

**TOWN OF WELLESLEY**  
WELLESLEY, MASSACHUSETTS 02481

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DEPARTMENT OF PUBLIC WORKS  
ENGINEERING DIVISION

May 29, 2018

Lenore Mahoney, Executive Secretary  
Wellesley Zoning Board of Appeals  
525 Washington Street  
Wellesley, Ma 02482

**RE: ZBA 2018-25**

Dear Lenore,

In response to the application for a 40B residential development at 135 Great Plain Avenue, by Northland Residential, the Department of Public Works (DPW) is providing these initial comments. These comments are offered as preliminary as the development plans have varying levels of detail and full detailed engineering review is not appropriate at this time.

The project consists of 44 housing units on a 12-acre site, addressed as 135 Great Plain Avenue. The applicant is proposing a mix of townhouses and duplexes. We understand that units will be for private sale and maintenance of the facility including all public spaces and infrastructure will be completed by a homeowners association. Great Plain Avenue in this area is a 28' wide paved road within a variable width right of way, generally over 40 feet wide at the subject lot. The road pavement is in fair condition and there is a sidewalk one side of the street. No improvements to the public right of way are proposed as part of the application.

The DPW's primary concerns are as follows:

**Traffic, Transportation and Circulation**

The project is located between the Great Plain Avenue, Wellesley Avenue and Seaver Street intersection and the Recycling and Disposal Facility (RDF). The Town has a safety concern due to elevated vehicle accidents at the Wellesley Avenue, Seaver Street, and Great Plain Avenue intersection and is working on an improvement project for the intersection. There has also been consideration of a traffic light at the intersection of the RDF driveway to assist with peak period congestion. We note that the sidewalks are inconsistent along the corridor, particularly between Brook Street and the site, which we feel will be an issue with a development of this magnitude.

Within the project site we noted that the entrance drive is proposed to be 11' wide lanes in each direction with 8' wide parallel parking on one side. This seems marginal given the anticipated 314 vehicle trips expected daily, particularly in the entrance area, and considering that there does not seem to be any accommodations for snow storage.

The project narrative indicates that there are 64 garage parking spaces and 24 driveway spaces for the 44 units or 2 spaces per housing unit, but many of the buildings are proposed to be 3 bedrooms. We also note that there are 22 guest parking spaces, but there are no facilities for dumpsters or truck deliveries.

### **Sewer**

The design is similar to the previously approved subdivision, proposing a collection system with a sewer pump station and force main, only the use is more intense. This is not the DPW's preferred plan as we believe a gravity system could potentially be installed by extending the sewer collection on Great Plain Ave to the site. The sewer flow is conservatively estimated to be 13,500 gallons per day, with peak flows that could approach 30 gallons per minute and the operation of a small sewer pump station might be problematic for homeowners associations.

### **Stormwater**

The overall stormwater management proposal is, once again based on the previously approved subdivision plan, relying on a collection system that discharges to large subsurface infiltration systems. The collection system consists of 8 catch basins and 15 manholes, 1,200 feet of drain line. Details of the infiltration system are missing, but it appears that concerns related to poor soils and separation from the seasonal high ground water are lesser factors in the analysis submitted. The current design maximizes infiltration into the ground. We are continuing to review the hydrology, and recommend that a system profile as well as a map of the groundwater contours together with all geotechnical data that supports the infiltration assumptions be submitted.

We would note, as we did with the subdivision design, that buried infiltration system designs seem inconsistent with Wellesley's commitment to doing more to improve water quality. The better "Best Management Practices" (BMP's), which would maximize biological treatment, have been not been incorporated. We feel this is unfortunate given the commitment the community has made, particularly in the Fuller Brook watershed.

We also believe that the amount of impervious areas has increased significantly with this application and we are still reviewing the amount of added infiltration holding capacity associated with the "Storm Trap" system. We note that with this design, the discharge from the primary underground system will be about ten cubic feet per second (cfs) during 100-year design storms. This causes some concerns with the potential for impact along the bank area of Fuller Brook. The design includes a rip-rap area at the outlet and a level spreader, to mitigate this impact.

### **Other Concerns**

Constructability and preservation of buffer zones are a concern in a few areas, namely the abutting properties at 117, 141 and 145 Great Plain Avenue where some of the buildings, walls, that are required for grading, the tree clearing, the building and parking lighting and landscaping will have the potential to impact adjoining properties. We also feel the tree clearing and grading along some of the wetland buffer zones is quite close to the jurisdictional buffer zone limit and has the potential for impact.

The plan calls for somewhat narrow drives and has some robust planting areas which raise concerns for snow management. It is likely that some combination of plowing and active removal will be required as part of the winter maintenance. We note that a few sections the proposed drives are sloped between 10-12% which may be problematic in slippery conditions. A grass eyebrow is proposed along the outer drive loop, which breaks up one of the more intensely paved areas, and allows for the potential to plant trees, however the size (approximately 10' wide by 100') seems disproportionate to the amount of pavement and the mass of the buildings.

An Erosion and Sediment Control Plan has been included, which outlines that the amount of disturbed area is significant and will be subject to a NPDES permit. The notes on the plan make the contractor responsible for a wide variety for decisions including staging, fueling, stockpiling, temporary

protection measures, preservation of infiltration beds and more. Given the size of the project and the proximity to environmental resources, we feel a more detailed construction management plan, particularly one that might consider staging, parking and materials deliveries is appropriate to consider as part of this application.

Lastly, we want to note that this is considered a private development and that the applicant or the following homeowner's association will be responsible for all infrastructure, including any sewer pump stations or complicated storm water management systems, as well as all management and maintenance, including trash, recycling collection and winter maintenance. We also want to express our opinion that while the ZBA may be the single regulating body, it is our expectation that the Town's Street Permit Program, which will permit and condition any work in the public right of way, including utility connections and curb cuts will be administered by us. These permit are historically applied by the site contractor and also serve to assure that the work complies with State and Federal requirements such as Jackie's Law.

We hope this review useful and we are available to answer any questions or to follow up on any other issues raised here.

Very truly yours,

A handwritten signature in blue ink, appearing to read "David Hickey", written in a cursive style.

David J. Hickey, Jr., P.E.  
Town Engineer

cc: Mike Pakstis  
Doug Stewart  
Michael Zehner  
Meghan Jop  
Tom Harrington

