

January 28, 2025

Mr. Zachary McBride, Chair
Sherborn Zoning Board of Appeals
Town Hall
Sherborn, Massachusetts 01770

Re: Pine Residence Multi-Family Residential Development – Comprehensive Permit
Engineering Peer Review – Stormwater - RTC
41 North Main Street
Sherborn, MA 01770

Dear Mr. McBride,

On behalf of Barsky Estate Realty Trust (Applicant), Highpoint Engineering, Inc. (Highpoint) provides the following responses to the comments related to the stormwater design with the Comprehensive Permit Application for the proposed multi-family development at 41 North Main Street in Sherborn MA. These comments were outlined in a memorandum dated January 6th, 2025, sent to Mr. Zachary McBride, the Town of Sherborn Chair of Zoning Board of Appeals, and subsequently forwarded to Highpoint on the same day. Below are the comments received, followed by Highpoint's responses, reflecting updates to the Limited Stormwater Report and Exhibits 1 & 2, dated January 28, 2025, are highlighted in **bold** below.

Comments received by Tetra Tech via memorandum dated January 06, 2025:

MA DEP Stormwater Standards/Handbook:

1. We recommend the Applicant include the existing culvert located adjacent to the northwest corner of the site as a Design Point in the analysis and evaluate conditions at the culvert during the required storm events in both the pre- and post-development conditions. (Standard 2)

Response: We are unable to inspect and analyze the culvert due to snow cover during our most recent site visit. We request that this comment be added to the future conditions of approval list.

2. The Applicant has not provided any test pit data at the proposed Rain Garden location. The Applicant has not provided a cross-section or detail of the Rain Garden to confirm subsurface design of the best management practice (BMP). Rain Gardens are generally considered infiltration BMP's and shall maintain minimum two feet of separation from estimated seasonal high groundwater (ESHGW). (Standard 3)

Response: This specific area is currently encumbered by an existing use and not available for testing. We have revised the previous "Rain Garden" to act as two forebays in series.

3. We recommend the Applicant show the interim wellhead protection area (IWPA, mapped area shown on (MassMapper) associated with properties to the south of the site. It appears the proposed Rain Garden may be located within this area which will require additional pre-treatment of runoff prior to discharge of surface runoff to the BMP. (Standard 3)

Response: The proposed rain gardens in the original submission have been substituted with two sediment forebays that discharge to the noted POA-1. There is no proposed recharge within

the sediment forebays, therefore no pre-treatment prior to recharge is required if it is determined this area is located within a potential IWPA. The surface discharge weighted TSS removal efficiency for the entire Project is summarized and provided in the revised limited stormwater report. The driveway grading along the sediment forebay will be revised to a cross-pitch condition at the low point to convey runoff from the entire roadway width to the forebays. The Applicant is respectfully requesting this modification be made a condition as part of the comprehensive permit decision.

4. The Applicant shall provide location of existing septic system and water supply well on the adjacent property to the south of the subject property to confirm general setback requirements from the proposed Rain Garden are maintained. (Standard 3)

Response: The approximate location of the existing well and soil absorption system on the abutting property to the south has been added to Exhibit 2.

5. It appears impervious cover within subcatchment areas PR WS-1D and WS-1E will not be directed to the proposed infiltration basin based on the routing diagram shown in the HydroCAD report. A capture area adjustment shall be provided for any impervious area not directed to infiltration BMP's. (Standard 3)

Response: The stormwater design has been revised to direct the previously designed detention basin (now a sediment forebay) to the proposed infiltration system (IB-1). We now meet the required 65% min target per SWMP as shown on the stormwater management analysis.

6. Flow from Subcatchment PR WS-1E does not appear to meet the 80% Total Suspended Solids (TSS) removal requirement. However, the Applicant may provide calculation to show the weighted average of discharge at the outfall yields the required removal rate. (Standard 4)

Response: We have provided a weighted average TSS removal calculation for POA-1. Please see calculation in drainage report checklist summary.

7. It appears the Applicant is proposing a Contech CDS water quality structure to treat discharge from Stormwater Basin B and achieve the required 80% TSS removal rate. It is standard practice to provide these types of structural pre-treatment practices upstream of the basin to limit sediment impact at the basin and reduce frequency of costly maintenance. We recommend an additional CDS unit be proposed in the treatment train upstream of the basin to treat runoff from Subcatchment PR WS-1D which is standard practice and will reduce the basin maintenance burden to future owners/residents of the Project. (Standard 4)

Response: The stormwater design has been revised to direct the previously designed detention basin (now a sediment forebay) to the proposed infiltration system (IB-1). We no longer need a WQU upstream.

8. The Applicant has applied the 50% TSS removal efficiency credit for the Extended Dry Detention Basin (EDDB, Stormwater Basin B). EDDB's require a sediment forebay be designed to achieve the 50% TSS removal rate. (Standard 4)

Response: We have revised our design for this treatment train. It can be seen on Exhibit 2.

9. The Applicant has not provided a Long-Term Pollution Prevention Plan (LTPPP). This plan details practices for pollution prevention as it relates to stormwater runoff and includes procedures for management of snow, storage and use of fertilizers, vehicle washing, pet waste management, etc. (Standard 4)

Response: This has been provided. See revised stormwater report.

10. Snow storage areas are minimal at the site, and we anticipate off-site export of snow will be required during heavy snow events. Snow piles shall also not impede sight distances at intersections. Details of snow management shall be included in the LTPPP. (Standard 4)

Response: A note on Exhibit 1 stating “All excess snow shall be trucked off-site during heavy snowstorm events”, and the relevant language has been added to the LT O&M.

11. As noted, a portion of the site is within the interim wellhead protection area (IWPA) which is considered a critical area. The Stormwater Report notes that the site does not discharge to a critical area which does not appear to be consistent with the Project scope provided. The Rain Garden appears to be located within the IWPA and will discharge within that area. (Standard 6).

Response: The Applicant requests a condition be added as part of the comprehensive permit decision. This item will be addressed prior to the issuance of a building permit.

12. The Applicant has not provided a Construction Period Pollution Prevention Plan, details of construction period erosion controls should be included on the Plans to ensure protection of adjacent resource areas and public infrastructure during construction. We also recommend earthwork volumes, truck travel routes, construction access points, etc. be provided in a construction management plan (CMP) for review by the Town. (Standard 8)

Response: The Applicant requests a condition be added as part of the comprehensive permit decision. This item will be addressed prior to the issuance of a building permit.

13. The Project appears to meet the requirements for coverage under the US EPA NPDES General Permit for Discharges from Construction Activities (CGP). We recommend a Condition requiring the Applicant provide proof of coverage under the NPDES CGP and provide a copy of the approved Stormwater Pollution Prevention Plan (SWPPP) prior to construction. (Standard 8)

Response: The Applicant, prior to commencement of construction, will be filing a Notice of Intent with the EPA for coverage. The Applicant requests that a condition be added that this be added a condition of approval prior to the issuance of a building permit.

14. The Applicant has not provided a Long-Term Operation & Maintenance Plan (O&M Plan) which details required inspection and maintenance procedures for the proposed stormwater management system. (Standard 9)

Response: A Long-Term O&M Plan has been provided. See stormwater report.

15. The Applicant has not provided an Illicit Discharge Compliance Statement. (Standard 10)

Response: An illicit discharge compliance statement will be provided upon completion of the final approved drainage report. The Applicant requests that a condition be added that a signature be added as a condition of approval prior to the issuance of a building permit.

16. The containment embankment for proposed Stormwater Basin B is approximately three feet wide at its top which is not sufficient to allow access by maintenance vehicles and may be prone to failure. Access shall be 15 feet wide as required to allow maintenance of critical components of the basin such as the outlet control structure and sediment forebay. The proposed fence and retaining wall will further limit maintenance access to the basin. EDDB's also require emergency spillways. (Vol. 2, Ch. 2, Pg. 53)

Response: The recommended 15' wide access path around the entire basin is not feasible due to the constraints of the site and is disproportionate to the proposed basin area footprint (7,500± sf). The plans shows a 10' wide access path on one side of the basin with gated access at two locations off the driveway. This provides adequate access at each end and along the length of the basin for landscape and medium-sized excavation/hauling equipment to maintain the basin per the Long-Term Operation and Maintenance Plan.

General Stormwater Comments

17. The 10-year peak water surface elevation in the infiltration basin and subsurface detention basin (hydraulically connected) is above a portion of the driveway adjacent to the intersection with Hunting Lane. This condition will require careful design during development of the final Plans for the Project to limit discharge out of proposed catch basins and limit off-site discharge to Hunting Lane. This site is in the Town's MS4 Area and off-site discharge should be limited to the extent practicable. We recommend the Applicant coordinate with the DPW related to this condition

Response: The roadway elevation at the low point of the intersection will be raised approximately 3ft' to accommodate subsurface conveyance infrastructure. We request that this comment be added to the future conditions of approval list.

18. Stormwater Basin B is designed with an outlet orifice that is 1.5 feet above the bottom of the basin which requires infiltration to dewater the basin. As such, it appears this basin will function as an infiltration basin and shall meet all necessary requirements for siting and designing infiltration basins including test pits and setbacks to structures, septic systems, wells, etc.

Response: The stormwater basin has been revised to be designed as a sediment forebay (FB-1). We have added a small orifice at the bottom of the outlet control structure size to dewater the system between 24-72 hours.

19. We recommend the Applicant include assumed piped stormwater infrastructure on the Plans and provide sizing calculations to convey the 25-year storm event.

Response: The Applicant requests this condition be added as part of the comprehensive permit decision. This item will be addressed prior to the issuance of a building permit.

20. Proposed grading between dwellings upgradient of Stormwater Basin B is directing runoff toward foundations which may cause scour against foundation walls. We recommend these areas be graded with shallow swales between the structures to reduce potential impact to building foundations. Additionally, a swale should be proposed to direct runoff around Building 9 as the upgradient areas are graded in a manner that directs stormwater to the rear of that building.

Response: The grading has been revised to sheet flow away from the dwellings upgradient of (DB-1) to redirect the flow of stormwater away from the foundations.

21. The proposed 175 contour at the proposed at-grade infiltration basin (Stormwater Basin A) does not appear to tie out correctly at the north end of the basin. A berm should be graded on this end of the basin to limit potential embankment failure.

Response: The proposed 175 contour at the proposed at-grade infiltration basin (IB-1) has been revised to tie out at the north end of the basin.

22. We recommend roof runoff be piped to proposed basins to limit intermingling flow with surface runoff. Roof runoff (non-metal roofs) is considered clean and can be directly discharged to infiltration BMP's without pre-treatment.

Response: The Applicant requests this condition be added as part of the comprehensive permit decision. This item will be addressed prior to the issuance of a building permit.

23. The proposed subsurface detention system appears to accept surface runoff and we recommend the Cultec Separator Row be implemented in the final design to capture first flush flow and extend the life of the system.

Response: We have added a Water Quality Unit (WQU-1) upstream of the underground system (UDS-1). The WQU exceeds the TSS efficiency of a separator row. See revised stormwater report.

This concludes the response to the comments received from Tetra Tech as part of the stormwater review with the Comprehensive Permit Application Review process associated with the proposed multi-family development at 41 North Main Street, Sherborn, MA.

If you have any questions or comments, please contact the undersigned at 617-875-7124

Sincerely,

HIGHPOINT ENGINEERING, INC.



Danell Baptiste
Project Manager