MEMORANDUM

To: Cambridge Planning Board

From: Brooke McKenna, Transportation Commissioner

Date: April 7, 2025

Subject: 745 Concord Avenue Project (PB#407)

The Cambridge Traffic, Parking, and Transportation Department (TP+T) has reviewed the Transportation Impact Study (TIS) for the proposed 745 Concord Avenue Project by Boylston Properties.

The Project entails a 232,464 square feet residential building with 236 apartment units, approximately 15 at-grade auto parking spaces, 248 long-term bicycle parking spaces, and 24 short-term bicycle parking spaces. It will replace 48,463 square feet of existing commercial buildings, which currently house a mix of office and light industrial uses, along with 30 at-grade surface parking spaces.

TP+T certified the Project's TIS as accurate and complete on December 19, 2024. The TIS evaluated the transportation conditions surrounding the site, including adjacent roadways and intersections, projected trip generation, and a five-year future transportation analysis. The analysis incorporated a general background traffic growth rate and other planned developments in the area. However, it did not include the proposed Healthpeak project, as a TIS for that development has not yet been submitted. It should be noted that the TIS evaluated a 230-unit project, whereas the Special Permit Application is for 236 units. TP+T does not believe the difference will have any substantial changes to the findings in TIS.

The TIS evaluated all modes of transportation - automobile, transit, walking, and bicycling – and indicated that the Project will generate a total of:

- 1,340 total daily person trips including:
 - **520 vehicle trips** (46 AM peak hour/53 PM peak hour)
 - **366 transit trips** (32 AM peak hour/36 PM peak hour)
 - 130 pedestrian trips (12 AM peak hour /13 PM peak hour)
 - **66 bicycle trips** (6 AM peak hour/7 PM peak hour)
 - **248 work-from-home trips** (22 AM peak hour/26 PM peak hour)
 - 10 other trips

Planning Board Special Permit Transportation Criteria Exceedances

The TIS indicated that the Planning Board Special Permit Transportation Criteria were exceeded in eight instances as shown below. Full Planning Board criteria summary sheets are attached.

- Pedestrian Level-of-Service (PLOS) exceedances (4 total):
 - Crossing Concord Avenue at Spinelli Place PLOS F in AM and PM peak hours (2 exceedances).
 - Crossing Concord Avenue at Smith Place PLOS F in AM and PM peak hours (2 exceedances).
- Pedestrian and bicycle facilities exceedances (4 total):
 - Sidewalk gap -A short stretch of Smith Place lacks a sidewalk.
 - Lack of bicycle facilities No bicycle facilities exist on Spinelli Place, Smith Place, and Fawcett Street.

TP+T Comments and Recommendations

TP+T provides the following comments and recommendations for the Planning Board's consideration regarding this project:

1.0 General Comments.

TP+T believes that a proposed 745 Concord Avenue multi-family housing project aligns with the City's **2019 Alewife District Plan**, which envisions Alewife as a vibrant mixed-use district with additional housing, including affordable housing.

A key aspect of this project is its low parking ratio, with only **15 parking spaces for 236 housing units**. No similarly sized residential project with such a low parking ratio has been built in Cambridge for over 50 years. However, this approach aligns with the **Alewife District Plan goal** of promoting sustainable transportation by encouraging walking, biking, and transit use while minimizing vehicle miles traveled.

The Alewife District Plan supports progressive transportation policies such as:

- Reduced parking supply
- Enhanced Transportation Demand Management (TDM)
- Improved bicycle and pedestrian infrastructure
- Better public transit and shuttle service

As part of the project, the developer will implement key transportation improvements, including:

- Upgrading bus stop conditions on both sides of Concord Avenue
- Sidewalk-level cycle tracks on Concord Avenue and Spinelli Place
- Comprehensive TDM measures to support car-free and car-light living

Given the existing traffic congestion in Alewife, particularly during peak hours, minimizing new automobile trips is critical to achieving the district's vision. A May 2024 traffic count recorded 14,180 vehicles per day on Concord Avenue, including 1,219 vehicles during the AM peak hour and 1,051 vehicles during the PM peak hour. This traffic level is expected to persist with or without the project, reinforcing the need for alternative transportation solutions.

2.0 Automobile Parking

Proposed Parking and Intended Use

The Project includes 15 at-grade parking spaces. The TIS stated that the Project will provide at least two electric vehicle cars for residents to carshare. TP+T expects the other spaces will be used for:

- Short-term parking needs such as drop-off/pick-up and loading
- Healthcare workers serving residents
- Residents with mobility challenges
- Residents, visitors, or building contractors

Potential Parking Demand

TP+T requested that the TIS estimate a potential parking demand based on nearby developments, including Atmark Apartments on Fawcett Street, and Finch Cambridge Apartments on Concord Avenue.

The TIS estimated a worst-case parking demand of 0.75 spaces per unit (173 spaces).

The developer anticipates attracting car-free residents due to the low on-site parking availability. This follows the principle that if parking is not provided, fewer residents will own or bring cars when deciding to move here. This makes sense and studies have found that when development projects provide a high number of parking spaces it leads to higher parking demand.

Off-Site Parking Considerations

If residents require parking, the TIS evaluated potential on-street parking availability within a 15-minute walking radius from a study conducted on Tuesday, May 14, 2024:

- Total on-street parking spaces: 360Quadrangle area: 135 spaces
 - Highlands area: 225 spaces
- Peak occupancy (6:00 AM): 166 vacant spaces
- Late evening occupancy (10:00 PM): 181 vacant spaces.

In the worst-case scenario (demand for 173 spaces), there would be a shortage of approximately 7 spaces, not accounting for the 15 on-site spaces.

Potential Future Parking Solutions

The developer is exploring shared parking arrangements, including:

- Mt. Auburn Healthcare lot (35-59 Smith Place): up to 75 spaces available at night
- Atmark Apartments: Discussions for potential use of up to 50 unused spaces
- Future Healthpeak development: May provide additional shared parking opportunities

Any off-site parking agreement must comply with city permitting requirements, including potential Special Permit approvals for shared parking.

TP+T recommends that prospective tenants be informed that:

- On-site parking is extremely limited
- On-street parking is limited and may be reduced over time
- Shared parking options are not guaranteed and subject to private agreements

3.0 Bicycle Parking.

- The Project will provide 248 long-term bicycle parking spaces, and 24 short-term bicycle parking spaces.
- TP+T, in collaboration with the Community Development Department (CDD), will review the final bike parking design during the Building Permit review process.

4.0 Site Plan.

The site plan enhances the multi-modal uses along Concord Avenue, incorporating:

- Sidewalk-level cycle tracks
- Upgraded westbound bus stop including a bus shelter and bench
- Street trees and plantings
- 8-foot-wide sidewalks
- Pedestrian friendly entry plaza with benches and green space
- Eliminating one existing curb cut and reducing the width of another existing curb cut along the site's Concord Avenue frontage

Drop-off & Circulation

- The Project will provide a one-way driveway off Concord Avenue diagonally connecting to Spinelli Place for drop-off.
- The driveway uses an existing private access easement and will function like a hotel forecourt.
- TP+T may designate a "No Left-Turn" from eastbound Concord Avenue onto the driveway to manage traffic flow and safety. This will likely be determined after the Project is constructed.

Spinelli Place Improvements

The developer will reconstruct Spinelli Place along their frontage to align with the street hierarchy design recommended in the Alewife District Plan, including sidewalk-level cycle track, street trees and sidewalk.

To achieve the future vision for Spinelli Place with cycle tracks on both sides, and the extension of Spinelli Place to Mooney Street, land would be needed from other property owners, such as the Fayerweather Street school and West Cambridge Science Park.

Eastern State Road & Service Access

The eastern side of the Project parcel abuts Eastern State Road which is a private road. The Project proposes a service court off Eastern State Road which will include approximate 12 on-site parking spaces for loading and service deliveries, disability parking spaces, and for drop-off/pick-up activities. The other three spaces will be along the drop-off/pick-up driveway on the westside of the project.

The intersection of Eastern State Road and Concord Avenue is currently a substandard driveway treatment design and should be revised to current city standards to ensure a continuous level concrete sidewalk and bicycle facility across the driveway.

The Eastern State Road cross-section nearly aligns with the Alewife District Plan, but minor differences exist. The city is discussing adjustments with the developer, including potentially not having on-street parking on the east side of the street to realign or narrow the roadway cross-section, however the envisioned parking side is currently owned by Mt. Auburn Healthcare at 725 Concord Avenue.

Site Plan Summary

Except for the minor alignment issue along Eastern State Road, overall, the site plan aligns with the Alewife District Plan, and the developer has collaborated closely with TP+T and city staff to refine the cycle tracks, bus stops, sidewalk, and landscaping.

TP+T also appreciates the developer's willingness to address parking concerns and explore shared parking arrangements.

5.0 Transportation Mitigation.

TP+T provides the following transportation mitigation recommendations to offset the project's transportation impacts, which are consistent with other development projects that have a Planning Board Special Permit in Cambridge. These measures prioritize pedestrian and cyclist safety, public transportation improvements, and sustainable mobility options.

5.1 Concord Avenue Improvements

- Design and reconstruct the sidewalk-level cycle track along the project frontage on Concord Avenue to remove gaps in physical and/or grade separation.
- Design shall be reviewed by Public Works and Transportation Departments prior to construction.
- Site plan design, including curb lines, curb cuts, relocation of utilities and streetlights, planting strips, buffers, and sidewalks, shall be approved by the City.
- The property owner shall maintain the sidewalk and cycle track, including snow, ice, and debris removal, as needed.
- A public access easement for pedestrian and bicycle travel shall be provided to the City as needed on the project's property.
- Deliveries or drop-off/pick-up vehicles shall not stop or park on the cycle track or Concord Avenue in front of the site.
 - **Completion Deadline:** Prior to the issuance of the first Occupancy Permit or as approved by TP+T.

5.2 Bus Stop Improvement

- Construct and maintain the bus stop, shelter, and bench on the westbound side of Concord Avenue in front of the project site, as approved by the City.
- To improve the overall condition of the eastbound bus stop at Concord Avenue/Spinelli Place, install a narrow bus shelter and bench, as approved by the City.
- The bus stop design shall follow preferred dimensions shown in the 2025 MBTA Bus Stop Design Guide Chapter 4 "Floating Bus Stops" pp. 8-49. Bus stop lengths shall be determined by dimensions shown on p.39 in Table 8 for "Mid-block, before crosswalk, one lane" type of bus stop. Final design, including pavement markings, shall be approved by TP+T and Public Works. We will work with the Project team to refine the final site plan and bus stop design for pedestrian zone, separated bike lanes and street trees/plantings.
- Property owner shall maintain bus stops, including snow, ice, and debris removal.

Completion Deadline: Prior to the issuance of the first Occupancy Permit or as approved by TP+T.

5.3 Spinelli Place Reconstruction

- Design and reconstruct Spinelli Place adjacent to the Project site, including the intersection at Concord Avenue.
- The design shall be approved by the City, including curb lines, curb cut, utilities, landscape, and sidewalks.
- Property owner shall maintain sidewalks and cycle tracks adjacent to the project (e.g., snow, ice, and debris removal).
- Property owner shall provide a public access easement for pedestrian and bicycle travel as needed on the project's property.
- Coordinate with the City for any future design changes aligned with the Alewife District Plan.

Completion Deadline: Prior to the issuance of the first Occupancy Permit or as approved by TP+T.

5.4 Eastern State Road Improvements

- Design and reconstruct Eastern State Road (a private road) adjacent to the Project, including the intersection at Concord Avenue. The roadway shall remain designed as a driveway pending future abutting development opportunities, and this condition shall not preclude future design alignment with the district plan.
- The design shall be approved by the City, including curb lines, curb cut, utilities, landscape, and sidewalks.
- Property owner shall maintain sidewalk, roadway, pavement markings, and signage in the portion of the road owned, in coordination with adjacent property owner.
- Coordinate with the City for any future design changes aligned with the Alewife District Plan.
 - **Completion Deadline:** Prior to the issuance of the first Occupancy Permit or as approved by TP+T.

5.5 Concord Avenue Pedestrian Crossing at Spinelli Place

- Upgrade the existing pedestrian flashing beacon crosswalk with a Rectangular Rapid Flashing Beacon (RRFB).
- Reconstruct pedestrian ramps, median islands, pavement markings, and signage as approved by TP+T and DPW.
 - **Completion Deadline:** Prior to the issuance of the first Occupancy Permit or as approved by TP+T.

5.6 Electric Vehicle (EV) Charging Infrastructure

- Provide at least two EV charging stations serving four (4) vehicles in the service court. This includes charging for the two (2) EV Car Sharing vehicles for residents' use discussed in the TDM measures below.
- Make all other parking spaces in the service court EV-Ready parking spaces for future EV charging stations as needed.
 Completion Deadline: Prior to the issuance of the first Occupancy Permit.

5.7 Transportation Demand Management (TDM) Measures

- i. All parking spaces provided for residents or employees shall be charged at market rate, whether they are located on-site or off-site through a shared parking arrangement. For residents, parking shall be charged separately from rent to remind residents of the cost of owning a vehicle.
- ii. Designate a Transportation Coordinator (TC) to oversee TDM initiatives, provide transportation information, and liaise with transportation organizations. The TC will:
 - a. Oversee the marketing and promotion of transportation options to all residents and employees and respond to individual requests for information in person and via phone and email.
 - b. Compile and distribute up-to-date information explaining all transportation options to new residents as part of their welcome packet.
 - c. Post their email and phone information in a central and visible location where all residents can access it.
 - d. Be the liaison between the site and transportation organizations including, but not limited to, the MBTA, Alewife TMA, and the City of Cambridge.
 - e. Participate in any TC training offered by the City of Cambridge.
 - f. Conduct annual transportation monitoring as required by the Community Development Department.
- iii. Provide information about transportation options available to residents in a welcome packet. The packet will contain information on both the range of options available and any building manager or condominium association programs to support the use of these options. Getting Around Cambridge maps can be purchased from the Community Development Department.
- iv. To establish the habit of using public transportation, advertise and offer a 100% subsidy for the cost of a bus/subway LinkPass (currently \$90/month) for two consecutive months to each adult member of a residential household upon move-in. For rental units, this requirement renews each time a new household moves in.
- v. Provide sustainable transportation information on the project's website, advertising, social media, and property newsletters.
- vi. To share and promote sustainable transportation information with residents and visitors, provide information on nearby transportation options in a central and visible location where residents and visitors can access it. If the information is provided in print, include nearby bicycle facilities, pedestrian facilities, and public transit schedules, including Alewife TMA shuttle schedules. An accurate

- real-time transportation information screen may be provided instead of print maps and schedules. If provided, the real-time transportation information screen must show nearby public transit, shuttle, and bikeshare availability.
- vii. The Property owner shall have annual Alewife TMA membership, and offer Alewife TMA shuttle access, emergency ride home, ride-matching, and other TMA programs to residents and employees.
- viii. The Property owner shall offer a one-year Bluebikes membership (Gold Level) to each adult member of new rental households upon move-in. This requirement is renewed each time a new household moves in.
- ix. Provide and maintain bike repair areas in the long-term bicycle parking areas. Bike room equipment should include a repair station including bike pump and tools, lockers, battery storage, and charging station.
- x. Do not charge residents fees for bicycle parking, lockers, battery storage, or charging station.
- xi. Establish an e-mobility fleet (six e-scooters, two e-bikes, four e-cargo bikes). The fleet composition may change over time depending on resident needs.
- xii. Provide an EV Car Sharing program with at least two electric vehicles (EV) onsite. Use of this program may be restricted to building residents.
- xiii. Offer subsidies for residents walking or biking to work.
- xiv. The Project proponent will host an Annual Transportation Fair around the third week of May, aligning with National Bike to Work Day, to provide residents with information on sustainable transportation options.
- xv. The Project proponent will provide comprehensive bike services and programming, including bike safety training and scheduled or on-demand repair services.
- xvi. Conduct annual **transportation monitoring** including mode-split surveys, driveway counts, and parking utilization reports for ten years following the issuance of the Certificate of Occupancy.
 - a. The property owner shall conduct a mode-split survey and monitoring for residents, and employees, using a survey instrument approved by CDD, and report that information annually. Driveway counts and parking utilization (for vehicles and bicycles) shall be reported every two years. If the certificate of occupancy for the project is issued between September 1 and February 29, the monitoring shall take place during the months of September or October and be reported to CDD no later than November 30. If the certificate of occupancy for the project is issued between March 1 and August 31, monitoring shall take place during the months of April or May and be reported to CDD no later than June 30. This will ensure that the monitoring captures a realistic assessment of the transportation patterns of the project, while giving time to compile the results and report them to the City.

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Planning Board Criteria Performance Summary

Special Permit Transportation Impact Study (TIS)

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Planning Board	Permit Numbe	er:							
Project Name:	735-755 Con	ncord Avenu	e						
Total Data Entri	es = <u>81</u>			Total Number of	Criteria	Exceedances = _	8		
1. Project Vehic	le Trip Genera	ation_							
Weekday =	520 AM Peal	k Hour =	46	PM Peak Hour =	53	Exceeds Criteria? [Y	//N]	N/N/N	-

2. Level of Service (LOS)

	W	Weekday Morning Peak Hour					Weekday Evening Peak Hour			
Intersection	Existing	With Project	Traffic increase	Exceeds Criteria?	Existing	With Project	Traffic increase	Exceeds Criteria?		
Concord Avenue at Blanchard Road	F	F	1.1%	No	F	F	1.3%	No		
Concord Avenue at Spinelli Place	E	E	0.2%	No	C	C	0.6%	No		
Concord Avenue at Eastern States Road	C	С	0.7%	No	C	С	1.2%	No		
Concord Avenue at Smith Place	C	D	1.7%	No	C	C	2.4%	No		
Concord Avenue at Fawcett Street	В	В	1.9%	No	В	В	2.3%	No		



3. Traffic on Residential Streets

Roadway Reviewed Segment		Weekday	Morning Pe	ak Hour	Weekday Evening Peak Hour			
	Amount of Residential	Existing Two-Way Traffic	Increase due to Project	Exceeds Criteria?	Existing Two-Way Traffic	Increase due to Project	Exceeds Criteria?	
Griswold Street	Concord Avenue to Sunset Road	1/2 or more	45	5	No	37	10	No
Blanchard Road	Colby St/S. Normandy Av. to Concord Av.	1/2 or more	806	9	No	920	7	No
	Mannix Circle to Concord Av.	>1/3 but <1/2	855	9	No	883	10	No
	Blanchard Road to Spinelli Place	1/3 or less	1,251	9	No	1,106	12	No
Concord	Spinelli Place to Smith Place	1/3 or less	1,183	8	No	1,070	12	No
Avenue	Smith Place to Wilson Road	1/3 or less	1,139	17	No	1,046	22	No
	Fawcett Street to Wheeler Street	1/3 or less	1,177	23	No	1,151	27	No
Smith Place	Concord Avenue to Fawcett Street	1/3 or less	188	17	No	170	20	No

4. Lane Queue (for Signalized Intersections Critical Lane)

	Weekday Morning Peak Hour				Weekday Evening Peak Hour			
Intersection/Lane	Existing	With Project	Difference in Queue	Exceeds Criteria?	Existing	With Project	Difference in Queue	Exceeds Criteria?
Concord Avenue at Blanchard Road								
Concord Avenue EB LT/TH TH/RT	8	8	0	No	7	7	0	No
Concord Avenue WB L	6	6	0	No	8	8	0	No
Concord Avenue WB T	7	7	0	No	8	8	0	No
Concord Avenue WB R	4	4	0	No	9	9	0	No
Blanchard Road NB LT/TH	22	22	0	No	30	30	0	No
Blanchard Road NB RT	0	0	0	No	0	0	0	No
Blanchard Road SB LT/TH/RT	17	17	1	No	15	16	1	No
Concord Avenue at Fawcett Street								
Concord Avenue EB LT/TH TH/RT	5	5	0	No	7	7	0	No
Concord Avenue WB LT/TH/RT	8	8	0	No	10	11	1	No
Fawcett Street SB LT/TH/RT	3	3	0	No	3	3	0	No



5. Pedestrian and Bicycle Facilities (for Critical Pedestrian Crossing)

Pedestrian Level of Service – Signalized Intersections

	Weekda	ny Morning P	eak Hour	Weekday Evening Peak Hour		
Intersection	Existing	With Project	Exceeds Criteria?	Existing	With Project	Exceeds Criteria?
Concord Avenue at Blanchard Road:						
Concord Avenue (West)	D	D	No	D	D	No
Concord Avenue (East) Blanchard Road (North) Blanchard Road (South) Griswold Street (North)	C	С	No	С	C	No
	D	D	No	D	D	No
	D	D	No	D	D	No
	A	A	No	A	A	No
Concord Avenue at Fawcett Street:	D	ъ.	3.7	ъ.	ъ.	3.7
Concord Avenue (East)	В	В	No	В	В	No
Fawcett Street (South)	A	A	No	A	A	No

Pedestrian Level of Service - Unsignalized Intersections

	Weekda	y Morning P	eak Hour	Weekda	eak Hour	
Intersection	Existing	With Project	Exceeds Criteria?	Existing	With Project	Exceeds Criteria?
Concord Avenue at Spinelli Place: Concord Avenue (West) Spinelli Place (North)	F A	F A	Yes No	F A	F A	Yes No
Concord Avenue at Eastern States Road: Concord Avenue (West) Eastern States Road (North)	B A	B A	No No	B A	B A	No No
Concord Avenue at Smith Place: Concord Avenue (West) Smith Place (North)	F A	F A	Yes No	F A	F A	Yes No



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Planning Board Criteria Performance Summary

Special Permit Transportation Impact Study (TIS)

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Safe Pedestrian and Bicycle Facilities

Adjacent Street or Public Right-of-Way	Sidewalks or Walkways Present?	Exceeds Criteria?	Bicycle Facilities or Right-of-Ways Present?	Exceeds Criteria?
Spinelli Place	Yes	No	No	Yes
Smith Place	$\mathrm{No^a}$	Yes	No	Yes
Fawcett Street	Yes	No	No	Yes

^aA short stretch of Smith Place is missing a sidewalk.

