

To: Alison C. Steinfeld, Planning Director
Department of Planning and Community Development
333 Washington Street
Brookline, MA 02445

From: James. D. Fitzgerald, P.E., LEED AP

Date: February 13, 2017

Subject: 384 Harvard Street, Brookline (40B)
Traffic Peer Review

Environmental Partners has been retained by the Town of Brookline to review the Transportation Demand Management Plan (TDMP) dated December 5, 2016 for the proposed development located at 384 Harvard Street and to observe existing on-street parking demand surrounding the site. Environmental Partners has subcontracted with Walker Parking Consultants to assist in the review of the TDMP as well as the parking layout.

The project site is located at 384 Harvard Street on the west corner of the signalized Harvard Street at Williams Street and Stedman Street intersection. Both Stedman Street and Williams Street are one-way roadways that travel in a southwest direction. They intersect Harvard Street at a signalized offset-tee intersection. There is an exclusive left turn lane from Harvard Street onto Williams Street. The Edward Devotion School is located on the east corner of the intersection which generates substantial pedestrian (school children) traffic during the morning and afternoon when in operation. (The school is currently under reconstruction.)

Williams Street is primarily a residential street and has cement concrete sidewalks along both sides. “No Parking Any Time” signs and “No Parking This Side” signs exist along the northwestern side of Williams Street within the vicinity of the site; primarily permit parking is allowed on the southeastern side.

The project entails the demolition of the existing Epstein Auditorium building and the construction of an independent senior living community. This development will include 53 one-bedroom apartments and nine two bedroom apartments for a total of 62 units, as well as almost 5,000 square feet of retail space on the ground floor intended “to serve resident and neighborhood needs”. The proposed driveway is 20 feet wide and is located on Williams Street.

Massachusetts Bay Transit Authority (MBTA) Bus Route 66 stops at the intersection of Harvard Street at Stedman Street, across from the project site, as well as at the intersection of Harvard at Shailer Street, one block southeast of the project site. The Green Line (C Branch) has local stops at: Beacon Street at Summit Avenue (approximately 1,200 feet south of the project site); Beacon Street at Harvard Street (approximately 1,300 feet southeast of the project site); and Beacon Street at Saint Paul Street (approximately 2,200 feet east of the project site). The Green Line (B

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Branch) has a local stop at Commonwealth Avenue at Harvard Avenue approximately 2,600 feet northwest of the site.

On-Street Parking Observations

Environmental Partners observed parking along the roadway network surrounding the proposed site from 2:00 to 4:00 p.m. on a weekday (Wednesday, January 25, 2017) and from 11:30 a.m. to 12:00 p.m. on a Saturday (February 4, 2017), times recommended by the Town.

These observations included recording the number of occupied on-street parking spaces along each roadway segment (or block) periodically throughout each observation period. The average number of occupied spaces and the average percentage of occupied parking spaces were determined. (See the attached “Parking Occupancy Summary” chart.) The average percentage of occupied parking spaces was graphically depicted on the attached “Weekday Parking Observations” map and the “Weekend Parking Observations” map respectively.

The findings show substantially greater parking demand during the mid-day Saturday period than the weekday afternoon period. During the critical Saturday period:

- Parking immediately adjacent to the proposed development (on the corner of Harvard Street at Williams Street) is primarily fully occupied. The southern side of Harvard Street (Fuller Street to Williams Street) is 91% occupied and the primarily permit parking along Williams Street (Harvard Street to Centre Street) is 100% occupied. Parking along the opposite (northern) side of Harvard Street ranges from 80% to 100% occupied.
- Parking is available further from the proposed site. On the southern side of the block, parking occupancy is only 68% full along Centre Street from Fuller Street to Williams Street. On the other side of Harvard Street, parking occupancy along Stedman Street is only 49% while along Beale Street, (permit) parking occupancy is only at 48%.

It should be noted that the Edward Devotion School was under construction and not in session while the above observations were made. Parking surrounding the school especially along Stedman Street and Harvard Street is likely to change once school construction is complete at which time the construction related parking will disperse and the operating school will generate parking. (Construction parking was observed to occupy approximately half of the Stedman Street spaces during the beginning of the weekday observations but cleared out shortly thereafter. Construction parking was not observed during the Saturday observations.)

Transportation Demand Management Plan

The TDMP states that the intent of the project is to create a nearly car free community thereby limiting the number of vehicle trips generated by the site and minimizing neighborhood parking demand. On-site parking is provided for the following uses:

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Congregation Kehillath Israel	3 spaces
Accessible Space	1 space
Car Share	2 spaces
Retail Employees	2 spaces
JCHE (employees)	4 spaces
JCHE (other)	<u>2 spaces</u>
Total	14 spaces

The following approach was identified in the TDMP to promote this intent of a nearly car free community:

Employees (Senior Housing & Retail)

- An on-site employee will be responsible for implementing the TDMP.
- The TDMP states that only 4 employees are anticipated at the senior housing and an additional 2 employees are anticipated at the retail space. The 6 total employees will be allowed to use the on-site parking (included in the proposed 14 spaces).
- Additional staff anticipated to provide other services such as periodic programming and fitness or recreational activities is also anticipated. These individuals will be advised to use on-site parking if available. Based on the parking breakdown provided, it appears that only 3 parking spaces (1 accessible and 2 standard) may be available for staff of other programs. In the event that on-site parking is not available, parking in metered *Harvard Street* parking spaces or in municipal parking lots will be reimbursed by the JCHE in an effort to discourage parking in spaces along residential side streets. Although projections for these activities are not provided, it is presumed it will generate only minor parking during weekdays when parking demand along Harvard Street appears to be lighter.

Residents

- Residents will not be allowed to park on-site; vehicle use is intended to be discouraged by providing a one-time \$80 move-in transportation credit for residents to use at their discretion. ***It seems unlikely that an \$80 credit will be enough of an incentive for all “independent seniors” living in the proposed 62 unit development to rely solely on alternative modes of travel and not own any vehicles.*** Walker Parking Consultants has provided additional comment.
- The applicant will work with the town and MBTA to construct shelters at bus stops and install MBTA maps on site in order to promote MBTA bus service along Harvard Street. ***Definitive bus shelter locations and types are not specified.***
- Two ZipCar spaces will be provided on-site and are included in the proposed 14 on-site parking spaces. This program may be used by residents on-site or the neighborhood residents.

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- Accommodations for the Ride will be provided along Harvard Street. ***However drop-off/pick-up accommodations will result in the loss of on-street parking along Harvard Street adjacent to the site that was heavily utilized during our weekend observations.***
- Options such as Uber and Lyft will be explained to residents by the JCHE. ***However, while this is a great option for many, some senior citizens may be reluctant to use technology involving an app if they do not already use it or own the appropriate technology. Also, drop-off/pick-up accommodations will result in the loss of on-street parking along Harvard Street adjacent to the site that was heavily utilized during our weekend observations.***
- The Brookline Elderly Taxi Service (BETS) and Brookline ElderBus are also available. ***However drop-off/pick-up accommodations will result in the loss of on-street parking along Harvard Street adjacent to the site that was heavily utilized during our weekend observations.***
- JCHE Transportation Service will also be available to provide residents with transportation destinations such as stores, restaurants, and malls as well as museums, casinos and cemeteries.

Visitors

- There is no designated visitor parking on-site. ***It does not appear to be realistic to anticipate that the installation of bicycle racks and information on public transportation will result in visitors for 62 units of senior housing to not drive their vehicle.*** Walker Parking Consultants has provided additional comment.
- The Town's PARC Program was presented as a means to address parking demand for visitors who are home care workers hired by residents, allowing them to park beyond the Town's two-hour parking time limit. ***This, however, could potentially further impact parking along the residential side streets. Suggestions of providing information on public transportation, encouraging home care workers to serve more than one client, signing in, and recommending the workers use public transportation or encouraging them to park in a different area does not appear to be a full proof way of preventing an increase in parking demand.***

Reference in the TDMP is made to trip generation estimates established in Stantec's October 28, 2016 report, indicating that "if these goals are met the project will have only a nominal impact on area traffic operations". Environmental Partners has not performed a peer review of the traffic report as part of the requested efforts.

Although the 5,000 square foot retail component of the project is intended "to serve resident and neighborhood needs", it is likely that it will also generate some parking demand that also has not been accounted for. Walker Parking Consultants has provided additional comment.

Monitoring should include mid-day Saturday observations given the higher demand for on-street parking and the potential for increased parking demand generated by visitors to the senior housing as well as the retail component.

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Monitoring should include off-site parking comparisons to ensure that the suggested approach of discouraging driving is effective and that there are no impacts to parking along the surrounding roadway network.

Summary

- ***The presented assumption that all visitors to 62 units of senior housing and retail patrons will use alternative modes of transportation appears to be overly optimistic.***
- ***Likewise, the assumption that none of the independent seniors living in the 62 units will own a personal vehicle requiring parking is debatable.***
- ***The proposed drop-off/pick-up accommodations along Harvard Street will result in the loss of on-street parking along Harvard Street adjacent to the site that was heavily utilized during peak periods.***
- ***Based on the above, some impact to surrounding parking opportunities seems to be inevitable. These impacts, however, have not been realistically quantified.***
- ***Should the development be constructed without additional parking, the impacts may be quantified during the Monitoring Program. However, it remains unclear how any additional parking demand will be met after the development is constructed.***

Parking Occupancy Summary

On-Street Parking Surrounding 384 Harvard Street, Brookline

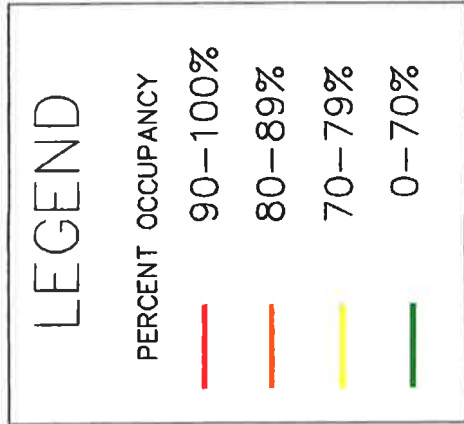
PERCENT OCCUPANCY		
Street	Weekday Average*	Weekend Average**
Thorndike St (ES south of Harvard)	53%	53%
Winchester St (NS Thorndike to Coolidge)	38%	0%
Winchester St (NS Coolidge to Fuller)	34%	25%
Winchester St (NS Fuller to Williams)	69%	70%
Williams St (ES Centre to Winchester)	80%	91%
Williams St (ES Harvard to Centre)	70%	100%
Centre St (NS Fuller to Williams)	74%	68%
Fuller St (ES Centre to Winchester)	71%	83%
Coolidge St (ES Harvard to Winchester)	61%	79%
Harvard St (SS Thorndike to Coolidge)	88%	100%
Harvard St (SS Coolidge to Fuller)	42%	89%
Harvard St (SS Fuller to Williams)	44%	90%
Harvard St (NS Thorndike to Coolidge)	100%	100%
Harvard St (NS Coolidge to Fuller)	70%	100%
Harvard St (NS Fuller to Naples)	75%	80%
Harvard St (NS Naples to Beals)	42%	100%
Harvard St (NS Beals to Stedman)	58%	83%
Thorndike St (ES Clarence to Harvard)	69%	67%
Thorndike St (ES Gibbs to Clarence)	23%	30%
Coolidge St (ES Clarence to Harvard)	66%	88%
Coolidge St (ES Gibbs to Clarence)	19%	17%
Fuller St (WS Clarence to Harvard)	76%	94%
Fuller St (WS Gibbs to Clarence)	47%	45%
Naples Rd (ES Gibbs to Harvard)	47%	60%
Beals St (ES)	52%	48%
Stedman St (WS Gibbs to Harvard)	65%	49%
Clarence St (NS)	20%	9%
Gibbs St (NS)	28%	14%
Winchester St (NS Wellman to Beacon)	50%	75%
Wellman St (ES Centre to Winchester)	77%	83%
Centre St (NS Shailer to Beacon)	69%	81%
Shailer St (ES Harvard to Centre)	90%	100%
Harvard St (NS Shailer to Babcock)	93%	100%
Harvard St (SS Shailer to Babcock)	98%	100%
Babcock St (ES John to Harvard)	83%	100%
John St (SS Babcock to Pleasant)	52%	75%
Pleasant St (ES John to Harvard)	71%	100%
Pleasant St (WS John to Harvard)	90%	100%
Beacon St (WS Pleasant to Harvard)	88%	100%
Beacon St (WS Harvard to Centre)	100%	100%
Beacon St (WS Centre to Winchester)	90%	100%
Average	64%	74%

*Weekday observations performed Wednesday, January 25, 2017 from 2:00 to 4:00 p.m

**Weekend observations performed Saturday, February 4, 2017 from 11:30 a.m. to 12:00 p.m

WEEKDAY PARKING OBSERVATIONS

2:00 PM TO 4:00 PM



WEEKEND PARKING OBSERVATIONS

11:30 AM TO 12:00 PM

