



City of Cambridge Executive Department

May 22, 2023

To the Honorable, the City Council:

Please find the attached response from Assistant City Manager for Community Development Iram Farooq, regarding the proposed Alewife Overlay District: Quadrangle (AOD-Q) Zoning Petition and Design Guidelines.

The recommended actions are to accept the proposed zoning amendments as a City Council Zoning Petition, and to refer the Petition to the Planning Board and Ordinance Committee for hearings.

Very truly yours,

Yi-An Huang City Manager

Attachment(s)





CITY OF CAMBRIDGE

Community Development Department

IRAM FAROOQ

Assistant City Manager for Community Development

City Council To:

From: Iram Faroog, Assistant City Manager for Community

Development

SANDRA CLARKE Deputy Director Chief of Administration Date:

May 17, 2023

Proposed Alewife Overlay District: Quadrangle (AOD-Q) Zoning Subject:

Petition & Design Guidelines

KHALIL MOGASSABI

Deputy Director Chief Planner

To the Honorable, the City Council,

We are pleased to transmit the attached Alewife Overlay District: Quadrangle (AOD-Q) Zoning Petition and updated Alewife Design Guidelines for the Council's consideration.

Approximately one year ago, the Council adopted a development moratorium on new office and laboratory uses in Alewife Overlay Districts 1-5 until December 31, 2023, or until the time of enactment of new zoning for the Quadrangle. The purpose of the moratorium was to create and enact amended requirements for the Alewife Overlay Districts in consultation with stakeholders of the Alewife Overlay Districts and surrounding neighborhoods, based on development plans and guidelines published by the City.

Soon thereafter, the City formed the Alewife Zoning Working Group (the "Working Group") consisting of residents, representatives of the business community, local institutions, property owners, and developers, led by staff from the Community Planning and Zoning and Development Divisions of the Community Development Department, to meet regularly and develop an urban design framework and zoning recommendations for the Quadrangle and provide these recommendations back to the City Council for its consideration.

The Working Group met nine (9) times since June 2022 to discuss the recommendations from the Envision Alewife District Plan (2019), offer updates and refinements based on current development conditions in the Quad, and build strong consensus around a unified vision for the neighborhood. The Working Group's primary planning objectives for the future of the Quad included:

- Create a balanced, vibrant, and mixed-use district;
- Increase housing supply, including affordable housing;
- Promote uses which help to establish and support a self-sustaining neighborhood;

- Prioritize the early delivery of critical infrastructure to support the district; and
- Transition and scale development appropriately to existing adjacent neighborhoods.

Today, that new vision has been translated into an actionable development strategy in the form of a new Alewife Overlay Quadrangle district zoning ordinance and accompanying updated Alewife Design Guidelines. The attached package contains two primary parts:

- A zoning petition to replace the current Alewife Overlay Districts 1-4 with a new Alewife Overlay District: Quadrangle (AOD-Q). The zoning petition consists of the zoning amendments necessary to effectuate the change, as well as accompanying maps which identify certain height subdistricts and a future street map which implement a form-based approach to front yard setbacks per the Alewife District Plan recommendations.
- An updated Alewife Design Guidelines document which will ensure new development in the Quad is reinforcing the planning objectives of the Working Group and results in a distinct, high-quality urban realm.

We want to sincerely thank the Working Group members, members of the broader public, and other critical stakeholders who made this vision come to life. We look forward to continuing the conversation with the City Council.

The Zoning Ordinance of the City of Cambridge Shall Be Amended as Follows: Insert the Following Section 20.1100: Alewife Overlay District – Quadrangle

20.1100.1 Establishment and Scope.

- **1.1.** There is hereby established the Alewife Overlay District Quadrangle ("AOD-Q") District, which shall be governed by the regulations and procedures specified in this Section 20.1100.
- **1.2.** The AOD-Q District shall be an Overlay District established on the Zoning Map of the City of Cambridge by Section 3.20.

20.1100.2 General Provisions.

- **2.1 Purpose.** It is the purpose of the AOD-Q District to promote a development pattern that implements the vision and goals of the Envision Alewife District Plan (2019) and the Principles of the Alewife Zoning Working Group (2023), referred to herein as the "AOD-Q Principles." In summary, this Section is intended to achieve the following objectives:
 - (a) Support the creation of a mixed-use environment with a balance of residential and non-residential uses.
 - (b) Incorporate a variety of neighborhood-supporting uses that provide retail, services, recreation, culture, and employment opportunities to residents, employees, and visitors to the area, and help to activate the ground stories of buildings.
 - (c) Promote the development of significant public infrastructure and open space in the District to improve physical access and connectivity, and to transform the area from an auto-oriented environment to one that prioritizes transit, biking and walking.
 - (d) Address area-specific environmental concerns by promoting resilience to future flooding, reducing urban heat island effects, and managing stormwater with a focus on green infrastructure and mitigating impacts on public sewage and drainage systems.
 - (e) Maintain and preserve a regulated transition between large
 - (f) r-scale development in the district and nearby smaller-scale residential neighborhoods and communities.
 - (g) Review and permit redevelopment through a process that encourages comprehensive, long-range planning and urban design while providing sufficient flexibility to property owners to adapt to changing conditions over time.

20.1100.3 Applicability.

3.1 General Applicability. The requirements of the base zoning district shall apply to development in the AOD-Q District except as modified by this Section 20.1100. Where this Section 20.1100 sets forth a provision that deviates from the provisions of the base

- zoning district, the provisions of this Section 20.1100 shall control. Specifically, the provisions of the Parkway Overlay District in Section 20.60 shall not apply to development under this Article.
- 3.2 Special Permits. The provisions of this Section 20.1100 shall apply as-of-right except where a special permit is indicated. In the AOD-Q District, the Planning Board shall be the special permit granting authority for any special permit required by this Section 20.1100 or by other provisions in this Zoning Ordinance. A special permit shall be granted or denied pursuant to the procedures set forth in Section 20.1100.8 below, except in the case of a PUD special permit as set forth below.
- Planned Unit Development (PUD) District. The AOD-Q District shall be considered a PUD district. Where indicated, some provisions of this Section 20.1100 are applicable only to a PUD Development Proposal, which may be permitted pursuant to the requirements and procedures of Article 12.000 of this Zoning Ordinance and the additional PUD provisions set forth in this Section 20.1100. The Planning Board may grant any special permits required for a PUD Development Proposal through a single PUD approval process.
- 3.3.1 Required PUD Special Permit Review. If a development proposal involves the construction of 250,000 or more square feet of Gross Floor Area (GFA) for non-residential use, then a special permit may only be granted pursuant to the PUD procedures. The aforementioned 250,000 square-foot threshold shall apply cumulatively to all development that occurs on contiguous or non-contiguous lots within the AOD-Q District that are in common ownership or under common control at any time within five (5) years following the first date of application for any special or building permit for development on the lot or lots, beginning on the date of adoption of this Section 20.1100.
- **3.3.2 Elective PUD Special Permit Review.** Where the PUD procedures are not required by the preceding paragraph, a developer may choose to apply for a PUD special permit if the standards for a PUD set forth in this Section 20.1100 and in Article 12.000 are met.
- **3.4 Transfer of Development Rights.** The transfer of permitted GFA from a Donating Lot to a Receiving Lot shall be permitted by special permit within the AOD-Q District, subject to the general provisions of Section 21.10. Any lot within the AOD-Q District may be permitted as either a Donating Lot or a Receiving Lot.
- 3.5 Subdivision of Lots. Where it is proposed to subdivide a lot (after approval by special permit has been granted by the Planning Board for development on that lot) in order to convey to the City of Cambridge an easement or fee interest in property for the purpose of creation of a city or private street, a pedestrian pathway, a pedestrian bridge, bicycle path, open space or park, or other public use as identified in the special permit per the provisions set forth below in Section 20.1100.5.1.4.4, such subdivision shall be

permitted, notwithstanding any definition of lot or street in this Ordinance or any limitation in applicable base or overlay districts with regard to minimum lot size, required yards or other dimensional, open space or other regulatory requirement or limitation. All dimensional requirements of the Zoning Ordinance and this Section 20.1100 shall be satisfied by the lot or development parcel as a whole as defined in the application for a special permit (the "Development Parcel") and shall be waived with regard to any subsequent subdivided lots. No development approved by special permit in this Section 20.1100 shall be subsequently rendered non-conforming with regard to the dimensional requirements applicable to it as a result of a subdivision of land to create an approved public or private street, park, or pedestrian, bicycle or other pathway, or other public use as indicated above.

20.1100.4 Use Regulations

- **4.1** Additional Permitted Uses. The following uses, as they are listed in Article 4.000 and otherwise defined in this Zoning Ordinance, shall be permitted as-of-right in addition to uses permitted as-of-right in the base district:
 - (a) Residential Uses: All uses in Section 4.31.d through 4.31.g.
 - (b) Education uses: All Subsections of Section 4.33.b.
 - (c) Civic & Institutional uses: All uses listed in Section 4.33.d through 4.33.h.
 - (d) Retail & Consumer Service Uses: All uses listed in Section 4.35.
 - (e) Outdoor Retail or Consumer Service Establishments: Open-Lot Retail Sales Establishment (Section 4.36.a), Outdoor Entertainment and Recreation Facility (4.36.d), and Temporary Outdoor Retail or Consumer Service Use (Section 4.36.j).
 - (f) Light Industry, Wholesale Business and Storage Uses: Manufacturing, processing, assembly and packaging uses (All subsections of 4.37.b), Bottling of beverages (4.37.c), Printing, binding, publishing and related arts and trades (4.37.f), and Food Commissary (4.37.i).
- **4.2 Limited Uses**. A Distribution Center, Parcel Delivery Center, or Delivery Warehouse Section 4.37 (d) shall be permitted where the base district is the Industry B-2 district only after the granting of a special permit from the Planning Board.
- 4.3 Uses Allowed by Special Permit.
- **4.3.1 Parking as a Principal Use.** Where not otherwise permitted, parking as a principal use may be permitted by the Planning Board as a component of a PUD if provided in accordance with Section 20.1100.5.5.4 below.
- **4.3.2 Other Uses.** Any other use that may be permitted as-of-right or by special permit in a Business B zoning district may be permitted by special permit from the Planning Board upon determining that such use is consistent with the goals and objectives of the AOD-Q district and conforms to the special permit criteria set forth in Section 20.1100.8.4.3.
- 4.4 Neighborhood Uses.

- 4.4.1 Intent of Neighborhood Uses. It is the intent of this Section to promote and incentivize the inclusion of a diversity of uses in the AOD-Q District that help to reinforce the district as a self-sufficient neighborhood and complement the workspaces and living spaces that are expected to be the predominant uses. Such uses include retail and other personal or professional services, educational, cultural, and recreational amenities, and diverse employment opportunities serving residents of different backgrounds. Such uses are particularly encouraged on the Ground Stories of buildings and in locations that are planned to support and encourage an active public realm.
- **4.4.2 List of Neighborhood Uses.** For the purposes of this Section 20.1100.4.4.2, "Neighborhood Uses" shall mean any of the following range of uses as they are listed in Article 4.000 and otherwise defined in this Zoning Ordinance:
 - (a) Educational Uses (Section 4.33.b).
 - (b) Community Center (Section 4.33.e.2).
 - (c) Healthcare facilities. (Section 4.33.d.1, 4.33.d.4 through Section 4.33.d.6).
 - (d) Professional office uses (Section 4.34.a through Section 4.34.c).
 - (e) Private library, museum or noncommercial gallery (Section 4.33.h.2).
 - (f) Local Government uses (All uses in Section 4.33.f).
 - (g) Retail or Consumer Service Establishments (All uses in Section 4.35).
 - (h) Open-Lot Retail Sales Establishment (Section 4.36.a).
 - (i) Outdoor Entertainment and Recreation Facility (Section 4.36.d).
 - (j) Temporary Outdoor or Consumer Service Use (Section 4.36.j).
 - (k) Food Commissary (Section 4.37.i).
- 4.4.3 Other Designated Uses. Upon issuing a special permit or amendment to a special permit, the Planning Board may designate a specific use, not otherwise listed above, as a Neighborhood Use in the context of a specific development that is the subject of a special permit or amendment if it is found to meet the intent of this Section. Such designation and any limitations on approval shall be set forth in the conditions of the special permit.
- 4.4.4 Location of Neighborhood Uses. A Neighborhood Use, where provided, shall generally be located at the Ground Story with one or more entrance(s) providing direct access from a public sidewalk or Open Space and not requiring passage through any portion of the building not occupied by that Neighborhood Use. In granting a special permit or amendment, the Planning Board may approve modifications to the standards of this Paragraph upon finding that an alternative location better serves the intent of this Section for the intended use.
- **4.5 Minimum Neighborhood Uses in a PUD.** Where a proposal is seeking a PUD special permit, the area devoted to Neighborhood Uses (which shall include any area that is

exempt from the calculation of Gross Floor Area (GFA), as set forth below) shall equal at least 3% of the total non-residential GFA in the PUD.

20.1100.5 Development Standards

- **5.1 GFA and FAR.** A development may exceed the Gross Floor Area (GFA) and Floor Area Ratio (FAR) limitations of the base zoning district by special permit from the Planning Board as set forth below.
- **5.1.1 FAR Limitations.** The limits on FAR subject to special permit approval are set forth in the table below.
 - (a) The figures in the "Non-residential FAR" row limit the non-residential component of a development proposal, which means the GFA on the lot or Development Parcel devoted to non-residential use divided by the total land area of the lot or Development Parcel.
 - (b) The figures in the "Total FAR" row limit the total mixed-use FAR of a development proposal, which means the GFA on the lot or Development Parcel devoted to the sum of both residential and non-residential uses divided by the total land area of the lot or Development Parcel. For a residential or mixed-use development subject to the Inclusionary Housing Requirements in Section 11.200 of this Zoning Ordinance, the GFA increase for residential uses set forth in Section 11.203.5 shall be permitted.
 - (c) The figures in the "Special Permit" column limit the FARs allowable by Planning Board special permit, subject to the special permit criteria applicable in the AOD-Q District, but excluding PUD special permits.
 - (d) The figures in the "PUD" column limit the FARs allowable by PUD special permit from the Planning Board for a Development Proposal that meets the PUD requirements applicable in the AOD-Q District.
 - (e) The figures in the "Infrastructure PUD" column limit the FARs allowable by PUD special permit from the Planning Board for a Development Proposal that meets the PUD requirements applicable in the AOD-Q District, including the provision of a Major Infrastructure component as set forth in Section 20.1100.7.3.

Table of FAR Limits by Use.

	Special Permit	PUD	Infrastructure PUD
Non-residential FAR	1.00	1.25	1.50
Total FAR	4.00	4.00	4.00

5.1.2 Counting of Conveyed Land. Where it is proposed to subdivide a lot or Development Parcel (after approval by special permit has been granted by the Planning Board for

development on that lot) in order to convey to the City of Cambridge an easement or fee interest in property for the purpose of creation of a city or private street, a pedestrian pathway, a pedestrian bridge, bicycle path, open space or park, or other public use as identified in the special permit and per Section 4.1.5.1 of this Ordinance, then the entire area of the lot or Development Parcel, inclusive of the land to be conveyed, shall be counted when applying FAR limitations.

- **5.1.3** Required Residential GFA. Development seeking a special permit to increase non-residential FAR in accordance with Section 20.1100.5.1.1 above shall devote a minimum of 40% of the total GFA on the lot or Development Parcel to residential uses as listed in Sections 4.31 a. through h. of this Zoning Ordinance, exclusive of any exempt GFA granted as part of an approved Final Development Plan.
- **5.1.3.1 Timing of Required Residential GFA.** The required residential GFA may be provided on any portion of the Development Parcel and may be provided during any phase of a multi-phase development, provided, however, that construction of the required residential GFA shall have commenced prior to or simultaneous with the issuance of a final certificate of occupancy for more than sixty percent (60%) of non-residential GFA on the lot or Development Parcel.
- **5.1.3.2 Housing Fund Contribution.** In cases where an owner demonstrates that developing the required residential component of a special permit is infeasible, a development seeking a special permit, but not a PUD special permit, to increase non-residential FAR in accordance with Section 20.1100.5.1.1 above may make a contribution to the City's Affordable Housing Trust in place of constructing the required residential GFA. The contribution rate shall be \$90 per square foot of required residential GFA that is not constructed, and shall be subject to annual escalation equal to that identified in Section 11.202.b of this Ordinance, and shall be made prior to the issuance of a building permit for the project.
- **5.1.4 GFA Exemptions**. Upon granting a special permit, the Planning Board may exempt floor area devoted to the following uses and meeting the criteria below from the calculation of GFA on the lot or Development Parcel. Floor area exempt from GFA calculations shall not be counted for the purpose of applying any requirements set forth in this Section 20.1100 or elsewhere in the Zoning Ordinance.

5.1.4.1 Uses Eligible for Exemption.

- (a) Floor area devoted to public infrastructure and facilities supportive of the intent of the AOD-Q district, including but not limited to transit stations, municipal facilities, public pedestrian/bicycle connections, and any building or structure owned, leased, or operated by the City of Cambridge for public use.
- (b) Neighborhood Uses, in accordance with the provisions of Section 20.1100.4.4 above.

- (c) Structured parking provided in accordance with the standards of Section 20.1100.5.5.4 below.
- (d) Light Industry, Wholesale Business and Storage Uses: Manufacturing, processing, assembly and packaging uses (All subsections of 4.37.b), Bottling of beverages (Section 4.37.c), Printing, binding, publishing and related arts and trades (Section 4.37.f), and Food Commissary (Section 4.37.i).
- **5.1.4.2 Criteria for Exemption.** In granting exemptions from GFA calculations, the Planning Board shall find that the uses to be exempted are located and designed in a way to ensure long-term adherence to the purpose of the AOD-Q District. The special permit shall include a plan clearly depicting the areas to be exempt and the conditions shall set forth the range of uses permitted to occupy such areas in the future to ensure ongoing compliance. Any deviation from the range of uses permitted to occupy such areas as set forth in the special permit conditions shall require an amendment to the special permit.
- **5.1.4.3 Additional GFA.** Upon granting a special permit, the Planning Board may permit additional GFA on a lot or Development Parcel exceeding the FAR limitations of Section 20.1100.5.1.1 above for the reasons set forth below. Additional GFA may be devoted to non-residential or residential uses, but shall be counted as GFA for the purpose of compliance with other applicable requirements set forth in this Section 20.1100 or elsewhere in the Zoning Ordinance, including but not limited to residential GFA requirements and fund contributions.
- **5.1.4.4 Additional GFA for Conveyance of Land.** Where land is conveyed to the City of Cambridge by fee or easement (in a form acceptable to the City) for use as public street segments, pedestrian and bicycle paths, public open space, or other public use consistent with the AOD-Q Principles or otherwise identified by the Planning Board to serve a public purpose consistent with the intent of the AOD-Q District, the permissible GFA on the lot or Development Parcel can be increased by an amount equal to 1.5 times the area of the land conveyed for such purpose.
- 5.1.4.5 Additional GFA Bonus for Light Industrial Uses. Where floor area is dedicated to Light Industry, Wholesale Business and Storage Uses: Manufacturing, processing, assembly and packaging uses (All subsections of 4.37.b), Bottling of beverages (Section 4.37.c), Printing, binding, publishing and related arts and trades (Section 4.37.f), and Food Commissary (Section 4.37.i), the permissible GFA on the lot or Development Parcel may be increased by an amount equal to 2.0 times the amount of floor area dedicated to such uses as a bonus. The special permit shall include a plan clearly depicting the areas of Light Industrial uses to which the bonus is attributed, and the conditions shall set

forth the range of uses permitted to occupy such areas in the future to ensure ongoing compliance. Any deviation from the range of uses permitted to occupy such areas as set forth in the special permit conditions shall require an amendment to the special permit.

- 5.1.4.6 Additional GFA Bonus for Neighborhood Uses. Where floor area is dedicated to Neighborhood Uses (whether or not such uses are exempt from GFA calculations), the permissible GFA on the lot or Development Parcel may be increased by an equivalent amount of floor area as a bonus. The special permit shall include a plan clearly depicting the areas of Neighborhood Uses to which the bonus is attributed, and the conditions shall set forth the range of uses permitted to occupy such areas in the future to ensure ongoing compliance. Any deviation from the range of uses permitted to occupy such areas as set forth in the special permit conditions shall require an amendment to the special permit.
- **5.2 Building Height.** The height regulations of the base zoning district, including any general height exceptions set forth in Section 5.23 of this Zoning Ordinance, shall apply. However, a building may exceed the building height limitations of the base zoning district by special permit from the Planning Board as set forth below.
- **5.2.1 Height Zones.** The following Height Zones shall be established in the AOD-Q District as depicted on the Alewife Subdistrict Height Map and Boundary Descriptions, attached to and made a part of this Zoning Ordinance, for the purpose of regulating building heights allowable by special permit:
 - (a) AOD-Q North Height Zone
 - (b) AOD-Q South Height Zone
 - (c) AOD-Q West Height Zone
- **5.2.2 Tables of Height Limitations.** The building heights allowable by special permit in each Height Zone are set forth in the tables below. Building heights shall be limited by both the number of Stories Above Grade and by the maximum height above Grade in feet, subject to the general height exceptions in Section 5.23.
 - (a) The figures in the "Non-residential Heights Table" table limit the height of any portion of a building containing a non-residential use.
 - (b) The figures in the "Residential Heights Table" table limit the height of any portion of a building containing a residential use.

- (c) The figures in the "Special Permit" columns limit the building heights allowable by Planning Board special permit subject to the special permit criteria applicable in the AOD-Q District, but excluding PUD special permits.
- (d) The figures in the "PUD" columns limit the building heights allowable by PUD special permit from the Planning Board for a development proposal that meets the PUD requirements applicable in the AOD-Q District.
- (e) The figures in the "Infrastructure PUD" columns limit the building heights allowable by PUD special permit from the Planning Board for a development proposal that meets the PUD requirements applicable in the AOD-Q District, including the provision of a Major Infrastructure component as set forth in Section 20.1100.7.3.

Non-residential Heights Table

Height Subdistrict	Special Permit	PUD	Infrastructure PUD
AOD-Q North	4 stories above grade and 65 feet	5 stories above grade and 80 feet	8 stories above grade and 125 feet
AOD-Q South	4 stories above grade and 65 feet	5 stories above grade and 80 feet	6 stories above grade and 95 feet
AOD-Q West	3 stories above grade and 50 feet	3 stories above grade and 50 feet	3 stories above grade and 50 feet

Residential Heights Table

Height Subdistrict	Special Permit, PUD or Infrastructure PUD	
AOD-Q North	12 stories above grade and 145 feet	
AOD-Q South	12 stories above grade and 145 feet	
AOD-Q West	6 stories above grade and 75 feet	

- **5.2.3 Height Variations.** The height limitations set forth in the tables above shall be modified as set forth below.
- **5.2.4 Neighborhood Transition.** For any portion of a building within 100 feet of a residential zoning district, the maximum height shall be 35 feet. For any portion of a building more than 100 feet from a residential zoning district boundary but within 200 feet of that district boundary, the maximum height shall be 45 feet.
- **5.2.5** Additional Height for Large Land Conveyance. As part of a PUD special permit, any buildings or portions of a building in the AOD-Q North or AOD-Q South height zones can

exceed the allowable heights set forth in the tables above, not to exceed one additional story and 15 additional feet, to accommodate bonus GFA from a lot of at least one (1) acre in size that is conveyed to the City of Cambridge per the provisions of this Section. The specific building sites for which additional height is sought shall be included in the required submittal materials for a Development Proposal for a PUD Special Permit as set forth in Section 20.1100.8.5.5.3 of this Article.

- **5.3 Minimum Lot Area per Dwelling Unit.** For a development containing residential uses seeking a Planning Board special permit under this Section 20.1100, there shall be no minimum lot area per dwelling unit requirement.
- **5.4 Open Space.** The standards set forth below shall apply in place of the standards of the base zoning district.
- **5.4.1 Total Open Space.** The minimum ratio of Open Space to the total area of the lot or Development Parcel shall be twenty (20) percent and shall consist of any combination of Green Area, Permeable, Public, Publicly Beneficial or Private Open Space. The Open Space shall be located at grade.
- 5.4.2 Public or Publicly Beneficial Open Space. Development seeing a special permit to increase FAR, GFA, or building height under this Section 20.1100 shall provide any combination of Public Open Space or Publicly Beneficial Open Space on the lot or Development Parcel as set forth below. Such required Public Open Space or Publicly Beneficial Open Space shall be generally accessible to the public for the purposes for which the space is designed and approved by the Planning Board.
 - (a) For development seeking a special permit, excluding PUD special permits, at least twenty-five (25) percent of the required open space provided on the lot shall be any combination of Public Open Space or Publicly Beneficial Open Space. The intent of such Open Space shall be to provide small-scale neighborhood amenities such as pocket parks, plazas, playgrounds, or similar uses subject to Planning Board approval.
 - (b) For development seeking a PUD Special Permit, at least 20 percent of the land area of the Development Parcel shall be any combination of Public Open Space or Publicly Beneficial Open Space. The intent of such open space shall be to serve district-wide open space needs identified in the Alewife District Plan, such as pedestrian/bicycle open space connections, community parks, and green infrastructure.
- **5.4.3 Permeable Area.** The minimum ratio of Permeable Area to the total area of the lot or Development Parcel shall be 25 percent. For the purpose of this Section 20.1100.5.4.3, Permeable Area shall mean 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.
- **5.4.4. Conveyed Land.** For the purpose of applying the Open Space and Permeable Area requirements of this Section 20.1100.5.4, land that is conveyed to a public entity for use as Public Open Space per the provisions of Section 20.1100.5.1.4.4, shall be counted as a component of the qualifying Open Space and Permeable Area, where applicable, and as a component of the total area of the lot or Development Parcel. However, land that is conveyed for another public purpose, including but not limited to public streets (including associated sidewalks and bicycle infrastructure), public transportation infrastructure, or municipal facilities, shall not be counted as Open Space or Permeable Area and shall be excluded from the total area of the lot or Development Parcel for the purpose of compliance with this Section 20.1100.5.4.
- **5.4.5** Combined or Pooled Open Space. Upon granting a special permit, the Planning Board may allow owners of adjacent or non-adjacent lots or Development Parcels in the AOD-Q District to collectively meet applicable requirements for Open Space or Permeable Area, provided that the lots or Development Parcels are held in common ownership or the Planning Board finds that there is a binding agreement among property owners recorded on the title of both parcels at the Registry of Deeds that the requirements for all lots or Development Parcels will be met on an ongoing basis. The Planning Board shall also find that the purpose of the AOD-Q District is advanced by providing combined or pooled Open Space or Permeable Area, and shall place conditions on special permits applicable to all component lots or Development Parcels indicating the amount of Open Space and Permeable Area required on each. Land adjacent to, but outside of, a Development Parcel may be used to satisfy Open Space and Permeable Area requirements as part of the delivery of a Major Infrastructure Component, if such land is required by the terms of the special permit to be maintained as Public Open Space by a perpetual easement or similar legal mechanism as required by the Planning Board. Any owners' failure to maintain ownership or a binding agreement relative to the combined or pooled open space shall require an amendment to the special permit and may constitute a violation of the Zoning Ordinance.
- **5.5 Building and Site Design Standards.** The following standards shall generally apply to new buildings in the district. Pre-existing buildings that do not conform to the following standards shall follow the requirements and procedures as set forth in Section 8.10 of this Ordinance.
- **5.5.1 Modifications.** Upon granting a special permit, the Planning Board may approve modifications to the standards set forth below that are found to serve the purpose and

intent of the district in a way that better responds to site-specific conditions. Approved modifications shall be specifically enumerated in the special permit decision.

5.5.2 Street Frontage.

- **5.5.2.1 Front Yards.** The front yard setback of the base zoning district shall generally be permitted except as set forth below.
- **5.5.2.2 Front Yard Setback for Parcels with Frontage on Concord Avenue.** The minimum front yard setback for any development with frontage along Concord Avenue shall be twenty-five (25) feet measured from the street line. For corner lots, only the front yard oriented toward Concord Avenue shall be required to provide this setback.
- 5.5.2.3 Build-to Zone. In order to accomplish the goals of promoting a consistent block pattern and street wall within the AOD-Q District, for development seeking a Special Permit under this Article, the principal front façades of buildings shall be located within a "Build-to Zone" that is established as a range of distances set back from a present or future street centerline as depicted on the map attached hereto and made part of this Ordinance. The Build-to Zone shall serve as the minimum front setback in place of the front yard requirements of the base zoning district, which shall not apply. For development seeking a special permit that has frontage on a street for which a build-to zone has not been depicted, then the minimum front yard standards of the base zoning district shall apply.
- **5.5.2.4 Build-to Zone Defined.** The Build-to Zone is defined as an area measuring five feet (5') in depth measured by a continuous line perpendicular from the street centerline toward the interior of the lot, as depicted on the Map referenced in Section 5.5.2.3 above and as set forth below:

Street(s)	Minimum Front Setback from Centerline	Maximum Front Setback from Centerline
A Streets – Primary	38.5'	43.5'
B Streets – Secondary	35.5′	40.5'
C Streets – Tertiary	28.5'	33.5′

- **5.5.2.5 Minimum Build-to Percentage**. A minimum of 70% of the building's principal front façade, shall be located within the Build-to Zone.
- **5.5.2.6 Build-to Zone Modification for Flood Resilience.** Where a development incorporates any elements in Section 5.24.1.h of this Ordinance in order to meet the Flood Resilience

Standards in Section 22.80 of this Ordinance, the principal front façade of a building may be located outside of the required Build-to Zone to accommodate such elements without being in violation of the Build-to Zone requirements, subject to Planning Board review and approval in accordance with Section 20.1100.3 of this Ordinance.

- **5.5.2.7 Building Façade Length.** As an exception to the Build-to Zone standards above, the principal front building façade of a single building located within the Build-to Zone shall not exceed two hundred (200) feet in length, measured parallel to the street centerline. In the case of a building with a longer frontage, massing recesses shall be provided extending back at least ten (10) feet in depth measured from and perpendicular to the minimum setback line and at least twenty (20) feet in width measured parallel to the minimum setback line so that the maximum length of any unbroken façade within the Build-to Zone does not exceed 200 feet.
- **5.5.2.8 Design of Front Yards.** Front yards shall consist of any combination of landscaped areas and paved areas for pedestrian and bicycle use. Parking shall not be located in front yards and automobile use shall be limited to the following:
 - **5.5.2.8.1** Areas to be devoted to public roadways and on-street parking.
 - **5.5.2.8.2** Access drives to off-street parking and loading facilities located behind or within buildings, as limited by Article 6.000.
- **5.5.2.9 Elevated Front Projections.** Front yards may contain elevated porches, walkways, stairs, and/or ramps projecting from the principal building façade that provide a transition from the pedestrian realm at the sidewalk Grade and portions of the Ground Story that are elevated in accordance with the Flood Resilience Standards of Section 22.80 of this Zoning Ordinance.
- **5.5.3 Minimum Ground Story Height.** Within 50 horizontal feet of the principal front façade of a building, the Ground Story shall have a minimum height of 18 feet in order to be suitable for a range of Neighborhood Uses, whether or not Neighborhood Uses are initially proposed to occupy such spaces.
- **5.5.4 Limitations on Structured Parking.** Portions of a building located within 20 feet of the principal front façade shall contain principal uses as permitted in the district and shall not contain structured parking except as follows:
 - (a) Structured parking in Stories Below Grade shall be permitted.
 - (b) Structured parking in Stories Above Grade shall be permitted, so long as the parking is screened from view from adjacent public streets.
 - (c) On buildings that front more than two streets, the limitations of this Paragraph shall only be required for two front façades.

- (d) The Planning Board may grant a waiver of the requirements of this Paragraph in the case of a pooled or principal use parking facility serving the district as a whole in accordance with Section 20.1100.6.3 below.
- **5.5.5 Entrances.** Each principal use within a building shall have one or more pedestrian access/egress point(s) located at the Ground Story of a façade with direct access to a public sidewalk or open space. Pedestrian access to a building shall not require crossing a vehicular parking or loading area. Pedestrian crossings of access drives shall conform to City standards for pedestrian crossings of vehicular ways.
- **5.5.6 Fences.** No fence shall be permitted within twenty-five (25) feet of a required front yard that is more than four (4) feet in height from the curb level of the street or more than thirty (30) percent opaque. Chain-link and wire fences shall be prohibited.
- 5.5.7 Curb Cuts. Only one curb cut of a maximum of forty (40) feet shall be permitted per one hundred (100) linear feet of street frontage in the Parkway Overlay District. Wherever possible, curb cuts should be on local streets rather than arterial roadways and in no case shall a curb cut be allowed within one hundred (100) feet of an intersection unless the lot contains less than one hundred and twenty-five (125) feet of street frontage. Nothing in this provision shall apply to the creation of curb cuts in order to accommodate a new public street.
- 5.5.8 Street Tree Planting. New buildings shall incorporate street tree plantings at regular intervals of no more than thirty (30) feet apart along the street frontage of the lot. Specifications of the required planting shall be subject to review and approval by the Department of Public Works prior to the issuance of a Building Permit. The required planting intervals may be modified as-of-right to the extent necessary to prevent conflicts with infrastructure, subject to a determination by the Department of Public Works.
- 5.5.9 Side and Rear Yards.
- **5.5.9.1 Side Yard Setback.** There shall be no minimum side yard setback within the first sixty-five feet (65') of the front of the lot, measured from the rear edge of the build-to zone to the rear lot line. The minimum side yard setback thereafter shall be fifteen (15) feet.
- **5.5.9.2 Rear Yard Setback**. There shall be no minimum rear yard setback in the AOD-Q district.
- **5.5.9.3 Waiver of Yard Requirements**. Upon issuing a special permit, the Planning Board may waive any side and/or rear yard requirements, provided that the open space requirements of Section 20.1100.5.4 are met.

5.6 Other Standards

- **5.6.1 Environmental Performance Standards.** The requirements of Article 22.000 of this Zoning Ordinance shall apply.
- **20.1100.6 Off-Street Parking, Bicycle Parking, and Loading**. The requirements of the base zoning district as set forth in Article 6.000 of the Zoning Ordinance shall apply except as set forth below.
 - **6.1 Minimum Parking Requirements.** There shall be no minimum required accessory off-street automobile parking for permitted principal uses.
 - 6.2 Maximum Parking Requirements. The maximum accessory off-street parking allowed for permitted principal uses shall be determined by applying the rates set forth below to each use on a lot or Development Parcel and taking the summation of the result for all uses. For any use not listed below, the maximum parking ratio set forth in Article 6.000 for the base zoning district shall apply. Exceeding the maximum allowed parking shall require a waiver of maximum parking under the general provisions of Article 6.000.
 - (a) Maximum of 1.5 spaces per 1,000 square feet of GFA for Retail and Consumer Service Uses as listed in Sections 6.36.5 and 6.36.6 of the Schedule of Parking and Loading Requirements.
 - (b) Maximum of 1.1 spaces per 1,000 square feet of GFA for Office Uses as listed in Section 6.36.4, lines a. through e. of the Schedule of Parking and Loading Requirements.
 - (c) Maximum of 0.8 spaces per 1,000 square feet of GFA for Technical Office for Research and Development Uses as listed in Section 6.36.4, line f. of the Schedule of Parking and Loading Requirements.
 - (d) Maximum of 0.5 spaces per 1,000 square feet of GFA for Industrial Uses as listed in Sections 6.36.7 and 6.36.8 of the Schedule and Parking and Loading Requirements.
 - (e) Maximum of 0.75 spaces per Dwelling Unit for Residential Uses as listed in Section 6.36.1, lines a. through h. of the Schedule of Parking and Loading Requirements.
 - 6.3 Pooled or Principal Use Parking. The Planning Board may, by special permit, allow accessory parking serving one or more lots or Development Parcels to be located in whole or in part in pooled parking facilities within the AOD-Q District, notwithstanding the limitations set forth in Section 6.22.1. The Planning Board may also, by special permit, allow a principal use parking facility as a component of a mixed-use development. In either case, the number of parking spaces in the facility or facilities

(whether accessory or principal) shall not exceed the maximum parking requirements for all other principal uses on the lots or Development Parcels, and the Planning Board must find that the provision of parking in a pooled facility: (1) Help to advance the objective of the Alewife District Plan; (2) Aids in implementation of effective Transportation Demand Management measures to reduce dependence on the single occupancy automobile; (3) The facility is appropriately located to serve the development it serves; and (4) The facility is well designed, does not diminish the pedestrian-friendly quality of the area around it, and is otherwise consistent with the Alewife Design Guidelines.

6.4 Off-Street Loading Requirements. Development in the AOD-Q district shall provide off-street loading as set forth in Section 6.80 of the Zoning Ordinance except that the Planning Board may, upon issuing a special permit, waive any requirements for the amount, location and design of loading facilities, and may permit loading facilities to be shared across various uses and lots within the AOD-Q District, upon finding that such waiver would reduce the negative impacts of loading activities on the public realm. The special permit may include conditions to ensure this criterion is met.

20.1100.7 Infrastructure.

- **7.1 Purpose.** The purpose of this Section 20.1100.7 is to ensure that new commercial development contributes to the financing of major infrastructure projects that are necessary to support the sustainable growth of the AOD-Q district and provide greater connectivity to encourage walking and biking as primary modes of transportation.
- **7.2 Fund Contribution**. A developer shall be required to make a contribution of twenty dollars (\$20) per square foot of non-residential GFA developed by special permit in excess of the FAR and GFA limitations of the base zoning district to the City of Cambridge to fund public infrastructure improvements supporting the Alewife area. This contribution shall not be required for a PUD developer constructing a major public infrastructure improvement as set forth below.
- **7.3 Major Infrastructure.** A PUD developer seeking to employ the FAR and height allowances for an "Infrastructure PUD" as set forth in section 20.1100.5.1.1 and 20.1100.5.2.2 shall include the construction of one of the following public infrastructure improvements as a component of the Development Proposal.
 - (a) A publicly-accessible connection across the railroad right-of-way generally between the AOD-Q District and the AOD-6 District, providing, at a minimum, pedestrian and bicycle access to the MBTA Alewife Red Line Station by way of Cambridgepark Drive.

- (b) An MBTA Commuter rail station and required associated improvements (including, but not limited to, access areas, landing areas, lighting, and landscaping) serving the Alewife district.
- **7.3.1 Approval of Major Infrastructure.** When approving a Final Development Plan for an Infrastructure PUD, the Planning Board shall find that the location and function of the infrastructure component supports the vision described in the Alewife District Plan (2019) and that it will be designed and constructed in a manner that conforms to applicable standards to support its function.
- 7.3.2 Timing of Major Infrastructure Completion. For an Infrastructure PUD, the Phasing Plan shall include the timeline for completion of the infrastructure component. In general, the infrastructure component shall commence construction before the issuance of a certificate of occupancy for over 50% of the non-residential GFA and must be substantially completed before the issuance of a certificate of occupancy for over 75% of the non-residential GFA of an approved Final Development Plan. The Planning Board may approve adjustments to the timing as necessary due to factors beyond the control of the developer. For the purpose of this paragraph, "substantially completed" shall mean that construction work has been finished and access has been provided to the City of Cambridge, the Massachusetts Bay Transportation Authority (MBTA), and/or any other applicable public permitting agencies to inspect and authorize the infrastructure for public use.

20.1100.8 Development Review

- **8.1 Advisory Review.** The AOD-Q District shall be considered an Area of Special Planning Concern. Development proposals listed in Subsection 19.42 and 19.43 Development Consultation Procedures, shall be subject to the Development Consultation Procedure specified in Section 19.40, except as modified below.
- **8.2 Small Project Review.** In addition to the provisions of Section 19.42.1, the Small Project Review procedure shall be required of any project that includes the rehabilitation of at least 2,000 square feet of GFA within an existing building to accommodate a new use.
- **8.3 Large Project Review.** A Large Project Review development consultation shall be required for any development proposal involving the construction of a new building or new structure or an alteration of an existing building or structure that increase the gross floor by two thousand (2,000) square feet but is not seeking a special permit.
- **8.3.1** The Large Project Review procedure shall be conducted by the Planning Board.

- **8.3.2** Before applying for a development consultation with the Planning Board, applicants for the Large Project Review Procedure shall first consult with Community Development Department staff to discuss the procedure and to receive advisory input on the proposal.
- **8.3.3** Notice of the development consultation with the Planning Board shall be provided to parties as set forth in Section 19.43.3 and members of the public shall have the opportunity to comment to the Planning Board in writing prior to the consultation or in real-time during the consultation.
- **8.3.4** The development consultation shall be held within 65 calendar days of the Community Development Department receiving a complete set of application documents. A final report shall be issued to the applicant within 30 days of the development consultation, and shall be provided to the Superintendent of Buildings prior to issuance of a building permit.

8.4 Special Permit Review

- **8.4.1 Procedures.** Except in the case of PUD special permits, all special permit applications for uses or development in the district shall be made to the Planning Board and shall follow the procedures set forth in Section 10.40 of the Zoning Ordinance.
- **8.4.2 Project Review.** Where a proposal meets the thresholds for a Project Review Special Permit in Section 19.20 of this Zoning Ordinance, the requirements and procedures set forth in Section 19.20 shall apply.
- **8.4.3 Criteria.** In addition to the criteria in Section 10.43 of the Zoning Ordinance and other criteria specific to the special permit being sought, the Planning Board shall grant a special permit only if it finds that the following general criteria are met:
 - (a) The proposal supports the purpose of the AOD-Q District.
 - (b) The proposal is generally consistent with the vision and goals of the Envision Alewife District Plan (2019) and the Principles of the Alewife Zoning Working Group (2023).
 - (c) Development plans are in general conformance with the Alewife Design Guidelines (2023) and the Citywide Urban Design Objectives in Section 19.30 of this Zoning Ordinance. The Planning Board may grant special permits for development that deviates from specific design guidelines if the Board finds that the proposal, on the whole, advances the intent of those guidelines.

- 8.5 Planned Unit Development (PUD) Review.
- **8.5.1 Purpose.** The purpose of the PUD permitting process in the AOD-Q district is to encourage larger-scale development to take a comprehensive, long-range approach to planning and development that incorporates a balanced mix of private uses and public amenities that support the City's planning objectives for the area. It offers a streamlined permitting process for developers with flexibility to adapt to changes over time, subject to ongoing oversight by the Planning Board.
- 8.5.2 Requirements for a PUD in the AOD-Q District.
- 8.5.3 Development Parcel.
 - **8.5.3.1** A PUD Development Parcel may contain one or more contiguous or noncontiguous lots or portions of lots located within the AOD-Q District.
 - **8.5.3.1** A developer may include a lot or Development Parcel that has previously received a Planning Board special permit into the Development Parcel for a new PUD Development Proposal. If a new PUD special permit is granted, then the conditions of the new PUD special permit shall supersede the conditions of previous special permits issued for that lot or Development Parcel.
 - **8.5.3.2** The minimum size of a Development Parcel shall be the greater of (1) one acre or (2) seventy-five percent of the area of a lot or combination of lots in the AOD-Q District (a) in existence as of [DATE OF ADVERTISEMENT] and (b) held in common ownership or under common control as of [DATE OF ADVERTISEMENT] where it is proposed to incorporate any portion of such lot or lots within the Development Parcel.
- 8.5.4 Development Controls. Development seeking a PUD Special Permit under this Article shall conform the General Development Controls set forth in Section 12.50 of this Zoning Ordinance and all development controls applicable to PUD Development Proposals in the AOD-Q District as set forth elsewhere in this Section 20.1100, including but not limited to requirements for Neighborhood Uses, residential uses, open space, and infrastructure contributions.
- **8.5.5 Procedures.** Review and approval of a PUD Special Permit shall generally follow the procedures set forth in Article 12.000 of the Zoning Ordinance, except as set forth below.
 - **8.5.5.1 Development Proposal Submission.** In addition to the requirements for a Development Proposal set forth in Article 12.000, a Development Proposal shall

contain a list of special permits being sought, all other forms and documentation required for the special permits being sought, and a narrative describing factual characteristics of the proposal that demonstrate how it meets the applicable special permit criteria. A Development Proposal shall also contain the following information depending on whether it takes the form of a one-phase site development proposal or a phased development plan, as set forth in more detail below.

- **8.5.5.2 One-phase Site Development Proposal.** A Development Proposal for the development of one or more buildings on a single site within one uninterrupted phase of construction shall include plans and information consistent with the submittal requirements for a Project Review Special Permit as set forth in Section 19.20 of this Zoning Ordinance.
- **8.5.5.3 Phased Development Plan.** A Development Proposal for the development of multiple buildings on multiple contiguous or non-contiguous sites in distinct phases over time shall include the following materials in schematic form, but need not include detailed design drawings for each development site:
- (a) Site Development Plan describing how the Development Parcel is divided into distinct building sites, streets, and open spaces and showing the locations and conceptual designs of streets, open spaces, and other site infrastructure, including cross-sections and elements such as paving, plantings, grading, and other major site features;
- (b) Development Program summarizing the major development characteristics of the Development Proposal including proposed land uses, proposed Gross Floor Area by categories of land use, number of dwelling units, parking spaces, loading bays, long-term and short-term bicycle parking spaces, and open space, both for the Development Parcel at an aggregate level and for each component building site, presented in tabular form;
- (c) Site Massing Plan illustrating the height and massing of building volumes for each proposed building site, including the massing of mechanical equipment located above the roofs of buildings, and including studies of anticipated shadow impacts;
- (d) Parking and Loading Plan identifying the locations, sizes, and number of spaces of all vehicle parking facilities, bicycle parking facilities, and facilities for loading or other vehicular service functions, and an operations plan describing how the facilities will be assigned and managed;
- (e) Connectivity Plan illustrating all pedestrian, bicycle, and vehicular circulation

- routes, their connections to nearby public circulation routes and destinations outside the Development Parcel, and approximate locations of access and egress points on each building and parking facility;
- (f) Open Space Plan illustrating and quantifying the areas of all proposed open space and the ownership and designation of each area, as well as descriptions of major design elements and themes to be incorporated into each space and the types of uses and activities that could be accommodated in each space, including areas that will be designated for programmed uses;
- (g) Ground Floor Tenanting and Activation Plan illustrating the conceptual arrangement of uses at the ground story of each building site, in particular Neighborhood Uses, residential and office lobbies, utility spaces, and plans for programming and activating those spaces including a report from a specialist describing strategies for recruiting and supporting tenants in a manner that will support the goals of the district;
- (h) Neighborhood Uses and Open Space Advisory Committee Plan For development seeking an Infrastructure PUD special permit, a plan shall be submitted for the formation of an advisory committee consisting of neighborhood residents and stakeholders to provide input and guidance in the planned programming of the required Public Open Space and Neighborhood Uses included in the PUD development. The details of the committee and how input will be solicited throughout the build-out of the PUD shall be made part of the Planning Board's approval of the Final Development Plan.
- (i) Housing Plan providing the approximate number and mix of housing unit types proposed on each residential site;
- (j) Phasing Plan describing the general sequence and timeline for the detailed design and construction of all major project elements, including buildings, landscaping, streets, and utilities, and the completion or conveyance of any public infrastructure or property interests;
- (k) Sustainability Plan describing (i) how the sustainability requirements of Section 22.20 will be met and (ii) expected greenhouse gas emissions from the development and strategies employed to improve energy efficiency and support renewable energy production through individual building design and by utilizing existing or new district-wide energy systems, with reference to the recommendations of the City's Net Zero Action Plan;
- (I) Resilience Plan describing (i) how the Flood Resilience Standards of Section 22.80 and the Green Factor Standard of Section 22.90 will be met, (ii) general conformance with the Resilience Objectives in Section 19.38 of the Zoning Ordinance, and (iii) broader strategies to promote resilience within individual building sites and within the district as a whole, including natural stormwater

- management systems, increased vegetation and shade, and measures to withstand and recover from extreme climatological events, with reference to the recommendations of the Resilient Cambridge plan;
- (m) Transportation Plan incorporating: (i) a Transportation Impact Study required by Section 19.20; (ii) a Shared Parking Study that identifies opportunities for reducing the total amount of parking required to serve all uses through the sharing of parking spaces by multiple uses; (iii) a study of the impacts of increased demand on public transportation services in the Alewife area; (iv) a description of the development's relationship to future regional rail, bus, pedestrian/bicycle, and other transportation system connections in the area; and (v) a Transportation Demand Management and Mitigation program describing measures to offset or mitigate the development proposal's impacts on transportation systems, including but not limited to impacts of truck traffic and loading activities;
- (n) Environmental Comfort Plan providing professional assessments of the impacts of the development on neighboring properties and the general public in terms of excessive noise, lighting, wind, and shadows, and describing measures taken to mitigate such impacts through building location and massing, arrangement of uses, screening, and other building and site improvements; and
- (o) Architectural Character Plan describing general approaches to the design of buildings, landscaped areas, streets, and pathways, identifying the type of visual character that the development will aim to achieve, with the expectation that specific designs of individual buildings and spaces will be reviewed in further detail as they are developed.
- 8.5.5.4 Preliminary Approval of a Development Proposal. After holding a preliminary public hearing in accordance with Section 12.35 of this Zoning Ordinance, the Planning Board shall make a Preliminary Determination to authorize the submission of a Final Development Plan if the Development Proposal is found to be in general conformance with the special permit criteria in Section 20.1100.8.4.3 above and the PUD approval criteria in Section 12.35.3 of this Zoning Ordinance, provided that the Final Development Plan is modified or improved in response to comments set forth in the Preliminary Determination.
- **8.5.5.5** For a Phased Development Plan, the Planning Board shall also determine whether the proposed Phasing Plan will ensure that the purpose of this Section 20.1100 will be met over the duration of the development period, and that the mix of permitted uses and public benefits will be provided in a balanced and complementary way over time. The Planning Board may request changes to the Phasing Plan as part of a Final Development Plan submission.

- **8.5.5.6 Final Development Plan Submission.** The Final Development Plan submission shall include all materials included in the Development Proposal, revised as appropriate, plus a narrative describing how the revisions respond to the comments set forth in the Preliminary Determination.
- **8.5.5.7 Final Development Plan Approval.** The Planning Board shall grant a PUD special permit to approve the Final Development Plan, with conditions as set forth below, upon finding that it contains the modifications or improvements requested in the Preliminary Determination, and that the resulting plan is in conformance with the special permit criteria in Section 20.1100.8.4.3 above and the PUD approval criteria in Section 12.35.3 of this Zoning Ordinance. The Planning Board may simultaneously grant any other special permits required as part of the Final Development Plan approval upon finding that the criteria specific to those special permits are met.
- **8.5.5.8 Conditions.** The conditions of a PUD special permit shall set forth the approved program of development and uses and other requirements to ensure that the criteria for approval are met, including but not limited to: Neighborhood Uses, housing, open space, infrastructure and transportation improvements, mitigation and monitoring of transportation and other adverse public impacts, and project timeline and phasing.
- **8.5.5.9 Amendments.** An approved Final Development Plan, or the conditions of a PUD special permit approving that Final Development Plan, may be amended in accordance with Section 12.37 of this Zoning Ordinance. The conditions of a PUD special permit may set forth detailed provisions for the Planning Board's consideration of future proposed amendments.

Amend Section 20.90 Alewife Overlay Districts 1-6 to read, "20.90 Alewife Overlay Districts 5 and 6", and make the following modifications:

- 20.91Establishment and Scope. There are hereby established six two Alewife Overlay Districts, which shall be governed by the regulations and procedures specified in this Section 20.90. It is the intent of this section that these regulations will apply to the area at Alewife that has historically developed as a retail and industrial area generally at rather low densities, but which can be expected to develop more extensively and in greater variety of uses in the future.
- **20.93.4**Districts. The Alewife Overlay Districts shall be identified in this Section 20.90 by the following names:
 - 1. Alewife Overlay District 1 (Quadrangle Northwest)
 - 2. Alewife Overlay District 2 (Quadrangle Northeast)

- 3. Alewife Overlay District 3 (Quadrangle Southwest)
- 4. Alewife Overlay District 4 (Quadrangle Southeast)
- 5 1. Alewife Overlay District 5 (Shopping Center)
- 6 2. Alewife Overlay District 6 (Triangle)
- **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.
 - 1. Quadrangle Northwest District: 1.5 for all uses.
 - 2. Quadrangle Northeast District: 1.5 for all uses.
 - 3. Quadrangle Southwest and Quadrangle Southeast Districts: 1.5 for non-residential uses; 2.0 for residential uses.
 - 4 <u>1.</u> Shopping Center District: 1.25 for non-residential uses; 2.0 for residential uses. However, Gross Floor Area shall be further limited as set forth below.
 - (a) No individual retail establishment (Section 4.35 and 4.36) shall have a Gross Floor Area exceeding 50,000 square feet, except in the case of a grocery store or supermarket, which may be as large as 60,000 square feet.
 - (b) Where the total amount of Gross Floor Area on a lot (which shall be any lot or combination of lots held in common ownership as of January 1, 2006) exceeds 100,000 square feet, the square footage devoted to non-residential uses shall be at a minimum 20% and shall not exceed 50%.
 - For a lot (which shall be any lot or combination of lots held in common ownership as of January 1, 2006) of ten acres or more, the required non-residential development shall consist of Retail Business and Consumer Service Establishments, Section 4.35, exclusively until at least 225,000 square feet of retail use is located on the lot, after which any non-residential use shall be permitted.
 - Where a project subject to the provisions of this Paragraph (b) has received a special permit from the Planning Board, the permit decision shall establish how the requirements of this Paragraph (b) are met if a project is constructed in phases over time.
 - 5 2. Triangle District: 1.75 for non-residential uses; 2.0 for residential uses.
- **20.95.11**Additional FAR for Public Improvements. In order to provide an incentive to property owners to protect important segments of future roadways and infrastructure from permanent building construction, the Planning Board, in its review of any Special Permit application, may grant additional FAR above that permitted in Section 20.95.1 above in all

Overlay Districts where the proposed development incorporates or provides one or more of the following improvements or property interests in a manner and to an extent determined to be sufficient to significantly advance the objectives of the Concord-Alewife Plan.

- 1. Construction of a publicly accessible pedestrian bridge connection across the railroad right of way between the Quadrangle Northeast District or that portion of the Quadrangle Southeast District within 300 feet of the railroad right of way and the Triangle District or incorporation of structural elements into a building's design that includes or would permit future construction of such a pedestrian connection, as well as the conveyance (in a form acceptable to the City) of the necessary fee or easement property interests in land that would permit access to such a connection. In this instance the additional FAR, available for any use, shall be 0.25 applied to the entire lot that is the subject of the special permit.
- 21. Conveyance of fee or easement property interests to the City of Cambridge (in a form acceptable to the City) to permit the future construction of roadway segments, pedestrian paths, the pedestrian bridge referenced above in Paragraph 1, public parks and other publicly accessible open space and recreation features consistent with the Concord-Alewife Plan, which segment, path, park or open space is identified on the maps entitled Priority Infrastructure Plan and Additional Infrastructure Plan or is otherwise identified by the Planning Board at another location and determined by the Board to be of equal value and consistent with those elements identified on the Map and the objectives set forth in the Plan.

In this instance, the additional FAR shall be equal to the FAR otherwise permitted on the lot as-of-right or by special permit, but shall be applied only to that portion of the lot for which a fee or easement interest is to be conveyed.

- **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:
 - 1. Quadrangle Northwest District: 55 feet for non-residential uses; 65 feet for residential uses. However, buildings may be as high as 80 feet provided that only the additional residential GFA provided for in Section 20.95.11 above may be located in the part of the building between 65 feet and 80 feet. However, these heights are modified further as set forth below:
 - (a) For any portion of a building within 100 feet of a residential or Open Space zoning district the maximum height shall be 35 feet; for any portion of a building more than 100 feet from a residential or Open Space zoning district but within 200 feet of those districts, the maximum height shall be 45 feet.
 - 2. Quadrangle Northeast District: 70 feet for all uses. However, these heights are modified further as set forth below:

- (a) For residential uses the height may be increased to 85 feet provided the building floorplate above 70 feet is limited to 10,000 square feet or less and those portions of buildings above 70 feet are separated by at least 50 feet.
- (b) GFA transferred into this District pursuant to the TDR provisions of Section 21.40 or the additional GFA provided for in Section 20.95.11 above, may be located in portions of buildings used for residential purposes up to 105 feet in height provided the floorplate above 85 feet does not exceed 6,000 square feet and portions of buildings greater than 85 feet in height are separated by at least 50 feet.
- 3. Quadrangle Southwest District: 55 feet for non-residential uses; 65 feet for residential uses. However, buildings may be as high as 80 feet provided that only the additional residential GFA provided for in Section 20.95.11 above may be located in the part of the building between 65 feet and 80 feet. These heights are modified further as set forth below:
 - (a) For any portion of a building within 100 feet of a residential or Open Space zoning district (but not including the Fresh Pond Reservation Open Space District) the maximum height shall be 35 feet; for any portion of a building more than 100 feet from a residential or Open Space zoning district (but not including the Fresh Pond Reservation Open Space District) but within 200 feet of those districts the maximum height shall be 45 feet.
- 4. Quadrangle Southeast District: 70 feet for non-residential uses; 85 feet for residential uses. However, these heights are modified further as set forth below:
 - (a) GFA transferred into this District pursuant to the TDR provisions of Section 21.40, may be located in portions of buildings used for residential purposes up to 105 feet in height provided the floorplate above 85 feet does not exceed 10,000 square feet and portions of buildings greater than 85 feet in height are separated by at least 50 feet.
- 5 1. 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.
 - (b) GFA transferred into this District pursuant to the TDR provisions of Section 21.40, may be located in portions of buildings used for residential purposes up to 105 feet in height provided the floorplate above 85 feet does not exceed 6,000 square feet and portions of buildings greater than 85 feet in height are separated by at least 50 feet.

- € 2. Triangle District: 85 feet for all uses. However, these heights are modified further as set forth below:
 - (a) For residential uses the height may be increased to 105 feet provided the building floorplate above 85 feet is limited to 10,000 square feet or less and those portions of buildings above 85 feet are separated by at least 50 feet.
 - (b) Residential GFA transferred into this District pursuant to the TDR provisions of Section 21.40, may be located in portions of buildings up to 125 feet in height provided the floorplate above 105 feet does not exceed 6,000 square feet and portions of buildings greater than 105 feet in height are separated by at least 50 feet.

20.95.31Minimum Yard Requirements. The yard requirements of the applicable base zoning district shall apply except as modified below.

- 1. Minimum Front Yard. The minimum front yard requirement in the Quadrangle Northwest, Northeast, Southwest and Southeast Districts shall be fifteen (15) feet (except for portions of lots subject to the Parkway Overlay District, which shall be subject to the minimum front yard provisions of Section 20.60).
- 2. Any Yard Abutting a Residential or Open Space District. For that portion of a yard in the Quadrangle Northwest and Southwest Districts that abuts a lot in a Residence or Open Space district, that yard shall be a minimum of twenty-five (25) feet and shall be subject to the use restrictions set forth in Section 20.95.32, Paragraph 2 below.

20.95.32Restrictions in Required or Provided Yards.

- 1. Required or Provided Front Yards. That area between the principal front wall plane of a building and a street, whether required or provided, shall consist entirely of Green Area or Permeable Open Space extending along the entire length of the lot. Areas devoted to vehicular use are prohibited from this area with the exception of access drives leading directly to parking facilities located elsewhere on the site, in conformance with the requirements of Article 6.000.
 - The Open Space shall be located at mean grade of the abutting street but nothing in this Section 20.95.32 shall prohibit customary landscaping features, elements and grading that may vary the grade of the required setback above that of the adjacent street provided the setback area remains essentially at grade.
 - Where a lot abuts more than two streets the provision of this Section shall apply to no more than two streets.
- 2. Other Yards. Required Yards in the Quadrangle Northwest and Quadrangle Southwest Districts, as set forth in Paragraph 2 of Section 20.95.31 above, shall consist entirely of Green Area or Permeable Open Space. Areas devoted to vehicular use are prohibited from this area.

- **20.98***Transfer of Development Rights*. The transfer of permitted GFA from a Donating Lot to a Receiving Lot shall be permitted in the Alewife Overlay Districts Q, 5 and 1–6, subject to the provisions of Section 21.40 and the dimensional and use provisions of the applicable base zoning districts, as modified by the provisions of Alewife Overlay Districts as set forth in the Section 20.90.
- **20.910**Special Provisions Related to Local Government Uses—Section 4.33(f). Notwithstanding any provisions of the applicable base district regulations or any provision of this Section 20.90, all uses set forth in Section 4.33 (f) shall be permitted as of right in Overlay Districts 1-4, subject to the following as-of-right dimensional and other requirements.
- **20.910.1**Maximum Floor Area Ratio. The maximum FAR shall be as permitted in Section 20.95.1 for residential uses.
- **20.910.2**Maximum Height. The maximum height shall be as permitted in Section 20.95.2 for residential uses, subject to the limitations imposed in the Parkway Overlay District (Section 20.60).
- 20.910.3 Yard Requirements. The following yard requirements only shall apply.
 - 1. Front Yard. A fifteen foot front yard shall be required.
 - 2. Side and Rear Yards. A ten foot side and rear yard shall be required.
 - 3. Any Yards Abutting a Residential or Open Space District. Any yard abutting a residential or open space district shall be twenty-five feet and shall consist entirely of Green Area or Permeable Open Space.
- **20.910.4**Required Open Space. The minimum ratio of Open Space to the total area of the lot shall be fifteen (15) percent and shall consist of any combination of Green Area, Permeable, Public, Publicly beneficial or Private open space. The Open Space shall be located at grade.
- **20.910.5**Permeable Area Requirement. There shall be no Permeable Area requirement provided the City Engineer certifies to the Superintendent of Buildings that the development meets 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.
- **20.910.6**The provisions of Section 19.20 and 19.50 shall not apply to these uses.
- [20.910.7]Other Requirements. All other requirements and procedures of this Section 20.90 and the applicable base zoning district shall continue to apply.

Amend Section 21.40 Alewife Overlay Districts 1-6 to read, "21.40 Alewife Overlay Districts Q, 5 and 6", and make the following modifications:

21.43.1Gross Floor Area Available for Transfer from a Donating Lot to a Receiving Lot.

 Some or all of the Gross Floor area permitted on the Donating Lot, as determined by the applicable base zoning district regulations, any additional development allowed in Section 20.90 and Section 20.1100 by special permit, and by the provisions of Section 5.28.2 as they apply to existing development on the site, may be transferred to a Receiving Lot.

21.43.2Restrictions on the Use of the Donating Lot after Transfer is Authorized.

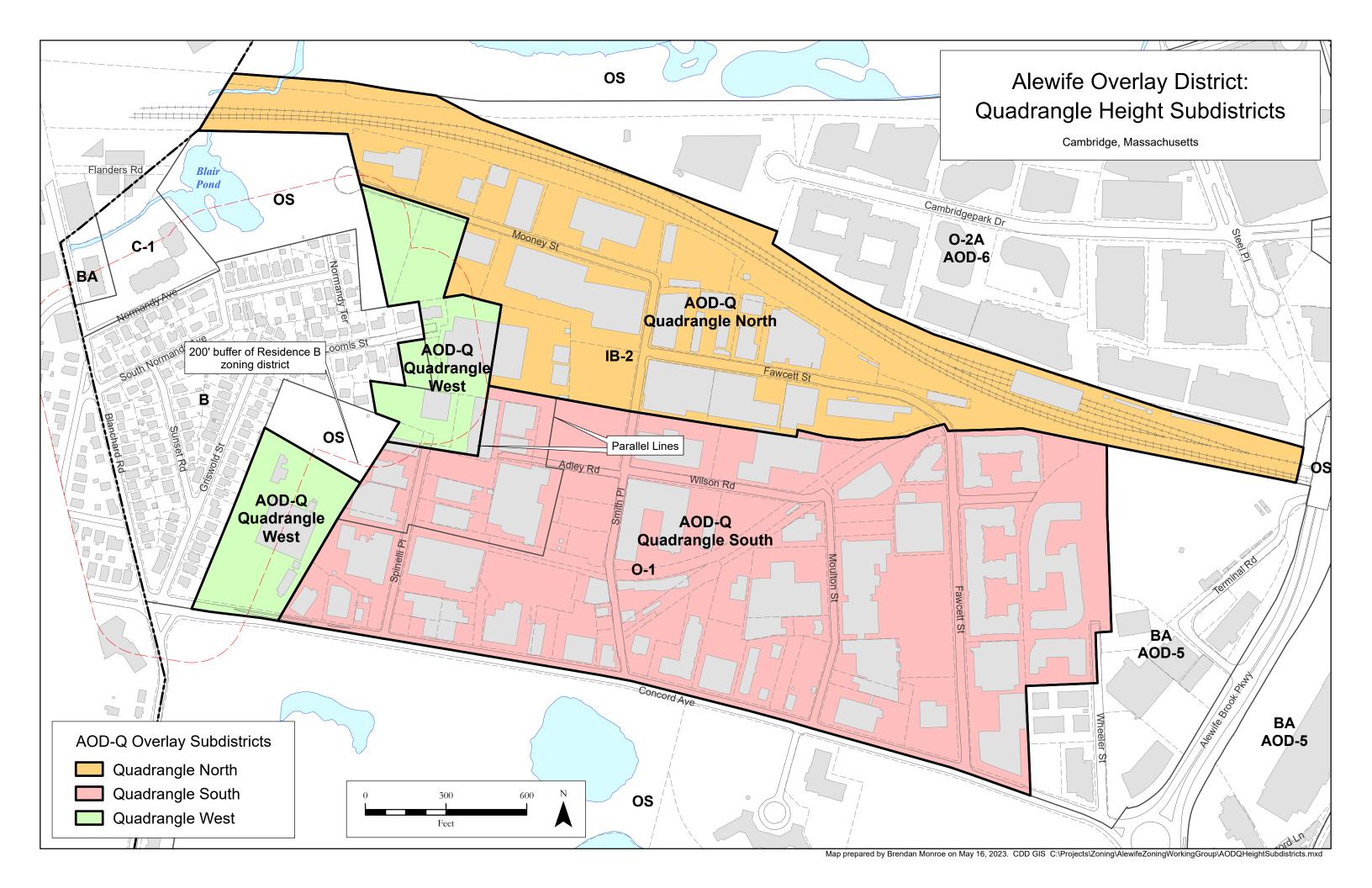
- 1. Where it is proposed to transfer all development allowed on the Donating Lot, the lot shall be thereafter developed in one of the following ways:
 - a. As a Public, Green Area, Permeable or Publicly Beneficial Open Space.
 - b. For any residential use permitted in a Residence C-1 District in a building or buildings meeting all the dimensional requirements of the Residence C-1 District. An FAR of 0.75 shall be authorized on the site, in addition to that authorized for transfer to the Receiving Lot. Such additional FAR, however, shall not be granted for transfers of GFA that only occur within the boundaries of a single Overlay District.
 - c. Any technical office for research and development, laboratory and research facility, Section 4.34 f, in a building or buildings constructed to meet all the dimensional requirements of the Office 1 District. An FAR of 0.75 shall be authorized on the site, in addition to that authorized for transfer to the Receiving Lot. Such additional FAR, however, shall not be granted for transfers of GFA that only occur within the boundaries of a single Overlay District.
 - i. Where an existing building has a Gross Floor Area at or below an FAR of 0.75 and is occupied by a Technical office for research and development use, such building and use shall be considered to meet the requirements of this Subparagraph c and the full transfer from the lot of permitted FAR shall be permitted.
- 2. Where it is proposed to retain some of the development potential on the Donating Lot, either in new construction or in existing buildings, the provisions of the applicable base district and Section 20.90 and Section 20.1100 shall apply to that development.
- **21.43.42**Transfer of Development Rights Between Two or More Overlay Districts. Where it is proposed to transfer GFA out of one Overlay District into another the following rules shall apply.

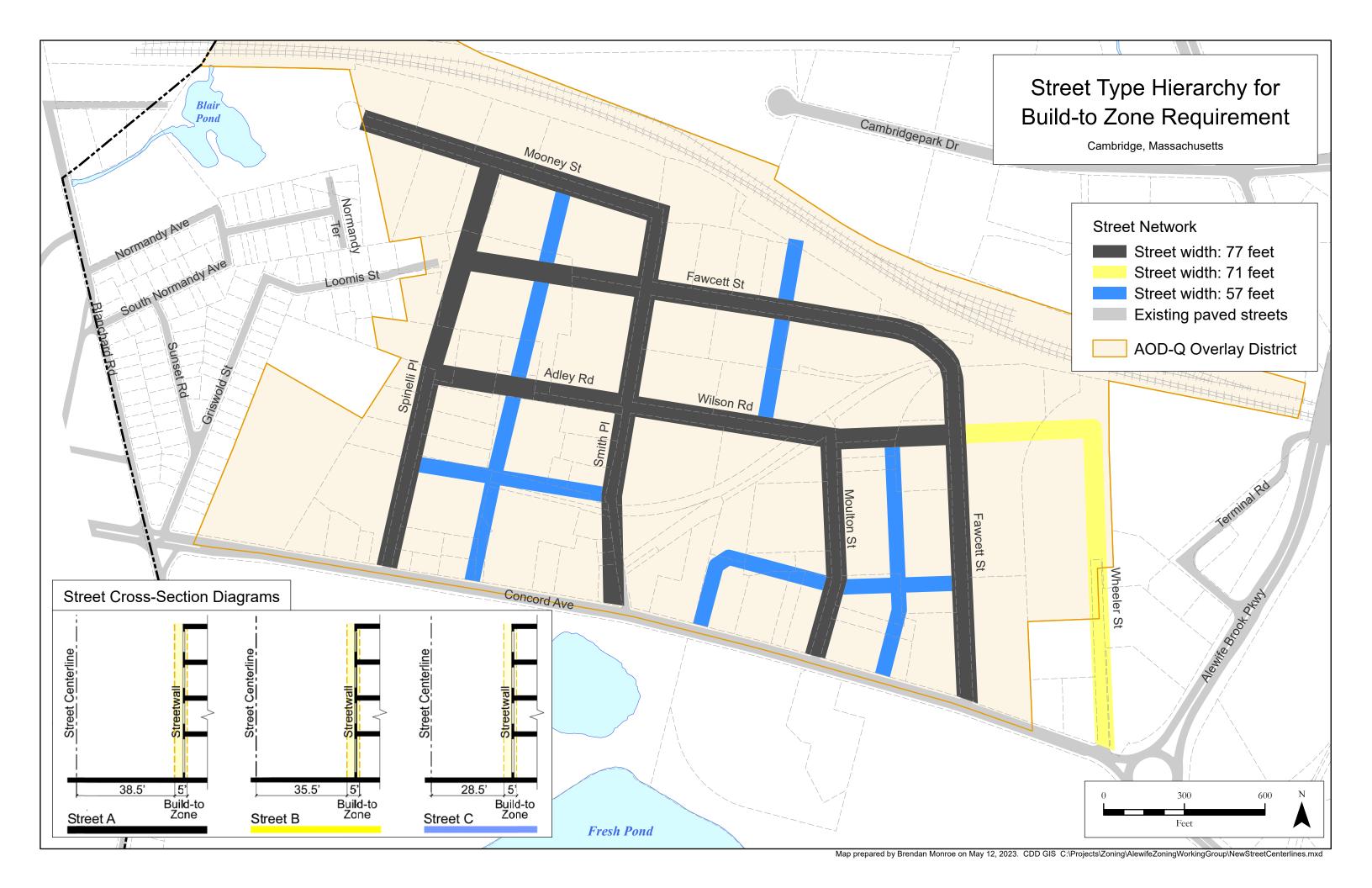
- Overlay Districts 1 and 3 Those portions of the AOD-Q District west of the centerline of Smith Place shall contain only Donating Lots. Gross Floor Area from these Districts may only be transferred to Overlay Districts enumerated in Paragraphs (2) and (3) below.
- 2. Those portions of the AOD-Q District east of the centerline of Smith Place, as well as Alewife Overlay Districts 4, 5 and 6 shall contain only Receiving Lots and may receive transferred GFA only from the Donating Lots identified in 21.43.42.1 above Overlay Districts 1 and 3.
- 3. Overlay District 2 The portions of the AOD-Q North Height Subdistrict shall contain only Receiving Lots and may receive transferred GFA only from Overlay Districts 1 and 3 the Donating Lots identified in 21.43.42.1 above. However, transferred GFA shall only be permitted if it can be demonstrated to the satisfaction of the Planning Board that there is in place a safe and functional pedestrian connection from Overlay District 2 the AOD-Q North Height Subdistrict across the railroad tracts to generally in the location of Overlay District 6; or that the development authorized by a Transfer of Development Rights Special Permit will provide physical elements or property right interests that will facilitate the construction of such a pedestrian connection in the future, to include but not be limited to: fee, easement or other property interest sufficient to permit the construction of a pedestrian bridge and to permit the general public access the facility; construction of elements of the bridge on the site or within buildings to be constructed on the site, or actual construction of the pedestrian connection.

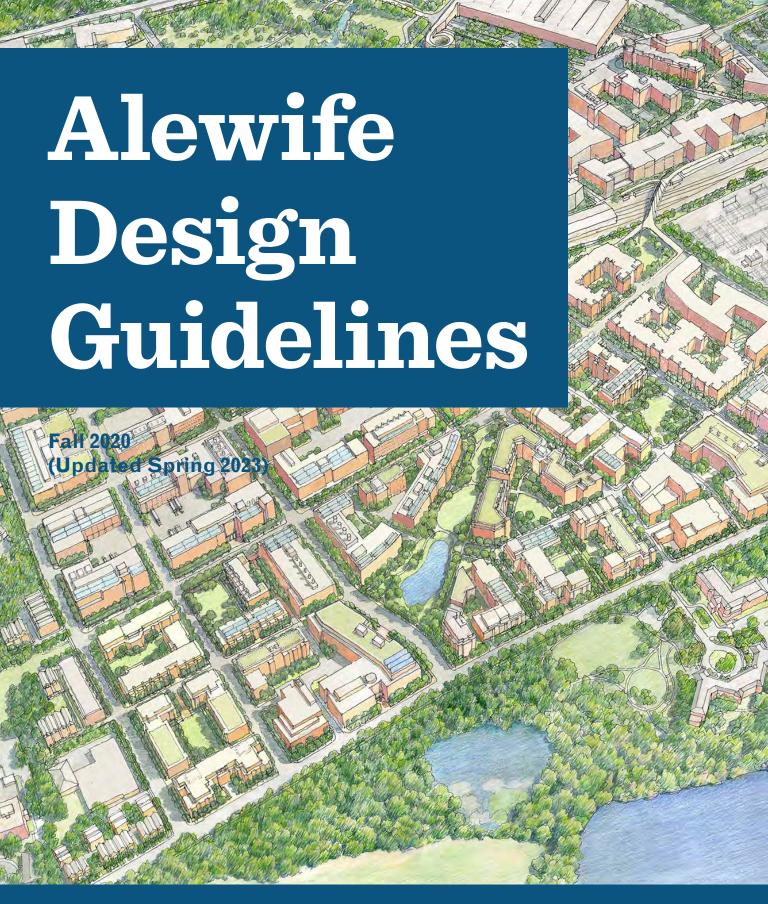
Amend Section 20.70 Flood Plain Overlay District as follows:

- **20.75***Criteria*. The Planning Board shall grant a Special Permit for development in the Flood Plain Overlay District if the Board finds that such development has met all of the following criteria in addition to other criteria specified in Section 10.43:
 - No filling or other encroachment shall be allowed in Zone A areas or in the floodway which would impair the ability of these Special Flood Hazard Areas to carry and discharge flood waters, except where such activity is fully offset by stream improvements such as, but not limited to, flood water retention systems as allowed by applicable law.
 - Displacement of water retention capacity at one location shall be replaced in equal volume at another location on the same lot, on an abutting lot in the same ownership, on a noncontiguous lot in the same ownership, or in accordance with the following requirements.
 - 3. All flood water retention systems shall be suitably designed and located so as not to cause any nuisance, hazard, or detriment to the occupants of the site or abutters. The

- Planning Board may require screening, or landscaping of flood water retention systems to create a safe, healthful, and pleasing environment.
- 4. The proposed use shall comply in all respects with the provision of the underlying zoning district, provisions of the State Building Code, Wetlands Protection Act, and any other applicable laws.
- 5. Applicants for development in the Alewife area shall be familiar with area-specific and general city-wide land use plans and policy objectives (e.g. Concord-Alewife Plan, A Report of the Concord Alewife Planning Study, November 2005; Toward a Sustainable Future, Cambridge Growth Policy, 1993, Update, 2007; Section 19.30 Urban Design Objectives of this Zoning Ordinance) and shall demonstrate how their plan meets the spirit and intent of such documents in conjunction with the requirements of this Section 20.70 Flood Plain Overlay District and Sections 20.90 and 20.1100, as applicable.—Alewife Overlay Districts 1-6.
- 6. The requirement of Section 20.74(3) has been met.







Alewife Design Guidelines

Prepared for the City of Cambridge Community Development Department, 2020. (Updated 2023)

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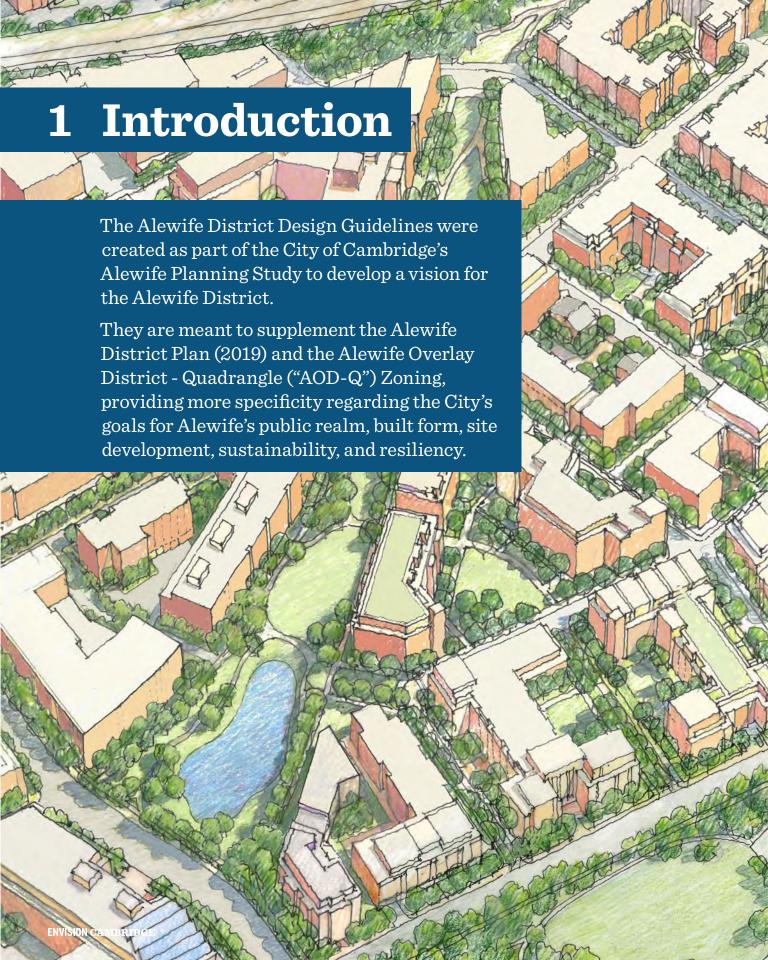
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City of Cambridge

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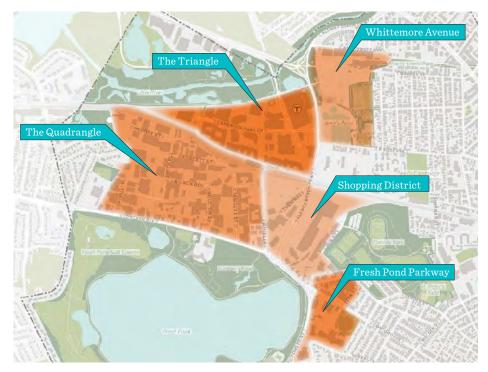


These guidelines are intended to inform property owners, business owners, developers, architects, and the general public about the desired character and form of the district, and to be used by the Planning Board in their review of development projects.

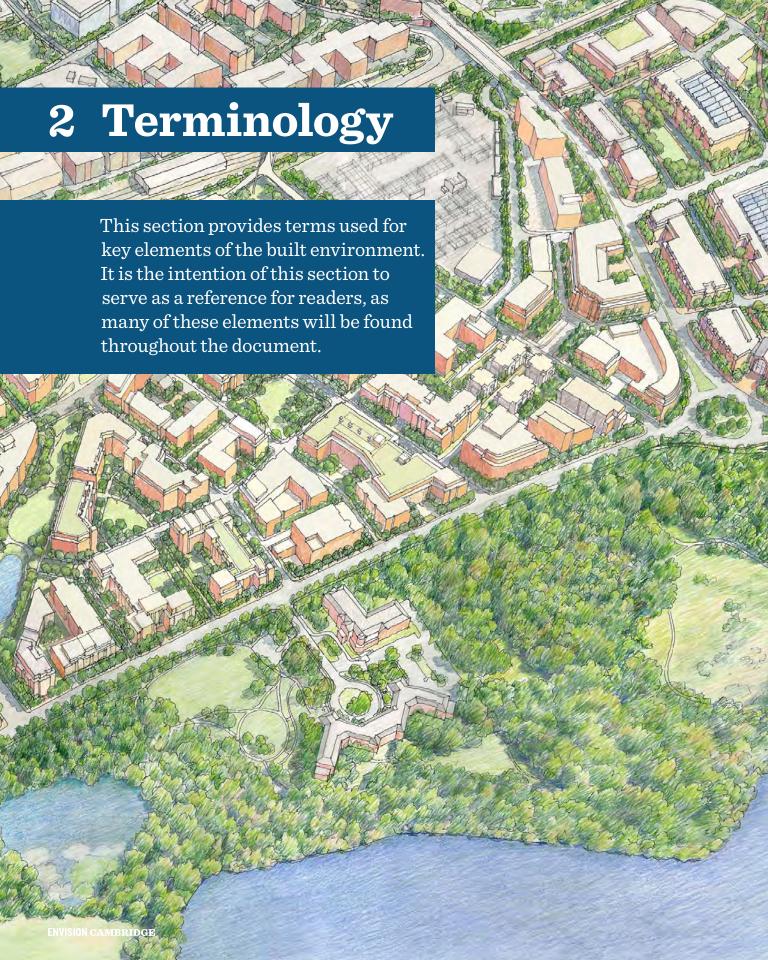
In conjunction with the Alewife District Plan and the Alewife Overlay District - Quadrangle (AOD-Q) Zoning, these guidelines will serve as an instructive reference in the review processes undertaken by City departments, boards, and commissions. The Alewife District Plan includes a broader treatment of development goals, public realm goals, and other issues that relate to new private development. Thus, the Alewife District Plan should be consulted to understand more fully the planning and urban design context for these guidelines.



The Alewife District is located in western Cambridge, adjoining the Alewife Brook Reservation, Danehy Park, Fresh Pond Reservation and the Cambridge Highlands neighborhood.

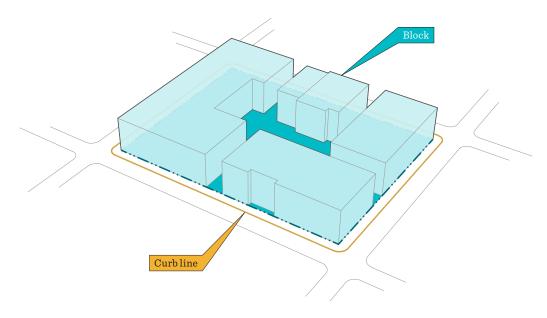


Alewife is comprised of several subdistricts. Recent zoning focuses on the Quadrangle.



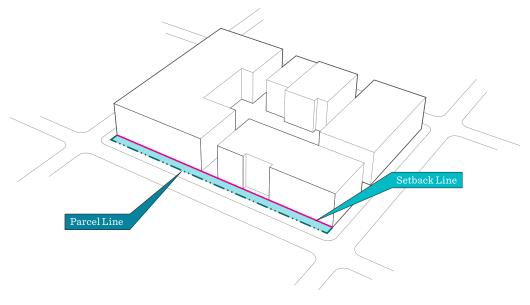
Block

 \boldsymbol{A} group of adjacent buildings, bounded by public streets or other open spaces.



Setback Line

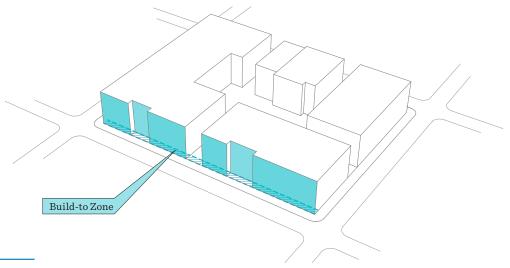
A setback line runs parallel to a parcel's property boundary and establishes the minimum allowed distance between the public right of way and the building facade.



Build-to Zone

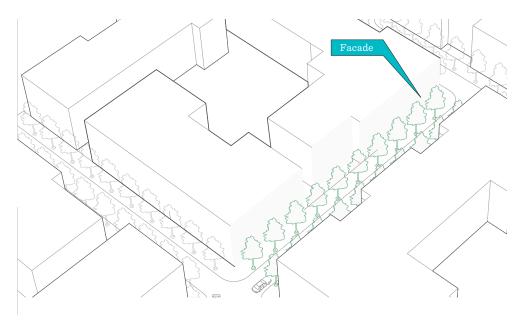
The Build-to Zone provides flexibility in establishing where the principal front facade of a building can be located. It is defined as an area five feet (5') in depth measured by a line perpendicular from the street centerline toward the interior of the lot.

In the case of the Alewife Quad, the Build-to Zone shall serve as the minimum front setback in place of the front yard requirements. A minimum of 70% of the building's principal front facade shall be located within the Build-to Zone.



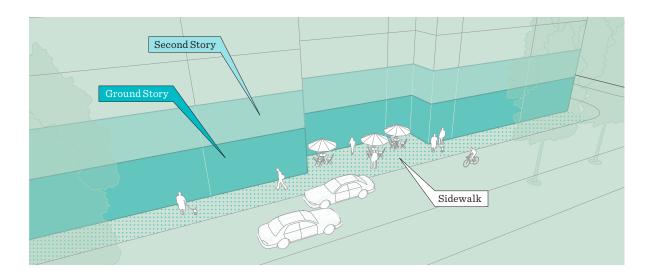
Facade

The face of a building towards a street or other open space. The design of the primary, or "front", facade of the building is particularly important, as it frames the public realm and contributes to its character.



Pedestrian Zone (of Facade)

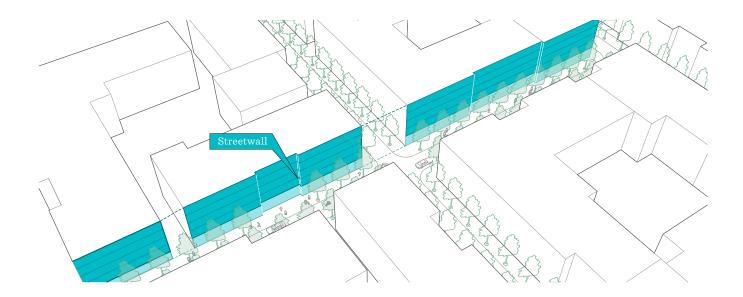
A portion of the facade that consists of the building's Ground Story, and on occasion its second story, fronting upon an active public right-of-way. On major public streets, pedestrian frontage zones generally include Ground Story uses that are oriented to engage the public space of the sidewalk.





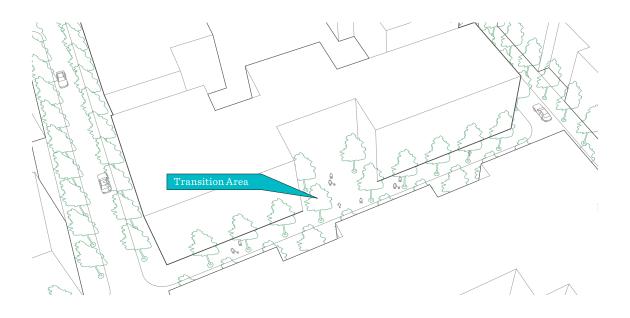
Streetwall

The street wall is defined as the building facade above the level of the pedestrian zone, aligned along a street or public open space. It is generally located on the inner edge of the sidewalk on primary streets. The streetwall's civic responsibility is to define and visually enrich the public realm; it should have a scale $\,$ and degree of detail appropriate to the size and character of the street or other public space it addresses.

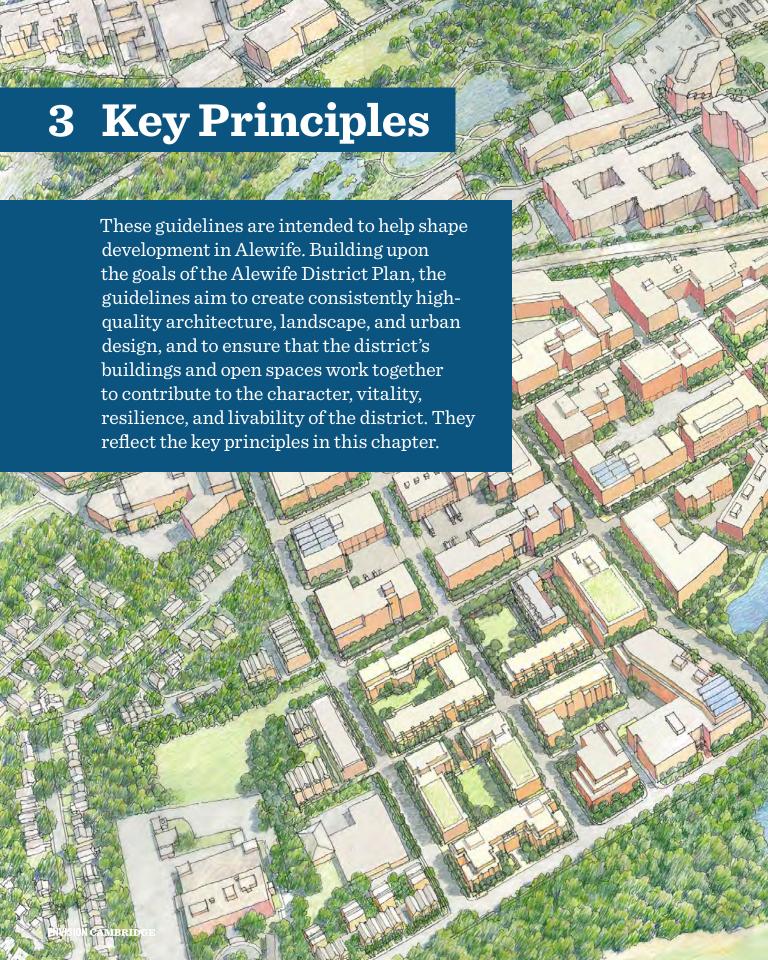


Transition Area

A transitional space between the public sidewalk and a building facade. Depending on circumstance, it may consist of plantings, paved areas along the building facade, or courtyards open to the street.







Key Principles

Sense of Place

Create meaningful and memorable streets, parks, and squares, scaled to the pedestrian experience and walkable urban blocks.

Elements of Design

Demonstrate excellence in architectural design and the design of the public realm.

Pedestrian Friendly Streets

Create pedestrian streets that are rich with visual interest and activity.

Parks and Squares

Foster well-connected, programmatically diverse, and environmentally beneficial parks and squares.

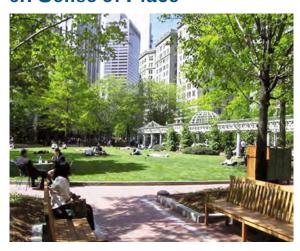
Sustainability and Resilience

Integrate sustainability and resilience into the design of buildings, parcels, and public open spaces.

Large Development Sites

Integrate large development sites into the surrounding community.

3.1 Sense of Place



Create meaningful and memorable streets, parks, and squares, suited to the pedestrian experience and structured by walkable urban blocks, by:

- Framing the public realm with architectural streetwalls that create roomlike public spaces.
- 2. Reinforcing and complementing the spaces of the public realm with landscape design.
- 3. Designing buildings that relate to the pedestrian scale.
- 4. Enlivening streets and squares with a mix of active building uses.
- 5. Promoting walkable blocks and streets.

3.2 Elements of Design



Demonstrate excellence in architectural design and the design of the public realm by:

- Creating an interconnected system of streets, parks, and squares.
- 2. Shading open spaces and corridors between buildings.
- 3. Designing commercial, retail, and residential buildings in a way that creates clear and comfortable public spaces. Reserve iconic and exceptional design features for building types of civic importance.
- 4. Delineating facades into horizontal zones of base, middle, and top to break down the building's scale.
- 5. Incorporating vertical articulations and changes of material or color to reduce the visual bulk of large buildings.
- 6. Varying facade treatment and carefully considering materials, textures, and details.

3.3 Pedestrian Friendly Streets



Create active pedestrian streets that are rich with visual interest and beauty by:

- 1. Activating building ground floors and providing frequent entrances where reasonably possible.
- 2. Providing substantial transparency into retail or other active ground floor uses.
- 3. Incorporating canopies and awnings on ground story facades facing primary streets.
- 4. Shading streets and sidewalks with continuous street trees.
- 5. Designing and programming sidewalks, and providing street furniture, lighting, street trees, and other landscape elements that foster activity appropriate for the street type.

3.4 Parks and Squares



Foster well-connected, programmatically diverse, and environmentally beneficial parks and squares by:

- 1. Providing open spaces of varied character, scale, and amenities to serve a wide range of uses.
- 2. Prioritizing a safe and comfortable environment for residents and visitors.
- 3. Including focal points that foster community.
- 4. Planting and nurturing canopy trees.
- 5. Integrating art into the public realm.
- 6. Enhancing environmental comfort with features that provide shade and cooling, such as shade structures, canopies and trees.

3.5 Sustainability and Resilience



The Finch Cambridge, a 100% permanently affordable housing development, meets the highest energy-efficiency and sustainability standards, including Passive House standards.



Integrate sustainability and resilience into the design of buildings, parcels, and public open spaces by:

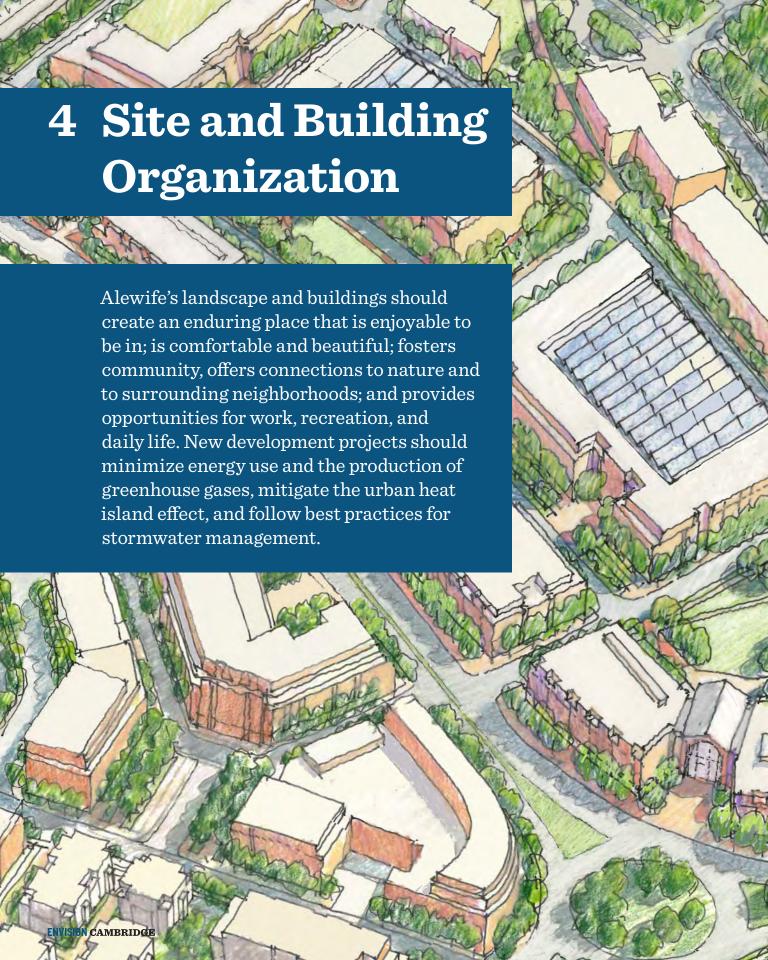
- 1. Protecting buildings and occupants from flooding.
- 2. Mitigating the urban heat island effect.
- Supporting ecological diversity and resilience by providing a variety of species of vegetation, and, where appropriate, providing understory vegetation and ground cover in addition to canopy trees.
- 4. Creating energy efficient buildings and reducing greenhouse gas emissions.
- 5. Controlling stormwater.
- Incorporating on-site and district clean power generation.

3.6 Large Development Sites

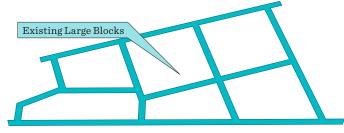


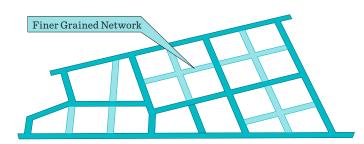
Integrate large development sites into the surrounding community by:

- 1. Carefully considering the massing and siting of new buildings and developments.
- 2. Creating new public streets and thoughtfully designed, strategically located public spaces within large parcels.
- 3. Managing block size and scale within large parcels to blend in with the fabric of adjacent streets, blocks, and neighborhoods.
- 4. Consolidating parking, loading areas, service roads, and fire lanes.
- Planting shade trees within and around service areas and other paved areas to provide additional tree canopy and screening from public view.

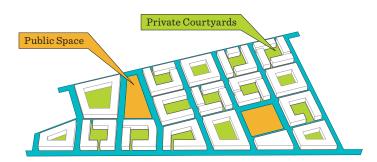


URBAN BLOCKS





Break up large blocks by creating new streets and pedestrian and bicycle paths.



Buildings should define block perimeters while incorporating courtyards and paths to give the district semi-private spaces, fine-grained porosity, and permeability.

4.1 Urban Blocks and the Public Realm

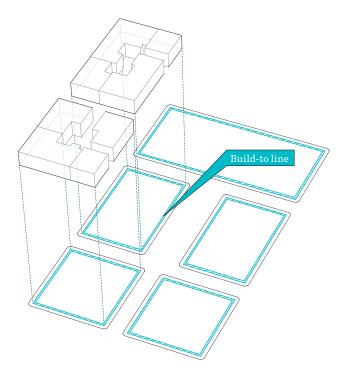
Building massing and siting should be designed to create coherent and walkable urban blocks, and to frame Alewife's streets, squares, parks, and paths. These streets and other public open spaces should constitute an interconnected network that extends through the district and links it to the surrounding parks and neighborhoods.

- Develop blocks with coherent perimeters streetwalls composed of facades and elevations—along the streets, parks, and squares they border.
- 2. Arrange building massing and the geometry of floor plates to create urban blocks in accord with the build-to zones established by zoning for Alewife's various street types.
- 3. Create detailed master plans for large properties to delineate streets and other open spaces, guide building massing, and establish building setback and build-to lines.
- 4. Create a finer grained network of streets and paths to break up the existing large blocks and increase the connectivity of the Alewife District as a whole and of large developments within it.
- 5. Where possible, divide the bulk of large projects into separate buildings to avoid a monolithic appearance and to create visual and physical connections between the public street and the more private courtyards and other open spaces within the sites.
- 6. Buildings whose massing along the street is longer than 200 feet should be broken into shorter facade segments by forecourts, notches, or changes in plane.
- 7. Buildings should minimize shadows on existing and proposed open spaces.

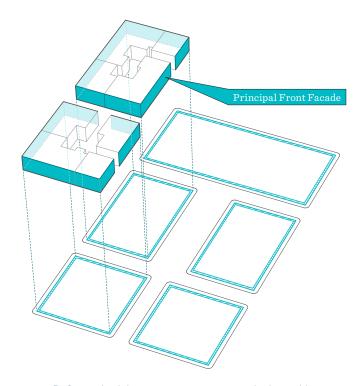
4.2 Frame the Public Realm

The alignment and continuity of building streetwalls should frame three dimensionally coherent streets, parks, and squares.

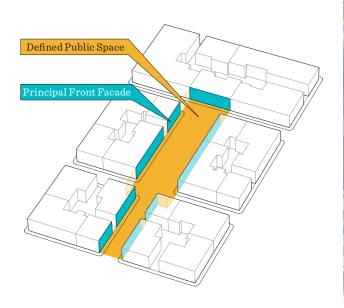
- 1. Buildings should front onto the street. Their facades should located on building setback lines or within build-to zones established by zoning.
- 2. Locate and design buildings to create legible volumetric public spaces: streets, parks, and squares.
- 3. Streetwall facades of large buildings should generally incorporate relatively planar or repetitive areas, designed to frame adjoining public spaces.
- 4. Streetwall facades should generally emphasize a single primary plane, aligned in the build-to zone established in the zoning for the street.
- 5. Building streetwalls addressing public streets or open spaces should be a minimum of three stories above grade or the level of elevated walkways.
- 6. Streetwalls should be generally continuous so as to spatially define streets and other public spaces. They should be enriched by variation in facade design and materials.
- 7. Top floors of taller buildings should be stepped back or differentiated from the plane of the facade. Where buildings face large open spaces such as Fresh Pond Reservation, or arterial streets such as Alewife Brook Parkway, stepbacks may occur at a higher level.
- 8. Where tall buildings adjoin or face significant existing residential buildings, their facades should step back by a minimum of 10' at approximately the level of the existing building.
- 9. At second floors and above, projecting elements such as balconies and bay windows should be provided where possible to add variety and interest to facades.



Establish build-to zones to define public space by regulating building footprints.



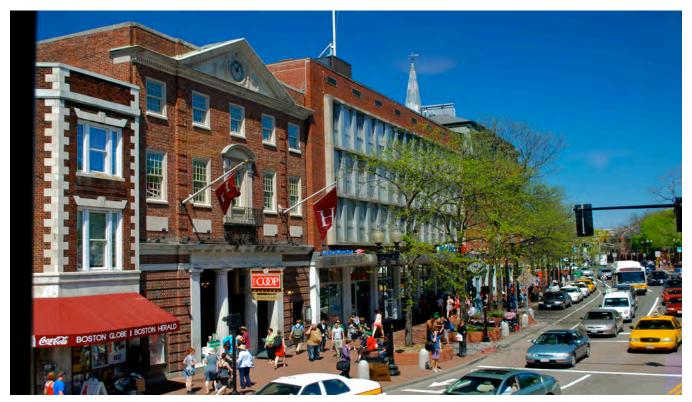
Define and celebrate important streets and other public open spaces by addressing them with principal front facades aligned according to build-to zones.



Locate building massing and principal front facades to create legible volumetric public spaces.



Design civic open spaces as public rooms at the scale of the city.



 $Continuous\ streetwalls\ define\ streets\ and\ public\ spaces.\ Varied\ facades\ visually\ enrich\ the\ streetwall.$

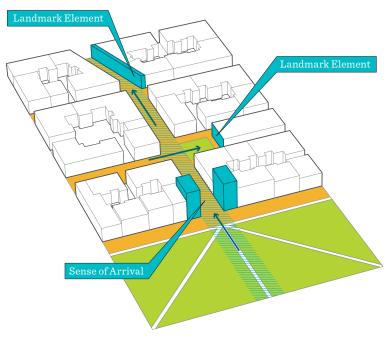
4.3 Articulate the Public Realm

Building facades and massing should respond to the varied conditions of site and context. In contrast to areas of relatively planar or repetitive form that frame the public spaces they address, more unique building elements should provide variety and mark significant connections, junctions, and thresholds of the public realm.

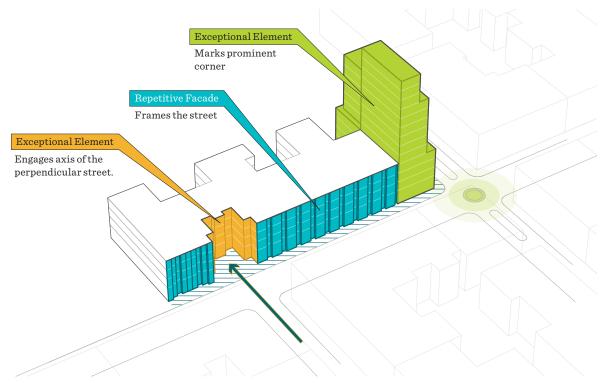
- 1. Buildings should frame streets, parks, squares, and significant intersections. Buildings should define and enliven public space. Their designs should have consistency and variety, including repetitive architectural elements and unique motifs.
- 2. Incorporate exceptional elements in building facades and massing to reinforce views, axes, significant corners, building entrances, courtyards, and other critical points in the district's public realm.
- 3. Set back portions of buildings from the back of sidewalks, depending on the street and building type, to allow for building entrances, recessed storefronts, cafe zones, residential forecourts, and courtyards.
- 4. In general, provide streetwall facades located in the build-to zone at the corners of the block.
- 5. Locate tall buildings to
 - a. provide landmarks from distant views,
 - b. relate to larger open spaces in and around the district, and
 - c. reinforce a sense of entry to Cambridge.



Emphasize the civic importance of primary public spaces by differentiating between principal front facade and side facades by means such as contrasting materials, colors, scales, the amount and type of detail and articulation, and compositional formality vs. informality.



Locate exceptional or landmark elements to reinforce the spatial structure of the public realm. Create a sense of entry and arrival into parks and squares.



Massing and facades should define and enliven public space by combining consistency and variety, positioning background elements and unique motifs in response to the urban context.



 $\label{lem:poisson} \mbox{Differentiated color and modulated massing reduces the building's sense of bulk, while celebrating the street corner.}$



Emphasized corner helps frame the primary street by reinforcing the importance of the facade that addresses it.

4.4 Sustainable and Resilient Site Design

Sites should be resilient to the effects of climate change, including frequent flooding due to precipitation and sea level rise/storm surge, and increasing heat. Sites should mitigate stormwater runoff and minimize the urban heat island effect.*

Guidelines

- Maximize permeable area and vegetated area as specified by the Alewife District Plan
- Consult with Department of Public Works and Community Development Department during the process for specific guidance on resilience planning and sustainable site design.
- 3. Minimize impermeable pavement and maximize permeable surfaces.
- Incorporate light-colored pavement and high-reflectivity surface materials where effective.
- 5. Detain stormwater on site to slow the rate of runoff.
- Integrate green infrastructure to capture and detain stormwater, such as bioswales, rain gardens, or dry ponds, into landscape plans.
- 7. Incorporate underground storage tanks to slow the release of stormwater.
- 8. Where possible, raise street levels to reduce potential for flooding. Consult the Flood Viewer (www.cambridgema.gov/services/floodmap) and the Department of Public Works to ascertain the design elevation.
- Provide vegetative and structural shading for sidewalks and other public spaces, with particular attention to pedestrian, bicycle, and vehicular corridors.
- 10. Select plant materials that will be resilient to the anticipated hotter and more variable climate, and to saltwater intrusion, where applicable.

4.5 Entries and Access

Site access and building entries should be designed and located to create an enjoyable, high quality pedestrian realm.

Guidelines

Pedestrian Entrances

Locate pedestrian entrances to engage and activate streets and other public spaces.

- Frequent entrances to buildings and storefronts should be provided along public ways.
- 2. Block corners should incorporate storefront entrances.
- 3. Lobbies for office, laboratory, industrial, and residential buildings should generally be located away from block corners.
- 4. Pedestrian entrances should be sited in locations easily accessible from transit stops.

Vehicular Entrances and Drop-offs

Design and locate vehicular entrances, driveways, and vehicle drop-offs to minimize their visual and operational impact on the public realm.

- Driveways and parking entrances should be located on side streets or alleys wherever possible.
- 2. Driveway widths should be minimized.
- 3. Driveways should be perpendicular to the street.
- 4. Curb cuts should be minimized in number and width, and shared wherever possible.
- 5. Privately owned drives should be designed as streets, incorporating sidewalks, planting zones and bike lanes depending on their use and location.
- 6. Where fire lanes are required between buildings, they should be shared between adjoining lots and designed as streets depending on their connectivity within the street system.

- 7. Drop-off lanes/areas should be located in the street; they should not be separate driveways.
- 8. Circular drives, turnarounds and off-street drop-off areas should not be permitted, and if possible, eliminated.
- 9. In areas anticipated to be prone to flooding, provide passive flood barriers at at-grade entrances.

Loading, Service Areas, and Surface Parking Design and locate loading and servicing areas and parking entrances to minimize intrusion into the public realm.

- Service and loading areas should not be visible from public streets or open spaces. They should be limited to rear of buildings, secondary ways, alleys or internal courtyards.
- 2. Where possible, consolidate off-street loading areas and service roads serving multiple buildings and multiple parcels.
- 3. Avoid excessively large loading or service entrances and minimize their presence on public streets.
- 4. Any loading bays facing public streets should be provided with doors designed to complement the facade design, and deep enough to accommodate the full length of delivery trucks.
- 5. Locate surface parking in block interiors, not visible from major public streets.
- 6. Security fences, gates at service yards, and similar features should be avoided in areas visible to the public.
- 7. Chain link fencing, barbed wire, concertina wire or similar products should not be allowed.
- 8. Locate exterior gas tanks unobtrusively, preferably in locations not visible from primary public streets.
- 9. Coordinate with city staff on the locations of gas delivery trucks that are required to conduct operations in open air.

4.6 Utilities and Mechanical/ Electrical/Data Equipment

Utilities should be designed and located to minimize their impacts on the pedestrian environment and to be resilient to the effects of climate change.

Guidelines

Mechanical and electrical equipment and gas meters should not be audible or visible from public streets or open spaces.

- Preference should be given to housing mechanical and electrical equipment within buildings, rather than as site elements.
- 2. Any site-located electrical equipment should be located on the interior of blocks or screened from view from the public right-of-way, and not located between the building and any public way, or forward of the principal facade.
- 3. Where site-located mechanical or electrical equipment cannot be avoided, it should be concealed by plantings or attractive enclosures.
- 4. Mechanical and utility rooms should not be located along major streets. They should be located on minor streets or in block interiors where possible.
- 5. Mechanical or electrical equipment within buildings that must be located on public ways and needs direct access from the street should be provided with architectural facade treatments that complement the overall facade design.
- 6. Design and locate building and site utilities to minimize risk and disruption from flooding. Considerations include waterproofing, backflow preventers, and shutoffs, and accessibility of water, gas, electric power, and sanitary sewer systems during flood events.

- 7. Locate electrical equipment, including transformers, switchgear, generators, and critical communications/data equipment above anticipated flood levels.
- 8. Locate emergency power equipment and fuels above anticipated flood levels or provide waterproof barriers as indicated.
- 9. Ensure that fire detection and suppression equipment and communications/data equipment will remain operational during flood events.
- 10. New electrical and data lines should be underground.

- 11. To protect tree plantings from conflicts with utilities, locate utilities for new streets (and reconstructed streets wherever possible) under vehicular roadways, rather than under sidewalks,.
- 12. Incorporate on-site power generation and energy storage and/or utilize district energy systems where feasible.
- 13. Consider eliminating on-site fuel combustion.
- 14. Continue to eliminate combined sewers throughout the district.



Locate electrical equipment (e.g. transformers, switch gear) inside buildings with attractive treatment of louvers or blank walls.



Elevated walkways can provide access during flood events.

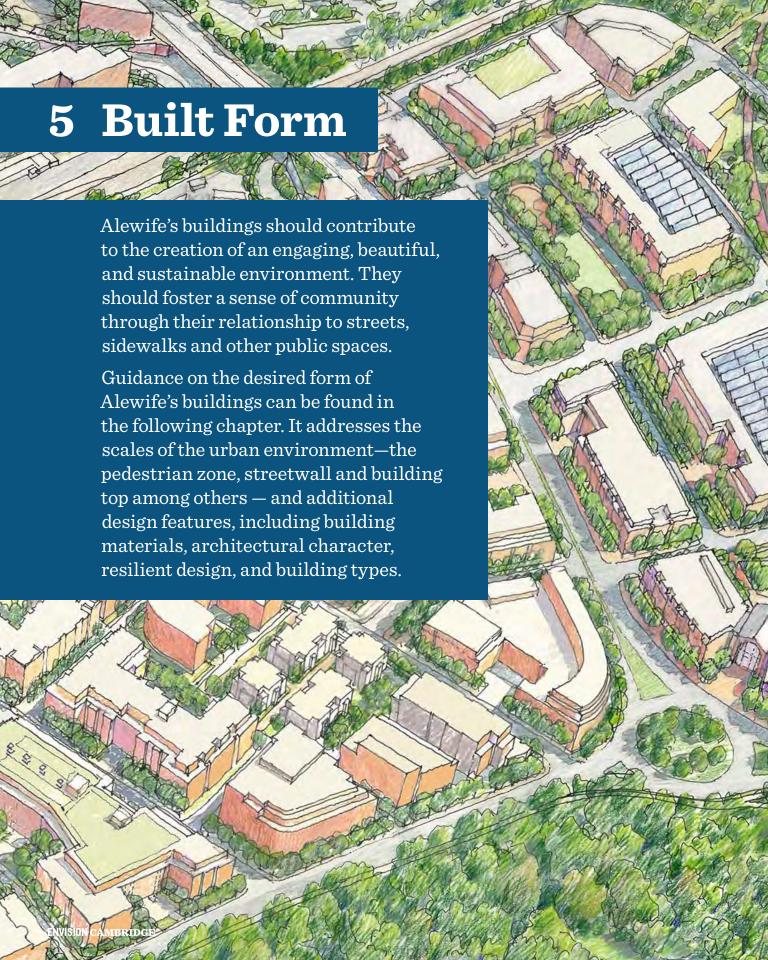


Climate-resilient development anticipates flooding events and sea level rise in the future.

4.7 Emergency Services and Access During Flood Events

In areas currently or projected to be at risk of flooding, implement systems and programs to facilitate building management and operation during flood events, maintain functionality of critical systems, protect the safety of building occupants and emergency personnel, and expedite quick recovery.

- Provide "shelter-in-place" facilities and equipment within buildings, including emergency medical and other emergency response supplies, backup electric supply for critical loads, passive thermal comfort (i.e. efficient building or room envelope), and backup communications capacity.
- 2. Be part of neighborhood resilience networks to enable mutual assistance.
- Create neighborhood resilience hubs and/ or cooling centers. Design free standing community facilities and community facilities in larger buildings to remain functional during flood events and power outages.
- 4. Develop an action plan for flooding and other emergencies. Address notification, evacuation, meeting places, elevator operation, etc.
- 5. Provide access points and routes for fire and other emergency personnel, and for evacuation purposes. Exterior stairs to second floors should be considered to facilitate emergency access during flood events.
- 6. In flood prone areas, provide accessible electrical shutoffs to safeguard emergency personnel.
- 7. Ensure that fire detection and suppression systems will remain operational during flood events or loss of power.
- 8. Engage a consultant to advise on best practices for emergency services and access.







By combining motifs and details that resonate with each other at a variety of scales, building massing and facade composition mediates between the scale of the pedestrian, the building, the street or square, and the skyline.

5.1 Building Elements

Alewife's buildings should respond to and mediate between the wide range of scales of the urban environment: the scale of the pedestrian, of the adjacent buildings, of the street or square, and of distant views from neighboring parks and major thoroughfares.

As part of this response, building massing and principal front facades should be organized into horizontal zones. The specific characteristics of these zones, their relative sizes and importance, and the amount of differentiation between them, will vary depending on building type and context.

Pedestrian Zone

The building's ground floor, and on occasion its second floor, offer amenities, comfort, shelter, and visual enrichment, and accommodate retail and community programmatic uses.

Streetwall

The facade of the building's next three to six floors above the pedestrian zone frames the spatial volume of the adjoining streets, parks, or squares.

Upper Floors and Towers

The floors of tall buildings above the streetwall zone define spaces at a larger scale, and add visual interest to distant views.

Building Top

The top contributes to the building's articulation. Depending on building type, the top may range from a cornice or simple parapet, to a stepped back top floor, to an assemblage of penthouses.

Roofs and Terraces

Roofs and terraces can provide publicly beneficial open spaces; be an amenity for building occupants; help mitigate the urban heat island effect and stormwater runoff; and serve as locations for photovoltaic arrays.

Bridges and Connectors

Occasionally, the floor plates of separate buildings may be linked together by bridges or sizable connecting elements. They should be designed to minimize any detrimental impacts on the public realm.

5.1.1 The Pedestrian Zone

The pedestrian zone provides shelter, accessibility, and visual interest at the pedestrian scale and accommodates active uses that enliven streets and squares. On commercial streets and on streets with ground floor retail, the pedestrian zone's facade should be distinct in character from the street wall floors above. On residential streets, particularly in buildings with ground story residential units, less differentiation between the pedestrian zone's facade and the streetwall above is appropriate.

- 1. Where possible, buildings should engage and animate the public realm with neighborhood uses, such as retail, restaurants, arts and culture, entertainment and recreation, childcare and healthcare, libraries and education. professional office, and co-working spaces.
- 2. The pedestrian zone should incorporate elements that create a visually rewarding and intimate pedestrian environment. Depending on the character of the street and the ground floor functions, these may include:
 - a. Angled display windows, frequent entrances, and recessed entrances,
 - b. Awnings and canopies over the sidewalk.
 - c. A high window-to-wall ratio,
 - d. Variations in mullion patterns, and incorporation of operable windows.
 - e. Varied materials or colors.
 - f. Higher-quality materials and detailing, with particular attention given to enhancing building entries and openings, and
 - g. Residential entrances and stoops.



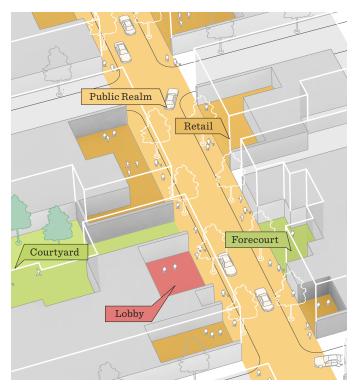
A distinct pedestrian zone emphasizes the horizontal continuity of the pedestrian realm.



Canopies, awnings, and recessed retail entrances can shelter pedestrians and activate the street.

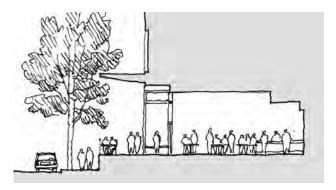


Facade materials, details, and proportions enrich the pedestrian realm.



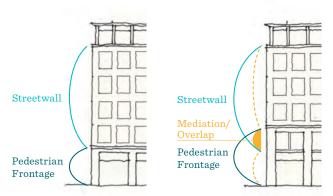
Passages, lobbies, and courtyards create permeable ground stories. Semi-public/semi-private interior retail and community spaces further expand the pedestrian realm.

- 3. The design of facades at the ground story for non-residential uses should reduce the distinction between exterior and interior space, revealing activity within the building:
 - a. On buildings with commercial or neighborhood uses on the ground story, facades should have 60 to 75% transparent glazing.
 - b. Ground story facades of retail, restaurant, and office space, as well as light-industrial and neighborhood uses should maximize transparency, particularly between 2 feet to 12 feet above the adjoining sidewalk.
 - c. Avoid frosted glazing and translucent films at ground story facades.
 - d. Pedestrian frontages should align with the plane of the streetwall. Slightly recessed shopfronts and entrances are an exception. Deeply recessed ground stories along the street front should be avoided.



Transparent ground story facades extend the public space of the sidewalk or elevated walkway into the semi-public/semi-private interior.

- e. Consider incorporating large operable doors or windows in sidewalk-side restaurant dining.
- f. Storage rooms, toilets, restaurant kitchens, and other back-of-house facilities should be located away from the pedestrian zone on primary streets and other public open spaces to maximize facade transparency.
- g. Kitchen exhaust for food service uses should not negatively impact the ground level pedestrian experience. It should be relegated to side streets or back-of-building and be elevated above pedestrian height, or exhausted at the roof level.
- h. Blank walls on primary streets exceeding 20' in length should be avoided.
- i. Ground stories should have a minimum floor-to-floor dimension of 18'.
- j. Ground story levels should be flush with or easily accessible from the adjoining sidewalk or elevated walkway.
- 4. Where the facade expression of the pedestrian zone includes the building's second floor, the second floor facade should either be visually integrated with the ground story facade and differentiated from the street wall zone above, or serve as a mediating element linking the ground story and the streetwall zone.



The pedestrian zone of the facade may be distinct from the streetwall zone above it, or it may be linked to the streetwall zone by designing the second floor facade as a shared mediating zone.

- 5. On residential buildings with ground floor residential units, less difference is necessary between the facades of the pedestrian zone and the streetwall floors above. Some distinction, however, in material, character of openings, detailing of solid wall, should be provided, to contribute to the pedestrian-friendly scale of the street.
- 6. Residential buildings with ground story units should have frequent entrances with stoops, landscape plantings, steps, and accessible routes as appropriate to provide access and maintain a sense of privacy.
- 7. Where buildings have front yards that are elevated in response to elevated ground stories, low walls, combined with steps and ramps, should achieve the requisite grade change to ground story level. Sloped berms are discouraged.

- 8. Where retail or community uses are not provided, ground story spaces on Smith Place, Wilson Road, Fawcett Street, Concord Ave, Cambridgepark Drive, Fresh Pond Parkway, Alewife Brook Parkway, and the Shopping District should be designed to accommodate future active uses.
 - a. Ground story facades should be readily convertible to retail storefronts.
 - b. Venting and exhaust needs of future food service uses should be readily accommodated and directed away from primary streets and the pedestrian level.
 - c. Interior power and HVAC systems should be zoned or easily convertible to enable convenient division and sublease of interior spaces to retail tenants. They should be located above future flood elevations.

Ground floor flood adaptation strategies

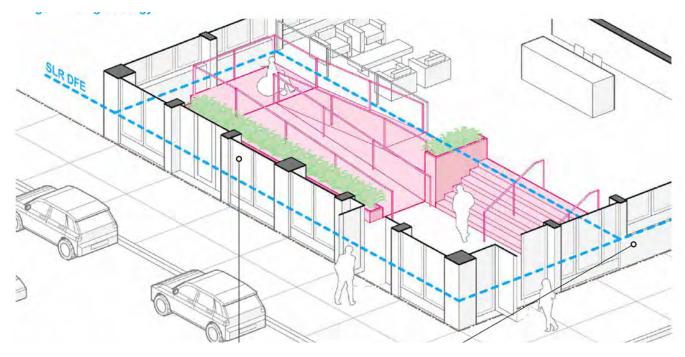
Cambridge's Climate Resiliency Zoning establishes that all habitable residential spaces must be elevated above the projected 1% Long-Term Flood Elevation (LTFE) for their site, and that non-residential occupiable spaces must either be elevated above the 10% LTFE for their site, or that they be provided with barriers sufficient to protect them with that level of flooding. Small entrances, vestibules, and lobbies are allowed to be not protected if they are constructed to recover from flooding. (See Article 22 of the Cambridge Zoning Ordinance.)

Various strategies can provide ready public access to lobbies, retail and other active or neighborhood uses, and other programmatic spaces on ground stories, despite their elevation above existing or future grade. They include, but are not limited to:

- Lobbies and other spaces located at sidewalk level and provided with interior stairs and ramps up to elevated ground story levels.
- Exterior steps and ramps, located in a forecourt, leading from sidewalk level to lobbies and other spaces at the elevated ground story level.
- Elevated walkways along the building's frontage that are flush with the building's elevated ground story level, and are provided with steps and ramps up from the sidewalk level;
- Streets and sidewalks that are raised from their current level to above the LTFE, thereby providing direct access to elevated ground story spaces.

The most appropriate means of elevating to the ground floor will vary between projects and may be different from one part of a building to another. This depends on the characteristics of the site, building design and uses, and the designers' creativity.

- 1. Sidewalk Level Entry with Internal Circulation
 - a. This strategy provides the strongest visual connection between the public realm and the building interior.
 - b. Steps and ramps inside lobbies should provide access up to ground story level and to general building circulation.
 - c. Street level lobbies and other spaces should be constructed of flood tolerant materials and/or protected from flooding by exterior walls that are floodproofed up to the appropriate LTFE level, or protected by passive flood barriers.



Street level building lobby with steps and ramps up to first floor elevated above flood level.

2. Elevated Forecourt

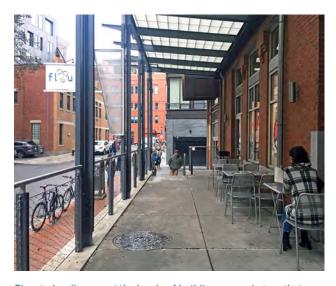
- a. Exterior ramps and steps should provide access from sidewalk level up to a forecourt at the same level as the building's elevated ground story.
- b. Ramps and steps should be designed as integral parts of the project's architectural and landscape design: e.g.: as elements of a forecourt or other feature that is open to the street.
- c. The ramps and steps should generally be located behind the primary plane of the building's streetwall.



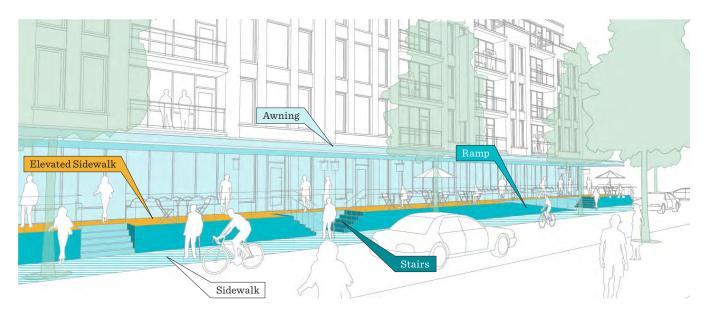
Elevated forecourt, with steps and ramps up from sidewalk levfel, giving access to the building's elevated lobby. .

3. Elevated Walkways

- a. This strategy enables shared access to multiple entrances, advantageous when a building's ground story accommodates several separate publicly accessible uses.
- b. Where ground stories are elevated to 4 feet or less above the street level sidewalk. exterior elevated walkways, flush with ground story level may be used to provide public access to the building. Steps and ramps from the street level will be necessary to access the ground story entrances and walkway.
- c. The walkways should be 12 feet wide, including steps and ramps. They should be sheltered by a projecting canopy for their full 12-foot width, with a minimum vertical clearance of 12 feet.
- d. Elevated walkways should have a minimum clear width of 5 feet, excluding access ramps and steps.
- e. Where possible, elevated walkways should be continuous between adjacent buildings and parcels along streets.
- f. Particular attention should be given to the design of railings and low walls supporting elevated walkways to ensure that these are attractive elements of the public realm.



Elevated walkways, at the levels of building ground story that are raised above flood level, can provide shared access to multiple neighborhood uses and building lobbies, and serve as locations for outdoor seating.



Stairs and steps should be located at frequent intervals to connect elevated walkways to the sidewalk. Canopies shelter pedestrians from inclement weather.

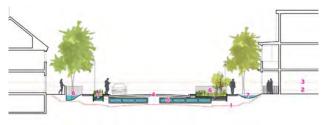
- g. Elevated walkways will generally be on private property, but should be open and freely accessible to the public.
- h. Elevated walkways should be readily accessible from the street level sidewalk. Steps and the starting points of ramps to elevated walkways should occur at a maximum spacing of 100 feet along the ground level sidewalk.
- Steps and/or ramps should be provided where elevated walkways terminate, and at block corners.
- j. Provide a transition area where new curbs and grade level sidewalks do not align with existing ones that will remain.

4. Elevated Streets

- a. Where possible, consideration should be given to elevating the street and sidewalk to the appropriate LTFE level. This strategy will require detailed coordination with the city, utility companies, and regulatory agencies.
- Appropriate measures should be taken to maintain stormwater capacity and avoid displacing floodwaters onto neighboring private and public properties.



Elevated walkways extend interior retail space into the public realm while providing access to elevated first floors.



STREET SECTION

- 1 EXISTING GRADE
- 2 100-YEAR-FLOOD ELEVATION
- 3 500-YEAR-FLOOD ELEVATION
- 4 REBUILT ROAD

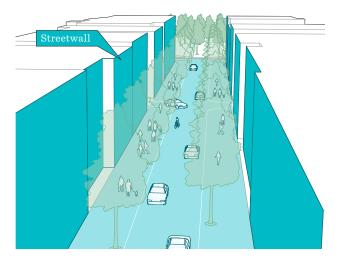
- 5 UNDERGROUND STORMWATER STORAGE AND UTILITIES
- 6 RAIN GARDEN
- 7 BIOSWALE

Elevated street with underground stormwater detention.

5.1.2 The Streetwall

Streetwalls should create room-like public spaces by framing their three-dimensional volumes.

- 1. A minimum of 70% of the streetwall facade should be within the build-to zone.
- 2. In general, it is particularly important for the definition of public space that streetwalls be aligned on the build-to line at block corners.
- 3. Streetwall heights should be in harmony with the widths of the streets and squares they address; they should typically be a minimum of 4 to 6 floors tall. Taller streetwalls may be appropriate where buildings address large open spaces.
- 4. Streetwalls should be organized by a pattern of expressed structural bays, window openings, and/or surface articulation.
- 5. Changes of material, scale, or the design and amount of articulation and relief should be used to emphasize the distinction between adjoining streets that differ in size and character.
- 6. Incorporate focal elements to respond to significant visual axes, to emphasize significant corners, to express changes in interior program, or to articulate primary building entrances.
- 7. The incorporation of a cornice and/or the elaboration and differentiation of the streetwall's top floor should be considered as a means to frame the spatial volume of the street by emphasizing its upper boundary.
- 8. Visible vents (kitchen, bathroom, laundry, etc.) should not be located on streetwalls addressing primary streets or other public open spaces.







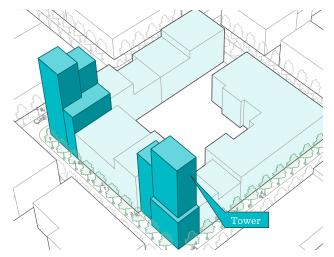
Harmony in height, scale, materials and colors gives coherence to the street or square.

5.1.3 Towers and Upper Floors

Depending on the building type and programmatic needs, the upper portions of tall buildings may take the form of towers with smaller floor plates, or bulkier buildings with floor plates similar in size to those of the streetwall floors below them.

Their massing and facades should be designed to lead the eye upward and, where their heights and locations permit, serve as landmarks seen from the surrounding areas.

- The towers and upper volumes of buildings more than 85 feet tall should be designed to mitigate a sense of height and bulk, especially those that are both broad and tall.
- 2. The massing and facades of the upper portions of tall buildings should generally have smaller floor plates than the streetwall floors below, should be stepped back from them.
- 3. They should be differentiated from them from the streetwall floors by differences in the scale of massing elements, materials, fenestration patterns, proportions, color, or other means.
- 4. Where possible, tall buildings should be oriented so that their narrower facades face the primary street or open space.
- 5. Especially where buildings are both tall and broad, consideration should be given to mitigating their sense of bulk by breaking up the visual continuity of their upper floors and/or by giving them a different facade treatment than the streetwall floors.
- 6. Towers should be articulated to avoid a monolithic appearance, and should emphasize slender, vertically oriented proportions.
- 7. Upper floors should avoid "slab" volumes that make the building appear bulky.



The massing of large towers should be broken up to reduce their visual bulk.







Many strategies can be used to differentiate streetwall floors from towers and upper floors, connect them, and establish harmonious relationships with the surrounding environment.

5.1.4 The Building Top

Depending on design intent and programmatic use, the massing and facade design of top floors may be differentiated from those of the streetwall floors below. creating a varied profile at the skyline and helping to frame the street as volumetric space.





Top floors and penthouses may be differentiated to accommodate mechanical equipment or to create an expressive building top.

Guidelines

- 1. Mechanical penthouses and other roof structures should be designed to blend with the facade below, or part of the facade's pattern.
- 2. Building tops that are unique in material and design from the facades below should be stepped back a minimum of 10' from the plane of the building facade.
- 3. Rooftop mechanical equipment should be screened with a reflective, ventilated screen with a Solar Reflectance Index (SRI) of at least 45 to mitigate the urban heat island effect.
- 4. Mechanical penthouses should have a minimum height and area, while allowing for future tenant equipment.
- 5. Exhaust related flues that extend above screening may exceed this height limit but should be located to minimize impacts to the public realm.

5.1.5 Roofs and Terraces

In addition to their potential as amenities for workers and residents, roofs and terraces will play a significant role in managing stormwater, minimizing the urban heat island effect, and accommodating photovoltaic arrays.

- 1. A variety of options should be considered individually and in combination for sustainability and energy efficiency, including intensive and extensive green roofs, high albedo roofs (with a minimum of 75% of their area with a Solar Reflectance Index (SRI) of at least 78 for flat roofs and 29 for steep roofs), blue (water retaining) roofs, and photovoltaic arrays.
- 2. Roofs should be solar ready. Mechanical equipment and penthouses should be compactly arranged and positioned to maximize the contiguous unshaded area available for photovoltaic arrays.
- 3. Consider the potential of building and parking garage roofs and of terraces at building stepbacks as amenities for the benefit of residents, workers, and the wider public.



Green roofs, like this one, hide parking garages from sight, help absorb stormwater, minimize the urban heat island effect, and provide open space for residents and workers.

5.1.6 Connectors and Bridges

To avoid removing pedestrian presence from public streets, connectors between buildings are discouraged. Upper floor connections should be considered only in circumstances where tenants need large floor plates that might otherwise result in excessive apparent building mass. Such connectors should be designed to provide architectural interest, maintain permeability, and continue to allow light and views of the sky.

- 1. Connectors between multiple tenants/ uses in different buildings are discouraged.
- 2. Connectors over public ways are discouraged.
- 3. All connectors should be set back at least 35 feet from public streets and other public spaces.
- 4. All connectors should be highly transparent.
- 5. Within blocks, provide ground level public passage at selected locations.
- 6. Over promenades or pedestrian walkways,
 - a. Provide at least two stories of clearance above ground
 - b. Connectors should be no more than 20 feet wide and 2/3 of the building height.
- 7. Where multiple connectors are provided:
 - a. They should be spaced apart by double their greatest width.
 - They should be placed so as to create architectural interest and to allow a reasonable amount of light to reach the ground.





5.2 Building Massing

Alewife's buildings should contribute to the definition of the open spaces. Building massing should give spatial definition to Alewife's streets, parks, and squares, and be compatible with nearby existing buildings. Building form should minimize the amount of shading and loss of sky view in open spaces.

- 1. A minimum of 70% of the building's principal front facade shall be located within the Build-to Zone.
- 2. Forecourts, open to the street, are encouraged to provide transitional open space, and to accommodate steps and ramps up to elevated first floor levels
- 3. Pedestrian frontages should be located in the build-to zone, with exceptions for recessed retail or other entrances and shopfronts.
- 4. Building facade lengths longer than 200 feet should be broken into shorter facade segments by forecourts, notches, or changes in plane.
- 5. Large buildings should incorporate upper story stepbacks to help mediate their scale, preserve sky views, minimize undesirable wind conditions, and create sensitive transitions to significant existing buildings.
 - a. 50% to 80% of upper floors above 85' should be set back 8-10 feet from the plane of the streetwall.
- 6. The extension of a portion of the facade plane from the upper stories to the ground may enhance the sense of place by creating a strong vertical emphasis.
- 7. Building tops that are differentiated in material and design from the facade below should be setback by a minimum of 5 feet.







The articulation of tall and broad buildings into distinct massing elements, and the use of facades that emphasize verticality, help reduce their visual bulk.



Forecourts, open to the street, can create welcome interruptions in the streetwalls of long buildings.







High-quality, durable facade materials contribute to a rich visual environment.

5.3 Building Materials

Buildings should be constructed of high-quality durable materials. Materials should create a sense of permanence.

- Sustainability considerations such as operational energy use and embodied carbon and energy should be a factor in material choices.
- 2. In general, the solid portions of streetwall facades should be primarily masonry and high-quality precast concrete.
- 3. Large areas of curtain wall, metal panels, or fiber cement siding should be used judiciously as elements of emphasis in contrast to solid wall surface and more substantial materials.
- 4. Predominately glass facades should be avoided unless it can be demonstrated through modeling that their energy performance will equal or exceed that of punched window facades.
- 5. Spandrel glass should be avoided. Shadow boxes are preferred.
- 6. Vision glass should be clear, with high transparency and low reflectivity. Low iron glass without reflective coatings is preferred for ground floors.
- 7. Warm colors are encouraged.
- 8. Light colors are encouraged to minimize heat absorption and the consequent heat load on building systems, and to minimize the urban heat island effect.
- Panelized systems should be constructed of durable and dimensionally stable materials.
 Their fasteners should generally be concealed.
 Joint details should be precise and consistent.
 Large undivided panels are discouraged.
- 10. The use of Exterior Insulation Finishing Systems (EIFS), or "synthetic stucco", should be avoided.

5.4 Architectural Character

Alewife's buildings should create an engaging environment through design variety with facades that work together to create cohesive public space. Their designs should add visual interest to the district and add to the unique character of an area with multiple building types.

Guidelines

Scale and Detail

- 1. Details and embellishments should be used to refine and enrich facades. Examples include:
 - a. Masonry string-courses, lintels, sills, and trim,
 - b. Changes in plane to produce shadow lines.
 - c. Variations in texture, color; and joint patterns,
 - d. Balcony railings, and
 - e. Sun screening devices.
- 2. Key locations for detailed design focus are the pedestrian zone, building entrances, corners, setbacks, top floors, and silhouettes.







Facade detail, proportion, materials, color, and three dimensional relief contribute to a rich visual environment.

Fenestration

- 1. Windows should be detailed and articulated to enhance the building's appearance.
- 2. Variations in mullion widths and pattern; the incorporation of solid panels within openings; the articulation of wall surface at the periphery of openings; and the incorporation of shading elements should be considered.
- 3. Operable windows should be used in residential and community buildings, and where possible in commercial buildings.
- 4. Horizontal strip windows should be avoided except in industrial buildings.











Patterns of fenestration and modulation of wall surface provide variety.

5.5 Resilient Design

Continue to refer to the City's most current guidance for resilient design standards. These include protecting buildings from flooding, designing buildings to minimize the impact of extreme heat events, and maximizing the use of passive strategies for thermal comfort.

Guidelines

- 1. Elevate habitable residential spaces above the projected 1% Long-Term Flood Elevation (LTFE) for their site.
- 2. Elevate non-residential occupiable spaces above the 10% LTFE for their site or provide them with barriers sufficient to protect them with that level of flooding. Unprotected small entrances, vestibules, and lobbies are allowed if they are constructed of water-safe or easily replaceable materials so as to recover from flooding.
- 3. Passive barriers for floodproofing are recommended at all entrances below the 2070 1% flood elevation.
- 4. Elevate critical building mechanical, electrical, and communications systems above anticipated flood levels.
- 5. Design building envelopes for low heat transmission, low solar heat gain, and natural ventilation.
- 6. Use energy efficient HVAC systems and consider using all electric HVAC and cooking systems.
- 7. Consider employing thermal mass strategies to minimize the impact of high exterior temperatures on building occupants and to reduce cooling energy loads.
- 8. On buildings with ground floor retail or community space, provide awnings or canopies to shade sidewalks and ground stories.
- 9. Incorporate shading elements for fenestration.
- 10. Use high-reflectivity materials on roof surfaces and light-colored paving to reduce heat impact on buildings and public sidewalks and plazas.
- 11. Install green roofs (intensive, extensive or biosolar) where feasible.

5.6 Building Types

In the future, Alewife will have a broad range of building types: residential, office, research, light industrial, retail, civic, and institutional. While they will vary in form and use, they should all help to create a pedestrian friendly and visually rich public realm, be resilient to the urban heat island effect and flooding, and have a minimal carbon footprint.

5.6.1 Commercial Buildings (Office/ Laboratory/Research)

- 1. Include changes in facade plane, and other modulations of massing, to reduce their scale.
- 2. Design large buildings to respond sensitively to the heights of significant neighboring buildings.
- 3. Incorporate ground story retail and neighborhood uses where feasible.
- 4. Design ground story spaces to allow future conversion to retail or neighborhood uses.
- 5. Provide tall ground story heights throughout street facing portions of buildings, suitable for retail, regardless of whether or not retail is currently feasible in these locations
- 6. A commercial building's lobby should occupy no more than 25 feet of street frontage.
- 7. Provide publicly accessible passages through long buildings to maximize permeability for people walking in the district.
- 8. Structural bays should be expressed and have a dimensional range of 20 feet to 30 feet.
- 9. Top floors of tall buildings should generally be stepped back from the streetwall.
- 10. Streetwalls should incorporate detail, subtle relief, and carefully considered patterns of fenestration.
- 11. Organize mechanical equipment and screening relative to building massing and facades; treat them as integral parts of the building design
- 12. Interior lighting for buildings with late-night uses should minimize light pollution, especially near residential buildings or natural areas.



Commercial lobbies should be transparent and extend the public realm into the building.



Mechanical equipment and screening should be integral parts of office building design.

5.6.2 Industrial Buildings

- 1. Incorporate ground story neighborhood uses, entrances at frequent intervals, and transparent storefronts. See section 4.1.1 of these guidelines for more detail.
- 2. Where retail is not feasible, locate front office, reception areas, showrooms, or employee amenities such as dining facilities on street frontages.
- 3. For large industrial buildings with multiple tenants, provide numerous entries at sidewalk level to help activate the pedestrian environment.
- 4. Invest in the architecture of street-facing and publicly visible facades, while ensuring that these remain integrated with the design of the rest of the building.
- 5. Structural bays should be expressed.

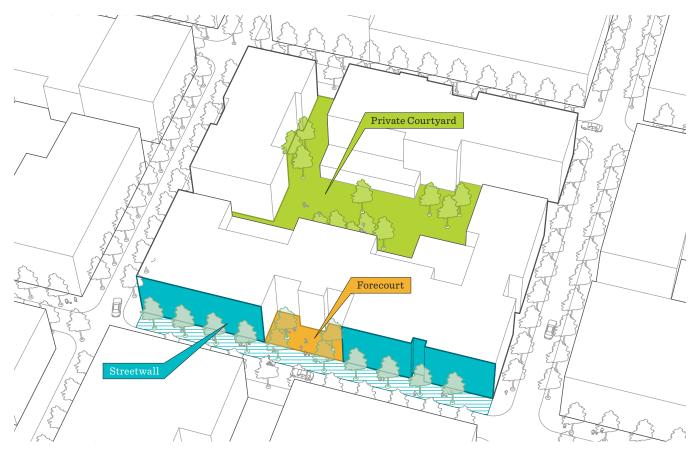


Incorporating retail, office, or showroom spaces on the ground floor of industrial buildings makes them more accessible and pedestrian-oriented.

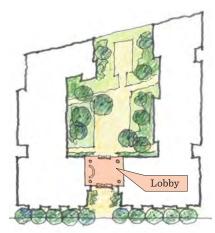
5.6.3 Residential Buildings

- 1. Streetwalls should provide architectural consistency that frames streets as visually coherent public spaces, yet also be sufficiently varied to provide visual interest.
- 2. More irregular massing should be considered on block interiors to create smaller scaled or more intimate private courtyards.
- 3. The level of detail, expression of structural bay widths, and massing of streetwalls should relate to the scale of the street and the scale of individual units.

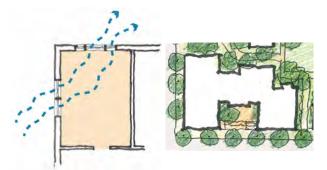
- 4. Incorporate courtyards, open to the street, to provide semi-public transitional open space, and to facilitate ascent to the elevated residential ground floor level.
- 5. Incorporate recesses, courtyards, and units with multiple corners to bring light deeper into floor plates and allow cross ventilation.
- 6. Top floors of street facades should generally be stepped back to reduce the building's visual bulk, and their massing and facade expression should generally be articulated to reflect the scale of dwelling units.
- 7. Where possible, terraces should be provided at building setbacks as private or communal amenities or as locations for green roofs.



Streetwalls define the boundaries of public streets. Residential forecourts enrich them with variety and semi-public green space. Courtyards within blocks offer private space for residents.



Forecourts and lobbies leading to courtyards give urban blocks a sense of porosity.



Incorporate recesses, courtyards, and units with multiple corners to bring light deeper into floor plates and allow cross ventilation.

- 8. Locate residential lobbies directly on public streets, or on courtyards that open onto those streets.
- 9. Facades of large residential buildings should provide visual interest and mediate between the scale of individual units and the civic scale of the streetwall. Potential design strategies and elements include:
 - a. The articulation of facades into vertical zones by changes in plane, material, color, fenestration pattern, etc
 - b. Bay windows.
 - c. Vertically proportioned recesses.
 - d. Double height entries and lobby spaces.
 - e. Sheltered and human-scaled balconies, including "Juliet balconies".
- 10. In addition, streetwall facades should be enriched by fine-grained detail. Examples include:
 - a. Balcony railings,
 - b. Shading devices,
 - c. Bond patterns in masonry and joint patterns in other wall materials,
 - d. Mullion patterns in fenestration.



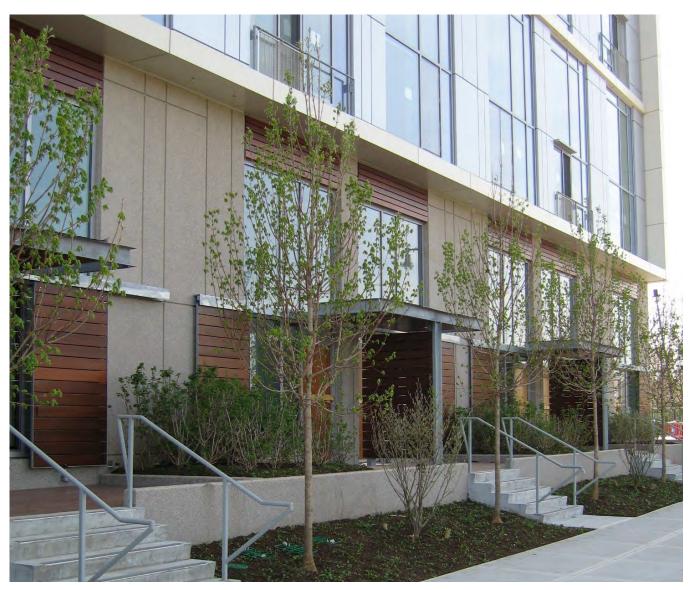
 $Residential\ streetwall\ facades\ should\ express\ residential\ scale.$



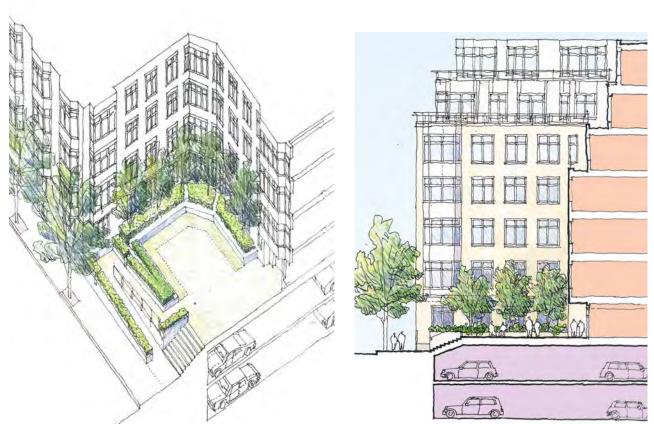
Balconies and sun shading devices can add visual interest.

- 11. In portions of street level facades that do not include residential units or retail space (e.g. common rooms and lobbies), incorporate 40 to 60 percent transparent glazing.
- 12.Incorporate individual entries to ground story units or double height loft-style units along street frontages to strengthen the street's residential feel and scale.

13. Where ground story units are elevated above grade, and facades are set back from the sidewalk, consider creating an elevated walkway in the building setback zone. This would be accessed by ramps and steps from the public sidewalk to provide access to multiple ground story residential entrances.



At residential buildings with front setbacks, landscape should create thresholds of privacy while still allowing visual connection.



Residential forecourts offer transition areas between the public sidewalk and the private building interior, and facilitate access to raised ground stories.



Interior courtyards provide private open space, promote social connections, and enhance views from residential units. Their vegetation and the treatment of their ground plane help mitigate the urban heat island effect and absorb stormwater.

5.6.4 Civic and Institutional Buildings

- 1. To emphasize their community presence, a more unique form and appearance may be appropriate for civic and institutional buildings than for other buildings in the district.
- 2. The design of civic and institutional buildings should express the unique character of their uses and programs and contribute to the coherence and spatial definition of the streets, parks, or squares they address.



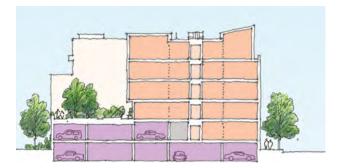
The civic role of institutional buildings may be symbolized by their iconic facades. In this example, a double glazed facade with adjustable shading mechanisms combines energy efficiency with visual openness.



Expressive forms are one means to symbolize civic or institutional importance.

5.6.5 Parking Garages

- Above-grade parking garages on primary streets should be hidden from view.
- 2. Wherever possible, garages should be wrapped by residential, commercial or other uses if facing a public street or public open space.
- 3. Parking garages should include ground floor retail uses where feasible.
- 4. Where garage facades are visible and not wrapped by occupiable uses, they should be architecturally screened. The facades should be of comparable design and material quality as adjacent buildings, and may include combinations of solid walls, louvers, vegetation, and perforated metal, among others.
- 5. Pedestrian stairs and lobbies should be highly glazed and visible to the public.
- Vehicular entrances should be unobtrusive and integrated into the design of ground floor facades.
- 7. Sloped garage ramps should not be visible from public streets and open spaces.
- 8. Ventilation openings on streets or other public open spaces should be screened by louvers or other means.
- 9. Garage lighting should minimize light trespass and glare.
- 10. Consider green roofs and usable terraces on top of parking garages.
- 11. The top levels of tall parking garages may serve as locations for photovoltaic arrays.



The tops of parking garages that are lower than nearby or adjoining buildings should be treated as landscaped terraces.

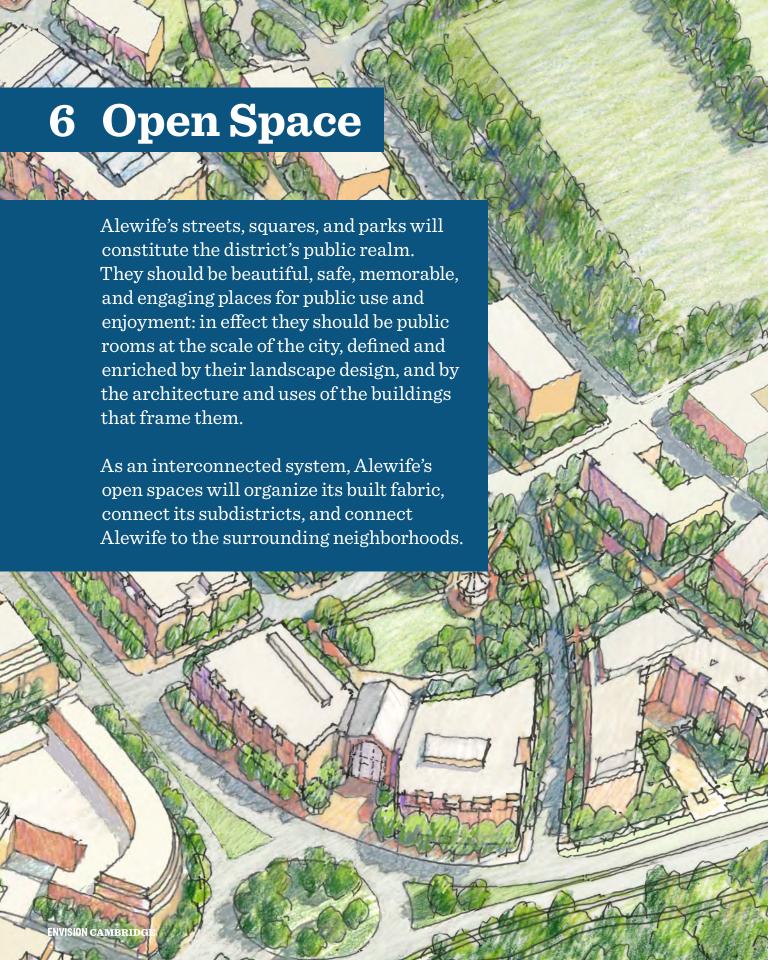
- 12. Parking garages should be designed to accommodate alternative land uses in the future
- 13. Recharging facilities for electric vehicles should be provided.
- 14. Locate garages below grade where possible.
- 15. Garage roofs that are 4 feet or less above the sidewalk, should be landscaped to provide publicly beneficial open space.
- 16. Below-grade garages should be provided with passive barriers at entrances and ventilation openings to protect from flooding or wet floodproofed to allow water to pass through during a flood event.



The sides of parking garages that face public spaces should be wrapped by commercial or residential uses. On less significant sides and on the interiors of blocks, they should be screened.



Entrances to parking garages should be unobtrusive and be integrated into the design of ground floor facades.





Flexible clear open spaces, generous plantings, and sky views serve our needs for a connection to nature and outdoor life.



Create "Cool Corridors" on primary streets through tree canopy and structural shading.



Stormwater mitigation features should be integral parts of landscape design. The Alewife Constructed Wetland is an example.

6.1 Site Design, Resilience, and Sustainability

As Alewife develops, its existing streets, parks, and squares should be improved, and new streets, with their own characters, sizes, programs, and uses, should be constructed. Their landscape design and open space amenities should create an engaging, programmatically rich, and continuous pedestrian environment.

The district's open spaces should coherently framed by surrounding building facades. They should create usable and enjoyable places, and interconnect to create an integrated system of public paths, streets, and larger spaces.

Open spaces will contribute to creating an environmentally sustainable district as elements of a performative landscape that absorbs excess stormwater, improves water and air quality, and provides shade and cooling to reduce the urban heat island effect.

- 1. Utilize green infrastructure to reduce flooding impacts from smaller rainfall events and to mitigate the urban heat island effect.
- 2. Adhere to the city's "25:2" stormwater management policy, under which all redevelopment must store the difference in stormwater volume between the predevelopment 2-year, 24-hour storm event runoff and the post-development 25-year, 24-hour storm event runoff.
- 3. Concentrate the majority of green open space in parks, courtyards, and interiors of blocks, rather than in narrow front yard setback zones.
- 4. Open spaces should provide access to sunlight, sky views, and protection from wind.
- 5. Open spaces should contain a range of amenities, such as:
 - a. Seating and other types of street furniture,
 - b. Canopy trees,
 - c. Water features,
 - d. Areas for multiple uses, exercise, play, events, and locations for food trucks, and
 - e. Small retail pavilions.

- 6. Works of public art should be integrated into their environment; designed and located as part of an overall vision for the public space.
- 7. Wayfinding signage should be provided in large open spaces to facilitate direct and accessible connections.
- 8. Public bathrooms should be incorporated in high pedestrian traffic areas, based on an evaluation of need as the district develops.



Provide public bathrooms where needed.



Public spaces with robust tree canopies provide an attractive, shaded environment throughout the year.

6.2 Environmental Comfort

Alewife's open spaces should provide safe and pleasant environments, with shade, shelter, and a connection to nature, and should help mitigate negative environmental impacts.

Guidelines

Cool Spaces

- 1. Landscape design public and private should provide shade and cooling through the planting and concentration of canopy trees.
- 2. Emphasis should be placed on creating "cool corridors" by shading the primary bus, bicycle, and pedestrian routes.

Lighting

- 1. Site lighting and exterior architectural lighting should create a safe environment, but light levels should be no higher than necessary.
- 2. Light trespass and glare should be prevented, and lights should not be directed upward.
- 3. Architectural lighting above the second floor level should be avoided.
- 4. Lighting fixtures should be shielded and luminaires should be of a warm color temperature.
- 5. Lighting fixtures should be approved by the International Dark Sky Association.
- 6. Low level lighting should be considered at steps and ramps to elevated walkways.
- 7. Light trespass from commercial building interiors should be minimized by building core and shell design, and through tenant agreements.

Noise

 Mechanical noise should not impact the quality of life in public spaces like parks or private spaces, such as residences. Design, select, locate, and acoustically screen equipment to protect neighbors from noise.

Shadow, Glare and Wind

1. It's important to consider how a building will cast shadows, reflect sunlight, and impact wind flow on the surrounding public space and nearby buildings. If negative effects are identified, take steps to minimize them.

6.3 Urban Forest

As Alewife develops, its open spaces—both publicly and privately owned—should contribute to growing Cambridge's urban forest. Benefits will include improved public health and wellbeing created through a connection with nature, enlarged and enhanced natural habitat, reduced heat island impact, and reduced stormwater runoff.

- 1. Consideration should be given to the preservation of existing trees, including relocation, if necessary.
- 2. Plant new trees to improve shading, reduce heat island impacts, and enhance areawide stormwater management.

- 3. Create a more balanced ecosystem and support natural habitat by providing a diverse tree canopy and understory plantings throughout the district's open spaces.
- 4. Plant shade trees along streets and within and around service areas, parking lots, and other paved areas.
- Provide productive soil conditions for new street trees, including consistent soil materials, appropriate aeration and drainage, and high nutrient levels.
- 6. Utilize the tree species, planting standards, and maintenance regimens recommended by the Department of Public Works and the Cambridge Urban Forest Master Plan for streets and other open spaces.



Provide a connected and diverse tree canopy.

6.4 Character and Uses

Open spaces should vary in character and accommodate a wide range of uses and events, depending on their size and the needs of the surrounding neighborhood.

- 1. Provide a mix of clear flexible open areas with more sheltered intimate places.
- 2. Provide facilities for both active and passive uses.
- 3. Provide specialized play and recreational areas and equipment.
- 4. Activate open spaces with retail activity.





Provide broad open areas to accommodate impromptu uses and organized events.







Play equipment and public events activate open spaces and serve neighborhood needs.



Wayfinding throughout the district should be clear and accessible, and communicate necessary information.





The Universal Playground at Danehy Park fully incorporates Universal Design (UD) - the concept that all parts should be as usable as possible, without changes, by everyone. It takes sensory, cognitive, and emotional abilities into consideration to create a universally welcoming and usable space.

6.5 Universal Access and Design

In the design of buildings and outdoor spaces, place special emphasis on universal access and design. This means going beyond accommodations; recognizing the right that all people have to access and inhabit a space regardless of their cognitive and physical capacities, creating more equitable places.

- Provide wayfinding signage throughout the site and create direct accessible connections.
- 2. Ensure that streetscape elements do not conflict with accessible parking.
- 3. Incorporate "visitability" measures in residential buildings.
- 4. Ensure that parks and plazas provide activities and facilities serving people of all ages.
- Ensure that outdoor spaces provide comparable facilities for all people regardless of their ability to ascend steps or ramps.
- 6. Use technology to help compensate for limitations in sensory abilities.
- 7. Provide audible and tactile information beyond existing requirements at crosswalks and in building elevators.
- 8. Ensure that streetscape elements do not conflict with designated accessible parking.
- 9. Benches should generally have backs and arm rests to assist people that benefit from extra support and stability.
- 10. Benches should be placed frequently to assist people with mobility and stamina limitations.

6.6 Streets and Paths

New streets and paths should connect Alewife's subdistricts and tie the district to nearby neighborhoods and parks. Alewife's streets should be welcoming, safe, and enjoyable for bicyclists and pedestrians of all ages and abilities. Primary streets should be designed as "cool corridors," shaded by canopy trees.

- 1. Streets should be designed as part of Alewife's overall open space system, incorporating continuous street trees, and stormwater mitigation features where appropriate.
- 2. Street should facilitate a network of pedestrian and bicycle routes, connected to the surrounding areas of Cambridge.
- 3. To enhance the experience of the street as a space for people, there should be clear delineations between the vehicular street: the public sidewalk; the semi-public/semi-private character of front yards and entry courtyards; and the private building interiors. In order to achieve this, curbs, bicycle lanes, street trees, sidewalks, low walls or edge plantings, front yards, and elevated walkways should be aligned as a series of layers parallel to the street.



Parallel parked cars and curbside street trees define the sidewalk and separate pedestrians from traffic. Canopies provide shade and provide shelter from rain or snow. Ground floor facades and retail frontage aligned along the edge of the sidewalk activates the public realm.



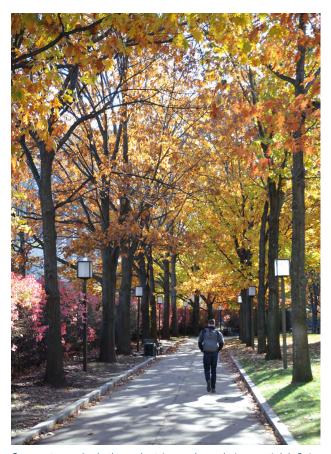
Mid-block walkways enhance pedestrian connectivity and offer opportunities for active uses.



Pedestrian streets and woonerfs create a more generous pedestrian environment by either eliminating or slowing vehicular traffic.



Transparent storefronts create a spatial and visual connection between interior and exterior spaces.



Canopy trees shade the pedestrian realm and give spatial definition to the city's streets, paths, and other public spaces.

- 4. To facilitate direct physical and/or visual engagement between building interiors and the public realm on primary commercial streets, sidewalks should generally extend to building facades.
- 5. Street trees should define space and shelter pedestrians and bicyclists. Street trees should be:
 - a. Canopy trees, tall enough once mature to not obstruct ground level views.
 - b. Spaced 20' to 30' apart, and consistently aligned.
 - c. Located in the sidewalk, adjacent to the curb where possible, or between elevated cycle tracks and the pedestrian sidewalk.
- 6. Tree wells should be coordinated with zones of paving materials and their joint patterns.
- 7. Utilities should be located underground and under the vehicular street to avoid interference with tree canopies and root systems.



Multi-use paths enhance connectivity for pedestrians and bicyclists.

- 8. In addition to canopy trees, incorporate structural shading, such catenary shades spanning across streets and independent shade structures.
- 9. Minimize street widths and curb radii at intersections to slow vehicular traffic and make pedestrian crossings shorter.
- 10. On-street parking should be parallel.
- 11. Paving should generally be light-colored.
- 12. Consider incorporating brick surfaces in sidewalks, as long as it remains compliant with accessibility regulations and best practices.
- 13. Where front yard setbacks separate buildings from the public sidewalk, elements such as curbs, low walls, hedges or low plantings, or fences should define the front boundary of the yard.
- 14. On streets with front yard setbacks where building ground story levels are elevated significantly above sidewalk levels, low retaining walls, up to 30" tall, should be provided along the inner edge of the sidewalk to achieve the grade change.
- 15. Chain link fencing should not be visible from public streets.



Where front yards are above the level of the sidewalk, low retaining walls should be used. This enhances the distinction between the private front yard and the public sidewalk.



Sidewalks should accommodate pedestrian passage, street trees, street furniture, and where appropriate, seating for cafes and restaurants.



Parks should include open flexible areas that can accommodate multiple uses.



Movable outdoor furniture encourages quiet gathering and relaxation



Parks should provide appropriate seating and benches should have backs.

6.7 Parks

Alewife is bordered by several large parks: Fresh Pond Reservation, Danehy Park, and the Alewife Brook Reservation. These provide a wide range of options for passive and active recreation. Within the district, the primary need is for smaller neighborhood parks, and for connectivity to the adjoining open spaces.

As the district develops, new parks may be created as publicly- and privately-owned public spaces. These parks should provide opportunities for a wide range of activities, including quiet enjoyment of nature, recreation, active play, outdoor dining or picnicking, temporary markets, organized public events, and informal gatherings.

- Parks should be predominately green, with paths located to facilitate pedestrian and bicycle access, and paved areas integrated to accommodate temporary outdoor markets.
- 2. Park designs should integrate naturalized stormwater mitigation features, such as bioswales, retention ponds, and rain gardens.
- 3. Pavement should be light-colored and permeable wherever possible.
- 4. Parks should provide seating, including benches with backs. Locations should include park entrances and along paths.
- Plant and trees species should be selected to provide beneficial habitat for pollinators and other species, Native species are preferred.
- Plants and tree species should be appropriate to changing climate, including heat and drought tolerance.
- 7. Tree planting strategies should include a variety of species to account for known and potential infestations and disease.

- 8. Parks should include spaces of differing scales to accommodate a wide range of activities, individuals and groups, including:
 - a. Flexible open areas—generally lawns suitable for a wide range of planned and impromptu activities.
 - b. Smaller scaled, more sheltered and intimate spaces that provide views of larger spaces and the activity in them.
- 9. To create a defined boundary for a park, layered landscape elements should be used to frame the open areas of the park. This layered border can separate the park from adjacent streets and provide smaller, sheltered spaces for sitting or walking. Some examples that can be used include allées of trees, bordering paths, hedges and other low plantings, low walls, fences, benches, and structures such as trellises or pergolas.
- 10. Parks should incorporate multiple entrances, designed to celebrate arrival in the park.
- 11. Play areas should be located near residential buildings where possible.



Kids enjoy protected play areas.



Layers of landscape elements that provide visual permeability, such as trees, trellises, loggias, low plantings, paths, benches, etc. frame open areas.



Fences enhance parks by demarcating their perimeters while offering visual connections from the bordering streets.



Celebrate park entrances to emphasize the sense of arrival.



Squares should be primarily paved to provide flexible open space suitable for a variety of uses.



The framing of public space by streetwall facades provides a sense of spatial enclosure.



Larger plazas or squares should include a clear ground plane that accommodates multiple uses.

6.8 Squares and Plazas

New squares and plazas should be created as integral elements of development projects. They should be beautiful and welcoming places that are a focus of community life. They should be predominately pedestrian, and enlivened by outdoor dining, temporary markets, playful landscape features, public art, outdoor events, and the ground floor activity of buildings that frame them.

- Squares should be framed by building facades and bordered by streets on at least two sides, and wherever possible, active uses in the ground stories of the buildings around them.
- 2. Squares should be primarily paved to provide flexible open space for a variety of uses.
- 3. Pavement should be light-colored and permeable.
- 4. Depending on their locations and character, squares, plazas, and courtyards should incorporate trees and other plantings, benches, water features, public art, outdoor seating areas for restaurants and cafes, as well as the public, and areas for temporary retail—carts, trucks, stands, and tents.
- 5. Landscape design should complement the sense of spatial enclosure provided by the buildings that frame squares by incorporating bordering shade trees and other landscape elements.
- 6. Vehicular traffic along or through squares, where it occurs, should be slow.

6.9 Privately Owned Public **Spaces**

Privately Owned Public Spaces (POPS), including parks, squares, and courtyards, will be an important component of Alewife's system of open spaces. Regardless of the specific arrangements for maintenance, funding, security, operation, etc., they should be perceived as fully open to the public.

- 1. Entrances from public streets should be generous, direct, and unimpeded.
- 2. Any fences and gates should be open and integral to the design—incorporated into architecture or landscape that frames the space-rather than imposed.
- 3. Privately owned public spaces should, at least, be open from dawn to dusk.
- 4. If possible, they should be available for event programming.
- 5. Landscape design and the provision of amenities should be guided by the same considerations as in publicly owned open spaces.
- 6. Where possible, the design and location of privately owned public spaces should be done in coordination with adjoining owners, both public and private, so as to create larger contiguous open spaces where possible, and to distribute smaller ones throughout the district.





Privately owned public spaces, such as this plaza at the Kendall T Station, should be welcoming and integral to the district's public realm.



Privately owned public spaces can be valuable public amenities, such as the skating rink at Termeer Square.



Large developments should include semi-public forecourts to break up long building facades.



Courtyard activated by ground level and second floor retail.



Entry court, visually open to the street, but separated from it by planting and a grade change—a transitional space that is intimate yet also part of the streetscape.

6.10 Entry Courtyards

As semi-public/semi-private spaces, entry courtyards enrich both the public realm and the private spaces within buildings. They should be used to break street facades of long buildings into shorter segments, give light to building interiors, and accommodate steps and ramps from sidewalk level to an elevated ground story.

- 1. Incorporate permeable paving where possible, preferably light-colored paving.
- 2. Consider providing retail or other activating uses in building ground stories around entry courtyards.
- Incorporate fixed and/or movable seating as appropriate to the adjoining ground story uses.
- 4. Include trees and other plantings to provide shade and to enhance the privacy of adjoining residential interior spaces.

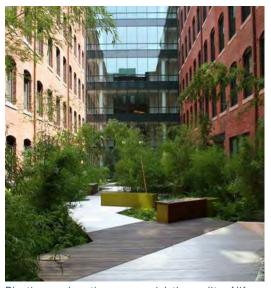


Even small entry courtyards can add beauty and richness to the pedestrian experience.

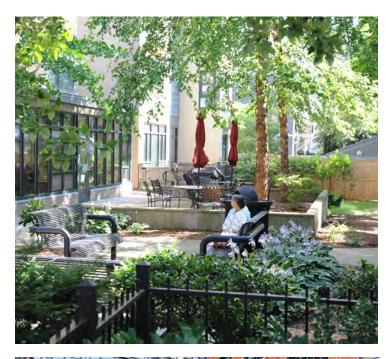
6.11 Private Open Spaces

Private open spaces, such as exterior yards and courtyards within blocks, should be designed to retain and absorb stormwater and minimize the urban heat island effect.

- 1. Minimize impermeable area and use lightcolored paving where possible.
- 2. Incorporate stormwater mitigation features such as bioswales, rain gardens, and retention ponds where feasible.
- 3. Incorporate trees to augment Cambridge's urban forest.
- 4. Where courtyards occur at grade or on upper levels, create visual and physical connections to these spaces.
- 5. Avoid the use of chain link fence, barbed wire, or concertina wire in locations visible to the public.
- 6. Where building streetwall facades are set back from inside edge of the sidewalk, define the edge of the sidewalk. Means include slightly raised front yards, seat walls or low retaining walls, fences, or continuous lines of vegetation such as hedges along the sidewalk.



Plantings and seating areas enrich the quality of life for residents and workers.





- 7. Where the grade of front yards is above that of the adjacent sidewalk, avoid sloped berms with toes that meet the sidewalk. Instead provide curbs, seatwalls, or low retaining walls at the edge of the sidewalk.
- 8. Curbs, seatwalls and low retaining walls at the edge of sidewalk should be landscaped to provide a green buffer between the sidewalk and building facade.

6.12 Public Art

Enrich the visual environment and strengthen the sense of place by incorporating expressions of creativity.

- 1. Incorporate public art as an integral component of the development's architectural and landscape design.
- 2. Where possible, integrate arts related uses such as galleries, arts displays, or artists studios on the ground level of affordable housing developments that are located on business and commercial streets.
- 3. Commemorate Cambridge's history.





Opportunities for creation and play engage the public.



Memorials enrich our sense of community: the Tom Magliozzi plaque at Brattle Square.



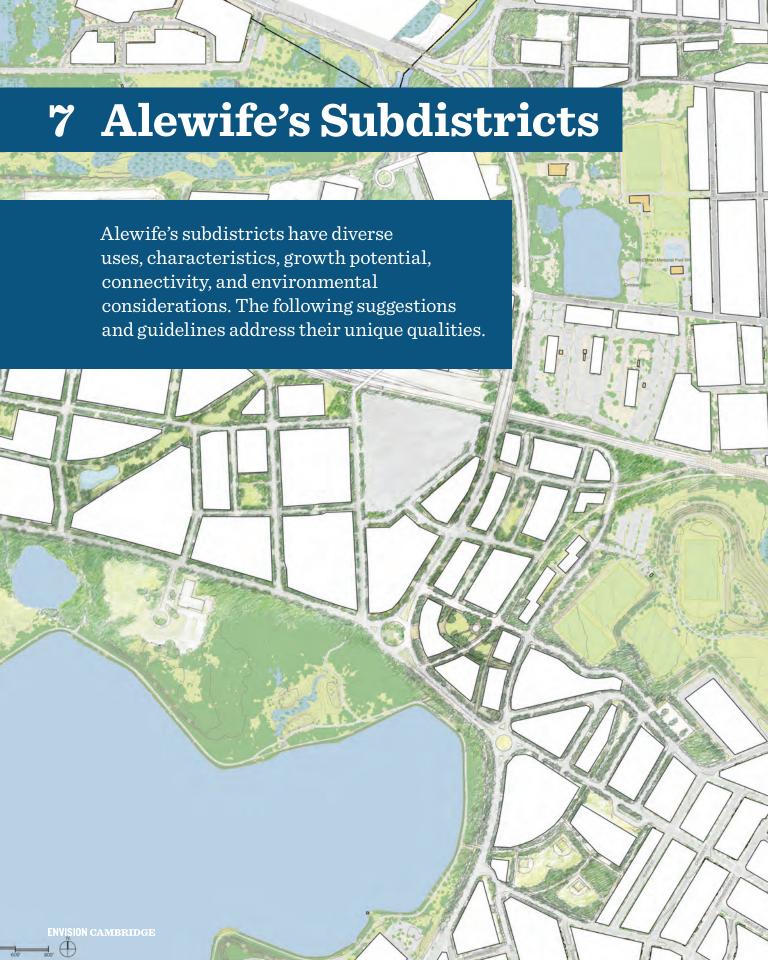
The works of local artists enrich public spaces and contribute to the Cambridge community's sense of identity.



Sculpture can give memorable character and focus to shared spaces. $% \label{eq:character}$

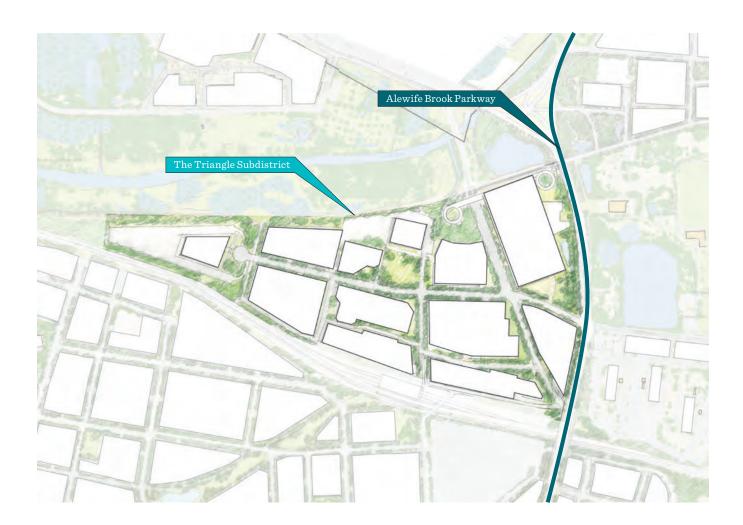


Climbable sculpture encourages children to think of public spaces as their own.



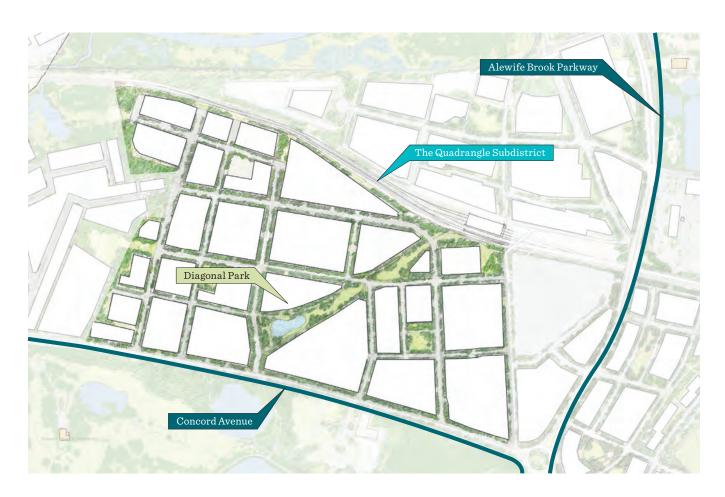
7.1 The Triangle

- 1. To create a walkable pedestrian environment, existing privately owned driveways should be transformed to look and feel like publicly owned streets. Their sidewalks, street furniture, bicycle lanes, street trees, and other plantings should provide shelter, beauty, and connectivity.
- 2. Consideration should be given to increasing public access to privately owned open spaces.
- 3. Provide Alewife Brook Parkway with generous sidewalks, curbside street trees, and streetwall facades with ground floor retail or other active uses. Ground floors of buildings along the Parkway should be provided with entrances at sidewalk level.
- 4. In the block adjoining the Parkway, consideration should be given to creating an elevated landscaped terrace above structured parking in the interior of the block, with open pedestrian access from the Alewife Brook Parkway's western sidewalk, and to including tall buildings in the block adjoining the Parkway, to create, in conjunction with the residential towers of the Rindge Avenue district, a western gateway to Cambridge.
- 5. A multi-use path should be created under the Alewife Brook Parkway bridge, connecting to the Rindge Avenue district.



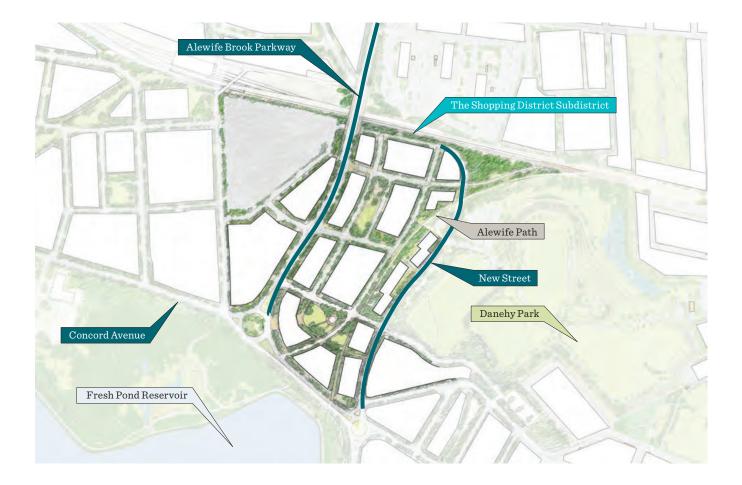
7.2 The Quadrangle

- 1. As the existing super-blocks and large parcels are developed, create additional streets and paths within them to increase the connectivity and permeability of the Quadrangle.
- 2. Existing or new privately-owned streets should be accessible and pedestrian friendly.
- 3. Owners of adjoining parcels should coordinate on the location and design of fire lanes and service drives, sharing them to maximize developable area and green space.
- 4. Transform Concord Avenue into an urban boulevard, lined by street trees, separated bicycle lanes, generous pedestrian sidewalks, landscaped setbacks, substantial building facades, and landscaped courtyards.
- 5. The proposed linear diagonal park should be framed with building facades. Its paths should connect to the paths from the courtyards of the adjoining blocks.
- 6. Multi-use paths should be constructed connecting the Quadrangle's streets and bicycle lanes to the pedestrian/multi-use path to be constructed along the south side of the railroad tracks.
- 7. Avoid the construction of dead-end streets wherever possible.
- 8. Consideration should be given to creating a green buffer along the tracks where width should be preserved for the proposed future Belmont Multi-use Trail.



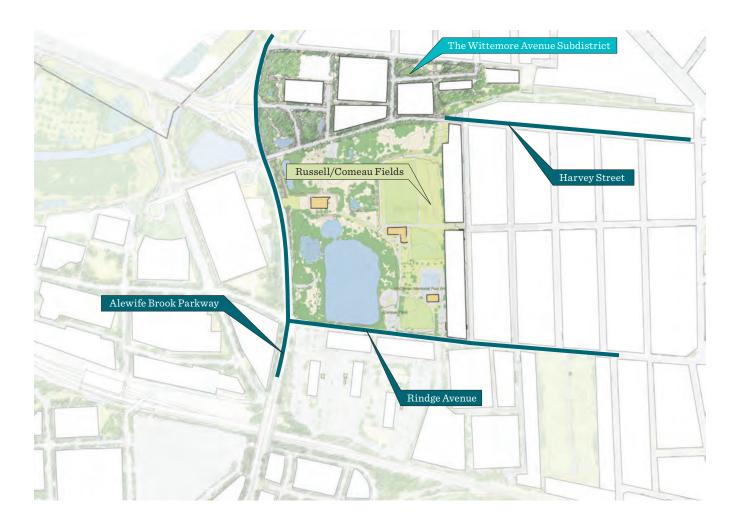
7.3 The Shopping District

- 1. Create a system of urban blocks, defining a network of streets, squares, and parks.
- 2. Parking garages facing parks, squares, and major streets should be lined with retail, commercial, or residential space.
- 3. Consider incorporating pedestrian streets and/or woonerfs.
- 4. Provide Alewife Brook Parkway with generous sidewalks, curbside street trees, and streetwall buildings with ground floor retail or other active uses that meet the grade of the sidewalk. Include accessible pedestrian routes down to grade from the bridge level.
- 5. Provide multi-use paths connecting to the proposed Watertown Line trail.



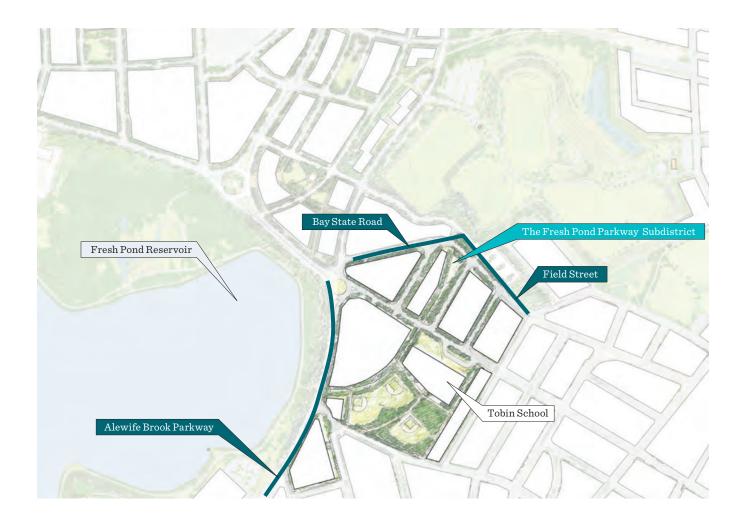
7.4 Whittemore Avenue

- 1. Pedestrian and bicycle connections should be provided to the extension of the Linear Path along the axis of Harvey Street.
- 2. Locate and configure buildings to create streetwalls along Fresh Pond Parkway, Whittemore Avenue, and the extension of the Linear Path.
- 3. Provide pedestrian-friendly sidewalks, lined by curbside street trees.
- 4. Locate surface parking, if any, on the interior of blocks, or below buildings or landscaped terraces.



7.5 Fresh Pond Parkway

- 1. Locate and configure buildings to create streetwalls along Fresh Pond Parkway, Lexington Avenue, and Lakeview Avenue.
- 2. Provide pedestrian-friendly sidewalks, lined by curbside street trees.
- $3. \ \ Locate surface parking, if any, on the interior of blocks, or below buildings or landscaped terraces.$



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