



George J. Saraceno, Senior Civil Engineer

TO: Lenore Mahoney, Executive Secretary of the Zoning Board of Appeals (ZBA)

**RE: 680 Worcester Street
Comprehensive Permit – ZBA 2018-64**

DATE: November 14, 2018

The Town of Wellesley Department of Public Works (DPW) has reviewed the Comprehensive Permit Application for the redevelopment of 680 Worcester Street submitted by 680 Worcester Road, LLC. The application includes a copy of the Official Development Prospectus dated August 2018. We met with the applicant's engineer on October 4, 2018 to discuss the project. As a result of the meeting, revised plans, dated October 18, 2018 were submitted to this office for review.

The project is proposing a single access point via a curb opening from Route 9 east bound lane. The project is abutted by the Newton Wellesley Alzheimer's Center to East, two residential lots that front Sterns Road to the South, and 676 Worcester Street, a residential lot to the West. The subject lot is located in a Single Residence 10 (SR-10) district. The lot is a 20,020 square foot lot, with, until recently, a single family dwelling, existing driveway, and wood shed. The lot also contains an existing easement for a sanitary sewer connection from 680 Worcester Street to Francis Road and slope easement related to Route 9. The remaining utilities, including water, power, communications and gas are located from Route 9.

The proposal is for a 4-story condominium complex with an at grade parking garage, consisting of 20 units, including 5 affordable units and 34 parking spaces. The plans indicate that there will be onsite stormwater infiltration for the roof and paved area, onsite snow storage, new utility connections, retaining walls, new curb cut, patio and landscaping. The project will feature an open parking garage with access to a patio at the rear of the lot. Included in the garage are three, 6 bay stacked parking units. Recent changes to the plan include new boxed parking that also serves as snow storage area, reconfiguration of the stacked parking spaces, proposed changes to the sewer easement, elimination of the stormwater overflow pipe and small changes to the driveway.

Our review of the proposal is that the proposed density is creating numerous safety, nuisance and constructability issues. One of the primary concerns is restrictive circulation and accessibility. We believe that the project has not provided enough area for emergency, large truck, moving van and sewer maintenance equipment vehicles to turn around onsite. In fact, any passenger vehicle that is unable to find a space will have to retrace their path back to the access drive. This will likely create queuing issues on Route 9. It is our opinion that the snow storage proposed will not be useful because the locations will either be in conflict with parking or will be over a wall, and onto a 2:1 slope that is proposed on close proximity to a neighbor. There seems to be a high potential for an impact on the abutting property. We have concerns with the vehicle stacking system as it is unclear if the height and length requirements are accommodated properly. We are also concerned with the

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construction of the gravity block retaining wall that is proposed along 140 feet, extending along the West and South portion of the property within one foot of the property line. Again, this has the ability to impact abutting property. Much of this wall is ten feet tall and it will be loaded on the surface with parking and a stormwater infiltration system.

Another area of concern is the easements on the property. The project proposes to modify the existing sewer easement, which will require both DPW board and Town Meeting approval. The bigger concern with the sewer service as proposed is that it will be beneath a deck, with limited accessibility and very difficult conditions for servicing and maintaining. We are also strongly recommending upsizing the existing 6" main from the site to the main in Francis Street to reflect what is a significant change of use, single family house to a multi-story building. While, unlikely to be a physical issue we note that several structures, including a transformer and an underground infiltration system are located within the slope easement. The applicant should confirm that this is allowed or is acceptable to the easement owner.

The applicant has provided a copy of the Stormwater Management Report dated June 21, 2018 which includes compliance with Massachusetts DEP Stormwater Management Standards, soil testing results, hydrologic analysis and Determination of Applicability form by Massachusetts Department of Environmental Protection. The Stormwater Management Report includes a table that shows a reduction in the peak rate and volume of runoff for the 2-year, 10-year, 25-year and 100-year storm events, which were analyzed using HydroCAD v10.0. We request that the applicant's design engineer provide a complete copy of the HydroCAD analysis for the project.

Three deep observation holes (DOH) were performed on the site to determine the characteristics of the soil, depth to groundwater and suitability of infiltrating stormwater runoff from the impervious areas. The results indicate gravel, to coarse sand to loamy sandy soils, with depths ranging from 96 inches to 125 inches. The results also indicate that the annual high groundwater table is approximately five feet below grade. Only one DOH was advanced in the area of the proposed stormwater infiltration system. We have some concerns that this material was imported to the site as fill, possible as part of the Route 9 construction. The proposal is based on providing a minimum of two feet of separation between the infiltration system and the high ground water. We recommend that confirmatory soil testing, witnessed by a representative of the Town be conducted prior to final permitting.

Lastly, but possibly most importantly we are concerned about constructability of the project. Again the density leaves little room to set cranes, stockpile material or to stage deliveries, not to mention the need for construction worker parking. This site's only access is via a state highway, and we are very concerned that there could be traffic safety, and potential for traffic impacts / delays as the likely outcome will be some offloading and material delivery that will occur on Route 9. It also seems likely that parking will occur on surround neighborhood streets.

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GENERAL

1. Elevations shown on the Existing Conditions Plan, drawing C2, are referenced to NAVD88. Elevations must be provided on the Town of Wellesley Benchmark System.
2. Deep hole soil logs should be added to the project plans.
3. The applicant should provide a description of the requirements slope easement at the front of the property along Route 9, and the impacts of the proposed features within it.
4. Asbestos pipe found during excavation on the property must be disposed of according to MADEP 310 CMR 4.00.
5. Provide a copy of the state permit to access the Route 9 (Worcester Street) to bring utilities into the site, i.e., water, sewer, gas, electric and CATV.
6. Label the parking spaces in the parking garage, including the four additional parking spaces outside the building. How does the site accommodate the four parking spaces if the snow storage area is full?
7. Clarify on the plans the location of the deck adjacent to the proposed patio.
8. Provide a legend for the line types used on the plans.
9. The Vehicle Access Plan, drawing C4, shows that a SU-30 type vehicle has difficulty turning into the site and exiting the site..
10. The applicant should provide the Town with a copy of the approval from MassDOT for the turning radius shown on the plan as discussed at a meeting with the applicant's design engineer on October 4, 2018.
11. Provide cut and fill calculations for the site and include a Construction Management Plan for the project, including work hours, trucking, dewatering, staging, parking, etc.
12. Add dimensions for the parking spaces proposed for the project.
13. The location of the proposed retaining wall is close to the property line and may require a construction easement from the neighboring property construction.
14. Add concrete to the back of the vertical concrete detail, as shown on the Detail Sheet, drawing C-8.

STORMWATER

1. We recommend adding a test pit for the proposed infiltration system at the northwest portion of the lot.
2. Review the Detail Sheet, drawing C7 and revise the details to state "determined by the Town of Wellesley". The driveway apron detail should be legible.
3. On Detail Sheet, drawing C-8, show the proposed location of the concrete sidewalk with a concrete mono-berm.
4. On the Detail Sheet, drawing C-8, provide the elevations for the proposed grade, top of stone, bottom of stone, top of infiltration system, bottom of infiltration system and depth to mean high ground water.

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WATER & SEWER

1. We recommend that the sanitary sewer easement be free from any permanent structures to provide access to the easement. This includes permanent structures over the easement.
2. We recommend that the existing 6-inch sewer main within the sewer easement be upgraded to an 8-inch sewer line from 680 Worcester Street to Francis Road. This is the common municipal standard for commercial sewer mains.
3. Show the proposed sewer invert for the sanitary sewer service exiting the building.
4. The proposed fire and domestic water services should include gate valves so that each connection can be isolated for future maintenance. We recommend adding a gate valve next to the proposed fire hydrant.
5. Show the location of the proposed backflow preventor for the building. Add a note to the plans that the Water & Sewer Division is required to inspect the backflow preventor.
6. Three sets of three stacker spaces are proposed in the parking garage area. CityLift 2 Level Vehicle Lifts are proposed and seem to have minimal overhead clearance provided. Are there restrictions on the size of the vehicles that the proposed system can accommodate? Also, which housing units will be assigned to which spaces?
7. Relatively steep slopes are proposed at the southerly side of the property, approximately 2 feet to 1 foot vertically and parts of this areas are proposed for snow storage. What is proposed to reduce potential soil erosion in these areas?
8. The proposed construction fence is shown along the property line. Provide a detail on the proposed construction fence.
9. The proposed four parking spaces located at the southwesterly corner of the property are stacked horizontally, and will require moving a vehicle to proceed to and from these stacked spaces.
10. Proposed retaining walls shall be designed by a Registered Professional Engineer licensed in the State of Massachusetts including design calculations submitted for review.
11. Detail Sheet, drawing C-8, A proposed tire tracking pad detail is shown on the plan. The proposed location of the tire tracking pad should be identified on the project plans.
12. Detail Sheet, drawing C-9, A detail is provided for the proposed E-One Grinder Pump. Information including electrical service conduit locations for power, backup pump and/or alarms to be provided and other pertinent information.

LANDSCAPING

1. Label all proposed trees and shrubs with the appropriate plan name.
2. The proposed tree shown adjacent to the stop sign is too close to the wheel chair ramp and curb cut. Label the proposed tree size and note how tall and wide the tree will grow. We recommend relocating the tree.
3. Show the number of trees that have been removed from the project site, labeling DBH, type of tree and condition of tree.

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4. Provide a tree protection detail and show on the plans.
5. We recommend revising the planting detail to show 2/3 of the burlap be removed from the root ball.
6. Show the location of the irrigation system and valve boxes to water the plants and lawn area.
7. We agree with the choice of planting options except the Hemlock.
8. Consider two additional trees along Worcester Street with a combination of ornamental and shade trees.
9. When choosing plants lean towards using natives rather than exotics.

We appreciate the opportunity to provide comments on this project. We hope that our thoughts are useful and, feel free to email or call me if you have questions or concerns.

Sincerely,



George J. Saraceno
Senior Civil Engineer

cc: Michael Pakstis
William Shaughnessy
Michael Quinn
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