STAFF REPORT: APRIL 9, 2025 MEETING APPLICATION NUMBER: HDC2025-00117 VIOLATION NUMBER: 21-410 ADDRESS: 3470 CAMBRIDGE HISTORIC DISTRICT: SHERWOOD FOREST APPLICANT: CAREN PASKEL PROPERTY OWNER: CAREN PASKEL DATE OF PROVISIONALLY COMPLETE APPLICATION: MARCH 17, 2025 DATE OF STAFF SITE VISIT: APRIL 3, 2025

SCOPE: REPLACE STEEL AND WOOD WINDOWS WITH VINYL-CLAD WOOD WINDOWS (WORK COMPLETED WITHOUT APPROVAL)

EXISTING

The house at 3470 Cambridge, constructed in 1927, is clad with reddish-brown brick and has a steeply pitched side gable roof that is covered with asphalt shingles. The brick wall surface on the two front-facing gable walls were set in a contrasting basket weave pattern. The sloping western roof of the large gable extends down the façade and meets the front entry's front-facing and projecting gable roof. The three-bay wide house is accentuated by arched openings at the first floor, which is comprised of two sets of French doors on either side of the arched front porch entrance and front door. A decorative crest and stone quoins further articulate the recessed front entry. The historic wood French doors remain in place, however the window sash are sliding or double-hung replacement vinyl units with between-the-glass grids.



Above: Staff photo, April 3, 2025. Right: Aerial view of property – looking west, April 2024. Eagleview.

The driveway is located between the house and the lot's western/side property line and leads to a free-standing garage and an extended paved area at the back of the house. Stairs lead down from the paved area to the remaining rear grass-covered yard.



The walls of the dormers on the side elevations are faced with a half-timber/stucco design. The windows are vinyl replacement units, double-hung and sliding units.



West-side wall.

Staff photos, April 2025.

East side wall.



Rear wall, applicant photo, 2025.

The rear wall has a large shed dormer faced with wood shake siding and a raised patio extending from three sets of French doors. The historic wood French patio doors remain, as do the leaded glass fixed window sash in the triple window opening. The remaining windows are vinyl replacement units of double-hung or sliding operation. The three entrance doors have been replaced, a large second floor porch has been erected, and all the railings are new.

PROPOSAL

Replacement of wood and steel windows with Pella Lifestyle aluminum-clad wood windows. The scope of
work excludes replacing the rear wall three-unit window which has leaded glass sash, as well as the French
door openings on the façade and rear walls (which equals eight openings, as stated on the application's
"description of existing conditions").

STAFF OBSERVATIONS AND RESEARCH

- The Sherwood Forest Historic District was enacted on May 13, 2002.
- The building permit for the house and garage was issued on July 19, 1927. As shown in the Sanborn map, this property is much deeper than wide.



Designation photo, 2002. HDAB

Top: Permit Card, BSEED. Bottom: Sanborn Map

- The installation of the existing vinyl windows was reviewed by the Commission at the February 12, 2025 meeting and the Commission issued a Denial.
- The current application proposes installing aluminum-clad wood windows. Staff would like to remind the Commission that, as the vinyl windows were installed without approval, <u>the Commission's review is to</u> <u>determine if the removal of the distinctive-character defining steel and wood windows and installation of</u> <u>aluminum-clad wood windows meets the Standards; this application is not for the comparison of vinyl</u> <u>windows to aluminum-clad windows.</u>
- As mentioned above, staff considers the historic windows to be distinctive character-defining features.
 - Steel casement windows were a popular material for window frames in the early 20th century. Their thin frames allowed for more expansive glass surface, creating a striking visual contrast to the monolithic materiality of masonry-clad walls. The dimensional surface of the steel sash helped emphasize the verticality of the window openings, and in conjunction with the French doors on the front and rear walls, created a consistent rhythm on each side of the dwelling. Additionally, the multi-operational window openings are a design feature found in only a few local historic districts. These features are identified within the Sherwood Forest Elements of Design:

7) **Relationship of materials.** The majority of houses are faced with pressed, wire cut or glazed brick, often combined with wood, stone and/or stucco. Stone trim is common, and wood is almost universally used for window frames, half-timbering, and other functional trim. <u>Windows are commonly either of the metal casement or wooden sash variety.</u>

19) Degree of complexity within the façades. The degree of complexity has been determined by what is typical and appropriate for a given style. Overall, <u>there is a higher degree of complexity in the English</u> <u>Revival style buildings, where their façades are frequently complicated by gables, bays, irregularly</u> placed openings and entrances, and irregular massing, than those of other styles.

• The one-over-one wood double-hung windows, within the stucco-clad side gables and wood shake covered rear shed dormer, offered a uniformity of window operation and design at the third floor.



Above: Façade. Right: SE corner – façade and east side walls. Below right: Rear wall. Below: West-side wall. All photos provided by applicant (undated).





- The original windows were removed without HDC approval; the scope of work that would meet the requirements of the historic ordinance (Section 21-2-59(e)) is the fabrication and installation of new steel-framed windows with an identical pattern and operation as the historic windows, and wood one-over-one double-hung sash at the third floor, with dimensions and placement that match the historic windows.
- Additionally, the removal of the historic windows without a thorough examination of their repairability does not meet the following Secretary of the Interior Standards:
 - 2) The historic character of a property shall be retained and preserved. The removal of historic materials or alteration of features and spaces that characterize a property shall be avoided.
 - 5) Distinctive features, finishes, and construction techniques or examples of craftsmanship that characterize a property shall be preserved.
 - 6) Deteriorated features shall be repaired rather than replaced. Where the severity of deterioration requires replacement of a distinctive feature, the new feature shall match the old in design, color, texture, and other visual qualities and, where possible, materials."
 - 9) New additions, exterior alterations, or related new construction shall not destroy historic materials that characterize the property. The new work shall be differentiated from the old and shall be compatible with the massing, size, scale, and architectural features to protect the historic integrity of the property and its environment.

Staff compiled the photos below to compare the operation and design of the original windows and the proposed windows. The mock-up windows were copied from the applicant's window order. Windows are listed from left to right for each floor. **Façade**





Second Floor: 80 – Front Bedroom, 75 – Upstairs Bath, 90 – Master Bedroom *Third Floor:*

West (side) Wall



First Floor: 10 & 15 - Dining Room, 50 & 55 - Kitchen Second Floor: 70 - Back Bedroom West, 85 – Front Bedroom Third Floor: 125 – 3rd Floor Big Room

Above: The large square-shaped windows at the front of the house appear to have had central operating casements (2w/3h) between two sidelights (2w/3h), all of which were below a full width (4w/1h) transom.

Below: The taller-than-wide windows on the side walls (and one opening at the rear-second floor) of the house appear to have had a single operating casement(2w/3h) with one adjacent sidelight (2w/3h), all of which were below a full width (4w/1h) transom.



Rear Wall



First Floor: $45 - \frac{1}{2}$ Bath, 60 - Back Stairs Second Floor: 110 - Master Bath, 65 - Back Bedroom WestThird Floor: $115 - 3^{rd}$ Floor Bath, 120 - Office

East (side) Wall



First Floor: 20 & 25 – Living Room, 30, 35 & 40 – Exercise Room Second Floor: 95 & 100 – Master Bedroom, 105 – Master Bath Third Floor: $130 - 3^{rd}$ Floor Big Room

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- If the Commission considers the installation of aluminumclad wood windows, the dimensions and details of the selected replacement windows should be reviewed.
 - As the steel windows were removed without approval the dimensions of the historic windows were not obtained, so a dimensional comparison can't be completed.
 - Due to the difference in strength of steel and wood, the dimensions of the aluminum-clad wood frames and muntins/grilles will likely not match the thinness of the historic width and profile of the steel window frames, muntins and mullions.
 - The historic windows offered a unique operational design. However, it is staff's opinion that only the stile that closed against the sidelight offered a slightly increased width; the mullion separating the lower window sash from the transom is almost the same thickness as the frame and muntins.
- According to Pella's Lifestyle brochure, the casement window section shows the dimensions of the new casement windows would be as follows (coordinating with the symbols from Pella's location illustration):

Top Rail (VH)	2 - 7/16"
Bottom Rail (VS)	$2 - \frac{1}{4}$ "
Stile (LJ)	2 - 7/16" (left)
Stile (HJ)	$2 - \frac{1}{4}$ " (right)
Muntin	7/8" simulated divided light





Drawings from Pella's Lifestyle brochure.

• If the Commission considers the installation of the proposed aluminum-clad windows, the placement of the new windows should match the more deeply recessed location of the historic windows within the window openings. The depth of plane change between window and wall surfaces is an important feature on the elevations of the house and the current windows don't convey the same visual appearance.



The depth of the "before" steel windows is quite evident and clearly offers a relief from the masonry wall. The replacement windows are minimally set back in the window opening, and from a distance, appear to be in plane and a part of the exterior wall. Applicant photos.

ISSUES

Window Replacement

- As the windows were removed without HDC approval, the scope of work that would meet the requirements of the historic ordinance (Section 21-2-59(e)), is the fabrication and installation of new steel-framed windows with an identical pattern and operation as the historic windows, and wood one-over-one double-hung sash at the third floor, with dimensions that match the historic windows.
- The original windows were distinctive character-defining features.
 - The thin frames of steel windows allowed for an expansive glass surface, creating a striking visual contrast to the solid, dark materiality of the masonry-clad walls.
 - The multi-operational window openings are found in only a few local historic districts and offered a dimensionality and operation that was architecturally appropriate for the age and design of the house.
- The current application proposes to install single or double-casement windows within the window openings at the first and second floors.
 - The operation of the windows will change to monolithic casements, which are not consistent with the general characteristics of a historic window of the type and period of an early 20th century house.
 - The placement of new windows often doesn't match the deeply recessed location of the historic windows within the window openings. The depth of plane change between window and wall surfaces is an important feature on the elevations of the house.

RECOMMENDATIONS

Section 21-2-78, Determination of Historic District Commission

Recommendation 1 of 1, Denial: Replacement of steel and wood windows with aluminum-clad wood windows Staff recommends that the replacement of the steel and wood windows with the aluminum-clad wood window windows is inappropriate according to the Secretary of the Interior's Standards for Rehabilitation and the Sherwood Forest Historic District's Elements of Design, specifically:

- Standard 2) The historic character of a property shall be retained and preserved. The removal of historic materials or alteration of features and spaces that characterize a property shall be avoided.
- Standard 5) Distinctive features, finishes, and construction techniques or examples of craftsmanship that characterize a property shall be preserved.
- Standard 6) Deteriorated historic features shall be repaired rather than replaced. Where the severity of deterioration requires replacement of a distinctive feature, the new feature shall match the old in design, color, texture, and other visual qualities and, where possible, materials. Replacement of missing features shall be substantiated by documentary, physical, or pictorial evidence.
- Standard 9) New additions, exterior alterations, or related new construction shall not destroy historic materials that characterize the property. The new work shall be differentiated from the old and shall be compatible with the massing, size, scale, and architectural features to protect the historic integrity of the property and its environment.
- And *Elements of Design 7 and 19*.

For the following reasons:

- The distinctive character-defining features were removed without HDC approval. Therefore, the scope of work that would meet the requirements of the historic ordinance (Section 21-2-59(e)), are the fabrication and installation of new steel-framed windows with an identical pattern and operation as the historic windows, and wood one-over-one double-hung sash at the third floor with dimensions that match the historic windows and mullion (where present).
- The original windows were distinctive character-defining features.
 - The thin frames of steel windows allowed for an expansive glass surface, creating a striking visual contrast to the solid, dark materiality of the masonry-clad walls.
 - The multi-operational window openings are found in only a few local historic districts and offered a dimensionality and operation that was architecturally appropriate for the age and design of the house.
- The current application proposes to install single or double-casement windows within the window openings at the first and second floors.
 - The operation of the windows will change to monolithic casements, which are not consistent with the general characteristics of a historic window of the type and period of an early 20th century house.