TORONTO

REPORT FOR ACTION

2022 Mid Humber Gap Municipal Class Environmental Assessment

Date: June 23, 2022
To: Infrastructure and Environment Committee
From: General Manager, Transportation Services and General Manager, Parks, Forestry and Recreation.
Wards: 1 – Etobicoke North, 5 – York-South Weston

SUMMARY

The Mid Humber Gap is located within Wards 1 (Etobicoke North) and Ward 5 (York-South Weston). It refers to an 800 metre (m) gap in the Humber River Trail (HRT) between Crawford-Jones Memorial Park to the north, and the Mallaby Park to the south.

The Mid Humber Gap constitutes a significant barrier to a continuous HRT system from Toronto's northwest boundary to Lake Ontario and is also a barrier to delivering the future Loop Trail. The Loop Trail will be a continuous 65 kilometre (km) off-road, multi-use ring trail that will connect multiple ravines, neighbourhoods, and trail systems throughout Toronto.

In 2019, a preliminary feasibility study was undertaken to evaluate trail alignment concepts that would close this gap in the HRT. The preliminary findings of this analysis provided strong rationale for undertaking a more rigorous evaluation framework. This lead to the City of Toronto, together with the Toronto and Region Conservation Authority (TRCA), initiating a Municipal Class Environmental Assessment (MCEA) study in 2021 to identify the preferred multi-use trail alignment for the Mid Humber Gap. Public input was incorporated through two rounds of public consultation which included virtual public meetings, Stakeholder Advisory Group sessions, online questionnaires and individual meetings with property owners.

Among the emerging directions, this report recommends the preferred trail alignment, an in-valley option, for endorsement by City Council. The recommended preferred design consists of an asphalt 4 m wide multi-use trail, including two pedestrian-cycle bridges and an elevated boardwalk. From Crawford-Jones Memorial Park, the trail would cross the Humber River via a new pedestrian-cycle bridge. A paved multi-use trail would be built along the west bank of the Humber River through land owned by the Weston Golf and Country Club (WGCC). A second pedestrian-cycle bridge would connect to the east bank of the Humber River on land owned through a private trust. A new paved multi-use trail through the land trust property would connect to the existing HRT at Mallaby Park.

RECOMMENDATIONS

The General Manager, Transportation Services and General Manager, Parks, Forestry and Recreation recommend that:

1. City Council endorse the recommended preferred trail alignment concept for the Mid Humber Gap to include the in-valley Concept 1A as per Attachment 1.

2. City Council request the Toronto and Region Conservation Authority and General Manager, Transportation Services and General Manager, Parks, Forestry and Recreation to prepare the Final Report, issue the Notice of Completion, and put the Final Report in the public record in accordance with the requirements of the Municipal Class Environmental Assessment.

FINANCIAL IMPACT

A preliminary capital cost estimate of approximately $7,500,000 (excluding property costs) has been identified for the recommended preferred design.

Funding for the trail development works (excluding property) is included within the 2022 – 2031 Council Approved Capital Budget and Plan for Transportation Services under CTP817-05. Operating costs for the trail maintenance will be identified as an operating impact of capital in a future Parks, Forestry and Recreation budget submission.

Funding for the land acquisition, which has been based on a preliminary estimate of potential costs and land values, has been allocated within Parks, Forestry and Recreation's 2022-2031 Council Approved Capital Budget and Plan, in the Parkland Acquisition sub-project, with funding from Section 42 Parkland Acquisition Cash-in-lieu Reserve Funds. If additional funding is required, funds would need to be secured and considered along with other priorities through a future budget process. Approval for specific acquisitions will be sought at a later date through either use of delegated authority or a report to Council, pending the result of detailed appraisals and negotiations with private property owners.

The Chief Financial Officer and Treasurer has reviewed this report and agrees with the financial impact information.

DECISION HISTORY

On June 5, 2012, Toronto City Council approved the Bikeway Trails Implementation Plan, which identified and prioritized new bikeway trail connections to expand and enhance Toronto’s bikeway network. As one of 26 projects identified within the Plan, the Mid Humber Gap constitutes a significant barrier to a continuous trail system from Toronto’s northwest boundary to Lake Ontario.
http://app.toronto.ca/tmmis/viewAgendaItemHistory.do?item=2012.PW15.2

On January 29, 2020 Toronto City Council approved the Ravine Strategy Implementation report, which outlined a balanced approach to funding the ravine system over the long term. This approach included several recommended strategies, including investment, in partnership with TRCA and Evergreen Canada to advance the implementation of the Loop Trail. The Loop Trail is a sixty-five (65) km off road, multi-use ring that will connect multiple ravines, neighbourhoods and trail systems throughout Toronto. The Mid Humber Gap trail has been identified as a significant gap in the future Loop Trail.
http://app.toronto.ca/tmmis/viewAgendaItemHistory.do?item=2020.EX12.1

On December 15, 2021 Toronto City Council approved the Cycling Network Plan Update, which established a new timeframe for cycling network programming and planning to improve road work coordination, accountability, and implementation. The Mid Humber Gap trail was identified for study in the near-term priorities (2022-2024).
http://app.toronto.ca/tmmis/viewAgendaItemHistory.do?item=2021.IE26.10

COMMENTS

Project Purpose & Background

In 2012, City Council adopted the Bikeway Trails Implementation Plan, which identified and prioritized new bikeway trail connections to expand and enhance Toronto's bikeway network. As one of 26 projects identified within the Plan, the Mid Humber Gap constitutes a significant barrier to a continuous trail system from Toronto's northwest boundary to Lake Ontario and is also a gap in the future Loop Trail. The Loop Trail will be a continuous 65 km off-road, multi-use ring trail that will connect multiple ravines, neighbourhoods, and trail systems throughout Toronto.

Previously comprised of a gap of approximately 1.4 km between Weston Road and Lawrence Avenue West, the City has taken a multi-phased approach to close the Mid Humber Gap in order to provide a continuous multi-use trail connection along the Humber River Trail (HRT).

Phase 1 was completed in 2013, which included the implementation of a 600 m trail connecting Mallaby Park to the HRT system by converting a pre-existing informal foot trail into a 3.5 m wide paved multi-use trail.

In 2019, the City and TRCA completed a feasibility study to evaluate trail alignment concepts that would close the remaining 800 m gap in the HRT between Mallaby Park and Crawford-Jones Memorial Park. The feasibility study evaluated a range of conceptual trail alignments and identified "in-ravine" and "on-road" options for further investigation.

The preliminary findings of the feasibility study provided a strong rationale for undertaking a more rigorous planning framework via the Municipal Class Environmental Assessment (MCEA) Schedule B process, which was formally launched in March 2021.

Building off the significant work completed to date, the primary objective of the Mid Humber Gap MCEA is to identify a preferred multi-use trail alignment for the remaining 800 m gap in the HRT between the Mallaby Park staircase west of St. Phillips Road and the southern entrance to Crawford-Jones Memorial Park off Cardell Avenue.

Public involvement is an integral part of the MCEA process, and public input was incorporated through two rounds of public meetings, a Stakeholder Advisory Group, an online questionnaire, and other consultation activities.

Project Study Area

The project study area is illustrated in **Figure 1** and is bounded to the east by St. Phillips Road and Weston Road and to the west by the WGCC. Approximately 1 km of the Humber River is encompassed within the project area, which sits within the Lower Humber sub-watershed.

The Mid Humber Gap project study area is located between two completed sections of the HRT; to the north, at Crawford Jones Memorial Park just west of Cardell Avenue and, to the south, the Mallaby Park staircase at St. Phillips Road.

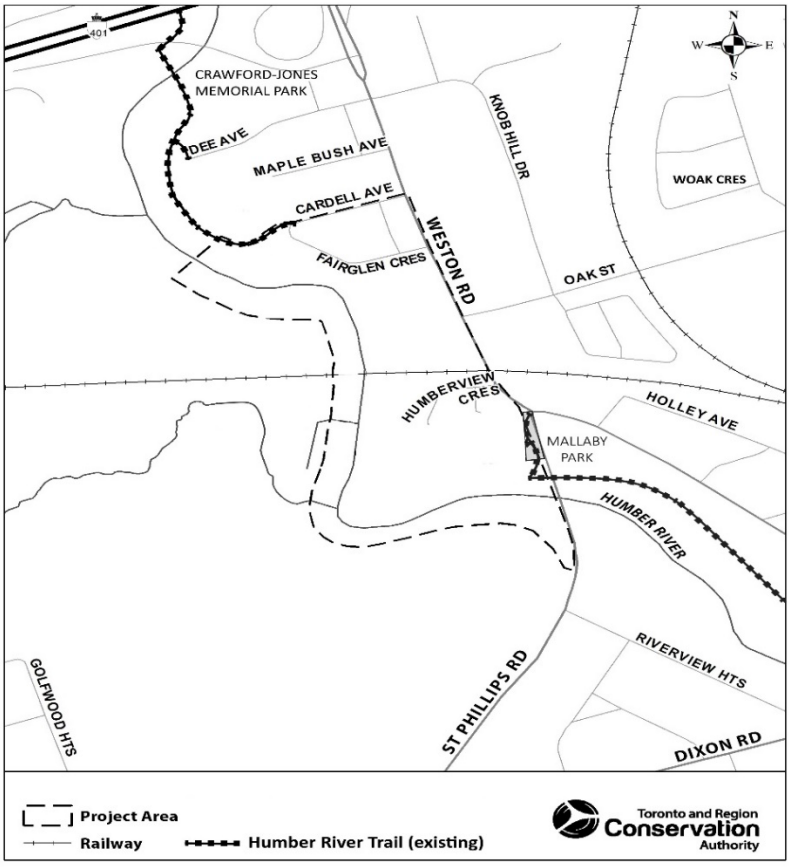


Figure 1: The Mid Humber Gap project area

Trail Alignments

A total of six trail alignment concepts were considered at the initial phase of the MCEA, four of which were identified as part of the Phase 2 feasibility study undertaken in 2019. The six concepts and a “Do Nothing” scenario were subject to a high-level screening process to eliminate trail routes that were less preferred based on several natural, socio-cultural, financial, technical, and public safety factors. The six trail alignment concepts comprised a mix of exclusively in-ravine or on-road options, as well as a hybrid approach that utilized both ravine and road segments to close the gap. A detailed description of all six concepts can be found in Attachment 2.

Following the high-level screening process, Concepts 1A, 2A, and 3A were carried forward as preliminary preferred trail alignment concepts that would be subject to a more rigorous technical analysis. The concepts are described briefly below and shown in **Error! Reference source not found.**.

- Concept 1A (Modified Full In-Valley Alignment): From Crawford-Jones Memorial Park, the trail would cross the Humber River via a new pedestrian-cycle bridge. A paved multi-use trail would be built along the west bank of the Humber River through land owned by the WGCC. A second pedestrian-cycle bridge would connect to the east bank of the Humber River on land owned through a private trust. A new paved multi-use trail through the land trust property would connect to the existing HRT at Mallaby Park.

- Concept 2A (Modified Hybrid In-Valley/On-Road Alignment): From Crawford-Jones Memorial Park, a cantilevered boardwalk would be constructed along the steep east bank of the Humber River to the Metrolinx rail bridge. The trail would route eastward along the northern edge of the rail corridor through lands owned by Metrolinx to connect to Weston Road, where it would continue along an existing constrained pathway/sidewalk beyond Humberview Crescent to the existing path at Mallaby Park. The staircase at Mallaby Park would be replaced with a switchback ramp to connect trail users to the lower valley and the existing HRT.

- Concept 3A (Modified On-Road Alignment): Trail users would need to exit Crawford-Jones Memorial Park and be routed to Weston Road via Cardell Avenue. Pedestrians would utilize a new sidewalk on Cardell Avenue / Fairglen Crescent, constructed in 2022 as part of a road resurfacing and watermain replacement project. At Weston Road, a two-way cycle track would be constructed on the west side of the street, requiring modifications to the existing lane configuration by eliminating the third northbound lane north of Oak Street to Cardell Avenue and shifting the roadway to the east for a portion south of Oak Street. The two-way cycle track would end at the Metrolinx rail bridge, where the existing sidewalk would be converted to a multi-use trail. Safety features, such as a guard rail, would be installed to separate users from adjacent vehicular traffic. A constrained pathway/sidewalk south of the rail bridge would connect to an existing path in the upper portion of Mallaby Park. The staircase at Mallaby Park would be replaced with a switchback ramp to connect trail users to the lower valley and the existing HRT.

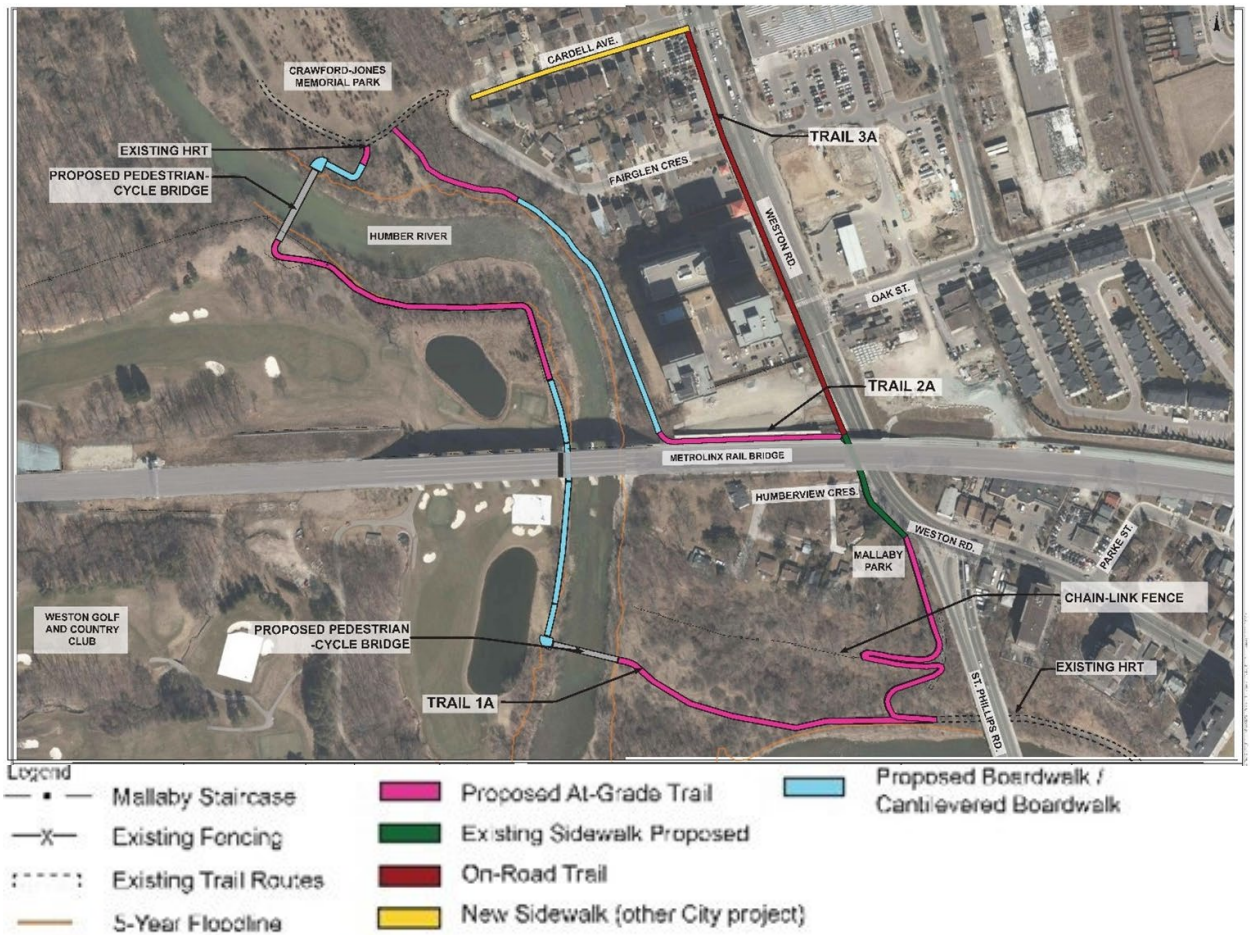


Figure 2: Preliminary preferred trail alignment concepts for the Mid Humber Gap **Error! Reference source not found.Error! Reference source not found.**

Evaluation of Preliminary Preferred Trail Alignments: Methodology, Criteria, and Findings

Preliminary preferred trail alignment Concepts 1A, 2A, and 3A were refined and developed in further detail based on new information collected through technical studies and consultation carried out during the MCEA. Technical studies that informed the refinement and evaluation included a hydraulic report and fluvial geomorphological/erosion assessment for the proposed structures, a traffic analysis for the on-road concept (3A), a terrestrial biological inventory for the project area, and a geotechnical desktop study.

The evaluation criteria used to identify the preferred trail alignment were modified from the initial high-level screening process to include new information gathered from the technical studies and consultation undertaken during the MCEA. The evaluation criteria are listed below:

Problem Statement

- Does the alignment address the following problem statement - The Mid Humber Gap constitutes a significant barrier to a continuous multi-use trail system along

the HRT and is a discontinuity in the future Loop Trail. The Loop Trail is a 65 km off-road, multi-use ring that will connect multiple ravines, neighbourhoods and trail systems throughout the City of Toronto. Existing routes pose safety concerns to users forced to detour along busy local roads that lack designated cycling infrastructure and are not fully accessible.

Natural Environment

- Impacts to bank stability
- Impacts to woodland and terrestrial habitat
- Impacts to wetlands
- Impacts on aquatic habitat

Social Environment

- User Experience
- Impact to private properties and businesses
- Impact to traffic and public transportation
- Trail accessibility and safety
- Consistency with trail policies and plans

Cultural Environment

- Impacts to archaeological resources
- Impacts to cultural resources

Financial Factors

- Property costs
- Design and approval costs
- Capital costs
- Maintenance costs

Technical Environment

- Constructability
- Impacts to existing public utilities and infrastructure

Public and Safety Factors

- Flood risk
- Safety factors related to traffic
- Other safety factors

Each of the preliminary preferred trail concepts was scored using a scale from least to most preferred based on its potential impact or ability to meet the project problem statement.

Scoring was based on quantitative measures where possible (e.g., area of woodland to be removed). For many criteria (e.g., ease of construction), impacts were based on qualitative assessment and professional experience based on projects of similar scope

and complexity. A summary table of the detailed evaluation, along with a comparative analysis for each concept, is included in Attachment 3.

Preferred Alignment

Through the detailed comparative analysis of the three preliminary preferred trail alignments, Concept 1A - Modified Full In-Valley Alignment was identified as most preferred due to receiving the highest score in the evaluation. Consisting of an exclusively in-valley connection between Crawford-Jones Memorial Park and Mallaby Park, Concept 1A closes the existing gap in the HRT through the implementation of a paved multi-use trail, with two pedestrian-cycle bridges spanning the Humber River. To minimize impacts to private lands on the west bank of the Humber River, a short segment of elevated boardwalk is proposed parallel to the riverbank. A refined conceptual alignment for Concept 1A is shown in **Figure 3** and Attachment 1, with conceptual renderings provided in Attachment 4.

The preferred trail alignment best meets the evaluation criteria and guiding problem statement, receiving significant public support through public events, online feedback, and general correspondence.

Concept 1A addresses the remaining gap in the HRT with a safe, accessible multi-use trail segment that aligns with municipal planning and trail initiatives. As part of the MCEA, the preferred trail alignment has been advanced to a 30% level of design and is described in more detail below.

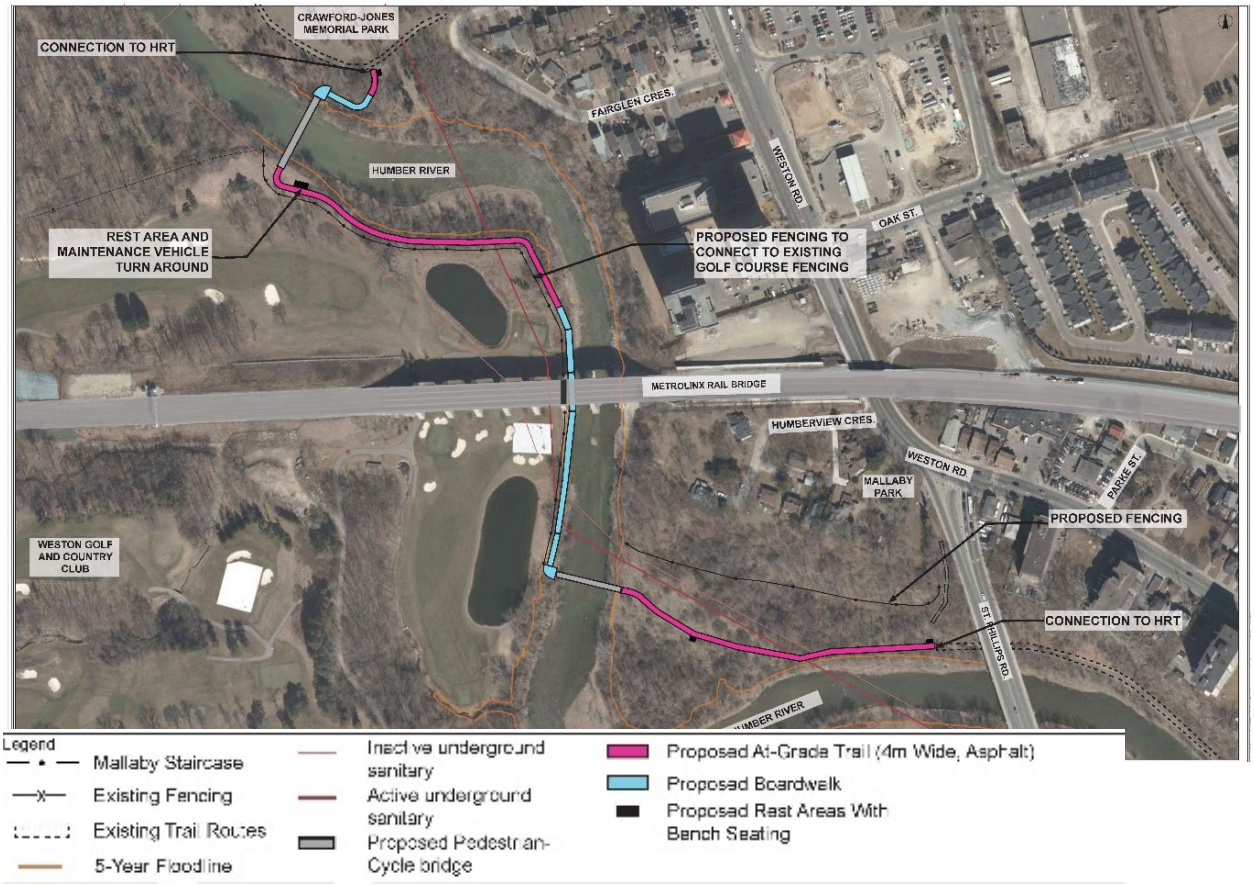


Figure 3: The preferred trail alignment Concept 1A

Description of General Route

Beginning at the existing paved trail in Crawford-Jones Memorial Park, the preferred trail alignment would cross the Humber River via a new pedestrian-cycle bridge and route along the west bank of the Humber River through property owned by the WGCC. Just north of the Metrolinx rail bridge, the paved at-grade trail would transition into an elevated boardwalk that would connect to a second pedestrian-cycle bridge that would take users to the east bank of the Humber River. A paved at-grade trail through a private land trust would connectto the existing HRT in Mallaby Park, just south of the existing staircase.

Trail Design

The preferred trail alignment would be designed to accommodate two-way pedestrian, cyclist, and other non-motorized trail uses. The at-grade trail would be 4 m in width with an asphalt surface. A 1 m wide mowed grass strip would be maintained on either side of the trail with an additional 1 m on either side provided for signage and other trail elements (e.g., fencing). The general alignment of the at-grade trail would follow relatively flat ground with shallow grades.

Four rest areas are proposed as part of the 30% conceptual design. The exact number and location of rest areas as well as their trail elements, such as bike parking, waste receptacles, and signage locations, would be identified as part of the detailed design process following completion of the MCEA.

Boardwalk

The elevated boardwalk structure would be approximately 139 m in length and 4 m in width and would run along the west side of the Humber River from just north of the Metrolinx rail bridge to the south pedestrian-cycle bridge. Subject to the findings of a geotechnical analysis to be completed during detailed design, the boardwalk would be supported by helical piers.

The boardwalk would include a covered structure along its entire length to protect trail users from golf balls and debris from the overhead rail bridge. In addition, a protective screen would be installed on the west side of the boardwalk structure from the boardwalk deck to the canopy (see Conceptual Renderings in Attachment 4).

Pedestrian-Cycle Bridge Crossings

Both bridge crossings would be designed as prefabricated COR-TEN steel through truss structures, with an interior width of 4 m and anti-slip weathering sleep decking. Railing heights would be a minimum of 1.37 m in height.

Spanning approximately 55 m, the north bridge crossing would include a ramp structure to connect the east bank to the existing paved trail at Crawford-Jones Memorial. Due to differences in ground elevation, the 9.0 m ramp would be designed at a 7% grade or less to maintain general accessibility.

The south bridge crossing, connecting the golf course lands owned by the WGCC on the west bank to lands owned by a private land trust to the east, would span approximately 46 m. Options that include an overhead canopy and screening will be included as part of the design, to protect trail users from golf course activity and to prevent trespassing on private lands. Any design and specification of the canopy and screening will be developed in greater detail following the MCEA and landowner approvals.

Hydraulics and Hydrology

The planning, design, and permitting of the bridge crossings and elevated boardwalk within the floodplain has been guided by the TRCA's Living Cities Policies, with comprehensive flood modelling and geomorphologic study undertaken as part of the MCEA to ensure all structures are carefully sited, sufficiently sized, and appropriately designed.

Analysis of each structure at the 30% detailed design level indicates that each structure can be constructed with only minor increases to water surface elevations during extreme (i.e., regional level) flood events. Ice jamming is known to occur in the area and potential impacts will be considered in the detailed design phase. Changes necessary to

ensure that flood and erosion risk remain minimal will be re-assessed during detailed design.

Public Consultation

Public involvement is an integral part of the MCEA process. Public consultation on the trail concepts and the preferred alignment was carried out online through the project's website (toronto.ca/MidHumberGap) due to the ongoing COVID-19 pandemic.

A Stakeholder Advisory Group (SAG) comprising members of the public, interest groups, private landowners, and other stakeholders was created. Two meetings were held during the MCEA phase of the project.

Two virtual public meetings were hosted at key project milestones, with information posted on the project's website for additional public review and input.

Private landowners within the project study area were contacted directly through notices and consulted during virtual meetings. Consultation with Indigenous communities was undertaken by TRCA's Indigenous Engagement representative.

Overall, a broad range of residents, businesses, and stakeholders were engaged over two rounds of public consultation. Below summarizes the content focus and activities:

- Round One - Identification of problems/opportunities, study objectives and the list of six conceptual trail alternatives

- Round Two - Evaluation of alternatives and identification of preliminary preferred alternative solution

Consultation activities carried out to date:

- Two SAG Meetings: May 5, 2021 and February 3 2022
- Two virtual public events: 77 participants on May 9, 2021 and 89 participants on May 17, 2022
- Two on-line questionnaires (Responses: 56 Round One, 100+ Round Two)
- Over 95 emails and phone calls logged (to date: May 31, 2022)
- Six individual meetings with landowners including Weston Golf & Country Club and Private Land Trust
- One presentation to the Parks, Forestry and Recreation Disability Steering Committee – Servicing People with Disabilities: September 16, 2021
- Indigenous engagement with the Mississaugas of the Credit First Nation, Six Nations of the Grand River (Both Six Nations Elected Council and Haudenosaunee Confederacy Chiefs Council), and Huron-Wendat Nation

Notification and communications carried out to date:

- 10,041 flyers (May 25, 2021) and 10,040 flyers (April 29, 2022) delivered by Canada Post for the virtual public meetings to the project study area bounded by Highway 401 (north); Lawrence Avenue (south); Islington Avenue (west); and Elm Street/Langside Avenue (east)
- Email invitation to SAG members, stakeholder list, and local Councillors, MPP and MPs
- Paid advertisement in Etobicoke Guardian (May 27, June 3, 2021 and May 5, 12, 2022)
- Project webpage: **toronto.ca/midhumbergap**

What We Heard

With over two rounds of public consultation with technical experts, stakeholders, landowners, and members of the public, the following key comments were provided.

- Public response was supportive of closing the Mid Humber Gap, with an in-valley alignment (Option 1A) identified as preferred
- Property owners raised concern with potential impacts associated with in-ravine alignments, including safety, impacts to wildlife and natural habitat, trespassing, and vandalism. Response to these concerns will be reviewed through the detailed design stage of this project and in consultation with the property owners, particularly in areas that directly impact their properties. The project team has noted that an advanced design would include detail to mitigate impact to natural areas, provide for flood tolerate trail infrastructure, and introduce protective measures (i.e. fencing) to protect trail users and eliminate opportunity for trespassing.
- The project team received additional comments related to the importance of accessibility, minimizing impacts to the natural environment (and opportunities for restoration), and concerns for user safety and impacts to traffic flow with an on-road option.

A full public consultation summary report will be included as part of the Final Report prepared as part of the MCEA and posted on the public record.

Future consultation will take place through the Notice of Completion stage (which is required to complete this MCEA study) and when the Final Report is made available to the public for a 30 day review period.

Property Acquisition

The implementation of the preferred alignment recommended in the MCEA will require the acquisition of private property interests. A property assessment identified the following private property requirements:

- An approximately 12,750 square m portion of the property owned in trust by the Humberview Crescent ownership group ("Humberview Cres Land Trust") from the pathway and buffer area south to the Humber River eastern shoreline.

- An approximately six metre wide strip or 6100 square metre portion of the property owned by the WGCC along the western shoreline of the Humber River.

- An easement from Metrolinx for a short portion of the trail which travels under the rail corridor on the west bank of the Humber River.

The acquisition of ravine lands will further the goals of the Ravine Strategy, Parkland Strategy and Official Plan by acquiring valley lands with a focus on trail connections and addressing gaps in the trail system to improve access to and through ravine parks.

Preliminary discussions with affected property owners have taken place throughout the MCEA process, including trail alignment and preliminary design refinements to minimize impact to adjacent properties. Details on how to adequately address private property concerns around safety, security and trespassing will be carried forward and refined in the detailed design phase of this project and in consultation with the affected landowners. Necessary design changes to ensure that flood and erosion risk remain minimal will be re-evaluated as part of detailed design. Negotiations to acquire the required property interests will take place following the completion of the MCEA.

Implementation and Next Steps

Subject to City Council's adoption of the recommendations in this report, the Final Report prepared as part of the MCEA will be filed on the public record for a minimum 30-day review period. During this period, questions or concerns can be directed to the City.

Interested persons may provide written comments to the project team. Any outstanding issues with the project should be addressed to City to attempt to find a mutually acceptable resolution.

A request may be made to the Ministry of the Environment, Conservation and Parks for an order requiring a higher level of study, or that conditions be imposed, only on the grounds that the requested order may prevent, mitigate or remedy adverse impacts on constitutionally protected Aboriginal and treaty rights. Requests on other grounds will not be considered.

Corporate Real Estate Management would lead ongoing negotiations with the respective property owners in consultation with Transportation Services, Parks, Forestry and Recreation, and Legal Services. Agreements would be advanced using delegated authority, or reporting to Council as appropriate, pending the results of detailed appraisals and negotiations with private property owners. Once all property interests have been defined, detailed design would begin in 2023/2024.

CONTACT

Jacquelyn Hayward
Director, Project Design & Management
Transportation Services Division
Tel: 416-392-5348
jacquelyn.hayward@toronto.ca

Rosanne Clement
Interim Director, Parks Development & Capital Projects
Parks, Forestry & Recreation Division
Tel: 416-395-7900
Rosanne.Clement@toronto.ca

SIGNATURE

Barbara Gray
General Manager
Transportation Services Division

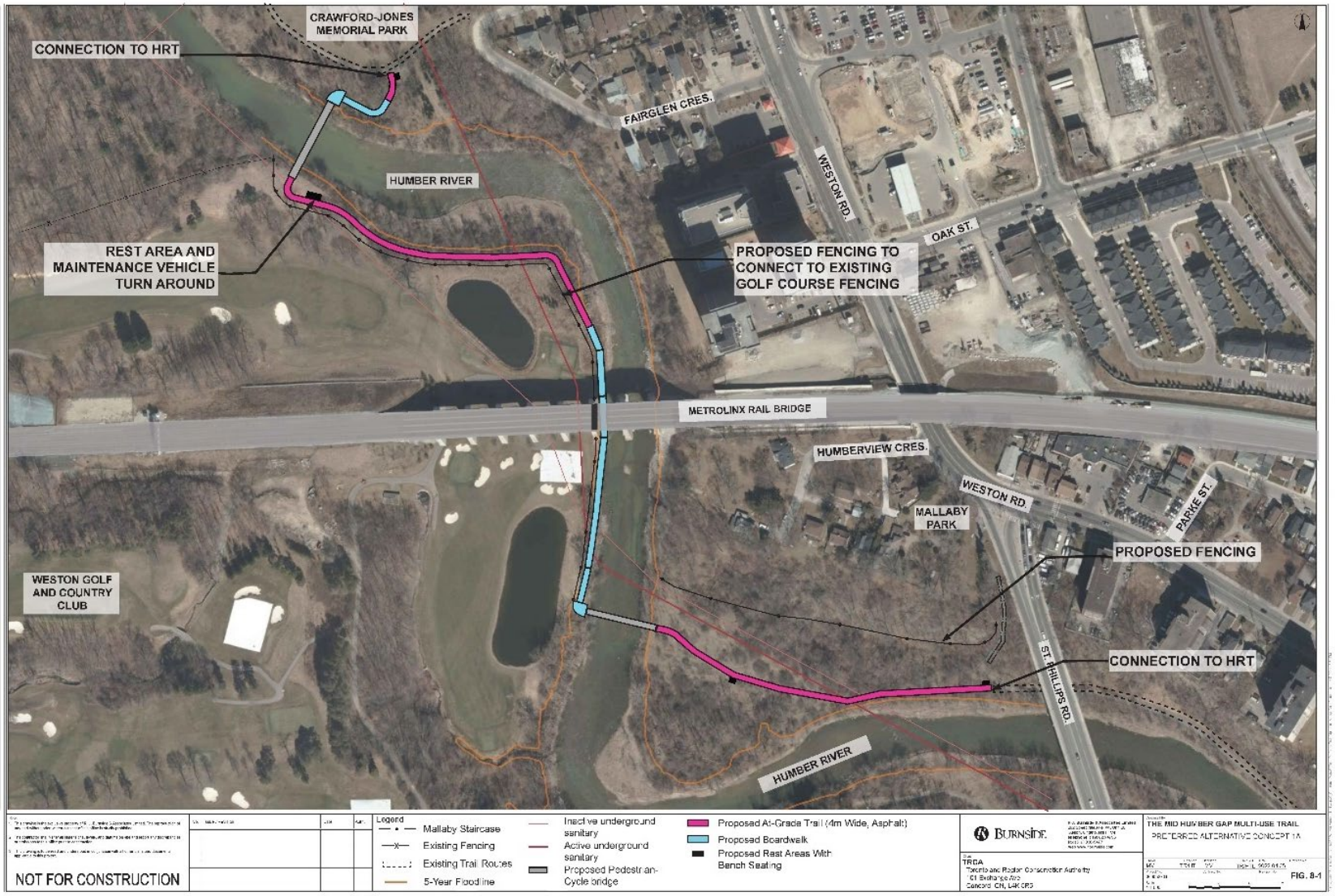
Janie Romoff
General Manager
Parks, Forestry & Recreation Division

ATTACHMENTS

Attachment 1: Preferred Trail Alignment Concept – 1A
Attachment 2: Trail Alignment Concepts
Attachment 3: Evaluation Summary and Comparative Analysis of Preliminary Preferred Trail Alignment Concepts
Attachment 4: Conceptual Renderings of Preferred Trail Alignment Concept 1A

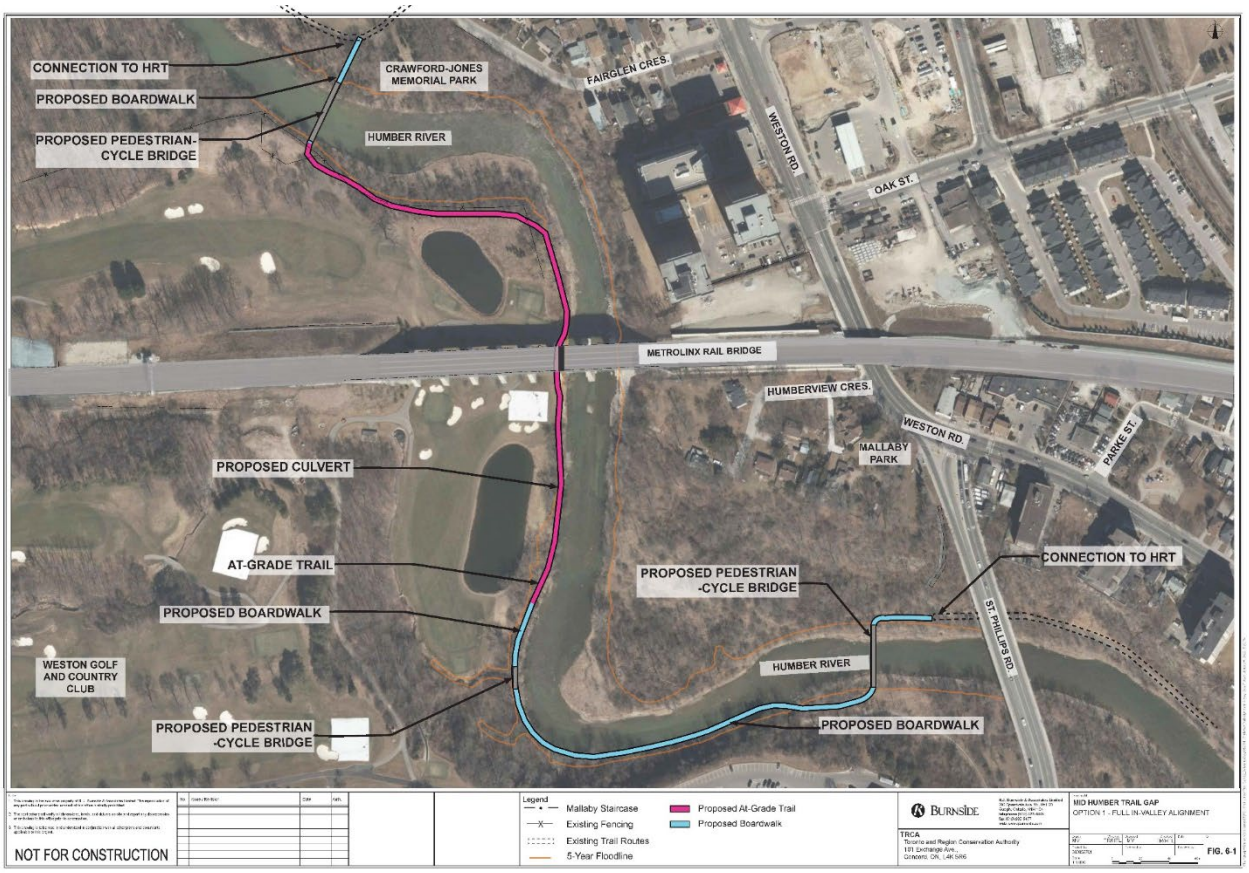
ATTACHMENT 1:

PREFERRED TRAIL ALIGNMENT CONCEPT 1A

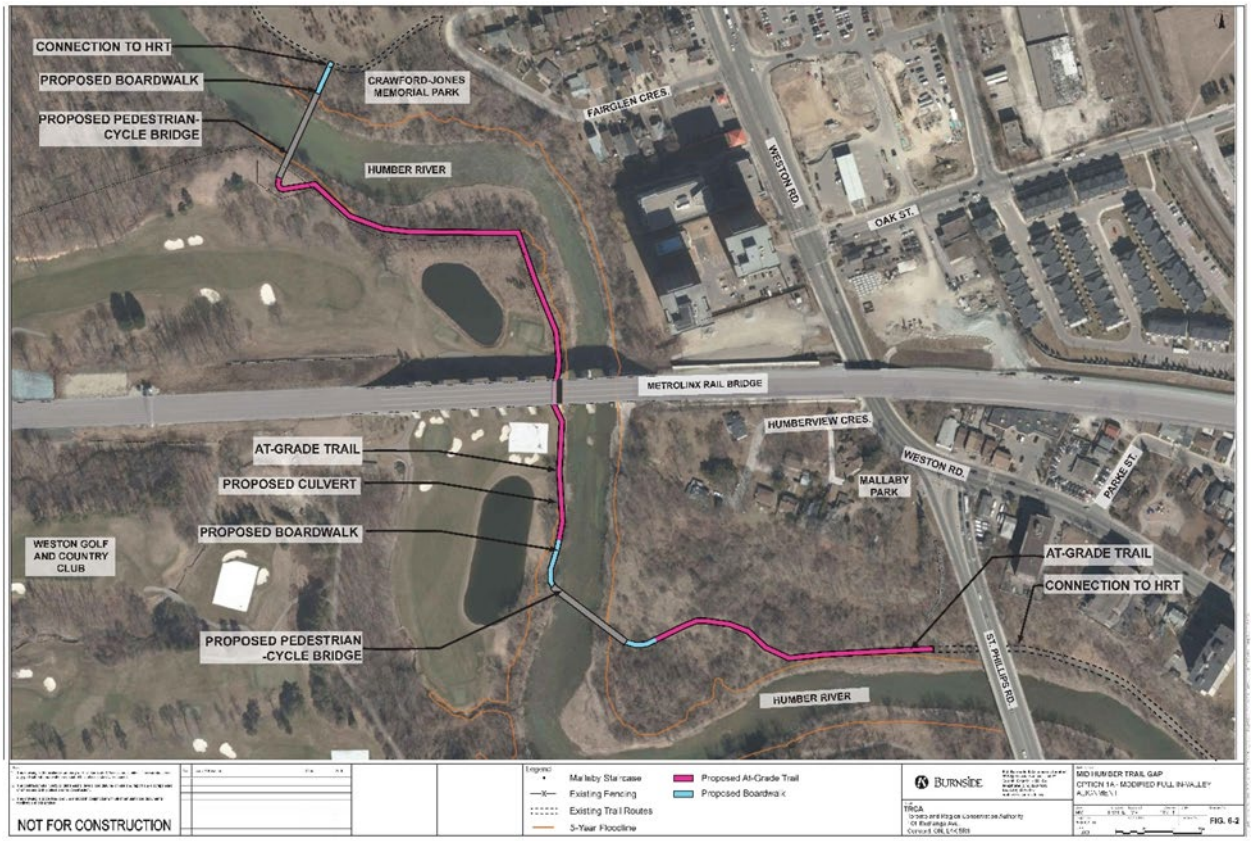

CRAWFORD-JONES MEMORIAL PARK
CONNECTION TO HRT
FAIRGLEN CRES.
WESTON RD.
HUMBER RIVER
OAK ST.
REST AREA AND MAINTENANCE VEHICLE TURN AROUND
PROPOSED FENCING TO CONNECT TO EXISTING GOLF COURSE FENCING
METROLINX RAIL BRIDGE
HUMBERVIEW CRES.
WESTON RD.
PARKE ST.
MALLABY PARK
PROPOSED FENCING
WESTON GOLF AND COUNTRY CLUB
ST. PHILLIPS RD.
CONNECTION TO HRT
HUMBER RIVER
NOT FOR CONSTRUCTION
Legend
Mallaby Staircase
Existing Fencing
Existing Trail Routes
5-Year Floodline
Inactive underground sanitary
Active underground sanitary
Proposed Pedestrian-Cycle bridge
Proposed At-Grade Trail (4m Wide, Asphalt)
Proposed Boardwalk
Proposed Rest Areas With Bench Seating
BURNSIDE
TRCA
Toronto and Region Conservation Authority
101 Exchange Ave
Concord ON, L4K 0R5
THE MID HUMBER GAP MULTI-USE TRAIL
PREFERRED ALTERNATIVE CONCEPT 1A
FIG. 8-1

ATTACHMENT 2:

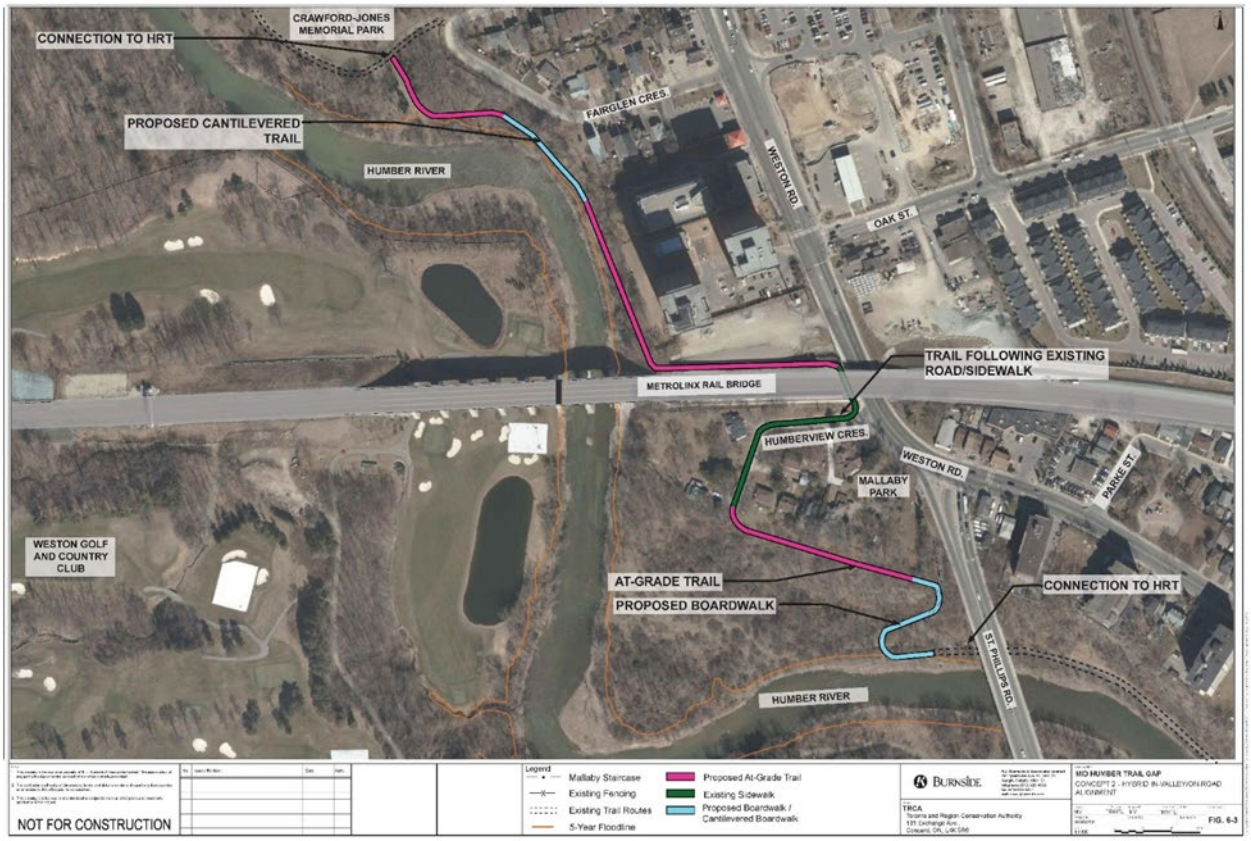
TRAIL ALIGNMENT CONCEPTS



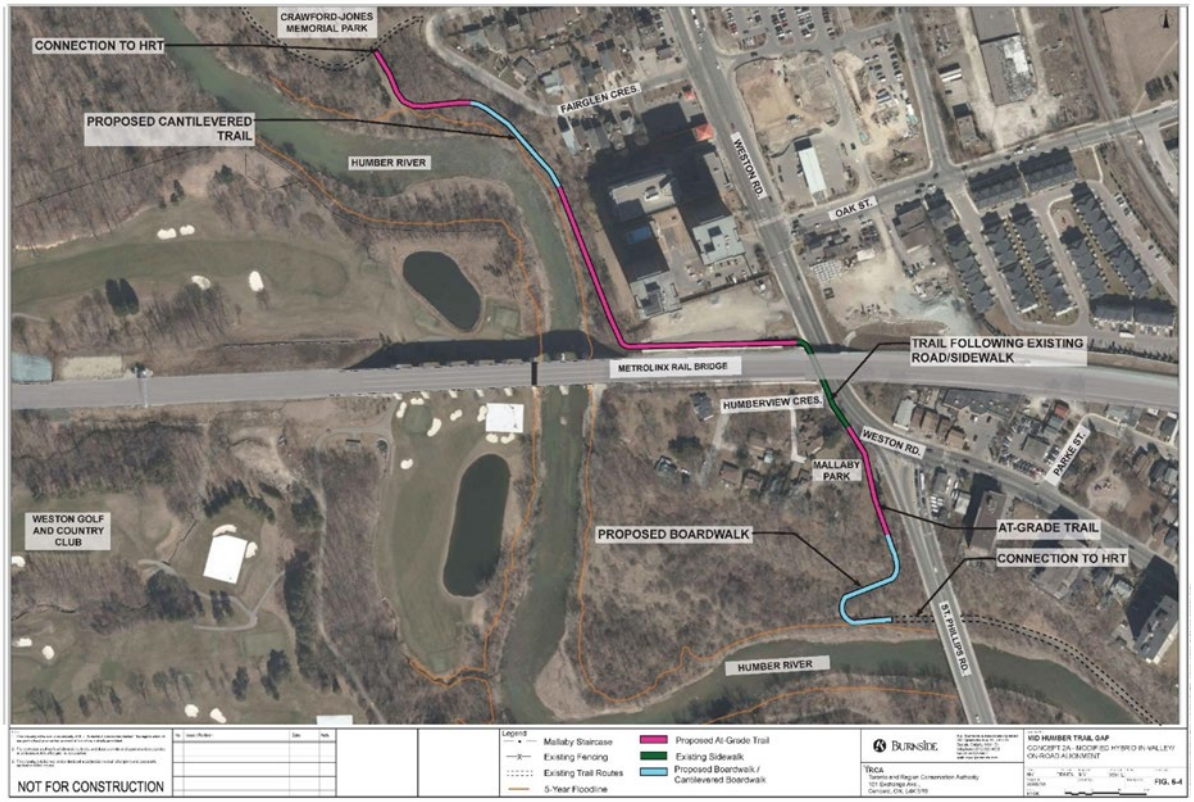
Concept 1 (Full In-Valley Alignment): From the existing trail at Crawford-Jones Memorial Park, users would cross the Humber River via a new pedestrian-cycle bridge and follow a trail along the western bank of the Humber River through the WGCC property. A second pedestrian-cycle bridge would be required over a small tributary south of the golf course irrigation pond. The trail would then follow a steep valley wall around a deep bend in the Humber River. Due to the steep slope, this section of trail would be a cantilevered boardwalk, anchored to the slope, along with significant armourstone retaining walls. A third pedestrian-cycle bridge would connect the existing HRT on the east side of the river at Mallaby Park.



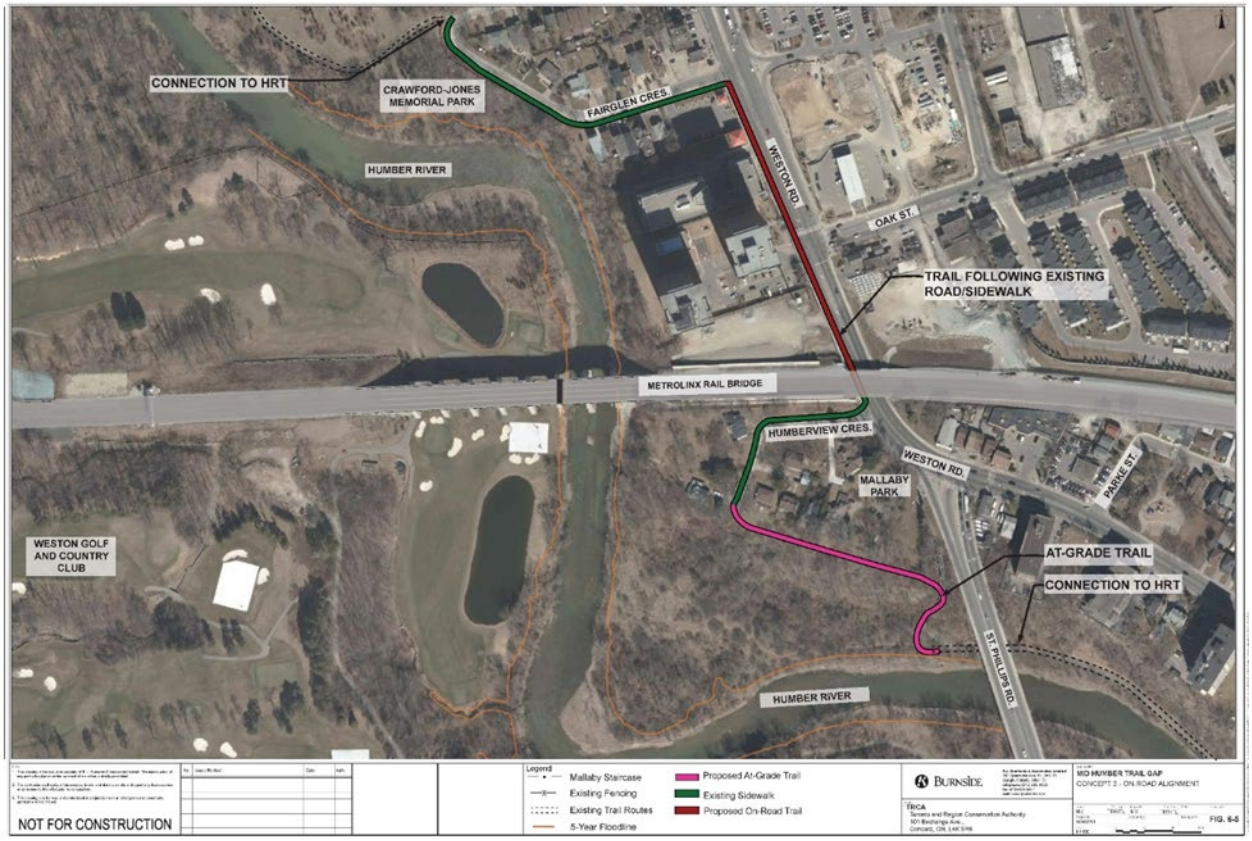
Concept 1A (Modified Full In-Valley Alignment): From Crawford-Jones Memorial Park, trail users would cross the Humber River via a new pedestrian-cycle bridge. Users would then follow a trail along the west bank of the Humber River through WGCC property, similar to Concept 1. In this concept, the second pedestrian-cycle bridge would be located upstream of the bend in the Humber River near the irrigation pond to a connection point on land owned by a private land trust on the east bank. A new trail through the land trust property would connect to the existing HRT at Mallaby Park.



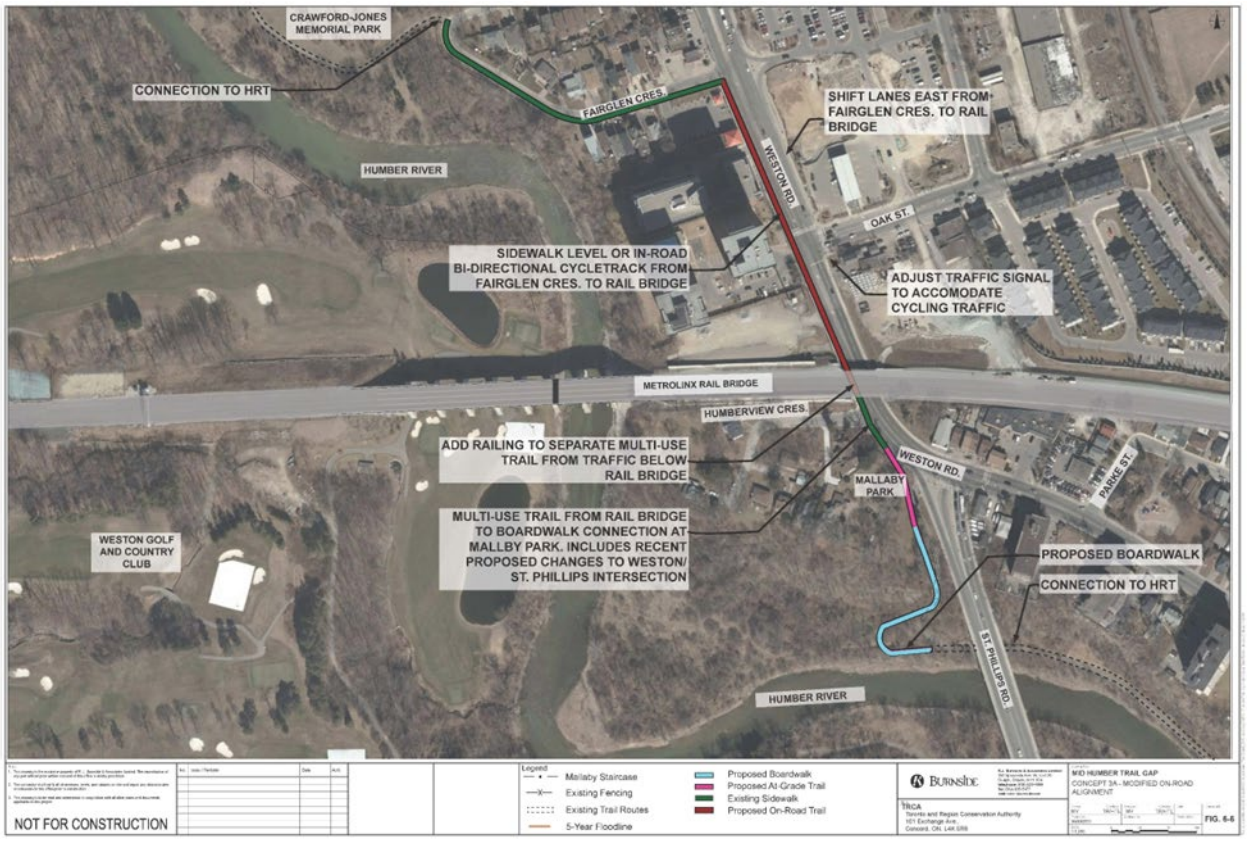
Concept 2 (Hybrid In-Valley/On-Road Alignment): The existing trail at Crawford-Jones Memorial Park would be extended along the east bank of the Humber River. The steep valley wall north of the rail bridge would require construction of a cantilevered boardwalk, a portion of which would be constructed over an existing TRCA-owned armourstone retaining wall. At the rail bridge, the trail would turn eastward along the northern edge of the rail corridor through lands owned by Metrolinx to connect to Weston Rd. Trail users would cross below the rail bridge using the existing sidewalk and would then follow Humberview Crescent. A new trail would be constructed along the top of the slope at the rear of the properties on Humberview Crescent in a city-owned road right-of-way. This section of trail would be bounded by two armourstone retaining walls due to the steep gradient in this area. The staircase in Mallaby Park would be replaced with a switch-back ramp that connects trail users to the lower valley and existing HRT.



Concept 2A (Modified Hybrid In-Valley/On-Road Alignment): A modified version of Concept 2, where south of the rail bridge trail users would continue along the Weston Road sidewalk beyond Humberview Crescent to the existing path in the upper portion of Mallaby Park. The staircase in Mallaby Park would be replaced with a switch back ramp that connects trail users to the lower valley and existing HRT.



Concept 3 (On-Road Alignment): Trail users would exit Crawford-Jones Memorial Park at Fairglen Crescent using the road or new sidewalk that is to be constructed via a separate City project. At Weston Road, the route would turn southward and utilize the existing sidewalk or shared traffic lanes for cyclists to the rail bridge. Trail users would cross below the rail bridge using the existing sidewalk and would then follow Humberview Crescent. A new trail would be constructed along the top of the slope at the rear of the properties on Humberview Crescent in a city-owned road right-of-way. This section of trail would be bounded by two armourstone retaining walls due to the steep gradient in this area. The staircase in Mallaby Park would be replaced with a switch-back ramp that connects trail users to the lower valley and existing HRT.



Concept 3A (Modified On-Road Alignment): Trail users would exit Crawford-Jones Memorial Park at Fairglen Crescent using the road or new sidewalk to be constructed via a separate City project. Pedestrians would utilize the existing sidewalk, while cyclists would follow a new two-way cycle track constructed on the west side of Weston Road. This would require modifications to the existing lane configuration on Weston Road requiring modifications to the existing lane configuration by eliminating the third northbound lane north of Oak Street to Cardell Avenue and shifting the roadway to the east for a portion south of Oak Street. The two-way cycle track would end at the rail bridge where the existing sidewalk would be converted to a multi-use trail. Safety features, such as a guard rail would be installed to separate users from adjacent vehicular traffic. A sidewalk south of the rail bridge would connect to an existing path in the upper portion of Mallaby Park, improvements to make this a wider multi-use trail would be reviewed. Current modifications made at the St. Philips and Weston Rd intersection, account for southbound cyclists on this shared facility. The staircase in Mallaby Park would be replaced with a switchback ramp that connects trail users to the lower valley and the existing HRT.

ATTACHMENT 3

EVALUATION SUMMARY AND COMPARITIVE ANALYSIS OF PRELIMINARY PREFERRED TRAIL ALIGNMENT CONCEPTS

CRITERIA FOR EVALUATING ALIGNMENTS	Do Nothing	Concept 1A	Concept 2A	Concept 3A
PROBLEM STATEMENT	○	●	◑	◑
NATURAL ENVIRONMENT	●	◑	◔	◕
SOCIAL ENVIRONMENT	◔	◕	◔	○
CULTURAL ENVIRONMENT	●	◑	◕	◕
FINANCIAL FACTORS	◕	◔	○	◑
TECHNICAL FACTORS	●	◑	○	◑
PUBLIC SAFETY FACTORS	◑	◕	◑	◑
OVERALL SUMMARY	**Not Carried Forward**	**Most Preferred**	**Least Preferred**	**Somewhat Preferred**

Concept	Advantages	Disadvantages
Do Nothing	• Avoids impact beyond existing conditions to woodlands, steep slopes, Humber River, archaeological and cultural heritage resources • Requires no capital cost • Requires low maintenance costs, associated with existing staircase only	• Does not address the accessibility barrier created by the staircase • Provides a poorly connected, low-appeal experience as users are required to exit the valley • Does not provide improved cycling conditions on Weston Road • Does not address the problem statement
Concept 1A (In-Valley)	• Provides a safe, accessible and well-connected trail experience • Avoids conflict with traffic • Requires lower capital cost compared to Concept 2A • Aligns with TRCA and City planning policies •	• Requires property acquisition and/or easement on WGCC and private land trust • Raises potential for trespassing and vandalism on WGCC and private land trust • Includes a trail which is primarily within the 25-year floodplain • Requires short segment of elevated boardwalk at the 5-year floodplain elevation • Installation of bridges and boardwalk creates minor increase in flood elevation at low frequency flood events • Construction is complex due to proximity to WGCC and Humber River, sanitary sewer line and rail bridge

Concept	Advantages	Disadvantages
		• May require bank stabilization measures due to the proximity of the boardwalk to the riverbank
Concept 2A (Hybrid In-Valley/On-Road)	• Avoids impact to the WGCC • Requires only a small portion of the private land trust • Avoids structures within the floodplain	• Requires acquisition of property from Metrolinx • Design and construction of cantilevered boardwalk is highly complex due to steep slope, proximity of underground parking garage, stormwater outflow and existing retaining walls • Removes stabilizing vegetation on a steep slope, potentially causing slope instability issues • Provides a poor user experience as trail users must exit and re-enter the valley • Results in safety concerns with the passage of pedestrians and cyclists through the narrow trail below the rail bridge at Weston Road • Requires the highest capital and maintenance cost • May require in-water construction access
Concept 3A (On-Road)	• Minimizes impact to natural environment and avoids structures in the floodplain • Avoids impact to WGCC • Results in minor impact to private land trust • Results in the lowest capital and maintenance costs relative to other concepts	• Requires acquisition of property from Metrolinx and auto service centre on Weston Road • Reduces number of northbound lanes from three to two • May affect Oak Street bus stop • High traffic volumes on Weston Road may result in turning conflicts for cyclists on cycle-track due to volume of traffic turning in and out of residential and commercial driveways • Provides a poor user experience as trail users must exit and re-enter the valley • Results in safety concerns with the passage of pedestrians and cyclists through the narrow trail below the rail bridge at Weston Road

ATTACHMENT 4

CONCEPTUAL RENDERINGS OF PREFERRED TRAIL ALIGNMENT CONCEPT 1A

Conceptual view of at-grade trail, looking west towards the southern bridge over the Humber River

Conceptual view from Weston Golf and Country Club, looking east towards the elevated boardwalk along the edge of the Humber River