



October 10, 2023

Ms. Frances Heslin
37 Melbourne Avenue
Reading, MA 01867
shasheegirljr@gmail.com

**Re: Wetland Resource Area Evaluation
37 Melbourne Avenue, Reading**

Dear Ms. Heslin:

In response to your request, Oxbow Associates, Inc. (OA: specifically, R. Strohsahl, PWS) reviewed the above-referenced site with specific regard to wetland resource areas on October 4, 2023. This evaluation was conducted in accordance with standard methodology for delineating vegetated wetlands under the Massachusetts Wetlands Protection Act (MGL Ch. 131, §40; the "Act"), its Regulations (310 CMR 10.00), and the Town of Reading Wetlands Protection Regulations (Section 7.1).

Existing Conditions and Wetland Resource Areas

The site is located east of Melbourne Avenue, south of Sunnyside Avenue, and northeast of Buckingham Drive. The parcel encompasses approximately 0.3± acres and contains a single-family home with a paved driveway, elevated rear deck, above-ground pool, and fenced landscaped yard. At the southeastern property boundary there is a stone headwall with an intermittent stream flowing east through a 24-inch culvert. The topography slopes gently to the east, towards the stream.

The streambed is approximately 3-5 feet wide, and at the time of the evaluation there was less than two inches of flowing water. The stream has a boulder, sand, and gravel substrate near the mouth of the culvert that transitions to organic muck further downstream. According to the latest USGS topographical maps, and the USGS StreamStats program, there are no perennial streams within 200-feet of the subject property.

OA delineated the greatest horizontal extent of the wetland resource areas with blue plastic flags labeled A1 to A7 based evidence of hydric soils, and predominance of wetland vegetation. The A-series flags delineate the edge of the Bordering Vegetated Wetland (BVW; 310 CMR 10.55) along the eastern property boundary. The attached figure shows the location of these flags and the estimated buffer zones which extend onto the property.

Vegetation associated with the property includes, Norway maple (*Acer platanoides*), black cherry (*Prunus serotina*), white ash (*Fraxinus americana*), white spruce (*Picea glauca*), apple (*Malus* spp.), tree of heaven (*Ailanthus altissima*), speckled alder (*Alnus incana*), glossy buckthorn (*Frangula alnus*), common winterberry (*Ilex verticillata*), northern arrowwood (*Viburnum dentatum*), multiflora rose (*Rosa multiflora*), poison ivy (*Toxicodendron radicans*), Virginia creeper (*Parthenocissus quinquefolia*), purple loosestrife (*Lythrum salicaria*), goldenrod (*Solidago* spp.), pokeweed (*Phytolacca americana*), jewelweed (*Impatiens capensis*), irises (*Iris* sp.), bitter dock (*Rumex obtusifolius*), ground ivy (*Glechoma hederacea*), bitter nightshade (*Solanum dulcamara*), mugwort (*Artemisia* spp.), dandelion (*Taraxacum officinale*), bedstraw (*Galium* spp.), marsh seedbox (*Ludwigia palustris*), clover (*Trifolium* spp.), and *Sphagnum* mosses.

While investigating the wetland resource area on the site, OA documented soil profiles throughout the area in question. Evidence of historic manipulation could be observed, likely attributed to leveling of the lot during house construction. Soils examined inside the delineated wetland, east of flag A4, exhibited a thick, buried O-horizon (organic) below sandy-loam fill material, indicative of prior wetland formation.

Wetland Soil Plot

Horizon	Depth	Color	Notes
A	0-8"	10YR 2/1	Fine sandy loam
	8-12"	5Y 3/1	Coarse sand, exogenous material
O_{be}	12-18"+	10YR 2/1	Organic, hemic

Upland (Buffer) Soil Plot

Horizon	Depth	Color	Notes
O_i	2-0"	10YR 2/1	Fibric
A	0-3"	10YR 2/1	Fine sandy loam
	3-6	2.5Y 5/3	Coarse sand, exogenous material
A_b	6-16"+	10YR 2/1	w/ 5% gravel, 2% 2.5Y 6/1 depletions

Soil profiles observed within the lawn (buffer zone) were generally composed of backfilled material deposited following the construction of the house.

According to the 15th Edition (effective August 1, 2021) of the Natural Heritage and Endangered Species Program's (NHESP), Massachusetts Natural Heritage Atlas and the 2021 MassGIS data layers, there are no mapped habitats for state-listed wildlife species or certified or potential vernal pools on or immediately adjacent to the property.

According to the latest FEMA National Flood Insurance Program map (25017C0313E, effective June 4, 2010) the property is not mapped within the 100-year floodplain, indicating there is no Bordering Land Subject to Flooding (BLSF; 310 CMR 10.57) on the property.

Regulatory Implications and Recommendations

It is OA's opinion that the area delineated by flags A1 to A7 is subject to jurisdiction under the Wetland Protection Act as a BVW, and a *Fresh Water Wetland* under the Town of Reading Wetland Protection Regulations. The delineated boundary is our professional opinion of the limit of the wetland resource area and must be reviewed and confirmed by the Reading Conservation Commission (RCC) before it is considered a legal boundary.

In general, the RCC discourages any work or activity within 100 feet of a wetland resource area. Any activities proposed within 100 feet of the wetland boundary are subject to review by the RCC and the Massachusetts Department of Environmental Protection (DEP). Any activity proposed within BVW is subject to review by the RCC, and may require filing a 401 Water Quality Certificate with the DEP. The Town of Reading also has a "No Net Loss" policy regarding wetlands. Any wetland fill requires in-kind replication adjacent to the same wetland system, and compensation shall be at a 2:1 ratio to the impacted area.

The Town also has a "Tree Replacement Policy," which requires the replacement of trees and/or shrubs (dependent on the size and quantity of the trees/shrubs proposed to be removed) proposed within the BVW or buffer zone. Replacement plantings must be native species and are required to survive for two years or likewise be replaced.

Under the local jurisdiction of the Regulations, the Town imposes a 25-foot Zone of Natural Vegetation (ZNV) horizontal to the approved BVW boundary. The ZNV prohibits *any activity* within the 25-foot buffer and is enforced by the RCC to prevent pollution, sediment, chemicals, etc., from infiltrating into the wetland system. To protect the ZNV, the Town also enforces a No-Structure Zone within 10 feet of the ZNV (35-foot buffer zone), which discourages new foundations, frost walls, or other inground structures.

It is our understanding that you wish to construct a new addition and elevated rear deck off the rear of the house and removal of the existing shed. As the proposed project extends into the 100-foot buffer zone of the BVW, the project will be under the jurisdiction of the RCC and DEP. According to the Town's Wetland Regulations, the project does not meet the definition of a "minor project," as the new addition requires the installation of slab foundation. As currently designed, a Notice of Intent (NOI) filing will likely be required to be submitted to the RCC and DEP prior to work beginning.

The GIS/GPS map we have provided can be used as a planning tool, however, a Professional Land Surveyor will need to complete a survey and plan of the existing and proposed conditions. The anticipated NOI application must include a site plan illustrating the existing conditions, property boundaries, existing structures, deck, limits of driveway/pavement, walkways, edge of vegetation, wetland boundaries, wetland buffers (25-,35-, and 100-foot), topography, proposed

erosion control barrier, any pertinent construction notes and details, as well as, the proposed project design, and limit of work.

Incorporating a Planting Plan that includes the installation of native shrubs within the ZNV and proposing the elimination of existing invasive plants (tree of heaven, etc.), into the anticipated NOI filing will likely be viewed favorably by the RCC. A list of recommended native plants and sources for purchasing can be found on the Town's Conservation Division website. OA recommends confirming that any proposed plants will survive in the soil hydrology found on the property prior to installation.

If you have any questions, please do not hesitate to contact us.

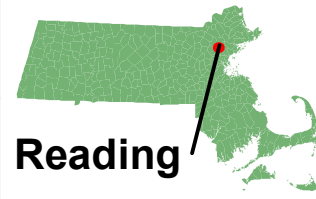
Sincerely,

Ronald H. Strohsahl



Ronald Strohsahl, PWS
Senior Wetland Scientist






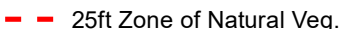




Encls. *Wetland Delineation* Figure
USGS Site Locus Figure



MELBOURNE AVENUE



Legend

-  Iron Pin / Pipe
-  Fence Corner
-  Soil Plots
-  Wetland Flags
-  Wetland Line
-  25ft Zone of Natural Veg.
-  35ft No-Structure Zone
-  100ft BVW Buffer Zone
-  Approx. Prop. Boundary
-  Property Parcels

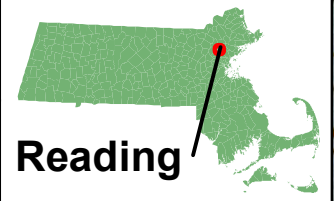
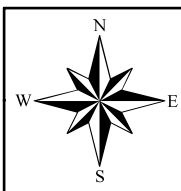


1:300


1 inch = 25 feet



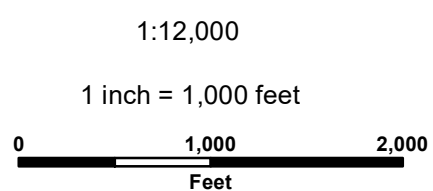
Wetland Delineation
2021 Orthophotograph
37 Melbourne Ave
Reading, MA
October 10, 2023



Legend

 Property Boundary

USGS, MassGIS



USGS Site Locus
37 Melbourne Ave
Reading, MA

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