400 Harvey Road, Manchester, NH 03103 | T (603) 627-5500 | F (603) 627-5501
allenmajor.com

ALLEN & MAJOR ASSOCIATES, INC.

May 21, 2024

To: Mr. Gregory Rondeau, Chairman
Town of Franklin Planning Board
355 East Central Street
Franklin, MA 02038

Copy: Donegal, LLC

A&M Project #: 1362-25

Re: 6 Forge Parkway
Industrial Building
Response to
Review Comments

Dear Mr. Rondeau,

Allen & Major (A&M) is in receipt of review comments from the BETA Group, Inc., dated May 13, 2024, and received on 05-13-24 for the above referenced project. Please find A&M's responses to these comments below. The most recent comments are provided along with A&M's responses in **bold.** For ease of review, comments that have been addressed are omitted.

BETA Group, Inc.:

SW3. BETA3: The pipe flow is anticipated to provide less treatment than in the existing conditions and will not provide any opportunity for infiltration. The designer should consider a modification, such as revising the new conveyance pipe to be perforated with stone bedding beneath to maintain the existing condition. The designer should also review grading downstream of the discharge. A portion of the stone will be located parallel to the proposed contours and proposed grading will create a channel of concentrated flow..

A&M Response: Converting a portion of the conveyance pipeline to perforated is not feasible due to its proximity to the proposed retaining wall on the downgradient slope. The introduction of additional infiltration directly behind a retaining wall should be avoided. Please note that the proposed infiltration for the project does exceed the requirements for both the development site and the contributing area associated with this conveyance pipeline. Please refer to updated "Groundwater Recharge" calculations. Additionally, the proposed riprap apron has been re-aligned slightly to be more perpendicular to the existing contour lines and will dissipate the energy of the stormwater eliminating the potential for concentrated flow.

SW5. The 8 minutes TC flow path represents the time needed for stormwater runoff to reach the offsite catch basin but does not account for the additional travel time to SP-3. This travel time should include flow through a swale (existing) or pipe (proposed) followed by shallow concentrated flow down the hillside to the wetland boundary. The model has been revised to utilize an impervious cover type for the building roofs.

A&M Response: In general, the Tc calculation should end at the next node in the routing diagram. So if you use a separate reach to model the swale, you should not include the reach as a Tc segment. The Tc flow path for both A-1 and B-2 are set to 8 minutes to represent the flow through the internal roof drainage system of the building. The conveyance pipeline represented by node 1P, DMH-8, DMH-9 & DHM-10 is the next node in succussion after the Subcathments A-1 & B-2. The flow path for the above-mentioned area is adjusted through the downstream reach (Reach R1) to account for the reduction in path of travel from the new outfall to the wetland system. The same methodology was utilized in the existing conditions watershed analysis.

SW7. Refer to Comment SW3.

A&M Response: See response for SW3.

SW8. The Standards require a minimum of three test pits for each infiltration basin. Only one of the conducted test pits was located within the basin footprint and has an associated seasonal high groundwater elevation (2.75' below the proposed system bottom). TP-3 was terminated at a depth of six feet due to refusal. In consideration of the critical nature of this system to the site development, additional test pits should be performed within the footprint of the basin.

A&M Response: Additional test pits are scheduled to be conducted next week. We believe there is a high level of probability that the test results will be consistent with the remainder of the site. Accordingly, in the event the Board is satisfied on all other matters, we do respectfully ask the Board to consider making the submission of the final test pit results a condition of approval with the caveat that if the test results do vary significantly the applicant will comply with BETA Group, Inc.'s recommended course of action.

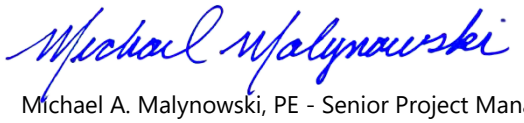
SW9. BETA recommends for test pits to be conducted during the design phase. Comment remains.

A&M Response: Additional test pits are scheduled to be conducted next week. We believe there is a high level of probability that the test results will be consistent with the remainder of the site. Accordingly, in the event the Board is satisfied on all other matters, we do respectfully ask the Board to consider making the submission of the final test pit results a condition of approval with the caveat that if the test results do vary significantly the applicant will comply with BETA Group, Inc.'s recommended course of action.

SW11. A note has been provided on Sheet C-504 indicating that buried fill material in the subgrade will be removed and replaced with native soils. Provide note identifying requirements for backfill material to be placed between the system bottom elevation and the existing ground surface. Backfill material must meet or exceed the hydraulic conductivity utilized in the HydroCAD model. Based upon data obtained in conjunction with comment SW8, BETA recommends for a simple cross-section detail to be provided to assist the contractor during construction.

A&M Response: A cross-section showing the area in question has been added to sheet C-107, as requested. It is noted on the section, and on the detail on sheet C-504, that once the fill material is removed it shall be replaced with in situ material and compacted per the geotechnical engineer's recommendations. Should import materials within this area be required, it shall meet the gradation of MassDOT item M1.04.1.

Very Truly Yours,
ALLEN & MAJOR ASSOCIATES, INC



Michael A. Malynowski, PE - Senior Project Manager
Attachments:
1. Site Development Plans, revised as of May 21, 2024
2. Drainage Report, revised as of May 21, 2024