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May 19, 2015

**RE: Addendum to Lauzon Parkway Improvements Environmental Study Report
Notice of Filing of Addendum
Our File: W.O. 3214032**

To Whom It May Concern:

MMM, on behalf of the Ontario Ministry of Transportation (MTO), the City of Windsor and the County of Essex, completed a Class Environmental Assessment (EA) Study to address the future requirements for Lauzon Parkway, County Road 42, and the future East-West Arterial. An Environmental Study Report (ESR) documenting the decision making process for this Class EA Study was filed on January 20, 2014 for a 45 day public review period. The study was carried out in accordance with the Ontario Environmental Assessment Act through the application of the *Municipal Class Environmental Assessment* (October 2000 as amended in 2007 and 2011).

At the March 3, 2014 Windsor City Council meeting, Council directed that an Addendum be undertaken for the above noted EA Study. The Addendum would re-examine the East-West Arterial Road component of the Project, in an attempt to resolve property access concerns. The study area is shown on the key map.

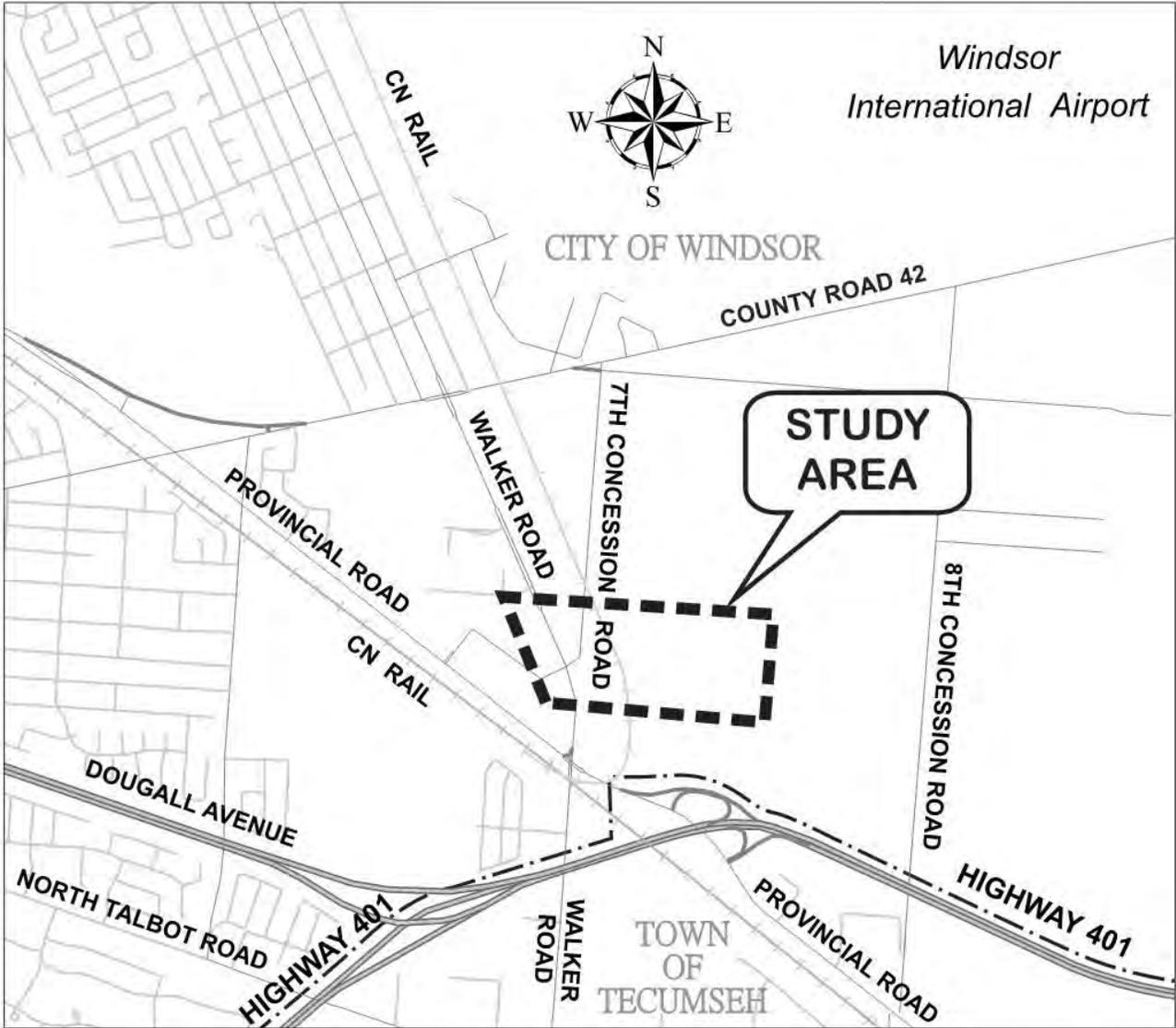
An Addendum to the ESR (January 20, 2014) has now been completed. The Addendum contains details associated with the revisions to the proposed East-West Arterial within the Study Area shown on the key map.

Therefore, please note that this Addendum Report should be read in conjunction with the Original ESR (January 20, 2014), as some recommendations in Part C: East-West Arterial of the Original ESR (January 20, 2014), pertaining to the Addendum Study Area, have been updated.

Please note that only the changes proposed in the Addendum are open for review.

Please see the attached Notice of Filing of Addendum for further information.

Yours very truly,
MMM Group Limited



Addendum to Lauzon Parkway Improvements Environmental Study Report

Notice of Filing of Addendum

THE STUDY

MMM, on behalf of the Ontario Ministry of Transportation (MTO), the City of Windsor and the County of Essex, completed a Class Environmental Assessment (EA) Study to address the future requirements for Lauzon Parkway, County Road 42, and the future East-West Arterial. The study recommended: widening of Lauzon Parkway and its extension to Highway 401; an interchange with Highway 401; further extension of Lauzon Parkway from Highway 401 to Highway 3; widening of County Road 42 from Walker Road to County Road 25 (E. Puce Road); and a new East-West Arterial roadway from Walker Road to 10th Concession Road. An Environmental Study Report (ESR) documenting the decision making process for this Class EA Study was filed on January 20, 2014 for a 45 day public review period.

The study has followed the Ontario Environmental Assessment Act through the application of the Municipal Class Environmental Assessment (October 2000 as amended in 2007 and 2011).

At the March 3, 2014 meeting of the Windsor City Council, Council directed that an Addendum be undertaken, which would re-examine the E-W Arterial Road component of the Project, in an attempt to resolve property access concerns. The study area is shown on the key map.

Environmental Assessment Addendum

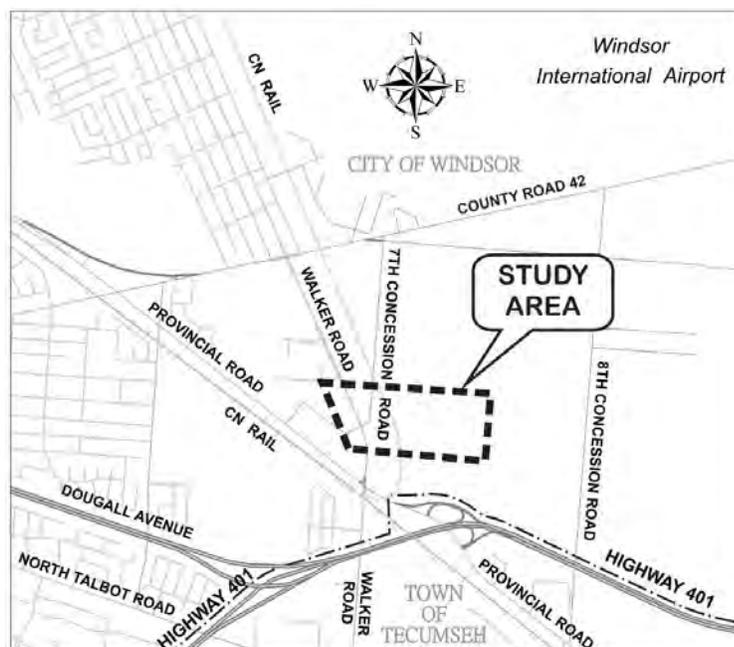
An Addendum has now been completed to the ESR (January 20, 2014). The Addendum contains details of the revisions to the proposed East-West Arterial within the Study Area. **Please note that only the changes proposed in the Addendum are open for review.**

By this notice, the Addendum is being placed on the public record for review in accordance with the requirements of the *Municipal Class Environmental Assessment* (October 2000 as amended in 2007 and 2011) process. Subject to comments received as a result of this notice and the receipt of all necessary approvals, the project may proceed to the next phase of design.

The Addendum will be available for a 30-day public and agency review period from **May 19, 2015** to **June 17, 2015** at the following locations during regular business hours:

Windsor City Hall
City Clerk's Office
350 City Hall Square West
Windsor, Ontario N9A 6S1
Tel: 519-255-6222

Ministry of the Environment and
Climate Change
Windsor Area Office
4510 Rhodes Drive, Unit 620
Windsor, Ontario, N8W 5K5
Tel: 519-948-1464



The Addendum will also be available for viewing from May 19, 2015 on the project website: www.lauzonparkwayea.ca.

Interested persons are encouraged to review this document and provide comments by **June 17, 2015**. If, after consulting with the staff of the City of Windsor and their consultant, you have unresolved concerns regarding the revisions to the undertaking, you have the right to request that the Minister of the Environment and Climate Change (11th Floor, Ferguson Block, 77 Wellesley Street West, Toronto, Ontario, M7A 2T5) make an order for the project to comply with Part II of the Environmental Assessment Act (referred to as a Part II Order (bump-up)). A copy of the Part II Order request shall be forwarded to the City of Windsor at the address below and should also be forwarded to the Director, Environmental Approvals Branch, Ministry of the Environment and Climate Change (Floor 12A, 2 St. Clair Avenue West, Toronto Ontario M4V 1L5), and MMM Group Limited at the address below. If there are no outstanding concerns by **June 17, 2015**, the project will be considered to have met the requirements of the Class EA.

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Thank you for your participation in this study

Comments and information regarding this project will be maintained on file for use during the project and may be included in project documentation. Information collected will be used in accordance with the *Municipal Freedom of Information and Protection of Privacy Act*. With the exception of personal information, all comments will become part of the public record.

Des renseignements sont disponibles en français en composant (905) 823-8500 Poste 1471 (Yannick Garnier).



LAUZON PARKWAY IMPROVEMENTS

Class Environmental Assessment Study

ENVIRONMENTAL STUDY REPORT

ADDENDUM



May 19, 2015

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1 INTRODUCTION AND BACKGROUND

1.1 BACKGROUND OF EA STUDY

A Class Environmental Assessment (EA) Study has been completed to address the future requirements for Lauzon Parkway Improvements. The study had the following main components:

- Lauzon Parkway from E.C. Row Expressway to County Road 42 (2.5 km);
- Lauzon Parkway's extension to Highway 401 (3 km);
- An interchange with Highway 401;
- Lauzon Parkway's further extension to Highway 3 (2.5 km);
- County Road 42 from Walker Road to the City/County Boundary (5.5 km);
- County Road 42 from the City/County Boundary to County Road 25 (10 km); and
- The future East-West (E-W) Arterial from Walker Road to 10th Concession Road/County Road 17 (5 km)

A parallel study is being carried out for the preparation and approval of a Secondary Plan for the remainder of the lands transferred to the City of Windsor in 2003. The area of the draft Sandwich South Secondary Plan is bounded, in general terms, by: Provincial Highway 401 to the south; the Windsor International Airport, CP Rail mainline, and E.C. Row Expressway to the north; 8th Concession Road to the west; and the Town of Tecumseh to the east.

The study area for the Class Environmental Assessment Study is illustrated in Exhibit 1 and Exhibit 2.

EXHIBIT 1: LAUZON PARKWAY IMPROVEMENTS CLASS EA STUDY AREA MAP

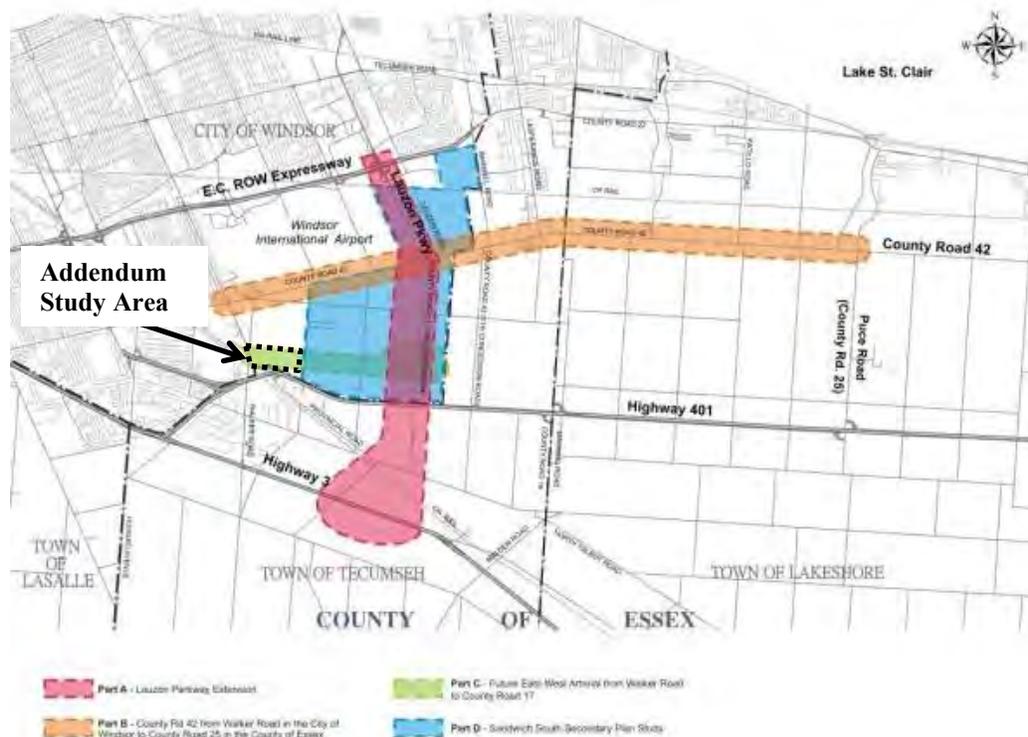


EXHIBIT 2: EA ADDENDUM STUDY AREA MAP



This study followed the *Ontario Environmental Assessment Act* through the application of the Municipal Class Environmental Assessment (October 2000 as amended in 2007 and 2011) and referred to the Environmental Assessment for Provincial Transportation Facilities for highway improvements. With the coming into force of the *Canadian Environmental Assessment Act* (CEAA 2012), new regulations mean the improvements proposed as part of this study did not fall under any category where a Federal EA is required. The preparation and approval of the Secondary Plan will follow the requirements of the *Ontario Planning Act*.

The proposed nature of this undertaking identified it as Schedule ‘C’ under the Municipal Class EA. It was directed by a Project Team that included staff members from MTO, the City of Windsor, the County of Essex, and the consulting team of MMM Group Limited. External agencies and stakeholder groups with interests in the study area were notified of the project in April 2011 and two Public Information Centres (PIC) were held on July 16, 2011 and October 22, 2012. The Environmental Study Report (ESR) was filed, and the Notice of Study Completion was advertised, in January 2014 with a notification period ending March 6, 2014.

1.2 NEED FOR AN ADDENDUM STUDY

The plan for the E-W Arterial was generally accepted positively by the Windsor-Essex citizens. However, the Windsor Christian Fellowship (WCF), an existing stakeholder along the future E-W Arterial, opposed the mid-block access provided to their property as part of the recommended plan. WCF was consulted throughout the EA process and subsequently as documented in Section 1.4.2.

The project proponents reported the Study findings to the City of Windsor Executive Committee including a response to a Council Question (CQ) relating to the Windsor Christian Fellowship (WCF) access at its meeting of January 27, 2014, with a subsequent Report to the same Committee on February 24, 2014 following additional consultation with WCF (see Section 1.4). The Executive Committee recommended to Council that the alternative for access to the WCF property at Walker Road and 7th Concession as shown on the plan dated February 19, 2014 (Exhibit 5) from the GSP Group be recommended as an addendum to the EA for the future E-W Arterial south of the WCF.

Due to tight timelines respecting the end of the Notification Period for the Notice of Study Completion, pre-emptive Part II Orders were submitted by the City of Windsor and Windsor Christian Fellowship with respect to property access to the E-W Arterial, which were later retracted by both parties once a commitment was made to undertake an Addendum for this issue. Other Part II Order submissions were received which were unrelated to this issue.

The City of Windsor Council, at the March 3, 2014 Council meeting, confirmed the direction of the Executive Committee, that the recommended alternative for access to the WCF property at Walker Road and 7th Concession as shown on the plan dated February 19, 2014 from the GSP Group, be recommended as an addendum to the EA for the future E-W Arterial south of the WCF.

City of Windsor staff recommended that a comprehensive traffic impact analysis be undertaken for the complete system to assess the feasibility of the WCF plan. Based on the Council direction, an addendum to the ESR was initiated by the City of Windsor in March 2014 for the Study Area identified as the E-W Arterial between Walker Road and the proposed East Pelton N-S Collector Road, illustrated in Exhibit 2.

As a result of the motion to move forward with the EA Addendum, WCF and the City of Windsor withdrew their requests for a Part II Order, in letters sent to MOE in May 2014, provided in Appendix A.

The Minister of the Environment reviewed the Part II Order request submissions and on December 23, 2014 approved the Lauzon Parkway Environmental Assessment; acknowledging the commitment from the City of Windsor to undertake an Addendum which would re-examine the E-W Arterial Road component of the Project, in an attempt to resolve property access concerns. This EA Addendum Report documents the circumstances necessitating the reconsideration, the environmental implications of the proposed change, and any mitigation measures.

1.3 MUNICIPAL CLASS EA ADDENDUM PROCESS

The Lauzon Parkway Class EA Study was carried out in accordance with the Municipal Class Environmental Assessment (October 2000 as amended in 2007 and 2011), which includes an addendum process for proponents to make changes to a project after the filing of the Environmental Study Report (ESR).

The addendum process that was followed is detailed in the Municipal Class EA. Key points are summarized below:

- the EA Addendum shall describe the circumstances necessitating the change, the environmental implications of the change, and what, if anything can and will be done to mitigate any negative environmental effects;
- the addendum shall be filed with the ESR and the Notice of Filing of Addendum shall be given to all potentially affected members of the public and review agencies;
- when an Addendum to an ESR is issued, only the items in the addendum (i.e., the changes) are open for review;
- the addendum shall be made available for a period of 30 days following the Notice of Filing of Addendum for review and response by affected parties; and
- the Notice shall include the public's right to request a Part II Order within the 30-day review period. If no request is received, the proponent is free to proceed with implementation and construction.

This EA Addendum Report describes the circumstance necessitating the reconsideration, the alternative solutions being considered, the results of the traffic analysis undertaken, consultation with stakeholder and affected property owners, an evaluation of alternatives a summary of the recommended changes to the ESR: including required design plate updates and property acquisition, the associated potential impacts and mitigating measures, updated construction cost estimates and consultation with affected stakeholders.

1.4 CONSULTATION

A key component of the EA process is public consultation. For this study, the main points of public consultation are:

- to review and receive input about the background information and the preferred transportation planning solution (as noted in Section 1.4.2);
- to review and receive public input regarding the preferred alternatives (as noted in Section 1.4.2); and
- to make the final ESR available for public review for a 30-day period (Notice of Filing of Addendum – May 12, 2015)

Based on the MCEA Process described in Section 1.3, only affected property owners were directly consulted during the Addendum process, and notified of the filing of this Addendum Report.

The Notice of Filing of Addendum was sent on May 12, 2015 to property owners affected by changes to the original EA design as a result of this Addendum. The Notice was also published in the Windsor Star, on May 16, 2015.

The comments received from the public are discussed in pertinent sections of the Addendum. The consultation process and inputs received are documented in the in Appendix A. With the exception of personal information, all comments will become part of the public record.

1.4.1 Consultation with Windsor Christian Fellowship (WCF) Prior to Addendum

The Project Team consulted with WCF on various issues throughout the original EA Study, as part of the EA process. A summary of the consultation with WCF which are most directly related to this Addendum is provided below.

The WCF owns two properties along the proposed E-W Arterial at 4490 7th Concession Road and 4500 Walker Road. These properties are located near the western limit of the proposed roadway. The East Pelton Secondary Plan, illustrated in Exhibit 3, recommended two access points to the WCF property (property accesses are illustrated by this symbol “▲”, and roundabouts are illustrated by this symbol “⊙”); one from the E-W Arterial and a second from a proposed Collector Road, north of the property.

EXHIBIT 3: EAST PELTON SECONDARY PLAN (2009) – LAND USE PLAN



**Schedule EP-2: Land Use
 East Pelton Planning Area**

| | | |
|---------------------|---------------------|-------------------------|
| LEGEND | | |
| FUTURE URBAN AREA | MIXED USE | SECONDARY PLAN BOUNDARY |
| COMMERCIAL CENTRE | COMMERCIAL CORRIDOR | COMMUNITY NODE |
| MINOR INSTITUTIONAL | MAJOR INSTITUTIONAL | |
| PRIVATE RECREATION | OPEN SPACE | |

City of Windsor Official Plan : Volume II
 Date of Approval:

A brief informal discussion was held with WCF at their offices in October 2012, during PIC 2, to discuss WCF's concerns about their future accesses. Following this, a meeting with the WCF was held on November 27, 2012. At the meeting, WCF submitted a report to the Project Team entitled "Required Changes to the Plans for the Lauzon Parkway Improvements Environmental Assessment" (included in Appendix A of the ESR). Among their main concerns were:

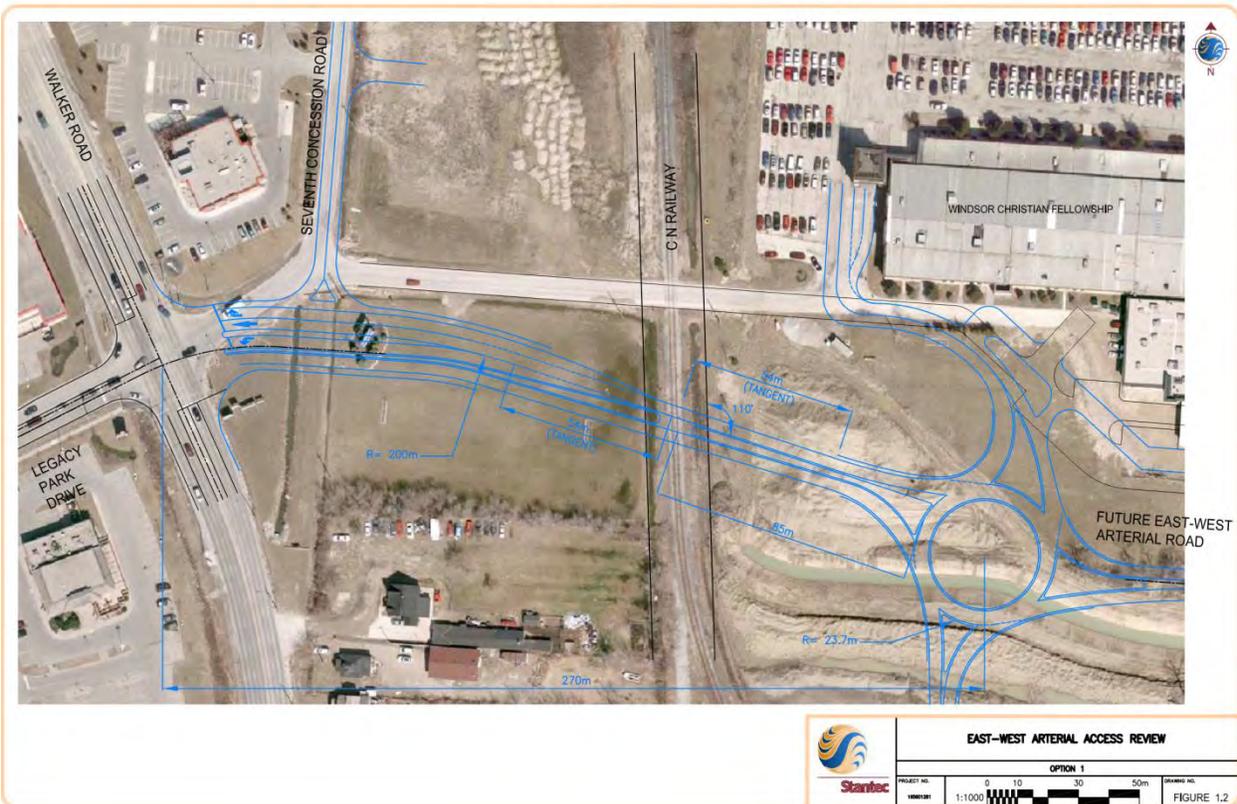
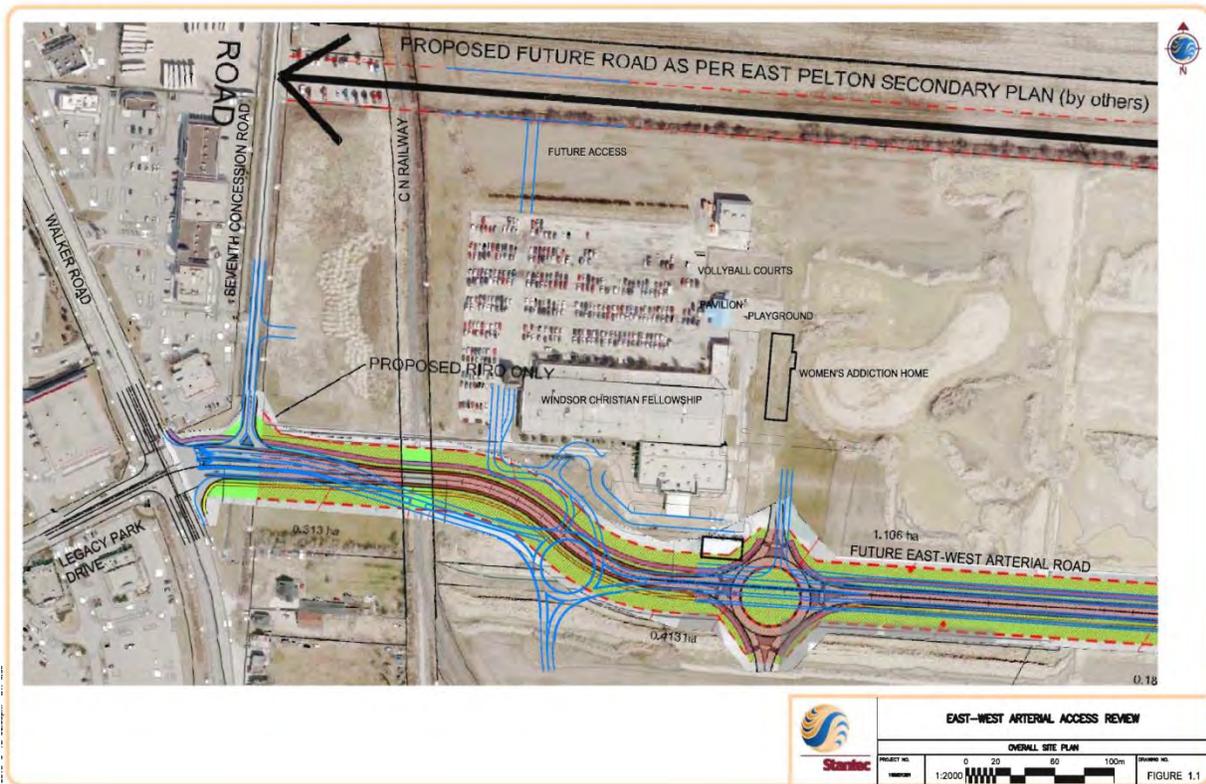
- additional future accesses to 4490 7th Concession Road and 4500 Walker Road from the proposed accesses as agreed to in the East Pelton Secondary Plan; and
- proposed lane configuration and geometry of the E-W Arterial.

The Project Team responded to the WCF in December 2012 noting that they would review their comments regarding access to their property and the lane configuration of the E-W Arterial. WCF's engineering consultants, Stantec, submitted a letter to the Project Team on August 13, 2013 in response to the WCF access as portrayed at PIC 2. The WCF preferred option, as outlined in the letter, was a roundabout located east of the CN Rail line and approximately aligns with the existing main entrance (west end) of the WCF building. The Project Team met with WCF and their technical and legal consultants on Aug. 19, 2013 to discuss the access alternatives. The Project Team's main concern for the preferred option was its proximity to the CN Rail line, and potential queuing over the tracks. It was agreed that Stantec would provide revised access options for consideration, based on the comments provided at the meeting.

Further to the meeting held on Aug. 19, 2013 to discuss future access of WCF on the proposed E-W Arterial, a technical meeting was held at MMM Mississauga Office on Sept. 4, 2013 to discuss the design aspects of Stantec's proposed alternative access concept. Stantec presented a set of 2031 projected traffic volumes of the E-W Arterial / WCF intersection, and an alternative roundabout concept to the EA-proposed roundabout. The alternative concept had the roundabout located approximately 85 m east of the CN Rail line, as well as a right-in-right-out access proposed just to the east of the WCF Banquet Hall (at the EA-proposed roundabout location). This was very similar to the option submitted by Stantec on September 24, 2013, as noted in the following paragraph and illustrated in Exhibit 4.

Stantec submitted an additional report, "Windsor Christian Fellowship Future Access Solution", on September 24, 2013. The report contends that the E-W Arterial access to the WCF property as depicted at PIC 2 would not be conducive to the operations of the institution, as it would be located at the back of their facilities, and in an area where there is high pedestrian traffic and recreational activities. Stantec proposed a roundabout intersection on a realigned E-W Arterial at a location that approximately aligns with the facility's main entrance, and a secondary right-in-right-out access to the east of the primary access, illustrated in Exhibit 4. The realignment was south of the proposed right-of-way and increased the distance between the right-of-way and the existing building facility.

EXHIBIT 4: STANTEC PROPOSED ROUNDABOUT - SEPTEMBER 24, 2013



Additional consultations during the Lauzon Parkway Improvements Environmental Assessment Study 45-day review period, which included participation at public meetings in Council Chambers, are referenced in section 1.2 and culminated on March 03, 2014 in the direction to pursue an Addendum to the EA as follows:

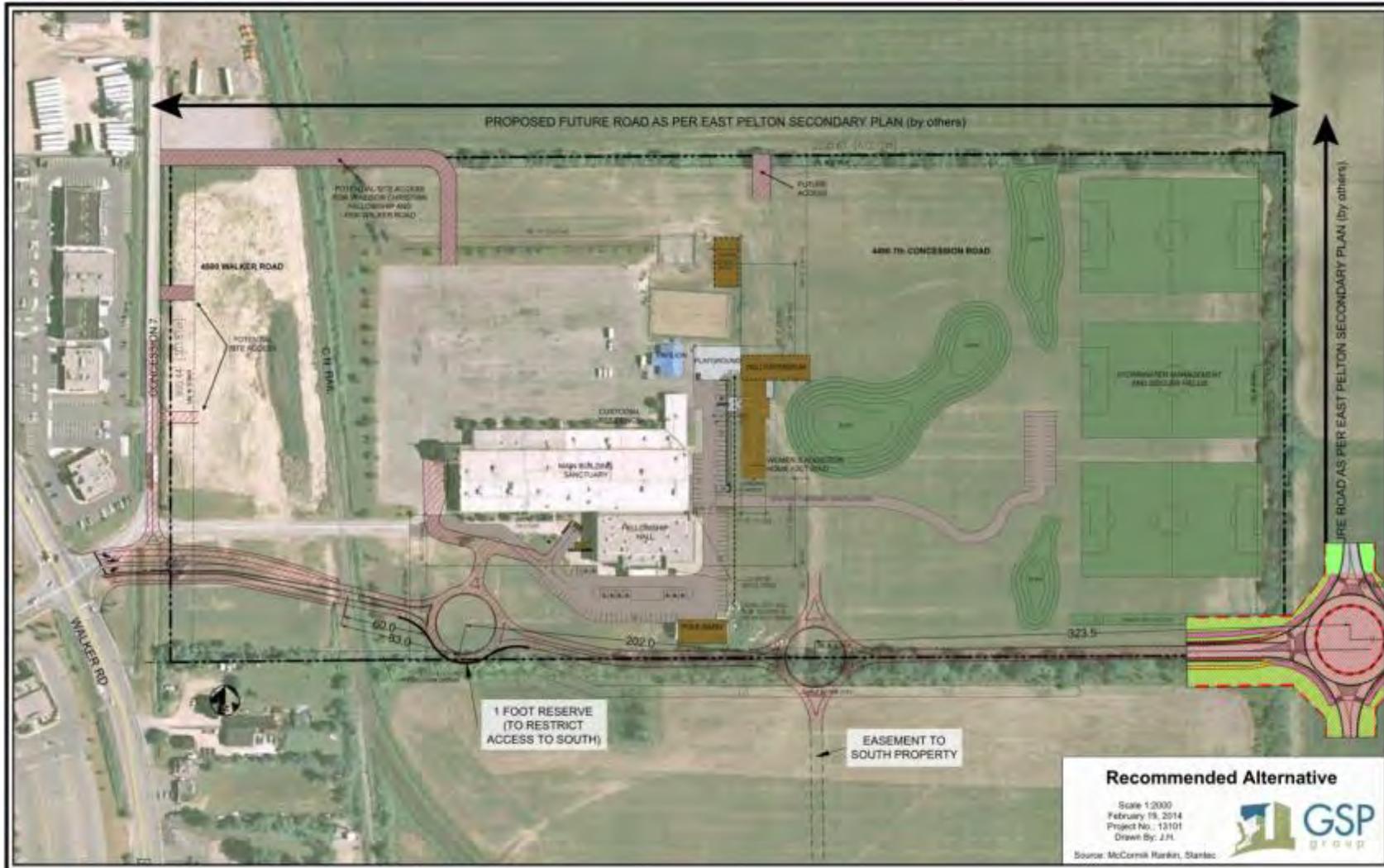
The project proponents reported the Study findings to the City of Windsor Executive Committee including a response to a Council Question (CQ) relating to the Windsor Christian Fellowship (WCF) access at its meeting of January 27, 2014 (LiveLink Report #16937). WCF presented the access request reflecting the September 24, 2013 drawing in Exhibit 4 at the same meeting. City of Windsor Administration was directed to further dialogue with WCF on the access matter and report back to the City of Windsor Executive Committee on February 24, 2014.

The additional consultation meeting occurred and the outcome was reported by City of Windsor Administration as directed on February 24, 2014 (LiveLink Report #17013). During these consultations, WCF proposed the 3-leg roundabout in addition to the Mid-Block roundabout access (Exhibit 5) which they also presented to the Executive Committee on February 24, 2014. As noted, Council directed the Addendum to the EA on March 03, 2014.

On March 6, 2014, GSP Group, on behalf of WCF, submitted a request for a Part II Order in respect of the Lauzon Parkway Improvements Class EA that an alternative to the recommended plan for a mid-block roundabout access to the WCF property be recommended to City Council. The alternative, dated February 19, 2014, included an additional 3-leg roundabout located 60 m from the CN Rail line and between the rail line and the recommended Mid-Block Roundabout Access, and is illustrated in Exhibit 5. It is noted that some of the accesses illustrated in this plan are outside of the study area and scope of this EA Addendum.

Additional correspondence and consultation with WCF since the initiation of this addendum are documented in Section 1.4.2.

EXHIBIT 5: WCF-PROPOSED PLAN WITH ADDITIONAL 3-LEG ROUNDABOUT ACCESS (FEBRUARY 19, 2014)



1.4.2 Consultation with WCF during the EA Addendum

A key component of the EA process is public consultation. Windsor Christian Fellowship (WCF), an identified stakeholder, was consulted throughout the EA Addendum process.

A meeting with WCF was held on July 2, 2014 to discuss and confirm the revised land-use assumptions and study methodology for the traffic analysis. The Project Team provided clarification regarding the updated land-use assumptions for the East Pelton Secondary Area, noting that based on the City's latest information, the East Pelton Secondary Area is going to be developed sooner than anticipated in the original EA analysis (development could start within a year rather than in year 2023, as assumed in the original EA analysis). The Project Team also confirmed with WCF the land-use assumptions and densities of their properties which would be used in the formulation of traffic volumes. WCF was inflexible in assigning growth to their property both from development and service attendance. For the Addendum study horizons (2031 and full build-out), development growth is limited to the contents of a former development application (30 residential units) and zero growth in service attendance. The Minutes from this meeting are provided in Appendix A.

On July 25, 2014 GSP Group provided configuration concepts of the 3-leg roundabout, with 2 and 4 lanes on the E-W Arterial, with connections to the southern parking lot and internal road layouts. WCF site specific analysis assumptions are outlined in Chapter 3, and detailed in the Traffic Analysis Report (Appendix B).

On December 10, 2014 MMM provided GSP Group the data from the queue length survey conducted on November 9, 2014, and a new alternative roundabout concept (Alternative 4 detailed in Section 3.2) for review. GSP Group provided comments on the new alternative on December 19, 2014.

On February 23, 2015, preference feedback respecting the new alternative vs. the original EA concept was requested from the remaining directly affected property owners and CN Rail via a Notification Letter (provided in Appendix A), however no responses were received.

In a combined face-to-face and teleconference meeting on April 1, 2015, MMM Group, City Administration, the Ward Councillor and representatives from WCF including GSP Group and Stantec Consulting, discussed the alternatives carried forward as part of the traffic analysis, as outlined in Section 3.2 of this report .

In response to a question from City of Windsor Council and to seek confirmation from Council respecting the Addendum preferred alternative, the LiveLink Report 17631 *Lauzon Parkway Environmental Assessment – Filing a Study Addendum and CQ15-2015 Update Request* (Appendix A) was presented at the April 07, 2014 Council Meeting. WCF provided the following documentation to City of Windsor Council for this meeting (Appendix A):

- Letter Dated April 2, 2015 which included a request for a deferral
- Email from Eric Saulesleja dated April 7, 2015 including five Conceptual Improvements WCF Site Plan Options prepared by Stantec Consulting to address internal traffic queuing

The Minutes of the Council Meeting are included in Appendix A. As per Council Motion CR66/2015, Council granted the requested deferral to the April 20, 2015 Council Meeting.

On April 9, 2015, City Administration discussed, by teleconference, the five Options prepared by Stantec with GSP Group regarding the internal road network of the WCF property. The Conceptual Improvements WCF Site Plan Options 1-5 were evaluated by MMM and the WCF Site Plan Option 4 was selected to be carried forward for further consideration. The Modified Alternative 2A roundabout location was developed to be considered in conjunction with Option 4. Due to the increased potential for queuing over the rail crossing, **in addition to** the WCF site specific growth assumption criteria, strict adherence to the provision of “free-flow” is essential for the implementation of this alternative.

On April 14, 2015 Senior Administration met with WCF and its representatives including GSP Group and Stantec Consulting to discuss the Modified Alternative 2A, the conditions of its implementation beyond the Addendum criteria, and the commitment to provide the alternative to Council for their consideration clarifying Administrations continued support for Alternative 4.

The following documentation was provided from WCF and City Administration respectively for the April 20, 2015 Council Meeting:

- Memorandum Aird & Berlis LLP dated April 20, 2015
- Memo: Additional Information to Council dated April 17, 2015

The Minutes of the April 20, 2015 Council Meeting are included in Appendix A. As per Council Motion CR81/2015, Council supported finalizing the Addendum with Alternative 4. As clarified in the Memo: Additional Information to Council dated April 17, 2015, the Addendum would be finalized with a secondary option should the conditions of the Traffic Analysis Report not be met at the time of detailed design.

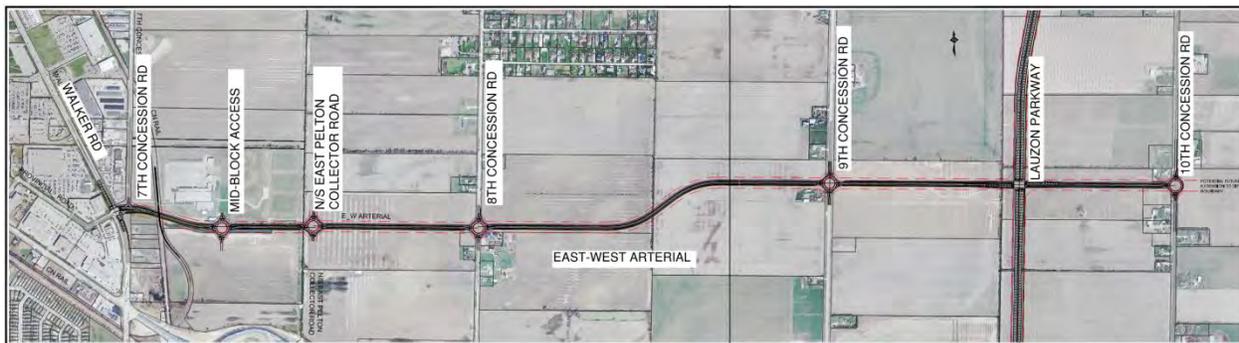
2 EA RECOMMENDATIONS

This section summarizes the recommended plan for the new E-W Arterial as described in detail in Part C.6 of the ESR.

2.1 E-W ARTERIAL

A new E-W linkage is needed within the future Sandwich South community, which will provide a spine within the transportation network and support the future development capacity demands of the community. The future E-W Arterial link from Walker Road to 10th Concession Road was identified in the *Windsor Annexed Area Master Plan Study* (2006). The E-W Arterial was further developed in the *East Pelton Secondary Plan* (2009) which included a future E-W arterial road connecting to Walker Road, and formed the basis for this roadway component in the EA. Exhibit 6 illustrates the recommended E-W Arterial from Walker Road, in the west, to 10th Concession Road, in the east, as well as the connection to the Lauzon Parkway extension.

EXHIBIT 6: E-W ARTERIAL FROM WALKER ROAD TO 10TH CONCESSION ROAD

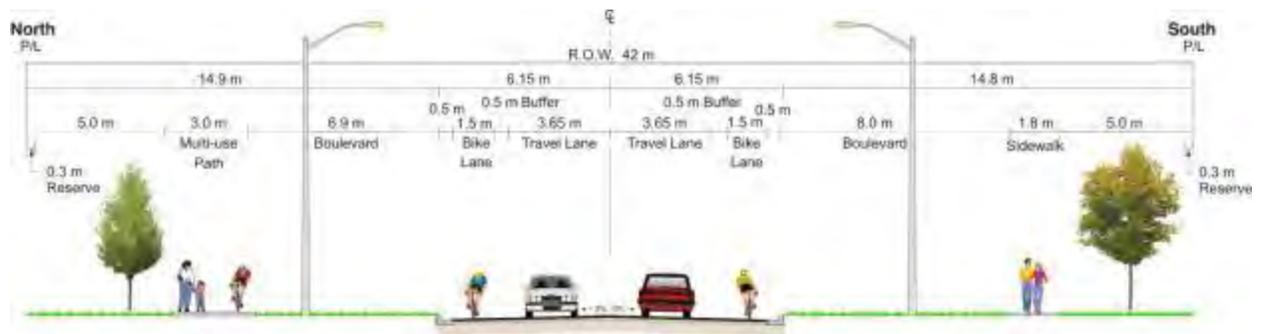


2.2 RECOMMENDED CROSS-SECTION

The future E-W Arterial, from Walker Road to 10th Concession Road/County Road 17, is planned as a controlled access Class II Arterial urban roadway, in the City of Windsor. The proposed cross-section is illustrated in Exhibit 7, and includes the following:

- a new 2-lane urban cross-section;
- planning of proposed intersections;
- active transportation facilities incorporated within the transportation corridor – sidewalk, multi-use path, and buffer-separated bike lanes;
- illumination and landscaping; and
- protection for ultimate 4-lane urban cross-section beyond the project horizon (2031).

**EXHIBIT 7: TYPICAL CROSS-SECTION E-W ARTERIAL
 WALKER ROAD TO 10TH CONCESSION ROAD / COUNTY ROAD 17**



(Source: Exhibit C.6-2 of the ESR, January 2014)

2.3 INTERSECTIONS

E-W Arterial has six proposed intersections; as listed (from west to east) below, the existing and future recommended intersections are illustrated in Exhibit 6, and noted in Exhibit 8.

EXHIBIT 8: SUMMARY OF E-W ARTERIAL INTERSECTIONS

| Intersecting Road | Existing Intersection | Future Intersection |
|---|-----------------------|-----------------------------------|
| Walker Road/Legacy Park | Signalized | Signalized ¹ |
| 7 th Concession Road | N/A | Unsignalized (right-in/right-out) |
| Concession 7 Lot 14 Mid-block Property Access | N/A | Roundabout ² |
| Proposed Future Road | N/A | Roundabout |
| 8 th Concession Road | N/A | Roundabout |
| 9 th Concession Road | N/A | Roundabout |
| Lauzon Parkway | N/A | Roundabout ³ |
| 10 th Concession Road / County Road 17 | N/A | Roundabout |

1. A median will be placed on E-W Arterial between the westbound left-turn and through lanes, to prevent unsafe operations from 7th Concession to southbound Walker Road.
2. A roundabout will be provided as an access to 4490 7th Concession Road concurrently with the proposed improvement at Walker Road; the roundabout will also maintain access to 7th Concession Road from Walker Road, through U-turn movements.
3. The LOS for a roundabout is acceptable for 2021, but is unacceptable for 2031. Therefore a roundabout is recommended for the interim 4-lane Lauzon Parkway, and will be converted to a signalized intersection for the ultimate 6-lane Lauzon Parkway.

2.3.1 Mid-Block Roundabout Access

The Project Team recommended the proposed East Pelton Secondary Plan approved access to the WCF property on E-W Arterial as a roundabout. This proposed roundabout provides additional operational access, by providing a U-turn movement, to northbound 7th Concession Road. The location of the roundabout was recommended consistent with the proposed Major Road Plan in the East Pelton Secondary Plan, which provides additional north-south and east-west collector roads bordering the east and north sides of the WCF property, and also provides access to all lands within the Secondary Plan. The roundabout access to WCF on E-W Arterial is located approximately mid-block between the 7th Concession Road and the proposed East Pelton N-S Collector Road, in order to provide access to lands to the north and the south. The

roundabout also provides access from Walker Road to northbound 7th Concession Road with minimal out-of-way travel (approximately 800 m).

3 TRAFFIC ANALYSIS

To undertake an addendum to the western section of Part C, E-W Arterial Road of the Lauzon Parkway Class EA Study, a detailed traffic impact analysis was required to assess alternatives for modified access to the WCF property. The feasibility of the WCF plan dated February 19, 2014 was part of this analysis, which included a 3-leg roundabout access to their property and a 4-leg roundabout additionally accessing the property to the south, located along the 650 m between the CN Rail corridor and the EA recommended roundabout at the north/south East Pelton Collector Road, at the east limits of their property.

3.1 TRAFFIC ANALYSIS ALTERNATIVES

The following scenarios were identified for analysis in order of priority (i.e., if a prior alternative provided satisfactory operations, the alternatives that followed would not need to be analysed) for this addendum study:

- **Alternative 1:** 2-lane E-W Arterial with a 4-leg roundabout approximately at the recommended EA Mid-block roundabout location, with the addition of the WCF proposed 3-leg roundabout (approximately 60 m east of the CN Rail line)
- **Alternative 2:** 4-lane E-W Arterial with a 4-leg roundabout approximately at the recommended EA Mid-Block roundabout location (modified with 2 lanes), and the addition of the WCF proposed 3-leg roundabout access (approximately 60 m east of the CN Rail line)
- **Alternative 2A:** Alternative 2 4-leg Midblock roundabout and WCF proposed 3-leg roundabout access shifted 20 m to the east, to provide 80 m storage between the CN Rail line and the WCF proposed 3-leg roundabout, and 200 m between these two roundabouts
- **Alternative 3:** 4-lane E-W Arterial with a 4-leg roundabout approximately at the recommended EA Mid-Block roundabout location (modified with 2 lanes), and the addition of a signalized intersection at the location of the WCF proposed 3-leg roundabout (approximately 60 m east of the CN Rail line)
- **Alternative 4:** 4-lane E-W Arterial with the recommended EA Mid-Block roundabout (modified with 2 lanes) shifted west approximately 100 m (approximately 120 m east of CN Rail line)
- **Alternative 5:** 2-lane E-W Arterial with the recommended EA Mid-Block roundabout modified with 2 lanes

Alternative 4 and 2A were not included in the original scope of the EA Addendum study - they were developed during the study process.

Alternative 5 is consistent with the EA technically preferred original design with a modified two lane roundabout between the CN Rail line and the proposed N-S East Pelton Collector Road, to accommodate the accesses for WCF and the property to the south, approximately 220 m east of CN Rail line. The EA recommended plan was also analysed to confirm the continued suitability of the EA recommendation of a 2-lane E-W Arterial with the updated land use.

The locations of WCF Access for these alternatives are shown in Exhibit 9 to Exhibit 13.

EXHIBIT 9: WCF ACCESS LOCATION FOR ALTERNATIVE 1, 2

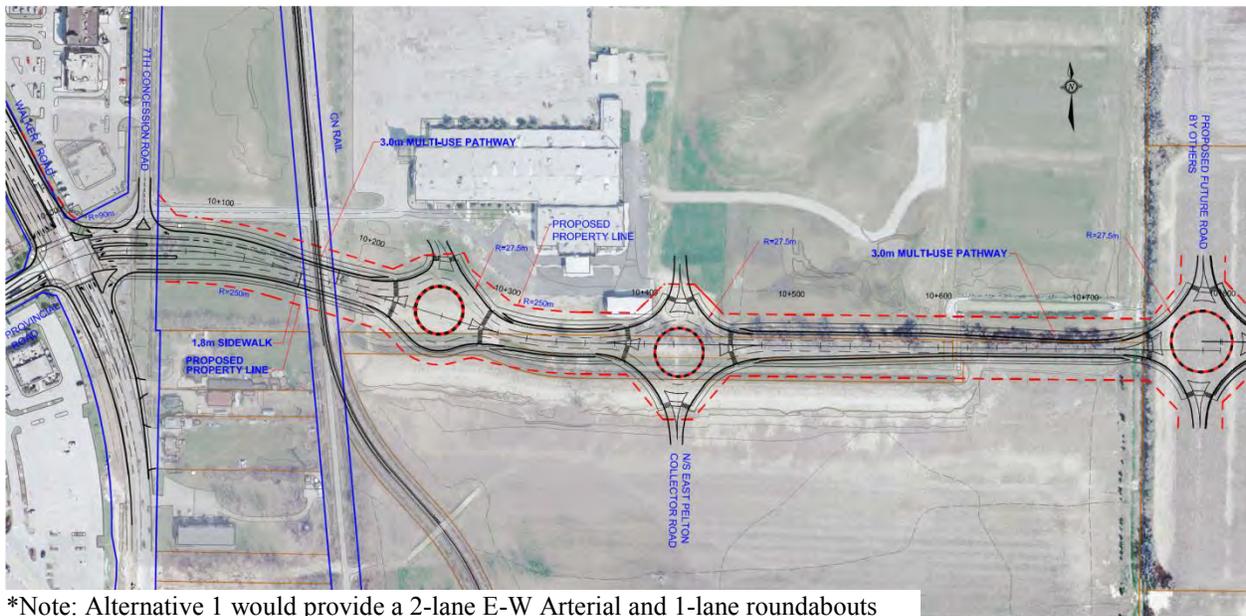


EXHIBIT 10: WCF ACCESS LOCATION FOR ALTERNATIVE 2A

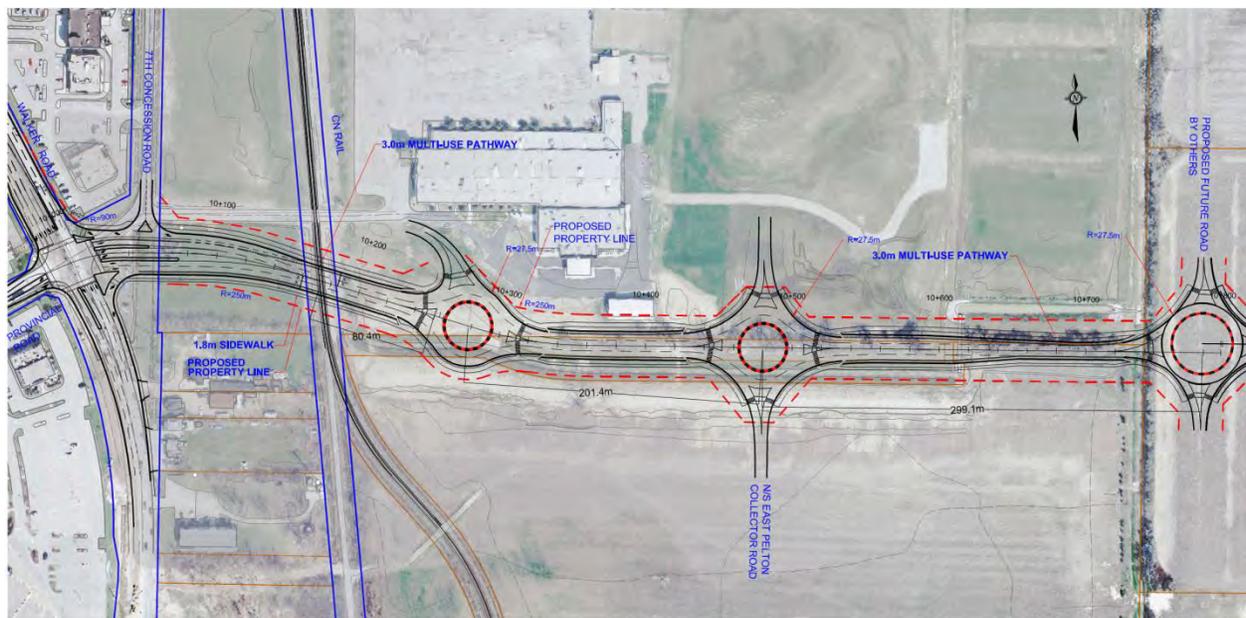


EXHIBIT 11: WCF ACCESS LOCATION FOR ALTERNATIVE 3

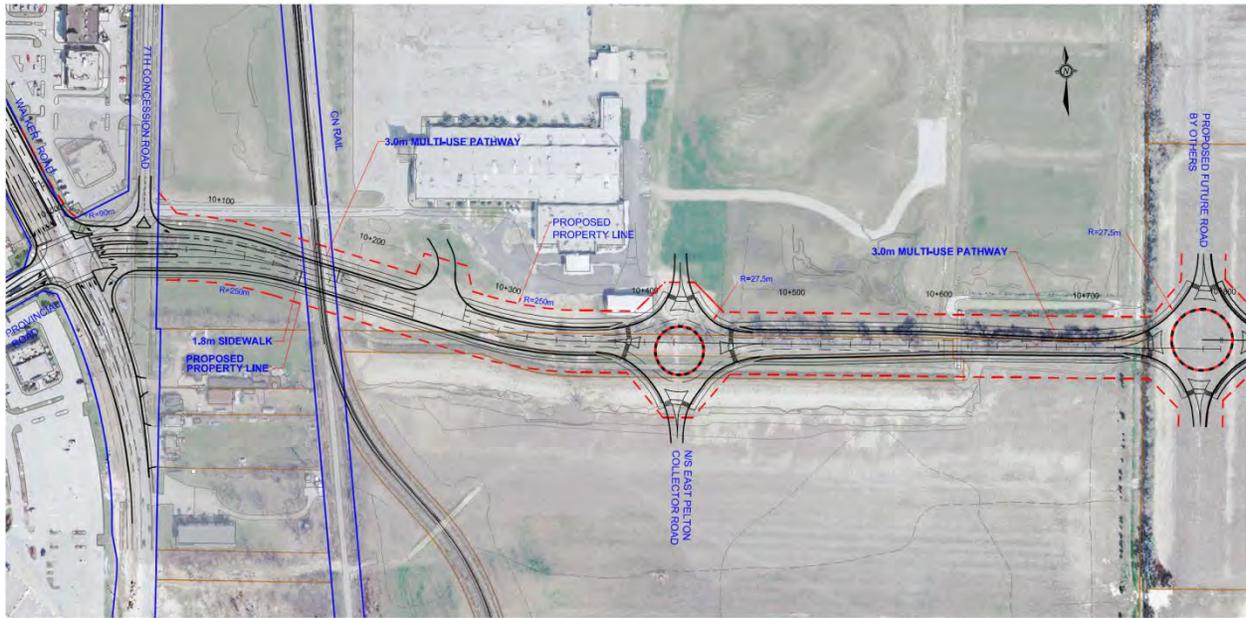


EXHIBIT 12: WCF ACCESS LOCATION FOR ALTERNATIVE 4

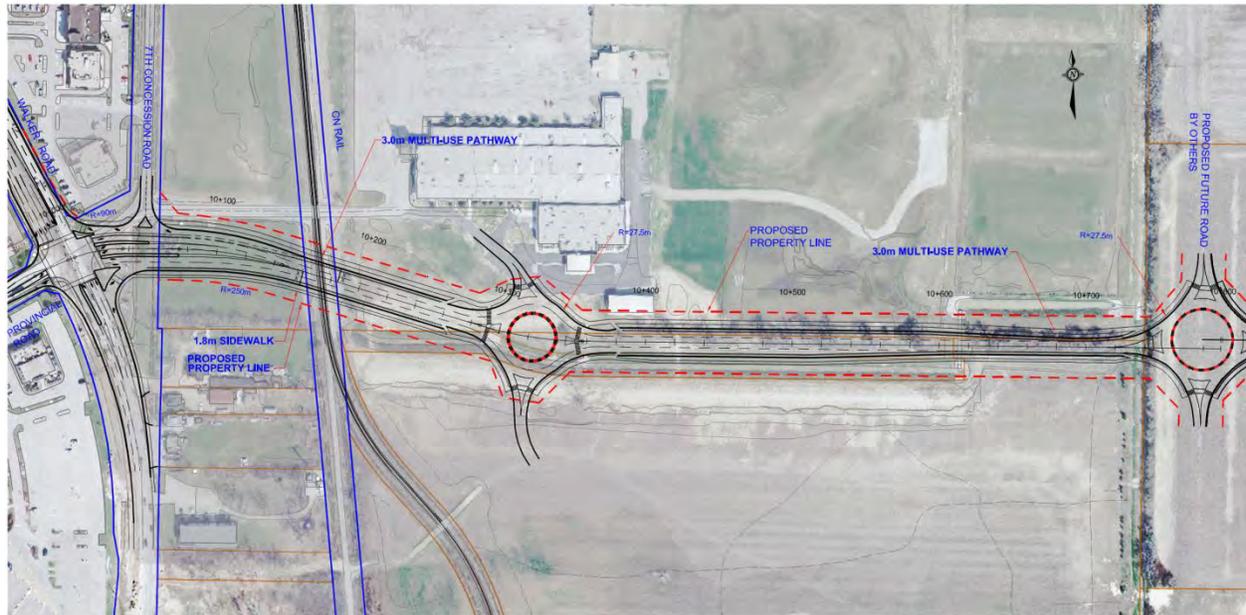
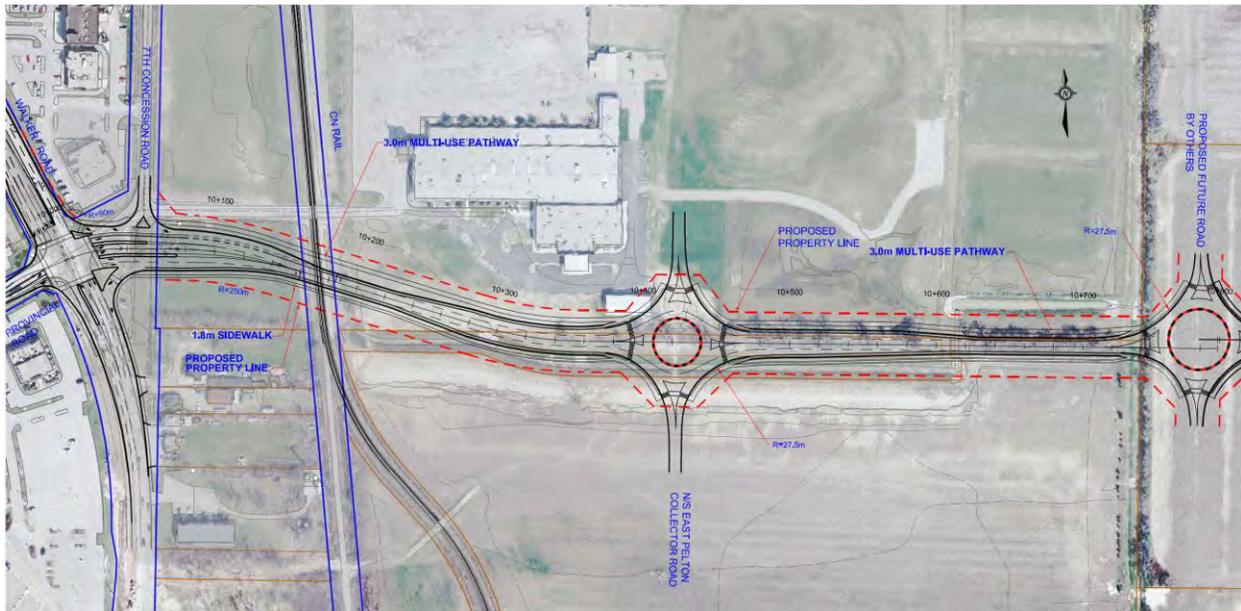


EXHIBIT 13: WCF ACCESS LOCATION FOR ALTERNATIVE 5



WCF was consulted prior to finalizing the work plan for the traffic analysis for this addendum which was agreed as follows:

Horizon Years

- 2031
- Full build-out (not analysed if operations failed under 2031 conditions)

Analysis Periods

- Weekday PM peak hour
- Sunday outbound peak hour (i.e. peak of outbound traffic from WCF after Sunday services)
- Sunday inbound peak hour (i.e. peak of inbound traffic to WCF before Sunday services)

3.1.1 Access Scenarios

The WCF plan dated February 19, 2014 included additional proposed access locations beyond the direct access to the E-W Arterial which is the focus of this Addendum. Two alternative scenarios for access to WCF were considered:

- Scenario 1: with a north access on the proposed E-W collector road adjacent to WCF
- Scenario 2: without a north access

3.1.2 Land Use Assumptions

The Traffic Analysis Report provided in Appendix B, details the Site Generated Traffic information that forms the basis of the analysis.

The land-use assumptions for the East Pelton Secondary Area, based on the City's latest information, indicates that this area is going to be developed sooner than anticipated in the original EA analysis (development could start within a year rather than in Year 2023 as assumed in the original EA analysis). The original forecasts for the EA were prepared in and around 2011, and since that time, the City had allowed servicing of these lands. This shift in the timing of development accounts for an increase in projected traffic volumes for the East Pelton area, which is expected to be full build-out by 2031. The Sandwich South Secondary Plan area was assumed to be 43% developed by 2031 (same as the original EA).

The full build-out condition (i.e., beyond 2031) was developed assuming full build-out of the Sandwich South Secondary Plan area.

As part of the Lauzon Parkway EA study, the traffic demands for the study area intersections were projected using a travel demand model (TransCAD based), developed for the Essex-Windsor Regional Transportation Master Plan (EWRTMP) study and updated for the 2031 population and employment projections provided by the City of Windsor and County of Essex in year 2011. The model assigns/simulates traffic volumes on road network based on high-level land use assumptions (i.e. population and employment) for the various traffic analytical zones within the City of Windsor and County of Essex and associated trip rates.

These projected traffic volumes needed to be updated in the current EA Addendum Study, which requires detailed traffic analysis considering detailed land use assumptions for the East Pelton Secondary Plan area. The future traffic volumes for the study area intersections were projected using a typical traffic impact study approach, where the background traffic volumes were estimated using the travel demand model and site traffic estimated using the 'ITE Trip Generation Rates'. To estimate the site traffic, the City of Windsor provided inputs on the proposed development in the East Pelton Secondary Plan including:

- area of the lot (sq. ft./acres),
- possible built-up area/coverage rate/number of units and
- type of the proposed land use (e.g. shopping mall, single/semi-detached residential house, etc.).

3.1.3 Confirmed WCF Site Specific Analysis Assumptions:

Critical assumptions regarding WCF site were provided by the WCF's Consultant during this Addendum study, which are integral to the traffic analysis modeling, are identified in Section 4.1 of the Traffic Analysis Report, and repeated here for ease of reference:

Of these assumptions, the following 3 modelling assumptions are highlighted as they become necessary conditions for future implementation:

- Zero growth in service attendance
- On-site development is limited up to 30 residential units

- Free-flow onto the site

As outlined in the Traffic Analysis Report, the free-flow condition was not considered valid for the alternatives that did not directly provide the minimum observed storage demand between the right-of-way and the main entrance.

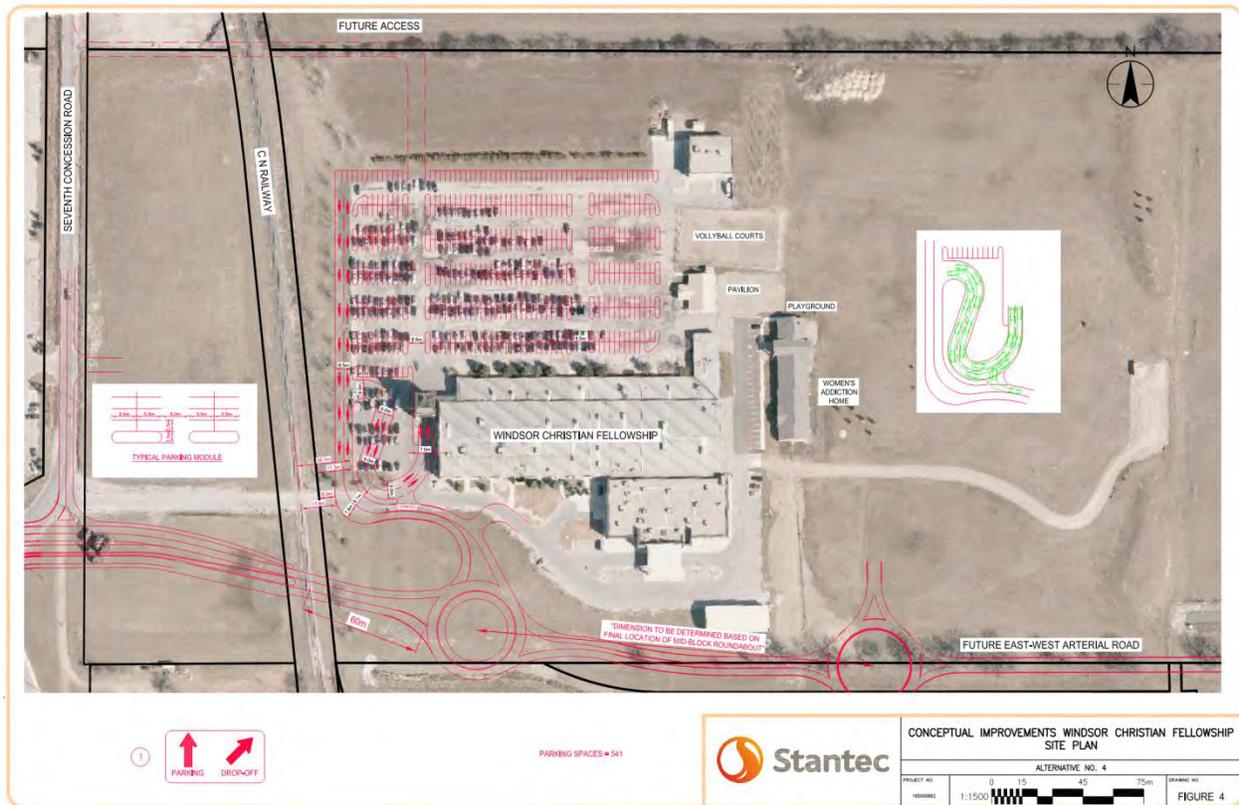
Despite queueing surveys confirming the current practice of managing on-site traffic does not provide a free-flow condition, the WCF requested this assumption be incorporated into the additional analysis resulting in Alternative 2A. Site plans detailing circuitous inbound storage between the right-of-way and the main entrance drop-off were provided to City of Windsor Council on April 7, 2015 for the WCF plan dated February 19, 2014, to demonstrate options that provide on-site storage that meets or exceeds the observed storage demand length.

WCF INTERNAL SITE PLAN

Five options were provided by WCF and their consultant in an effort to address the observed queue which is projected to interfere with traffic operations and potentially result in the queue backing up to the at-grade rail crossing on the eastbound approach of the E-W Arterial at the WCF access roundabout. This back-up into the rail crossing is a major safety concern to be addressed. These options create increased on-site vehicle storage capacity.

The options provided by WCF attempt to create a “free-flow” condition by adding on-site storage in a circuitous route between the roadway and the drop-off destination. This results in a potential for premature stopping at nearest opportunities to unload passengers and avoid long queues. Mitigation techniques include curbing, fencing, and other deterrents which may include flow monitoring staff. Of those provided, WCF Site Plan Option 4, illustrated in Exhibit 14, was carried forward for further consideration based on the storage capacity and layout.

EXHIBIT 14: WCF OPTION 4 – SITE PLAN



Aside from limited physical constraints that encourage a desired behaviour, the City noted that they cannot control the human factor elements, and remains concerned due to the unnecessary increase in safety risk. Alternative 1 to 4, as recommended in the following Sections, represents an inherent amount of risk based on the agreed project assumptions that was not present in the EA technically preferred original design. WCF Site Plan Option 4 contains these same increased risks compounded due to the reduced distance to the rail crossing and the noted human factors element.

3.2 TRAFFIC ANALYSIS SUMMARY

This section provides a summary of the results from the traffic analysis described in the previous section. The detailed Traffic Analysis Report is provided in Appendix B. As noted in the previous section, six alternatives were considered to provide access to the WCF property. The following key points summarize the traffic analysis results conducted for the six alternatives:

ALTERNATIVE 1: 2-LANE E-W ARTERIAL WITH THE RECOMMENDED EA MID-BLOCK ROUNDABOUT, WITH THE ADDITION OF THE WCF PROPOSED 3-LEG ROUNDABOUT

This alternative is expected to result in periodic queueing for the eastbound approach at the WCF Access roundabout, which would back up to the upstream railway crossing and could create unsafe conditions at the rail crossing. This alternative does not address the potential traffic operational issues.

Do not carry forward.

ALTERNATIVE 2: 4-LANE E-W ARTERIAL WITH THE RECOMMENDED EA MID-BLOCK ROUNDABOUT (WITH 2 LANES), AND THE ADDITION OF THE WCF PROPOSED 3-LEG ROUNDABOUT ACCESS

This alternative is expected to result in periodical queueing for the eastbound approach at the WCF Access roundabout, which would back up to the upstream railway crossing and could create unsafe conditions at the rail crossing. This alternative does not address the potential traffic operational issues and disruption to traffic operations on the East-West Arterial and further, that this queue may even extend to the at-grade rail crossing.

Do not carry forward.

ALTERNATIVE 2A: ALTERNATIVE 2 4-LEG MIDBLOCK ROUNDABOUT AND WCF PROPOSED 3—LEG ROUNDABOUT ACCESS SHIFTED 20 M TO THE EAST, TO PROVIDE 80 M STORAGE BETWEEN THE CN RAIL LINE AND THE WCF PROPOSED 3-LEG ROUNDABOUT, AND 200 M BETWEEN THESE TWO ROUNDABOUTS.

This alternative is expected to function similar to Alternative 2, except that it provides additional storage between the CN Rail line and the WCF proposed 3-leg roundabout. The additional storage is expected to mitigate the periodical queueing for the eastbound approach at the WCF Access roundabout. Alternative 2A was developed to be considered in conjunction with the internal site plan of WCF Option 4, as noted in Section 3.1.3.

Carry forward.

ALTERNATIVE 3: 4-LANE E-W ARTERIAL WITH THE RECOMMENDED EA MID-BLOCK ROUNDABOUT (WITH 2 LANES), AND THE ADDITION OF A SIGNALIZED INTERSECTION AT THE LOCATION OF THE WCF PROPOSED 3-LEG ROUNDABOUT

This alternative is expected to result in periodic queueing for the eastbound approach at the WCF Access roundabout which would back up to the upstream railway crossing and could create

unsafe conditions at the rail crossing. This alternative does not address the potential traffic operational issues.

Do not carry forward.

**ALTERNATIVE 4: 4-LANE E-W ARTERIAL WITH THE RECOMMENDED EA MID-BLOCK
ROUNABOUT (WITH 2 LANES) SHIFTED WEST APPROXIMATELY 100 M**

This alternative with a 4-leg roundabout (with 2 lanes) would provide the required storage within the WCF property (approximately 145 -150 m) and also provide more storage between the roundabout and at-grade rail crossing, compared to Alternatives 1, 2, 2A and 3. This alternative could address the potential traffic operational issues and would be able to provide an acceptable level of service with a 4-lane E-W Arterial.

Carry forward.

**ALTERNATIVE 5: 2-LANE E-W ARTERIAL WITH THE RECOMMENDED EA MID-BLOCK
ROUNABOUT AMENDED WITH 2 LANES**

This alternative could address the potential traffic operational issues and would be able to provide an acceptable level of service for the EA recommended option with a 2-lane roundabout and a 2-lane E-W Arterial.

Carry forward.

Based on the analysis, Alternatives 2A, 4 and 5 are expected to address the potential traffic operational and safety issues for the future conditions. Therefore, these alternatives were included in the Assessment of Alternatives (refer to Section 4).

3.2.1 Walker Road Intersection

Based on the updated timings for the proposed development of the East Pelton Secondary Plan, dual left turn lanes are recommended, and should be protected, for the southbound left-turn and westbound left-turn movements at the Walker Road and E-W Arterial intersection.

These dual left turn lanes were not part of the original EA recommended design. The need for these additional lanes may be re-assessed during the design phase prior to implementation, by conducting an intersection operational analysis. Additional property requirement and revised lane configurations at Walker Road and E-W Arterial intersection are further discussed in Section 5.

For the 2031 condition, the westbound queue at Walker Road is not expected to extend up to the CN railway line for Alternative 4 and 5, but is expected for Alternative 2 and 2A. A potential need for traffic signal pre-emption with train detection for the westbound approach on E-W Arterial at Walker Road should be confirmed during the next phase of design for the preferred alternative.

4 ASSESSMENT OF ALTERNATIVES

Having identified the alternatives which address the traffic operational and potential safety issues (as presented in Section 3.2), a comparative assessment of the intersection/access alternatives was carried out considering the socio-economic, cultural, natural environments, as well as technical considerations including traffic operations, geometrics, intersection spacing, and cost.

The intersection/access alternatives considered were:

- **Alternative 2A:** 4-lane E-W Arterial with a 4-leg Midblock roundabout and 80 m of storage between the CN Rail line and the WCF proposed 3-leg roundabout, and 200 m between these two roundabouts;
- **Alternative 4:** 4-lane E-W Arterial with a 2-lane Mid-block roundabout 120 m east of railway line (shifted west from the original EA roundabout); and
- **Alternative 5:** 2-lane E-W Arterial with a 2-lane Mid-block roundabout 220 m east of railway line (same location as the original EA roundabout)

The assessment of impacts of each of the alternatives was based on the existing environmental conditions, compiled through field visits and secondary source information, summarized in Section C.4 of the ESR for Lauzon Parkway EA. Then, a comparative evaluation of the alternatives was undertaken within four major groupings: Socio-Economic, Cultural, Natural Environment, and Technical Considerations.

The summary of the assessment and evaluation of intersection/access alternatives is illustrated in Exhibit 15. The detailed assessment of the environmental effects associated with each of the alternatives and the corresponding comparative evaluation was documented and is included in Appendix C.

EXHIBIT 15: ASSESSMENT AND EVALUATION OF ALTERNATIVES

| Factor/Criteria | Alternative 2A | Alternative 4 | Alternative 5 |
|--|----------------|---------------|---------------|
| SOCIO-ECONOMIC ENVIRONMENT <ul style="list-style-type: none"> Impacts to property and access Community effects | | | |
| CULTURAL ENVIRONMENT <ul style="list-style-type: none"> Archaeology Heritage features | | | |
| NATURAL ENVIRONMENT <ul style="list-style-type: none"> Impacts to stormwater management Impact on vegetation, wildlife, and aquatic resources | | | |
| TECHNICAL CONSIDERATIONS <ul style="list-style-type: none"> Traffic operations Geometrics Connectivity with local road network Cost | | | |
| OVERALL SUMMARY | | | |
| <p>Alternative 2A provides a direct connection from the roundabout access to WCF building’s main entrance and would provide direct drop-off operations for WCF patrons to the main facility. Alternative 2A provides mid-block access to the south property aligned with the existing easement to the property further south for ease of future development. Alternative 2A provides good connection to the 7th Concession Road. Alternative 2A requires additional property from the original EA and provides minimal distance between two roundabout accesses. Alternative 2A would have the cost of an additional roundabout, signal pre-emption, as well as added lanes on E-W Arterial. With WCF Site Plan Option 4, Alternative 2A still could result in a potential for premature stopping at the nearest opportunities to unload passengers and avoid long queues, which could disrupt the free-flow conditions. Based on observed existing queue storage demand, Alternative 2A does not provide sufficient storage within the WCF site without modifications. The alternatives for on-site modification reviewed require commitment respecting mitigations to counteract human factors and prevent premature stopping to unload passengers at nearest opportunity locations that could reduce the effective storage length and negatively impact roadway operations.</p> <p>Alternative 4 provides a direct connection from the roundabout access to WCF building’s main entrance. This would provide direct drop-off operations for the parishioners. Although Alternative 4 provides an offset access to the south property, as it is currently undeveloped, the impacts are not considered substantial. Alternative 4 also provides good connection to the 7th Concession Road, and provides good spacing between intersections. Alternative 4 would not have additional cost for a roundabout. With WCF Site Plan Option 4, Alternative 4 still represents an inherent amount of risk based on the agreed project assumptions that was not present in the EA technically preferred original design.</p> <p>Alternative 5 provides a central connection to the WCF and southern property, but does not address the WCF concerns of creating a circuitous route for the drop-off operations. Alternative 5 does not have any additional property impacts than those in the original EA. Alternative 5 provides mid-block access to the south property for ease of future development. Alternative 5 provides the longest out-of-way travel to 7th Concession Road. Alternative 5 would not have additional cost for a roundabout.</p> <p>Alternative 4 is preferred as it provides good access to all properties, meets geometric standards with respect to distance to adjacent intersections, provides sufficient on-site storage, provides sufficient storage between the railway crossing and the WCF access, limits the number of direct accesses to the controlled access arterial reducing driver demand, and results in minimal added costs. However, as Alternative 4 still represents an inherent risk based on the agreed project assumptions, if these assumptions are not met, then Alternative 5 would be preferred.</p> | | | |
| | | | |

Alternative 4 is preferred as it provides good access to all properties, meets geometric standards with respect to distance to adjacent intersections, provides sufficient on-site storage, provides sufficient storage between the railway crossing and the WCF access, limits the number of direct accesses to the controlled access arterial reducing driver demand, and results in minimal added costs. However, as Alternative 4 still represents an inherent risk based on the agreed project assumptions, if these assumptions are not met, then Alternative 5 would be preferred.

5 CHANGES TO THE EA RECOMMENDED PLAN

Having identified the preferred access alternative, the following are the recommended changes to the EA Recommended Plan:

- 4-laning E-W Arterial from Walker Road to the proposed East Pelton N-S Collector Road
- Shifting the EA recommended roundabout location approximately 100 m west
- Adding a lane to the roundabout configuration
- Additional turning lane requirements at the Walker Road and E-W Arterial intersection;

The changes are further described in the following sections.

CONDITIONS FOR THE RECOMMENDED PLAN

These changes are predicated on the following 3 modelling assumptions which are necessary conditions for future implementation:

- Zero growth in service attendance
- On-site development is limited up to 30 residential units
- Free-flow traffic onto the site

Should any of these conditions not be present and valid at the time of detailed design, Alternative 5 would be implemented as it is not reliant on the first two assumptions and is located at a sufficient distance from the WCF main entrance to provide free-flow traffic into the site, as in the original EA Study, and provides additional storage between the CN Rail line and the roundabout. If at the time of detailed design it is mutually agreeable with the property owners north and south of the E-W Arterial, consideration could be given to moving the Alternative 5 roundabout up to 20 m east.

The zero growth condition could be verified by a traffic survey, which would confirm that the observed peak hour inbound volume into WCF, does not exceed 293 vehicles. This limit was the observed inbound volume to WCF, based on a survey conducted by Stantec on Sunday April 12, 2015. This condition would allow for WCF to accommodate service attendance growth without negatively impacting roadway operations and maintaining inbound volumes below the peak hour limit by modifying their operations. For example providing additional service times or incentivizing a greater spread in arrival times.

The free-flow condition could be verified by a queue survey conducted for the peak hour queuing from the stop sign located at the grade crossing on the main existing access from 7th Concession Road. As discussed in Section 4.2 of the Traffic Analysis Report included in Appendix B, the existing observed queue from the stop sign reached a maximum of 7 vehicles, which is the maximum queue that would be accommodated within the WCF property for the recommended Alternative 4. Therefore, with the existing entrance configuration and the 4500 Walker Rd site undeveloped, a peak hour queue length from the stop sign of up to 7 vehicles would be considered as free-flow conditions; a queue of more than 7 vehicles would not be

considered as a free flow condition. Alternate measures for the free-flow condition would need to be established under a changed entrance configuration and/or if development on the 4500 Walker Rd. site has occurred.

5.1 ROAD GEOMETRY

5.1.1 Design Criteria

Within the City of Windsor, from Walker Road to 10th Concession Road / County Road 17, a new E-W Arterial is planned as a controlled access Class II Arterial urban roadway. Details of the E-W Arterial roadway geometrics are presented in Exhibit C.6 1 of the original ESR. A section of the E-W Arterial within the Addendum study area would include 4-lanes at 3.65 m, with a total lane width of 14.6 m. All other elements of the design criteria have not been modified.

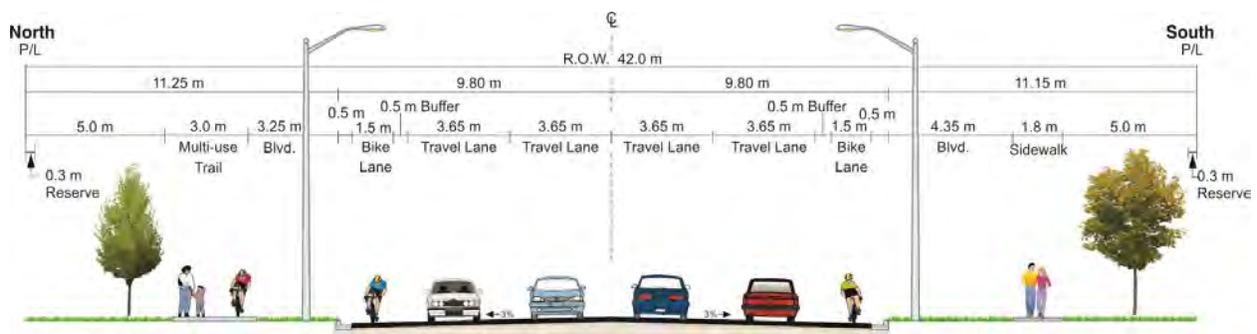
The roadway and intersections were planned to accommodate a WB-20 design vehicle (i.e., standard tractor-trailer).

5.1.2 Typical Cross-Section

As noted in Section 2.1, the E-W Arterial was originally recommended as a 2-lane roadway, with the ROW protection for a future 4-lane cross-section. Due to the WCF access roundabout being shifted closer to the CN rail line, it is recommended that the E-W Arterial will be built with 4-lanes from Walker Road to east of the mid-block roundabout.

The revised cross-section for E-W Arterial between Walker Road and the mid-block roundabout is illustrated in Exhibit 16.

EXHIBIT 16: TYPICAL 4-LANE CROSS-SECTION BETWEEN WALKER ROAD AND EAST OF THE MID-BLOCK ROUNDABOUT



Should Alternative 5 be implemented, the 4-lane cross-section would only be required in the vicinity of the Mid-Block roundabout and at the Walker Road intersection.

5.1.3 Intersections

WALKER ROAD INTERSECTION

At the Walker Road and E-W Arterial intersection, the southbound left-turn and westbound left-turn lanes are the critical movements and require dual left-turn lanes to accommodate the future peak hour traffic demands. Also, considering the high traffic demand of the westbound right turn, it is recommended that channelization be provided for this movement. Based on the updated timings for the proposed development of the East Pelton Secondary Plan, dual left turn lanes are recommended. This necessitates some minor additional property at the northeast corner of the intersection. This is discussed in Section 5.10.

The Walker Road intersection is illustrated in Exhibit 17 – Plate 1a.

MID-BLOCK ROUNDABOUT

The original EA identified a single-lane 4-leg roundabout access on the E-W Arterial at mid-block between 7th Concession and the proposed East Pelton N-S Collector Road. Through this EA Addendum, the mid-block roundabout is recommended to be relocated approximately 100 m west of the original EA recommended roundabout (approximately 120 m east of the CN rail line). The location of this roundabout was noted to best serve both the WCF and the adjacent property to the south, with a central access location.

The roundabout will have the same 55 m inscribed circle diameter, but will carry two lanes of traffic.

The mid-block roundabout is illustrated in Exhibit 17 – Plate 1.

5.2 ACTIVE TRANSPORTATION

There is no change to the recommended active transportation facilities located in this corridor as a result of this EA Addendum.

5.3 ACCESS MANAGEMENT

There is no change to the recommended access management recommendations in this corridor as a result of this EA Addendum.

5.4 STRUCTURES

There is no change to the recommended structures located in this corridor as a result of this EA Addendum.

5.5 DRAINAGE AND STORMWATER MANAGEMENT

Although the pavement area within the Addendum study area is increased, there is no change to the recommended drainage and stormwater management facilities located in this corridor as a result of this EA Addendum.

5.6 ILLUMINATION

There is no change to the recommended illumination facilities located in this corridor as a result of this EA Addendum.

5.7 UTILITIES

There is no change to the recommended active transportation facilities located in this corridor as a result of this EA Addendum.

5.8 PRELIMINARY COST ESTIMATE

The preliminary construction cost estimate for the E-W Arterial, from Walker Road to 10th Concession Road / County Road 17, is presented in the Section C.6.8 of the ESR.

The additional costs to the E-W Arterial as part of this Addendum include the following components:

- Two additional (dual) left-turn lanes at the Walker Road intersection (southbound and westbound approaches)
- Two additional through-lanes on E-W Arterial from Walker Road to the proposed mid-block roundabout
- One additional lane to the mid-block roundabout and east-west approaches

Refer to the plan/profile plates in Exhibit 17, for details of the E-W Arterial Recommended Plan. A summary of construction costs estimates is presented below in 2013 dollars, and the detailed breakdown is included in Appendix D. Many of the major items associated with the construction cost have already been identified in the ESR, for example asphalt and granular material for the 2-lane roadway, illumination, active transportation facilities. This Addendum Report only highlights the cost of specific changes to the Recommended Plan.

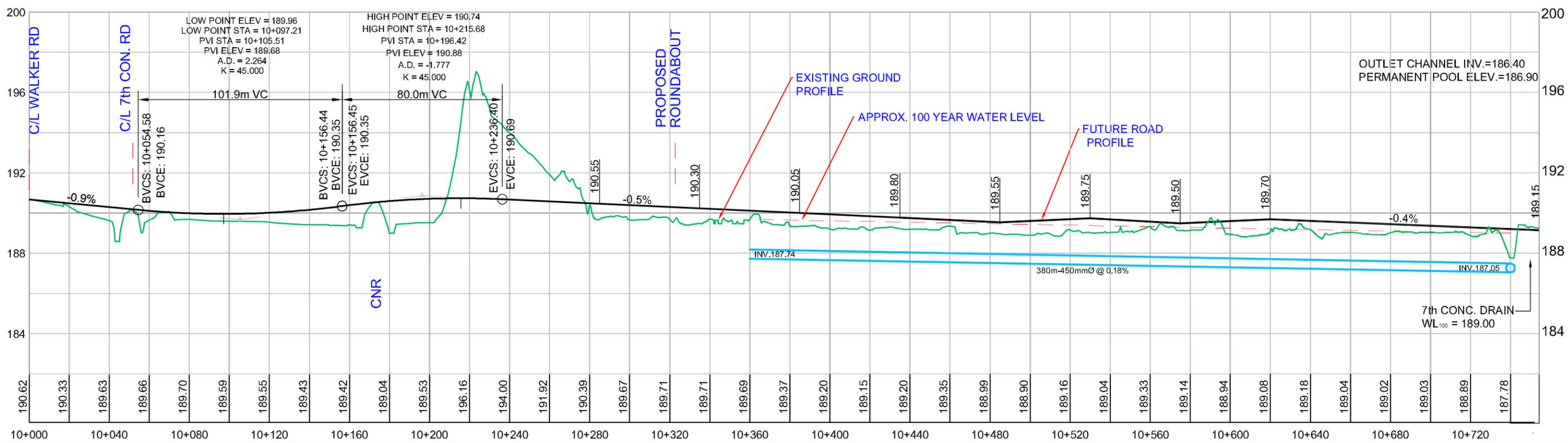
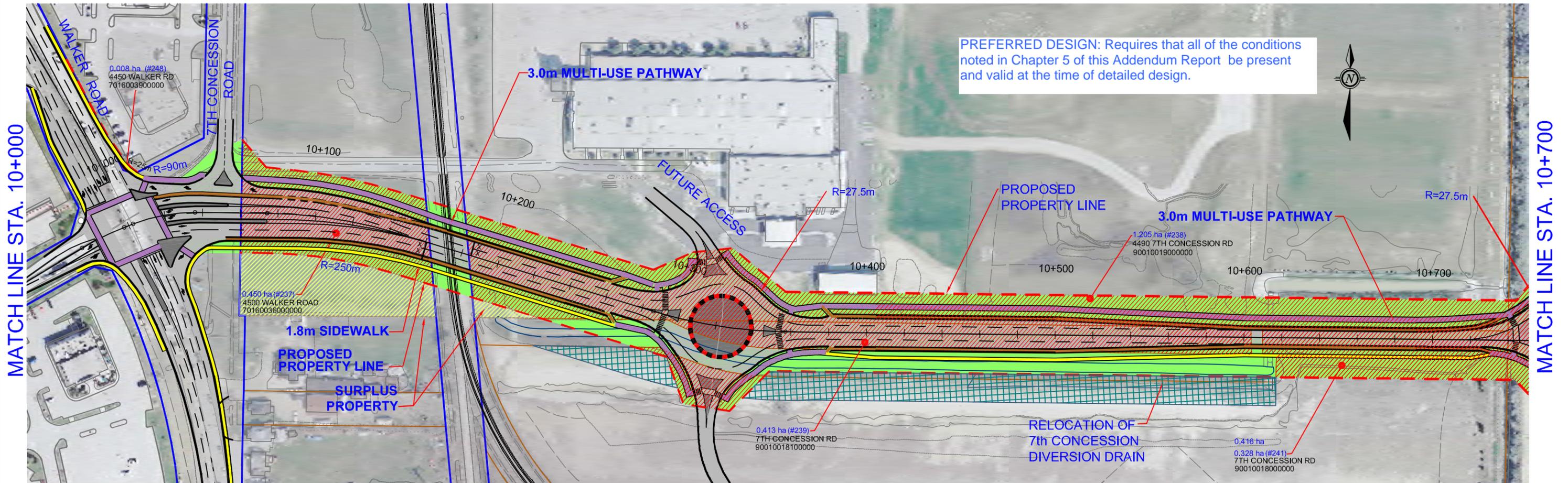
As noted in the ESR, the construction costs do not include new municipal services (i.e., sanitary sewers, watermains); utility relocations (i.e., sanitary sewers, watermains, municipal drains, hydro, gas, etc.); and property acquisition costs. Major hydro distribution along new roadways is also not included.

| Location | Estimated Cost | | |
|---|----------------|----------------------|---------------------------|
| | Original - ESR | Change | New Estimate |
| Walker Road Intersection Improvements | \$0.40 | \$0.07 ¹ | \$0.47 |
| Walker Road to 4490 7 th Concession Road Roundabout Access - Build 2 Lanes | \$0.80 | \$0.20 ²³ | \$1.00 |
| 4490 7th Concession Road Roundabout Access | \$2.20 | \$0.55 ⁴ | \$2.75 |
| Future Collector Road Roundabout | \$2.20 | - | \$2.20 |
| Total – items within Addendum Area (M) | \$5.60 | \$0.82 | \$6.42³ |

1. Estimated cost for adding two left-turn lanes at the Walker Road intersection.
2. Estimated cost for widening E-W Arterial from 2 to 4 lanes. This includes a small section between the Mid-block access roundabout and the East Pelton N-S Collector. This small section of roadway was previously included within the lump sum cost of the two roundabouts, being that they are in proximity to each other, and the lump sum roundabout cost includes approximately 100 m of the approach legs. As Alternative 4 shifted the original EA roundabout to the west, a small section between these roundabouts was accounted for in the widening of the E-W Arterial.
3. Should Alternative 5 be implemented, the estimated change in building the roadway could be reduced to \$0.12 M, and the Total cost would be \$6.35 M.
4. Estimated cost for adding a lane to the roundabout and approach legs.

5.9 PLAN/PROFILE PLATES OF RECOMMENDED PLAN

The Recommended Plan and profile is shown on Plates 1, 1a, and 2 in Exhibit 17.



LEGEND:

| | | | | | |
|--|-----------------------------|--|-----------------|--|-------------------------|
| | POTENTIAL PROPERTY REQUIRED | | PROPOSED ROAD | | BIKE LANE |
| | PROPOSED PROPERTY LINE | | RAISED MEDIAN | | NATURAL HERITAGE SYSTEM |
| | EXISTING RIGHT-OF-WAY | | PAVED SHOULDER | | EXISTING GROUND PROFILE |
| | EXISTING PROPERTY LINE | | LANDSCAPE AREA | | FUTURE ROAD PROFILE |
| | | | MULTI-USE TRAIL | | STORM SEWER PROFILE |
| | | | SIDEWALK | | RELOCATED DRAIN |

E-W ARTERIAL
 FROM STA 10+000 TO STA 10+700

LAUZON PARKWAY IMPROVEMENTS CLASS
 ENVIRONMENTAL ASSESSMENT STUDY (ADDENDUM)

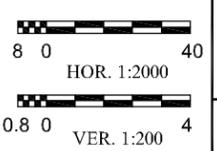
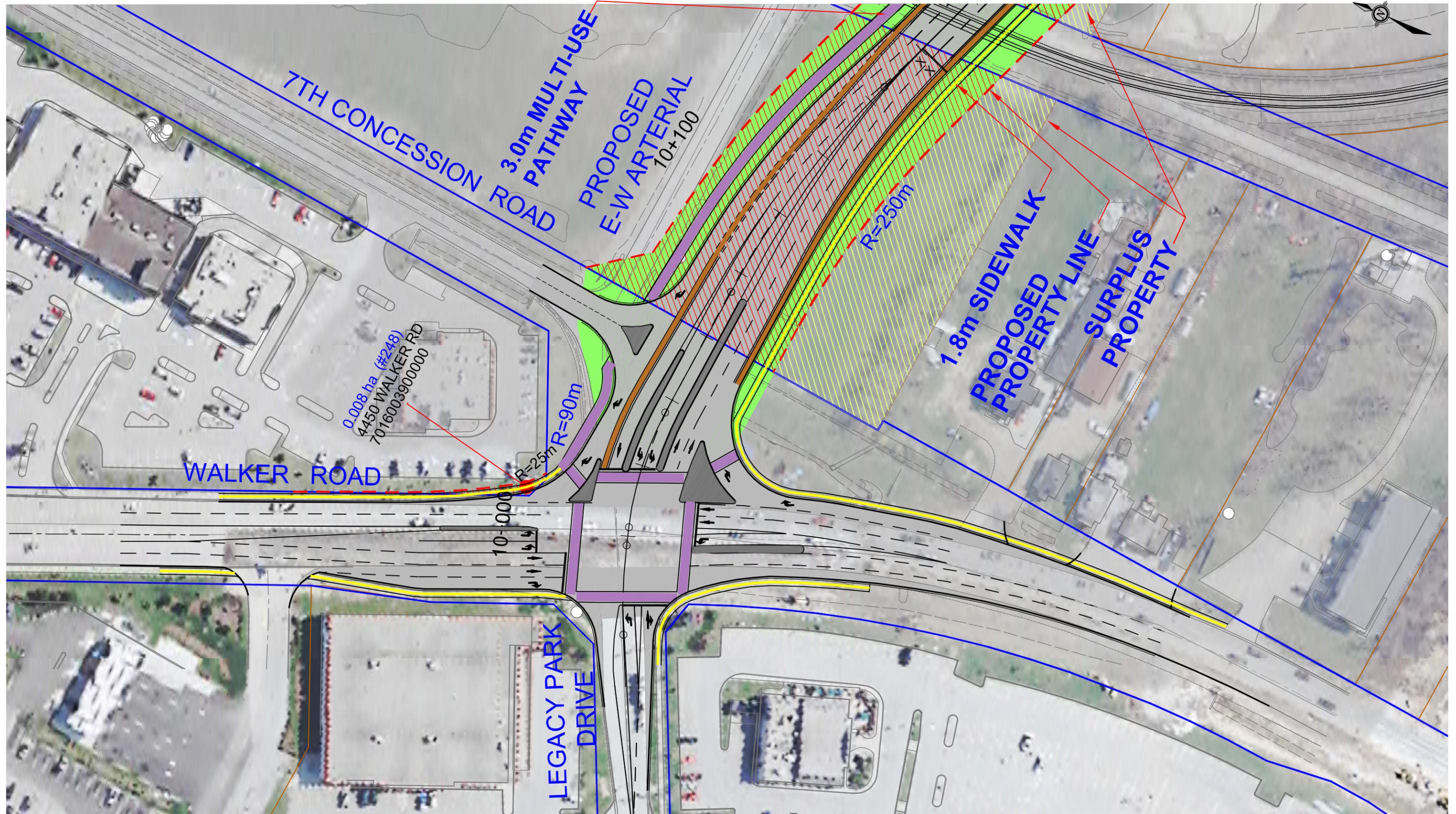


PLATE
1
 EXHIBIT 17

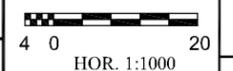


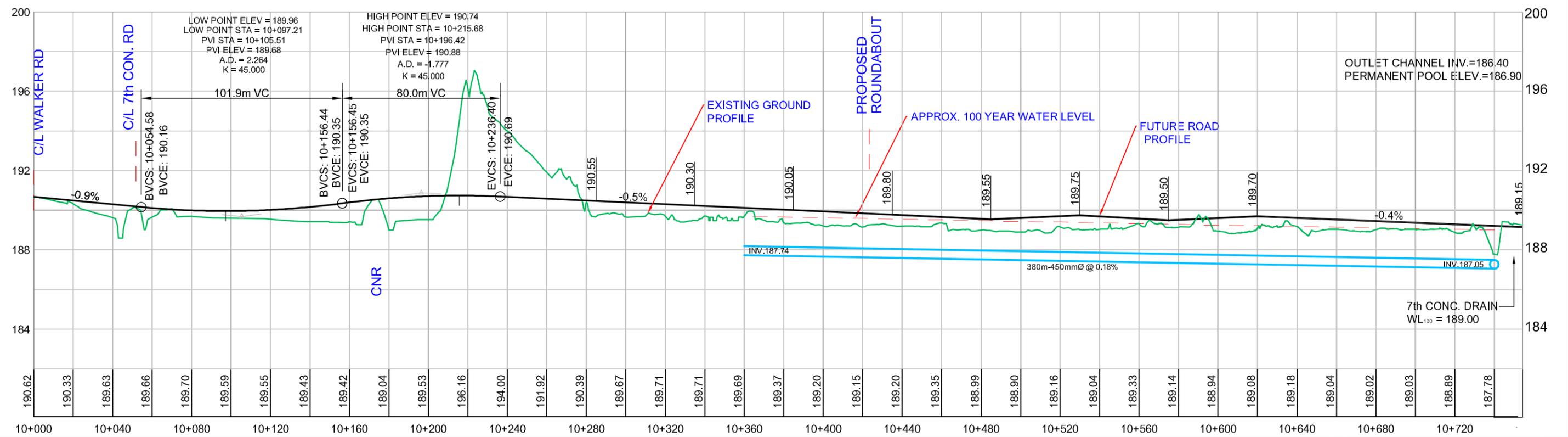
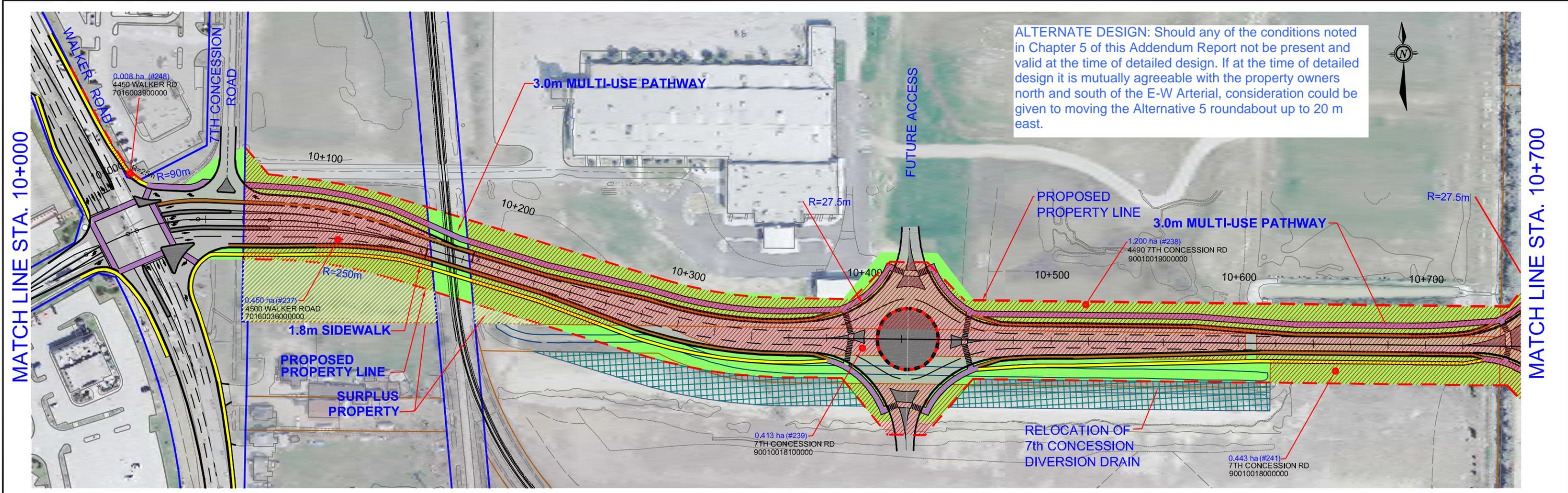
LEGEND:

- BIKE LANE
- POTENTIAL PROPERTY REQUIRED
- PROPOSED PROPERTY LINE
- EXISTING RIGHT-OF-WAY
- EXISTING PROPERTY LINE
- PROPOSED ROAD
- RAISED MEDIAN
- PAVED SHOULDER
- LANDSCAPE AREA
- MULTI-USE TRAIL
- SIDEWALK

E-W ARTERIAL AND WALKER ROAD

LAUZON PARKWAY IMPROVEMENTS CLASS
ENVIRONMENTAL ASSESSMENT STUDY (ADDENDUM)





LEGEND:

| | | | | | |
|--|-----------------------------|--|-----------------|--|-------------------------|
| | POTENTIAL PROPERTY REQUIRED | | PROPOSED ROAD | | BIKE LANE |
| | PROPOSED PROPERTY LINE | | RAISED MEDIAN | | NATURAL HERITAGE SYSTEM |
| | EXISTING RIGHT-OF-WAY | | PAVED SHOULDER | | EXISTING GROUND PROFILE |
| | EXISTING PROPERTY LINE | | LANDSCAPE AREA | | FUTURE ROAD PROFILE |
| | | | MULTI-USE TRAIL | | STORM SEWER PROFILE |
| | | | SIDEWALK | | RELOCATED DRAIN |

E-W ARTERIAL
 FROM STA 10+000 TO STA 10+700

LAUZON PARKWAY IMPROVEMENTS CLASS
 ENVIRONMENTAL ASSESSMENT STUDY (ADDENDUM)

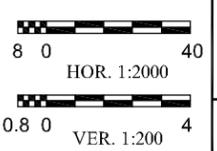


PLATE
2
 EXHIBIT 17

5.10 ENVIRONMENTAL EFFECTS AND MITIGATING MEASURES

Mitigation of impacts is applied throughout the EA process, including development of alternatives to avoid constraints, and selection of the Technically Preferred Plan by identifying the alternative that has the least overall effects on the environment. Additional mitigation measures are identified in this report to minimize any adverse impacts that cannot be completely avoided through the selection of the Technically Preferred Plan. These measures will be further refined and finalized in the next phase of design, and will be included in the contract documents for implementation during construction.

This section describes the potential environmental effects, direct and indirect, associated with the changes to Recommended Plan as noted in Chapter 5, as well as mitigating measures that will be implemented to minimize the effects and any necessary commitments to future work (design and construction). Mitigation includes planning decisions, design features, construction requirements and construction constraints.

All general mitigating measures as described in Section C.6.10 of the original ESR are still applicable within the Addendum Study Area.

5.10.1 Transportation and Infrastructure

The proposed undertaking as described in this Addendum will address the identified problems by addressing the future development and improving accessibility. The associated transportation benefits as noted in Section C.6.10.1 in the original ESR are still applicable.

The existing and future utilities located within the E-W Arterial study area and potential impacts to these utilities are identified in Section C.6.7 of the original ESR. The associated utility mitigation measures as described in Section C.6.10.1 in the original ESR are still applicable.

5.10.2 Socio-Economic Environment

PROPERTY REQUIREMENTS

Changes in the E-W Arterial plan between Walker Road and the proposed East Pelton N-S Collector Road, as summarized in Chapter 5, necessitate some changes to the property requirements from those outlined in the ESR.

Exhibit 17 illustrates the plan view of the E-W Arterial as provided in the Lauzon Parkway Improvements ESR - Plate 1, with a mid-block roundabout between Walker Road and the proposed East Pelton N-S Collector Road.

As part of the Addendum design changes described in Chapter 5, the changes to the property requirements are noted as follows:

| | |
|--|-----------------------|
| Previous total property requirement for E-W Arterial | 14.80 ha |
| Property included in the previous total that is no longer required | 0.03 ha |
| New property requirements identified | 0.02 ha |
| Net change in property impacts | (0.01 ha) |
| Updated total property required for the E-W Arterial | 14.79 ha ¹ |

- Should Alternative 5 be implemented, it would have all of the same property requirements, except for the minor additional property required at the Walker Road intersection. The updated total property required for the E-W Arterial would be 14.81 ha

The following table notes the updated property requirements to the affected properties as part of this Addendum, and is to supersede the associated values in Appendix P – Property Requirement List, of the original ESR:

| ID# | New Property Requirement (ha.) | Address | ARN |
|------------------|--------------------------------|--------------------------------------|----------------|
| 238 | 1.205 ¹ | 4490 7 th Concession Road | 90010019000000 |
| 241 | 0.416 ¹ | 0 7 th Concession Road | 90010018000000 |
| 248 ² | 0.008 | 4450 Walker Road | 70160039000000 |

- Should Alternative 5 be implemented, the area requirement for these properties would be the same as the original EA.
- The original EA did not impact this property; due to the added lanes at the Walker Road intersection, there are minor property impacts in the northeast corner.

ACCESS

There are no changes to the access management recommendations of the undertaking as a result of the EA Addendum Recommended Plan in addition to those outlined in Section C.6.10.2 of the ESR.

NOISE

There are no changes to the noise assessment recommendations of the undertaking as a result of the EA Addendum Recommended Plan in addition to those outlined in Section C.6.10.2 of the ESR.

CONTAMINATION OVERVIEW STUDY

There are no changes to the contamination assessment environment impacts or mitigation measures of the undertaking as a result of the EA Addendum Recommended Plan in addition to those outlined in Section C.6.10.2 of the ESR.

5.10.3 Cultural Environment

BUILT HERITAGE RESOURCES AND CULTURAL HERITAGE LANDSCAPES

There are no changes to the cultural heritage assessment environment impacts or mitigation measures of the undertaking as a result of the EA Addendum Recommended Plan in addition to those outlined in Section C.6.10.3 of the ESR.

ARCHAEOLOGICAL ASSESSMENT

There are no changes to the archaeological assessment environment impacts or mitigation measures of the undertaking as a result of the EA Addendum Recommended Plan in addition to those outlined in Section C.6.10.3 of the ESR.

5.10.4 Natural Environment

There are no significant changes to the natural environment impacts of the undertaking as a result of the EA Addendum Recommended Plan in addition to those outlined in Section C.6.10.4 of the ESR.

6 FUTURE CONSIDERATIONS AND COMMITMENTS TO FUTURE WORKS

All future considerations and commitments to future works as noted in Section 7.0 of the original ESR are applied to all of the revisions as part of this Addendum.

At the time of detailed design, a traffic study shall be carried out to determine whether the conditions outlined in section 5 are fulfilled, and whether Alternative 4 or Alternative 5 is carried forward for detailed design. If Alternative 5 is carried forward, consultation will be conducted with the land owners to the north and south regarding the final location of the midblock roundabout within the allowed range (0-20 m east of the location illustrated in Plate 2).