BURNSIDE

Forest Glade North Servicing Municipal Class Environmental Assessment

Environmental Study Report

City of Windsor

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Environmental Study Report

City of Windsor

R.J. Burnside & Associates Limited
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Guelph ON N1H 1C4 CANADA

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R.J. Burnside & Associates Limited

Report Prepared By:

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TR:af

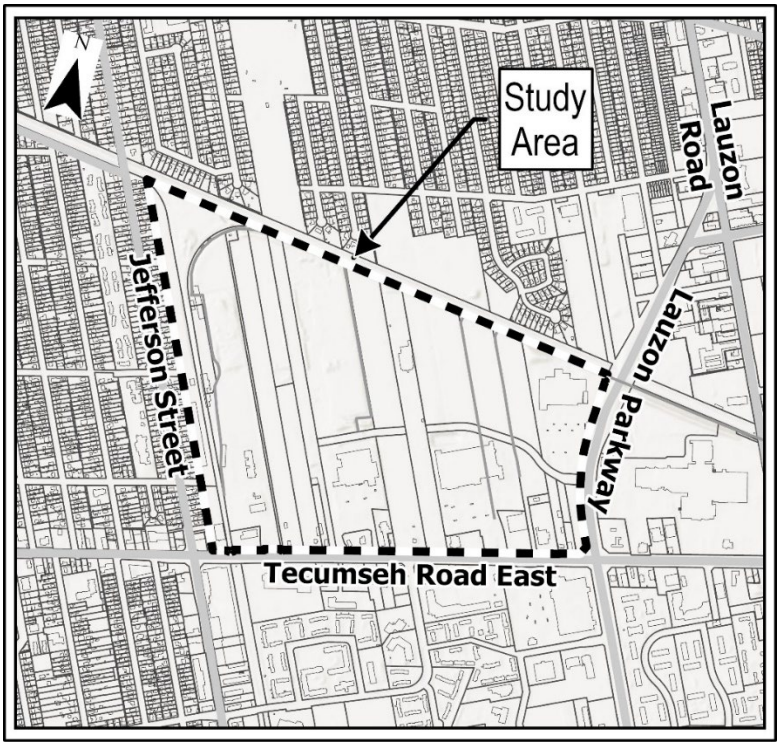
Executive Summary

Introduction

The Forest Glade North Planning Area, located in Windsor Ontario, is bounded by Lauzon Parkway to the east, Tecumseh Rd. E to the south, a CN rail line to the north and the rear property line of the lands fronting Jefferson Blvd. to the west. Future development in the area was studied as part of the Forest Glade North Secondary Plan and will include business park and mixed-use development.

The Secondary Plan identified an alignment for two collector roads through the area and identified the need for further study regarding the area's stormwater and sanitary sewer servicing.

Several new developments are currently being proposed, prompting the City to initiate a Municipal Class Environmental Assessment (MCEA) to expand on the work completed during the Secondary Planning process. The purpose of this MCEA is to further explore the alignment and design for collector roads and identify the preferred approach to provide sanitary sewers and stormwater management to the entire Forest Glade North Planning Area.



This MCEA follows the Municipal Class Environmental Assessment process in accordance with Ontario's Environmental Assessment Act, R.S.O. 1990 (February 2024 consolidation).

Existing Conditions

The built environment includes the following features:

- **Existing development:** Several structures are present in the study area, including commercial and retail developments, restaurants and banks, most notably Home Depot, Walmart and Rona. The Serbian Centre Catering and Events Facility is located centrally in the study area. A small number of residential properties are also present. Several undeveloped properties are currently being farmed.
- **Existing roads, including:**

  - Tecumseh Rd. E., which runs east-west along the southern edge of the study area. The road has three travel lanes in each direction with various additional turn lanes. A raised median is present along the centre of several sections of the road.
  - Lauzon Parkway, which runs in a north-south direction along the eastern edge of the study area. It includes three travel lanes in each direction and additional turn lanes.
  - An existing section of Catherine Street, which runs westward from Lauzon Parkway to the rear of the Walmart. The road currently has two travel lanes and sidewalks on both sides of the road.
  - Roseville Garden Dr., which runs southward from Tecumseh Rd. E beyond the study area.
- **Rail Line:** A rail line runs along the western and northern boundaries of the study area. A rail yard is present adjacent to the north-south running line.
- **The Hawkins Drain**: This is a maintained drainage feature that flows easterly along the rail line at the northern boundary of the study area. The Hawkins Drain is a municipal drain, governed by by-laws under the *Drainage Act*.
- **Infrastructure:** Several private stormwater management ponds are present. The study area is currently serviced directly off Tecumseh Road E. and Catherine St. for both sanitary and stormwater services.

Socio-economic conditions in the study area can be described as follows:

- **Land use:** The site is designated Mixed-Use Centre, Business Park, and Residential in Schedule D of the City of Windsor Official Plan and further designated as Mixed-Use Centre and Business Park in Schedule FGN-2 of the Forest Glade North Planning Area Secondary Plan.
- **Archaeological Resources:** Stage 1 and 2 Archaeological Assessment did not result in the recovery of artifacts and no archaeological sites were identified. No further Archaeological Assessment is required within the study area.
- **Cultural Heritage Resources:** A screening for cultural heritage was completed as part of this MCEA. It was determined through the screening process that there are no cultural heritage resources present on the subject lands.

The Natural Environment includes the following features:

- **Woodland**: A woodland in the northwest corner of the study area is protected as an Environmental Policy Area in accordance with the City's Official Plan. Several hedgerows are also present between agricultural fields and along the edges of the Hawkins Drain.
- **Species at Risk:** No species listed as Endangered or Threatened were observed within the study area; however, Chimney Crayfish burrows were found on site. Their burrows serve as critical overwintering habitat for the endangered Butler's Gartersnake. Other reptile species such as the Threatened Eastern Foxsnake could potentially inhabit the area, using the Hawkins Drain as a movement corridor. In addition, there are several existing outlets that facilitate drainage from the study area to the Hawkins Drain. Some of the outlets are buried

or crushed and are no longer functional. These outlets could potentially provide hibernaculum habitat for snakes.

- **Species of Conservation Concern:** Three species of conservation concern were identified within the study area: Missouri Ironweed (*Vernonia missurica*), Stiff Goldenrod (*Solidago rigida*) and Tall Boneset (*Eupatorium altissimum*).
- **Aquatic Habitat:** The Department of Fisheries and Oceans (DFO) classifies Hawkins Drain as a Class F Drain, meaning it is an intermittent watercourse that is dry for at least three months every year, and does not support sensitive fish species. The Hawkins Drain and its floodplain is regulated by the Essex Region Conservation Authority (ERCA).

Evaluation of Alternatives for Collector Road Cross-Sections

Several alternative cross-sections were considered as described in the table below.

Alternative	Description
1: Do Nothing	With this alternative, no new collector roads will be constructed. The "Do Nothing" option is a requirement of the MCEA process and serves as a baseline against which other alternatives can be reviewed.
2: Upgraded Cross-section for Turning and AT Improvements	This alternative includes a cross-section with two travel lanes, a two-way centre turn lane, sidewalk on one side of the road and multi-use path on the other side. With this alternative, the existing portions of Catherine St. would be reconstructed to match the new cross-section. This may necessitate relocation of existing utility poles. The road right-of-way would be 22 m in width, in keeping with the existing ROW sections. Some property acquisition would be required to complete the road connection. The entrance to the proposed transit terminal at the southwest corner of Lauzon Pkwy and Catherine St. will need to be designed to avoid impacts to queueing traffic at the Lauzon/Catherine intersection.
3: Existing Catherine St. Cross-section	The existing section of Catherine St. includes two travel lanes and a sidewalk on both sides of the roadway. With this alternative, the existing portions of Catherine St. would remain in their current condition without the need for any additional work. The Catherine St. and Roseville Garden Dr. extensions would be constructed using a similar cross-section. The road right-of-way would be 22 m in width, in keeping with the existing ROW sections. Some property acquisition would be required to complete the road connection. The entrance to the proposed transit terminal at the southwest corner of Lauzon Pkwy and Catherine St. will need to be designed to avoid impacts to queueing traffic at the Lauzon/Catherine intersection.

While the Do Nothing option has no impact on the environment and has no cost, it does not address the transportation needs for future development in the study area.

Alternative 2 was identified based on the Transportation Analysis completed by Paradigm, provided in Appendix E. The two-way centre turn lane allows for access to future development sites while providing a suitable level of service, without creating long queues at intersections and entrances. This Alternative has the highest cost and would require reconstruction of the existing portions of Catherine St. which could disrupt access to existing development. The incorporation of a multi-use path meets the guidance of the City's Active Transportation Master Plan and supports safe cycling in the area.

The benefit of Alternative 3 is that the existing portion of Catherine St. could remain in its current condition. This Alternative has a lower cost than Alternative 2. However, it would not provide an appropriate level of service and lengthy queues would be expected. The City's active transportation goals would not be achieved with this option.

It was determined that Alternative 2 is preferred.

Evaluation of Alternatives for Collector Road Alignments

Several alternative road alignments were considered for the Catherine St. extension as described in the table below.

Alternative	Description
1: Do Nothing	With this alternative, no new collector roads will be constructed. The "Do Nothing" option is a requirement of the MCEA process and serves as a baseline against which other alternatives can be reviewed.
2: Catherine St. Alignment Veering Westerly	With this alternative, the Catherine St. extension will run from Lauzon Pkwy in a westerly direction, curving southward along the western edge of Lot 6366 before curving back to the east to meet Tecumseh Rd. E at an existing break in the curbed median.
3: Catherine St. Alignment Veering Easterly	With this alternative, the Catherine St. extension will run from Lauzon Pkwy in a westerly direction, curving southward along the eastern edge of Lot 6366 before curving to the west to meet Tecumseh Rd. E. at an existing break in the curbed median.

While the Do Nothing option has no impact on the environment and has no cost, it does not address the transportation needs for future development in the study area.

Both Alternatives 2 and 3 adequately provide the Collector Roads prescribed in the Forest Glade North Secondary Plan. Both can meet Tecumseh Rd. E. at the existing break in the raised median, thus minimizing the need for changes on Tecumseh Rd. E. Both Alternatives also provide adequate sightlines that meet City design standards.

Alternative 2 provides a slightly shorter route that requires less property acquisition and has fewer impacts on adjacent properties. It also has a slightly lower cost due to its shorter length. As such, Alternative 2 is the preferred Alternative.

Evaluation of Wastewater Systems

Several alternative sanitary sewer connections were considered as described in the table below.

Alternative	Description
1: Do Nothing	The “Do Nothing” alternative means no action is taken in addressing the problem / opportunity statement. This would result in no wastewater servicing connection for the Forest Glade North planning area and therefore, does not accommodate planned growth.
2: Connect to City’s Existing Wastewater System at Tecumseh Road East	This alternative looks at servicing the planning area by installing a new section of sanitary sewer to connect to the existing sanitary sewer on Tecumseh Rd E. The sanitary sewer currently installed along Tecumseh Rd E is 250 mm in diameter which is the minimum diameter approved by the City. The existing 250 mm diameter sewer already accommodates some large commercial properties including Home Depot and Walmart. Based on the projected wastewater flows for the development area, the existing sanitary sewer on Tecumseh Rd E does not have sufficient capacity to accommodate the wastewater flows from the development area. The sanitary sewer on Tecumseh Rd. E and potentially other sewers in the network would need to be upgraded to make this a feasible option.
3: Connect to City’s Existing Wastewater System at Catherine St./Lauzon Pkwy	This alternative looks at servicing the planning area by extending the sanitary sewer along Catherine St. The sanitary sewer currently installed along a section of Catherine St. is 450 mm in diameter and increases to 525 mm diameter closer to the Lauzon Parkway intersection. The size of the sanitary sewer provides a larger available capacity than other available connections being considered. Based on available drawings, the 450 mm diameter sanitary sewer currently installed along Catherine St. has a 0.2% slope. At this slope, the projected ultimate flow for the development area is anticipated to surcharge the pipe (i.e., almost running at 100% full). Depending on where the parcel service connections are tied into the sanitary sewer, a portion of the already installed 450 mm diameter sanitary sewer may need to be upsized to a 525 mm diameter pipe or reinstalled at a steeper slope to accommodate the flow.

The Do Nothing alternative does not address provincial and City policies to provide adequate wastewater services to new development areas.

Alternative 2 services the new area. Because the sewer would be placed within the road ROW, no additional impacts beyond those identified for the road would be expected. The existing sanitary sewer on Tecumseh Rd. E. has relatively minimal capacity and is not sufficient to meet the quantity of wastewater projected to be created from future development in the area. A long section of sanitary sewer along Tecumseh Rd. E. would need to be upgraded to provide the necessary capacity.

Alternative 3 will connect to a larger diameter sewer in the existing Catherine St. ROW. The pipe along Catherine St. may also need to be upgraded but this represents a much shorter upgrade than required with Alternative 2 and Catherine St. is planned to be reconstructed to meet the preferred cross section. As such, Alternative 3 is the preferred alternative.

Evaluation of Stormwater Management Alternatives

Several alternative sanitary sewer connections were considered as described in the table below.

Alternative	Description
1: Do Nothing	With this alternative, no new stormwater management facilities will be constructed. The “Do Nothing” option is a requirement of the MCEA process and serves as a baseline against which other alternatives can be reviewed. This alternative would result in uncontrolled stormwater discharge from the development sites within the study area.
2: Construct two regional stormwater ponds, one on either side of the proposed Catherine Street extension	This alternative would direct stormwater to one of two detention ponds in the Forest Glade North Plan Area on lands not currently owned by the City of Windsor. This was recommended in the Secondary Plan.
3: Construct one regional stormwater management pond adjacent to the CN Rail and Hawkins Drain with on-site quality control for other properties outside of the pond catchment	This alternative would direct stormwater from the west side of the study area to one detention pond in the Forest Glade North Plan Area on lands not currently owned by the City of Windsor. The remainder of the study area would be serviced through on-site facilities on each individual property.

The Do Nothing alternative does not address provincial and City policies to provide adequate stormwater management. Having overland flow from developed areas run directly into the Hawkins Drain without quality or quantity controls would be detrimental to the drain and downstream aquatic habitats.

Alternative 2 would be relatively costly as the City would be responsible for the construction and maintenance of two stormwater management facilities. In addition, a substantial area would need to be acquired by the City, resulting in a significant impact to local landowners.

Alternative 3 provides adequate stormwater management. Having a single regional pond creates efficiencies for stormwater management in the area as the majority of new development would be serviced by the pond. Remaining areas can be managed through individual facilities similar to those currently being used for the Home Depot, Rona and Walmart sites. This alternative is less costly than Alternative 2 and would provide the same level of water quality and quantity control. This alternative is thus the preferred option.

Impacts, Mitigation Measures and Monitoring

Based on the evaluations described above, the preferred alternative is to:

- Extend Catherine St. and Roseville Garden Dr. with the following cross-section:
  - 22 m road ROW
  - Two travel lanes and a two-way centre turn lane
  - Multi-use trail on the north side of Catherine St. and east side of Roseville Garden
- One regional stormwater management pond in the northcentral portion of the study area
- An extension of the current sanitary sewer system with a connection at Lauzon Parkway

The potential environmental effects resulting from construction and operation of the proposed servicing are summarized in the table below.

Environmental Component	Environmental Sub-Component	Potential Environmental Impacts	Proposed Mitigation Measures	Recommended Monitoring Activities
Natural Environment	Migratory Birds	Potential for disturbance or destruction of migratory breeding birds and their habitat as a result of tree removal and ground clearing (prohibitions under the *Migratory Bird Convention Act, 1994*).	• Remove trees and complete vegetation clearing (including grubbing) between September 1 and March 31 of any year to avoid the bird nesting period. • If clearing must occur within the nesting period, a qualified Ecologist Ecologist/Avian Biologist will first search the affected area. Any active nests will be flagged and all clearing within the associated habitat will be avoided until the Ecologist/Avian Biologist confirms that the birds have fledged, and the nest is no longer active. • If a nesting migratory bird (or SAR protected under ESA, 2007) is identified within or adjacent to the construction site, all activities will stop and the Contractor (with assistance from a qualified Ecologist/Avian Biologist) shall discuss mitigation measures with the proponent. In addition, the proponent will contact MECP to discuss applicable mitigation options. The Contractor will proceed based on the mitigation measures established through discussions with the MECP.	• As required, if an active nest or species at risk are observed.
Natural Environment	Species of Conservation Concern	One or more individual Tall Boneset plants (a provincially rare species), will need to be removed.	• Collect seeds from the plants prior to their removal and use to augment plantings within the SWM Pond Planting Plan, ensuring the preservation and propagation of this species in the local landscape.	• None required.
Natural Environment	Fish Habitat/ Wildlife Movement	Development in close proximity to the Drain could damage fish habitat, including the Drain's banks and any vegetation along the banks that provide shade and nutrients to the watercourse. Wildlife may also use the riparian area to travel through the study area.	• Maintain a 30 m buffer from the Hawkins Drain. All development should be maintained outside of this buffer area with the exception of the SWM pond and its outlet. • The buffer area should be maintained in a natural condition in the long-term. • Any disturbance to the buffer area caused by construction of the SWM pond shall be restored with native vegetation. • Create a planting plan to naturalize areas around the SWM pond and install wildlife habitat features, as recommended in the Environmental Evaluation Report in Appendix D. • Minimize removal of natural woody debris, rocks and other materials when possible.	• A construction inspector shall ensure that construction activities do not encroach into the buffer area, with the exception of SWM-related works.
Natural Environment	Fish Habitat	Construction of the SWM pond outlet will require in-water work within the Hawkins Drain, which could disturb fish spawning.	• Complete all in-water work outside of the spring restricted timing window for fish (March 15 - July 15 of any given year).	• A construction inspector will ensure that in-water construction activities occur within the appropriate timing window.
Natural Environment	Significant Wildlife Habitat/ Habitat of Endangered and Threatened Species	Terrestrial crayfish burrows may provide hibernation sites for the Endangered Butler's Gartersnake. Removal of burrows could disrupt habitat for crayfish and snakes.	• Maintain a 5 m buffer around crayfish burrows. The buffer will be fenced to prevent encroachment during construction.	• A construction inspector shall ensure that construction activities do not encroach into the buffer area.

Environmental Component	Environmental Sub-Component	Potential Environmental Impacts	Proposed Mitigation Measures	Recommended Monitoring Activities
Natural Environment	Snakes	Endangered Eastern Foxsnake and Butler's Gartersnake are known to inhabit the general area. Individuals could be harmed during construction.	• Install reptile exclusion fencing around the development envelope to ensure that SAR reptiles do not enter the worksite. Fencing should be installed according to the Ontario Species at Risk Branch Best Practices Technical Note: Reptile and Amphibian Exclusion Fencing (2013). To prevent the entanglement of SAR snakes, an alternative product such as Curlex Net-free® blanket or the use of riprap over geotextile fabric is recommended. • Once reptile exclusion fencing has been erected, complete a Visual Area Survey to ensure that there are no individuals trapped inside. • Survey construction machinery and equipment that is left idle for over one hour or is parked overnight on the property between April 1 to November 30 for the presence of Eastern Foxsnake before (re)ignition. This visual examination should include all lower components of the machinery, including operational extensions and running gear. • Report any SAR individual that is present on the property to the Ministry of Environment, Conservation and Parks (MECP) within 48 hours of the observation or the next working day, whichever comes first. • If a SAR individual is encountered, allow the individual to disperse from the project site under its own ability, and maintain a minimum operating distance of 30 m between project machinery and the individual. MECP must be contacted if this cannot be done. • If an injured or deceased SAR is found, place the specimen in a non-airtight container maintained at an appropriate temperature and contact MECP staff immediately. • Consult with MECP as early as possible to confirm whether any permitting or approvals under the Endangered Species Act may be required. Submit an Information Gathering Form and Avoidance Alternatives Form to MECP to begin the review process and confirm whether any permitting is required.	• A construction inspector shall ensure fencing is installed correctly and inspect the area for snakes as noted in the mitigation measures.
Natural Environment	Hawkins Drain	Soil loosened during the construction process could wash into the Hawkins Drain and damage fish habitat.	• Create an Erosion and Sediment Control (ESC) Plan during the detailed design phase of the project in consultation with ERCA, ensuring conformity with industry best management practices and recognized standard specifications such as Ontario Provincial Standards Specification (OPSS). • Obtain a permit from ERCA for any construction works within regulated areas will require permits under Section 28 of the Conservation Authorities Act. • Adhere to wet weather restrictions during Site preparation and excavation. Avoid work near watercourses and open water features during periods of excessive precipitation and/or excessive snow melt. • Complete any in-water works in isolation of flowing waters, with work zone isolation achieved by placing cofferdams constructed of clean, non-erodible materials at the upstream and downstream limits of a given work area. Stream flows must be maintained downstream of in-water work areas through by-passing flows (by-pass culvert, channel, pumping etc.). De-water any isolated work area and ensure that the pumped water is conveyed to a filtering system and flow dissipation device to mitigate sedimentation and erosion to the receiving waterbody. Restore disturbed channel banks and riparian areas with erosion control blankets, topsoil, native seed mixtures, and plantings as soon as conditions allow.	• Control measures will be inspected regularly to ensure they are functioning and are maintained as required. If control measures are not functioning properly, no further work shall occur until the problem is resolved. All temporary ESC measures shall be installed in accordance with recognized provincial standards. Extra silt fence / turbidity curtain shall be stored on-Site, should additional sediment control be required.

Environmental Component	Environmental Sub-Component	Potential Environmental Impacts	Proposed Mitigation Measures	Recommended Monitoring Activities
Natural Environment	Surface and Ground Water	Potential for localized surface water or groundwater impacts as a result of spills, discharge or dumping of materials, fluids and other wastes during construction of proposed road extension and associated surface water facilities (e.g., swales).	• Refuel and maintain construction equipment in a controlled manner, away from natural features. Any hazardous materials used for construction will be handled in accordance with appropriate regulations. • Ensure equipment arrives at the site in a clean and well-maintained condition. • Ensure compliance with the Ontario Water Resources Act, 1990, c. O.40 with respect to the quality of water discharging into natural receivers. • Prepare a Construction Emergency Response and Communications Plan and follow protocols throughout the construction phase (including spill response plans). Train personnel in how to apply the plans and the plans. • Immediately report and clean up spills or depositions in accordance with provincial regulatory requirements and the contingency plan. A hydrocarbon spill response kit will be on site at all times during the work. Spills will be reported to the Ontario Spills Action Centre at 1-800-268-6060.	A qualified construction inspector shall regularly monitor construction activities to confirm the requirements outlined in the ESC Plan are followed. Workers shall report any instances of spills to their supervisors.
Physical Environment	Soils	Potential for movement and misuse of contaminated soils.	• Have a Qualified Professional (QP) prepare a Soil Management Plan (SMP) as defined in Ontario Regulation 160/06 for managing soil materials on-site (including excavation, location of stockpiles, reuse and off-site disposal).	A qualified construction inspector shall regularly monitor construction activities to confirm the requirements outlined in the Soil Management Plan are followed.
Cultural Heritage Resources	Archaeological Resources	Potential for previously unidentified archaeological resources to be found and disturbed.	• Should previously undocumented archaeological resources be discovered, they may be a new archaeological site and therefore subject to Section 48(1) of the Ontario Heritage Act. The proponent or person discovering the archaeological resources must cease alteration of the site immediately and engage a licensed consultant archaeologist to carry out an archaeological assessment, in compliance with Section 48(1) of the Ontario Heritage Act. • The *Funeral, Burial and Cremation Services Act*, 2002, S.O. 2002, c.33 requires that any person discovering human remains must cease all activities immediately and notify the police or coroner. If the coroner does not suspect foul play in the disposition of the remains, in accordance with Ontario Regulation 30/11 the coroner shall notify the Registrar, Ontario Ministry of Public and Business Service Delivery, which administers provisions of that Act related to burial sites. In situations where human remains are associated with archaeological resources, the Ministry of Citizenship and Multiculturalism should also be notified (at archaeology@ontario.ca) to ensure that the archaeological site is not subject to unlicensed alterations which would be a contravention of the *Ontario Heritage Act*.	None required.
Cultural Heritage Resources	Built Heritage and Cultural Heritage Landscapes	No cultural heritage resources were identified in the study area but cultural heritage resources may be present outside of the study area. If the study area changes for any reason, cultural heritage resources may be impacted.	• Should future work require an expansion of the study area then a subsequent review of cultural heritage resources should be undertaken to confirm the impacts of the proposed work on potential heritage resources.	None required.

Environmental Component	Environmental Sub-Component	Potential Environmental Impacts	Proposed Mitigation Measures	Recommended Monitoring Activities
Socio-economic Environment	Noise	Potential for noise from of large construction equipment.	• Implement noise control measures in accordance with municipal bylaws during construction, including restrictions on hours of operation and the use of appropriate machinery and mufflers. Limit the noise produced by the equipment through proper equipment maintenance. • Ensure that construction activities shall conform to the criteria set out in NPC-115. • Develop a complaint response protocol for nuisance impacts including, including noise, which may occur during construction.	An environmental monitor shall regularly monitor construction noise to ensure that noise control measures are being adequately applied. If noise control measures are not functioning properly, alternative measures shall be implemented immediately and prioritized above other construction activities.
Socio-economic Environment	Air Quality	Potential air quality impacts during construction.	• Maintain vehicles / machinery and equipment in good repair, equipped with emission controls, as applicable, and operate within regulatory requirements. • Apply dust suppression measures, as required. • Develop a complaint-response protocol for nuisance impacts including, including air emissions, which may occur during construction.	An environmental monitor shall regularly monitor construction emissions to ensure that dust control measures are being adequately applied.
Socio-economic Environment	Property Acquisition	Property will be required for the road right-of-way and SWM facility.	• Land acquisition (fee simple) will be obtained, as needed, to accommodate servicing. • The City is committed to making best efforts to secure property with landowners through amicable agreement. This will include compensation for the use of land. The City also reserves its property rights as set out in the Municipal Act, and powers outlined as part of the Act for property acquisition.	None required.
Socio-economic Environment	Property Access	The Catherine St. and Roseville Garden extensions and changes to Tecumseh Rd. E. may affect access to existing businesses during construction and in the long-term.	• Consult with all businesses and landowners throughout detailed design and construction to identify access requirements during construction and after roads have been completed. • Work with businesses and landowners to identify temporary access requirements during construction. • Work with Home Depot to review options to create an entrance for delivery vehicles from Catherine St. and customer access from Roseville Garden Dr. • Consult with the Serbian Centre to manage event parking on the south side of Catherine St. and pedestrian access to the Centre. • Develop and implement a traffic management plan during construction in coordination with the City. Provide adequate signage to give advance notice of disruptions and detours.	None required.
Socio-economic Environment	Hawkins Drain	The drain is subject to the Drainage Act. The Hawkins Drain watershed will be altered, resulting in changes to the portion of drain maintenance for which each property in the watershed is responsible.	• Section 65 of the Drainage Report will be updated. • All affected property owners will be notified of changes.	None required.

Consultation

Consultation was carried out with agencies, affected landowners and Indigenous communities. Consultation includes notification, a Public Information Centre and video conferences with several interested parties.

Consultation activities included the following:

- Notice of Project Commencement and Public Information Centre: The notice was mailed or emailed to 21 review agencies, nine utilities, eight Indigenous communities and all landowners in the study area.
- Public Information Center: A Public Information Centre was held on held at the Serbian Centre on November 26, 2024, from 5PM - 7PM. The PIC was held in person as an open house style session. Four people attended the PIC, including three landowners and one City councilor. Discussions were held between the participants and team members in attendance at the PIC; however, no written comments were submitted during or after the PIC. Discussion generally covered construction timing, property acquisition timing and process, and access to properties during and after construction.
- Meeting with Home Depot: A meeting was held virtually with Home Depot staff on November 22, 2024, to discuss proposed changes to the entrance off Tecumseh Rd. E. A proposed alternate entrance off the Roseville Garden Dr. extension was discussed, along with a possible entrance from Catherine St. Home Depot staff requested ongoing consultation throughout the detailed design and construction process to ensure changes can be phased appropriately to ensure some form of access is retained at all times. The City committed to future discussion and coordination.
- Meeting with the Three Fires Group (Chippewas of Kettle and Stony Point: On December 6, 2024, Burnside virtually met with Three Fires Group, representing Chippewas of Kettle and Stony Point, to review the Project scope, timelines, and to provide an opportunity for feedback and comments / concerns. Three Fires Group had no comments / concerns for the Project, but indicated they would like to be circulated all applicable studies and reports, and to continue to be circulated on all key Project information.
- Meeting with Chippewas of the Thames First Nation: On December 9, 2024, Burnside virtually met with COTTFN to review the Project scope, timelines, and to provide an opportunity for feedback and comments / concerns. COTTFN had no comments / concerns for the Project, but indicated they would like to be circulated all applicable studies and reports, and to continue to be circulated on all key Project information.

Commitments and Next Steps

Next steps will include:

- Detailed design, including the development of detailed drawings for the preferred alternative as well as construction standards and specifications, including a Construction Management Plan, Monitoring Plan, and Operations and Maintenance Plan.
- Additional consultation, as follows:
  - Throughout detailed design and construction, all affected landowners and business owners will be consulted with regard to any temporary and permanent changes to property access, changes to existing stormwater management structures, construction timing and phasing.
  - Landowners in the Hawkins Drain watershed will be advised of changes to the Drainage Report and associated effects to drainage responsibilities.
- Several permits and approvals will be obtained prior to construction, including any necessary permits or authorizations under the Endangered Species Act and Conservation Authorities Act as well as Permits to Take Water and Environmental Compliance Approvals related to construction work, sanitary sewer connections and stormwater management, as required.

Study Completion

At the conclusion of Phase 2 for the stormwater management and sanitary sewer solutions and Phase 3 for the collector road solution of the Municipal Class EA Study process, this Environmental Study Report (ESR) was finalized, and a Notice of Completion was issued. The ESR documents the decision-making process during the study. The Notice of Study Completion notified members of the public and agencies that the ESR would be available for public review for thirty-day period. The Notice was also mailed to all agencies, Indigenous communities and stakeholders on the Project Contact List. The ESR is also made available for public review on the project website, windsoreas.ca. Should anyone have concerns about the project, the process for requesting a higher level of study is described in Section 12 of this report.

To provide comments on the project, or if you require alternative accommodations to view the ESR, please contact the Study Team as per the dates provided on the Notice of Completion. Comments can be submitted to the following team members:

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Disclaimer

1.0 Introduction

The Forest Glade North Planning Area, located in Windsor Ontario, is bound by Lauzon Parkway to the east, Tecumseh Rd. E to the south, a CN rail line to the north and the rear property line of the lands fronting Jefferson Blvd. to the west. Future development in the area was studied as part of the Forest Glade North Secondary Plan and will include business park and mixed-use development. Several large commercial developments are present, including Home Depot, Walmart, and Rona. The Serbian Centre, featuring a church and event hall, is also present. A rail yard and a small number of other commercial units are also located in the area, along with multiple vacant properties.

The Secondary Plan identified an alignment for two collector roads through the area and identified the need for further study regarding the area's stormwater and sanitary sewer servicing.

Several new developments are currently being proposed, prompting the City to initiate a Municipal Class Environmental Assessment (MCEA) to expand on the work completed during the Secondary Planning process. The purpose of this MCEA is to further explore the alignment and design for collector roads and identify the preferred approach to provide sanitary sewers and stormwater management to the entire Forest Glade North Planning Area.

This MCEA follows the Municipal Class Environmental Assessment process in accordance with Ontario's Environmental Assessment Act, R.S.O. 1990 (February 2024 consolidation).

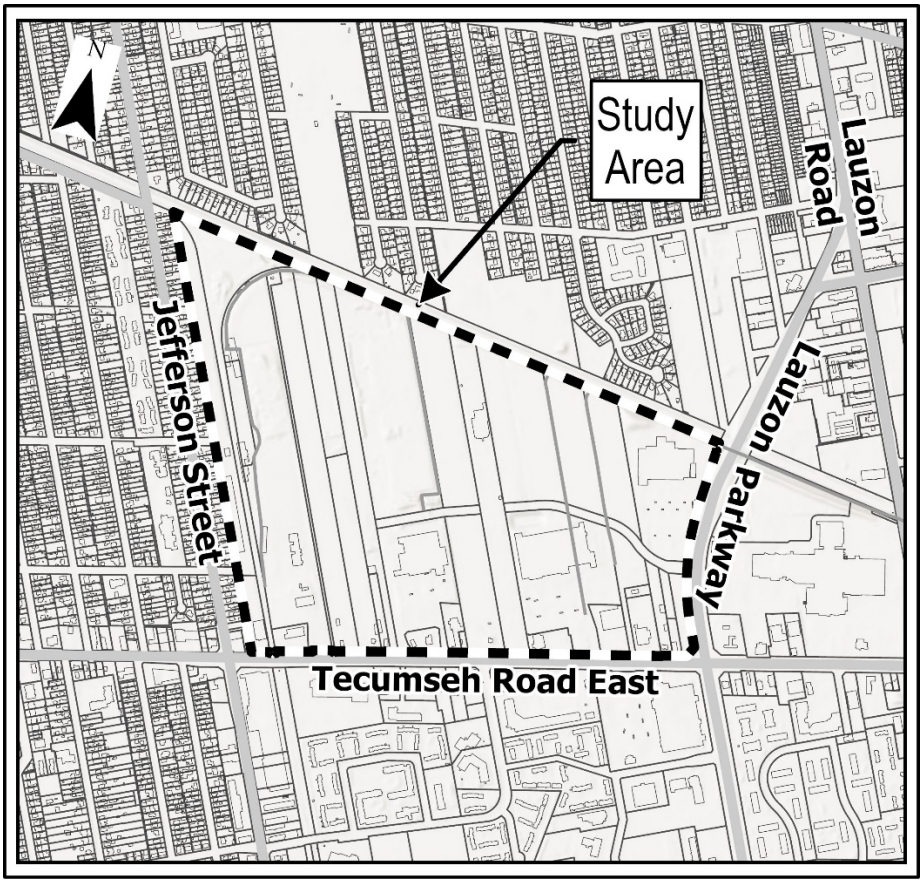
1.1 Study Area

The study area is bound by Lauzon Pkwy to the east, Tecumseh Rd. to the south, a CN rail line to the north and the rear property line of the lands fronting Jefferson Blvd. to the west. The Study Area is illustrated on Figure 1-1. The area is primarily comprised of agricultural lands and vacant fields. A treed natural area is present in the northwest corner of the study area. Several big box stores and smaller commercial businesses are also present, along with the Serbian Centre, located in the centre of the study area. Catherine St. runs in an east-west direction from Lauzon Pkwy for a distance of approximately 360 m before coming to a dead end. There are several internal driveways that serve the existing businesses, including a lengthy driveway from Tecumseh Rd. to the Serbian Center. CN rail lines run along the north and west side of the study area and are used for commercial freight and Via rail. The Hawkins Drain is a municipal drain running along the northern edge of the study area.

The study area is within Treaty #2, also known as the McKee Purchase, which was signed on May 19, 1790. Eight current day First Nations were signatories to the treaty or

have traditional territories, right or interests that include the study area. These include Aamjiwnaang, Caldwell, Chippewas of Kettle and Stony Point, Chippewas of the Thames, Delaware Nation, Munsee-Delaware, Oneida of the Thames and Walpole Island First Nations.

Figure 1-1: Study Area



2.0 Municipal Class Environmental Assessment Process

The planning of public sector projects or activities that have the potential for environmental effect is subject to an MCEA as required by *Ontario's Environmental Assessment Act, R.S.O. 1990* and requires the proponent to complete an Environmental Assessment (EA).

The MCEA process was developed by the Municipal Engineers Association, in consultation with the Ministry of the Environment, Conservation and Parks (MECP), as an alternative method to Individual EAs for recurring municipal projects that were similar in nature, usually limited in scale and with a predictable range of environmental impacts, which were responsive to mitigating measures. The MCEA solicits input from regulatory agencies, the municipality, Indigenous communities and the public at the local level. This process leads to an evaluation of the alternatives in view of the significance of the environmental effects, including the technical, natural, social / cultural and economic impact of a project, and the choice of effective mitigation measures.

2.1 Project Schedules

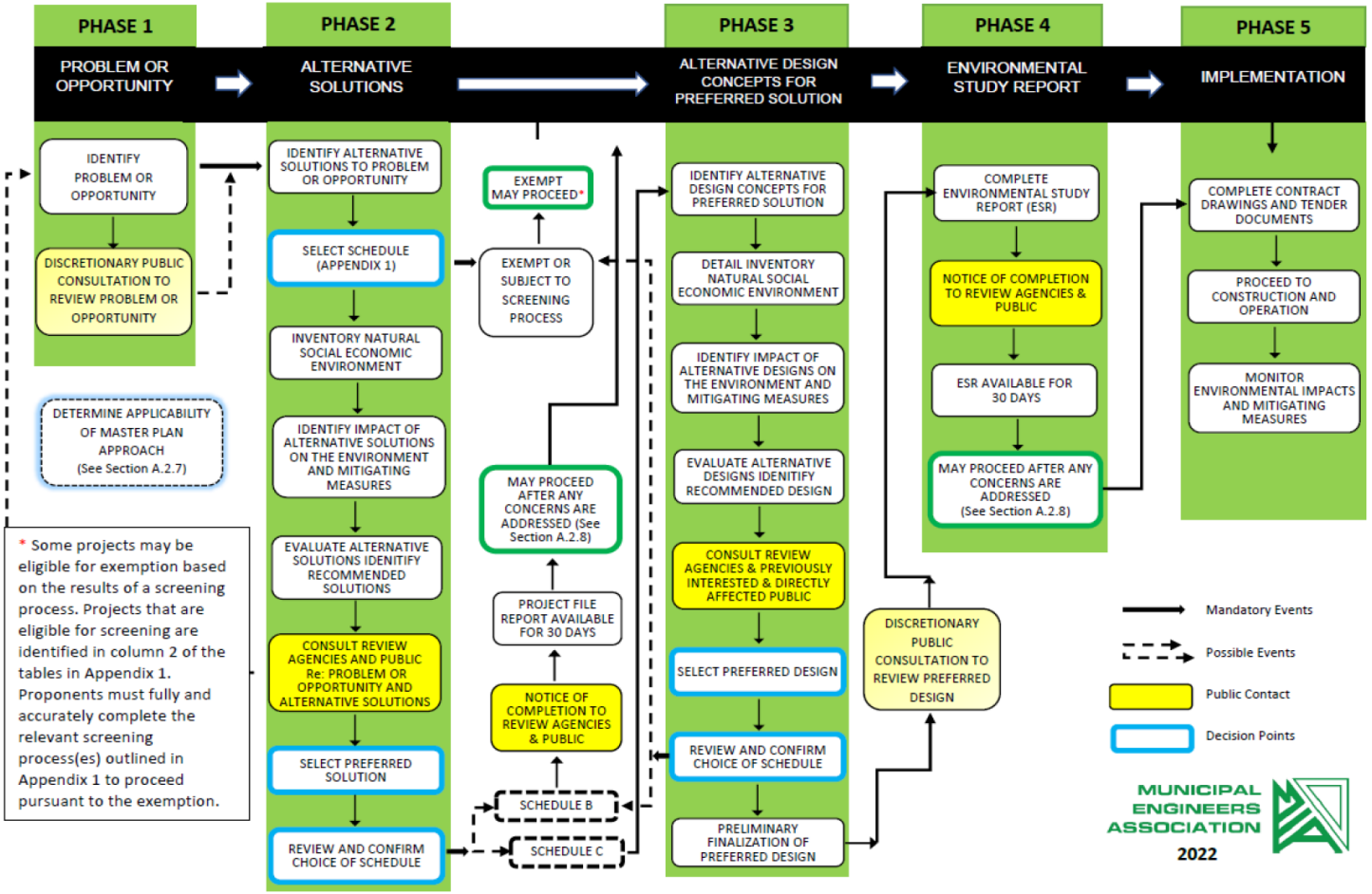
Under the Municipal Engineering Association MCEA Document (October 2000, as amended in 2007, 2011, 2015 and 2024), there are four categories of assessment within the MCEA process that are dependent on the complexity and potential for environmental impact.

- **Exempt:** Projects are limited in scale, have minimal adverse environmental impacts and are not required to undergo the environmental assessment process. Projects can proceed directly to Phase 5, implementation.
- **Schedule B:** Projects have the potential for some adverse environmental impacts. The proponent is required to undertake a screening process, involving mandatory contact with the directly affected public and regulatory agencies, to ensure that they are aware of the Project and that their concerns are addressed. Schedule B Projects require that a Project File Report be prepared and made available for public review. Proponents undertaking Schedule B Projects are required to complete Phase 1, 2 and 5 of the MCEA process.
- **Schedule C:** Projects have the potential for significant environmental impacts and must proceed under the full planning and documentation procedures of the MCEA document. Schedule C projects require that an Environmental Study Report (ESR) be prepared and filed on the public record for review by the public and regulatory agencies. Proponents undertaking Schedule C Projects are required to complete Phase 1 through 5 of the MCEA process.

The phases of the MCEA process are illustrated in Figure 2-1 and summarized as follows:

- Phase 1: Identify the problem (deficiency) or opportunity.
- Phase 2: Identify alternative solutions to address the problem or opportunity by taking into consideration the existing environment and establish the preferred solution taking into account public and review agency input. At this point, determine the appropriate schedule for the undertaking and document decisions in a Project File for Schedule B projects, or proceed through the following phases for Schedule C projects.
- Phase 3: Examine alternative methods of implementing the preferred solution, based upon the existing environment, public and review agency input, anticipated environmental effects and methods of minimizing negative effects and maximizing positive effects.
- Phase 4: Document, in an ESR, a summary of the rationale, and the planning, design and consultation process of the project as established through the above phases and make such documentation available for scrutiny by review agencies and the public.
- Phase 5: Complete contract drawings and documents and proceed to construction and operation. Monitor construction for adherence to environmental provisions and commitments. Where special conditions dictate, monitor the operation of the completed facilities.

Figure 2-1: Municipal Class Environmental Assessment Process Flow Chart



2.2 Class EA Schedule Confirmation

This Environmental Assessment covers the collector roads, stormwater management and wastewater servicing for the Forest Glade North planning area. The MCEA Schedules associated with each project were confirmed through the Municipal Engineers Association (refer to correspondence in Appendix A) and are described below.

Collector Roads

The roads projects contemplated under this MCEA meet the definition of "*Construction of a new collector road, or reconstruction or widening of an existing collector road that will not be for the same purpose, use, capacity or at the same location, and is required as a condition of approval on a plan of subdivision and/or the subdivision agreement which will come into effect under the Planning Act.*"

With respect to construction costs:

- Projects costing less than $3M are subject to Schedule B.
- Projects costing greater than, or equal to, $3M are subject to Schedule C.

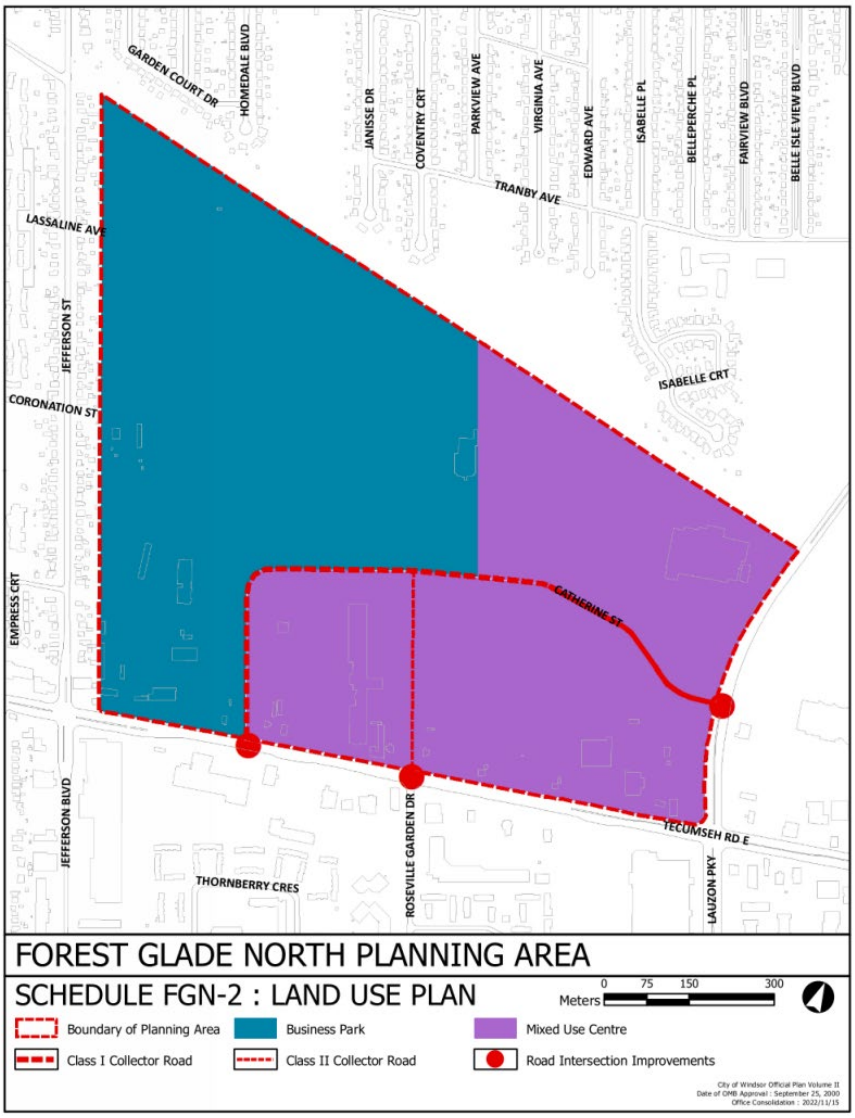
Construction of the proposed roads is likely to cost more than $3M and is therefore subject to Schedule C.

Under the MCEA process, previous studies can be used to address MCEA requirements if they were completed using a similar process. Collector roads were studied through the Secondary Plan. Section 6.3.1 of the Secondary Plan notes that, "*The [Secondary Plan] study process was completed in four phases: data collection and analysis, opportunities and constraints, evaluation of alternatives and policy directions.*" And that, "*three alternative concept plans were generated for discussion. Each concept plan was evaluated from the perspectives of land use, environment, market and transportation, in addition to the public input obtained through a public open house held in September 2003.*"

With regard to the area's road network, the Secondary Plan identified the location for two Collector Roads, as shown on Schedule FGN-2 of the Secondary Plan (Figure 2-2 below). An extension of the existing section of Catherine St. was proposed to be a Class I Collector Road and an extension of Roseville Garden Dr. was proposed to be a Class II Collector Road.

The process used through the Secondary Plan and study findings cover requirement for Phases 1 and 2 of the MCEA process. This EA will build on those findings and complete Phases 3 and 4.

Figure 2-2: Collector Roads Identified in the Forest Glade North Secondary Plan



Sidewalks and Multi-use Trails

The City's Active Transportation Master Plan (2019) includes a number of actions which pertain to this project. Specifically, Table 5 of the Master Plan identifies the following actions:

- Action 1B.6: Incorporate bicycle facilities as part of all new Environmental Assessment, infrastructure projects, as well as in conjunction with other projects, plans and developments.
- Action 1C.1: Integrate off-street pathway network with sidewalks and on-street bicycle routes for recreational and utilitarian forms of active transportation.

- Action 1D.1: Improve walking and cycling connections to transit service consistent with the concurrent Transit Windsor service review.

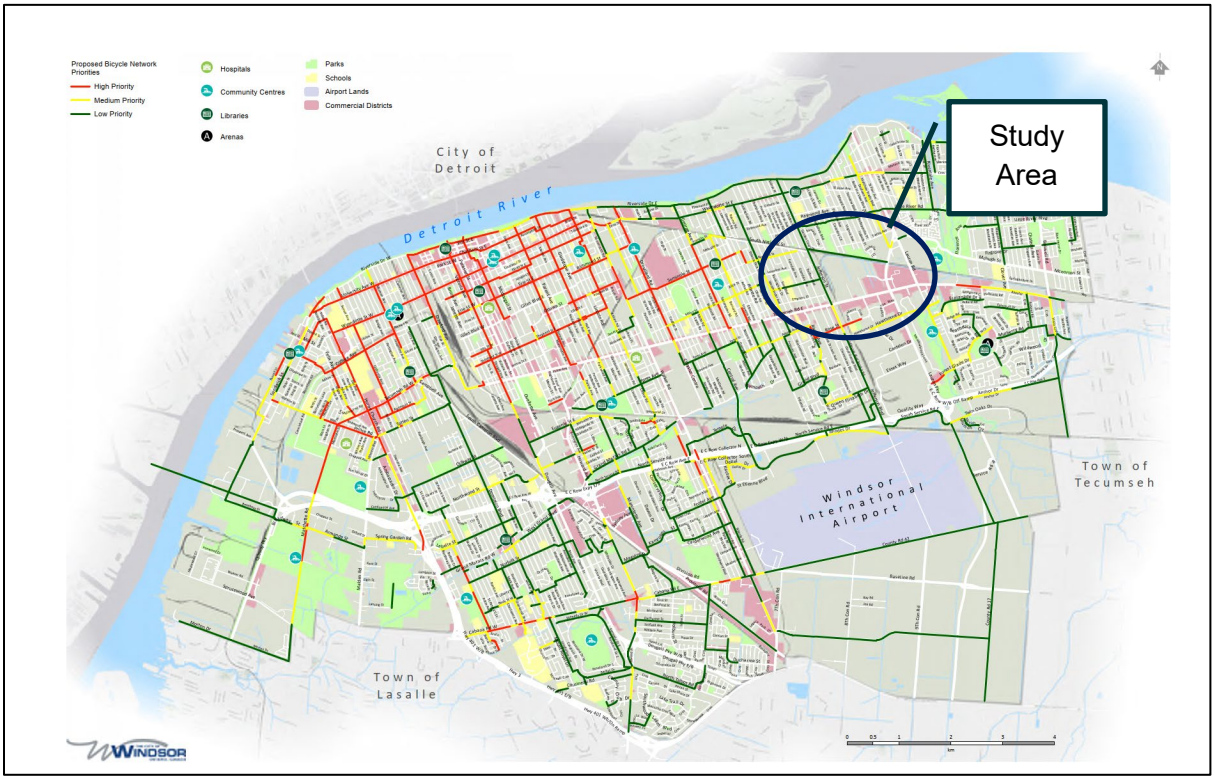
The Active Transportation Master Plan identifies that off-road trails along the rail corridor on the western and northern boundaries of the study area are a low priority, as shown in Figure 2-3. The future collector roads identified in the Secondary Plan are not shown in the network plans. As such the actions noted above are used to determine the type of facilities which may be appropriate in this area. According to the Municipal Class EA guidance document, construction or removal of sidewalks, multi-purpose paths or cycling facilities including water crossings outside of existing rights-of-way and/or in a utility corridor that are:

- Less than $4.1M to construct are exempt from the EA process
- Greater than $4.1M to construct are subject to Schedule B of the MEA process
- Greater than $12M to construction are subject to Schedule C of the MEA process

Sidewalks or paths located within existing rights-of-way are exempt from the EA process.

In this case, any sidewalk or trail constructed as part of the project will be included as part of the construction of collector roads. Active transportation options will be considered as part of the overall roadway design.

Figure 2-3: Cycling Network Priorities Outlined in the Windsor Active Transportation Master Plan (2019)



Stormwater Management

The stormwater system that will be required to service the plan area meets the MCEA definition to "*establish new or replace or expand existing stormwater detention/retention ponds or tanks and appurtenances including outfall to receiving water body where all such facilities are not located in an existing utility corridor, or an existing road allowance or where property acquisition is required.*"

Projects meeting this definition are subject to Schedule B of the MCEA.

The Secondary Plan did not study stormwater to the same extent as collector roads. The plan did include the following policies:

> *6.7.7.1 The Plan encourages development of communal stormwater management facilities to ensure the proper integration of the land uses within the Planning Area and discourages the development of multiple stormwater management facilities which service individual users.*
>
> *6.7.7.2 The Plan recognizes the potential need for two communal stormwater management facilities, one on either side of the proposed Catherine Street extension. The City supports a linear stormwater management pond north of the Catherine Street extension adjacent to the CN Rail line and Hawkins Drain. The precise delineation of these stormwater management facilities will be determined through the preparation of a comprehensive Stormwater Management Study.*

This MCEA will address these policies through the completion of a Schedule B Municipal Class EA study.

Wastewater Systems

The wastewater system that will be required to service the plan area meets the MCEA definition to, "*establish, extend or enlarge a sewage collection system and all works necessary to connect the system to an existing sewage outlet where such facilities are not located in an existing road allowance, or existing utility corridor.*"

Projects meeting this definition are subject to Schedule B of the MCEA.

The Secondary Plan was limited in its review of wastewater; however, the following policies were included:

> *6.7.7.3 A Servicing Study will be required for large-scale development applications within the Planning Area. The Servicing Study shall ensure the most efficient provision of services for all lands within the Planning Area.*

6.7.7.4 Development within the Planning Area shall occur on full municipal services.

This MCEA will address these policies by reviewing options to service the area with a connection to the municipal sanitary sewer system. All requirements for a Schedule B study will be completed.

2.3 Problem/Opportunity Statement

The initial step in the MCEA process is to identify the problem or opportunity which needs to be solved or addressed. This sets the framework for the remainder of the study. Earlier studies or reviews undertaken by the proponent may be available to assist in defining the problem.

In this instance, some initial planning work was completed through the Forest Glade North Secondary Plan. The purpose of this study is to build on work already undertaken and complete steps in the MCEA process which were not previously covered in the Secondary Plan. Therefore, the following problem/opportunity statement was identified to set the framework for this study:

"The purpose of this Environmental Assessment is to build on the work completed through the Forest Glade Secondary Plan by:

- *Completing Phases 3 and 4 of the MCEA process for the proposed extension of Catherine St. and north-south collector road and ensuring that appropriate and fulsome engagement is carried out.*
- *Determining the most appropriate active transportation facilities for the area to meet the guidance in the City's Active Transportation Master Plan.*
- *Undertaking a Stormwater Management Study, required under Sections 6.7.7.2 and 6.8.1(d) of the Secondary Plan, to determine the most effective way to manage stormwater over the entire study area.*
- *Completing a review of wastewater servicing options as required under Section 6.8.1(d) of the Secondary Plan to identify a preferred method for managing wastewater in the study area.*
- *Assessing the impacts of each collector road, stormwater and wastewater alternative on the natural, socio-cultural, technical and financial environment, using input from a variety of relevant Indigenous communities, agencies, stakeholders and public participants.*

3.0 Description of the Environment

Existing conditions provide a baseline from which to assess the potential impacts of a project. The existing built environment, socio-economic conditions, cultural heritage resources and natural environment within the Study Area were characterized and are described in the following sections.

3.1 Built Environment

The built environment includes human-made structures and alterations to the natural environment, including buildings, roads, infrastructure, and human-influenced topography.

3.1.1 Methodology

The built environment was characterized using a variety of mapping, background data, digital data files, and field reconnaissance on November 26, 2024. Background data included:

- Various stormwater management reports for existing development, including the Home Depot, Walmart and Rona stores
- 2018 Drainage Report for the Hawkins Drain
- Utilities information from a general request to Ontario One Call
- Open data mapping from the City of Windsor, including property boundaries, sanitary sewers, roads and sidewalks
- Mapping from the Tecumseh Rd. East Municipal Class Environmental Assessment
- A recent topographic survey and property survey

3.1.2 Existing Conditions

Existing Development

Several structures are present in the study area, including commercial and retail developments, restaurants and banks, most notably Home Depot, Walmart and Rona. The Serbian Centre Catering and Events Facility is located centrally in the study area. A small number of residential properties are also present. Several undeveloped properties are currently being farmed.

Existing developments are shown on Figure 3-1.

Signalized Intersection

Hawkins Drain

Study Area

Sources:

1. Ministry of Natural Resources, © Queen's Printer for Ontario
2. Natural Resources Canada © Her Majesty the Queen in Right of Canada.

Disclaimer:

R.J. Burnside & Associates Limited and the above mentioned sources and agencies are not responsible for the accuracy of the spatial, temporal, or other aspects of the data represented on this map. It is recommended that users confirm the accuracy of the information represented.

This map is the product of a Geographic Information System (GIS). As such, the data represented on this map may be subject to updates and future reproductions may not be identical.

Datum: North American 1983	
Coord. System: NAD 1983 UTM Zone 17N	
Projection: Transverse Mercator	
Central Meridian: 81°0'0.00"W	
False Easting: 500,000m	False Northing: 0m
Page Orientation: -13.45°	Scale Factor: 0.99960

N

Grid North

0 50 100 150 200 250

Metres

BURNSIDE

Client

CITY OF WINDSOR

Figure Title

FOREST GLADE NORTH PLANNING AREA

BUILT ENVIRONMENT

Drawn	Checked	Date	Figure No.
HN	SG	2025/01/08	3-1
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Roads

There are several existing roads surrounding, and within, the Study Area which include the following:

- Tecumseh Rd. E, which runs east-west along the southern edge of the study area. The road has three travel lanes in each direction with various additional turn lanes. A raised median is present along the centre of several sections of the road.
- Lauzon Parkway, which runs in a north-south direction along the eastern edge of the study area. It includes three travel lanes in each direction and additional turn lanes.
- An existing section of Catherine Street, which runs westward from Lauzon Parkway to the rear of the Walmart. The road currently has two travel lanes and sidewalks on both sides of the road.
- Roseville Garden Dr., which runs southward from Tecumseh Rd. E beyond the study area.

There are also a number of driveways and commercial entrances off Tecumseh Rd. E. and Catherine St., including an entrance to the Serbian event centre.

Signalized intersections are present at:

- Tecumseh Rd. E. and Lauzon Parkway
- Tecumseh Rd. E. and Roseville Garden Dr.
- Lauzon Parkway and Catherine St.
- Various plaza entrance off Tecumseh Rd. E, including the Home Depot

Public Transit

The study area is serviced by public transit. A new transit station is planned at the southeast corner of the study area, with access from Catherine St. Detailed plans for the station are under development.

Rail Line

A rail line runs along the western and northern boundaries of the study area. A rail yard is present adjacent to the north-south running line.

Hawkins Drain

The Hawkins Drain is a maintained drainage feature that flows easterly along the rail line at the northern boundary of the study area. The drain outlets to Little River and subsequently to the Detroit River. The Hawkins Drain is a municipal drain, governed by by-laws under the *Drainage Act*.

Infrastructure

Presently, the study area is serviced directly off Tecumseh Road E. and Catherine St. for both sanitary and stormwater services.

Three private stormwater management (SWM) ponds are located in the study area to manage stormwater from the Home Depot, Walmart and Rona properties. Each pond outlets to the Hawkins Drain. Each pond is managed privately by the respective owners. Stormwater from other properties flows overland to the Hawkins Drain or south to a storm sewer on Tecumseh Rd. E.

3.2 Socio-Economic Conditions

Socio-economic conditions include the land uses rights and interests, population and economic drivers influencing the study area.

3.2.1 Methodology

Socio-economic conditions were characterized through a review of existing information, databases, plans and policies, including the following:

- Provincial Planning Statement (2024)
- City of Windsor Official Plan (2023)
- City of Windsor Zoning Bylaw
- City of Windsor Forest Glade North Planning Area Secondary Plan (2004)
- Source Water Protection Mapping
- City of Windsor Active Transportation Plan (2019)
- Correspondence with MECP staff to identify Indigenous interests in the area (refer to Section 10.4 for further information)

3.2.2 Planning Context

Provincial Planning Statement (2024)

The 2024 Provincial Planning Statement (PPS) is the complimentary policy document to the *Planning Act, 1990*, issued under Section 3 of the Act.

Section 3.6 addresses sewage, water, and stormwater management, highlighting the need for these services to be optimized and financially viable over their lifecycle. The PPS emphasizes the importance of municipal sewage and water services as the preferred methods of servicing, while also promoting integrated stormwater management practices. This includes minimizing environmental impacts and ensuring public health and safety through effective planning and management of water resources.

Section 3.6 “Sewage, Water and Stormwater

1. Planning for sewage and water services shall:

b) ensure that these services are provided in a manner that:

3. protects human health and safety, and the natural environment, including the quality and quantity of water;"

8. Planning for stormwater management shall:

a) be integrated with planning for sewage and water services and ensure that systems are optimized, retrofitted as appropriate, feasible and financially viable over their full life cycle;

b) minimize, or, where possible, prevent or reduce increases in stormwater volumes and contaminant loads;

d) mitigate risks to human health, safety, property and the environment;

e) maximize the extent and function of vegetative and pervious surfaces;

f) promote best practices, including stormwater attenuation and re-use, water conservation and efficiency, and low impact development;”

The project will be designed to address these policy goals.

3.2.3 Land Use

3.2.3.1 Official Plan and Zoning Bylaw

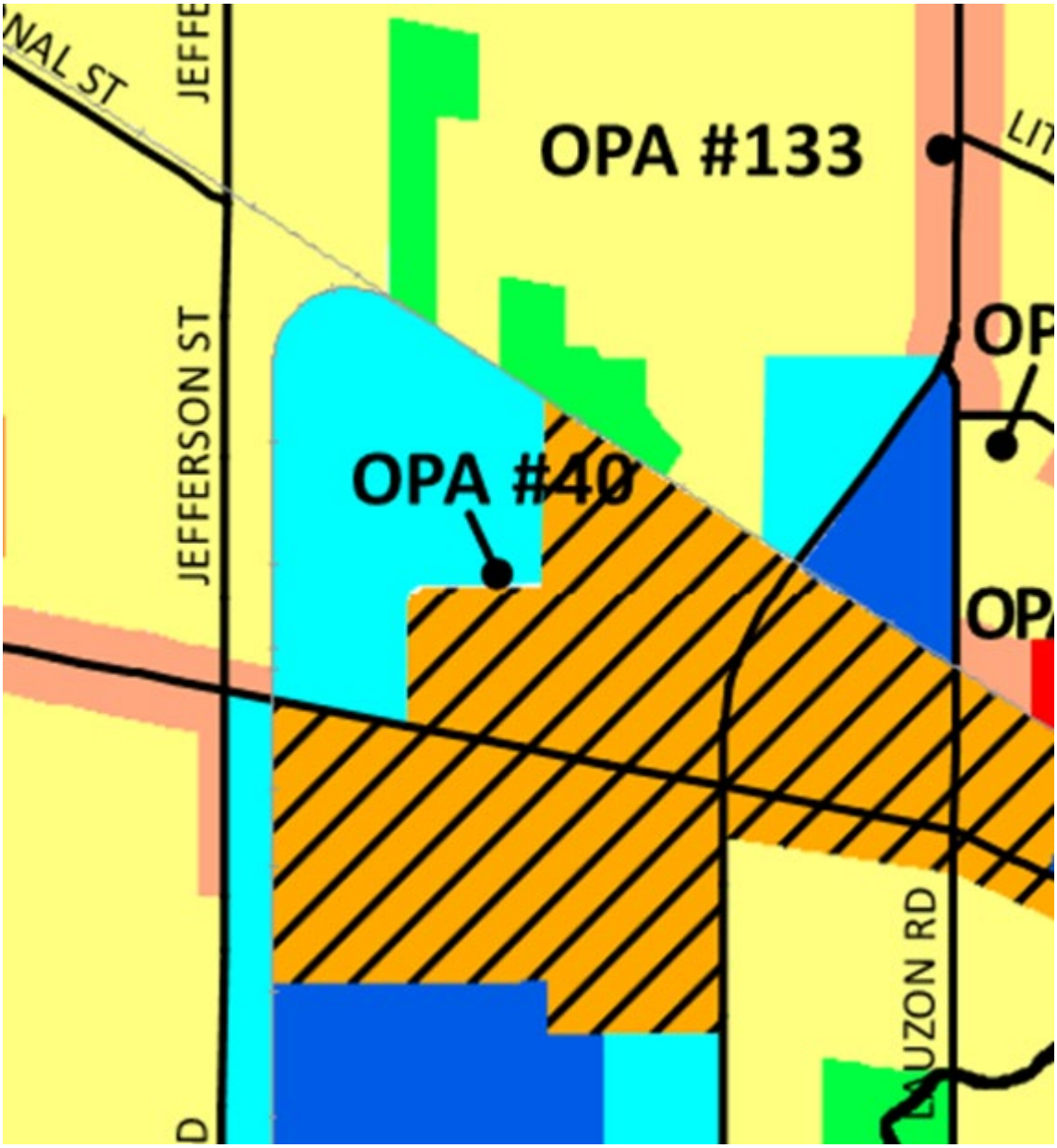
Large commercial retail uses have functioned in the Forest Glade planning area in a manner compatible with the surroundings for a number of years. The proposed development of an additional large commercial retail use, and enhancements to road connections, and the storm and wastewater network will ensure long-term compatibility and sustainability of the infrastructure with the surrounding environment.

The site is designated Mixed-Use Centre, Business Park, and Residential in Schedule D of the City of Windsor Official Plan and further designated as Mixed-Use Centre and Business Park in Schedule FGN-2 of the Forest Glade North Planning Area Secondary Plan, and zoned General Commercial (CD2.1), General Commercial, Warehouse

(CD3.3), Business Park (MD1.4), Railway (MD1.6), and Manufacturing District 2.1 (MD2.1) pursuant to the City of Windsor Zoning By-law No. 8600.

Land uses surrounding the study area include open space and residential (to the north), mixed-use centre (to the east and south), and residential (to the west) (Figure 3-2).

Figure 3-2: Land Use According to Schedule D of the City of Windsor Official Plan



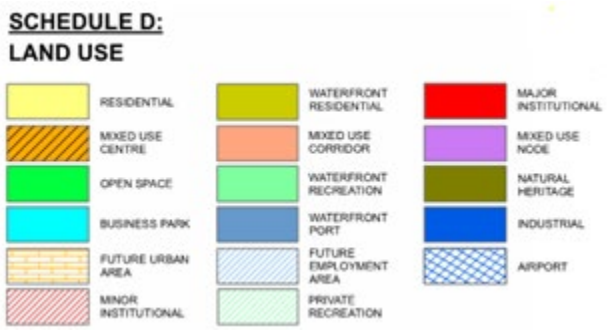
3.2.4 Future Development

The Forest Glade Secondary Plan guides future development in the study area. Approximately 44 hectares are designated as “Mixed Use Centre” on Schedule FGN-2 Land Use Plan. Policies within the Secondary Plan support development of Commercial and medium to high profile Residential as either stand-alone or part of a mixed use development. Medium and High-profile development is generally between six to 14 stories. The subject area is also designated as a Major Activity Centre (regional employment) where the policies promote a minimum of medium (30 units per net hectare) to high-density (80+ units per net hectare).

As such, it is expected that development in the study area will increase significantly in the coming years, requiring appropriate transportation, wastewater and stormwater servicing.

Detailed residential and commercial development projections were estimated based on policies. These projections were used to guide sizing and design parameters for the collector roads, stormwater facilities and wastewater system, provided in Appendices E, I and J. It is noted that the future residential densities and commercial development projections are estimates only and may be subject to change when development applications are received.

3.2.5 Source Water Protection



The study area falls under the Essex Region Source Protection Plan.

3.2.5.1 Vulnerable Areas

Wellhead Protection Areas (WHPAs)

Wellhead Protection Area (WHPA) is an area related to a wellhead and within which it is desirable to regulate or monitor drinking water threats. WHPAs are delineated for threats to quality and quantity. No WHPAs were identified in the study area.

Intake Protection Zones (IPZs)

Intake Protection Zone (IPZ) is an area related to a surface water intake, within which it is desirable to regulate or monitor drinking water threats. These areas are either set distances, delineated based on the time it would take to respond to a spill, or based on the catchment area of the intake. The study area falls within Intake Protection Zone 3. Infrastructure, including roads, sanitary sewers and stormwater facilities are permitted within the Intake Protection Zone 3 designation.

Issue Contributing Areas (ICAs)

Issue Contributing Area (ICA) is an area within a vulnerable area where presently occurring human activities or conditions resulting from past human activities have or are likely to contribute to the elevated concentration of particular substance in the drinking water source. Issues refer to pathogens and chemically specific substances which commonly include chloride, sodium, and nitrate. If an issue is identified for a well, then all prescribed drinking water threat activities related to that particular substance within the ICA are significant drinking water threats, regardless of vulnerability scoring. No ICAs were identified in the study area.

Highly Vulnerable Aquifers (HVAs)

Highly Vulnerable Aquifer (HVA) is an aquifer on which external sources have, or are, likely to have a significant adverse effect and includes the land above the aquifer. An aquifer can be considered highly vulnerable based on a number of factors, including how deep it is underground, what sort of soil or rock is covering it and the characteristics of the soil or rock surrounding it. The faster water is able to flow through the ground to an aquifer, the more vulnerable it is to contamination. No HVAs were identified in the study area.

Significant Groundwater Recharge Areas (SGRAs)

Significant Groundwater Recharge Area (SGRA) is a recharge area which helps maintain the water level in an aquifer that supplies a community with drinking water. Recharge areas often have loose or permeable soil such as sand or gravel, which allows the water to seep easily into the ground. Areas with shallow fractured bedrock are also often recharge areas. No SGRAs were identified in the study area.

3.3 Cultural Heritage Resources

3.3.1 Archaeology Resources

The Stage 1 Archaeological Assessment (2024) and background study determined that two previously registered archaeological sites are located within one kilometer of the Study Area. The property inspection determined that parts of the Study Area exhibit

archaeological potential and requiring a Stage 2 Archaeological. The Stage 1 Archaeological Assessment can be found under Appendix B.

The following recommendations were made:

1. Portions of the study area (particularly lands associated with 0 Catherine Street in Windsor Ontario) that are described as retaining archaeological potential are recommended to be subject to a Stage 2 archaeological assessment. It is recommended that these areas be subjected to test pit surveys at 5 metre (m) intervals per Section 2.1.2 of the *Standards and Guidelines for Consultant Archaeologists* (MCM 2011) or subject to pedestrian surveys at 5 m intervals per Section 2.1.1 of the *Standards and Guidelines for Consultant Archaeologists* (MCM 2011).

2. Portions of the study area that are described as having low archaeological potential are recommended to be considered free from further archaeological investigations per Section 2.1, Standard 2.b. of the *Standards and Guidelines for Consultant Archaeologists* (MCM 2011).

The Stage 2 Archaeological Assessment was completed in the fall of 2024 and is provided in Appendix B. The Stage 2 assessment did not cover the entire study area but rather was focused more specifically on areas for potential future road ROW and stormwater ponds. The assessment utilized test pit surveys, and pedestrian surveys on the subject lands which did not result in the recovery of artifacts and no archaeological sites were identified.

The following recommendation was made:

1. The test pits advanced in all areas produced no archaeological materials and no archaeological sites were identified. No artifacts or other archaeological resources were recovered during the pedestrian survey portion of the Stage 2 assessment. Therefore, this report recommends that no further Archaeological Assessment is required within the [focused] study area.

3.3.2 Cultural Heritage Resources

A screening for cultural heritage was completed as part of this MCEA. The checklist can be found under Appendix C. It was determined through the screening process that there are no cultural heritage resources present on the subject lands.

3.4 Natural Environment

The natural environment includes the ecological features, functions, and linkages that exist within the Study Area and beyond. The existing natural environment was characterized through a review of the existing secondary source information, previous

studies at the site, and a variety of field investigations and analyses. The following sections document the methodology used and the findings of the various studies. A detailed description of natural features in the Study Area can be found in the Environmental Evaluation Report provided in Appendix D.

3.4.1 Methodology

The natural environment was characterized through a review of existing information, databases and mapping. These sources included:

- City of Windsor Official Plan (2023)
- Provincial Planning Statement (2024)
- Endangered Species Act (2007)
- Ministry of Natural Resources and Forestry, Make-A-Map: Natural Heritage Areas, Interactive Map (2024)
- Ministry of Natural Resources and Forestry Natural Heritage Reference Manual (2010)
- Ministry of Agriculture, Food and Rural Affairs – AgMaps Interactive Map (2024)
- Ontario Reptile and Amphibian Atlas (ORAA)
- Ontario Breeding Bird Atlas (OBBA)
- Ebird
- Google Earth Imagery

In addition, a visit to the site was conducted on October 3, 2024. Field investigations were carried out including a vegetation inventory, vegetation community mapping using Ecological Land Classification protocols, and visual surveys to identify wildlife habitats and incidental wildlife observations. The initial study focused on a group of properties within the study area that were the subject of a future development application. In December of 2024, the area cover by the ecological study was expanded to cover areas where the collector roads, SWM infrastructure and sanitary sewer. The study can be found in Appendix D.

3.4.2 Woodlands and Natural Areas

The study area includes a woodland in the northwest corner. The woodland is protected as an Environmental Policy Area in accordance with the City's Official Plan. Several hedgerows are also present between agricultural fields and along the edges of the Hawkins Drain.

Additionally, there is a meadow present to the west of the study area where several Digger Crayfish burrows exist along the perimeter of the meadow.

3.4.3 Species at Risk (SAR)

A Species at Risk (SAR) Assessment was conducted as part of the EA process. No species listed as Endangered or Threatened were observed within the study area; however, Chimney Crayfish burrows were found on site. While Chimney Crayfish themselves are not considered at risk, their burrows serve as critical overwintering habitat for the endangered Butler's Gartersnake, which is known to utilize these burrows as hibernacula during the winter months. The presence of these burrows indicates that the site may provide important habitat for this species, although no direct sightings of the Butler's Gartersnake were made during site visits.

Other reptile species such as the Threatened Eastern Foxsnake could potentially inhabit the area, using the Hawkins Drain as a movement corridor.

In addition, there are several existing outlets that facilitate drainage from the study area to the Hawkins Drain. Some of the outlets are buried or crushed and are no longer functional. These outlets could potentially provide hibernaculum habitat for snakes.

3.4.4 Species of Conservation Concern

Three species of conservation concern were identified within the study area: Missouri Ironweed (*Vernonia missurica*), Stiff Goldenrod (*Solidago rigida*) and Tall Boneset (*Eupatorium altissimum*). All three are rare plants with a limited range and population in the province. None are protected under the *Endangered Species Act* but they are considered rare and their habitat is protected as a type of Significant Wildlife Habitat, protected under provincial policies and the City's Official Plan.

3.4.5 Aquatic Habitat

The Study Area is adjacent to an agricultural drain called Hawkins Drain, which runs parallel to the railway corridor along the northern edge of the property. The Department of Fisheries and Oceans (DFO) classifies Hawkins Drain as a Class F Drain, meaning it is an intermittent watercourse that is dry for at least three months every year, and does not support sensitive fish species. The Hawkins Drain and its floodplain is regulated by the Essex Region Conservation Authority (ERCA).

A headwater drainage assessment was completed. The results indicated that the Hawkins Drain does have hydraulic functions and may provide minimal fish habitat at certain times of the year. There is some natural vegetation in its riparian zone. Based on these characteristics, the recommended management for the drain is to protect it in its current condition.

There is a drainage channel that provides an outlet from the private SWM pond at the rear of the Home Depot property. From the SWM pond, it runs north and drains into the

Hawkins Drain. This channel was found to have very limited ecological function. The Environmental Evaluation Report, provided in Appendix D, concluded that the drain could be removed if supported by some form of mitigation to maintain its drainage function.

4.0 Collector Road Assessment

4.1 Alternative Solutions for Collector Roads

Phase 2 of the MCEA process requires an evaluation of alternative solutions. This was completed during the Secondary Plan process.

The Secondary Plan was completed by reviewing several alternative concepts for the proposed collector road alignments. By using a formal evaluation process, a preferred alignment was identified, as was shown in Figure 2-2.

This EA will build on those findings by completing Phases 3 and 4 of the MCEA process without the need to repeat Phase 2. Phases 3 and 4 are described in the following sections.

4.2 Alternative Designs for Collector Roads

Two aspects of the road design were considered in detail, including alternative cross sections (i.e. lane configuration and sidewalks/multi-use path options) and alternative alignments at the western end of the Catherine St. extension.

Road Cross Sections

Cross section alternatives to be reviewed are summarized in Table 4-1 and shown in Figure 4-1 and Figure 4-2.

Table 4-1: Collector Road Cross-Section Alternatives

Alternative	Description
1: Do Nothing	With this alternative, no new collector roads will be constructed. The “Do Nothing” option is a requirement of the MCEA process and serves as a baseline against which other alternatives can be reviewed.
2: Upgraded Cross-section for Turning and AT Improvements	This alternative includes a cross-section with two travel lanes, a two-way centre turn lane, sidewalk on one side of the road and multi-use path on the other side. With this alternative, the existing portions of Catherine St. would be reconstructed to match the new cross-section. This may necessitate relocation of existing utility poles. The road right-of-way would be 22 m in width, in keeping with the existing ROW sections. Some property acquisition would be required to complete the road connection. The entrance to the proposed transit terminal at the southwest corner of Lauzon Pkwy and Catherine St. will need to be designed to avoid impacts to queueing traffic at the Lauzon/Catherine intersection.

Alternative	Description
3: Existing Catherine St. Cross-section	The existing section of Catherine St. includes two travel lanes and a sidewalk on both sides of the roadway. With this alternative, the existing portions of Catherine St. would remain in their current condition without the need for any additional work. The Catherine St. and Roseville Garden Dr. extensions would be constructed using a similar cross-section. The road right-of-way would be 22 m in width, in keeping with the existing ROW sections. Some property acquisition would be required to complete the road connection. The entrance to the proposed transit terminal at the southwest corner of Lauzon Pkwy and Catherine St. will need to be designed to avoid impacts to queueing traffic at the Lauzon/Catherine intersection.

A Transportation Analysis was conducted by Paradigm Transportation Solutions Limited and is provided in Appendix E. The analysis considered future development in the study area and projected traffic volumes. The road configuration identified in the Forest Glade North Secondary Plan was used in the analysis, using the following road design assumptions:

- The cross-section will accommodate two travel lanes and a two-way centre-turn lane along with a multi-use trail on one side of the roadways and a sidewalk on the other.
- Cross-section elements for the road alignment of Catherine Street from Lauzon Parkway to Tecumseh Road are assumed to be those shown in the recommended cross-section elements are described in Table 4-2. It was determined through traffic and intersection modeling that these elements could support traffic likely to be generated as a result of future development in the study area.
- The two-way centre-turn lane will accommodate the left-turn storage lengths at the following intersections:
  - East-bound left turn lane on Catherine Street at Lauzon Parkway: 90 metres
  - South-bound left turn lane on Catherine Street at Tecumseh Road: 30 metres
  - South-bound left turn lane on Rose-Ville Garden Drive at Tecumseh Road: 120 metres
  - North-bound left lane on Rose-Ville Graden Drive at Catherine Street: 125 metres

The recommended cross-section elements are described in Table 4-2. It was determined through traffic and intersection modeling that these elements could support traffic likely to be generated as a result of future development in the study area.

Table 4-2: Cross-Section Elements Presented in Transportation Analysis

Cross-Section Element	Width (m)
Travel Lanes (2 x 3.5m)	7.0
Two-way Centre-Turn Lane	3.5
Road Curbs (2 x 0.5m)	1.0
South Side/East Side	
Boulevard	2.0
MUT/AAA Trail (1 x 3.0 m)	3.0
Property Line to Back of Trail	0.25
North Side/West Side	
Boulevard	2.0
Sidewalk	1.8
Property Line to S/W	1.45
Total	**22.0**

Evaluation Summary

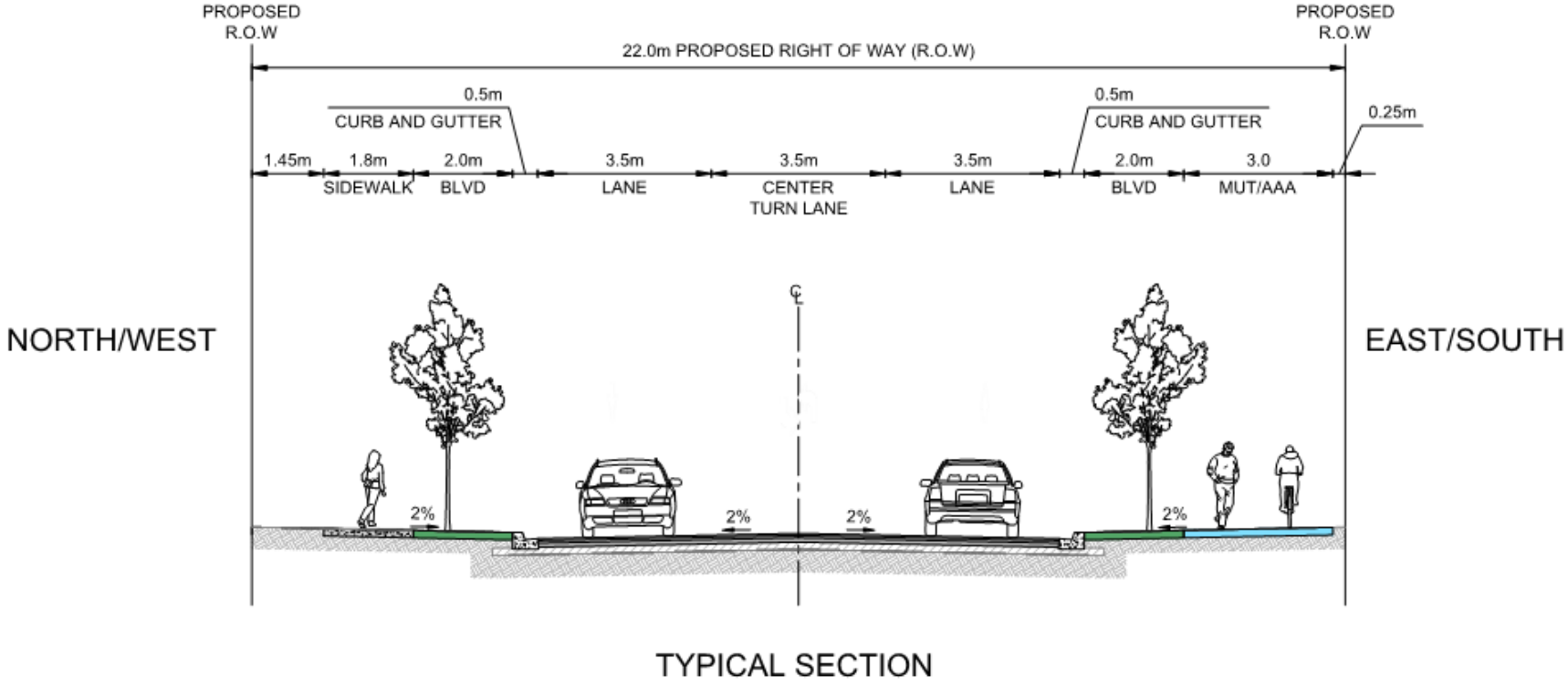
While the Do Nothing option has no impact on the environment and has no cost, it does not address the transportation needs for future development in the study area.

Alternative 2 was identified based on the Transportation Analysis completed by Paradigm, provided in Appendix E. The two-way centre turn lane allows for access to future development sites while providing a suitable level of service, without creating long queues at intersections and entrances. This Alternative has the highest cost and would require reconstruction of the existing portions of Catherine St. which could disrupt access to existing development. The incorporation of a multi-use path meets the guidance of the City's Active Transportation Master Plan and supports safe cycling in the area.

The benefit of Alternative 3 is that the existing portion of Catherine St. could remain in its current condition. This Alternative has a lower cost than Alternative 2. However, it would not provide an appropriate level of service and lengthy queues would be expected. The City's active transportation goals would not be achieved with this option.

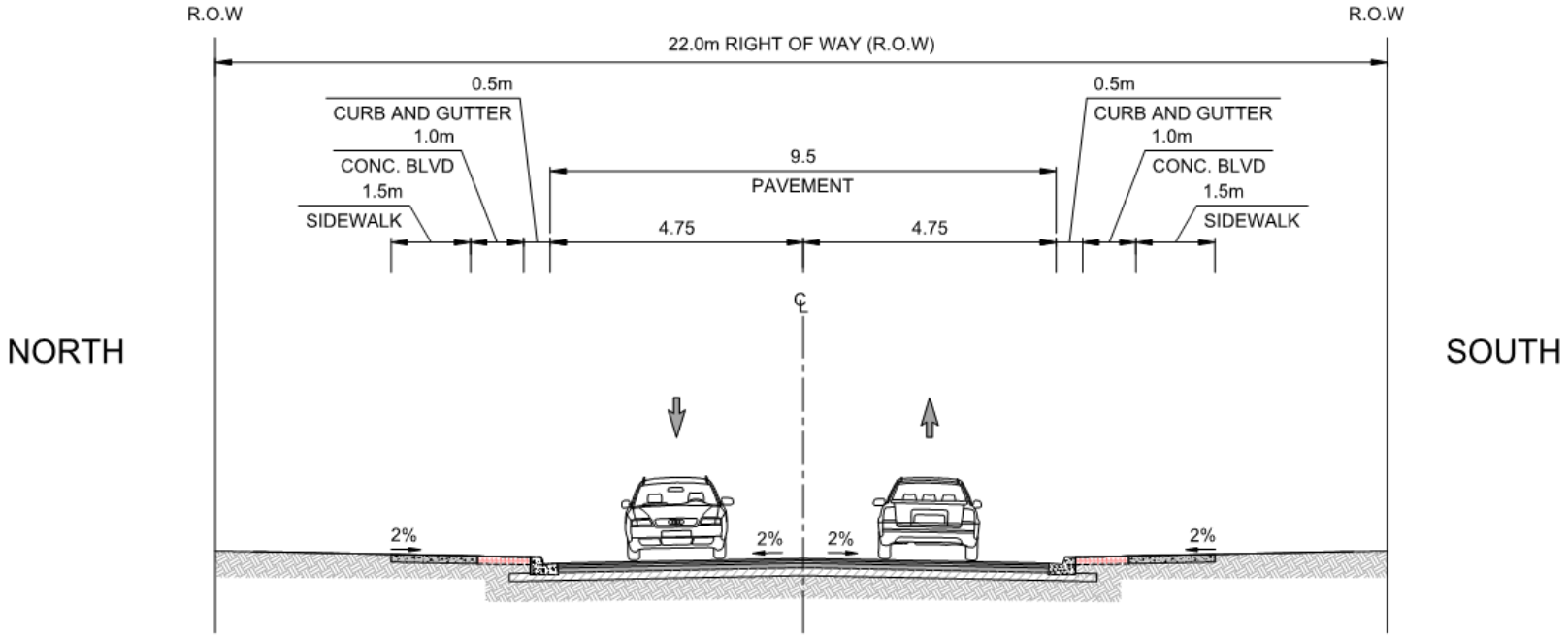
The full evaluation is provided in Appendix F. It was determined that Alternative 2 is preferred.

Figure 4-1: Alternative 2: Upgraded Cross-Section for Turning and AT Improvements



TYPICAL SECTION

Figure 4-2: Alternative 3: Existing Catherine St. Cross-Section



Road Alignment

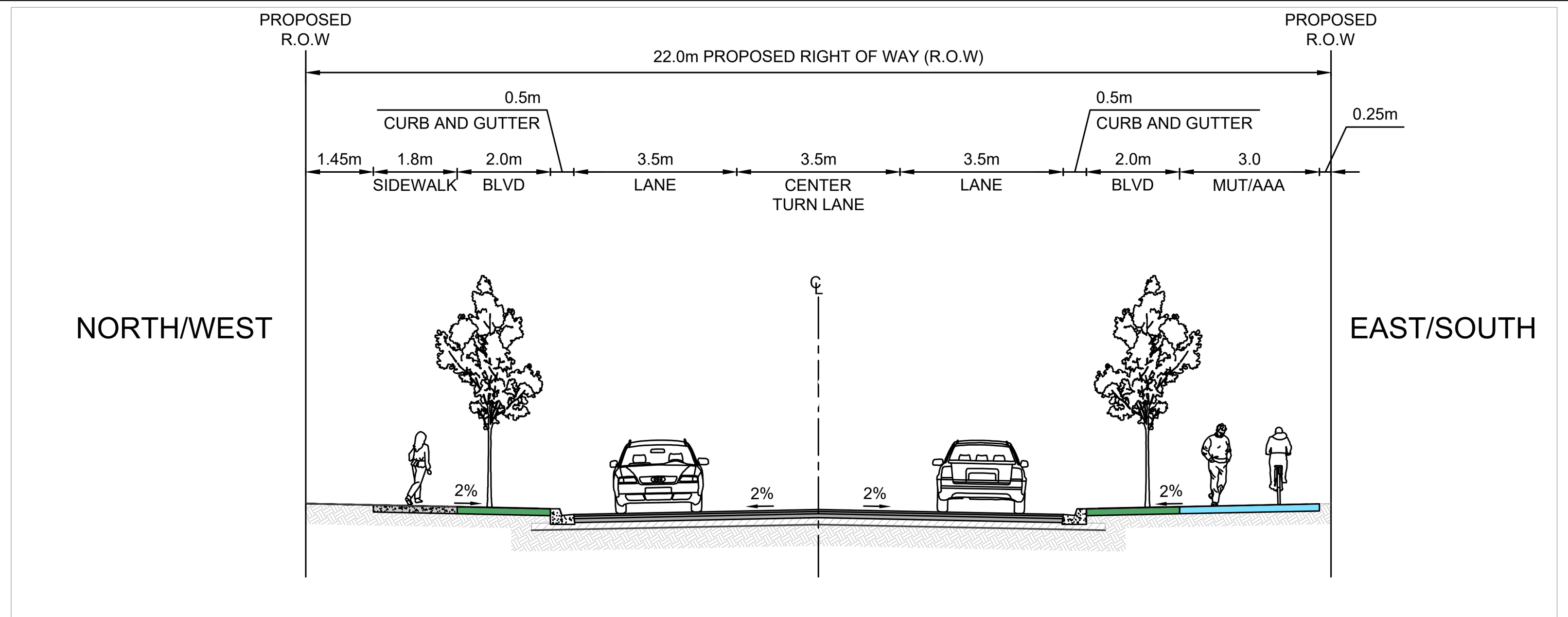
Although the road alignment was generally identified in the Secondary Plan, some refinements to the alignment are still required. This assessment took the following into consideration:

- The eastern portion of Catherine St. has been constructed and some portions of the future road ROW have been acquired. Thus, the alignment was maintained as constructed or planned in these areas.
- The Roseville Garden extension needed to hug the west property line of 6700 Tecumseh Road in order to increase the development potential of the property, as well as to provide access to 6630 Tecumseh Road East. Thus, this alignment was set as not subject to further review.
- Several options were identified for the alignment of the western end of Catherine St. where the road curves to the south to meet Tecumseh Rd. E. This area was subject to further review, as discussed below.

Road alignment alternatives are summarized in Table 4-3 and shown in Figure 4-3 and Figure 4-4.

Table 4-3: Collector Road Alignment Alternatives

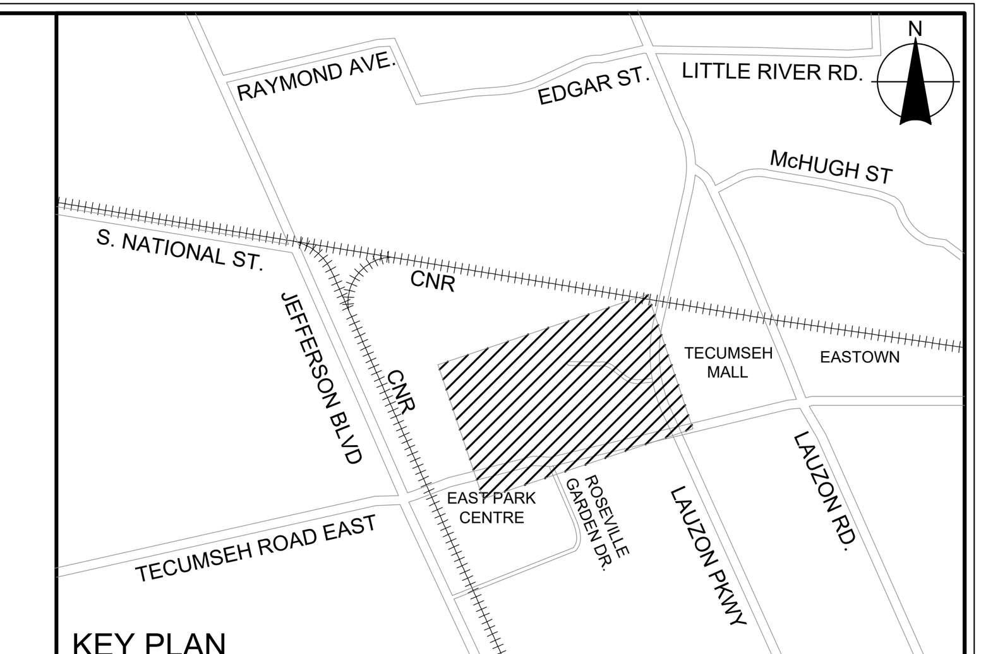
Alternative	Description
1: Do Nothing	With this alternative, no new collector roads will be constructed. The “Do Nothing” option is a requirement of the MCEA process and serves as a baseline against which other alternatives can be reviewed.
2: Catherine St. Alignment Veering Westerly	With this alternative, the Catherine St. extension will run from Lauzon Pkwy in a westerly direction, curving southward along the western edge of Lot 6366 before curving back to the east to meet Tecumseh Rd. E at an existing break in the curbed median.
3: Catherine St. Alignment Veering Easterly	With this alternative, the Catherine St. extension will run from Lauzon Pkwy in a westerly direction, curving southward along the eastern edge of Lot 6366 before curving to the west to meet Tecumseh Rd. E. at an existing break in the curbed median.



TYPICAL SECTION

LEGEND

- EXISTING PROPERTY LINE
- PROPOSED PROPERTY LINE
- POTENTIAL PROPERTY REQUIRED
- PROPOSED ROAD
- PROPOSED MULTI-USE-TRAIL
- PROPOSED SIDEWALK
- PROPOSED BOULEVARD



KEY PLAN
SCALE: N.T.S.

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2. The contractor shall verify all dimensions, levels, and datums on site and report any discrepancies or omissions to this office prior to construction.
3. This drawing is to be read and understood in conjunction with all other plans and documents applicable to this project.

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No.	Issue / Revision	Date	Auth.

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R.J. Burnside & Associates Limited
292 Speedvale Ave. W., Unit 20
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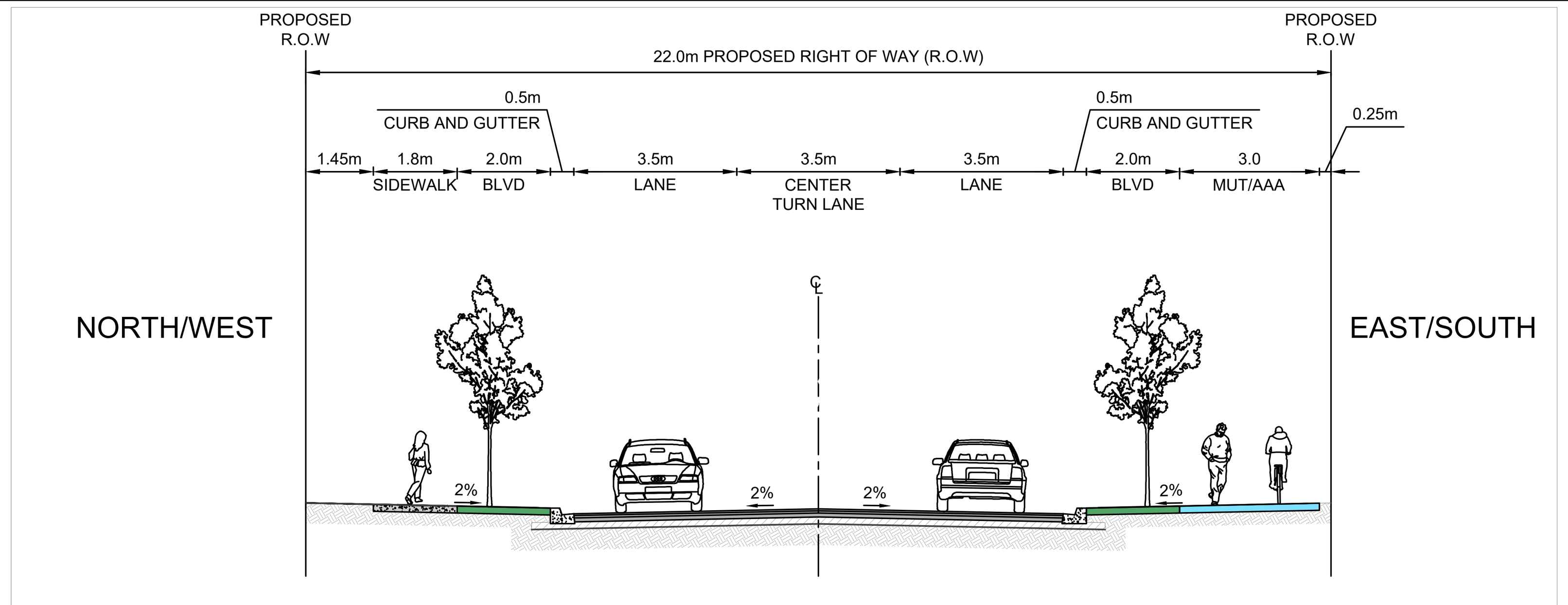
Client
CITY OF WINDSOR

Drawing Title
CITY OF WINDSOR, FOREST GLADE NORTH PLANNING AREA
CATHERINE STREET AND ROSEVILLE GARDEN DRIVE EXTENSION
OPTION - 1

Drawn	Checked	Designed	Checked	Date	Drawing No.
R.S	J.A	J.A	J.A	24/09/12	FIG 4-3
Project No. 300058184		Contract No. CONTRACT NO.		Revision No. 0	
Scale 1:1,250	0 25 50 75m				

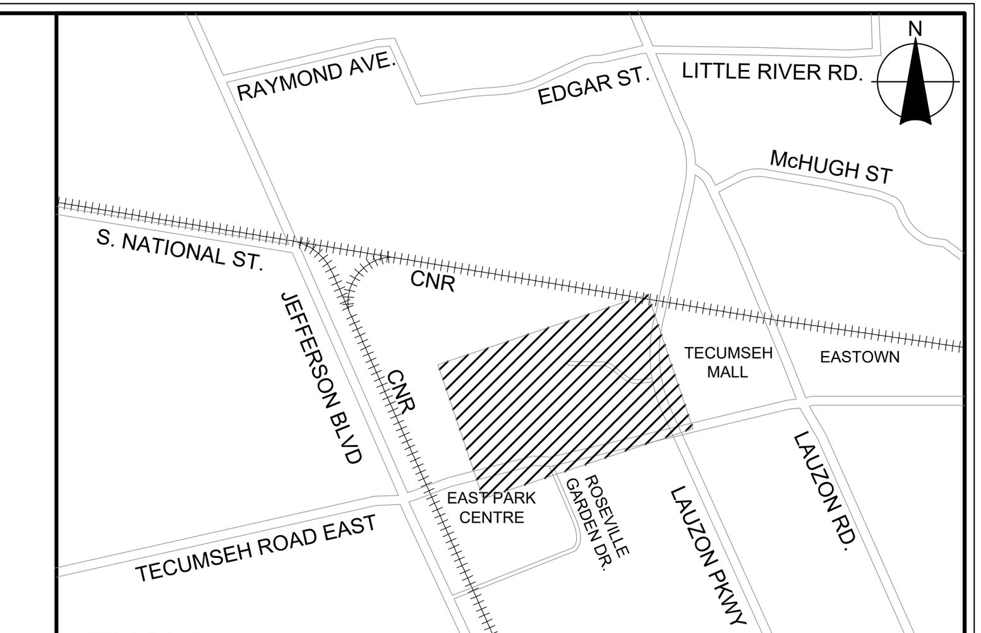
File: U:\058184\0000\03-PRD\058184-Plans-Option-1.dwg Date Plotted: September 13, 202



TYPICAL SECTION

LEGEND

- EXISTING PROPERTY LINE
- PROPOSED PROPERTY LINE
- POTENTIAL PROPERTY REQUIRED
- PROPOSED ROAD
- PROPOSED MULTI-USE-TRAIL
- PROPOSED SIDEWALK
- PROPOSED BOULEVARD



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Client
CITY OF WINDSOR

Drawing Title
CITY OF WINDSOR, FOREST GLADE NORTH PLANNING AREA
CATHERINE STREET AND ROSEVILLE GARDEN DRIVE EXTENSION OPTION - 2

Drawn	Checked	Designed	Checked	Date	Drawing No.
R.S	J.A	J.A	J.A	24/09/12	FIG 4-4
Project No. 300058184		Contract No. CONTRACT NO.		Revision No. 0	
Scale 1:1,250					

File: U:\058184\000\03-PRD\058184-Plans-Option-2.dwg Date Plotted: September 13, 2024

While the Do Nothing option has no impact on the environment and has no cost, it does not address the transportation needs for future development in the study area.

Both Alternatives 2 and 3 adequately provide the Collector Roads prescribed in the Forest Glade North Secondary Plan. Both can meet Tecumseh Rd. E. at the existing break in the raised median, thus minimizing the need for changes on Tecumseh Rd. E. Both Alternatives also provide adequate sightlines that meet City design standards.

Alternative 2 provides a slightly shorter route that requires less property acquisition and has fewer impacts on adjacent properties. It also has a slightly lower cost due to its shorter length. As such, Alternative 2 is the preferred Alternative. The detailed evaluation is provided in Appendix F.

5.0 Wastewater System Assessment

5.1 Alternative Solutions for Wastewater

Since there are limited sanitary sewer connections available to the Forest Glade North area, there are three wastewater servicing alternatives being considered. Alternatives are described in and shown on Table 5-1, Figure 5-1, and Figure 5-2. Alternatives 2 and 3 would be constructed within the existing future road ROWs determined through the evaluation of alternatives for Collector Roads. Property acquisition beyond that required to construct the roads is not anticipated.

Table 5-1: Alternative Wastewater Solutions

Alternative	Description
1: Do Nothing	The “Do Nothing” alternative means no action is taken in addressing the problem / opportunity statement. This would result in no wastewater servicing connection for the Forest Glade North planning area and therefore, does not accommodate planned growth.
2: Connect to City’s Existing Wastewater System at Tecumseh Road East	This alternative looks at servicing the planning area by installing a new section of sanitary sewer to connect to the existing sanitary sewer on Tecumseh Rd E. The sanitary sewer currently installed along Tecumseh Rd E is 250 mm in diameter which is the minimum diameter approved by the City. The existing 250 mm diameter sewer already accommodates some large commercial properties including Home Depot and Walmart. Based on the projected wastewater flows for the development area, the existing sanitary sewer on Tecumseh Rd E does not have sufficient capacity to accommodate the wastewater flows from the development area. The sanitary sewer on Tecumseh Rd. E and potentially other sewers in the network would need to be upgraded to make this a feasible option.
3: Connect to City’s Existing Wastewater System at Catherine St./Lauzon Pkwy	This alternative looks at servicing the planning area by extending the sanitary sewer along Catherine St. The sanitary sewer currently installed along a section of Catherine St. is 450 mm in diameter and increases to 525 mm diameter closer to the Lauzon Parkway intersection. The size of the sanitary sewer provides a larger available capacity than other available connections being considered. Based on available drawings, the 450 mm diameter sanitary sewer currently

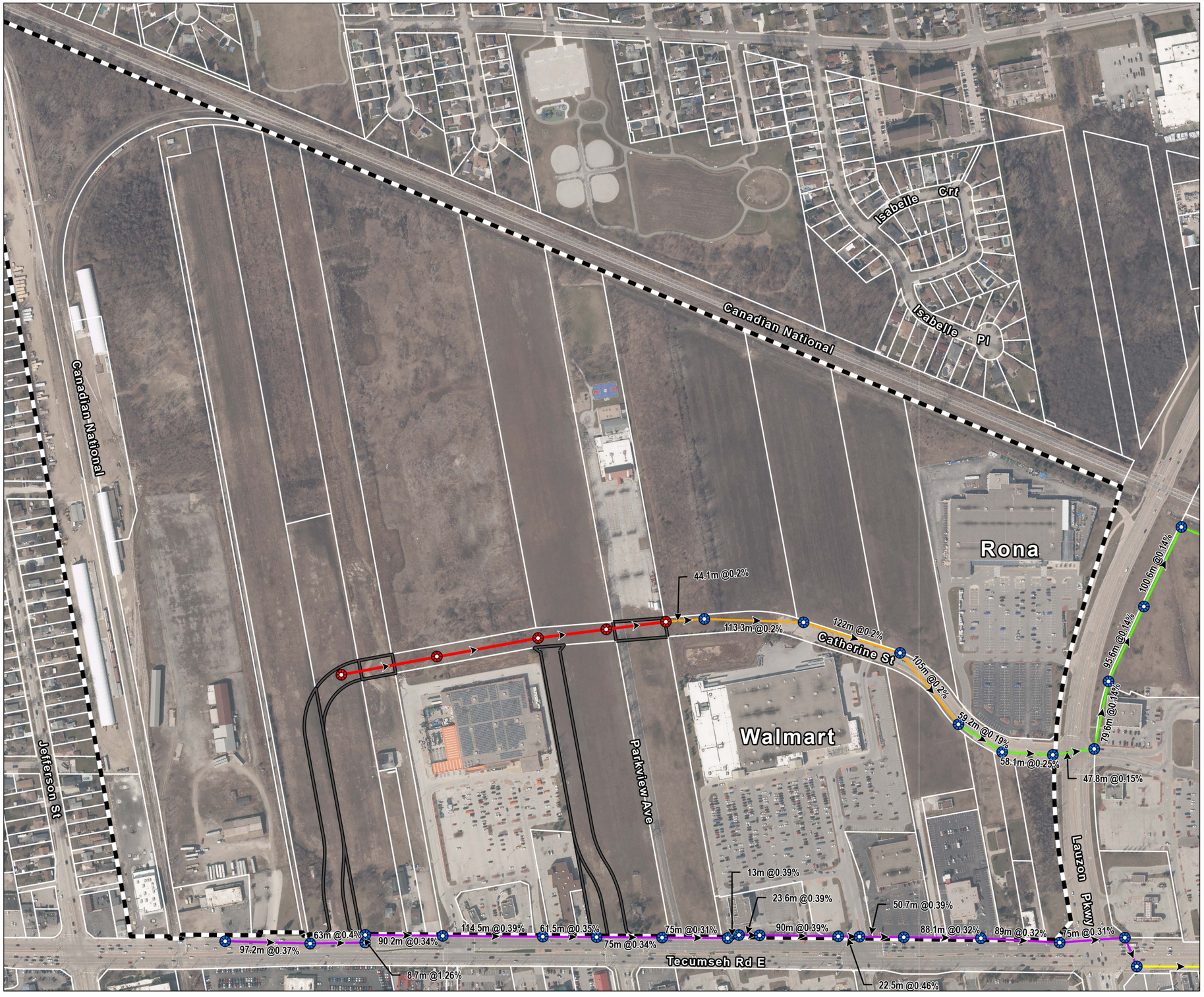
Alternative	Description
	installed along Catherine St. has a 0.2% slope. At this slope, the projected ultimate flow for the development area is anticipated to surcharge the pipe (i.e., almost running at 100% full). Depending on where the parcel service connections are tied into the sanitary sewer, a portion of the already installed 450 mm diameter sanitary sewer may need to be upsized to a 525 mm diameter pipe or reinstalled at a steeper slope to accommodate the flow.

The Do Nothing alternative does not address provincial and City policies to provide adequate wastewater services to new development areas.

Alternative 2 services the new area. Because the sewer would be placed within the road ROW, no additional impacts beyond those identified for the road would be expected. The existing sanitary sewer on Tecumseh Rd. E. has relatively minimal capacity and is not sufficient to meet the quantity of wastewater projected to be created from future development in the area. A long section of sanitary sewer along Tecumseh Rd. E. would need to be upgraded to provide the necessary capacity.

Alternative 3 will connect to a larger diameter sewer in the existing Catherine St. ROW. The pipe along Catherine St. may also need to be upgraded but this represents a much shorter upgrade than required with Alternative 2 and Catherine St. is planned to be reconstructed to meet the preferred cross section. As such, Alternative 3 is the preferred alternative. The full evaluation is provided in Appendix G.

Figure 5-1: Alternative 2: Connect to City's Existing Wastewater System at Tecumseh Road East



Proposed Right of Way

Proposed Sanitary Manhole

Proposed Sanitary Sewer

Existing Sanitary Manhole

Existing Sanitary Sewer

250mm, PVC

300mm, AC

450mm, CONC

525mm, CONC

Study Area

Sources:

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CITY OF WINDSOR

Figure Title

FOREST GLADE NORTH PLANNING AREA

WASTEWATER SERVICING
ALTERNATIVE 3

Drawn	Checked	Date	Figure No.
HN	SG	2025/01/08	**5-2**
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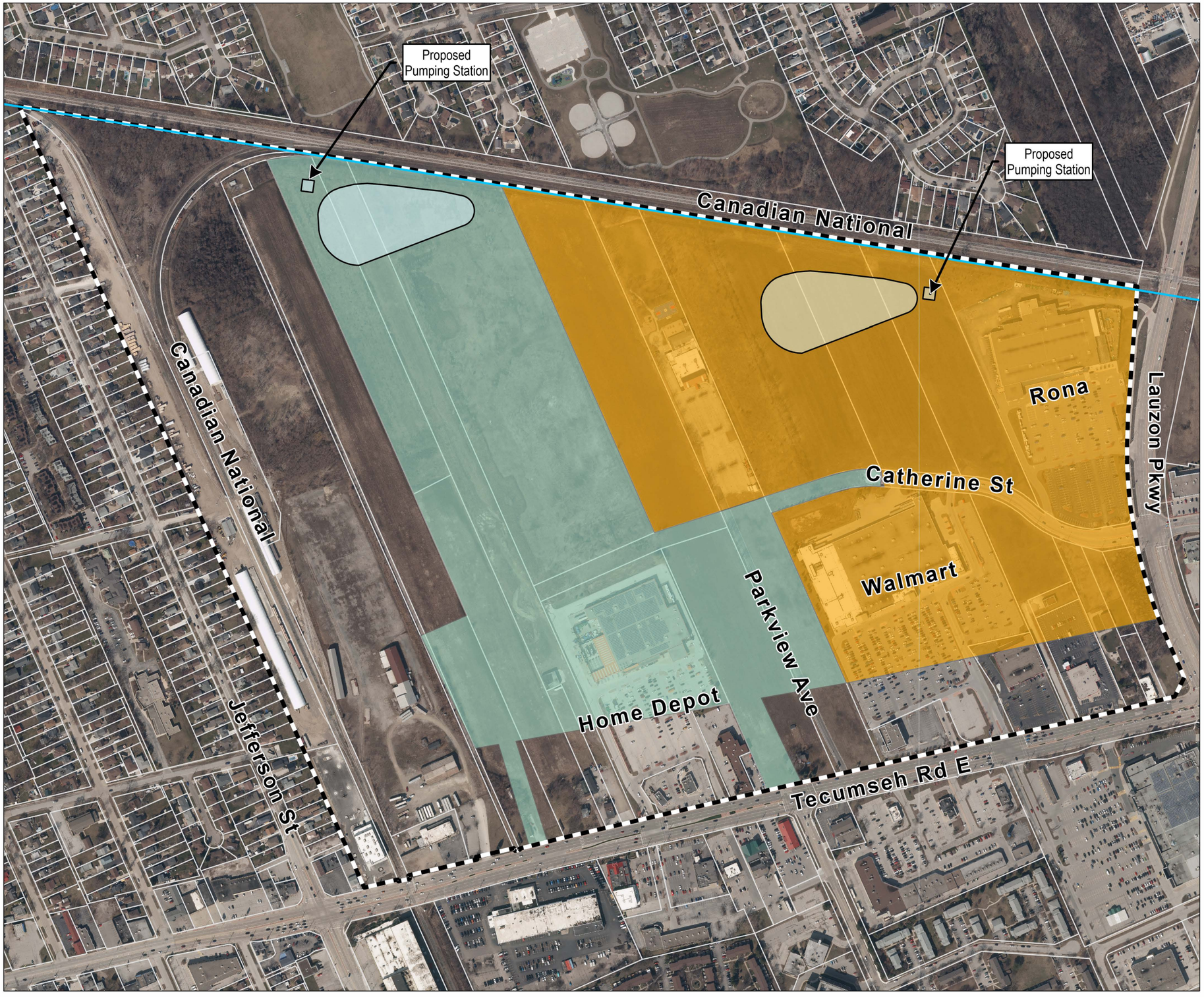
6.0 Stormwater Management Assessment

6.1 Alternative Solutions for Stormwater Management

In order to address the problem / opportunity statement, the alternative solutions for stormwater management listed in Table 6-1 have been proposed, and can be seen in Figure 6-1 and Figure 6-2.

Table 6-1: Alternative Stormwater Management Solutions

Alternative	Description
1: Do Nothing	With this alternative, no new stormwater management facilities will be constructed. The “Do Nothing” option is a requirement of the MCEA process and serves as a baseline against which other alternatives can be reviewed. This alternative would result in uncontrolled stormwater discharge from the development sites within the study area.
2: Construct two regional stormwater ponds, one on either side of the proposed Catherine Street extension	This alternative would direct stormwater to one of two detention ponds in the Forest Glade North Plan Area on lands not currently owned by the City of Windsor. This was recommended in the Secondary Plan.
3: Construct one regional stormwater management pond adjacent to the CN Rail and Hawkins Drain with on-site quality control for other properties outside of the pond catchment	This alternative would direct stormwater from the west side of the study area to one detention pond in the Forest Glade North Plan Area on lands not currently owned by the City of Windsor. The remainder of the study area would be serviced through on-site facilities on each individual property.



Study Area

Hawkins Drain

SWM Pond

Drainage Area - West SWMP

Draingae Area - East SWMP

Note: Areas that are not shown in orange or green are required to provide individual on-site stormwater management

Sources:

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Figure Title

FOREST GLADE NORTH PLANNING AREA

ALTERNATIVE 2 - CONSTRUCT TWO REGIONAL SWM PONDS

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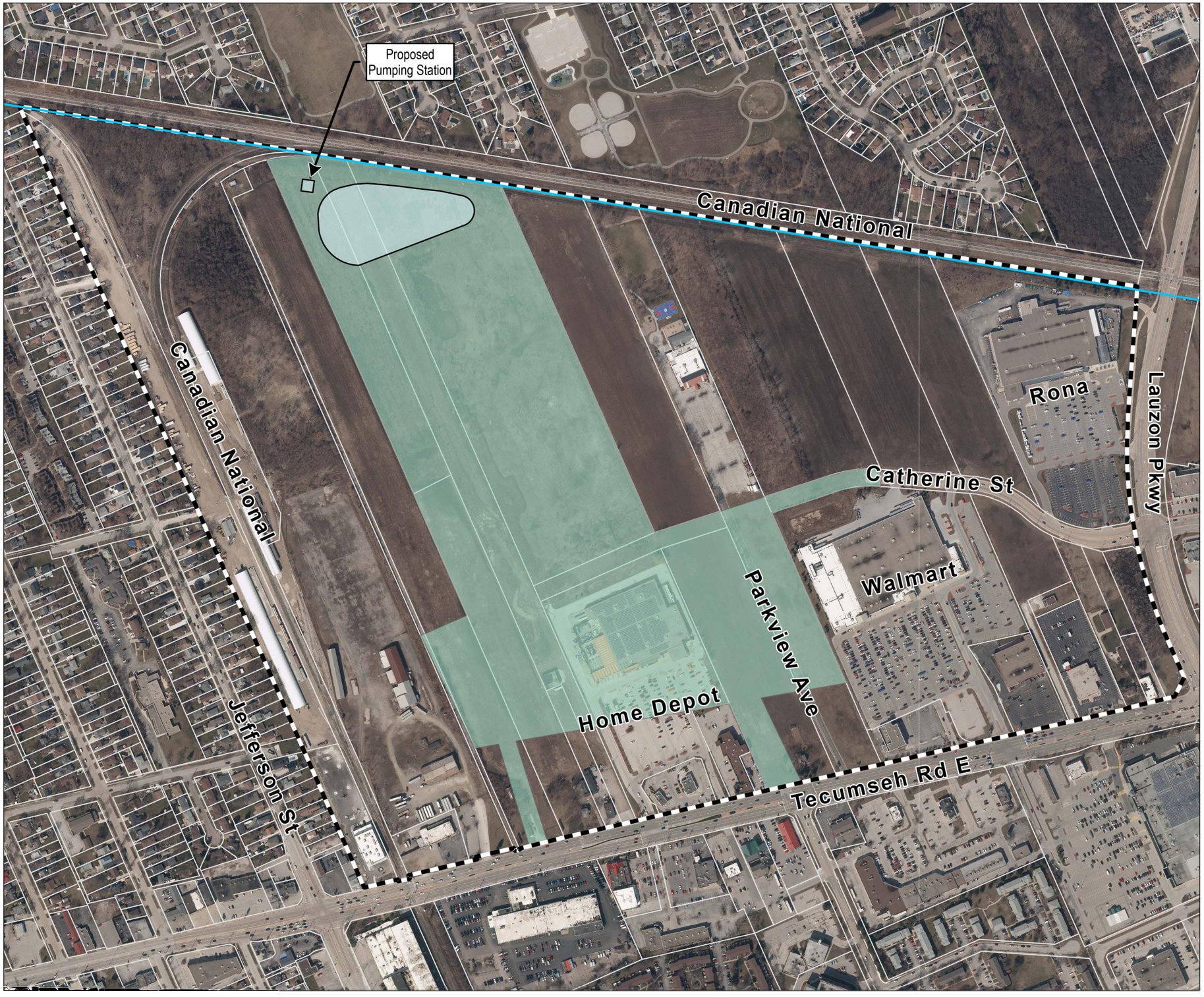

Study Area

Hawkins Drain

SWM Pond

Drainage Area - West SWMP

Note: Areas that are not shown in green are
required to provide individual on-site stormwater management

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Figure Title

FOREST GLADE NORTH PLANNING AREA

ALTERNATIVE 3 - CONSTRUCT
ONE REGIONAL SWM POND

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The Do Nothing alternative does not address provincial and City policies to provide adequate stormwater management. Having overland flow from developed areas run directly into the Hawkins Drain without quality or quantity controls would be detrimental to the drain and downstream aquatic habitats.

Alternative 2 would be relatively costly as the City would be responsible for the construction and maintenance of two stormwater management facilities. In addition, a substantial area would need to be acquired by the City, resulting in a significant impact to local landowners.

Alternative 3 provides adequate stormwater management. Having a single regional pond creates efficiencies for stormwater management in the area as the majority of new development would be serviced by the pond. Remaining areas can be managed through individual facilities similar to those currently being used for the Home Depot, Rona and Walmart sites. This alternative is less costly than Alternative 2 and would provide the same level of water quality and quantity control.

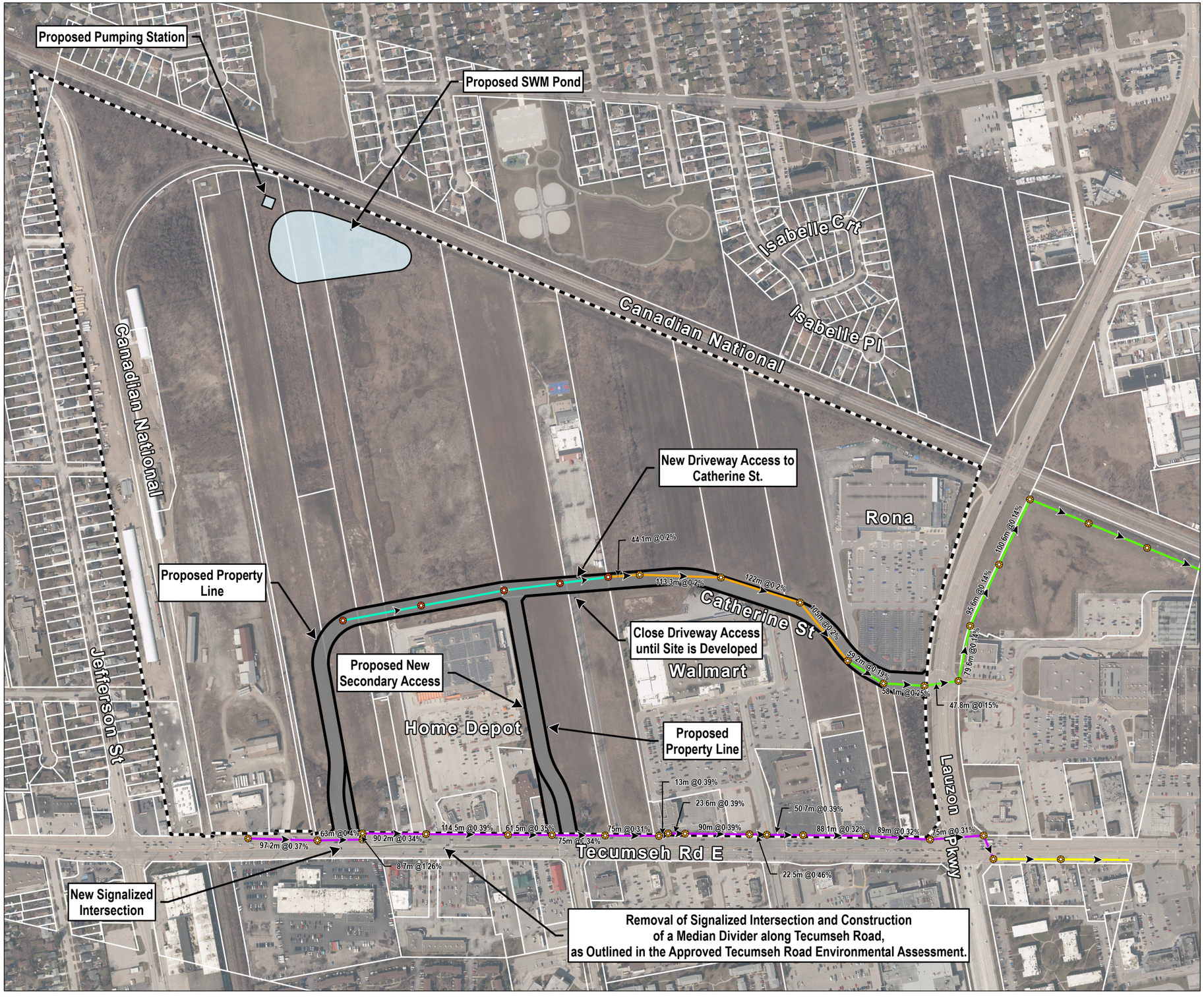
A detailed evaluation matrix is provided in Appendix H.

7.0 Summary of Preferred Alternatives

The preferred alternative is to:

- Extend Catherine St. and Roseville Garden Dr. with the following cross-section:
  - 22 m road ROW
  - Two travel lanes and a two-way centre turn lane
  - Multi-use trail on the north side of Catherine St. and east side of Roseville Garden
- One regional stormwater management pond in the northcentral portion of the study area
- An extension of the current sanitary sewer system with a connection at Lauzon Parkway

The preferred alternative is show in Figure 7-1. A detailed description of each element is provided in the following sections.



- Proposed Sanitary Manhole
- Existing Sanitary Manhole
- Proposed Sanitary Sewer

Existing Sanitary Sewer

- 250mm, PVC
- 300mm, AC
- 450mm, CONC
- 525mm, CONC
- Proposed Road
- Proposed SWM Pond
- Study Area

Sources:

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Figure Title

FOREST GLADE NORTH PLANNING AREA

PREFERRED ALTERNATIVE

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7.1 Collector Roads

7.1.1 Design

The road will be designed according to the specifications identified in the Transportation Analysis in Appendix E. This includes two travel lanes and a centre two-way turn lane. Also included is a multi-use trail and sidewalk on either side of the road.

7.1.2 Existing Portion of Catherine St.

For continuity, the existing section of Catherine St. will be upgraded to the recommended cross-section. The existing ROW is sufficient to accommodate the new cross-section. The upgrades are recommended to occur concurrently with the new sections of Catherine St. to ensure the necessary turning capacity at Catherine St. and Lauzon Pkwy. If upgrades to the sanitary sewer in the existing Catherine St. ROW are required, they should be completed as the road is upgraded. Any road upgrades to this section should take into consideration the proposed transit station at the southwest corner of the intersection and ensure they are incorporated into the design.

7.1.3 Tecumseh Rd. E.

A MCEA was previously completed for Tecumseh Rd. E. from Jefferson Blvd. to Banwell Rd. [Class EA - Tecumseh Road East Improvements - Jefferson Boulevard to Banwell Road, by LaFontain, Cowie, Buratto & Associates Ltd., dated October 1996]. The MCEA acknowledged the future northerly extensions of both Catherine St. and Roseville Garden Dr. at the locations currently being considered and included a continuous centre median on Tecumseh Rd. E. in the recommended design. It should be noted that the signalized access to Home Depot from Tecumseh Rd. E. was constructed in 2005 and was intended to be temporary. With the extension of Roseville Garden Dr. north, the signalized intersection can be removed and the raised median on Tecumseh Rd. E. can be extended through the area. This will eliminate eastbound access to Home Depot directly form Tecumseh Rd. However, alternative access can be provided from Roseville Garden Dr. Access for delivery vehicles could be provided through the new entrance or through an additional entrance off Catherine St. Access will be further examined, in consultation with Home Depot representatives, during detailed design.

Intersection improvements will need to be made, as follows:

- Tecumseh Rd. E and Roseville Garden Dr. may require signalization changes to manage traffic turning from Tecumseh Rd. E. to the northerly Roseville Garden extension.
- Lauzon Pkwy and Catherine St. may require a lengthened north-bound left turn lane on Lauzon Pkwy to accommodate additional vehicles turning onto Catherine St.

7.1.4 Serbian Centre Access

The Catherine St. extension will cross the driveway to the Serbian Centre that currently enters off Tecumseh Rd. E. It is anticipated that the Serbian Centre will be accessed from Catherine St. rather than from Tecumseh Rd. after construction is complete. The current driveway could be maintained as an emergency or overflow exist. It is understood that portions of the Serbian Centre lands south of Catherine St. are currently used for overflow event parking. Further consultation will occur with the Serbian Centre during detailed design to determine the need for a pedestrian crossing facility to ensure safe access during events.

7.2 Wastewater

The sanitary sewer will be constructed within the Catherin St ROW in accordance with the specifications outlined in the Wastewater Servicing Report in Appendix I.

7.3 Stormwater

The stormwater management pond will be constructed in accordance with the specifications outlined in the Stormwater Management Report provided in Appendix J. The pond will outlet to the Hawkins Drain. The location of the outlet will be confirmed during detailed design, taking into consideration the location of natural features and making best use of existing outlets.

8.0 Impacts, Mitigation Measures and Monitoring

The potential environmental effects resulting from construction and operation of the proposed servicing are summarized in Table 8-1. Measures to mitigate these impacts and monitoring activities to ensure that the mitigation measures are implemented effectively are also provided in the table.

All mitigation measures and monitoring activities shall be reviewed during the detailed design phase of the project. Mitigation measures are intended to inform the future detailed design team and be included in the mitigation and monitoring measures developed during the detailed design and permitting process. These mitigation measures will be enforced during construction within the tender documents, as applicable.

Table 8-1: Potential Environmental Effects, Mitigation Measures and Monitoring Activities

Environmental Component	Environmental Sub-Component	Potential Environmental Impacts	Proposed Mitigation Measures	Recommended Monitoring Activities
Natural Environment	Migratory Birds	Potential for disturbance or destruction of migratory breeding birds and their habitat as a result of tree removal and ground clearing (prohibitions under the *Migratory Bird Convention Act, 1994)*.	• Remove trees and complete vegetation clearing (including grubbing) between September 1 and March 31 of any year to avoid the bird nesting period. • If clearing must occur within the nesting period, a qualified Ecologist Ecologist/Avian Biologist will first search the affected area. Any active nests will be flagged and all clearing within the associated habitat will be avoided until the Ecologist/Avian Biologist confirms that the birds have fledged, and the nest is no longer active. • If a nesting migratory bird (or SAR protected under ESA, 2007) is identified within or adjacent to the construction site, all activities will stop and the Contractor (with assistance from a qualified Ecologist/Avian Biologist) shall discuss mitigation measures with the proponent. In addition, the proponent will contact MECP to discuss applicable mitigation options. The Contractor will proceed based on the mitigation measures established through discussions with the MECP.	• As required, if an active nest or species at risk are observed.
Natural Environment	Species of Conservation Concern	One or more individual Tall Boneset plants (a provincially rare species), will need to be removed.	• Collect seeds from the plants prior to their removal and use to augment plantings within the SWM Pond Planting Plan, ensuring the preservation and propagation of this species in the local landscape.	• None required.
Natural Environment	Fish Habitat/ Wildlife Movement	Development in close proximity to the Drain could damage fish habitat, including the Drain's banks and any vegetation along the banks that provide shade and nutrients to the watercourse. Wildlife may also use the riparian area to travel through the study area.	• Maintain a 30 m buffer from the Hawkins Drain. All development should be maintained outside of this buffer area with the exception of the SWM pond and its outlet. • The buffer area should be maintained in a natural condition in the long-term. • Any disturbance to the buffer area caused by construction of the SWM pond shall be restored with native vegetation. • Create a planting plan to naturalize areas around the SWM pond and install wildlife habitat features, as recommended in the Environmental Evaluation Report in Appendix D. • Minimize removal of natural woody debris, rocks and other materials when possible.	• A construction inspector shall ensure that construction activities do not encroach into the buffer area, with the exception of SWM-related works.
Natural Environment	Fish Habitat	Construction of the SWM pond outlet will require in-water work within the Hawkins Drain, which could disturb fish spawning.	• Complete all in-water work outside of the spring restricted timing window for fish (March 15 to July 15 of any given year).	• A construction inspector should will that in-water construction activities occur within the appropriate timing window.
Natural Environment	Significant Wildlife Habitat/ Habitat of Endangered and Threatened Species	Terrestrial crayfish burrows may provide hibernation sites for the Endangered Butler's Gartersnake. Removal of burrows could disrupt habitat for crayfish and snakes.	• Maintain a 5 m buffer around crayfish burrows. The buffer will be fenced to prevent encroachment during construction.	• A construction inspector shall ensure that construction activities do not encroach into the buffer area.
Natural Environment	Snakes	Endangered Eastern Foxsnake and Butler's Gartersnake are known to inhabit the general area. Individuals could be harmed during construction.	• Install reptile exclusion fencing around the development envelope to ensure that SAR reptiles do not enter the worksite. Fencing should be installed according to the Ontario Species at Risk Branch Best Practices Technical Note: Reptile and Amphibian Exclusion Fencing (2013). To prevent the entanglement of SAR snakes, an alternative	• A construction inspector shall ensure fencing is installed correctly and inspect the area for snakes as noted in the mitigation measures.

Environmental Component	Environmental Sub-Component	Potential Environmental Impacts	Proposed Mitigation Measures	Recommended Monitoring Activities
			product such as Curlex Net-free® blanket or the use of riprap over geotextile fabric is recommended. • Once reptile exclusion fencing has been erected, complete a Visual Area Survey to ensure that there are no individuals trapped inside. • Survey construction machinery and equipment that is left idle for over one hour or is parked overnight on the property between April 1 to November 30 for the presence of Eastern Foxsnake before (re)ignition. This visual examination should include all lower components of the machinery, including operational extensions and running gear. • Report any SAR individual that is present on the property to the Ministry of Environment, Conservation and Parks (MECP) within 48 hours of the observation or the next working day, whichever comes first. • If a SAR individual is encountered, allow the individual to disperse from the project site under its own ability, and maintain a minimum operating distance of 30 m between project machinery and the individual. MECP must be contacted if this cannot be done. • If an injured or deceased SAR is found, place the specimen in a non-airtight container maintained at an appropriate temperature and contact MECP staff immediately. • Consult with MECP as early as possible to confirm whether any permitting or approvals under the Endangered Species Act may be required. Submit an Information Gathering Form and Avoidance Alternatives Form to MECP to begin the review process and confirm the need for permitting.	
Natural Environment	Hawkins Drain	Soil loosened during the construction process could wash into the Hawkins Drain and damage fish habitat.	• Create an Erosion and Sediment Control (ESC) Plan during the detailed design phase of the project in consultation with ERCA, ensuring conformity with industry best management practices and recognized standard specifications such as Ontario Provincial Standards Specification (OPSS). • Obtain a permit from ERCA for any construction works within regulated areas will require permits under Section 28 of the Conservation Authorities Act. • Adhere to wet weather restrictions during Site preparation and excavation. Avoid work near watercourses and open water features during periods of excessive precipitation and/or excessive snow melt. • Complete any in-water works in isolation of flowing waters, with work zone isolation achieved by placing cofferdams constructed of clean, non-erodible materials at the upstream and downstream limits of a given work area. Stream flows must be maintained downstream of in-water work areas through by-passing flows (by-pass culvert, channel, pumping etc.). De-water any isolated work area and ensure that the pumped water is conveyed to a filtering system and flow dissipation device to mitigate sedimentation and erosion to the receiving waterbody. Restore disturbed channel banks and riparian areas with erosion control blankets, topsoil, native seed mixtures, and plantings as soon as conditions allow.	• Control measures will be inspected regularly to ensure they are functioning and are maintained as required. If control measures are not functioning properly, no further work shall occur until the problem is resolved. All temporary ESC measures shall be installed in accordance with recognized provincial standards. Extra silt fence / turbidity curtain shall be stored on site should additional sediment control be required.

Environmental Component	Environmental Sub-Component	Potential Environmental Impacts	Proposed Mitigation Measures	Recommended Monitoring Activities
Natural Environment	Surface and Ground Water	Potential for localized surface water or groundwater impacts as a result of spills, discharge or dumping of materials, fluids and other wastes during construction of proposed road extension and associated surface water facilities (e.g., swales).	• Refuel and maintain construction equipment in a controlled manner, away from natural features. Any hazardous materials used for construction will be handled in accordance with appropriate regulations. • Ensure equipment arrives at the site in a clean and well-maintained condition. • Ensure compliance with the Ontario Water Resources Act, 1990, c. O.40 with respect to the quality of water discharging into natural receivers. • Prepare a Construction Emergency Response and Communications Plan and follow protocols throughout the construction phase (including spill response plans). Train personnel in how to apply the plans and the plans. • Immediately report and clean up spills or depositions in accordance with provincial regulatory requirements and the contingency plan. A hydrocarbon spill response kit will be on site at all times during the work. Spills will be reported to the Ontario Spills Action Centre at 1-800-268-6060.	• A qualified construction inspector shall regularly monitor construction activities to confirm the requirements outlined in the ESC Plan are followed. Workers shall report any instances of spills to their supervisors.
Physical Environment	Soils	Potential for movement and misuse of contaminated soils.	• Have a Qualified Professional (QP) prepare a Soil Management Plan (SMP) as defined in Ontario Regulation 160/06 for managing soil materials on-site (including excavation, location of stockpiles, reuse and off-site disposal).	A qualified construction inspector shall regularly monitor construction activities to confirm the requirements outlined in the Soil Management Plan are followed.
Cultural Heritage Resources	Archaeological Resources	Potential for previously unidentified archaeological resources to be found and disturbed.	• Should previously undocumented archaeological resources be discovered, they may be a new archaeological site and therefore subject to Section 48(1) of the Ontario Heritage Act. The proponent or person discovering the archaeological resources must cease alteration of the site immediately and engage a licensed consultant archaeologist to carry out an archaeological assessment, in compliance with Section 48(1) of the Ontario Heritage Act. • The Funeral, Burial and Cremation Services Act, 2002, S.O. 2002, c.33 requires that any person discovering human remains must cease all activities immediately and notify the police or coroner. If the coroner does not suspect foul play in the disposition of the remains, in accordance with Ontario Regulation 30/11 the coroner shall notify the Registrar, Ontario Ministry of Public and Business Service Delivery, which administers provisions of that Act related to burial sites. In situations where human remains are associated with archaeological resources, the Ministry of Citizenship and Multiculturalism should also be notified (at archaeology@ontario.ca) to ensure that the archaeological site is not subject to unlicensed alterations which would be a contravention of the Ontario Heritage Act.	None required.
Cultural Heritage Resources	Built Heritage and Cultural Heritage Landscapes	No cultural heritage resources were identified in the study area but cultural heritage resources may be present outside of the study area. If the study area changes for any reason, cultural heritage resources may be impacted.	• Should future work require an expansion of the study area then a subsequent review of cultural heritage resources should be undertaken to confirm the impacts of the proposed work on potential heritage resources.	None required.

Environmental Component	Environmental Sub-Component	Potential Environmental Impacts	Proposed Mitigation Measures	Recommended Monitoring Activities
Socio-economic Environment	Noise	Potential for noise from of large construction equipment.	• Implement noise control measures in accordance with municipal bylaws during construction, including restrictions on hours of operation and the use of appropriate machinery and mufflers. Limit the noise produced by the equipment through proper equipment maintenance. • Ensure that construction activities shall conform to the criteria set out in NPC-115. • Develop a complaint response protocol for nuisance impacts including, including noise, which may occur during construction.	An environmental monitor shall regularly monitor construction noise to ensure that noise control measures are being adequately applied. If noise control measures are not functioning properly, alternative measures shall be implemented immediately and prioritized above other construction activities.
Socio-economic Environment	Air Quality	Potential air quality impacts during construction.	• Maintain vehicles / machinery and equipment in good repair, equipped with emission controls, as applicable, and operate within regulatory requirements. • Apply dust suppression measures, as required. • Develop a complaint-response protocol for nuisance impacts including, including air emissions, which may occur during construction.	An environmental monitor shall regularly monitor construction emissions to ensure that dust control measures are being adequately applied.
Socio-economic Environment	Property Acquisition	Property will be required for the road right-of-way and SWM facility.	• Land acquisition (fee simple) will be obtained, as needed, to accommodate servicing. • The City is committed to making best efforts to secure property with landowners through amicable agreement. This will include compensation for the use of land. The City also reserves its property rights as set out in the Municipal Act, and powers outlined as part of the Act for property acquisition.	None required.
Socio-economic Environment	Property Access	The Catherine St. and Roseville Garden extensions and changes to Tecumseh Rd. E. may affect access to existing businesses during construction and in the long-term.	• Consult with all businesses and landowners throughout detailed design and construction to identify access requirements during construction and after roads have been completed. • Work with businesses and landowners to identify temporary access requirements during construction. • Work with Home Depot to review options to create an entrance for delivery vehicles from Catherine St. and customer access from Roseville Garden Dr. • Consult with the Serbian Centre to manage event parking on the south side of Catherine St. and pedestrian access to the Centre. • Develop and implement a traffic management plan during construction in coordination with the City. Provide adequate signage to give advance notice of disruptions and detours.	None required.
Socio-economic Environment	Hawkins Drain	The drain is subject to the Drainage Act. The Hawkins Drain watershed will be altered, resulting in changes to the portion of drain maintenance for which each property in the watershed is responsible.	• Section 65 of the Drainage Report will be updated. • All affected property owners will be notified of changes.	None required.

9.0 Climate Change Considerations

Climate change is defined as any significant change in long-term weather patterns. The term can apply to any major variation in temperature, wind patterns or precipitation that occurs over time. Global warming describes the recent rise in the average global temperature caused by increased concentrations of GHGs trapped in the atmosphere. Scientists have concluded that human activity is largely responsible for recently observed changes to our climate since GHGs are mainly caused by burning fossil fuels to produce energy.

The MECP finalized a document entitled "*Considering Climate Change in the Environmental Assessment Process*" in 2017 that provides guidance relating to the Ministry's expectations for considering climate change during the environmental assessment process. It is suggested that this guide be consulted if an approved class environmental assessment has no climate consideration method.

There are two types of climate change effects that can be considered. The first is the effect that a project can have on climate change. In this case, the degree to which the project can provide some climate change mitigation measures is to be assessed. The second is the effect climate change has on the project. In this case, the degree to which the project can demonstrate adaptation to climate change impacts is assessed. Climate change was considered during this Class EA study and is discussed in the following Section.

9.1 City of Windsor Climate Change Trends

Climate change information derived from the Climate Atlas of Canada, 2024, identify observed changes in Windsor since 1975, which show that the average mean temperature has increased by 2.1°C, seeing warmer seasonal temperatures, and annual precipitation has increased by 120.1 mm - a 15% increase in annual average precipitation. Furthermore, it is anticipated that the average mean temperature will increase an additional 1.5°C by 2050, and annual precipitation increasing another 0.25 mm by 2050 (Climate Atlas of Canada, 2024).

In recent years, extreme weather events, flooding, increased daytime and nighttime temperatures, ice storms, and extreme temperature ranges have been observed. It is expected that these events will continue, as the City of Windsor projects the average number of days above 30°C will more than double by the 2050s, and more than triple by the 2080s, resulting in increased average precipitation - particularly in spring and fall City of Windsor Degrees of Change Climate Change Adaptation Plan, 2020). As these observed trends continue, so does the risk of increasingly extreme storm events.

9.2 Effects of the Project on Climate Change

9.2.1 Greenhouse Gas Emissions

This MCEA assesses impacts related to the wastewater and stormwater facilities and new collector roads. The future development will result in an increase population and new destinations which will attract additional traffic through the area, leading to increased vehicular emissions. However, emissions associated with adjacent development are not part of the current scope of work. A multi-use path has been incorporated in order to provide an active transportation option which can support long terms emission reduction goals.

Landscape changes associated with a project can also impact climate change. Vegetation can assist in removing carbon dioxide from the atmosphere. Existing vegetation will be retained to the extent practical. Removals will be kept to a minimum to limit direct effects to vegetation communities and vascular flora, as well as indirect effects (e.g., soil compaction and changes to topography and drainage). Disturbed areas will be re-stabilized, incorporating re-vegetation using non-invasive, preferably native plantings and / or seed mix appropriate to the site conditions and adjacent vegetation communities. Seed mixes will be used in conjunction with an appropriate non-invasive cover crop as appropriate.

9.3 Effects of Climate Change on the Project

There is potential for the project to be affected by climate change. Climate change is usually associated with any significant change in long-term weather patterns. Changes in the composition of the atmosphere is resulting in processes that alter global temperature and precipitation and is affecting local weather patterns. These processes can ultimately lead to increased occurrence of extreme weather events such as floods, droughts, ice storms, and heat waves.

Precipitation, whether it is rainfall, snowfall, or other forms of frozen / liquid water, is the key climate and weather-related variable of concern with respect to drainage and culvert design. As a result of climate change, storm events are predicted to become more intense, which can result in larger volumes of precipitation at one time. Other climate variables such as temperature are major inputs to evaporation and snowmelt processes. Increases in temperature are likely to impact precipitation and snowmelt runoff volumes discharged to watercourses.

9.3.1 Air Temperature

Effect of high temperatures are as follows:

Higher Mean Water Temperatures

- Affect biological treatment processes and drinking water quality in distribution networks
- Reductions in dissolved oxygen content
- Combined with higher phosphorus concentrations in lakes and reservoirs, promote algal blooms
- Taste and odour events requiring additional treatment
- Quicker chlorine decays in the distribution system
- Changes in the quantity and character of natural organic matter
- Different chemical treatment methods or other technologies might be needed

Higher Mean Wastewater Temperatures

- Affects biological treatment processes (reaction rates)
- Higher wastewater piping corrosion

Hotter, Drier Summers and Heat Waves

- Increased demand for water delivery
- Increased demand for collection systems

9.3.2 Precipitation

Increase In Rainfall

- Stormwater infrastructure more frequently exceeded
- Require increased capacity on wastewater treatment facilities
- Urban drainage systems could fail, causing problems such as sewer backups and basement flooding

Increased Frequency of Storm Events

- Implications for large urban drainage systems
- Uncontrolled surcharges in sewer system may introduce microbial and chemical pollutants to water resources
- Potential impact on the strength in wastewater systems
- Sinking of land surfaces
- Buildings, tankage, housed process equipment affected by flooding
- Overtaxing of drainage facilities
- Pipeline ruptures

- Increased heavy flows will also increase pumping requirements, thus increasing energy costs, and in some cases, overwhelming pumping capacity
- Direct physical impacts on systems from heavier rainfalls include the movement of debris that can block flows to culverts and catch basins, which in turn can result in localized flooding or erosion in surrounding areas, damaging the infrastructure

Increased Rain on Frozen Ground Events

- Increase the risk of stormwater infiltration into sanitary systems, creating more and larger combined sewer overflows
- Increased heavy flows will also increase pumping requirements, thus increasing energy costs, and in some cases, overwhelming pumping capacity

9.3.3 Stormwater Management

When stormwater is absorbed into soil, it is filtered and ultimately replenishes aquifers or flows into streams and rivers. Climate changes, including more frequent and intense storms and more extreme flooding events, can increase stormwater runoff.

More frequent and intense downpours can overwhelm the design capacity of municipal stormwater management systems. Overwhelmed stormwater management systems can lead to backups that cause localized flooding or lead to greater runoff of contaminants such as trash, nutrients, sediment, or bacteria into local waterways.

More frequent and intense downpours can also challenge communities with less robust water and wastewater systems. These systems can be overwhelmed by large amounts of rainfall or snowmelt and lead to more contamination into waterways, washing sediment, nutrients, or other pollutants into water sources. Increased sediment, nutrients and other pollutants can diminish water quality, threaten drinking water sources, and complicate water treatment processes. Drought conditions and lower stream flow can exacerbate these problems by concentrating pollutants and limiting dilution.

The stormwater management facility has been sized based on regulations and guidance that take into consideration future climate change conditions.

10.0 Consultation Summary

Consultation was carried out with agencies, affected landowners and Indigenous communities. Consultation includes notification, a Public Information Centre and video conferences with several interested parties.

10.1 Agency and Stakeholder Contact

A Project Contact List was developed as a mailing list to distribute all project Notices. The Project Contact List identified a wide range of stakeholders including relevant review agencies and organizations. A total of 21 review agencies and nine utilities received notices. Contact received a copy of the combined Notice of Commencement and Public Information Centre which was issued on November 9, 2024.

A copy of the Agency and Stakeholder Contact List and Notice of Commencement/PIC is provided in Appendix K.

10.2 Landowner and Public Contact

All landowners within the study area were mailed the Notice of Commencement/Notice of Public Open House, provided in Appendix K.

In addition, the notice was posted on the project website (windsoreas.ca) which included all pertinent project information and included contact information and details about how to participate in the study.

A Public Information Centre (PIC) was held at the Serbian Centre on November 26, 2024, from 5PM - 7PM. The PIC was held in person as an open house style session. A copy of the display boards is provided in Appendix K. Four people attended the PIC, including three landowners and one City councilor. Discussions were held between the participants and team members in attendance at the PIC; however, no written comments were submitted during or after the PIC.

Discussion generally covered the following topics:

- Construction timing
- Property acquisition timing and process
- Access to properties during and after construction

Information was provided to the level of detail available at the time. Commitments were made to ongoing consultation with landowners as property acquisition and construction proceed.

A meeting was held virtually with Home Depot staff on November 22, 2024, to discuss proposed changes to the entrance off Tecumseh Rd. E. A proposed alternate entrance

off the Roseville Garden Dr. extension was discussed, along with a possible entrance from Catherine St. Home Depot staff requested ongoing consultation throughout the detailed design and construction process to ensure changes can be phased appropriately to ensure some form of access is retained at all times. The City committed to future discussion and coordination. Meeting Minutes are provided in Appendix K.

10.3 Indigenous Engagement

As part of the consultation process, the Project Team engaged with Indigenous communities to inform them of the Project, ascertain their level of interest in the Project, offer opportunities to provide input into the Study and, if interested, undertake further engagement with these communities. Consultation with Indigenous communities is summarized in the contact list provided in Appendix L.

On May 31, 2024, Burnside sent an email to the Ministry of Environment, Conservation and Parks (MECP) Ontario Southwest Region EA Coordinator to request confirmation of the list of Indigenous communities to be contacted as Aamjiwnaang First Nation, Caldwell First Nation, Chippewas of the Thames First Nation, Delaware Nation, Chippewas of Kettle and Stony Point First Nation, Munsee-Delaware Nation, Oneida of the Thames, and Walpole Island First Nation.

An early notice of the servicing EA was sent out to all Indigenous communities ahead of the formal Notice of Commencement. Chippewas of the Thames First Nation (COTTFN), and Chippewas of Kettle and Stony Point First Nation responded to the early notice that they would have an interest in the project. A copy of the notice is provided in Appendix L.

Additional follow-up by email or phone call was made to ensure that each community received the early notice and that contacts were correct and up to date.

The Caldwell First Nation and Chippewas of the Thames use the Nations Connect online portal to track projects and notifications. The early notice and all subsequent notices were uploaded to NationConnect for these communities.

On November 9, 2024, the Notice of Study Commencement and Public Information Centre was sent to all Indigenous communities on the contact list and uploaded to the NationsConnect portal, where applicable. The Indigenous communities were asked to confirm if they had an interest in the project and if they would like to meet further to discuss the project scope and any input they may have on how the Project may adversely impact Aboriginal and / or treaty rights.

As the study progressed, Indigenous communities were invited to participate in archaeological work. Representatives of the Caldwell First Nation and Chippewas of the Thames First Nation acted as liaisons for the Stage 2 Archaeological fieldwork. The

Stage 1 and 2 Archaeological Assessments were sent to all Indigenous communities for review and comment prior to submission to the provincial registry.

Upon request, meetings were held with The Three Fires Group, representing Chippewas of Kettle and Stony Point and the Chippewas of the Thames. Each meeting is summarized below. No other communities expressed an interest in having a meeting with the project team.

A summary of consultation is provided in Table 10-1. Correspondence is provided in Appendix L.

Table 10-1 Summary of Indigenous Consultation

Community	Early Notification	Folow-up to Early Notification	Notice of Project Commencement/ PIC	Participation in Archaeological Field Work	Meetings	Draft Reports Sent
Aamjiwnaang First Nation	October 10/24	October 24/24	November 8/24	-	-	February 10/24
Caldwell First Nation	October 10/24	October 24/24	November 8/24	July/August 2024	-	February 10/24
Chippewas of Kettle and Stony Point Frist Nation	October 10/24	October 24/24	November 8/24	-	December 6, 2024	February 10/24
Chippewas of the Thames First Nation	October 10/24	October 24/24	November 8/24	July/August 2024	December 9, 2024	February 10/24
Delaware Nation (Moravian of the Thames)	October 10/24	October 24/24	November 8/24	-	-	February 10/24
Munsee-Delaware First Nation	October 10/24	October 24/24	November 8/24	-	-	February 10/24
Oneida of the Thames First Nation	October 10/24	October 24/24	November 8/24	-	-	February 10/24
Walpole Island First Nation (Bkejwanong Territory)	October 10/24	October 24/24	November 8/24	-	-	February 10/24

10.3.1 Three Fires Group (Chippewas of Kettle and Stony Point)

On December 6, 2024, Burnside virtually met with Three Fires Group, representing Chippewas of Kettle and Stony Point, to review the Project scope, timelines, and to provide an opportunity for feedback and comments / concerns. Three Fires Group had no comments / concerns for the Project, but indicated they would like to be circulated all applicable studies and reports, and to continue to be circulated on all key Project information. Meeting minutes can be found in Appendix L.

10.3.2 Chippewas of the Thames First Nation (COTTFN)

On December 9, 2024, Burnside virtually met with COTTFN to review the Project scope, timelines, and to provide an opportunity for feedback and comments / concerns. COTTFN had no comments / concerns for the Project, but indicated they would like to be circulated all applicable studies and reports, and to continue to be circulated on all key Project information. Meeting minutes can be found in Appendix L.

11.0 Commitments and Next Steps

Upon completion of this MCEA, additional work will be completed prior to construction. Detailed studies, consultation and permits and approvals will be required, as documented in the following sections.

11.1 Detailed Design Commitments

Following completion of this MCEA, the project will proceed to the detailed design phase. During detailed design, the preferred alternative will be refined and finalized to address site-specific conditions as identified in this report.

The detailed design phase involves the development of detailed drawings for the preferred alternative as well as construction standards and specifications, including a Construction Management Plan, Monitoring Plan, and Operations and Maintenance Plan.

Specifically, the detailed design phase will include preparation of the following, at a minimum:

- Plan and profile drawings
- Typical sections and details
- Material specifications
- Construction access route locations
- Construction sequencing and management plan
- Tree protection, removal and restoration plans
- Utility locates and mitigation plans
- Erosion and sediment control plans

Detailed design plans will specifically need to consider:

- Whether additional design elements need to be incorporated into the Catherine St. design in order to accommodate the proposed transit station
- How pedestrian access can be provided safely between the Serbian Centre overflow parking areas south of Catherine St. and the Serbian Centre on the north side of the road
- Coordination and phasing of the Roseville Garden Dr. extension and new access to Home Depot along with removal of the signalized intersection at the Home Depot entrance on Tecumseh Rd. E.
- Whether additional sanitary sewer capacity is needed in the existing pipe along Catherine St.

11.2 Commitments for Future Consultation

The following commitments to future consultation will be carried out:

- Throughout detailed design and construction, all affected landowners and business owners will be consulted with regard to any temporary and permanent changes to property access, changes to existing stormwater management structures, construction timing and phasing.
- Landowners in the Hawkins Drain watershed will be advised of changes to the Drainage Report and associated effects to drainage responsibilities.

11.3 Permits and Approvals

Table 11-1 provides a preliminary set of permit requirements that will need to be undertaken by the contractor. A final list of permits shall be determined during the detailed design phase of the Project.

Table 11-1: Permits and Approvals

Permit, Approval or Notice	Rationale	Administering Agency
Ontario Regulation 41/24	Required for work in regulated area, including outlet of SWM pond in the Hawkins Drain	ERCA
Fisheries Act, Request for Review	May be required during implementation if in-water work is necessary, including construction of SWM pond outlet	Department of Fisheries and Oceans
Endangered Species Act	A permit may be required for work in potential habitat for Butler's Gartersnake and Eastern Foxsnake. Information Gathering Form (IGF) and Avoidance Alternatives For (AAF) to be submitted to MECP.	Ministry of Environment, Conservation and Parks
Ontario Heritage Act	Stage 2 Archaeological Assessment to be approved by MCM and entered into Archaeological Registry prior to construction	Ministry of Citizenship and Multiculturalism

Permit, Approval or Notice	Rationale	Administering Agency
Temporary road closures and/or road occupancy	May be required during construction if access and/or staging on municipal roads is required	City of Windsor
Drainage Act	Updates to the Drainage Report in accordance with Section 65 of the Drainage Act are required to address changes to the Hawkins Drain drainage area	City of Windsor
Permit to Take Water	For dewatering activities, as required	Ministry of Environment, Conservation and Parks
Environmental Compliance Certificate	For stormwater management facility and sanitary sewer connection	Ministry of Environment, Conservation and Parks

12.0 Notice of Study Completion

At the conclusion of Phase 2 for the stormwater management and sanitary sewer solutions and Phase 3 for the collector road solution of the Municipal Class EA Study process, this Environmental Study Report (ESR) was finalized, and a Notice of Completion was issued. The ESR documents the decision-making process during the study. The Notice of Study Completion notified members of the public and agencies that the ESR would be available for public review for thirty-day period and is provided in Appendix M. The Notice was also mailed to all agencies, Indigenous communities and stakeholders on the Project Contact List. The ESR is also made available for public review on the project website, windsoreas.ca.

If concerns arise regarding potential adverse impacts to constitutionally protected Indigenous and treaty rights, a request for an order requiring a higher level of study or conditions on those matters should be submitted in writing to the Minister of the Environment, Conservation and Parks and the Director of the Environmental Assessment Branch.

Requests must be received by the Minister of the Environment, Conservation and Parks within 30 calendar days of the first publication of the Notice of Completion. A copy of the request should also be sent to the City of Windsor. If the Minister does not receive a request within the 30 calendar days, then the project will move forward to detailed design, approvals process and subsequent implementation of the preferred solution and design.

To provide comments on the project, or if you require alternative accommodations to view the ESR, please contact the Study Team as per the dates provided on the Notice of Completion. Comments can be submitted to the following team members:

Tricia Radburn, MCIP, RPP
Consultant Project Manager
R.J. Burnside & Associates Limited
292 Speedvale Ave. West, Unit 20
Guelph ON N1H 1C4
Tel: 1-800-265-9662 ext. 1778
E-mail: Tricia.Radburn@rjburnside.com

Juan Paramo, P.Eng.
Development Engineer
City of Windsor
350 City Hall Square West, Suite 210
Windsor ON N9A 6S1
Tel: 519-255-6267 ext. 6353
E-mail: JParamo@citywindsor.ca

A request to the Minister of the Environment, Conservation and Parks for an order imposing additional conditions or requiring a comprehensive environmental assessment may be made on the grounds that the requested order may prevent, mitigate or remedy adverse impacts on constitutionally protected Indigenous and treaty rights. Requests must include your full name and contact information.

Requests should specify what kind of order is being requested (additional conditions or comprehensive environmental assessment) and explain how an order may prevent, mitigate or remedy potential adverse impacts, and can include any supporting information. The request should be sent in hardcopy or by email to:

Minister of the Environment, Conservation and Parks
777 Bay Street, 5th Floor
Toronto ON M7A 2J3

Director, Environmental Assessment Branch
Ministry of the Environment, Conservation and Parks
135 St. Clair Avenue West, 1st Floor
Toronto ON M4V 1P5
EABDirector@ontario.ca

Please visit the ministry's website for more details of what information must be included in a request for order under section 16 of the Environmental Assessment Act at: https://www.ontario.ca/page/class-environmental-assessments-section-16-order.

Personal information submitted (e.g. name, address and phone number) is collected under the authority of the Ontario Environmental Assessment Act and collected and maintained for the purpose of creating a record that is available to the public. Personal information you submit will become part of the public record that is available to the general public, unless you request that your personal information remain confidential. Project and Notice information will be made accessible upon request in accordance with the Accessibility Standard for Information and Communication under the *Accessibility for Ontarians with Disabilities Act, 2005*.

R.J. Burnside & Associates Limited