Nature of Project: Remove non-historic wood window sashes install new aluminum clad wood window sashes.

APPLICANT:
CARRIE EHRFURTH
Raleigh Historic Development Commission – Certificate of Appropriateness (COA) Application

For Office Use Only
Transaction #: 1333794
File #: 149-160-CA
Fee: 147-
Amount Paid: 147-
Received Date: 9/26/16
Received By: [Signature]

Minor Work (staff review) – 1 copy
☑ Major Work (COA Committee review) – 10 copies
☐ Additions Greater than 25% of Building Square Footage
☐ New Buildings
☐ Demo of Contributing Historic Resource
☑ All Other
☐ Post Approval Re-review of Conditions of Approval

Property Street Address: 1101 Haynes Street, Raleigh, NC 27604
Historic District
Historic Property/Landmark name (if applicable): Pilot Mill
Owner's Name: The 1894 Building LLC and The 1903 Building, LLC
Lot Size: 2.50 A
(width in feet) 680’
(depth in feet) 335’

For applications that require review by the COA Committee (Major Work), provide addressed, stamped envelopes to owners of all properties within 100 feet (i.e. both sides, in front (across the street), and behind the property) not including the width of public streets or alleys. ([Label Creator])

<table>
<thead>
<tr>
<th>Property Address</th>
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<tbody>
<tr>
<td>1035 Halifax Street</td>
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<tr>
<td>108 Cedar Street</td>
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<td>1130 Haynes Street</td>
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2 env
Applicant Carrie Ehrfurth

Mailing Address PO Box 12929

City Raleigh | State NC | Zip Code 27605
Date Sept. 1, 2016 | Daytime Phone 919-755-2250

Email Address cehrfurth@hedgehogholdings.com

Applicant Signature

Will you be applying for rehabilitation tax credits for this project? ☒ Yes   ☐ No

Did you consult with staff prior to filing the application? ☒ Yes   ☐ No

Design Guidelines - Please cite the applicable sections of the design guidelines (www.rhdc.org).

<table>
<thead>
<tr>
<th>Section/Page</th>
<th>Topic</th>
<th>Brief Description of Work (attach additional sheets as needed)</th>
</tr>
</thead>
<tbody>
<tr>
<td>3.7</td>
<td>Windows</td>
<td>Replace the sashes in our wood double hung windows with painted aluminum sashes. The wood frames would remain.</td>
</tr>
</tbody>
</table>
**Minor Work Approval** (office use only)

Upon being signed and dated below by the Planning Director or designee, this application becomes the Minor Work Certificate of Appropriateness. It is valid until _________________. Please post the enclosed placard form of the certificate as indicated at the bottom of the card. Issuance of a Minor Work Certificate shall not relieve the applicant, contractor, tenant, or property owner from obtaining any other permit required by City Code or any law. Minor Works are subject to an appeals period of 30 days from the date of approval.

**Signature (City of Raleigh)_________________________ Date_________________________**

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### TO BE COMPLETED BY APPLICANT

<table>
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<tr>
<th>Attach 8-1/2&quot; x 11&quot; or 11&quot; x 17&quot; sheets with written descriptions and drawings, photographs, and other graphic information necessary to completely describe the project. Use the checklist below to be sure your application is complete.</th>
</tr>
</thead>
<tbody>
<tr>
<td><strong>Minor Work</strong> (staff review) – 1 copy</td>
</tr>
<tr>
<td><strong>Major Work</strong> (COA Committee review) – 10 copies</td>
</tr>
<tr>
<td>1. Written description. Describe clearly and in detail the nature of your project. Include exact dimensions for materials to be used (e.g. width of siding, window trim, etc.)</td>
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<td>2. Description of materials (Provide samples, if appropriate)</td>
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<tr>
<td>3. Photographs of existing conditions are required. Minimum image size 4&quot; x 6&quot; as printed. Maximum 2 images per page.</td>
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<tr>
<td>4. Paint Schedule (if applicable)</td>
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<tr>
<td>5. Plot plan (if applicable). A plot plan showing relationship of buildings, additions, sidewalks, drives, trees, property lines, etc., must be provided if your project includes any addition, demolition, fences/walls, or other landscape work. Show accurate measurements. You may also use a copy of the survey you received when you bought your property. Revise the copy as needed to show existing conditions and your proposed work.</td>
</tr>
<tr>
<td>6. Drawings showing existing and proposed work</td>
</tr>
<tr>
<td>7. Stamped envelopes addressed to all property owners within 100 feet of property not counting the width of public streets and alleys (required for Major Work). Use the to determine the addresses.</td>
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<tr>
<td>8. Fee (See Development Fee Schedule)</td>
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Narrative

When Pilot Mill was rehabilitated in 1999-2001, over 150 new double-hung sash wood windows were installed in the buildings we refer to as The 1894 Building and The 1903 Building. At the time, the original windows were missing or beyond repair. The design of the new wood windows was compatible with the original opening and the historic character of the mill buildings. Within five years, however, the wood windows started to fail and rot in different places, and the insulated glass panes started to leak. For the last ten years, we have repaired the windows by patching and splicing the many small deteriorated spots and we replacing the individual insulated glass panes that had failed (Exhibits 1-3). We have kept the windows painted to protect the wood, but we have found that the wood used to create the windows has not been able to hold up against the elements. It is a never ending maintenance project that creates tremendous cost each year.

After examining the issue, we discovered that the majority of the deterioration occurs in the sashes. We propose to replace the two sashes in each window with sashes that are have solid aluminum components (rails, stiles, muntins) with simulated divided lights. The existing wood frames would remain since those pieces are not deteriorating as badly, and it is our hope to retain as much of the current building fabric as possible.

The proposed sashes are made by Quaker Windows, a product that has have been used in multiple National Park Service approved historic mill rehabilitations including Revolution Mill in Greensboro and Eno River Mill in Hillsborough (Exhibit 4-5). The muntin configurations are designed to match the arrangement and contour of known historic wood windows (Exhibit 6). The new sashes would be coated in a satin crème color finish, and the wood frames would be painted to match. The change to the character of the building would be minimal, but the upgrade would extend the life of the windows and the building.
Exhibit 1: Existing window at Pilot Mill
Exhibit 2: Example of failed insulated glass. Leak in the seal causes condensation between the two pieces of glass.
Exhibit 3: Example of rotten wood in window at Pilot Mill. The far light on the left has failed too.
Exhibit 4: Revolution Mill, Greensboro, NC—NPS approved Quaker aluminum windows.

Exhibit 4: Eno River Mill, Hillsborough, NC—NPS approved Quaker aluminum windows.
Exhibit 6: Example shop detail on the simulated divided light, showing the muntin profile on the interior and exterior.
Built to Impress

Quality craftsmanship was the driving force for Harold and Marge Knoll when they started making windows and doors in 1949. The next generation of the Knoll family inherited the same respect for quality, apparent in every one of Quaker's 60+ lines of windows and doors.

Today, Quaker melds old-fashioned craftsmanship with the efficiencies of technology to manufacture the best product with the best value in the market. Glass is cut by the computer-driven Optimizer system to minimize waste...in-house testing facilities ensure consistent product performance...a state-of-the-art website provides architects with drawings of installation details (right down to caulk and screw locations)...we deliver finished product with our own trucks and drivers, to assure safe handling.

Our high-performance products, sold by knowledgeable dealers, continue the tradition of craftsmanship started more than a half century ago.

"A Tradition of Quality" has always been, and will continue to be, our motto and pledge. We constantly strive to build on our reputation for quality along with our history and passion for continual improvement and product development. We are committed to making your new windows the finest available.

Ken & Mike Knoll - OWNERS, QUAKER WINDOWS AND DOORS

Part of the Quaker Fleet
In-house Product Testing

Exhibit 7: Brochure from Quaker Windows
MADE IN THE USA

Quaker takes great pride in the fact that all of our windows and doors are made at our one manufacturing location in Freeburg, Missouri, right in the heartland of the United States of America. But just as important, the components that make up our products are made here too. From Kalamazoo to Corsicana, Ellaville to Owatonna, we go across the country in search of the best products available because at Quaker, we insist on a higher standard for our windows and doors.

While a global economy is a permanent part of today's business world, we sincerely ask for your support of our efforts to buy American-made products whenever and wherever possible.

If you would like more information on Quaker's manufacturing partners, contact our home office - 800.347.0438.
HISTORICAL

Across the country, razing age-old structures is out. Renovating and revitalizing is in. Quaker's family of Historical Series of products contains the unique features necessary for historical replication projects. Symmetrical sightlines. The capacity to match exterior colors. The ability to facilitate large sizes. Historically accurate panning and trim styles to preserve a building's distinguished appearance. Pertinent historical accessories such as raised grid profiles, ogee blocks and glass tints. Plus, Quaker offers a long-standing relationship with the National Park Service, the overseers of historical tax credit programs. Quaker currently offers hung, venting and fixed products in our historical product catalog.

Quaker's H300 Single Hung and H500 Single Hung are quite similar with the main difference found at the meeting rail. A heavier meeting rail on the H500 gives it an AAMA rating of AW-40 versus the CW-40 rating of the H300. Both have a matching fixed window.

The H400 and H420 Series are Quaker's venting units in our Historical product family. Find a crank-out casement, push-out casement, crank-out awning and fixed window under each Series. The difference between the two is a smaller sightline for the H420 as compared to the H400. Certified AAMA ratings for this products are as follows: Casement (AW-40), Awning (AW-40), Fixed (AW-50).

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<th><strong>H30C</strong></th>
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<td>Frame Depth</td>
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<td>Color</td>
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<td>Standard 2029</td>
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<table>
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<tr>
<th><strong>H40C &amp; H420</strong></th>
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EXPERTS IN AESTHETICS

When it comes to being faithful to original aesthetics, Quaker's expertise and know-how takes charge.

From the word "go", we devote special attention to every detail. We recognize and respect the fact that each project, sometimes each window, has its own individual flavor. So matching colors, shapes, grids, panning, matching anything for that matter... is simply standard procedure. We like to think we turn this uneasy task into an easy one.

RETURN  AFTER
OPTIONS

FINISHES

Standard Colors
Quaker's powder-coat paint is applied in-house and baked on for a long-lasting finish. All finishes meet ANSI/AAMA 2604 paint specifications (equal to 50% Kynar). Custom colors available on request.

Custom Coatings
Anodized: Anodic coatings provide excellent color saturation with minimal variation. Weather resistant colors are available from clear to black.

2605: In the most demanding environments, use Quaker's 2605 finish, which meets ANSI/AAMA 2605 specs. Similar to 70% Kynar except Quaker's 2605 is a 100% fluoropolymer.

2603: Also available.

GLAZING OPTIONS

Glass thickness: 1/8", 3/16", 1/4", 5/32", and 1/2" Overall insulated glazing panel thickness: 1/8" up to 1".

Types:
Clear, Low-E, bronze, grey, obscure, reflective and sun glass, mirror, solar-coated, heat, mirror and other special types. Most glass types are available as tempered (safety) glass.

PANNINGS, TRIMS, BRICKMOLDS & ACCESSORIES

Quaker has the correct panning and trim to make installation easy. Accessories can be pre-applied to reduce on-site labor and avoid field errors or shipped loose for easier handling and high-elevation installs. Dozens of panning and trim SKUs are immediately available to match even the most unique application.

For Historical applications, accurate pannings and accessories like Ogee Blocks can make all the difference in meeting necessary specifications.

GRIDS

Grids, also known as grilles or muntins, can be added to all windows and doors. They can be used to create a unique design or replicate a historical look. Grids can be designed as 1/8" to 3/8" in flat, raised or beveled shapes. They can be placed between the glass and/or applied to the glass.

* Not all grid widths are available for all grids shapes.

NOISE REDUCTION

Whether it's traffic, trains or trucks, or just a loud television, Quaker has a full range of products that can be tailored to meet or exceed OITC (Outdoor/Indoor Transmission Class) or STC (Sound Transmission Class) requirements in high decibel locations. STC ratings range from 30-48 and OITC ratings range from 22-35.