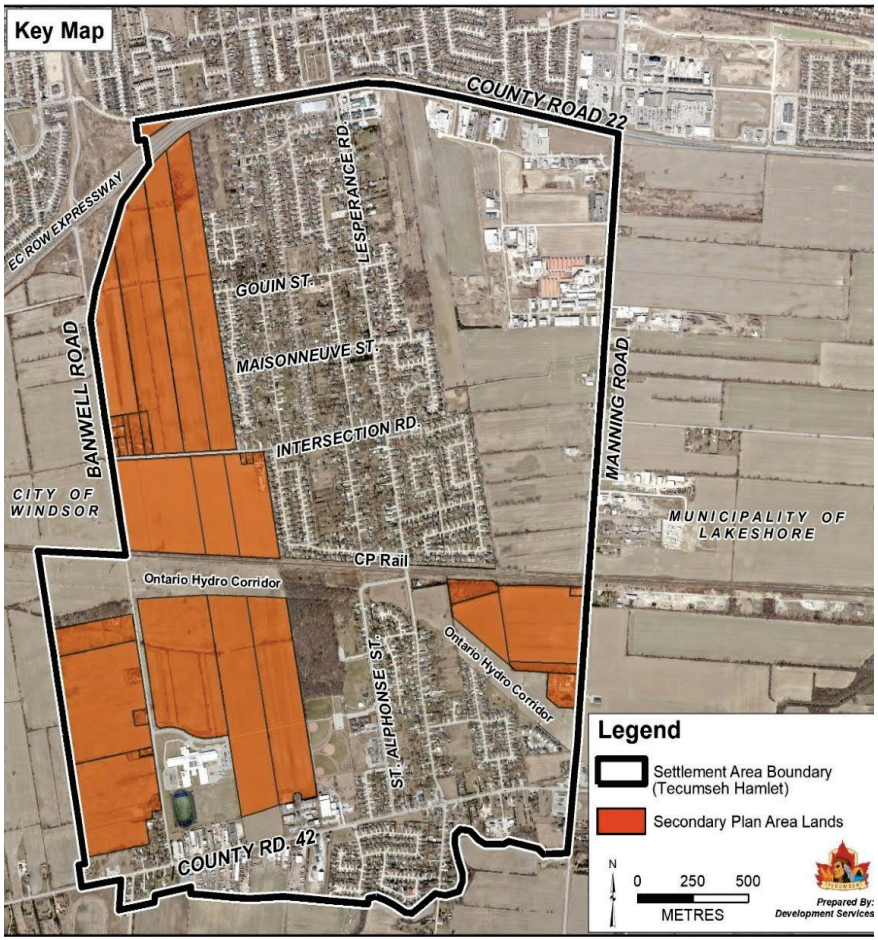
Tecumseh Hamlet Infrastructure Improvements

Municipal Class EA & Functional Design



Study Area

The Study Area includes the "Secondary Plan Area Lands" designated for future development in the Tecumseh Hamlet.

Study Purpose

To support the Tecumseh Hamlet Secondary Plan being completed by Dialog Design, Dillon was retained by the Town of Tecumseh to complete a Municipal Class EA and Functional Design for the municipal infrastructure improvements required to service future development in the Secondary Plan Area.

- Proposed infrastructure improvements include transportation, water, wastewater and stormwater management projects.
- The purpose of the Project is to meet the requirements of the Municipal Class EA (2023) and develop a comprehensive Servicing Plan that facilitates the orderly and timely development of the Hamlet.
- Upon completion of this EA, projects identified as recommended will be approved to proceed with construction.

Class EA Process

The **Municipal Class Environmental Assessment (MCEA)** is an approved planning and design process to ensure that municipal infrastructure projects meet the requirements of the Ontario Environmental Assessment Act.

MCEA PROJECT CATEGORY

The Project was reclassified to a **Schedule B project** in the recently amended *Municipal Class Environmental Assessment (*March 3, 2023). Schedule B projects must follow Phases 1 and 2 of the Class EA process and require an "environmental screening". For this project, Phases 1 and 2 were covered by **previously completed Master Plans**:

- **Phase 1, "Problem/Opportunity"**, provided the need and justification for infrastructure improvements
- **Phase 2, "Alternative Solutions"**, evaluated and identified preferred solutions.

To avoid or minimize adverse impacts, the **Schedule B environmental screening process** involves:

- The development and evaluation of Design Options to implement the preferred solutions;
- The preparation of an inventory of the potentially affected environment;
- Public and agency consultation;
- The selection of preferred designs; and
- An impact assessment of the preferred designs, including mitigation measures.

Background Studies

Previously Completed Master Plans:

Transportation Projects

- Town of Tecumseh Transportation Master Plan (2017)
- City of Windsor Banwell Road Environmental Assessment (2016)
- County Road 42 and 43 Environmental Assessment (2009)

Water and Wastewater Projects

- Town of Tecumseh Water and Wastewater Master Plan (2019)

Stormwater Projects

- Upper Litter River Watershed Drainage and Stormwater Management (SWM) Master Plan (2023); and
- Tecumseh Drainage Master Plan (2019).

Updated Problem/ Opportunity Statement

The previous Master Plans concluded that road, water, wastewater and SWM projects are needed to service new development in Tecumseh Hamlet. These needs are reinforced by:

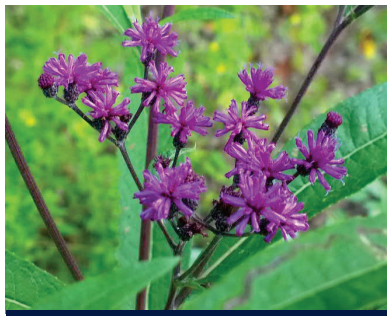
- Essex County's recent population, housing, employment and economic growth projections are substantially higher than previous projections
- Steady economic growth is forecasted in Windsor-Essex, associated with the battery manufacturing facility currently under construction; and
- The Province's *More Homes Built Faster Act* sets a target of 30,400 new houses in the County by 2031.

Existing Conditions

Field investigations, to identify any restrictions and constraints to development, will be completed this growing season.

The investigations will include:

- Aquatic Assessments of Pike Creek and Municipal Drains
- Ecological Land Classification (ELC)
- Botanical Surveys



Giant Ironweed

Willowleaf Aster

Examples of SCC and SAR include Giant Ironweed (left) and Willowleaf Aster (right), respectively.

Natural Environment

Vegetation communities will be also be assessed in the field for their potential to provide habitat for Species at Risk (SAR) and Species of Conservation Concern (SCC).

The following features may provide constraints to development:

- Significant Woodlands (McAuliffe Park);
- Municipal Drains (direct and contributing fish habitat);
- Potential SAR habitat; and
- Candidate Significant Wildlife Habitat (SWH).

Stormwater Management Ponds will include Waterfowl mitigation features to address safety due to proximity to the Windsor International Airport.

Tecumseh Hamlet Infrastructure Improvements
Municipal Class EA & Functional Design

Existing Conditions

Fisher Archaeological Consulting completed a Stage 1 Archaeological Assessment of the Tecumseh Hamlet Secondary Plan Area lands in 2012:

- Most of these lands have high archaeological potential due to the presence of watercourses, historic Aboriginal, refugee slave and Euro-Canadian settlements and the presence of the Smith Black Cemetery on Banwell Road.
- A Stage 2 Archaeological Assessment is required prior to the construction and the development of infrastructure on lands noted within the Stage 1 archeological report.

Cultural Heritage: Archaeology & Built Heritage

The Ministry of Citizenship and Multiculturalism requires the preparation of a Cultural Heritage Evaluation Report (CHER) as part of this project to determine potential impacts on the Study Area's built heritage and cultural landscapes. Important features are:

- The Smith Black Cemetery
- The Banwell Black Settlement of the 1830's, as commemorated by a Provincial plaque
- The Lachance Farm on Intersection Road

Tecumseh Hamlet Infrastructure Improvements
Municipal Class EA & Functional Design

Existing Conditions

Socio-Economic Environment

Existing Land Uses, Tecumseh Hamlet

- The Hamlet's existing population is about 5,300
- Land uses consist primarily of single detached residences and some commercial uses, community facilities and parks

Provincial Policy Statement (PPS)

- "Settlement Areas" shall be the focus of growth and development
- Full municipal services are the preferred form of servicing
- Municipalities shall consider the wise use and management of natural heritage, water and cultural heritage resources when planning for infrastructure

County of Essex and Town of Tecumseh Official Plans

- Both plans direct all non-agricultural development to "Settlement Areas", including the Tecumseh Hamlet, designated for "Future Development"
- The Town's plan projects a population of 32,050, an increase of 8,750 people by 2045
- Population projections prepared for the County's Official Plan Update project that the Town's population will be between 35,300 and 42,300 by 2051, significantly higher than previous projections
- Full municipal services are required in "Settlement Areas"

Tecumseh Hamlet Secondary Plan

- The Secondary Plan will address the integration of existing and new development, land use distribution, and related infrastructure requirements.
- The plan projects that 1,198 residential units will be built in the Hamlet over the next 10 years, potentially adding 3,000 people

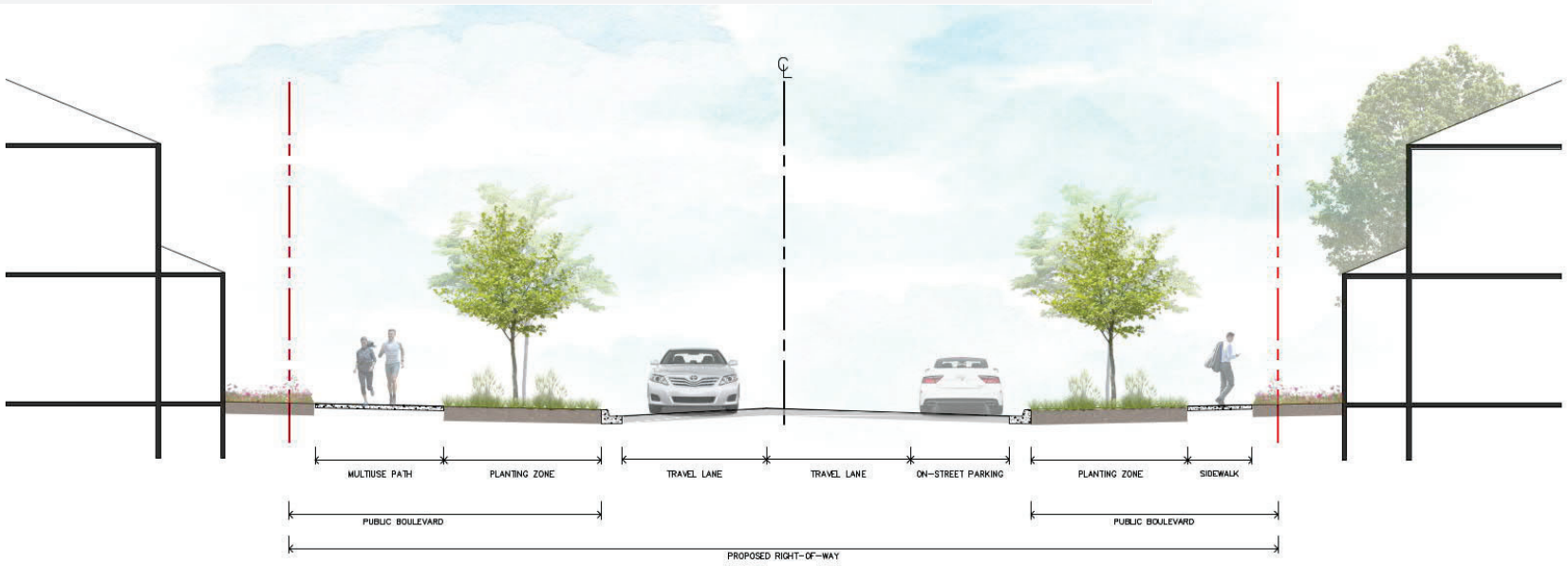
Transportation – Design Options

Town of Tecumseh Transportation Master Plan (2017)

Road improvements were identified as preferred solutions:

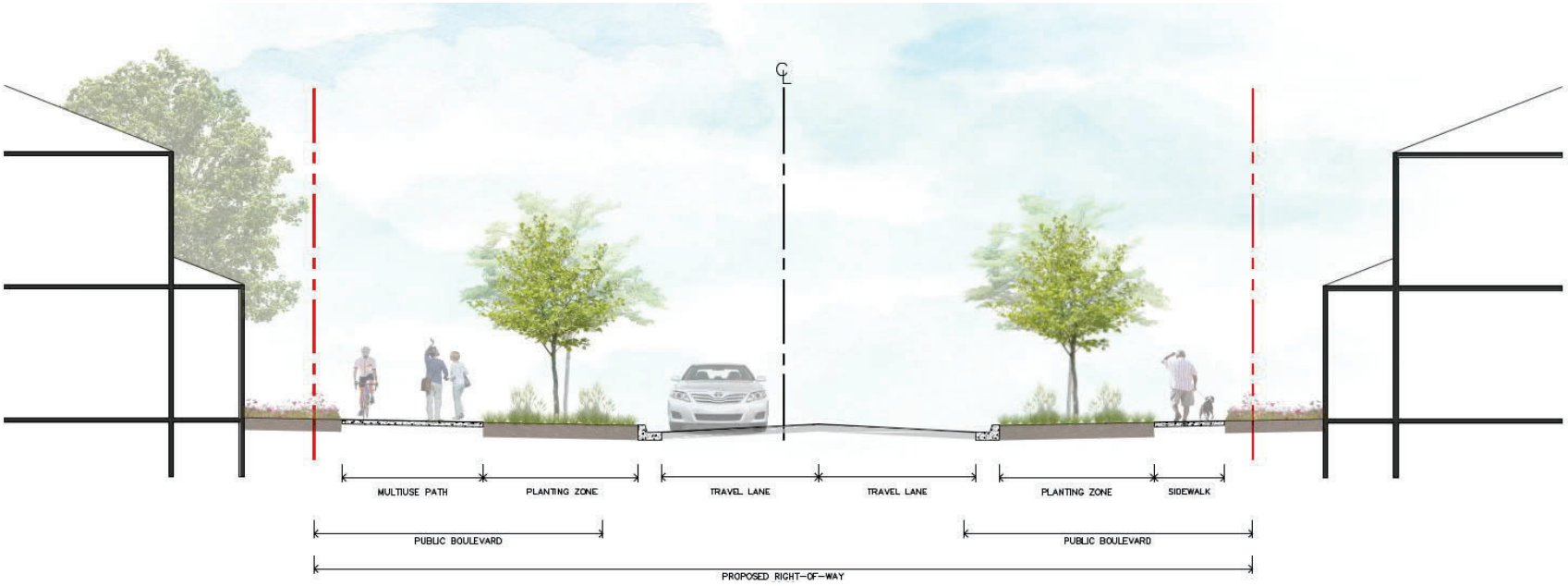
- Extension of Urban Collectors to Banwell Road/CR43;
  - Gouin Street;
  - Maisonneuve Street; and
  - Shields Street;
- Intersection Road Reconstruction from a rural cross-section to an urban cross-section.
- New Collector Roadway from Shields Street to CR42 through a new connection

Dillon has developed the following three Design Options for each road improvement project.



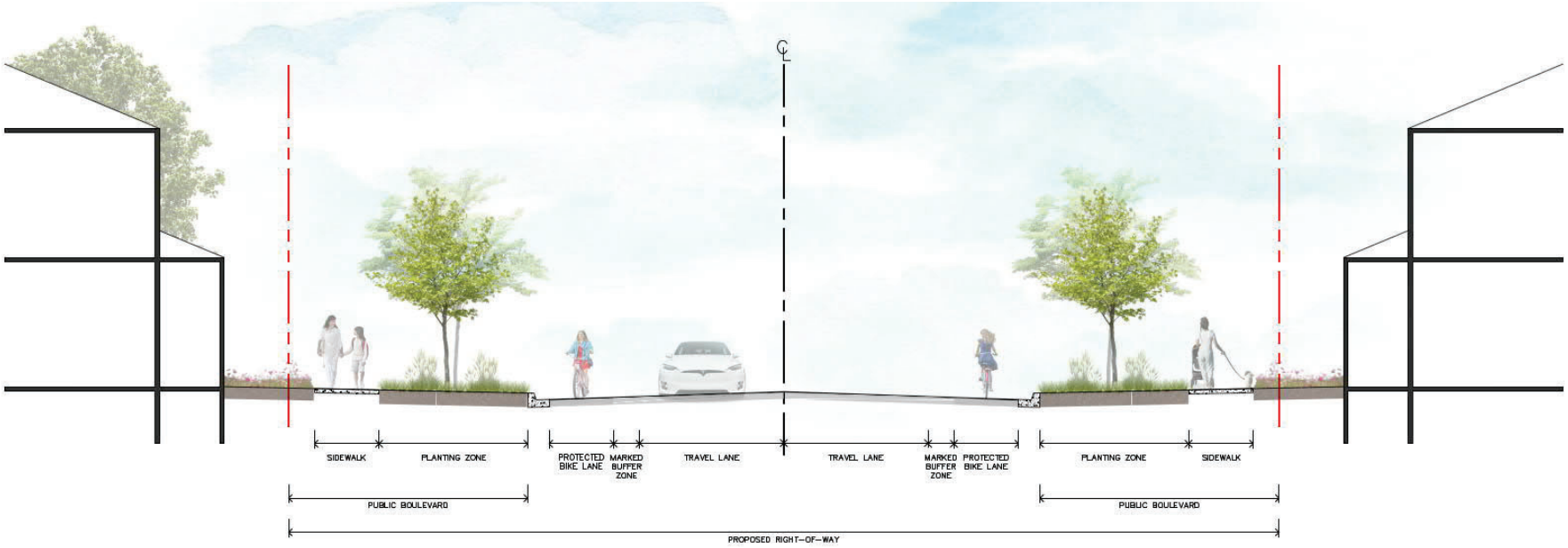
Option 1: Includes Off-Street Cycling Facilities (Multi-Use Path) and On-street Parking

Transportation – Design Options



Option 2: Includes Off-Street Cycling Facilities (Multi-Use Path) and No Parking

Transportation – Design Options



Option 3: Includes On-Street Cycling Facilities and No Parking

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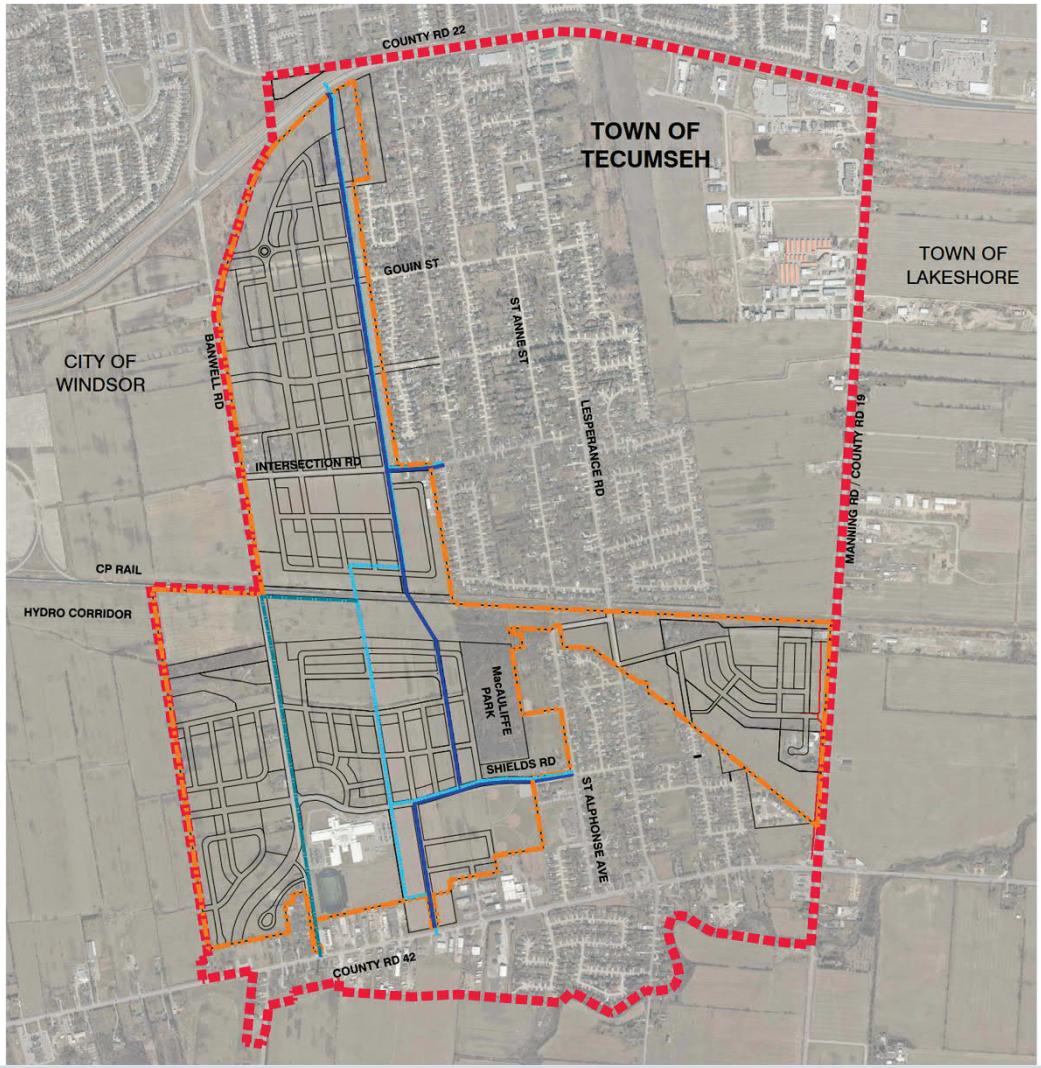
Water – Preferred Solutions and Design Options



Town of Tecumseh Water and Wastewater Master Plan (2019)

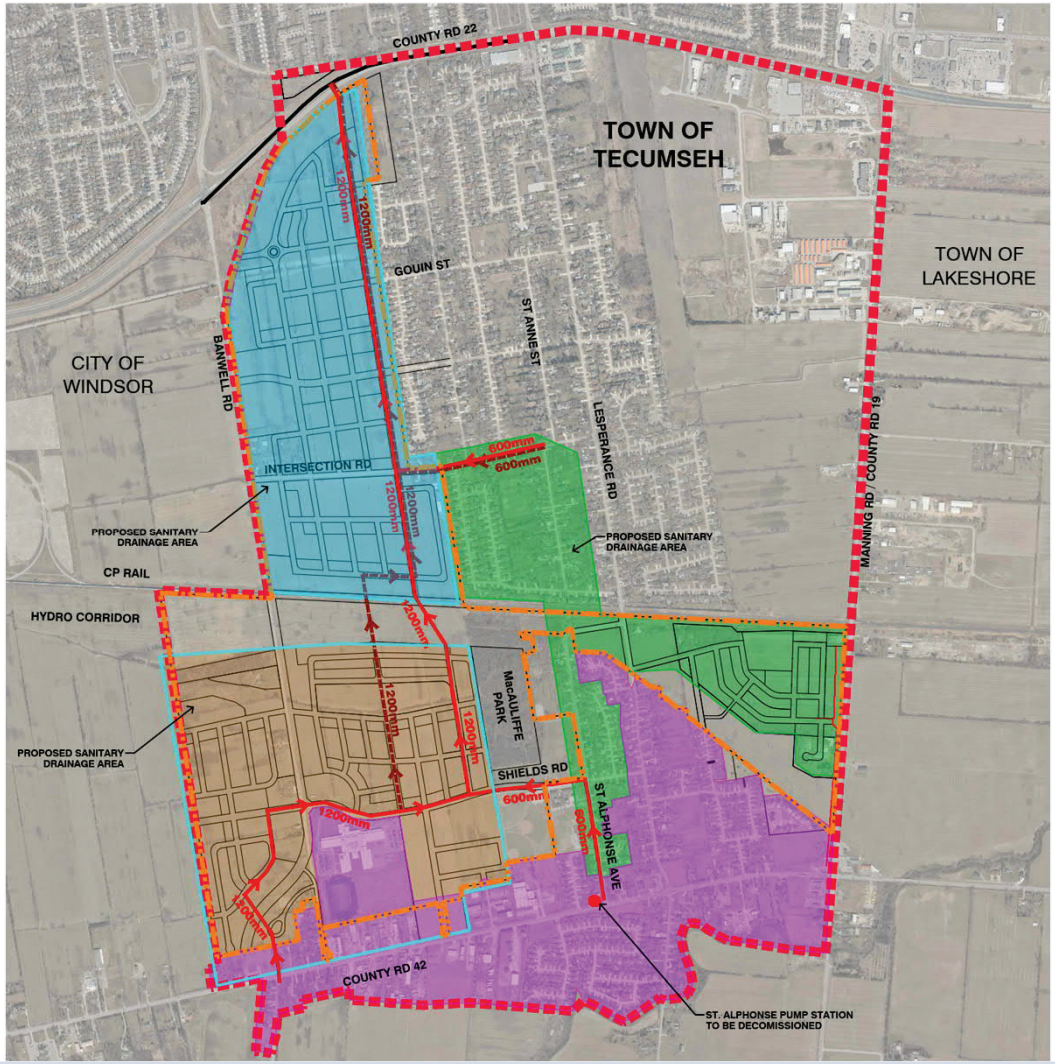
The Town's Water and Wastewater Master Plan (WWMP) Update, identified two trunk watermains as preferred water supply solutions:

- West Tecumseh Trunk Watermain, County Road 22 to CP Railway;
- West Tecumseh Trunk Watermain, CP Railway to County Road 42.

LEGEND

- URBAN AREA BOUNDARY
- TECUMSEH HAMLET STUDY AREA BOUNDARY
- NEW TRUNK WATERMAINS OPTION 1
- NEW TRUNK WATERMAINS OPTION 2
- NEW TRUNK WATERMAINS OPTION 3

Wastewater – Preferred Solutions and Design Options



Town of Tecumseh Water and Wastewater Master Plan (2019)

The Town's Water and Wastewater Master Plan (WWMP) identified three sewage projects as preferred solutions for servicing the Hamlet:

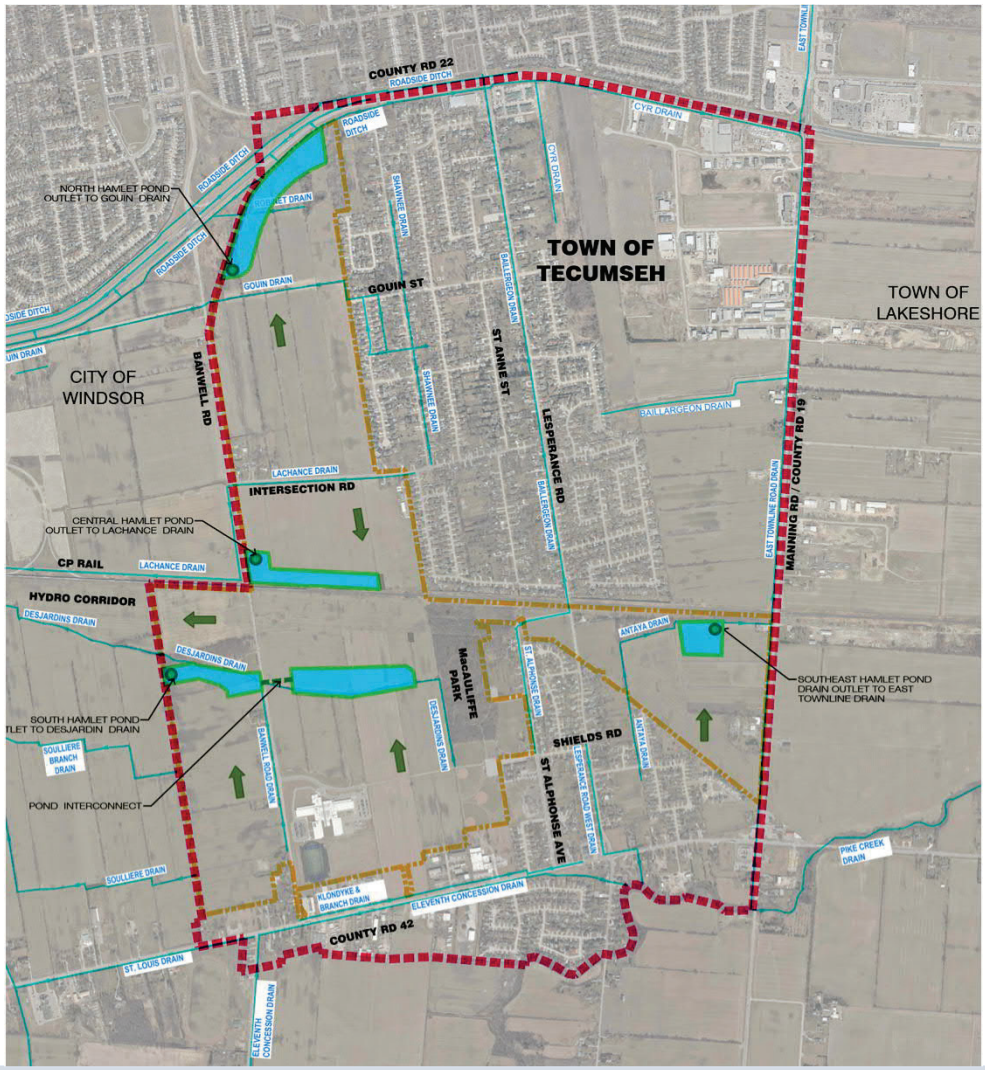
- West Tecumseh Trunk Sewer, County Road 22 to CP Railway and Intersection Road Relief Sewer;
- West Tecumseh Trunk Sewer, CP Railway to CR 42; and
- Southeast Hamlet Sanitary Sewer System and Pump Station Outlet.

The west trunk sewer provides opportunity to reassign drainage areas to avoid impacts to existing developed areas (and better distribute sewage flows).

LEGEND

- URBAN AREA BOUNDARY
- TECUMSEH HAMLET STUDY AREA BOUNDARY
- NEW TRUNK SANITARY SEWER OPTION 1
- NEW TRUNK SANITARY SEWER OPTION 2
- EXISTING TRUNK SANITARY SEWER
- SANITARY PUMP STATION

Stormwater – Preferred Solutions & Design Options



Upper Litter River Watershed Drainage and Stormwater Management Master Plan (2023)

The preferred alternative includes grouped stormwater management facilities located within defined stormwater management corridors. The facilities will service multiple properties and can be aligned with development blocks.

Four SWM projects are identified including:

- Four stormwater management ponds;
- Four pump stations; and
- Upstream trunk storm sewer infrastructure.

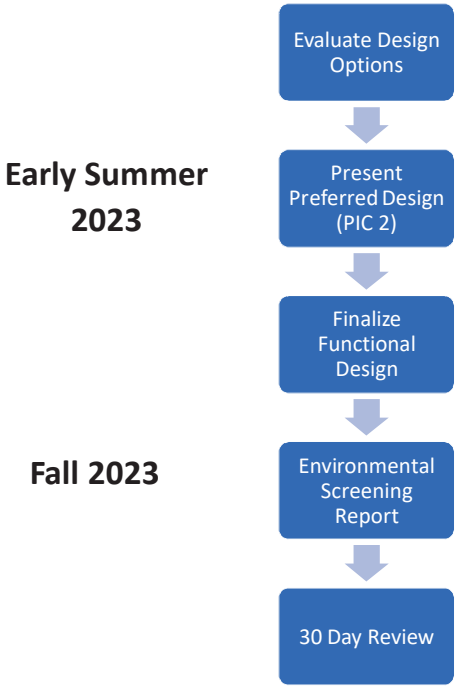
Evaluation of Design Options (Next Step)

As the next step in the Class EA process, the Design Options will be compared and evaluated using the following criteria:

Technical Considerations	Cultural Heritage	Natural Environment	Socio-Economic Environment
• Cost • Constructability • Health and Safety • Compatibly with Existing Infrastructure • Resiliency to accommodate changes to environment (Ie. Climate Change)	• Impacts on Cultural Resources including Archaeological Resources, Built Heritage and Cultural Landscapes	• Impacts on Aquatic and Terrestrial Resources, Species at Risk (SAR), Potential SAR habitat and Candidate Significant Wildlife Habitat (SWH)	• Impacts on farmland, residential uses, parks and recreational facilities and all other land uses that are potentially affected by the design options • Conformity to Provincial, County and Local land use planning policies.

Based on the evaluations, Preferred Design Options will be presented at Public Information Session #2.

Next Steps and Timelines



Provide your input!

To provide comments on this project or request further information, please contact one of the project team members listed below.

Please provide your comments by Thursday May 11, 2023.

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Information collected for this study will be used in accordance with the *Municipal Freedom of Information and Protection of Privacy Act*. With the exception of personal information, all comments will become part of the public record.

The Tecumseh Hamlet Secondary Plan

About the Study

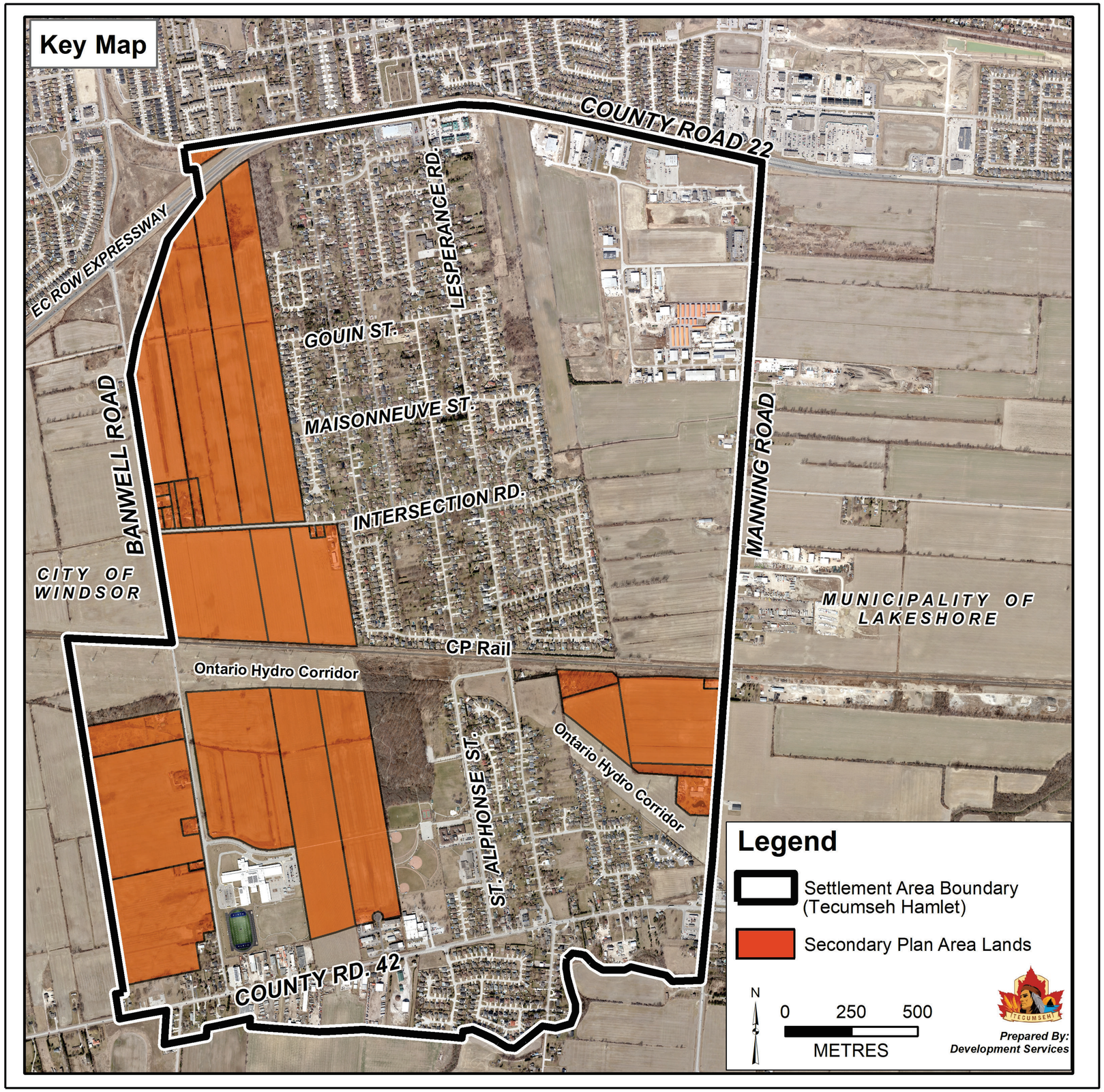
The Tecumseh Hamlet Settlement Area (see Key Map) is situated south of County Road 22 and is generally delineated by County Road 19/Manning Road to the east, County Road 42 to the south and Banwell Road to the west.

The Tecumseh Hamlet Secondary Plan Area is a composite of primarily large undeveloped lands (see Key Map) that are currently farmed. In addition, there are a number of natural heritage landscapes and existing homes. The scope of work will consider the broader Settlement Area (see Key Map) to carefully integrate key municipal infrastructure elements between the Secondary Plan Area Lands and existing built-up areas of the Hamlet. These key infrastructure elements include the extension of roads, trails, and underground services. A broader focus will ensure a holistic approach to the evolution of the Settlement Area and ensure that the boundary satisfies the requirements of future class EA and Master Plan study.

The Secondary Plan will address the integration of existing and new development, land use distribution, and related infrastructure requirements. It will seek to strengthen mobility and street network connectivity; build an interconnected network of public open space; identify the location and distribution of community facilities; and identify the future development intensity and scope. One of the main goals of the Plan will be to deliver a complete, walkable and diverse community, comprising sustainable neighbourhoods through the provision of a wide variety of land uses and building types, supported and enhanced by quality private development and public spaces and amenities.

Estimated Timeline

Secondary Plan Complete	Spring 2023
Functional Servicing Study Complete	Summer 2023
Detailed Design Phase 1 (Water & Waste Water from CR22 to CP Rail)	Fall 2023
Servicing Construction Target	Winter 2024



PROPOSED LAND USE PLAN

Hamlet Town Centre

The community amenity nodes are the commercial destinations within the Hamlet that support commercial uses, community facilities, civic spaces and parks.

High Density Neighbourhoods

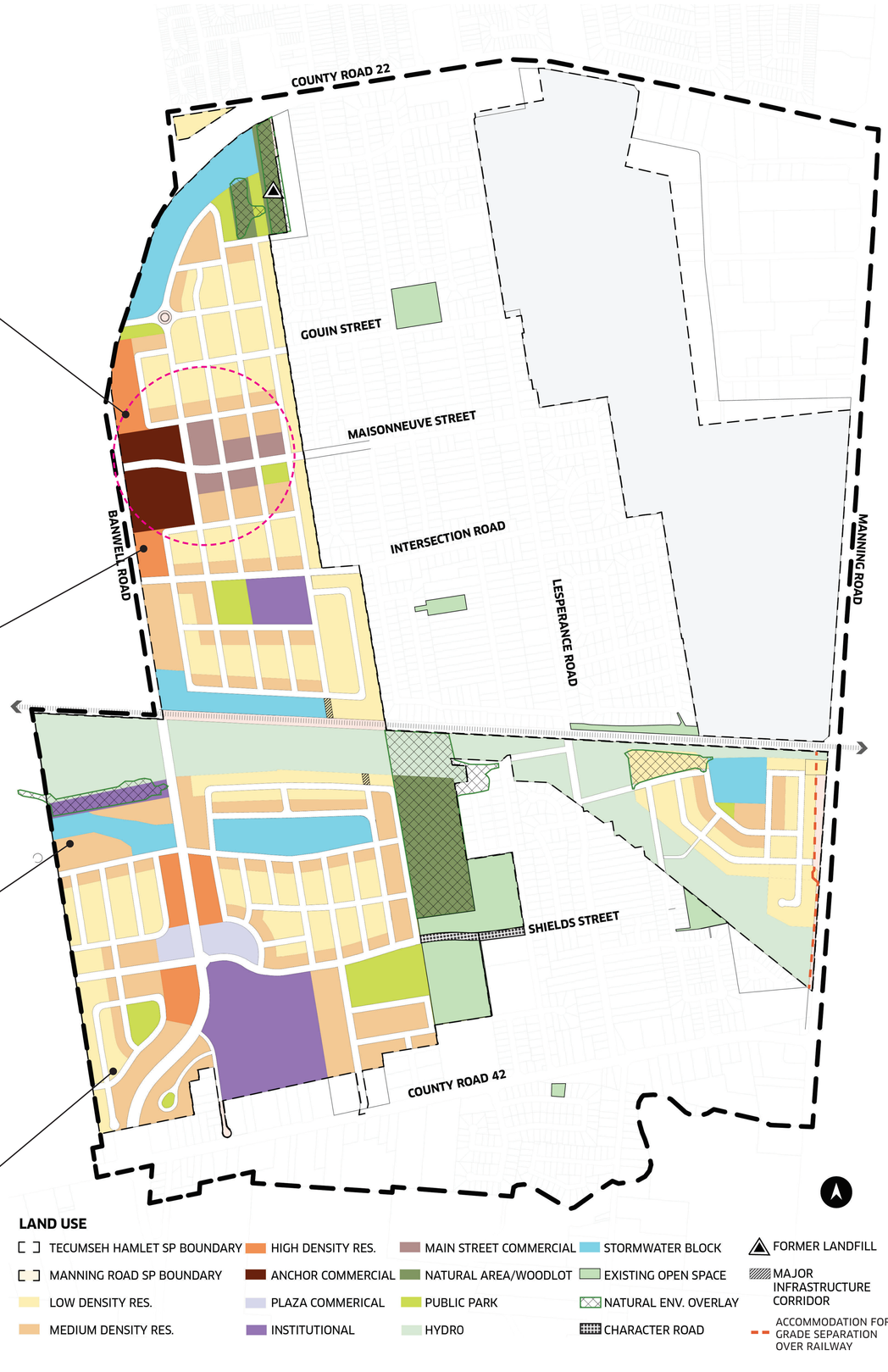
- Up to 6 storeys - Apartments, nursing homes, rest homes and retirement homes with opportunities for retail at grade
- Permitted density over 50 units/ha

Mid Density Neighbourhoods

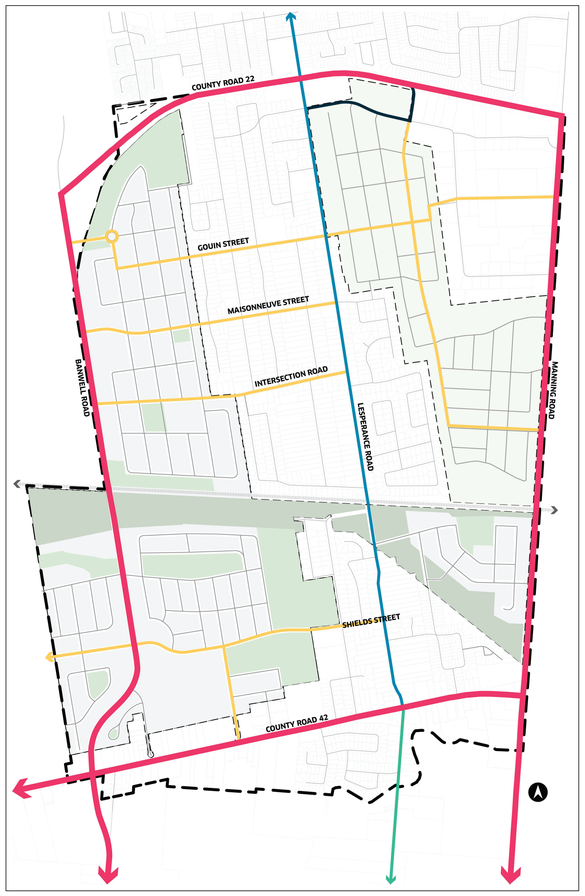
- Up to 4 storeys - Towns, stacked towns, row house, walk ups or small scale apt, mixed use buildings with commercial on the ground floor
- Permitted density 20-50 units/ha

Low Density Neighbourhoods

- Up to 2-2.5 storeys - Singles and Semis, Duplex Buildings
- Permitted density up to 20 units/ha



MOVEMENT FRAMEWORK



1 Road Hierarchy

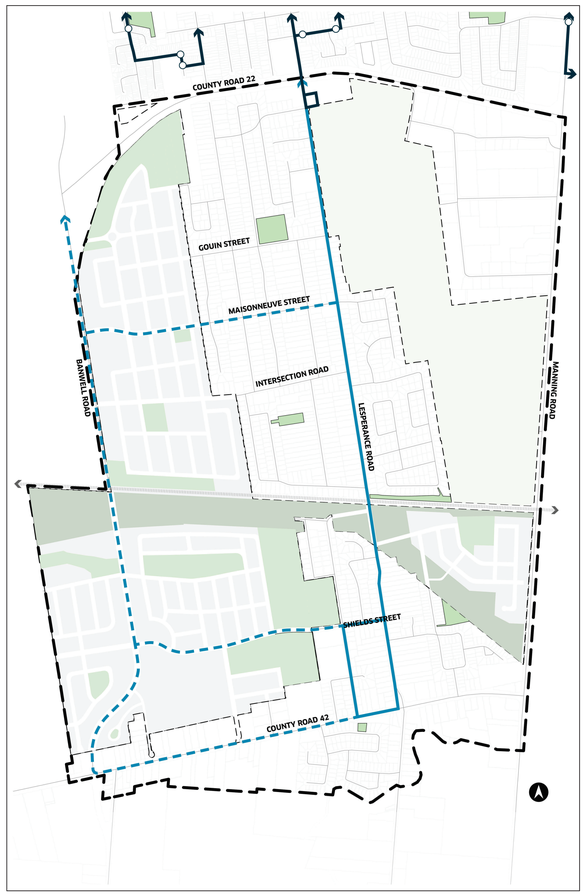
An interconnected road network in keeping with the County wide road classification system

- COUNTY/WINDSOR REGIONAL ROAD
- MINOR ARTERIAL
- COLLECTOR - URBAN
- COLLECTOR - RURAL
- PROPOSED SP ROADS

2 Pedestrian Network

An accessible, safe, convenient, and comfortable pedestrian network

- SIDEWALKS
- EXISTING TRAILS
- PLANNED TRAILS
- TRAILS OPPORTUNITIES
- MID-BLOCK CONNECTIONS



3 Transit

Opportunity to invest in public transit to support the increased density

- EXISTING ROUTES
- POTENTIAL FUTURE EXPANSION

4 Cycling Network

A comprehensive and connected neighbourhood fabric that encourage cycling

- EXISTING TRAILS
- TRAILS OPPORTUNITIES
- OFF-ROAD
- ON-ROAD SHARED
- OFF OR ON-ROAD
- ON AND OFF-ROAD
- CWATS ON-ROAD ROUTE
- CWATS OFF-ROAD ROUTE
- CWATS ON AND OFF ROAD

OPEN SPACE FRAMEWORK

1

Neighbourhood Parks

A network of neighbourhood parks within 15-minute walking distance of each neighbourhood

2

Civic Common

- A civic commons for the Hamlet Town Centre

3

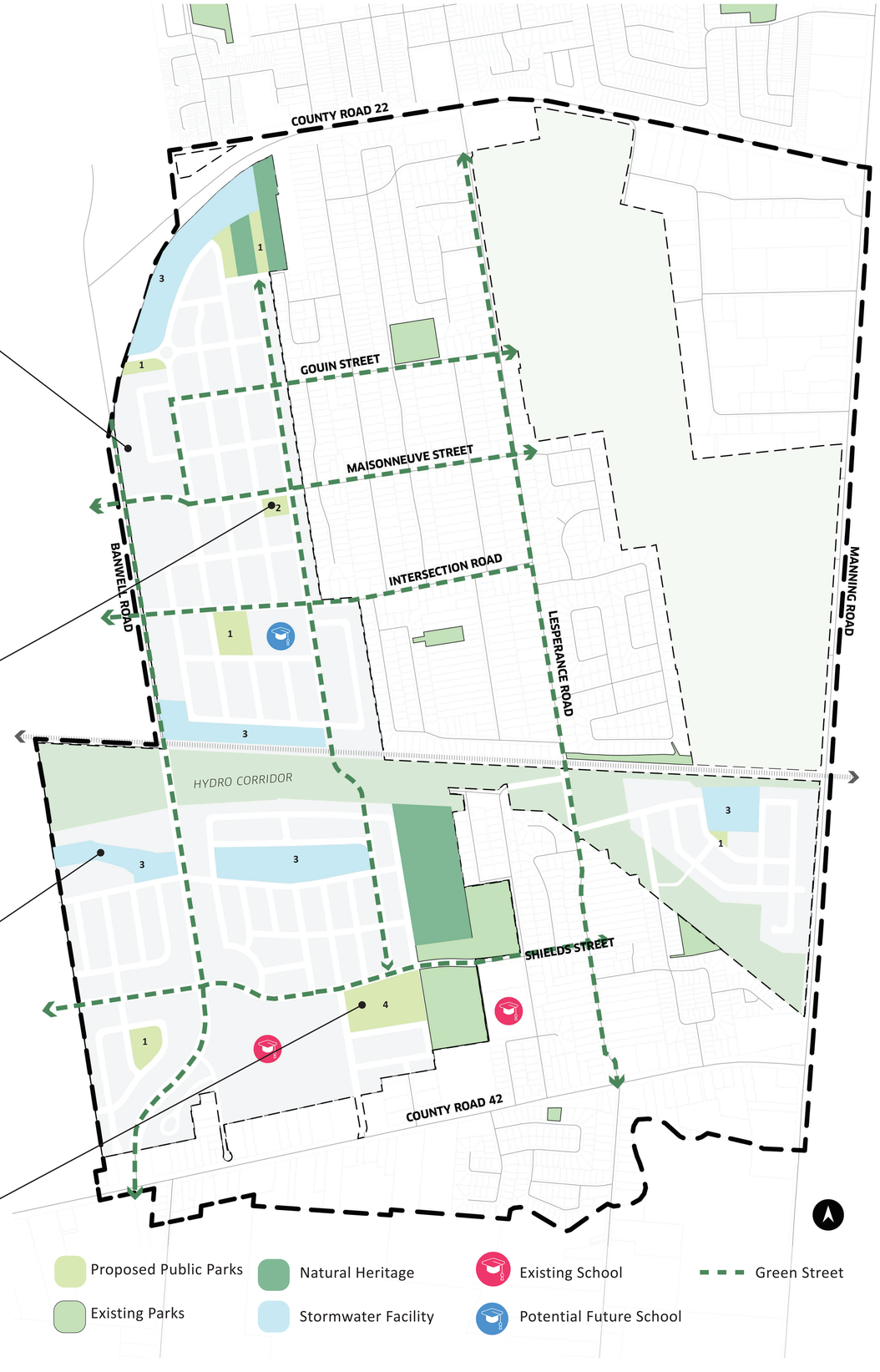
Stormwater Management Ponds

- Stormwater facilities as community amenities, well integrated into open space network

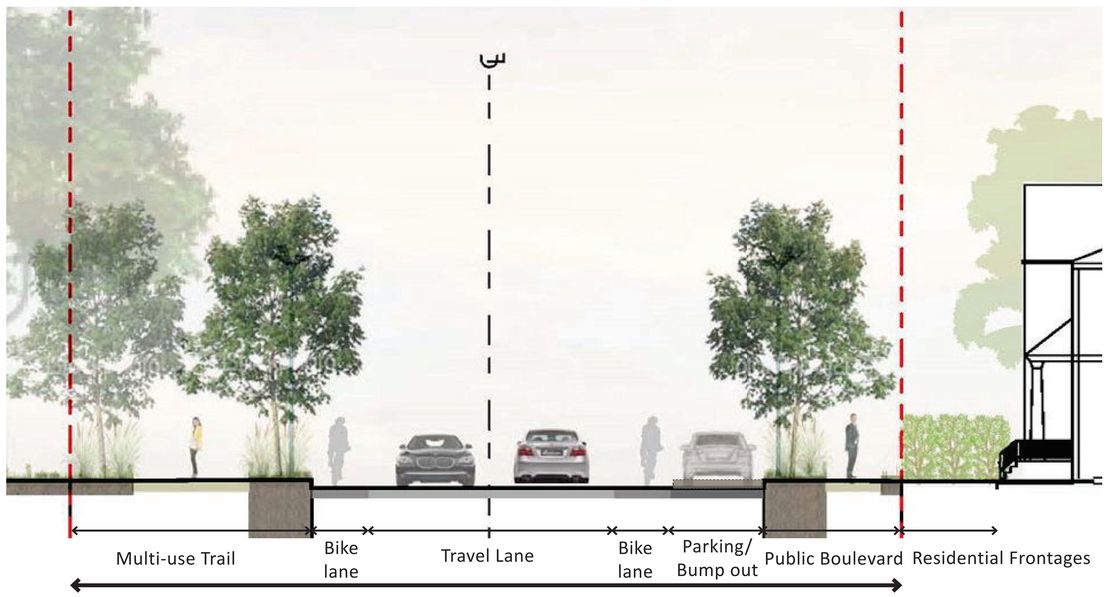
4

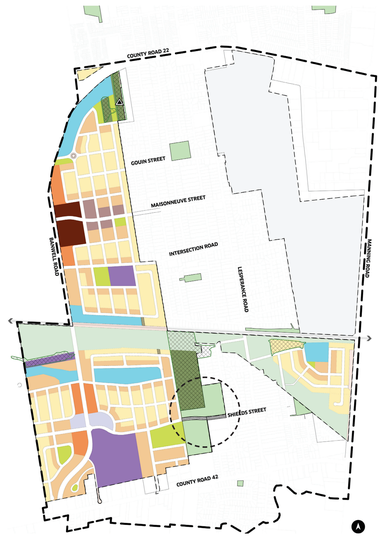
McAulliffe Park Extension

- Expansion of McAulliffe Park westerly



SHIELDS EXTENSION





Shields Street Extension

- Enhanced Scenic drive, connecting Banwell Road to Lesperance
- A unique street that integrates the school, the new neighbourhood park, commercial node, and residential development
- A green scenic drive that support medium density residential development and multi-modal transportation
- Enhanced streetscape for safe pedestrian movement, street beautification, and traffic calming

Add your comments