FIELD REPORT

General project and report information	1. **DATE: February 19, 2025** 2. **CLIENT: City of Kingston Historic Commission** 3. **PROJECT: 106-122 Green Street, Kingston** 4. **SCOPE OF WORK: Historic Window Assessment** 5. **REPORT PREPARED BY: Stacy Caputo**
General property information	1. **YEAR BUILT: Late 17th Century** 2. **HISTORY:** • **Dutch Colonial Style Architecture** • **Known as "Henry Sleight House" after one of the home's first owners. Henry Sleight was he owner of the home during the Revolution and was the Village President at the time** • **The home was partially burned during the Kingston Fire of October 16, 1777.** • **The house was later owned by John Tappen, who published the newspaper, The Plebeian, on the second floor** • **In 1905, the house was purchased by the Daughters of the American Revolution, Wiltwyck Chapter, who engaged Kingston architect Myron S. Teller to restore it. He installed the Dutch divided door, stoop with settees, and Federal transom and sidelights."**

Assessment	**1. At a site visit to the property on 2/19/25 the following observations were made:** • **South Elevation – (9) 6 over 6 windows** • **West Elevation – (1) 6 over 6 window, (5) 12 over 12 windows, (2) 6 over 6 windows (narrow, 2nd floor)** • **North Elevation – (11) 12 over 12 windows** • **East Elevation – (3) 12 over 12 windows** **2. Based on the written history and from what I observed onsite, the South (front) Elevation of the house was a later addition, the 6 over 6 windows are of slightly of younger age than the east and rear elevation windows. There's one newer 6 over 6 window located on the west elevation of the house that was a later addition. Also, on the west elevation, on the upper floor (furthest south windows) were a later replacement – but can still be dated to approximately late 19th to early 20th century.** **3. The windows at the property have all of the characteristics of windows on adjacent houses in the Stockade District of Kingston, built in the same time frame, and are indicative of windows built during late 17th century** **4. While I was not able to observe the window sashes at the interior side, from what I viewed on the exterior side, wood forming the sashes is in sound condition and can be fully restored.** **5. Other noted additions: lower floor of the house had four light wood storms added and the upper floor has new aluminum storms added.** **6. The addition of these storm windows has contributed to the protection of condition of the wood window sashes.**

106 Green Steet, Kingston NY:

This photo is of a west facing window at 106 Green St. The storm window, added at an unknown date, may have been added during the early 19th century. Older photos of the structure show the dwelling had an exterior shutter system that would have helped protect the sashes and would have provided a bit of security and protection against weather elements. At first glance, one would think that this is not worth saving, but that's not the case at all. While the window system is weathered, the wood and glass are both sound. The system that's failing is the paint system.

Also, not visible in this photo, are any gaps that may exist due to the jamb being out of square. Those gaps are easily remedied by adding bronze weatherstripping and by making a few minor adjustments to the sashes. Another attribute in regards to increasing the life span of this window system is to remove the current paint, sanding the old growth wood to release the tannins and treat the wood with a treatment of boiled linseed oil prior to painting. This will help protect the wood fibers, increase the rot resistance. Applying finish coats of linseed oil paint will also assist in increasing the lifespan of the windows.

Window System Information:

Originating from the Latin word fenestra, meaning window, fenestration refers to the openings in a building's facade. In simple terms, fenestration can be explained as the arrangement of windows, doors and openings in a building. What was once a rudimentary opening in a solid wall to allow for light and air, windows serve as an intrinsic architectural element of any building or structure.

Just as building techniques evolved and improved over time, so did windows. Fast forward the 17th century AD and the Dutch are settling in the Hudson Valley. Just south and on the west side of the Hudson River is Kingston, the first capital of New York. One of the early Dutch Stone Homes, located in, what is known as the Stockade District, is the property located at 106 Green Street, Kingston New York.

Wood Window Basics

Using this 12-over-12 double hung wood window as our example, here are the basic terms used for wood window parts. This window is called 12-ove-12 because there aer 12 panes of glass in each sash. Both sashes are moveable so it is called double-hung. If only the bottom sash moves, it is called single-hung. [5]

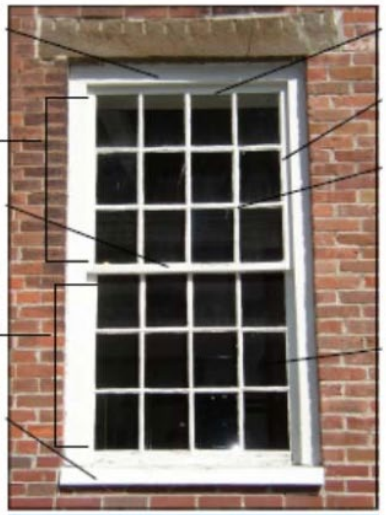
Jamb (the wood that frames the window opening)

Top Sash (upper section of window, may slide down to open)

Meeting Rail or **Check Rail** (the rail where the two sash come together)

Bottom Sash (lower section of window, typically slides up to open)

Sill (exterior, horizontal piece at the bottom of the window frame, commonly wood, stone, or brick)
Stool (interior shelf-like board at the bottom of a window against which the bottom rail of the sash rests)



A c. 1846 wood window in the former Robbins and Lawrence Armory, now the American Precision Museum in Windsor, VT.

Rail (horizontal part of sash)

Stile (vertical part of sash)

Muntin (horizontal, vertical, diagonal, or curved pieces that frame and provide mounting surface for the lights) The shape, or profile, of the muntin provides a clue to the window's age.

Light/lite/pane (glass, held in place by glazing putty and metal glazing points)

Key Attributes Of The Existing Windows at 106 Green Street Kingston NY:

1. Constructed with old growth wood, most likely pine or fir. Old growth wood is structurally denser and more rot resistant than modern, young growth wood.
2. Constructed by hand with traditional mortise and tenon joinery, fastened with removeable wood pegs
3. Each part of the sash is made individually, as the sash was made to be disassembled to ease repairs in the event of any damage
4. Each pane of glass is individually installed – in the event one pane is damaged, that individual pane can be replaced.
5. The individual panes of glass make the sash a true 'divided light "sash
6. "Wavy" glass panes cut from mouth blown cylindrical glass
7. Based on viewing and restoring windows in another home, from the same time period, located further on Green Street, the 12 over 12 windows appear to be single hung, with no weight balancing system. This corelates to the time period of the windows being made in the late 17th century. The 6 over 6 windows, located on the front (south elevation) are slightly newer, early to mid 18th century. A larger glass pane, a more narrow muntin and spline are indicative of being made at a later time frame.
8. Hand glazed with linseed oil putty

Existing Windows vs. New Window Sample:

Existing Windows	**New Window Sample**
1. Constructed From Old Growth Wood	1. Constructed From Young Pine
2. Mortise and tenon joinery with removeable wood pegs	2. Mortise and tenon joinery with staples
3. All parts are made individually	3 Rails and stiles are individual parts, muntins appear to be single part wood grid, also stapled
4. Each pane of glass is an individual mouth blown pane	4 Double pane insulated glass unit; IGU's are individual panes. Insulated glass units are not historical – the seal on IGU's is known to break, argon gas

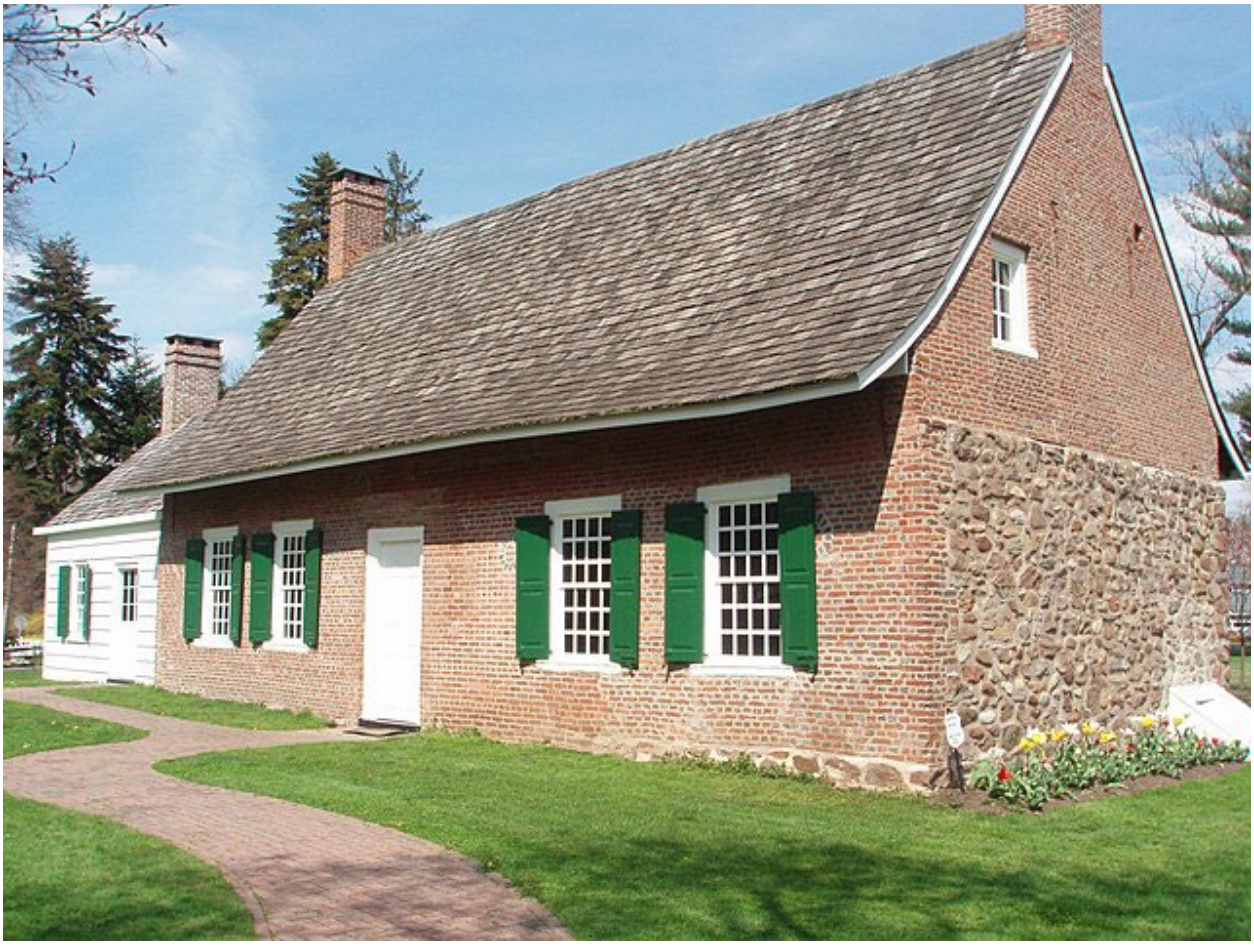
	escapes, glass ends up with cloudy appearance and can't be repaired.
5. Individual sash parts and panes make these windows true divided light windows	5 The insulated glass units are individual panes, but the rest of the window parts are not individual parts, this window is not easily repairable
6. Existing windows have "wavy" glass	6 The insulated glass units do not have wavy glass. They're made with flat plate glass
7. No weight balance system was visible, time frame indicative of single hung window system, with wood jamb and trim parts, hand molded	7 Sashes are installed within a vinyl lined wood framed jamb, not historical
8. The existing sashes are hand glazed and painted	8 Vinyl clad wood grid is stapled on to frame to create muntins. This method is not historically accurate. Also, the staples cause a perforation in the wood grid material. If left as is, rainwater and other moisture could result in wood rot. When wood is clad in vinyl and other non-permeable materials, when water infiltrates there is little to no air circulation

One last item to note:

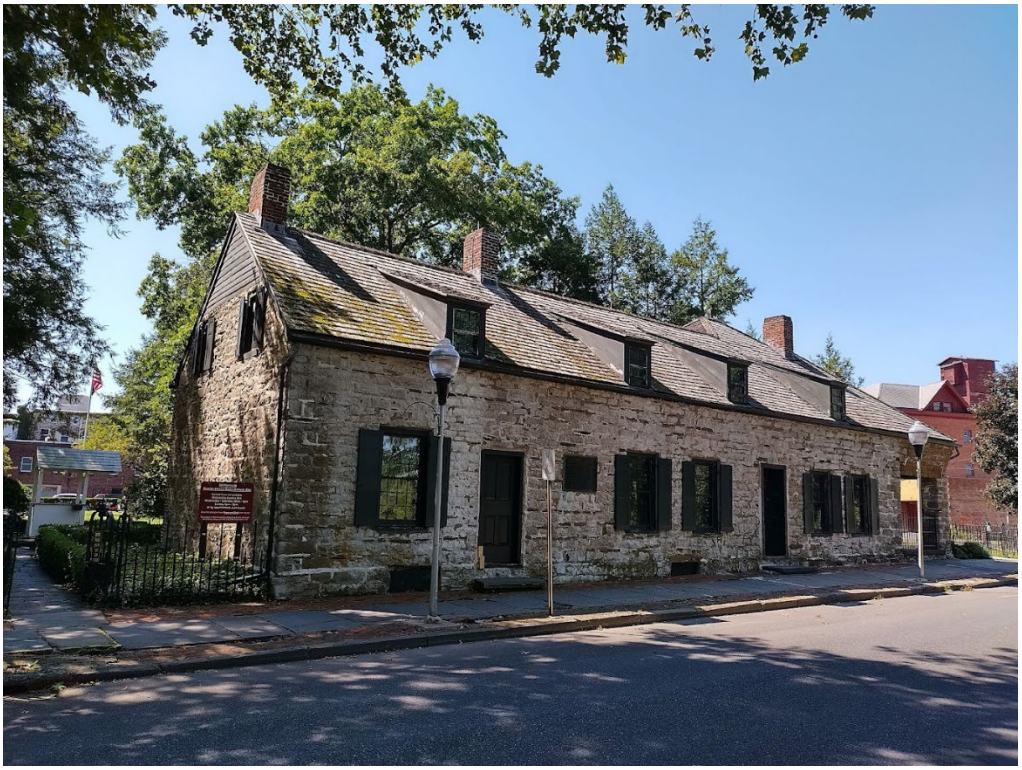
After any structure is built, it will settle over time. As a building settles, so do its parts. What was once perfectly square, will shift, and perfectly square corners will be slightly out of square. As a window opening may shift out of perfect alignment the jamb and sashes will also shift. This phenomenon creates a unique opening so that if what's original is removed, any new replacement would have to be custom made to fit perfectly. And, even with a customized new window, the original opening may have to be made smaller for the replacement window to be installed without any gaps. This installation process will change the architectural esthetic and may lead to other structural issues.

With proper care and maintenance, historical wood windows will last for centuries, and function efficiently. Having a proper storm and/or shutter system, along with the proper locks and weather stripping, there is never an advantage to replacing the existing windows of a structure.

Other structures built approximately in the same time frame as 106 Green Street, show similarities in the window systems that were made during that building period in Kingston. These similarities help date the existing windows to the 17th century:



DeWint House, Tappan NY. Built circa 1700.



Senate House, Kingston NY. Built circa 1676.

Tobias Van Steenburgh House, Kingston NY. Built Circa 1700

As can be seen in the photos above, the window systems in the structures captured above are in kind to 106 Green Street. The number of lights per sash are the same. The size of the window openings are similar in size to 106 Green St. And, the shutter systems operate in a similar fashion. All of these attributes date the windows at 106 Green to the same time frame.

Recommendation:

Based on the historical findings on this property and the observed condition of the existing windows, it is noted that these windows should remain in place and not be replaced. The sample of the replacement window that was reviewed at the onsite meeting on 2/19/25, is not a historically accurate replica of the existing windows and would change the look of the home and significantly change the historic value of the house. The existing windows contain characteristics in the glass and the structural elements of the wood sash that lend to the historic architectural value of this building and other similarly aged homes located in Kingston NY.

X

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Bridge Lane Restorations