

IMPLEMENTATION BRIEF

Project:	Pedestrian Connection Implementation Brief, Town of Pelham	
Client:	Town of Pelham	
Subject:	Potential Pedestrian Link Between Fonthill, Ridgeville, and Fenwick	
Date:	June 21, 2024	UEM Project No. 24-104

1. Introduction

The Town of Pelham retained Urban and Environmental Management Inc. (UEM) to perform an implementation brief exploring pedestrian connection options between the downtown districts of Fonthill, Ridgeville, and Fenwick. With increasing interest in enhancing active transportation connectivity, UEM has investigated potential corridors for pedestrian links between these communities. This implementation brief assesses facility options, addresses constructability challenges, and the consideration of property impacts. The deliverables as part of this brief include:

- Potential alternative corridors
- Proposed feasibility study work plan
- Potential design issues

This implementation brief will form the basis for a request for proposal for a more detailed feasibility study and/or final design.

2. Study Area Review

The existing sidewalk network is concentrated in each of the downtown districts, with notable gaps in certain sections. These missing sections will be among the options considered in this brief:

- From Fonthill to Ridgeville: The section between 190 Canboro Road (Fonthill) and Effingham Road (Ridgeville) (See attached Figure 1)
- From Ridgeville to Fenwick: The section between 456 Canboro Road (Ridgeville) and Sunset Drive (Fenwick) (See attached Figure 2)
- From Ridgeville to Fonthill: The section of Effingham Road between Regional Road 20 (Fonthill) and Canboro Road (Ridgeville) (See attached Figure 3)

The areas mentioned above force pedestrians to walk along the shoulder of the road which raises issues with pedestrian safety.



3. Alternate Sections

Although alternate corridor sections were reviewed, they posed several issues and challenges for a sidewalk or pathway. Consequently, these sections were not included in the implementation study. The issues identified with these corridor sections are as follows:

The section of road along Welland Road from Deborah Street to Balfour Street (approximately 20m ROW)

- Many large mature trees
- Identified as the longest corridor to connect Fonthill to Fenwick compared to the other corridor sections (would result in higher construction costs)
- Less number of residential homes compared to Canboro Road

The section of road along Regional Road 20 from EL Crossley Secondary School to Balfour Street (approximately 25m ROW)

- · Existing sections of deteriorating curb faced asphalt pathway
- No buffer separating the existing pathway from the road
- High traffic road with vehicles driving at speeds more than 80 km/hr
- Existing pathway width appears to be undersized and not in compliance with current standards in some sections
- Less number of residential homes compared to Canboro Road
- Potential property acquisition and significant grading required

4. Facility Options

The proposed horizontal sidewalk alignment will adhere to the existing road alignment, with necessary adjustments to minimize conflicts with utilities, trees, hydro poles, and property limitations. Depending on the chosen option, the existing sidewalk or facility may be designed as follows:

Option 1 – Multi-Use Pathway: A 2.5 m wide pathway for various uses

Option 2 – Sidewalk: A 1.5 m wide sidewalk

Option 3 – Sidewalk: A 1.5 m wide sidewalk with dedicated bike lanes along the road

For each facility option, there are two storm sewer choices: a deeper option and a shallower option. The deep storm sewer would be installed on the same side of the road as the sidewalk/pathway. In this case, the ditch would be filled in, and a swale with catch basins would collect drainage from both the road and the sidewalk/pathway. The shallow storm sewer option involves filling the ditch on the sidewalk/pathway side, constructing a swale with catch basins, and installing a pipe connecting the catch basin to the ditch on the opposite side of the road.

A potential feasibility study will also assess whether the sidewalk or facility is best suited for one side or both sides of the roadway, aiming to minimize crossing points. The proposed vertical and horizontal alignments will need to meet the minimum and maximum grades recommended by the Transportation Association of Canada (TAC) and comply with both AODA and the Town of Pelham guidelines. Buffers between the roadway and sidewalk or pathway will adhere to the OTM Books. The design will aim to minimize impacts on private driveway grades and property while ensuring positive drainage.



5. Proposed Feasibility Study Work Plan

The following outlines a potential feasibility study work plan:

- 1. Use aerial photography to select alternative pathway connection routes
- 2. Assess and select the preferred routes with Town staff review and input
- 3. Hold a public information centre to obtain public comments on the preferred pathway connection routes
- 4. Review public comments and decide to reassess or to proceed with the preferred routes
- 5. Undertake a topographic survey of the preferred routes and add utility information
- 6. Perform a Stage 1 Archaeological Assessment
- 7. Perform a geotechnical investigation
- 8. Carry out preliminary design of the preferred route
- 9. Prepare a construction cost estimate including utility relocation and property acquisition costs
- 10. Town decides to proceed with the final design or not

The projected estimated cost for preparing a future feasibility study is within the range of \$115,000 to \$125,000. The feasibility study would include topographic survey for approximately 3.8 km of roadway, a Stage 1 – Archaeological Assessment, preliminary design of the preferred option and the remaining tasks listed in the above proposed work plan. It should be noted that costs for a potential Stage 2 Archaeological Assessment are not included in this estimated cost. A Stage 1 Archaeological Assessment will determine whether a Stage 2 Archaeological Assessment is required. Should the Town opt to move forward with a detailed design, the anticipated estimated cost would be within the range of \$15,000 to \$25,000.

6. Potential Design Issues

Potential design conflicts and restraints associated with incorporating a new sidewalk/pathway into the existing road cross-section are identified below. Further assessment will be required in the potential feasibility study.

From Fonthill to Ridgeville: The section between 190 Canboro Road (Fonthill) and Effingham Road (Ridgeville)

- Hydro poles are located on the south side of the road
- Mature trees are located on the north side of the road
- Gas main is located on the north side of the road
- Drainage ditches are located on both side of the road

From Ridgeville to Fenwick: The section between 456 Canboro Road (Ridgeville) and Sunset Drive (Fenwick)

- Existing concrete box culvert crossing at 451 Canboro Road
- Hydro poles are located on both sides of the road
- Watermain/hydrants are located on the south side of the road
- Existing roadside parking is located at 486 Canboro Road on the north side of the road
- Existing asphalt path and curb is located on the south side of the road from 495 Canboro Road to Centre Street



From Ridgeville to Fonthill: The section of Effingham Road between Regional Road 20 (Fonthill) and Canboro Road (Ridgeville)

- Hydro poles are located on the east side of the road
- Mature trees are located on both sides of the road
- Deeper drainage ditches in some areas
- Some properties are located high above the roadway which may cause grading issues

Attachments

Figure 1: Canboro Road - 189 Canboro Road to Effingham Street

Figure 2: Canboro Road – 451 Canboro Road to Sunset Drive

Figure 3: Effingham Street – Regional Road 20 to Canboro Road

Figure 4: Typical Pathway Cross-Sections

Respectfully Submitted,

Urban & Environmental Management Inc.

Reviewed by:

Steve Brant, P. Eng.

Senior Project Engineer



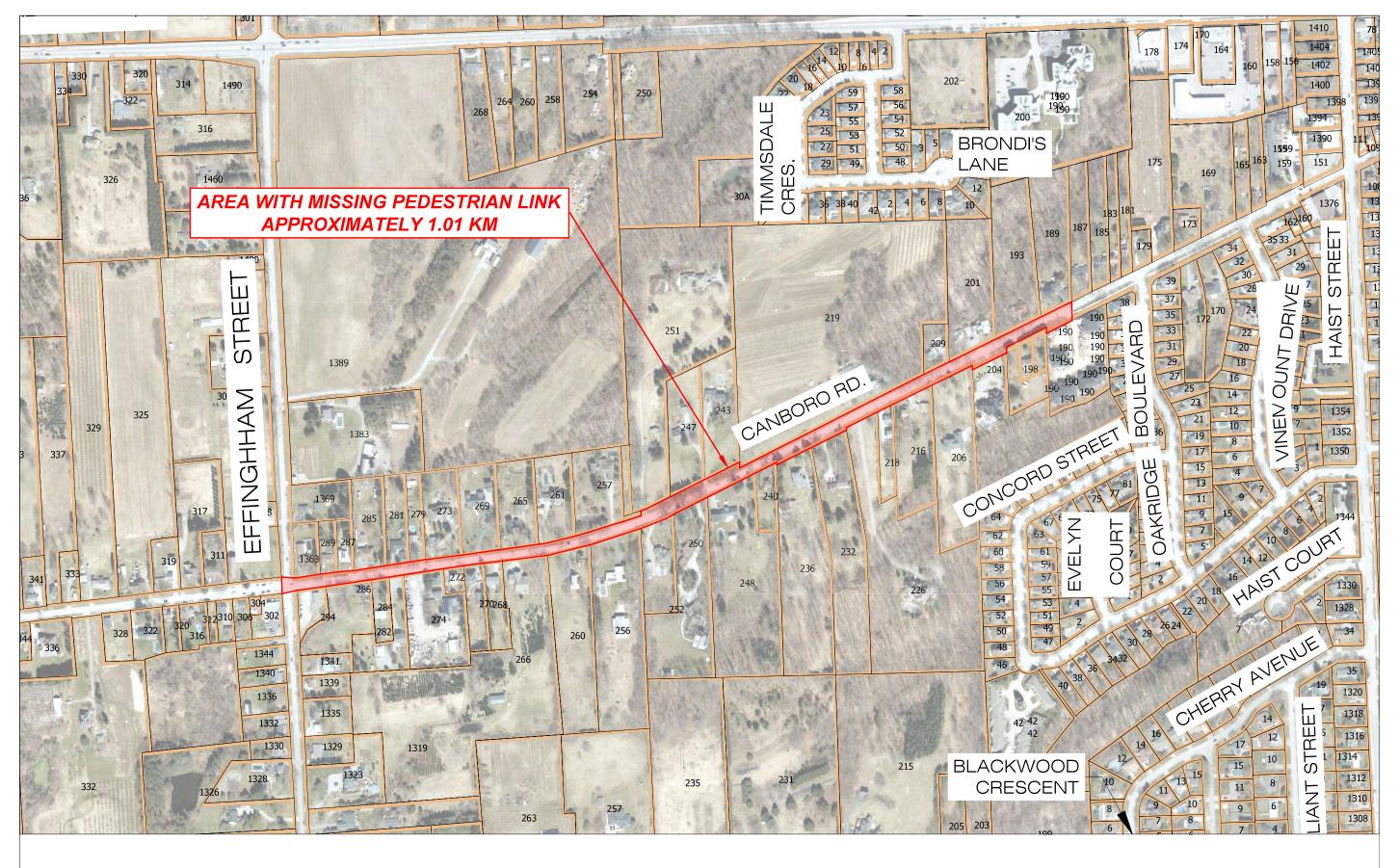


FIGURE 1: CANBORO ROAD 189 CANBORO ROAD TO EFFINGHAM STREET



FIGURE 2: CANBORO ROAD 451 CANBORO ROAD TO SUNSET DRIVE



FIGURE 3: EFFINGHAM STREET
REGIONAL ROAD 20 TO CANBORO ROAD

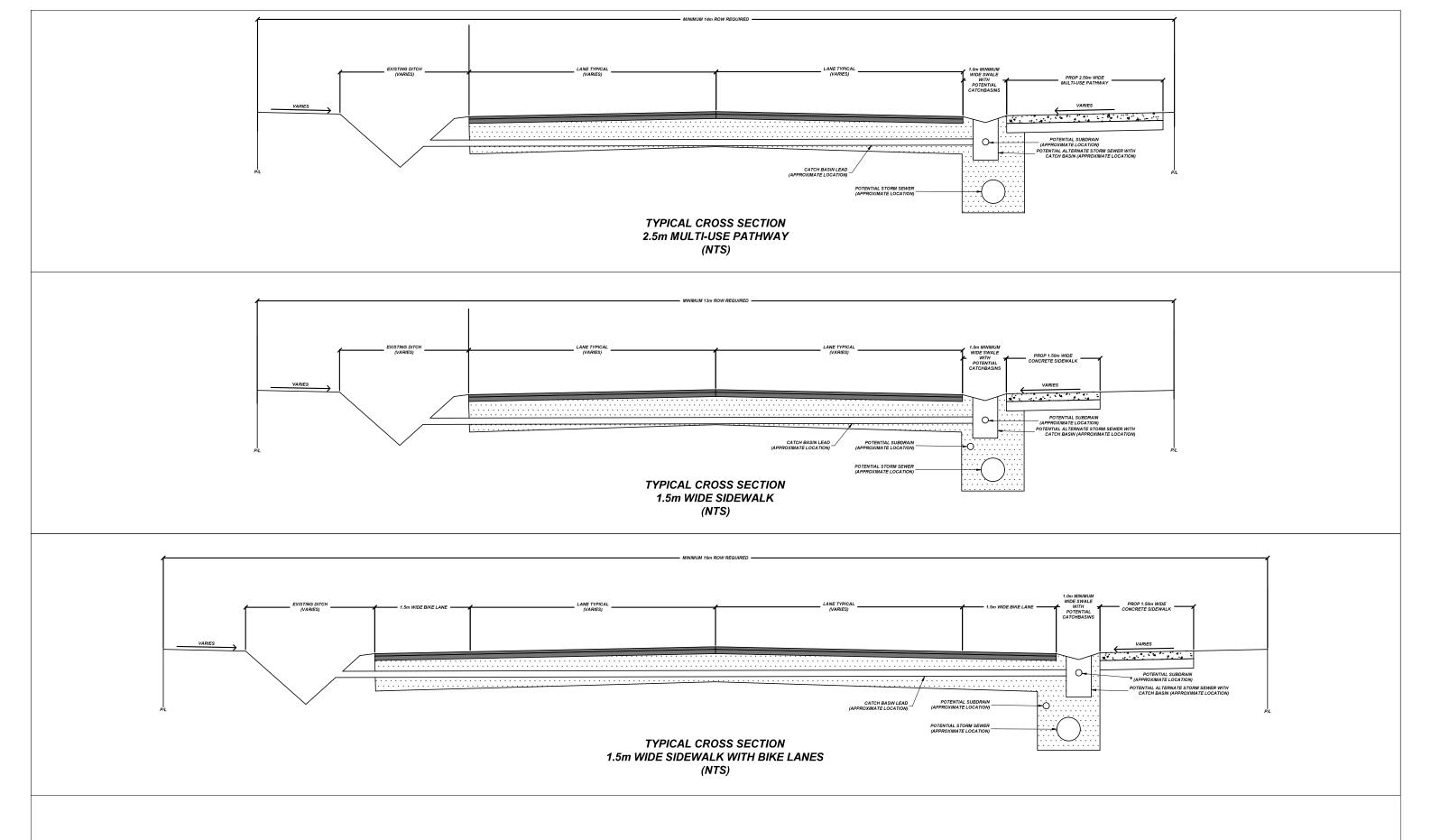


FIGURE 4: TYPICAL PATHWAY CROSS-SECTIONS