

### Section I – Items for Board of Directors Action

**TO:** Chair and Members of the Board of Directors  
Meeting #6/20, Friday, September 25, 2020

**FROM:** Sameer Dhalla, Director, Development and Engineering Services

**RE:** **ONTARIO LINE SUBWAY PROJECT**  
Draft Environmental Conditions and Early Works reports and future  
Environmental Impact Assessment report

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#### KEY ISSUE

To highlight key locations and technical concerns related to Draft Environmental Conditions and Early Works reports that will inform the future Environmental Impact Assessment Report for the Ontario Line Subway Project.

#### RECOMMENDATION

**WHEREAS** on June 30, 2020 the Government of Ontario filed O. Reg. 341/20 for the Ontario Line Project which allows for high priority transit projects to be constructed quickly, economically, and transparently while maintaining environmental oversight;

**WHEREAS** the preferred alignment within TRCA jurisdiction crosses multiple priority areas for natural heritage features and functions, including valley and stream corridors, forests, wetlands, wildlife connectivity areas, as well as natural hazard areas which can exacerbate flood and erosion risks;

**WHEREAS** the preferred alignment crosses several existing and proposed flood protection infrastructure, most notable of which is the proposed East Harbour Flood Protection Landform;

**WHEREAS** the preferred alignment crosses several TRCA-owned properties, including the E.T. Seton Park Area of Natural and Scientific Interest (ANSI) and Crothers Woods Environmentally Significant Area (ESA) which would result in significant impacts;

**THEREFORE, LET IT BE RESOLVED THAT** TRCA staff continue to work with Metrolinx staff through the Ontario Line Regulation (O. Reg. 341/20) and TRCA Voluntary Project Review (VPR) processes to address areas of environmental and development concern, including flood protection, erosion hazard management, natural heritage mitigation and compensation, crossing and pier locations, valleyland encroachment, and the alignment in the E.T. Seton Park ANSI;

**THAT** Metrolinx be requested to provide written responses to all TRCA comments, reports, and Board recommendations, as well as to provide technical studies in support of the preferred alternatives prior to confirming preferred alternatives and in doing so, address and commit to the recommendations outlined in Attachment 2;

**THAT** Metrolinx be requested to provide TRCA copies of the Environmental Conditions and Early Works reports, as well as the Environmental Impact Assessment Report and the associated appendices as per the terms of the TRCA-Metrolinx service level agreement;

**THAT TRCA staff report back to the Board of Directors once the complete draft Environmental Conditions Report, final Early Works Report and Final Environmental Impact Assessment is submitted by Metrolinx and provide confirmation of the recommended alternatives and their impacts;**

**AND FURTHER THAT Metrolinx, the City of Toronto, and Waterfront Toronto, and other relevant review agencies be circulated a copy of this staff report.**

### **BACKGROUND**

In April 2019, the province announced funding for the Greater Toronto Area's (GTA) transit network of four subway projects, including the new Ontario Line Subway (OLS) as well as the Scarborough Extension, Yonge Subway Extension, and Eglinton West LRT. On June 6, 2019, the Getting Ontario Moving Act received Royal Assent which, in part, amended the Metrolinx Act, 2006 to identify Metrolinx as being solely responsible for the design, development or construction of these projects. On February 18, 2020, to support the Building Transit Faster Act, the province proposed regulations to modify the existing environmental assessment process for four select priority transit projects in the Greater Toronto and Hamilton Area. Amendments made to existing O. Reg 231/08 related to the Scarborough Extension, Yonge Subway Extension, and the Eglinton West LRT. For the Ontario Line, a stand-alone O. Reg. 341/20 was approved in order to allow for more certainty in project planning and reduce the risk of delays. TRCA staff provided comments to the Ministry of Environment, Conservation and Parks on this regulation through the associated Environmental Registry of Ontario (ERO) posting ([ERO #019-0614](#)). A copy of [TRCA's submission](#) to the ERO was included as an attachment to a Summary Report on Policy Consultation Submissions to the Board of Directors, at Meeting #3/20 held on April 24, 2020.

### **Ontario Line Regulation (O. Reg. 341/20)**

The Ontario Line Regulation, O. Reg. 341/20. requires three main components be completed:

1. Environmental Conditions Report,
2. Early Works Report(s), and
3. Environmental Impact Assessment Report.

The new process largely follows the existing Environmental Assessment process for transit projects. Each reporting stage requires technical document support, consultation with the public, agencies, and Indigenous communities, and issues resolution if necessary. Provisions for Early Works projects are new and are intended to increase flexibility in obtaining permits in advance of the environmental impact assessment report being finalized. The approval process for Early Works include provisions for addressing concerns through an issue resolution process. The approval process for both the Early Works Report(s) and the Environmental Impact Assessment Report require Minister's Review and a Statement of Completion.

The Early Works Report can be prepared simultaneously with the Environmental Conditions Report. The Early Works report will summarize the site-specific environmental conditions, evaluate impacts, propose mitigation and monitoring measures, and a list of any permits and approvals that may be required. Detail design can commence once a Statement of Completion is prepared for the Early Works, prior to the Environmental Impact Assessment stage being complete. When the project moves to detailed design, Metrolinx has advised that it will be seeking TRCA Voluntary Project Review (VPR) and as such will adhere to standard

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requirements of our regular regulatory review under Ontario Regulation 166/06.

### **Ontario Line Subway Project**

The OLS will accommodate current and future ridership demands on TTC Line 1, increase capacity and relieve crowding at the TTC Bloor-Yonge interchange station, and provide new transit capacity to relieve overcrowding on the surface transit network. The OLS builds on previous work from the TTC Relief Line South and SmartTrack concepts but expands the line north to the Ontario Science Centre, and west to Exhibition/Ontario Place (see **Attachment 1**). In all, 15 stations are proposed, with connections to three GO Transit lines (Lakeshore East, Lakeshore West, and Stouffville), and the Queen, King, Bathurst, Spadina, Harbourfront, and Gerrard/Carlton streetcar routes. The project will be constructed in a dedicated right-of-way with a combination of elevated, tunneled, and at-grade segments.

### **RATIONALE**

TRCA is currently working with Metrolinx to review draft Environmental Conditions and Early Works reports, as well as background technical information. As the information provided by Metrolinx to date is incomplete, much of the environmental information and analysis below was completed for the purposes of this Board report using TRCA information. As such, it should not be used in place of the comprehensive study and evaluation to be completed by Metrolinx.

The following analysis focuses on TRCA regulated areas and key staff recommendations (Attachment 2). As shown on Attachment 1, there are two areas of TRCA focus, the Lower Don, divided into four study areas and the Upper Don River and West Don River, divided into three study areas. Specific TRCA interests are detailed below and a compilation of recommendations are provided in Attachment 2.

### **Lower Don River Study Areas**

- Area 1:** Permanent shift of Richmond Hill GO Corridor north toward the West Don Flood Protection Landform (FPL)
- Area 2:** Two new crossings on either side of the existing rail crossing south of Eastern Avenue (Early Works #1)
- Area 3:** New East Harbour Station between the Lower Don River crossing and Eastern Avenue (Early Works #2)
- Area 4:** Expansion of the Lakeshore East rail corridor between Eastern Avenue and Logan Avenue (Early Works #3)

Of key interest to TRCA in the Lower Don River Study Area are potential flood plain impacts and flood protection concerns, as shown on Attachment 3 and as follows:

- [West Don Lands Flood Protection Landform](#) (WDFPL) – Existing
- [Don Mouth Naturalization and Port Lands Flood Protection Project \(DMNP\)](#) - Proposed
- [East Harbour Flood Protection Landform](#) (EHFPL) - Proposed
- [Broadview and Eastern Flood Protection Municipal Class EA \(BEFP\)](#) – Proposed

### **AREA 1: LOWER DON RIVER Realigned Richmond Hill Corridor**

The Ontario Line tracks will meet grade at the Don Yard, which will require a permanent shift of the Richmond Hill GO corridor further north. Metrolinx has stated that impacts to the WDFPL are not anticipated. However, TRCA staff has concerns that the space limitations of this area may make impacts unavoidable, as the conceptual design presentation identified staging and storage areas on the FPL. TRCA interests in this area include:

#### **1. Flood Control**

- a. Flooding remains a main concern for a large part of the Richmond Hill GO corridor. In this section of the corridor, the Don River floods above the 350-year storm event. As TRCA will not support flood plain impacts resulting from the proposed works, mitigation measures may need to be considered.
- b. The project requires a shifting in the alignment of the Richmond Hill Line. In designing the realignment, it will be important to avoid impacting the WDFPL.

#### **2. Parkland, Trails and TRCA Lands**

- a. Most lands adjacent to the Richmond Hill GO Corridor are owned by TRCA. Should the realignment of the corridor extend beyond the Metrolinx right-of-way, a length of approximately 550 metres of TRCA land has the potential to be impacted.
- b. TRCA staff is concerned about any potential impacts to Corktown Common, a popular public space amenity in an urban core area with limited nearby greenspace access, managed by the City of Toronto.

### **AREA 2: LOWER DON RIVER New Lower Don River Crossing - Early Works**

The Lower Don Crossing Early Works will include construction of two new rail bridges over the Don River, to the north and south of the existing rail bridge, as well as utility relocations within the Lakeshore East rail corridor. The bridges will be constructed parallel to the existing rail bridge and will also provide multi-use connections for pedestrians and cyclists. TRCA interests in this area include:

#### **1. Flood Control**

- a. This area currently floods at the 50-year storm and is completely under water in the Regional Storm. Metrolinx is currently examining flood plain impacts through hydraulic modelling which assumes the proposed downstream flood protection works (i.e., DMNP) have been implemented.
- b. The Don Landing Restoration area is proposed as space for construction staging and offices. This area also floods at the 50-year storm and is a flood conveyance zone for the WDFPL with velocities of up to 1.5 metres/s. This poses flood risk to people and property.
- c. Metrolinx has not addressed impacts associated with the existing and planned flood protection infrastructure in this area, including integration with the East Harbour FPL as could be required to mitigate flood impacts on the OLS. Also not addressed are considerations for joint funding and implementation of a proposed BEFP north of the rail embankment.
- d. Metrolinx has not provided details or mitigation strategies for bridge works that are in proximity to the existing WDFPL.

### 2. Parkland, Trails and TRCA Lands

- a. Most lands adjacent to the Richmond Hill GO Corridor are owned by TRCA. If encroachment is unavoidable, TRCA staff estimate that approximately 0.5 ha of property could be required.
- b. There is a connection and access to the Regional Trail Network in this area and details regarding how the existing multi-use path is impacted by flooding as well as how it integrates with the WDFPL are required. Through this project there is also opportunity to redesign the trail to improve flood resiliency through features such as landscaping, trail grades and trail surfacing.

### AREA 3: LOWER DON RIVER East Harbour Station - Early Works

The East Harbour Station is a multi-modal transit hub that will serve several modes of public transit. This Early Works project includes two cross platforms situated between the Don Valley Parkway and Eastern Avenue, station access points to the north, south, and west (via the crossing), expansion of the Eastern Avenue rail bridge to accommodate the six-tracks, and an interim service road on the north side of the station for construction and emergency access. TRCA interests in this area include:

#### 1. Flood Control

- a. This area is prone to flooding in the 50-year storm and up to 1 metre in the Regional storm. Although the rail embankment and areas south of the rail corridor may no longer be subject to flooding once the implementation of the PLFP Project, areas north of the tracks will remain in the flood plain and vulnerable to flooding even with a complete implementation of the preferred alternative in the DMNP EA (2015). Metrolinx has not yet identified mitigation measures.
- b. TRCA staff understand that Metrolinx is working with all stakeholders in this area regarding key future flood proofing infrastructure. Future mitigation measures will need to address the following items (see **Attachment 4**):
  - [Approved DMNP EA](#) – Key flood protection measures have been authorized to tie-in with the existing railway embankment at Don Valley Parkway and Eastern Avenue Underpass;
  - [Port Lands and South of Eastern Transportation and Servicing Master Plan](#) – requires a new Broadview underpass with expanded flood protection tie-ins and drainage with the railway embankment;
  - [Gardiner Expressway and Lake Shore Boulevard Reconfiguration EA](#) – requires opening of bridge crossing on east side of Don River through railway embankment to accommodate Hybrid 3 option; and,
  - [Broadview Avenue Planning Study](#) – the extension of Broadview Avenue cannot pass under/through the proposed East Harbour Station until flood protection is complete, particularly to the north where proposed remediation is not yet approved or funded. To create an opening from the north, a flood prone area, will jeopardize the flood proofing investments planned and/or implemented to the south as part of the EHFPL.
- c. TRCA staff have identified that there are mutually beneficial outcomes for all stakeholders if the proposed BEFP flood protection infrastructure is constructed prior to the OLS, as this serious flood hazard risk would be mitigated. The City,

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Waterfront Toronto, and TRCA are actively working together on this project, however, at this time a preferred strategy, funding and timelines for implementation have not been determined. If the station is built prior to the implementation of the flood protection infrastructure, there is risk of increased flood risk to downstream areas. As such, mitigation strategies may be required for the station in the interim and must be included as part of the Early Works report.

### **AREA 4: LOWER DON RIVER**

#### **Expansion of Lakeshore East Rail Corridor - Early Works**

The Lakeshore East Joint Corridor Early Works will primarily consist of the Lakeshore East rail corridor expansion to accommodate six tracks (two for the proposed Ontario Line and four for heavy rail), noise walls, retaining walls, two new bridges on either side of the existing Queen Street East, Dundas Street East, and Logan Avenue rail bridges (totaling 6), and utility relocations. TRCA interests in this area include:

##### **1. Flood Control**

- a. Although TRCA's EA for the BEFP is almost complete and will identify the necessary flood protection necessary to remove the flood risk to this area, without funding and implementation, the area to the west of this corridor expansion is entirely within the flood plain during the Regional Storm and mitigation strategies must be identified.

#### **Upper Don River and West Don River Study Areas**

- Area 5:** Minton Crossing - new Upper Don River crossing south of Millwood Avenue  
**Area 6:** New Maintenance and Storage Facility (MSF) – Wicksteed Site  
**Area 7:** New crossing of the West Don River / E.T. Seton Park, north of Overlea Blvd to join Don Mills Road

Of key interest to TRCA in the Upper Don and West Don River are significant earthworks and impacts to the extensive Natural Heritage System, as shown on Attachment 4.

### **AREA 5: UPPER DON RIVER**

#### **Millwood/Minton Crossing**

A conceptual rendering a new crossing of the Upper Don River, to be located south of Leaside Bridge on Millwood Avenue, shows the bridge as a concrete segmental bridge with 6 to 8 potential piers within the valley system. The tracks to the south of this area will be below grade and will exit from a portal in the valley wall at Minton Place, then slope upwards to transition to the elevated section of the Ontario Line subway. TRCA interests in this area include:

##### **1. Flooding**

- a. Piers placed within the valley corridor could create hydraulic restrictions. Additional flood plain impacts must be avoided.

##### **2. Erosion**

- a. Based on preliminary information, upwards of 6,000 m<sup>2</sup> of valley slope surface may be altered, with a potential need for additional engineered solutions to stabilize slope alterations.

### 3. Natural Heritage

- a. In total, approximately 27 hectares of natural cover will be impacted within this area including 2 wetland features and a high priority stream.
- b. The proposed alignment fragments the priority areas for habitat connectivity and wildlife movement for species needing to move between forests (60 ha) and wetlands (17 ha). Additional impacts of railways in terms of noise and light pollution are expected, which will ultimately affect the ecological functions of the surrounding habitat and wildlife.
- c. TRCA data of species found within this area, includes 14 flora and 14 fauna regional and urban species of concern, and 1 ELC vegetation community of concern, covering about 1.8 hectares.
- d. In order to better avoid, minimize or mitigate impacts on the natural heritage, as well as to determine portal and pier placement, complete natural heritage surveys on flora, fauna and vegetation community as well as tree inventories should be conducted. As avoidance, minimization and mitigation may not be possible, compensation will be required and will be addressed at the VPR stage when impacts are quantified.

### 4. Parkland, Trails, and TRCA Lands

- a. The proposed line crosses TRCA-owned, City of Toronto-managed property, Crothers Woods. The area is a popular mountain biking destination and includes sections of the existing Don Mills/Lower Don Recreational Trail as well as part of the regional trail network, The Great Trail (formerly known as the Trans Canada Trail), and the Pan Am Path.

## AREA 6: UPPER DON RIVER Maintenance and Storage Facility (Wicksteed Site)

The Maintenance and Storage Facility (MSF) is in an existing industrial area surrounding Wicksteed Avenue and Beth Neilson Drive. Most of the site is bounded by the steep slopes of the West Don River Valley Life Science ANSI/E.T. Seton Park ESA, with the hydro corridor to the south and the CPR track to the west. TRCA interests in this area include:

### 1. Erosion

- a. Metrolinx has completed geotechnical and geomorphological analyses to confirm the Long-Term Stable Top of Slope (LTSTOS) and used this information to define the development limit for the MSF and avoid or minimize encroachments onto the slope. This design is still in the conceptual stages as further design and assessment work is needed.
- b. The MSF will require encroachment on the south top of slope and the west end of the south valley, but direct impacts on most of the south valley will be avoided. Encroachment into the south valley will be a maximum of 20 metres on both sides of Beth Neilson Drive. Erosion prevention measures will include a retaining wall (of up to 10 metres) and soil nails in the upper 14 metres of the slope.
- c. *Northeast to East Slope:*
  - i. Metrolinx is seeking to avoid impacting the slope at this area and are exploring engineering options to avoid slope disturbance. If such a solution is feasible for this site, then the disturbed valley wall surface for the northeast to east will be minimal (close to zero); however, the proposed risk mitigation strategy has not been fully assessed to-date and as a result, other options may be required. Should a design change be necessary, to provide the adequate level of stability acceptable to TRCA in terms of factor of safety,

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there is the potential for the removal of slope vegetation for this valley wall slope (up to approximately 35000 m<sup>2</sup> for the northeast to east boundary).

- ii. For the section of slope where the watercourse meanders close to the slope, channel works may also be needed to prevent toe erosion and not trigger further long-term instability. The additional disturbance to the valley corridor could be 100 to 200 m of the length of the watercourse, particularly at the middle section of the northeast to east slope.
- iii. TRCA has two slope treatment structures next to this area on Wicksteed Avenue. Experience has shown that stormwater runoff is creating serious gulying along the slope, leading to failure of TRCA slope drain systems in place to offset runoff.
- d. *South Slope:*
  - i. Based on what has been presented to TRCA, the south slope may need to be altered and reconstructed to accommodate the proposed works. Stabilization methods include retaining walls (potentially 10 m high), soil nailing and slope reconstruction by infilling or creating a berm. In those scenarios, the majority of the slope segment will need to be disturbed to either accommodate the proposed footprint or to facilitate the temporary means for a safe construction (i.e., temporary excavations and/or alterations to create a construction work area for machinery and installation equipment).
  - ii. The detailed design information has not yet been provided for the earthworks and engineering. The potential disturbance of the valley wall in the south slope area is approximately 25,000 m<sup>2</sup>.

### 2. Natural Heritage

- a. A total of 23 ha of natural cover may be directly impacted, including 5 wetland features, 12 ha of areas designated as ANSI and 7.5 ha of ESA.
- b. In terms of biodiversity there are 34 flora species of concern, 12 fauna species of concern, and 4 ELC vegetation communities of concern that may be impacted.
- c. This section is also identified as the priority areas for habitat connectivity and wildlife movement for species needing to move between forests (26 ha) and between forests and wetlands (18 ha).
- d. Additional impacts of railways in terms of noise and light pollution are expected, which will ultimately affect the ecological functions of the surrounding habitat and wildlife. Though these cannot be estimated quantitatively without further design details, careful consideration should be given to these impacts and their mitigation.
- e. The slope stabilization engineering works will limit the options for replanting and constrain any the potential to restore parts of the slope face with mature trees. This will cause permanent impacts to this ecologically significant area.

### 3. Parkland, Trails and TRCA Lands

- a. TRCA owns the entire northern and eastern slope of the proposed MSF. It is estimated that 0.19 ha of TRCA property could be impacted.

## AREA 7: WEST DON RIVER

### E.T. Seton Park Crossing (Overlea Crossing)

A conceptual rendering a new crossing of the West Don River, to be located near Overlea Blvd., shows the bridge with 6 to 8 potential piers within the valley system, exiting the MSF at grade and crossing the valley to an elevated alignment along Don Mills Road. TRCA interests in this area include:



### 1. Erosion

- a. *Slope Stability Hazard – West Valley:*
  - i. The west valley slope where the Overlea crossing exits the MSF is very steep and the proximity of the toe of the slope to the watercourse makes it vulnerable to long-term erosion hazards and slope instability. Based on the slope steepness and height, TRCA staff is concerned that engineered slope stabilization works may be needed for the entire slope height, approximately 3000 m<sup>2</sup>.
  - ii. It is further estimated that an area of about 100 metres at the toe of the valley slope near the watercourse will need some additional toe protection works.
- b. *Slope Stability Hazard – East Valley:*
  - i. The alignment will require significant an estimated total of 3,000 m<sup>2</sup> earthworks, as well as abutment works and retaining walls at the crossing.
- c. After the crossing, the alignment approximately follows the existing top of slope and runs parallel to the existing top of slope for no less than 350 metres in the regulated area, where the slope is about 25 metres high. The alignment needs to be adequately apart from the top of slope to prevent long-term erosion hazards. Due to site constraints, the proposed alignment in this area may also require further engineering of the slope to obtain the necessary stability (i.e., retaining structures, slope reinforcement by soils nail, anchors or similar).
- d. While there are no active erosion hazard sites near the proposed Overlea crossing, erosion control is major consideration for works in this area:
  - i. An existing erosion control structure is located approximately 150-200 metres upstream of the proposed crossing location along a sharp outer meander of the West Don River. This structure is a gabion basket retaining wall/revetment (ID# DR05.9) and is being investigated for potential major maintenance works as part of our upcoming Class EA within E.T. Seton Park.
  - ii. There are dozens of erosion control structures downstream of the confluence of the West Don River and Walmsley Brook. While TRCA does not own most of the structures, TRCA does own/monitor a few revetments along this stretch as well. It will be critical that the Metrolinx crossing/works in this area do not cause velocities to increase downstream, which may adversely impact existing erosion control structures.

### 2. Natural Heritage

- a. In total, about 39 ha of natural cover will be impacted within this area including 5 wetland features and a high order priority stream. This area also bisects a forest on the valley slope to the north of this valley crossing as it approaches Don Mills Road.
- b. In terms of biodiversity there are 38 flora and 29 fauna species of regional and urban concern, and 5 ELC vegetation community of concern covering about 1.8 ha in area.
- c. The proposed alignment fragments priority areas for habitat connectivity and wildlife movement for species needing to move between forests (89 ha) and between forests and wetlands (40 ha). Additional impacts of railways in terms of noise and light pollution are expected, which will ultimately affect the ecological functions of the surrounding habitat and wildlife.

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- d. The slope stabilization engineering works will limit the options for replanting and constrain any the potential to restore parts of the slope face with mature trees. This will cause permanent impacts to this ecologically significant area.

### 3. Parkland, Trails and TRCA Lands

- a. Depending on the alignment of the Overlea crossing, it is estimated that TRCA property may be impacted.
- b. The proposed alignment in this area crosses TRCA-owned, City of Toronto-managed property (E.T. Seton Park) and an existing section of the Don Mills (West Don) Trail, a [major city-wide cycling route](#) and multi-use path. To ensure that connectivity remains in the long-term, stations should have active transportation amenities (e.g., safe pedestrian connections, lighting, lit crossings, bike parking, bike wash stations, etc.) to promote active transportation as a safe first mile/last mile option for transit connections.

### **NATURAL HERITAGE RESTORATION AND COMPENSATION**

Metrolinx has examined a range of alignment alternatives and due to the magnitude of the proposed work, impacts to the natural heritage system, species and their habitat, and habitat connections will be unavoidable in some locations. Given the complexity of this work, and the unavoidable impacts to significant and sensitive areas throughout the TRCA jurisdiction, it will be imperative that losses to core features and their functions, contributing areas, as well as losses to lands required for habitat connectivity and buffers be restored. The loss of restorable lands as a result of the proposed works through the Don Valley NHS should also be considered and compensated for, to the extent possible, with the intent to preserve and improve ecological health of the area. Metrolinx will use its ecosystem compensation guidelines for this project. TRCA had input into the development of these guidelines and for TRCA regulated areas, the guidelines closely follow TRCA's ecosystem compensation guidelines.

### **CLIMATE CHANGE MITIGATION**

In October 2017, MECP released a guideline under the Ontario environmental assessment legislation directing that all projects going through the EA process, including IEAs, Class EAs, and those governed by EA regulations, must consider impacts to and opportunities for climate change mitigation and adaptation, and consider the vulnerability of projects to climate change. It was further recommended that applicable policies in the 2014 **Provincial Policy Statement** be addressed, including but not limited to encouraging green infrastructure and strengthening stormwater management requirements; requiring consideration of energy conservation and efficiency, reduced greenhouse gas emissions and climate change adaptation (e.g. tree cover); and consideration of the potential impacts of climate change that may increase the risk associated with natural hazards (e.g. flooding due to severe weather).

The climate change section of the EA should include recommendations for Green Infrastructure, Sustainable Energy, Sustainable Buildings and Sustainable Construction Practices. TRCA has recommended that a [completed Sustainable Technologies for Green Building, Green Infrastructure, and Sustainable Energy Design Evaluation Matrix](#) be included in the EA document.

### **STORMWATER MANAGEMENT**

Stormwater management is integral to the health of streams, rivers, lakes, fisheries and terrestrial habitats, and source water protection is integral for managing the quality and quantity

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of drinking water at its source. TRCA will require the OLS to meet the criteria in the TRCA 2012 [Stormwater Management Criteria](#) document for water quantity, water quality, erosion control, discharge water temperature, and water balance for groundwater recharge and natural features. Additionally, TRCA will require that Green Infrastructure techniques, including Low Impact Development (LID) measures should be used to address issues related to stormwater management, as well as maximize ecosystem services and mitigate the impacts of urbanization and climate change as identified in the [TRCA Introduction to Green Infrastructure](#), the Sustainable Technologies Evaluation Program (STEP) -[Urban Runoff Green Infrastructure](#) and the STEP 2010 [Low Impact Development Stormwater Management Planning and Design Guide](#).

### **PUBLIC REALM AND COMMUNITY BENEFITS**

TRCA staff understands that Metrolinx is committed to providing project-based community benefits where possible to support local opportunities for social and environmental improvements. We have identified to Metrolinx that there are a number of TRCA programs that actively engage with local communities to support a green, local economy, such as [TRCA Trails Program](#), [Sustainable Neighbourhood Retrofit Action Plans](#), [TRCA Conservation Land Care Program](#), [TRCA Community Transformation Program](#) and [Partners in Project Green](#), and recommended Metrolinx with TRCA and other partners to integrate such benefits into the OLS project. Specific examples include opportunities for developing trailheads where trails are in proximity to stations, or to explore opportunities to incorporate natural heritage or ecological features into facility design. TRCA staff also see an opportunity to integrate art, environmental education and stewardship into wayfinding for the OLS, such as design graphics and sign elements into the station designs, entrances and pedestrian access points. TRCA often encourages that as a minimum, Metrolinx incorporate simple educational ecological materials, information, or monuments into station entrance design that portray and inform local communities of the nearby natural heritage assets or TRCA/City trails wherever possible.

### **Relationship to Building the Living City, the TRCA 2013-2022 Strategic Plan**

This report supports the following strategies set forth in the TRCA 2013-2022 Strategic Plan:

**Strategy 2 – Manage our regional water resources for current and future generations**

**Strategy 3 – Rethink greenspace to maximize its value**

**Strategy 4 – Create complete communities that integrate nature and the built environment**

**Strategy 6 – Tell the story of the Toronto region**

**Strategy 7 – Build partnerships and new business models**

**Strategy 8 – Gather and share the best sustainability knowledge**

**Strategy 10 – Accelerate innovation**

**Strategy 12 – Facilitate a region-wide approach to sustainability**

### **FINANCIAL DETAILS**

- The project review fees are included as part of the TRCA-Metrolinx Service Level Agreement.
- Negotiations regarding natural heritage compensation, TRCA property acquisition or other programs not included in the SLA will be addressed through regular TRCA and will be informed through the review process.

### **DETAILS OF WORK TO BE DONE**

- TRCA staff will continue to work with Metrolinx to review and comment on the

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- Environmental Conditions and Early Works reports, as well as the Environmental Impact Assessment Report.
- TRCA staff will report back to the TRCA Board of Directors once the draft Environmental Conditions and Early Works reports, are received as well as the final Environmental Impact Assessment Report and provide updates as to how TRCA recommendations have been addressed.
  - TRCA will work with Metrolinx and ProjectCo. through the Voluntary Project Review process under the terms of the Metrolinx-TRCA Service Level Agreement and advise the Board of Directors of TRCA of issued VPR letters through the regular reporting process.

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**Date: September 15, 2020**

**Attachments: 4**

Attachment 1: Ontario Line Alignment

Attachment 2: Recommendations

Attachment 3: Flood Protection Infrastructure of the Lower Don

Attachment 4: Natural Heritage System of the Upper/West Don  
the Upper/West Don