

TRCA's

Beverley Acres German Mills Creek Erosion Control

Meeting: Community Liaison Committee #1

Date/Time: October 26th, 2023; 4:00 pm – 5:15 pm
Location: Microsoft Teams
Procurement No. 10039108
Aquafor Ref: 67343
Consultant: Aquafor Beech Ltd
Prepared by: Aquafor Beech Ltd (Rob Amos)
Hosted by: Toronto Region Conservation Authority (Phil Wolfram)

Invitees

Name	Company	Telephone	Email
Phil Wolfram (Lead Contact)	TRCA	416.902.3709	Phil.Wolfram@trca.ca
Iris Yan	TRCA	437.552.8438	iris.yan@trca.ca
Rob Amos	Aquafor Beech	416.705.2367	amos.r@aquaforb企业.com
Terrance Singh	Aquafor Beech	-	-
Jacob Ursulak	Aquafor Beech	-	-
Kevin Rustan	York Region	-	-
Roman Larock	York Region	-	-
Jeremy Wychreschuk	City of Richmond Hill	-	-
Kristina Delidjakova	City of Richmond Hill	-	-
Amanda Stock	TRCA	-	-
David Gingerich	TRCA	-	-
Sonia Dhir	TRCA	-	-
Victoria Kramkowski	TRCA	-	-
Residents adjacent to German Mills Creek	N.A	-	-

Objective of Meeting: Project Introduction

Items of Discussion

1. Welcome & Introductions - Phil Wolfram
2. PowerPoint Presentation - Rob Amos
3. Next Steps - Rob Amos
4. Questions - Phil Wolfram & Rob Amos

Item	Topic/Comments	Action By:
1	<p><u>Welcome & Introductions - Phil Wolfrain</u></p> <p>Phil Wolfrain (Phil) started the meeting by welcoming everybody to the meeting and gave a brief overview of the meeting format.</p> <p>Phil specified that the Community Liaison Committee (CLC) is formed from members of Aquafor Beech (Aquafor), Toronto Region Conservation Authority (TRCA), York Region, the City of Richmond Hill, and members from the community.</p> <p>Attendees (names in Microsoft Teams meeting) include:</p> <p><u>TRCA Project Manager and Coordinator</u></p> <ul style="list-style-type: none"> • Phil Wolfrain (Lead Contact) • Iris Yan <p><u>Aquafor Beech Limited</u></p> <ul style="list-style-type: none"> • Rob Amos (Aquafor's Project Manager) • Terrance Singh • Jacob Ursulak <p><u>York Region</u></p> <ul style="list-style-type: none"> • Kevin Rustan <p><u>TRCA Staff</u></p> <ul style="list-style-type: none"> • David Gingerich <p><u>City of Richmond Hill</u></p> <ul style="list-style-type: none"> • Kristina Delidjakova • Jermy Wychreschuk <p><u>Community Members and Interested Parties</u></p> <ul style="list-style-type: none"> • Anna Lockstein • Ben Mehdizadeh • Greg Shannon • Noura Macali • Orhan Danis • Tony Pulla • YRCC #641 represented by Vilius Zigmantas <p>Phil introduced Rob Amos (Rob) and informed that Rob will be leading the meeting.</p>	
2	<p><u>PowerPoint Presentation - Rob Amos</u></p> <p>Rob walked through a PowerPoint Presentation outlining the project, roles of the project team, existing conditions, Municipal Class Environmental Assessment (MCEA) process and statement, planned technical assessment, identified preliminary alternative solutions, and planned public consultation.</p> <p><u>Project Overview</u></p> <ul style="list-style-type: none"> • German Mills Creek and York Region's Sanitary Sewer, between Major Mackenzie Drive East and Palmar Avenue, is the primary focus of the project. 	

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	<ul style="list-style-type: none"> Erosion and natural hazards are placing six (6) sanitary sewer sites at risk, noted with the stars in the presentation slide deck. TRCA, in partnership with York Region, have retained Aquafor to complete a MCEA and detailed design to address risks to York Region infrastructure. <p><u>Project Team Roles</u></p> <ul style="list-style-type: none"> Aquafor specializes in projects of this nature and the project will be led by Rob Amos. Rob Amos will be supported by Jacob Ursulak and Terrance Singh. Phil Wolfram is TRCA's Project Manager who will be supported by Iris Yan. <p><u>Existing Conditions</u></p> <ul style="list-style-type: none"> A York Region sanitary sewer is located adjacent to and crosses German Mills Creek. Common bank protection measures found in the study area include wooden retaining walls, gabion baskets, and timber channel lining. Wooden retaining walls are pieces of lumber / timber which is constructed in the form of a wall to keep soil from falling into the watercourse. Gabion baskets are an older type of bank protection which involve weaving metal into a basket shape and filling the wire mesh basket with rock. Timber channel lining are pieces of lumber / timber that are positioned along the bottom of the channel which form a conveyer belt like structure. Most bank protection measures have failed and contribute to local erosion. Channel erosion around the wooden retain wall caused the wall to lean and overtime fall into the channel. Corrosion of the gabion basket's mesh caused the stones to fall out of the basket. The timber lining was placed on the bottom of the channel and is more resistant to erosion than the adjacent soil banks. Overtime the watercourse has eroded the soil banks, expanding the width of the channel, and the timber lining has not been able to protect the channel bed. Failed bank measures can quicken local erosion and have placed the sanitary sewer at risk of exposure. Exposure of the sanitary sewer can result in a breach of the sanitary sewer which would cause health and safety hazards. German Mills Creek was initially altered in the early 1980's to accommodate the sewer and development of the neighbourhood; however, the creek has naturally realigned and widened. German Mills Creek is more confined with bank protection measures at the upstream areas. The downstream areas don't have as many bank protection measures which has allowed German Mills Creek to widen. During construction of the sanitary sewer, the downstream end was parallel to German Mills Creek. Following creek widening, the sanitary sewer is currently located under the creek bed at the downstream section of the study area. Channel widening has also caused several outfalls to become perched and contributed to local scouring. The silty and soft channel material exacerbates local erosion and susceptibility to widespread erosion. The bank material contains engineering fill material which is highly susceptibility to erosion. 	

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	<p><u>MCEA Process and Statement</u></p> <ul style="list-style-type: none"> Beverley Acres German Mills Creek Erosion Control will follow a Schedule B project under the MCEA process. Phase 1 and 2 of the MCEA Process will be completed and followed up with a detailed design. Below is the MCEA Statement: <p>Toronto and Region Conservation Authority, in partnership with the Regional Municipality of York is initiating a Municipal Class Environment Assessment to identify erosion control solutions for sanitary infrastructure protection. The study area includes municipal lands and easements along German Mills Creek between Major Mackenzie Drive East and Palmer Avenue, in the City of Richmond Hill.</p> <p><u>Planned Technical Assessments</u></p> <ul style="list-style-type: none"> <i>Topographical Survey</i> from Major Mackenzie Dr E to Palmer Ave was completed by TRCA and is used to make the engineering drawings. <i>Tree Inventory and Arborist Report</i> will define key features and identify high value trees to be protected and invasive species that may be removed for construction access into the area. <i>Terrestrial and Aquatic Ecological Inventories Including SAR Screening</i> will define vegetation communities and determine types of ecological enhancement measures to incorporate into the design. <i>Hydraulic Modelling Investigation</i> will evaluate storm flow conditions and optimize the design for erosion protection, while also looking into achieving flood reduction benefits. <i>Geomorphic Analysis</i> will define historic changes in land use and estimate rates of erosion. <i>Geotechnical Investigation</i> will define soil parameters, inform the detailed design, and provide recommendation for disposal of excess material. <p><u>Preliminary Alternative Solutions</u></p> <ul style="list-style-type: none"> Alternatives to be assessed include Do Nothing, Local Works, and Extended Works. <i>Do Nothing</i> is defined by continuous monitoring and delaying restoration works. <i>Local Works</i> includes bank or channel restoration at the six (6) defined sanitary sewer sites. <i>Extended Works</i> involves restoration works across the entire study area. <p><u>Public Consultation</u></p> <ul style="list-style-type: none"> The notice of commencement was sent. 2 Technical Advisory Committee (TAC) and 2 Community Liaison Committee (CLC) Meetings are scheduled. Phil elaborated that the CLC will provide private landowners adjacent to the watercourse an opportunity to participate in the project and engage in project planning in advance of the Public Information Centre (PIC). 1 Public Information Centre will be held in Spring 2024, and is planned in both virtual and in-person formats. The notice of completion is expected to be sent in Summer 2024. 	

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3	<p><u>Next Steps - Rob Amos</u></p> <p>Rob concluded the PowerPoint Presentation and outlined the following key dates below:</p> <ul style="list-style-type: none"> • Final Conceptual Designs - December 2023 • Public Information Center - April 2024 • Final MCEA Project File and MCEA Concept Evaluation Report - June 2024 • Commencement of Construction - July 2026 	
4	<p><u>Questions - Phil Wolfram & Rob Amos</u></p> <p><u>Will a copy of the presentation be sent to participants?</u></p> <ul style="list-style-type: none"> • Phil answered that a copy of the presentation will be provided to all participants as well as posted on the Project Website. • Aquafor will prepare meeting minutes for publication along with the presentation. <p><u>What is the existing depth of cover over the sewer?</u></p> <ul style="list-style-type: none"> • The sanitary sewer elevation was projected onto the bottom of the channel elevation, as shown in the presentation. • Rob indicated that the depth and cover vary depending on the location. • Rob highlighted that the minimum cover (from the bottom of the channel to the top of the sanitary sewer) is less than 1 meter. • Rob elaborated that the best standard practice for sanitary sewer cover is 1 - 2 meters and that the sanitary sewer is not underneath German Mills Creek when the cover shown in the profile is less than 1 meter. <p><u>What is the separation between the creek and sewer?</u></p> <ul style="list-style-type: none"> • Rob indicated that there isn't a requirement / standard on the minimum separation between the creek and sanitary sewer. • Rob highlighted that the best practice is to have a minimum cover of 1 - 2 meters and have a horizontal distance of 2 meters away from the watercourse. • Rob specified that the sanitary sewer has a horizontal distance of 2 meters when the vertical distance between the top of the sewer and bottom of creek is less than 1 meter. <p><u>Is the hydraulic modelling to consider reducing the floodplain?</u></p> <ul style="list-style-type: none"> • The questioner elaborated that they have seen flood waters increase over the years and that flood levels are encroaching towards residential buildings. • The questioner clarified their question and asked if the modelling will show a reduction in flooding and a smaller floodplain. • Rob clarified that the design will not affect the total amount of water flowing into the area. • Rob highlighted that the design will not increase the area of flooding and opportunities will be explored to keep smaller storms confined to the channel. <p><u>In what direction is the preferred design heading towards (Do Nothing, Local Works, or Reach-based Works)?</u></p> <ul style="list-style-type: none"> • Rob highlighted that the EA process will determine the ideal design. • Phil elaborated that all design alternatives will be assessed using different design criteria which will assign a total score to each alternative. 	<p>TRCA</p> <p>ABL</p>

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	<ul style="list-style-type: none"> Phil indicated that the design alternatives will be presented to the public for feedback. Two members of the public indicated their support for a full reach-based restoration of the channel corridor within the project study area <p><u>Is there funding for maintenance after construction of the design?</u></p> <ul style="list-style-type: none"> The questioner elaborated that they have seen garbage, trees, and other items causing debris that buildup in the channel. The questioner clarified their question and asked if there is a budget or maintenance plan for upkeep after construction of the design. Phil specified that TRCA typically includes a 1-year warranty period with their contractor after construction of a design. Phil highlighted this project is being implemented in partnership by York Region and TRCA under the Streambank Infrastructure Erosion Control Management Program. The completed works will be monitored and maintained under this program. <p><u>Is modelling going to include areas upstream of Major Mackenzie Drive East? If not, how will the model account for future changes?</u></p> <ul style="list-style-type: none"> Phil highlighted that TRCA routinely updates their model approximately every 4 years to ensure the data stays relevant. The model update is a separate type of project. The questioner elaborated that flooding has increasingly worsened as the upstream areas were changed from farm land to paved surfaces. Rob explained that there are two types of models associated with watercourses, hydrological model and hydraulic model. Rob specified that the model the questioner asked about is the hydrological model and that Aquafor will use the best technology available to leave the watercourse in the best-case scenario. <p><u>Will there be a need to increase the capacity of the sanitary sewer?</u></p> <ul style="list-style-type: none"> Phil indicated that the design life of the sanitary sewer is typically 100 years and doesn't believe that York Region is currently planning on making any upgrades. Following the meeting Phil contacted York Region for additionally clarity. York Region's response is summarized below: <p>The Richmond Hill Collector [sanitary sewer] has a 100-year design life. There are approximately 67 years remaining and the sewer is currently in good condition. According to inspection records, the sewer does not require any structural upgrades. York Region have no need or plans to expand or upgrade this system in the capital forecast [annual budget]. In the event that additional capacity is required, the existing sewer could be replaced with a larger pipe or a second pipe be added using trenchless technology from Major Mackenzie. In this event there would be no impact to this proposed channel restoration project.</p>	
5	<p><u>Action Items</u></p> <p>ABL to send out Meeting minutes with to the TRCA.</p> <p>TRCA to send the presentation and meeting minutes to participants.</p> <p>TRCA to publish the presentation on their website.</p>	<p>ABL</p> <p>TRCA</p> <p>TRCA</p>

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	<p style="text-align: center;">Next Meeting – CLC Meeting #2: Wednesday March 6, 2024</p> <p style="text-align: center;">If you notice any errors or omissions in this document, please advise TRCA or Aquafor Beech within ten (10) business days of the issuance of these minutes.</p>	