

September 23, 2009

Karl A. McCarthy, PLS Harry R. Feldman, Inc. 112 Shawmut Avenue, 4th Floor Boston, MA 02118

Re:

Wetland Delineation Report Alewife Brook Parkway Cambridge, MA

Dear Mr. McCarthy:

Enclosed please find the wetland delineation report for the above-referenced project.

If you have any questions or require additional information, please do not hesitate to contact us.

Cordially,

Daniel B. Vasconcelos

David B. Vasincelu

Wetland Scientist

DBV:bsg

Enclosure

3573.0 ltr to client wd rpt 09.23.09



Wetland Delineation Report Alewife Brook Parkway Cambridge, Massachusetts

Prepared for:

Harry R. Feldman, Inc. 112 Shawnut Avenue, 4th Floor Boston, Massachusetts 02118

Prepared by:

Wetlands Preservation, Inc. 47 Newton Road Plaistow, New Hampshire 03865

WPI Job #3573.0

September 23, 2009

Wetland Delineation Report Alewife Brook Parkway Cambridge, Massachusetts

Introduction

The following report describes the site-specific delineation of wetlands at the above-referenced location. Wetlands Preservation, Inc. (WPI) performed the wetland delineation on the subject property on September 22, 2009. Wetland resource areas were delineated according to the guidelines set forth in the Wetlands Protection Act (WPA) 310 CMR 10.00.

Site Description

The site consists of an area of land located adjacent to Alewife Brook Parkway in Cambridge,
Massachusetts, and is depicted on the United States Geological Survey (USGS) Topographic Map,
Boston North Quadrangle (Figure 1). The site is bordered by Alewife Brook (a perennial stream) to the
north, Massachusetts Avenue to the east, Alewife Brook Parkway to the south, and open undeveloped
land to the west. The site consists primarily of an open upland dominated by maintained lawn grass and
ornamental tree plantings, with the remainder consisting of a narrow forested buffer associated with
Alewife Brook.

The site is depicted on the Natural Resources Conservation Service (NRCS) Soil Survey, Middlesex County, Massachusetts (Figure 2). According to the soil survey, the soils onsite consist entirely of Udorthents, wet substratum (655).

The site is depicted on the Natural Heritage Atlas (13th Edition), Lexington Quadrangle, published by the Massachusetts Natural Heritage and Endangered Species Program (NHESP), which indicates that there

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are no Estimated Habitats of Rare Wildlife, Priority Habitats of Rare Species, or Certified Vernal Pools present onsite (Figure 3).

The site contains areas which fall within the 100-year flood zone (Zone A5) according to the Federal Emergency Management Agency (FEMA) Flood Insurance Rate Map (FIRM), Community Panel Number 250186 0001 B (Figure 4).

Resource Areas

WPI delineated onsite wetland resource areas on September 22, 2009. Wetland resource areas were identified as specified in the WPA and using methods described in the manual entitled *Delineating Bordering Vegetated Wetlands under the Massachusetts Wetlands Protection Act* (1995).

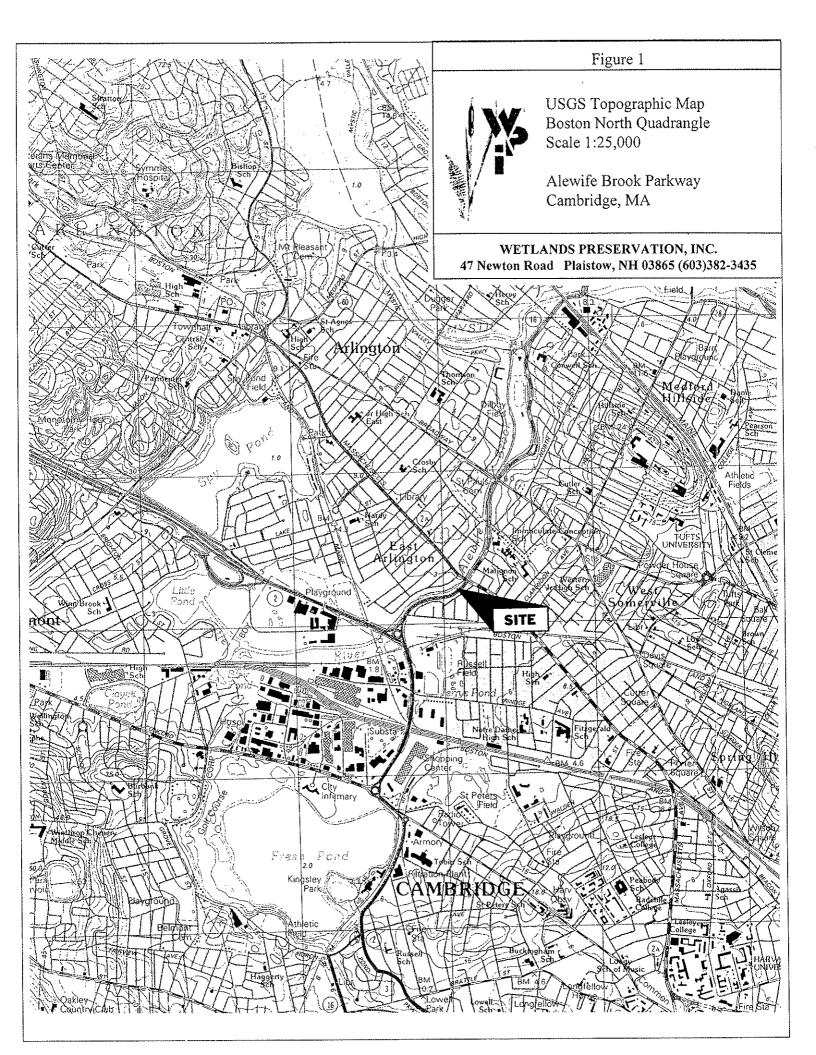
There are four types of resource areas associated with the site, as recognized by the WPA. Specifically, these resource areas are Bank jurisdictional under 310 CMR 10.54, Land Under Water (LUW) jurisdictional under 310 CMR 10.56, Bordering Land Subject to Flooding (BLSF) jurisdictional under 310 CMR 10.57, and Riverfront Area jurisdictional under 310 CMR 10.58. There is no Bordering Vegetated Wetland (BVW) present onsite, likely due to the fact that Alewife Brook is confined within a manmade channel at this location.

The Top of Bank associated with Alewife Brook was field delineated with alphanumerically coded blue flags labeled A-1 through A-12. The Top of Bank was delineated at the first break in slope at the edge of the manmade stream channel. This line also represents the limit of Bankfull conditions (the beginning of the Riverfront Area), as determined by the presence of woody vegetation (trees and shrubs) beginning at the break in slope/Top of Bank. The Riverfront Area extends 25 feet out from this A-series flag line per 310 CMR 10.58(2)(a)3.a. The LUW is located within the channel of the stream. The limit of BLSF is depicted on the FEMA FIRM for the site, with an elevation of 8 feet (Figure 4).

Vegetation along the A-series Bank and within the Riverfront Area in close proximity to the Bank consists primarily of red maple (Acer rubrum) and American elm (Ulmus americana) in the tree layer and glossy buckthorn (Frangula alnus) and arrowwood (Viburnum dentatum) in the shrub layer. Vegetation within the narrow forested buffer to the stream further out from the Bank includes red oak (Quercus rubra), gray birch (Betula populifolia), black cherry (Prunus serotina), Norway maple (Acer platanoides), tree-of-heaven (Ailanthus altissima), and crab apple (Pyrus sp.) in the tree layer, glossy buckthorn in the shrub layer, Oriental bittersweet (Celastrus orbiculatus) in the woody vine layer, and Japanese knotweed (Polygonum cuspidatum) in the groundcover layer. Further out from the stream, the majority of the Riverfront Area is dominated by maintained lawn grass and ornamental trees.

Conclusion

The site is located adjacent to Alewife Brook Parkway in Cambridge, Massachusetts and contains areas of Bank jurisdictional under 310 CMR 10.54, LUW jurisdictional under 310 CMR 10.56, BLSF jurisdictional under 310 CMR 10.57, and Riverfront Area jurisdictional under 310 CMR 10.58. The Bank/limit of Bankfull conditions was delineated by flags A-1 through A-12. The Riverfront Area consists of a line measured 25 feet out from and running parallel to the A-series Bank/limit of Bankfull line. The limit of BLSF is depicted on the FEMA FIRM for the site and is located at elevation 8 feet (Figure 4). Any future proposed activity within the above jurisdictional resource areas or their buffer zones will require a filing with the Cambridge Conservation Commission.



Web Soil Survey National Cooperative Soil Survey

USDA Natural Resources

measurements.

Source of Map: Natural Resources Conservation Service

This product is generated from the USDA-NRCS certified data as of

Soii Survey Area: Middlesex County, Massachusetts Survey Area Data: Version 9, Apr 15, 2009

The orthophoto or other base map on which the soil lines were compiled and digitized probably differs from the background

MAP LEGEND

Very Stony Spot

Area of Interest (AOI)

Area of Interest (AOI)

Soil Map Units

Soils

Special Point Features

Blowout

Wet Spot Other

Special Line Features Gully ૂટ

Short Steep Slope Other

Borrow Pit

 \boxtimes

Clay Spot

Ж

Cities Political Features 0

Closed Depression

Water Features

Gravelly Spot

Gravel Pit

Oceans

Streams and Canals

Transportation

Interstate Highways Rails ‡

Marsh or swamp

Lava Flow

Landfill

Mine or Quarry

US Routes

Miscellaneous Water

0 •

Perennial Water

Rock Outcrop

Major Roads Local Roads

Severely Eroded Spot

Sandy Spot Saline Spot

Sinkhole

Slide or Slip Sodic Spat

Stony Spot Spoil Area 111

MAP INFORMATION

The soil surveys that comprise your AOI were mapped at 1:25,000.

Please rely on the bar scale on each map sheet for accurate map

Web Soil Survey URL: http://websoilsurvey.nrcs.usda.gov Coordinate System: UTM Zone 19N NAD83

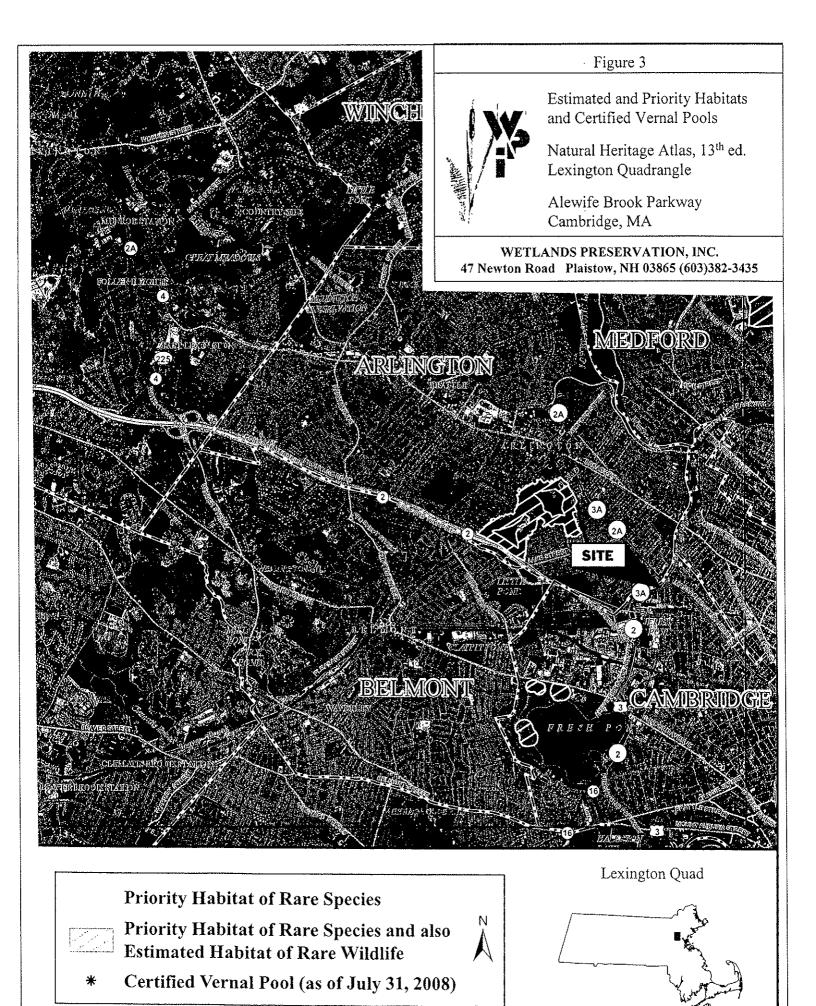
the version date(s) listed below.

Date(s) aerial images were photographed: 7/10/2003

imagery displayed on these maps. As a result, some minor shifting of map unit boundaries may be evident.

Map Unit Legend

Middlesex County, Massachusetts (MA017)			
Map Unit Symbol	Map Unit Name	Acres in AOI	Percent of AOI
602	Urban land	5,8	41.7%
626B	Merrimac-Urban land complex, 0 to 8 percent slopes	0.8	6.1%
655	Udorthents, wet substratum	7.2	52.3%
Totals for Area of Interest		13.8	100.0%



⊐ Miles

0.5

Figure 4