

MEMORANDUM

1180 BOYLSTON STREET, BROOKLINE, MA



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PARKING CONSULTANTS

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20 Park Plaza, Suite 1202
Boston, MA 02116

DATE: August 15, 2016
TO: James Fitzgerald, P.E., LEED AP
COMPANY: Environmental Partners Group, Inc.
ADDRESS: 1900 Crown Colony Drive, Suite 402
CITY/STATE: Quincy, MA 02169
CC:
FROM: Arthur G. Stadig, P.E.
PROJECT NAME: 1180 Boylston Street, Brookline, MA
PROJECT NUMBER: 16-2748.01
SUBJECT: Peer Review of Parking

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Walker Parking Consultants (WPC) has been retained by the City of Brookline through Environmental Partners Group to review parking for the 1180 Boylston Street application. WPC has received the Comprehensive Permit Application and supporting documents for 1180 Boylston Street prepared for the City of Brookline.

1180 Boylston Street is currently designed for 45 rental apartments with an age restriction to people 55+. There is also retail on the ground level of the building. The below grade parking level needs to accommodate 80 spaces. The plans currently show 29 tandem vehicle stackers to accommodate 58 spaces and 22 additional spaces parked on the floor, predominantly in drive lanes. The use of stackers and an elevator access system requires this garage have valet parking and the documents have outlined the parking to be managed with a valet operation. We have reviewed the plans and offer the following comments:

1. The developers have asked for a waiver to deviate from the parking space requirement. The City requires 2.0 spaces/unit and the waiver is for 1.0 spaces per unit. For a 55+ community we recommend a parking supply between 1.1 and 1.3 spaces per unit. This is based on previous studies for 55+ residential parking. Despite that, a 1.0 space per unit ratio may not cover the fluctuation in the number of vehicle owners. If the number of spaces provided on site falls short of the residential demand, where will other nearby parking options be located for tenants to park outside of the building?
2. Bike parking is not required for a building developed for "elderly housing" according to zoning. But if residents do have a bike, where will it be parked and how will the residents have access to the bike parking?
3. The driveway into the garage is 20' and appears to comply with zoning. This is a very tight dimension for two-way traffic, especially where turning maneuvers onto the property

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from the street will occur. It is compounded by the fact that Boylston is a busy 4-lane divided roadway. Cars may be making the turn quickly, thus needing a wider turning radius, stacking area and site-lines. Slowing down to turn into the driveway may hold up traffic on Boylston. If a car is exiting the property (stopped at the curb cut) while a car is slowing to make a right turn into the property, the entering car on the street will have to stop to wait for the exiting car to exit. This may slow traffic on Boylston.

4. The garage is intended to be operated with valet. A primary concern is the inadequate space to accommodate the drop-off and pick-up of vehicles. There are no obvious curb cuts or lay-bys for this so we assume the intent is to handle drop off and pick up of vehicles by tenants in the driveway. The driveway, mentioned above, is only 20' wide. That needs to accommodate two-way traffic and standing vehicles waiting for the tenant to come down from their unit or waiting to be parked in the below grade parking. The walls on either side of the driveway may also make it difficult for a passenger to get into or out of the car requiring the vehicle to pull out, blocking more cars in the driveway and holding up the flow of operations.
5. Residents will need to handle parcels both for loading and unloading. For example, if groceries or other merchandise needs to be unloaded, there does not appear to be room to accommodate this without blocking the drive lanes.
6. Valet operations require the accommodation of vehicles that may arrive at virtually the same time. For example, if four vehicles arrive within a minute or two, the first vehicle will stop within the property to be handed over to the valet attendant. The successive vehicles will "stack" behind this vehicle and will snake back into Route 9. The snake action will continue until all cars are taken from that line by the valet attendant. It is a good practice to have two lanes of entry drop-off to accommodate this action. While one lane is being evacuated by the valet attendant(s), the other lane can be filling in and not causing a back-up. The current design does not show this and will cause related back-up problems on a periodic basis.
7. The Massachusetts Accessibility Regulations (CMR 521 Section 23.8) states: "Valet parking facilities shall provide a passenger loading zone complying with 521 CMR 23.7, Passenger Loading Zone located on an accessible route to the entrance of the facility". This requires a 5' wide by 20' long access aisle adjacent and parallel to the vehicle pull-up space. There is no provision for this in the current design.
8. Additionally, the drop-off/pick-up layout does not address the intent to accommodate disabled residents without a long circuitous route to the building's elevators. If the retail drop-off/pick-up is in the driveway, will retail parkers have access to the building to walk through the lobby to Hammond Street or will they have to walk out the driveway to Route 9? Walking through the lobby could present a security issue to tenants and walking out the driveway is a pedestrian safety issue for the retail shoppers. This is a particular hazard to patrons with accessibility needs.

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9. The application write-up indicates 18 vehicles will leave during a 2-1/2 hour "peak hour" morning period. It's customary to use a 1-hour increment for a peak hour volume (PHV). The traffic report (separate from the applicant's write up) indicates only three residential cars will leave during the peak hour (which we assume is a 60-minute duration). That is only 6.7% of the residential spaces. People age 55+ still may work or have occupations and require a vehicle so we recommend increasing that PHV to 10-12 cars or 20-25%. Cars may also be dropped off during the morning peak hour for the retail shops such as owners or employees arriving for the day. During the evening peak-hour, the traffic report indicates 7 cars will enter and 12 cars will leave. Of the 7 cars entering the facility only 3 are residential. Similar to the morning PHV, 6.7% for residential cars entering during the afternoon peak hour volume seems low. Further, the volumes do not appear to cover week-end activity which is usually critical for a combination of residential and retail activities. We recommend that a more detailed review of peak-hour parking activity be undertaken to show adequacy of operations.
10. Valet runners, in a well-designed valet facility can typically run 10 to 15 cars per hour with a simple self-park layout, vehicle ramps and short running distances. This facility as designed with triple tandem vehicle lifts and too many cars parked in the aisles will slow that pace down by an order of magnitude. Car arrivals will not occur evenly throughout the hour. Cars will stack up and queue. It's especially significant during the afternoon peak hour when residents are arriving and retail parkers might be leaving. How will payment for retail parking be handled? This will cause some delay on both ends of the vehicle's trip to the garage, at arrival and departure. With the current parking design and layout, the number of valet attendants indicated in the write-up (two in the weekday AM and one thereafter all-day) is grossly inadequate to handle operations. After design changes are made as suggested above and below, we recommend a detailed timing analysis of valet operations be performed to demonstrate adequacy.
11. Note that we do not have specific information on the type of retail that will occupy the ground level space. The PHVs will be different depending on which type of shop or restaurant occupies the space.
12. The parking is fully assisted so pending special permit the development does not have to comply with the dimensional regulations of a self-park facility. The layout presented, while appearing to be compliant with a special permit for fully assisted parking, is too congested and not realistic for a viable valet operation.
 - a. For example, the plan indicates there are "5 staging spaces in [the] drive aisles". Based on WPC experience, there is no staging space in the drive-lanes. If you temporarily located 5 spaces in the open space on the plan, there would be no room to drive the car requiring retrieval (or parking). Further, these spaces in the drive lane block any other concurrent operations. All spaces displaced to move any one vehicle need to be re-parked to not block other operations. As stated in

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an earlier item a valet driver can run approximately 10 to 15 cars an hour in a reasonable designed facility. With the amount of cars requiring temporary movement, there is reason to believe the valet rate may get reduced to several cars an hour under peak congested conditions.

- b. Based on WPC experience with similar valet operations with stackers, the parking facility will be able to operate with close to no vehicles parked in the drive lanes. This reduces the car count by about 15 spaces
- c. It can be customary in a residential facility for the valet to drive the cars in and park anywhere there is space and then jockey them around after the peak hour wraps up. With the congested parking in the basement, the speed to jockey cars will be slowed considerably.
- d. Residential parking is typically consistent and predicable, especially on weekdays. Retail parking adds a component of unpredictability to the valet operation. The traffic report only discusses the weekday peak hour. The residential parking on the weekend is the opposite of the weekdays' consistency. Mixing this component with retail on the weekend could jam up the parking operations.
- e. The congestion of the parking below will have a ripple effect to the driveway off Boylston if cars have to temporarily be parked there.

13. The vehicle elevators appear to be small. Small elevators will slow operations.

We remain available to answer further questions and attend the City's ZBA meeting as required.

best,
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