Alewife Zoning & Policy Implementation

November 16, 2017
Site History

Cambridge – “The Great Swamp” [1777]

Cambridge – Alewife [1947]

Alewife Brook channelized [1909]
Impervious Surfaces

- 73% of the land area in Cambridge Highlands is impervious (excluding open spaces)
- High water table limits potential for infiltration; reducing impervious surfaces is just one part of a stormwater management solution
- Reducing impervious surfaces can also help address urban heat island effect, and quality of the public realm
Land Ownership

312 different owners

Source: City of Cambridge Tax Assessor and Property Database 2016
Urban design framework

Find a systemic solution to the impacts of climate change by aligning with the preparedness planning process

• Build to an elevation of 4’ or over for the first habitable floor level, which reduces flood risk from 2070 SLR/SS

Create a mixed-use walkable neighborhood that also promotes bicycles and transit

• Create a distributive multimodal transportation network by “completing the street grid” and making better connections to the T
• Create a “there there” for daytime and evening populations and to improve the “quality of address”
• Achieve a scaled transition of new development towards Cambridge Highlands

In order to realize our vision of transforming Alewife into a resilient neighborhood with strong amenities and sense of place, we need to retain a sufficient amount of value in order to encourage redevelopment.
Raised Plinth
Flood Protection: Raised Public Plinth on A Streets in Quad
Urban design framework: A network of green infrastructure

Green Infrastructure

- Proposed Green Link envisions a land-efficient open space network that links the Alewife T to Fresh Pond.

- Further study will explore the potential to tie this to a district-wide storm water strategy.

Midblock Stormwater Gardens
Open Space
Urban design framework: A network of green infrastructure

Green Link and mid-block connection precedents
Opportunities

- Encourage walking and biking to reduce growth vehicular trips.
- Provide off-street connections between disconnected existing open spaces.
- Create recreation loops at two scales in Alewife.
- Reduce urban heat island affect through increased shading and permeable surfaces.
- Increase storm water storage options using existing City-owned parcels.
Benefits of Achieving the Vision

- Potential for new publicly accessible open space.
- New connections can help rationalize the existing street grid, catalyze development, and facilitate achievement of the vision set out in the plan.
- Additional off-street pedestrian and bicycle as an alternative to vehicular transit.
- Balance of new housing units and jobs.
- Flood mitigation that also strengthens the urban street edge and pedestrian experience.
Net New Housing Units at 60% Buildout

- Quadrangle ~725 units
- Shopping Center ~745 units
- Jerry’s Pond ~310 units
- Fresh Pond Parkway ~330 units

Net New Jobs at 60% Buildout

- Quadrangle ~7,020 jobs
- Shopping Center ~1,030 jobs
- Jerry’s Pond ~350 jobs
- Triangle ~720 jobs
- Fresh Pond Parkway ~170 jobs

Proposed Land Use

- Residential
- Commercial
- Mixed-use Retail
- Mixed-use Industrial
- Live/Work Space
Alewife Implementation Plan: Zoning & Policy

Implementation Plan Breakdown

1. Zoning & Policy
   - Building Form & Plot Constraints
   - Roads & Off-Street Paths
   - Land Use Designation

2. Infrastructure & Capital Projects
   - Public Open Space
   - Priority Roads
   - Resiliency Infrastructure

3. Economic Development
   - Light Industrial Business Preservation
   - Low-barrier to Entry Jobs Program
Alewife Implementation Plan: Zoning & Policy

Alewife Implementation: Zoning

New Zones
Allow development through special permit on private parcels with a more predictable urban form, land use, and flood mitigation infrastructure.
(Replaces existing overlays)

Special Districts
Long-term plans for parcels over 7 acres that visualize the connectivity, open space, and urban form priorities embedded within the Envision Cambridge Alewife Plan.
(Revises existing SD-3 and replaces base zoning & overlays for new SD)

New Zones
- Open Space
- Parkway
- Triangle
- Mixed-use Light Industrial/Commercial
- Quad Commercial
- Quad
- Townhouse

Special Districts
- Special District 3
- New Special District
### Alewife Implementation: Uses

<table>
<thead>
<tr>
<th>Zones</th>
<th>Ground Floor Uses</th>
<th>Upper Floor Uses</th>
</tr>
</thead>
<tbody>
<tr>
<td>Mixed-use Lt. Industrial / Commercial</td>
<td>Accessory Retail, Lt. Industrial</td>
<td>Commercial</td>
</tr>
<tr>
<td>Quad Commercial</td>
<td>Active Uses, Commercial</td>
<td></td>
</tr>
<tr>
<td>Quad</td>
<td>Active Uses, Residential, Commercial</td>
<td>Residential, Commercial</td>
</tr>
<tr>
<td>Townhouse</td>
<td></td>
<td></td>
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<tr>
<td>Parkway</td>
<td></td>
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<tr>
<td>Triangle</td>
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</tbody>
</table>

Allowable Uses Below Elevated First Floor (All zones): Non-conditioned uses, Parking
Alewife Implementation Plan: Zoning & Policy

Alewife Implementation: Height

### Zones

<table>
<thead>
<tr>
<th>Zones</th>
<th>Maximum Height via Special Permit</th>
</tr>
</thead>
<tbody>
<tr>
<td>Mixed-use Lt. Industrial / Commercial</td>
<td>85-feet</td>
</tr>
<tr>
<td>Quad Commercial</td>
<td>85-feet¹</td>
</tr>
<tr>
<td>Quad</td>
<td>70-feet residential¹, 85-feet commercial¹</td>
</tr>
<tr>
<td>Townhouse</td>
<td>45-feet</td>
</tr>
<tr>
<td>Parkway</td>
<td>55-feet²</td>
</tr>
<tr>
<td>Triangle</td>
<td>125-feet</td>
</tr>
</tbody>
</table>

1. Additional height bonus up to 125-ft
2. Additional height bonus up to 70-ft

Height bonuses through special permit for publicly accessible open space, zero net energy use, district energy, or increased affordable housing.
## Alewife Implementation: Setbacks

<table>
<thead>
<tr>
<th></th>
<th>Mixed-Use Lt. Industrial</th>
<th>Quad Commercial</th>
<th>Quad</th>
<th>Parkway</th>
<th>Triangle</th>
<th>Townhouse</th>
</tr>
</thead>
<tbody>
<tr>
<td><strong>Front Setback</strong></td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td>A Street:</td>
<td>45-ft&lt;sup&gt;1,4&lt;/sup&gt;</td>
<td></td>
<td></td>
<td>A Street: 25-ft&lt;sup&gt;1&lt;/sup&gt;</td>
<td>A Street: 0-ft&lt;sup&gt;2,3&lt;/sup&gt;</td>
<td>A Street: 45-ft&lt;sup&gt;1,4&lt;/sup&gt;</td>
</tr>
<tr>
<td>B Street:</td>
<td>40-ft&lt;sup&gt;2,4&lt;/sup&gt;</td>
<td></td>
<td></td>
<td>B Street: 0-ft&lt;sup&gt;2&lt;/sup&gt;</td>
<td>B Street: 15-ft&lt;sup&gt;2,3&lt;/sup&gt;</td>
<td>B Street: 40-ft&lt;sup&gt;2,4&lt;/sup&gt;</td>
</tr>
<tr>
<td><strong>Side Setback</strong></td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td>Within first 65-ft of front lot line&lt;sup&gt;1&lt;/sup&gt;</td>
<td>0-ft&lt;sup&gt;1&lt;/sup&gt;</td>
<td>7-ft 6-inch&lt;sup&gt;2,3&lt;/sup&gt;</td>
<td>0-ft&lt;sup&gt;1&lt;/sup&gt;</td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td>Beyond 65-ft to rear lot line&lt;sup&gt;2&lt;/sup&gt;</td>
<td>15-ft&lt;sup&gt;2&lt;/sup&gt;</td>
<td>7-ft 6-inch&lt;sup&gt;2,3&lt;/sup&gt;</td>
<td>0-ft&lt;sup&gt;2,3&lt;/sup&gt;</td>
<td>15-ft&lt;sup&gt;2&lt;/sup&gt;</td>
<td></td>
<td></td>
</tr>
<tr>
<td><strong>Rear Setback</strong>: Must be a green open area</td>
<td></td>
<td>30-ft&lt;sup&gt;2&lt;/sup&gt;</td>
<td></td>
<td>0-ft&lt;sup&gt;2,3&lt;/sup&gt;</td>
<td>30-ft&lt;sup&gt;2&lt;/sup&gt;</td>
<td></td>
</tr>
<tr>
<td><strong>Maximum Facade Length</strong></td>
<td>Not required</td>
<td></td>
<td></td>
<td></td>
<td></td>
<td>200-ft</td>
</tr>
</tbody>
</table>

1. Required  
2. Minimum  
3. Matches existing setback minimum for street edge continuity.  
4. From street centerline.
Alewife Implementation: Setbacks

**Current Zoning**
- Office 1 (AOD-3,4)  
- Industrial B-2 (AOD 1,2)

**Proposed Zoning**
- All Quad Zones except townhouses

**Front Setback**
- (H+L)/4 or 10-ft from centerline of the street
- 15-ft

**Rear Setback**
- (H+L)/4 or 20-ft

**Side Setback**
- (H+L)/5

**Maximum Facade Length**
- Frontages longer than 200-ft are not permitted. Gaps between frontages must be at least 40-ft wide by 40-ft deep.

**Rear Setback**
- 30-ft Must be a green open area

**Side Setback**
- 0-ft within first 65-ft of front lot line req. 15-ft beyond 65-ft to rear lot line min.
# Flood Protection: Zoning for Resiliency

<table>
<thead>
<tr>
<th>Mixed-Use Lt. Industrial</th>
<th>Quad Commercial</th>
<th>Quad</th>
<th>Parkway</th>
<th>Triangle</th>
<th>Townhouse</th>
</tr>
</thead>
<tbody>
<tr>
<td><strong>Elevated Ground Floor</strong> (Above average site elevation)</td>
<td>4-ft</td>
<td></td>
<td></td>
<td></td>
<td>4-ft</td>
</tr>
<tr>
<td><strong>Public Plinth</strong> Located on A Streets only Width = 12-ft with a minimum of 5-ft clear path Height Above Ground = 4-ft</td>
<td>Required</td>
<td></td>
<td></td>
<td></td>
<td>Not Required</td>
</tr>
<tr>
<td><strong>Public Plinth Access</strong> Stairs and an ADA accessible ramps must be constructed where the plinth meets the parcel boundaries. Adjacent parcel owners may share access points through Special Permit.</td>
<td>200-ft maximum travel distance between plinth access points.</td>
<td></td>
<td></td>
<td></td>
<td>Not Required</td>
</tr>
</tbody>
</table>
Alewife Implementation: Setbacks

**Front Setbacks**
B Street (minimum) = 40-ft from centerline.

**Maximum Facade Length**
Frontages longer than 200-ft are not permitted. Gaps between frontages must be at least 40-ft wide by 40-ft deep.

**Maxmum Height:**
- Residential: 70-ft
- Commercial: 85-ft

**Rear Setback**
30-ft Must be a green open area

**Side Setback**
0-ft within first 65-ft of front lot line (required). 15-ft beyond 65-ft to rear lot line (minimum).

**Active Uses**
- Commercial
- Residential

**Front Setbacks**
A Street (required) = 45-ft from centerline. Accommodates elevated public plinth.
<table>
<thead>
<tr>
<th>Mixed-Use Lt. Industrial</th>
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<th>Quad</th>
<th>Parkway</th>
<th>Triangle</th>
<th>Townhouse</th>
</tr>
</thead>
<tbody>
<tr>
<td>Max. Number of Parking Spots (Minimum for all uses = 0)</td>
<td></td>
<td></td>
<td></td>
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<td></td>
</tr>
<tr>
<td>Retail = 1 per 1,000-sf</td>
<td>Office = .9 per 1,000-sf</td>
<td>R&amp;D = .8 per 1,000-sf</td>
<td>Industrial = 1 per 1,000-sf (under review)</td>
<td>Residential = 0.65 per dwelling unit</td>
<td></td>
</tr>
<tr>
<td>Parking Coverage</td>
<td>Must be below the 4-ft ground floor elevation &amp; covered by a building or landscaped deck</td>
<td>Not Required</td>
<td>Must be covered by a building or landscaped deck.</td>
<td></td>
<td></td>
</tr>
<tr>
<td>Driveway Access</td>
<td>Restricted to B Streets only. A Street access available through special permit.</td>
<td></td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td>Parking Location Restriction</td>
<td>Parking may not be located within 40-ft of frontage on A Streets or public open spaces.</td>
<td></td>
<td></td>
<td></td>
<td></td>
</tr>
</tbody>
</table>
Alewife Implementation: Parking

Parking Coverage
Must be below the 4-ft ground floor elevation & covered by a building or landscaped deck.

Driveway / Service Access
Restricted to B Streets only. A Street Access available through special permit.

Parking Ratios
Min. = 0; Max. as follows:
- Retail = 1 per 1,000-sf
- Office = .9 per 1,000-sf
- R&D = .8 per 1,000-sf
- Industrial = 1 per 500-sf
- Residential = 0.65 per dwelling unit

Parking Location
Parking may not be located within 40-ft of frontage on A Streets or public open spaces.

Active Uses
Commercial
Residential