



Hamilton

CONCESSION ST. – MOUNTAIN BROW BLVD.  
ROAD, SIDEWALK & MUP IMPROVEMENTS,  
AND WATERMAIN REPLACEMENT

May 7<sup>th</sup>, 2024

# AGENDA

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- 01** Introduction
- 02** Current Design
- 03** Proposed Work
- 04** Proposed Work
- 05** Detour Plan (Upper Gage to Oakcrest)

# PROJECT TEAM

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## Involved Staff

- Susan Jacob (Design, Manager, CoH)
- Mitchell Knot (Design, Senior Project Manager, CoH)
- Nasrin Firouzbakht (Design, Project Manager, CoH)
- Paul McShane (Construction, Senior Project Manager, CoH)
- Carolyn Ryall (Transportation, Director, CoH)
- Mike Field (Transportation, Manager, CoH)
- Arturo Rodriguez (Senior Designer, WSP)
- Christian Orozco (Junior Transportation Designer, WSP)



# PROJECT LOCATION



# INTRODUCTION

## ● Project Scope

- Reconstruction/ Rehabilitation of Concession Street between Upper Gage Avenue and Oakcrest Drive
  - Upper Gage Ave. - Upper Ottawa St.: Roadway reconstruction including new sidewalk and watermain replacement
  - Upper Ottawa St. - Oakcrest Drive: Roadway Resurfacing
- New Multi-use Path (MUP) from Upper Gage Ave to Oakcrest Drive
- Reconfiguration of Mountain Brow Blvd. intersection with new traffic signals

## ● Project Goal

- To achieve Complete Street and Vision Zero principles
- Enhancing pedestrian and active transportation safety, mobility and connectivity
- Provide upgraded watermain infrastructure for the community

# INTRODUCTION

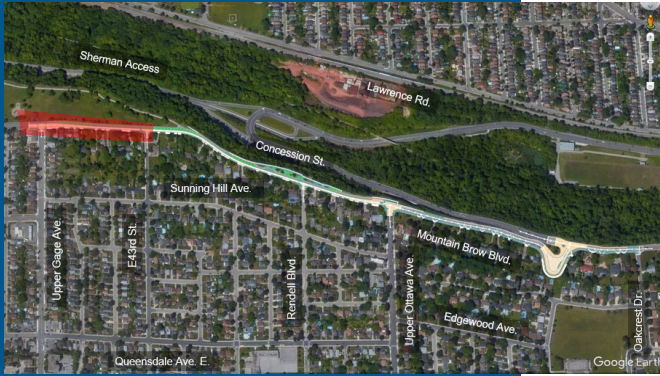
## **Project Status and Schedule**

- Design is currently being finalized for tendering
- Anticipated Construction Tendering: Spring 2024
- Anticipated Construction commencement: Summer 2024
- Anticipated Construction Completion: Fall 2024







# PROPOSED WORK

## Upper Gage Ave. to Upper Ottawa St.



- Reconstruction of existing roadway, maintaining 2 lanes of traffic.
- Existing watermain to be replaced
- New concrete pads to be installed at intersections on South side of Concession St. meeting AODA standards
- New MUP to be installed on North of Concession St.
- Proposed landscape planting along MUP



	Road Reconstruction		Driveway Restoration
	Concrete Sidewalk		
	Multi Use Path (MUP)		

# PROPOSED WORK

## Upper Gage Ave. to Upper Ottawa St.

- Reconstruction of existing roadway, maintaining 2 of lanes of traffic.
- Existing watermain to be replaced
- New concrete pads to be installed at intersections on South side of Concession St. meeting AODA standards
- New MUP to be installed on the North of Concession St.
- Proposed landscape planting along MUP
- New 1.4m Iron Eagle, aluminum black fence on the North side of Concession St.
- New 1.4m parapet wall with black coated railing on top on the North side



Match line



Match line

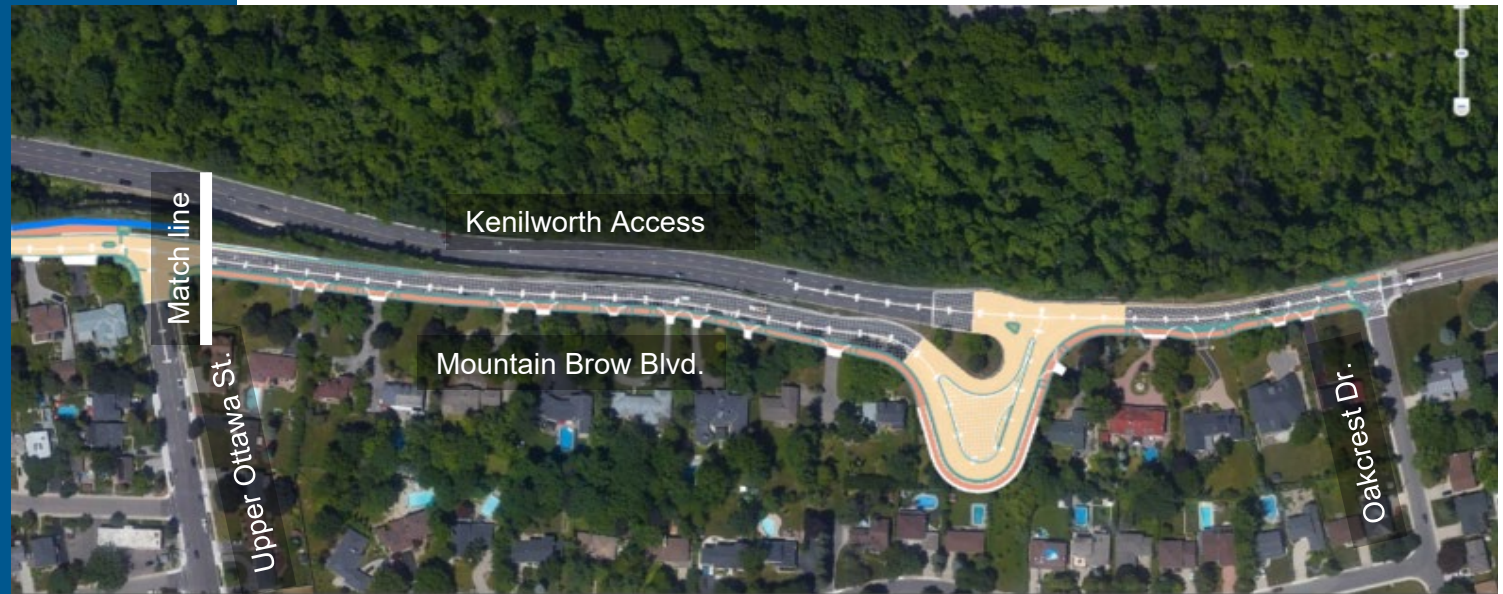


# PROPOSED WORK

## Upper Ottawa St. to Oakcrest Dr.



- Resurfacing of existing roadway, maintaining 2 of lanes of traffic.
- New MUP to be installed along south side of Concession St.
- Reconfiguration of Mountain Brow Blvd intersection.
- Proposed landscape planting.



- 1.4m Iron Eagle Black Fence
- Road Reconstruction
- Road Resurfacing
- Concrete Sidewalk
- Multi Use Path (MUP)
- Driveway Restoration

# PROPOSED WORK

## Examples of Parapet Wall and Fence





# PROPOSED WORK

## Upper Ottawa Ave. to Oakcrest Dr.



The intersection of Concession Street and Mountain Brow Blvd will be reconfigured into a standard T-intersection.

- New traffic signals will be installed.
- Proposed barrier and acoustic fencing to be installed on the south side of the intersection

-  Road Reconstruction
-  Road Resurfacing
-  Concrete Sidewalk
-  Multi Use Path (MUP)
-  Driveway Restoration
-  Vegetated Traffic Island
-  2.4m Acoustic Barrier
-  1.4m Partial Height Parapet Wall with Black Coated Railing



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wsp

Engineering Services  
Public Works



# PROPOSED WORK

## Upper Ottawa Ave. to Oakcrest Dr-Traffic Circle Area

### Advantages

- Traffic study was conducted, and the remodel of the traffic circle area was recommended in order to reduce high collision history
- A controlled signalize T-intersection was introduced as the best option
- Intersection controlled loop, eliminates West bound Trough and Eastbound Through, which was a safety concern in the Traffic Safety Report

# TRAFFIC IMPACT & DETOUR PLAN

## Upper Gage Ave. to to Oakcrest Dr.

- Single Lane of Through Traffic will be maintained along Concession Street
- Traffic Detour/Alternative Routes will be utilized to maintain Traffic Operation
- All local driveway accesses will be maintained during construction

# Construction Tender

## Schedule

- Tender date is mid May 2024
- Notices will be mailed out mid of May
- Construction is scheduled to commence in July 2024
- Contractor will be on-site from July to December 2024
- Minor restoration in Spring 2025



# Construction Timetable

## First Phase

The first phase of construction extends from Upper Gage Avenue to Upper Ottawa Street. This early stage focuses on a few essential elements designed to improve the area's infrastructure and facilities:

- Road reconstruction
- Watermain replacement
- Concrete works

# Construction Timetable

## Second phase

The second phase of construction extends from Upper Ottawa Street to Oakcrest Drive:

- Road Resurfacing
- Multi use path installation on the south side
- Signalized T-intersection
- Noise wall installation around the traffic circle

# Presentation of Final Traffic Operations and Measures

Mike Field  
Manager, Transportation, CoH



# The Approach to Roadway Safety

Vision Zero uses a data-based approach to road safety with the goal of reducing traffic-related serious injuries and fatalities towards the only acceptable goal: **ZERO**

Vision Zero aims for safer streets through safe systems.



## Traditional

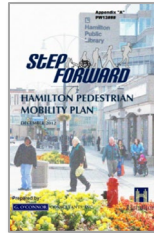
Prevent crashes	→	Prevent deaths and serious injuries
Improve human behavior	→	Design for human mistakes/limitations
Control speeding	→	Reduce system kinetic energy
Individuals are responsible	→	Share responsibility
React based on crash history	→	Proactively identify and address risks

## Safe System

# Policy Framework



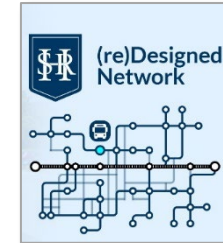
**Vision Zero  
Action Plan**



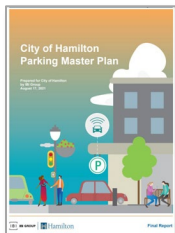
**Pedestrian  
Mobility Plan**



**Cycling Master  
Plan**



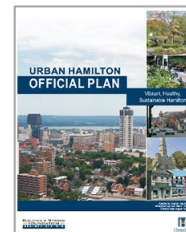
**(re)Envision  
the HSR**



**Parking  
Master Plan**



**Transportation  
Master Plan**



**Urban Hamilton  
Official Plan**



**Complete Streets  
Design Manual**

# Current Operations



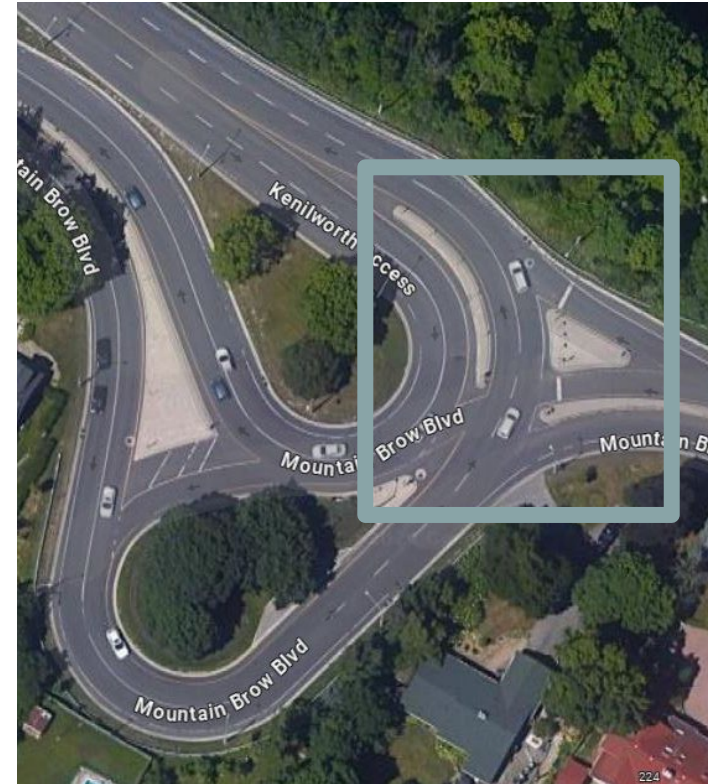


# Challenges & Opportunities



**High number of collisions  
between 2017-2021 (38)**

- Weaving and late-lane changes due to existing design
- Westbound motorists crossing over 4 lanes to enter the intended travel lane
- Motorists must watch for upbound vehicles while navigating through the circle
- Opportunity for safety enhancements by applying vision zero principals



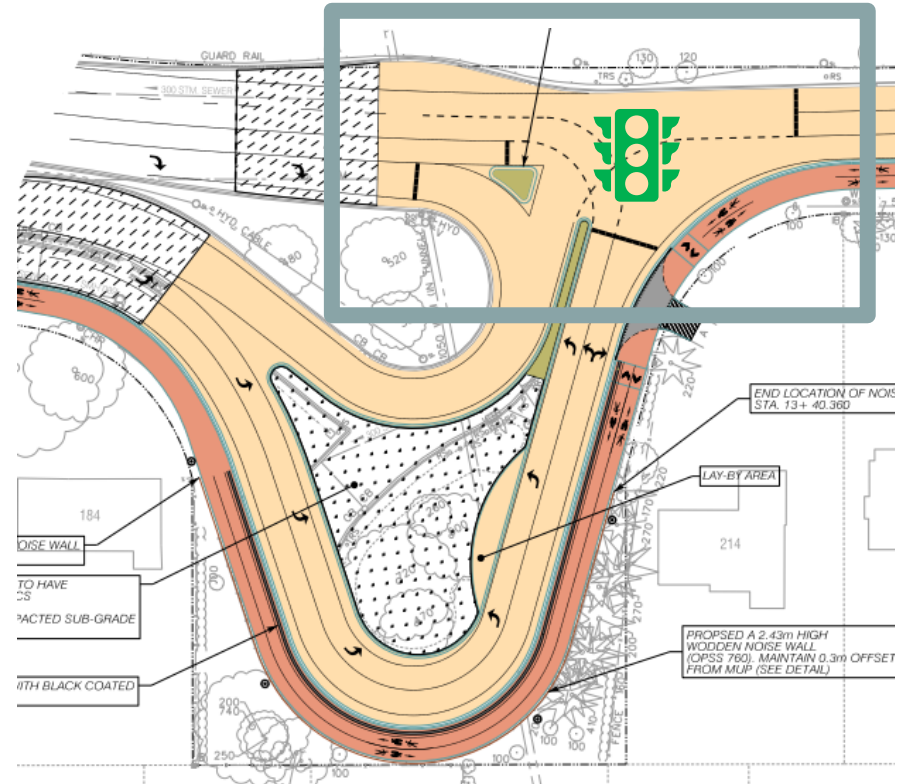




## Safe Systems Approach to Roadway Safety

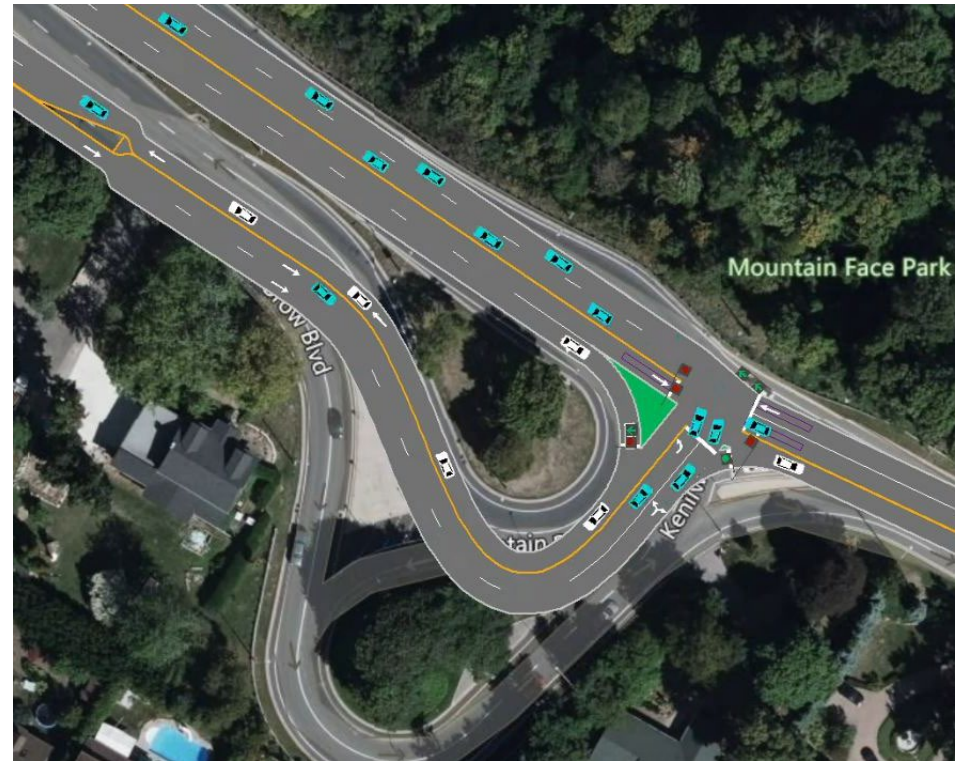
- Comprehensive road safety audit conducted
- 3 alternative designs considered
- Convert to a signalized intersection identified as the optimal solution
- Meets the principals of Vision Zero

## Optimal Configuration



# Future Traffic Flow

Level of Service	Expectation of Operations
<b>A</b>	Free flow: no delay
<b>B</b>	Stable flow: slight delay
<b>C</b>	Stable flow: Acceptable delay
<b>D</b>	Unstable flow: Tolerable delay
<b>E</b>	Unstable flow: Intolerable delay
<b>F</b>	Forced flow: Congestion



# Traffic Simulation



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THANK YOU