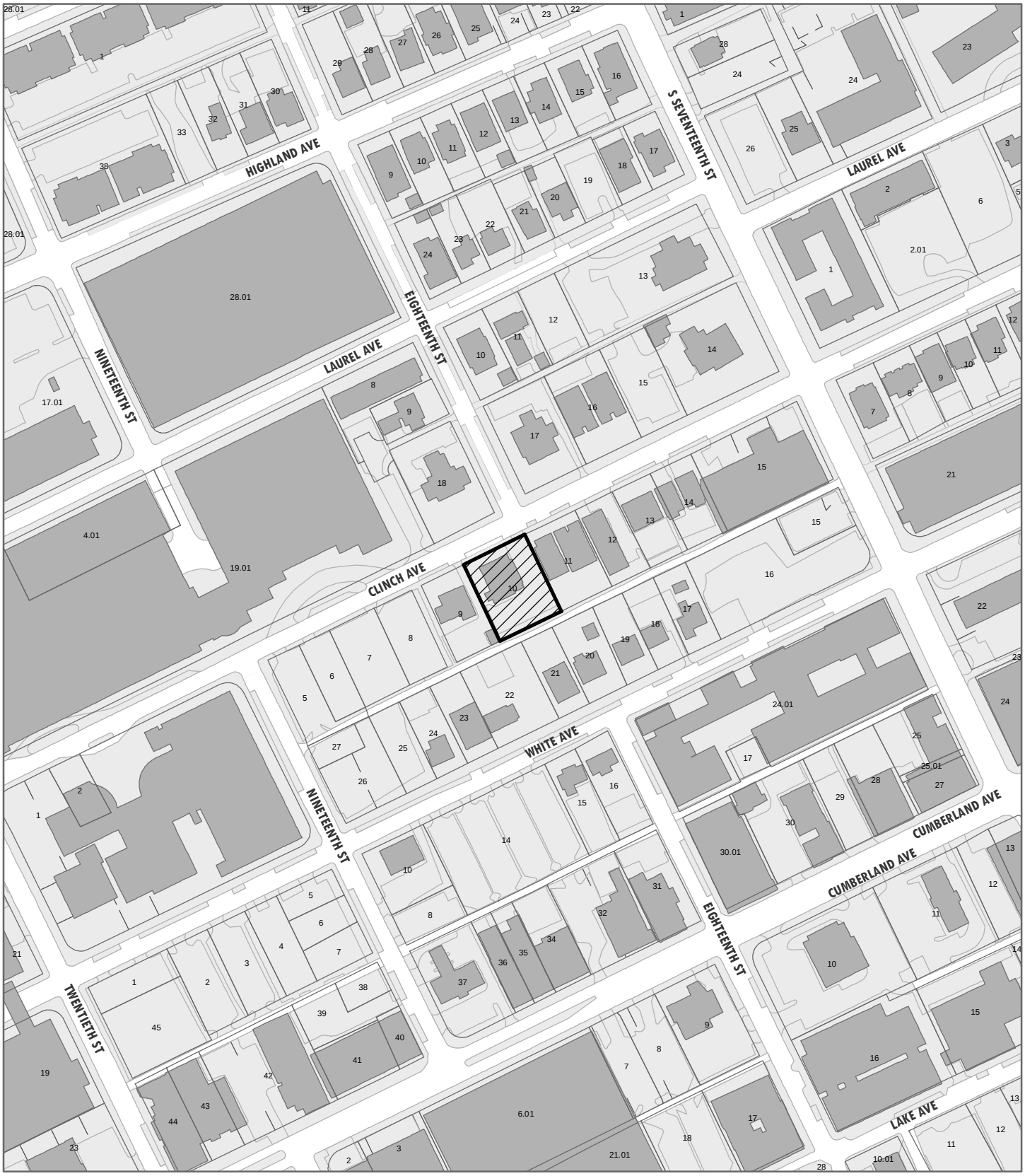


HISTORIC ZONING COMMISSION

10-F-23-HZ

APPLICATION FOR CERTIFICATE OF APPROPRIATENESS

1800 Clinch Ave. 37916

Ft. Sanders NC

Original Print Date: 10/4/2023

Knoxville/Knox County Planning -- Historic Zoning Commission

Petitioner: Logan Higgins

N

0 250

Feet

Staff Report

Knoxville Historic Zoning Commission

File Number: 10-F-23-HZ

Meeting: 10/19/2023
Applicant: Logan Higgins
Owner: Joshua Henson 1800 Clinch LLC

Property Information

Location: 1800 Clinch Ave. **Parcel ID** 94 N J 010
District: Ft. Sanders NC
Zoning: O (Office)
Description: American Four Square, c.1915

Two-and-one-half-story residence with a hipped roof clad in asphalt shingles, a brick exterior, and a continuous brick foundation. Hipped roof centered on façade.

Description of Work

Level II Major Repair or Replacement

After-the-fact review of exterior rehabilitation elements which do not align with Historic Zoning Commission review and issued COA (1-D-23-HZ). Changes during construction include the below.

Façade windows:
- On the center bays of the second story, glass block windows were installed instead of one-over-one, double-hung windows as proposed. The glass block windows also appear to be extended in height from the drawings, with the bottoms of the windows resting on the porch roof instead of separated by sills and 1-2 courses of brick as shown.
- On the outside bays of the second story, the windows are smaller in height and width than shown in the approved drawings. The drawings show the outermost frame of the second-story windows aligning with the outermost frame of the first story windows; as built, the second-story windows are centered over the first.
- On the dormer, windows have been enclosed from the inside with black-painted, fire-resistant backing. Photos provided indicate two pairs of sliding or casement windows on the new right side dormer (left side dormer not shown); approved drawings indicated three double-hung windows.

Brick masonry:
- The COA stated that brick repair and masonry repointing should meet specifications of NPS Preservation Brief 2. The brick used as infill is different in color and texture than the original.

Front entry:
- A projecting entry vestibule was constructed, with doors recessed from the primary façade. The approved elevation drawing depicted two multi-light exterior doors flanking a wood panel, flush with the primary elevation, and centered on the façade. The doors are two six-panel metal doors separated by a brick wall.

Applicable Design Guidelines

Fort Sanders NC-1, adopted by the Knoxville City Council on September 13, 2000.

E. Windows and Entrances
1. Window proportions and symmetry should be similar to the pre-1940 styles in the neighborhood.
2. Windows should be double hung, sash windows. Vinyl or metal-clad windows may be used in place of wood frame windows.
2 (sic). Egress windows will have to be designed to comply with fire/building code provisions.
4. Double-hung sash windows are recommended for two- to three-story new construction.
6. The proportions of upper level windows should not exceed the proportion of the first level.
7. Upper level windows should be provided and aligned with doors.
9. Entrances to the building should be provided from the street, using doors that have similar proportions and features to pre-1940 architecture.

Comments

N/A

Staff Findings

1. 1800 Clinch Avenue is a contributing resource to the Fort Sanders National Register Historic District and local NC overlay. Exterior rehabilitation and dormer additions were approved by the HZC in February 2023 (1-D-23-HZ).

2. All review of the work is after-the-fact; the changes to be reviewed by the HZC were completed on-site and recognized by the City building inspections team and architect to differ from the approved COA. The applicant describes fire and building-code related decisions driving the changes. The design guidelines do note that "egress windows will have to be designed to comply with fire/building code provisions" but these elements require approval by the HZC. The applicants should have identified the fire-rated requirements for duplexes/independent living facilities with many bedrooms alongside the floor plan and elevation designs.

3. Front dormer modifications: the HZC would not typically review interior modifications to apply backing to a window. The backing could be removed should the applicants invest in fire-rated windows for the dormers. The darker color behind the dormers is generally not visible from the street and could be construed as blinds.

4. Side dormer modifications: the applicant should clarify why the windows vary from the three double-hung windows approved by the HZC. The design guidelines note that double-hung windows should be used on two- and three-story new construction details; the dormers are new construction.

5. Second-story center windows: the glass block windows and window size is inappropriate for the building's design and does not reflect the approved COA. The applicant should select double-hung, one-over-one windows which are compatible with the remaining double-hung windows on the building and revise the window heights to reflect the proposed drawings, be the same overall size and placement as the windows on the second-story outer bays, and include sills as initially submitted.

6. Entryway: The new entry vestibule somewhat reflects the engaged brick pilasters which used to flank the front door. The new entry vestibule differs from the approved designs, but does not detract from the overall building's design. New entry doors are recommended to have "similar proportions and features to pre-1940 architecture." The applicant should submit new entry doors meeting the design guidelines to staff for approval.

7. Masonry: the applicant should provide additional information on new brick and mortar installed and how the brick and mortar relate to the existing masonry elements.

Staff Recommendation

Staff recommends after-the-fact approval of the projecting entry vestibule, the fire-rated covering on the front

dormers, the masonry changes (provided the applicant can confirm the new brick and mortar materials are generally compatible with the historic masonry elements), and the decrease in height on the second-story outer bay windows on the facade.

Staff recommends denial of the glass block design in the second-story center windows, the new front doors, and the change in side dormer window design and number. Applicant should select double-hung windows to replace the glass block infill, revising the fenestration opening to match the original COA and the size of adjacent windows, with a revised drawing submitted to staff for approval; select new entry doors meeting the design guidelines and submit to staff for approval; and revise the side dormer windows to reflect the original COA (three double-hung windows), with a revised drawing submitted to staff for approval.

DESIGN REVIEW REQUEST

- ☐ DOWNTOWN DESIGN (DK)
- ■ HISTORIC ZONING (H)
- ☐ INFILL HOUSING (IH)

Logan Higgins
Applicant

October 2, 2023	October 19, 2023	10-F-23-HZ
Date Filed	Meeting Date (if applicable)	File Number(s)

CORRESPONDENCE

All correspondence related to this application should be directed to the approved contact listed below.

☐ Owner ☐ Contractor ☐ Engineer ■ Architect/Landscape Architect

Logan Higgins	Heyoh Design + Development		
Name	Company		
133c S Gay St	Knoxville	TN	37902
Address	City	State	Zip
423-502-4210	logan@heyohdesign.com		
Phone	Email		

CURRENT PROPERTY INFO

Josh Henson	900 Phillips Ave Unit 301	865-805-9684
Owner Name (if different from applicant)	Owner Address	Owner Phone
1800 Clinch Ave	094NJ010	
Property Address	Parcel ID	
Fort Sanders	O	
Neighborhood	Zoning	

AUTHORIZATION

Lindsay Crockett	Lindsay Crockett	10.2.23
Staff Signature	Please Print	Date
Logan Higgins	Logan Higgins	10/2/2023
Applicant Signature	Please Print	Date

REQUEST

DOWNTOWN DESIGN

Level 1:

☐ Signs ☐ Alteration of an existing building/structure

Level 2:

☐ Addition to an existing building/structure

Level 3:

☐ Construction of new building/structure ☐ Site design, parking, plazas, landscape

See required Downtown Design attachment for more details.

☐ Brief description of work: _____

HISTORIC ZONING

Level 1:

☐ Signs ☐ Routine repair of siding, windows, roof, or other features, in-kind; Installation of gutters, storm windows/doors

Level 2:

☒ Major repair, removal, or replacement of architectural elements or materials ☐ Additions and accessory structures

Level 3:

☐ Construction of a new primary building

Level 4:

☐ Relocation of a contributing structure ☐ Demolition of a contributing structure

See required Historic Zoning attachment for more details.

☒ Brief description of work: alterations made during construction

INFILL HOUSING

Level 1:

☐ Driveways, parking pads, access point, garages or similar facilities ☐ Subdivisions

Level 2:

☐ Additions visible from the primary street ☐ Changes to porches visible from the primary street

Level 3:

☐ New primary structure

☐ Site built ☐ Modular ☐ Multi-Sectional

See required Infill Housing attachment for more details.

☐ Brief description of work: _____

STAFF USE ONLY

ATTACHMENTS

☐ Downtown Design Checklist

☐ Historic Zoning Design Checklist

☐ Infill Housing Design Checklist

ADDITIONAL REQUIREMENTS

☐ Property Owners / Option Holders

Level 1: $50 • **Level 2:** $100 • **Level 3:** $250 • **Level 4:** $500

FEE 1:	TOTAL:
100.00	100.00
FEE 2:	
FEE 3:	

NEIGHBORHOOD CONSERVATION

APPROVAL REQUEST FOR CHANGES DURING CONSTRUCTION

1800 CLINCH AVE

ARCHITECTURE BY:

heyoh design + development

heyohdesign.com
865.236.0430
admin@heyohdesign.com

DEVELOPMENT BY:

Henson Developments

hensondev.com
865.805.9684
joshua@hensondev.com

LOCATION MAP

KNOXVILLE, TN.

OVERVIEW

Description of Work:

The renovation at 1800 Clinch Ave faced considerable challenges in meeting compliance with modern building codes. Chief among those was emergency escape and fire separation between units.

To prevent the necessity of two large fire stairs on each side of the building, a firewall was placed down the middle of the structure, splitting it into two independent structures in order to meet fire code requirements.

This was the intention at the time of the design review. However, some details of compliance were not yet known.

The primary challenges in meeting code requirements became:
1. Code regulations eliminate the ability of having a single entrance vestibule shared by both units.
2. Code requires either the firewall extend beyond the exterior walls, or all windows and doors within 4' of firewall be fire rated.

Application:
The project proceeded with a design that provided the appearance of a central entry, and called for fire rated windows at openings within 4' of the firewall.

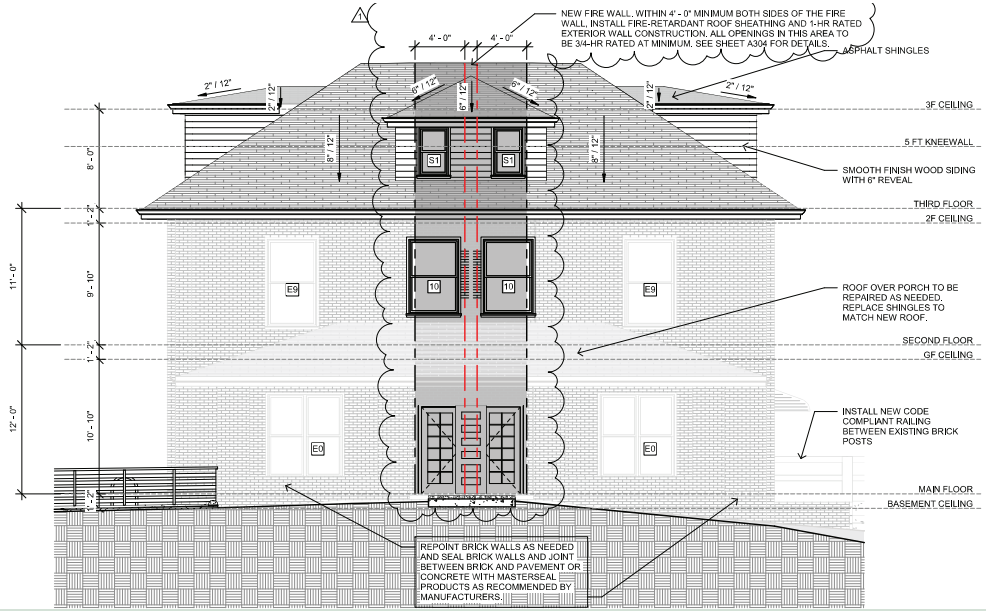
The tenants of this project are all UT students, and work to complete the renovation was under a strict fall semester move-in deadline.

Implementation:

1. Rated windows: Double hung windows were delivered and installed, as initially designed. However, it was later discovered that the new windows did not meet the fire rating requirements. Due to time sensitivity associated with project and product availability shortages, the owner was forced to search out alternative methods.
The development team determined glass block would be the most viable solution to meet fire rating requirements, while also utilizing historically relevant materials.

2. Entryways: The entrance suffered from two issues that led to a different appearance. Firstly, the masons were apparently on a roll and decided to brick the space between entrances rather than fill with trim. Secondly, as with the windows, sourcing fire rated entry doors proved most challenging to the construction team, and solid doors were used at entrances.

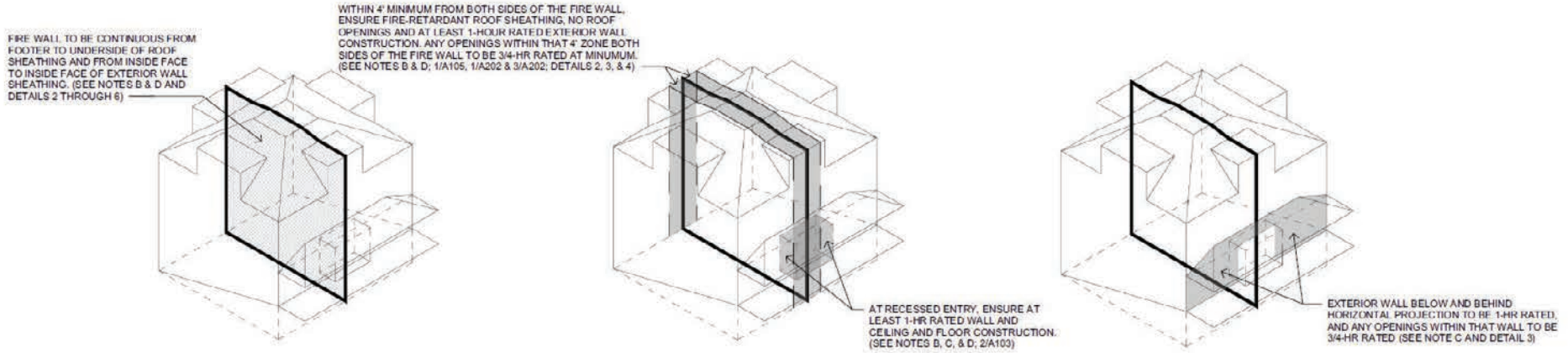
CONSTRUCTION PHOTO



FIRE SEPARATION DIAGRAMS

The existing building was cut entirely in half in order to create a code compliant firewall between the dwelling units. Without this, one or two large fire staircases would be required on opposite ends of the building.
If the firewall doesn't extend beyond the outside walls, openings within 4' of this wall are required to be fire rated.

FIRE SEPARATION DIAGRAMS



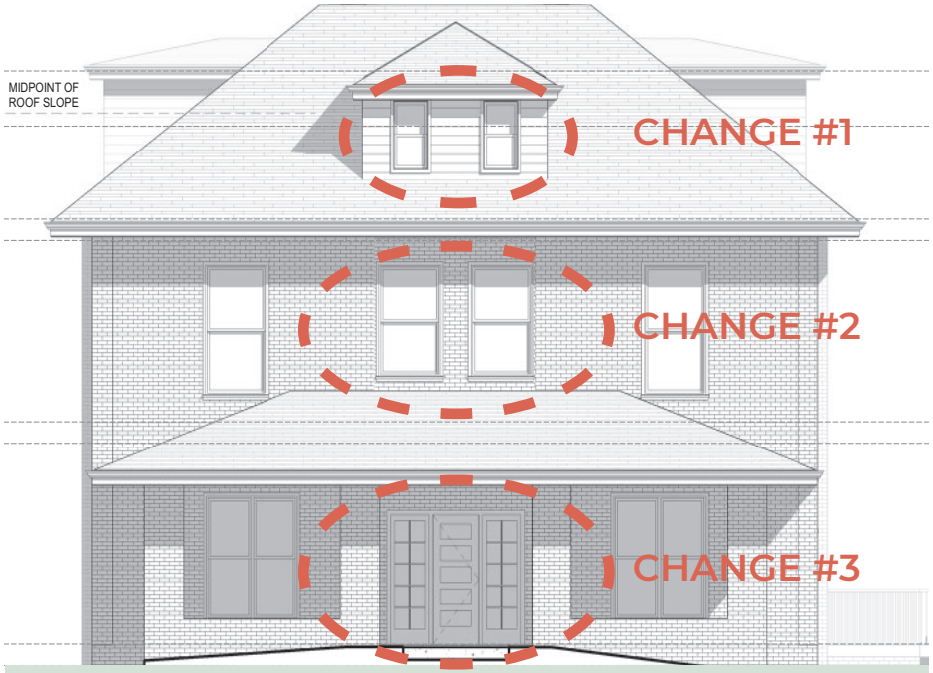
FIREWALL INFO

SUMMARY OF CHANGES

CHANGE #1 - DORMER WINDOWS BACKED WITH FIRE RATED MATERIAL

CHANGE #2 - 2ND STORY WINDOWS CHANGED TO GLASS BLOCK

CHANGE #3 - MODIFIED ENTRY VESTIBULE



APPROVED FRONT ELEVATION

APPLICABLE FORT SANDERS NC OVERLAY GUIDELINES:

SECTION 2E. - Windows and Entrances
THE GUIDELINES ACKNOWLEDGE THE IMPORTANCE OF FIRE/BUILDING SAFETY CODE, AND APPEAR TO GIVE LEEWAY WHEN FIRE/BUILDING REQUIREMENTS CONFLICT WITH GUIDELINES.

1. **Window proportions and symmetry should be similar to the pre-1940 styles in the neighborhood.**

2. Windows should be double hung, sash windows. Vinyl or metal-clad windows may be used in place of wood frame windows.

2. **Egress windows will have to be designed to comply with fire/building code provisions.**

3. Accent windows are appropriate with new construction

4. Double hung sash windows are recommended for two to three-story new construction

5. Variations of double hung windows should be considered in relation to the design of new buildings. Inserts are acceptable to mimic traditional window forms.

6. The proportions of upper level windows should not exceed the proportion of the first level.

7. Upper level windows should be provided and aligned with doors.

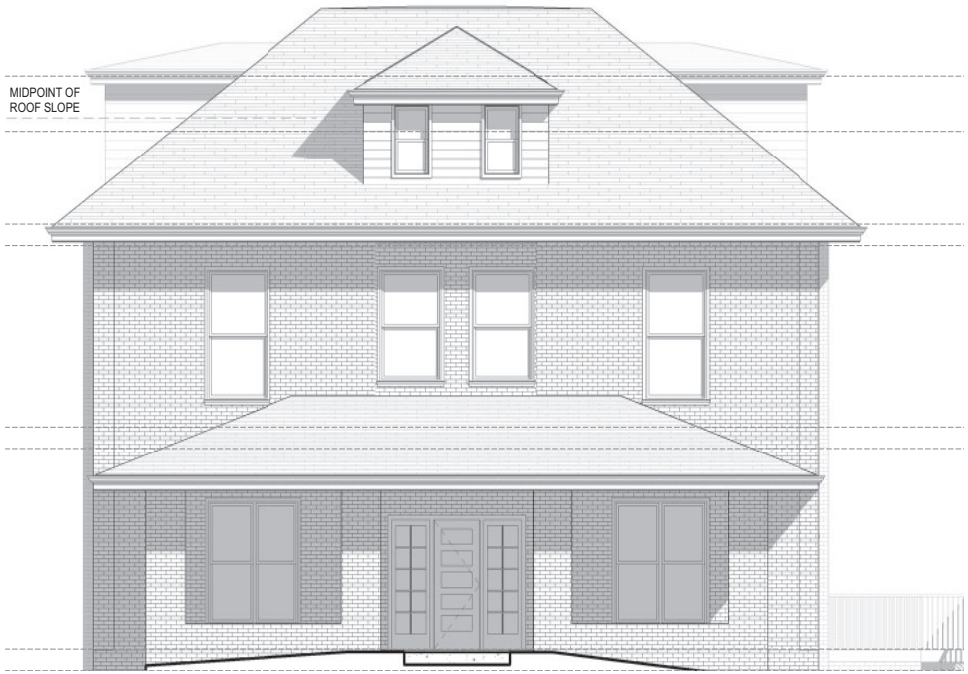
8. There should be at least 50% transparency, that is created by windows or french doors and balconies, on the recessed breaks between sections of buildings, including buildings joined together.

9. Entrances to the building should be provided from the street, using doors that have similar proportions and features to pre-1940 architecture.

10. When parking areas are provided behind buildings, rear entrances are also allowed.

11. Wrought iron balconies are appropriate accents on stucco or brick

12. Window boxes are appropriate in all types of recommended construction.



APPROVED FRONT ELEVATION WINDOWS

NEW WINDOWS W/ OPAQUE, FIRE RESISTANT BACKING.
(TRIM AND SIDING NOT PAINTED AT TIME OF PHOTOGRAPH)

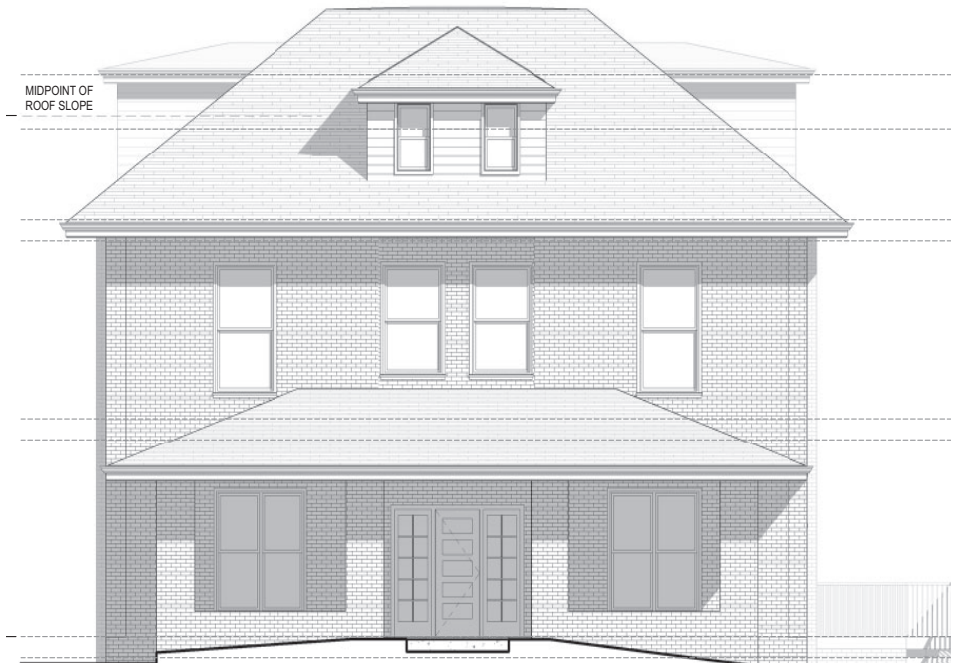
REASON FOR CHANGE

The firewall is required to extend to the roof. Per IBC 706.5.1, openings within 4' of a firewall that is not extending beyond the exterior walls, but have a fire rating of 3/4 hour.

After it became clear that the windows installed were not fire rated, most viable solution was determined to be closing the windows from inside with fire protection, but leaving them in the wall.

The fire protection was painted black so that from the outside it isn't clear that the windows are covered from inside.

This may be within compliance of the guidelines, however, inspections noted to get approval from the board.



APPROVED FRONT ELEVATION WINDOWS

CHANGED/BUILT CONDITION, GLASS BLOCK USED IN 2ND STORY WINDOWS

REASON FOR CHANGE

Double hung windows were installed, but were discovered during final inspection to not be in compliance with 706.5.1.

A request was made to the window supplier to provide fire rated windows and the construction team was told that would not be possible.
At 2 weeks into the semester, and with the student tenants needing to move in, the construction team determined they had two options for compliance with a timely completion:

Either replace with the windows with glass block, or board up the windows from inside like they did for the third floor. Due to the size and amount of daylight they provide, boarding up the windows from inside would have a very negative effect on for the users, so they installed the glass block.

CHANGE #2 - 2ND STORY WINDOWS CHANGED TO GLASS BLOCK

Options and Request

In the process of trying to find a solution for compliance, the development team realized that with more time, they have the following options for their 4' wide x 7' tall windows:

Option 1 - Fire rated double hung windows. They discovered that these are incredibly difficult to get. There are companies that provide them, but they are custom and rare, making them have with high cost and long lead times (especially at this size.)
They have a bulkier look to them than the windows installed, and the glass tends to be a different shade.

Option 2 - "Storefront" Windows The more viable option locally for fire rated windows is using a storefront system, with the glass being placed in an aluminum frame. These also have a bulkier look than the windows installed.

Option 3 - Fire Shutters These are small overhead doors that come down in the event of a fire. They too have very long lead times.

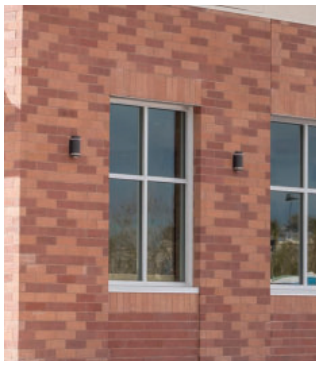
Option 4 - Glass block Glass block is a historic material, older than the building in question. The grid that it creates, is somewhat similar proportionally to those of square historic window panes.

Request:
All of the options for fire rated windows will have a different appearance than the windows installed on the rest of the building, or include an intrusive element to the exterior facade.

We believe that if we are going to have a unique look in the middle two windows, it would be better if they are intentionally different than the other windows, (instead of slightly different) while still being historically accurate to how this problem would have been resolved when this structure was built in 1917. For that reason, our request is to approve the glass block.

1. RATED WINDOWS

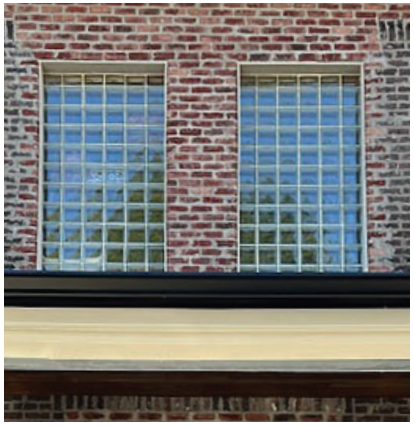
2. STOREFRONT WINDOWS



3. FIRE SHUTTERS

4. GLASS BLOCK

GLASS BLOCK INSTALLED

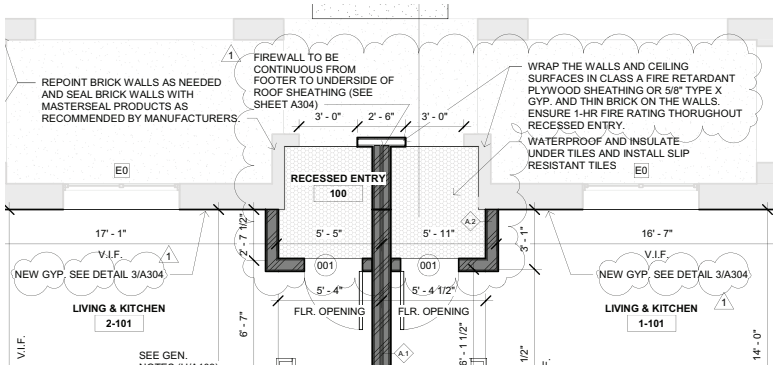


NEIGHBORING WINDOWS

DESIGNED FRONT ELEVATION

CHANGED/BUILT CONDITION

ENTRANCE IN PLAN



REASON FOR CHANGE

The original intent of the design was to maintain the look of a single entry door with two sidelights.

After the architecture team realized that IBC 706 would not allow this, the design was altered so that the sidelights became glass doors and there was a panel in the middle to reference the original entry door.

In the end, an overzealous mason decided that brick made more sense in the middle, and the availability of fire rated glass doors led to the entry doors being metal.

Unfortunately, there is no other alternative to having two separate entries for this building, so we request approval for the built condition.

Certificate of Appropriateness

Knoxville Historic Zoning Commission

File Number: 1-D-23-HZ

A Certificate of Appropriateness is hereby granted for the following property by the Knoxville Historic Zoning Commission:

Property Address: 1800 Clinch Ave.
Parcel ID: 94 N J 010
District: Ft. Sanders NC
Owner: Henson Development
Applicant: Logan Higgins Heyoh Design + Development

Level of Work: Level II
Construction of Addition or Outbuilding

Work Items:
Additions, Doors, Masonry Repair or Painting, Roofing, Windows

Description of Work:
Revision to previously submitted proposal. Project includes a roof reconstruction, including reconstruction of two existing dormers and addition of two more dormers, and exterior rehabilitation.

Existing house features a hipped roof with one hipped dormer centered on the façade (north) roof slope and one gable-roof dormer on the left side (east) roof slope. Proposal includes one hipped-roof dormer with two one-over-one windows centered on the façade, two hipped-roof dormers with three one-over-one windows centered on east and west elevations, and one hipped-roof dormer on the rear (south) elevation.

Exterior rehabilitation includes the installation of new windows (creating new fenestrations on some elevations) and the enclosure of others. On the façade, the center second-story windows will be enlarged. On the east elevation, three stories of paired double-hung windows will be installed on leftmost bay. On the west elevation, several windows will be partially enclosed or shifted in header height, along with addition of a secondary access door on the main level. Multiple windows will be enclosed on the south elevation.

Work also includes repair to existing porch roof, replacement of front door if needed, and repair/repointing to exterior brick masonry siding.

HZC motion at 2/16/23 meeting: APPROVAL of revision dated 1/23/23, subject to the following condition - 1) masonry repointing and brick repair to meet specifications of NPS Preservation Brief 2.

Action: Approved with Conditions
Certified By: Lindsay Crockett
Date Certified: 2/17/2023 **COA Expiration Date (3 years):** 2/16/2026

This Certificate Is Not A Building Permit

To obtain a building permit, drawings stamped as approved by the Historic Zoning Commission (HZC) staff must be submitted along with this Certificate of Appropriateness to the City of Knoxville Plans Review and Inspections Department or the Knox County Codes Administration Department, as appropriate. Any deviation from the drawings and written conditions approved by the HZC will require subsequent review and approval by the HZC or its staff.

Contact the appropriate building inspections office for permit requirements:

City of Knoxville Development Services: 865-215-2992 or 865-215-2991
Knox County Building Codes Administration: 865-215-2325

Drawings approved under 1-D-23-HZ

1 NORTH ELEVATION
A002 3/16" = 1'-0"

3 WEST ELEVATION
A002 3/16" = 1'-0"

4 SOUTH ELEVATION
A002 3/16" = 1'-0"

2 EAST ELEVATION
A002 3/16" = 1'-0"

REVISION	
No.	REVISION

Project:
CLINCH AVENUE HOUSE

Number: 222018

Client:
Joshua Henson

Info:
USE ON REVIEW APPLICATION

Location:
1800 Clinch Avenue
Knoxville, TN 37916

heyoh DESIGN + DEVELOPMENT

PROGRESS SET

N.F.C.

REQUIRES ARCH. STAMP

CHECKED BY:	LAH
DRAWN BY:	SRD
01.23.23	
3/16" = 1'-0"	

SHEET
A002
3 OF 3
USE ON REVIEW - ELEVATIONS