To: Planning Board  
From: CDD Staff  
Date: September 6, 2022  
Re: AHO-5, 116 Norfolk Street – Advisory Design Consultation Meeting #2

Overview

<table>
<thead>
<tr>
<th>Submission Type:</th>
<th>Affordable Housing Overlay (AHO) Advisory Design Review</th>
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<tbody>
<tr>
<td>Applicant:</td>
<td>Cambridge Housing Authority (CHA) and 116 Norfolk Apartments LLC</td>
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<td>Zoning District(s):</td>
<td>Residence C-1</td>
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<tr>
<td>Proposal Summary:</td>
<td>Rehabilitation, conversion, and expansion of an existing building with 38 single-room occupancy (SRO) apartments into 62 affordable studio apartments. The total Gross Floor Area (GFA) of the development is 43,100 square feet. The rehabilitated existing building height will remain at approximately 54 feet and the proposed addition height will be approximately 45 feet. The development will include no off-street parking spaces, 36 long-term bicycle parking spaces, and 4 short-term bicycle parking spaces. The building proposes additional space for resident amenities, as well as office space for CHA administrative staff and resident services program staff. It will also include renovations to an existing courtyard, open space, outdoor porch, and perimeter brick wall.</td>
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Planning Board Action: Review revised materials and provide final comments on conformance with AHO Development Standards, City Development Guidelines for the proposal area, Design Guidelines for AHO, and Citywide Urban Design Objectives. This is the second of two required advisory review sessions under the AHO.

## 11.207.5 – 11.207.7 AHO Development Standards

<table>
<thead>
<tr>
<th>Development Standard</th>
<th>Requirements for AHO Project in Residence C-1</th>
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</table>
| **Building Height & Stories** Above Grade  | • 4 Stories Above Grade or 45 feet for new construction.  
                                              • Existing building height is allowed for preservation/reuse.                                                                                                                                                                           |
| **Density**                                | • Maximum FAR of 2.00, except in the case of a preservation/reuse project.  
                                              • There is no minimum lot area per dwelling unit for an AHO Development.                                                                                                                                                               |
| **Yard Setbacks**                          | • For new construction: 10’ Front Yard, 7.5’ Side Yard, and 20’ Rear Yard.  
                                              • Front yards may be reduced to the average of the four (4) nearest pre-existing principal buildings on the same side of the street.  
                                              • Existing building setbacks are allowed for preservation/reuse.                                                                                                                                                                      |
| **Open Space**                             | • Generally 30% of lot area.  
                                              • Existing open space is allowed for preservation/reuse; minor reductions are permitted in order to adapt building to meet accessibility standards.                                                                                                                                    |
| **Existing Buildings**                     | • The required dimensional characteristics of the existing building and site shall be those existing at the time of conversion to an AHO Development.  
                                              • Certain modifications may be permitted as-of-right to an existing building for an AHO Development.                                                                                                                                          |
| **Parking and Bicycle Parking**            | • There is no minimum off-street parking required for an AHO Development.  
                                              • For AHO Developments of twenty (20) or more units, if less than 0.4 spaces per dwelling unit are provided, specific Transportation Demand Management (TDM) measures are required, including complimentary annual Bluebikes memberships or 50% discounted MBTA passes for six months, and providing transit information to each household within the AHO Development.  
                                              • Bicycle parking is generally required per Article 6.100; in an existing building, bicycle parking spaces meeting zoning standards are not required but are encouraged to be provided to the extent practical given the limitations of the existing structure. |
<p>| <strong>Site Design and Arrangement</strong>            | • Front yards may be landscaped or hardscaped but cannot be used for off-street parking.                                                                                                                                                     |</p>
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<th>Development Standard</th>
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<tbody>
<tr>
<td>Pedestrian entrances shall be visible from the street.</td>
<td>Building facades facing public streets shall have a minimum percentage of glazing.</td>
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<tr>
<td>Buildings with front facades in excess of 250’ in length shall provide forecourts to break up massing.</td>
<td>Building facades shall incorporate projections/recesses at regular intervals to promote visual interest.</td>
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<tr>
<td>Existing buildings may maintain existing conditions; alterations are allowed if they do not increase nonconformance with standards.</td>
<td>Facades of ground stories shall have expanses of no more than 25’ with no windows or pedestrian entryways.</td>
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<tr>
<td>Building Facades</td>
<td>Ground Stories and Below Grade</td>
</tr>
<tr>
<td>Ground stories with non-residential uses must have a height of at least 15’ and a depth of 35’.</td>
<td>New mechanical equipment shall be generally screened from view. Rooftop mechanical equipment must be set back from the roof line equal to its height.</td>
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<td>Existing buildings may maintain existing conditions; alterations are allowed if they do not increase nonconformance with standards.</td>
<td>Green Building Requirements as set forth in Article 22 shall generally apply to AHO Developments.</td>
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<tr>
<td>AHO Developments are exempt from the Green Roofs Ordinance.</td>
<td>Mechanical Equipment, Refuse Storage and Loading Areas</td>
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<tr>
<td>AHO Design Guidelines</td>
<td></td>
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### Site Design Objectives

<table>
<thead>
<tr>
<th>Response to Context</th>
<th>Design site layouts to harmonize with the neighborhood context.</th>
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<tbody>
<tr>
<td>Open Space &amp; Landscape Design</td>
<td>Design open space to enhance the lives of residents and the broader community by offering aesthetic and environmental benefits.</td>
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<td></td>
<td>Offer useful amenities to residents, provide opportunities to minimize the impact of new development on neighbors' privacy and quality of life, and contribute to the beauty of the city.</td>
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<tr>
<td>Circulation</td>
<td>Promote non-motorized mobility by prioritizing pedestrian-friendly and bike-accessible site design.</td>
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<tr>
<td>Parking</td>
<td>Minimize the impact of parking and driveway.</td>
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</table>
Utilities

- Minimize the visual, acoustical, and environmental impacts of essential utilities and services.

Outdoor Lighting

- Provide lighting for safety and functionality while minimizing energy use, light pollution, and other negative impacts.

Public Art

- Enrich the visual environment and strengthen the sense of place by incorporating art.

### Building Design Objectives

**Massing**

- Configure massing for compatibility with the prevailing or desired pattern of neighboring buildings and open spaces. In established neighborhoods, relate to the existing pattern of streets and other open spaces, and prioritize compatibility with existing buildings. In evolving areas, configure new developments to help realize the City’s vision for urban form.

**Facades**

- Design facades to enhance and enliven the public realm. In established areas, emphasize compatibility and reinforce sense of place. In evolving residential and commercial districts, contribute to the transformation of urban form by setting precedents for design excellence.
  - Where appropriate, incorporate ground level retail spaces and common areas to foster a lively enliven the urban environment.
  - Provide daylight to interior spaces, avoid excessive energy use, and protect the privacy of residents of neighboring buildings.
  - Design facades to relate to the residential scales and patterns of Cambridge’s diverse and historic neighborhoods.
  - Design street facades to offer a sense of civic presence and human scale, and visual interest as appropriate to their role in defining public space.

**Architectural Details, Materials, Color, and Finishes**

- Use materials that are warm, inviting, and compatible with surrounding existing buildings and the neighborhood context. Develop building facades of high-quality, durable materials and with colors, finishes, and textures appropriate to building contexts.

**Building Interiors**

- Affordable housing, like all housing, should serve the needs of its residents while contributing to the residential character and sense of neighborhood within the area at large.

**Sustainable Design Objective**

- Achieve resilience measures to the maximum extent possible, including energy efficiency and measures to promote the health and wellness of residents.

The complete set of Design Guidelines for Affordable Housing (28 July 2020) can be found at: [https://www.cambridgema.gov/-/media/Files/CDD/Housing/Overlay/zngamend_aho_designguidelines_20200728v2.pdf](https://www.cambridgema.gov/-/media/Files/CDD/Housing/Overlay/zngamend_aho_designguidelines_20200728v2.pdf)
### 19.30 Citywide Urban Design Objectives [SUMMARIZED]

<table>
<thead>
<tr>
<th>Objective</th>
<th>Indicators</th>
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| New projects should be responsive to the existing or anticipated pattern of development. | • Transition to lower-scale neighborhoods  
• Consistency with established streetscape  
• Compatibility with adjacent uses  
• Consideration of nearby historic buildings |
| Development should be pedestrian and bicycle-friendly, with a positive relationship to its surroundings. | • Inhabited ground floor spaces  
• Discouraged ground-floor parking  
• Windows on ground floor  
• Orienting entries to pedestrian pathways  
• Safe and convenient bicycle and pedestrian access |
| The building and site design should mitigate adverse environmental impacts of a development upon its neighbors. | • Location/impact of mechanical equipment  
• Location/impact of loading and trash handling  
• Stormwater management  
• Shadow impacts  
• Retaining walls, if provided  
• Building scale and wall treatment  
• Outdoor lighting  
• Tree protection (requires plan approved by City Arborist) |
| Projects should not overburden the City infrastructure services, including neighborhood roads, city water supply system, and sewer system. | • Water-conserving plumbing, stormwater management  
• Capacity/condition of water and wastewater service  
• Efficient design (LEED standards) |
| New construction should reinforce and enhance the complex urban aspects of Cambridge as it has developed historically. | • Institutional use focused on existing campuses  
• Mixed-use development (including retail) encouraged where allowed  
• Preservation of historic structures and environment  
• Provision of space for start-up companies, manufacturing activities |
| Expansion of the inventory of housing in the city is encouraged. | • Housing as a component of large, multi-building development  
• Affordable units exceeding zoning requirements, targeting units for middle-income families |
| Enhancement and expansion of open space amenities in the city should be incorporated into new development in the city. | • Publicly beneficial open space provided in large-parcel commercial development  
• Enhance/expand existing open space, complement existing pedestrian/bicycle networks  
• Provide wider range of activities |
Zoning & Development Staff Report

Overview
The Cambridge Housing Authority (CHA) is proposing to expand and renovate their existing historic property at 116 Norfolk Street. The current building, a former convent, contains 38 single-room occupancy (SRO) units. The CHA is proposing to reconfigure those units into studio apartments and to build a rear addition to create up to a total of 62 studio apartments under the provisions of the Affordable Housing Overlay (AHO). The project is pursuing Enterprise Green Communities (EGC) certification by seeking a total of 96 optional points on top of mandatory requirements.

The total Gross Floor Area (GFA) of the development is 43,100 square feet. The rehabilitated existing building height will remain at approximately 54 feet and the proposed addition height will be approximately 45 feet. The development will include no off-street parking spaces, 36 long-term bicycle parking spaces, and 4 short-term bicycle parking spaces. The building proposes additional space for resident amenities, as well as office space for CHA administrative staff and resident services program staff. It will also include renovations to an existing courtyard, open space, outdoor porch, and perimeter brick wall.

Planning Board Comments from Initial Consultation Meeting
The Planning Board (the “Board”) met on Tuesday, July 5, 2022 to review and comment on the design for this project. The Board reviewed a plan set submitted by CHA dated May 27, 2022 and a presentation dated July 5, 2022, as well as memos from the Community Development Department (CDD) and the Department of Public Works (DPW).

Board members were generally supportive of the proposed development, including the building and site design. The Board members were particularly supportive of the increase in affordable units. Among suggestions for further refinement, the Board identified minor building design and material improvements, accessibility questions, and parking and loading questions. The report from the initial meeting is attached.

Staff Comments on Revised Submission
Since the initial Planning Board consultation, the Applicant has met several times with City staff to further refine the proposed design of the site. The revised submission from the Developer is responsive to staff and the Planning Board’s initial comments and remains consistent with the AHO zoning standards. The cover letter outlines the full extent of revisions. It provides additional information on how Planning Board’s and Staff’s feedback has been incorporated into the updated design.

The following additional information was provided about the project’s conformance with AHO zoning requirements. Comments related to the building design, façade materials, accessibility, and site design are provided in a separate memo from Urban Design staff.

- Parking, Loading, and Bike Parking. The Planning Board’s Initial Report requested additional information on how motor vehicle parking demands would be managed for visitors and staff to
the site, as well as consideration for providing expanded TDM measures for residents. In its response, CHA noted that non-resident building visitors, such as full-time staff, service providers, and nurses, will be eligible to park at the Pisani Center, a CHA property less than a half mile from 116 Norfolk. CHA will pay for residents’ choice of 50% discounted MTBA passes for 6 months or a free BlueBikes subscription for 1 year, and the service partner, Eliot Community Human Services, will help residents apply for an ongoing 50% discounted MBTA pass.

- **Rooftop Mechanicals.** CDD’s staff memo dated June 29, 2022 noted that a small portion of the rooftop mechanicals appear visible above the roof line from 105 Norfolk Street, which would violate an AHO requirement that all rooftop mechanical equipment be set back from roof edges and screened from ground-level view on public streets and abutting residential lots. Revised rooftop mechanical renderings were not provided in the updated submission from the Applicant, but they were discussed in a follow-up staff meeting and the Applicant will provide updated drawings prior to application for a building permit.

- **Sustainability.** CDD’s initial review of the proposal against the City’s Green Building Requirements yielded a request for further exploration of the proposal’s impact on embodied carbon. Enterprise Green Communities (EGC) points regarding embodied carbon reduction are optional and promote steel, concrete, and insulation with a low global warming potential, roofing and paving with a high solar reflective index, and FSC or salvaged wood. The initial Green Building submission did not show any optional points being sought under “Environmentally Responsible Material Selection” criteria, but the developer’s response to the Planning Board notes that the structural materials being used will be primarily existing (in the case of the existing building) and wood framing instead of steel. The developer anticipates that the materials used in the project will meet EGC criteria. This item can be reviewed again at the building permit stage of Green Building Review.
Urban Design Staff Report

Overview
The Affordable Housing Overlay project at 116 Norfolk Street consists of the renovation of the historically significant building facing Norfolk Street and the construction of an addition to it. Together, the proposed renovation and addition will provide 62 studio apartment units, plus an administrative office suite, four lounges, a laundry, and a fitness room.

The revised design incorporates several improvements on the design presented in the first hearing on July 5, 2022. It remains in general conformance with the Design Guidelines for the Affordable Housing Overlay (2020). The addition is distinguished from the existing historic structure by materials, details, and form and separated from it by a new glazed entry element. The addition’s facades are compatible with those of the neighborhood in materials and color. Its massing is articulated for scale compatibility with the nearby two- and three-story buildings.

In the project’s first hearing, the Planning Board strongly supported the project for its provision of additional housing, its preservation of the existing south lawn and a portion of the existing porch, and for the quality of its design.

The Board’s comments on the design included:
• A suggestion that the new entrance, in the nook between the existing and new buildings, should be more prominent.
• A suggestion that the projecting portion of the west façade be reduced so as to give the building entrance more prominence.
• A suggestion that the cornice have a constant projection beyond the different planes of the facades below.
• It would be preferable to provide the rooftop solar PV panels when the project is constructed rather than at some point in the future.
• Concern that the project does not provide parking for residents and only a small amount for service providers and other workers.

Urban Design Comments on Design Revisions
The revised design addresses several of the Planning Board’s and staff’s comments and makes other improvements:

Site Design
• The grading of the south garden has been adjusted to integrate the slope up to the new entrance with the general site topography.
• The deteriorating wooden fence at the top of the brick wall along Suffolk Street will be replaced with a metal fence.
• Plantings have been added on the north side of the north terrace.
• Instead of a single mural on the west side of the addition, there are now three of them located on the brick garden walls around the complex.
• The design of the gates and metal fences at the site perimeter have been improved.
Building Design

- The addition’s color is now a somewhat purer, less greyish, blue, which seems fine.
- The façade of the proposed glazed connector between the existing building and the addition has been improved with a double door and canopy to emphasize the building’s new main entrance.
- The building entrance façade has been given a more hierarchically clear arrangement of transparent glazing, fritted glazing, opaque panels, and mullions, which gives the entrance additional emphasis.
- The level of the overhanging second floor on the west side of the new building has been adjusted to align with the bottom of the existing porch’s entablature, helping relate the addition to the existing building and also giving the entrance more prominence.
- Windows have been added to the west façade of the addition, below the overhanging second floor.
- The tall window heads of the addition’s first and second floors have been slightly reduced in height and given relief detail, improving their proportions.

Sustainability

- The roof will be solar ready. Photovoltaic panels are indicated on the roof of the southern portion of the addition. Consideration could be given to also providing them on the northern portion of the addition and also on the roof of the existing building.

Suggestions for further study

Because the Planning Board’s review of this project is advisory, there are no conditions for continuing design review. However, as the developer further refines the design through the building permit and construction process, staff would encourage the developer to review the following topics. Staff will continue to consult with the developer as appropriate.

1. While the appearance of the glazed link between the existing building and the addition has been improved, the horizontal grain of its facades - stretched between the existing and new buildings - downplays its significance as the main entrance to the existing building and to the addition. To strengthen the sense of entry, the link could be given a stronger identity as a third element of the composition. Potential means to achieve this could include vertical reveals separating the link’s north and south facades from the adjoining building masses, and a more vertical façade expression, continuing the mullion and glazing pattern through the link’s floor levels.
2. Consider reconfiguring the new building’s cornice to maintain a constant projection as it goes around the projecting and recessed portions of the façade.
3. To relate the windows of the addition to those of the existing building, and to help absorb the tall first and second floor window heads into the overall pattern of the facades, consider using light colored mullions instead of dark ones in the addition’s windows.
4. Large portions of the existing brick garden wall are indicated as being replaced by new construction. Verify that this replacement is necessary.
5. Proposed tree species and locations.
6. Provide a hedge along the eastern portion of the Suffolk Street frontage – the portion in front of the addition’s south wing.
7. Coordinate with city staff on potential future revisions to Suffolk Street.
8. Coordinate as appropriate with city staff on brick restoration on the existing building.
9. Dimensions and clearances in the bicycle storage rooms and the routes to them.
10. The designs of the art installations and their means of attachment to the brick garden wall.
11. Investigate whether additional PV panels could be provided on the roofs.
12. Additional information regarding embodied carbon.