Ms. Cheryl Henlin
City of New Bedford
Department of Environmental Stewardship
133 William Street
New Bedford, Massachusetts 02740

Subject: Spring 2012 Wetland Inspection
Keith Middle School, New Bedford, Massachusetts

Dear Ms. Henlin:

In accordance with the Long-Term Monitoring and Maintenance Implementation Plan (LMMIP) prepared by BETA Group, Inc. dated October 20, 2006, for the Keith Middle School (KMS) in New Bedford, Massachusetts, TRC has completed its May 2012 inspection of wetlands abutting the KMS. A TRC senior ecologist conducted the inspection on May 11, 2012. 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 F of the LTMMIP. A copy of the completed inspection form is provided with this letter as an attachment. Photographs taken during the inspection are also included as an attachment.

In general, the slope extending down to the wetland from the parking lots and rear school access drive is well vegetated with grasses and herbaceous plants. 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 determined to be fully vegetated and stabilized. The area of slope failure previously noted during the 2008 inspection has been stabilized with riprap and appears to be stable. The silt fence previously installed downgradient of the repaired area has been removed. One partially excavated burrow was evident in the northwestern portion of the cap slope during the inspection. This hole was the same burrow noted in the 2011 inspection and has been abandoned as recent burrowing activity was not evident.

An apparent area of slight slumping (i.e., approximately two inches in height) was noted in the northern portion of the cap slope during the inspection. Several small saplings are present downslope of this area which were cut during the site inspection. Although corrective actions do not appear warranted at this time, this area should be monitored in 2013 to verify that slumping is not increasing.

Several small stands of the invasive plant Japanese knotweed (*Polygonum cuspidatum*) are present in the vicinity of stormwater outfalls and in the central portion of the wetland/cap slope. These plants form a dense overstory that precludes understory vegetation from becoming established due to the heavy shading. Erosion is more likely to occur beneath the Japanese knotweed stands due to the absence of the ground vegetation. It is recommended that the knotweed stands be eliminated from the slope and vicinity of the wetland through one or two cuttings during the growing season with a subsequent herbicide application in the late summer/early fall. During the site inspection, cutting of all knotweed within the central portion of the wetland/cap slope was completed. One additional cutting of the knotweed over the summer will result in lower stem heights in the late summer/early fall so herbicide application can be minimized. It should be noted that subsequent treatments may be required to completely eliminate stands of knotweed at the site.

Other recommendations regarding the slope conditions and stabilization/repair have been 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: 5-11-12 Inspection By: Scott Heim

A. SLOPE BETWEEN SCHOOL AND WETLAND

Is slope condition acceptable? X 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 slight slumping noted in northwestern portion of slope (approx. 8' from double-gate fence)

Condition slumping appears to be minor (approx.. 2") at this time

Describe any repairs to slope conducted since previous inspection:

Animal burrow observed in 2011 is still abandoned – no recent activity

All repairs adequate? ☐ YES ☐ No

Photograph of repair attached ☐

B. WETLAND

Is wetland condition acceptable? X 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 within the wetland

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 2012 Wetland Inspection
Keith Middle School
New Bedford, Massachusetts

1) Slope in central portion of wetland/cap edge looking north. Vegetation is well established.

2) Slope in central portion of wetland/cap edge looking north. Japanese knotweed stand in background.

SITE PHOTOGRAPHS
May 2012 Wetland Inspection
Keith Middle School
New Bedford, Massachusetts

3) Central portion of slope after Japanese knotweed stand was cut.

4) Abandoned animal burrow in northwestern portion of wetland/cap.

SITE PHOTOGRAPHS
May 2012 Wetland Inspection
Keith Middle School
New Bedford, Massachusetts

5) Stabilized slope along northwestern cap looking south. .

6) Stabilized slope along northwestern cap looking north.

SITE PHOTOGRAPHS
May 2012 Wetland Inspection
Keith Middle School
New Bedford, Massachusetts

7) Rip rap slope in northwestern portion of cap slope. Note small stand of Japanese knotweed in left foreground of photograph.

8) Well-vegetated northern portion of cap slope looking east.

SITE PHOTOGRAPHS
May 2012 Wetland Inspection
Keith Middle School
New Bedford, Massachusetts

9) Area of slight slumping in northwestern portion of wetland/cap slope. The saplings downslope of slumping were cut during the site inspection.

10) Close-up of slumping along northwestern portion of slope.