



MEMORANDUM

Christina Papadopoulos
Stormwater Engineer
Town of Billerica – DPW Engineering

To: Katherine Malgieri
Director
Town of Billerica – Planning & Community Development

From: Isabel Tourkantonis
Director of Environmental Affairs
Billerica Conservation Department
Danielle Danzing, PE
Elizabeth Roche, PE
Kimley-Horn and Associates, Inc.

Date: 11/26/2025
Subject: Stormwater Peer Review
161 Concord Road
Billerica, MA 01821

Kimley-Horn has completed the review of the application for a modification to a previously approved project consisting of a proposed industrial building located at 161 Concord Road in the Town of Billerica. The review included:

- Item 1 – Request for Amendment of Order of Conditions and its appendices prepared by Bohler, dated 10/10/2025.
- Item 2 – Request for Stormwater Permit Amendment and its appendices, prepared by Bohler, dated 10/15/2025.
- Item 3 – Supplemental Drainage Package prepared by Bohler.
- Item 4 – Modification of Site Plan Special Permit, prepared by Bohler, dated 10/10/2025.
- Item 5 – Approved Site Plans, prepared by Bohler, dated 7/6/2022 (8 sheets total).
- Item 6 – Amended Site Plans, prepared by Bohler, dated 7/28/2022 (16 sheets total).
- Item 7 – 161 Concord Road Previous Peer Review prepared by Beta, dated 8/3/2022.
- Item 8 – Geotechnical Report prepared by GeoEngineers, dated 7/15/2022.
- Item 9 – Previously Executed Site Plan Special Permit decision prepared by Billerica Planning Board, dated 8/4/2022.

Stormwater Review

1. Provide Erosion and Sediment Control plans for review per Town of Billerica Board of Health Rules and Regulations 5.2.010.
2. A waiver request was submitted for Town of Billerica Board of Health Rules and Regulations 6.6.010.2.d.1. citing the ultimate discharge to the Concord River rather than the Town's municipal infrastructure. Engineer to prove no negative impact nor flooding downstream to the system in the 100-year storm event. Upon review of the groundwater elevation, infiltration rates, and impacts to the existing resource areas, Kimley-Horn does not recognize any concerns with this request. The Supplemental Drainage Package Table 1.1. conveys that the peak flow is reduced for the 2-, 10-, 25-, and 100-yr storms which exceed the attenuation requirement imposed by the Massachusetts Stormwater Handbook Standard 2.
3. Provide explanation for the use of 0.42 as infiltration rate.
4. No soil mapping is provided, please include per Town of Billerica Board of Health Rules and Regulations 6.6.010.2.d.e.
5. Provide drainage area maps showing drainage to each inlet. Deep sump catch basins only qualify for 25% TSS removal when the impervious area draining to the catch basin is $\frac{1}{4}$ acre or less per the Massachusetts Stormwater Handbook Volume 2.
6. Per the change in use, the applicant states that the project no longer necessitates review as a LUHPPL. Kimley-Horn defers to the Town of Billerica on confirmation of this determination based on land use classification. However, so long as the TSS removal calculation is accurate per comment #5 above, the project is exceeding the required 44% TSS removal prior to discharge to the infiltration BMP per Massachusetts Stormwater Handbook Standard 5.
7. Provide Total Phosphorus removal calculations per Town of Billerica Board of Health Rules and Regulations 6.7.006.
8. Provide pipe sizing calculations per Town of Billerica Board of Health Rules and Regulations 6.7.009(14).
9. Provide MassDEP Stormwater Checklist.
10. Provide mosquito controls in Operations & Maintenance Plan per Massachusetts Stormwater Handbook Volume 2.
11. Verify StormTrap chambers can function in accordance with the design plan. StormTrap detail on C-903 does not match what is shown in plan view. Discrepancies consist of chamber height in the details indicates 5' and plan chamber depth varies from 2' to 7'. Minimum grade above the chamber indicates 0.5' with the detail indicating that the minimum grade must be a minimum of 1.5 feet above the top of chamber.

Site Plan Review

12. Per previous peer review by Beta on 8/13/22, Kimley-Horn defers to the Town for portions of proposed plan that are not in compliance with the lot and building perimeter green strip requirements and associated planting requirements per Town of Billerica Zoning Bylaws Section 7 and acknowledges that these requirements may be waived under Section 7.G.7.

13. Per Town of Billerica Zoning Bylaws Section 8.C.1, the minimum depth of a standard parking space is 19', not 18' as indicated in the Zoning Analysis Table on Sheet C-301. It is acknowledged that stall depths were changed to 19' per previous peer review by Beta on 8/13/22, but please revise the required parking stall criteria and provide typical parking stall dimensions on the Site Layout Plans. If compact car stalls are not proposed, remove Note 1 under the Zoning Analysis Table and required dimensions.
14. Per Town of Billerica Zoning Bylaws Section 8.E.3, no more than one loading space (one dock and one door) per 10,000 square feet of floor area is allowable. For the proposed 147,400-square foot building, this equates to 14 loading spaces. On Sheet C-303, it is unclear whether there are 2 or 3 loading docks on the westernmost side which would total to either 14 or 15 proposed loading spaces. Please show garage door locations or otherwise indicate the number of loading spaces and doors to be compliant.
15. Provide dimensions for the "No Left Turn" sign on C-903. Please also provide heights of all traffic flow signs to verify that they meet the maximum height requirement (4') and will not necessitate a sign permit per Town of Billerica Zoning Bylaws Section 9.

Conservation Commission Review

16. Per the Billerica Wetlands Protection Bylaw 8.2.B, by-law a wetland resource area boundary shall expire after three years from the date of issuance. Kimley-Horn will defer to the Town of Billerica on whether the Original Order of Conditions or original Resource Delineation are still valid.
17. Based on review of the Order of Conditions Amendment and associated plan changes, the following observations have been made:
 - a. The calculation of an increase in impervious area from 27,036 square feet to 44,273 square feet and the calculation of a decrease in impact to the Riverfront Area resource area from 15,313 square feet to 12,187 square feet appears to be generally accurate based on PDF area takeoffs and scale of the Amended Site Plan drawings.
 - b. The calculation of approximately 2,600 square feet of Wetland Replication Area appears to be generally accurate based on PDF area takeoffs and scale of the Amended Site Plan drawings.
 - c. The existing concrete headwall is no longer shown or called out on Sheet C-302 near the location of the proposed wetland replication.
 - d. The concrete sidewalk at the stream crossing has been reduced from 10' to 5'.
 - e. The proposed culvert is no longer dimensioned or called out.
 - f. Limits of retaining walls have been reduced on both C-302 and C-303 (north and south of site). There has been a reduction in the retaining walls present within the 100' wetland buffer on Sheet C-303. Without the grading plan from the previous plan, unable to determine changes in heights.
18. No alternatives provided per 310 CMR 10.58(4). Kimley-Horn defers to the Town Conservation Commission on the evaluation of the 6 alternatives provided in the original Order of Conditions application.
19. Provide Erosion and Sediment Control plans for review per 310 CMR10.58(4)d.3.
20. Has a wildlife habitat evaluation study been performed per 310 CMR10.60?