SOUTH RIVER ENVIRONMENTAL

61 Meetinghouse Lane, Marshfield, MA 02050 Phone:

Brendan Sullivan – Cavanaro Consulting, Inc.

From: John Zimmer

To:

Date: February 3, 2016

Re: Wetland Delineation Report – Phillips Road – New Bedford, MA

On November 24, 2015, a site investigation was conducted within the approximately 10-acre parcel located south of Phillips Road and east of Acushnet Avenue (Route 18) in New Bedford, MA to identify and delineate bordering vegetated wetland and mean annual high water (first observable break in slope) associated with an unnamed intermittent stream. The City of New Bedford does not have a local wetlands protection bylaw, therefore the wetland resource areas were delineated according to the State of Massachusetts Department of Environmental Protection (DEP) Wetlands Protection Act Regulations only.

Existing Conditions

The majority of the property has been previously disturbed and is currently undeveloped. The western two-thirds of the property is open and vegetated by grass, shrub and tree species such as poison ivy (*Toxicodendron radicans*), staghorn sumac (*Rhus typhina*), black cherry (*Prunus serotina*) and various goldenrod species (*Solidago* sp.) that are indicative of an abandoned field in the early-successional stage of revegetation. Based on the nature of the site, it appears that the area may have been used for agricultural purposes in the past. Forested upland areas to the north and south are dominated by red oak (*Quercus rubra*), white oak (*Quercus alba*) in the overstory with a dense understory of common greenbriar (*Smilax rotundifolia*) and multiflora rose (*Rosa multiflora*). A significant stone wall, approximately four to five feet in height is located along the eastern edge of the old field and extends across the entire property from north to south. The area to the east of the stone wall has not been previously disturbed and contains both upland and wetland forest. A small pond is located at the southeastern property corner, and the intermittent stream discharges directly to the pond.

The soils within upland portions of the property exhibit a thick organic layer over a plowed A horizon. According to the Massachusetts Natural Heritage and Endangered Species Program Natural Heritage Atlas (MAGIS 2016), the site is not located directly within an estimated habitat of rare wildlife.

Wetland Resource Areas

Bordering Vegetated Wetland (BVW)

One bordering vegetated wetland, associated with an unnamed intermittent stream, was identified within the project property. The wetland is located to the east of the stone wall along the eastern property boundary and extends the length of the site from south to north. The wetland boundary was delineated according to the DEP publication "Delineating Bordering Vegetated Wetlands" under the Massachusetts Wetlands Protection Act (1995) and is flagged with pink survey tape and numbered sequentially from WF-1 to WF-37. The BVW is a palustrine forested / scrub-shrub system that is dominated by red maple (*Acer rubrum*) and American elm (*Ulmus Americana*) in the overstory. Shrub and herbaceous species within the understory include northern arrowwood (*Viburnum dentatum*), highbush blueberry (*Vaccinium corymbosum*), cinnamon fern (*Osmunda cinnamomea*) and common greenbriar.

The hydrology within the site has been altered in the northwest portion of the property as evidenced by the hydrophytic plant species (particularly highbush blueberry) that had been established but are currently dead or dying. This may a result of the residential development that has occurred to the north and west of the site or through changes in the general water table. Due to the lack of hydrology and transition to upland species, this area was not identified as bordering vegetated wetland.

Inland Bank

The unnamed stream is identified as intermittent on the USGS topographic quadrangle and flows to the south across Phillips Road through a culvert and extends along the entire length of the property to a discharge point at an unnamed pond southeast of the site. The stream has well-defined banks along the entire length, averages approximately 5 feet in width and approximately 6-inches to one foot in depth. The stream has a silty substrate and was flowing at the time of the delineation. Since the stream is not identified as perennial, there is no associated Riverfront Area; therefore the first observable break in slope was utilized to delineate the Inland Bank resource area. Inland Bank was flagged with blue survey tape and numbered sequentially from IB-1 to IB-27.

A second intermittent stream is located to the west of the BVW and intermittent stream complex. It commences at a headwall and flows to the east where it discharges into the intermittent stream. Based on the nature of the site, it is likely the discharge point for a French drain that may have been installed during the agricultural use of the site. There is no BVW associated with the channel and there are no wetland resource areas to the west. For identification purposes, this channel was incorporated into the flagging associated with the BVW but is clearly denoted as intermittent and non-jurisdictional on the existing conditions plan.

Regulations

The City of New Bedford does not have a local wetlands bylaw. Therefore, all work proposed within the property will be subject only to the MA Wetlands Protection Act. As such, the jurisdiction of the Conservation Commission is limited to the BVW and the Inland Bank associated with the main intermittent stream as well as the associated 100-foot buffer zones. The secondary intermittent channel (identified as IB-A series) is not considered an area subject to jurisdiction since it is located upgradient of the BVW, does not connect two resource areas and does not have any BVW associated with the channel.

Should you have any questions regarding this report, please do not hesitate to contact me at 978-697-0854.

Sincerely,

John Zimmer Wetland Scientist

