TOWN CLERK, ROCKLAN JUL 25 23 MILL 32

PGB ENGINEERING, LLC

CIVIL ENGINEERING DESIGN & CONSULTING

49 TUPELO ROAD MARSHFIELD, Ma 02050-1739

Tel.: 781-834-8987 PGBEngineeringLLC@gmail.com

July 25, 2023

Rockland Zoning Board of Appeals Town Offices 242 Union Street Rockland, MA 02370

Subject: Shinglemill - Chapter 40B Comprehensive Permit

Dear Zoning Board of Appeals:

This is to advise that we have reviewed the following documents related to the proposed Shinglemill Chapter 40B development off Pond Street:

- Shinglemill Apartments Comprehensive Permit Plans (32 sheets), revised July 14, 2023, prepared by Coneco Engineers & Scientists (Coneco)
- Local Road Improvements plan, dated July 14, 2023, prepared by Coneco
- Wetland Buffer Impact Exhibit plan, dated July 14, 2023, prepared by Coneco
- Sewer Connection Alternatives plan, dated July 14, 2023, prepared by Coneco
- Mass Balance Analysis (Cut/Fill) plan, dated July 14, 2023, prepared by Coneco
- Proposed Staff Guage/Piezometer Pairs, Discharge Lines, and Discharge Point Locations plan, dated February 11, 2021, prepared by Coneco
- Landscape Plans (9 sheets) revised July 21, 2023, prepared by Traverse Landscape Architects
- Stormwater Management Report, revised July 14, 2023, prepared by Coneco
- Traffic Memorandum, prepared by McMahon, dated June 12, 2023
- List of Requested Exceptions, Waivers and Permits, dated July 14, 2023
- Flow Test Report, dated August 6, 2018, prepared by John Hoadley and Sons, Inc.
- Response to comments letters from Coneco, dated July 14, 2023. Responses are to our May 30, 2023 letter to the Board and comments from ARJWW, Sewer Commission, Highway Superintendent, Fire Department, Police Department and Public (Parsons, Hansen and Kearny)

The documents have been revised to address comments contained in our May 30, 2023 letter to the Board as well as comments from others as listed above. Below are the comments from our May 30 letter in plain text, followed by the current status of each in **bold text**.

1. An updated list of waivers should be provided to reflect the design shown on the current plans. Addressed – an updated list of waivers has been submitted and it appears to be complete.

- 2. An updated mass balance analysis should be provided to reflect the design shown on the current plans. The updated mass balance analysis indicates that there will be a net fill of about 77,297 cubic yards of soil material. This will result in well over 3,000 truckloads of material.
- 3. Landscape plans should be updated to reflect the design shown on the current plans. Addressed the revised Landscape Plans reflect the current design shown on the civil plans. We recommend that the Board determine whether the proposed landscaping is satisfactory.
- 4. The project as proposed will require the Applicant to file an Environmental Notification Form (ENF) with the Massachusetts Environmental Policy Act (MEPA) since it will trigger the MEPA Review Threshold 301 CMR 11.03(6)(b)(14). This requires submission of an ENF for a project that will generate 1,000 or more new average daily trips on roadways providing access to a single location and construction of 150 or more new parking spaces at a single location. The project proposes 299 parking spaces and 199 residential units, which will generate 1,082 average daily trips to this location. In the response, Coneco explains that an ENF is not required and cites the McMahon memorandum which indicates that the project will generate 904 average daily trips. We confirmed this number with Gillon Associates (see attached trip generation results) so at this point we agree that an ENF is not required.
- 5. A portion of the proposed sewer main that would convey sewage from the development to the Rockland Sewer System would pass through the Zone A Surface Water Protection area tributary to the Rockland Reservoir. This is not allowed by 310 CMR 22.20B(3)(b) which reads "all sewer lines and appurtenances are prohibited, except as required to eliminate existing or potential pollution to the water supply, or where the crossing of tributaries is necessary to construct a public sewer system." The proposed sewer line does not meet either of the two exceptions listed.
 - a. It is not required to *eliminate existing or potential pollution to the water supply* because there is no existing pollution, related to sewage in the area that the line would be installed and without a sewer line in that location there is no potential source of pollution that the line would eliminate.
 - b. Installation of the line would serve a private development and should not be considered a public sewer system.
 - Coneco contends that the project meets the exceptions. We do not agree, and we believe that in order for the sewer main to pass through Zone A, a variance would need to be granted by MassDEP. Coneco also provided an alternative route for the sewer line which would not pass through Zone A. However, the alternate route is within 25 feet of the vernal pool, and it crosses through private property (parcel 10-067), which we do not believe is owned or controlled by the Applicant. If the parcel is not owned or controlled by the Applicant, we do not consider this a viable option.
- 6. Based on Chairman Heshion's May 11, 2023 letter, the Sewer Commission has not approved a municipal sewer connection for the project. Without a connection to the municipal sewer system the project cannot be built. We understand that there is a moratorium on new connections to the sewer system which is the result of an

Environmental Protection Agency (EPA) Order (Docket No. CWA-AO-R01-FY22-05). To ensure compliance with the EPA Order we recommend that the Board not entertain any request for relief from Sewer Department/Commission fees and regulations. In the response, Coneco states that "the Applicant is not requesting any relief from the Sewer Department/Commission fees and regulations."

7. We understand that the Applicant is proposing to provide domestic water supply with onsite wells and that fire protection would be provided by the Abington-Rockland Joint Water Works system. Documentation should be provided to demonstrate that there will be adequate water supply for fire protection (hydrant flow tests and hydraulic modeling). Documentation should also be provided to demonstrate that the onsite wells will provide adequate water supply in both quantity and quality of water. In the response, Coneco cites the flow test by John Hoadley and Sons and states that the Applicant's mechanical engineer has "communicated to the applicant that the water system should be sufficient to supply fire protection throughout the development," and "a final analysis will be performed to ensure that the development will meet all fire prevention requirements." We trust that building permits would not be issued until the fire prevention requirements are met but the Board could include this as a condition of approval should the Board approve the project.

In the response, Coneco also indicates that "pump tests for the proposed on-site wells will be performed in accordance with the MassDEP approved BRP WS 13 permit conditions by Coneco with oversight by Onsite Engineering to ensure compliance with state regulations. The results of the pump tests, including quantity and quality results, will be provided to the town as required." Should the Board approve the project we recommend a condition requiring that the Applicant provide documentation showing that there is adequate potable water supply for domestic use.

- 8. As noted in the April 26, 2023, Coneco letter, the Applicant has withdrawn its Notice of Intent application to the Conservation Commission until the ZBA issues its decision on the project. The Applicant is seeking waivers from the Rockland Wetland Protection Bylaw (Chapter 407). Chapter 407 has a 25-foot 'no-touch' buffer and defines the 100-foot buffer to wetlands as a resource area. Almost the entire access road is within the 25-foot 'no-touch' buffer and much of the project is within the 100-foot buffer to wetlands. We request that the Applicant's engineer provide the total area of disturbance and the total proposed impervious area within the 25-foot 'no-touch' and 100-foot buffers to wetlands so that we may assess the impacts. The Wetland Buffer Impact Exhibit contains the information we have requested. We note that there will be 4.34 acres of total buffer zone disturbance (2.73 acres impervious), and about one acre of disturbance within the 25-foot 'no touch' buffer (0.46 acres impervious). Total upland area on site is about 12.9 acres, therefore, total disturbance within the buffer is 33.7% of the upland area, and impervious area within the buffer is 21.1% of the upland area.
- 9. The locations of the proposed dumpster pads will require trash trucks to back up long distances which could pose safety concerns with pedestrians. The pad location south of the 'L' building will require the truck to back up over 225 feet and the pad location south

of the 'bar' building will require the truck to back up about the same distance and around a ninety-degree corner. We note that in a previous submittal, the Applicant indicated that open dumpsters would not be proposed in lieu of trash compactor rooms. In the response, Coneco acknowledges that the trash trucks will need to back up a long way and confirms that covered dumpsters are proposed and not compactor rooms. Our concern about pedestrian safety remains.

- 10. There appears to be a proposed concrete sidewalk adjacent to a Cape Cod berm between the 'bar' building and the emergency access drive toward Wilson Street. We recommend that there be a vertical concrete curb to better separate pedestrians from vehicular traffic. We note that there is another section of Cape Cod berm adjacent to concrete sidewalk off the northeast corner of the 'L' building, however, this is the Fire Department emergency access location for access to the rear of the building and the curb needs to be mountable for fire and emergency apparatus to gain access. Addressed concrete curb is now proposed at the sidewalk between the 'bar' building and the emergency access drive toward Wilson Street.
- 11. There are some discrepancies between plans and cross sections, where the plans show vertical concrete curb (or monolithic concrete curb and sidewalk) but the cross sections show Cape Cod berm and granite curb in some locations. Addressed the discrepancies have been resolved.
- 12. Proposed inspection ports for the subsurface chamber systems should be a minimum of six-inch diameter. Addressed the detail specifies six-inch inspection ports.
- 13. The proposed Cape Cod berm should be placed monolithically with both pavement courses so that stormwater may be controlled during the time between placement of pavement courses. Addressed the Cape Cod berm is specified to be placed monolithically with both pavement courses and a note has been added to the plans stating "if curbing is not immediately installed at the time of paving, the contractor shall embank the perimeter of the pavement to ensure runoff from paved areas is directed towards the stormwater management systems."
- 14. We recommend a minimum of six inches of reclaimed asphalt (M1.09.0 or M1.10.0) for the emergency access roads rather than four inches of 1-1/2" crushed stone. Addressed the detail specifies six inches of reclaimed asphalt as recommended.
- 15. The proposed downspout emergency overflow should be a few inches above finished grade to prevent surface water from entering the system. Addressed the downspout detail has been revised as recommended.
- 16. It appears that all of the proposed sidewalks are to be cement concrete but there is a Bituminous Concrete Sidewalk detail on Sheet 29. Addressed the bituminous concrete sidewalk detail has been removed from the plans.
- 17. The drawdown time calculation for Chamber System A should be based on the infiltration rate of 2.41 inches per hour. Addressed the drawdown calculation has been revised accordingly.

- 18. The Long-Term Pollution Prevention Plan included in the Stormwater Management Report notes that snow storage areas are shown on the plans. We have not seen where these areas are shown. The Long-Term Pollution Prevention Plan has been revised to specify that snow is to be stored in grass and landscaped areas and there is a snow stockpile area shown on the plans. Coneco also states that "during major snow events, in which snow cannot be stored on site, snow will be trucked off and disposed of in a legal manor." Should the Board approve the project, we recommend a condition of approval be that snow is to be removed from the site when available storage on site is exhausted.
- 19. While reviewing the drainage calculations, we noted some discrepancies between the HydroCAD model and the plans. Coneco sent us the HydroCAD files for the project so we were able to correct the discrepancies and are satisfied that the proposed stormwater system will adequately mitigate post-development runoff and will be in compliance with the MassDEP Stormwater Management Standards. Informational, no response required. However, we note that the revised Stormwater Management Report has been corrected to correspond with the HydroCAD model.

In summary, the following are the issues, related to our review, that we believe the Board should consider in its deliberations:

- 1. The project will generate substantial construction traffic, especially truck traffic for delivery of fill (well over 3,000 truckloads).
- 2. We believe that a variance from MassDEP would be required to install the sewer line through Zone A.
- 3. The Sewer Commission has not approved a sewer connection for the project.
- 4. The Applicant has not provided evidence of adequate potable water supply.
- 5. Disturbance in wetland buffer zones is extensive and Chapter 407 does not allow disturbance within 25 feet of wetlands (about an acre of disturbance is proposed within the 25-foot buffer).

By:

6. Trash truck access and pedestrian safety.

Should you have any questions, please give us a call.

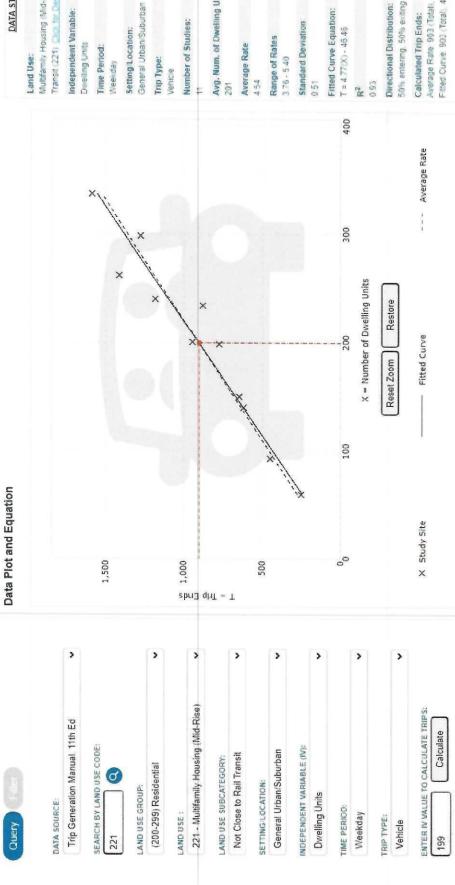
Very truly yours,

PGB Engineering, LLC

Patrick G. Brennan, P.E.

PGB enc.

cc: Dave Taylor Henry Nover



DATA STATISTICS

Multifer IV. Housing Wid-Rise - Not Close to Rail

Independent Variable:

Avg. Num. of Dwelling Units

Standard Deviation

Directional Distribution:

50% entering 50% enting

Average Rate 903 (Total), 452 Entry), 451 Evit) Fitted Curve 903 (Total), 451 (Entry), 452 (Evit)