



October 16, 2020

Conservation Commission
11 Townhouse Rd.
Weston, MA 02493-7320

Subject: Peer Review #2, Hanover-Weston 40B Notice of Intent (NOI), 518 South Avenue, DEP File No. 337-1383

Dear Commission Members:

At this date I have received no additional documents from the applicant since 9/14/20. At the public hearing of 9/22/20, my understanding was that the applicant's team would respond to comments received from John Chessia, P.E., and the Commission. That has not occurred, and consequently, to facilitate the permit application's continued momentum, I am issuing this second, shorter letter to help frame what are, in my professional opinion, major regulatory issues facing the applicant.

Documents I have received to date from the applicant include:

- Notice of Intent Application (NOI), dated 6/30/20, with a series of attachments including stormwater and hydrogeologic reports;
- Snow Storage mapping (1 sheet), dated 6/21/20;
- Site Development Plans, revised through 6/21/20;
- Work Plan for Hydrogeologic Evaluation, dated 6/28/20;
- A letter to the Commission from Tetra Tech and Sanborn-Head dated 9/11/20;
- A letter to Neal Cheal, Tetra Tech, from Mount Hope Engineering, dated 6/22/20;
- An expanded USGS map titled, "USGS Locus Map," dated 9/01/20;
- Revised plan sheets C-6, C-7, C-10 and C-11, all dated through 9/8/20; and
- A letter to the Commission from the Weston Fire Chief, dated 9/11/20.

In addition, the Commission received oppositional letters from hydrologist Scott Horsley, John Chessia, P.E. and residents of Weston.

COMMENTS

Comments are based on the requirements of the MassDEP Wetlands Protection Act (WPA), the MassDEP Stormwater Regulations and other relevant state guidance. Further, my comments will remain broad, as the applicant needs to affirm before the Commission that their basic design meets current MassDEP regulatory requirements.

1) Wastewater System

The project effluent leaching area is proposed as close as 50-feet from the edge of BVW. This appears to be in violation of the MassDEP July 2018 "Guidelines for the Design, Construction, Operation, and Maintenance of Small Wastewater Treatment Facilities with Land Disposal." Table 2, page 44 of that document requires a leaching facility to be a "minimum" distance of 100-feet from Surface Waters (BVW).

The design engineer should justify the apparent nonconformity with minimum MassDEP setback requirements.

2) Porous Pavement

The project proposes that a portion of the porous pavement cross over and lie on top of the effluent leaching area. The same document referenced in item 1 above requires that any subsurface drain or stormwater infiltration basin be a "minimum" of 25-feet from a wastewater leaching facility. This appears to prohibit the design submitted to the Commission.

Further, the Stormwater Regulations appear to require porous pavement to be set back from BVW by 50-feet. Over 300-feet of the porous pavement lies within 50-feet of the wetland edge.

The design engineer should justify the apparent nonconformity of the proposed porous pavement with the MassDEP setback requirements.

3) Stormwater Infiltration Within Building

A significant portion of post-development stormwater is being mitigated through use of subsurface chambers within the major building on site. Although I have previously raised the following issues, they remain undressed:

- Maintenance of the chambers ... Commission should receive a robust description of how regular, required maintenance will be implemented.
- Replacement of chambers ... Applicant should anticipate that the subsurface chambers will need to be replaced. The plans are unclear regarding this issue, and whether replacement will even be possible.
- Chamber setbacks from foundation walls ... As designed, the chambers lie between 10 and 20-feet from the foundation. Applicant should verify that these setbacks are in compliance with regulations.
- Because no architectural plans were submitted with the NOI, I cannot determine if interior support foundational walls are required. If so, the chamber design as submitted may not be practical as support walls may bisect the chambers. Applicant should document that there will not be a conflict between foundation requirements and subsurface chamber placement.

4) Wastewater System Approval

As noted in my first review, a Groundwater Discharge Permit is required by the state for disposal of sanitary wastewater from large systems. A hydrologic evaluation was approved by MassDEP in December 2019. A follow-up Hydrologic Report was then conducted in coordination with MassDEP in early 2020. That report was approved by MassDEP in June 2020. These two analyses allow the proponent to proceed to final Title 5 design.

Please note that the actual Groundwater Discharge Permit has not been issued by MassDEP.

5) Potential Wetland, Stream and Associated Water Resources Impacts

The issues regarding potential wetland alteration to BVW and stream quality resulting from the 38,000 gallons per day of wastewater discharge have not been addressed. The applicant's team initially indicated they would independently do so. That has not occurred.

There has been previous discussion about the presumption of no impact that is found in Title 5. My opinion is that a small wastewater treatment facility is not a Title 5-regulated system, and that, therefore, the presumption is not applicable to this proposal.

The potential impact issues I raised previously have not been resolved.

SUMMARY

Additional technical issues exist, and are not mentioned in this letter. I have purposely not done so because the items I cite above (particularly, items 1, 2 and 3) need to be addressed first. Several of these, if not resolved, are potentially fatal to the project, or could require major design revisions. Consequently, I recommend focus on these major issues.

Please contact me with questions.

Very truly yours,



Wetland Scientist, Hydrologist