To: Planning Board
From: Jeff Roberts, Senior Manager for Zoning and Development
Date: May 9, 2017
Re: Observatory Hill Village Zoning Petition

Background

A proposal has been submitted by a group of residents to change the provisions of the Zoning Ordinance affecting a stretch of Concord Avenue located roughly between Harvard Square and the Alewife area. The proposal would create a zoning overlay district called the Observatory Hill Village Overlay District, which would alter some of the use and dimensional requirements of the underlying base zoning (Business A-1) and impose some additional requirements pertaining mainly to urban design, built form, and ground floors. Overall, the petition incorporates similar standards and approaches to those used in other areas of the city, such as northern Massachusetts Avenue.

Residents from this area have met with CDD staff in the past, most recently in summer 2016, to discuss concerns related to the future of the area and to understand the tools and strategies that could be employed through the Zoning Ordinance to further their goals. The issues discussed at that time are reflected in the preamble of the petition, and include preserving the mix of small businesses in the area, retaining the overall scale and character of the neighborhood, and mitigating traffic and parking concerns. After meeting with CDD staff, residents took their own initiative in developing the petition and gaining support from the community.

Overview

This report summarizes some of the characteristics of the area as they relate to land use and zoning, and provides some discussion of the current zoning and the anticipated effect of the proposed changes. The report is accompanied by a series of informational maps and graphics provided as an appendix.

In addition, CDD has been working with its urban design consultants, Over,Under, to create some visualizations showing the potential effects of the proposed zoning, and hopes to make those available at the public hearings.
Area of Proposed Change

See maps titled “Location of Petition Area” and “Affected Area.” Note that while the petition describes the proposed overlay district as applying to “the area described generally as Business A-1 zoning district,” the list of addresses cited is somewhat ambiguous and may include areas along Walden Street and Huron Avenue that are outside of the BA-1 district. For the remainder of this report, it is assumed that the proposed requirements would apply only within the BA-1 base district.

Existing Conditions

Location

This specific section of Concord Avenue serves as a transition from the portion closer to Harvard Square, which includes larger buildings and a greater institutional presence, and the section leading toward Fresh Pond, which has a more consistent smaller-scale residential pattern. The section is also bookended by intersections with Walden Street and Huron Avenue, which provide two of the main north-south routes through the Neighborhood Nine part of the city.

Overall Pattern of Development – See “Aerial Oblique Image” (at the end of this document)

The area is largely characterized by three-story buildings, mostly on small lots in a pattern that is typical of historic multifamily neighborhoods in Cambridge, including wood-frame housing in three-decker and pitched-roof styles. In the center of the stretch is a larger lot that was redeveloped more recently as a townhouse-style condominium development, which has a partial fourth floor and houses a Cambridge Public Library branch at the ground floor.

Near the corners with Huron Ave and Walden Street are some more commercial development types, including one-story commercial buildings, two larger mixed-use buildings with apartment-style housing above ground-floor office or retail, a two-story office building, and gas station sites at each corner. The area also boasts one of Cambridge’s smallest buildings, a one-story building at the corner with Appleton Street that is only 8 feet wide, which was purportedly built as a “spite house” in the early 20th century and has been used more recently as an office and design studio.

Land Use – See map titled “Land Use by Parcel”

While the development pattern is mostly residential, there are several buildings originally built as homes that have been converted to office use. There are also several more residential lots that are mixed-use due to having office, retail, or other non-residential use at the ground floor (including the aforementioned condominium development that includes the branch library). Within the retail spaces, uses include a small grocery store and café, a bakery, some restaurants, and specialty retail shops.

Density – See map titled “Floor Area Ratio (FAR) by Land Use Category”

Existing development has a relatively modest density, with most lots being built to an FAR of around 1.00 or less. Some outliers include mixed-use apartment-style buildings at the intersections with Walden and Huron, which are built to a greater density than other sites in the area (above 1.5), and the gas stations at those same intersections, which are significantly underdeveloped compared to the rest of the area (FAR around 0.2-0.3).
Height – See map titled “Building Heights”

As noted, nearly all buildings in the area are three stories or less, generally reaching a maximum height of around 35 feet. There are a couple of buildings that have a maximum height greater than 40 feet, due to having partial fourth stories that were added to the buildings at some point in time. One-story buildings tend to have heights around 14-17 feet, though some have partial added stories or other features that raise the overall height.

Front Setbacks

As the petitioners have observed, Concord Avenue in this section has a fairly intimate scale, with a roadway width of about 30 feet carrying two lanes of traffic and one lane of parallel parking, and sidewalks about 7-8 feet wide on either side.

The setbacks distances of buildings to Concord Avenue vary considerably, with several commercial or mixed-use buildings built to the front lot line and other buildings set back at distances ranging from only a few feet to around 10 feet, or in a few cases 20 feet or more.
Current and Proposed Zoning

Zoning History

The area was zoned Business A (BA) for most of the history of the zoning map, and was rezoned to Business A-1 (BA-1) in 1986 (Ordinance #1035).

Overview of Current Zoning

The BA-1 zoning district is a mixed-use district, allowing single-family, two-family, townhouse and multifamily dwellings, along with institutional, office, and limited retail uses. The height limit is 35 feet, allowing three-story buildings. Like in other mixed-use districts, there are different sets of dimensional requirements applicable to residential and non-residential uses.

For residential uses, the allowed dimensions are the same as in the Residence C-1 district (the City’s most typical multifamily district), where the prominent style is three-story development of wood-frame detached dwellings, townhouses, “three-decker” or other smaller-scale multifamily buildings with modest yard setbacks.

For non-residential uses, the BA-1 district allows a maximum FAR of 1.00 and does not require front or side yard setbacks, thereby allowing one-story buildings with larger building footprints (such as typical “strip” retail buildings), as well as two-story or possibly three-story buildings with decreasing footprint areas. Though mixed-use buildings can be complicated to design given the differing sets of requirements, the zoning does allow portions of otherwise residential buildings to be converted for offices, retail establishments, or other non-residential functions.

Generally speaking, the existing conditions in the district provide a good representation of the types of development that are allowed in BA-1 – three-decker and two-family housing types, one-story retail, smaller-footprint multi-story office, and modest-scale mixed-use buildings.

Current and Proposed Zoning Requirements

The main effect of the overlay petition is to change or complement some of the dimensional requirements applicable in base zoning, particularly by increasing some minimum required yard setbacks and modifying height requirements somewhat to allow a couple feet of additional overall height where non-residential uses are located at the ground floor. Additional requirements are also provided to encourage mixed-use forms of development that are pedestrian-friendly and interface with the street in a way similar to existing buildings. No changes to the allowed density of uses or required amounts of parking are proposed. The dimensional and other proposed changes are summarized briefly in the tables on the following pages. Additional detail is provided in the petition text.

Some requirements in the overlay district may be waived by special permit from the Planning Board. Also, some requirements may be waived in order to further the preservation of historic structures; the petition does not provide a list of historic structures but references the Cambridge Historical Commission as a resource.
### Table of Changes to Standard Dimensional Requirements

<table>
<thead>
<tr>
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<tbody>
<tr>
<td>Maximum FAR</td>
<td>0.75</td>
<td>1.00</td>
<td>0.75</td>
<td>1.00</td>
</tr>
<tr>
<td>Minimum Lot Area per Dwelling Unit</td>
<td>1,500 square feet</td>
<td>N/A</td>
<td>1,500 square feet</td>
<td>N/A</td>
</tr>
<tr>
<td>Maximum Height</td>
<td>35 feet</td>
<td>35 feet</td>
<td>37 feet for mixed-use buildings</td>
<td>37 feet for mixed-use buildings</td>
</tr>
<tr>
<td></td>
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<td>incorporating an existing structure</td>
<td>incorporating an existing structure</td>
</tr>
<tr>
<td></td>
<td></td>
<td></td>
<td>if ground floor height &gt; 15 feet</td>
<td>if ground floor height &gt; 15 feet</td>
</tr>
<tr>
<td>Minimum Front Yard Setback</td>
<td>(H+L) ÷ 4</td>
<td>None</td>
<td>(H+L) ÷ 4</td>
<td>5 feet</td>
</tr>
<tr>
<td></td>
<td>At least 10 feet</td>
<td></td>
<td>At least 10 feet above non-residential ground floor</td>
<td>(May be reduced by Planning Board SP)</td>
</tr>
<tr>
<td>Minimum Side Yard Setbacks</td>
<td>(H+L) ÷ 5</td>
<td>None</td>
<td>(H+L) ÷ 5</td>
<td>7.5 feet where abuts residence</td>
</tr>
<tr>
<td></td>
<td>At least 7.5 feet</td>
<td></td>
<td>At least 7.5 feet</td>
<td></td>
</tr>
<tr>
<td>Minimum Rear Yard Setback</td>
<td>(H+L) ÷ 4</td>
<td>(H+L) ÷ 5</td>
<td>25 feet (devoted to green area open</td>
<td>25 feet (devoted to green area open space)</td>
</tr>
<tr>
<td></td>
<td>At least 20 feet</td>
<td>At least 20 feet</td>
<td>space)</td>
<td></td>
</tr>
<tr>
<td>Minimum Private Open Space</td>
<td>30% (proportional if mixed use)</td>
<td>None</td>
<td>30% (proportional if mixed use)</td>
<td>None</td>
</tr>
</tbody>
</table>
### Additional Proposed Overlay District Requirements

<table>
<thead>
<tr>
<th>Ground Floor Uses</th>
<th>BA-1 Base Zoning</th>
<th>Proposed Overlay District</th>
</tr>
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<tbody>
<tr>
<td>Ground Floor Uses</td>
<td>May be residential, or a range of non-residential uses including institutional, office, or limited types of retail.</td>
<td>Must be one of a limited range of non-residential uses, for a minimum of 75% of façade frontage, serving small-scale retail establishments, offices, or institutional uses that are publicly beneficial.</td>
</tr>
<tr>
<td>Ground Floor Elevation</td>
<td>No limit on elevation.</td>
<td>Must be at grade or up to 4 feet above grade; at grade required for non-residential ground floor use.</td>
</tr>
<tr>
<td>Façades</td>
<td>No specific requirements/limitations.</td>
<td>Main building entrances must face a major street; individually leased spaces must have separate entrances; minimum glazing required at ground floor.</td>
</tr>
<tr>
<td>Projecting bays</td>
<td>Building projections may encroach into required yards (with limitations), but are counted in Gross Floor Area.</td>
<td>Area of projections no more than 2.5 feet deep, 8 feet wide, located above the ground floor, and covering no more than 40% of façade would be excluded from Gross Floor Area.</td>
</tr>
<tr>
<td>Parking</td>
<td>Article 6.000 provides some limitations on where parking may be located; parking in above-ground structures generally must conform to dimensional zoning requirements.</td>
<td>Surface parking is not allowed in front of a building; parking is not allowed inside of a building within the first 40 feet of depth from the principal façade.</td>
</tr>
<tr>
<td>Reconstruction of Damaged/Destroyed Nonconforming Buildings</td>
<td>Recent amendment to Article 8.000 allows buildings damaged or destroyed by fire or other catastrophe to be restored as they existed.</td>
<td>Similar allowance proposed, with somewhat different standards for restoration.</td>
</tr>
<tr>
<td>Project Review</td>
<td>Planning Board special permit required for projects of 20,000 square feet or more.</td>
<td>In addition to special permit requirements, as an area of special planning concern, public advisory review required for projects of 2,000 square feet or more.</td>
</tr>
</tbody>
</table>
Issues for Consideration

There are many detailed provisions to consider in the petition. While the details deserve further discussion, below are some broad reflections on the overall approach to help guide the initial deliberations on this petition.

Opportunities for Change

Based on the current patterns of development, including the relative small sizes of lots and the fairly “close fit” between the existing heights and densities and those that are allowed under current zoning, there is not expected to be much major redevelopment in this area in the future. Probably the most likely opportunities for complete redevelopment are the gas stations, which seem to be both diminishing in value a land use and are comparatively underdeveloped. The work being done by the City’s consultant is considering how the proposed zoning regulations might be applied if new construction occurred on those lots.

Nonetheless, there is the potential for other types of change in the area, rather than wholesale redevelopment, which has raised concern among neighbors. These include the loss of desired retail uses, due to economic or other pressures, and the potential for addition or alteration to properties that have some remaining development potential. Therefore, a zoning approach to this area should consider not just how it would affect new development, but also how it would encourage property owners who are contemplating alterations or changes of use to do so in keeping with the desired character of the neighborhood.

Mixed-Use Character

The petition borrows greatly from the requirements in northern Massachusetts Avenue, which set urban design standards meant to ensure development that is consistent with the mixed-use character of the area. Recently adopted requirements in that area require new development to provide non-residential uses at the ground floors of residential buildings, to prevent new projects from breaking the continuity of the retail streetscape. Many of the approaches used to promote a pedestrian-friendly urban character on Massachusetts Avenue would be appropriate in this area as well. Given residents’ interest in maintaining the village-like character that currently prevails, sensible urban design standards could result in better outcomes for new development as well as alterations to existing sites.

However, given that this area does not have as strong a commercial character as Massachusetts Avenue, and the pattern of ground-floor retail use is not as consistent, some additional consideration might be given to whether it is appropriate to require ground-floor commercial use. In this respect, most lots within the district would become non-conforming, and it may be difficult to attract enough retailers to fill additional spaces that might be created in the future. Other alternatives could be considered to incentivize retail, or to promote commercial uses in certain key areas where it would be most viable.

Parking

While the preamble to the petition cites the need for parking in the area, the petition does not propose changes to parking requirements other than to further limit the locations where it can be provided. This issue is a conundrum in many commercial areas of the city, where small businesses and residents often
feel that they need parking, but are also constrained by requirements that are often physically difficult to meet, and require seeking relief. Finding a set of parking allowances and requirements that balances urban design and transportation goals is a continuing challenge.

**Overlay Zoning Approach**

Overlay districts are commonly used in the city where special use regulations are needed that extend beyond the boundaries of a single base district, or when additional requirements are needed that do not fall within the ordinary purview of use, dimensional, and parking standards that apply within base zoning districts. This proposal follows the pattern of mixed-use, urban design-oriented overlay zoning found in many areas of the city including Central Square, Harvard Square, northern Massachusetts Avenue, Memorial Drive, and Prospect Street.

One of the disadvantages of overlay district zoning, in cases where the intent is partly to modify the base zoning requirement, is that it can be difficult to understand and conceptualize the full effects of the “layered” zoning requirements on a lot. A person trying to understand the zoning requirements for a lot would first need to study the base zoning, which has many requirements contained throughout the Zoning Ordinance, and then study the overlay zoning, which may or may not render certain provisions of the base zoning irrelevant, or result in outcomes that seem contrary to the intent. Setback requirements are a common example. While overlay zoning might require fixed setbacks in some cases in order to provide a consistent street edge, base zoning contains setback requirements determined by formula based on the dimensions of the building. Without applying all requirements rigorously to a proposed development, it is difficult to tell where the base setback requirements will control and where the overlay setback requirements will control, and what the resulting outcome would be.

In the case of the proposed petition, the overlay district itself contains two “layers” of requirements; one set applies generally, and the other applies to lots within the BA-1 base district. But since all of the overlay district requirements also appear to apply generally within the BA-1 district, the distinction is not clear.

An approach that simplifies and consolidates the desired standards might be helpful, so that property owners, residents, businesses and others could have a clear, shared understanding of what the requirements are and what they aim to achieve.
From the "Friends of Observatory Hill Village" Zoning Petition:

**20.x03 Applicability.** The Observatory Hill Village Overlay District shall be an overlay district on the zoning map established by Section 3.20. Existing street addresses include 181-299 and 186-298 Concord Avenue, the northwest property-line of 147 to 175 and 152 to 184 Huron Avenue, 21 to 25 Manassas Avenue, and 297 to 379 and 363 to 380 Walden Street.
Land Use Categories

Residential
- 1 - 3 units
- 4 - 25 units
- 26 - 534 units

Residential with ground floor Commercial
- 1 - 3 units
- 4 - 25 units

Mixed Use, with primary use first
- Commercial with Residential
- Residential with Commercial

Other Categories
- General Commercial
- Office
- Utility
- Charitable/Religious
- Education
- Higher Education
- Health
- Government Operations
- Public Open Space
- Transportation
- Vacant Land

Map prepared by Brendan Monroe on April 28, 2017.
Floor Area Ratio (FAR) is the ratio between the floor area of buildings on a lot and the area of the lot. The maximum FAR allowed in Business A-1 varies according to land use:

Maximum allowed floor area ratio (FAR):  
- Residential 1.00  
- Nonresidential 0.75  
- Commercial 0.75 - 1.00  
- Mixed Use 0.75 - 1.00  
- Less than 0.75  

Map prepared by Brendan Monroe on June 1, 2016. CDD GIS C:\Projects\Zoning\Petitions\ConcordAveBA-1\LandUseFARConcordAveBA1.mxd
Building heights taken from 2010 planimetric data, which assigns a value for the height above ground level of the tallest point on the building (TOP/GL). Heights are shown for buildings within parcels that intersect Zone BA-1.