

SUMMARY OF FINDINGS – EXTERIOR

Overall the building's exterior is in good condition and retains high historic integrity, representative of the property's period of significance.

The Museum property is located at 30 Center Street, on a corner lot of approximately one acre, bordered by Center Street to the north and Elm Street to the east. An open lawn area remains to the east of building and a small asphalt parking lot accommodating approximately 7 parallel spots is located in the northwest corner of site. Two small outbuildings are located at the southwest corner of the site; the Willard Hose (1890) and Big Tree buildings.

The main cobblestone building was constructed with a fieldstone foundation, masonry bearing exterior walls and interior wood framing. A crawl space is present under the floor framing and can be accessed through a removable section of the flooring in the west hall.

The 1871, 1906, and 1916 additions are built of wood frame construction on a stone foundation, with an assumed crawl space under floor framing. The 1968 and 1973 south (rear) additions are also built of wood frame construction but rest on a slab-on-grade foundation.

There is currently no wheelchair accessible route from the parking lot into the building. All entrances have steps up into the building wings.

MASONRY

The exterior walls of the original schoolhouse are constructed of coursed cobblestones on a low fieldstone foundation. Corner quoins, window lintels and sills, and the watertable units are limestone. Mortar is of a soft, lime mix and tooled with a "V" profile.

Overall the masonry is in good condition; select repointing was completed in 2000. However, mortar deterioration is still evident where water is washing over the cobblestone, due to undersized and failing roof drainage, and under window sills lacking a proper drip edge. Minor cracks and delamination were noted at limestone window sills.

At the southwest corner of the west wing there is a pronounced bow in the cobblestone wall at the bearing end of the existing heavy timber header. The movement was likely caused by a previous modification of the masonry opening that was not properly shored during construction. There is no visible evidence of cracking or distress in the mortar joints, indicating the movement may be stabilized.

There are plantings which are too close to the building foundations and vines growing on the cobblestone masonry. Areas of mildew and vegetative growth on the masonry are present in shaded areas of the north elevation of the east wing. Grade at the foundation perimeter and corners has eroded, allowing water to drain towards building.

The building has three chimneys which are constructed of brick masonry; a stucco coating covers the east chimney of the west wing. Overall the chimneys are in good condition with limited areas of mortar deterioration primarily concentrated towards the top of each stack. However, the chimneys lack proper flashing at roof intersections which could lead to unwanted water infiltration and damage. The chimney at the intersection of the west hyphen addition with the 1871 addition does not have a proper chimney cap.



Image III- 1: East elevation of east wing showing mortar deterioration and delamination of window sill.



Image III- 2: Looking along north (front) wall



Image III- 3: Structural movement at southwest corner of west wing

WOOD SIDING AND TRIM

Wood clapboard siding covers the 1871 addition, the connector hyphen between the west wing and the 1871 addition, and the 1916 addition. Overall, it is in good condition with areas experiencing varied degrees of paint deterioration. Vertical board and batten siding covers the contemporary additions and is in good condition, although several battens are cracked or missing.

The area of wood clapboard sided infill on the west elevation of main cobblestone building is showing signs of severe water damage and deterioration. The current state allows water to infiltrate into the building and is the probable cause of water damage to the interior of the Middle Room and the West Hall below.

Exterior wood soffit and trim at the cobblestone building is in overall good condition with areas of deterioration due to moisture infiltration resulting from paint failure.

ROOF AND ROOF DRAINAGE

The 1838 cobblestone building and 1871 addition hipped roofs are non-insulated with asphalt shingle roof covering in good condition. The 1916 (Pioneer Room) and 1968 (Memorial Room) additions are covered in asphaltic rolled roofing with reflective coating. Wall flashing at termination of the roof at the main building wood cornice has resulted in the deterioration of exposed bare wood. The Memorial Room addition's vapor barrier and blown-in insulation have deteriorated and there is evidence of mildew and mold growth.

The Annex has asphaltic roll roofing nearing the end of its useful life and has been improperly flashed at wall connections. The Coach House addition has a gabled roof with asphalt single roofing in poor condition.

The hyphen addition's shed roof was replaced in 2008 with self adhered roll roofing. It was reported by the Society that ice damming occurs during winter months. Flashing has been

improperly installed at complex intersections at the chimney and original exterior door assembly of the 1871 addition.

The rainwater drainage system consists of exterior aluminum hanging gutters and downspouts discharging water onto grade. The building gutters and downspouts are in overall fair functional condition. The gutters are not screened, allowing debris to enter and collect. This situation is most apparent at rear of building which is surrounded by mature trees.

There are several areas where gutter and downspouts have disconnected allowing water runoff on building. Gutters and downspouts along the east side of the building's rear additions are possibly under-designed for the volume of runoff, evident in moisture damage at wood soffits and trim and deterioration of mortar from water flowing down the side of the building.

Extenders have been added to downspouts in an attempt to discharge water away from the building. Poor grading in several areas is resulting in water traveling towards building foundation.



Image III- 5: Typical deterioration of painted finish at clapboard siding



Image III- 4: Inaccessible Main Entrance at the west wing, part of the original ca. 1838 cobblestone schoolhouse



Image III - 6: Deteriorated clapboard clad framed infill on west elevation of main block



Image III- 7: Deteriorated wood cornice and soffit. Also shown is improper wall flashing.



Image III- 9: Annex addition roof, note condition of the roof covering and improper wall flashing



Image III-11: Disconnected and uncovered gutter at 1968 Memorial Room Addition

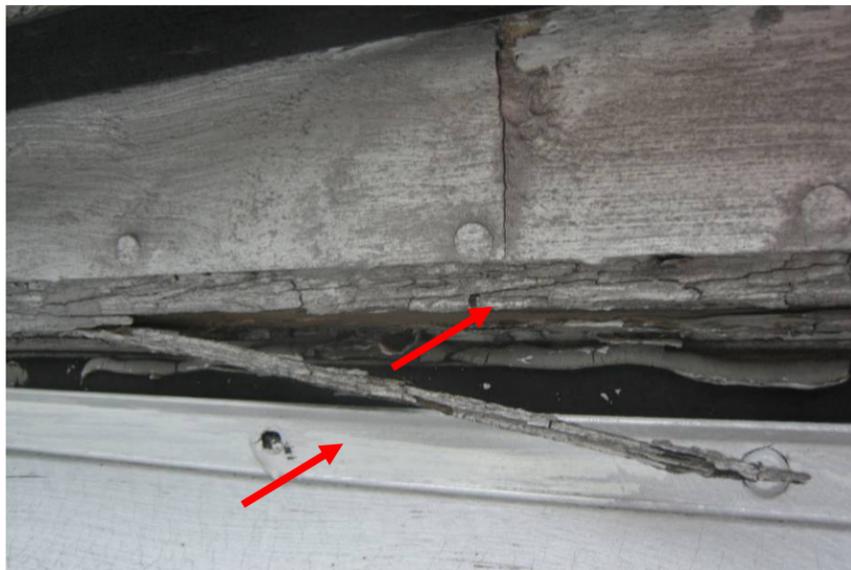


Image III- 8: Deterioration of wood at termination of 1968 addition (Memorial Room) roof at cobblestone wall.



Image III-10: Improper flashings at hyphen addition roof at intersection with 1871 addition.



Image III- 12: Disconnected downspout at connector addition.



Image III- 13: Water discharge at building foundation.

MAIN ROOF STRUCTURE

The main block has a hipped roof covered in asphalt shingles. The framing is a system of heavy timber beams and posts supporting 3 x 6 rafters on 24" centers.

There is visible structural deflection at the ridge line of the roof and this movement is likely caused by several factors. First, roofs typically experience some movement over time. Next, there are not many visible connections between main framing members and failure could be occurring at these connection points. Lastly, the main ridge board has been cut in two locations rendering it ineffective.

The structural failures at the roof structure appear to be the cause of the visible sag in the Auditorium's vaulted wood ceiling below. This condition appears to be specifically related to movement of the north king post of the roof structure.

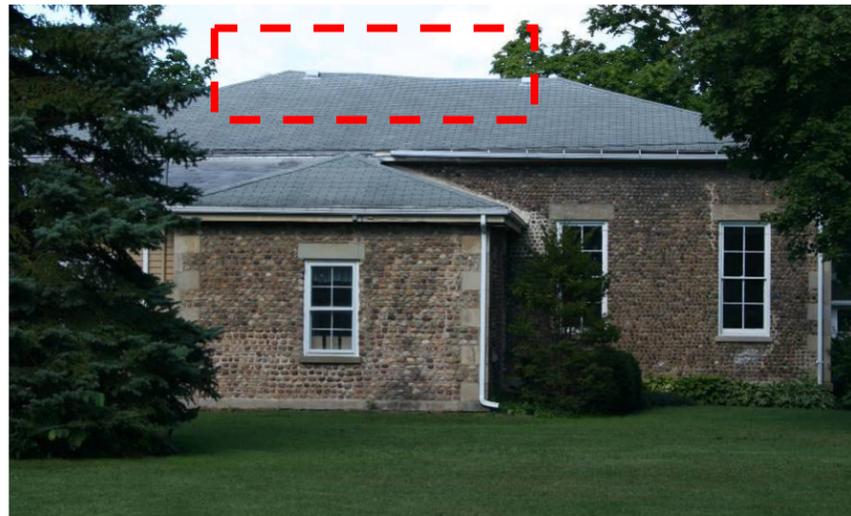
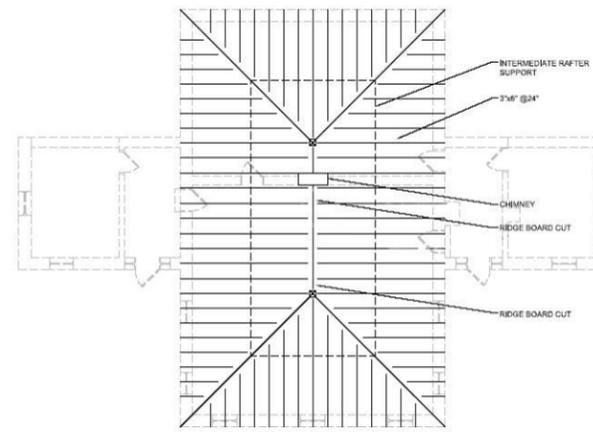
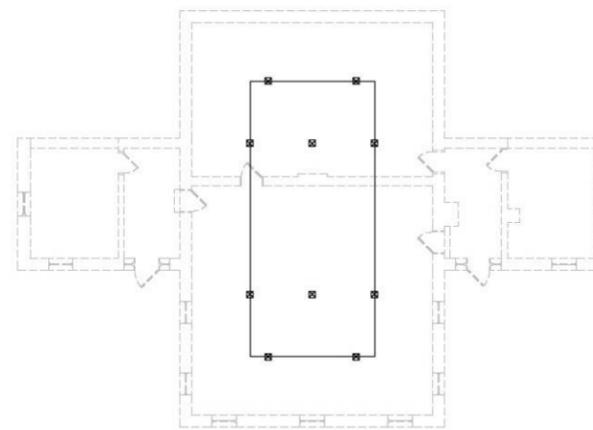


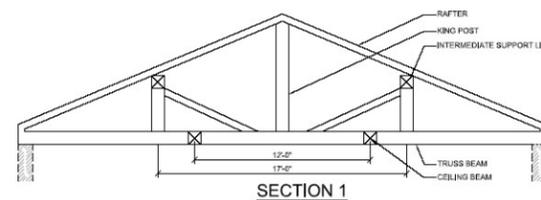
Image III- 14: Sagging of ridge at hipped roof of main block



ROOF FRAMING



INTERMEDIATE RAFTER SUPPORT



SECTION 1

Image III- 15: Sketch drawings of existing framing at main roof (Courtesy of Jensen BRV Engineering, PLLC)



Image III- 16: View of roof structure of main block looking north over ceiling of Auditorium. Showing north king post which is most likely cause of sag in barrel vaulted ceiling below.



Image III- 17: Missing section at main ridge board.

WINDOWS

The building retains its original wood, double hung windows in good overall condition, although many units are not in operable condition.

The main block has narrow 4/4 wood double hung windows. The windows have been made more energy efficient with the addition of fixed interior storm units with UV-filtering film. The operational condition of these units was not able to be verified.

The wings of the schoolhouse would have originally had a single 2/2 double hung window at the north (front) facade. The original configured window is extant at the west wing, but was previously removed at the east wing. In 1916 a 4/4 configured unit was installed along with a new masonry window opening and 4/4 unit at the east wall of the east wing. These windows have exterior storm units. Overall the windows are in good condition, although the painted finish is worn and exhibits surface cracking. All but the north window have been sealed shut and do not currently open.

The main block has steel framed windows installed at the south (rear) wall ca.1930s. The windows are housed in wall construction of the Memorial Room addition, ca. 1968, partially viewable above suspended ACT ceiling. There are three 16-light steel framed units, with textured glass, housed in wood frame construction within the cobblestone masonry wall.

Other windows include original 6/6 wood double hung units in the 1871 addition; 4/4 wood double hung windows in the 1916 addition which are currently boarded from interior to prevent UV damage to museum artifacts; and 6-pane wood hopper sash windows in the hyphen addition connecting the west wing to the rear 1871 addition, presumably re-used from the earlier ca. 1906 configuration of the connector building. Overall the windows are in good condition, although the painted finish is worn and exhibits surface cracking and many units are missing the sash cords. Exterior storm windows are present but not uniform in material, condition or operability.



Image III – 18: Original Window - Exterior



Image III – 19: Original Window – Interior



Image III- 20: Ca. 1930s steel framed sash windows on south elevation of main block visible above dropped ceiling of Memorial Room.

DOORS

The main entrance is through the west wing and has been retrofitted with a contemporary door ca. 2004. Originally this opening would have held a mirror replica of the door assembly still extant on the north façade of the east wing.

The original ca. 1838 entrance of the east wing features a solid wood door with single raised panel with rectangular, single glazed transom and sidelights. The assembly is in overall good condition, save some cracked glass and missing panel trim.

Exterior doors have been fitted with panic hardware, but remain inaccessible by wheelchair due to approach paths, thresholds, and lack of power-assist operators.

Another historic exterior door is located on the south (rear) wall of the 1871 addition which is a 2-panel glazed wood door with 2-light awning transom in fair condition.

Several contemporary, multi-light paneled wood doors at the rear additions are in good condition but are not utilized by the Museum and are treated as exit only doors.



Image III: 21 – Original entrance door at east wing



Image III: 22 - Replacement entrance door at west wing