



March 20, 2024

**Email** (ctirone@ci.reading.ma.us)

Charles Tirone, Conservation Administrator  
Town of Reading  
Town Hall  
16 Lowell Street  
Reading, MA 01867

**Re: Peer Review Letter**  
**Notice of Intent – Strada Mixed Use Building**  
**252-262 Main Street and 10 Pinevale Avenue**  
**Assessor’s Map as Map 11 Lots 192-194 & 196**  
**DEP File #: 270-0779**  
**Reading, Massachusetts**

[LEC File #: TORea\23-608.02]

Dear Mr Tirone and Members of the Conservation Commission:

LEC Environmental Consultants, Inc., (LEC) was retained to evaluate the extent and boundaries of Wetland Resource Areas located adjacent to 252-262 Main Street and 10 Pinevale Avenue in Reading, Massachusetts associated with a November 29, 2023 Notice of Intent (NOI) Application filed by Allen & Major Associates, Inc., on behalf of BLVD Reading, LLC for the construction of a mixed-use development and associated site appurtenances. LEC reviewed the NOI Application and associated *Civil Plans for Strada Mixed Use Building* prepared by Allen & Major Associates, Inc., and dated October 5, 2023 (*NOI Plans*).

Our review was conducted in accordance with the *Massachusetts Wetlands Protection Act* (M.G.L. c. 131, § 40, the *Act*) and its implementing Regulations (310 CMR 10.00, the *Act Regulations*); the *Town of Reading Wetlands Protection Bylaw* (Section 7.1, the *Bylaw*) and the *Town of Reading Wetland Protection Regulations* (the *Bylaw Regulations*); the *Army Corps of Engineers Wetland Delineation Manual* (Environmental Laboratory, 1987), and the *Regional Supplement to the Corps of Engineers Wetland Delineation Manual: Northcentral and Northeast Region* (Version 2, January 2012); the *Mass DEP Massachusetts Handbook for Delineation of Bordering Vegetated Wetlands under the Massachusetts Wetlands Protection Act* (September 2022, the *Delineation Handbook*); and the *Field Indicators for Identifying Hydric Soils in New England* (Version 4, 2020, the *Field Indicators Guide*).

### **Site Evaluation and BVW Boundary Review**

LEC conducted a site evaluation on February 6, 2024 to inspect the property and review the field delineation of an off-site Bordering Vegetated Wetland (BVW) delineated by Goddard Consulting, LLC. LEC traversed the property and adjacent land to the southwest, and evaluated plant community

composition, soil conditions, and the presence or absence of hydrologic indicators. A forested upland occurs within the western portion of the site and continues off-site to the west and south, extending to an off-site forested wetland. LEC reviewed Goddard wetland flags W-100 through W-112 as depicted on the *NOI Plans*.

The forested upland contains a canopy dominated by Norway maple (*Acer platanoides*), with scattered individuals of silver maple (*Acer saccharinum*), American elm (*Ulmus americana*), and red maple (*Acer rubrum*). The understory is dominated by Tartarian honeysuckle (*Lonicera tartarica*), with scattered patches of burning bush (*Euonymus alatus*), sapling Norway maple, and sapling northern red oak (*Quercus rubra*). Individuals of multiflora rose (*Rosa multiflora*) and sapling American elm, and entanglements of Asiatic bittersweet (*Celastrus orbiculatus*) and wild grape (*Vitis* sp.) also were observed. The groundcover within the upland contains individual patches of hay-scented fern (*Dennstadia punctilobula*) and sensitive fern (*Onoclea sensibilis*).

LEC inspected soil conditions within the forested upland along the BVW boundary and typically observed a 14-inch thick, loamy sand topsoil (A Horizon) with a soil matrix color of 10YR 2/2. LEC observed several weathered subsoil (B<sub>w</sub> Horizon) horizons beneath the topsoil, including: a weathered, loamy sand subsoil (B<sub>w</sub> Horizon) with a soil matrix color of 10YR 4/4 to a depth of 20+ inches; and a loamy sand subsoil (B<sub>w1</sub> Horizon) with a soil matrix color of 10YR 3/2 to a depth of 18± inches, underlain by a second loamy sand subsoil (B<sub>w2</sub> Horizon) with a soil matrix color of 10YR 4/3 to a depth of 20± inches. No redoximorphic features or other indicators of hydrology were observed within the upland soil profiles.

The forested wetland canopy contains patches of red maple, with individuals of silver maple and American elm. The sparse understory is vegetated with individual saplings from the canopy, burning bush, and poison ivy (*Toxicodendron radicans*) vines. The groundcover contains patches of skunk cabbage (*Symplocarpus foetidus*), cinnamon fern (*Osmunda cinnamomea*), and spinulose woodfern (*Dryopteris carthusiana*).

LEC inspected soil conditions within the BVW and mucky loamy sand topsoil (A Horizon) with a soil matrix color of 2.5Y 2.5/1. The topsoil is underlain by a weathered, loamy sand subsoil (B<sub>w</sub> Horizon) with a soil matrix color of 2.5Y 5/3 to a depth of 20+ inches. Redoximorphic concentrations of 2.5Y 5/4 and depletions of 2.5Y 5/2 were observed throughout the subsoil. This soil profile meets the *S1: Sandy Mucky Mineral* hydric soil indicator in the *Field Indicators Guide*. Soils were saturated to the surface and up to 5 inches of standing water were observed within the central portion of the BVW.

Based on the above observations, LEC observed and agrees with all BVW flags established by Goddard Consulting, LLC, with the exception of flag W-107, which was missing at the time of our evaluation. LEC established a replacement wetland flag with blaze orange surveyor's tape with the words "LEC Resource Area" printed in black and numbered this flag 107R. This flag was placed 10.5± feet upgradient of the missing wetland flag W-107 as depicted on the *NOI Plans*. While LEC flag 107R occurs upgradient of the BVW boundary depicted on the *NOI Plans*, it does not appear to affect the extent

of Buffer Zone on the subject property. LEC also notes that from BVW flag W-100, the BVW boundary appears to extend to the north, off-site, roughly parallelling the paper street identified as Star Road on the *NOI Plans*. However, again, this additional off-site wetland does not appear to affect the extent of Buffer Zone on the subject property.

## Potential Vernal Pool

As part of our evaluation, LEC was asked to determine the likelihood of the BVW containing a Vernal Pool. As stated above, up to roughly 5 inches of standing water were observed within the central portion of the BVW (roughly down-gradient of BVW flags W-100 through W-105). Based on stain lines observed within the BVW surrounding the flooded portion, LEC estimates the mean annual flood level elevation within the BVW occurs within 1 to 2 inches of the flood level observed during our site evaluation. This observation correlates to a maximum 6 to 7-inch deep water column within the central portion of the BVW. LEC typically associates Vernal Pool breeding activity with water columns approaching 12" or greater; however, it may be possible for certain Facultative and/or Obligate Vernal Pool species to successfully breed in more shallow pools, so long as an adequate water column is present through the Vernal Pool hydroperiod. If the BVW contains a Vernal Pool, no work appears to be proposed within 100 feet of the BVW containing the Vernal Pool based on the *NOI Plans*.

## Recommendations

Based on our site evaluation and review of the NOI Application, LEC concurs with all off-site BVW flags observed with the exception of BVW flag W-107. LEC established a new flag 107R roughly 10.5 feet upgradient of the missing BVW flag W-107. This modification does not appear to affect the extent of Buffer Zone on the property. With regard to the potential for a Vernal Pool to occur within the BVW, it may be possible for Vernal Pool breeding activity to occur within the relatively shallow water column observed within the BVW; however, even if a Vernal Pool occurs within the BVW, no work appears to be proposed within 100 feet of the BVW containing the Vernal Pool according to the *NOI Plans*.

Thank you for the opportunity to provide these peer review services. Please do not hesitate to contact me should you have any questions, require additional information, or wish to discuss further.

Sincerely,

**LEC Environmental Consultants, Inc.**



Richard A. Kirby  
Senior Wetland Scientist

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