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150 Longwater Drive, Suite 101
Norwell, MA 02061
Tel: 781-792-3900
Fax: 781-792-0333
www.mckeng.com

February 18, 2022

Mr. Robert Rosa
Rockland Zoning Board of Appeals
242 Union Street
Rockland, MA 02370

Re: "Site Development Plans, (Assessor's Map 57, Parcel 70), 320 Concord Street, Rockland, Massachusetts"

Dear Mr. Rosa and members of the Rockland Zoning Board of Appeals,

This letter is in response to an Engineering Peer Review Letter dated January 21, 2022 from Patrick G. Brennan, P.E. of Amory Engineers, P.C.

Enclosed herewith are the following:

- Plans entitled "Site Development Plans, (Assessor's Map 57, Parcel 70), 320 Concord Street, Rockland, Massachusetts" prepared by McKenzie Engineering Group, Inc. (MEG) dated November 30, 2021 with a latest revision date of February 18, 2022.
- Drainage Calculations and Stormwater Management Plan prepared by MEG dated November 30, 2021 with a latest revision date of February 18, 2022.
- List of Requested Exceptions and Waivers prepared by Wall Street Development Corp. dated October 12, 2021 with a latest revision date of January 24, 2022.
- Plan entitled "Building Grading Plan" prepared by MEG dated February 2, 2022.
- Letter from the Rockland Fire Department dated February 7, 2022.
- Plan entitled "Photometric Study – King Luminaire" prepared by Speclines dated February 23, 2022

The following are responses to the comments that were highlighted in the Engineering Peer Review Letter that warrant further clarification (MEG responses are shown in *blue italics*).

Requested Exceptions and Waivers Comments:

1. The proposed development would require Site Plan Review if not applied for under Chapter 40B. The list of waivers should identify waivers requested from the Rules and Regulations of the Planning Board (R&R) as they relate to Site Plan Review, Design Standards and Construction Specifications. **In the response, MEG indicates that the Applicant will submit a revised list of Waivers and Exceptions. However, we have not received a revised list.**

Please see attached revised List of Waivers and Exceptions which has been submitted to the Board by the Applicant.

2. The Applicant is seeking relief from fees associated with the Abington-Rockland Joint Water Works (ARJWW). The Zoning Board of Appeals does not have the authority to waive the requirements of Abington/Rockland Joint Water Works. **In the response, MEG indicates that he Applicant will be discussing this relief with the ARJWW.**

The Applicant will discuss the requested relief from fees with the Abington Rockland Joint Water Works.

3. The Applicant is seeking relief from all requirements associated with infiltration and inflow (I&I) mitigation requirements of the Rockland Sewer Commission. The Board should consult with the Sewer Commission prior to granting any relief from its requirements. **In the response, MEG indicates that the Applicant will be discussing this relief with the Sewer Commission.**

The Applicant will discuss the requested relief from infiltration and inflow mitigation requirements with the Rockland Sewer Commission.

General and Roadway Comments:

1. The proposed layout does not allow for large vehicles to turn around on site, especially if there are vehicles parked in the individual driveways at the units. The Fire Truck Turning Plan shows that the Rockland aerial truck will need to back out onto Concord Street. This should be discussed with the Fire Department. **The revised plans show an emergency turnaround between Buildings 3 and 4 and Sheet T-1 shows that the Fire Department's largest apparatus can pull into the site driveway and turnaround by backing into the emergency turnaround. The Board should consult with the Fire Department to confirm that this configuration is acceptable.**
Please see attached letter from the Rockland Fire Department regarding the acceptance of the provided emergency vehicle turnaround area.
2. With the width of the main driveway at twenty feet, parking should be prohibited along the sides of the driveway. **The revised plans specify "no parking" signs on each side of the site driveway and emergency turnaround. We recommend that the emergency turnaround be striped to provide a visual indication that parking is prohibited.**
The Site Layout Plan, Sheet C-1 has been revised to include 4" yellow pavement marking hatching within the emergency turnaround area.
3. We recommend a guardrail along the end of the main driveway to prevent vehicles from driving off the end and either off the proposed retaining wall or onto the golf course. **Addressed – a guardrail is proposed as recommended.**
4. The Monolithic Bituminous Concrete Berm (Cape Cod Berm) Detail on Sheet D-1 appears to show the berm to only be installed with the top course of pavement. The berm should be installed with both the binder and top courses of pavement so that the stormwater system will be operational when the binder course is placed. **Addressed – the detail has been revised to specify that the berm is to be placed with both courses of pavement.**

5. A landscaping plan should be submitted to the Board for review. Abutter screening should be incorporated into the plan. **A landscaping plan has been submitted for the Board's review. We note that no fencing is proposed.**
Comment noted.
6. We assume that snow storage would be along the edges of the site driveways. However, without a landscape plan we cannot determine if there will be adequate room for the snow (or if trees and/or shrubs, etc. would be in the way). We also note that snow storage along the south side of the main driveway will increase runoff onto the Wong property as the snow melts since the grade drops from the edge of roadway about two to three feet to the property line. **Snow storage areas have been shown on the plan in landscaped areas in front of each building. In the response, MEG indicates that "snow storage that cannot be accommodated on-site shall be hauled off-site, snow collection and transfer off-site shall be paid for by the Homeowner's Association." Should the Board approve the project we recommend this be a condition of approval. Also in the response, MEG states that "snow storage from the proposed roadway will not be stored along the south side of the roadway to prevent runoff as noted." While we agree with the premise of this statement, we question how it will be monitored and enforced.**
Comment noted, snow removal procedures and regulations within the development will be the responsibility of the Homeowner's Association.
7. The Report on Existing Municipal Facilities and Services/Impacts indicates that the "access drive, once constructed, will have traditional low-impact street lighting." Specifications on fixtures, height, etc. should be provided. **As noted above, lighting specifications and a photometric plan have been submitted. However, the photometric analysis is limited to the footprint of the proposed driveway, it should extend to the property line to demonstrate that there will be no spillover onto the adjacent property.**
Please see attached revised Photometric Study prepared by Speclines and dated February 23, 2022.
8. The Construction Sequence listed on Sheet ESC-1 and included in the Construction Phase Pollution Prevention and Erosion and Sedimentation Control Plan (CPPP) should include when building construction would take place. **Addressed – the construction of the buildings (Task 12) is scheduled to start after binder pavement placement.**
9. The Applicant should explain how trash service will be provided. **The Applicant has indicated that trash service would be provided by a private contractor, paid for by the Homeowner's Association.**
No response required.
10. With the high water table, basements could be problematic. The Applicant should provide information on whether the dwellings will have basements or be slab-on-grade construction. **Addressed – based on the architectural plans (and email confirmation from the Applicant), the basement floor will be at the same elevation as the garage floor so they will be above water table.**

11. The architectural plans show decks on some of the units. If decks are proposed they should be shown on the Site Development Plans, especially since this will further reduce setbacks from abutters. **Addressed – decks are shown on the Site Development plans. The minimum setback to the side property line is 14 feet.**
12. The August 30, 2021 Project Eligibility Letter from Mass Housing recommended a number of issues to be addressed in the application to the Zoning Board of Appeals. The Applicant should review these with the Board. **Comment remains.**
Comment noted.

Utility Comments:

1. Documentation should be provided to demonstrate that there will be adequate water supply for domestic use and fire flow. **MEG submitted a water demand calculation that indicates that the project should use approximately 1,320 gallons of water per day. However, no fire flow information has been provided. Approval for water supply must be secured from the ARJWW.** *The Applicant met with the Abington Rockland Joint Water Works (ARJWW) on January 20, 2022 and received conditional water approval. A letter from the ARJWW is forthcoming.*
2. The proposed location of the existing hydrant that is currently within the limits of the proposed main driveway should be shown on the plan so that it is relocated as part of this project. **Addressed – the proposed location of the hydrating is shown on the plan to be about 25 feet north its current location.**
3. The Fire Department and ARJWW should be consulted about the location of the proposed hydrant on site. **We recommend that the Board consult with the Fire Department to confirm that the proposed hydrant location is acceptable.**
No response required.
4. The proposed water main is specified to be PVC in plan but ductile iron in General Note 4 on Sheet D-3. ARJWW should be consulted to confirm which material is acceptable. **Addressed – the water main is now consistently specified to be ductile iron.**
5. The water main should be shown on the Typical Roadway Cross Section on Sheet D-1. **Addressed – the water main is shown on the cross section, however, the minimum cover of five feet should be labeled.**
6. Documentation of adequate capacity in the existing municipal sewer system should be provided. We note that this project is currently the fifth project listed on the Sewer Commission's Waiting List for Connections after Current Sewer Moratorium is Lifted. **In the response, MEG indicates that the Sewer Commission has been contacted. A letter from the Sewer Commission should be submitted.**
The Rockland Sewer Commission has been contacted regarding the capacity of the municipal sewer system.
7. The proposed sewer main on site will be installed below seasonal high groundwater. The design should incorporate check dams along the pipe so that groundwater does not follow the pipeline.

Additional methods to prevent infiltration should also be discussed with the Sewer Commission.

Clay check dams are specified at fifty foot intervals along the proposed sewer line on site.

No response required.

8. Invert elevations should be specified for the house connections to the sewer main and at the cleanout. **Addressed – invert elevations are shown on the plan.**

Stormwater and Erosion Control Comments:

1. The proposed silt sock erosion control barrier should be installed around the entire perimeter of the site. **The silt sock is shown around the perimeter of the site except for the rear property line. We suspect this is due to the proposed temporary sedimentation basin being located in that area. However, the silt sock should extend across the rear property line.**
The proposed silt sock erosion control barrier has been revised to extend across the rear property line.
2. We note that in order to provide adequate separation from seasonal high groundwater, the majority of the site will be filled between two and three feet. **The cut & fill analysis indicates a net fill of about 850 cubic yards.**
Comment noted.
3. Invert elevations should be specified for the roof drain piping to confirm that there will be adequate pitch to convey water to the subsurface infiltration system. We question whether the piping shown will be adequate to connect to all downspouts on the dwellings. **Addressed – invert elevations and additional piping are shown on the plans.**
4. We recommend cleanout manholes and additional inspection ports (minimum of one on each end chamber) for the proposed subsurface infiltration system. These, along with header pipe configurations should be shown/specified on the plans. **Inspection ports are shown on one end of each row of chambers. The inspection ports are only six inch diameter and are for inspection purposes. They do not provide a means to clean the system. The two inlet pipes should be located within the same row of chambers with a manhole at each inlet to provide for a means of cleaning the system.**
The Grading and Drainage Plan, Sheet C-2 has been revised to show proposed precast concrete drain manholes at each end of the subsurface infiltration system inlet to provide a means of cleaning the system. Filter fabric has been provided at the inlet into the subsurface infiltration system at each end.
5. Rain garden plantings should be specified on the Rain Garden detail on Sheet D-2. We question what the layer between the bioretention soil and the undisturbed earth is proposed to be. **Addressed - rain garden plantings are specified on the Landscape Plan and the layer between the bioretention soil and the undisturbed earth is specified to be crushed stone.**
6. A Temporary Sedimentation Basin detail is included on Sheets ESC-I and D-5. The proposed location of the discharge pipe should be shown on the plans. **A riprap emergency spillway outlet is shown on the plans which would discharge onto the golf course property if the basin were to overflow.**

Comment noted.

7. The Long Term Pollution Prevention Plan (LTPPP) should specify that a Homeowners Association will be responsible for post construction operation and maintenance of the site and stormwater system (not the developer). **In the response, MEG identifies a paragraph in the LTPPP where it notes that the HOA is responsible for maintenance. However, this should be listed on page I of the document under "Responsible Party/Property Owner".**

The Post-Development Best Management Practice Operation and Maintenance Plan has been revised as noted to state "All structural BMP's as identified on the site plans will be owned and maintained by the developer until such at time that a Homeowner's Association is created, then the Homeowner's Association will own and maintain the BMP's."

8. The Rain Garden section of the LTPPP should include annual soil/media addition. **Addressed – the LTPPP now specifies annual soil/media addition.**
9. The note specifying sift sacks to be installed in the existing catch basins on Concord Street should indicate that the silt sacks are 'to be removed upon completion of construction.' **Addressed – the note has been revised accordingly.**

Very truly yours,

MCKENZIE ENGINEERING GROUP, INC.



Erik Schoumaker, P.E.

Project Engineer

CC: Wall Street Development Corp