

Project File Report

Hagersville Master Servicing Plan



Project File Report
Hagersville Master Servicing Plan

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Haldimand County Land Acknowledgement Statement

We humbly acknowledge that Haldimand County sits on the ancestral land of many generations of Indigenous nations, who have been here since time immemorial.

Today, this land continues to be home to many Indigenous peoples, including the Six Nations of the Grand River and the Mississaugas of the Credit First Nation, as well as non-Indigenous settlers from a variety of backgrounds. As a community, we have a shared responsibility for stewardship of the land on which we live and work. We are grateful for the opportunity to work together and to share the land we all call home.

Acknowledging reminds us that our living conditions are directly related to the abundant resources of the Indigenous peoples. We commit to continue learning, reflecting on our past, and working in allyship with Indigenous communities, toward respective community goals and objectives, in peace, respect, and friendship.

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Hagersville Master Servicing Plan

1.0 Introduction

1.1 Project Overview

Haldimand County (the County) completes Master Servicing Plans (MSPs) updates for water, wastewater, stormwater, and transportation servicing for five different communities/service areas within the County: Caledonia, Hagersville, Jarvis, Cayuga, and Dunnville. Each of these MSPs are updated approximately every five to ten years. The purpose of these updates is to identify existing servicing conditions and future servicing needs for the four servicing components (water, wastewater, stormwater, and transportation) of the MSP.

The County has retained J.L. Richards & Associates Limited (JLR) and CIMA+ (previously C3 Water Inc.) to prepare an MSP Update for Hagersville that fulfills the Phase 1 and Phase 2 requirements of a Municipal Class Environmental Assessment (MCEA). Previously, in 2009, the Hagersville MSP for Water, Wastewater, Stormwater, and Transportation was completed by Stantec Consulting Ltd. (Stantec).

1.1.1 Objectives of the Master Servicing Plan

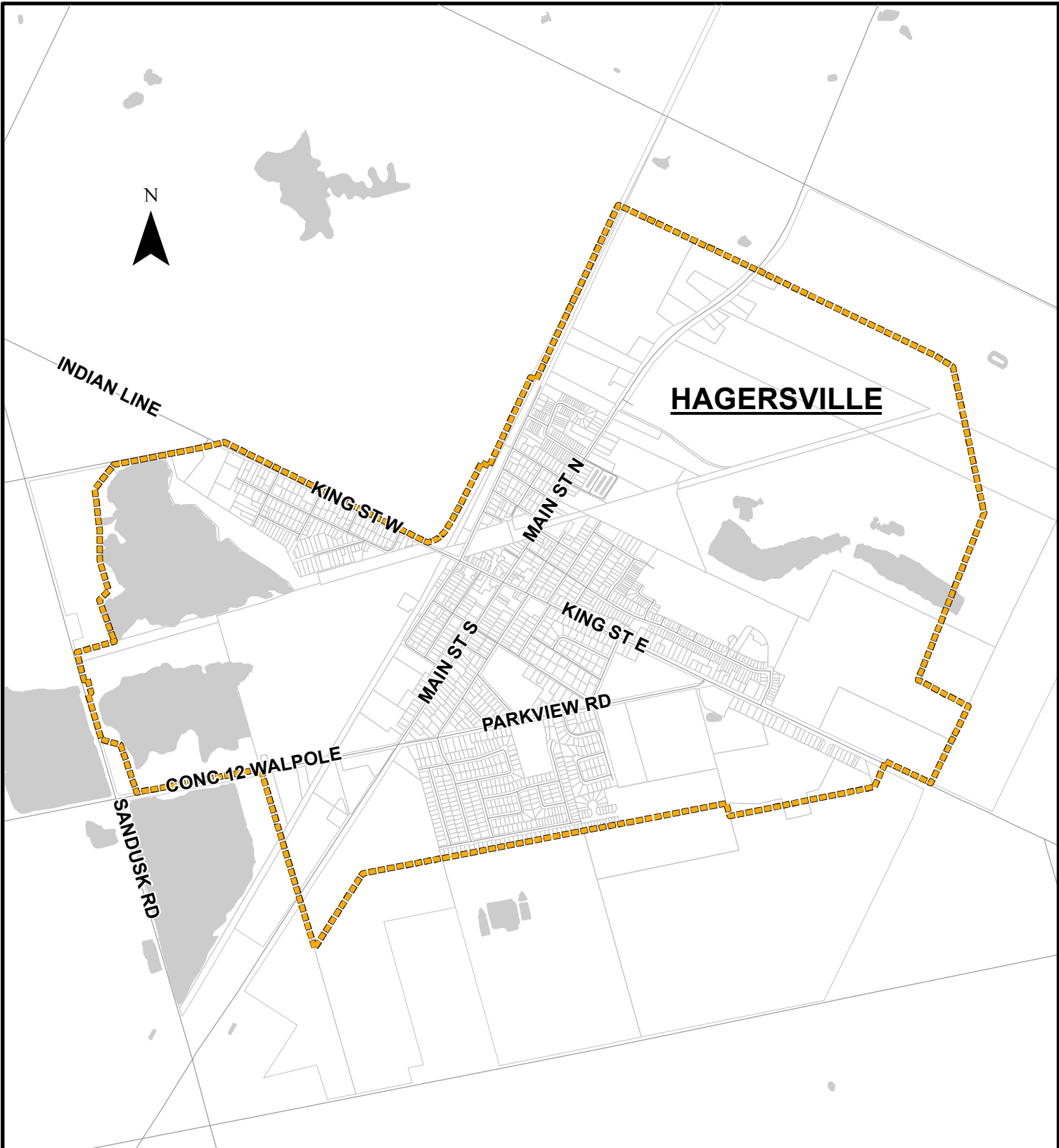
This Project File Report summarizes the findings of the 2023 MSP Update. The purpose of the MSP is to identify the individual water, wastewater, stormwater, and transportation infrastructure improvements based on future servicing requirements, and develop an implementation plan for these upgrades. This work has been carried under four separate work packages:

- Work Package 1: Water Servicing
- Work Package 2: Wastewater Servicing
- Work Package 3: Stormwater Servicing
- Work Package 4: Transportation Servicing

This Project File Report summarizes the findings of each work package in Section 5. Work packages have been appended to the Project File Report (refer to Appendices B through E). The Profile File Report also summarizes all planning and policy considerations, population and employment growth forecasts, environmental and land use considerations, and stakeholder and rightsholder consultation activities that have informed the findings of this MSP.

1.1.2 Study Area Overview

The community of Hagersville is located within the western part of the County at the crossroads of Highway 6 and County Road 20 (King Street). The community has a population of approximately 3,000 residents based on the 2021 census (Statistics Canada, 2021) and new development is predominantly residential. Figure 1 illustrates the study area boundary, which encompasses the urban boundary of Hagersville. Municipal infrastructure in Hagersville includes a municipal water and wastewater system, stormwater infrastructure, and a transportation network.



PROJECT: **HAGERSVILLE MASTER SERVICING PLAN**
HAGERSVILLE, ONTARIO

DRAWING: **STUDY AREA**



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FIGURE 1

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Hagersville Master Servicing Plan

1.1.3 Previous Related Studies

2009 MSP (Stantec)

In 2009, the MSP for Hagersville was prepared (Stantec, 2009) to help guide the development of water, wastewater, stormwater, and transportation services. For this study, estimates of population and household growth up to 2026 were considered. The study recommendations generally included the following infrastructure upgrades:

- **Water Servicing:** a new 5,500 m³ storage tank to replace the existing standpipe and feedermain upgrades from the Hagersville Booster Pumping Station (BPS).
- **Wastewater Servicing:** general pumping station upgrades, sanitary main and forcemain upgrades, sewer rehabilitation, and upgrades to the Water Pollution Control Plant (WPCP).
- **Stormwater Servicing:** seven (7) new stormwater management facilities and storm sewer improvement works.
- **Transportation Servicing:** three (3) new two-lane collector road-ways with traffic calming features and a new traffic circle.

2021 Water and Wastewater Model Updates

In preparation for the Hagersville MSP update, the County retained JLR in association with C3 Water to carry out an update of the existing water and wastewater models for the Hagersville community to existing (2021) conditions. The objective of the model update was to assess the performance of the water and sanitary systems under the current conditions, both from an infrastructure and demand/flow perspective. Additional details on the 2021 Water and Wastewater Model Updates are included in Appendix B (Work Package 1 – Water Servicing) and Appendix C (Work Package 2 – Wastewater Servicing).

1.2 Class Environmental Assessment and Master Planning Process

The Ontario Environmental Assessment Act (Act) sets out a planning and decision-making process to consider potential environmental effects before a project begins. The purpose of the Act is to provide for the protection and conservation of the natural environment (R.S.O. 1990, c.E.18, s.2).

The MCEA process is followed for common types of projects to streamline the review process while ensuring that the project meets the requirements of the Act. In 1987, the first MCEA document prepared by the Municipal Engineers Association (MEA) on behalf of Ontario Municipalities was approved under the Act. Updates and amendments were subsequently made in 1993, 2000, 2007, 2011, 2015, and 2023.

The MCEA process includes the following stages:

- Phase 1: Problem and/or opportunity identification.
- Phase 2: Identification and evaluation of alternative solutions.
- Phase 3: Identification and evaluation of design concepts.
- Phase 4: Complete and place Environmental Study Report on public record.
- Phase 5: Implementation and monitoring.

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A Master Plan is conducted under the framework of the MEA MCEA process. It is a planning tool that identifies infrastructure requirements for existing and future land use through the application of environmental assessment principles and is intended to satisfy Phases 1 and 2 of the MCEA process.

Various approaches can be used to conduct Master Plans, given their broad scope. This Master Plan is being completed with sufficient detail to fulfill the requirements for Schedule 'B' projects (Approach 2). Projects categorized as Schedule B undertakings have the potential for significant environmental impacts and are required to follow specific phases under the MCEA. This includes consultation with all parties that may potentially be affected by the project and the preparation of a MCEA Project File Report that documents the MCEA process.

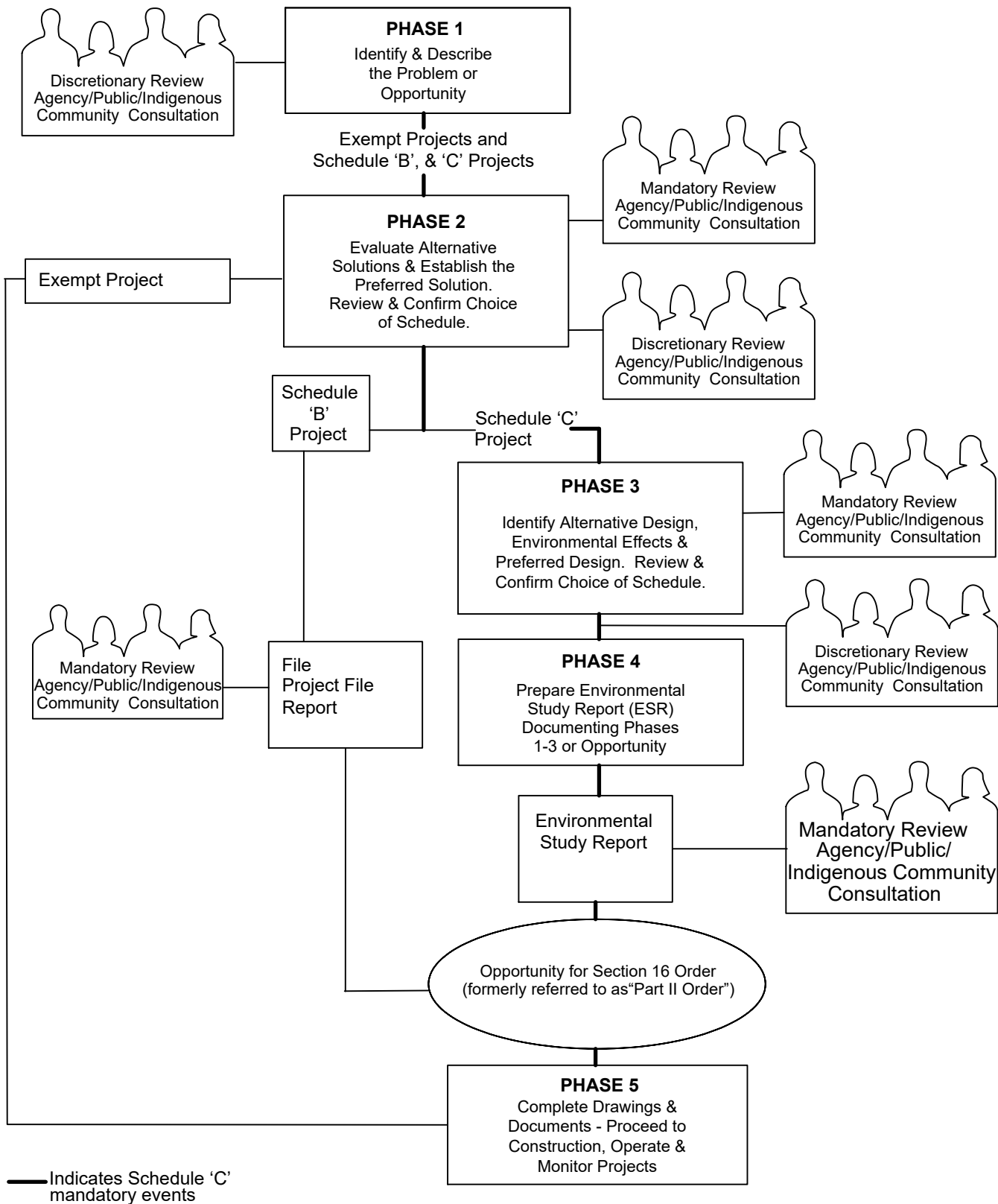
For this Master Plan, a Project File Report will be made available for public, agency, and Indigenous community review at the completion of the MCEA process for a mandatory 30-day period. This period is followed by a 30-day waiting period to allow the Ministry of the Environment, Conservation and Parks (MECP) to request or notify proponents of a 'Section 16 Order' (formerly known as a 'Part II Order'). Following the 30-day waiting period, if there are no requests received from the MECP for a 'Section 16 Order', then proposed Schedule 'B' projects and projects exempt from Environmental Assessment Act (EAA) requirements can proceed to implementation (Phase 5). At this point, any Schedule 'C' projects would be identified for further study. The MCEA process is documented in Figure 2 (page 6).

2.0 Problem and Opportunity Statement

To support existing and planned growth in Hagersville identified in the County's Official Plan, Haldimand County is undertaking an engineering study to update the 2009 Master Servicing Plan for Hagersville. The purpose of the Master Servicing Plan Update is to evaluate Hagersville's long-term water, wastewater, stormwater, and transportation infrastructure needs and identified preferred infrastructure solutions to be implemented to match the growth in Hagersville during the Master Plan planning horizon.

Through consultation with participating stakeholders and rightsholders, including residents, government review agencies, developers, and Indigenous communities, the MCEA framework will enable the consideration of options and identify preferred infrastructure solutions that are environmentally, socially, and financially responsible and sustainable.

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HAGERSVILLE, ONTARIO

DRAWING: **CLASS ENVIRONMENTAL ASSESSMENT PROCESS**



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3.0 Planning and Growth

3.1 Planning and Policy Considerations

3.1.1 Provincial Policy Statement

The 2020 Provincial Policy Statement (PPS) provides general policy guidance on matters of provincial interest related to land use planning and development (Government of Ontario, 2020). The 2020 PPS also provides policy direction for appropriate development while protecting resources of provincial interest, public health and safety, and the quality of the natural environment.

All local planning matters must be consistent with the 2020 PPS, which is issued under Section 3 of the Planning Act. Policies related to infrastructure, servicing (sewer and water), climate change, natural heritage wetlands and water, and Indigenous interests may have implications at the MCEA level. Alternatives in this MCEA have been assessed based on conformance with the 2020 PPS.

3.1.2 Growth Plan for the Greater Golden Horseshoe

The study area is not subject to the Oak Ridges Moraine Conservation Plan, Niagara Escarpment Plan, Greenbelt Plan, and Lake Simcoe Protection Plan.

The study area is subject to the Growth Plan for the Greater Golden Horseshoe. The Plan came into effect on May 16, 2019 and was amended on August 28, 2020. All decisions in respect of the exercise of any authority that affects a planning matter will conform with this Plan, subject to any legislative or regulatory provisions providing otherwise.

3.1.3 Haldimand County Official Plan

The Official Plan for Haldimand County has its basis in the Planning Act, the Provincial Policy Statement, and the Growth Plan for the Greater Golden Horseshoe. The Haldimand County Official Plan was adopted in 2006 and the most recent amendments were approved by the Ministry of Municipal Affairs and Housing in 2021 (Phase 1 Official Plan Update). The Phase 1 Official Plan Update has been developed to guide growth and development to 2046.

The Official Plan permits municipal services and utilities in all land use designations in the County, subject to certain conditions. Section 5.E.1 of the Official Plan states:

5.E.1. Utilities and services necessary for the provision of municipal water and sanitary sewage, storm services, public roads, railway lines, hydro, gas, and facilities for the detention, retention, or discharge of storm water are permitted in all land use designations provided that such development satisfies the provisions of the Environmental Assessment Act, the Environmental Protection Act, and any other relevant legislations except where any of these facilities would promote a development pattern that is contrary to the Official Plan.

The County is currently undergoing a second update (Phase 2 Official Plan Update), which will include general official plan updates, including policy amendments for natural heritage systems, community building, health and social services, and agriculture, commercial, industrial, lakeshore, and hamlet areas. Haldimand County adopted the Phase 2 Official Plan Update on August 29,

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2022 through the Official Plan Amendment 69 (By-law 1320-HC/22). Official Plan Amendment 69 is now before the Ministry of Municipal Affairs and Housing for a decision.

3.1.4 Land Use and Existing Development

Existing land use in Hagersville consists of residential, institutional, commercial, and industrial uses. Figure 3 shows the current zoning mapping in Hagersville established in the Haldimand County Official Plan.

As part of the 2021 existing conditions model updates for Hagersville, the existing residential and equivalent industrial, commercial, and institutional (ICI) population was determined. Since the completion of the model updates, several recent developments have been constructed and occupied. Table 1 summarizes the newly constructed developments in Hagersville since the completion of the existing conditions model updates based on information provided by the County in March 2023. The newly constructed developments are also shown in Figure 4.

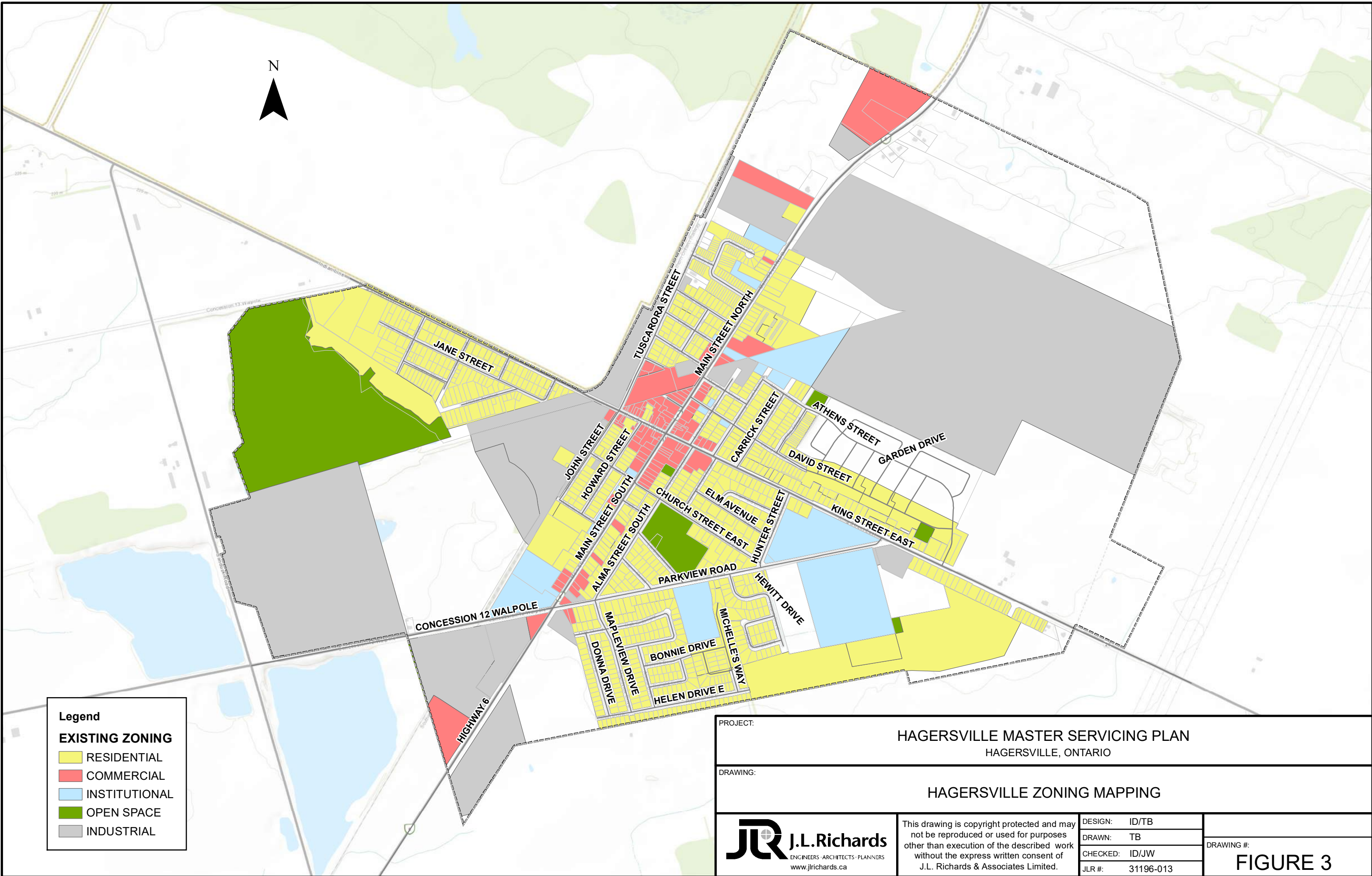
Table 1. Newly Constructed Developments in Hagersville

Development	Total Existing Units 2023	Total Area (ha) 2023
Haldimand Gardens – Phase 2	160	7.62
The Jackson	77	0.91
Walpole Square	32	3.26
Existing Urban Business Park ⁽¹⁾	70	5.51
Total	339	17.30
Table Notes: (1) Approximately 1/3 of this urban business park has not been constructed. This undeveloped portion of the business park has been incorporated into the future growth projections for Hagersville.		

Table 2 summarizes the existing residential and employment population in Hagersville, including the newly constructed developments. Equivalent units were converted into equivalent population based on the average persons per unit of 2.60 from the Haldimand County Revised Growth Analysis to 2051 report by Watson & Associates (2020).

Table 2. Hagersville Existing Residential and Employment Population

Land Use	Equivalent Units	Equivalent Population
Residential	1,606	4,175
Industrial	997	2,591
Commercial	131	340
Institutional	430	1,119
Total	3,164	8,225

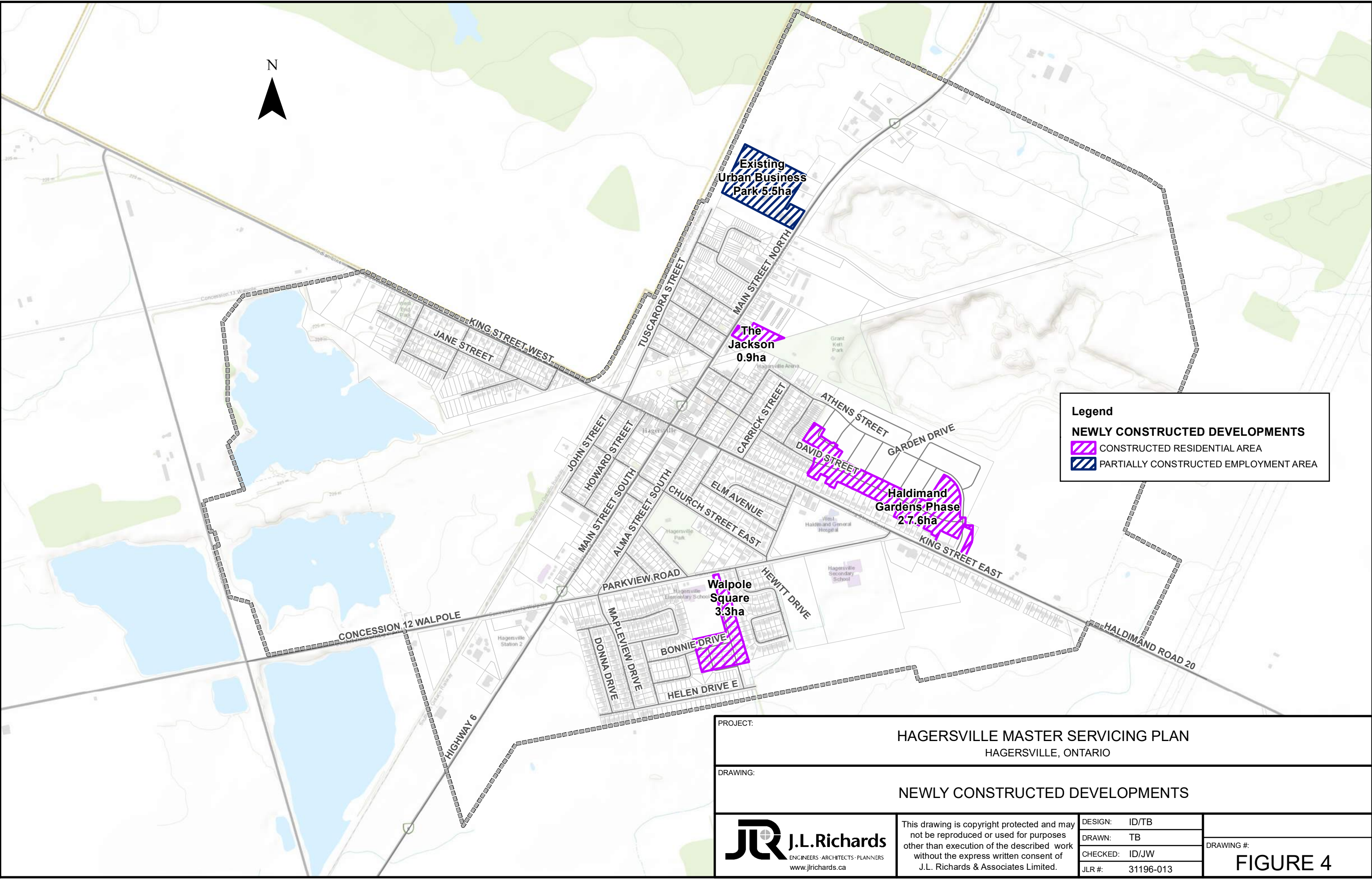


Legend

EXISTING ZONING

 RESIDENTIAL
 COMMERCIAL
 INSTITUTIONAL
 OPEN SPACE
 INDUSTRIAL

PROJECT:	HAGERSVILLE MASTER SERVICING PLAN HAGERSVILLE, ONTARIO	
DRAWING:	HAGERSVILLE ZONING MAPPING	
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PROJECT:	HAGERSVILLE MASTER SERVICING PLAN HAGERSVILLE, ONTARIO		
DRAWING:	NEWLY CONSTRUCTED DEVELOPMENTS		
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3.2 Population and Employment Growth Forecast

3.2.1 Residential Growth Projections

A future household forecast to 2051 was provided in the Haldimand County Revised Growth Analysis to 2051 (Watson, 2020). The population projections for 2016, 2041, and 2051 are summarized in Table 3.

Table 3. Hagersville Existing and Future Residential Population (Watson, 2020)

Year(s)	Population	Units
2016 ⁽¹⁾	3,100	1,150
2041 ⁽¹⁾	6,700	2,460
2051 ⁽¹⁾	8,200	3,110
Residential Growth 2016 - 2051	5,100	1,960
Table Notes: (1) Source: Watson & Associates Economists Ltd., Haldimand County Revised Growth Analysis to 2051.		

In March 2023, the County provided a breakdown of residential unit growth based on approved and planned residential developments over the County's future planning horizon. These growth projections were revised in October 2023 to include growth for a proposed development at Part of Lot 45 Registered Plan 905 (Main/Tuscarora Development). This development has not yet received any development applications, however a zoning application was received and deemed complete in September 2023. Table 4 summarizes the growth projections for future residential areas provided by the County.

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Table 4. Hagersville Residential Growth Projections by Subdivision (Haldimand County, 2023)

Development	Units 2023 - 2033	Units 2033 - 2048	Units Beyond 2048	Total Future Units	Total Area (ha)
Crystal Lake	35	0	0	35	6.65
Eastway	0	156	0	156	11.01
Livingston	0	0	377	377	14.37
Main/Tuscarora	267	0	0	267	2.18
Sandusk	275	475	380	1,130	77.73
Smith Farms – Phase 1	450	0	0	450	40.85
Smith Farms – Phase 2	0	0	335	335	
Woodland Country Estates – Phase 1	21	0	0	21	2.11
Woodland Country Estates – Phase 2	85	0	0	85	6.90
Total	1,133	631	1,092	2,856	173.59

The County projections for residential growth extend beyond the 2051 household forecasts in the Haldimand County Revised Growth Analysis to 2051 (Watson, 2020). It was confirmed in consultation with the County that the Master Plan should be based on the County’s residential growth projections, and the Master Plan planning horizon should match that of the County’s planning horizon used in the development of these projections. This planning horizon excludes 25.72 hectares of vacant lands from growth projections in the County.

The distribution of future residential growth used in the MSP is shown in Figure 5.

3.2.2 Employment Growth Projections

A summary of jobs growth projections was provided by Watson in the Haldimand County Revised Growth Analysis to 2051 (Watson, 2020). The total number of jobs in Hagersville, including employment area jobs, community area jobs, and total jobs are summarized in Table 5.

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Table 5. Hagersville Existing and Future Jobs (Watson, 2020)

Year(s)	Employment Area Jobs	Community Area Jobs	Total Jobs
2016	290	1,350	1,640
2041	1,628	542	2,170
2051	580	2,220	2,800
Job Growth 2016 – 2051	290	870	1,160

In June 2023, the County provided a breakdown of the land available for employment area over the Master Plan planning horizon. The number of future jobs was then calculated based on an employment area density of 15 jobs per gross hectare. Table 6 summarizes the employment growth projections provided by the County.

Table 6. Hagersville Future Jobs (Haldimand County, 2023)

Development	Total Area (ha)	Percent Developed	Existing Jobs 2023	Future Jobs 2023 - 2033	Future Jobs 2033 - 2048	Future Jobs Beyond 2048	Total Future Jobs
Existing Urban Business Park	5.51	67%	56 ⁽¹⁾	0	0	27	27
Vacant Urban Business Park	20.89	0%	0	0	0	313	313
Main/Tuscarora Development	0.04	0%	0	1	0	0	1
Total	26.44	-	56	1	0	340	341
Table Notes:							
(1) This existing growth has been incorporated into the existing equivalent population.							

The County assumed lower amounts of employment growth compared to the job projections in the Haldimand County Revised Growth Analysis to 2051 (Watson, 2020). It was confirmed in consultation with the County that the MSP should be based on the County's employment growth projections over the Master Plan planning horizon. This planning horizon excludes 25.72 hectares of vacant lands from growth projections in the County.

The distribution of future employment growth used in the MSP is shown in Figure 5.

3.2.3 Equivalent Population

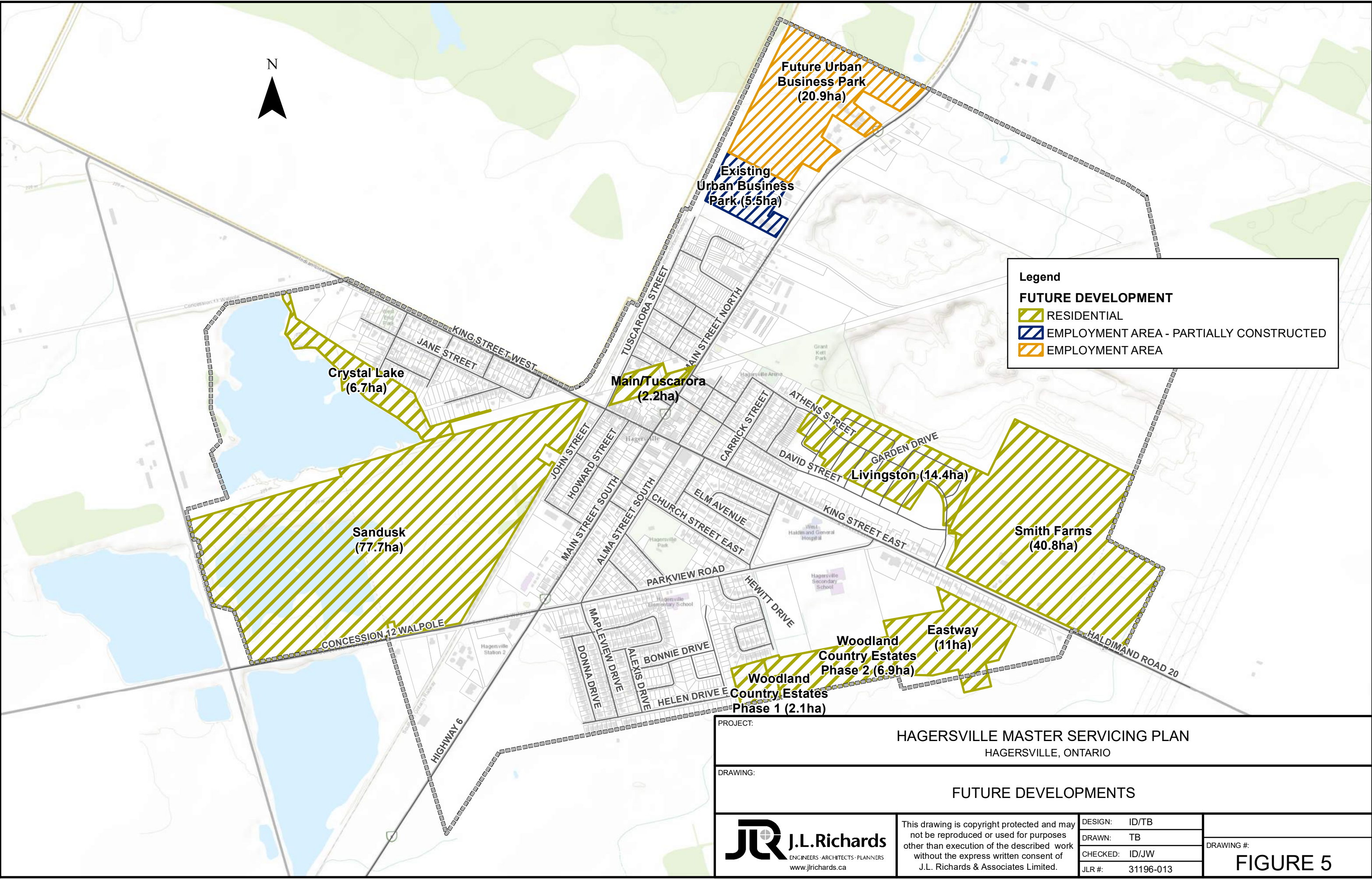
Equivalent residential population was calculated by converting residential units to persons using a household density of 2.6 persons per unit (Watson, 2020). Future employment area, community area, and institutional equivalent population was based on design criteria presented in Work

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Package 2: Wastewater Servicing. A summary of existing and future equivalent population is provided in Table 7.

Table 7. Equivalent Population


Year(s)	Total Equivalent Units	Total Equivalent Population
Existing (2023)	3,164	8,225
Future		
2023 – 2033 (10-Year)	1,134	2,948
2033 – 2048 (25-Year)	631	1,641
Beyond 2048 (Beyond 25-Year)	1,524	3,963
Total Future	3,289	8,552
Total (Existing + Future Growth)	6,453	16,777



Legend

FUTURE DEVELOPMENT

- RESIDENTIAL
- EMPLOYMENT AREA - PARTIALLY CONSTRUCTED
- EMPLOYMENT AREA

PROJECT: HAGERSVILLE MASTER SERVICING PLAN HAGERSVILLE, ONTARIO			
DRAWING: FUTURE DEVELOPMENTS			
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4.0 Environmental and Land Use Considerations

4.1 Natural Environment

4.1.1 Vegetation Communities and Significant Wildlife Habitat

An Ecological Land Classification (ELC) survey was completed as part of the 2009 Hagersville MSP. This survey identified three woodlots and two pine plantations within the urban boundary which are potential constraints to development. The urban boundary also contains Class 3 and 4 agricultural soils. These soils have a restricted range of crops that can be cultivated, and/or require special conservation practices.

An updated ELC survey was not conducted as part of this MSP update. Changes to the ELC may have occurred since the 2009 MSP. It is recommended that updated ELC surveys are conducted prior to construction for the proposed sites to determine if there are any vegetation communities or significant wildlife habitat that could be impacted by construction. Specifically, updated surveys are recommended for the identified site for the new water reservoir and BPS at the south end of Hagersville and for the identified site for the new or expanded WWTP. Updated ELC surveys for these two project sites should be conducted as part of the recommended Schedule B MCEA for New Reservoir and BPS and Schedule C MCEA for the Hagersville WWTP.

4.1.2 Aquatic Habitat

A fisheries habitat and community inventory survey was completed as part of the 2009 MSP. Three minor watercourses were identified: the headwaters of Stoney Creek, a tributary to Sandusk Creek, and a tributary to Rodger's Creek. At the time of the survey, Stoney Creek and the tributary of Sandusk Creek were dry with no isolated pools. They were classified as intermittent with an unknown thermal regime by the Ministry of Natural Resources (MNR). Rodger's Creek was flowing but no fish were present. It was classified as a warm water community by the MNR. Several former quarry ponds also exist within the urban boundary but they were not included in the 2009 inventory survey as they were privately owned and not identified as fish habitat.

An updated fisheries habitat and community inventory survey was not conducted as part of this MSP update, and changes may have occurred since the 2009 MSP. An updated desktop survey of potential aquatic Species at Risk in the study area was completed and is detailed in Section 4.1.4. Updated aquatic habitat field surveys are recommended to be completed for proposed sites where there is potential for aquatic habitat.

A cursory review of the proposed site for the new water reservoir and BPS was completed using aerial photos of the site and land-use designation and natural environment mapping. This review did not identify potential for aquatic habitat, however a more detailed review should be conducted as part of the recommended Schedule B MCEA for New Reservoir and BPS to determine if updated aquatic habitat surveys are required for this site.

The preferred wastewater treatment works and sites will be identified as part of the proposed Schedule C MCEA for the Hagersville WWTP, therefore the need for updated aquatic habitat surveys will be assessed as part of this subsequent EA.

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4.1.3 Breeding Amphibians and Birds

The original 2009 MSP did not consider breeding amphibians and birds.

The potential for disruption to breeding amphibians and birds is dependent on the preferred alternatives. Details regarding the preferred alternatives for each servicing component are provided in Work Packages 1 through 4 (Appendices B through E). Many preferred projects are recommended along already disturbed infrastructure corridors and roadways. The impacts on breeding amphibians and birds for projects proposed on the sites of future proposed residential and business developments (refer to Section 3.2.1 and 3.2.2 for additional details on proposed developments) were not considered as part of this MSP, as these impacts will be considered as part of the County's planning development processes under the Planning Act.

The impacts of the new water reservoir and BPS on breeding amphibians and birds will be considered as part of the recommended Schedule B MCEA for New Reservoir and BPS. The impacts of the new or expanded WWTP on breeding amphibians and birds must be considered as part of the proposed Schedule C MCEA for the Hagersville WWTP. Additional details regarding this project are provided in Work Package 2: Wastewater Servicing.

Additional details regarding amphibian and bird Species at Risk are provided in section 4.1.4.

4.1.4 Species at Risk and Species of Conservation Concern

The Ontario *Endangered Species Act* was updated in 2007 and is intended to provide tools and direction on how to protect and recover vulnerable species and their habitat. The Committee on the Status of Species at Risk in Ontario (COSSARO) considers which species should be listed as at risk, and provides an annual report to MECP communicating their decisions. The Species at Risk in Ontario (SARA) list is updated approximately annually.

As part of this MSP update, JLR conducted a desktop review of the Natural Heritage Information Centre (NHIC) database. The NHIC database has information on historical observations of occurrences of species at risk and/or areas important to the conservation of the species (e.g., the courtship, nesting, rearing, and feeding areas). From this review, 12 potential Species at Risk were identified within the Hagersville MSP study area:

- Barn Swallow (*Hirundo rustica*)
- Bobolink (*Dolichonyx oryzivorus*)
- Eastern Meadowlark (*Sturnella magna*)
- Eastern Milksnake (*Lampropeltis triangulum*)
- Eastern Wood-pewee (*Contopus virens*)
- Grasshopper Sparrow (*Ammodramus savannarum*)
- Henslow Sparrow (*Ammodramus henslowii*)
- Midland Painted Turtle (*Chrysemys picta*)
- Red-headed Woodpecker (*Melanerpes erythrocephalus*)
- Snapping Turtle (*Chelydra serpentina*)
- Upland Sandpiper (*Bartramia longicauda*)
- Wood Thrush (*Hylocichla mustelina*)

The Department of Fisheries and Oceans (DFO) has prepared mapping on habitat and distribution data for aquatic Species at Risk. A review of this mapping database was conducted as part of this

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MSP updated. Based on this review, there is not currently any aquatic Species at Risk or critical habitat for these species within the Hagersville MSP study area.

The NHIC provides details on occurrences within a 1 km x 1 km grid and cannot be used to determine if there is potential for Species at Risk on specific parcels. In order to identify if there is potential for identified Species at Risk on parcels where project have been recommended, field surveys by a qualified professional are recommended to be completed before construction. Specifically, additional field surveys should be completed for the identified site for the new water reservoir BPS and the new or expanded WWTP. Field surveys for these two project sites should be conducted as part of the recommended Schedule B MCEA for New Reservoir and BPS and Schedule C MCEA for the Hagersville WWTP.

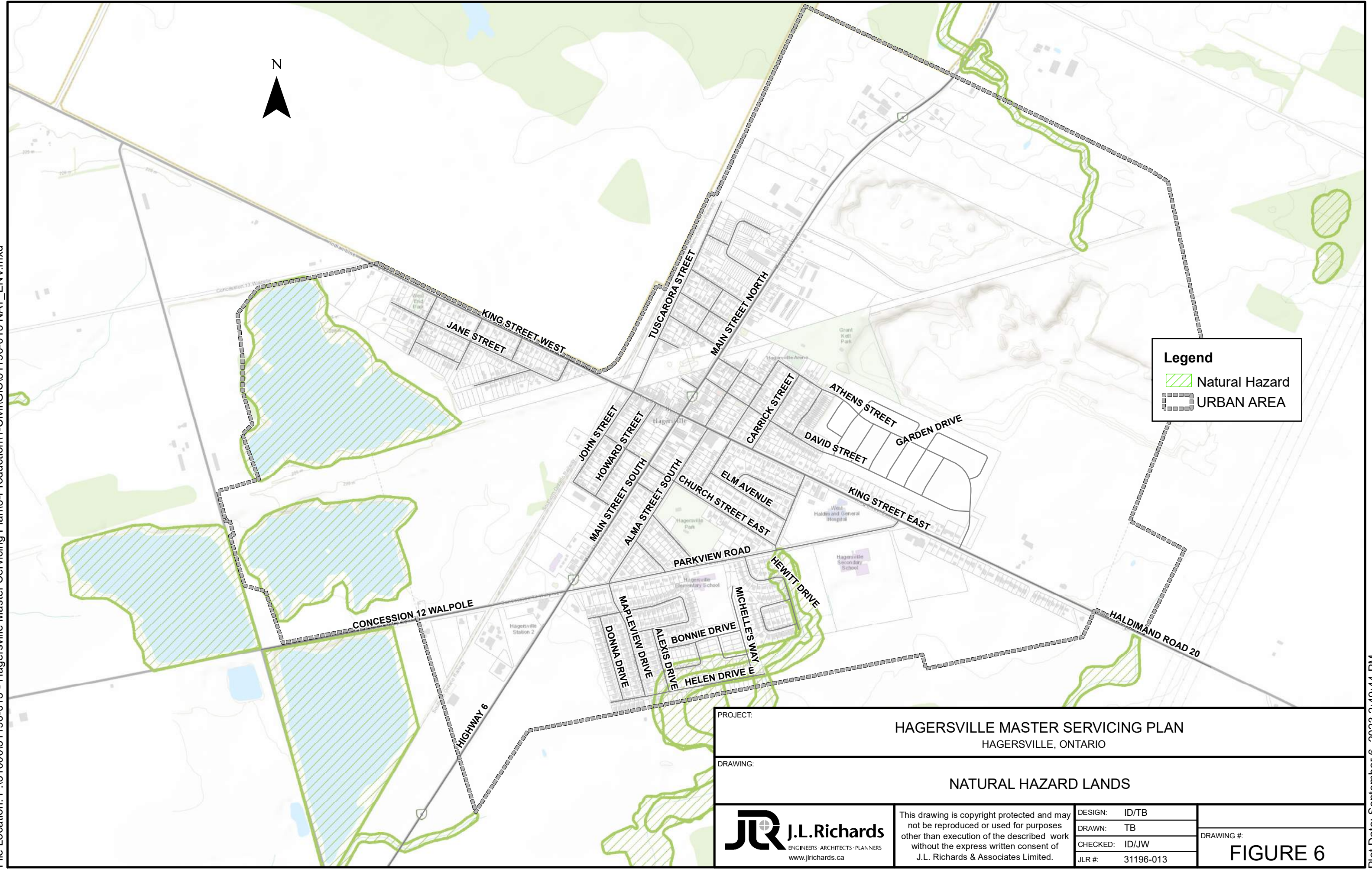
For the new or expanded WWTP, additional field surveys are recommended to be completed as part of the proposed Schedule C Class Environmental Assessment for the Hagersville Wastewater Treatment Plant to determine if there is potential for any of these Species at Risk on the proposed wastewater treatment sites.

4.1.5 Geology and Hydrogeology


No geological or hydrogeological investigations were completed as part of the 2009 MSP. Investigations should be completed before construction on preferred infrastructure projects to verify site specific conditions.

4.1.6 Natural Environment Areas

Figure 6 shows the natural hazard lands in Hagersville, regulated through the Long Point Region Conservation Authority (LPRCA) and the Grand River Conservation Authority (GRCA), which include riverine hazard lands. There are no other natural environment areas within the study area boundary, including no provincially significant wetlands, floodways, flood fringe limits, or other hazard lands.



Legend

-  Natural Hazard
-  URBAN AREA

PROJECT:	HAGERSVILLE MASTER SERVICING PLAN HAGERSVILLE, ONTARIO		
DRAWING:	NATURAL HAZARD LANDS		
 <p>J.L. Richards ENGINEERS · ARCHITECTS · PLANNERS www.jlrichards.ca</p>	This drawing is copyright protected and may not be reproduced or used for purposes other than execution of the described work without the express written consent of J.L. Richards & Associates Limited.		DESIGN: ID/TB
			DRAWN: TB
			CHECKED: ID/JW
			JLR #: 31196-013
			DRAWING #: FIGURE 6

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4.2 Ground and Surface Water

4.2.1 Source Water Protection

Ontario's Clean Water Act provides the mandate for a provincial drinking water source protection program in Ontario. Its focus is on the protection of water sources for municipal drinking water systems, with additional attention to surface water and groundwater sources on the broader landscape.

Hagersville falls within the jurisdiction of both the LPRCA and the GRCA. The LPRCA updated the Long Point Region Source Protection Plan (LPR SPP) in May 2020 and amended it in March 2022. The Long Point Region Assessment Report provides the technical basis for the LPR SPP and was published in May 2020. The GRCA updated the Grand River Source Protection Plan (GR SPP) in February 2022. The Grand River Assessment Report provides the technical basis for the GR SPP and was published in February 2022.

4.2.2 Groundwater

There is one Permit to Take Water (PTTW) in Hagersville in the northeastern part of the study area, on the border of the Big Creek and Lower Grand watersheds. It is used for dewatering by Lafarge Canada Inc.

There are no wellhead protection areas in Hagersville established by the LPRCA or the GRCA.

4.2.3 Surface Water

There are no Intake Protection Zones (IPZ) in Hagersville established by the LPRCA or the GRCA.

4.3 Archaeological Resources

No archaeological studies were completed as part of the 2009 MSP. As part of this MSP Update, the Ministry of Citizenship and Multiculturalism (MCM) was consulted to determine if there are any known archaeological sites within the study area. The MCM confirmed there are 101 reported archaeological sites within the study area and advised that more sites may be found if additional archaeological surveys are undertaken as part of the MSP Update.

The potential for disruption to archaeological resources was not assessed for infrastructure projects proposed on the sites of proposed future residential and business developments (refer to Section 3.2.1 and 3.2.2 for proposed developments), as the development of infrastructure on these sites will follow the County's planning processes under the Planning Act. These projects include sanitary pumping stations, sanitary gravity sewers, water mains, and stormwater management infrastructure proposed for future developments.

For all other proposed projects, the potential for disruption to archaeological features is dependent on the preferred alternatives. For recommended transportation projects, all preferred alternatives are within the existing disturbed roadways therefore will not have an impact on potential archaeological resources.

For water projects, most linear upgrades are recommended within the existing infrastructure corridor and are not anticipated to impact archaeological resources. The MCM's *Criteria for Evaluating Archaeological Potential* and *Criteria for Evaluating Marine Archaeological Potential*

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screening forms were completed for the preferred new water reservoir and BPS location. The screening was conducted by reviewing aerial photos of the identified sites as well as land-use designation, natural environment, and local heritage information of the project areas. Refer to Appendix A for a copy of the screening forms. Based on this screening, there is minimal impact to archaeological resources anticipated, however potential for archaeological resources will be reviewed in further detail during the recommended Schedule B MCEA for New Reservoir and BPS.

Similarly for wastewater, sanitary pipe upgrades are recommended within the existing infrastructure corridor and are therefore not anticipated to impact archaeological resources. For the preferred wastewater treatment project, potential sites for a WWTP expansion or new WWTP have not been identified as part of this MSP. Potential sites and archaeological potential of these sites will be identified as part of the recommended Schedule C MCEA for the Hagersville WWTP. Additional details regarding this project are provided in Work Package 2: Wastewater Servicing.

4.4 Cultural Heritage

No cultural heritage studies were completed as part of the 2009 MSP.

The County maintains a database of designated heritage sites and potential heritage properties within the County. There does not appear to be any designated heritage locations within the Hagersville study area. However, 24 structures or properties in Hagersville have been identified as having potential cultural heritage based on the County's *2023 Potential Heritage Properties List* (Appendix A). No proposed projects have been identified on properties on the County's *2023 Potential Heritage Properties List*.

Similar to archaeological resources, the potential for disruption to cultural heritage features is dependent on the preferred alternatives. The potential for disruption to cultural heritage resources was not assessed for infrastructure projects proposed on the sites of proposed future residential and business developments (refer to Section 3.2.1 and 3.2.2 for additional details), as the development of infrastructure on these sites will follow the County's planning processes under the Planning Act. These projects include sanitary pumping stations, sanitary gravity sewers, water mains, and stormwater management infrastructure proposed for future developments.

For recommended transportation projects, all preferred alternatives are within the existing disturbed roadways therefore will not have an impact on cultural heritage resources or areas with potential cultural heritage.

The MCM's *Criteria for Evaluating Potential for Built Heritage Resources and Cultural Landscapes* screening forms have been completed for identified potential water storage and booster pumping station locations. Screenings were conducted by reviewing aerial photos of the identified sites as well as land-use designation, natural environment, and local heritage information of the project areas. Refer to Appendix A for a copy of the screening forms. Based on this screening, there is minimal impact to cultural heritage resources anticipated, however potential for cultural heritage resources at this site will be reviewed in further detail during the recommended Schedule B MCEA for New Reservoir and BPS.

Similarly for wastewater, sanitary pipe upgrades are recommended within the existing infrastructure corridor and are therefore not anticipated to have impact on cultural heritage. For the preferred wastewater treatment project, potential sites for a WWTP expansion or new WWTP have not been identified as part of this MSP. Potential sites and cultural heritage potential of these

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sites will be identified as part of the recommended Schedule C MCEA for the Hagersville WWTP. Additional details regarding this project are provided in Work Package 2: Wastewater Servicing.

4.5 Climate Change

The original MSP completed in 2009 did not consider the impacts of climate change. The MECP has since published the Considering Climate Change in the Environmental Assessment Process Guide (2017) which sets out the Ministry's expectation for considering climate change in the preparation, execution and documentation of environmental assessment studies and processes.

Climate change mitigation refers to measures implemented to reduce the project's expected production of greenhouse gas (GHG) emissions and impacts on carbon sinks. The project's GHG emissions can be categorized as operating carbon (emitted during the operation phase) or embodied carbon (emitted during the manufacturing and construction phase). Potential ways of reducing both direct and indirect emissions from recommended infrastructure will be identified in subsequent design or MCEA stages. Potential mitigation measures will be considered and incorporated into the evaluation process throughout the recommended Schedule B MCEA for New Water Reservoir and BPS and Schedule C MCEA for the Hagersville WWTP.

Climate change adaptation refers to the resilience or vulnerability of the infrastructure to changing climatic conditions. Impacts on climate change on municipal infrastructure projects include property-specific concerns such as flooding and system-wide impacts on water demand and electricity consumption. Work Package 3: Stormwater Servicing details stormwater management requirements that should be addressed by proposed developments. The design of recommended projects should consider climate change to optimize the resilience of the infrastructure. The recommended Schedule B MCEA for a New Water Reservoir and BPS and the Schedule C MCEA for the Hagersville WWTP will review potential adaptation measures that can be incorporated into the design and construction of the identified infrastructure.

5.0 Summary of Preferred Servicing Alternatives

Four work packages have been prepared in support of this Master Plan update. A number of servicing strategies were developed based on the 2009 MSP as well as the identified existing and future servicing constraints. Required projects and cost estimates were updated for the various servicing projects that were proposed in the 2009 MSP. A summary of the total cost of the proposed upgrades to meet the projected demands of the Master Plan planning horizon is provided in Table 8.

These cost estimates were developed based on past experience on similar projects, professional judgement, and equipment costs provided by suppliers. Design completed as part of this MSP is conceptual in nature for the purpose of obtaining cost estimates. All design parameters should be confirmed through further studies (Schedule C MCEA, where applicable) or detailed design. Any provided estimate of costs is based on historic construction data and does not include labour, material, equipment, manufacturing, supply, transportation, or any other cost impacts in relation to COVID-19. JLR shall not be responsible for any variation in the estimate caused by the foregoing factors, but will notify the Client of any conditions which JLR believes may cause such variation upon delivery of the estimate.

Table 8. Cost Estimate of Preferred Servicing Alternatives

Servicing Component	Cost Estimate⁽¹⁾
Water Servicing	\$22,200,000
Wastewater Servicing	\$11,940,000 – \$61,940,000
Stormwater Servicing	Not Applicable ⁽¹⁾
Transportation Servicing	\$560,000

Table Notes:

- (1) Costs represent construction costs only, unless otherwise noted. Engineering costs have been included in the cost estimate for the New or Expanded Wastewater Treatment Plant (refer to Section 5.2, Work Package 2 for additional details).
- (2) Due to the wide range of site specific constraints and development design solutions to address the CLI ECA requirements, costs are unable to be estimated for stormwater management on a development basis.

The following sections summarize the key findings of each work package.

5.1 Work Package 1: Water Servicing

CIMA+ completed the 2023 Water Servicing Review and Update (Work Package 1). This included a review of future growth conditions, confirmation of water servicing alternatives, selection of the preferred servicing alternative, and the creation of an implementation plan for the preferred water servicing alternative. A summary of the preferred projects and costs is provided in Figure 7 and Table 9.

Refer to Appendix B for the full work package.

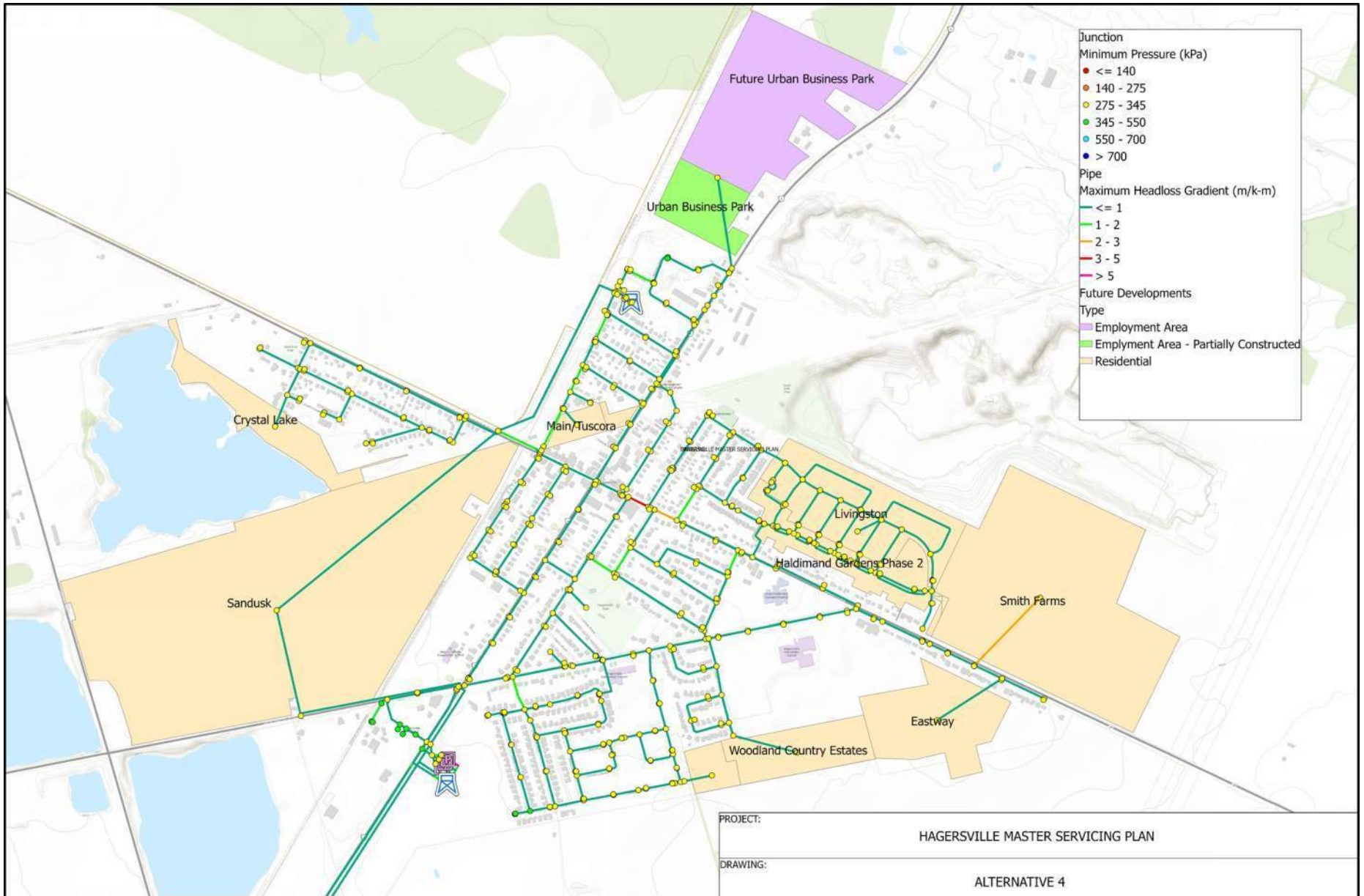


Figure 7. Preferred Water Servicing Alternative

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Hagersville Master Servicing Plan**

Table 9. Cost Estimates and Timing of the Preferred Water Servicing Alternatives

MSP System Component	Description	Local Improvement	Cost Estimate (2023\$) ⁽¹⁾	Funding			Estimated Timing	Trigger	EA Schedule	Funding Rationale
				County	Developer	DC				
WM-1	New 450 mm Transmission watermain (WM) from Rd. 55 to Parkview	No	\$9,500,000	0%	0%	100%	Currently Underway	Approved development anticipated to occur over next 3 years.	Exempt	Trunk infrastructure upgrade
WM-2	New 350 mm WM from Highway 6 (through Sandusk development) to standpipe	Yes	\$3,200,000	0%	100%	0%	Near Term	Sandusk development	Exempt	Existing external servicing upgrade
WM-3	Upsize from 250mm to 300 mm WM Along Parkview Road from Highway 6 to King St East	Yes	\$1,700,000	0%	100%	0%	Near Term	Smith Farms Phase 1	Exempt	Existing external servicing upgrade
WM-4	Upsize from 250mm to 300 mm WM Along King St E from Parkview Road to Smith Farms	Yes	\$600,000	0%	100%	0%	Near Term	Smith Farms Phase 1	Exempt	Existing external servicing upgrade
WM-5	Replace 200 mm Watermain Along King St West from Southern Ontario Railing to Sarah St	N/A	\$600,000	100%	0%	0%	Future Considerations	Fire flow conditions	Exempt	Cast iron watermain replacement
WM-6	Upsize from 150mm to 200 mm Watermain Along Mary Avenue from King St West to Jane St	N/A	\$100,000	100%	0%	0%	Long Term	Fire flow conditions	Exempt	Cast iron watermain replacement
WM-7	Upsize from 150mm to 200 mm Watermain Along Jane St	N/A	\$600,000	100%	0%	0%	Long Term	Fire flow conditions	Exempt	Cast iron watermain replacement
WM-8	Upsize from 150mm to 200 mm Watermain Along Porter Avenue	N/A	\$200,000	100%	0%	0%	Long Term	Fire flow conditions	Exempt	Cast iron watermain replacement
WM-9	Upsize from 150mm to 200 mm Watermain Along Porter St from Jane Street to Quarry St	N/A	\$100,000	100%	0%	0%	Long Term	Fire flow conditions	Exempt	Cast iron watermain replacement
WM-10	Upsize from 150mm to 200 mm Watermain Along Quarry St	N/A	\$100,000	100%	0%	0%	Long Term	Fire flow conditions	Exempt	Cast iron watermain replacement
WM-11	Upsize from 150mm to 200 mm Watermain Along Sarah St	N/A	\$200,000	100%	0%	0%	Long Term	Fire flow conditions	Exempt	Cast iron watermain replacement
Watermains Subtotal			\$13,700,000	(excluding developer led projects)						
W-PS-1a	New in-ground reservoir at the south end of Hagersville	No	\$2,750,000	0%	0%	100%	Long Term	Required to service development beyond 1,150 units	Schedule B or Eligible for Screening (ASP ⁽²⁾)	Water reservoir servicing multiple basis
W-PS-1b	New booster station with added pumping capability at in-ground reservoir	No	\$5,250,000	25%	0%	75%	Long Term	Required to service development beyond 1,150 units	Schedule B or Eligible for Screening (ASP ⁽²⁾)	Water pumping station servicing multiple basins. Replaces existing boosted station.
W-PS-2	Decommission existing booster pumping station	No	\$500,000	100%	0%	0%	Long Term	Asset to be retired once new booster station constructed.	Exempt	Asset retirement costs provisioned for in existing Asset Management Plan.
Reservoir and BPS Subtotal			\$8,500,000							
Total Water Cost			\$22,200,000	(excluding developer led projects)						

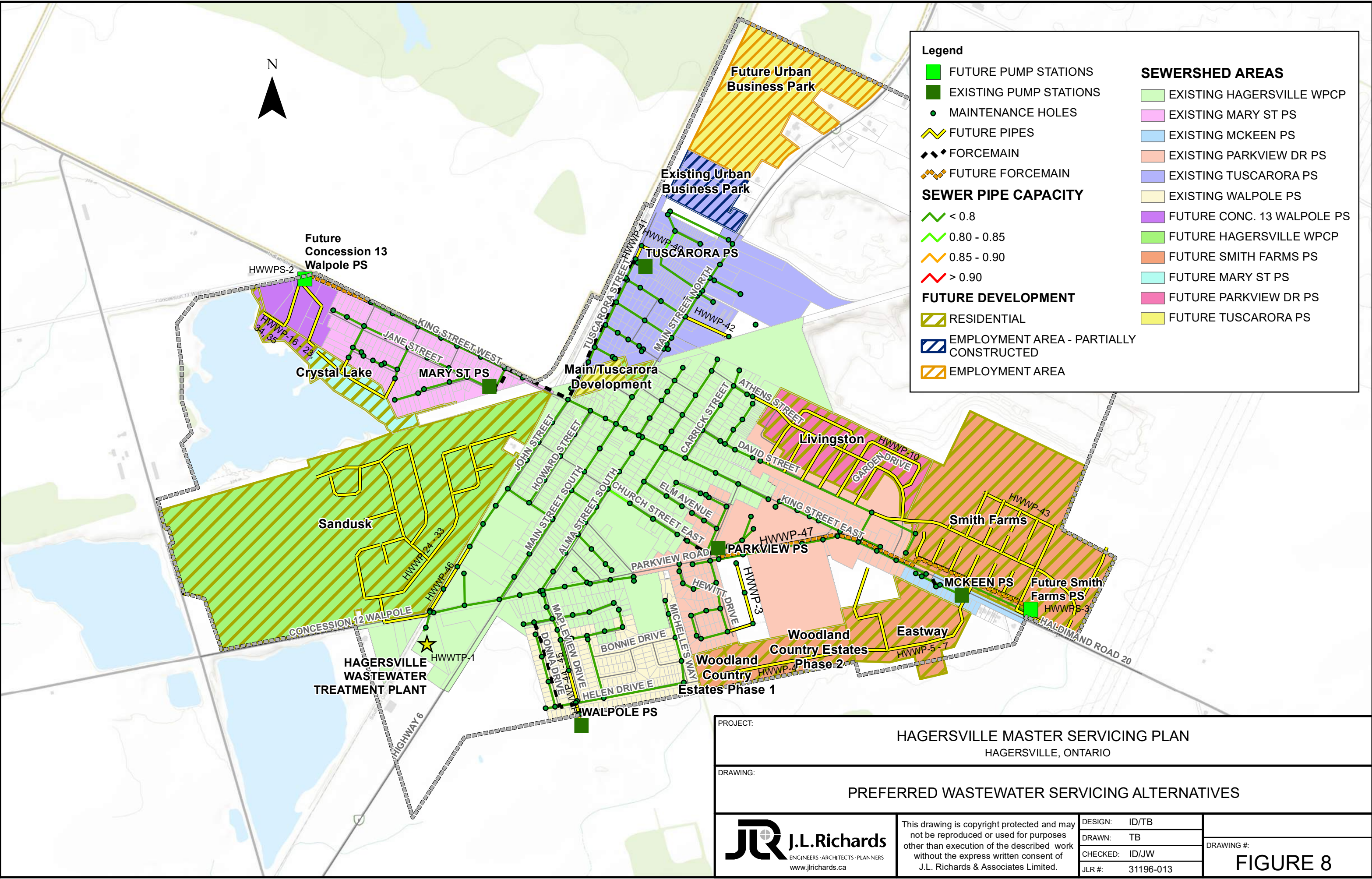
Table Notes:
 (1) Costs represent construction costs only, unless otherwise noted.
 (2) Archaeological Screening Process

5.2 Work Package 2: Wastewater Servicing

JLR completed the 2023 Wastewater Servicing Review and Update (Work Package 2). This included a review of future growth conditions, confirmation of wastewater servicing alternatives, selection of the preferred servicing alternative, and the creation of an implementation plan for the preferred wastewater servicing alternative. A summary of the preferred projects and costs is provided in Figure 8 and Table 10. The total cost of the proposed upgrades to meet the demands in the Master Plan planning horizon ranges between \$11,940,000 and \$61,940,000, depending on the advanced wastewater treatment plant alternative.

Refer to Appendix C for the full work package.

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PROJECT:	HAGERSVILLE MASTER SERVICING PLAN HAGERSVILLE, ONTARIO		
DRAWING:	PREFERRED WASTEWATER SERVICING ALTERNATIVES		
 <p>J.L. Richards ENGINEERS · ARCHITECTS · PLANNERS www.jlrichards.ca</p>	DESIGN:	ID/TB	DRAWING #: FIGURE 8
	DRAWN:	TB	
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	JLR #:	31196-013	

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Table 10. Cost Estimate and Timing of Preferred Wastewater Alternative

MSP System Component ⁽¹⁾	Description	Review Comment	Cost Estimate (2023\$) ⁽²⁾	Funding			Estimated Timing	Trigger	EA Schedule	Funding Rationale
				County	Developer	DC				
Pumping (Pumping Stations) and Forcemains										
HWWPS-1	Proposed PS and Forcemain for the Eastway and Woodland Country Estates developments.	Not required due to alternative solution (HWWPS-3).	Not Required							
HWWPS-2	Future Concession Road 13 Walpole PS and Forcemain	To service the future Crystal Lake residential development. Approximate design flow capacity of 1.5 L/s.	Developer Led Project	0%	100%	0%	Near-term	Crystal Lake	Exempt	New sanitary pump station to service developments in one basin area
HWWPS-3	Future Smith Farms PS and Forcemain	To service the future Smith Farms, Eastway and Woodland Country Estate residential developments. Approximate design flow capacity of 50 L/s.	Developer Led Project	0%	100%	0%	Near-term	Smith Farms Phase 1 or Woodland Country Estates Phase 1 or 2	Exempt	New sanitary pump station to service developments in one basin area
Pumping Stations and Forcemains Subtotal			\$0 (excluding developer led projects)							
Sanitary Mains										
HWWP-1 to HWWP-2	New Pipe Network: Walpole Development (300 mm ø)	Constructed since 2009 MSP using different pipe layout and diameters, no longer required.	Not Required							
HWWP-3	New Pipe: East of Hewitt Drive (300 mm ø)	No change from 2009 MSP.	Developer Led Project	0%	100%	0%	Future Consideration	Growth East of Hewitt Drive	Exempt	New service extension from existing
HWWP-4	New Pipe Network: Woodland Country Estates development (300 mm ø)	No change from 2009 MSP.	Developer Led Project	0%	100%	0%	Near-term	Woodland Country Estates	Exempt	New service extension from existing
HWWP-5 to HWWP-7	New Pipe Network: Eastway development (300 mm ø)	No change from 2009 MSP.	Developer Led Project	0%	100%	0%	Long-term	Eastway	Exempt	New service extension from existing
HWWP-8 to HWWP-9	New Pipe Network: Haldimand Gardens Phase 2 development (300 mm ø)	Constructed since 2009 MSP using different pipe layout and diameters, no longer required.	Not Required							
HWWP-10	New Pipe Network: Livingston development (300 mm ø)	No change from 2009 MSP.	Developer Led Project	0%	100%	0%	Future Consideration	Livingston	Exempt	New service extension from existing
HWWP-11 to HWWP-15	New Pipe Network: Valentini development (300 mm ø)	Constructed since 2009 MSP using different pipe layout and diameters, no longer required.	Not Required							
HWWP-16 to HWWP-23 and HWWP-34 to HWWP-35	New Pipe Network: Crystal Lake development (300 mm ø)	No change from 2009 MSP.	Developer Led Project	0%	100%	0%	Near-term	Crystal Lake	Exempt	New service extension from existing
HWWP-24 to HWWP-33	New Pipe Network: Sandusk development (200 mm, 300 mm and 450 mm ø)	No change from 2009 MSP.	Developer Led Project	0%	100%	0%	Near-term	Sandusk Phase 1	Exempt	New service extension from existing
HWWP-36	New Pipe: Vacant Land on Parkview Road.	Constructed since 2009, no longer required.	Not Required							
HWWP-37	Pipe Upgrade: Replace portion of existing 375 mm sewer on Parkview Road	Not required due to alternative proposed solution (refer to Component HWWP-46)	Not Required							

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Hagersville Master Servicing Plan**

MSP System Component ⁽¹⁾	Description	Review Comment	Cost Estimate (2023\$) ⁽²⁾	Funding			Estimated Timing	Trigger	EA Schedule	Funding Rationale
				County	Developer	DC				
HWWP-39	Pipe Upgrade: Replace a portion of existing 300 mm sewer on Sherring Street N	No capacity issues along Sherring Street N in model, upgrade if there is an operational issue or lifecycle renewals are required.								Not Required
HWWP-40	Pipe Upgrade: Emily Street between MacNeil Crescent and Tuscarora Street (200 mm to 250 mm ø)	Not addressed in 2009 MSP. Required to service Master Plan planning horizon.	\$165,000	10% ⁽³⁾	0% ⁽³⁾	90% ⁽³⁾	Long-term	Future Urban Business Park or observed reduction in conveyance performance	Exempt	Addresses existing system deficiency and upgrade of existing underground service external to development
HWWP-41	Pipe Upgrade: Tuscarora Street at the intersection with Emily Street (200 mm to 250 mm ø)	Not addressed in 2009 MSP. Required to service Master Plan planning horizon.								
HWWP-42	Pipe Upgrade and Slope Revision: Oneida Street (east of Main Street North) (200 mm to 250 mm ø). Pipe slope set to minimum slope required for pipe diameter.	Not addressed in 2009 MSP. Required to service Master Plan planning horizon.	\$260,000	0%	100% ⁽⁴⁾	0%	Future Consideration	Existing Urban Business Park and/or Future Urban Business Park	Exempt	Upgrade existing underground service external to development
HWWP-43	New Pipe Network: Smith Farms development (300 mm and 375 mm ø)	Not addressed in 2009 MSP. Required to service Master Plan planning horizon.	Developer Led Project	0%	100%	0%	Near-term	Smith Farms Phase 1	Exempt	New service extension from existing
HWWP-44	Pipe Upgrade – Slope Revision: Mapleview Drive at the intersection with Helen Drive East	Not addressed in 2009 MSP. Required to service Master Plan planning horizon.	\$295,000	100% ⁽⁵⁾	0% ⁽⁵⁾	0% ⁽⁵⁾	Long-term	Observed reduction in conveyance performance	Exempt	Addresses existing system deficiency
HWWP-45	Pipe Upgrade: Mapleview Drive upstream of Walpole PS wet well (200 mm to 250 mm ø)	Not addressed in 2009 MSP. Required to service Master Plan planning horizon.								
HWWP-46	Pipe Upgrade – Slope Revision: Three (3) 675 mm diameter pipe sections along CN railway corridor upstream of intersection with Concession 12 Walpole. Pipe slope set to minimum slope required for pipe diameter.	Not addressed in 2009 MSP. Required to service Master Plan planning horizon.	\$530,000	0%	0%	100%	Long-term	Impacted by all developments except Sandusk	Exempt	Upgrade existing underground service external to development
HWWP-47	Pipe Upgrade – Slope Revision: One (1) 350 mm diameter pipe section along Parkview Drive adjacent to Hagersville Secondary School property. Pipe slope set to minimum slope required for pipe diameter.	Not addressed in 2009 MSP. Required to service Master Plan planning horizon.	\$290,000	0%	0%	100%	Future Consideration	Livingston	Exempt	Upgrade existing underground service external to development
Sanitary Mains Subtotal			\$1,540,000 (Excluding developer led projects)							

**Project File Report
Hagersville Master Servicing Plan**

MSP System Component ⁽¹⁾	Description	Review Comment	Cost Estimate (2023\$) ⁽²⁾	Funding			Estimated Timing	Trigger	EA Schedule	Funding Rationale
				County	Developer	DC				
Wastewater Treatment Plant										
HWWTP-1	Schedule C Class EA for New or Expanded Wastewater Treatment Plant	Not addressed in 2009 MSP. Required for a new or expanded WWTP.	\$400,000	0%	0%	100%	Near-term	Required to service development beyond 1,506 units ⁽⁷⁾	-	Treatment plant servicing multiple basins
	New or Expanded Wastewater Treatment Plant	Updated from the 2009 MSP to address future treatment flow requirements.	\$10,000,000 - \$60,000,000 ⁽⁶⁾	Varies Based on Alternative Chosen			Long-term	Required to service development beyond 1,506 units ⁽⁷⁾	Schedule C	Treatment plant servicing multiple basins
Wastewater Treatment Plant Sub-total			\$10,400,000 - \$60,400,000							
Total Wastewater Cost			\$11,940,000 - \$61,940,000 (excluding developer led projects)							

Table Notes:

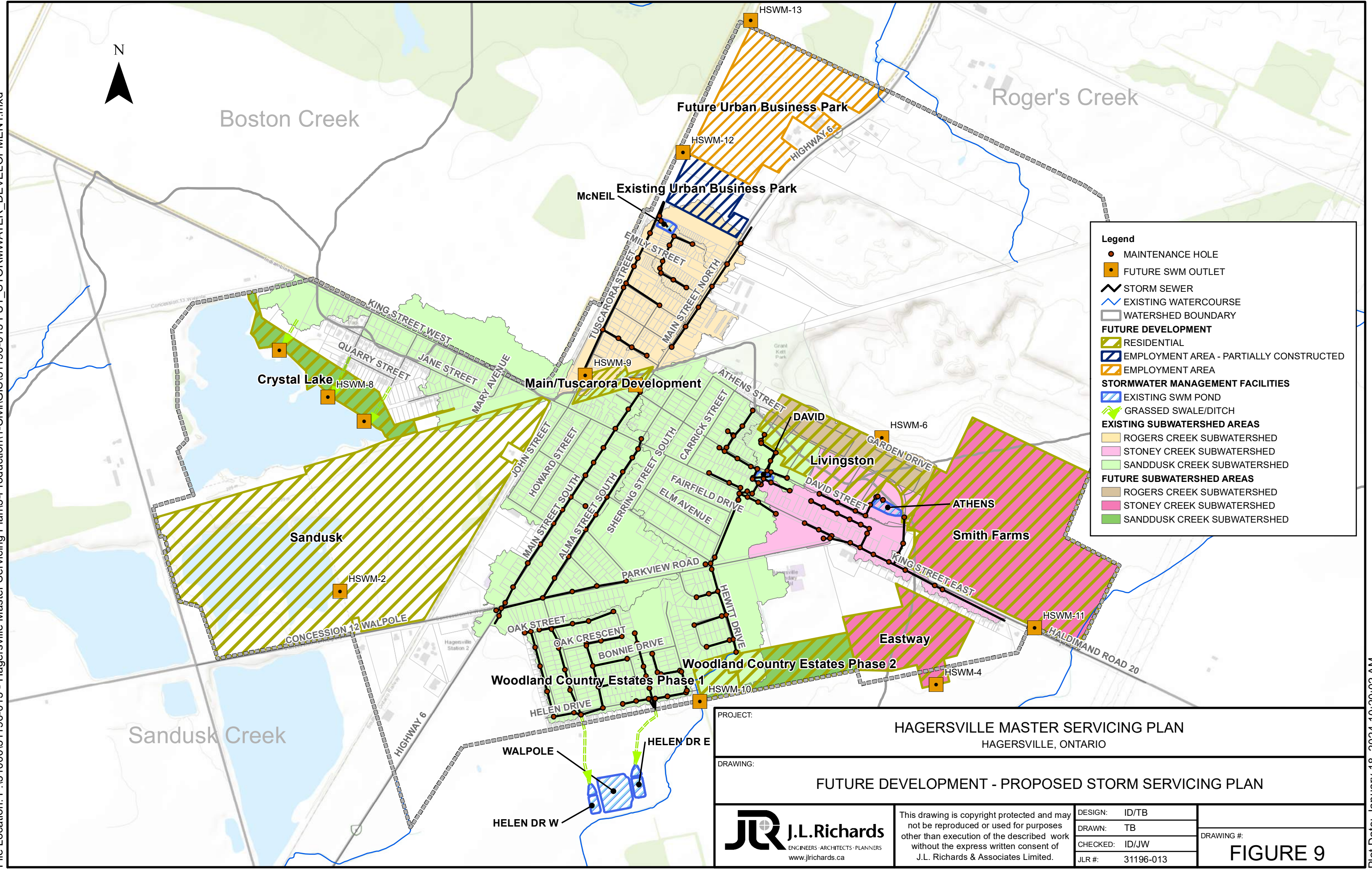
- (1) Where applicable, project numbers match with project numbers provided in the 2009 MSP.
- (2) Costs represent construction costs only, unless otherwise noted.
- (3) The existing gravity sewer system along Tuscarora Street/Emily Street near the Tuscarora SPS currently has a Max/Full Flow Ratio of >0.85. The Max/Full Flow Ratio increases under the future condition. Costs have been allocated between the County and DC accordingly. This project is to be County managed.
- (4) This project is to be County managed and funded by Developers.
- (5) The existing gravity sewer system along Mapleview Drive to the Walpole SPS currently has Max/Full Flow Ratio >0.85. No future flows impact this area of sewer, therefore 100% of the costs of this upgrade have been allocated to the County.
- (6) Costs include 30% contingency and 12% engineering costs.
- (7) Assumes upgrades are required when WWTP reaches 85% capacity.

5.3 Work Package 3: Stormwater Servicing

JLR completed the 2023 Stormwater Servicing Review and Update (Work Package 3). This included a review of future growth conditions, confirmation of stormwater servicing alternatives, selection of the preferred servicing alternative, and the creation of an implementation plan for the preferred stormwater servicing alternative. A summary of the preferred projects and costs is provided in Figure 9 and Table 11. As discussed in Work Package 3, due to the wide range of site-specific constraints and development design solutions to address the CLI ECA requirements for stormwater servicing, costs are unable to be estimated for stormwater management on a development basis.

Refer to Appendix D for the full work package.

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Legend

- MAINTENANCE HOLE
- FUTURE SWM OUTLET
- STORM SEWER
- EXISTING WATERCOURSE
- WATERSHED BOUNDARY
- FUTURE DEVELOPMENT**
- ▨ RESIDENTIAL
- ▨ EMPLOYMENT AREA - PARTIALLY CONSTRUCTED
- ▨ EMPLOYMENT AREA
- STORMWATER MANAGEMENT FACILITIES**
- ▨ EXISTING SWM POND
- ▨ GRASSED SWALE/DITCH
- EXISTING SUBWATERSHED AREAS**
- ▨ ROGERS CREEK SUBWATERSHED
- ▨ STONEY CREEK SUBWATERSHED
- ▨ SANDDUSK CREEK SUBWATERSHED
- FUTURE SUBWATERSHED AREAS**
- ▨ ROGERS CREEK SUBWATERSHED
- ▨ STONEY CREEK SUBWATERSHED
- ▨ SANDDUSK CREEK SUBWATERSHED

PROJECT:		HAGERSVILLE MASTER SERVICING PLAN HAGERSVILLE, ONTARIO	
DRAWING:		FUTURE DEVELOPMENT - PROPOSED STORM SERVICING PLAN	
 <p>J.L. Richards ENGINEERS · ARCHITECTS · PLANNERS www.jlrichards.ca</p>	<p>This drawing is copyright protected and may not be reproduced or used for purposes other than execution of the described work without the express written consent of J.L. Richards & Associates Limited.</p>	DESIGN: ID/TB DRAWN: TB CHECKED: ID/JW JLR #: 31196-013	
		DRAWING #: <h1 style="margin: 0;">FIGURE 9</h1>	

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Table 11. Cost Estimates and Timing of the Preferred Stormwater Servicing Alternatives

MSP System Component ⁽¹⁾	Description	Review Comment	Cost Estimate (2023\$)	Funding			Estimated Timing	Trigger	EA Schedule	Funding Rationale
				County	Developer	DC				
Stormwater Management:										
HSWM-1	McNeil SWMF	Constructed since 2009 MSP, no longer required.					Not Required			
HSWM-3	Walpole (Helen Drive) SWMF	Constructed since 2009 MSP, no longer required.					Not Required			
HSWM-5	David SWMF	Constructed since 2009 MSP, no longer required.					Not Required			
HSWM-7	Athens SWMF	Constructed since 2009 MSP, no longer required.					Not Required			
HSWM-2, HSWM-4, HSWM-6, and HSWM-8 to HSWM-13	Stormwater management for future developments (Sandusk, Eastway, Livingston, Crystal Lake, Main/Tuscarora, Woodland Country Estates, Smith Farms, and the Existing and Future Urban Business Parks)	Stormwater servicing for future developments must be in compliance with the County's CLI ECA. Alternative SWM measures than what was proposed by the 2009 MSP may be required to address the required components of the CLI ECA					Due to the wide range of site specific constraints and development design solutions to address the regulatory requirements (i.e., CLI ECA requirements), costs are unable to be estimated for stormwater management on a development basis. Project timing will be driven by the respective development.			
Stormwater Mains										
HSS-1	Main Street Upgrades (675 to 825 mm ø)	Revised assessment in dynamic dual-drainage model demonstrated these sewers are less critical than considered previously. Upgrades could be done if there is a flooding issue or capital works projects involving excavation in the ROW are being considered.					Not Required			
HSS-2	Alma Street Upgrades S (600 mm ø)									
HSS-3	Hewitt Drive Upgrades (525 mm ø)									
HSS-4 to HSS-5	Walpole Site Sewers (600, 825, and 1050 mm ø)	Constructed since 2009 MSP, no longer required.					Not Required			
HSS-9	Haldimand Gardens to Athens SWMF Site Sewers	Constructed since 2009 MSP using different pipe layout and diameters, no longer required.					Not Required			
HSS-10	Haldimand Gardens to David SWMF Site Sewers.	Constructed since 2009 MSP using different pipe layout and diameters, no longer required.					Not Required			
HSS-6, HSS-7, HSS-8, and HSS-11	Woodland Country Estates Site Sewers (600, 675, 900 mm ø)	Stormwater servicing for future developments must be in compliance with the County's CLI ECA. Alternative SWM measures than what was proposed by the 2009 MSP may be required to address the required components of the CLI ECA.					Refer to Stormwater Management Section of Table			

Table Notes:

(1) Where applicable, project numbers match with project numbers provided in the 2009 MSP.

5.4 Work Package 4: Transportation Servicing

JLR completed the 2023 Transportation Servicing Review and Update (Work Package 4). This included a review of future growth conditions, confirmation of transportation servicing alternatives, selection of the preferred servicing alternative, and the creation of an implementation plan for the preferred transportation servicing alternative. A summary of the preferred projects and costs is provided in Figure 10 and Table 12. The total cost of the proposed upgrades to meet the projected demands in the Master Plan planning horizon is \$560,000.

Refer to Appendix E for the full work package.

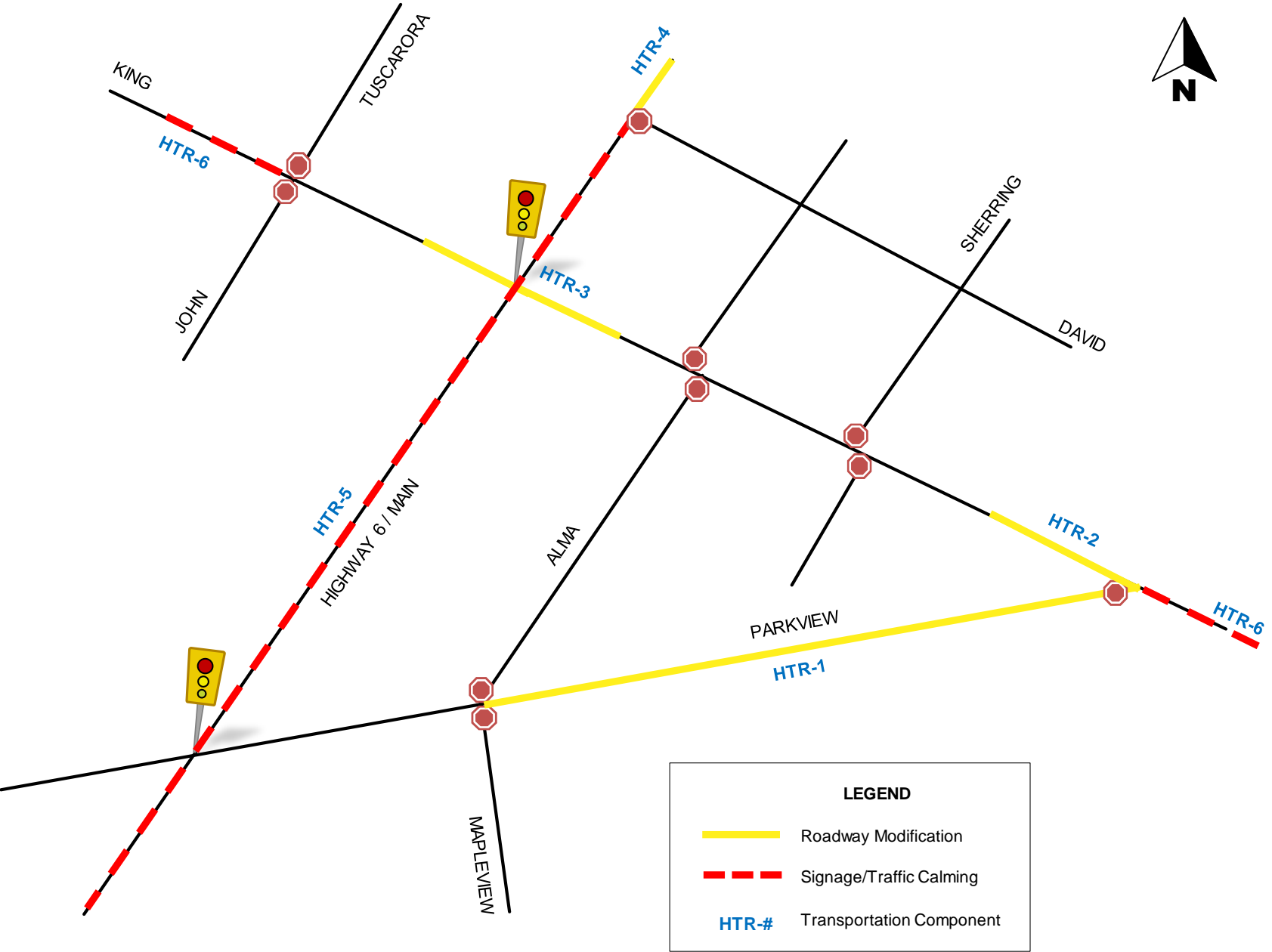


Figure 10: Transportation Improvements

Table 12. Cost Estimate and Timing of Preferred Transportation Alternative

MSP System Component ⁽¹⁾	Description	Review Comment	Cost Estimate (2023\$) ⁽¹⁾	Funding			Estimated Timing	Trigger	EA Schedule	Funding Rationale
				County	Developer	DC				
HTR-1	Upgrade Parkview Road (within urban boundary) to arterial (add sidewalk, both sides)	Carried forward from the 2009 MSP. The County intends to complete a reconstruction of Parkview Road between Main Street and King Street in 2032 as identified in the 2024 Capital Budget.	\$330,000 ⁽²⁾	100%	0%	0%	Near-term	Parkview Road Reconstruction Project (2032)	Exempt	Addresses existing system deficiency
HTR-2	Upgrade King Street (within urban boundary) to arterial (add sidewalk, north side only)	Carried forward from the 2009 MSP. The County intends to complete this work in 2027 as identified in the 2024 Capital Budget.	\$200,000	0%	0%	100%	Near-term	King Street E Sidewalk Replacement (2027)	Exempt	Addresses existing system deficiency
HTR-3	Main / King Intersection Improvement: Provide auxiliary eastbound and westbound left-turn lanes	The Sandusk TIS recommends only the provision of an auxiliary eastbound left-turn lane. However, the MSP identified the need for both auxiliary left-turn lanes.	\$15,000	50%	0%	50%	Near-term	Impacted by multiple developments	Exempt	Upgrade existing intersection external to development
HTR-4	Main / David Intersection Improvement: Provide auxiliary southbound left-turn lane	As required based on the MTO's left-turn lane warrant analysis. Within the MTO Highway 6 connecting link through Hagersville; may require MTO approval.	\$15,000	0%	100%	0%	Future Consideration	Livingston Development	Exempt	Upgrade existing intersection external to development
HTR-5	Main Street / Highway 6 Improvement: Provide traffic calming measures		TBD	100%	0%	0%	Near-term	Traffic Management Study (2024)	Exempt	Addresses existing system deficiency
HTR-6	King Street Improvement: Provide traffic calming measures		TBD	100%	0%	0%	Near-term	Traffic Management Study (2024)	Exempt	Addresses existing system deficiency
Total Transportation Cost			\$560,000 (excluding traffic calming measures)							

Table Notes:
(1) Costs represent construction costs only, unless otherwise noted.
(2) Costs account for sidewalk installation only.

6.0 Public and Agency Consultation

6.1 Notice of Study Commencement

A notice of study commencement was prepared by the consulting team. A project mailing list was developed identifying developer, review agency, and Indigenous community stakeholders and rightsholders. A copy of the mailing list is provided in Appendix F.

The Notice of Study Commencement was:

- Mailed and/or e-mailed to developers, review agencies, and Indigenous communities the week of May 8, 2023.
- Placed on the County's website the week of May 8, 2023.

A copy of the Notice of Commencement is included in Appendix G. Responses received to the Notice of Commencement are included in the following sections.

6.2 Public Information Centres

6.2.1 Public Information Centre No. 1

The first Public Information Centre (PIC) for the Hagersville MSP was held on October 18, 2023. The purpose of the PIC was to present existing conditions and future servicing constraints that had been identified. A Summary Memorandum was prepared to summarize comments received during PIC No. 1 (Appendix H).

6.2.2 Public Information Centre No. 2

A second PIC for the Hagersville MSP was held on March 6, 2024. The purpose of this PIC was to present recommended servicing alternatives and gather input from stakeholders, rightsholders, and residents. A Summary Memorandum was prepared to summarize comments received during PIC No. 2 (Appendix I).

6.3 Public Stakeholder Consultation

Table 13 below provides a summary of public comments received to date regarding the MSP Update.

Table 13. Public Stakeholder Comments and Consultation

Stakeholder	Comment	Action
No public comments received to date. Refer to the PIC 1 Summary Report and PIC 2 Summary Report for public comments received during the two PICs.		

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6.4 Consultation with SNGR and MCFN

Table 14 provides a summary of comments from the Six Nations of the Grand River (SNGR) and the Mississaugas of the Credit First Nation (MCFN) regarding this MSP Update. Refer to Appendix J for a copy of meeting minutes as well as written correspondence received from these groups.

Table 14. Indigenous Communities Comments and Consultation

Rightsholder	Comment	Action
Six Nations of the Grand River	<p>Comments from consultation meeting held on October 19, 2023:</p> <ul style="list-style-type: none"> Concerns regarding the cumulative impacts of development and infrastructure projects on trees and ecology; Haldimand County has looked at providing water from Hagersville to Six Nations; SNGR will be further consulted once potential infrastructure projects have been identified to get additional input on the identified projects. 	<p>Impacts to natural environmental features will be considered during the evaluation of alternative projects.</p> <p>A presentation with an overview of the existing conditions and future servicing constraints was circulated via email to SNGR for comment.</p> <p>A presentation with an overview of the recommended servicing alternatives was circulated via email to SNGR for comment on February 15, 2024. No comments have been received to date.</p>
Mississaugas of the Credit First Nation	<p>Comments from consultation meeting held on October 23, 2023:</p> <ul style="list-style-type: none"> Concerns were raised regarding the transportation impacts of the Main/Tuscarora Development; Haldimand County to meet with MCFN to discuss the status of proposed developments in Hagersville; Haldimand County has looked at providing water from Hagersville to Six Nations; Haldimand County suggested an additional meeting with MCFN to discuss 	<p>Growth from the Main/Tuscarora development was incorporated into the MSP Update.</p> <p>A presentation with an overview of the existing conditions and future servicing constraints was circulated via email to MCFN for comment.</p> <p>A presentation with an overview of the</p>

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Rightsholder	Comment	Action
	<p>experiences of MCFN and water servicing issues.</p> <ul style="list-style-type: none"> • MCFN would like to be involved in the assessment of archaeological potential as the project continues. • MCFN will be further consulted once potential infrastructure projects have been identified to get additional input on the identified projects. 	<p>recommended servicing alternatives was circulated via email to MCFN for comment on February 15, 2024. No comments have been received to date.</p>

6.5 Developer Consultation

Table 17 provides a summary of developer comments received to date regarding the MSP update. Refer to Appendix K for a copy of the written correspondence received from developers.

Table 15. Developer Comments and Consultation

Stakeholder	Comment	Action
Developer 1	<p>May 19, 2023 – Requested information regarding the stormwater servicing projects near/on the Woodland Country Estates development and listed specific interests in the stormwater pipe on Hewitt Drive.</p> <p>October 25, 2023 – Requested storm subcatchments used in the MSP.</p>	<p>Added to the mailing list. Project team notified the developer that the MSP will identify deficiencies in the existing storm sewer system, including along Hewitt Drive, and identify high level stormwater management requirements for future developments. A copy of the storm subcatchment shapefiles was also forwarded to the developer. A final copy of the stormwater report will be circulated to the developer, when available.</p>
Developer 2	<p>September 29, 2023 – Requested to be added to the mailing list.</p>	<p>Added to the mailing list.</p> <p>Notified developer that PIC materials would</p>

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Stakeholder	Comment	Action
	<p>October 16, 2023 – Requested information on when PIC materials would be made available online.</p> <p>November 1, 2023 – Provided comments in response to PIC 1. Identified that their lands are outside of the urban boundary therefore requested that infrastructure proposed on their lands (SWMF-3 and Haldimand Gardens SPS) be situated within the urban boundary. Additionally identified that the grassed swale/ditch shown on their lands was not currently present as the area is currently being farmed.</p> <p>December 13, 2023 – Requested that they be kept informed of the adjacent landowners engineering plans.</p> <p>March 27, 2024 – Provided comments on the recommended alternatives and asked for additional details on the drainage locations of the WWTP and Smith Farms development. Additionally identified that their lands are flat and consideration would need to be taken when designing the stormwater outlet for the Eastway development.</p>	<p>be made available following the meeting, and provided a link to the project webpage.</p> <p>Noted by the project team. Confirmed that the location of the Haldimand Gardens PS and SWMF-03 will be amended accordingly prior to the second PIC. Identified that an easement was previously approved for the stormwater outlet of the Eastway development.</p> <p>Noted by the project team.</p> <p>Comments were noted by the project team. Identified that the WWTP effluent is discharged to the Harrop Drain / Sandusk Creek. Stormwater from Smith Farms will outlet into the local ditch system along Haldimand Road 20 and eventually discharge to Stoney Creek.</p>

6.6 Adjacent Municipality Consultation

Table 16 provides a summary of comments received from adjacent municipalities regarding the MSP Update. Refer to Appendix L for a copy of the written correspondence received from adjacent municipalities.

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Table 16. Adjacent Municipalities Comments and Consultation

Stakeholder	Comment	Action
City of Hamilton	<p>July 27, 2023 – The City of Hamilton requested that City staff be added to the project mailing list for the MSP Update.</p> <p>The City of Hamilton also advised that they are currently updating their 2006 Water, Wastewater, and Stormwater Master Plan and recommended that the County and the City of Hamilton stay engaged during the concurrent update of their Master Plans to discuss any potential servicing impacts.</p>	<p>City staff were added to the project mailing list.</p> <p>Noted by the project team, and advised that there will be an upcoming meeting in 2024 between the City of Hamilton and Haldimand County to review water demands as part of the existing Water Servicing Agreement between the two municipalities.</p>

6.7 Review Agency Consultation

Table 17 provides a summary of review agency comments received to date regarding the MSP Update. Refer to Appendix M for a copy of the written correspondence received from review agencies.

Table 17. Review Agency Comments and Consultation

Stakeholder	Comment	Action
Grand River Conservation Authority (GRCA)	<p>May 16, 2023 – The GRCA identified several natural hazard and natural heritage features within the study area. The GRCA recommended consulting the Long Point Region Conservation Authority (LPRCA), the Ministry of Natural Resources and Forestry (MNRF), the Ministry of the Environment, Conservation, and Parks (MECP), and the Federal Department of Fisheries and Oceans (DFO) regarding the project if in-water works or watercourse crossings will be required. The GRCA requested to remain on the project mailing list.</p> <p>March 12, 2024 – The GRCA noted that the preferred water, wastewater, and transportation alternatives are not located</p>	<p>The Notice of Study Commencement was mailed/e-mailed to the LPRCA, the MNRF, and the MECP the week of May 8, 2023. The DFO will be consulted if any in-water works, or watercourse crossings are anticipated as part of the MSP update.</p> <p>The GRCA will remain on the project mailing list.</p> <p>Noted by the project team. Project documentation has</p>

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Stakeholder	Comment	Action
	<p>within the regulated areas of the GRCA watershed. GRCA recommend consultation with Long Point Region Conservation Authority (LPRCA) for proposed water, wastewater, and transportation upgrades/improvements.</p> <p>GRCA advised that the proposed stormwater upgrades for the future urban business parks and the Main St / Tuscarora St development are within the GRCA watershed, and a permit may be required for work conducted at the future urban business park. upgrades in the future urban business park.</p> <p>GRCA requested to continue to be consulted as plans and details are developed for work at the future urban business park.</p>	<p>been sent to the LPRCA; however, no comments have been received.</p> <p>GRCA should continue to be kept informed on any plans and details regarding stormwater upgrades at the future urban business park.</p>
<p>Ministry of the Environment, Conservation, and Parks (MECP)</p>	<p>May 18, 2023 – The MECP requested that all Notices and Class EA documentation identify the Master Plan approach that is being followed for this project.</p> <p>October 13, 2023 – The MECP provided a list of Aboriginal communities that require consultation and outlined steps that must be followed in relation to Aboriginal consultation. The MECP noted that the County must consider the impacts to source protection, climate change adaptation and mitigation, and impact to species at risk and their habitats, in addition to other areas of interest.</p>	<p>All future Notices and Class EA documentation will identify the Master Plan approach for this project.</p> <p>Aboriginal communities were contacted prior to the first PIC. Additional information on consultation with SNGR and MCFN is provided in section 6.4.</p>
<p>Hydro One Networks Inc (Hydro One)</p>	<p>May 24, 2023 – Hydro One requested to be consulted during all stages of the project.</p>	<p>Hydro One will remain on the project mailing list.</p>
<p>Ministry of Natural Resources and Forestry (MNR)</p>	<p>May 29, 2023 – The MNR provided information, tools, and relevant policies and legislation to guide the identification of natural features and resources in the project area.</p>	<p>Comments were noted by the project team.</p>
<p>Ministry of Citizenship and Multiculturalism (MCM)</p>	<p>June 5, 2023 – The MCM indicated that a Cultural Heritage Report: Existing Conditions and Preliminary Impact Assessment should be undertaken during the planning phase and summarized in the report.</p>	<p>Refer to Section 4.3 and 4.4.</p>

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Stakeholder	Comment	Action
	<p>In addition, for Schedule B projects, the MCM indicated a Cultural Heritage Evaluation Report (CHER) may be required for impacted built heritage resources or cultural heritage landscapes that have not been evaluated for Cultural Heritage Value or Interest (CHVI). If a resource with CHVI is identified, a Heritage Impact Assessment (HIA) will be required.</p> <p>The MCM also recommended determining if an archeological assessment will be required using the MCM’s Criteria for Evaluating Archeological Potential and Criteria for Evaluating Marine Archeological Potential.</p> <p>July 12, 2023 – The MCM reported that there are 101 archaeological sites within the Hagersville study area and advised that there will likely be additional sites found if archaeological surveys are undertaken at the proposed project sites.</p> <p>March 12, 2024 - The MCM requested a Project Information Form (PIF) for any archaeological assessments being prepared for the project. MCM recommend that a Cultural Heritage Report: Existing Conditions and Preliminary Impact Assessment be undertaken for the project study area. Any technical cultural heritage studies should be sent to the MCM for review as part of the environmental assessment process.</p>	

6.8 Haldimand County Council Presentation

A presentation was made at the Council in Committee meeting held on June 19, 2024, prior to the issuance of the Notice of Completion. Slides from the Council in Committee presentation are provided in Appendix N. Council unanimously voted to adopt the Hagersville Master Servicing Plan Project File Report.

7.0 Cumulative Effects and Potential Impacts to Treaty Rights

An analysis of the MSP’s cumulative effects and impacts on treaty rights and the inherent rights of Indigenous Peoples in the project study area and surrounding areas was conducted. The United Nations Declaration on the Rights of Indigenous Peoples (UNDRIP), and Canada’s commitment to implement these rights under the UNDRIP Act (UNDRIPA), was used as reference to determine the potential impacts to the rights of Indigenous Peoples. The following table summarizes the potential rights impacts of the Hagersville MSP.

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Table 18. Cumulative Effects and Potential Impacts to Project Rights

UNDRIP Act Article	Impact Considerations	Impact Mitigation
Rights Relating to Culture, Traditions, Customs, and Spirituality		
<p>Article 11.1: Indigenous peoples have the right to practise and revitalize their cultural traditions and customs. This includes the right to maintain, protect and develop the past, present and future manifestations of their cultures, such as archaeological and historical sites, artefacts, designs, ceremonies, technologies and visual and performing arts and literature.</p> <p>Article 12.1: Indigenous peoples have the right to manifest, practise, develop and teach their spiritual and religious traditions, customs and ceremonies; the right to maintain, protect, and have access in privacy to their religious and cultural sites; the right to the use and control of their ceremonial objects; and the right to the repatriation of their human remains.</p> <p>Article 15.1: Indigenous peoples have the right to the dignity and diversity of their cultures, traditions, histories and aspirations which shall be appropriately reflected in education and public information.</p> <p>Article 24.1: Indigenous peoples have the right to their traditional medicines and to maintain their health practices, including the conservation of their vital medicinal plants, animals and minerals. Indigenous individuals also have the right to access, without any discrimination, to all social and health services.</p>	<ul style="list-style-type: none"> • There are 101 registered Archaeological Sites within the Hagersville Study Area. It is important to note that even if there are no registered sites on preferred project sites, given the number of registered Archaeological Sites in the area, there is likely significant archaeological and historical Indigenous presence in the area of the identified project sites. • There are no registered cultural heritage sites, however there are 24 properties within Hagersville that have potential for cultural heritage. • Woodlots have been identified in Hagersville. Historic Indigenous community settlement areas were influenced by the location of hardwood trees, as they were a primary source of fuel and nutrition (ash from hardwood trees was, and continues to be used, in food preparation, as well as a cleaner) • Preferred sites may contain medicinal plants, animals, and minerals that are vital to traditional medicines and health practices of Indigenous communities • Preferred project sites may hold specific significance to Indigenous communities. 	<ul style="list-style-type: none"> • A walk through of the proposed project sites could be conducted with the affected Indigenous community for further investigation; discussions can be held to determine specific significance and concerns held by the Indigenous community at and around the proposed project sites • During the walkthrough, species of interest could be identified for harvest and transplant if appropriate. Protection of these species may be integral to continued cultural practice. • The knowledge learned from these site walkthroughs could be incorporated into the project and future project information • Previously and future disturbed areas could be rehabilitated with native plant species following construction.

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<p>Article 25: Indigenous peoples have the right to maintain and strengthen their distinctive spiritual relationship with their traditionally owned or otherwise occupied and used lands, territories, waters and coastal seas and other resources and to uphold their responsibilities to future generations in this regard.</p> <p>Article 31.1: Indigenous peoples have the right to maintain, control, protect and develop their cultural heritage, traditional knowledge and traditional cultural expressions, as well as the manifestations of their sciences, technologies and cultures, including human and genetic resources, seeds, medicines, knowledge of the properties of fauna and flora, oral traditions, literatures, designs, sports and traditional games and visual and performing arts. They also have the right to maintain, control, protect and develop their intellectual property over such cultural heritage, traditional knowledge, and traditional cultural expressions.</p>		
<p>Rights Relating to Decision Making and Participation in Projects</p>		
<p>Article 13.2: States shall take effective measures to ensure that this right is protected and also to ensure that indigenous peoples can understand and be understood in political, legal and administrative proceedings, where necessary through the provision of interpretation or by other appropriate means.</p>	<ul style="list-style-type: none"> • Several types of project information, including notices, reports, and presentations, are used as part of the consultation process to inform interested stakeholders and rightsholders of the project. • There may be interested persons who are unable to understand the provided project information 	<ul style="list-style-type: none"> • This MSP is being conducted according to the requirements of Phases 1 and 2 of the MCEA process. By following this process, the study will meet the intention of meaningful consultation with Indigenous communities, including ensuring all provided project information can be understood by interested Indigenous peoples.

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<p>Article 18: Indigenous peoples have the right to participate in decision-making in matters which would affect their rights, through representatives chosen by themselves in accordance with their own procedures, as well as to maintain and develop their own indigenous decision-making institutions.</p>	<ul style="list-style-type: none"> • There are some rights that have the potential of being affected by this MSP if impact mitigation measures are not implemented, therefore Indigenous peoples have the right to participate in decision-making for matters that affect their rights. 	<ul style="list-style-type: none"> • This MSP is being conducted according to the requirements of Phases 1 and 2 of the MCEA process. By following this process, the study will meet the intention of meaningful consultation with Indigenous communities • Through meaningful consultation, Indigenous peoples can participate in the evaluation and decision-making process of the MCEA by providing comments and discussing concerns with preferred projects and sites
<p>Rights Relating to Development and Economic and Social Conditions</p>		
<p>Article 21.1: Indigenous peoples have the right, without discrimination, to the improvement of their economic and social conditions, including, inter alia, in the areas of education, employment, vocational training and retraining, housing, sanitation, health and social security.</p> <p>Article 23: Indigenous peoples have the right to determine and develop priorities and strategies for exercising their right to development. In particular, indigenous peoples have the right to be actively involved in developing and determining health, housing and other economic and social programmes affecting them and, as far as possible, to administer such programmes through their own institutions.</p>	<ul style="list-style-type: none"> • Indigenous peoples living in Hagersville have the right to the improvement of their municipal services (water, wastewater, stormwater, and transportation), without discrimination, and may be interested in the development of municipal services that impact them. 	<ul style="list-style-type: none"> • This MSP is being conducted according to the requirements of Phases 1 and 2 of the MCEA process. By following this process, areas of Hagersville requiring municipal service improvement will be identified, without discrimination against Indigenous communities • Through meaningful consultation, particular areas or conditions of concern held by Indigenous communities can be discussed and incorporated into the MSP as needed
<p>Article 21.2: States shall take effective measures and, where appropriate, special measures to ensure continuing improvement of their economic and social conditions. Particular</p>	<ul style="list-style-type: none"> • There may be members of the Indigenous communities with special needs living in Hagersville (e.g., elders, youth, women, persons with disabilities). These members 	<ul style="list-style-type: none"> • Any preferred projects will follow appropriate provincial guidelines (e.g., Design Guidelines for Drinking Water Treatment, Ontario Drinking Water

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<p>attention shall be paid to the rights and special needs of indigenous elders, women, youth, children and persons with disabilities.</p>	<p>may be more vulnerable to municipal services (water, wastewater, stormwater, and transportation) in poor condition, and special measures should be taken to ensure the improvement of these municipal services</p>	<p>Standards, Design Guidelines for Sewage Works, etc.). By following these guidelines, members of Indigenous communities, including vulnerable members of the population, will be protected.</p>
<p>Rights Relating to the Environment and Conservation</p>		
<p>Article 29.1: Indigenous peoples have the right to the conservation and protection of the environment and the productive capacity of their lands or territories and resources. States shall establish and implement assistance programmes for indigenous peoples for such conservation and protection, without discrimination.</p> <p>Article 29.2: States shall take effective measures to ensure that no storage or disposal of hazardous materials shall take place in the lands or territories of indigenous peoples without their free, prior and informed consent.</p>	<ul style="list-style-type: none"> • Development of municipal services will be proposed as part of this MSP. • During construction of preferred projects, hazardous materials may be used or identified on site. 	<ul style="list-style-type: none"> • This MSP is being conducted according to the requirements of Phases 1 and 2 of the MCEA process. By following this process, potential projects will undergo an evaluation process that considers the protection and conservation of the environment. • Additionally, measures to protect and conserve the environment within Hagersville will be identified and recommended for projects that have the potential for impacts to the environment. • Through meaningful consultation, particular areas or conditions of concern held by Indigenous communities can be discussed and incorporated into the MSP as needed. • Hazardous materials used or found during construction of preferred projects will not be stored or disposed of on the lands or territories of Indigenous peoples without their free, prior, and informed consent.

8.0 Limitations

This report has been prepared by J.L. Richards & Associates Limited for Haldimand County's exclusive use. Its discussions and conclusions are summary in nature and cannot properly be used, interpreted or extended to other purposes without a detailed understanding and discussions with the client as to its mandated purpose, scope and limitations. This report is based on information, drawings, data, or reports provided by the named client, its agents, and certain other suppliers or third parties, as applicable, and relies upon the accuracy and completeness of such information. Any inaccuracy or omissions in information provided, or changes to applications, designs, or materials may have a significant impact on the accuracy, reliability, findings, or conclusions of this report.

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