

Urban Design Staff Report

Urban Design Comments

Introduction and Context

This Affordable Housing Overlay project at the intersection of Massachusetts Avenue and Mellen Street consists of the restoration of the historic Second Empire style Saunders House, its renovation into four residential units, and the construction of a new twenty-five unit building on the site of Saunders House's existing parking lot in the eastern portion of the site.

The Saunders House faces Massachusetts Avenue across a broad and deep front lawn. At two floors plus a mansard roof, it is small relative to the large residential buildings common on this part of Mass Ave, an elegant point of punctuation in contrast to their large streetwall-defining volumes. Its deep cornice, curved mansard roof, idiosyncratic dormers, and richly detailed porch contribute visual interest and a sense of domesticity to the street. Staff appreciates the project's restoration of the Saunders House and recommends that the applicant continue to work with the Cambridge Historical Commission as the project develops.

The new building is located behind the Saunders House, a boxy volume twice the height of the Saunders House and the typical residential buildings on Mellen Street, and with a much larger floor plate. Its tall and broad north façade faces Mellen street, which is lined by mostly two and three floor residential buildings.

The siting and bulk of the new building present the design challenge of using massing and façade design to create sympathetic relationships to the contrasting scales and characters of the Mellen Street and Massachusetts Avenue, and to the Saunders House itself.

Consistency with AHO Guidelines for Building Design

The Affordable Housing Overlay Design Guidelines emphasize that the massing and facades of new buildings should be compatible with the prevailing pattern of neighboring buildings and open spaces.

They recommend incorporating stepbacks to relate to lower neighboring buildings, dividing large developments into separate buildings, articulating the facades of large buildings with vertical recesses or projections, and considering both symmetrical and asymmetrical arrangements to best relate to neighboring buildings. They encourage that long facades be broken up by means such as recesses, projections, and bay windows; that the dimensions of structural bays be expressed; and that building bases, middles, and tops be differentiated, with the massing and detail of building tops and rooflines receiving special attention.

Their recommendations for façade design encourage compatibility with the architecture of the immediate context: the use of details, materials, and elements that add visual interest; window to wall ratios that relate to prevalent patterns; the enrichment of glazed areas with mullion patterns and features such as trim and sunshading devices; the creation of welcoming spaces at building entrances by the provision of shelter and shade, benches, and landscaping; and the provision of views into common

spaces, such as lobbies and amenity rooms. For projects on corner lots, the recommend responding to the different characters of the adjoining streets.

Where new buildings are proposed on sites with existing historic structures, they recommend that these buildings be preserved and restored, and that a degree of distinction and separation be provided between the existing and new constructions.

Recommendations for Building Design

Massing and Facades

While the proposed design relates to many of these guidelines, more could be done to increase its contributions to the public realm.

The proposed new building is a roughly cubical block. Its six-floor western half faces Massachusetts Avenue and overlooks the Saunders House. Its eastern half steps down to five floors in deference to the existing three floor house on the neighboring parcel and the residential neighborhood to the east. The building's prominent northwest corner is emphasized by a tower-like bay window that addresses the Saunders House's side lawn and marks the corner of the new building as seen from Mass Ave. The 73' wide and mostly flat Mellen street façade will have a major impact on the character and scale of the street.

The project's Massachusetts Avenue context includes several nearby buildings similar in size to the new building. Their bulk is articulated by changes in plane and the use of vertical elements – recesses and bay windows – to break up their overall mass. Their facades use changes in materials, window proportions and spacing, and trim to emphasize the distinction between their primary facades and side facades. Detail and materials provide visual interest and a sense of scale.

- While the proposed building's massing and facades reference these types of strategies, staff would like to encourage further exploration of possibilities to mitigate its cubical bulk and to make stronger contributions to the distinct characters of the adjoining streets.

The new building's most significant façade faces Mellen Street, which is otherwise framed by a variety of mostly two and three floor existing residential buildings enriched with the detail typical of late 19th c and early 20th c construction. The proposed building's top floor step-down at the east helps relate it to the scale of its neighbors, and the corner bay window articulates its northwest corner. Further adjustments, however, to the building's facades and massing could enhance the new building's contributions to Mellen Street.

- Consideration should be given to dividing the Mellen Street façade into two zones: the western zone the width of the recessed Mellen Street entrance and linking it to the building's sixth-floor volume, the eastern zone relating more closely in scale to the neighboring house.
- As part of this, consideration should be given to articulating the western portion of the Mellen Street façade with additional bay windows, whose verticality would reinforce the division of the façade into two distinct zones, contrast to the Saunders House's strong horizontal cornice, and relate to the Saunders House's bay windows and also the numerous vertical elements of the nearby houses on Mellen Street.
- For a more sympathetic relationship to the neighboring house to the east on Mellen Street, consideration could be given to further stepping down the building's eastern portion, or to recessing the eastern portion of the fifth-floor volume back from the typical plane of the façade.

Staff appreciates the broad first floor recess that leads to the building lobby and accommodates an outdoor terrace (see more about this area in discussion of the site plan below), and the expression of the amenity room and meeting room in the design of the first-floor façade.

The new building has a bulky appearance relative to the Saunders House.

- Consideration could be given to setting the new building's sixth floor, including its elevator, back from its west side, and/or breaking up the continuity of the sixth-floor façade by changes in plane, and to eliminating the sixth-floor portion of the corner bay window/tower.
- Consideration could be given to deemphasizing its upper cornice and giving the lower cornice more projection.

The window-to-wall ratio of the Mellen Street façade is fairly low at 20%, giving the façade a somewhat anonymous appearance.

- Consideration should be given to giving the windows a larger role in organizing the façade. Means could include providing larger windows, grouping them together for more visual impact, to incorporating details and trim that would increase their visual impact relative to the wall surface.

The majority of the new building's facades are clad with horizontally grooved flush cementitious panels; the corner bay window/tower is clad with flat panels.

- Consideration could be given to utilizing lap siding for the detail and shadow it provides.
- Care should be taken when specifying and installing panelized systems to ensure a successful appearance.

It is not clear whether interior spaces will be ventilated by through-wall or rooftop vents.

- Rooftop venting would be preferable.
- If through wall vents are used, they should be carefully located as positive elements of the façade design.

The new building's roof will accommodate mechanical equipment.

- Its visibility from ground level should be evaluated and screening provided if indicated.

Long-term bicycle parking

Thirty long term bicycle parking spaces are provided in the basement of the Saunders house, accessed via the elevator and an exterior stair to the south side yard.

- Some of the long-term bicycle parking spaces in the building's basement appear to be compromised by columns. The clearances should be reviewed.

Consistency with AHO Guidelines for Site Design

The Affordable Housing Overlay Guidelines recommend that open spaces help foster community by offering gathering spaces and play spaces for residents, and that their plantings contribute to the beauty of the city's streets and sidewalks. They recommend framing the street and sidewalk by the provision of elements such as low walls, hedges, and low plantings, and shading buildings, open spaces, and paved surfaces with canopy trees. They recommend that, where possible, forecourts provide transitional

space, enriched by plantings and seating, between the street and building entrance. Trash, service, and utility equipment should be located to minimize its impact on the public realm.

Staff appreciates the preservation of The Saunders House's front lawn, along with the cast iron fence on Massachusetts Avenue, and the hedge and small tower-like stone structure on Mellen Street. The new building fills most of the site behind the Saunders House, leaving narrow setbacks facing the adjoining properties on the east and south. The new building's slightly larger setback on the north, along Mellen Street, continues the Saunders House's side lawn, and will be, in effect, the front yard of the new building. While it is small, it will help serve the residents' need for outdoor space.

Recommendations for Site Design

Entry Terrace

The most significant feature of the new building's site is its entry terrace, which faces Mellen Street and is partially recessed into the building's first floor. In its overall dimensions it relates to the front porch of the Saunders house. Its scale and character are enhanced by its beamed trellis-like soffit and reused stone pavers. In addition to loose furniture, a low seatwall parallels the ramped path from Mellen Street. A pair of bike racks, oriented at 45 degrees to the building, occupy the terrace's eastern end. Strip lighting is proposed at the lobby facade.

The terrace presents the project's greatest opportunity to enhance the social life of the building. It has the potential to be an enjoyable shared space for the residents and a welcome transitional space between Mellen Street and the building lobby, an outdoor living room-like space that encourages casual meeting and relaxation while providing a connection to the outdoors and a sense of shelter. To more fully develop its potential, staff recommends that consideration be given to:

- Providing additional built in benches, including at its eastern end, to create the sense of a cozy nook from which one can overlook the street and see residents as they enter and exit.
- Reducing the impact of the proposed bicycle racks on other uses of the terrace. The recessed area next to the connector between the existing and new buildings could be considered as an alternative location. It would be no farther from the lobby entrance doors and could be sheltered by a roof spanning its breadth.
- Providing a table to encourage the use of the terrace for casual dining or as an outdoor workspace.
- Providing electrical outlets.
- Providing subtle lighting from indirect sources instead of the proposed strip lighting.

Transformer

The building's transformer is proposed on the south side of the existing building. It is partially screened by a fence, which extends considerably closer to Mass Ave than the Saunders House's porch.

- If possible, the transformer and its fence should be located more deeply into the site, and the fence should more fully screen the transformer.
- The application notes the possibility of relocating the transformer to the building's basement, which would be preferable.

Plantings

A well-maintained hedge runs for about 35 feet along the Mellen Street sidewalk at the side of the Saunders House's front yard. Many of the front yards of the existing buildings along Mellen Street present similar hedges to the sidewalk.

- To strengthen the relationship between the new building and its context, and to enhance the entry terrace, consideration should be given to extending the hedge for the full length of the project's Mellen street frontage, with an entrance at the paved path to the building's terrace and lobby.

The existing curbside sidewalk trees on Mass Ave and Mellen Street vary in condition and age; there are gaps on both streets.

- Unless precluded by subsurface conditions or sightlines, and in coordination with the DPW for species and planting standards, consideration should be given to providing additional curbside trees in the Mass Ave and Mellen Street sidewalks.

Consistency with AHO Guidelines for Sustainable Design

The Affordable Housing Overlay Design Guidelines recommend measures such as exterior window shading, passive ventilation, light colored roofs, and consideration of embodied energy.

Recommendations for Sustainable Design

The project will be Passive House Certified. It will have low heating and cooling loads, which become a path to using net zero energy. With the installation of solar PV on the roof of the new building, its energy needs can be partially offset with renewable energy. Healthy materials will be prioritized, and the team is reviewing low embodied carbon materials. The preservation of the Saunders House is appreciated not only for its historical and aesthetic value, but also for its reuse of existing construction.

- Consideration could be given to further enhancing the project's sustainability by minimizing the embodied energy of construction materials, specifying a light-colored roof or a green roof, and incorporating rooftop solar panels as part of the initial construction.
- The provision of additional street trees would help reduce the area's urban heat island effect.

Consistency with Citywide Urban Design Objectives

The Citywide Urban Design Objectives state that new projects should be responsive to the existing pattern of development. Heights and setbacks that provide suitable transitions to lower scaled areas should be considered. Buildings should be designed and oriented on the lots to be consistent with the established streetscapes. Historical contexts and buildings should preferably be preserved. Mechanical equipment should be designed, located, and screened to minimize impacts on neighbors. They encourage the expansion of Cambridge's housing inventory.

The project's provision of affordable residential units and its preservation of the Saunders House fully accord with these objectives. The new building's size presents challenges; many of the recommendations above are meant to bring it closer to the objectives' intent.