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CITY OF CAMBRIDGE  
COMMUNITY DEVELOPMENT DEPARTMENT

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To: Planning Board

From: Swaathi Joseph, Associate Zoning Planner  
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Date: February 16, 2017

Re: Special Permit **PB #326, 195 & 211 Concord Turnpike**

This memo contains an overview of the proposed project at 195 and 211 Concord Turnpike, the special permit being requested, and related comments. Comments from the City Engineer at the Department of Public Works (DPW) are provided in a separate document and comments from the Traffic, Parking and Transportation Department (TP&T) are forthcoming.

### **Summary of Proposal**

The applicant is proposing demolition of two existing buildings to construct a multi-family residential development in two buildings with a total of 320 dwelling units. The project also includes 243 off-street parking spaces accommodated at the basement and ground levels, 336 long-term bicycle spaces, 38 short term bicycle spaces, and landscaped areas accessible to the building residents and general public.

### **Requested Special Permits**

The site is located in the Special District-4A (SD-4A) zoning district and the Flood Plain Overlay District and partially in the Parkway Overlay District. The proposed project is seeking a Project Review Special Permit per Section 19.20; special permits to diverge from the standards of the Parkway Overlay District per Section 20.63.7 to alter the Green Area Open Space in the front yard, to increase the allowed height of a fence, to site on grade open parking area in the front yard, and to locate mechanical equipment in the front yard; special permit for building construction in the flood plain per Section 20.73; special permit to waive gross floor area (GFA) for parking facilities in the flood plain per Section 5.25.42; special permit for reduction of required parking per Section 6.35.1; special permit to exceed allowed curb cut width; and special permit to increase building height in Special District 4A per Section 17.42.3. The project also requires review by the Conservation Commission, which completed its review and issued an Order of Conditions dated November 23, 2016 for compliance with Massachusetts Wetlands Protection Act.

Requested Special Permits	Summarized Findings <i>(see appendix for zoning text excerpts)</i>
Project Review Special Permit (Section 19.20)	<ul style="list-style-type: none"> <li>• The project will have no substantial adverse impact on city traffic within the study area, upon review of the traffic impact indicators analyzed in the Transportation Impact Study and mitigation efforts proposed.</li> <li>• The project is consistent with the urban design objectives of the City as set forth in Section 19.30 (see following page).</li> </ul>
Alter the required Green Area Open Space in the front yard, increase the height of the fence, site on grade open parking area in front of the building, and locate mechanical equipment in the front yard in Parkway Overlay District (Sections 20.64.1.2, 20.65, 20.66.2, 20.67)	<p>In reviewing applications for any special permit in the Parkway Overlay District, the Planning Board shall consider compliance with the requirements specified in this Section 20.60, the recommendations made in the Cambridge Community Development Department's 1979 report entitled Alewife Revitalization, and the criteria specified in Section 10.43.</p> <p>The Board may grant such a permit upon its determination that the development proposed will better serve the objectives of this Section 20.60 than if the standards were followed and that the criteria specified in Section 10.43 will be satisfied.</p> <p>(See full criteria in appendix)</p>
Construction in Flood Plain Overlay District (Section 20.73)	<ul style="list-style-type: none"> <li>• No encroachment of the floodway or displacement of water retention capacity is allowed unless fully offset.</li> <li>• Flood water systems shall not cause nuisance, hazard or detriment to site or abutters.</li> <li>• Development is consistent with zoning, area plans and guidelines, and applicable laws including Wetlands Protection Act.</li> <li>• Review by the City Engineer and Conservation Commission are required.</li> </ul> <p>(See full criteria in appendix)</p>
Waive GFA for parking facilities in Flood Plain Overlay District (Section 5.25.42)	<ul style="list-style-type: none"> <li>• Only the minimum number of parking spaces required for the uses on the site are provided.</li> <li>• Where in a flood hazard area, the construction of a parking facility underground is             <ul style="list-style-type: none"> <li>(a) not technically feasible due to the requirements of the Massachusetts Wetlands Protection Act</li> <li>(b) would require construction that would violate requirements or limitations of the Massachusetts Wetlands Protection Act</li> <li>(c) would, in the view of the Cambridge Conservation Commission, seriously compromise the wetlands</li> </ul> </li> </ul>

	<p>protection objectives of the Massachusetts Wetlands Protection Act</p> <p>(d) would result in costs of construction that are significantly greater than would otherwise be typical for the location were it not in a flood hazard area</p> <ul style="list-style-type: none"> <li>The above ground facility is designed so as to reduce its actual or perceived bulk through, among other possible techniques, limiting the number of parking spaces it contains, placement of portions of the facility below grade where feasible, or its location relative to actively occupied portions of the construction. Construction above grade is discouraged that would increase the amount of impervious area on the lot.</li> </ul>
Reduction in required parking (Section 6.35.1)	Lesser amount of parking will not cause excessive congestion, endanger public safety, substantially reduce parking availability for other uses or otherwise adversely impact the neighborhood; or will provide positive environmental or other benefits to the users of the lot and the neighborhood, including assisting in provision of affordable housing units.
Exceedance of allowed curb cut width (Section 6.43.5)	Increased curb cut width will facilitate traffic and safety. (see appendix)
Exceedance of building height in Special District 4A (Section 17.42.3)	The additional height will better serve the objectives of this Section 17.40 to increase the amount of open space in the district and to limit the extent to which building and other hard surfaces cover the ground. (See full criteria in appendix)
General special permit criteria (Section 10.43)	Special permits will be normally granted if the zoning requirements are met, unless it is found not to be in the public interest due to one of the criteria enumerated in Section 10.43 (see appendix).

**Citywide Urban Design Objectives [SUMMARIZED]**

Urban Design 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>

Urban Design Objective	Indicators
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, city water supply system, and sewer system.	<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>
New construction should reinforce and enhance the complex urban aspects of Cambridge as it has developed historically.	<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>
Expansion of the inventory of housing in the city is encouraged.	<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>
Enhancement and expansion of open space amenities in the city should be incorporated into new development in the city.	<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>

### Area Planning and Zoning

Special District 4A (SD-4A), along with the adjacent Special District 4 (SD-4), make up a unique part of the city sandwiched between the Concord Turnpike (Route 2), a heavily-trafficked regional roadway, and the Alewife Reservation, an important natural resource area. In the mid-20<sup>th</sup> century, the area became developed with an auto-oriented focus, containing low-to-mid-rise buildings with large expanses of paved parking area, which negatively impacted the Alewife Reservation as an environmental and a community resource.

Focused planning efforts in the 1990s and 2000s resulted in a strategy to encourage redevelopment of those previously developed sites in a way that would reduce impervious area, create additional landscaping near the reservation, and improve pedestrian, bicycle and transit amenities while

supporting a healthy and economically viable mix of land uses. This plan led to the ongoing development of the Cambridge Discovery Park complex (approved by the Planning Board as case PB #198) and the neighboring residential development at 223 Concord Turnpike (PB #254), the former FACES nightclub site. The current proposal is on the last remaining site that reflects the former, more auto-oriented pattern of development dominated by lower-scale buildings and extensive paved parking.

The base zoning requirements and regulations of Office-2 (O-2), which allows residential and non-residential uses by right, are applicable in SD-4A except for a set of specific dimensional requirements including a reduced FAR and reduced height, which can be increased to up to 90 feet with a special permit from the Planning Board. SD-4 and SD-4A were established in 2001 with the stated goals of balancing residential and non-residential development to be consistent with the public interest, protecting regulated wetlands where they occur, maintaining flood storage capacity consistent with federal, state, and local regulations, restoring currently developed areas to their natural state in order to eliminate harmful impacts on sensitive wetland environments, limiting the extent of land covered by impervious surfaces, and minimizing the amount of additional traffic passing through congested intersections on arterial and neighborhood streets. Further enhancement of the parkway character of Concord Turnpike is also intended.

The base zoning is modified by the Parkway Overlay District zoning, which augments the base zoning regulations in designated areas to enhance public safety by reducing visual confusion and haphazard development in order to encourage development that will protect and enhance the use and enjoyment of public open space resources. Development in this district is subject to specific dimensional requirements and design standards, such as standards for front yard setbacks and front façade designs to enhance the open space character of the parkways. The specific requirements can be modified by the Planning Board in order to approve alternate design approaches to meeting that goal.

As with much of the Alewife area, the site is located within the Flood Plain Overlay District, which encompasses areas designated as Flood Hazard Zones A and AE on the Middlesex County Flood Insurance Rate Maps (FIRMs) issued by the Federal Emergency Management Agency (FEMA). Projects within this district require a Planning Board special permit in order to review the measures being taken to meet applicable standards for flood water management.

Overall planning for the Alewife area has progressed over several phases. The urban design study *Alewife Revitalization Plan: Alewife Urban Design Study Phase II* of 1979 and subsequent rezoning of the district established a set of development goals and guidelines for Alewife, but many elements of that plan were unrealized. Nevertheless, this plan is cited as a consideration in reviewing special permits in the Parkway Overlay District as per section 20.63.5. The citywide rezoning of 2001, which was adopted in the same year as the creation of SD-4 and SD-4A, established the Project Review Special Permit requirement and the Citywide Urban Design Objectives. The Concord-Alewife Planning Study of 2006 established goals for mixed-use development and a set of urban design guidelines, but did not include the SD-4 and SD-4A area. Similarly, the “Envision Alewife” process is currently studying the area, with a vision for Alewife to be a sustainable, resilient, mixed-used district with convenient and safe connections within the neighborhood and to the rest of the city, along with amenities that support interaction and

social ties among its residents. However, this process is still ongoing and its focus is largely on the Quadrangle portion of the area near Fresh Pond and Concord Avenue.

## **Comments on Proposal**

### *Overall Consistency with Planning and Zoning*

In the broadest sense, the proposal to develop housing on this site supports the citywide planning goal of adding to the housing supply as well as the area-specific goals of transitioning from auto-oriented uses and sites dominated by paved parking into more compact, pedestrian/bicycle-oriented mixed-use development with improved open space and infrastructure to better manage flood water and other environmental impacts. The proposal also supports the evolving mix of uses in the area, providing housing that complements the existing and planned commercial and hotel development at Cambridge Discovery Park as well as the neighboring residential development.

The scale, density and use of the proposed project are consistent with the SD-4A zoning requirements, with the height of the building allowed to exceed 60 feet (to a maximum of 90 feet) with a special permit from the Planning Board. The proposed buildings have a tallest height of 69 feet. The proposed project will be 324,440 square feet in Gross Floor Area (GFA), which reaches the maximum FAR of 1.95 for residential uses that is allowed by right (when incorporating the “bonus” for inclusionary housing). The Project Review Special Permit requirements (Section 19.20) do apply, as the additional GFA is more than 50,000 square feet. As discussed further in the report from TP&T, the project has completed a Transportation Impact Study (TIS) and proposes public access improvements, transportation demand management (TDM) programs, and other measures to discourage additional automobile trips and encourage a more walkable, bikeable, and transit-oriented neighborhood. An Access Permit from the Massachusetts Department of Transportation (MassDOT) will be required for this project since it is accessed from a state highway.

The project is proposing divergence from multiple dimensional and design requirements in the Parkway Overlay District including height of a fence in the front yard exceeding 4 feet, siting parking area in the front yard of the building, and siting mechanical equipment in the front yard. In addition, the 25-foot front yard setback along Concord Turnpike does not consist entirely of Green Area Open Space. The proposal is meeting other standards of that district, such as the step-back of building heights above 55 feet. Given the practical realities of being located on a busy state highway, it may be reasonable to consider alternative approaches to site design. In granting relief, the Board should consider whether the alternative approaches, given site-specific factors, better serve the objectives of the district, which include protecting and enhancing the use and enjoyment of public open space resources along the parkways. The approaches being taken are discussed in the urban design section below.

Like some other residential developments in the flood plain, the project is designed with some parking above-grade. This approach is generally discouraged in citywide planning by counting above-grade structured parking in FAR and GFA calculations, though the zoning allows relief in cases where flood risk is a factor, as it is here. The applicant has submitted information demonstrating that the proposal meets the criteria for such an exemption. An additional factor in granting relief is that the project is minimizing

the extent of parking provided; in this case, the project is also seeking a special permit to reduce the required number of parking spaces. The proposed parking reduction has also been reviewed by TP&T, who will provide additional comments.

The proposed driveway design will result in two curb cuts on Concord Turnpike, each wider than 30 feet, requiring a special permit from the Board of Zoning Appeal to exceed the maximum allowed curb cut width per Section 6.43.3(b). The Planning Board is allowed to grant this special permit as per Section 10.45. Again, the location along Route 2 is an important site-specific factor to be considered by the Board.

#### *Flood Plain Requirements*

The Flood Plain Overlay District zoning requires technical review by the City Engineer and the Cambridge Conservation Commission to ensure that the development will not diminish the site's ability to accommodate the retention and flow of flood water. Approval is also conditioned on compliance with the Wetlands Protection Act, pursuant to which an Order of Conditions has been issued by the Conservation Commission. The flood water requirements also dovetail with city standards for stormwater management. Per zoning requirements, the Applicant has provided an engineering report along with the Order of Conditions, and a report has been provided by the City Engineer, all demonstrating conformance with applicable standards, subject to ongoing technical review at the construction phase.

#### *Urban Design*

As discussed above, the site has several distinct interfaces, which require careful consideration and design responses. The unfriendly interfaces of Route 2 and the Discovery Park Garage pose several challenges, while the more amenable, open space connections to Discovery Park and the adjacent wetland area are significant opportunities. The project essentially wraps around the Discovery Park Garage in a U-Shape, and is oriented towards Route 2, with a series of internal driveways and north-south connections, with the connection to the east being a key feature of the site design because it forms the primary route to the Alewife Reservation, which connects to the Alewife MBTA Station and regional bikeway system.

#### Pedestrian and bicycle connections

Much attention has been paid to pedestrian and bicycle connections to, from and within the site. A key urban design objective for the site is to ensure that the open space/ multi-use path feels safe and welcoming in recognition that this is likely to be the principal point of access for pedestrians and cyclists. While the details of the connections to Acorn Park Drive are still being resolved, staff is supportive of providing multiple connections wherever possible. Such connections should be in logical locations given the locations of existing crosswalks on Acorn Park Drive and the design of each building.

Pre-application meetings with the Applicant have focused on mitigating the auto-centric forecourt, which, despite being located adjacent to the highway, is something that staff feels warrants careful attention. There is a need to both service the highway-side location, and create a pedestrian-friendly environment. In this regard, additional ways to screen and enhance the appearance of the surface

parking area should be explored. The potential to buffer the proposed sidewalk along Route 2 to create a more pleasant, comfortable and safe public realm is also a design consideration. It is understood that there are limitations due to site access constraints, but opportunities for improvement should continue to be explored where feasible. Furthermore, the pedestrian pathway from the Route 2 sidewalk to the Building 2 lobby should be made more direct.

#### Open space and public realm

Contributions to open space are principally focused on well-landscaped raised courtyards for residents and at-grade landscaped yards on the north and south sides, which incorporate naturalistic design features. The imposition of fire lanes required on both sides of the building appears to impact the viability of providing more useable open space at grade; shared fire lanes would be preferable, but would require agreement from the abutting property owner(s) and acceptance by the Fire Department. The front landscaped area is primarily ornamental and acts as a buffer to the highway. A small play area is proposed to the south of the site, adjacent to the potential Discovery Park connection, which will require more focused design work to ensure that this is an amenable and safe location for children and parents. In addition, opportunities to provide bench seating in locations along the main north-south pedestrian connection and near building entrances should be considered.

#### Building scale and massing

Some of the design issues that have previously been of concern to the Planning Board, such as large parking plinths and the “unrelenting” length of new residential buildings, are pertinent to the review of this case. The proposal addresses these issues by breaking the project into two separate 6-story buildings, with significant articulation of the facades facing Route 2. Building 1 is the larger of the two, and wraps around the parking garage in an L-shape, oriented towards Route 2 and Vox with a double-height pass-through fragmenting the built form. The project incorporates both single and double loaded corridors, which creates variation in form, and enables provision of natural light to some of the long corridor spaces.

#### Building facades and architectural character

In addition to the manipulation of massing described above, the project utilizes several design techniques to respond to the residential context created by Vox, including use of similar materials, finishes, and detailing. While a relationship between the two projects is established, the proposed design establishes its own identity through different colors and finishes, and a playful pattern of projecting bay windows across each façade that faces Route 2. The bays, combined with the bulk control plane step-back, help break down the façade lengths and reduce the perceived scale of the buildings.

Base, middle and top are also clearly expressed, although in some instances the top, while finished differently and separated by a trim band, is co-planar with the façade below, which creates a relatively sheer façade. These locations are both internal to the site and on the south elevation, which should be further studied.

Another important element of the project is the interface with the wetland area and Discovery Park to the south. The addition of balconies to these façades, as well as the location of stairs and lobbies at



either end of each building, ensures that these will be active edges, where a sense of human habitation is evident. These elements have the potential to become more spatially interesting features of the facades to help draw people into the site.

#### Ground floor design

Despite the podium parking, efforts have been made to activate the ground floor on the north and south sides of both buildings, and to wrap around building corners into the site. Most notably, a bowling alley is proposed within Building 2 facing Route 2 as a tribute to the existing Lanes and Games use. It will have high levels of transparency and is expected to create an active edge during both the day and night. Staff feel that the treatment of the Route 2 ground floor creates an attractive and active pedestrian edge, while also addressing the unpleasant highway environs.

Main entrances to each building are located down the internal sidewalk connections, with canopy elements used to draw people around building corners. This is a sensible way to buffer and protect pedestrians from the highway, but could perhaps be made to feel more prominent and welcoming. Staff note that the lobby space for the central wing facing Route 2 does not appear to have a front building entrance at this location.

While the east and west elevations are less sensitive, the podium level is not as well articulated in these locations, particularly where the site abuts the adjacent wetland to the southwest. Each elevation should be evaluated in terms of its visibility from the public realm, and further design details and architectural features could be incorporated accordingly. Similarly, the Building 2 ground floor design to the south, where the pedestrian and bicycle connections will be reinforced, has potential to be more visually interesting by making the bicycle room and associated lobby transparent.

#### Details

Trash and recycling are handled internal to each building, and most mechanical equipment is housed within the parking podium. Due to constraints associated with the flood plain and other site issues, the electrical infrastructure servicing Building 2 is proposed to be located within the front setback area. While not a location normally supported by Cambridge design standards and guidelines, in this instance given the highway environs and other site constraints, the location may be acceptable to the Planning Board as the alternative locations might have greater impacts on the pedestrian realm or usable landscaping. Nevertheless, staff would suggest additional vegetation and some transparency to soften the proposed high, solid fence screening.

Further information regarding the placement of utility meters is also needed. While the location down the side elevations seems appropriate, there are opportunities to ensure that the visual presence of the meters is minimized through careful design, siting and plantings.

Rooftop mechanicals appear sufficiently set back from building facades and are relatively well screened; however, further information regarding the selection of screening materials should be provided for continuing review. Given the size of the roof and the lack of encumbrances, the project is also considered a good candidate for solar photovoltaic panels.

### *Sustainable Design*

In addition to the flood mitigation and stormwater requirements, the project is required to meet the current Green Building Requirements, which require the project to be designed to a LEED Silver level. Staff has reviewed the submitted green building materials with the Applicant's consultant and has found that the project is on track to fulfill the requirements.

As a result of the 2015 Net Zero Action Plan, the City is developing a proposal to increase the sustainable design standards for new buildings, with a particular focus on energy performance and enhanced commissioning. For this particular project, enhanced commissioning would be of particular benefit both to the city's sustainability goals and to the future homeowners of the building. The green building submission for the project does not include the enhanced commissioning credit. Staff recommends that all efforts be made to earn this credit in the building's final design.

The Net Zero Action Plan also recommends that new buildings be "solar ready," meaning that the building includes rooftop space with maximum solar access (i.e., located to the south of any equipment that might cast a shadow) and designed to accommodate the future installation of solar energy equipment such as photovoltaic panels. While this is not required, staff highly recommends pursuing this objective. Also, the City is currently conducting a public process to develop a Climate Change Preparedness Plan to mitigate and adapt to climate change impacts, which includes preparing for increased flooding over time and mitigating urban heat island effects.

### **Continuing Review**

The following is a list of some key issues that staff recommends should be addressed further as the building and site designs advance, through continuing review either by the Planning Board or staff. These would be in addition to measures that may be recommended by TP&T and DPW. Additional comments from the Planning Board are welcome.

- Improved plans and graphics, including floor plans clearly identifying all window and door openings, sharper and more detailed elevations, and larger-scale drawings for each building.
- Perspective views showing the Building 2 south elevation and pedestrian/bicyclist connections from Discovery Park.
- Investigation of further articulation at the top floor where a step-back is not provided.
- Site design details, including screening of the parking area and electrical equipment, final sidewalk and pathway locations, possibility of benches and/or other park furniture, and approach to designing the proposed play area.
- Final selection of façade materials, particularly at the ground floor façades and on screening elements for the rooftop mechanicals.
- Final selection of landscape materials.