Alewife Zoning Working Group

Meeting #8: Final Zoning Recommendations February 9, 2023

Today's Agenda

- District Vision & Planning Objectives
- Transportation Analysis
- Final Zoning Recommendations
- Healthpeak Presentation
- Working Group Discussion
- Next Steps
- Public comment

Planning Objectives

- Create a mixed-use district
- Increase housing supply, including affordable housing
- Promote neighborhood uses
- Prioritize earlier delivery of infrastructure
- Scale down to existing neighborhood

Key Zoning Recommendations

- Increase residential density and heights
- Tie commercial density and heights to production of housing, neighborhood uses, open space, and infrastructure
- Require contributions to district housing for any commercial development above base
- Require contributions to transportation infrastructure for any commercial development above base
 - Transportation impact fees or delivery of priority transportation infrastructure

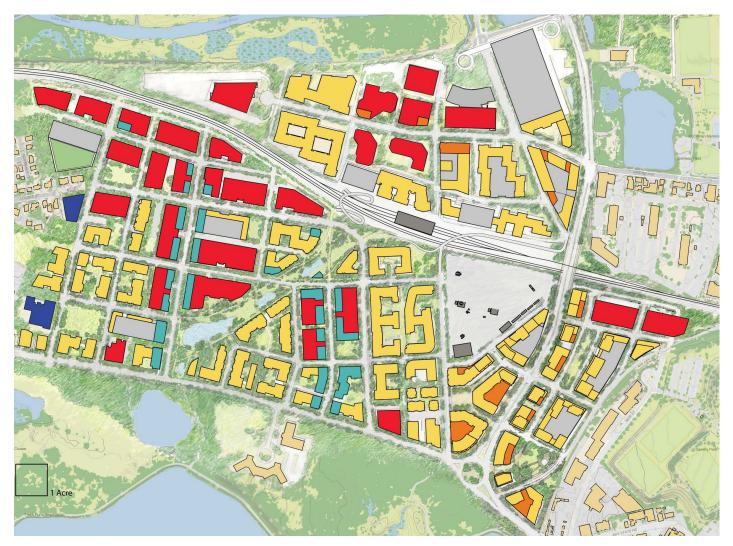
Vision Plan

Conceptual illustration of potential mixed-use build-out based on proposed zoning

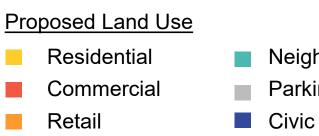
202 Green and height buffer next to neighborhood 00000000 6000000 U **Bridge connections** DOm E-Bol New streets and Commuter rail paths 30 **Terminal Road** connection New parks Active street life and mix of neighborhood uses Upper floor setbacks next to residential

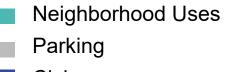
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Alewife Vision Benefits



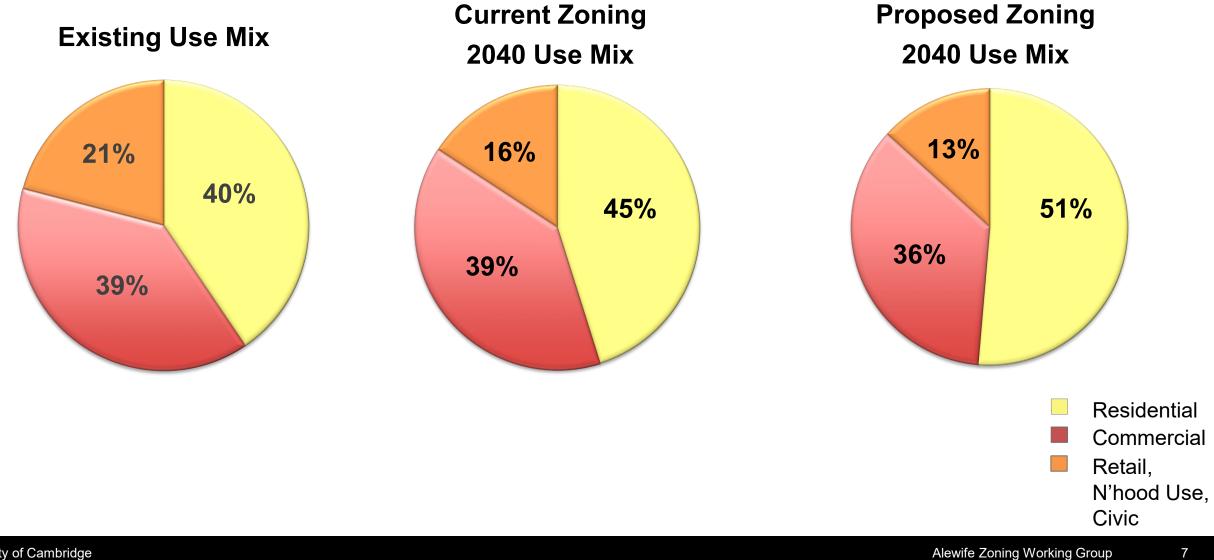
2040 Buildout	
- New Housing Units	~3,750 units
- New Affordable Housing Units (Inclusionary)	~750 units
- New Residents	~7,500 residents
- Net New Jobs	~6,000 jobs





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How does the proposed zoning compare?

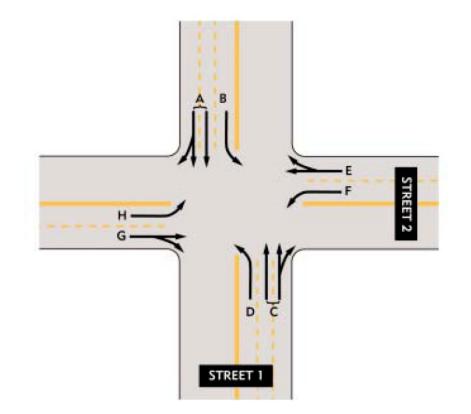


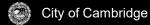
How does the proposed zoning compare?

	Existing Development	Current Zoning 2040 Buildout	Proposed Zoning 2040 Buildout
Residential	3.2 million	5.1 million	7 million
Office/R&D	3.1 million	4.4 million	4.8 million
Retail, N'hood Use, Civic	1.7 million	1.8 million	1.8 million
Total	8 million	11.3 million	13.6 million

Critical Sums

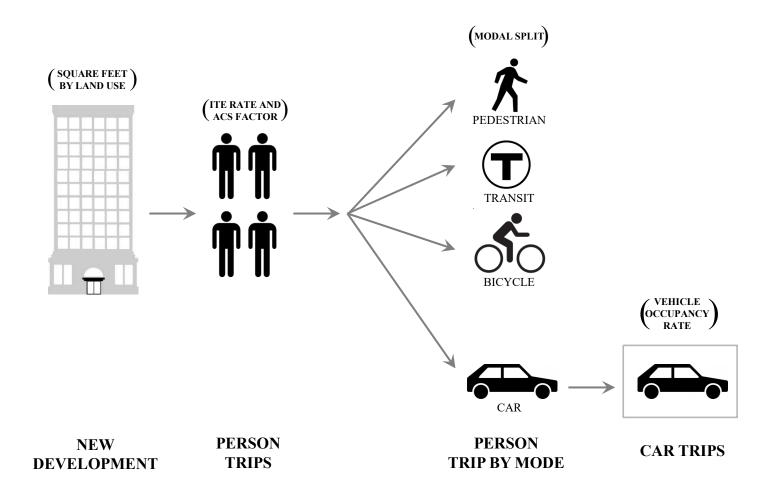
- Critical Sums Analysis is a planning tool used to compare build-out scenarios
- Compares how different levels of buildout impacts specific intersections in general way
- Not a traffic engineering tool
- Same methodology used in prior planning studies:
 - 2001 Citywide Rezoning
 - 2001 ECaPS
 - 2004 Concord-Alewife Plan
 - 2011 K2C2
 - 2019 Alewife District Plan





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Critical Sums Methodology

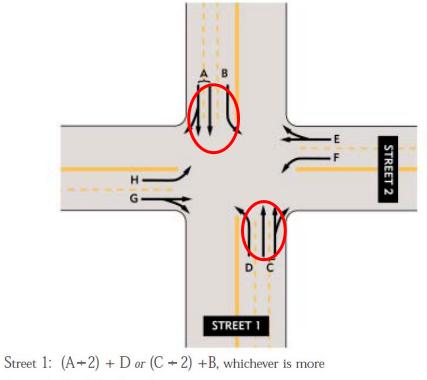


Critical Sums Methodology

Critical movement volume at an intersection is the sum of all conflicting traffic movements (vehicles per hour).

- Intersections with 1,500 or fewer vehicles per hour considered to operate adequately, i.e. motorists will wait no more than two light cycles to get through the intersection.
- **Rotaries** with **1,800** or fewer vehicles are considered to operate adequately

When thresholds are exceeded, intersection operation starts to deteriorate exponentially.

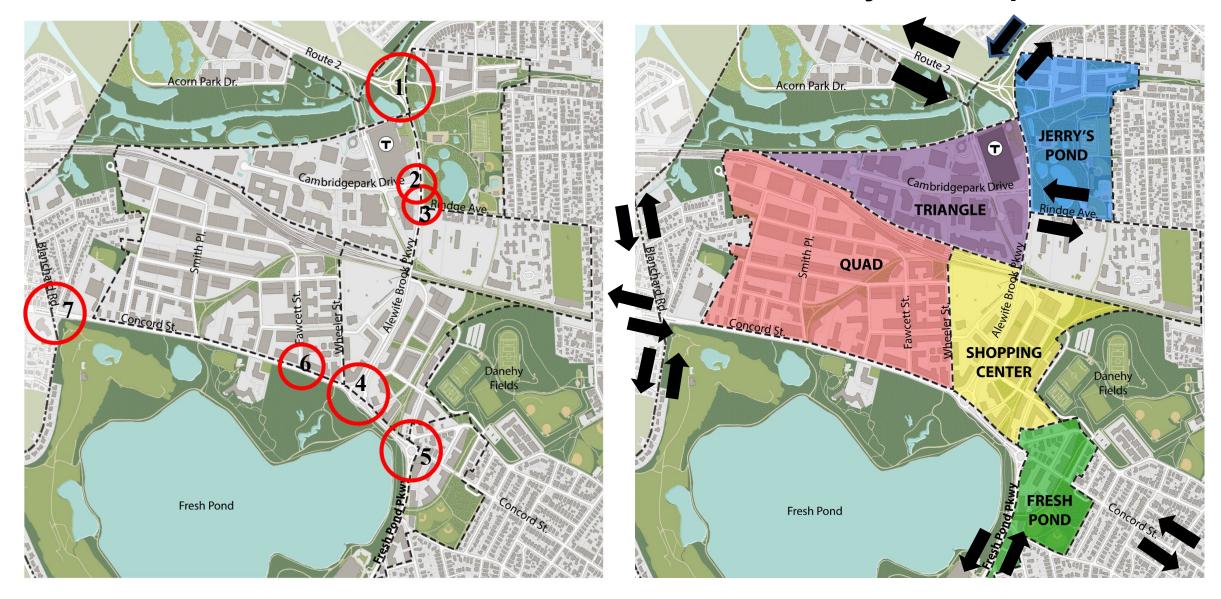


Street 2: E + H or G + F, whichever is more

Critical Sum = Result of Street 1 +Street 2

Study Area Intersections

Study Area Trips



City of Cambridge

Critical Sums By Intersection

	Existin	g (2016)	2040 Curre	nt Zoning	2040 Propos	sed Zoning
Intersection	Total Volume	Critical Sum	Total Volume	Critical Sum	Total Volume	Critical Sum
1. Alewife Brook Parkway & Route 2	2 5498	1699	5537	1784	5606	1800
2. Alewife Brook Parkway & Cambridge Park Drive	3844	1267	4103	1375	4143	1366
3. Alewife Brook Parkway & Rindge Ave.	3769	1305	4036	1363	4117	1371
4. Alewife Brook Parkway & Concord Ave Rotary	3388	2152	3952	2342	4214	2442
5. Concord Ave & Fresh Pond Parkway Rotary	3033	1375	3434	1598	3652	1712
6. Concord Ave & Fawcett St.	1350	708	1917	1110	2207	1345
7. Concord Ave & Blanchard Rd.	1955	1096	2402	1341	2622	1468

Red = over threshold

Findings

- Under current and proposed zoning, no new intersections exceed thresholds.
- Required parking ratios (low maximums) and infrastructure improvements promote sustainable modes of transportation

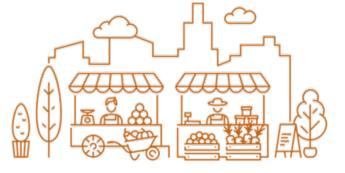
Overall Approach & Zoning Intent

- Adopt recommendations from Envision Alewife, such as:
 - Open space
 - Dimensional standards
 - Flood/heat resilience
 - Max parking ratios & TDM
 - Buffer from Highlands Neighborhood
 - Funding for transit and infrastructure
- Take it further by:
 - Increasing allowable heights/density for housing
 - Expand permitted uses and incentivize neighborhood uses
 - Address large-scale development through PUD review process
 - Expand development bonuses to achieve critical public benefits



Increase housing





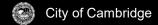


Prioritize earlier delivery of infrastructure

Promote neighborhood uses

Scale down to existing neighborhoods

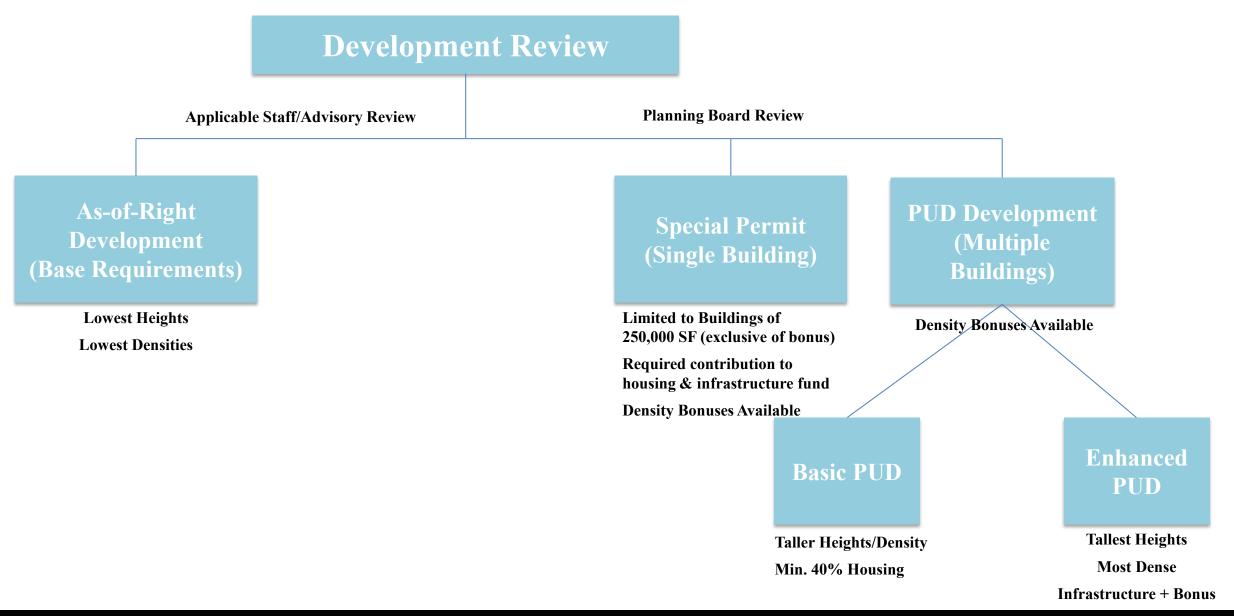




Overall Zoning Structure

- Base requirements
 - Low-to-moderate scale development that contributes positively to District-wide planning goals. New standards apply to all new development, including special permits and PUD's.
 - Updated to address open space, permitted uses, dimensional requirements.
- Special Permit requirements
 - Larger development subject to Planning Board review.
 - Contains a mix of residential and non-residential development
 - Provides opportunity to implement planning goals at a site-by-site level through development review process, transportation impact review, and urban design review.
 - PUD review
 - For multiple buildings streamlined pathway to permit phased development in exchange for public benefits.
 - Uses existing review process for PUD development multiple public hearings and ongoing design review.

Overall Zoning Structure



Review Process

• Base requirements

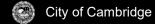
- Usually requires an advisory review or staff level review
- 50,000+ square feet requires special permit review
- 25,000+ square feet requires building and site plan review

• Special Permit requirements (Planning Board)

- Limited increases in height or density on a single site
- Typically larger, single building development (250,000 square feet or less)
- Planning Board must find conformance with area plans and guidelines, and that it provides public benefits that outweigh adverse effects.

• PUD requirements

- Greater increases in height and density, transfer of development rights, phased development and timing
- Additional public benefits required
- Follows the existing PUD review process in zoning
- Basic & Enhanced: Enhanced required to provide infrastructure and gets bonus for development parcel



Uses

- Permit the following uses:
 - Multifamily, townhouse, and elderly congregate housing (4.31.d through g)
 - ALL Retail and Consumer Service establishments (4.35)
 - Temporary outdoor retail/consumer service uses (4.36.j)
 - Educational Uses, like daycare centers, schools, etc. (4.33.b)
 - Light Industrial/Maker space (4.37)
 - Civic & Institutional uses such as libraries, community/gathering spaces, healthcare uses, and municipal facilities (4.33.d through h)



Neighborhood Uses

- Create "Neighborhood Uses" and Incentivize Them
 - Retail & consumer service establishments
 - Community gathering spaces
 - Libraries
 - Daycare centers
 - Arts & Cultural spaces
 - Light industry/maker spaces
 - Dentist/Doctors offices
 - Healthcare facilities
 - Temporary outdoor retail
 - Co-working spaces
 - Other uses, subject to Planning Board Review & Approval



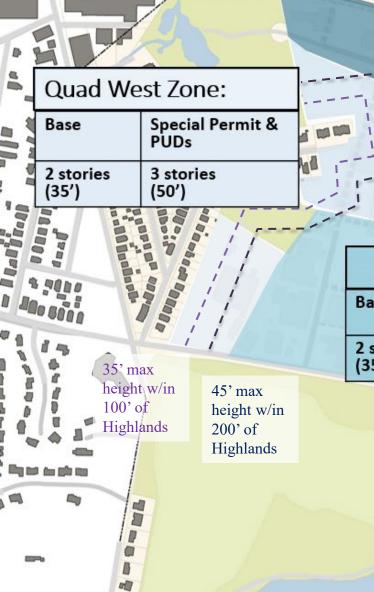
Neighborhood Uses

- Incentivize the incorporation of neighborhood uses in the ground story of buildings throughout the District, by:
 - Exempting from calculation of Gross Floor Area
 - Additional GFA bonus
- For PUD Require minimum 3% of total non-residential GFA be devoted to Neighborhood Uses

Ground Story Neighborhood Use **Minimum % of Ground Story** Frontage

Minimum Depth from Principal Wall Plane

Allowable Non-residential Height Zones



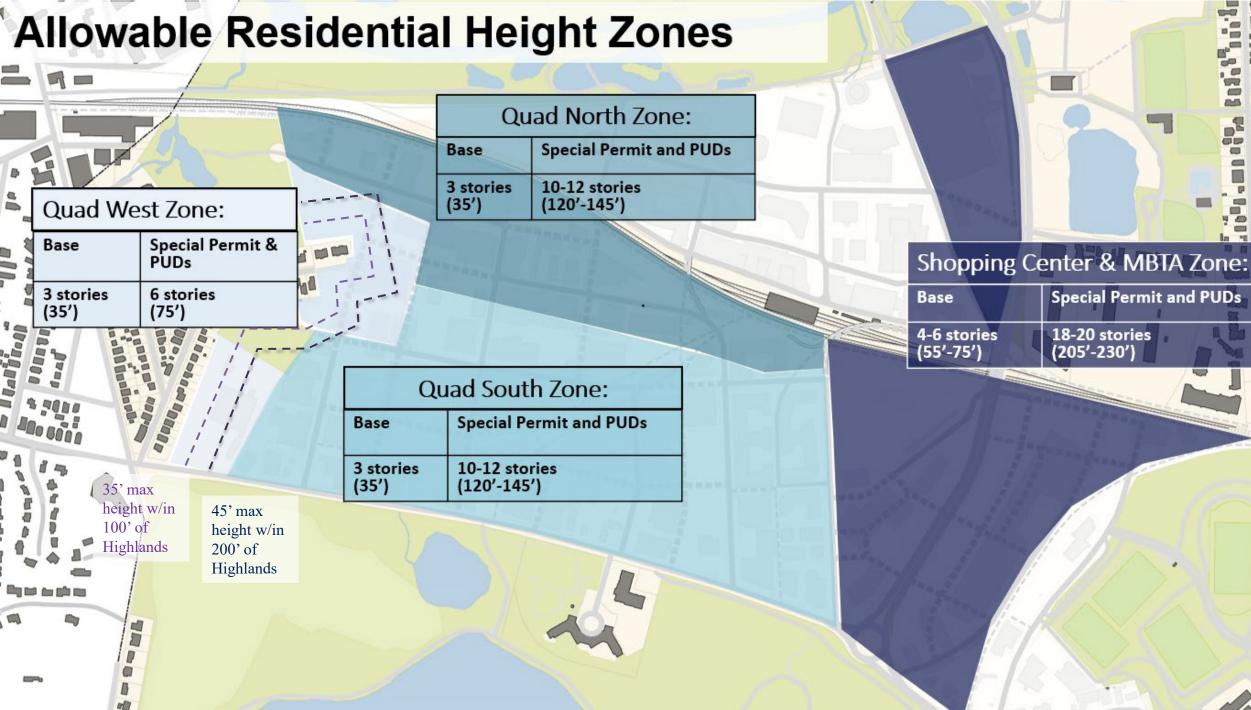
		Quad No	orth Zone	:
1 mar	Base	Special Permit	Basic PUD	Enhanced PUD
	2 stories (35′)	4 stories (65')	5 stories (80')	8 stories (125')

Quad South Zone:			
ase	Special	Basic	Enhanced
	Permit	PUD	PUD
stories	4 stories	5 stories	6 stories
5')	(65')	(80')	(95')

Shopping Center & MBTA Zone:

В	ase	Special Permit	Basic PUD	Enhanced PUD
	-4 stories	4 stories	5 stories	6 stories
	35-65')	(65')	(80')	(95')

Bild Phone



Max Floor Area Ratio – Overview of Approach

	Current Zoning			Proposed Zoning	
	Base Requirements	Special Permit Requirements	Base Requirements	Special Permit Requirements (Single Use)	PUD Requirements
NR	0.75-1.25	1.25-1.75	0.75	1.00	Basic PUD: 1.25 Enhanced PUD: 1.50
R	0.75-1.25	1.50-2.00	0.75-1.25	3.00 (3.90 w/ inclusionary bonus)	3.00 (3.90 w/ inclusionary bonus)
					Min. 40% housing

- Base requirements: Keep both residential and non-residential at current base zoning levels
- Special permit & PUD: Tiered commercial FAR based on whether housing and/or infrastructure included. Increase residential to 3.0 (3.90 with inclusionary bonus)
- "Enhanced" PUD includes Major Infrastructure ped/bike rail crossing, commuter rail
- Additional bonus for land conveyed for public use (streets, open space, &c.)
- Exemption and bonus GFA for Neighborhood Uses

Density Bonuses

- PUD Infrastructure Bonus
 - Delivery of bike/ped railroad crossing
 - Construction of an MBTA commuter rail station
 - For enhanced PUD, added height flexibility for TDR when conveying land for municipal facility

+ 0.25 FAR to Development Parcel

• Conveyance of Land for Public Use

- Available to all special permits
- Public open space
- Completion of roadway/path segment
- Municipal facility
- District stormwater or district energy facility
- Other public use subject to PB review and approval

1.5x applicable FAR applied to size of land conveyed

GFA Exemptions

- Ground Floor
 Neighborhood Use
 (meeting dimensional requirements)
- Shared District Parking
- All subject to Planning Board Review & Approval



Required Housing

- Special Permit (Single Use) Requirements:
 - For nonresidential development, offsetting payment in lieu of providing housing
- Mixed-Use PUD
 - 40% min. housing in Quadrangle; 60% min. housing in Shopping Center & Triangle
 - No offsetting payment permitted.
 - Some required housing may be offset by an all-affordable housing development for a range of incomes.

Setbacks, Open Space & Permeable Area

- Setbacks:
 - Follow Envision Alewife standards (build-to line, no side or rear)
 - 25' setback along Concord Ave
- Open Space:
 - 20% total open space requirement
 - 25% permeable area requirement
 - Publicly beneficial open space required in special permit

Proposed Street Types in the Quadrangle

- Grade-Separated Bicycle Lane with Additional Elevated Walkway
- Grade-Separated Bicycle Lane
- 🗕 Bicycle Lane
- Shared Lane Pavement Marking



Transportation Recommendations

- Maximum parking ratios
 - Principal use parking and pooled parking subject to PB review and approval
- New commercial development to contribute to public infrastructure (approx. \$15-20)

Maximum Number of Parking Spaces		
Retail	etail maximum 1.5 per 1,000 SF	
Office	maximum 1.1 per 1,000 SF	
R&D	maximum 0.8 per 1,000 SF	
Industrial	maximum 0.5 per 1,000 SF	
Residential	maximum 0.75 per dwelling unit	

Sustainability Recommendations

- ALL new development:
 - DPW guidelines for stormwater management must be met
 - Street tree planting per Envision Alewife recommendations
 - Flood Resilience and Green Factor requirements must be met
- Buildings over 25,000 square feet:
 - LEED Gold, Passive House, or Enterprise Green Communities
 - Green Roofs required
 - Applicable Green Building Requirements must be met

