independently. The specifications for the lift shaft were designed using a Savaria Brand Model V-1504, vertical platform lift, Type 1L 36" x 48" cab, which has the capability to be installed within the existing building and meet the floor-to-floor travel distance. This platform lift requires no machine room (self-contained within the lift shaft) and requires single-phase power. In accordance with the State of NH Building Code platform lifts are permitted to be installed as part of an accessible route in existing buildings with a vertical travel distance up to 14 feet. Platform lifts differ from elevators in that their use is specific to handicap individuals and is not meant to be general conveyance to anyone visiting a building. Platform lifts convey individuals vertically using a moveable platform, not a fully enclosed cab, like an elevator.

For security and safety of staff and information three transaction/service windows have been integrated into the design, one located at the Front Desk/Admin office on the main floor, one at the Town Clerk's Office on the main floor and one at the Tax Collector's Office on the second floor. Additionally, the number of doors connecting the public spaces on each floor from the staff spaces have been reduced to one each, to provide additional security.

On the first story, the staff offices have been separated, eliminating direct access from other offices, and adding a hallway which leads to the new exit stair enclosure and the existing exit to the rear of the

building. Constructing sound attenuated interior walls between offices will help to reduce noise travel and provide privacy to staff and the public when discussing sensitive matters. The Town Clerk's office is also reduced in overall size while having direct access to the storage area in the rear addition. Another storage area, accessed from the interior hallway is located within the staff area on the main floor. On the westerly end, or parking lot side of the rear addition, two legitimate accessible restrooms have been designed. Adjacent to the restrooms and accessed off the same hallway is the mechanical room in the location of the existing furnace is located. Another small closet is located outside this area, located under the existing stair landing.

On the second floor, the lobby at the top of the stair has been expanded to allow for accessibility for exiting and entering the lift as well as maneuvering through the space. The Tax collector's office is now accessed through a door off the Selectmen's Meeting Room, which is separated from the Lobby by a door for security purposes. Both the Zoning Officer office and Building Code Enforcement office remain on the second floor, though their spaces are slightly expanded. This plan proposes the walls between these offices be full-height walls, to provide greater security and privacy between the offices and Selectmen's meeting room. A small closet off the new exit stair was added as well.

Room by Room Area Comparison: Existing Vs. Schematic Design 1

Room:	Design: Existing	Option 1
First Story		
Front Office/Service	201	125
Town Clerk Office	249	103
Town Admin Office	123	101
Additional Office	117	93
Staff Common Area	0	0
Storage	227	289
Misc Area/Egress	377	531
Restrooms	43	102
Mechanical	57	97
Other		
Second Story		
Tax Collector Office	164	133
Building Code Officer	76	112
Zoning Officer	84	97
Selectmen	403	358
Storage	85	12
Misc Area/Egress	107	292
Restrooms	0	0
Mechanical	0	0
Other	132	0
Basement		
Storage	0	0
Mechanical	0	0
Egress	0	0
Masonic Building		
Storage	0	0
Total Utilized Area	2,445	2,445

Schematic Plans Option Two Narrative

Similar to Option One, the schematic plans for Option Two keep the existing staff and services in the existing Town Office building without providing additional space through expansion of the Town Office building, however this option provides significant space for long-term storage of documents and other items within the adjacent Freedom Masonic Temple building.

Code Information: In the Option Two schematic, the re-use of the existing Town Office without adding onto the structure, defines this project as a "Alteration-Level 3", within the International Existing Building Code (State of NH Building Code), and as a "Reconstruction" within NFPA 101 Life Safety Code (State of NH Fire Code). While changes to the configuration of the building are proposed, the occupancy of the building remains as a Group B occupancy within the State Building Code and an Existing Business Occupancy within the State Fire Code. The change of the first-floor level of the Masonic Temple from a gathering space and associated kitchen to a storage space defines the work in the Masonic Temple as a change of occupancy, but a change of occupancy that can work favorably. Changing the occupancy of the Masonic Building's lower level from a Group A-2 occupancy to a Group S-1 occupancy within the State Building Code and from an Existing Assembly Occupancy to a Storage Occupancy within the State Fire Code are steps in a more lenient code direction. The provisions for Group S-1 and Storage occupancies do not require additional, or more restrictive requirements for general life safety features, such as means of egress, fire protection systems or building construction requirements from either of the two codes.

At the Town Office Building, the existing interior stair remains, and the lobbies and exterior façade of the building are slightly altered to allow for altered entrance and circulation. The uses on the second story of the building remain as is, though the layout of the floor is adjusted to provide safety upgrades and provide greater functionality to staff on this building level.

This layout removes a significant amount of storage space from the Town Office building as a large area of the first story of the adjacent Masonic Lodge is now designated for a centralized storage space. Closets to store everyday items and supplies have been incorporated in the Town Office Design.

The same platform lift used in the schematic design Option One is used in schematic design Option Two, though it has been located in a different area of the building. Again, this lift requires no machine room and is capable of floor-to-floor travel distance required in this building and requires only single-phase power.

This design moves the building entrance from the existing location at the southwest end of the building to the south side of the building, where the existing restroom is currently located. This was done to provide a legitimate accessible entry with a minimum ramp area, affecting less of the parking lot. Additionally, this will provide Town Staff with the ability to view patrons arriving in the parking area by relocating the service area to the southwest corner of the building.

This design also works to incorporate security measures for staff, with all staff services available from service windows and limits entry points to staff areas from the first and second floor lobbies. Legitimate accessible restrooms are provided at the north end of the rear addition and the existing storage area in the addition is converted to the mechanical space. As with schematic design Option One, the offices on the first floor are each accessed off a hallway to provide privacy and separation while still being proximate to each other.

The upper story in this design remains used by the same departments and Board of Selectmen. The Zoning Officer and Building Code Enforcement office is combined to one to allow for a combined service window off the elevator landing. The Tax collector's Office remains at the top of the stairs, however the door accessing this office is now located from within the Selectmen's Meeting room and not directly off the service lobby/landing area.

The proposed changes and improvements to the Masonic building include new interior partitions on the first floor to limit access and provide greater security to sensitive information in a building that will be shared with other tenants. A new, dedicated entrance to the first story storage area has been incorporated into the design as well. Replacement of the second story secondary means of egress (currently an exterior metal fire escape at the north gable end), has been included in the schematic design to provide greater life safety to the tenants of the Town of Freedom. The design proposes the removal of the fire escape and replacement with a code compliant wood exterior exit stair. In order to provide a favorable environment for the storage of documents, additional improvements including new insulation in the walls, floor, and floor-ceiling assembly, replacement windows and a new HVAC system capable of temperature and humidity control would be included in this design. While not a code requirement, due to the importance of the documents and information that would be stored in the building this design would also propose a full building, monitored fire detection and alarm system be installed to notify emergency services in the early stages of a fire event within the building.

Room by Room Area Comparison: Existing Vs. Schematic Design 2

Room:	Design: Existing	Option 2
First Story		
Front Office/Service	201	78
Town Clerk Office	249	180
Town Admin Office	123	134
Additional Office	117	198
Staff Common Area	0	0
Storage	227	38
Misc Area/Egress	377	493
Restrooms	43	107
Mechanical	57	148
Other		
Second Story		
Tax Collector Office	164	156
Building Code Officer	76	80
Zoning Officer	84	80
Selectmen	403	374
Storage	85	0
Misc Area/Egress	107	333
Restrooms	0	0
Mechanical	0	0
Other	132	0
Basement		
Storage	0	0
Mechanical	0	0
Egress	0	0
Masonic Building		
Storage	0	1,536
Total Utilized Area	2,445	3,935

Schematic Plans Option Three Narrative

Option Three schematic plans continue to utilize the Town Office building as the sole structure for the Town of Freedom Selectmen, staff, and Town services, however these plans include an extensive expansion of the existing structure through vertical additions. First, the schematics proposed replacing the existing stacked granite and poured concrete foundations with a cast-place-concrete foundation with a full-height basement. This schematic design removes the existing addition off the rear (north end) of the building and replaces it with a new-construction, two-story structure that is more aesthetically similar to the original schoolhouse building.

Code Information: In this schematic, the re-use and renovation of the original schoolhouse portion of the existing Town Office defines this portion of the project as a "Alteration-Level 3", within the International Existing Building Code (State of NH Building Code), and as a "Reconstruction" within NFPA 101 Life Safety Code (State of NH Fire Code). The proposed basement and total removal and replacement of the rear/north addition defines these portions of the project as "Additions". Additions must comply with the new building requirements of the International Building Code and NFPA 101 Life Safety Code. While changes to the configuration of the building are proposed, the occupancy of the building remains as a Group B occupancy within the State Building Code. The renovated and altered area of the existing Town Office building to remain may comply with the requirements for an Existing Business Occupancy within the State Fire Code, the new areas, again the basement and rear addition, are required to comply with the requirements of a New Business Occupancy.

The basement area in this design is mainly used for long-term and secure storage, with a small area dedicated to mechanical systems, if necessary. Design of both the construction of the basement and the systems that serve the basement will need to account for this space being used for document storage and the control of moisture and humidity as these conditions can be prevalent in basements and sub-grade building spaces.

Just as in schematic design Option Two, the lobbies and exterior aesthetic remain, although altered, and the existing interior stair remains as is. This schematic design removes the main entrance from the west end of the south eave wall of the building and moves the main entrance to the west wall of the new addition, which due to the site topography allows for greater accessibility without the need for steps and a ramp to access the first-floor level of the building. The entrance vestibule and exterior deck, ramp and stairs are then removed from the design, creating more space in the parking lot.

With the removal of mechanical and large storage space from the first floor of the building to the basement, an area is opened to allow for the staff to have a common area, perhaps a break room or meeting space. A restroom on the first floor is also located in the staff area to provide staff with a separate restroom from the public.

This schematic option differs in vertical accessibility as it now integrates a LULA elevator, not a platform lift. With the addition of the basement level the allowable travel distance for a platform lift will be exceeded with a conveyance serving three floors, requiring an elevator. LULA stands for Limited Use, Limited Application, and these lifts are hybrids of platform lifts and traditional commercial elevators. Similar to platform lifts, LULA elevators are meant solely for use by individuals with disabilities and not a general conveyance. LULAs look more like traditional elevators while generally having smaller footprints

and requiring less impactful structural features, such as pits, overhead hoist clearances and less stringent hoist way construction requirements.

The second story area is expanded in this design as the rear addition becomes two stories. This allows for more versatility in access to the public/lobby area on the upper floor and ability to create a separate service window for Zoning/Building Code Enforcement. With the expanded area at the rear addition the Selectmen's Office/Meeting room increases in size to allow for greater space and flexibility.

Room by Room Area Comparison: Existing Vs. Schematic Design 3

Room:	Design: Existing	Option 3
First Story		
Front Office/Service	201	78
Town Clerk Office	249	171
Town Admin Office	123	226
Additional Office	117	115
Staff Common Area	0	231
Storage	227	0
Misc Area/Egress	377	450
Restrooms	43	198
Mechanical	57	0
Other		
Second Story		
Tax Collector Office	164	226
Building Code Officer	76	164
Zoning Officer	84	147
Selectmen	403	478
Storage	85	20
Misc Area/Egress	107	320
Restrooms	0	0
Mechanical	0	0
Other	132	66
Basement		
Storage	0	1,027
Mechanical	0	228
Egress	0	138
Masonic Building		
Storage	0	0
Total Utilized Area	2,445	4,283

Respectfully submitted to the Town of Freedom Town Office Advisory Committee

For Bergeron Technical Services, LLC

Kate Richardson, C.F.P.S
Project Manager, ICC Accessibility Inspector/Plans Examiner

Shawn G. Bergeron, Sr., C.F.P.S
Manager/ICC Certified Building Inspector

ATTACHMENTS-

- Photo Pages of the Town of Freedom Town Office Building and Masonic Temple Building (11 pages)
- Asbestos Pb & PCB Survey Report for 33 Old Portland Road, Freedom, NH", dated October 2021 by Desmarais Environmental
- Asbestos Pb & PCB Survey Report for 29 Old Portland Road, Freedom, NH", dated October 2021 by Desmarais Environmental
- Septic Inspection Report dated 9/3/2021 by Turner Septic Inspections, for 33 Old Portland Road, Freedom, NH 03836
- Letter from the Town Office Advisory Committee Chair, dated February 2, 2021
- Staff Interview Responses document, prepared by Bergeron Technical Services, and dated 11 February 2022
- Letter from Bergeron Technical Services to the Town Office Advisory Committee regarding the Masonic Temple, dated May 12, 2022.
- Sketch entitled, "Freedom Masonic Building, Existing Conditions Structural Cross Section" dated 8-19-2022, prepared by Bergeron Technical Services.
- Copy of Town of Freedom Tax Map 52-A, showing subject properties 18 (Masonic Temple) and 19 (Town Office).

Town Of Freedom

Town Office Feasibility Study

33 Old Portland Road

South (Road) side of the Town Office Building

West (parking lot) side of the Town Office Building

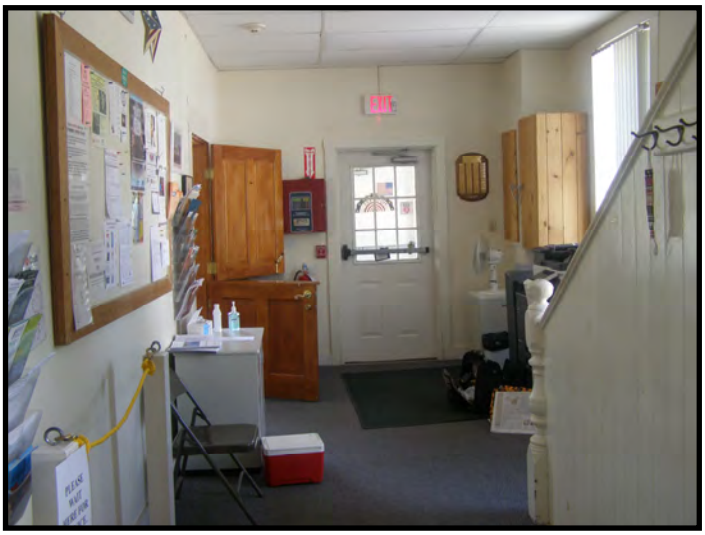
North side of the Town Office Building

East side of the Town Office Building

Town Of Freedom

Town Office Feasibility Study

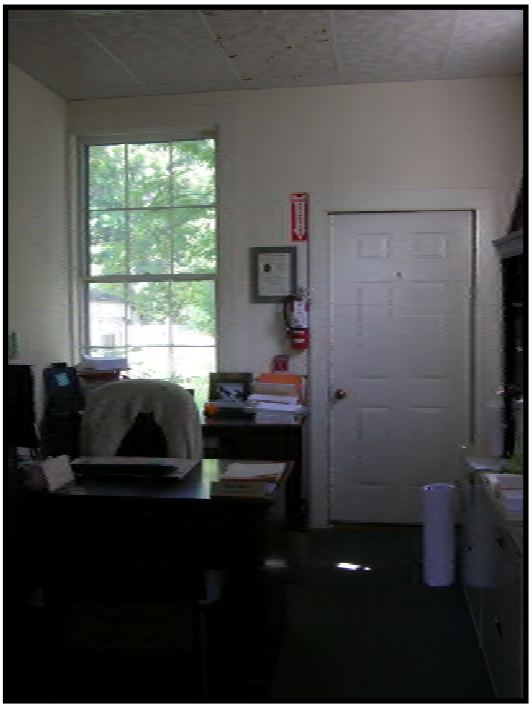
33 Old Portland Road



View of the main lobby looking toward the front entrance

The interior stair

Administraı ve Assistant's office looking toward service door (Dutch door)

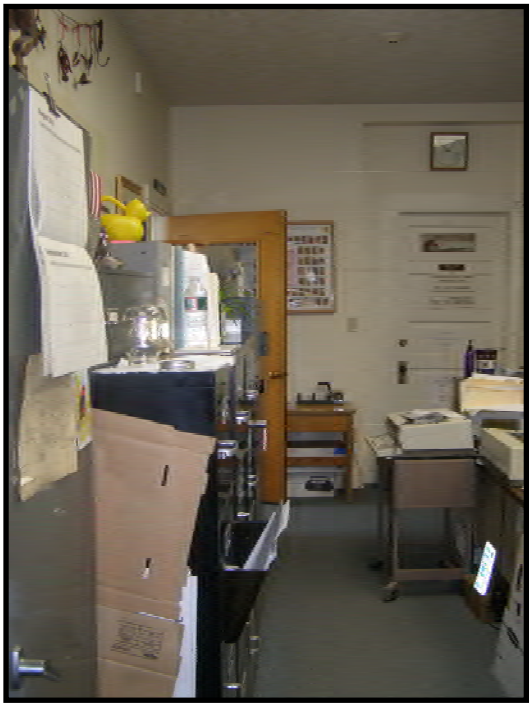


Second first floor exit door to the exterior, located in the Town Administrator's Office

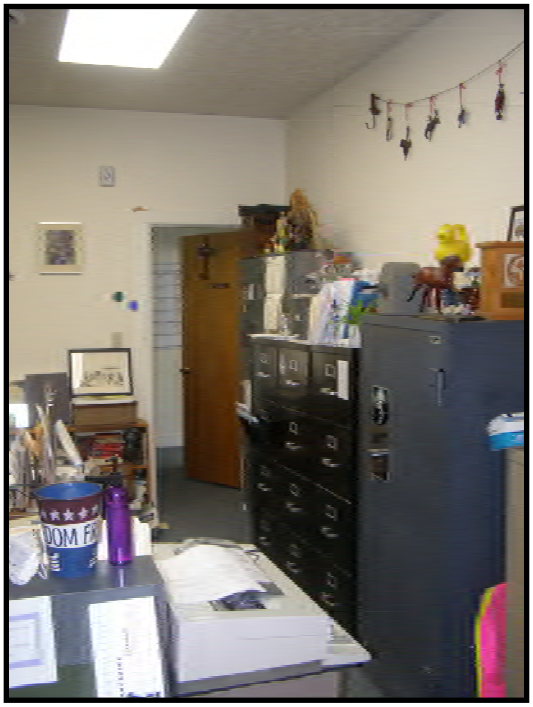
Town Of Freedom

Town Office Feasibility Study

33 Old Portland Road



Town Clerk's Office looking toward public entrance door



Town Clerk's Office looking toward Town Administrator's Office

Town Office Restroom. 18" ver. cal grab bar on the sidewall of the toilet required for accessibility is not installed.

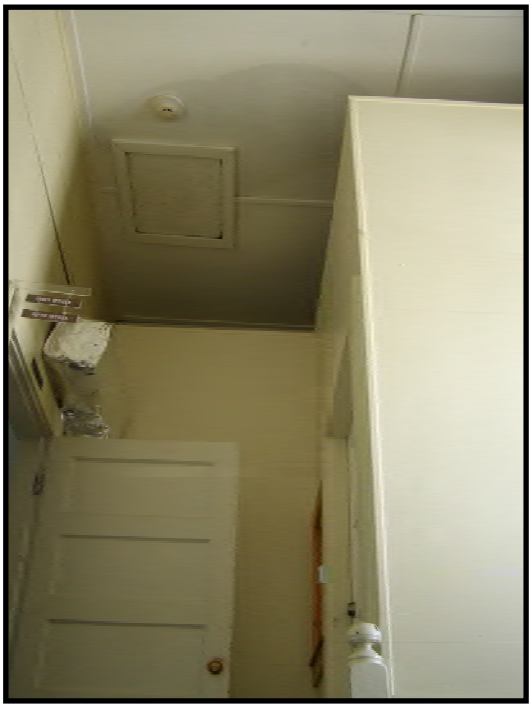
Storage/mechanical space at rear addition. Exit door is at left indicated by yellow arrow. Oil-fired furnace is located just to the right of this photo.

Second floor stair landing, door leading into the Selectmen's Office and Zoning/Building Code offices. Example of the bead-board wall finish throughout the second story.

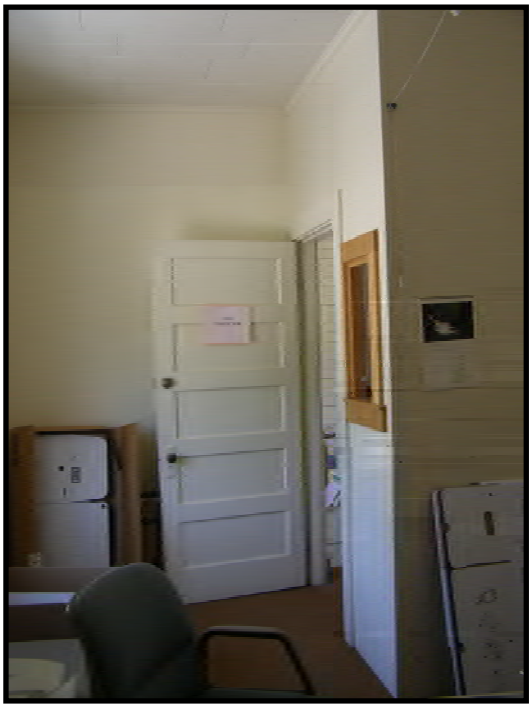
Selectmen's office looking toward stair landing.

Selectmen's Office looking at exit door to the exterior metal fire escape.

Zoning/Building Code Office partial dividing walls within Selectmen's Office.



Attic access hatch in ceiling above the second floor stair landing



Tax Collector's Office looking toward stair landing

Tax Collector's Office looking toward inner office

Inner office looking toward Tax Collector's Office

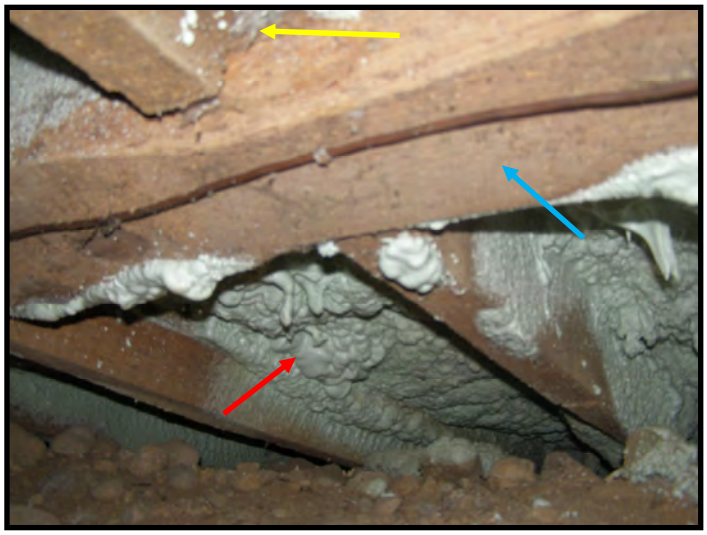


Photo of the first floor system taken from the crawl space. Blue arrow indicates a main carrying beam. The Yellow arrow indicates where the floor joists are 1/2 mortised into the beam. The red arrow indicates where approximately 6" of spray foam insulation has been installed between the floor joist bays.

Photo of the first floor system taken from the crawl space. Blue arrow indicates a stone support. The yellow arrow indicates metal distribution ducting for the oil furnace.

Photo of the attic above the original schoolhouse section of the building.

Photo of the attic. Red arrow indicates charred/cut rafters. Yellow arrow indicates blown-in cellulose insulation in the ceiling joist bays

Town Of Freedom

Town Office Feasibility Study

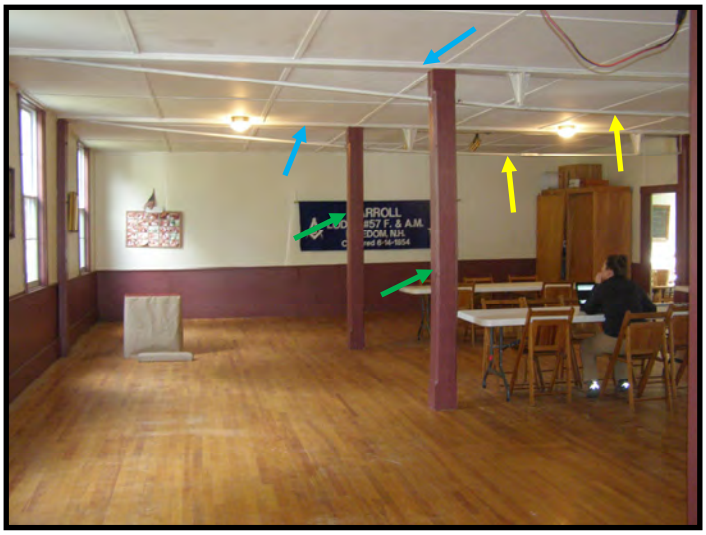
33 Old Portland Road

South (Road) side of the Freedom Masonic Temple

North side of the Freedom Masonic Temple

East side of the Freedom Masonic Temple

West side of the Freedom Masonic Temple



Existing banquet hall at first floor of Masonic Temple. Blue arrow indicates carrying beams for the second story floor. Green arrow indicates the mid-span columns supporting the floor beams. The yellow arrow indicates the steel tension rods.

Westerly exterior wall of the Masonic Temple, viewed from inside the banquet hall. Signs of wall splaying cab ne observed at the wall-ceiling intersection.

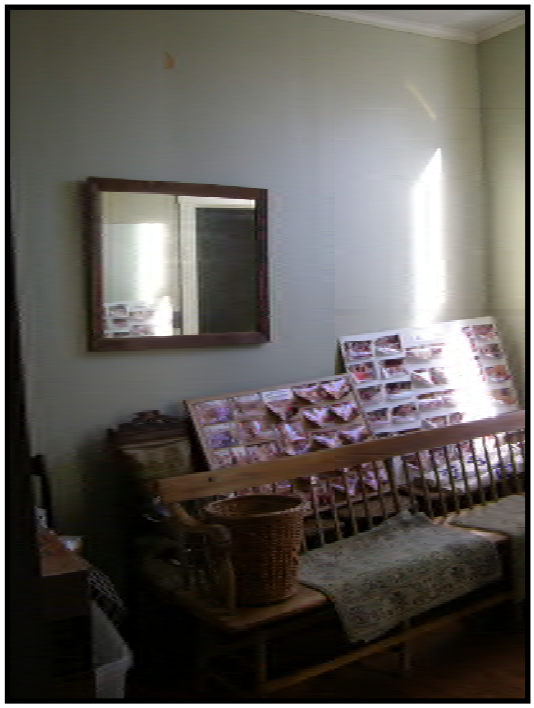
Masonic Temple looking south toward upper lobby.

Masonic Temple looking north. Emergency exit door leading to exterior metal fire escape indicated with blue arrow.

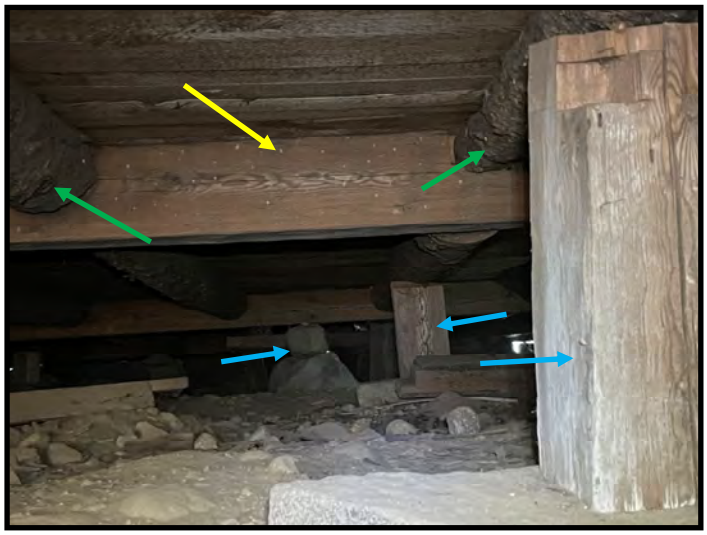
Masonic Temple first floor lobby, looking towards the east. The tile floor in this space has tested positive for asbestos.

Masonic Temple kitchen, serving the first story banquet hall, looking south.

Masonic Temple kitchen, serving the first story banquet hall, looking north.



Masonic Temple lounge at the northeast corner of the building, serving the first story banquet hall.



Masonic Temple crawl space/floor system. Yellow arrow indicates main carrying beam (with powder post beetle frass). Green arrow indicates 3/4 timber joists. Wood post and stone piers can be seen in this photo, supporting both beams and bolstering joists, (blue arrows).

Side view of the timber joist connection to the main beams. The beam is supported by dry-stacked stones. Beyond, light can be seen coming through the granite perimeter foundation, where mortar has deteriorated and fallen away.

Masonic Temple crawl space/floor system. The condition of the crawl space is quite good, dry with sufficient space between the dirt floor and undersides of the wood floor members. This photo also shows an electrical junction box with exposed and unsupported non-metallic wiring.

Masonic Temple crawl space/floor system. Yellow arrow indicates where timber joists have been cut/removed and replaced, with new wood posts installed at the joint. Wood posts have moved out of plumb, likely a result of seasonal movement over time.

Westerly eave space at second story of Masonic Temple. Evidence of the original arched ceiling can be seen at the end (gable) wall. The original collar tie joint at a bent can also be observed (red arrow). This side of the roof remains sheathed in 1x boards. Additional dimensional lumber bracing has been added to support the roof purlins (blue arrow)

A close view of a joint where an original collar tie member was removed from the bent frame

Attic space above second floor at the Masonic Temple. The king posts are indicated in red, these have been cut off the ceiling level, sandwiched and fastened between the 2x6 ceiling joists.

Easterly eave space at second story of Masonic Temple. The yellow arrow is indicating a hole in the OSB roof sheathing. Additional diagonal bracing has been added to the bent framing between the post and rafter. A section of the top plate has been replaced with dimensional lumber (green arrow).

ASBESTOS PB & PCB
SURVEY REPORT

33 OLD PORTLAND ROAD
FREEDOM, NH

October 2021

320 Hemlock Lane, Barrington, NH 03825 ph 603-664-5500 www.denvironmental.com

October 27, 2021

On October 7, 2021, Desmarais Environmental, Inc. conducted a non-destructive asbestos, lead and PCB survey and testing of 33 Old Portland Road in Freedom, New Hampshire.

The scope of work covered the entirety of interior and exterior building materials. The purpose of this survey was to determine the presence of asbestos-containing, lead-containing, and PCB-containing materials to ensure compliance with the regulatory requirements to renovate the building.

Reasonable efforts have been made by Desmarais Environmental, Inc personnel to locate and sample suspect asbestos-containing and lead-containing materials (ACM & LCM). However, for any facility, the existence of unique or concealed ACMs and debris is a possibility. In addition, sampling and laboratory analysis constraints typically hinder the investigation. Desmarais Environmental, Inc. does not warrant, guarantee or profess to have the ability to located or identify all asbestos containing materials within the area surveyed.

ASBESTOS BACKGROUND INFORMATION

Asbestos is a term to describe six naturally occurring mineral fibers that are commonly found in a wide array of building construction materials due to the fiber strength and heat resistant properties. When asbestos containing materials become damaged or are disturbed during repair, remodeling or demolition activities; microscopic fibers become airborne. Asbestos fibers are so tiny and light that they can remain airborne for many hours. When inhaled, they can cause health problems. The three (3) most common types of asbestos are chrysotile, amosite and crocidolite. The lesser common types are tremolite, anthophyllite, and actinolite. Nearly 95% of all asbestos in the United States is chrysotile.

The Environmental Protection Agency classifies asbestos-containing building materials (ACBM) into three (3) general categories.

1. Surfacing Materials
    a. Any material that has been sprayed-on or troweled-on, or otherwise applied to surfaces. Textured ceilings, joint compound, and fireproofing are some examples of surfacing materials.
2. Thermal System Insulation (TSI)
    a. Any material applied to pipes, fittings, boilers, breeching, tanks, ducts, or other interior mechanical components designed to prevent heat loss or water condensation.
3. Miscellaneous Materials
    a. Any material that is not surfacing or thermal system insulation. Floor tiles, ceiling tiles, and transite board are some examples of miscellaneous materials.

The condition of asbestos containing materials is classified according to its friability, the current state of condition and its potential for disturbance. Friability is determined by the ability, when dry, to be crumbled, pulverized, or reduced to powder by hand pressure. The current state of condition is broken up into three categories

1. Significantly Damaged
    a. Over 10% evenly distributed damage or over 25% of the localized damage.

2. Damaged
    a. Less than 10% evenly distributed damage or less than 25% of the localized damage.
3. Good
    a. No visible damage or very little damage.

The potential for disturbance is categorized by answering three (3) questions with high, moderate or low. The three questions are as follows,

1. The potential for contact with the material?
2. The influence of vibration on the material?
3. The potential for air erosion on the material?

Any question with a high answer shows potential for significant damage, any question answered with moderate shows potential for damage and all questions answered with low shows low potential.

The Environmental Protection Agency established the National Emission Standards for Hazardous Air Pollutants, 40 CFR 61, regulation to require the owner of a demolition or renovation activity and prior to commencement of the demolition or renovation, to thoroughly inspect the affected facility or part of the facility where the demolition or renovation operation will occur for the presence of asbestos. EPA defines a facility as any institutional, commercial, public, industrial, or residential structure, installation or building. It includes any structure, installation, or building containing condominiums or individual dwelling units operated as a residential cooperative, but excludes residential buildings having four or fewer dwelling units.

The State of New Hampshire established Env-A 1800 (Asbestos Management and Control) to better deal with asbestos within residential buildings. Under Env-A 1804.01, the State of New Hampshire requires that the owner/operator of a facility has an asbestos survey completed on the affected portion(s) prior to undertaking any demolition or renovation activity. According to Env-A 1802.31, the State of New Hampshire defines a facility as any institutional, commercial, public, or private building or structure, work place, ship, installation, active waste disposal site, inactive waste disposal site operated after July 9, 1981, or rental dwelling.

Asbestos samples of suspect materials were collected as described below according to type and quantity of material per homogeneous area. A homogeneous area is defined as a suspect material of similar age, appearance, function and texture.

Material	Samples
Miscellaneous materials	One sample per homogeneous area
Surfacing materials	Three samples per homogeneous area
Thermal system insulation	Three samples per homogeneous area

LEAD BACKGROUND INFORMATION

Lead is a naturally occurring element found in small amounts in the earth's crust. While it has some beneficial uses, it can be toxic to humans and animals, causing health effects.

EPA's Lead Renovation, Repair and Painting Rule (RRP) Rule requires that firms performing renovation, repair and painting projects that disturb lead-based paint in homes, child care facilities and pre-schools built before 1978 be certified by EPA (or an EPA-authorized state), use certified renovators who are trained by EPA-approved training providers and follow lead-safe work practices.

There are currently two methods recognized by the EPA for testing paint, which are X-Ray Fluorescence (XRF) analyzation and pain chip sampling followed by analysis by an accredited laboratory. In this case, paint chip sampling was conducted following analysis by Optimum Analytical & Consulting, LLC. Located in Salem, New Hampshire.

The laboratory report is expressed as weight of lead per weight of paint chip. The federal definition of lead-based paint is 0.5% lead or 5,000 milligram of lead per kilogram of paint chips.

POLYCHLORINATED BIPHENYLS (PCBs) BACKGROUND INFORMATION

Polychlorinated Biphenyls (PCBs) were used in the construction, renovation and repair of many buildings, including schools, from the 1950's through the late 1970's. PCBs may be present in products and materials produced before the 1979 PCB ban. PCB's were used in industrial and commercial applications including electrical, heat transfer, and hydraulic equipment. They were also used as plasticizers in paints, plastics and rubber compounds; and in pigments in dyes and some papers. PCBs commonly found in building construction include exterior window and door caulking and expansion joints. Most commercial PCB mixtures are known in the United States by their industrial trade names; the most common name is Aroclor. The primary focus in identifying polychlorinated biphenyls (PCBs) for this survey was in caulk within the buildings in preparation for its renovation or demolition.

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LABORATORY ANALYTICAL METHODS

Asbestos

All bulk samples collected were forwarded to Optimum Analytical & Consulting, LLC. located in Salem, New Hampshire. Optimum is a NIST/NVLAP and AIHA-accredited laboratory.

Analyses were performed using standard optical microscopy and petrographic techniques. A representative portion of the bulk sample was placed on a glass slide, immersed and macerated in the appropriate index oils. This was then examined under plane and fully polarized light on the petrographic microscope. The following features were used to identify unknown particles and fibers: Morphology, index of refraction, birefringence, size, color, etc.

Analytical results (compositions and percentages) are listed on the bulk report form attached. For the purpose of these analyses, asbestos determination and identification is based on definitions as set forth in the US. EPA Environmental Monitoring Systems Laboratory TEST METHOD "Interim Method for the Determination of Asbestos in Bulk Insulation Samples," EPA-600/M4-82-020.

Polarized-light microscopy is not consistently reliable in detecting asbestos in floor tiles. Confirmation by Transmission Electron Microscopy is recommended for negative floor tile samples.

Pb

All lead chip samples collected were forwarded to Optimum Analytical & Consulting, LLC. located in Salem, New Hampshire. Optimum forwarded samples to Aerobiology Laboratory. in Pennsauken Township, NJ.

Paint chips were analyzed using Atomic Absorption method SW846-7000B/3051. Results are reported in percent weight of the sample.

PCB

All bulk samples collected were forwarded Phoenix Environmental Laboratories located in Manchester, Connecticut.

Analyses were performed using EPA Method 8082 PCBs by gas chromatography. This method is used to determine the concentrations of PCBs as Aroclors or as individual PCB congeners in extracts from solids. A measured weight of the sample is extracted and analyzed using electron capture detectors (ECD) or electrolytic conductivity detectors (ELCD).

PHOTOS

TABLE OF ASBESTOS BULK SAMPLING RESULTS

Sample #	Location	Item	Result
1	Shingle	Roof	None
2	Window Glaze	Original Bldg.	None
3	Window Glaze	Addition	None
4	Window Caulk	Original Bldg.	None
5	Window Caulk	Addition	None
6	Sheetrock Composite	Hall	None
7	Linoleum	Bath	None
8	Adhesive	Bath	None
9	2X4 Ceiling Tile Fissured	Main Office	None
10	2X4 Ceiling Tile Smooth	Main Office	None
11	Tread	Stairs	None
12	Landing	Stairs	None
13	Ceiling Panel	Hall	None
14	Green Cove Base	Hall	None
15	Adhesive	Hall	None

None = No Asbestos Structures Detected

TABLE OF LEAD PAINT CHIP SAMPLING RESULTS

Sample #	Item / Location	Result (%)
1	Siding	**8.56**
2	Window Casing	**11.7**
3	Window Casing	1.77
4	Siding	**9.77**
5	Window Caulk	0.583
6	Window Caulk	0.024
7	Fire Escape	0.474
8	Door Casing	<RL
9	Wainscot	0.143
10	Window Casing	1.12
11	Baseboard	<RL
12	Wall	<RL
13	Wall	<RL
14	Newel Post	0.654
15	Stringer	<RL
16	Window Well	**27.1**
17	Inv Wains	**7.01**

<RL = Less Than Reporting Limit

POLYCHLORINATED BIPHENYLS (PCBs) RESULTS

Sample #	Description	Location	Results PPM
PCB 1	Window Caulk Original	Exterior	ND
PCB 2	Window Caulk Addition	Exterior	ND

ND = None Detected

Laboratory Data sheets report on 1,000 µg/Kg = 1 PPM

Results & Discussion

Asbestos was not identified in any samples collected.

Lead was identified in the windows, exterior siding, trim and horizontal wainscoting on second floor. The legal threshold to consider lead paint leaded is 5%. The entire exterior should be considered lead paint, all windows, and the horizontal wainscoting. Some hidden lead components may exist within the building.

PCB materials above 50 PPM fall under EPA regulations requiring removal or encapsulation. Levels were below detectable limits.

COST ESTIMATE

Item / Location	
Lead remediation varies depending on approach. To completely de-lead the property would likely require siding replacement, window replacement and some interior renovations.	$150,000-$300,000

The laboratory reports are presented in Appendix 1.

If you have any questions regarding this report or require additional services, please do not hesitate to contact our office at (603) 664-5500.

Respectively submitted,
Desmarais Environmental, Inc.

Raymond G. Desmarais, CIH, CSP
New Hampshire Licensed Inspector, Management Planner & Designer
New Hampshire License #024-IMD

Appendix 1:
Laboratory Reports

PHOENIX
Environmental Laboratories, Inc.

Monday, October 18, 2021

Attn: Mr.Ray Desmarais, CIH, CSP
Desmarais Environmental, Inc.
320 Hemlock Lane
Barrington, NH 03825

Project ID: 33 OLD PORTLAND ROAD FREEDOM NH
SDG ID: GCJ54595
Sample ID#s: CJ54595 - CJ54596

This laboratory is in compliance with the NELAC requirements of procedures used except where indicated.

This report contains results for the parameters tested, under the sampling conditions described on the Chain Of Custody, as received by the laboratory. This report is incomplete unless all pages indicated in the pagination at the bottom of the page are included.

All soils, solids and sludges are reported on a dry weight basis unless otherwise noted in the sample comments.

A scanned version of the COC form accompanies the analytical report and is an exact duplicate of the original.

If you are the client above and have any questions concerning this testing, please do not hesitate to contact Phoenix Client Services at ext.200. The contents of this report cannot be discussed with anyone other than the client listed above without their written consent.

Sincerely yours,

Phyllis Shiller
Laboratory Director

NELAC - #NY11301
CT Lab Registration #PH-0618
MA Lab Registration #M-CT007
ME Lab Registration #CT-007
NH Lab Registration #213693-A,B
NJ Lab Registration #CT-003
NY Lab Registration #11301
PA Lab Registration #68-03530
RI Lab Registration #63
UT Lab Registration #CT00007
VT Lab Registration #VT11301

Environmental Laboratories, Inc.
587 East Middle Turnpike, P.O.Box 370, Manchester, CT 06045
Tel. (860) 645-1102 Fax (860) 645-0823

ACCREDITED IN ACCORDANCE WITH nelac NY # 11301

Sample Id Cross Reference

October 18, 2021

SDG I.D.: GCJ54595

Project ID: 33 OLD PORTLAND ROAD FREEDOM NH

Client Id	Lab Id	Matrix
PCB 1	CJ54595	SOIL
PCB 2	CJ54596	SOIL

PHOENIX
Environmental Laboratories, Inc.
587 East Middle Turnpike, P.O.Box 370, Manchester, CT 06045
Tel. (860) 645-1102 Fax (860) 645-0823

ACCREDITED IN ACCORDANCE WITH nelac NY # 11301

Analysis Report

October 18, 2021

FOR: Attn: Mr.Ray Desmarais, CIH, CSP
Desmarais Environmental, Inc.
320 Hemlock Lane
Barrington, NH 03825

Sample Information		Custody Information		Date	Time
Matrix:	SOIL	Collected by:		10/08/21	8:00
Location Code:	DESMAR	Received by:	LB	10/13/21	11:11
Rush Request:	Standard	Analyzed by:	see "By" below		
P.O.#:					

Laboratory Data

SDG ID: GCJ54595
Phoenix ID: CJ54595

Project ID: 33 OLD PORTLAND ROAD FREEDOM NH
Client ID: PCB 1

Parameter	Result	RL/ PQL	Units	Dilution	Date/Time	By	Reference
Extraction for PCB	Completed				10/13/21	X/Q	SW3540C
PCB (Soxhlet SW3540C)							
PCB-1016	ND	760	ug/Kg	1	10/14/21	SC	SW8082A
PCB-1221	ND	760	ug/Kg	1	10/14/21	SC	SW8082A
PCB-1232	ND	760	ug/Kg	1	10/14/21	SC	SW8082A
PCB-1242	ND	760	ug/Kg	1	10/14/21	SC	SW8082A
PCB-1248	ND	760	ug/Kg	1	10/14/21	SC	SW8082A
PCB-1254	ND	760	ug/Kg	1	10/14/21	SC	SW8082A
PCB-1260	ND	760	ug/Kg	1	10/14/21	SC	SW8082A
PCB-1262	ND	760	ug/Kg	1	10/14/21	SC	SW8082A
PCB-1268	ND	760	ug/Kg	1	10/14/21	SC	SW8082A
QA/QC Surrogates							
% DCBP	43		%	1	10/14/21	SC	30 - 150 %
% DCBP (Confirmation)	42		%	1	10/14/21	SC	30 - 150 %
% TCMX	34		%	1	10/14/21	SC	30 - 150 %
% TCMX (Confirmation)	35		%	1	10/14/21	SC	30 - 150 %

Project ID: 33 OLD PORTLAND ROAD FREEDOM NH
Client ID: PCB 1

Phoenix I.D.: CJ54595

Parameter	Result	RL/ PQL	Units	Dilution	Date/Time	By	Reference

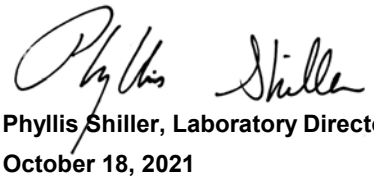
RL/PQL=Reporting/Practical Quantitation Level (Equivalent to NELAC LOQ, Limit of Quantitation) ND=Not Detected at RL/PQL
BRL=Below Reporting Level L=Biased Low
QA/QC Surrogates: Surrogates are compounds (preceeded with a %) added by the lab to determine analysis efficiency. Surrogate results(%) listed in the report are not "detected" compounds.

Comments:

Results are reported on an ``as received`` basis, and are not corrected for dry weight.

All soils, solids and sludges are reported on a dry weight basis unless otherwise noted in the sample comments.

If you are the client above and have any questions concerning this testing, please do not hesitate to contact Phoenix Client Services at ext.200.
The contents of this report cannot be discussed with anyone other than the client listed above without their written consent.



Phyllis Shiller, Laboratory Director
October 18, 2021
Reviewed and Released by: Rashmi Makol, Project Manager

PHOENIX
Environmental Laboratories, Inc.
587 East Middle Turnpike, P.O.Box 370, Manchester, CT 06045
Tel. (860) 645-1102 Fax (860) 645-0823

ACCREDITED IN ACCORDANCE WITH nelac NY # 11301

Analysis Report

October 18, 2021

FOR: Attn: Mr.Ray Desmarais, CIH, CSP
Desmarais Environmental, Inc.
320 Hemlock Lane
Barrington, NH 03825

Sample Information		Custody Information		Date	Time
Matrix:	SOIL	Collected by:		10/08/21	8:00
Location Code:	DESMAR	Received by:	LB	10/13/21	11:11
Rush Request:	Standard	Analyzed by:	see "By" below		
P.O.#:					

Laboratory Data

SDG ID: GCJ54595
Phoenix ID: CJ54596

Project ID: 33 OLD PORTLAND ROAD FREEDOM NH
Client ID: PCB 2

Parameter	Result	RL/ PQL	Units	Dilution	Date/Time	By	Reference
Extraction for PCB	Completed				10/13/21	X/Q	SW3540C
PCB (Soxhlet SW3540C)							
PCB-1016	ND	830	ug/Kg	1	10/14/21	SC	SW8082A
PCB-1221	ND	830	ug/Kg	1	10/14/21	SC	SW8082A
PCB-1232	ND	830	ug/Kg	1	10/14/21	SC	SW8082A
PCB-1242	ND	830	ug/Kg	1	10/14/21	SC	SW8082A
PCB-1248	ND	830	ug/Kg	1	10/14/21	SC	SW8082A
PCB-1254	ND	830	ug/Kg	1	10/14/21	SC	SW8082A
PCB-1260	ND	830	ug/Kg	1	10/14/21	SC	SW8082A
PCB-1262	ND	830	ug/Kg	1	10/14/21	SC	SW8082A
PCB-1268	ND	830	ug/Kg	1	10/14/21	SC	SW8082A
QA/QC Surrogates							
% DCBP	44		%	1	10/14/21	SC	30 - 150 %
% DCBP (Confirmation)	41		%	1	10/14/21	SC	30 - 150 %
% TCMX	34		%	1	10/14/21	SC	30 - 150 %
% TCMX (Confirmation)	35		%	1	10/14/21	SC	30 - 150 %

Parameter	Result	RL/ PQL	Units	Dilution	Date/Time	By	Reference

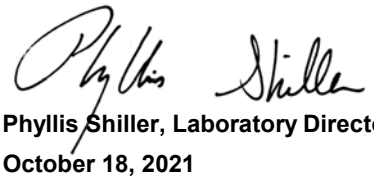
RL/PQL=Reporting/Practical Quantitation Level (Equivalent to NELAC LOQ, Limit of Quantitation) ND=Not Detected at RL/PQL
BRL=Below Reporting Level L=Biased Low
QA/QC Surrogates: Surrogates are compounds (preceeded with a %) added by the lab to determine analysis efficiency. Surrogate results(%) listed in the report are not "detected" compounds.

Comments:

Results are reported on an ``as received`` basis, and are not corrected for dry weight.

All soils, solids and sludges are reported on a dry weight basis unless otherwise noted in the sample comments.

If you are the client above and have any questions concerning this testing, please do not hesitate to contact Phoenix Client Services at ext.200.
The contents of this report cannot be discussed with anyone other than the client listed above without their written consent.



Phyllis Shiller, Laboratory Director
October 18, 2021
Reviewed and Released by: Rashmi Makol, Project Manager

Environmental Laboratories, Inc.
587 East Middle Turnpike, P.O.Box 370, Manchester, CT 06045
Tel. (860) 645-1102 Fax (860) 645-0823

NY # 11301

QA/QC Report

October 18, 2021

QA/QC Data

SDG I.D.: GCJ54595

Parameter	Blank	Blk RL	LCS %	LCSD %	LCS RPD	MS %	MSD %	MS RPD	% Rec Limits	% RPD Limits
QA/QC Batch 596120 (ug/Kg), QC Sample No: CJ44633 10X (CJ54595, CJ54596)										
Polychlorinated Biphenyls - Soil										
PCB-1016	ND	170	94	98	4.2				40 - 140	30
PCB-1221	ND	170							40 - 140	30
PCB-1232	ND	170							40 - 140	30
PCB-1242	ND	170							40 - 140	30
PCB-1248	ND	170							40 - 140	30
PCB-1254	ND	170							40 - 140	30
PCB-1260	ND	170	86	96	11.0				40 - 140	30
PCB-1262	ND	170							40 - 140	30
PCB-1268	ND	170							40 - 140	30
% DCBP (Surrogate Rec)	104	%	81	93	13.8				30 - 150	30
% DCBP (Surrogate Rec) (Confirm	101	%	80	92	14.0				30 - 150	30
% TCMX (Surrogate Rec)	97	%	99	103	4.0				30 - 150	30
% TCMX (Surrogate Rec) (Confirm	100	%	109	114	4.5				30 - 150	30

Comment:

A LCS and LCS Duplicate were performed instead of a matrix spike and matrix spike duplicate.

If there are any questions regarding this data, please call Phoenix Client Services at extension 200.

RPD - Relative Percent Difference
LCS - Laboratory Control Sample
LCSD - Laboratory Control Sample Duplicate
MS - Matrix Spike
MS Dup - Matrix Spike Duplicate
NC - No Criteria
Intf - Interference

Phyllis Shiller, Laboratory Director
October 18, 2021

Monday, October 18, 2021

Criteria: None

State: NH

Sample Criteria Exceedances Report

GCJ54595 - DESMAR

SampNo	Acode	Phoenix Analyte	Criteria	Result	RL	Criteria	RL Criteria	Analysis Units

*** No Data to Display ***

Phoenix Laboratories does not assume responsibility for the data contained in this exceedance report. It is provided as an additional tool to identify requested criteria exceedences. All efforts are made to ensure the accuracy of the data (obtained from appropriate agencies). A lack of exceedence information does not necessarily suggest conformance to the criteria. It is ultimately the site professional's responsibility to determine appropriate compliance.

Environmental Laboratories, Inc.
587 East Middle Turnpike, P.O.Box 370, Manchester, CT 06045
Tel. (860) 645-1102 Fax (860) 645-0823

ACCREDITED IN ACCORDANCE WITH nelac NY # 11301

Analysis Comments

October 18, 2021 SDG I.D.: GCJ54595

The following analysis comments are made regarding exceptions to criteria not already noted in the Analysis Report or QA/QC Report: None.

CHAIN OF CUSTODY RECORD

PHOENIX *Environmental Laboratories, Inc.*

587 East Middle Turnpike, P.O. Box 370, Manchester, CT 06040
Email: info@phoenixlabs.com Fax (860) 645-0823
Client Services (860) 645-8726

KD Temp 15.2° Envelope Pg of

Data Delivery:
☐ Fax #:
☒ Email Ray@denvironmental.com

Customer:	Desmarais Environmental, Inc.	Project:	33 Old Portland Road Freedom NH
Address:	320 Hemlock Lane	Report to:	
	Barrington, NH 03825	Invoice to:	

Project P.O.:
Phone #: (603) 664-5500
Fax #: (603) 664-5600

PCBClient Sample - Information - Identification

Sampler's Signature ______ Date: ______

Matrix Code:
DW=drinking water WW=wastewater S=soil/solid O=oil
GW=groundwater SL=sludge A=air X=other

Analysis Request

Phoenix Sample #	Customer Sample Identification	Sample Matrix	Date Sampled	Time Sampled	PCB Soxhalet	Initial packet
54595	PCB1	S	10/8/2021	8:00 AM	X	X
54596	PCB2	S	10/8/2021	8:00 AM	x	X

Container columns: Soil VOA Vials [ ] methanol [ ] Sod Bisulfate; GL Soil container ( ) oz; GL Soil container ( ) oz; 40 ml VOA Vial [ ] As is [ ] HCl; GL Amber 1000ml [ ] As is [ ] H2SO4; PL As is [ ] 250ml [ ] 500ml [ ] 1000ml; PL H2SO4 [ ] 250ml [ ] 500ml; PL HNO3 250ml; PL NaOH 250ml; Bacteria Bottle

Relinquished by:	Accepted by:	Date:	Time:
Ray Desmarais			
(signature)	(signature)	10/13/21	11:11

Comments, Special Requirements or Regulations:

Turnaround:
☐ 1 Day*
☐ 2 Days*
☐ 3 Days*
☐ Standard
☒ Other
* SURCHARGE APPLIES

CT/RI
☐ RCP Cert
☐ GW Protect
☐ GA Mobility
☐ GB Mobility
☐ SW Protection
☐ Res. Vol.
☐ Ind. Vol.
☐ Res. Criteria
☐ Other

MA
☐ MCP Certification
☐ GW-1
☐ GW-2
☐ GW-3
☐ S-1
☐ S-2
☐ S-3
☐ MWRA eSMART
☐ Other

Data Format
☐ Excel
☐ PDF
☐ GIS/Key
☐ EQuIS
☐ Other ______

Data Package
☐ ASP-A
☐ NJ Reduced Deliv. *
☐ NJ Hazsite EDD
☐ Phoenix Std Report
☐ Other

State where samples were collected: NH

OPTIMUM
Analytical and Consulting, LLC

85 Stiles Road, Suite 201
Salem, NH 03079
603-458-5247

Ray Desmarais
Desmarais Environmental, Inc.
320 Hemlock Lane
Barrington NH 03825

Project Reference:	
Laboratory Batch #:	2140297
Date Samples Received:	10/12/2021
Date Samples Analyzed:	10/22/2021
Date of Final Report:	10/26/2021

SAMPLE IDENTIFICATION:

Fifteen (15) samples from 33 Old Portland Rd., Freedom, NH project were submitted by Ray Desmarais on 10/12/2021

This bulk sample(s) was delivered to Optimum Analytical Consulting, LLC (Optimum) located in Salem, New Hampshire for asbestos content determination.

ANALYTICAL METHOD:

Analytical procedures were performed in accordance with the U.S. Environmental Protection Agency (EPA) Recommended Method for the Determination of Asbestos in Bulk Samples by Polarized Light Microscopy and Dispersion Staining (PLM/DS)(EPA-40 CFR Appendix E to Subpart E of Part 763, Interim Method of the Determination of Asbestos in Bulk Insulation Samples, EPA-600/ R-93-116 Method for Determination of Asbestos in Bulk Building Materials). This report relates only to those samples analyzed, and may not be indicative of other similar appearing materials existing at this, or other sites. Quantification of asbestos content was determined by Calibrated Visual Estimation. Optimum is not responsible for sample collection activities or analytical method limitations. The laboratory is not responsible for the accuracy of results when requested to physically separate and analyze layered samples.

In any given material, fibers with a small diameter (<0.25µm) may not be detected by the PLM method. Floor tile and other resinous bound materials may yield a false negative if the asbestos fibers are too small to be resolved using PLM. Additionally, there is currently no approved EPA analytical method to reliably confirm vermiculite as non-asbestos containing. Additional analytical methods may be required. Optimum Analytical recommends using Transmission Electron Microscopy (TEM) or other approved methods for a more definitive analysis.

Optimum will retain all samples for a minimum of three months. Further analysis or return of samples must be requested within this three month period to guarantee their availability. This report may not be reproduced except in full, without the written approval of Optimum Analytical and Consulting, LLC.

Use of the NVLAP and AIHA Logo in no way constitutes or implies product certification, approval, or endorsement by the National Institute of Standards and Technology or the American Industrial Hygiene Association.

Detection Limit <1%, Reporting Limits: CVES = 1%, 400 Point Count = .25%, 1000 Point Count = 0.1%; Present or Absent are observations made during a qualitative analysis.

This report is considered preliminary until signed by both the Laboratory Analyst and Laboratory Director or Supervisor. If you have any questions regarding this report, please do not hesitate to contact us.

Jamie L. Noel
Laboratory Director

Kristina Scaviola
Laboratory Supervisor

NVLAP Lab ID#: 101433-0

OPTIMUM
Analytical and Consulting, LLC
85 Stiles Road, Suite 201, Salem, NH 03079 Phone: (603)-458-5247

BULK SAMPLE ANALYSIS REPORT POLARIZED LIGHT MICROSCOPY

PLM (EPA-40 CFR Appendix E to Subpart E of Part 763, Interim Method of the Determination of Asbestos in Bulk Insulation Samples, EPA-600/ R-93-116 Method for Determination of Asbestos in Bulk Building Materials) NVLAP Lab Code: 101433-0

CLIENT: Desmarais Environmental, Inc.
ADDRESS: 320 Hemlock Lane
CITY / STATE / ZIP: Barrington NH 03825
CONTACT: Ray Desmarais
DESCRIPTION: PLM Analysis
LOCATION: 33 Old Portland Rd., Freedom, NH

ORDER #: 2140297
PROJECT #:
DATE COLLECTED:
COLLECTED BY: Ray Desmarais
DATE RECEIVED: 10/12/2021
ANALYSIS DATE: 10/22/2021
REPORT DATE: 10/26/2021
ANALYST: Jamie Noel

REPORT OF ANALYSIS

Laboratory ID Sample No.	Sample Location Description	Layer No. Layer %	Asbestos Type	(%)	Non-Asbestos Components	(%)
2140297-001	Roof					
1	Shingle, Black	LAYER 1 100%	None Detected		Fibrous Glass Cellulose Fiber Binder/Filler	35% 1% 64%
		Total % Asbestos:	No Asbestos Detected		**Total % Non-Asbestos:**	100.0%
2140297-002	Original Bldg.					
2	Window Glazing, Beige/Black	LAYER 1 100%	None Detected		Cellulose Fiber Non-Fibrous Material	1% 99%
		Total % Asbestos:	No Asbestos Detected		**Total % Non-Asbestos:**	100.0%
2140297-003	Addition					
3	Window Glazing, Beige/White/Gray	LAYER 1 100%	None Detected		Cellulose Fiber Non-Fibrous Material	1% 99%
		Total % Asbestos:	No Asbestos Detected		**Total % Non-Asbestos:**	100.0%
2140297-004	Original Bldg.					
4	Window Caulking, Beige/White	LAYER 1 100%	None Detected		Cellulose Fiber Non-Fibrous Material	1% 99%
		Total % Asbestos:	No Asbestos Detected		**Total % Non-Asbestos:**	100.0%
2140297-005	Addition					
5	Window Caulking, Gray/White	LAYER 1 100%	None Detected		Cellulose Fiber Non-Fibrous Material	1% 99%
		Total % Asbestos:	No Asbestos Detected		**Total % Non-Asbestos:**	100.0%
2140297-006	Hall					
6	Sheetrock Composite, Gray Note: No Joint Compound Present	LAYER 1 100%	None Detected		Cellulose Fiber Non-Fibrous Material	10% 90%
		Total % Asbestos:	No Asbestos Detected		**Total % Non-Asbestos:**	100.0%
2140297-007	Bath					
7	Linoleum, Beige	LAYER 1 100%	None Detected		Cellulose Fiber Non-Fibrous Material	1% 99%
		Total % Asbestos:	No Asbestos Detected		**Total % Non-Asbestos:**	100.0%
2140297-008	Bath					
8	Mastic, No Mastic Present Under Linoleum	LAYER 1 100%				

OPTIMUM
Analytical and Consulting, LLC
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BULK SAMPLE ANALYSIS REPORT
POLARIZED LIGHT MICROSCOPY

PLM (EPA-40 CFR Appendix E to Subpart E of Part 763, Interim Method of the Determination of Asbestos in Bulk Insulation Samples, EPA-600/ R-93-116 Method for Determination of Asbestos in Bulk Building Materials) NVLAP Lab Code: 101433-0

CLIENT:	Desmarais Environmental, Inc.	**ORDER #:**	2140297
ADDRESS:	320 Hemlock Lane	**PROJECT #:**	
CITY / STATE / ZIP:	Barrington NH 03825	**DATE COLLECTED:**	
CONTACT:	Ray Desmarais	**COLLECTED BY:**	Ray Desmarais
DESCRIPTION:	PLM Analysis	**DATE RECEIVED:**	10/12/2021
LOCATION:	33 Old Portland Rd., Freedom, NH	**ANALYSIS DATE:**	10/22/2021
		REPORT DATE:	10/26/2021
		ANALYST:	Jamie Noel

REPORT OF ANALYSIS

Laboratory ID Sample No.	Sample Location Description	Layer No. Layer %	Asbestos Type	(%)	Non-Asbestos Components	(%)
2140297-009	Main Office					
9	Ceiling Tile, Gray	LAYER 1 100%	None Detected		Cellulose Fiber Fibrous Glass Binder/Filler	65% 15% 20%
		Total % Asbestos:	No Asbestos Detected		**Total % Non-Asbestos:**	100.0%
2140297-010	Main Office					
10	LAYER 1 Ceiling Tile, Yellow	LAYER 1 100%	None Detected		Cellulose Fiber Fibrous Glass Non-Fibrous Material	1% 97% 2%
	LAYER 2 Mastic, Tan	LAYER 2 100%	None Detected		Cellulose Fiber Non-Fibrous Material	1% 99%
		Total % Asbestos:	No Asbestos Detected		**Total % Non-Asbestos:**	100.0%
2140297-011	Stairs					
11	LAYER 1 Tread, Brown	LAYER 1 100%	None Detected		Cellulose Fiber Non-Fibrous Material	1% 99%
	LAYER 2 Adhesive, Tan	LAYER 2 100%	None Detected		Cellulose Fiber Binder/Filler	1% 99%
		Total % Asbestos:	No Asbestos Detected		**Total % Non-Asbestos:**	100.0%
2140297-012	Stairs					
12	Landing, Brown	LAYER 1 100%	None Detected		Cellulose Fiber Non-Fibrous Material	1% 99%
		Total % Asbestos:	No Asbestos Detected		**Total % Non-Asbestos:**	100.0%
2140297-013	Hall					
13	Ceiling Panel Wood, Brown	LAYER 1 100%	None Detected		Cellulose Fiber Non-Fibrous Material	99% 1%
		Total % Asbestos:	No Asbestos Detected		**Total % Non-Asbestos:**	100.0%
2140297-014	Hall					
14	Cove Base, Blue	LAYER 1 100%	None Detected		Cellulose Fiber Non-Fibrous Material	1% 99%
		Total % Asbestos:	No Asbestos Detected		**Total % Non-Asbestos:**	100.0%
2140297-015	Hall					
15	Adhesive, Tan	LAYER 1 100%	None Detected		Cellulose Fiber Non-Fibrous Material	1% 99%
		Total % Asbestos:	No Asbestos Detected		**Total % Non-Asbestos:**	100.0%

OPTIMUM
Analytical and Consulting, LLC

85 Stiles Road, Suite 201, Salem, NH 03079 Phone: (603)-458-5247

BULK SAMPLE ANALYSIS REPORT
POLARIZED LIGHT MICROSCOPY

PLM (EPA-40 CFR Appendix E to Subpart E of Part 763, Interim Method of the Determination of Asbestos in Bulk Insulation Samples, EPA-600/ R-93-116 Method for Determination of Asbestos in Bulk Building Materials) NVLAP Lab Code: 101433-0

CLIENT:	Desmarais Environmental, Inc.	**ORDER #:**	2140297
ADDRESS:	320 Hemlock Lane	**PROJECT #:**	
CITY / STATE / ZIP:	Barrington NH 03825	**DATE COLLECTED:**	
CONTACT:	Ray Desmarais	**COLLECTED BY:**	Ray Desmarais
DESCRIPTION:	PLM Analysis	**DATE RECEIVED:**	10/12/2021
LOCATION:	33 Old Portland Rd., Freedom, NH	**ANALYSIS DATE:**	10/22/2021
		REPORT DATE:	10/26/2021
		ANALYST:	Jamie Noel

REPORT OF ANALYSIS

Laboratory ID Sample No.	Sample Location Description	Layer No. Layer %	Asbestos Type	(%)	Non-Asbestos Components	(%)

Analyst Signatory: _____

Jamie Noel

NVLAP TESTING
NVLAP Lab Code: 101433-0

OPTIMUM
Analytical and Consulting, LLC

85 Stiles Road, Suite 201, Salem, NH 03079 Phone: (603)-458-5247

BULK SAMPLE ANALYSIS REPORT
POLARIZED LIGHT MICROSCOPY

PLM (EPA-40 CFR Appendix E to Subpart E of Part 763, Interim Method of the Determination of Asbestos in Bulk Insulation Samples, EPA-600/ R-93-116 Method for Determination of Asbestos in Bulk Building Materials) NVLAP Lab Code: 101433-0

CLIENT:	Desmarais Environmental, Inc.
ADDRESS:	320 Hemlock Lane
CITY / STATE / ZIP:	Barrington NH 03825
CONTACT:	Ray Desmarais
DESCRIPTION:	PLM Analysis
LOCATION:	33 Old Portland Rd., Freedom, NH

ORDER #:	2140297
PROJECT #:	
DATE COLLECTED:	
COLLECTED BY:	Ray Desmarais
DATE RECEIVED:	10/12/2021
ANALYSIS DATE:	10/22/2021
REPORT DATE:	10/26/2021
ANALYST:	Jamie Noel

2140297

Sample Log and Chain of Custody Record

Project: 33 Old Portland Road Freedom NH

Normal Turnaround Please

Sample #		Description	Location	Analysis
1		Shingle	Roof	PLM ASB
2		Window Glaze	Original Bldg	PLM ASB
3		Window Glaze	Addition	PLM ASB
4		Window Caulk	Original Bldg	PLM ASB
5		Window Caulk	Addition	PLM ASB
6		Sheetrock Composite	Hall	PLM ASB
7		Linoleum	Bath	PLM ASB
8		Adhesive	Bath	PLM ASB
9		2X4 Ceiling Tile Fissured	Main Office	PLM ASB
10		2X4 Ceiling Tile Smooth	Main Office	PLM ASB
11		Tread	Stairs	PLM ASB
12		Landing	Stairs	PLM ASB
13		Ceiling Panel	Hall	PLM ASB
14		Green Cove Base	Hall	PLM ASB
15		Adhesive	Hall	

Sampled By:	**Ray Desmarais**
Shipped To:	**Optimum**
Received By:	10/12/21 @ 12:30

Desmarais Environmental, Inc. 62 Al Wood Dr Barrington, NH 03825
Office: 603-664-5500 Fax: 603-664-5600

AEROBIOLOGY LABORATORY ASSOCIATES, INCORPORATED
A Pace Analytical® Laboratory

Telephone: 781-935-3212
Facsimile: 781-932-4857
Email: boston@aerobiology.net

Laboratory Report

Contact: Jamie Noel
Client: Optimum Analytical & Consulting,LLC
Address: 85 Stiles Road, Suite 201
Salem, NH 03079

Batch #: C 308872
Date received: 10/14/2021
Date analyzed: 10/14/2021
Date of report: 10/14/2021

Project # 2140282
P.O.# N/A
Project Site: 33 Old Portland Rd.
Freedom, NH

AIHA-LAP, LLC Lab ID 102754

Lead Analysis In Paint Using SOP Based on SW846-7000B/3051
Results in weight percent on an "as received" weight basis

Lab ID	Client ID	Sample date	Description	Result	Reporting Limit	Comments
C 688853	1	10/11/21	Siding	8.56	0.016	Paint+Plaster
C 688854	2	10/11/21	Window Casing	11.7	0.011	Paint+Plaster
C 688855	3	10/11/21	Window Casing	1.77	0.008	
C 688856	4	10/11/21	Siding	9.77	0.005	Paint+Plaster
C 688857	5	10/11/21	Window Caulk	0.583	0.015	Paint+Plaster
C 688858	6	10/11/21	Window Caulk	0.024	0.023	Paint+Caulk
C 688859	7	10/11/21	Fire Escape	0.474	0.021	
C 688860	8	10/11/21	Door Casing	<RL	0.015	
C 688861	9	10/11/21	Wainscot	0.143	0.020	
C 688862	10	10/11/21	Window Casing	1.12	0.057	

Simona Peavey, Tech. Manager Chemistry
Aimee Cormier, Lab Director

Unless otherwise indicated, all samples were received in acceptable condition.
All results apply only to the samples tested and as received and are accurate to no more than three significant figures.
Unless otherwise indicated, all the quality control criteria for the method above have been met.
RL-Reporting Limit(%by weight) Note on units: mg/Kg is the same as ppm by weight.
RL-Reporting Limit; Defined as the lowest concentration the laboratory can accurately quantitate.

Please visit our website at www.proscience.net for the current accreditation status.

AEROBIOLOGY LABORATORY ASSOCIATES, INCORPORATED
A Pace Analytical® Laboratory

Telephone: 781-935-3212
Facsimile: 781-932-4857
Email: boston@aerobiology.net

Laboratory Report

Contact: Jamie Noel
Client: Optimum Analytical & Consulting,LLC
Address: 85 Stiles Road, Suite 201
Salem, NH 03079

Batch #: C 308872
Date received: 10/14/2021
Date analyzed: 10/14/2021
Date of report: 10/14/2021

Project # 2140282
P.O.# N/A
Project Site: 33 Old Portland Rd.
Freedom, NH

AIHA-LAP, LLC Lab ID 102754

Lead Analysis In Paint Using SOP Based on SW846-7000B/3051
Results in weight percent on an "as received" weight basis

Lab ID	Client ID	Sample date	Description	Result	Reporting Limit	Comments
C 688863	11	10/11/21	Baseboard	<RL	0.175	Note 1
C 688864	12	10/11/21	Wall	<RL	0.017	
C 688865	13	10/11/21	Wall	<RL	0.043	
C 688866	14	10/11/21	Newer Post	0.654	0.016	
C 688867	15	10/11/21	Stringer	<RL	0.092	
C 688868	16	10/11/21	Window Well	27.1	0.020	
C 688869	17	10/11/21	Inv. Wains	7.01	0.036	

Note 1: There was not enough sample in the bag required for analysis, therefore the results may not be accurate.

Simona Peavey, Tech. Manager/Chemistry
Aimee Cormier, Lab Director

Unless otherwise indicated, all samples were received in acceptable condition.
All results apply only to the samples tested and as received and are accurate to no more than three significant figures.
Unless otherwise indicated, all the quality control criteria for the method above have been met.
RL-Reporting Limit(%by weight) Note on units: mg/Kg is the same as ppm by weight.
RL-Reporting Limit; Defined as the lowest concentration the laboratory can accurately quantitate.

Please visit our website at www.proscience.net for the current accreditation status.

ProScience Analytical Services, Inc.
Chemistry Chain of Custody Record

LABORATORY/HEADQUARTERS
22 Cummings Park, Woburn, MA 01801
T:781-935-3212 F:781-932-4857

www.proscience.net
general@proscience.net

Turn Around Time Requested

Rush/<6 Hours	Same Day	Next Day	2 Day	3 Day	5 Days
					X

Client: Optimum Analytical + Consulting, LLC

Address: Street: 85 Stiles Rd, Ste 201
Town: Salem State/Zip: NH 03079

Project Site: Line 1: 33 Old Portland Rd Project Number: 2140282
Line 2: Freedom, NH PO:

Contact: Jamie.Noel, Kristina.Scavida, Ann.Berrigan @OptimumAnalytical.com Phone / FAX / Alt/Pager

☐ NELAC analysis

TYPE OF ANALYSIS (circle)

DUST WIPES	PAINT (0.1 g)	SOIL (1 g)
AIR	TSP	TCLP (100g)
(min)	PM10	Other

Please use a separate form for each matrix.

Element: gravimetric
Pb Cd Cr As Fe
Se Ag Ba Hg
Other (please specify under Comments)

For Laboratory Use
BATCH NUMBER: C 308872
☐ QC

☐ ASTM E1792

FOR LABORATORY USE ONLY

Date and Time Sampled	Field I.D.	Sample Description/Location	Air Sampling Information: Start Time	End Time	Start Flowrate	End Flowrate	Volume (liters)	Wiped area: length (inch)	width (inch)	Area (sq in)	ANALYSIS: Weight (grams)	Dil'n	AA/ICP Reading	RESULT	Lab I.D.
10/11/21	1	Siding													688353
	2	Window Casing													54
	3	" "													55
	4	Siding													56
	5	Window Caulk													57
	6	" "													58
	7	Fire Escape													59
	8	Door Casing													60
	9	Wainscot													61
	10	Window Casing													62

Relinquished By: [signature] Date: 10/13/21 Time: 2p
Received By: Paula Leavitt-Cole Date: 10/14/21 Time: 9:35

Comments:

ver 5.5

All samples must be from the same source (lot) as was used for the collected field samples

ProScience Analytical Services, Inc.
Chemistry Chain of Custody Record

LABORATORY/HEADQUARTERS
22 Cummings Park, Woburn, MA 01801
T:781-935-3212 F:781-932-4857

www.proscience.net
general@proscience.net

Turn Around Time Requested: [ ] Rush/<6 Hours [ ] Same Day [ ] Next Day [ ] 2 Day [ ] 3 Day [X] 5 Days

Client: Optimum Analytical + Consulting, LLC
Address: Street 85 Stiles Rd, Ste 201
Town: Salem State/Zip: NH 03079
Project Site: Line 1 33 Old Portland Rd Project Number: 2140282
Line 2 Freedom, NH PO:
Contact: Jamie.Noel, Kristina.Scavicia, Ann.Berrigan @optimumanalytical.com Phone: FAX: Alt/Pager:

[ ] NELAC analysis

TYPE OF ANALYSIS (circle)

DUST WIPES	PAINT (0.1 g)	SOIL (1 g)
AIR	TSP	TCLP (100g)
(min)	PM10	Other

Please use a separate form for each matrix.

Element: (Pb) circled, Cd, Cr, As, Fe, Se, Ag, Ba, Hg — gravimetric
Other (please specify under Comments)
[ ] QC

For Laboratory Use
BATCH NUMBER: C 308872

[ ] ASTM E1792

FOR LABORATORY USE ONLY

Date and Time Sampled	Field I.D.	Sample Description/Location	Air Sampling Information: Start Time	End Time	Start Flowrate	End Flowrate	Volume (liters)	Wiped area: length (inch)	width (inch)	Area (sq in)	ANALYSIS: Weight (grams)	Dil'n	AA/ICP Reading	RESULT	Lab I.D.
10/11/21	11	Baseboard													63
↓	12	Wall													64
↓	13	Wall													65
↓	14	Newel Post													66
↓	15	Stringer													67
↓	16	Window Well													68
↓	17	Inv. Wains													69

Relinquished By: [signature] Date: 10/13/21 Time: 2 [initials]
Received By: Date: Time:

Comments:

ver 5.5

PAGE 2 OF 2

ASBESTOS PB & PCB
SURVEY REPORT
MASONIC TEMPLE

29 OLD PORTLAND ROAD
FREEDOM, NH

October 2021

320 Hemlock Lane, Barrington, NH 03825 ph 603-664-5500 www.denvironmental.com

October 27, 2021

On October 7, 2021, Desmarais Environmental, Inc. conducted a non-destructive asbestos, lead and PCB survey and testing of 29 Old Portland Road (Masonic Temple) in Freedom, New Hampshire.

The scope of work covered the entirety of interior and exterior building materials. The purpose of this survey was to determine the presence of asbestos-containing, lead-containing, and PCB-containing materials to ensure compliance with the regulatory requirements to renovate the building.

Reasonable efforts have been made by Desmarais Environmental, Inc personnel to locate and sample suspect asbestos-containing and lead-containing materials (ACM & LCM). However, for any facility, the existence of unique or concealed ACMs and debris is a possibility. In addition, sampling and laboratory analysis constraints typically hinder the investigation. Desmarais Environmental, Inc. does not warrant, guarantee or profess to have the ability to located or identify all asbestos containing materials within the area surveyed.

ASBESTOS BACKGROUND INFORMATION

Asbestos is a term to describe six naturally occurring mineral fibers that are commonly found in a wide array of building construction materials due to the fiber strength and heat resistant properties. When asbestos containing materials become damaged or are disturbed during repair, remodeling, or demolition activities; microscopic fibers become airborne. Asbestos fibers are so tiny and light that they can remain airborne for many hours. When inhaled, they can cause health problems. The three (3) most common types of asbestos are chrysotile, amosite and crocidolite. The lesser common types are tremolite, anthophyllite, and actinolite. Nearly 95% of all asbestos in the United States is chrysotile.

The Environmental Protection Agency classifies asbestos-containing building materials (ACBM) into three (3) general categories.

1. Surfacing Materials
    a. Any material that has been sprayed-on or troweled-on, or otherwise applied to surfaces. Textured ceilings, joint compound, and fireproofing are some examples of surfacing materials.
2. Thermal System Insulation (TSI)
    a. Any material applied to pipes, fittings, boilers, breeching, tanks, ducts, or other interior mechanical components designed to prevent heat loss or water condensation.
3. Miscellaneous Materials
    a. Any material that is not surfacing or thermal system insulation. Floor tiles, ceiling tiles, and transite board are some examples of miscellaneous materials.

The condition of asbestos containing materials is classified according to its friability, the current state of condition and its potential for disturbance. Friability is determined by the ability, when dry, to be crumbled, pulverized, or reduced to powder by hand pressure. The current state of condition is broken up into three categories

1. Significantly Damaged
    a. Over 10% evenly distributed damage or over 25% of the localized damage.

2. Damaged
    a. Less than 10% evenly distributed damage or less than 25% of the localized damage.
3. Good
    a. No visible damage or very little damage.

The potential for disturbance is categorized by answering three (3) questions with high, moderate, or low. The three questions are as follows,

1. The potential for contact with the material?
2. The influence of vibration on the material?
3. The potential for air erosion on the material?

Any question with a high answer shows potential for significant damage, any question answered with moderate shows potential for damage and all questions answered with low shows low potential.

The Environmental Protection Agency established the National Emission Standards for Hazardous Air Pollutants, 40 CFR 61, regulation to require the owner of a demolition or renovation activity and prior to commencement of the demolition or renovation, to thoroughly inspect the affected facility or part of the facility where the demolition or renovation operation will occur for the presence of asbestos. EPA defines a facility as any institutional, commercial, public, industrial, or residential structure, installation, or building. It includes any structure, installation, or building containing condominiums or individual dwelling units operated as a residential cooperative but excludes residential buildings having four or fewer dwelling units.

The State of New Hampshire established Env-A 1800 (Asbestos Management and Control) to better deal with asbestos within residential buildings. Under Env-A 1804.01, the State of New Hampshire requires that the owner/operator of a facility has an asbestos survey completed on the affected portion(s) prior to undertaking any demolition or renovation activity. According to Env-A 1802.31, the State of New Hampshire defines a facility as any institutional, commercial, public, or private building or structure, workplace, ship, installation, active waste disposal site, inactive waste disposal site operated after July 9, 1981, or rental dwelling.

Asbestos samples of suspect materials were collected as described below according to type and quantity of material per homogeneous area. A homogeneous area is defined as a suspect material of similar age, appearance, function and texture.

Material	Samples
Miscellaneous materials	One sample per homogeneous area
Surfacing materials	Three samples per homogeneous area
Thermal system insulation	Three samples per homogeneous area

LEAD BACKGROUND INFORMATION

Lead is a naturally occurring element found in small amounts in the earth's crust. While it has some beneficial uses, it can be toxic to humans and animals, causing health effects.

EPA's Lead Renovation, Repair and Painting Rule (RRP) Rule requires that firms performing renovation, repair and painting projects that disturb lead-based paint in homes, childcare facilities and pre-schools built before 1978 be certified by EPA (or an EPA-authorized state), use certified renovators who are trained by EPA-approved training providers and follow lead-safe work practices.

There are currently two methods recognized by the EPA for testing paint, which are X-Ray Fluorescence (XRF) analyzation and pain chip sampling followed by analysis by an accredited laboratory. In this case, paint chip sampling was conducted following analysis by Optimum Analytical & Consulting, LLC. Located in Salem, New Hampshire.

The laboratory report is expressed as weight of lead per weight of paint chip. The federal definition of lead-based paint is 0.5% lead or 5,000 milligram of lead per kilogram of paint chips.

POLYCHLORINATED BIPHENYLS (PCBs) BACKGROUND INFORMATION

Polychlorinated Biphenyls (PCBs) were used in the construction, renovation, and repair of many buildings, including schools, from the 1950's through the late 1970's. PCBs may be present in products and materials produced before the 1979 PCB ban. PCBs were used in industrial and commercial applications including electrical, heat transfer, and hydraulic equipment. They were also used as plasticizers in paints, plastics, and rubber compounds, and in pigments in dyes and some papers. PCBs commonly found in building construction include exterior window and door caulking and expansion joints. Most commercial PCB mixtures are known in the United States by their industrial trade names; the most common name is Aroclors. The primary focus in identifying polychlorinated biphenyls (PCBs) for this survey was in caulk within the buildings in preparation for its renovation or demolition.

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LABORATORY ANALYTICAL METHODS

Asbestos

All bulk samples collected were forwarded to Optimum Analytical & Consulting, LLC. located in Salem, New Hampshire. Optimum is a NIST/NVLAP and AIHA-accredited laboratory.

Analyses were performed using standard optical microscopy and petrographic techniques. A representative portion of the bulk sample was placed on a glass slide, immersed and macerated in the appropriate index oils. This was then examined under plane and fully polarized light on the petrographic microscope. The following features were used to identify unknown particles and fibers: Morphology, index of refraction, birefringence, size, color, etc.

Analytical results (compositions and percentages) are listed on the bulk report form attached. For the purpose of these analyses, asbestos determination and identification is based on definitions as set forth in the US. EPA Environmental Monitoring Systems Laboratory TEST METHOD "Interim Method for the Determination of Asbestos in Bulk Insulation Samples," EPA-600/M4-82-020.

Polarized-light microscopy is not consistently reliable in detecting asbestos in floor tiles. Confirmation by Transmission Electron Microscopy is recommended for negative floor tile samples.

Pb

All lead chip samples collected were forwarded to Optimum Analytical & Consulting, LLC. located in Salem, New Hampshire. Optimum forwarded samples to Aerobiology Laboratory. in Pennsauken Township, NJ.

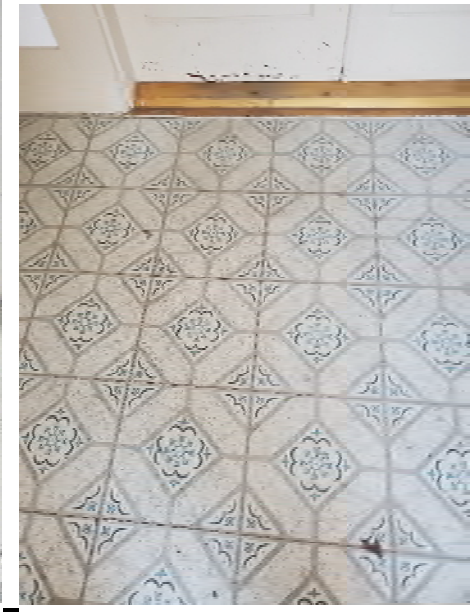
Paint chips were analyzed using Atomic Absorption method SW846-7000B/3051. Results are reported in percent weight of the sample.

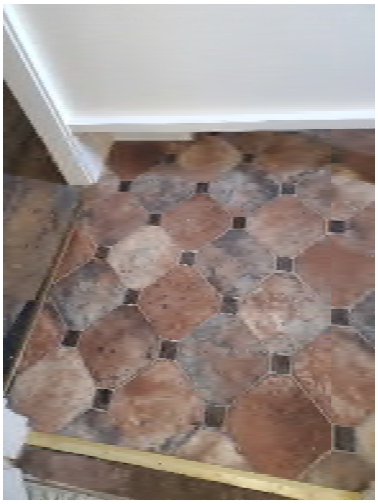
PCB

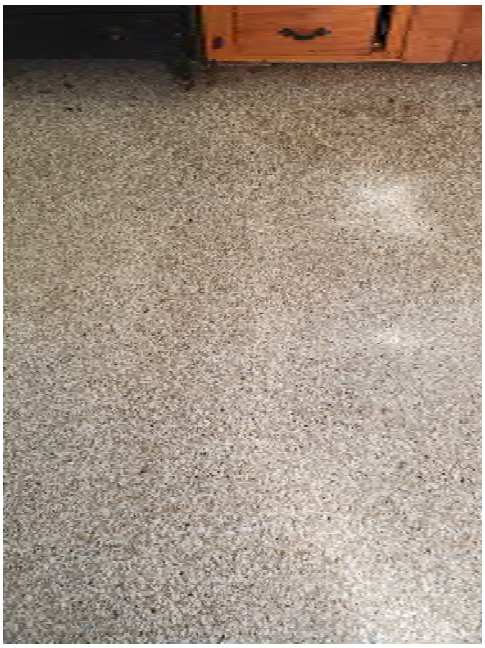
All bulk samples collected were forwarded Phoenix Environmental Laboratories located in Manchester, Connecticut.

Analyses were performed using EPA Method 8082 PCBs by gas chromatography. This method is used to determine the concentrations of PCBs as Aroclors or as individual PCB congeners in extracts from solids. A measured weight of the sample is extracted and analyzed using electron capture detectors (ECD) or electrolytic conductivity detectors (ELCD).

PHOTOS







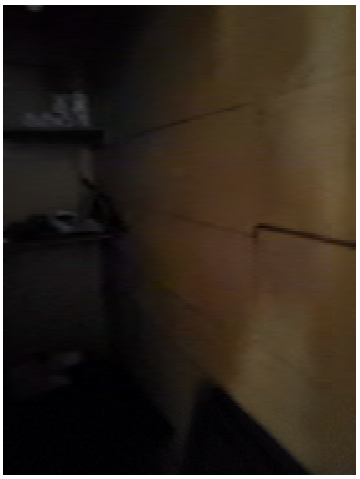


TABLE OF ASBESTOS BULK SAMPLING RESULTS

Sample #	Location	Item	Result
1	Floor Tile	Entry	**2% Chrysotile Asbestos**
2	Adhesive	Entry	None
3	Linoleum	Men	None
4	Adhesive	Men	None
5	Plaster	Boiler Room	None
6	Plaster	Boiler Room	None
7	Plaster	Boiler Room	None
8	Sheetrock Composite	Entry	None
9	Felt	Boiler Room	None
10	Linoleum	Kitchen	None
11	Adhesive	Kitchen	None
12	Ceiling Panel	2nd meeting Room	None
13	Wall	2nd meeting Room	None
14	Paper under carpet	2nd meeting Room	None

None = No Asbestos Structures Detected

TABLE OF LEAD PAINT CHIP SAMPLING RESULTS

Sample #	Item / Location	Result (%)
1	Window Casing Ext	**29.9**
2	Fire Escape	1.79
3	Upper Trim	**5.62**
4	Front Door	**3.41**
5	Front Door Casing	**17.7**
6	Window Casing	**34.7**
7	Wall Brown	0.894
8	Baseboard	**25.9**
9	Mens Door	0.81
10	No Sample	
11	Wall	0.101
12	Wall red	**4.97**
13	Wall White	0.165
14	Post	**10.2**
15	Ceiling	0.165
16	Closet Wall Yellow	**24.5**
17	Stringer	1.78

18	Tread	0.240
19	Door Casing	**9.20**
20	Baseboard	**5.02**
21	Wall	0.295
22	Wall	0.322

<RL = Less Than Reporting Limit

Results & Discussion

Asbestos was identified in the entry floor tile.

Lead was identified in the windows, exterior siding, trim, interior trim, some walls. The legal threshold to consider lead paint leaded is 5%. The entire exterior should be considered lead paint, all windows, and much of the interior paints contain lead. Some hidden lead components may exist within the building.

No suspect PCB materials were observed.

COST ESTIMATE

Item / Location	
Lead remediation varies depending on approach. To completely de-lead the property would likely require siding replacement, window replacement and significant interior renovations. Historical preservation requirements could affect mitigation options to more expensive methods.	$150,000-$300,000
Asbestos Floor Tile	$2,000

The laboratory reports are presented in Appendix 1.

If you have any questions regarding this report or require additional services, please do not hesitate to contact our office at (603) 664-5500.

Respectively submitted,
Desmarais Environmental, Inc.

Raymond G. Desmarais, CIH, CSP
New Hampshire Licensed Inspector, Management Planner & Designer
New Hampshire License #024-IMD

Appendix 1:
Laboratory Reports

OPTIMUM
Analytical and Consulting, LLC

85 Stiles Road, Suite 201
Salem, NH 03079
603-458-5247

Ray Desmarais
Desmarais Environmental, Inc.
320 Hemlock Lane
Barrington NH 03825

Project Reference:
Laboratory Batch #: 2140299
Date Samples Received: 10/12/2021
Date Samples Analyzed: 10/25/2021
Date of Final Report: 10/26/2021

SAMPLE IDENTIFICATION:

Fourteen (14) samples from Masonic Temple, Freedom, NH project were submitted by Ray Desmarais on 10/12/2021

This bulk sample(s) was delivered to Optimum Analytical Consulting, LLC (Optimum) located in Salem, New Hampshire for asbestos content determination.

ANALYTICAL METHOD:

Analytical procedures were performed in accordance with the U.S. Environmental Protection Agency (EPA) Recommended Method for the Determination of Asbestos in Bulk Samples by Polarized Light Microscopy and Dispersion Staining (PLM/DS)(EPA-40 CFR Appendix E to Subpart E of Part 763, Interim Method of the Determination of Asbestos in Bulk Insulation Samples, EPA-600/ R-93-116 Method for Determination of Asbestos in Bulk Building Materials). This report relates only to those samples analyzed, and may not be indicative of other similar appearing materials existing at this, or other sites. Quantification of asbestos content was determined by Calibrated Visual Estimation. Optimum is not responsible for sample collection activities or analytical method limitations. The laboratory is not responsible for the accuracy of results when requested to physically separate and analyze layered samples.

In any given material, fibers with a small diameter (<0.25µm) may not be detected by the PLM method. Floor tile and other resinous bound materials may yield a false negative if the asbestos fibers are too small to be resolved using PLM. Additionally, there is currently no approved EPA analytical method to reliably confirm vermiculite as non-asbestos containing. Additional analytical methods may be required. Optimum Analytical recommends using Transmission Electron Microscopy (TEM) or other approved methods for a more definitive analysis.

Optimum will retain all samples for a minimum of three months. Further analysis or return of samples must be requested within this three month period to guarantee their availability. This report may not be reproduced except in full, without the written approval of Optimum Analytical and Consulting, LLC.

Use of the NVLAP and AIHA Logo in no way constitutes or implies product certification, approval, or endorsement by the National Institute of Standards and Technology or the American Industrial Hygiene Association.

Detection Limit <1%, Reporting Limits: CVES = 1%, 400 Point Count = .25%, 1000 Point Count = 0.1%; Present or Absent are observations made during a qualitative analysis.

This report is considered preliminary until signed by both the Laboratory Analyst and Laboratory Director or Supervisor. If you have any questions regarding this report, please do not hesitate to contact us.

Jamie L. Noel
Laboratory Director

Kristina Scaviola
Laboratory Supervisor

NVLAP Lab ID#: 101433-0

OPTIMUM
Analytical and Consulting, LLC
85 Stiles Road, Suite 201, Salem, NH 03079 Phone: (603)-458-5247

BULK SAMPLE ANALYSIS REPORT
POLARIZED LIGHT MICROSCOPY

PLM (EPA-40 CFR Appendix E to Subpart E of Part 763, Interim Method of the Determination of Asbestos in Bulk Insulation Samples, EPA-600/ R-93-116 Method for Determination of Asbestos in Bulk Building Materials) NVLAP Lab Code: 101433-0

CLIENT:	Desmarais Environmental, Inc.	**ORDER #:**	2140299
ADDRESS:	320 Hemlock Lane	**PROJECT #:**	
CITY / STATE / ZIP:	Barrington NH 03825	**DATE COLLECTED:**	
CONTACT:	Ray Desmarais	**COLLECTED BY:**	Ray Desmarais
DESCRIPTION:	PLM Analysis	**DATE RECEIVED:**	10/12/2021
LOCATION:	Masonic Temple, Freedom, NH	**ANALYSIS DATE:**	10/25/2021
		REPORT DATE:	10/26/2021
		ANALYST:	Kristina Scaviola

REPORT OF ANALYSIS

Laboratory ID Sample No.	Sample Location Description	Layer No. Layer %	Asbestos Type	(%)	Non-Asbestos Components	(%)
2140299-001	Entry					
1	Floor Tile, Beige/Green	LAYER 1 100%	Chrysotile	2%	Cellulose Fiber Non-Fibrous Material	1% 97%
		Total % Asbestos:		2.0%	**Total % Non-Asbestos:**	98.0%
2140299-002	Entry					
2	Adhesive, Tan	LAYER 1 100%	None Detected		Cellulose Fiber Non-Fibrous Material	2% 98%
		Total % Asbestos:	No Asbestos Detected		**Total % Non-Asbestos:**	100.0%
2140299-003	Men					
3	Linoleum, White	LAYER 1 100%	None Detected		Cellulose Fiber Non-Fibrous Material	1% 99%
		Total % Asbestos:	No Asbestos Detected		**Total % Non-Asbestos:**	100.0%
2140299-004	Men					
4	Adhesive, No Adhesive Present	LAYER 1 100%				
2140299-005	Boiler Room					
5	LAYER 1 Plaster, White	LAYER 1 100%	None Detected		Cellulose Fiber Fibrous Glass Non-Fibrous Material	6% 2% 92%
	LAYER 2 Skim Coat/ Coating, Purple	LAYER 2 100%	None Detected		Cellulose Fiber Non-Fibrous Material	3% 97%
		Total % Asbestos:	No Asbestos Detected		**Total % Non-Asbestos:**	100.0%
2140299-006	Boiler Room					
6	LAYER 1 Plaster, White	LAYER 1 100%	None Detected		Cellulose Fiber Fibrous Glass Non-Fibrous Material	6% 2% 92%
	LAYER 2 Skim Coat/ Coating, Purple	LAYER 2 100%	None Detected		Cellulose Fiber Non-Fibrous Material	3% 97%
		Total % Asbestos:	No Asbestos Detected		**Total % Non-Asbestos:**	100.0%
2140299-007	Boiler Room					
7	LAYER 1 Skim Coat, Purple	LAYER 1 100%	None Detected		Cellulose Fiber Non-Fibrous Material	1% 99%
	LAYER 2 Plaster, White	LAYER 2 100%	None Detected		Cellulose Fiber Non-Fibrous Material	3% 97%
		Total % Asbestos:	No Asbestos Detected		**Total % Non-Asbestos:**	100.0%

OPTIMUM
Analytical and Consulting, LLC
85 Stiles Road, Suite 201, Salem, NH 03079 Phone: (603)-458-5247

BULK SAMPLE ANALYSIS REPORT
POLARIZED LIGHT MICROSCOPY

PLM (EPA-40 CFR Appendix E to Subpart E of Part 763, Interim Method of the Determination of Asbestos in Bulk Insulation Samples, EPA-600/ R-93-116 Method for Determination of Asbestos in Bulk Building Materials) NVLAP Lab Code: 101433-0

CLIENT:	Desmarais Environmental, Inc.	**ORDER #:**	2140299
ADDRESS:	320 Hemlock Lane	**PROJECT #:**	
CITY / STATE / ZIP:	Barrington NH 03825	**DATE COLLECTED:**	
CONTACT:	Ray Desmarais	**COLLECTED BY:**	Ray Desmarais
DESCRIPTION:	PLM Analysis	**DATE RECEIVED:**	10/12/2021
LOCATION:	Masonic Temple, Freedom, NH	**ANALYSIS DATE:**	10/25/2021
		REPORT DATE:	10/26/2021
		ANALYST:	Kristina Scaviola

REPORT OF ANALYSIS

Laboratory ID Sample No.	Sample Location Description	Layer No. Layer %	Asbestos Type	(%)	Non-Asbestos Components	(%)
2140299-008	Entry					
8	Sheetrock Composite, Gray Note: No Joint Compound Present	LAYER 1 100%	None Detected		Cellulose Fiber Non-Fibrous Material	10% 90%
		Total % Asbestos:	No Asbestos Detected		**Total % Non-Asbestos:**	100.0%
2140299-009	Boiler Room					
9	Felt, Black	LAYER 1 100%	None Detected		Cellulose Fiber Non-Fibrous Material	90% 10%
		Total % Asbestos:	No Asbestos Detected		**Total % Non-Asbestos:**	100.0%
2140299-010	Kitchen					
10	Linoleum, Gold	LAYER 1 100%	None Detected		Cellulose Fiber Non-Fibrous Material	1% 99%
		Total % Asbestos:	No Asbestos Detected		**Total % Non-Asbestos:**	100.0%
2140299-011	Kitchen					
11	Adhesive, Note: Insufficient Adhesive for Analysis	LAYER 1 100%				
2140299-012	2nd Meeting Room					
12	Ceiling Panel, Gray Note: No Joint Compound Present	LAYER 1 100%	None Detected		Cellulose Fiber Non-Fibrous Material	10% 90%
		Total % Asbestos:	No Asbestos Detected		**Total % Non-Asbestos:**	100.0%
2140299-013	2nd Meeting Room					
13	Wall, Gray Note: No Joint Compound Present	LAYER 1 100%	None Detected		Cellulose Fiber Non-Fibrous Material	10% 90%
		Total % Asbestos:	No Asbestos Detected		**Total % Non-Asbestos:**	100.0%
2140299-014	2nd Meeting Room					
14	Paper Under Carpet, Gray Note: Appears to be Sheetrock	LAYER 1 100%	None Detected		Cellulose Fiber Non-Fibrous Material	10% 90%
		Total % Asbestos:	No Asbestos Detected		**Total % Non-Asbestos:**	100.0%

Analyst Signatory: _____
Kristina Scaviola

NVLAP TESTING
NVLAP Lab Code: 101433-0

OPTIMUM
Analytical and Consulting, LLC
85 Stiles Road, Suite 201, Salem, NH 03079 Phone: (603)-458-5247

BULK SAMPLE ANALYSIS REPORT
POLARIZED LIGHT MICROSCOPY

PLM (EPA-40 CFR Appendix E to Subpart E of Part 763, Interim Method of the Determination of Asbestos in Bulk Insulation Samples, EPA-600/ R-93-116 Method for Determination of Asbestos in Bulk Building Materials) NVLAP Lab Code: 101433-0

CLIENT:	Desmarais Environmental, Inc.
ADDRESS:	320 Hemlock Lane
CITY / STATE / ZIP:	Barrington NH 03825
CONTACT:	Ray Desmarais
DESCRIPTION:	PLM Analysis
LOCATION:	Masonic Temple, Freedom, NH

ORDER #:	2140299
PROJECT #:	
DATE COLLECTED:	
COLLECTED BY:	Ray Desmarais
DATE RECEIVED:	10/12/2021
ANALYSIS DATE:	10/25/2021
REPORT DATE:	10/26/2021
ANALYST:	Kristina Scaviola

2140299

Sample Log and Chain of Custody Record

Project: Masonic Temple Freedom NH

Normal Turnaround Please

Sample #		Description	Location	Analysis
1		Floor Tile	Entry	PLM ASB
2		Adhesive	Entry	PLM ASB
3		Linoleum	Men	PLM ASB
4		Adhesive	Men	PLM ASB
5		Plaster	Boiler Room	PLM ASB
6		Plaster	Boiler Room	PLM ASB
7		Plaster	Boiler Room	PLM ASB
8		Sheetrock Composite	Entry	PLM ASB
9		Felt	Boiler Room	PLM ASB
10		Linoleum	Kitchen	PLM ASB
11		Adhesive	Kitchen	PLM ASB
12		Ceiling Panel	2nd meeting Room	PLM ASB
13		Wall	2nd meeting Room	PLM ASB
14		Paper under carpet	2nd meeting Room	PLM ASB

Sampled By:	**Ray Desmarais**
Shipped To:	**Optimum**
Received By:	DB 10/12/21 @ 12:30

Desmarais Environmental, Inc. 62 Al Wood Dr Barrington, NH 03825
Office: 603-664-5500 Fax: 603-664-5600

Aerobiology Laboratory Associates, Incorporated
A Pace Analytical® Laboratory

Telephone: 781-935-3212
Facsimile: 781-932-4857
Email: boston@aerobiology.net

Laboratory Report

Contact: Jamie Noel
Client: Optimum Analytical & Consulting,LLC
Address: 85 Stiles Road, Suite 201
Salem, NH 03079

Batch #: C 308873
Date received: 10/14/2021
Date analyzed: 10/14/2021
Date of report: 10/14/2021
Date of revision:10/27/2021

Project # 2140279
P.O.# N/A
Project Site: 29 Old Portland Rd.
Freedom, NH Masonic Temple

AIHA-LAP, LLC Lab ID 102754

Lead Analysis In Paint Using SOP Based on SW846-7000B/3051
Results in weight percent on an "as received" weight basis

Lab ID	Client ID	Sample date	Description	Result	Reporting Limit	Comments
C 688870	1	10/11/21	Window Casing Ext	33.9	0.021	
C 688871	2	10/11/21	Fire Escape	1.79	0.032	
C 688872	3	10/11/21	Upper Trim	5.62	0.043	
C 688873	4	10/11/21	Front Door	3.41	0.018	
C 688874	5	10/11/21	Front Door Casing	17.7	0.015	
C 688875	6	10/11/21	Window Casing	34.7	0.011	
C 688876	7	10/11/21	Wall Brown	0.894	0.017	
C 688877	8	10/11/21	Baseboard	25.9	0.040	
C 688878	9	10/11/21	Mens Door	0.81	0.018	Paint+Wood
C 688879	11	10/11/21	Wall	0.101	0.017	

Simona Peavey, Tech. Manager Chemistry
Aimee Cormier, Lab Director

Unless otherwise indicated, all samples were received in acceptable condition.
All results apply only to the samples tested and as received and are accurate to no more than three significant figures.
Unless otherwise indicated, all the quality control criteria for the method above have been met.
RL-Reporting Limit(%by weight) Note on units: mg/Kg is the same as ppm by weight.
RL-Reporting Limit; Defined as the lowest concentration the laboratory can accurately quantitate.

Please visit our website at www.proscience.net for the current accreditation status.

Aerobiology Laboratory Associates, Incorporated
A Pace Analytical® Laboratory

Telephone: 781-935-3212
Facsimile: 781-932-4857
Email: boston@aerobiology.net

Laboratory Report

Contact: Jamie Noel
Client: Optimum Analytical & Consulting,LLC
Address: 85 Stiles Road, Suite 201
Salem, NH 03079

Batch #: C 308873
Date received: 10/14/2021
Date analyzed: 10/14/2021
Date of report: 10/14/2021
Date of revision:10/27/2021

AIHA-LAP, LLC Lab ID 102754

Project # 2140279
P.O.# N/A
Project Site: 29 Old Portland Rd.
Freedom, NH Masonic Temple

Lead Analysis In Paint Using SOP Based on SW846-7000B/3051
Results in weight percent on an "as received" weight basis

Lab ID	Client ID	Sample date	Description	Result	Reporting Limit	Comments
C 688880	12	10/11/21	Wall Rd	4.97	0.020	
C 688881	13	10/11/21	Wall White	0.165	0.043	
C 688882	14	10/11/21	Post	10.2	0.023	
C 688883	15	10/11/21	Ceiling	0.165	0.032	
C 688884	16	10/11/21	Closet Wall Yellow	24.5	0.043	
C 688885	17	10/11/21	Stringer	1.78	0.024	
C 688886	18	10/11/21	Tread	0.240	0.040	
C 688887	19	10/11/21	Door Casing	9.20	0.017	
C 688888	20	10/11/21	Baseboard	5.02	0.088	
C 688889	21	10/11/21	Wall	0.295	0.033	

Simona Peavey, Tech. Manager Chemistry
Aimee Cormier, Lab Director

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P.O.# N/A
Project Site: 29 Old Portland Rd.
Freedom, NH Masonic Temple

Lead Analysis In Paint Using SOP Based on SW846-7000B/3051
Results in weight percent on an "as received" weight basis

Lab ID	Client ID	Sample date	Description	Result	Reporting Limit	Comments
C 688890	22	10/11/21	Wall	0.322	0.039	Paint+Paper

Simona Peavey, Tech. Manager Chemistry
Aimee Cormier, Lab Director

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RL-Reporting Limit; Defined as the lowest concentration the laboratory can accurately quantitate.

Please visit our website at www.proscience.net for the current accreditation status.

Aerobiology Boston

From: Jamie Noel <jamie.noel@optimumanalytical.com>
Sent: Wednesday, October 27, 2021 8:18 AM
To: Aerobiology Boston; Kristina Scaviola; Ann Berrigan
Subject: RE: C308872 and C308873 Reports 33 Old Portland Rd., Freedom, NH
Attachments: C308873 Report 33 Old Portland Rd., Freedom. NH.pdf

Hi Guys,

Can you amend the report address to **29 Old Portland Road Freedom, NH Masonic Temple?**

Thank you

From: Aerobiology Boston <boston@aerobiology.net>
Sent: Wednesday, October 20, 2021 3:45 PM
To: Jamie Noel <jamie.noel@optimumanalytical.com>; Kristina Scaviola <kristina.scaviola@optimumanalytical.com>; Ann Berrigan <ann.berrigan@optimumanalytical.com>
Subject: C308872 and C308873 Reports 33 Old Portland Rd., Freedom, NH

Good afternoon:
Your report is attached.
Paula

We appreciate your business!

Aerobiology Laboratory Associates Inc.
22 Cummings Park
Woburn, MA 01801
Lab (781) 935-3212
Fax (781) 932-4857

This e-mail (and the documents accompanying it) is intended only for the use of the individual to which it is addressed. It may contain confidential information, which is privileged belonging to the sender. If you are not the intended recipient, you are hereby notified that any disclosure, copying, distribution on the contents of this information is strictly prohibited. If you have received this transmission in error, please notify us and destroy this item and its attachments.

Turner Septic Inspections

PO Box 1753 North Conway NH 03860

Septic Inspection Report

Inspection date	9/3/2021
Site Location	33 Old Portland rd., Freedom, NH 03836
Weather	partly cloudy, 72
Client	Bergeron Technical
Mailing Address	
Phone	603-356-0022
Email	Shawnb@bergerontechnical.com

Design Capacity	building was an old school, converted to town offices
Actual number of bedrooms	none
Number of Bathrooms	one
Year Round or Seasonal Occupation	year round, Daytime
Garbage disposal present	no
Dishwasher present	no
Washing machine present	no

Septic Tank

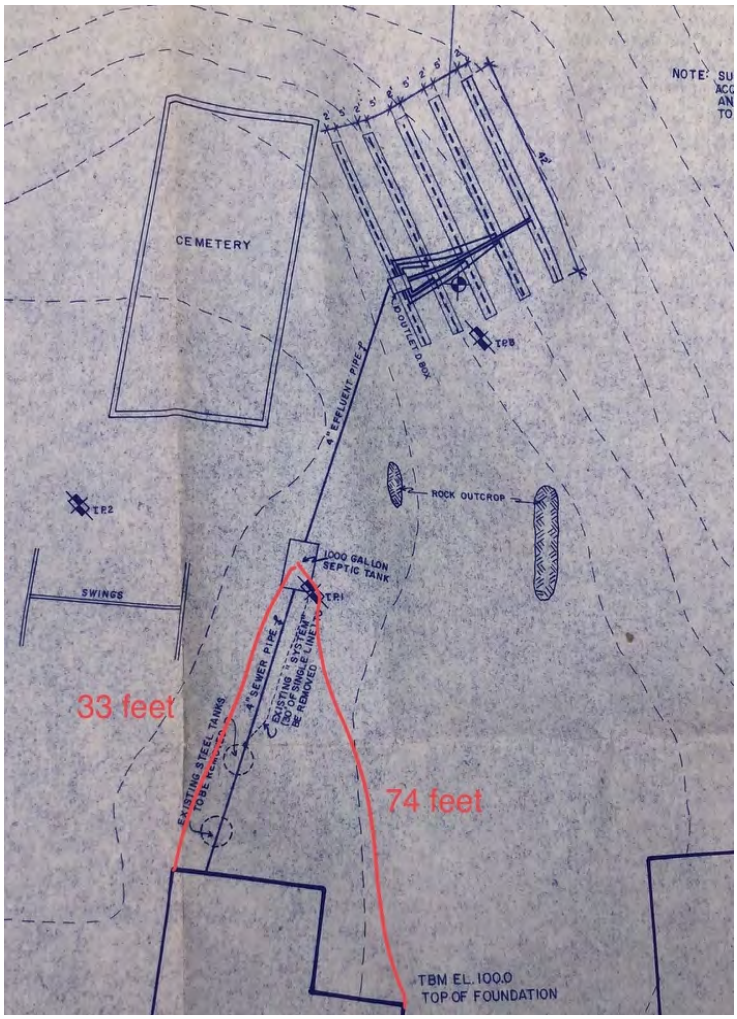
Condition	fair, no visible cracks
Intake pipe	pvc, good flow
Baffles	concrete, fair condition
Tank Type	concrete
Tank Capacity	1250 gallon
Access for Tank Cleaning	yes
Filter	no
Depth to Cover	12"
Liquid Level	pumped day before inspection
Solids Level	"
Scumm Level	"
Distance to Well	town water

Pump Station	N/A

Tank and Cover
Access to Pump Station
Pump Working
Alarm Float
Pump Float
Effluent Filter
Access for Filter Cleaning
Depth to Cover
Access Riser

Disposal Field

Type of field	stone and pipe trenches
Disposal field located	yes
Size of field in square feet	42'x25' approximately
Condition of Field	leach field was dry, with appropriate signs of use for its age grown trees present in/above leach field
Additional Comments and Summary	septic system appears in working condition. septic tank was pumped prior to inspection, so system could not be loaded for perc test. trees in/above leach field should be removed, and Root Kill applied



Company Disclaimer
All statements are the opinions of Turner Inspections

1. In order to do a thorough inspection of the Subsurface Wastewater Disposal System, Turner Inspections must physically dig up covers on septic tanks and dig inspection holes. These will be conducted with the least disruption of property as reasonably possible.
2. Based upon what we were able to observe and our experience with on-site wastewater technology, we submit this Subsurface Wastewater System Inspection Report based on the present condition of the on-site sewage disposal system. Our company has not been retained to warrant, guarantee, or certify the proper functioning of the system for any period of time in the future. Because of the numerous factors (usage, soils characteristics, previous failures, ground water, etc.) which may affect the proper operation of a septic system as well as the inability of our company to supervise and monitor the use and maintenance of the system, this report shall not be construed as a warranty by our company that the system will function properly for any particular prospective buyer. Turner Inspections disclaims any warranty, either expressed or implied, arising from the inspection of the septic system or this report. We are also not ascertaining the impact the system is having on the ground water.

Inspection Performed by:
Seth Turner of Turner Septic Inspections
State of NH Septic System Evaluator #0197
1727 East Conway rd.
Center Conway, NH 03813

603 307 4973

This report was completed in accordance with minimum reporting criteria. The information contained in this report accurately describes the conditions observed relative to the specific items referenced in this report that existed on the inspection date. I have studied the information contained herein and assert that my assessment is honest, thorough, and to the best of my ability true and correct.

Town Office Advisory Committee
Town of Freedom
PO Box 227
Freedom, NH 03836

February 2, 2021

Mr. Shawn Bergeron
Ms. Kate Richardson
Bergeron Technical Services, LLC
PO Box 241
North Conway, NH 03860

Dear Shawn and Kate,

This is the committee's input into BTS' development of a formal proposal and agreement form between the town of Freedom and BTS to complete a feasibility study for rehabilitation and/or addition to the existing town office. This is the committee's best effort to describe the work. If you find we have left out important activities, please add them and highlight their inclusion for the committee to review.

Warrant Article Language

At the March 10, 2020 town meeting, the Board of Selectmen proposed Article 30 to form the Town Office Advisory Committee. The original article included looking at a new building site, but it was amended to focus only on the existing Town Office. The language is below:

> Article 30 (as amended on the floor):
> To see if the Town will vote to raise and appropriate the sum of $40,000 (forty thousand dollars) to conduct a feasibility study for the restoration and/or addition to the existing Town Office and further to create a Town Office Advisory Committee to consider ways to optimize the Town Office space, accessibility and mobility needs with $40,000 to come from the previously established Municipal Land and Building Capital Reserve Fund. No amount to be raised from taxation. Recommended by the Board of Selectmen 3-0

Committee's Goals for the Town Office Building

Things to Protect

- Preserve the first and second floor lobbies
- Preserve the staircase
- Maintain look of the exterior of the building
- Find alternatives for using the second floor of the town office building for more than storage

Possibilities (Perhaps, in a later phase)

- Replace vinyl siding with clapboards
- Restore cupola

Committee's Options (BTS may propose another option that might meet space needs)

1. Rehabilitate the town office building (only) to meet space needs.
   a. No ADA provisions for public use of second floor
   b. Access second floor with elevator or simpler handicapped lift
2. Rehabilitate the town office and the Masonic temple to meet space needs

Project Steps

1. Evaluate structures
   a. Update analysis of town office building
   b. Analyze the Masonic temple building
2. Determine base needs and wants
   a. Interview department heads
   b. Review with committee
   c. Consider impact of technology on these needs
   d. Identify life safety and accessibility requirements for using these buildings
3. Generate preliminary schematics for alternatives (1a, 1b, 2 above and/or a potential BTS alternative) to determine how to meet the needs
4. Jointly (with the committee) create and execute a communications plan for educating the community on needs and alternatives, solicit community input, and build support for the project
5. Develop presentations and host community meetings on alternatives
6. Develop cost estimates for the top 2 alternatives
7. Draft one (preferably) or two warrant articles for the March 2023 town meeting

Timing:

The committee decided to postpone its work for a year to work with BTS. Your current schedule to start in August for a November/December 2021 completion will not give the committee sufficient time to do community outreach, engage the community, and gain support. The committee wants to have the summer months to work with the community. At our January 22 meeting, you said the delay would allow you to start in later spring and complete in the summer. Please specify the detailed schedule that you can meet in your proposal.

If you need any additional information to complete your work, please contact me at annebcunningham@gmail.com or 917-930-3046.

Sincerely,

Anne B. Cunningham
Committee Chair

- ***Answers underlined in bold were expressed and emphasized by multiple staff***
- *Answers underlined were expressed by multiple staff*

Your NEEDS list: What do you need to do your job? (e.g., amount of space, areas for storage, Wi-Fi, number of electrical receptacles) This list can be things you have or do not have currently.

- ***More Space***
- *Service window/counter*
- *Better storage solution for records – on site, one area, climate controlled*
- *Better internet service*
- *More electrical receptacles*

Your WANTS list: Items that would be nice to have to help you do your job and enjoy your space/working environment but are not necessary for you to do your job.

- *Single story office area for all staff*
- *Pest control (hornets and rodents)*
- *Separate staff & public restrooms*
- *Breakroom/kitchenette & personal item storage (coats, purses) – Staff room*
- *Small meeting room with plan table*

Is there anything currently missing from your office or workspace that you need to your job effectively?

- ***Legitimate, safe, consolidated file storage***
- *Easy access to printing and scanning*

Is there any feature of your office or workspace that is outdated or that you do not currently need?

100-amp electrical service – larger needed and constantly throwing breakers

What do you enjoy most about the Town Office building? (You can list as many things as you'd like)

- *No responses to this question (Several mentions of the building not being ideal for offices)*

What bothers you most about the Town Office building? (Again, list as many things as you'd like)

- *Does not work effectively as a town office building*
- *Too much maintenance has been deferred for too long*
- *Driveway access*
- *Parking configuration (also parking not defined – no striping)*
- *Soft, sloping floors*

Do you feel the Town office building is safe in the event of an environmental emergency, such as a fire or weather event?

- *All no's – lack of legitimate exits/egress from both floor levels mentioned. Exterior door in Leen's office does not operate as it should , fire escape door is hard to open and no one feels comfortable using the fire escape.*

Do you feel the Town office building is safe in the event of a security emergency (break-ins, theft, staff physical safety)?

- *All no's. There is no accountability for access to staff-only areas. (Similarly, no control over sensitive information)*
- *There is no legitimate separation of the staff areas from the public areas, and staff are subject to the public without a barrier (service windows desired)*
- *Staff are unable to monitor the parking area and entry door*

Do you feel your office is too difficult to access by the public, adequately accessible by the public or too easy to access by the public?

- *Too accessible at the main floor level and not accessible enough at upper floor (both able-bodied and disabled visitors)*

How do you feel about the interior environment of the building? (Heating, cooling, ventilation, lighting, noise from adjacent areas, noise from the exterior)?

- ***Air quality is #1 concern***
- *Interior environment is not controllable*
- *Building in general is drafty – especially near/around windows*
- *Lighting is insufficient and not adjustable (dimmers would be nice)*
- *The second story of the building is warm to hot throughout the year*
- *The interior environment is not suitable for storage of documents and office supplies. Humidity has damaged*
- *High ceilings make climate control difficult and inefficient*

If you regularly work with other Town staff or departments, which?

- *Admin works closely with all departments*
- *Building-zoning work closely together*

Does your office provide you with enough privacy from other staff?

- *Staff can easily hear between adjacent offices*

Does your office provide you with enough accessibility to other staff? If no, which staff members or departments need to be more accessible to you?

- ***Departments on separate floors are not easily accessible to each other***

Do you have any other comments you would like to add regarding the Town Office building?

- ***Building access – specifically the driveway being so steep***
- *Parking is not defined, there have been several incidents*
- *Floors are soft and sloping – concern over heavy furniture tipping*
- *Septic has backed up multiple times in recent history*
- *The flow of the building is not ideal for offices*

- *Upper level needs to be accessible if offices are to remain*

As the people who use the Freedom Town Office the most and are there for extended periods of time, your input is invaluable towards improving the space and functionality of the Town Offices. The following questions relate to the Freedom Town Office Building. We would like to hear your needs and wants relative to the building and its systems. For example:

- The heating, ventilation, and air-conditioning (HVAC) system
- Electrical system
- Plumbing system
- Spaces, areas, and facilities provided to staff and the public in and around the building
- Special needs or wants that you feel should be provided

1. Your NEEDS list: What do you need to do your job? (e.g., amount of space, areas for storage, Wi-Fi, number of electrical receptacles) This list can be things you have or do not have currently.
2. Your WANTS list: Items that would be nice to have to help you do your job and enjoy your space/working environment but are not necessary for you to do your job.
3. Is there anything currently missing from your office or workspace that you need to your job effectively?
4. Is there any feature of your office or workspace that is outdated or that you do not currently need?
5. What do you enjoy most about the Town Office building? (You can list as many things as you would like)
6. What bothers you most about the Town Office building? (Again, list as many things as you would like)
7. Do you feel the Town office building is safe in the event of an emergency? For example, a fire or weather event?
8. Do you feel the Town office building is secure, either during or outside of working hours? (break-ins, theft, staff physical safety)
9. Do you feel your office is too difficult to access by the public, adequately accessible by the public or too easy to access by the public?
10. How do you feel about the interior environment of the building? (Heating, cooling, ventilation, lighting, noise from adjacent areas, noise from the exterior)?
11. If you regularly work with other Town staff or departments, which ones?
12. Does your office provide you with enough privacy from other staff?
13. Does your office provide you with enough accessibility to other staff? If no, which staff members or departments need to be more accessible to you?
14. Do you have any other comments you would like to add regarding the possible renovation and continued use of the Town Office building?

Bergeron Technical Contact Information:
Kate Richardson, Project Manager
Ph. 603.356.0022
Email: KateR@BergeronTechnical.com

BERGERON
TECHNICAL SERVICES LLC
P.O. Box 241
North Conway, New Hampshire 03860

Town Office Advisory Committee
Anne B. Cunningham, Committee Chair
Town of Freedom
P.O. Box 227
Freedom, NH 03836

May 12th, 2022

Reference: Masonic Temple

Dear Anne,

Please express our thanks to your committee for taking time to meet with me and Kate last week. From our perspective we felt the meeting was quite productive as both sides were able to bring the other up to speed on their thoughts and findings. This letter is in response to your request to quickly summarize our thoughts about the Masonic Temple.

As we talked about when we met, we inspected the Temple from bottom to top. We started by thoroughly investigating the crawl area beneath the building and completed our efforts up in the attic area.

Beginning beneath the building, we found the floor structure and its supports to be in relatively good condition, particularly when one considers the age of the building. We did note some powder post beetle activity and some vertical supports that need to be improved but nothing that cannot be repaired. Interestingly the crawl area is very dry and appears to have always been that way. In a few concentrated areas beneath the building, we noted piles of wood shavings that may remain from when the building was built. As someone who enjoys working with hand tools, Shawn couldn't help but to think that he may have found the remnants of mortise and tenon joints having been cut by hand tools many years before. It is hard to imagine these shavings would still be as intact as what we found but we have no other explanation! As mentioned, the lowermost floor and its supports are adequate and can be reasonably improved.

Above the lowermost floor, the building's structural abilities deteriorate quickly.

Based on some historical research and conversation with long-term Freedom residents, we learned the original building had been a church and was primarily a single-story of post and beam construction. For the original structure, structural bents were placed perpendicular to the long axis of the building, with the bents being the component that supported the walls and roof. Recall that this had originally been a single-story building – other than the area immediately inside the main (south) entry. Beyond the south entry, to the north, the majority of the building had the main (slightly above grade level) floor, with what was likely a wonderful, vaulted ceiling up to the underside of the gable roof. At the eaves, the transition from the vertical outside walls to the sloped gable roof was transitioned in graceful plaster arches. In its life as a church, there were two components that visually interrupted the floor to ceiling exposure. The first would have been horizontal "collar ties" running laterally from east to west at each structural bent. The second was a "king post" which was a vertical tension member running from the underside of the ridge beam, downward to the center of each collar tie. The king post held the middle of the collar tie from sagging downward as in order for the collar ties to sag, each would have to have pulled the king post, and therefore the roofs ridge beam, downward. The combination of the collar ties and king posts were important as they performed the important function of laterally connecting the eave walls together, holding the two long-axis walls straight and plumb, and also preventing the roof from dropping downward. Unfortunately, when the upper floor was constructed, the collar ties and king posts were likely "in

the way" as their orientation across the narrow dimension of the building and hanging downward from the ridge, probably placed a "head bumper" at each bent. Our belief is that the upper floor was built and then, the collar ties and king posts were removed. With these important structural members removed, there began a slow but likely consistent structural deterioration where the east and west wall splayed outward, and the roof dropped downward. Before the collar ties were removed however, the tradesmen knew that some component was needed to tie the long axis exterior walls together and they attempted to accomplish this task and another, by installing the vertical columns, the lateral support beams (concealed within the floor/ceiling assembly) and lateral tension rods and bridges which can be observed in the main level meeting room. These components were to accomplish two tasks; the first to offset the outward forces on the long axis walls/prevent the roof from dropping downward but also, the beams that are concealed within the ceiling above the tension rods are supporting the second floor's floor joists. These joists represent a more common (by today's standards) "stick built" type of construction as compared to the original post and beam. The floor joists beneath and supporting the Masonic Temple floor are oriented north to south, running parallel to the long axis of the building. These joists are supported at their bearing ends by the concealed beams. Unfortunately, the vertical columns, tension rod ties and concealed beams are either insufficient to offset the structural loads that are applied to them (upper floor live and dead load in addition to splaying forces from roof loads) or their placement is too low which has allowed downward and outward movement despite their presence. The splaying of the long axis (eave) walls and the downward movement of the roof can best be observed from the exterior of the building. The former by viewing down the length of the roof eave from ground level and the latter by viewing up the roof slope from below the eave. In addition to the flawed second-floor construction, various roof related building components from the uppermost roof supporting beam along the east wall to the supportive purlins and roof sheathing have deteriorated with only some having been improved over time. At the east side of the building, the uppermost eave wall support beam has been somewhat repaired and the roofs structural members and sheathing somewhat repaired and replaced. At the west roof slope, the roof sheathing and structural components appear to be original.

What to do from here?

First, please know that Bergeron Technical enjoys the building and its history and we have a long history of helping our clients in saving old structures. Some examples are the Madison Town Hall, the Majestic Theater, the Ossipee Freight House, and the Wolfeboro Freight House. With those examples presented, we have to say we are concerned for the future of this building. The main floor level is structurally adequate for reasonable use however "reasonable" needs to be carefully defined. At the upper floor, from a structural perspective, we are not comfortable with anything more than very light occupancy and any occupancy should be relatively static. A large dance group and observers, for example could be disastrous. Also, the time of year and accumulation of snow and ice on the roof has to be considered. Accumulated snow load will likely be the greatest load the building is normally exposed to and with the moderately rusted and mechanically fastened steel roofing, snow accumulations will likely remain in place longer that what many would expect. Additionally, the building is not heated during the winter which also leads to accumulated snow remaining on the roof. The other structural (roof) condition that has to be considered is unbalanced loads, the transfer of energy laterally across the roof when one side of the roof sheds accumulated snow yet the snow on the opposite side remains.

In addition to structural concerns which are building code items, we also must mention life safety concerns which are fire code related. At the main (grade floor) level there are two exits, the main entry at the south gable and a single door at the southwest corner of the main meeting room. Because these exits are very close to one another it is possible that should one become unavailable for example because of a fire emergency, the other

could be unavailable too. At the Masonic Temple level, should the main (south) stairway become unavailable, upper floor occupants would have to use the steel fire escape that is fastened to the north gable end wall. We have little faith that this egress element would remain structurally sound should a few occupants be moving quickly downward. Additionally, in the event of a loss of electrical power, both building levels would be thrown into total darkness as there are no emergency lights.
Let's consider the ultimate questions as we know they are going to be asked:

1. Can this building be saved?
   - Absolutely, Bergeron Technical can help our clients save almost any building.
2. From the structural perspective, which is the place to begin, what would saving this building entail?
   - First, you would have to identify the use of the building and its configuration. Most importantly we need to know if the people of Freedom want to continue with having the two building levels, which we believe is required however, this should be verified.
   - The second step would require a detailed structural documentation of all building components and a determination of which ones can be saved, which ones need to be improved and which ones will need to be replaced. This will require an in depth and somewhat destructive structural analysis and detailing of the building's structural components which would lead to the development of a structural improvement plan. This plan would be based on the requirements of the International Existing Building Code, not the International Building Code as this would be the rehabilitation of an existing structure.
3. Is it "worth it" to save this building?
   - Only the people of Freedom can answer this question. The more in-depth structural review and plan will cost at least twenty-thousand dollars and perhaps more. When that's complete, you would only have the plan to make the necessary improvements.
   - Implementation of the structural improvement plan, even with us not knowing what that will entail at this time, could cost a lot of money. With approximately 2,200 square feet of building to structurally improve, at $75.00 per square foot for improvements (which may be low in this current construction-cost environment) the cost would be one hundred sixty-five thousand dollars.
4. Then, with the structural improvements having been completed, the building will still need improvements to its electrical, plumbing and heating systems along with improvements to handicap accessibility and means of egress.

Thank you for asking Bergeron Technical to assist in this important study. Please know that we want to help the people of Freedom make informed decisions so don't hesitate to ask questions. We will do the best we can to answer them accurately.

Sincerely,
Bergeron Technical Services, LLC

Shawn G. Bergeron, Sr.
Manager/Owner

ICC Certified Building Inspector
INTERNATIONAL CODE COUNCIL
Shawn G. Bergeron

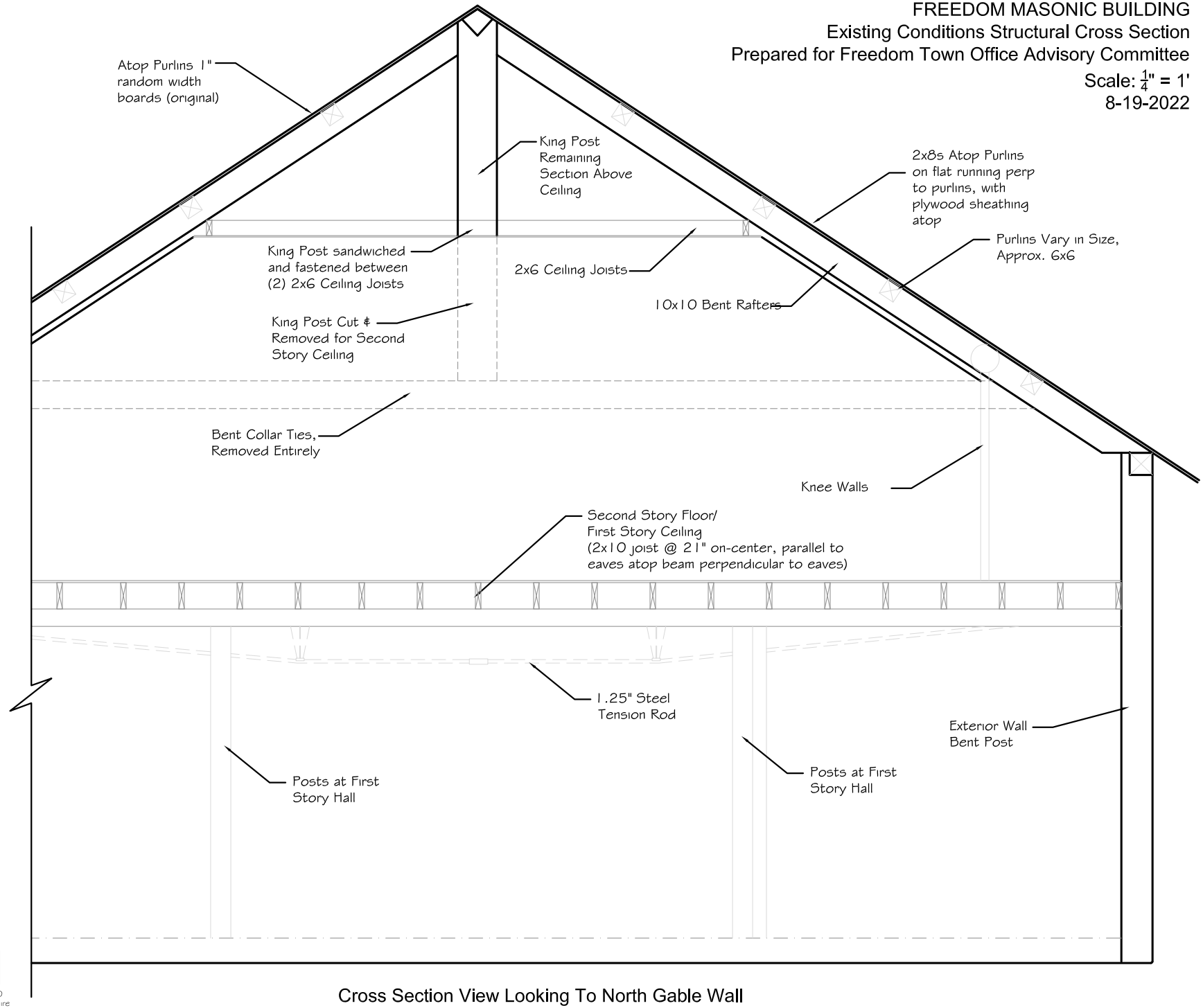
Katharine M. Richardson
Project Manager/Owner

Certified Fire Protection Specialist
Katharine
NFPA
Richardson
#4223

FREEDOM MASONIC BUILDING
Existing Conditions Structural Cross Section
Prepared for Freedom Town Office Advisory Committee

Scale: $\frac{1}{4}$" = 1'

8-19-2022



Cross Section View Looking To North Gable Wall

BERGERON TECHNICAL SERVICES LLC

P.O. Box 241 North Conway, NH 03860
290 East Side Road Conway, New Hampshire
603.356.0022
www.BergeronTechnical.com

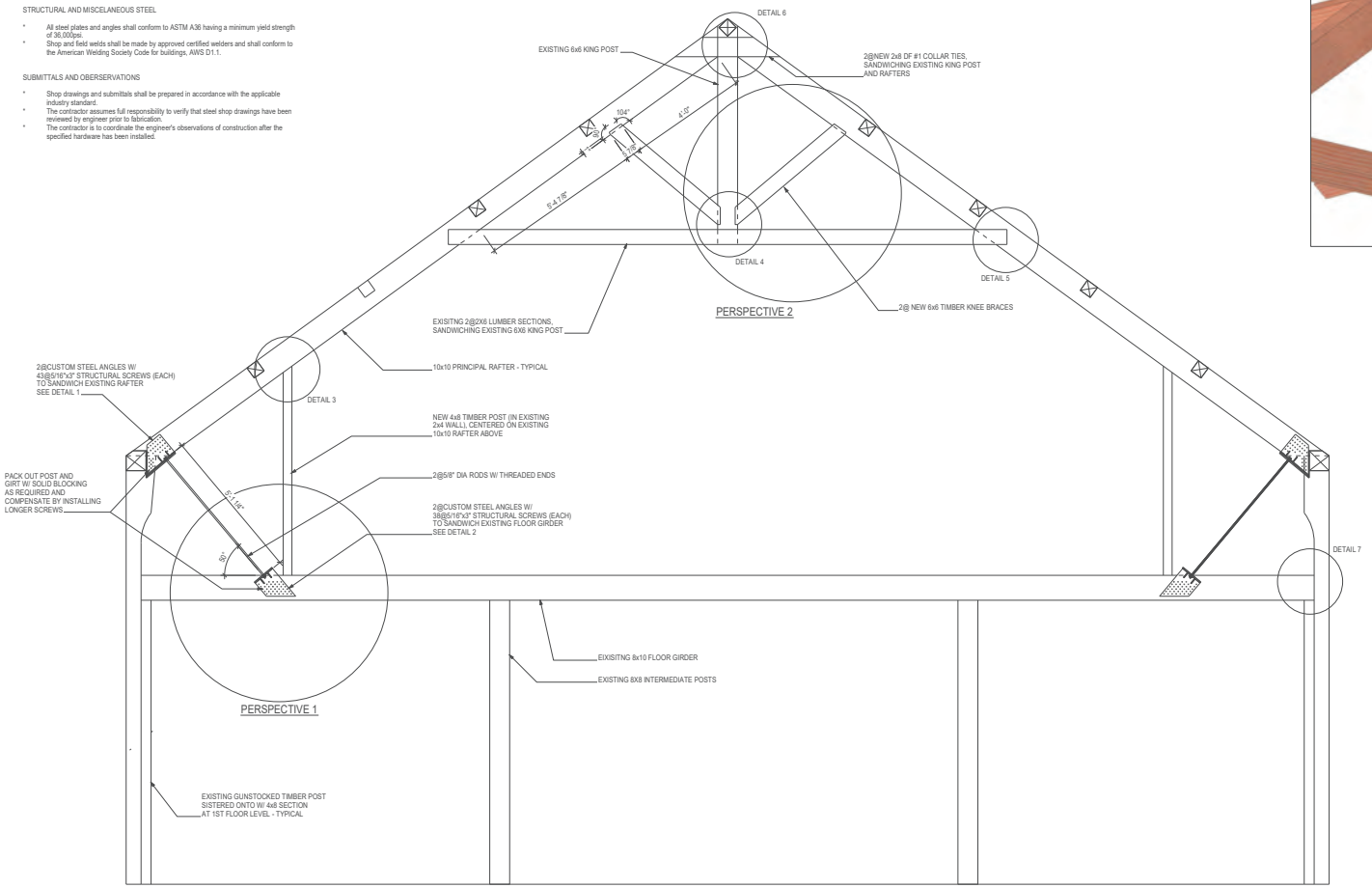
2024-2025 STRUCTURAL REMEDIATION BY ANNETTE DEY ENGINEERING

STRUCTURAL AND MISCELANEOUS STEEL

- All steel plates and angles shall conform to ASTM A36 having a minimum yield strength of 36,000psi.
- Shop and field welds shall be made by approved certified welders and shall conform to the American Welding Society Code for buildings, AWS D1.1.

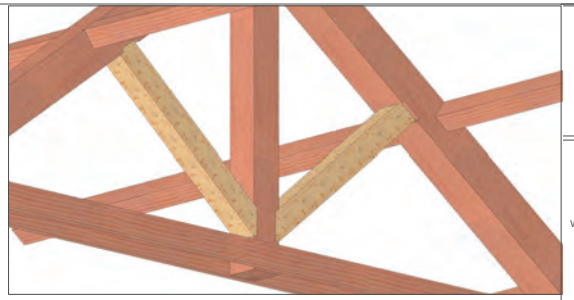
SUBMITTALS AND OBERSERVATIONS

- Shop drawings and submittals shall be prepared in accordance with the applicable industry standard.
- The contractor assumes full responsibility to verify that steel shop drawings have been reviewed by engineer prior to fabrication.
- The contractor is to coordinate the engineer's observations of construction after the specified hardware has been installed.

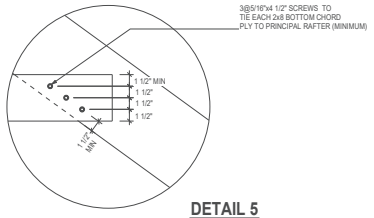


INTERIOR TIMBER BENT - TYPICAL OF 4

SCALE: 1/2"=1'-0"

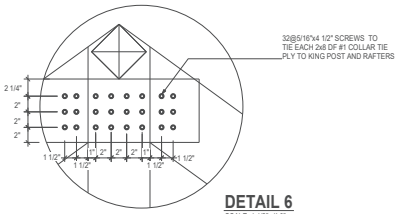


PERSPECTIVE 2



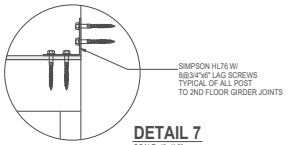
DETAIL 5

SCALE: 1 1/2"=1'-0"



DETAIL 6

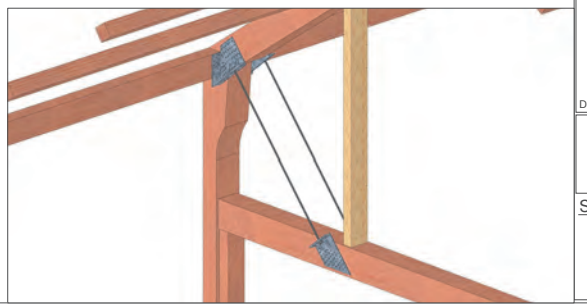
SCALE: 1 1/2"=1'-0"

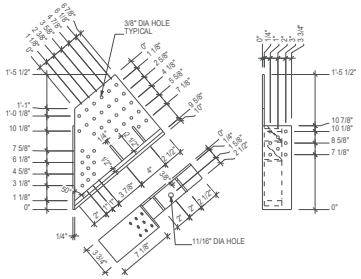


DETAIL 7

SCALE: 1"=1'-0"

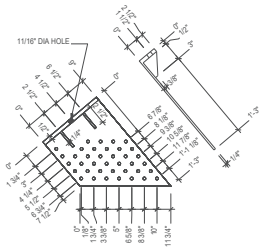
PERSPECTIVE 1





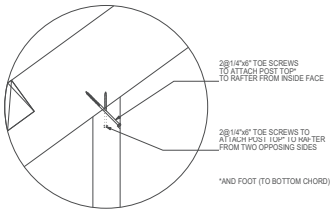
DETAIL 1

SCALE: 1 1/2"=1'-0"



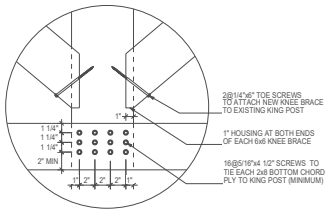
DETAIL 2

SCALE: 1 1/2"=1'-0"



DETAIL 3

SCALE: 1 1/2"=1'-0"



DETAIL 4

SCALE: 1 1/2"=1'-0"

ANNETTE DEY
ENGINEERING LLC
PO BOX 22
WALPOLE, NH 03608 USA
PH: (603) 756-4047
FAX: (603) 756-4047
EMAIL:
annettedey @ gmail.com

MASONIC TEMPLE

IN

FREEDOM
NEW HAMPSHIRE

DATE	FOR
07OCT24	REVIEW
27NOV24	CONSTR.
12DEC24	DETAIL 7

DRAWING NAME:

TIMBER TRUSS REINFORCEMENT DRAWINGS

STAMP:

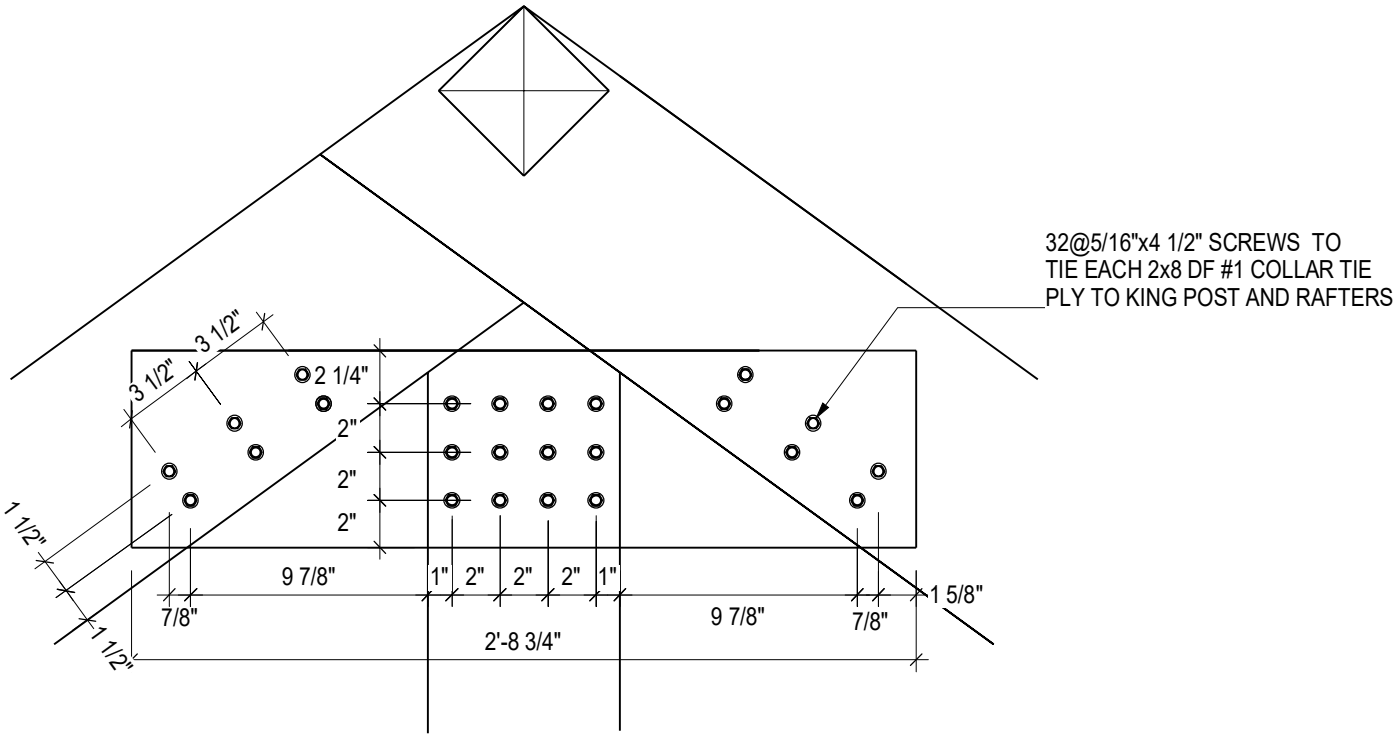
DATE:

SCALE:

DESIGN TEAM:
AD/MF

SHEET NUMBER:

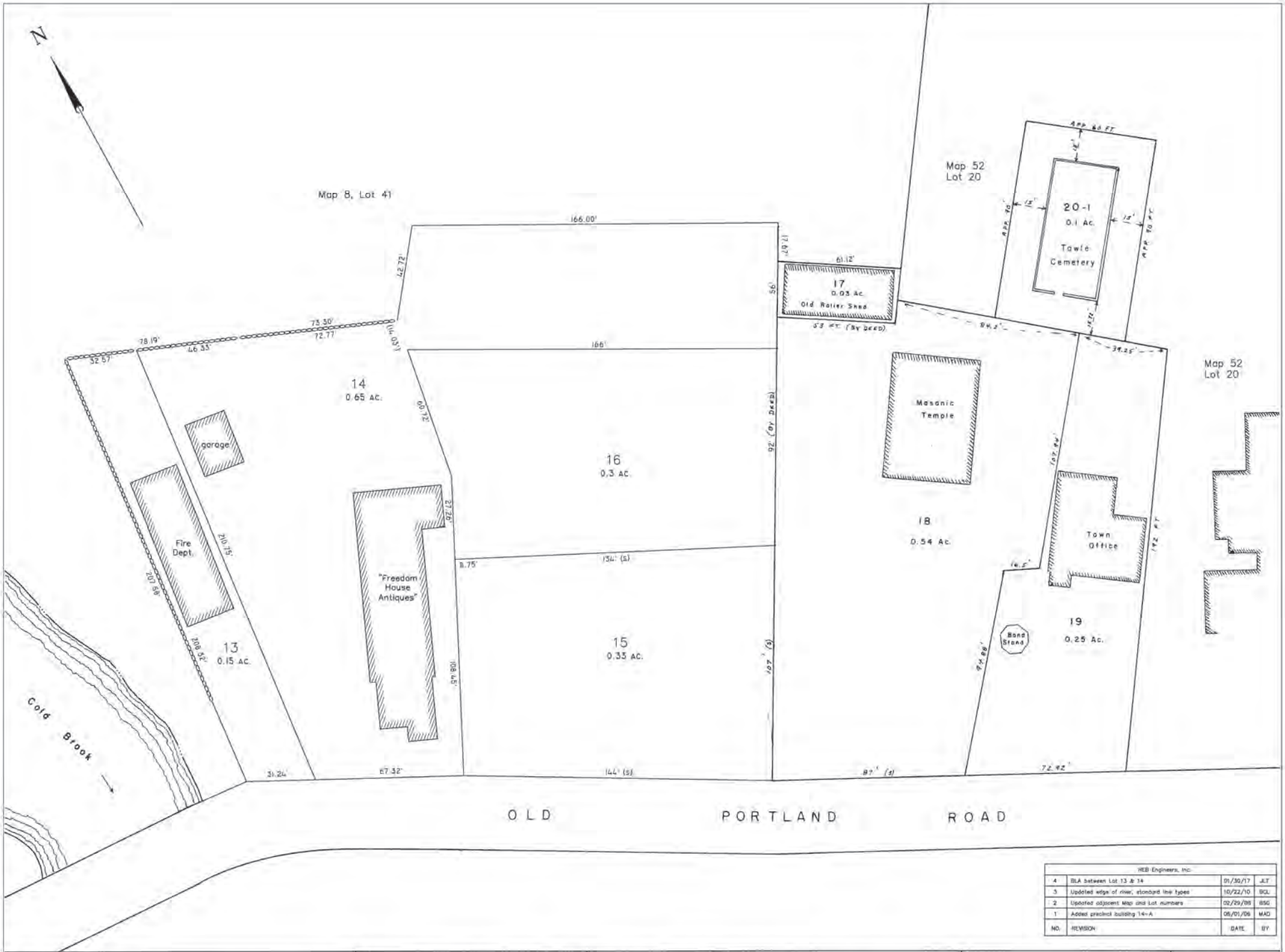
TF-1.0



ALTERNATIVE* DETAIL 6

SCALE: 1 1/2"=1'-0"

*APPLIES TO TRUSS BENT WITH NEWLY INSTALLED KING POST ONLY



	HEB Engineers, Inc.		
4	BLA between Lot 13 & 14	01/30/17	JLT
3	Updated edge of river, standard line types	10/22/10	BGL
2	Updated adjacent Map and Lot numbers	02/29/08	BSG
1	Added precinct building 14-A	08/01/06	MAD
NO.	REVISION	DATE	BY

LEGEND
9 — TAX MAP LOT NUMBERS
(9) — ORIGINAL SUBDIVISION LOT NUMBERS
21 — ADJACENT MAPS

FOR ASSESSMENT PURPOSES
NOT TO BE USED FOR CONVEYANCES

SCALE: 1" = 20 ft.
0 10 20 40 60 80 ft.

MAP DATE: Feb. 18, 1996

REVISED TO APR. 01, 2017
BY: HEB ENGINEERS, INC.
P.O. BOX 440, NORTH CONWAY, NH
03860 (603) 356-6936

PREPARED BY
ROGER S. BURNELL, CONWAY, N.H.

PROPERTY MAP
TOWN OF FREEDOM
CARROLL COUNTY, NEW HAMPSHIRE

52-A
MAP NO.