



April 13, 2023
REVISED April 26, 2023

Ref: 12293.76

Ms. Susan Erickson, Chair
Maynard Conservation Commission
Town Hall
195 Main Street
Maynard, MA 01754

Re: Notice of Intent Application – 2 Powder Mill Road

Dear Ms. Erickson,

VHB has completed a Notice of Intent and Stormwater review for the submittal of the proposed project located at 2 Powder Mill Road in Maynard, Massachusetts. VHB received the following items for review:

- Site Plans by Connorstone Engineering Inc., dated February 8th, 2023.
- Notice of Intent and Stormwater Management Application Form prepared by Connorstone Engineering Inc., dated February 8th, 2023.

VHB has been requested to review the submitted materials for compliance with The Town of Maynard Stormwater Management Regulations (Amended June 8th, 2021), Department of Environmental Protection (DEP) regulations (310 CMR 10.00), Town of Maynard Wetland Protection Regulations, and Massachusetts Stormwater Management Standards, as applicable to this type of project.

WETLAND RESOURCE REVIEW

DEP's comments from their April 12, 2023 email, have been incorporated herein, with VHB's comments following DEP's.

1. Bordering Land Subject to Flooding Impacts

DEP: This project does not appear to meet the performance standards for work within Bordering Land Subject to Flooding. The subsurface structure proposed to provide compensatory flood storage does not provide an unrestricted hydraulic connection to the remaining floodplain and therefore it appears that 310 CMR 10.57(4)(a)(1) is not met. In addition, a table clearly showing incremental compensatory flood storage and fill should be provided with the NOI. Fill is proposed within the FEMA regulatory floodplain and appears to

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narrow this floodway within the northern portion of the project. If flood flows are restricted by the proposed work, the project will not meet 310 CMR 10.57(4)(a)(2).

VHB Comment: VHB concurs with DEP that the proposed subsurface structure provided for compensatory flood storage does not appear to provide an unrestricted hydraulic connection to the remaining floodplain as designed. The proposed 12" diameter openings in the retaining wall would direct water (in a restricted manner through the existing retaining wall) straight to the River to the west, rather than providing an *unrestricted* hydraulic connection to the existing floodplain to the north and east of the site. The current design also appears to restrict 100-year flood flows, which currently run up to existing elevation 147 near Existing House #8, to a much narrower strip of land at the northwest side corner of the lot where snow storage is proposed. This does not meet 310 CMR 10.57(4)(a)(2). A table showing incremental compensatory flood storage in cubic yards at each elevation would clarify the project's compliance with the requirement to provide storage at each elevation, up to and including the 100-year flood elevation, that will be displaced by the project.

2. Riverfront Area Impacts

DEP: The proposed River Pavilion is immediately adjacent to the river, in an area that may not be degraded. Does the structure meet performance standards for redevelopment work in Riverfront Area, particularly 310 CMR 10.58(5)(d)? Can improvements be made, with input from the Town of Maynard, to the 24" RCP Municipal drain to improve the water quality at this outfall?

VHB Comment: As noted in the application, the proposed River Pavilion is partially located within an area that is currently vegetated. Although this area may have been disturbed in the past, the area outside of the existing pavement may not meet the definition of previously developed Riverfront Area described in 310 CMR 10.58(5), which lists the absence of topsoil. Additionally, portions of the proposed River Pavilion may not meet the performance standards in 310 CMR 10.58(5)(c) and (d) as the proposed work appears to be located closer to the river than existing conditions and it is not clear that sufficient restoration or mitigation has been proposed in accordance with 310 CMR 10.58(f) or (g). We recommend this area be revisited for compliance with this section.

3. General Comments

DEP: Additional elevations should be provided for the existing conditions, including the grades for the retaining walls along the river. Riprap specifications and calculations (showing that the selected stone can withstand both outfall flows and river flows) should be provided for all proposed stormwater outfalls.

VHB Comment: VHB concurs that additional elevations for existing conditions, including the retaining walls, would assist in determination of the project's compliance with the Wetlands



Protection Act; and that additional riprap information would confirm compliance with the Massachusetts Stormwater Standards (see Stormwater Management Comments below). In addition, VHB has the following comments:

- Under Section III. C. 2. of the Maynard Wetland Protection Regulations, work within the locally regulated "50-Foot No Disturbance Zone for Disturbed Lands" requires a waiver from the Maynard Conservation Commission. To support the Applicant's request for a waiver, additional information should be provided to confirm that the waiver will be consistent with the intent and purpose of the Bylaw and Regulations. As outlined in Section IV. Of the Regulations, compensatory mitigation and restoration may be required by the Maynard Conservation Commission along with an alternatives analysis.
- The 50-foot locally jurisdictional Buffer Zone should be added on the "Proposed Site Plan".
- Label Inner and Outer Riparian Zones.
- In Section B.2. on the WPA Form 3, Proposed Replacement of Bordering Land Subject to Flooding should be provided in square feet, not cubic feet.
- Add monitoring well locations to the site plans. Town Staff noted that wells exist on site.
- If infiltration is being proposed, test pits will be required in the area proposed for infiltration. A trench permit will also be required from the Maynard Department of Public Works if the test pits are greater than 5 feet in depth.
- If test pits are required, silt sacs will need to be installed in any existing catch basins in proximity to the pits, and they should be surrounded by straw hay bales.
- If soil stockpiles from the test pits are to be exposed for greater than 24 hours, the soil stockpiles will need to be covered and silt socks or hay bales will need to surround the stockpile areas to prevent erosion.
- If a 21E investigation or remediation is proposed for the site, the work associated with the testing would require a separate Notice of Intent, since no information regarding any releases, investigation or remediation were included in the supplied Notice of Intent submittal.

STORMWATER MANAGEMENT COMMENTS

As identified in the project documents, this project is a redevelopment project. As a redevelopment project, it is only required to meet the stormwater standards to the maximum extent practicable.



Below are the 10 stormwater standards and VHB comments on their compliance:

Standard 1: The applicant has stated that they have met Standard 1 as there are no new untreated discharges.

VHB Comment: The plans appear to show existing riprap at the proposed 15" and 8" outlet locations. Has the condition of the existing riprap been analyzed to see if it was sufficient to prevent erosion or scour along the riverbank? Outlets should be sized with the appropriately sized riprap pad, and calculations should be provided to support the sizing.

Standard 2: Based on the projects stormwater report, the project is not increasing rate or volume of runoff from the site vs existing conditions.

Standard 3: Based on the projects stormwater report, there is no net increase of impervious area; therefore, there is no recharge requirement as it pertains to Standard 3.

Standard 4: The applicant is providing proprietary separators to provide an equivalent flow rate associated with water quality volume.

VHB Comment: The applicant is asking for a waiver from the Town's 50% Phosphorous removal prior to discharge requirement. The Commission should note that the water quality units (Stormceptor) being proposed do not treat for phosphorous removal.

Under subscript 15 in Volume 1, Chapter 1, of the MA DEP Stormwater Handbook, it states, "If there is a Total Maximum Daily Load (TMDL) that indicates that stormwater BMPs are needed to reduce the concentration in stormwater runoff of pollutants other than TSS such as nitrogen and phosphorous, the BMPs selected must be consistent with the TMDL. See Volume 1, Chapter 2."

The Town of Maynard's Stormwater Management Regulations state, "Stormwater Management Systems for Redevelopment projects shall be designed to meet an average annual pollutant removal equivalent to 80% of the average annual load of TSS related to the total post-construction impervious area on the site and 50% of the average annual load of TP related to the total post-construction impervious surface area on the site."

Under Section 6 Waivers A, "The Commission may waive strict compliance with any requirement of these regulations, where such action is:

1. Allowed by federal, state and local statues and/or regulations;
2. In the public interest; and
3. Not inconsistent with the purpose and intent of the Stormwater Management Bylaw"

It is VHB's interpretation that a waiver for the 50% TP removal does not qualify under any of these stipulations. In fact, the waiver is inconsistent with the purpose and intent of the stormwater bylaw, which is to prevent a water body from becoming further impaired. While this section of the Assabet (MA82B-06) may not have a Phosphorus TMDL for stormwater, it ultimately



discharges to the Merrimack River, which does have a stormwater-related nutrient TMDL (Phosphorous). Additionally, other sections of the Assabet River do have a phosphorous TMDL; the downstream water body is already impaired. The applicant should discuss this with the Commission to understand their perspective on this waiver request.

Standard 5: Based on the projects stormwater report, this project is not considered a LUHPPL.

Standard 6: Based on the projects stormwater report, this project is not in a critical area.

Standard 7: Based on the projects stormwater report, this project is a redevelopment and meets the stormwater standards to the maximum extent practicable.

Standard 8: Based on the projects stormwater report, the applicant has provided Construction Period Controls. The project will also disturb less than 1 acre and will not require a NPDES General Construction Permit.

Standard 9: Based on the projects stormwater report, the applicant has provided an Operation and Maintenance Plan.

Standard 10: Based on the project's stormwater report, there are no illicit discharges associated with the project.

VHB Comment:

The plans and stormwater report do not suggest the project is proposing infiltration on site, however if the project is proposing infiltration, then according to the MA DEP Stormwater Management Regulations Volume 2, Chapter 2 one soil boring or one test pit for every 5,000 feet of basin area, with a minimum of three borings for each infiltration basin. The applicant is currently not showing any data within or near the potential basin footprint. The applicant should provide soil data on site if infiltration is being proposed.

TRAFFIC ENGINEERING COMMENTS

While a review of traffic related components for this development is not under the purview of the Conservation Commission, our understanding is that the Applicant will be required to file a Site Plan with the Town of Maynard Planning Board, and as such, traffic is under the purview of that Board. We provide the below comments as a guide to help the Applicant with their future site plan application.

1. The Applicant should confirm that the Waltham Street curb cut is located to the southeast of the bridge segment under MassDOT jurisdiction.
2. The Applicant should document the available stopping sight distance from both directions on both Powder Mill Road and Waltham Street approaching the proposed driveways. Intersection stopping sight distance also should be measured from the driveways, particularly with regard to



the adjacent building walls. These measurements should be taken from a point approximately 14.5 feet from the edge of the traveled way using a 3.5-foot driver's eye height and looking in both directions on the adjacent roadways to a 2-foot object height and compared to AASHTO requirements with any necessary adjustments. If adequate sight distance is unavailable, appropriate safety mitigation measures shall be proposed by the Applicant.

3. The adequacy of the proposed parking supply for the proposed residential uses and restaurant should be documented both relative to the Zoning Bylaws and from a functional perspective. This should include the allocation of parking to each use and how that will be controlled.
4. The ability of vehicles to maneuver out of parking spaces #26 and #27 should be documented with vehicle tracking diagrams.
5. The Applicant will need to demonstrate how loading for the restaurant use will occur. The location of any residential visitor parking also will need to be identified along with how residential move-in/move-out activity, deliveries, etc. will be accommodated.
6. Depending on the number of restaurants seats and residential units, capacity analyses may be required for the proposed Site driveways, and possibly other locations including the Waltham Street/Powder Mill Road signalized intersection adjacent to the Site.

If you have any questions or comments, please call me at 617-607-1577.

Sincerely,

A handwritten signature in blue ink that reads "Wayne P. Amico". The signature is fluid and cursive.

Wayne P. Amico, P.E.

Senior Team Leader, Transportation

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