



PROJECT # 16-2892.00

DATE: November 21, 2018  
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PROJECT NAME: 1299 Beacon Street Peer Review (Update)  
PROJECT NUMBER: 16-2892.00

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Walker Consultants (Walker) has been retained by the Town of Brookline through Environmental Partners Group to review parking for the 1299 Beacon Street 40B application. Walker has reviewed the application materials presented by the proponent that are generally available on the Town's website for this project. This memo provides an update to our original review memo dated June 28, 2018 and follow-up memo dated August 1, 2018. The updates specifically address changes that are represented in drawings dated November 1, 2018 by CBT Architects and a shared parking analysis by Simon Design Engineering (Simon) dated November 16, 2018. Updates are made to previous peer review comments as indicated below.

11.21.18 Update: Updated plans indicate 1299 Beacon Street is currently designed for 80 residential apartments (down from 81) over 2 levels of retail and restaurant approximately 10,700sf (previously 10,400 SF). Restaurant use was not previously expressed or addressed in previous submissions. The project is designed as a 55 and over development. There are 120 parking spaces (down from 148) contained in 4 levels below grade (previously two levels below grade) to accommodate self-park residential and retail users. All parking and loading is still accessed via Sewell Street to the rear of the property. The parking continues to be accessed by a two-way ramp and all vehicle stackers and valet operations have been removed from the project.

We have reviewed the materials and offer the following comments:

1. This site is in the G-1.75(CC) zoning district and requires 2.0 spaces per residential unit and 1/300sf of retail, totaling 189 spaces (148 residential; 41 retail). Waiver item J in the application indicates the project is reducing the number of required spaces by 1.22 spaces/unit, leaving 0.78 spaces/unit provided. There is no justification or methodology for how the provided ratio is determined. The waiver item goes on further to explain that 45 spaces will serve the retail and 54 will serve the residential. The ratio for dedicated residential parking is 0.73 spaces/unit (54/74). With only 41 spaces required for the retail component, the 58 remaining for the residential creates a ratio of 0.78 spaces/unit (58/74). The proponent should be more definitive in defending a large reduction in required parking. In our research, if these spaces are market rate for the area with near-by transit service, we suggest an appropriate parking supply be between 0.7 to 0.9 spaces per unit, or 52-67 spaces. While on the low end, this development does fall within that range. We believe the upper end of the range would be more appropriate. The pricing and parking allocation for residents affects parking demand and is not addressed in the application materials.
  - a. 8.1.18 Update: The new total number of parking spaces required by zoning appears to be 162 for residential and 35 spaces for retail. The waiver items have not been updated, but assuming the zoning requirement will be maintained for the retail use with the remaining 113 spaces for residential. This renders a parking space to unit ratio of 1.40 per unit which is higher than the range noted above.



overwhelmed without adequate queuing space at grade. Typically, a single valet runner can handle 12 cars in an hour. The proponent has not provided information about vehicular elevators and the throughput capacity of the equipment and approach could slow operations. The primary concern is that there is not enough staging or parking area to accommodate the PHV during a combined peak retail and residential timeframe. Based on our experience, the design of the ground level access and staging area is likely only adequate for residential operation and likely to be inadequate and problematic for retail operations. We strongly recommend that the proponent provide a detailed operational study of the ground level parking/staging area to show adequacy. Further, parking spaces shown are a very poor level-of-service as indicated below and further complicate the operations.

- a. 8.1.18 Update: The vehicular elevators have been replaced with a two-way ramp down from grade and another ramp down to the lower parking level. This will help operations. There are no dimensions on the ramp to check maneuverability and the slopes cannot be confirmed. Ramp blends are noted, but 15% and 16% slopes are steep and a poor level of service. The drop-off and pick-up area is presumed to be at the P1 level but there is no definitive indication of this. There is some space to perform drop-off and pick-up operations on P1 but it is not conclusive that this area is adequate for all the operations. The drawings and corresponding notes indicate there may be queuing on the P1 level and the ramp. Asking patrons to queue on a 16% ramp slope is not recommended. The east half of the P1 level will be difficult to access but can be managed by valet operators. There could be congestion on P1 at the bottom of the ramp where this is effectively an intersection and standing cars could disrupt operations. Valet operations should take extra care (especially during the high PHVs) to manage the cars once a patron has dropped off their vehicle and it is waiting to be taken to park. Alternatively, there is little space for a car to be queuing without disrupting operations if the patron has called for their car, but is late in arriving at the drop off area to pick up their car. Again we recommend that the proponent perform a detailed operations study to confirm the valet operations can operate safely and effectively as shown.
  - b. 11.21.18 Update: All stackers have been removed from the garage so it is assumed to be all self-park with no valet operation. There are a few ramp dimensions on the plans. A 23' clear ramp which will work on the straight portion, but it will be tight as opposing traffic turn the corners. The ramp slopes are not noted on the plans.
5. Further to the above point, it is unclear where the vehicular drop-off and pick-up areas are for this operation and how the retail patrons access the public space at the rear of the building that includes an accessible route. A passenger loading zone is required to be compliant with 521 CMR 23.7. By the size of curb-cuts and drive lanes, we interpret the need to have a one-way circulation. We assume this one-way enters at the loading lane and exits at the parking spaces. If this is the sequence, the vehicular turn from the porte-cochere drop off/loading zone into the vehicle elevator will not work. It's too tight and will require a multi-point turn to align. If the circulation is meant to be a two-way design in front of the vehicle elevators, the curb cut is only 19' and too narrow for two-way traffic. The surface spaces have a drive aisle that is only 19' wide which does not meet zoning and will be very difficult to maneuver into and out of the spaces. There isn't enough maneuvering space for cars to exit the vehicular elevator while other cars are queuing.
- a. 8.1.18 Update: The turn from the porte-cochere drop off area to the ramp will be tight for some cars. A 3-point turn or a wide turn into up-bound ramp traffic may be necessary, slowing operations.





- a. As noted above, the surface spaces do not meet zoning and are a Level of Service (LOS) F maneuverability. This is the most critical of all the waiver requests.
- b. The spaces in the basement are stackers and many are compact. Zoning allows for 25% to be compact and the proponent is proposing 30 compact spaces or 30%. There is a provision about increasing the number of compact spaces up to 50%, but it requires special permitting and an increase in the number of spaces.
  - i. From the Zoning By-law: *If authorized by special permit, the percent of compact spaces may be increased up to 50% provided that one additional parking space (either full size or compact), not to be included in the total number of spaces required pursuant to §6.02, paragraph 1., is provided for every eight compact spaces proposed beyond the 25% allowed by right, but at least one additional space shall be provided in any case where a special permit is granted pursuant to this section.*

While compact spaces are allowed in the garage, we do not recommend using them, especially in a layout with vehicular stackers. Smaller stackers are more restrictive in size than compact surface space where valet runners can take more liberties with parking layouts.

- i. 8.1.18 Update: Compact space are not noted on the plans but it is likely the project dimensions have not changed.
    - ii. 11.21.18 Update: Compact spaces have been noted on the plans and comply with the dimensions in the Zoning Ordinance. We do not recommend using compact spaces.
  - c. The dead end to the left of the parking plan is only 57' clear. It technically meets zoning with 16' long compact spaces along one wall, 18' long standard spaces along the other, and a 23' drive aisle. See note (b) above regarding compact spaces.
    - i. 8.1.18 Update: Dimensions are not shown so this comment cannot be updated.
    - ii. 11.21.18 Update: Dimensions of this dead end comply with zoning, but we do not recommend using compact spaces.
  - d. The spaces opposite the drive aisle from Stair 2 and spaces surrounding the center core do not meet zoning. The drive aisle is only 18'-6" wide. It does not meet the drive aisle zoning dimension for 8'-6" 90-degree spaces and it is a LOS F for maneuverability.
    - i. 8.1.18 Update: Dimensions are not shown so this comment cannot be updated.
    - ii. 11.21.18 Update: All spaces and drive aisle dimensions appear to meet Zoning.
  - e. 11.21.2018. The parallel space adjacent to the retail elevator lobby on each level cannot be accessed by the proper parallel parking technique by pulling forward in the drive aisle ahead of the space. Furthermore, all parallel spaces in this garage require the driver to make a multi-point turn to park or exit the space depending on the direction the car is parked. This is a low level of service maneuver.
10. 11.21.2018. There is bike storage on each level of the garage. It is not clear if this is intended for both public and residential use. We recommend that provisions be made to bring bikes down in an elevator. Bikes cannot ride on the parking ramps and compete with vehicle traffic.

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