



PROJECT # 16-3007.00

DATE: September 18, 2019  
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 PROJECT NUMBER: 16-3007.00

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Walker Consultants (Walker) has been retained by the Town of Brookline through Environmental Partners Group to review parking for the 445 Harvard Street 40B application. Walker reviewed the application materials on July 12, 2019 presented by the proponent that are generally available on the Town’s website for this project. Walker is in receipt of an updated parking layout (file name dated 7-23-19) on September 3, 2019 which includes a vertical puzzle parking system.

The plans indicate 445 Harvard Street is currently designed for 25 residential apartments (13 one-bedroom, 9 two-bedroom, and 3 three-bedroom units) with ground level retail (4,360sf). There are 25 parking spaces shown on the plan, contained in 1 level below grade to be access by a vehicle elevator. All standard spaces are accommodated with vehicle stacker units.

**Update 9.18.2019:** *The new plans (file name dated 7-23-19) do not indicate a change to the unit mix, but the retail has been reduced to 1830sf to accommodate puzzle parking to be accessed on the ground level. The puzzle parking will be three cars high with one level of car storage in a pit below grade and two cars stacked at grade. A vehicle elevator to below grade parking has been removed from the project.*

We have reviewed the materials and offer the following comments:

1. This site is in the L-1.0 zoning district and requires 2.0 spaces per one-two bed residential unit, 2.3 spaces per three+ bed residential unit, and 1/200sf of (ground level) retail, totaling 73 spaces (51 residential; 22 retail). Waiver item L in the application indicates the project is reducing the number of required spaces from 1.5 spaces per unit. This is an incorrect ratio for what is required. The project application description and tables show a garage with 20 residential spaces, while the plans show 25 spaces. The 25 spaces on the plan are a reduction of 48 spaces from what is required by Zoning. There is no justification or methodology for how the new supply is determined.
  - a. The proponent indicates 20 residential spaces for 25 units or a ratio of 0.8 spaces per unit. This falls within our recommended range of 0.7-0.9 spaces per unit.
    - i. **Update 9.18.2019:** The unit mix has not changed, and the total parking supply has not changed so the comment still applies.
  - b. There is no reference to accommodating visitors or trades people as is required by Zoning. 10% of the zoning mandated residential space count is required to accommodate these users.
    - i. **Update 9.18.2019:** The unit mix has not changed, and the total parking supply has not changed so the comment still applies for 10% of 51 spaces.
  - c. Zoning requires 22 spaces for retail so unless a waiver is requested, the entire garage (minus 3 spaces) is required to be allocated to this use. The proponent doesn’t make a specific allocation of the remaining 5 spaces that are located on the plans. If they are meant for retail parking, this is a reduction of over 75% from the 22 required spaces.



of parking spaces, as is customary with ITE data. The PHVs for retail also depend on what type of retail will lease the space. If it is destination retail, more parking is needed and the PHVs will be higher. If parking cannot be accommodated in the garage, then nearby public parking and on-street parking will have to be utilized. Should the PHV for a weekday evening total 29 trips as indicated in the traffic report, the drop off area, vehicle elevator, and stackers cannot handle this volume as it is currently laid out.

- a. **Update 9.18.2019:** The original comment still applies.
5. 521 CMR 23.8 remarks that van spaces are not required in a valet garage. Standard accessible spaces have not been given a reprieve and appear to be required. A 25-space garage is required to have one accessible space. There appears to be one standard accessible space at grade, but there are no others. The regulations do not dictate where the spaces must be. Walker recommends it be on grade in case someone drives a specially designed car that cannot be driven by a valet attendant. These comments do not reflect the additional requirements to meet Federal ADAAG regulations pertaining to accessible spaces. These regulations are even more restrictive and should be carefully reviewed.
  - a. **Update 9.18.2019:** For 20 parking spaces, one is required to be a van accessible space. It appears a van space is located in the garage. 8'-2" headroom is required to/from/at the space and it is unclear from the materials if this can be accommodated.
6. We recommend the proponent include electric vehicle charging station(s) in the garage.
  - a. **Update 9.18.2019:** The original comment still applies
7. **9.18.2019** Walker takes no exception with updated puzzle parking layout. Some larger vehicles may have difficulty maneuvering into and out of the puzzle parking without a multi-point turn due to the 22'-23' drive aisle, but the drive aisles appear to meet the zoning requirements. It should be noted that a puzzle parking system has unique characteristics such as limited pedestrian headroom, footing that is affected by the pallet system, and requirements to place the vehicle into the system which reduce parcel management time. This is OK for most urban residential parking but may be limiting for some users.

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