Project Review Special Permit – Traffic Impact Findings

- **19.25.1** Traffic Impact Findings. Where a Traffic Study is required as set forth in Section 19.24 (3) above the Planning Board shall grant the special permit only if it finds that the project will have no substantial adverse impact on city traffic within the study area as analyzed in the Traffic Study. Substantial adverse impact on city traffic shall be measured by reference to the traffic impact indicators set forth in Section 19.25.11 below.
 - In areas where the Planning Board determines that area-specific traffic guidelines have been established in the Ordinance, the Board recognizes written agreements between project proponents and the City dealing with transportation mitigation strategies.
- 19.25.11 Traffic Impact Indicators. In determining whether a proposal has substantial adverse impacts on city traffic the Planning Board shall apply the following indicators. When one or more of the indicators is exceeded, it will be indicative of potentially substantial adverse impact on city traffic. In making its findings, however, the Planning Board shall consider the mitigation efforts proposed, their anticipated effectiveness, and other supplemental information that identifies circumstances or actions that will result in a reduction in adverse traffic impacts. Such efforts and actions may include, but are not limited to, transportation demand management plans; roadway, bicycle and pedestrian facilities improvements; measures to reduce traffic on residential streets; and measures undertaken to improve safety for pedestrians and vehicles, particularly at intersections identified in the Traffic Study as having a history of high crash rates.

The indicators are: (1) Project vehicle trip generation weekdays and weekends for a twenty-four hour period and A. M. and P.M. peak vehicle trips generated; (2) Change in level of service at identified signalized intersections; (3) Increased volume of trips on residential streets; (4) Increase of length of vehicle queues at identified signalized intersections; and (5) Lack of sufficient pedestrian and bicycle facilities. The precise numerical values that will be deemed to indicate potentially substantial adverse impact for each of these indicators shall be adopted from time to time by the Planning Board in consultation with the TPTD, published and made available to all applicants.

Project Review Special Permit – Urban Design Findings

19.25.2 Urban Design Findings. The Planning Board shall grant the special permit only if it finds that the project is consistent with the urban design objectives of the city as set forth in Section 19.30. In making that determination the Board may be guided by or make reference to urban design guidelines or planning reports that may have been developed for specific areas of the city and shall apply the standards herein contained in a reasonable manner to nonprofit religious and educational organizations in light of the special circumstances applicable to nonprofit religious and educational activities.

19.30 Citywide Urban Design Objectives

The following urban design objectives are intended to provide guidance to property owners and the general public as to the city's policies with regard to the form and character desirable for new development in the city. It is understood that application of these principles can vary with the context of specific building proposals in ways that, nevertheless, fully respect the policies' intent. It is intended that proponents of projects, and city staff, the Planning Board and the general public, where public review or approval is required, should be open to creative variations from the detailed provisions presented in this Section as long as the core values expressed are being served. A project need not meet all the objectives of this Section 19.30 where this Section serves as the basis for issuance of a special permit. Rather the permit granting authority shall find that on balance the objectives of the city are being served. Nor shall a project subject to special permit review be required to conform to the Required Building and Site Plan Requirements set forth in Section 19.50.

Further indicators of conformance with these policy objectives shall be found in planning documents and plans developed for specific areas of the city or the city as a whole, to the extent that they are not inconsistent with the objectives set forth in this Section 19.30. These documents include the Harvard Square Development Guidelines, the Central Square Action Plan, the Central Square Development Guidelines, the North Massachusetts Avenue Urban Design Guidelines Handbook, the University Park at MIT Urban Design Guidelines, the North Point Policy Plan and Design Guidelines, the Cambridge Institutional Growth Management Plan, the East Cambridge Riverfront Plan, the Eastern Cambridge Plan, the Eastern Cambridge Design Guidelines, the Alewife Revitalization, Alewife Urban Design Study Phase II and its Draft update of 1991, and Toward a Sustainable Future: Cambridge Growth Policy Document.

19.30 Citywide Urban Design Objectives [SUMMARIZED]

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

Special Permits to Increase FAR and Height, Waive Yard Requirements, and Reduce Required Open Space in Alewife Overlay Districts

20.92 *General Purpose.* It is the purpose of this Section 20.90 to augment existing base district zoning regulations to respond to the unique problems and pressures for change in the Alewife area. The regulations contained in this Section 20.90 provide for more careful public scrutiny of future development proposals and provide an opportunity to shape the form and character of that development in ways that will benefit both individual property owners and the general interests of the larger commercial and residential neighborhood as a whole.

These regulations are intended to harness the opportunities presented with the redevelopment of private property in ways that will:

- 1. Encourage forms of development, mix of uses, and range of improvements that will facilitate and encourage walking, biking and transit use and reduce the growth of auto trips in an area already burdened with regional vehicular traffic passing through to other destinations in the metropolitan region;
- 2. Preserve and enhance the capacity to store floodwater, recharge groundwater and manage the collection and disposal of stormwater in ways that add to the quality and visual appeal of the built environment as well as to the quality of the water itself;
- 3. Minimize the negative impact of new development on the adjacent Cambridge Highlands residential neighborhood while introducing new amenities and services that will benefit the residents of that neighborhood;
- 4. Integrate the entire area through the creation of new pedestrian paths, roadways, green spaces and bridges that will facilitate movement within the several Districts and beyond to the Cambridge Highlands, North Cambridge and Neighborhood Nine neighborhoods and the Fresh Pond Reservation;
- 5. Introduce a significant component of residential living and support retail services to enhance the area's appeal for all persons who come to work, shop as well as live within the Districts; and
- 6. Create an identity and sense of place for the Alewife Districts that parallels the development of the historic urban centers that characterize much of Cambridge.

20.95.1 Maximum Floor Area Ratio. The maximum ratio of floor area to the lot area may be increased as set forth below, after the issuance of a special permit from the Planning Board.

- 4. Shopping Center District: 1.25 for non-residential uses; 2.0 for residential uses.
- **20.95.2** Maximum Permitted Height. The maximum height for any building may be increased as set forth below, after the issuance of a special permit from the Planning Board:

- 5. Shopping Center District: 55 feet for all uses. However, these heights are modified further as set forth below:
 - (a) For non-residential uses the height may be increased to 70 feet provided the building floorplate above 55 feet is limited to 15,000 square feet or less and those portions of buildings above 55 feet are separated by at least 50 feet; for residential uses the height may be increased to 85 feet provided the building floorplate above 55 feet is limited to 10,000 square feet or less and those portions of buildings above 55 feet are separated by at least 50 feet.
- **20.95.21** Permitted Height Within the Parkway Overlay District, Section 20.60.

The provision for heights in Section 20.95.2 above shall be subject to the further height limitations of Sections 20.64.2 and 20.69.1 of the Parkway Overlay District.

- 20.64.2 Maximum Building Height. The transition from public open spaces to private development should not be abrupt. Therefore, the maximum height of the principal front wall plane of buildings in the Parkway Overlay District shall be fifty-five (55) feet. Portions of buildings may be allowed to extend to eighty-five (85) feet in height provided that those portions in excess of fifty-five (55) feet are set back from the principal front wall plane at least ten (10) feet and that those portions also set back from one or more sixty (60) degree building bulk control planes.
- **20.69.1** Notwithstanding any other provisions in either the Parkway Overlay District and/or the base zoning district, the maximum height for any building or structure within Concord Avenue Parkway Subdistrict shall not exceed fifty (50) feet.
- 20.63.6 Developments that must obtain a special permit under any section of the Zoning Ordinance shall be exempt from the Development Consultation Procedures mandated by Subsection 20.69. Compliance with the regulations and guidelines for the Parkway Overlay District shall be considered in the context of the special permit review.
- **20.95.2** Waiver of Yard Requirements. The yard requirements of the applicable base or Overlay districts may be reduced or waived as set forth below:
 - 1. Side and rear yard requirements of any applicable base zoning district may be waived, subject to the minimum requirements of Section 20.95.31 above, and front yards may be reduced to a minimum of fifteen (15) feet after the issuance of a special permit from the Planning Board.

- 3. The Planning Board shall consider the following in making its findings:
 - a. The objectives of the Concord-Alewife Plan continue to be met.
 - b. The stormwater management objectives for the area continue to be met both on the site and as the site may be a part of a larger system for managing stormwater runoff
 - c. The reduction or waiver of yard requirements provides for more efficient development of land; encourages or facilitates a more logical pattern of buildings, streets, parks and open space; or enhances the urban, pedestrian character of the area as envisioned in the Concord- Alewife Plan.
- 20.63.7 The development standards specified in Section 20.60 shall apply to all development within the Parkway Overlay District not exempted by subsections 20.63.2, 20.63.3, and 20.63.4. Divergence from these standards may be allowed only by issuance of a special permit from the Planning board as specified in Subsection 10.45. 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.
- **20.64.1** Front Yards. Front yards should be of sufficient size and appropriately landscaped so as to increase public safety and to positively contribute to the visual and environmental quality of the district. Therefore the following standards shall apply:
 - 1. The minimum front yard setback for the principal front wall for any structure shall be twenty-five (25) feet measured from the street line. For corner lots, only the front yard oriented toward Concord Turnpike, Alewife Brook Parkway, Concord Avenue, or Fresh Pond Parkway shall be required to provide this setback. The other front yard shall satisfy the minimum setback specified in Section 5.30 for the base zoning district.
 - Required front yards shall consist entirely of Green Area Open Space as defined in Article 2.000 with the exception of paving necessary for vehicular access. Such paved access area shall be limited to one 24-foot driveway for each one hundred (100) feet of lot frontage or fraction thereof.
 - 3. Front yards shall contain at least one three (3) inch caliper tree for every twenty-five (25) linear feet of street frontage.
 - 4. Front yards may contain fences along front and side lot lines in accordance with the provisions of Subsection 20.65.
- 20.96 At Grade Open Space and Permeable Area Requirements. Each lot shall be required to provide open space located at grade in the quantities set forth below. That open space may be any combination of Green Area, Permeable, Public, Publicly Beneficial, or Private open space as defined in Article 2.000.
 - In addition, each lot shall provide Permeable Area in quantities set forth below. Permeable Area shall be defined as that at-grade surface of a lot that is fully permeable to the infiltration of water to the soil below and whose subsurface permits the percolation of such surface

water to the groundwater without interruption or diversion by any building, pavement, structure, or other manmade element with the exception of incidental utilities.

Nothing in these requirements shall prohibit the same portion of a lot from meeting both the Open Space and the Permeable Area requirements of this Section 20.96

- 20.96 .1 Quantity. The minimum ratio of Open Space and Permeable Area to the total area of the lot shall be fifteen (15) percent for Open Space and twenty-five (25) percent for Permeable Area. The Permeable Area requirement may be reduced as of right with the certification to the Superintendent by the City Engineer that the lot and the development upon it meet the Department of Public Works standards for water quality management and the retention/detention of the difference between the 2-year 24-hour pre-construction runoff hydrograph and the post-construction 25-year 24-hour runoff hydrograph as outlined in the publication Proposed Concord Alewife Area Stormwater Management Guidelines, May 2006, Cambridge Department of Public Works, and upon a finding by the Planning Board pursuant to its review of an application under the provisions of Section 20.93.2, that such reduction advances the relevant purposes of this Section.
- **20.96.3** Reduction in Required Open Space. The Planning Board may allow by Special Permit the reduction of required Open Space, or permit such Open Space to be located other than at grade if the applicant can demonstrate that the urban design and stormwater management objectives as set forth in the Concord-Alewife Plan continue to be met, as for example through the use of innovative stormwater management techniques like green roofs.

Special Permit Provisions to Reduce Setbacks for On Grade Open Parking Facilities

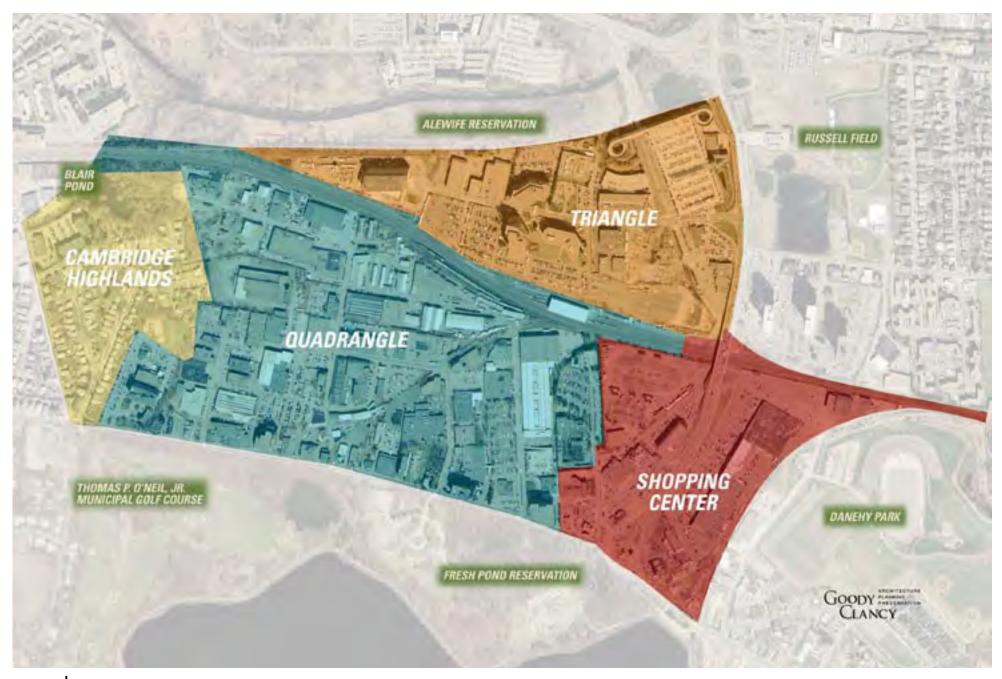
- **6.44.1** Setbacks for on grade open parking facilities shall be provided as follows:
 - (a) No on grade open parking spaces shall be located within ten (10) feet of that portion of a building wall containing windows of habitable or occupiable rooms at basement or first story.

(g) The Board of Zoning Appeal may grant a special permit to allow for modification of the requirements in 6.44.1 (a) if site specific factors favor such modification.

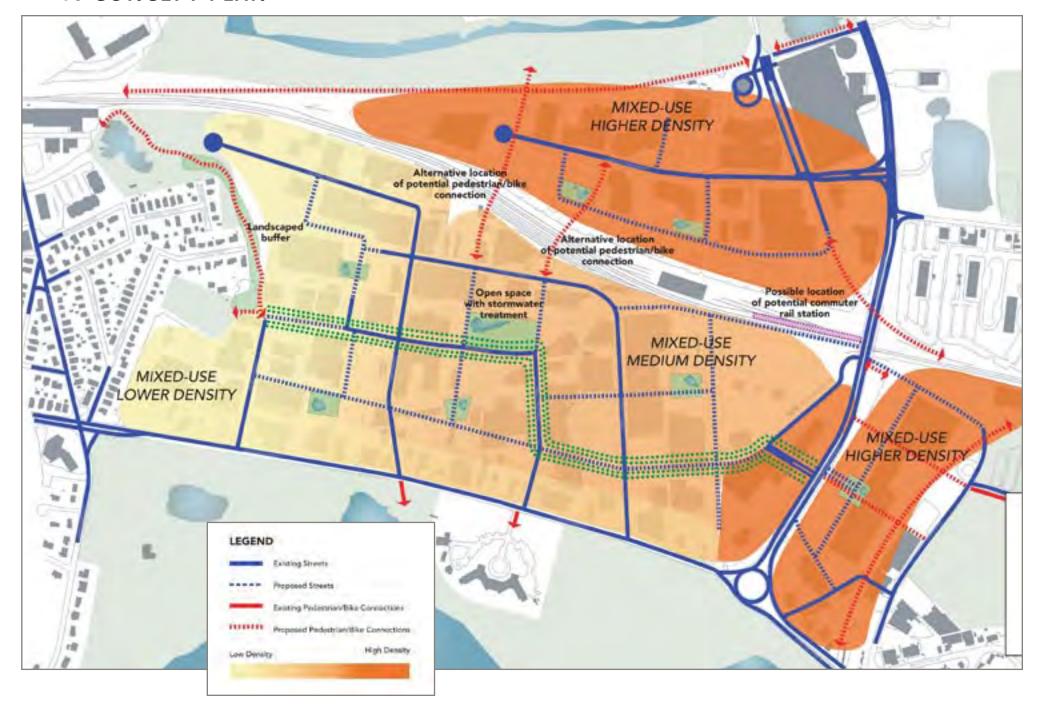
General Criteria for Issuance of a Special Permit

- **10.43** *Criteria.* Special permits will normally be granted where specific provisions of this Ordinance are met, except when particulars of the location or use, not generally true of the district or of the uses permitted in it, would cause granting of such permit to be to the detriment of the public interest because:
 - (a) It appears that requirements of this Ordinance cannot or will not be met, or
 - (b) traffic generated or patterns of access or egress would cause congestion, hazard, or substantial change in established neighborhood character, or
 - (c) the continued operation of or the development of adjacent uses as permitted in the Zoning Ordinance would be adversely affected by the nature of the proposed use, or
 - (d) nuisance or hazard would be created to the detriment of the health, safety and/or welfare of the occupant of the proposed use or the citizens of the City, or
 - (e) for other reasons, the proposed use would impair the integrity of the district or adjoining district, or otherwise derogate from the intent and purpose of this Ordinance, and
 - (f) the new use or building construction is inconsistent with the Urban Design Objectives set forth in Section 19.30.
- 10.45 Any development application requiring a special permit from the Planning Board that contains elements requiring a special permit from the Board of Zoning Appeal may be allowed by the Planning Board within the scope of the Planning Board special permit and shall not require a separate application to the Board of Zoning Appeal.

STUDY AREA-



10 CONCEPT PLAN -



Goals: Areawide

Land Use and Density

- Support mixed-use development throughout the Study Area to create a vibrant urban environment.
- Encourage development that responds to transit proximity by allowing higher densities and taller heights closer to Alewife Station.
- Create incentives for cooperation among property owners to meet study goals, especially stormwater management and infrastructure goals.
- Create urban design guidelines that encourage future development and create a sense of place for Concord-Alewife.
- Create guidelines that encourage future development to be responsive to stormwater, open space, and transportation goals for the Study Area.

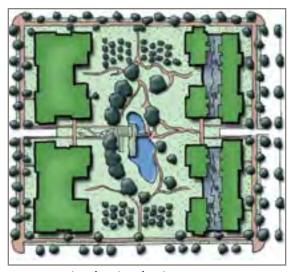
Infrastructure, Stormwater Management, and Open Space

• Encourage creation of some combination of large open spaces, smaller retention ponds, and neighborhood squares; use parks, street plantings, parking lots, and other open space to enhance stormwater retention and treatment.

- Ensure that new development and redevelopment increases permeability and utilizes principles of low-impact development to improve runoff quality and reduce runoff quantity.
- Apply best management practices and low impact development strategies to mitigate stormwater runoff.
- Improve connections between open space resources in and adjacent to the Study Area.

Traffic and Transportation

- Reduce anticipated auto-trip growth as compared to what is allowed under current zoning.
- Reduce auto mode share by employing measures such as:
 - improving access to transit,
 - designing a walkable and bike-friendly community,
 - improving the pedestrian environment, and
 - balancing provision of parking with transportation-demand management (TDM) goals.



Encourage site planning that incorporates low-impact development strategies to improve stormwater management in future development.

GOALS: AREAWIDE [continued] -

- Address safety issues on the periphery of the Study Area as well as within its interior.
- Provide for the possibility of consolidating existing surface parking into a structure as part of overall site improvements.

Housing

- Create a variety of housing opportunities that serve a diverse population of varying incomes, ages, and household sizes.
- Provide a mix of ownership and rental housing at all income levels.









These renderings and photos illustrate the desired future character of the mixed-use area.

Goals: Shopping Center

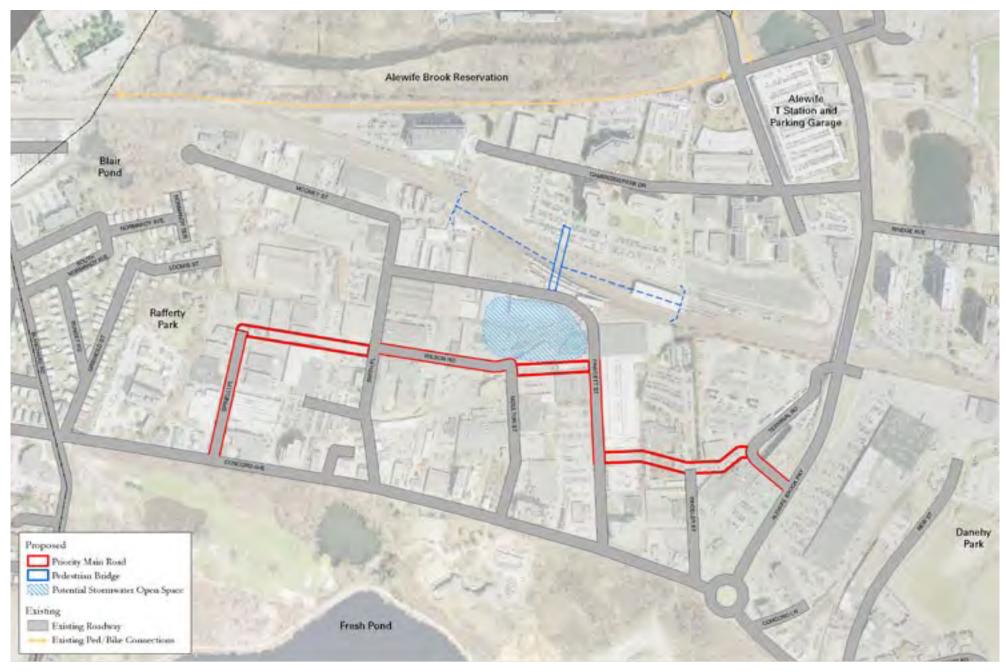
- Introduce a mix of uses, including housing, in the Shopping Center area.
- Encourage small-scale neighborhood retail.
- Use building and site design to create a vibrant, walkable environment.
- Improve circulation within the Shopping Center with a clearly visible roadway system.
- Enhance overall accessibility to and from the Quadrangle, Alewife Station, the Highlands, and North Cambridge via improved and new pedestrian walkways.
- When the Watertown rail line ceases to be active, create a multiuse path along the right of way and connect it to the rich regional path system created by Linear Park, Minuteman Path, and Belmont Path.
- Encourage improvements within the Shopping Center that support housing as well as a mix of uses.







11 PRIORITY INFRASTRUCTURE -



12 ADDITIONAL INFRASTRUCTURE -



APPENDIX

Concord-Alewife Design Guidelines

These urban design guidelines are recommended to guide the character of future development in the Concord-Alewife Study Area.

AREAWIDE GUIDELINES

- Break large blocks into smaller blocks, of sizes similar to those in surrounding Cambridge neighborhoods, to improve circulation and to be compatible with surrounding neighborhoods.
- Vary the design of individual buildings to create an architecturally diverse district.
- Street-level facades should include active uses such as frequent residential entrances, with setbacks for stoops and porches; neighborhood-serving retail including shops, restaurants, cafés; services for the public or for commercial offices such as fitness centers, cafeterias, day care centers; community spaces such as exhibition or meeting spaces; and commercial lobbies and front entrances.
- Encourage awnings/canopies to provide shelter and enliven ground-floor façades.

- Design residential buildings with individual units and front doors facing street, including row-house units on the lower levels of multifamily residences.
- Encourage sustainable and green building design and site planning.
- Use low-impact-development principles in building and site design as a way to meet city, state, and federal stormwater requirements. Examples of low-impact development strategies include green roofs, bioswales, filter strips, and retention/detention ponds. For additional detail refer to "Low Impact Development in Cambridge: Concepts and Criteria" (currently under development by the DPW). As an additional benefit, reducing impermeable surfaces in the area would lessen the urban heat-island effect.
- Use site design that preserves future rights-of-way identified in the Circulation Concept Plan.
- Improve existing streets to meet City standards, including streetscape improvements.

- Strengthen bicycle and pedestrian links to adjacent areas. Provide links that strengthen physical and visual connections to open space resources.
- Screen service areas from major streets.
- Parking below grade is preferred. If abovegrade parking is to be provided, design it so it is not visible from nearby residential neighborhoods, from public streets, or from pathways. Line above-ground structured parking with active uses (shops, cafés, lobbies) along important public ways; use parking structures to provide visual and acoustical screening between the railroad tracks and the rest of the area.
- Design and locate lighting and signage to support the district's pedestrian-friendly quality.

LOCATION-SPECIFIC GUIDELINES

SHOPPING CENTER (AOD-5)

• Provide pedestrian links to create strong physical and visual connections to Danehy Park.

CONCORD-ALEWIFE DESIGN GUIDELINES

- Improve the pedestrian connection to Alewife Station and to North Cambridge.
- Create a new street network, including a north-south main street.
- Ensure that a significant number of entrances for building(s) face Alewife Brook Parkway and/or new main street.
- Create a strong pedestrian link across the Alewife Brook Parkway to connect the east and west parts of the Study Area.
- Create building height/façade setbacks between 55' and 85'.

TRIANGLE (AOD-6)

- Create a pedestrian-friendly environment along CambridgePark Drive.
- Provide small setbacks (5' to 15') from the right-of-way for café seating, benches, or small open spaces.
- Screen service areas from CambridgePark Drive.
- Provide pedestrian links that strengthen physical connections to Alewife Reservation, consistent with its master plan.
- Create building height/façade setbacks between 85' and 105'.

• Locate new development to preserve right-of-way for future crossing of the railroad tracks to connect the Triangle and Quadrangle.

QUADRANGLE (AOD-1, 2, 3, 4)

- Scale and use in areas adjacent to Cambridge Highlands should be compatible with the residential neighborhood and serve as a transition between the Highlands and the rest of the Quadrangle.
- Use streetscape and other improvements to define Wilson Road as part of a major east-west connection through the Quadrangle.
- Develop a vegetated buffer between the Highlands and Quadrangle that also provides a north/south link to adjacent open spaces.
- Create an open-space system characterized by parks and green spaces of varying scales and uses.
- Use pooled resources to create a new central public open space in the Quadrangle that incorporates stormwater management.

- Locate active uses around the future open space to create a safe and active environment throughout the day and evening.
- Provide pedestrian links to strengthen physical connections to the shopping center.
- Create building height/façade setbacks between 85' and 105'.
- Create a consistent edge along Concord Avenue, with a combination of residential and retail uses.
- Use streetscape and other improvements to define Smith Place and Spinelli Place as major north-south entries into the Quadrangle, and to establish Concord Avenue as a major gateway.
- Provide pedestrian links to strengthen connections to Fresh Pond Reservation. consistent with the Fresh Pond Master Plan.
- · Strengthen the streetscape and other improvements to define Concord Avenue.
- Locate new development to allow for a future above-grade crossing between the Triangle and the Quadrangle.