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June 29, 2021

Mr. Patrick G. Brennan, P.E.
Amory Engineers, P.C.
25 Depot Street, P.O. Box 1768
Duxbury, MA 02331

Re: Site Development Plan, Dyer Street, Rockland, Massachusetts

Dear Mr. Brennan,

This letter is in response to an Engineering Peer Review Letter dated June 15, 2021 from Patrick G. Brennan, P.E. of Amory Engineers, P.C.

Enclosed herewith are the following:

- Plans entitled "Site Development Plan, Assessor's Map 34, Lots 83, 84, 87, 88, 89 & 90, Dyer Street, Rockland, Massachusetts" prepared by McKenzie Engineering Group, Inc. (MEG) dated October 23, 2020 with a latest revision date of June 29, 2021.
- Executive Summary Drainage Calculations and Stormwater Management Report prepared by MEG dated October 23, 2020 with a latest revision date of June 29, 2021.

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*).

Town Counsel Advice:

1. We had questioned whether the proposal was a subdivision and if the roadway needed to be constructed to Subdivision Standards. Attorney Galvin advised that the proposal is not a subdivision and the Planning Board should determine whether the proposed width, grade and construction of the proposed roadway is adequate. The proposal includes widening the existing portion of Dyer Street and constructing the extended portion of Dyer Street to twenty-four feet wide with twelve inch Cape Cod berms on each side. Easements are proposed at the driveways for the five and seven unit buildings so that large vehicles may turn around. A swept path analysis has been submitted which shows that the Fire Department's largest apparatus can turn around in the proposed easements at the driveways for the five and seven unit buildings. **We note that the narrowest street allowed by the Rules and Regulations of the Planning Board (R&R) is twenty-six feet and granite curb is required by the R&R. The R&R also require a circular turnaround with a minimum pavement diameter of 100 feet and property line diameter of 120 feet.**

Comments:

1. The project now includes subsurface infiltration systems consisting of plastic chambers surrounded by crushed stone. A waiver is required from R&R §III.C.2.f.1 to allow subsurface systems.
Comment noted.
2. We note that the calculations indicate that stormwater rate and volume of runoff will not be increased from existing conditions to post-development conditions. However, we have not completed a detailed review of the drainage calculations as Mr. Henry Nover, P.E. is reviewing the stormwater design of the project for conformance with the MassDEP Stormwater Management Standards (SMS) for the Rockland Conservation Commission. All of Mr. Nover's comments should be addressed.
Comments relating to the Stormwater Management Standards in a letter dated June 22, 2021 from Henry Nover, P.E. have been addressed.
3. A waiver is required from R&R §III-C.2.e.1) to allow for less than 2.5 feet of cover over the drain pipes. We note that drain pipes with less than 2.5 feet of cover are specified to be Class 5 reinforced concrete, which is appropriate.
Comment noted.
4. We note that floor drains from the garages in the five and seven unit buildings are shown to be connected to the drainage system. Floor drains cannot be connected to the drainage system. If floor drains are proposed they should discharge to a tight tank or the municipal sewer system. However, we recommend against the use of floor drains.
Floor drains are not provided in the latest Site Plan submission. The drains associated with the multi-family buildings which are connected to the drainage systems are roof drains.
5. Documentation has been provided to demonstrate that there will be adequate water supply for fire flow. However, the Applicant needs to secure approval from the ARJWW Commissioners for domestic water supply. Should the Board approve the project we recommend that documentation of water approval be a condition of approval.
The Abington Rockland Joint Water Works have been contacted regarding water supply approval for the proposed development.
6. The Board should review and determine whether the landscaping shown on the proposed Landscaping Plan (Sheet LA- I) is adequate.
Comment noted.
7. As noted in our March 23, 2021 letter, snow storage areas are shown on the plan but they do not appear to be adequate to accommodate the amount of snow that may be generated from the parking areas and snow will likely need to be hauled off site.
Comment noted.
8. As noted in our March 23, 2021 letter, the plans show proposed stockade fence along the west property lines of the duplex unit lots and there is no detail of the stockade fence. In the response MEG states that "the proposed stockade fences will be wooden and 6 ft. in height. Details and construction specifications will be provided by the manufacturer during the construction

process." Should the Board approve the project we recommend a condition requiring submission of fence details prior to construction.

Comment noted.

Very truly yours,

MCKENZIE ENGINEERING GROUP, INC.



Erik Schoumaker, P.E.
Project Engineer



Bradley C. McKenzie, P.E.
President

CC: Gaspar Investment Inc.
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