



Condition Assessment of the Antrim Grange No. 98

253 Clinton Road, Antrim, New Hampshire

By

Mae H. Williams, Preservation Consultant with Brian Gallien of Ironwood Restoration

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

Table of Contents

Introduction/Summary	i
Part I: History and Development of the Property.....	1
Early History of Antrim & Antrim’s First Meetinghouse (1785-1831).....	1
Antrim Town Hall (1832-1894).....	9
Antrim Grange No. 98 (1894-present).....	13
Part II: Architectural Description with Character-defining Features	17
Site Description.....	17
Exterior Description.....	18
Interior Description.....	23
First/main floor plan	25
Second floor plan	32
Part III: Existing Conditions Assessment	39
Site Inspection/Site Plan	39
Exterior Inspection.....	40
Interior Inspection.....	44
Brief Description and Evaluation of MEP systems	48
Part IV: Recommendations.....	49
Bibliography of Works Cited	59
Appendices/Supplemental Information	61
Appendix A: Secretary of the Interior’s Standards for Rehabilitation.....	62
Appendix B: Weblinks for Preservation Briefs Mentioned in IV: Recommendations	63

Table of Contents

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Introduction/Summary

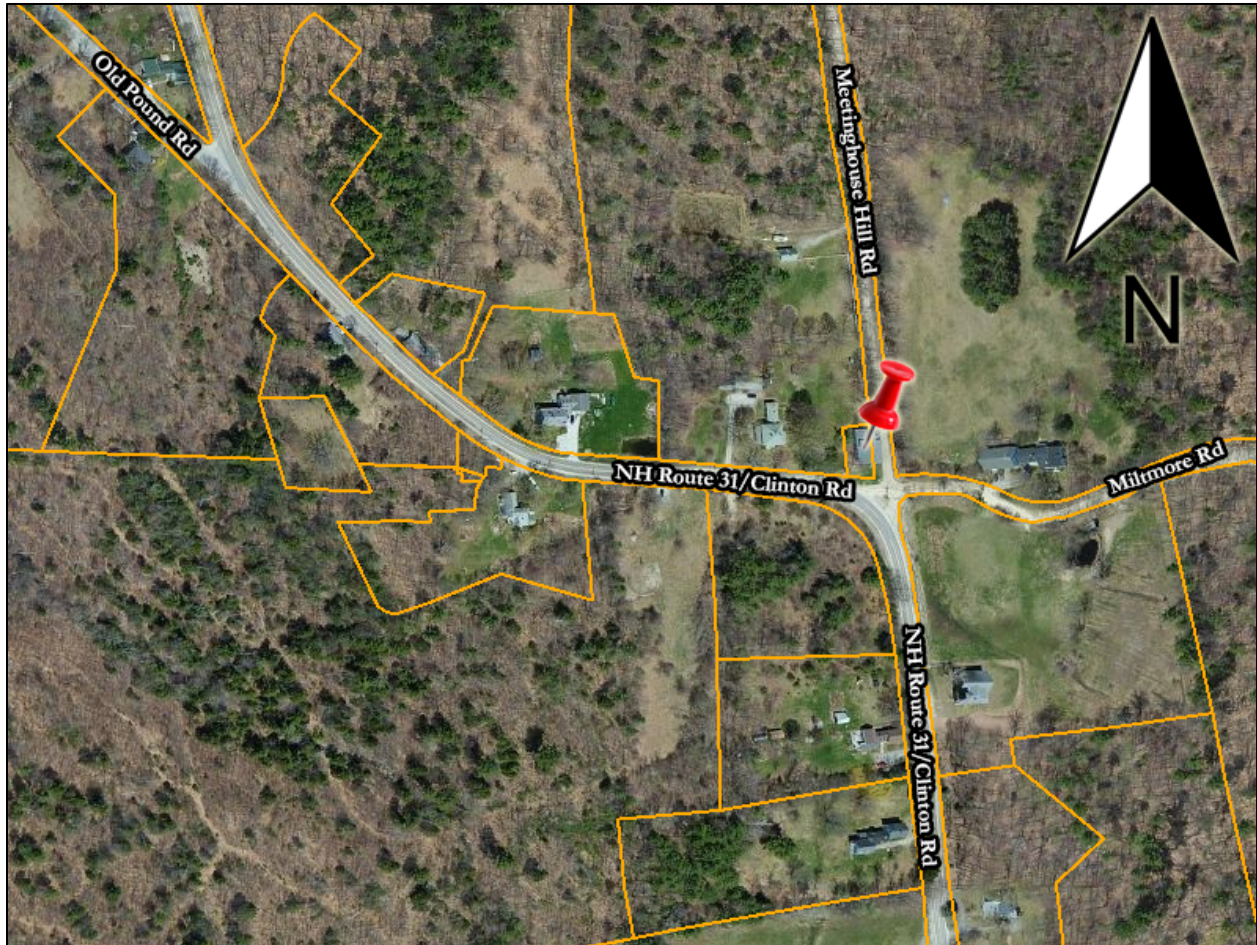


Figure 1: Location of the Antrim Grange No. 98 at 253 Clinton Road

Purpose

The condition assessment of the Antrim Grange No. 98 has been funded in part by a 2020 grant from the New Hampshire Preservation Alliance, which receives support for its grants program from New Hampshire's Land and Community Heritage Investment Program (LCHIP). The purpose of this study is to document the history, evolution, and structural condition of the building, and to use this context to identify character-defining features of the structure. The character-defining features and history are then used to define the future treatment options for the building as the Grange works to ensure the building's continued use into the twenty-first century.

Methodology

Preservation consultant Mae H. Williams was first contacted by the Antrim Grange in December of 2019 as they were preparing a grant application for the New Hampshire Preservation Alliance. The Grange had contacted the New Hampshire Preservation Alliance seeking assistance in the development of a long-term preservation plan for the building that adheres to the *Secretary of the Interior's Standards* and wanted specific help with addressing problems with the building sills. After the initial conversation, Ms. Williams began collecting a detailed history of the structure, assembling research from historic documents and images

Introduction/Summary

at the Antrim Grange, New Hampshire Division of Historic Resources, New Hampshire State Library, and by consulting historic maps and reading available local histories.

A field inspection of the Antrim Grange No. 98 was conducted in July of 2020, with the assistance of preservation carpenter Brian Gallien of Ironwood Restoration. The team examined all areas of the building and grounds, documenting and analyzing the current condition of the structure, its current and historic systems and its historic integrity, and pulling together all of the necessary information to complete this document.

Summary

The story of the Grange building began in 1785, when Antrim constructed their first Meetinghouse on top of Meetinghouse Hill (in Old Antrim Center), next to the Meetinghouse Cemetery. Over time the population centers of Antrim shifted away from the hilltop, especially after the construction of Clinton Rd/NH Route 31 in 1820 diverted traffic away from the steep hill. The village moved south to the base of the hill, and, eventually, a new church was constructed in the new village center in 1826. After sitting vacant for several years, the old twin-porch meetinghouse was disassembled in 1832, and parts of the second floor and roof frame were moved down the hill and incorporated into the new Town Hall (now Grange). In 1876-1877 a single-bay addition was constructed at the north end of the building, and the original twelve-over-twelve windows were swapped out for the present two-over-two sash. By the 1890s, the population of “South Village” had grown significantly in response to the success of mills along the Contoocook River, and a new Town hall was constructed there in 1893, leaving the building empty once more. Since 1894, the building has been home to the Antrim Grange No. 98.

The Grange building is in fair condition, and is experiencing many of the condition issues that are common for a building that is approximately 200 years old. Unfortunately, when the north bay was added to the building in the late 19th century, it was built directly on the ground. The proximity to the earth, combined with the topography of the site, has meant that the sub-structure of the north end of the building is so degraded that it is almost non-existent. The repair of the sills and floor structure of this section of the building is of the highest priority. Careful inspection of the structure has revealed other less immediate concerns, all of which have been described and prioritized in the Recommendations section of this report.

The Grange was determined to be eligible for the National Register of Historic places as part of a potential Antrim Center historic district in 2012. The building is historically significant as a remnant of the earlier prominence of Antrim Center and civic history of the community, for its role in the history of the local chapter of the Grange, and as an example vernacular interpretation of a Greek Revival style public hall.

Historic Building Assessment Team:

Architectural Historian

Mae H. Williams
Historic Preservation Consultant
PO Box 941
Meredith, NH 03253
603.707.0502
mae@unlockinghistory.com

Preservation Contractor

Brian J. Gallien
Ironwood Restoration, LLC
PO Box 487
Marlow, NH 03456
(603) 446-3669
ironwood@ironwd.com

Part I: History and Development of the Antrim Grange

Though parts of the Antrim Grange building date back to 1785, the present building is more closely associated with the building's reconstruction in 1832 as the first Antrim Town Hall. The story of the Grange building began in 1785, when Antrim constructed their first Meetinghouse on top of Meetinghouse Hill (in Old Antrim Center), next to the Meetinghouse Cemetery. Over time the population centers of Antrim shifted away from the hilltop, especially after the construction of Clinton Rd/NH Route 31 in 1820 diverted traffic away from the steep hill. The village moved south to the base of the hill, and, eventually, a new church was constructed in the new village center in 1826. The old twin-porch meetinghouse was disassembled in 1832 after sitting vacant for several years, and parts of the second floor and roof frame were moved down the hill and incorporated into the new Town Hall (now Grange). In the late nineteenth-century, a single-bay addition was constructed at the north end of the building and a stage was created within the hall. By the 1890s, the population of "South Village" had grown significantly in response to the success of mills along the Contoocook River, and a new Town hall was constructed there in 1893 leaving the building empty once more. Since about 1898, the building has been home to the Antrim Grange No. 98.

EARLY HISTORY OF ANTRIM & ANTRIM'S FIRST MEETINGHOUSE (1785-1831)

The Antrim Grange is situated near the geographical center of the Town, at a crossroads in the village of Antrim Center in Antrim, Hillsborough County, New Hampshire. The 36.5 square mile Town of Antrim is bounded on the north by Windsor and Hillsborough, on the east by the Contoocook River and the towns of Deering and Bennington, on the south by Hancock, and on the west by Nelson and Stoddard. Antrim has several villages including Antrim Center (near the geographical center of the Town), Branch Village (along the North Branch River), Clinton Village (along the Great Brook), and South Village (formerly Woodbury's Village, adjacent to where the Great Brook empties into the Contoocook River). Antrim Center is located at the foot of Meetinghouse Hill, northeast of Gregg Lake.¹ While the other Antrim villages sprang up at industrial centers along reliable water sources, Antrim Center developed as a largely agricultural municipal center. The population of Antrim in 2020 was 2,637, reflecting the steady increase in population since the 1950s.

The territory that is now Antrim was home to Native Americans long before the European settlement of the area in the eighteenth century. The Penacook group of the Abenaki lived throughout the Merrimack River Valley, and had hunting grounds along the Contoocook River at the east side of the Town.²

Three years after the Pilgrims settled at Plymouth Colony, the first English settlers founded permanent settlements at Portsmouth and Dover in 1623.³ On November 3, 1620, the Council of Plymouth in Devon, England, had received a grant of all the territory in America from the fortieth to the forty-eighth parallel from King James. This grant went through several generations of ownership, and on January 30, 1746, fifteen lots in New Hampshire were bought out by a syndicate of Portsmouth merchants and government officials, referred to as the Masonian Proprietors.

While the Masonian Proprietors granted township after township to enrich their holdings, the group reserved a large tract of land adjacent to Mount Monadnock for themselves. Originally known as

¹ The original Old Centre village was established atop Meetinghouse Hill and moved to this location in the 1820s and 1830s.

² Rev. John M. Whiton, *History of the Town of Antrim, N.H. For A Period of One Century; from 1744 to 1844* (Concord, NH: Steam Power Press of McFarland & Jenks, ca. 1844), 14.

³ John Hayward, *A Gazetteer of New Hampshire, Containing Descriptions of All the Counties, Towns, and Districts in the State...* (Boston, MA: John P. Jewett, 1849), 25.

Part I: History and Development of the Antrim Grange

“Cumberland” this area was more often called “Society Land” after the syndicate (figure 2). The territory of Society Land encompassed all of what are now the towns of Antrim, Bennington, Deering, and Hancock and parts of Francestown and Greenfield. In 1753, Society Land was surveyed and the tract was divided into fifteen shares.

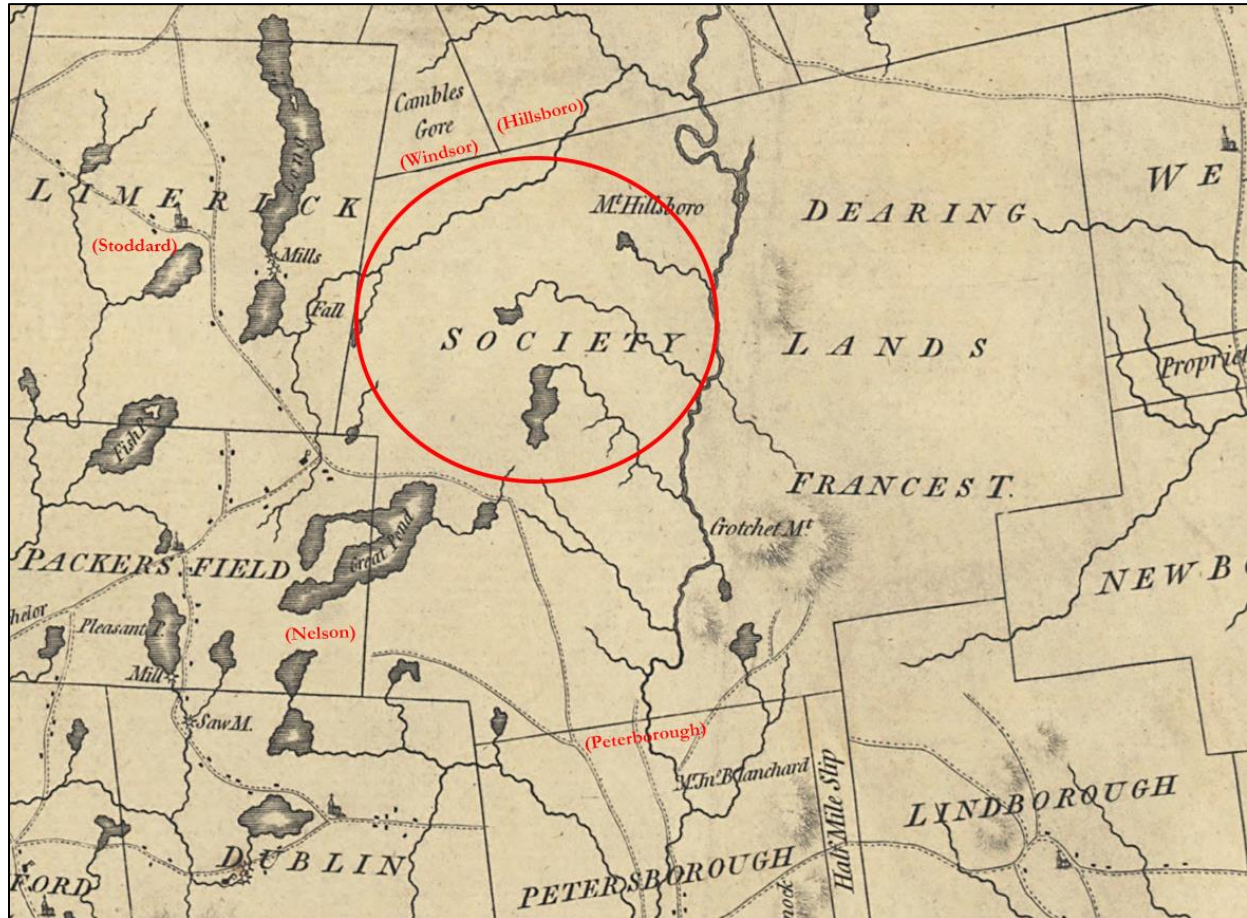


Figure 2: Early Map of Society Lands from the “Topographical map of the State of New Hampshire” surveyed by Samuel Holland, Esq. and printed 1784 (Library of Congress Website)

Meanwhile, five shiploads of immigrants from Northern Ireland (who were, in turn, of Scottish and English ancestry) arrived in Boston, Massachusetts and Portland, Maine on August 4, 1718.⁴ The newcomers were descendants of Scotch Presbyterians who had settled in Antrim and Londonderry, Ireland and came to the new world seeking freedom from economic instability at home. Facing religious intolerance and ethnic prejudice in Boston, some of the families traveled north to New Hampshire in the spring of 1719. Sixteen of these families settled in an area they called “Nutfield” (this was incorporated as Londonderry in 1722).⁵

These “Scotch-Irish” settlers began moving into the territory that would become Antrim as early as the 1740s. The first European settler is said to have been **Philip Riley/Roiley/Raleigh** (1719-1791),⁶ an Irish

⁴ Everett S. Stackpole, *History of New Hampshire*, Volume 1, (New York: The American Historical Society, 1916), 241.

⁵ Edwin A. Charlton, *New Hampshire As It Is...* (Claremont, NH: Tracey and Sanford, 1855), 49.

⁶ Rev. W. R. Cochrane, *History of the Town of Antrim New Hampshire...* (Manchester, NH: Mirror Steam Printing Press, 1880), 653 and Whiton, 14. Riley died in Sudbury, Massachusetts in 1791.

Part I: History and Development of the Antrim Grange

immigrant who came from Londonderry, NH⁷ or Sudbury, Massachusetts⁸, and settled in the northeast corner of what would become Antrim, near Riley's Mountain in 1744.⁹ After a Native American raid on a garrisoned house in Hopkinton in April 1746, Riley abandoned his log cabin and returned to New Boston and Londonderry.¹⁰

Antrim remained relatively unpopulated until after the close of the French and Indian War. In the Spring of 1761, after Canada was captured by the British, Riley returned, eventually finding his cabin amongst the new-growth trees.¹¹ The following year, in 1762, Daniel McMurphy arrived from Hillsboro.¹²

The Masonian Proprietors began to advertise the fertile lands on the banks of the Contoocook River in an effort to entice families to settle the frontier and, in turn, raise the value of their property. In 1768,¹³ Deacon **James Aiken** (1731-1817),¹⁴ his wife, and four children moved to a log cabin on the side of the Contoocook River.¹⁵ Aiken was born in Londonderry, and fought in the battle of Bunker Hill.¹⁶ Aiken built the first framed building (a barn) in the territory in 1769.¹⁷

Further settlement of the area was delayed by the Revolutionary War. According to a census taken this year, the population of Society Land, which at this time encompassed all of Antrim and Hancock, the western part of Greenfield and most of Bennington, was 177.¹⁸ It is estimated that approximately 80 people lived in what would become Antrim at this time,¹⁹ and twenty-six men from the community fought in the Revolution.²⁰ The first ever sermon delivered in Antrim was preached by Rev. Davison of Londonderry in John Aiken's barn in September, 1775.²¹

The settlers petitioned to have a new township incorporated in 1777, and the Town of Antrim was incorporated on March 22, 1777. The first Town Meeting was held in the home of Esq. **John Duncan** (1734-1823)²² on May 1, 1777. At this meeting, the townspeople voted to employ a surveyor to find the geographical center of the Town.²³ The surveyor having reported that the center lay at the top of Meetinghouse Hill, a meeting was convened at the location on August 20. After the meeting, the townsfolk began to clear a spot for a burying ground and common on the hilltop, next to the trees that had been marked

⁷ Isaac W. Hammond, ed., *Documents Relating to Towns in New Hampshire...* (Concord, NH: Parsons B. Cogswell, State Printer, 1882), 105.

⁸ Elmer Munson Hunt, *New Hampshire Town Names and Whence They Came* (Peterborough, NH: Noone House, 1970), 124

⁹ Cochrane, 653; Hammond, 105; Hunt, 124; D. Hamilton Hurd, ed., *History of Hillsborough County, New Hampshire* (Philadelphia: J. W. Lewis & Co., 1885), 253.

¹⁰ Hurd, 253. Or to Concord, Massachusetts (Whiton, 15)

¹¹ Hammond, 105; Hurd, 253; and Whiton, 15.

¹² Hurd, 253.

¹³ Charlton, 97 and Hayward, 31.

¹⁴ Anonymous, "Find A Grave – Millions of Cemetery Records Online" (www.findagrave.com), Deacon James Aiken is buried at Meeting House Cemetery.

¹⁵ Whiton, 16.

¹⁶ Cochrane, 338 and Hammond, 105.

¹⁷ Whiton, 1.

¹⁸ Whiton, 20. Frankestown was incorporated in 1772, and Deering in 1774.

¹⁹ Hurd, 254.

²⁰ Hammond, 105.

²¹ Whiton, 20. Though services were held as early as 1775, it is worth noting that the Presbyterian Church was not formally organized until 1788, at which time it had seventy-two members (Hurd, 256).

²² Anonymous (www.findagrave.com), John Duncan is buried at Meeting House Cemetery.

²³ Cochrane, 45; Hurd, 255; and Whiton, 23.

Part I: History and Development of the Antrim Grange

by the surveyors. It was not until September 1777 that the first roadway was laid out through Antrim,²⁴ running,

more or less north-south through Antrim from a point near the Bennington line, through Antrim Center, over Meetinghouse Hill, and then on to the North Branch. This road, known as the 'Leading Road,' served as the axis of settlement, channeling much of the town's economy toward the mills and settlements along the North Branch River until a new roadway was constructed around the base of Meetinghouse Hill in the 1820s.²⁵

After the Meetinghouse Cemetery, Common, and road were established, a focus of political and religious activity was created and the first village in Antrim began to grow on Meetinghouse Hill.

Though the Town began the process of constructing of a meeting house as early as 1779, the fledgling community had trouble raising the funding and man-power for the construction. In 1783, the Town petitioned the State of New Hampshire for the ability to impose a tax of a penny an acre, for the next three years, on non-resident lands in order to raise money for the construction of a town meeting house.²⁶ During this period, the meetinghouse was a municipal building, housing civic gatherings during the week and religious meetings on the Sabbath, presided over by a minister whose annual salary was paid by mandatory contributions (in the form of taxes or goods) by every town member, regardless of religious disposition. While most New Hampshire towns supported a Congregationalist minister, the majority of the settlers of Antrim were adherents of the Presbyterian Church,²⁷ so the early town Ministers were adherents of this faith.

At the March 1784 Town meeting, the Town voted to build a fifty by forty-foot meetinghouse the following year. The building was to be modeled after the West Meeting House in Londonderry (from whence many of the settlers originated) and have porches at either end,²⁸ allowing access to a second-floor gallery space. This layout and form was typical of a second-period meetinghouse of the Revolutionary War era. "Out of an estimated 1,155 structures built [in new England] during the second-period architectural style (roughly between 1699 and 1820), about 190 remain – a survival rate of a little more than 16 percent."²⁹ Second - period meetinghouses were often built to resemble large barns or houses in overall shape. Like the contemporary Georgian and Federal houses, these meetinghouses were usually side-gabled, and windows were usually five or seven-ranked. Paneled doors were located at the center of the façade, beneath a decorative crown supported by pilasters. Windows were double-hung with 9 or 12 panes per sash and were set in rigid symmetry. Second-floor windows were just below the cornice, which was often decorated with dentil moldings. The building had a twin-porch layout with exterior porches at the gable ends that sheltered stairs to the gallery-level. The twin-porch layout was very common, particularly along the Contoocook River Valley between 1772 and 1804. "So densely concentrated was the style that at the beginning of the

²⁴ Cochrane, 48 and Hurd, 255.

²⁵ Russell Stevenson for A. D. Marble & Company, "New Hampshire Division of Historical Resources Area Form: Antrim Center" (2011), 5.

²⁶ Hammond, 114; and Whiton, 27.

²⁷ James L. Garvin, "New Hampshire Division of Historical Resources Individual Inventory – Antrim Congregational Church (ANT0005)" (2007/rev. 2010), 3.

²⁸ Whiton, 27.

²⁹ Peter Benes, *Meetinghouses of Early New England* (Amherst & Boston, MA: University of Massachusetts Press, 2012), 5.

Part I: History and Development of the Antrim Grange

nineteenth century it was possible to ride north from Brookline [NH] to Bridgewater and pass through seventeen contiguous towns and see sixteen twin-porch meetinghouses.”³⁰

The contract for constructing the frame of the Meetinghouse was awarded to the lowest bidder, Col. **William Gregg** (1730-1815) of Londonderry. Gregg was a master builder, and was “most likely”³¹ involved in the construction of the Londonderry meetinghouse in 1769, making him a perfect candidate for the project.³² Gregg arrived in Antrim on June 8, 1785 and, in the space of twenty days, oversaw the cutting of timber and construction of the building’s hewn timber frame. The pine timber was cut on the plain “near Mr. Jonathan Carr’s” (near the Branch Cemetery) and the hardwood timber was cut on Meetinghouse Hill.³³ The building frame was raised on June 28, 1785, with the aid of men from the adjacent towns. “As a sample of the usages of the time, it may be stated, that a breakfast was provided for the raisers, of bread, cheese, and dry fish; a dinner of meat. Two barrels of rum were purchased for the use of the workmen, it being scarce needful to be added that the day of the temperance reform had not yet come.”³⁴ The first worship service was held in the skeletal building the following Sabbath, with loose flooring laid over the floor joists, boards on blocks for seats, and a few boards slung over the beams to screen the sun.³⁵ The first Town Meeting was held in the new structure on September 15, 1785.³⁶ Though a roof was added to the building by the end of the year, it took several years before the meetinghouse was completed.³⁷

In 1786, the meetinghouse was enclosed by “rough boarding” (sheathing boards?) and the sub-floor was laid. While **James** (ca. 1754-1786) and **Samuel Dinsmore** (1757-1822)³⁸ were working on the building, the staging gave way, sending the two men to the ground. Though Samuel was relatively unharmed, James broke his back in the fall, only surviving for three or four hours and never again speaking after the incident.³⁹ The tragic accident was quite the blow to the small community (the population at the time was about 289),⁴⁰ especially as James was so young and full of promise, having served as chairman of the selectmen in 1783 at the age of twenty-nine.⁴¹

The meetinghouse was not finished until 1791⁴² or 1792,⁴³ when gallery pews were installed. By the time of the first US Federal Census in 1790, the Antrim population reached 528 people in approximately 90 families. By March of 1790, there were still no glass windows in the meetinghouse.⁴⁴

³⁰ Peter Benes, “Twin-Porch versus Single-Porch Stairwells: Two Examples of Cluster Diffusion in Rural Meetinghouse Architecture,” (*Old Time New England*, Vol. 69, 1979), 56.

³¹ Benes, *Meetinghouses of Early New England*, 235.

³² William Gregg was a distinguished military officer, who commanded a division in the Battle of Bennington on August 16, 1777 under General John Stark. (Cochrane, 179 and Whiton, 28).

³³ Cochrane, 179; and Whiton, 28.

³⁴ Whiton, 28.

³⁵ Whiton, 28. During the service, a violent thunderstorm erupted, dumping copious amounts of water on the small congregation as they fled for shelter in the nearby home of Mr. Gates.

³⁶ Cochrane, 77.

³⁷ Whiton, 28.

³⁸ Anonymous (www.findagrave.com), both James and Samuel Dinsmoor are buried at Meeting House Cemetery.

³⁹ Cochrane, 75; and Whiton, 30.

⁴⁰ Hurd, 255.

⁴¹ Cochrane, 75.

⁴² Whiton, 31.

⁴³ Cochrane, 180.

⁴⁴ Cochrane, 79.

Part I: History and Development of the Antrim Grange



Figure 3: Drawing of the First Antrim Meetinghouse by F.L. Nay (Cochrane, 71)

When completed, the meetinghouse was a large two-story south-facing structure with the gable end facing the Meetinghouse Hill Road and a drive-way to the north, between it and the adjacent Meeting House Cemetery (figure 3). There were windows on each floor, and three entrances to the building: one at the center of the south side (with the pulpit directly across, at the center of the north side of the building), and one at each of the porches. A long row of south-facing horse-sheds extended west from the building to the edge of the common. A second row of horse-sheds with a north-south orientation stood on the east side of the road.⁴⁵

On December 26, 1799, the Second New Hampshire Turnpike was incorporated. This road crossed the northeast corner of Antrim as it traveled southeast from Hillsboro, crossed the Contoocook River, and continued to Deering.⁴⁶ This road further contributed to the development of the northeast corner of Antrim, along the heavily traveled route.

The first Town Minister, Rev. Walter Fullerton, was ordained in 1800 and dismissed in 1804.⁴⁷ By this time the Town had four school districts: North Branch, Antrim Center (at Old Antrim Center), Antrim South Village, and one at the east side of town⁴⁸ and the population was 1,059. By 1810, the population grew to 1,277 and by 1820 reached 1,330, despite the loss of 45 lives in 1813 “of the prevailing fever”.⁴⁹ The 1817 *Gazetteer* listed the town as having “a meeting-house, 4 grain-mills, 4 saw-mills, 2 mills for dressing cloth, 1 carding machine, and 3 trading stores.”⁵⁰

⁴⁵ Cochrane, 257.

⁴⁶ Eliphalet & Phineas Merrill, *A Gazetteer of the State of New Hampshire in Three Parts* (Exeter, NH: C. Norris & Co., 1817), 3; and Stackpole, V2, 348. This road remains as Old Turnpike Road, a section of NH Route 202, and Old Concord Road.

⁴⁷ Hayward, 31.

⁴⁸ Stevenson, 5.

⁴⁹ Merrill, 82.

⁵⁰ Merrill, 82.

Part I: History and Development of the Antrim Grange

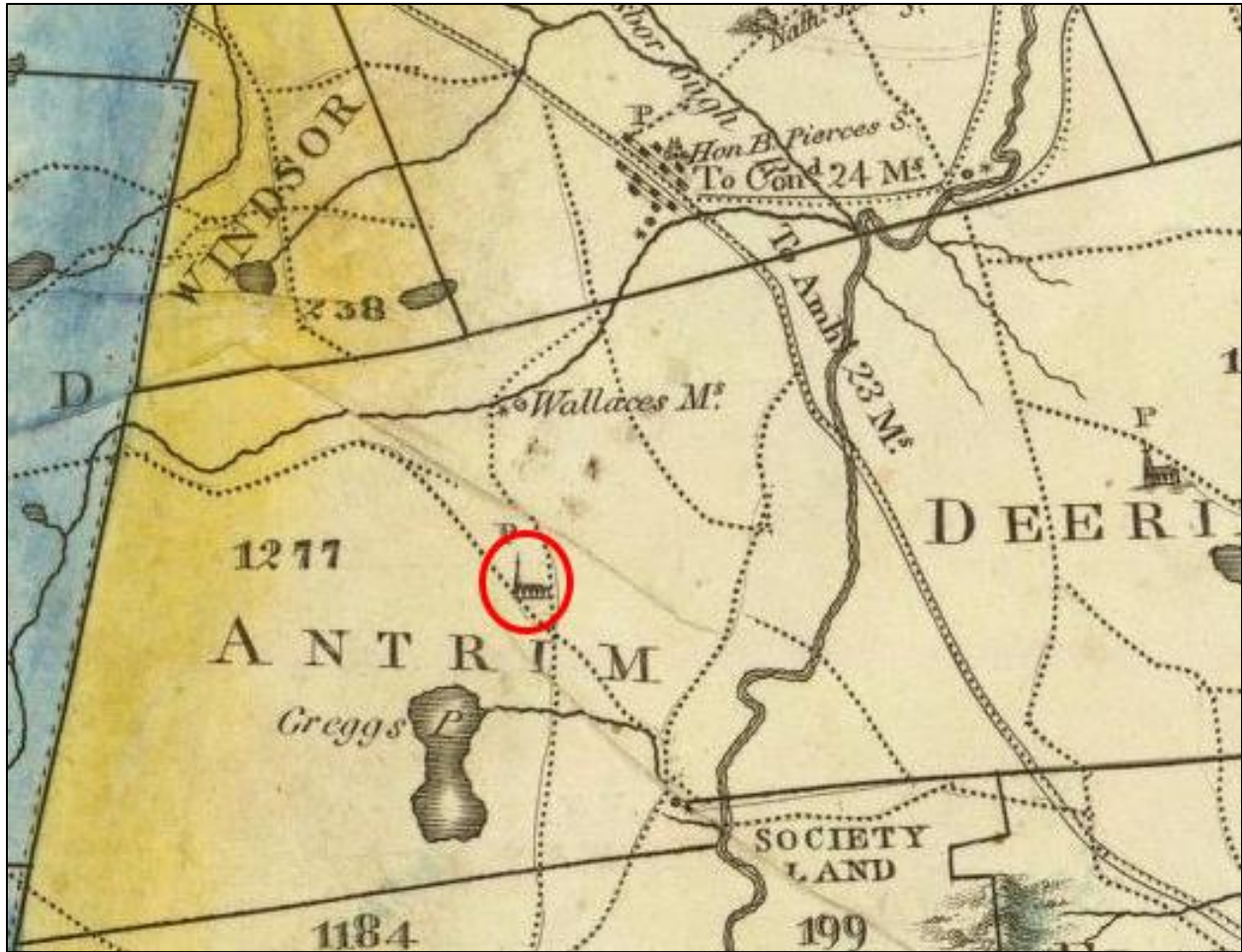


Figure 4: Excerpt from the Philip Carrigain "Map of New Hampshire, 1816"

The Old Antrim Center village changed radically in the 1820s. Though it provided a centralized municipal village, the steep road up over Meetinghouse Hill made for very difficult travel in poor weather. In 1820, a new road was laid out around the west side of Meeting House Hill from “near the Pound to Nathan Pierce’s old place”⁵¹ (this road was not completed until 1822). Traffic was almost entirely diverted from the hill, and the Old Antrim Center village, which included a schoolhouse, meetinghouse, tavern, and a few dwellings, slowly migrated south to the more accessible location of the present village of Antrim Center.⁵² A new Center Cemetery was established in ca. 1820 along the south side of the new road, as the old cemetery was reaching capacity.⁵³

On February 4, 1823, a meeting was held to discuss either moving the existing meetinghouse or building a new more conveniently located building.⁵⁴ A few years later, in 1826, a brick Second Presbyterian Meetinghouse was completed next to the new cemetery.⁵⁵ On November 27, 1826 the town voted to

⁵¹ Cochrane, 96.

⁵² By 1885, all that remained of the early settlement was the 1777 Meeting House Cemetery (Hurd, 257).

⁵³ Stevenson, 12.

⁵⁴ Cochrane, 96.

⁵⁵ Hurd, 245. This Second Presbyterian Meetinghouse was remodeled in 1857 and was demolished in about 1896.

Part I: History and Development of the Antrim Grange

discontinue preaching in the old Meetinghouse, and have Rev. **John M. Whiton** (1785-1856)⁵⁶ officiate in the new building. He preached a farewell sermon at the old meetinghouse in the morning and began preaching in the new building in the afternoon.⁵⁷

Even after abandoning the old Meetinghouse and the construction of the new Presbyterian Meetinghouse, the Town continued to discuss the fate of the old building (now referred to as the “Town Hall”) and whether it was necessary to build a new purpose-built municipal hall.⁵⁸ Up until the passage of “The Toleration Act” in 1819, the Church (usually Congregational, but in this case Presbyterian) was a town function and town responsibility with town meeting and religious services held in the same “meeting house.” These meeting houses were the only public buildings that existed during the first two centuries for many New England towns, and the Town employed the minister, whose salary was a separate tax (usually) on all voters, regardless of denomination. After 1819, no person could be taxed against his will to support a specific religion, and many churches were removed from meetinghouses as a result.⁵⁹ Separation was a slow process, as the state was not allowed to pass *ex post facto* laws, meaning that pre-existing contracts were allowed to continue and receive public support until they ran out.⁶⁰ Because of this arrangement, many churches and town meeting houses were constructed across New Hampshire between 1820 and 1850.

Rev. Whiton was allowed to continue at his town-appointed post, with his present salary, after the passage of the Act. The Town appointed Whiton as their minister shortly after his graduation from Yale College (later University) in 1805. The Town voted to dismiss the Salary of Rev. Whiton at the March 1836 meeting, formally separating the church from the Town.⁶¹

ANTRIM TOWN HALL (1832-1894)

The 1785 Meetinghouse, meanwhile, sat vacant atop the hill from the construction of the new Presbyterian church in 1826 until 1832. On May 30, 1832, at a specially-scheduled town meeting, it was voted to accept the plan of the selectmen to repurpose the 1785 building for a Town Hall at the base of the hill, about a quarter of a mile south of the present location on land belonging to Capt. Robert Reed.⁶² The plan called for rebuilding the building “by leaving out the middle band and cutting it down to one story in hight [sic].”⁶³ An impartial committee of non-residents, consisting of Thatcher Bradford of Hancock, Solomon McNeil of Hillsboro, Russell Tubbs of Deering, was created to choose a location for the new Town Hall.⁶⁴ In June, land was purchased from Capt. **Robert Reed** and a contract for taking down, moving, and rebuilding the

⁵⁶ Anonymous (www.findagrave.com), Rev. John Milton Whiton Sr. is buried at Maplewood Cemetery in Antrim.

⁵⁷ Cochrane, 97.

⁵⁸ In Marcy 1829, another vote was taken to see if the town would move the “Town House” down the hill to a more convenient place (Cochrane, 101).

⁵⁹ Some towns opted to keep both functions within one building by allowing multiple churches to use the meeting hall. The Sunday mornings of the year were then divided up, based on the size of each congregation.

⁶⁰ Everett S. Stackpole, *History of New Hampshire*, vol. IV (New York: The American Historical Society, 1916), 230.

⁶¹ Cochrane, 97 and Whiton, 41. It seems that after 1836 Whiton became an employee of the Presbyterian Church, as he continued to preach to his congregation until 1852, at which time he moved to Bennington.

⁶² Antrim History Committee, *Parades and Promenades: Antrim, New Hampshire...the second hundred years* (Canaan, NH: Phoenix Publishing, 1977), 18.

⁶³ Cochrane, 102.

⁶⁴ Whiton, 41.

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Part I: History and Development of the Antrim Grange

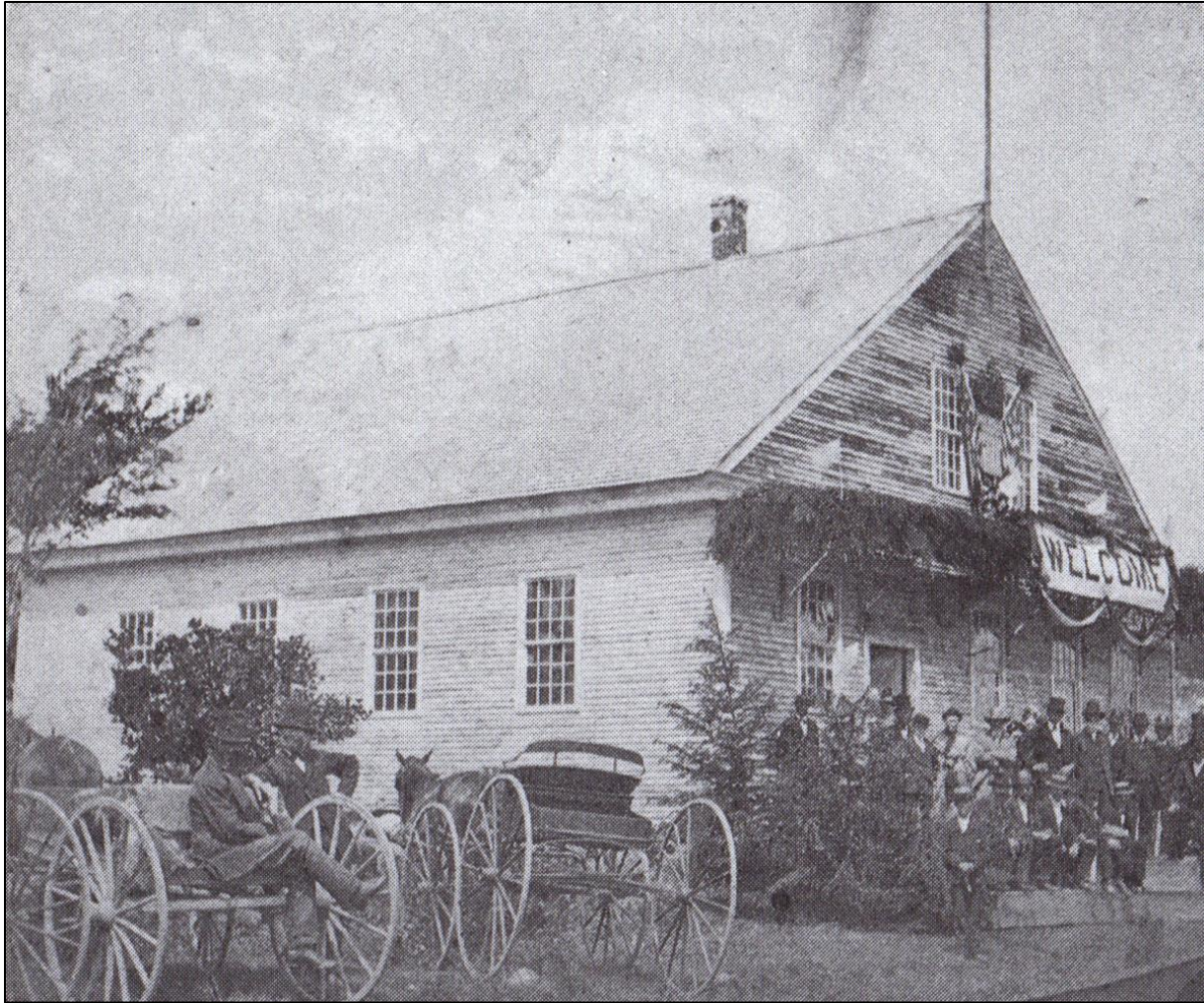


Figure 6: Old Town Hall, from a stereograph by J. A. French, abt. 1870 Antrim Historical Society, 2)

The first known photograph of the “Old Town Hall” was taken in about 1870 by well-known Cheshire County photographer, Jotham A. French (1834-1898).⁷⁰ At this time, the building retained the twelve-over-twelve windows, and had not yet been extended to the north to accommodate the stage. The primary entrance was located in the southwest corner of the building, opening into the present reception room.

The additional bay at the north end of the building was very likely added in 1876-1877. The *School and Financial Reports of the Town of Antrim for the Year Ending March 1, 1877* details several expenses for the building including, \$30 paid to A. D. White for labor on bridges and the town house, \$66.75 paid to D. J. Parkhurst & Son for 22 M shingles and lumber, \$1.50 paid to Chas. F. Whitey for a day’s work at the town house, \$1.50 paid to David Stacy for work on the town house, \$1.50 paid to Luman Swett for work on the town house, \$13.64 paid to J. B. Woodbury for nails &c. for bridge and town house; \$1.50 paid to Lawson A. White for one day’s work on town house, \$1.25 paid to Henry A. Rogers for work on town house, \$26.50 to Josiah Lovern for plank and boards; \$3.00 to Alvin R. Barker for two days work on the

⁷⁰ French was a professional photographer from Westmoreland/Keene and was active in the area between 1861-1898. A large collection of his photographs is held by the Cheshire County Historical Society in Keene, NH and the Getty Institute.

Part I: History and Development of the Antrim Grange

town house, \$8.75 paid to C. D. Sawyer for work on town house, and \$2.14 paid to D. H. Goodell for 268 feet of timber.⁷¹ Though the Town Report does not specify the work that was done, this is the only large expenditure on the building during this period, and the physical evidence supplied by the new section of the building correlates with this date: the extension is constructed with an early balloon frame fastened with cut nails.⁷²

After the Civil War, much of the focus in the Town shifted to Antrim's South Village and the reliable waterpower of the Great Brook, which was now being harnessed for industrial production. Though Antrim counted 242 farms by 1870, the census also listed "various manufacturing facilities, including a sash, door, and blind maker; cast steel and concrete hoe manufacturer; window shade factory; looking glass frame maker; various furniture manufacturers; shoe peg manufacturer; and silk factory; as well as three gristmills, nine sawmills, two tanneries, and six blacksmiths."⁷³ The industrialization of the economy was aided by the commencement of the Peterborough and Hillsborough Railroad in 1878, which connected Peterborough with the Contoocook River Railroad in Hillsborough, passing through Hillsborough, Antrim and Hancock. The railroad bypassed Antrim Center, and the local "Antrim Station" was located just across the Contoocook River from South Village, in the town of Bennington.⁷⁴ The arrival of the railroad transformed the manufacturing in South Village, opening up markets further afield and allowing the factories to grow. Between 1880 and 1890 the population of the Town grew from 1,172 to 1,248, with many people moving to South Village to power the mills.⁷⁵ By the 1890s, the Boston & Maine Railroad (which had acquired the lines of the Peterborough & Hillsborough Railroad) had four trains stopping at Antrim Station.

The agricultural boom of the early decades of the nineteenth century throughout New Hampshire was short lived. As western exploration and the expansion of the railroads opened up the west, farmers abandoned their rocky hill farms for the relatively flat, rock-free, large-scale farms of the west. Land prices began to plummet and continued on the downward trend through the end of the nineteenth century. This was exacerbated after the end of the Civil War, when many fled rural communities to take advantage of government land grants or seek their fortunes working in industrialized communities with the lure of a steady paycheck.

The few farmers that did stay did benefit from the arrival of the railroad in that they were now able to ship their products further afield. Farmers throughout the town hauled goods across the river to Antrim Station. The invention of the refrigerated railroad car in 1881 allowed farmers to transport milk to Boston markets.⁷⁶ Up until this time, dairy production was limited to more local markets and/or the transport of more stable commodities such as cheese. The trains also brought a new means of income to the farms of Antrim Center: summer boarders. Farmers began to supplement their income by taking in summer boarders in the mid-nineteenth-century.⁷⁷

⁷¹ Town of Antrim, *School and Financial Reports of the Town of Antrim for the Year Ending March 1, 1877* (Hillsborough Bridge, NH: Holton & Thompson, 1877), 16-18.

⁷² Cut nails were the fastener of choice from the early 1800s through the 1880s-1890s, when less expensive wire nails began to appear on the market (James L. Garvin, *A Building History of Northern New England* (Lebanon, NH: University Press of New England, 2001), 77).

⁷³ Stevenson, 7.

⁷⁴ Stevenson, 8.

⁷⁵ United States of America, Bureau of the Census, "United States Federal Census" 1880 and 1890 population totals.

⁷⁶ Stevenson, 8.

⁷⁷ Stevenson, 8.

Part I: History and Development of the Antrim Grange

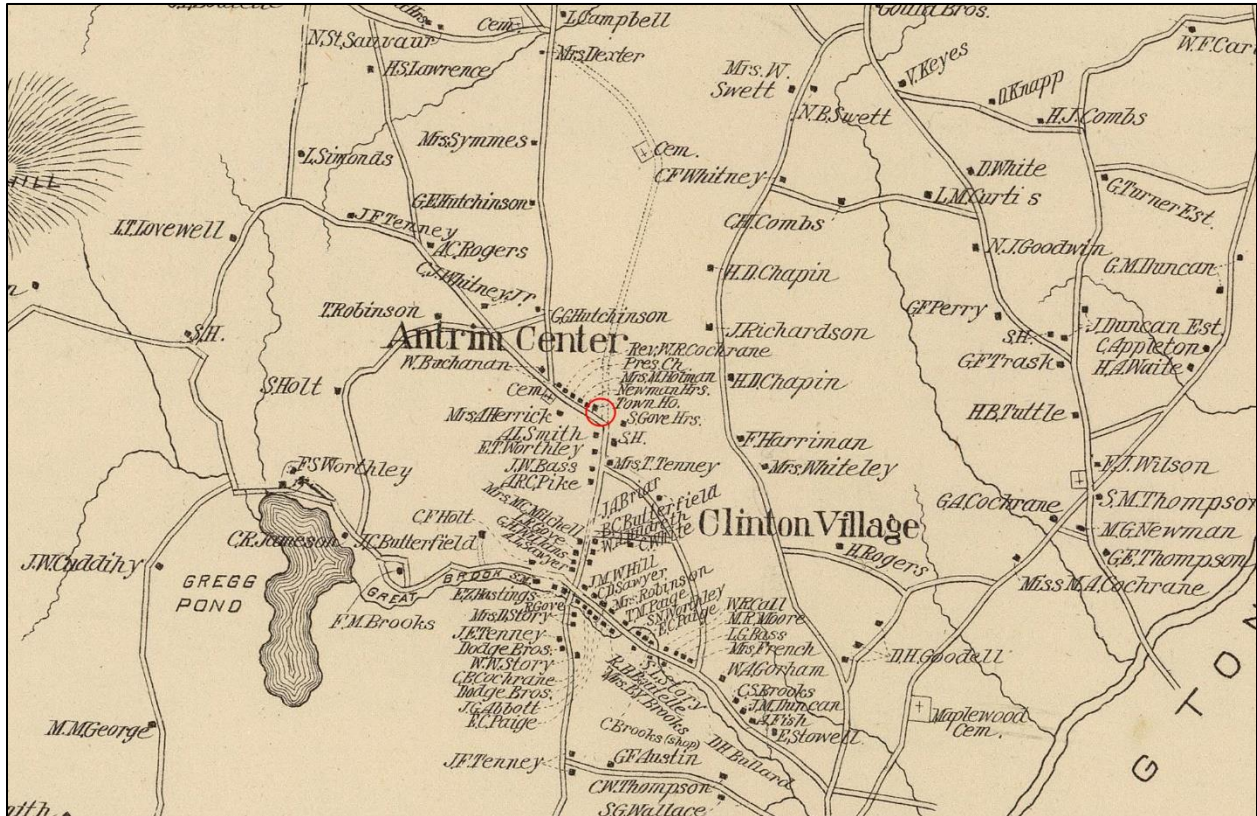


Figure 7: Map of Antrim in 1892 (Hurd, Town and City Atlas of the State of New Hampshire, 1892)

By the 1890s, South Village had become the most populous village in Antrim with 700 people,⁷⁸ and many campaigned for moving the municipal center from the geographical center of town to the population center. In 1882, a Congregational Church was founded in South Village to support the mill workers.

A new brick town hall was constructed in South Village, and dedicated in March 1894, forcing the hand of those who wanted to keep the municipal center in Antrim Center and formally removing it to South Village.⁷⁹ The former Meetinghouse/Town Hall was virtually abandoned, and many of the businesses and public spaces in the village of Antrim Center moved southeast. The harness shop and store moved to South Village, which began to produce its own electricity in 1894 at the Goodell Company, first for its own factories, and eventually for every street corner in South Village, Clinton and Antrim Center.⁸⁰ Soon after, in 1896, the 1826 brick Presbyterian Church at Antrim Center was purportedly demolished with dynamite.⁸¹ Church members who fought moving services to South Village met temporarily in the old Town Hall, before constructing a new Antrim Congregational Church at 223 Clinton Rd (ANT0005) in 1897.⁸²

⁷⁸ Stevenson 9.

⁷⁹ Stevenson, 9.

⁸⁰ Garvin, "New Hampshire Division of Historical Resources Individual Inventory For – Antrim Congregational Church (ANT0005), 3. The first electric street lights were installed in Antrim Center in 1894 (Antrim History Committee, 44 and Stevenson, 10).

⁸¹ Garvin, "New Hampshire Division of Historical Resources Individual Inventory For – Antrim Congregational Church (ANT0005), 3; Antrim History Committee, 215.

⁸² Stevenson, 9.

Part I: History and Development of the Antrim Grange

ANTRIM GRANGE NO. 98 (1894-PRESENT)

The **Antrim Grange No. 98** purchased the former Meetinghouse/Town Hall from the Town in 1894, and repurposed the building for use as a Grange Hall. The Antrim Grange was the 98th chapter of the Grange to be organized in New Hampshire when it was organized on December 11, 1883. The new organization had eighteen charter members and **George Whittum** (1840-1903)⁸³ as the first master.⁸⁴ Prior to the purchase of the old Town Hall, the grange met in private homes.⁸⁵

As a part of the reconstruction following the American Civil War, **Oliver Hudson Kelley** (1826-1913) toured the American south as a clerk for the United States Bureau of Agriculture. During this tour, Kelley developed the idea of a farmer's organization, a concept that would become the National Grange of the Order of Patrons of Husbandry (commonly known as the "Grange").⁸⁶ This organization encouraged farm families to band together for their common well-being, in a way similar to how labor unions worked for factory workers. The Grange movement promoted cooperative farming to lobby fair prices for goods, championed education in rural areas, and lobbied for the Extension Service, Rural Free Delivery and the Farm Credit System. The Grange offered full membership to women and could negotiate on behalf of the farmers with railroad companies to ensure a fair price for shipping products to market. The group also provided a network of "work bees" to step in with assistance if a fellow member was sick or injured. The organization further worked to "break up the monotony and isolation of farm life by providing means of social enjoyment, the absence of which has been a prolific source of deserted farms."⁸⁷ Local chapters of the National Grange spread quickly across America, often constructing Grange Halls to house meetings, educational events, dances, potlucks, and entertainments.

Though the first State Grange was organized in Minnesota, February 23, 1869, it was not until August 19, 1873 that the first Grange was organized in New Hampshire (Gilman Grange, No. 1, in Exeter).⁸⁸ A few months later, in December of 1873, the New Hampshire State Grange was organized. By the time it was organized, there were seventeen Subordinate Granges in the State.⁸⁹ The Grange movement rapidly gained momentum, and, the Antrim Grange became the 98th local organization to be formed in New Hampshire in 1894. By the time of the founding of the Antrim Grange, the organization was able to offer life insurance to its members through the Patrons' Relief Association (formed in 1876), had formed the New Hampshire Grange Fair Association (organized in 1886), and organized the Grange Mutual Fire Insurance Company.⁹⁰

The Antrim Grange quickly went to work modifying the building to reflect its new use. The Grange converted some of the front rooms into ante-rooms for their meetings, and creating the second-floor dining hall and kitchen out of former attic space. The west entry was removed, and the twelve-over-twelve windows replaced by the present two-over-two sash. By 1902 the organization had grown to about 80

⁸³ Anonymous (www.findagrave.com), George E. Whittum is buried at Maplewood Cemetery in Antrim, NH.

⁸⁴ H. H. Metcalf, "Antrim – A Typical New Hampshire Town" (*The Granite Monthly*, Vol., XXVII, No. 6, June 1902), 353.

⁸⁵ Antrim History Committee, 32.

⁸⁶ National Park Service, "Oliver Hudson Kelley" (<https://www.nps.gov/people/oliver-hudson-kelley.htm>). Accessed August 2020.

⁸⁷ N. J. Bachelder, "The Grange in New Hampshire" (*The Granite Monthly*, Vol. XIV, No. 12, December 1892), 359.

⁸⁸ Bachelder, 354.

⁸⁹ Bachelder, 355.

⁹⁰ Bachelder, 357.

Part I: History and Development of the Antrim Grange

members with **J. Leon Brownwell** serving as Master; **Warren W. Merrill** (1865-1926)⁹¹ Lecturer; and Miss **Linda Hutchinson** (1861-1929),⁹² Secretary. In 1919, new concrete steps were added to the front of the building, and the dormers were added to the roof after ca. 1930 (figure 8).

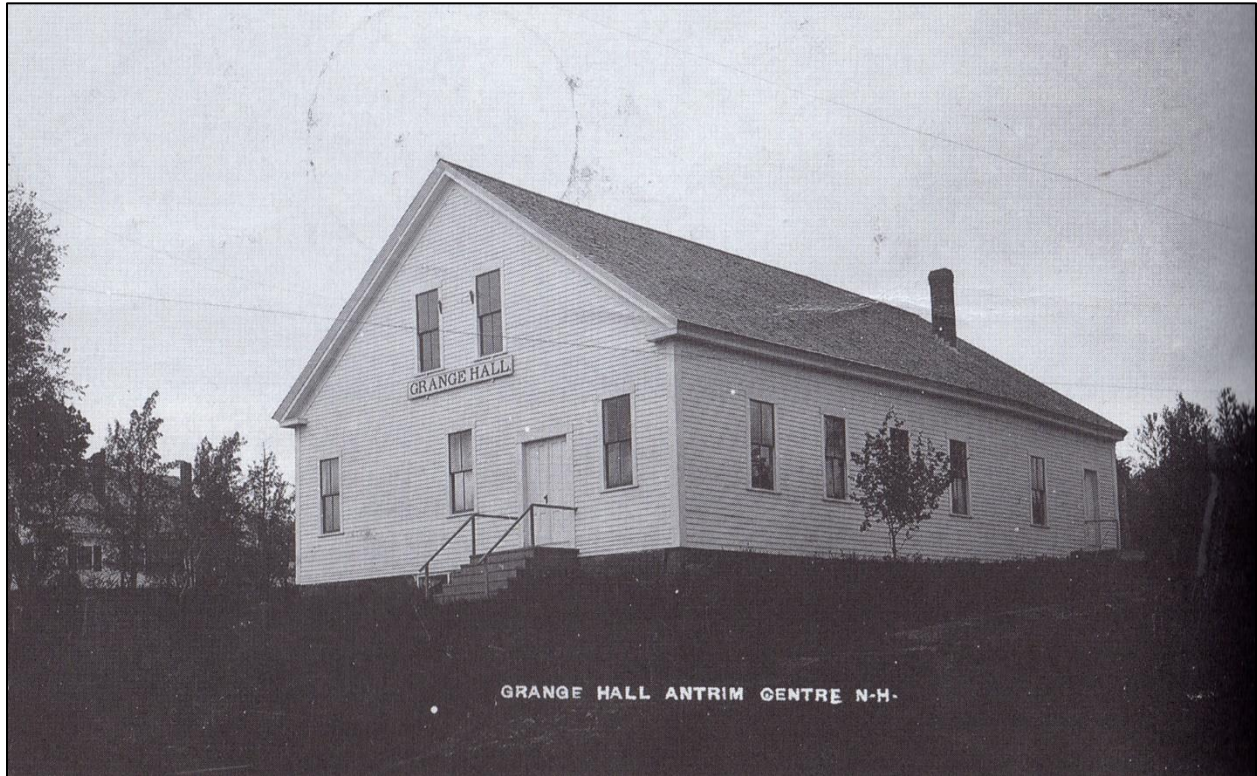


Figure 8: Photo-postcard of Antrim Grange Hall, ca. 1930 (Scott Baker, *A Stroll Through Antrim*, 3)

Agriculture in Antrim continued to decline through the twentieth century as the demographics of the Town shifted and the population continued to shift southeast, away from Antrim Center and toward South Village/NH Route 202. In 1900, the Antrim Center Post Office was closed,⁹³ and in 1940 the District 2 Schoolhouse was closed as the schools were consolidated in Antrim's South village.⁹⁴ The rise of automotive transportation, particularly after World War II, made it easier for people to travel for work and recreation, and Antrim Center began to transition into a bedroom community whose residents traveled elsewhere for work. By the 1970s, the population had declined to such an extent that the Antrim Congregational Church ceased continuous operation.⁹⁵

The Antrim Grange has also declined through the second half of the twentieth century up to the present. Agricultural production is down, and the Grange has struggled to maintain active membership. The group continued to share their building with other local groups. In exchange for their use of the building, the local Oddfellows installed the pellet stove (and associated wiring upgrades) at the west side of the hall in ca. 2006. At approximately the same time, a local private school worked with the Grange to put on an annual

⁹¹ Anonymous (www.findagrave.com), Warren Wilkins Merrill is buried at Maplewood Cemetery in Antrim.

⁹² Anonymous (www.findagrave.com), Linda E. Hutchinson is buried at North Branch Cemetery in Antrim.

⁹³ Stevenson, 10.

⁹⁴ Stevenson, 11.

⁹⁵ Stevenson, 11.

Part I: History and Development of the Antrim Grange

12th Night celebration every January: a winter event that drew up to 80 visitors. Though the Grange met regularly in the building until 2017, hosting a variety of programs from art exhibits to public concerts, the membership had dropped significantly by this time.⁹⁶ In 2020, the organization has 17 members, 10 of whom are currently active.⁹⁷

By 2017, the Grange realized that their building was in desperate need of attention. In the 1970s, the local building code enforcement officer had announced that the Grange could no longer use the second-floor of the building for public events, as neither the extremely steep open interior stair nor exposed fire escape at the north elevation of the building met building code requirements. Since that time, the second floor has been used solely for storage. Though some emergency roof-work was done in the 1990s, very little maintenance has been carried out on the building in recent decades.

The Antrim Grange realized that they had a lot of work to do on the building just to maintain the current and historic use of the space as a seasonal meeting place with the occasional winter event. The floor at the northeast corner of Hall had become extremely “spongy”, and further exploration revealed that the girt at this location was completely rotten, having sat directly on the dirt beneath the building for almost 200 years. When the Grange began to repair the building’s frame, they quickly realized that the building needed additional work as well, with cracking walls, roof leaks, a ceiling that some members felt “needs to be replaced”, and failing windows. The site also lacked adequate on-site parking. For small events, participants parked on the lawn in front of the building, and along the shoulder at the base of Meetinghouse Hill Road. For larger events, people had to park off-site at the old Antrim Congregational Church down the street (now At the Cross, 223 Clinton Rd) or in the fields behind the Uplands Inn (4 Miltimor Rd).

They realized that, if the Grange ever wanted to expand the use of the building by leasing it out to other public entities, reinstating running water or restroom facilities, they would need to make some considerable changes to the property. At present, the building had an unusable second floor, lack of running water/plumbing, old wiring, and inadequate parking.⁹⁸ Though only used occasionally in the winter months, if the group ever wanted to expand the seasonal use of the building in the future, they would also need to consider things like heating, and providing adequate building insulation. The group contacted the NH Preservation Alliance for guidance with their overwhelming “to-do” list.

⁹⁶ Abby Kessler, “Antrim Grange Launches Effort to Restore its Hall” (*Monadnock Ledger-Transcript*, July 24, 2017).

⁹⁷ Beth Merrill, Antrim Grange #98 Member, August 2020.

⁹⁸ Kessler, 2017.

Part I: History and Development of the Antrim Grange

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Part II: Architectural Description with Character-Defining Features

The identification of the character-defining features of historic properties like the Antrim Grange is a critical first step in planning for its future life. Before applying *The Secretary of the Interior's Standards*, it is important to understand what physical features of the building help to tell the story of its history and architectural importance. The *Standards* recognize the importance of maintaining these original features and spaces while rehabilitating the property for a compatible use and future life. Recognizing that a property may have original features throughout that are all “character defining,” the *Standards* allow for the categorization of the features into **primary** and **secondary** spaces and features.

Primary spaces and features are those that should not be changed or removed unless they are beyond repair (at which time they should be replaced to match the old in design, color, texture and materials).

Secondary spaces and features are those that can be altered *when necessary* to accommodate compatible change that allows new and continued use of the property.

Further, the guidelines of the *Secretary of the Interior's Standards* state that “identification, retention, protection and repair” should be given first priority in every rehabilitation project. Interior spaces are not only defined by their finishes and features, but by the size and proportion of the rooms themselves and how they functioned in the historic use of the space. Distinctive features and finishes should be retained as much as possible in primary interior spaces, whereas extensive changes are more acceptable in the secondary interior spaces that service the primary or functional portion of the building. This does not mean that secondary spaces are insignificant or that all character-defining finishes can be removed from secondary spaces; it just means that more leeway is given for change needed to accommodate modern use in these areas.

SITE DESCRIPTION

The Antrim Grange No. 98 is located on a 0.11-acre parcel at 253 Clinton Road (Map 228-Lot 4). The property sits on a hillside, with land sloping down from the north, toward Clinton Road. The Grange is within the cluster of buildings that make up the village of Antrim Center, which was determined to be an eligible historic district for the National Register in 2017. The property is bounded to the east by Meetinghouse Hill Rd (now a class 6 road), to the south by Clinton Rd, and to the north and west by 255 Clinton Rd (Map 228-Lot 3).

The Grange building takes up almost the entire lot. There is a small sloping lawn at the south of the building, between it and Clinton Road. A dry fieldstone wall is located a few feet north of the building, signifying the edge of the parcel. The Meetinghouse Road is even closer to the edge of the building, which likely lies at the legal setback from the road. The set-back at the west elevation is also very narrow.

Parking for the site is limited to the sides of the nearby roads and the narrow patch of lawn to the south of the building. Though the building once was supplied with water that was gravity-fed from a spring up Meetinghouse Hill, the building currently has no water source. The electrical service to the building comes from a utility pole to the southeast of the building, in an island between Clinton Rd, Meetinghouse Rd, and Miltimor Rd.

Part II: Architectural Description with Character-Defining Features

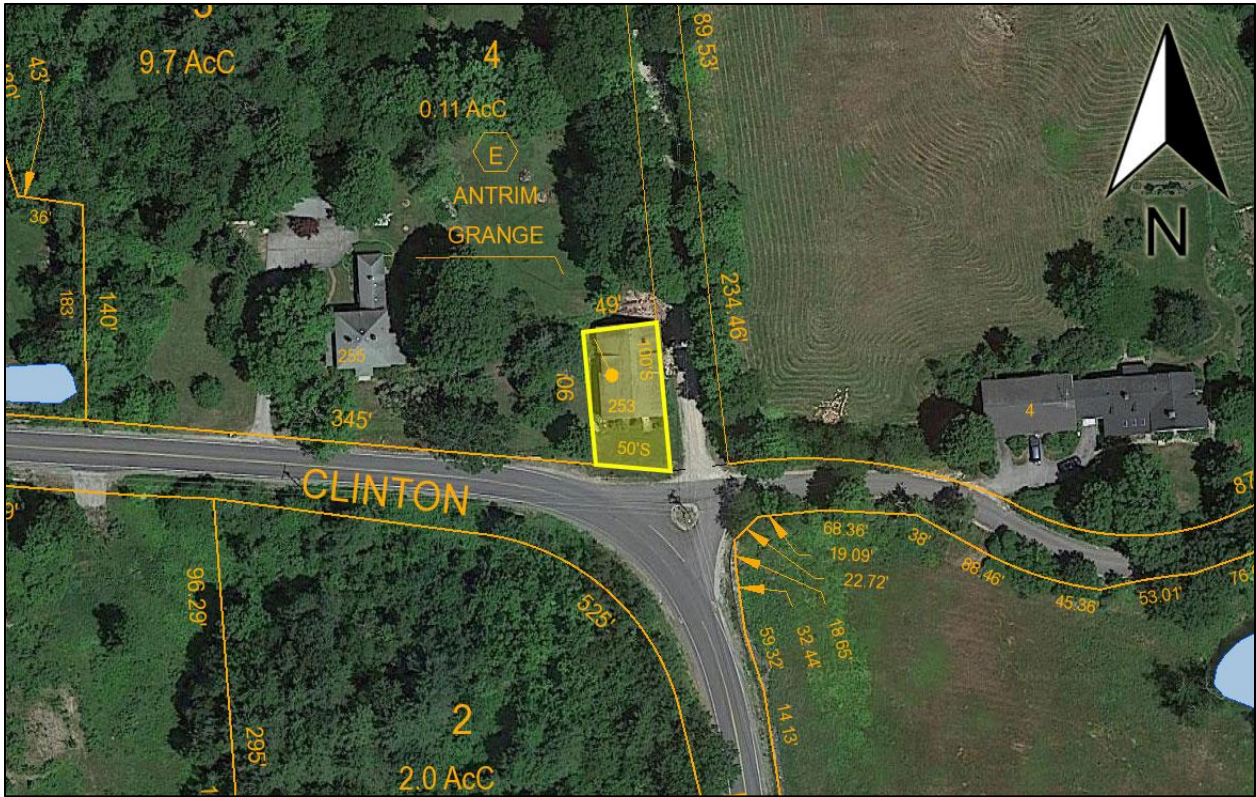


Figure 9: Aerial image of Antrim Grange No. 98 with Tax Map superimposed

Character-Defining Features of the Site		
Primary Features	Secondary Features	Non-Historic Features
<ul style="list-style-type: none">Site near the center of the village of Antrim Center and at the base of Meetinghouse Hill		

EXTERIOR DESCRIPTION

The gable-end of the Antrim Grange faces south, overlooking Antrim Center. The one-and-a-half-story gable-front building is five bays wide, and six bays long (seven bents). The majority of the building sits on granite underpinning atop a dry fieldstone foundation. In places mortar has been added to the stones to fill cracks and add stability. The north bay of the wooden building sits directly on the ground (figures 10 & 11).

Part II: Architectural Description with Character-Defining Features



Figure 10: Primary facade (south elevation) of Antrim Grange



Figure 11: Antrim Grange photographed from northeast showing east and north elevations.

Part II: Architectural Description with Character-Defining Features



Figure 12: East shed dormer

The Grange has a typical roof pitch. The roof is covered with asphalt shingles. Until recently, the roof was pierced on the east slope by a brick chimney. The chimney, which was removed in 2018-2019 as part of the ongoing effort to address rotten framing of the ground floor, likely dated to the building's conversion to Grange use in the early 1890s and was a character-defining feature of the building. When the building was used as a Town Hall, the chimney was further south along the east slope (figure 6).

There are matching shed dormers at either slope, just north of the center of the building. Each dormer contains a pair of two-over-two windows, clapboard siding, and flat narrow trim (figure 12). The sash of the west dormer has been temporarily removed for restoration, and the window openings are currently covered with plastic sheeting. The dormers were added after ca. 1930 (they were not present in the ca. 1930 photograph of the building (figure 8) by the Grange in order to provide extra light and headroom in the second-floor dining room.



Figure 13: Eave detail showing modern flat "shingle molding" at left and molded historic "shingle molding" at right

Part II: Architectural Description with Character-Defining Features

The eaves of the Grange are boxed. The current building has a flat frieze board with square bed molding, flat soffit and flat fascia. The majority of the shingle molding is replaced with a simple flat board, set at an approximately 45° angle (figure 13). A small section of the original shingle molding survives at the southwest corner of the building. The building likely once had a wide Greek Revival-style frieze board with simple molded bed molding in addition to the shingle molding. These eave details were likely quite damaged by the time of the emergency roof repairs in the 1990s and were replaced with the simplified details as part of the roof repair. The boxed eaves continue around the southeast and southwest corners of the building, creating simple returns at the primary façade. The eaves at the north end of the building are close, with no overhang or returns. The lack of detail at the rear of the building is likely original to the construction of the addition.



Figure 14: South elevation, showing location of historic second door

The Grange has wood clapboard siding and narrow flat corner boards. The siding is variable in length, with extremely short sections of clapboard used as patches throughout. The clapboards throughout are butted together, and most are affixed with machine cut nails, suggesting that the majority of the clapboards are contemporary with the construction of the building at this site in 1832.

The primary entrance to the building is through the southeast corner. A set of concrete steps with pipe-rail (inscribed 1919) lead to a pair of four-panel doors. Markings in the clapboards indicate that there was once a second, matching, entrance at the southwest corner of the building (figure 14). Paired entries would be typical of a nineteenth-century public building, and it is likely that the second entry was removed by the Grange shortly after they gained ownership of the building. A secondary entrance is located along the east side of the building, near the northeast corner of the building (figure 15). A single concrete step leads to a four-panel door at this location. A third entry is located at the north elevation.



Figure 15: Side-entry (east elevation)

Part II: Architectural Description with Character-Defining Features



Figure 16: Typical Grange window

The windows throughout the building are double-hung two-over-two wooden sash (figure 16). The original meetinghouse windows had twelve lights per sash (figure _6). Typical windows of the early nineteenth century would have been six-over-six, suggesting that the late eighteenth-century windows from the original meetinghouse were reused in the reconstructed building. Large two-over-two windows gained popularity in the second half of the nineteenth-century, suggesting that the current windows date to around the time the Grange took possession of the building. Many of the two-over-two sash have been temporarily removed to the building interior as they await restoration. The window openings have been covered with plastic sheeting in an attempt to protect the building interior in their absence.

<i>Character-Defining Features of the Building's Exterior</i>		
<i>Primary Features</i>	<i>Secondary Features</i>	<i>Non-Historic Features</i>
<ul style="list-style-type: none"> • <i>Height & massing of the building</i> • <i>Roof pitch & historic eave detail</i> • <i>Regular, symmetrical window and door locations (fenestration)</i> • <i>Historic two-over-two window sash</i> 	<ul style="list-style-type: none"> • <i>Secondary entrances at northeast corner</i> • <i>ca. 1930 dormers</i> • <i>Clapboard sidings</i> • <i>Concrete steps</i> 	

Part II: Architectural Description with Character-Defining Features

INTERIOR DESCRIPTION

The interior of the Antrim Grange has changed very little since the Grange acquired the property in the 1890s. The existing town hall layout was easily adapted to a Grange Hall by the addition of a stage in a new single-bay addition, splitting of the vestibule into multiple ante-chambers (including a vestibule, reception room, and ticket counter), and adding a dining hall and kitchen to the attic.

There is an extremely cramped crawlspace beneath the main portion of the building (the northern bay sits directly on dirt). The main (first) floor is composed of an entry vestibule, reception room, the lodge room, and a stage/backstage area. A set of very steep stairs leads up from the reception room to the second floor, which houses a long hallway, an open attic, a dining hall, and kitchen.

The building frame is composed of two sections: the south six bents were recycled from the 1785 meeting house and the north bent was added in the late nineteenth century, likely as part of the conversion of building use from a town house to Grange. The eighteenth-century section of the timber frame is heavy and employs the “scribe-rule” of timber framing. In this section of the frame, the larger framing members are all hand-hewn. The frame of this section would have been laid out on the ground, and then each mortise and tenon was created individually using an awl or knife. The intersections were then marked with identical numerals, giving each joint a unique mark to ensure that the frame would be put together correctly when raised. The later ca. 1832 framing employs the “square-rule” method of framing, which came into practice by the 1820s and 1830s, reflecting the increasing standardization of joinery.⁹⁹ Smaller timbers from this era are mostly sawn on a reciprocating (up-and-down), water-powered saw. The north bay addition, in contrast, is constructed with the light timbers of an early balloon-style frame, as is typical of the last quarter of the nineteenth-century.

There is a shallow crawlspace beneath the main portion of the building. Within this area, one can easily see the framing of the ground/first floor. The building sills are all hand-hewn out of heavy timbers, and are clearly recycled from the earlier meetinghouse. A window-well at the southwest corner of the building, exposes the empty mortise at the underside of the sill that may indicate that a plate or girt was repurposed as a sill, as the mortise pocket is typical of receiving a floor joist (figure 17). Several heavy girts run across the building from east to west and are tenoned into the sills and supported by intermittent wooden posts set onto flat



Figure 17: Underside of sill near southwest corner of building with empty mortise

⁹⁹ With square-rule framing, rafters, studs, joists and other framing members were cut *en mass* from prepared standard joint patterns. All joints were cut to the same dimension, and were made to be interchangeable using squared reference lines scribed onto each timber.

Part II: Architectural Description with Character-Defining Features

rocks. One of the girders has been “stretched” or extended to accommodate the existing span by mortising in sawn dimensional stock into the end of the timber and held in place with pegs. One of the pieces of stock is then tenoned into the west sill (figure 18).



Figure 18: Board stretcher at the intersection of a first-floor girder (or carrying timber) and west sill

The floor joists run north-south between the girts and support the sub-floor. The girts, joists, and sub-floor are all sawn on a reciprocating saw mill, as was typical of early nineteenth-century construction (figure 19). A set of additional under-floor wooden supports was added to the area beneath the reception room/vestibule in the second-half of the 19th century, and modern material has been added to “sister” one of the girts near the center of the building. The crawlspace floor is littered with old pieces of decaying wood and stones.



Figure 19: The floor joists are notched into the top of the sill of the Grange, as seen in the south sill of the building

Part II: Architectural Description with Character-Defining Features

First-Floor/Ground Floor

The interior of the first floor of the approximately 40 by 62-foot Grange reflects the late nineteenth century interior renovations and consists of an entry vestibule, reception room, the lodge room, and a stage/backstage area (figure 20). Generally, the interior floors are wood and the walls and ceilings are plaster (with the exception of the Lodge room, which has a pressed metal ceiling).

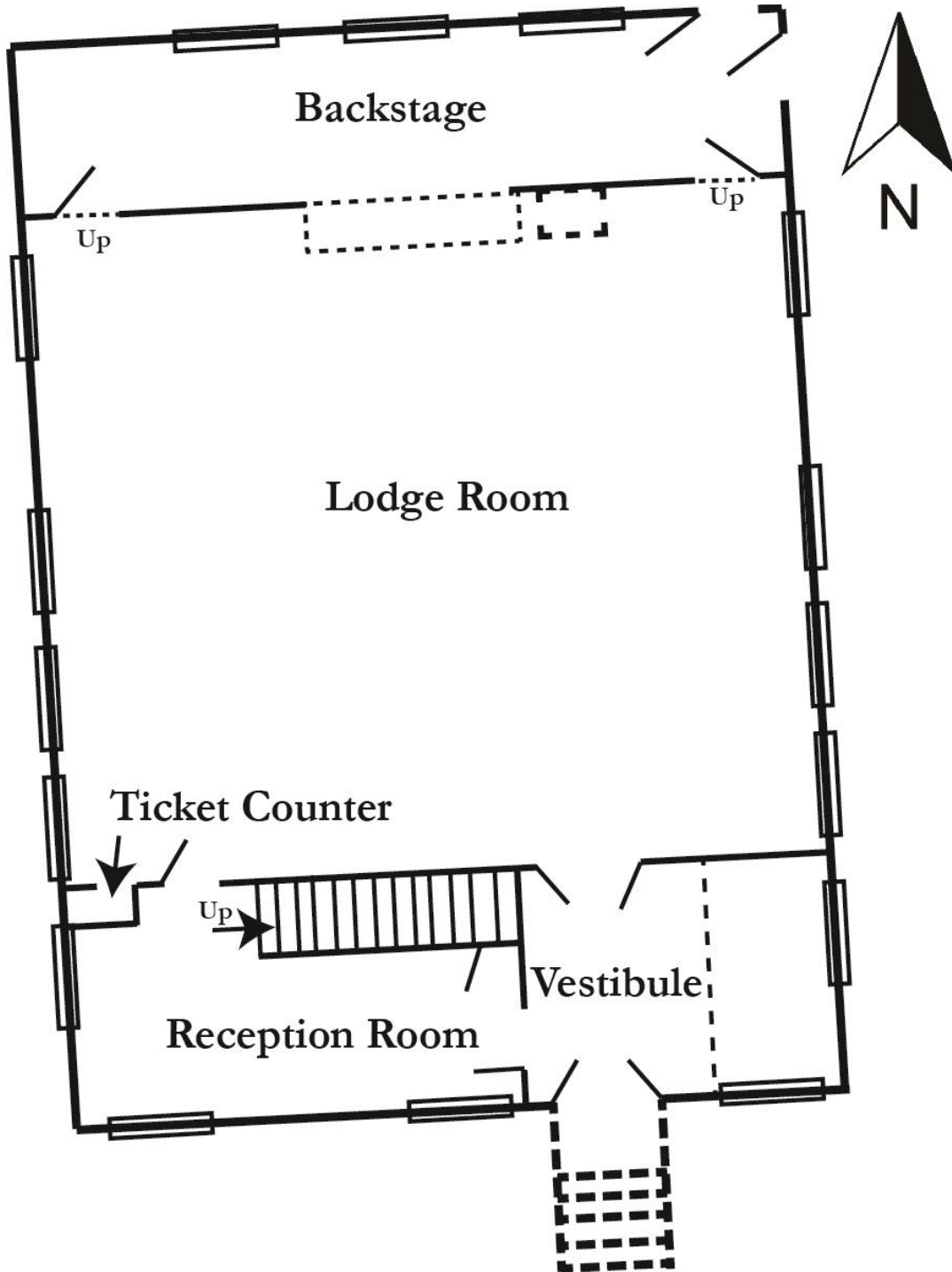


Figure 20: Sketch of the first/main floor of the Antrim Grange (note: Not to Scale)

Part II: Architectural Description with Character-Defining Features

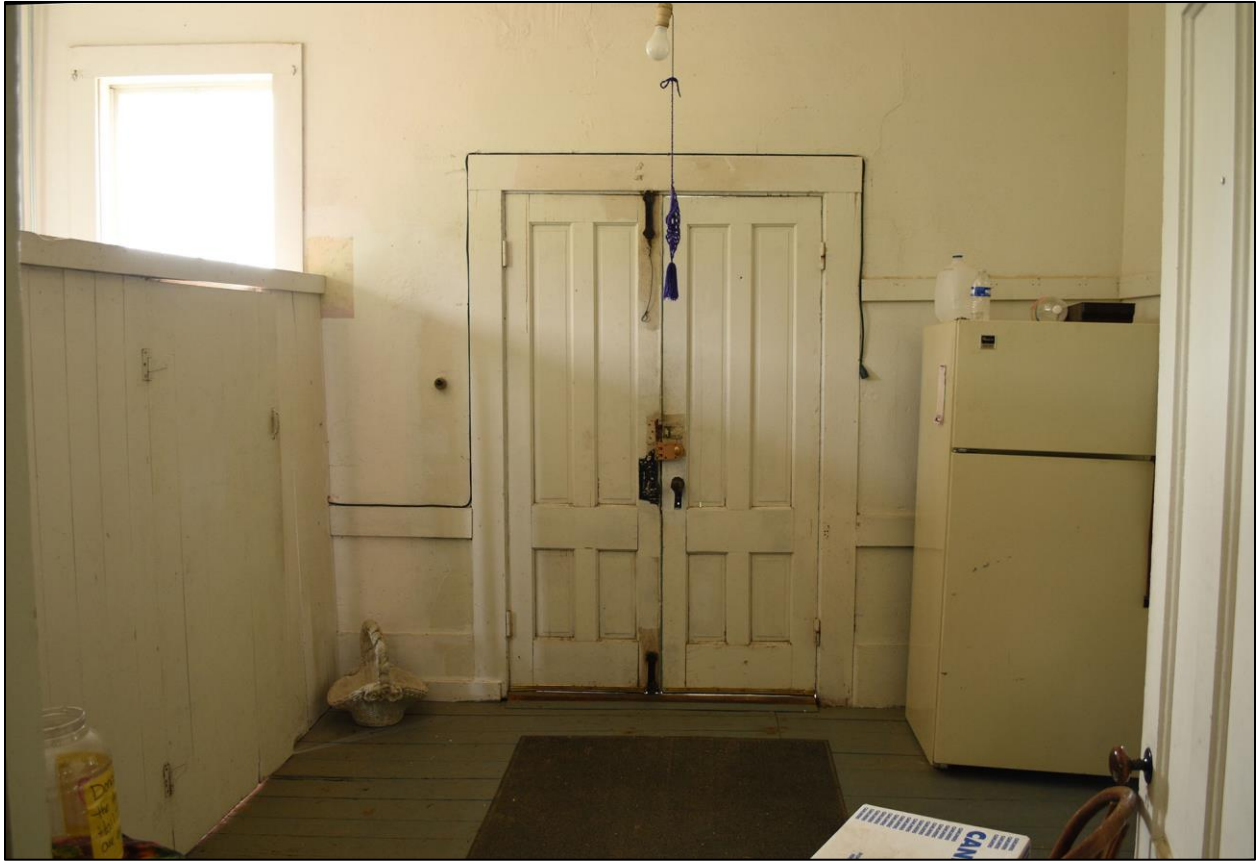


Figure 21: Vestibule, facing south

One walks through the paired exterior doors into a small **vestibule** room (figure 21). This small room has plaster walls and ceilings with a painted wooden floor laid east-west. A wide flat board encircled the space, creating a chair-rail, beneath which is a flat wainscot. The door and window trim are similarly wide and flat, and there is a very wide baseboard. A second band of trim, creating a beltcourse from the west side of the entry and along the west wall once served as a hook rail.

A vertical board half-wall has been inserted along the east side of the room to create a storage closet. The chair rail continues through this closet, but the hook rail is not present in this section of the room.

Paired four-panel Greek Revival style doors at the north wall of the vestibule open into the large **Lodge Room** (figure 22). The lodge has a hardwood floor (laid north-south), plaster walls, and coved ceiling. The coved ceiling is covered in pressed metal. Like in the vestibule, the trim throughout is wide and flat. A wide-flat chair rail encircles the room, and there is a flat wainscot beneath with a wide baseboard at the bottom. The east and west walls are interrupted by the boxed posts of the meetinghouse frame, which flare as they rise to the ceiling in order to support the complex joint at the convergence of the wall-plate, attic girts, and rafters above the room's ceiling (figure 23).

Part II: Architectural Description with Character-Defining Features



Figure 22: Lodge Room, facing north toward stage



Figure 23: Gun-stock posts along lodge room. The wall-posts are flared at the top to allow for a stronger joint at the wall-plate (photo by Brian Gallien)

Part II: Architectural Description with Character-Defining Features



Figure 24: Detail around former chimney



Figure 25: Lodge Room light fixtures

The pressed metal ceiling is coved on the east and west elevations and has a simple egg-and-dart molding along the north and south wall intersections and around the now empty location of a former chimney (removed in 2017) (figure 24). A metal stove pipe once ran from the brick chimney, across the ceiling to a large cast-iron woodstove that is located near the southwest corner of the room. The flat metal ceiling is pressed with a simple repeating geometric pattern of rectangles and ellipses. Several 1920s or 1930s light fixtures are suspended from the ceiling throughout the lodge room. Each fixture has a ca. 1940s plastic shade on the underside, diffusing the light against the ceiling (figure 25).

A raised wooden stage projects slightly into the center of the north end of the lodge room (figure 26). The stage intersects the north wall just below the chair-rail. Stage lights are located in a folding section at the top of the front of the stage. The proscenium opening is rectangular and flat, with curved corners. The interior edge is trimmed with a flat piece of wood that blends into the plaster of the wall, creating a very simple opening. A set of sliding interior doors separates the backstage area from the narrow stage and lodge room.



Figure 26: Detail of stage

Part II: Architectural Description with Character-Defining Features

There are doorways from the lodge room to the **backstage** area on either side of the stage. Each of these has temporarily been covered with plywood while the Grange has been working on replacing the girder beneath the north end of the lodge room.¹⁰⁰ This girder was added to the 1785 frame when the building was moved in 1832, and was the original north wall of the moved building. Though a stone foundation was laid beneath the south, east, and west sills, the area from this girder north to the north sill was not excavated, and the sills and floor structure were laid directly onto the earth. As a result of nearly 200 years of direct contact with the earth, by 2017 when the Grange began to investigate the “spongy” floor at the north end of the lodge room, the girder beneath the stage wall was almost entirely disintegrated. As part of the process of addressing this girder, the backstage doors and associated steps have been temporarily removed.

Currently, a temporary board ramp leads from the lodge room, through the northeast stage door, and into the backstage area. The interior sheathing and floor have been removed in the backstage area, exposing the frame of the walls and ceiling (figure 27). This section of the building was added in 1876-77, when the building was used as a Town Hall. Most of the exterior wall framing and sheathing boards were manufactured on a reciprocating saw and affixed with cut nails.¹⁰¹ The interior surfaces were covered with plaster attached to cut lath, as was also typical of the second-half of the nineteenth-century.



Figure 27: Backstage area facing northeast

¹⁰⁰ The historic interior doors are safely stored in the vestibule so as to be put back when the structural repairs are complete.

¹⁰¹ Cut nails were widely used in coastal towns and well-supplied inland communities by 1800 and quickly dominated the market over the more expensive and labor-intensive wrought nails. After the 1880s, cut nails were gradually replaced with even less expensive wire nails (Garvin, *A Building History of Northern New England*, 75-77).

Part II: Architectural Description with Character-Defining Features



Figure 28: North side of stage wall, facing southwest

The wall separating the stage from the lodge was likely added by the Grange when they acquired the building (figure 28). This wall is constructed with dimensional lumber that was sawn on a circular saw and is affixed with wire nails.¹⁰² The lath is also typical of the second half of the 19th century, as is the heavy cast-iron barn door hardware for the sliding stage doors.

A wide six-panel door at the southwest corner of the lodge room leads to the **Reception Room** (figure 29). A small closet-like space to the west of the door houses a ticket-counter for Grange events and allows the Steward of the Grange to screen visitors prior to entering the Lodge during meetings. The ticket counter/closet projects into the reception room and has bead-board walls and was likely added in ca. 1894 by the Grange. The reception room has plaster walls and ceiling and a wooden floor. Like the other rooms of the first floor, this room has a heavy flat chair rail, flat wainscot, and wide baseboard around the exterior walls.

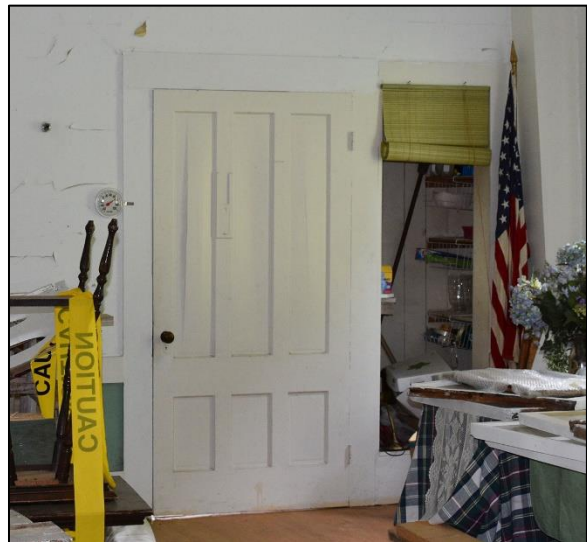


Figure 29: Door between the Lodge and Reception Room (with ticket window at right)

¹⁰² Beginning in the 1880s, wire-nails began to appear in the American market. (Garvin, *A Building History...*, 77)

Part II: Architectural Description with Character-Defining Features



Figure 30: Reception Room, facing northeast



Figure 31: Detail of newel post

The north wall of the reception room is dominated by a steep open staircase (figure 30). There is a large closet beneath the stairs with a four-panel Greek Revival door with porcelain handle. The wall between the reception room and under-stair closet is made of vertical bead-board. The newel post at the base of the stairs is heavy and turned, and typical of the late Victorian period (figure 31). The nosing of each step projects slightly, and the hand-rail is supported by one turned baluster at each step. Marks at the underside of the hand-rail and at each step provide evidence that the stair historically had two balusters on each step, and every other baluster has been sawn out and removed. There is a corresponding pipe-rail on the interior wall.

Part II: Architectural Description with Character-Defining Features

Attic/Second Floor

The second floor of the Antrim Grange is composed of the open attic, an enclosed hallway, a dining hall, and a kitchen. Much of the second-floor finishes date to the late 19th century, when the building was repurposed as a Grange Hall.

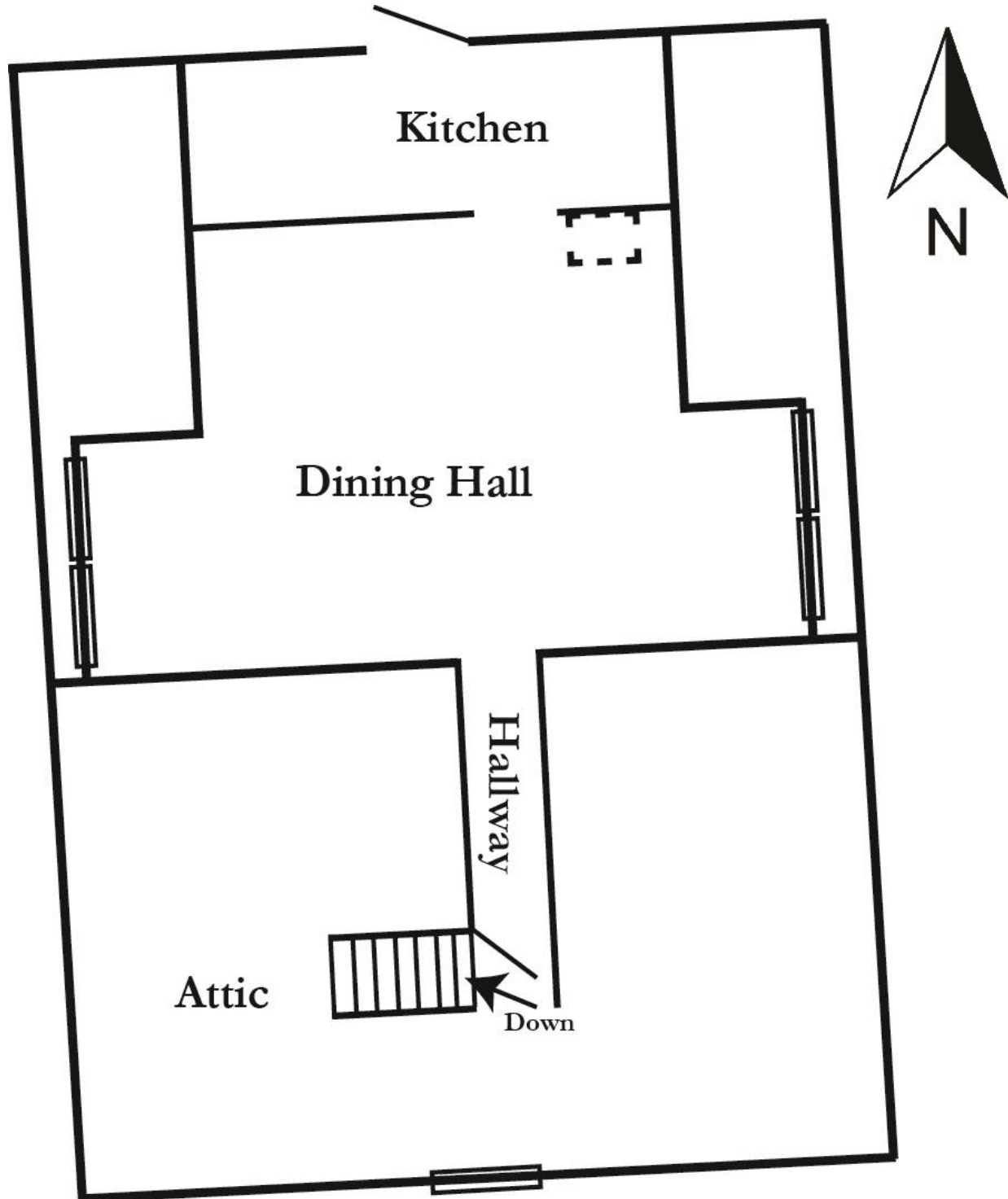


Figure 32: Sketch of the second-floor layout (note: not to scale)

Part II: Architectural Description with Character-Defining Features

The section of the attic-stairs that is within the second-floor level has bead-board walls. There is a solid batten door at the top of the attic stairs with porcelain knob. The door is suspended on long strap hinges, and there is a metal lock (figure 33). The door likely dates to the late 19th century, and the knob may be slightly earlier.



Figure 33: Back of attic door, facing north to dining hall Figure 34: East dormer

The stairs empty into a long narrow **hallway**. The walls and ceiling of the hallway are bead-board which has been left unfinished. The floor is unfinished pine boards.

The hallway extends to the left (north), toward a large finished **dining hall**. Large shed dormer windows at either roof slope were added after ca. 1930 to create a well-lit dining space (figures 34 & 35). The walls of the dining hall are covered in horizontal bead-board. The bead-board has been left unfinished on the interior walls and painted white on the end walls. The ceiling is covered in metal roofing that has been painted white to reflect additional light into the space, creating an airy atmosphere. The window and door trim are flat and is all painted white.

Part II: Architectural Description with Character-Defining Features



Figure 35: Dining hall, facing northwest from east dormer

The north wall of the t-shaped dining hall has a long counter running along the length of the room. Above the counter are two square openings that provide pass-throughs to the kitchen at the north end of the building, the door to which is at the northeast corner of the dining room, adjacent to the location of the former chimney.

Part II: Architectural Description with Character-Defining Features



Figure 36: Kitchen, facing northeast



Figure 37: Kitchen, facing west

Part II: Architectural Description with Character-Defining Features

The kitchen is located to the north of the dining hall (figures 36 & 37). The walls and ceilings of the kitchen are beadboard, and the floor is covered in sheet linoleum. Until recently, there was a large cast-iron cook stove in the southeast corner of the room, adjacent to the brick chimney (both of which were removed in 2017). There is a large ca. 1948 General Electric Stratoliner (DD2-F1) electric range/oven at the east wall, blocking a door between the kitchen and attic eaves (figure 38).¹⁰³ A long counter at the northeast corner of the room suspends a cast-iron sink with large built-in dual-drain-boards. The sink has a simple art-deco style faucet with unique globe-shaped sprayer head (figure 39). The sink is no longer functional but was historically run by gravity-feed from a spring up on Meetinghouse Hill.



Figure 38: 1948 advertisement for the General Electric Stratoliner



Figure 39: Sink faucet detail

¹⁰³ General Electric Company, "General Electric In the Home... On the Farm" (1948 catalogue viewed on the Association for Preservation Technology Building Technology Heritage Library on www.archive.org August 2020), 15.

Part II: Architectural Description with Character-Defining Features

There is a four-panel exterior door at the mid-point of the north kitchen wall. This door once led to an exterior fire-escape that was removed in 2018. Several large built-in cupboards are located in the northwest portion of the room. A long counter along the south wall of the kitchen provided a serving location for Grange suppers.

The south end of the hallway (which is hidden by the door when it is open) is unfinished and opens into a large unfinished **attic** space (figure 40). While the other rooms of the second-floor appear to have been added in the late 19th century by the Grange, this space reflects the earlier unfinished nature of the floor and has probably changed very little since 1832 when the building was moved to this location and altered for use as a town hall. The building's frame is fully visible in this unfinished space.



Figure 40: View of attic frame, facing northeast from southwest corner

The Antrim Grange roof is supported by a king post truss system that was made by William Gregg in 1785 for the Antrim Meetinghouse and recycled when sections of the structure were moved down the hill to this location and the Town Hall was constructed. The king post trusses have two chords to provide extra stability to the frame, as is relatively common in late 18th century meetinghouses. The principal rafters of each truss are connected by purlins that run along the length of the roof. The sheathing boards are applied vertically from the eaves to the ridge on top of the purlins. The heavy principal rafters, upper chords, king posts, purlins, and tie beams are all hand-hewn, and the smaller members of the frame (the braces and sheathing boards) are all sawn on a reciprocating (up-and-down) saw (figure 41).

Part II: Architectural Description with Character-Defining Features



Figure 41: Detail of roof structure showing contrast between charred sawn sheathing boards and hand-hewn frame

The roof sheathing boards may be recycled from another building. Evidence of charring throughout the sheathing boards suggests that they were damaged by a fire (figure 41). There is no evidence of fire-damage to the frame itself. A modern layer of plywood was added between the historic sheathing boards and asphalt shingles in the 1990s when the roof was last replaced.

Character-Defining Features of the Building’s Interior		
Primary Features	Secondary Features	Non-Historic Features
<ul style="list-style-type: none">• Building frame• Open floorplan of hall• General layout of first-floor• Stage at north end• Pressed metal ceiling at Lodge room	<ul style="list-style-type: none">• Interior doors• Greek-Revival style door hardware• 1920s-1930s light fixtures• Mid-20th century kitchen fixtures• Layout of second-floor• Plaster and bead-board wall and ceiling surfaces	

Part III: Existing Conditions Assessment

Many of the condition issues of the Antrim Grange No. 98 relate to the building's inadequate north foundation and deferred building maintenance. Overall, the building is in fair physical condition, with areas in need of immediate attention and issues relating to code compliance and overall usability. The building has sat in somewhat of a state of suspended animation since 2017, when the Grange realized that the sill repair that they had begun to undertake was part of a larger and more expensive undertaking than expected.

SITE INSPECTION

The tax parcel associated with the Antrim Grange No. 98 does not extend much beyond the 40 by 62-foot building (figure 42).¹⁰⁴ The Grange is located on the side of a hill, with the land rising steeply behind the building to the north. The building sits at the east, north and west parcel boundaries and has a very small lawn to the south, between the building and Clinton Rd.



Figure 42: Approximate site plan drawn from Antrim Town Tax Maps showing building and lot dimensions

¹⁰⁴ In fact, town tax maps indicate that the east side of the building may actually extend into the right-of-way for Meeting House Hill Road.

Part III: Existing Conditions Assessment

At the base of a hill, the land to the north (behind) the building pitches water down toward the Grange building. Water is then funneled beneath the building to a swale at the southwest corner of the building.

The only available parking is on a very narrow stretch of shoulder at the base of Meetinghouse Hill Road and on the small lawn in front of the building. The four vehicles present on the day of the site-visit nearly filled these spaces to capacity. During large events, the Grange must obtain permission from nearby landowners to park vehicles off-site at locations such as the old Antrim Congregational Church and adjacent field to the east, behind the Uplands Inn.

The electrical service to the Grange is from an overhead wire that stretches from a utility pole to the southeast of the building and enters the building through the southeast corner of the structure. There is no water nor septic on site and there is very little room to add these features on the cramped lot.

EXTERIOR INSPECTION

There are significant issues with the foundation and first-floor framing. The north bay of the Antrim Grange is on grade, and the lower framing and wall at this side of the building have disintegrated as a result of the constant contact with the damp ground (figure 43). The granite underpinning of the other sections of the building has shifted over time, and there are several stones that have tipped out of plumb (particularly at the southwest corner of the building, figure 44).



Figure 43: North sill



Figure 44: Foundation at SW corner

Part III: Existing Conditions Assessment



Figure 45: West roof slope and dormer window

The asphalt shingle roof of the Grange is in poor condition. There are several shingles missing near the ridge at the north end of the east slope, and there is some moss and lichen growth throughout this side of the roof. The shingles of the west slope are even more cupped and cracked. The intersection between each dormer and the asphalt shingle roof is marked by damp clapboards and biological growth, suggesting inadequate or failing flashing (figure 45).

The exterior clapboards are in fair condition. There are areas of peeled paint throughout and several missing and split clapboards throughout the building exterior. A section of clapboards and adjacent trim is missing near the north door to the building, where the exterior sheathing is left uncovered (figure 46). Faint lines above the door indicate the gable roof above the door that once sheltered an outhouse at this location. This outhouse was removed in 2017 (the 2005 composting toilet is currently in storage). Of greater concern is the large opening at the northwest corner of the building that was cut away to provide access to the area beneath the backstage area during the ongoing sill-work (figure 47, the hole is currently covered with a tarp).



Figure 46: North entrance with ghosting showing historic hood above doorway

Part III: Existing Conditions Assessment



Figure 47: View looking down through the hole at northwest corner of the building, at the girt between hall and backstage area (Photo courtesy of Andras Lazar)



Figure 48: Hole in soffit at east elevation

Part III: Existing Conditions Assessment

The exterior building trim is somewhat damaged. Some of the historic character of the building was lost when large sections of the cornice were replaced with modern materials in a more simplified design. A section of the east soffit is loose (figure 48), and there are missing corner boards and window trim near the northwest corner of the building.

The historic windows are in fair to poor condition. Over time, some of the window sills, particularly on the west side of the building, have been replaced. Many of the sash were removed several years ago when a window restoration project was begun and have not been reinserted for fear of damage during the ongoing sill restoration. The empty window openings were temporarily covered with plastic sheeting, which is degrading rapidly and no longer adequately functioning to bar birds and animals from the building interior. The historic windows that remain in place have peeling paint and areas of loose and or missing glazing putty (figure 49). Fortunately, the wooden sash themselves appear to be in stable condition.



Figure 49: Detail of typical Grange window. This window, at the west side of the building, is assumed to have a replacement sill.

The exterior doors lack any kind of weather-stripping and in several instances, daylight is visible through the cracks between the door and jambs. Though the building is currently unheated, and the Grange may be less concerned with thermal performance, the large cracks are also not assisting with deterring animals from inhabiting the interior space. The concrete steps to the main entrance are tipped back against the historic building, trapping moisture against the wooden frame. There is no barrier-free entrance to the Grange.

Part III: Existing Conditions Assessment

INTERIOR INSPECTION

Crawlspace: As stated earlier, there are some major condition issues with the framing of the first-floor of the Antrim Grange. The north sill of the building is extremely rotten, as is the adjacent girder that runs beneath the edge of the stage, between the Lodge Room and backstage area. From within the crawlspace beneath the building, one can see that many of the original wooden support columns along the building interior are out of plumb or have toppled entirely (figure 50). Other supports that were placed directly onto the dirt beneath the building are rotten. There is a large amount of loose debris in the crawlspace, inhibiting air-flow, trapping moisture and encouraging ants/beetles, and other moisture-loving insects.



Figure 50: Crawlspace beneath Grange, facing north. Note debris in foreground and tipped wooden column near center of image

First Floor: The plaster surfaces of the interior of the Antrim Grange are in generally fair condition with some cracked and failing sections throughout. There are two areas of concentrated plaster damage: at the north wall of lodge room, where the building has been disturbed by the recent work on the structure below, and at the ceiling of the vestibule, directly above the building entrance (figure 51).

Part III: Existing Conditions Assessment



Figure 51: Exposed split lath at vestibule ceiling, facing east

There is some damage to the metal ceiling of the Lodge Room. There are several areas throughout the ceiling where the original pressed metal is patched inappropriately with non-matching metal (figure 52). The painted surface is peeling throughout, and there is a large area that is patched with plastic where the chimney was recently removed at the north wall of the room. Much of the trim below the stage is missing.



Figure 52: Pressed metal ceiling, showing patch

Part III: Existing Conditions Assessment

The backstage area has been completely stripped down to the studs. At present, the stairs between the lodge room and backstage area are removed, and access is along a very tenuous ramp. All of the interior plaster has been removed from the walls and ceilings of this space, and the entire flooring system was also removed. The west end wall of the room is also missing, and is covered by a sheet of plastic. From this space, one can clearly see the extent of the rot to the girder that runs beneath the stage (figure 53). The damage is so extensive that only small sections of the heavy timber remain at all. Damage to the north sill is also visible from this location. The north sill is split along the top, and has been sistered by several modern boards in an attempt to consolidate it (figure 54).



Figure 53: Crawlspace beneath backstage area, facing southeast and showing location of rotten girder



Figure 54: Badly deteriorated north sill of Grange with modern dimensional lumber attached to historic sill

Part III: Existing Conditions Assessment

Generally, the reception room interior is in good condition, however there are significant condition issues relating to the stairs between the reception room and the second floor of the building. The stairs are extremely steep, and are entirely open to the attic with no fire-wall. Though the railing feels relatively sturdy, many of the balusters are missing, and there is damage to the base of the newel post (figures 30-31).

Second Floor/Attic: One of the most important condition issues to note with the second floor/attic of the Antrim Grange is that there is no adequate means of egress. Since the 1970s, the Grange has not been able to use this space, as neither the interior stair nor the previously-removed exterior fire-stair meet life-safety codes. The second-floor structure is also under-built for live-loading and is likely not adequate for large concentrations of people. As the Antrim Grange considers their long-term plans for the building, they may want to consult with a structural engineer regarding the capacity of the second floor and how to ensure that the use of the space complies with modern life-safety codes.

The second-floor of the Grange is somewhat of a time-capsule, as it has not been used since the 1970s. There is a large hole in the floor in the dining room at the former location of the chimney. With the removal of the chimney, there is no longer any means of heating the second-floor rooms (the chimney had thimbles for a heating stove in the dining room and a cast-iron cookstove in the kitchen). The wiring of the dining room light fixtures is very frayed.

There is damage to the bead-board ceiling of the kitchen over the electric stove from historic roof leaks (figure 34). The interior surfaces are quite dingy, and the sink and stove are extremely dirty. The ever-present evidence of rodent activity strongly suggests that the stove would need to be fully restored (re-wired) prior to safe use. The gravity-fed water system is no longer working, and the north door opens into thin-air, creating a safety hazard.

Part III: Existing Conditions Assessment

BRIEF DESCRIPTION AND EVALUATION OF MEP SYSTEMS

There is a relatively new electrical panel at the southeast corner of the building, within the vestibule area (figure 55). The modern panel has electrical breakers, and some of the older electrical circuits have been replaced with modern Romex. Much of the wiring within the building is knob-and-tube.

The historic heating system was removed in part in 2017, when the chimney was removed from the building. At present, the only heat source within the building is a small pellet stove on the west wall that was installed by the Oddfellow's in ca. 2006 (they also installed modern wiring to the stove). Though the Grange has no current long-term plans to use the building year-round, it is important to note that the building does not appear to have any insulation, nor exterior storm windows.

The building currently has no intrusion alarms, fire-alarm, nor running water. Though this is not an issue at present, running water may need to be introduced in the future, should the Grange ever want to reinstate a functioning kitchen or bathroom facilities. There is also no septic associated with the site. It may prove to be more cost-effective for the Grange to simply rent a portable toilet for large events than to wrestle with installing permanent restroom facilities on the small lot.

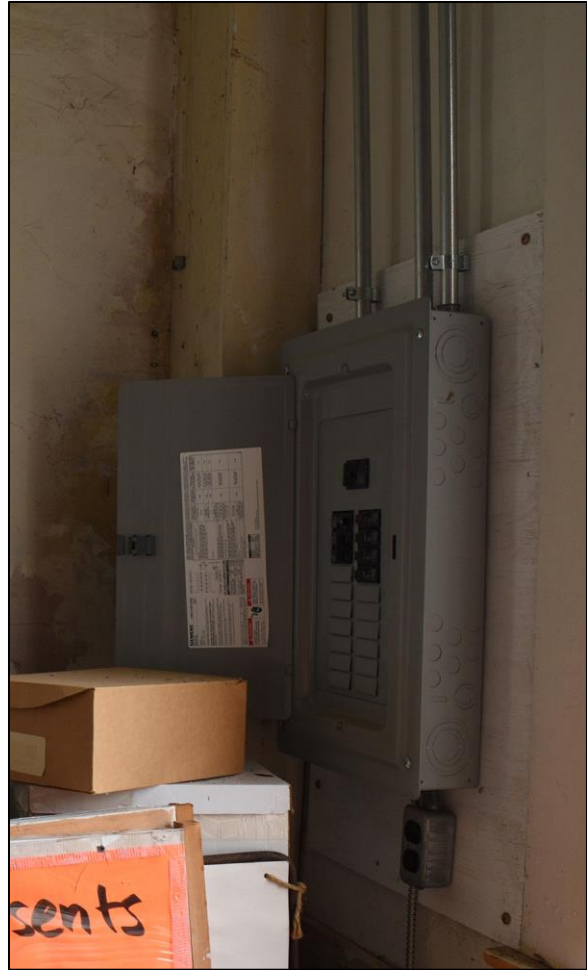


Figure 55: Electrical panel

Part IV: Recommendations for the Antrim Grange

It is recommended that all work to the Antrim Grange No. 98 be undertaken in accordance with the *Secretary of the Interior's Standards for Rehabilitation* (Appendix A). There are four different treatment approaches under the guidelines of the Secretary of the Interior: Preservation, Rehabilitation, Restoration, and Reconstruction. Because the Antrim Grange evolved over time, the *Standards for Rehabilitation* are the most appropriate guidelines to use for the building. These *Standards* acknowledge the need to alter and add to historic properties to meeting continuing or changing use while maintaining the property's historic character.

The recommendations listed in this Condition Assessment provide a list of needed building improvements in an effort to physically secure the existing building and refurbish the character-defining features while also adapting the structure to comply with modern building code. The recommendations are made in a suggested phased approach according to the immediacy of the condition issues and programmatic needs of the Grange. As funding becomes available, the Grange will want to create more detailed architectural and engineering drawings and specifications for each item, based on National Park Service recommendations. It is recommended that the Grange consult with the NH Division of Historical Resources and New Hampshire Land and Community Heritage Investment Program prior to beginning any construction.

The building renovations can easily be broken down into short, mid, and long-range priorities to create more palatable projects. As with any historic building, the greatest priority should be given to keeping the elements out of the building and preventing further decay and returning the space to comfortable Grange use. Once the elements are kept out and the building is structurally secure, then the Grange can focus on deferred maintenance and compliance with life-safety codes. Finally, once these items are addressed, the Grange can focus efforts on more aesthetic aspects of the building.

Part IV: Recommendations for the Antrim Grange

GENERAL REPAIRS AND MAINTENANCE BY PRIORITY	
SHORT-RANGE RECOMMENDATIONS TO STABILIZE THE BUILDING FOR USE (AS SOON AS POSSIBLE)	ANTICIPATED COST
1. Contact an Historic Archaeologist – Prior to any ground-disturbing activities, it is important to contact an historic archaeologist in order to mitigate any potential archaeological evidence relating to the history of the site. ¹⁰⁵	\$1,000-1,500
2. Drainage Work and Moisture Mitigation – Consult with a site-civil engineer to provide guidance on developing a plan to regrade the building perimeter to ensure that water from the roof and further up the hill travels away from the building. Consider installing a stone drip edge around the sides of the building to further prevent water from splashing back against the building. Remove silt and other debris that has built up in the crawl-space to further discourage moisture beneath the structure. Ensure that all work on the foundation is done in accordance with National Park Service <i>Preservation Brief 39: Controlling Unwanted Moisture in Historic Buildings</i> .	\$16,500-22,000
3. Install a Foundation Beneath the North Bay – Employ a mason, with experience in working with historic buildings to excavate beneath the north bay addition. When the addition was constructed in 1876-1877, it appears to have been constructed on a rubble stone foundation that allowed it to move seasonally in conjunction with the existing building. It is presumed that this foundation remains to some extent beneath the existing dirt and should be replaced in-kind to below the frost line so as to be differentiated visually from the foundation beneath the rest of the building and keeping with the historical character of what is there and to keep the building sills from being in direct contact with the grade.	\$8,000-12,000
4. Reset Foundation Stones & General Repairs – Employ a mason, with experience in working with historic buildings, to reset granite underpinning that has slipped out of plumb, paying particular attention to the southwest corner of the building. Any additional jacking up of the building should be kept to a minimum, so as to not further damage the interior plasterwork.	\$8,000-14,000

¹⁰⁵ Several granting organizations require archaeological work when any ground-disturbing activities are undertaken, and it is important to be aware of this cost as part of the budgeting process.

Part IV: Recommendations for the Antrim Grange

<p>5. First-Floor Framing Inspection and Repairs – Employ a timber frame specialist to replace north sill, north sections of adjacent east and west sills, northernmost cellar girder and floor joists. Sometimes it is possible to locate salvaged timbers, in this case one would look for rough sawn material to match the existing timbers, if not rough sawn Douglas fir can be a substitute. Again, it might be possible to find salvaged rough sawn floor joists for this project also. If not, a few lumber yards routinely carry 2” x 10” x 16’ rough sawn spruce which can be sized appropriately for the project. Boarding should match original thickness if known and should be reasonably dry preferably 15% or below moisture content. Hemlock or spruce works well or if salvaged, can be first growth pine.</p> <p>Thoroughly inspect all first-floor framing and supports, complete all necessary repairs to first floor framing system. Reset existing piers that have shifted or are underperforming. Where framing members are found to be structurally deficient, best practice is to first repair (preserve) the original material whenever possible and, when replacement is absolutely necessary, replace in-kind, utilizing traditional framing techniques wherever possible.</p>	\$40,000-55,000
<p>6. Replace Asphalt Roof – Remove existing roofing down to sheathing, replace any broken or missing sheathing with similar material. Ensure that adequate flashing is installed at each of the dormer windows. To install the step-flashing at the dormers, the clapboarding will need to be carefully removed (saving any salvageable material) in coordination with the siding repairs. Although counter-flashing is usually installed prior to the windows, the flashing can be tucked as far under the window sills of the installed windows as is feasible. Copper flashing is recommended, using a high-quality caulking such as Lexal or OSI QuadMax. Install ice and water shield along eaves, install 15lb felt or other underlayment and re-roof both slopes and dormers with high grade asphalt shingles to match existing in color, shape, profile to as great an extent as possible. Another shingle option would be to replace the current three-tab shingles with architectural shingles of similar color to increase the longevity of the roof and more closely resemble wood shingles.¹⁰⁶</p> <p>All work is to be in accordance with National Park Service <i>Preservation Brief 4: Roofing for Historic Buildings</i>.</p>	\$13,000-18,000

¹⁰⁶ Estimate is based on the price for 30-year shingles at approx. \$400-500/square foot installed. Prices will increase in proportion to shingle longevity.

Part IV: Recommendations for the Antrim Grange

<p>7. Exterior Siding & Trim Repair - Complete repairs to exterior walls, starting with northwest corner. The exterior wood siding, trim and woodwork should be inspected for rot, excessive paint cracking resulting in exposed wood surfaces, and areas of crazing. In some instances, it may be possible to repair split or otherwise damaged clapboards with products such as PC Products Rot Terminator and PC Woody epoxy. Where rot is found, replacement shall be kept to a minimum, and all replacement shall match the existing material in terms of texture, dimensions, and design, utilizing radial-sawn clapboards matched to the taper of the original siding with all joints butted to match the existing. New fasteners shall match the original and be galvanized if possible.</p>	\$15,000-23,500
<p>8. Repair Historic Windows – Repair, re-glaze, and re-putty the twenty-two two-over-two light historic windows throughout building as needed (44 sash), securely reinstalling the sash in their historic locations. Each window shall be stripped of all paint to not only remove flaking paint but also remove all lead paint from the surface, making the windows safe for use. Window sash shall be re-glazed, primed, and painted with two coats of finish paint on both sides to match the existing. The estimated price does not involve adding weather-stripping to the windows, as the building is currently unheated. It may be economical to start with the windows that are currently removed from the building, and repair the remaining windows in the next project phase. It also may be possible to utilize supervised volunteer labor to number, remove, and reinstall sash. The estimate assumes an average cost of \$250-\$350 per sash.¹⁰⁷ All work to be performed in accordance with the National Park Service <i>Preservation Brief 9: The Repair of Historic Wood Windows</i>.</p>	\$11,000-15,400
<p>9. Repair Exterior Doors – All of the exterior doors need repair, and all doors lack weather-stripping. The doors need to be removed and restored to ensure their continued use with cracks filled, and weather-stripping added to prevent drafts and discourage pests. If further inspection finds that the wood is no longer stable, it may be necessary to replace the second-floor exterior door. Replacement is to be in-kind, with new doors to match existing in terms of design, color, texture, and materials. It is possible that in-kind replacement doors may be found at an architectural salvage yard.</p>	\$4,000-6,500
<p>Total Short-Range Recommendations</p>	\$116,500-167,900

¹⁰⁷ The Grange window restoration has already been started, so some of the sash are already restored, lowering the overall cost of the restoration. If the project was not already under way, the start to finish cost of a window restoration contractor might range from approximately \$18,600-24,000.

Part IV: Recommendations for the Antrim Grange

MID-RANGE RECOMMENDATIONS: ONGOING BUILDING MAINTENANCE (1-5 YEARS)	ANTICIPATED COST
10. Cornice and Rake Repairs – As with the exterior siding and trim, it is difficult to fully assess the extent of the repair work needed on the cornice until work begins. Being that the cornice work will require staging, the most economical approach is to complete the wall work and cornice work at the same time. Also, worth noting, if painting the building is on the agenda, having staging in place would make that much more economical as well.	\$10,000-15,000
11. Exterior Painting – Once repaired, the exterior surfaces shall then be completely cleaned of all dirt and grime, and any loose paint shall be removed by lightly scraping and hand sanding. Where required, additional sanding by mechanical means may occur, in the most sensitive fashion to remove unstable paint. The use of pressure-washing is NOT recommended in historic buildings. Once surfaces are prepared, spot prime and full prime the entire exterior with an oil-based primer, followed by two coats of high-quality latex paint. Refinish all surfaces to match the existing. All work is to be performed in accordance with the National Park Service <i>Preservation Brief 10: Exterior Paint Problems on Historic Woodwork</i> .	\$11,000-14,500
12. Install New Storm Windows – The installation of new triple-track aluminum storm windows (such as Harvey) with UV-coated glass throughout the building will further protect the delicate historic sash from the elements. Proper storm windows will protect the investment of the restoration of the historic window sash, and will help thermally insulate the building should the Grange ever decide to pursue using the building year-round as part of their long-term plans. All work is to be performed in accordance with the National Park Service <i>Preservation Brief 3: Improving Energy Efficiency in Historic Buildings</i> and <i>Preservation Brief 9: The Repair of Historic Wood Windows</i> .	\$6,200-8,000
13. Electrical Upgrades – Though some electrical upgrades have been made, not all of the historic wiring was replaced. To create a safe environment, it is recommended that all remaining historic knob-and-tube style wiring be replaced with modern electrical wiring by an electrician with experience in historic buildings, utilizing historic wiring locations to as great an extent as is practicable to minimize new holes in the historic building fabric. In order to retain historic character, re-use and re-wire the existing fixtures and ensure that all fixtures utilize LED bulbs to lower energy consumption.	\$16,000-19,000
14. Provide a Restroom for Public Events – In order to provide restroom facilities for public events, it may be easiest for the Grange to simply rent a barrier-free porta-potty for public events, rather than to reinstate the privy addition against the lot line to house a composting toilet (installing a septic system would require running water and may not be physically or economically feasible)	\$225-295/EVENT
Total Mid-Range Recommendations	\$43,425-56,795+

Part IV: Recommendations for the Antrim Grange

LONG-RANGE RECOMMENDATIONS: CODE COMPLIANCE/LONG-TERM MAINTENANCE (5-10 YEARS)	ANTICIPATED COST
<p>15. Interior Plaster Repair - Plaster surfaces throughout the building should be repaired as economics allow. Repairs to be done by a contractor with experience with historic plaster and in accordance with National Park Service <i>Preservation Brief 21: Repairing Historic Flat Plaster</i>.</p>	\$8,000-13,500
<p>16. Repair Pressed Metal Ceiling – Repair rust at metal cornices and ceilings in accordance with National Park Service <i>Preservation Brief 49: Historic Decorative Metal Ceilings and Walls: Use, Repair, and Replacement</i>. Carefully remove any damaged panels from the ceiling and gently sand any rusted areas with 80-grit sandpaper. Remove as much rust as possible and apply an anti-rust primer to rusted areas to stop the damage from spreading. Fill any dents or holes with autobody filler, pressing filler until it reaches the height of the surrounding area and mold to match surrounding metal panel. Once dry, paint to match the other panels in accordance with National Park Service <i>Preservation Brief 28: Painting Historic Interiors</i>.</p> <p>Where panels are missing, it is sometimes possible to match the pattern with current inventory from tin ceiling manufactures. Although some of the manufacturers will custom make a die and press new panels, this may not be economically feasible for a small project. Another alternative is to remove a panel that is in excellent condition, strip it of paint (though it can be argued that leaving the paint on will blend better), and make a mold of the existing panel. This can be accomplished with products from companies such as Abatron. Once the mold is complete, one can paint epoxy consolidate into the mold one layer at a time, thus following the contours of the mold, and create a resulting epoxy resin panel that matches the pattern of the original in a new material.</p>	\$4,500-7,500
<p>17. Reinstate Historic Brick Chimney – The historic brick chimney that was removed in 2017 as part of the efforts to structurally repair the building was defined as a secondary character-defining feature and should be reinstated as part of the long-term plans for the building, using historic photographs and physical evidence to guide the design and construction. The newly reinstated chimney could potentially be used to vent a pellet stove, wood stove, or other heater. If any of the original bricks have been salvaged and are in good condition and suitable for exterior placement, they should be used to construct the exterior portion of the building, and any visible interior locations. If new brick is needed, it should match the original as close as possible in size, surface texture, and color.</p>	\$6,300-8,500

Part IV: Recommendations for the Antrim Grange

<p>18. Install A Barrier-Free Entrance to the Building – Although the lack of accessible entrance to the Grange has not been an issue to date, the Grange may consider adding an ADA-compliant entrance in the future to create a barrier-free meeting space that can be rented to other organizations for events and meetings. It may be possible to place ADA-compliant access to utilize the north or northeast entries, and then ramp down into the main room. Work with an architect experienced in historic structures to establish a design that is in accordance to National Park Service <i>Preservation Brief 32: Making Historic Properties Accessible</i>.</p>	\$5,500-6,500
<p>Total Long-Range Recommendations</p>	\$24,300-36,000

Part IV: Recommendations for the Antrim Grange

EXTREME LONG-RANGE PLANNING:

Though at present, the Grange does not anticipate pursuing the year-round use of the building as part of their long-term plans, if they ever decide to use the building year-round, they may consider the following:

19. Install New Heating System – The present heating capacity of the Antrim Grange is extremely limited, with heating confined to a single space-heater within the hall. This space-heater may be sufficient to take the “chill” out of the air and slightly extend the seasonal use of the space, but if the Grange decides to use the building year-round, they will want to further explore their heating options. If the Grange decides to pursue lengthening the season of the building’s use, they shall ensure that all work is to be performed in accordance with the National Park Service *Preservation Brief 3: Improving Energy Efficiency in Historic Buildings*.

A new forced hot-air heating system may cost between \$26,000-32,000

20. Install Insulation Throughout the Building – At present, the Antrim Grange does not appear to have any insulation, and the building is only used seasonally with the occasional winter event heated by the pellet stove in the hall. If the Grange decides to pursue lengthening the season of the building’s use, they will at the very least want to add insulation at the attic floor and beneath the ground floor. There are several insulation types that are approved by the National Park Service, and it is important that whatever type of insulation is decided upon be reversible (IE: something that can be removed in the future). The Grange shall ensure that all work is to be performed in accordance with the National Park Service *Preservation Brief 3: Improving Energy Efficiency in Historic Buildings*.

Installing blown-in rock-wool insulation may cost between \$10,300-13,600.

Though, at present, the Grange does not anticipate pursuing the use of the second-floor, should those plans change, then they may consider the following:

21. Consult with a Structural Engineer – Consult with a structural engineer well-versed in preservation to obtain a structural evaluation of the building to figure out the load capacity of the second floor and what would need to be done to ensure that the loading meets current building code.

Consultation with a structural engineer may cost between \$1,800-2,300

22. Consider Working with Neighbors to Readjust the north lot-line to create space to add a Small Addition at the North end of the Building – Consider consulting with neighbors to adjust the lot lines and create space to add a small addition at the north side of the building to house a secondary means of second-floor egress and reinstate the privy to house a small composting toilet or similar. The Grange may want to consult with an architect with experience with historic buildings to design an exterior stair addition at the north end of the building that will provide a code-compliant means of secondary egress from the second-floor. It may be useful to make the first-floor entrance the same height as the backstage area and incorporate an at-grade exterior entrance in order to make the building more universally accessible. It may also be possible to incorporate a composting or incinerating toilet into the base of the stair-tower, to reintroduce rest rooms into the building while minimally impacting the historic fabric.

23. Consider Working with Adjacent Landowners to Obtain a Small Lot for a parking lot – The Grange has been fortunate to have supportive neighbors who have allowed for parking on their land for Grange events. Eventually the group may need to obtain a more formal solution in the future.

Part IV: Recommendations for the Antrim Grange

SUMMARY OF COSTS:	
SHORT-RANGE RECOMMENDATIONS (AS SOON AS POSSIBLE)	ANTICIPATED COST
1. Contact an Historic Archaeologist	\$1,000-1,500
2. Drainage Work and Moisture Mitigation	\$16,500-22,000
3. Install a Foundation Beneath the North Bay	\$8,000-12,000
4. Reset Foundation Stones & General Repairs	\$8,000-14,000
5. First-Floor Framing Inspection and Repairs	\$40,000-55,000
6. Replace Asphalt Roof	\$13,000-18,000
7. Exterior Siding & Trim Repair	\$15,000-23,500
8. Repair Historic Windows	\$11,000-15,400
9. Repair Exterior Doors	\$4,000-6,500
Total Short-Range Recommendations	\$116,500-167,900
MID-RANGE RECOMMENDATIONS (1-5 YEARS)	ANTICIPATED COST
10. Cornice and Rake Repairs	\$10,000-15,000
11. Exterior Painting	\$11,000-14,500
12. Install New Storm Windows	\$6,200-8,000
13. Electrical Upgrades	\$16,000-19,000
14. Provide a Restroom for Public Events	\$225-295/EVENT
Total Mid-Range Recommendations	\$43,425-56,795+
LONG-RANGE RECOMMENDATIONS (5-10 YEARS)	ANTICIPATED COST
15. Interior Plaster Repair	\$8,000-13,500
16. Repair Pressed Metal Ceiling	\$4,500-7,500
17. Reinstate Historic Brick Chimney	\$6,300-8,500
18. Install A Barrier Free Entrance to the Building	\$5,500-6,500
Total Long-Range Recommendations (not including extreme long-range items)	\$24,300-36,000
Project Subtotal	\$184,225-260,695
Contingency (+15%)	\$27,634-39,105
Total Project Construction Cost	\$211,859-299,800+

Part IV: Recommendations for the Antrim Grange

EXTREME LONG-RANGE PLANNING: POTENTIAL ADD-ON COSTS <i>If the Grange ever decides to pursue the year-round use of the building or the use of the second floor, they may consider the following additional add-on costs:</i>	ANTICIPATED COST
19. Install New Heating System	\$26,000-32,000
20. Install Insulation Throughout the Building	\$10,300-13,600
21. Consultation with a Structural Engineer	\$1,800-2,300
22. Consider Working with Neighbors to Readjust the north lot-line to create space for a small addition	\$TBD
23. Consider Working with Adjacent Landowners to Obtain a Small Lot for a parking lot	\$TBD
Total Add-on Long-Range Recommendations	\$38,100-47,900+

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Appendices/Supplemental Information

The following appendices have been assembled as supplementary information to accompany the Antrim Grange No. 98 Condition Assessment. The information is added for any reader who wishes to read further into reports and discussion points raised by this report, and for use in creating finalized plans for implementing the recommendations. This report aims to create a general list of recommendations for future work on the building, to be further explored as funding becomes available. Because the report does not include Specifications for the future work, the information from appropriate National Park Service guiding documents has been included here for use in helping to create the Architectural & Engineering Specifications ahead of specific construction projects.

Appendix A: 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 B: Weblinks for Preservation Briefs Mentioned in IV: Recommendations

The following National Park Service Preservation Briefs were referenced in the IV-Recommendations section of this report. To find these reports in full, please refer to the website links below:

Preservation Brief 4: Roofing for Historic Buildings, by Sarah M. Sweester, 1978:

<https://www.nps.gov/tps/how-to-preserve/briefs/4-roofing.htm>

Preservation Brief 9: The Repair of Historic Wooden Windows, by John H. Myers, 1981:

<https://www.nps.gov/tps/how-to-preserve/briefs/9-wooden-windows.htm>

Preservation Brief 10: Exterior Paint Problems on Historic Woodwork, by Kay D. Weeks and David W. Look, AIA, 1982:

<https://www.nps.gov/tps/how-to-preserve/briefs/10-paint-problems.htm>

Preservation Brief 21: Repairing Historic Flat Plaster – Walls and Ceilings, by Marylee MacDonald, 1989:

<https://www.nps.gov/tps/how-to-preserve/briefs/21-flat-plaster.htm>

Preservation Brief 28: Painting Historic Interiors, by Sara B. Chase, 1992:

<https://www.nps.gov/tps/how-to-preserve/briefs/28-painting-interiors.htm>

Preservation Brief 32: Making Historic Properties Accessible, by Thomas C. Jester & Sharon C. Park, AIA, 1993:

<https://www.nps.gov/tps/how-to-preserve/briefs/32-accessibility.htm>

Preservation Brief 39: Holding the Line: Controlling Unwanted Moisture in Historic Buildings, by Sharon C. Park, AIA, 1996:

<https://www.nps.gov/tps/how-to-preserve/briefs/39-control-unwanted-moisture.htm>

Preservation Brief 49: Historic Decorative Metal Ceilings and Walls: Use, Repair and Replacement, by Karen R. Staveteig, 2017:

<https://www.nps.gov/tps/how-to-preserve/briefs/49-decorative-metal.htm>