

March 27, 2023



AGENDA

- 1.TMP Overview
- 2.W WW MP Overview
- 3.Integrated EA Overview
- 4.Next Steps



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TMP Overview



AIMS AND OBJECTIVES:

The primary goals of the TMP were to:

- Determine the impacts to the existing transportation network of the proposed land use changes, and provide mitigations
- Establish Streetscape design standards
- Using the EA process develop alternatives and identify preferred options
- Promote modal shift to sustainable transportation modes
- Develop implementation phasing to support the Block Plan approach in OPA 63



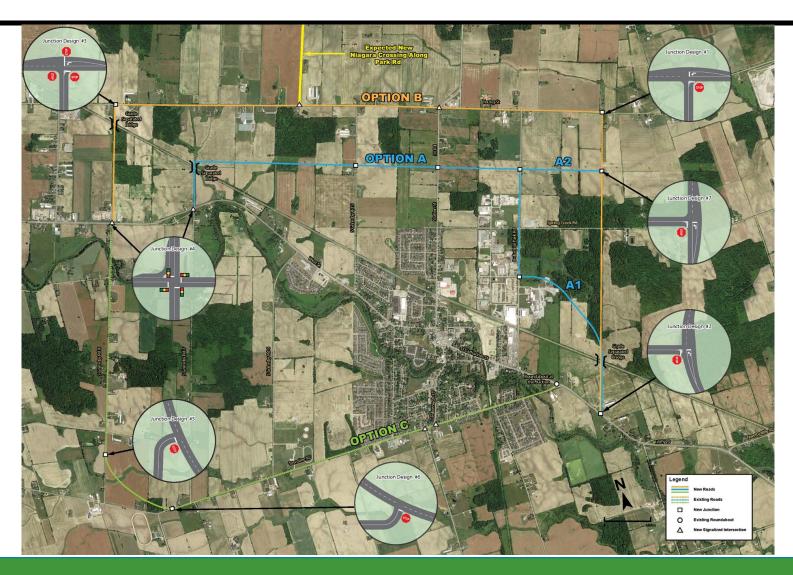
TRAFFIC ASSESSMENT:

- The transportation assessment consisted of two main components:
 - A traffic analysis and forecasting exercise
 - A review of existing and future multi-modal needs

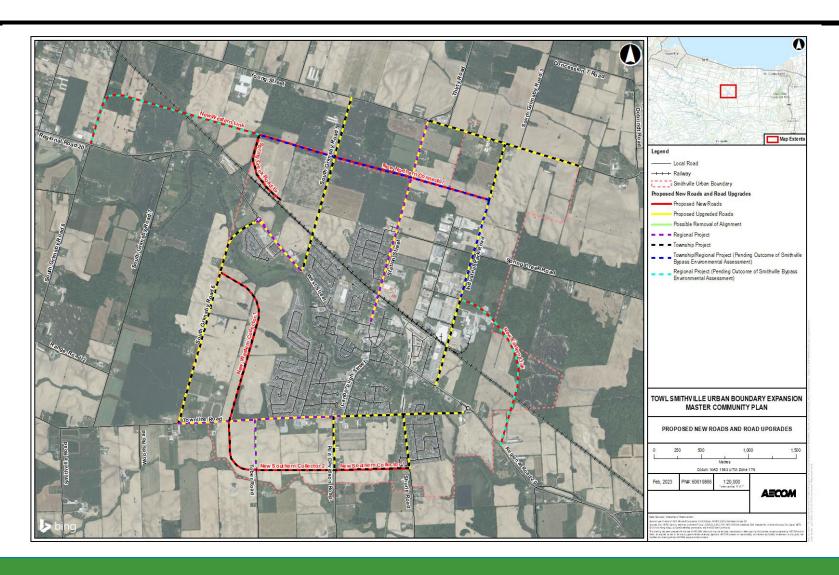
The Traffic Analysis has included the development of a traffic model that simulates existing traffic infrastructure and volumes to allow for testing of future scenarios. It has been conducted in three stages:

- Model Development: development of model, input of traffic volumes and trip origin and destinations
- Phase I: Future scenario testing and major infrastructure
- Phase II: Refinement of preferred concept network and scenario testing

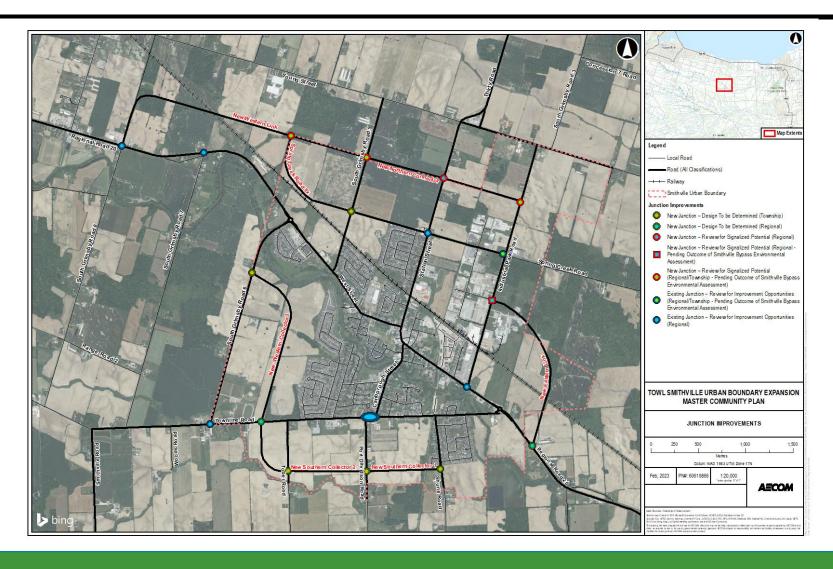








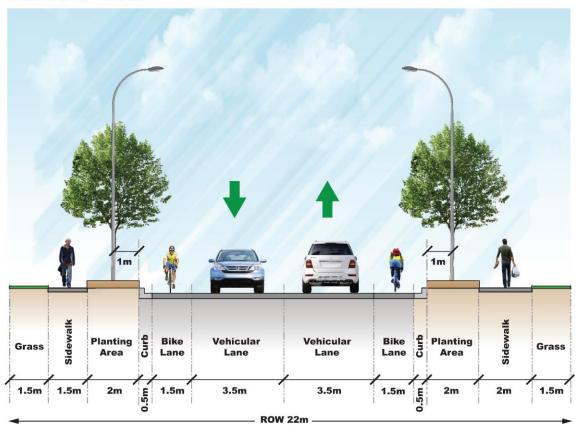






STREETSCAPE DESIGNS

Collector Road



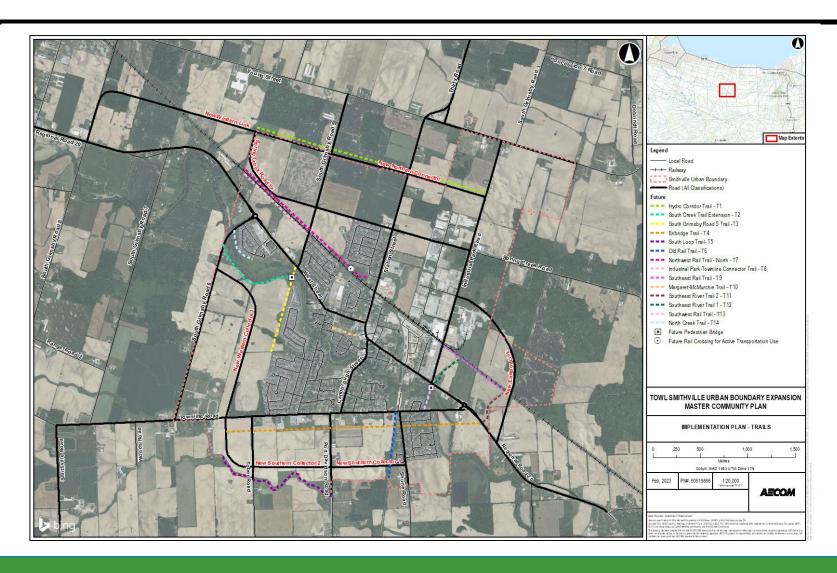


OTHER MEASURES:

In addition to road infrastructure, other recommendations include:

- Providing infrastructure and policies to support the uptake of active transportation modes
- Develop programs and engagement to promote Vision Zero
- Include measures to support the economic viability and place-making for the downtown core
- Provide public mobility options for residents that offer connections to other urban locations







-PHASING AND COST ESTIMATES

Estimates Capital Costs for Recommendations (Niagara Region Projects)

Phasing Timeframe	Roads & On-Street Cycling Facilities	Non-Infrastructure Measures	
Within the next 10 years	\$74.2M - \$87.7	\$40,000	
10 – 20 years	\$14.3M	\$40,000	
Greater than 20 years	\$5.4M	\$40,000	
Total	\$93.9M - \$107.4M	\$120,000	

Estimated Capital Costs for Recommendations (Township Projects)

Phasing Timeframe	Roads & On-Street Cycling Facilities	Trails	Non-Infrastructure Measures	
Within the next 10 years	\$79.8M - \$105.3M	\$8.875M - \$11.175M	\$320,000 - \$465,000	
10 – 20 years	\$45.5M - \$49M	\$8.775M - \$10.575M	\$245,000 - \$265,000	
Greater than 20 years	\$27.2M - \$48.7M	\$4M - \$5.3M	\$245,000 - \$265,000	
Total	\$152.5M - \$203M	\$21.65M - \$27.05M	\$810,000 - \$995,000	



POSSIBLE FUNDING MECHANISMS

- Direct Developer costs (e.g., trails, intersection improvements)
- Developer front end or cost sharing agreements
- Niagara Region development charges
- Township development charges
- Tax Base
- Potential provincial subsidies/grants and Regional Programs



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W WW MP Overview



WATER AND WASTEWATER ASSESSMENTS:

The primary goals of the assessments completed were to:

- Determine the impacts on the water and wastewater systems due to growth
- Review system upgrades to provide sustainable services
- Develop servicing options
- Identify prefer alternatives via integrated EA process
- Use of hydraulic models to replicates system conditions



WATER AND WASTEWATER ASSESSMENTS BASIS

The assessment criteria was created using:

- Region of Niagara future infrastructures as per DC Study
- Block plan process proposed under OPA 63
- Urban boundary expansion concept
- Considered the following:
 - Transportation MP,
 - Subwatershed Study,
 - WWTP PPCP Study

- RON Water and Wastewater MP
- Official Plan, etc.



WATER AND WASTEWATER SYSTEM ASSESSMENTS:

The assessments completed involved:

- Treatment capacity review
- Storage capacity review (Water only)
- Pumping capacity review
- Conveyance system capacity review

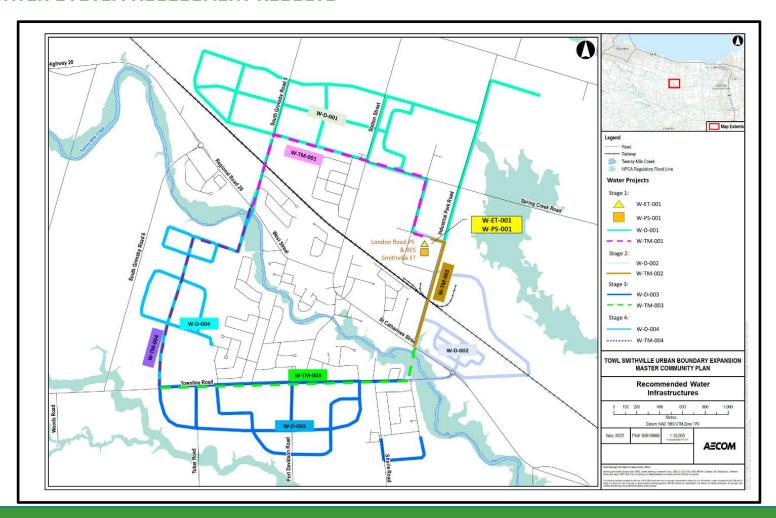


WATER SYSTEM ASSESSMENT RESULTS

- Confirmed the requirement of new storage facility as per RON DC study
- Require additional pump capacity at London Road pumping station to address fire flow requirement
- Confirmed the need of RON Ring System Concept



WATER SYSTEM ASSESSMENT RESULTS



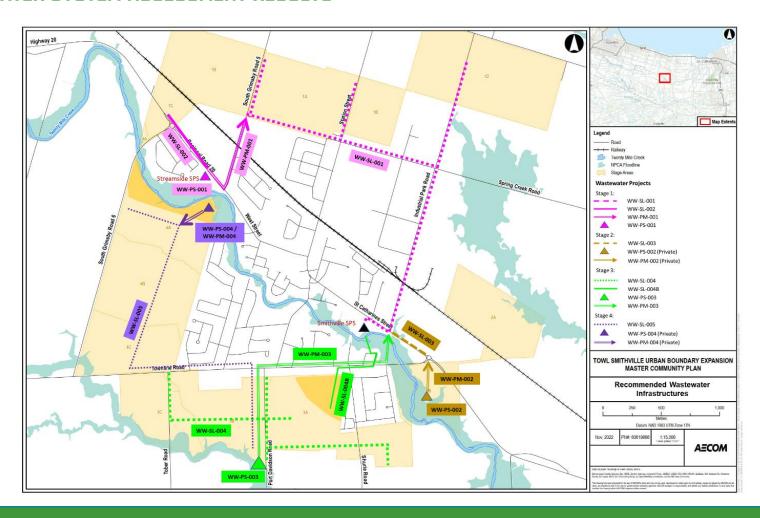


WASTEWATER SYSTEM ASSESSMENT RESULTS

- Confirmed the requirement of Streamside and Smithville Sewer Pumping Stations upgrades as per RON DC study
- Identified the additional pumping facility and conveyance system requirement to accommodate the urban boundary expansion growth



WASTEWATER SYSTEM ASSESSMENT RESULTS





The Water and Wastewater Master Plan report including water and wastewater project listing was finalized, to support future development charges studies for Township and Niagara Region.



PROJECT LISTING TABLE EXAMPLE

Capital Project ID	Stage	Descriptions	Size	Costs (2022\$)	Class EA Project Schedule	Anticipated Schedule
W-D-001	1	Local distribution mains for Stage 1	300mm	\$13,579,650	А	Next 10 years
W-D-002	2	Local distribution mains for Stage 2	300mm	\$5,308,538	А	Next 10 years
W-D-003	3	Local distribution mains for Stage 3	300mm	\$7,763,648	А	10 – 20 years
W-D-004	4	Local distribution mains for Stage 4	300mm	\$4,235,490	А	> 20 years



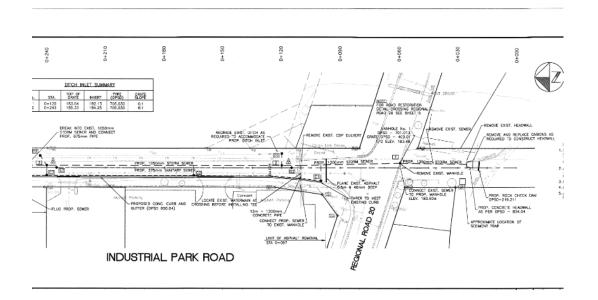
POSSIBLE FUNDING MECHANISMS

- Direct Developer costs (e.g., local watermain and sewer system)
- Developer front end or cost sharing agreements
- User and Connection fees
- Niagara Region development charges
- Township development charges
- Tax Base
- Potential provincial subsidies/grants and Regional Programs



OTHER WORK

 Stage 3 and 4 Twenty Mile Creek watermain crossing existing utilities review to support future preliminary design projects and permanent and temporary easements.







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Integrated EA Overview



INTEGRATION WITH SMITHVILLE MCP AND MCEA

- Municipal infrastructure EA planning was completed in collaboration with the Smithville MCP planning process
- Followed the Municipal Class EA Integrated Planning Act process.
- Defined a list of Transportation and Water and Wastewater infrastructure projects that will be implemented as development is phased
- MCEA documentation includes Water and Wastewater pumping/linear infrastructure and SWMF location figures in context of the preferred development concept



An Integrated Planning Act / Municipal Class EA must fulfill the procedural requirements including completion of MCEA Phases 1 and 2 (Problem / Opportunity, and Alternatives Evaluation).

Phase 1: PIC 2 summarized infrastructure servicing problems based on the preliminary preferred Master Community Concept Plan. Constraints and opportunities were also presented and explored with the TAC through the entire planning process. The final Problem and Opportunity Statement was posted on the PlanSmithville.ca website.

Phase 2: Background studies documented existing conditions including the Subwatershed Study baseline and characterization, agricultural impact assessment, and archaeological / cultural heritage assessments. Alternative solutions were then identified and evaluated for each Municipal infrastructure component (ex. Transportation, Water and Wastewater, and Subwatershed / Stormwater) where applicable.



Transportation

- High level evaluation of Smithville North and South By-pass options (within the study area)
- Quantitative analysis of various off-road trail routes
- Confirmed recommended road cross-sections for road improvements

Water and Wastewater

- Identified and evaluated water and wastewater servicing strategies for each stage of development.
- Sewage pumping station locations were determined based upon study area topography and within MCP park - open space blocks in conjunction with Stormwater Management Facilities

Stormwater Management

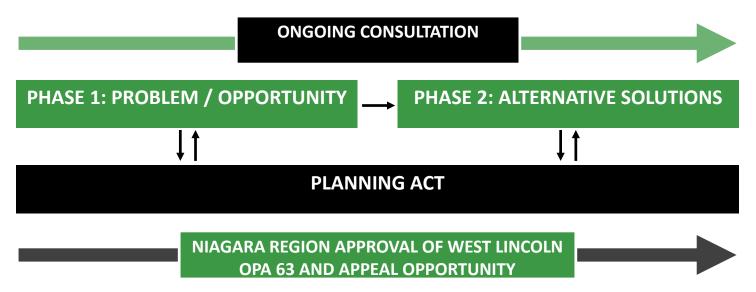
 Identified and evaluated various approaches for managing stormwater (e.g., LID, stormwater management pond)



INTEGRATION WITH THE PLANNING ACT

The Master Plan must address at least the first two phases (i.e., Phase 1 and Phase 2) of the Municipal Class Environmental Assessment process as shown below.

We have integrated this process with the planning act to achieve the following streamlined approach





Integrated approached reduces duplication by simultaneously complying with the Planning Act and MCEA processes including:

- Public Notifications
 - Combine notices, clear statement integrated approach is being used and opportunity to appeal under the Planning Act
 - Notifications sent to all abutting landowners within 120m of the urban boundary expansion study area
 - Mandatory point of consultation under the MCEA and Planning Act



COMMUNICATIONS AND CONSULTATION

- Notice of Commencement and Visioning PIC (January 30, 2020)
 - Provided an overview of the Smithville
 Master Community Plan goals and process,
 included breakout table discussions with
 the public to establish a vision on how the
 Smithville Community should grow



- PIC 1 (February 11, 2021)
 - Documented the various studies including existing conditions and engagement opportunities that will be completed prior to the evaluation of alternative concepts



COMMUNICATIONS AND CONSULTATION

- PlanSmithville.ca virtual engagement platform
 - Available: February 3rd, 2021
 - Designed to share information and received feedback throughout the planning process
 - 3004 users
 - 4651 sessions with majority of users directly accessing the site
 - 12293 page views → 2.64 pages per user









COMMUNICATIONS AND CONSULTATION

- PIC 2 (October 6, 2021)
 - Provided an overview of the Preferred Concept Plan and the results of preliminary impact assessments that were used to develop the Problem and Opportunity statement
- PIC 3 and Presentation to Council (OPA 62) (April 27, 2022)
 - This Public Meeting presented an updated project timeline along with the findings of the impact assessment and recommendations for managing growth including recommended transportation and water and wastewater servicing strategies
- Presentation to Council (OPA 63) (June 27, 2022)
 - This Public Meeting focused on policy and mapping for the development of the new urban lands



Following the completion of the Infrastructure Master Plan Studies, an Integrated Planning Act, and MCEA Report was prepared to:

- Present a summary of how the Master Community Plan,
 Planning Act, and Municipal Class EA were integrated so that
 land use planning and Municipal servicing infrastructure
 decisions were made at the same time.
- Fulfills MCEA Phases 1 and 2
- Overview of the implementation plan including property requirements, impacts, and mitigation
- Streamlines the approvals and appeals process under the Environmental Assessment Act and the Planning Act

Notice of MCEA Completion coordinated with Niagara Region's Notice of OPA 63 approval (opportunity to appeal under the Planning Act)



Subject to no appeals to Niagara Region approval of West Lincoln OPA 62 and 63 or the resolution of appeals, identified MCEA Schedule B projects (e.g., sewage pumping station location) are automatically approved and can proceed to implementation when required.





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Next Steps



Next Steps

- Make Integrated Planning Act and MCEA available for public review
- Issue MCEA Notice of Completion in conjunction with Niagara Region's approval of OPA 62 and 63
- Subject to no appeals, or resolution of appeals, issue a final notice documenting approval and opportunity to adjust servicing through future Block Plan and MESP process including MECA addendum if required



Discussion

West Lincoln Your Future Naturally

Thank you!

Presentation to Council

March 27, 2023

