

Yellow Creek Below Summerhill Gardens - Emergency Works Declaration

To: Councillor Mike Layton, Ward 11, City of Toronto
From: Ashour Rehana, Manager, Capital and Special Projects
Date: 07/31/2019

Toronto and Region Conservation Authority (TRCA) is preparing to undertake emergency erosion control works along a 90 metre stretch of Yellow Creek below Summerhill Gardens in the City of Toronto.

TRCA staff conducted a walk-through of Yellow Creek in January 2019 to identify key areas of erosion concern along the entire watercourse. During this walk-through, an erosion site was identified at the toe of a steep coincident slope below 50 to 66 Summerhill Gardens.

The engineered portion of the channel appears undersized as there is evidence of regular over-topping. A stone and mortar retaining wall on the west bank adjacent to the coincident slope has become undermined and outflanked due to continued erosion. Elevated flows during storm events are now being directed over this retaining wall and towards the toe of the coincident slope on the west bank which is eroding and undermining the toe of the slope. If this hazard is not promptly addressed, continued erosion will result in slope failures which will threaten an existing formal trail and potentially also threaten private dwellings located at the crest of the slope. The proposed emergency works will take place on land owned by the City of Toronto.

It is Toronto and Region Conservation Authority's declaration that the project is to be carried out forthwith in response to an emergency and it is in the interests of public health and safety and environmental and property protection.

The scope of work includes removing the outflanked/undermined stone & mortar retaining wall and realigning the overflow channel away from the base of the coincident slope to mitigate the risk of slope failure precipitated by toe erosion. A dilapidated pedestrian bridge which has been closed by PF&R will be decommissioned to remove the potential safety hazard. A vegetated island (with significant presence of invasive Japanese Knotweed) will be removed to make room for the new channel. The existing engineered channel will be backfilled, graded and planted. The toe of the coincident slope will be protected with an armourstone retaining wall at the upstream end of the failure area and will transition to a vegetated rip rap buttress towards the downstream end. The bed of the new channel will be stabilized by constructing a riffle-pool sequence.

TRCA will incorporate existing stone and aggregate material into the new erosion control structures. This will reduce the amount of new stone material that needs to be imported to the site.

The existing baseflow channel will be used to by-pass flows allowing much of the work to be performed with minimal release of sediment downstream. Construction crews will also follow reasonable Best Management Practices when excavating areas containing Japanese Knotweed.

Construction access to the emergency works site will be from the south entrance to trail off of Mount Pleasant Road. Machinery and equipment will travel north along an existing asphalt trail to the emergency works site. Sections of the asphalt trail that are undersized will be widened with aggregate material to improve access for heavy machinery.

TRCA intends to mobilize its forces as early as Monday, August 12, 2019 and expects the emergency works will take approximately 8-16 weeks to complete. To ensure public safety, formal and informal trails along work areas and the construction access route will be closed until the emergency works have been completed. The trail closure plan will be communicated via signage installed on-site and notices distributed to stakeholders.

For more information, please contact the undersigned at 416-661-6600 Ext. 5524 or ashour.rehana@trca.ca.

Sincerely,

A handwritten signature in black ink, appearing to read 'A. Rehana', with a horizontal line underneath.

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