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June 2, 2015

Mr. Raymond Holberger
City of New Bedford
Department of Environmental Stewardship
133 William Street
New Bedford, Massachusetts 02740

Subject: Spring 2015 Wetland Inspection
Keith Middle School, New Bedford, Massachusetts

Dear Mr. Holberger:

In accordance with the Long-Term Monitoring and Maintenance Implementation Plan (LTMMIP) Rev 5.5 prepared by TRC dated August 2012, for the Keith Middle School (KMS) in New Bedford, Massachusetts, TRC has completed its May 2015 inspection of wetlands abutting the KMS. A TRC senior ecologist conducted the inspection on May 29, 2015. A stated in the LTMMIP, the purpose of the inspection is to visually observe the wetlands and vicinity for unacceptable conditions including indications of excessive sedimentation occurring within the wetlands, including such conditions as, but not limited to, dumping of debris, exposed side slopes, erosion from spring rains, stressed or dead vegetation, animal burrows, slumping and unauthorized excavation.

The inspection consisted of walking the entire slope adjacent to the wetland area and observing areas of potential erosion and sedimentation at the wetland/cap slope interface. Observations were recorded in the Wetland Sediment Inspection Form included as Appendix G of the LTMMIP. A copy of the completed inspection form is provided with this letter as an attachment (W-1). Photographs taken during the inspection are also included as an attachment (W-2).

In general, the slope extending down to the wetland from the parking lots and rear school access drive is well vegetated with grasses and other herbaceous plants and various shrub and tree saplings. The predominant vegetation noted on the slope of the landfill cap include grasses, vetch, sheep sorrel, birdsfoot trefoil, mugwort and black swallowwort. Overall, no evidence of erosion or sedimentation into the adjacent wetland was noted during the site inspection. Slopes previously noted as having thin vegetative cover were

evaluated and, although plant cover remains thin, these slopes are currently adequately stabilized.

A single small animal burrow (potentially a muskrat burrow) was present along the toe of slope within the northwestern portion of the cap. Monitoring of this burrow should continue to ensure that it is not enlarged beyond its current small size (see photograph in Attachment W-2).

Several small stands of the invasive plant Japanese knotweed (*Polygonum cuspidatum*) that were present in the vicinity of stormwater outfalls and in the central portion of the wetland/cap slope were treated with an herbicide in 2013. In addition, small tree saplings comprised primarily of black locust (*Robinia pseudoacacia*) were also previously treated with an herbicide that same year. It appears that these applications were effective in greatly reducing knotweed abundance along the landfill cap slope although several small stands are beginning to recolonize two of the outfall areas. However, the stands of Japanese knotweed do not presently require herbicide treatment. Tree saplings appear to also have recovered from the herbicide application and several black locust tree saplings remain along the southwestern and northwestern landfill slopes and should be cut and herbicide applied before they become much larger.

Other recommendations regarding the slope conditions and stabilization/repair will be provided under a separate Cap Inspection report by TRC. Implementation of these recommendations will adequately protect the wetlands from any future erosion and sedimentation issues that may occur.

If you have any questions regarding this report, please contact me at 978-656-3583 or David Sullivan at 978-656-3565.

Sincerely,

Scott J. Heim

Scott J. Heim
Senior Ecologist

Attachments

Attachment W-1

Wetland Sediment Inspection Form

WETLAND SEDIMENT INSPECTION FORM
KEITH MIDDLE SCHOOL

Use this inspection form to document annual inspections. If unacceptable conditions are observed, complete an additional form immediately after repairs are completed.

Inspection Date: May 29, 2015 Inspection By: Scott Heim

A. SLOPE BETWEEN SCHOOL AND WETLAND

Is slope condition acceptable? ✕ YES ☐ No

(look for dumped debris or waste; stained soil; erosion of soil on slope leading down to wetland; subsidence or slumping of greater than two inches of soil on slope; dead vegetation, if such vegetation is required for erosion control; animal burrows; and/ or evidence of unauthorized excavation)

If no, attach photograph ☐

If no, describe unacceptable condition:

Location _____

Condition All portions of the slope are vegetated and stabilized - no evidence of erosion.

A ~~small animal burrow noticed along toe of slope in northeastern portion of slope.~~

Describe any repairs to slope conducted since previous inspection:

_____

_____

_____

All repairs adequate? ☐YES ☐ No

Photograph of repair attached ☐

B. WETLAND

Is wetland condition acceptable? ✕ YES ☐ No

(look for dumped debris or waste, stained soil, visible accumulation of mineral sediment in wetland, and/ or evidence of unauthorized excavation)

If no, attach photograph ☐

If no, describe unacceptable condition:

Location _____

Condition No sedimentation noted in wetland from slope

_____

Describe any repairs to slope conducted since previous inspection:

_____

_____

All repairs adequate? ☐ YES ☐ No

Photograph of repair attached ☐

Attachment W-2

Site Photographs

SITE PHOTOGRAPHS
May 2015 Wetland Inspection
Keith Middle School
New Bedford, Massachusetts

1) Slope in southern portion of wetland/cap edge looking south. Vegetation is well established on the slope. Black locust tree in center foreground should be treated.

2) Central portion of slope looking north.

SITE PHOTOGRAPHS
May 2015 Wetland Inspection
Keith Middle School
New Bedford, Massachusetts

3) Central portion of wetland/cap. Note absence of trees/shrubs.

4) Northwestern portion of cap looking north. Note small Japanese knotweed stand in left foreground of photo at outfall location.

SITE PHOTOGRAPHS
May 2015 Wetland Inspection
Keith Middle School
New Bedford, Massachusetts

5) Stabilized slope along northwestern cap looking north. Note fairly black locust saplings along pond edge which should be treated with herbicide before they become much larger.

6) Black locust sapling along toe of slope. Tree is stressed but surviving despite 2013 herbicide application.

SITE PHOTOGRAPHS
May 2015 Wetland Inspection
Keith Middle School
New Bedford, Massachusetts

7) Small animal burrow at toe of slope in northwestern portion of cap.

8) Northern portion of wetland/cap slope. No tree saplings present in this area.