



March 29, 2021

Ashland Zoning Board of Appeals
c/o Peter Matchak
Town Planner/Director
Town of Ashland
101 Main Street
Ashland, MA 01721

RE: A&M Project # 2604-01
Arbella at Ashland, Memorial Drive
Response to Peer Review Comments

Dear Chairman Trefethen, Mr. Matchak and Members of the Zoning Board of Appeals:

On behalf of our Client, UA Senior Manager LLC, Allen & Major Associates Inc. (A&M) would like to provide responses, summarized below as related to correspondence received from Maeghan Dos Anjos, Town of Ashland Conservation Agent, and Evan White, Town of Ashland Project Engineer, dated February 11, 2021.

Drawing revisions are contained within drawings dated March 24, 2021 (revision 1) as distributed to the Zoning Board of Appeals.

The responses to the comments are shown below in **bold** preceded by the original comment shown in *italics*.

Comment 1: The site plans currently show DRAFT on various sheets. In addition, there are no stamps on the plans.

Response 1: Noted. The revised plans were noted as unstamped during submission. The revision 1 drawings have been signed and stamped.

Comment 2: The stormwater checklist is stamped, but it is not signed or dated. In addition, several boxes are left unchecked.

Response 2: Similar to Response 1, the stormwater checklist has been sealed and signed.

Comment 3: The Stormwater Management Report doesn't contain any information on test pits, and we highly recommend that the infiltration rates from the Hydrologic Soil Group classifications be verified by performing soil testing. It is also necessary to determine seasonal high ground water levels to assure a functional design for infiltration structures.

Response 3: Noted. A&M performed onsite test pits in February 2020 to confirm infiltration rates referenced in the design. For purposes of the stormwater basin, the in-situ infiltration rates were higher than those utilized in the design. A&M maintained the original design values to provide an additional factor of safety given known site conditions. With regard to the subsurface infiltration systems – the onsite soil testing yielded higher than desired groundwater tables which negated the ability to test for infiltration. As a result, the subsurface stormwater system has been relocated to an area of the project that will be located in fill and greater than four feet above the natural grade/water table to ensure

functionality. The revised calculations are contained within the stormwater report submitted to the Zoning Board of Appeals in conjunction with a response to comments letter.

Comment 4: When the Cirrus Apartments were developed, a study was done on the Trolley Brook Culvert and the downtown drainage. The study is entitled "Hydrologic/Hydraulic Analysis Report for the Trolley Brook Culvert – Ashland, MA" and is dated June 30, 2016. In the conclusion of that report on page 7, note VII states "The additional volume of runoff from the proposed development will increase flooding of the culvert significantly for the 10-year and higher storms." In addition, Stormwater Management Standard 2, in Volume 1 Chapter 1 states "Proponents must also evaluate the impact of peak discharges from the 100-year 24-hour storm. If this evaluation shows that increased off-site flooding will result from peak discharges from the 100-year 24-hour storms, BMPs must also be provided to attenuate these discharges." Therefore, we strongly recommend that this report be updated to reflect the impacts to the culvert from the proposed development and that the stormwater design be updated to reflect changes necessary to mitigate these impacts.

Response 4: The stormwater report evaluates the peak rates of runoff for multiple storm events including the 100-year rate. The stormwater BMPs proposed provide a net reduction at the limits of the property therefore negating any potential downstream impacts to the Trolley Brook Culvert. This condition was supported through e-mail correspondence from Thomas Houston, Professional Services Corporation in an e-mail to Mr. Evan White dated March 3, 2021: "If the calculations provided by Allen & Major are accurate, the overall impact on the Trolley Brook Culvert should not be significant".

Comment 5: GCG's peer review letter states that the waiver of the Stormwater Management Permit under the local bylaws will not impact compliance with the stormwater management standards as the applicant will have to obtain a NPDES permit with the Environmental Protection Agency (EPA). Yet, the Town's NPDES permit, known as a MS4 permit, requires us to pass these bylaws, and perform inspections and document those inspections on developing sites. Those documents then get forwarded to the EPA by the Town of Ashland through Ms. Dos Anjos, and Mr. White. When or if this project starts work, the EPA will not be inspecting this site, and we (Ms. Dos Anjos, and Mr. White) will not be able to perform regular inspections, if the waiver of the local Stormwater Management Permit is approved by the Zoning Board of Appeals.

Response 5: It is the opinion of the development team that the project as proposed is compliant with the conditions of the MS4 permit (and the Massachusetts Stormwater Regulations) and that granting relief from the Town of Ashland Stormwater Permit would not result in an adverse condition. The project requires coverage under the EPA SWPPP program with regular inspections performed as defined by the permit program. The applicant would seek the opportunity to work with the Town to provide copies of these inspections to confirm the project remains compliant throughout construction. The confines of the Comprehensive Permit program and the LIP application allow for the waiver of locally implemented by-laws in favor of state mandated regulations for consistency of applications.

Comment 6: Erosion controls should be inspected regularly. Note that the Conservation Commission has defined regular inspections as daily, and requires additional inspections to be made after every rainfall event equal to or greater than .25" in a 24-hour period or greater than 1.0" per hour to ensure their integrity. The submittal also notes that sediment buildup on waddles and silt fence should be removed if greater than 6-inches. It should be noted that sediment buildup greater than half the height of these BMP's should be removed (i.e. 8-in waddle has an effective height of 4-inches).

Response 6: The inspection timeline was determined using the standards set forth in the SWPPP NPDES program inclusive of using a 0.5 inch rainfall event over a twenty-four period as the threshold for inspection and/or weekly inspection. In consideration of working with the Town, the inspection process language can be refined to reflect "inspection immediately preceding and following a storm event anticipated to produce [to be specified] inches of rainfall".

Comment 7: The plans are missing details (or design specifications) on the stormwater management BMPs. These should be added.

Response 7: A full complement of details and stormwater narrative is included in the revised submission.

Comment 8: The Operations and Maintenance Plan needs to be a separate document. It currently combines temporary erosion control methods and post-construction stormwater maintenance with long term Operations and Maintenance. This makes it rather misleading to pin point this critical document. In addition, it is missing some misleading information. According to Standard 9 of the Massachusetts Stormwater Management Handbook, an Operations and Maintenance Plan must contain the following:

- a. Stormwater management systems(s) owners;*
- b. The party or parties responsible for operation and maintenance, including how future property owners will be notified of the presence of the stormwater management system and the requirement for proper operation and maintenance;*
- c. The routine and non-routine maintenance tasks to be undertaken after construction is complete and a schedule for implementing those tasks;*
- d. A plan that is drawn to scale and shows the location of all stormwater BMPs in each treatment train along with the discharge point;*
- e. A description and delineation of public safety features; and*
- f. An estimated operations and maintenance budget.*

Response 8: The additional information is noted. A&M request the opportunity to incorporate a condition into any permits issued by the Zoning Board that allow for a fully detailed Operation and Maintenance plan with costs to be provided at a date certain prior to ground break. A&M seeks the opportunity to include the site manager, construction team, and operational staff in providing a more detailed and comprehensive breakdown to more fully compile this report.

Comment 9: A mounding analysis is needed to determine separation of groundwater from the bottom of proposed BMPs.

Response 9: The stormwater regulations require mounding analysis if the separation to the bottom of the BMP is less than four feet to estimated seasonal high groundwater AND the system is used to attenuate peak discharge (Stormwater Handbook Volume 3). The stormwater BMPs maintain a minimum separation of four feet to the water table.

A&M believes these responses will provide sufficient information for the final review of this application.

If you require any additional information, please feel free to contact me.

Very truly yours,

ALLEN & MAJOR ASSOCIATES, INC.



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cc: J. Smetana, UA Senior Manager LLC
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Enclosure: Site Development Drawings – Revision 1