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# CITY OF CAMBRIDGE

Community Development Department

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To: Planning Board

From: CDD Staff

Date: 11/2/2021

Re: Affordable Housing Overlay Design Consultation **AHO-2, Jefferson Park Federal** (45-60, 61-75, 77-92, 93-108 Jackson Circle; 1, 2-19, 21-41, 109-124, 1000 Jackson Place; and 266-278 Rindge Avenue)

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## Overview

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Submission Type: Affordable Housing Overlay (AHO) Advisory Design Review

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Applicant: Cambridge Affordable Housing Corporation

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Zoning District(s): Residence B

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Proposal Summary: Construct 6 residential buildings and one accessory maintenance building with a total of 379,634 square feet of Gross Floor Area, 278 affordable apartments, 135 off-street parking spaces, 258 long-term and 32 short-term bicycle parking spaces.

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Planning Board Review and comment on conformance with AHO

Action: Development Standards, City Development Guidelines for the proposal area, Design Guidelines for AHO, and Citywide Urban Design Objectives. Note that an additional design consultation will be required for the developer to respond to the Board's initial comments.

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Memo Contents: CDD Zoning Report & Urban Design Report

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Other Staff Reports: Department of Public Works (DPW), in separate document.

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**11.207.5 – 11.207.7 AHO Development Standards**

Standard	Indicators
Building Height & Stories Above Grade	<ul style="list-style-type: none"> <li>Maximum four (4) stories / 45 feet. With a ground-story active non-residential use, the maximum height may be increased to 50 feet.</li> </ul>
Density	<ul style="list-style-type: none"> <li>If the underlying District Dimensional Standards establish a maximum FAR of less than 1.00, the AHO Development may not exceed an FAR of 2.00.</li> <li>There is no minimum lot area per dwelling unit requirement.</li> </ul>
Yard Setbacks	<ul style="list-style-type: none"> <li>Residence B underlying zoning requires a 15’ Front Yard, 7.5’ Side Yard, and 25’ Rear Yard. The AHO permits a reduction to a 20’ rear yard.</li> </ul>
Open Space	<ul style="list-style-type: none"> <li>Minimum 30% of lot area per AHO.</li> </ul>
Parking and Bicycle Parking	<ul style="list-style-type: none"> <li>No minimum auto parking requirement.</li> <li>For AHO Developments of twenty (20) or more units if less than 0.4 spaces per dwelling unit (DU) are provided, specific Transportation Demand Management (TDM) measures are required.</li> <li>Bicycle parking is required per Article 6.100, but additional flexibility is provided for the location, quantity and type (long-term and short-term) of bicycle parking required. The provision of a 23-dock Bluebikes station counts towards up to thirty (30) required long-term bicycle parking spaces.</li> </ul>
Site Design and Arrangement	<ul style="list-style-type: none"> <li>Building facades facing a public street or public open space shall have a minimum 20% clear glass.</li> <li>Buildings with front facades in excess of 250’ in length shall provide forecourts to break up massing.</li> </ul>
Building Facades	<ul style="list-style-type: none"> <li>Building facades facing public streets shall have a minimum percentage of glazing.</li> <li>Building facades shall incorporate projections/recesses at regular intervals to promote visual interest.</li> <li>Facades of ground stories shall have expanses of no more than 25’ with no windows or pedestrian entryways.</li> </ul>
Ground Stories and Below Grade	<ul style="list-style-type: none"> <li>Ground stories with non-residential uses must have a height of at least 15’, average depth of 35’ from the front façade, and at least 30% clear glass frontage.</li> <li>Facades of ground stories cannot have expanses of more than 25’ with no windows or pedestrian entryways.</li> </ul>

Standard	Indicators
Mechanical Equipment, Refuse Storage and Loading Areas	<ul style="list-style-type: none"> <li>• Mechanical equipment shall be generally screened from view. Rooftop mechanical equipment must be set back from the roof line equal to its height.</li> </ul>

**AHO Design Guidelines**

Site Design Objectives	
Response to Context	<ul style="list-style-type: none"> <li>• Design site layouts to harmonize with the neighborhood context.</li> </ul>
Open Space & Landscape Design	<ul style="list-style-type: none"> <li>• Design open space to enhance the lives of residents and the broader community by offering aesthetic and environmental benefits.</li> <li>• 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.</li> </ul>
Circulation	<ul style="list-style-type: none"> <li>• Promote non-motorized mobility by prioritizing pedestrian-friendly and bike-accessible site design.</li> </ul>
Parking	<ul style="list-style-type: none"> <li>• Minimize the impact of parking and driveway.</li> </ul>
Utilities	<ul style="list-style-type: none"> <li>• Minimize the visual, acoustical, and environmental impacts of essential utilities and services.</li> </ul>
Outdoor Lighting	<ul style="list-style-type: none"> <li>• Provide lighting for safety and functionality while minimizing energy use, light pollution, and other negative impacts.</li> </ul>
Public Art	<ul style="list-style-type: none"> <li>• Enrich the visual environment and strengthen the sense of place by incorporating art.</li> </ul>
Building Design Objectives	
Massing	<ul style="list-style-type: none"> <li>• 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.</li> </ul>
Facades	<ul style="list-style-type: none"> <li>• 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.</li> <li>• Where appropriate, incorporate ground level retail spaces and common areas to foster a lively enliven the urban environment.</li> <li>• Provide daylight to interior spaces, avoid excessive energy use, and protect the privacy of residents of neighboring buildings.</li> <li>• Design facades to relate to the residential scales and patterns of Cambridge's diverse and historic neighborhoods.</li> </ul>

	<ul style="list-style-type: none"> <li>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.</li> </ul>
Architectural Details, Materials, Color, and Finishes	<ul style="list-style-type: none"> <li>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.</li> </ul>
Building Interiors	<ul style="list-style-type: none"> <li>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.</li> </ul>
<b>Sustainable Design Objective</b>	
Site and Building Design	<ul style="list-style-type: none"> <li>Achieve resilience measures to the maximum extent possible, including energy efficiency and measures to promote the health and wellness of residents.</li> </ul>

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]

Objective	Indicators
New projects should be responsive to the existing or anticipated pattern of development.	<ul style="list-style-type: none"> <li>Transition to lower-scale neighborhoods</li> <li>Consistency with established streetscape</li> <li>Compatibility with adjacent uses</li> <li>Consideration of nearby historic buildings</li> </ul>
Development should be pedestrian and bicycle-friendly, with a positive relationship to its surroundings.	<ul style="list-style-type: none"> <li>Inhabited ground floor spaces</li> <li>Discouraged ground-floor parking</li> <li>Windows on ground floor</li> <li>Orienting entries to pedestrian pathways</li> <li>Safe and convenient bicycle and pedestrian access</li> </ul>
The building and site design should mitigate adverse environmental impacts of a development upon its neighbors.	<ul style="list-style-type: none"> <li>Location/impact of mechanical equipment</li> <li>Location/impact of loading and trash handling</li> <li>Stormwater management</li> <li>Shadow impacts</li> <li>Retaining walls, if provided</li> <li>Building scale and wall treatment</li> <li>Outdoor lighting</li> <li>Tree protection (requires plan approved by City Arborist)</li> </ul>
Projects should not overburden the City infrastructure services, including neighborhood roads,	<ul style="list-style-type: none"> <li>Water-conserving plumbing, stormwater management</li> <li>Capacity/condition of water and wastewater service</li> <li>Efficient design (LEED standards)</li> </ul>

<p>city water supply system, and sewer system.</p>	
<p>New construction should reinforce and enhance the complex urban aspects of Cambridge as it has developed historically.</p>	<ul style="list-style-type: none"> <li>• Institutional use focused on existing campuses</li> <li>• Mixed-use development (including retail) encouraged where allowed</li> <li>• Preservation of historic structures and environment</li> <li>• Provision of space for start-up companies, manufacturing activities</li> </ul>
<p>Expansion of the inventory of housing in the city is encouraged.</p>	<ul style="list-style-type: none"> <li>• Housing as a component of large, multi-building development</li> <li>• Affordable units exceeding zoning requirements, targeting units for middle-income families</li> </ul>
<p>Enhancement and expansion of open space amenities in the city should be incorporated into new development in the city.</p>	<ul style="list-style-type: none"> <li>• Publicly beneficial open space provided in large-parcel commercial development</li> <li>• Enhance/expand existing open space, complement existing pedestrian/bicycle networks</li> <li>• Provide wider range of activities</li> </ul>



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# CITY OF CAMBRIDGE

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Date: 11/2/2021

Zoning Report: **AHO-2, Jefferson Park Federal** (45-60, 61-75, 77-92, 93-108 Jackson Circle; 1, 2-19, 21-41, 109-124, 1000 Jackson Place; and 266-278 Rindge Avenue)

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## **Affordable Housing Overlay (AHO) Zoning**

This development is proposed to be consistent with the AHO standards set forth in Section 11.207 of the Zoning Ordinance. The AHO provides for an as-of-right approval pathway, meaning that if it complies with the requirements in Section 11.207, including requirements for all units to have permanent affordability restrictions, it does not need to obtain a special permit or other discretionary approval from a City Board or Commission. The AHO provides some relaxed zoning requirements and additional flexibility compared to the base zoning, as summarized in the introductory section of this memo.

The purpose of the advisory design consultation process by the Planning Board is to review the proposal and comment on its general conformance with the City's urban design objectives, including design guidelines created specifically for the AHO, and make suggestions for improvement. After the first design review session, the developer will make a revised submission responding to the Planning Board's comments, and the Planning Board will make a final advisory report. Upon completion of the Planning Board's advisory design consultation process, the developer may apply for a building permit.

## **Site & Zoning Context**

### **Site Context**

The site is located in North Cambridge on Rindge Avenue, east of Alewife Brook Parkway and west of Porter Square. The area transitions from a mix of automobile-dependent retail, multifamily residential, and some legacy industrial uses to the west (see Rindge Towers, Fresh Pond Mall) to lower-scale, predominately residential development to the north and south of Rindge Avenue as it heads east towards the Massachusetts Avenue and Porter Square commercial areas.

The site is bounded by North Cambridge Catholic Cemetery to the east, the MBTA Fitchburg Commuter railroad line to the south, residential developments to the west, and Rindge Avenue to the north. Adjacent residential buildings include the "Jefferson Park State" complex, also managed by the Cambridge Housing Authority (CHA) and recently rebuilt, and the private "Brickworks" condominium complex built in 2005. Nearby public amenities include the MBTA Alewife Station and Russell Field, with connections to the regional pedestrian/bicycle trail network. Danehy Park is on the opposite side of the rail line, and can be accessed via the rail crossing at Sherman Street. Further east are the Peabody School and parks complex. There is bus service along Rindge Avenue from Russell Field to Porter Square, Inman Square, and Central Square.

The site currently contains eleven (11) buildings ranging from 1-4 stories in height, and consisting of approximately 250,000 square feet of Gross Floor Area (GFA) and 175 affordable dwelling units. Of these eleven buildings, approximately eight (8) are devoted to multifamily residential uses. Additional buildings contain institutional uses and accessory uses to support the existing residential development.



Figure 1. Aerial photograph of the area surrounding the JP Federal site. (Source: Nearmap, March 27, 2021).

### **Site Zoning**

The site, and larger surrounding area, are zoned Residence B. Some abutting sites are zoned Residence C-1A. The Residence B district permits detached single-family, two-family, and townhouse dwellings by-right. Limited institutional uses, such as educational and social service uses, may be permissible either as-of-right or by special permit under the Institutional Use Regulations (IURs) in Section 4.50 of the Zoning Ordinance. Residence B is a moderately restrictive residence zoning district in Cambridge, with a 35-foot height limit and with requirements for FAR, lot area per dwelling unit, and open space that are more restrictive than Residence C-1 districts but less restrictive than Residence A-1 or A-2 districts.

### **Comments on Proposal**

#### **Project Description**

The CHA proposes to demolish the existing buildings on the site and construct six new multifamily residential buildings and one accessory maintenance building, all resulting in approximately 380,000 square feet of GFA and 278 affordable dwelling units. The proposed buildings will be approximately forty-five (45) feet in height. Each of the six building sites will have adjacent open space, which will collectively serve a range of functions including internal courtyards and communal parks and play areas,

totaling 106,000 square feet. A new grid system of private driveways with adjacent sidewalks will be created to provide site circulation and tie buildings and open spaces together.

Of the 278 units created, approximately 13% will be one-bedroom units; 40% will be two-bedroom units; 40% will be three-bedroom units; and 7% will be four-bedroom units. All units will be rental units reserved for households with incomes at or below 80% area median income (AMI). The development proposes 132 on-site, off-street parking spaces, primarily sited along the internal driveway system, and three off-site parking spaces. The development also proposes 258 long-term bicycle parking spaces in various locations internal to the first floors and basements of buildings, and 32 short-term bicycle parking spaces distributed through the site. One “Bluebikes” public bicycle sharing station is also proposed.

A portion of one building, fronting Rindge Avenue, will contain a non-residential community-educational space to house a Head Start program that is currently housed in the complex.

### **Consistency with AHO Development Standards**

The AHO development standards applicable to this project are summarized in the table in the introductory section of the memo. The following commentary provides a high-level overview of how the AHO standards compare to this development proposal:

- The proposed residential buildings are mostly built to the four-story, 45’ height limit established by the AHO in this district. Some portions of buildings step down to three stories, particularly where they face lower-scale buildings along Rindge Avenue.
- The AHO sets an FAR limit of 2.00 in this district, and the proposal is well below that limit with an FAR of 1.16. The AHO does not limit the number of affordable dwelling units that can be built.
- The proposed network of new private open spaces and courtyards will result in private open space on about 32% of the lot area, which exceeds the minimum requirement of 30% in the AHO and all of which is proposed to be at ground level and permeable. The outdoor, short-term bicycle parking areas will contribute toward the open space provided on the lot, which is permitted under the AHO, and will be surfaced with permeable pavers.
- Along with multifamily housing, the AHO allows active non-residential uses at the ground floors if they are permitted in the base zoning district. The Institutional Use Regulations (IURs) generally permit educational and social service uses by-right if they are on a lot containing the same category of pre-existing institutional use. Though it is not required to include a non-residential space, the inclusion of the existing Head Start program will benefit the project by providing services to residents and varied activities along the Rindge Ave frontage. The AHO standards require such uses to face public streets and to meet certain design-based standards for height, depth, and transparency.
- The AHO establishes a number of design standards for facades facing public streets, such as minimum glazing requirements, façade recess/projection requirements, and landscaping requirements. For this proposal, those standards are required along Rindge Avenue only, as is the 15-foot front yard setback requirement. The interior private ways of the development are



still considered driveways, and not streets, because they are interior to the lot, even though they are designed to appear similar to streets. Nevertheless, this proposal applies many similar design approaches to facades along interior drives.

- The AHO design standards also require rooftop mechanical equipment to be set back from roof edges and screened from ground-level view on public streets and abutting residential lots. The approach of this proposal is to consolidate rooftop appurtenances away from roof edges and to create parapets by raising the outer walls above the roof line, blocking sight lines to the equipment.
- The AHO does not require any minimum number of off-street parking spaces, but requires that any developments over twenty (20) units providing less than 0.4 off-street parking spaces per dwelling unit implement prescribed TDM measures for the proposal. This development proposes 0.48 spaces per dwelling unit, and thus is not required to provide TDM measures.
- The AHO allows for some flexibility in the required bicycle parking for an AHO development, both in terms of quantity (e.g., allowing a Bluebikes station to count towards long-term bike parking requirements) and location (AHO developments may place bicycle parking anywhere on the lot or an adjacent lot under common control). This proposal includes the provision of a 23-dock Bluebikes station, which counts towards up to thirty (30) required long-term bicycle parking spaces. Bicycle parking that is provided still needs to meet the location, access, and layout standards of Section 6.100. More detailed review may be needed for some of the proposed long-term bicycle parking areas to ensure that they conform.
- This proposal is subject to the City's Green Building Requirements as set forth in Section 22.20 of the Zoning Ordinance. The proposal is meeting this requirement by targeting Passive House certification following PHIUS+ 2018 Core guidelines, which is encouraged in the City's climate planning goals. A Green Building Report has been submitted to the City. Prior to obtaining a building permit for the project, the City must verify that the necessary documentation has been submitted to certify compliance with the standards in Section 22.20.
- The recently adopted Green Roofs Requirement is not applicable to an AHO project, but the proposal does include photovoltaic solar energy systems on the roof.



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Date: 11/2/2021

Urban Design Report: **AHO-2, Jefferson Park Federal** (45-60, 61-75, 77-92, 93-108 Jackson Circle; 1, 2-19, 21-41, 109-124, 1000 Jackson Place; and 266-278 Rindge Avenue)

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## Urban Design Comments

The existing Jefferson Park Federal housing complex was constructed in 1950 and consists of 175 affordable apartments. The existing structures have deteriorated significantly, to the point that 57 of the units are now uninhabitable. The Cambridge Housing Authority has determined that replacement would be more cost effective than renovation. The proposed scheme increases the number of units to 278 including many three- and four-bedroom units, a significant addition to Cambridge's housing stock, and also increases the amount of usable green open space.

The site is large, about 7.4 acres. The proposed project's primary public front is on Rindge Avenue, whose character varies considerably in terms of the amount of tree canopy, building setbacks, and building sizes. Small two and three floor wood siding or shingled residential buildings and single-story commercial buildings line much of the street, but the bulkier panel-clad Jefferson Park State residential project adjoins the west side of the site, and the brick 22 story Rindge Tower Apartments / Fresh Pond Apartments are nearby. The North Cambridge Catholic Cemetery provides green open space on the east. The Fitchburg Commuter Railroad Line runs along the site's south border.

Nearby parks and recreational fields include Russell and Comeau Fields, the Alewife Brook Reservation, The Fresh Pond Reservation, and Danehy Park. The Fresh Pond Shopping Center is nearby. Transportation options include the MBTA Alewife station, numerous bus lines, the Minuteman Multipurpose Trail, and the Linear Park. In addition, a new multipurpose trail is proposed parallel to the Fitchburg Line, within the southern boundary of the site.

### **Overall Urban Design Concept:**

1. The proposed urban blocks, internal drives, and other open spaces organize the site, knit it together with the adjoining Jefferson Park State complex, and connect it to Rindge Avenue.
2. The proposed "Main Street" extends from Rindge Avenue through the site to the location of the proposed multi-use trail along the Fitchburg Line, and also borders the adjoining Jefferson Park State residential complex.
3. The amount of green open space is increased considerably. A wide variety of types of open spaces are provided: tree lined streets, enclosed and semi-enclosed courtyards, a romantically landscaped park, and play areas.
4. The internal drives are designed as urban streets with parallel parking, curbside street trees, sidewalks, and landscaped front yards.
5. A system of pedestrian paths runs throughout the site, knitting the internal drives, courtyards, and other open spaces together.

6. The buildings are four stories tall except for the three-story wing of Building 1 facing Rindge Avenue and a single-story maintenance building at the southeast corner of the site.
7. Buildings are configured to frame the site's internal drives and open spaces. They share a basic vocabulary of form, but are varied in color and materials.

***Consistency with AHO Design Guidelines***

As noted in the Zoning and Development memo, the project is proposed to be consistent with the standards set by the Affordable Housing Overlay, which are set forth in Section 11.207 of the Cambridge Zoning Ordinance. These guidelines are intended to ensure that AHO projects are of high quality and are compatible with their neighborhoods in terms of massing, façade development, ground floor uses, circulation, and site design.

The AHO Design Guidelines are meant to:

1. Promote the creation of context-sensitive 100% affordable housing developments that enhance their neighborhoods and the public realm.
2. Promote the creation of new affordable housing developments that incorporate urban design best practices and strive for design excellence, including integrating green infrastructure and green building design.
3. Provide design guidance for new construction, rehabilitation, and additions to existing buildings.
4. Provide affordable housing developers, property owners, the Planning Board, neighbors, City staff, and the Affordable Housing Trust with a framework to guide the advisory design review process for affordable housing development under the Affordable Housing Overlay.

Accordingly, the Guidelines recommend that Affordable Housing Developments:

1. Respond to their contexts, reinforcing and enhancing their existing shared and unique architectural and urban design character.
2. Contribute to Cambridge as a visually rich, beautiful, and safe pedestrian environment through their architectural, site, and landscape design.
3. Provide a sense of comfort by making new buildings and additions inviting and compatible with their neighbors.
4. Use construction materials that are compatible in scale, texture, and color with those of the surrounding context.
5. Incorporate architectural details and subtle embellishments to relate to human dimensions and scale.
6. Organize building facades into base, middle, and top.
7. Incorporate common spaces to foster a sense of community.
8. Harmonize new buildings and additions in appearance and scale with historically significant buildings.
9. Contribute to Cambridge as an energy efficient and resilient community.
10. Respond to the urban, architectural, and landscape character of the surrounding neighborhoods.
11. Provide street facades that offer a sense of civic presence and human scale, and incorporate architectural details to provide visual interest appropriate to their roles in defining public space.

In addition, the design review process is intended to incorporate the Citywide Urban Design Objectives in Section 19.30 of the Cambridge Zoning Ordinance. While the Jefferson Park site is outside the specific area covered by the Alewife Design Guidelines, their recommendations for open spaces could also be

seen as pertinent. The proposed design for Jefferson Park generally follows these principles and guidelines.

### **Site Design**

#### **As recommended by the AHO guidelines:**

- The project creates a connective network of internal drives and paths, arranged to engage the internal drives system of the adjoining Jefferson Park State development and the city street network, and to create blocks that are similar in breadth to those in the site's context.
- A variety of open spaces will serve residents' needs.
- The site's vegetative cover will be greatly increased, including numerous curbside street trees at a close spacing.
- Many existing trees will be preserved.
- Pedestrian and vehicular circulation routes are distinct and separated.
- Much of the pedestrian paving is permeable.
- The depth of the front setback on Rindge Avenue is similar to other buildings nearby.
- Parallel parking is provided along internal drives, rather than parking lots.
- The project is divided into seven separate buildings to reduce the scale, and to relate to the size of nearby existing buildings.
- Courtyards, both fully enclosed within buildings and open on one side, provide more private open space.
- Landscaped front yards and multiple ground level entrances are provided along the internal drives.
- While some of the residential units are at grade to facilitate accessibility, others are elevated for additional privacy.
- Trash areas, transformers, and switchgear equipment are located inside buildings to minimize their impacts on residents and the general public. The emergency generator is site-located but screened. Mechanical equipment is located on the rooftops.
- Gas meters will be screened by foundation plantings.
- Indoor long-term and outdoor short-term bicycle parking is provided, plus a Bluebike station.

#### **Further development of the following elements could bring the project into greater accord with the guidelines:**

- Further improve shading and the aesthetic character of the project's internal drives with additional curbside street trees.
- The landscape design of front yards, both on Rindge Avenue and within the site, could be further developed to both enrich the pedestrian experience on the sidewalk and enhance privacy within the first-floor residential units.
- The landscape designs of the courtyards could be further developed.
- The amount of permeable paving could be further increased.

#### **Specific recommendations for site design:**

- Additional locations for trees and low plantings, benches, low seatwalls, and short-term bicycle racks should be investigated, including in the Rindge Avenue setback, in courtyards, along sidewalks, and near the Community Room.
- East Street and West Street, and the Rindge Avenue setback appear to offer opportunities for additional street trees.

- The city's long-term goals for the area include the construction of a multi-use trail along the Fitchburg line. The applicant is encouraged to work with city staff to ensure that the site plan can accommodate the trail, including consideration of alternatives for its precise route.
- Note that the vehicular travel lane on South Street is 20' wide. Consideration could be given, in coordination with Cambridge Fire Department, to reducing it to the 14' width provided at East Street. Note that if the future multi-use trail was adjacent to the street, it may satisfy requirements for fire truck outriggers.
- Consideration could be given to more extensive use of permeable pavers on pedestrian walks, and in addition, to its use in the parallel parking zones. Of the internal drives. Consideration could be given to increasing the privacy of the small private decks that line the perimeters of the courtyard by the use of opaque fences.
- Residential units on the second, third, and fourth floors of Building 5 will overlook the emergency generator. Alternative locations should be considered, such as the south side of the maintenance building at the southeast corner of the site, facing the tracks.
- Bicycle parking should be reviewed, including calculations and parking design requirements, provisions for longer than standard bikes, accessibility of long-term bicycle storage rooms, the potential for an increased number of short-term spaces, covered if possible, and the final location of the Bluebike station.
- More information on open space amenities, such as children's play areas, furnishings, intended uses, etc. could be provided.
- Review of tree species and planting standards.
- Review of the outdoor lighting plan.
- Review of the detailed design of crosswalks, curb cuts, etc.

### **Building Design**

The proposed buildings consistently border the site's internal drives and create enclosed and semi-enclosed courtyards. They vary in color, materials and plan configurations, but their facades are basically similar in design, giving the project a homogenous appearance. Occasional small upper-level setbacks break up the massing of facades. It is not clear whether or not they create usable terraces for the adjoining units. A wide range of unit types are provided. In addition to the Head Start facility on the first floor of Building 1, common spaces include a community room, laundries, and bicycle storage rooms.. The numerous entrances to first-floor units and to stairs leading to upper floor units will help activate the site's internal private ways.

### **Massing:**

#### As recommended by the AHO Design Guidelines:

- The project is divided into seven individual buildings to reduce its scale and to better relate to the existing context.
- Building massing creates urban blocks compatible in size to those of the surrounding neighborhoods, and frames fully enclosed and open courtyards and a park.
- Building 1's wing facing Rindge Avenue is lowered to three floors to relate to the height of the Jefferson Park State housing, and to the heights of the buildings on the north side of Rindge Avenue.

#### Further development of the following elements of the building's massing could bring the project into greater accord with the guidelines:

- Building 1's wing facing Rindge Avenue could be broken up into shorter segments.

- The wings of the buildings along Main Street could respond more strongly to its importance as the scheme's organizational spine.
- Top floors could be more articulate

Specific recommendations for Building Massing:

- As the Jefferson Park's primary public face, the Rindge Avenue façade of Building 1 could respond more strongly to the street and the context buildings. More assertive vertical divisions that would break up the length of the façade to relate to the smaller scale of the houses on the opposite side of the street could be considered, including a recess in the zone above the passage to the courtyard.
- To emphasize Main Street as the project's primary spine, consideration could be given to using streetwall massing and/or corner articulation to emphasize the difference between the north/south Main Street and the secondary perpendicular cross streets.
- Consideration could be given to creating greater articulation of the fourth-floor massing by means such as stepbacks that would create small terraces or balconies, or vertical recesses that would create the effect of dormers or bay windows. These types of refinements could do much to give the buildings more visually engaging profiles at the skyline.

**Façades:**

The project's buildings have different color schemes and use a variety of materials, including masonry, corrugated metal panels, flat metal panels, flat cementitious panels in different textures, siding, EIFS, and wood. They all follow the same basic format: ground floors are distinguished from upper floors by contrasting materials; upper floors are divided vertically by areas of different color and by (generally slight) changes in plane, and include terraces at setbacks in some locations. The courtyard facades predominately consist of flat cementitious cladding panels and have less detail than the outward facing façades. In general, the project's façades are understated; they exhibit a certain reticence to present an engaging face to the adjoining public spaces. Windows are generally small and often isolated from each other by broad areas of blank wall.

In accord with the AHO Design Guidelines:

- Building facades are articulated into smaller components by materials, color, and changes in plane to add visual interest and create an intermediate sense of scale.
- Ground floors are distinguished by the use of different (and more durable) materials than the floors above.
- First-floor entrances are provided at frequent intervals. Many are recessed to provide shelter and enriched with wood paneling. Exterior steps ascend to stoops at the entrances of units elevated above grade.
- Larger windows are provided at the first-floor Head Start facility facing Rindge Avenue.
- Art will be incorporated in the outdoor passage through Building 1 from Rindge Avenue to the building's courtyard.
- High parapets will screen rooftop mechanical equipment. Tall equipment is held back from the roof edge to minimize its visibility above the parapets.

Further development of the following elements could bring the project into greater accord with the guidelines:

- AHO recommendations suggest that façades be differentiated in response to views, visual axes, corner conditions, different types of streets and other open spaces, and other unique elements

of a project's context. Potential strategies include the judicious use of repetitive elements vs. exceptional elements, and of relatively planar facades vs. more three-dimensional ones, of contrasting patterns and sizes of windows, of different materials or details.

- In addition to helping to temper the homogeneity of the proposed design, these types of strategies could help to further emphasize the hierarchical importance of Rindge Avenue and the site's internal Main Street and thereby strengthen the sense of place within Jefferson Park and reinforce its connections to its contexts. Greater articulation of massing and façade design at fourth floors to create a more visually engaging skyline and to reduce the building's sense of bulk
- A higher level of detail could be provided at first floor facades, and greater elaboration or amenity at entrances would create a more rewarding pedestrian realm and relate to existing buildings of the neighborhood.

#### Specific recommendations for Facades:

##### General:

- The proposed window-to-wall ratio is fairly low throughout the project. To give windows more presence, fenestration details, joint patterns of cladding materials, details of sills, jambs, and heads, elements that create shadows, etc. should be considered as ways to add visual interest and enhance the scale of openings.
- Both on the exterior facades and in the courtyards, there are occasional setbacks at the third-floor level. It is not clear if these create terraces that will be usable by the adjoining units, but such terraces would help enliven the facades and connect unit interiors to the site's streets and courtyards.
- Consider the addition of balconies or Juliette balconies or upper floor terraces at setbacks both as amenities and to enliven facades.
- Consideration should be given to coordinating the joint patterns of panelized cladding systems with window opening and changes in plane.
- The courtyard elevations are fairly plain. The use of economic materials in these less public areas may be appropriate, but the potential of details and joint pattern should be maximized. Window openings and joint patterns should be carefully arranged to enrich these facades. Larger windows may help organize these facades and add visual interest.
- Consideration should be given to enriching first floor elevations by means such as masonry details and joint patterns, subtle changes in plane, shadow lines, and by the arrangement of openings and of mullion patterns within them.
- Further development of First floor entrances to units, the common entrances to Buildings 4, 5, and 6 and the passages through buildings 1, 2, and 3, including benches or low seat walls, lighting, mailboxes, projecting canopies, the design of raised stoops, and railings, trellises, integrated signage for common spaces, and the potential for upper-level facades to visually relate to the entrances below them, etc.
- Some of the elevations are undercut at grade by a horizontal reveal. Consideration could be given to bringing the plane of the ground floor facades down to grade.
- For both appearance and durability, cementitious panels should be avoided on first floor facades.
- Operable windows are shown as awning type. For greater flexibility and ventilation, consideration could be given to using "tilt/turn" windows.

- Avoid using through-wall vents. If possible, especially on Rindge Avenue and Main Street. Where they must be used, they should be arranged in an orderly fashion and match the color of the wall material they are installed in.
  - Staff recommends avoiding the extensive use of cementitious panels, especially large panels and in large areas, to avoid exposed fasteners, and to avoid use of cementitious panels within four feet of grade. Consider masonry and/or metal panels as alternatives. In any case care could be taken in installation to ensure panels are plumb and that joints are consistent.
  - Staff discourages the use of EIFS for aesthetic and environmental reasons and because of concerns about durability.
  - 
  - Consideration could be given to breaking down the scale of the fourth-floor facades and to differentiating them from the second and third floor facades by means such as stepbacks, changes in plane, balconies, terraces, bay windows, dormers, larger windows, sunshades, etc.
  - Sightlines to and potential screening of mechanical equipment should be further investigated.
- **Rindge Avenue and Main Street Facades:**
    - In response to Rindge Avenue, the proposed north façade of Building 1 differs from the project's other facades. It seems unduly understated, however. Additional emphasis on the façade as Jefferson Park's primary public face would enhance its connection to the neighborhood.
    - The proposed facades along Main Street are essentially similar to the facades on the other sides of the buildings. A more assertive response to Main Street as the project's primary organizational axis would enhance the sense of place within Jefferson Park and its connections to its context.
    - In both of these areas, consideration could be given to providing larger windows and/or windows grouped to create larger façade elements at the residential floors, and the precise design of mullion patterns and fenestration details.
    - On Rindge Avenue the use of repetitive bay windows could be considered to create a sense of a larger scale.
    - The incorporation of a canopy or trellis and vines along the top of the first-floor façade would emphasize the pedestrian scale of the setback along Rindge Avenue, help distinguish the first floor from the residential floors, emphasize the passage through to the building's courtyard, and enrich the Head Start facility.
    - More detailed consideration of art, pavement and soffit materials, lighting, and the location of doorways would enrich the passage from Rindge Avenue to Building 1's courtyard.

#### **Building Plans:**

In accord with the AHO Design Guidelines, the plans:

- Provide numerous three and floor bedroom units.
- Incorporate a street-facing active use: the Head Start facility.
- Provide common spaces a community room, bicycle storage, and laundries.
- Trash, recycling, and electrical transformers and switchgear equipment are hidden in interior spaces.



- Rooftop mechanical equipment is screened by a tall parapet and located away from roof edges.

Further development of the following elements could bring the project into greater accord with the guidelines:

- More information on the uses and features of the Community Room would be helpful.
- More interior common spaces could be considered: work or study rooms, meeting rooms, music practice rooms, etc.
- Review of the dimensions and layouts of unit plans to ensure livability, with particular attention to the family-sized units.

Specific Recommendations for Building Plans:

- Review of bicycle parking, including calculations, clearances, access, and provisions for longer than standard bikes. Note that, as common spaces, bicycle storage rooms need to be ADA/MAAB accessible.
- Consider active uses for the full length of the Rindge Avenue ground floor.
- Provide accessible terraces at upper floors.
- Verify that shared laundries are big enough.
- The transformer vault occupies the northeast corner of building 6, facing Main Street, and the courtyards of building 5 and 6. If possible, a less sensitive location should be considered.
- Room sizes are larger than other recent residential projects, but more spacious living rooms and more storage space could be considered, especially in the multi-bedroom units.

#### **Sustainable Design:**

The project is seeking Passive House (PHIUS) certification, and in addition is using Enterprise Green Communities (EGC) Certification Plus. It will have an energy efficient exterior envelope including triple-glazed windows, a fairly low window-to-wall ratio, heavily insulated walls, rooftop energy recovery units, and rooftop PV panels.

In accord with the AHO Design Guidelines for sustainability:

- The first floors are elevated above estimated 2070 100-year flood levels.
- Walls and roof are light-colored.
- The project will include PV panels as necessary to meet Passive House requirements, and will be solar ready for additional panels.

Further development of the following elements could bring the project into greater concordance with the guidelines:

- The extent of operable windows in the residential units is not clear from the documents.
- The submission includes calculation that show significant potential for photovoltaic power generation.
- The incorporation of green roofs would help reduce the urban heat island effect.

Specific Recommendations for Sustainability:

- Perform Life Cycle Assessments of building materials' embodied carbon.
- Expand on the information in the Green Building Report by:
  - Providing information on the environmental qualities of selected materials.
  - Considering additional PV power generation.

**Summary of Priority Recommendations:**

1. Provide additional street trees where possible on East Street, West Street and Rindge Avenue.
2. Further develop the pedestrian realm, front yards, building entrances within the site and in the Rindge Avenue frontage with features such as additional plantings, low walls, fences, stoops, benches, etc.
3. Enhance the civic presence of the Rindge Avenue façade. Consider breaking up its length, and enhance the pedestrian scale and visual interest of its ground floor facing Rindge Avenue.
4. Give Main Street greater hierarchical emphasis by distinguishing the facades that face it from the facades on the perpendicular streets, and by giving it greater consistency from building to building.
5. Provide greater articulation at the fourth-floor façades.
6. Consider reducing the use of cementitious panels and EIFS.
7. More fully develop the details, joint patterns, textures, and colors of the exterior walls. Review the design of bike parking areas and the access routes to them.
8. Study options to accommodate the proposed multipurpose trail along the Fitchburg Line.
9. Verify the amount of screening needed for rooftop mechanical.