

Land Use Compatibility Report

Hawkridge Golf Course, Severn ON

TT Project No: 24010598_01

Prepared For

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1.0 Introduction

At the request of LIV Communities (Client), Thornton Tomasetti (TT) presents this Land Use Compatibility Report regarding the conversion request for the Hawkridge Golf Course lands (the Project).

The purpose of this study is to review the potential land use compatibility impacts between the Project and the surrounding commercial and industrial land uses.

Where applicable, this report will provide recommendations to meet the requirements of the relevant Land Use Planning Authority (LUPA). LUPAs generally adopt the criteria developed by the Ontario Ministry of the Environment, Conservation and Parks (MECP) and provincial policies, but may also have unique requirements.

2.0 Site and Surrounding Area

2.1 Planned Development

The proposed development consists of 290 single detached homes, 310 townhouse units, 250 Golf Villa units (stacked townhouses), stormwater management pond, parklands/trails, and a treatment plant. The existing lands are currently a golf course, in which the Project will retain portions of the existing golf course.

The Project site plan is included in Figure 1.

2.2 Project Location and Surroundings

The Project is located on the between Uthoff Line and Burnside Line, north of Highway 11 in Severn Ontario. The existing lands are the Hawk Ridge Golf Club.

The surrounding lands include a combination of single family homes, residential neighborhoods and commercial buildings. The Walker Orillia Pit is located on the opposite side of Uthoff Line, with the Dufferin Aggregates/KJ Beramish Asphalt Plant located further to the west. The south lands are currently vacant, where the lands are proposed for a residential development (owned by LIV Communities). Industrial facilities with a potential to impact the development include the Kubota Materials Canada Corporation manufacturing facility to the east on the other side of Highway 11 and a solar farm to the west on the opposite side of Uthoff Line.

Highway 11 is located approximately 240 m to the south, where the development is bordered between Uthoff Line and Burnside Line. No railways are located within 1000 m of the Project.

The project location and surrounding area is shown in Figure 2.

2.3 Zoning & Official Plan

2.3.1 Zoning Bylaw

Severn

Under the Township of Severn Zoning By-Law 2010-65 (updated July 15, 2020), the Project land is surrounded by:

- Lands to the north include: a combination of Residential (RR, R1, RM), Rural (RU), Agricultural (AG) and Open Space (OS) lands;
- Lands to the east include: a combination of Industrial (M), Commercial (C), Residential (RR, R, ER), Agricultural (AG), and Greenland (GL);
- Lands to the south are included with the Town of Orillia, and discussed in the following section; and
- Lands to the west include: a combination of Residential (RR, Rurual (RU), and Industrial (M).

Copies of the Township of Severn zoning maps are included in Appendix A for the surrounding area.

Orillia

Lands to the south are the development are covered under the City of Orillia Zoning By-Law 2014-44 (consolidation date of June 1, 2024), as follows:

- Lands to the south include: a combination of Residential (R2, R4, R5), Institutional (I1, I2, I3), Open Space (OS1), Rural (RU), Environmental Protection (EP) and Industrial (M1, M2, M3) and Commercial (C3 and C4) lands.

Copies of the City of Orillia zoning maps are included in Appendix A for the surrounding area.

2.3.2 Official Plan

Severn

On review of the Township of Severn Secondary Plan (ToSSP) dated September 6, 2022, Rural lands are located to the west and east of the development, with country Residential to the north. Further to the east are industrial lands beyond the Rural lands. Beyond the Rural lands to the west are Extractive Industrial lands. A copy of the ToSSP is included in Appendix B.

Lands to the south are covered in the City of Orillia Official Plan, discussed in the following section.

Orillia

The City of Orillia Official Plan (CoOOP), with consolidation date of June 1, 2024, covers the lands to the south of the development. On review, the lands south of the development include Neighborhood Greenfield, Stable Neighborhood, Parkland and Major Open Space, Community Commercial, and Business Park/Industrial. A copy of the CoOOP is included in Appendix B.

3.0 Land Use Compatibility

Industrial and sensitive land uses are commonly separated by LUPAs in their official plans and zoning by-laws. When these types of land use occur near each other there is a potential for conflict due to contaminants such as dust or noise from the industrial land use. While industrial facilities are required to limit their impacts on surrounding sensitive land uses and are often designed with mitigation measures intended to address existing neighbors, the introduction of new sensitive receptors can lead to complaints, thus requiring more stringent mitigation requirements for existing facilities.

3.1 Regulatory Background

3.1.1 Provincial Policy Statement

The *Provincial Policy Statement, 2020 Under the Planning Act* (PPS), published by the government of Ontario came into effect on May 1, 2020. Section 1.2.6 of the PPS reads as follows:

1.2.6.1 Major facilities and sensitive land uses shall be planned and developed to avoid, or if avoidance is not possible, minimize and mitigate any potential adverse effects from odour, noise and other contaminants, minimize risk to public health and safety, and to ensure the long-term operational and economic viability of major facilities in accordance with provincial guidelines, standards and procedures.

1.2.6.2 Where avoidance is not possible in accordance with policy 1.2.6.1, planning authorities shall protect the long-term viability of existing or planned industrial, manufacturing or other uses that are vulnerable to encroachment by ensuring that the planning and development of proposed adjacent sensitive land uses are only permitted if the following are demonstrated in accordance with provincial guidelines, standards and procedures:

- a) there is an identified need for the proposed use;*
- b) alternative locations for the proposed use have been evaluated and there are no reasonable alternative locations;*
- c) adverse effects to the proposed sensitive land use are minimized and mitigated; and*
- d) potential impacts to industrial, manufacturing or other uses are minimized and mitigated.*

3.1.2 Environmental Protection Act

Section 9 of Ontario's Environmental Protection Act (EPA) requires that industrial facilities obtain an approval to operate from the MECP.

Approval, plant or production process

9 (1) No person shall, except under and in accordance with an environmental compliance approval,

(a) use, operate, construct, alter, extend or replace any plant, structure, equipment, apparatus, mechanism or thing that may discharge or from which may be discharged a contaminant into any part of the natural environment other than water; or

(b) alter a process or rate of production with the result that a contaminant may be discharged into any part of the natural environment other than water or the rate or

manner of discharge of a contaminant into any part of the natural environment other than water may be altered.

In order to obtain and maintain this approval, industrial facilities are required to demonstrate that their emissions (including noise emissions) are within applicable limits at nearby sensitive receptors.

3.1.3 Township of Severn Official Plan

The Township of Severn South of Division Road Secondary includes the following requirement:

E.3.4 NOISE ATTENUATION

The noise generated by Provincial Highway No.'s 11 and 12, the fairground and the existing aggregates operation in Lots 2, 3 and 4, Concession III poses a potential constraint on development. As such, where required, Council's consideration of residential development proposals in proximity to these uses shall be preceded by noise analyses undertaken in accordance with the requirements of the Ministry of the Environment and/or the Ministry of Transportation.

Highway 11 and existing aggregate operations have the potential to impact the Project and have been reviewed in this report.

3.2 Recommended Setbacks

The *D-6 Compatibility Between Industrial Facilities* (D6) guideline published by the MECP was last revised in July 1995, and sets out potential area of influence (AOI), as well as minimum recommended separation distances (MSD) for industrial facilities from sensitive land uses.

The D6 guidelines are generally accepted as applicable screening standards for demonstrating compliance with the PPS and GP requirements for land use compatibility. In cases where a sensitive land use would be located within the identified minimum recommended separation distance, additional consideration and mitigation is typically recommended to ensure that the sensitive land use is not subject to adverse effects, and the industrial facility is not unreasonably limited in its operations.

The separation distances may be determined from different points on the properties depending on the site conditions; however, the typical measurement is based on the property lines.

Table 1 provides the potential influence area and recommended minimum separation distance from the industrial facility to the sensitive land use. Table 2 is a list of applicable criteria for the categorization of the industrial facilities.

Table 1: D-6 Separation Distances for Industry Classes

Category	Potential Area of Influence	Recommended Minimum Separation Distance
Class I	70m	20m
Class II	300m	70m
Class III	1000m	300m

Table 2: D-6 Industrial Categorization Criteria

Category	Outputs	Scale	Process	Operation/Intensity
Class I	<ul style="list-style-type: none"> - Sound not audible off property - No ground borne vibration on plant property - Infrequent and not intense dust and/or odour 	<ul style="list-style-type: none"> - No outside storage - Small scale plant or scale is irrelevant in relation to all other criteria for this Class 	<ul style="list-style-type: none"> - Self-contained plant or building which produces/stores a packaged product - Low probability of fugitive emissions 	<ul style="list-style-type: none"> - Daytime operations only - Infrequent movement of products and/or heavy trucks
Class II	<ul style="list-style-type: none"> - Sound occasionally audible off property - Possible ground borne vibration, but cannot be perceived off property - Frequent and occasionally intense dust and/or odour 	<ul style="list-style-type: none"> - Outside storage permitted - Medium level of production allowed 	<ul style="list-style-type: none"> - Open process - Periodic outputs of minor annoyance - Low probability of fugitive emissions 	<ul style="list-style-type: none"> - Shift operations permitted - Frequent movement of products and/or heavy trucks with the majority of movements during daytime hours
Class III	<ul style="list-style-type: none"> - Sound frequently audible off property - Ground borne vibration can frequently be perceived off property - Persistent and/or intense dust and/or odour. 	<ul style="list-style-type: none"> - Outside storage of raw and finished products - Large production levels 	<ul style="list-style-type: none"> - Open process - Frequent outputs of major annoyances - High probability of fugitive emissions 	<ul style="list-style-type: none"> - Continuous movement of products and employees - Daily shift operations permitted

3.3 Surrounding Commercial and Industrial Facilities

3.3.1 Existing Facilities

A review was completed based on the available satellite imagery, zoning maps, existing MECP approvals in the vicinity of the Project area, and publicly available information. Based on our review, a combination of Class I, Class II and Class III industries are located within a 1000 m radius. A summary table of industries reviewed is included in Appendix C and shown in Figure 2.

The following sections provide a detailed discussion of facilities within the Area of Influence (AOI) and TT’s assessment of potential impacts.

Township of Severn Public Works and Utilities Office (1024 Hurlwood Lane)

The Township of Severn Public Works and Utilities Office (ToSPWUO) is an administrative building with an emergency generator installed outdoors within an enclosure. The facility is considered a Class I industry, as minimal activity is anticipated from an office building. The location of the facility is adjacent to the Project property line, and within the Class I industry AOI and MSD.

The generator is currently operating under MECP Certificate of Approval (Air) No. 0183-6XRQ5, dated April 14, 2007. Air and noise emissions would be related to regular testing of the generator. As the unit is operating under an MECP CofA for air emissions, the applicable criteria would be met at the ToSPWUO property line and are not a concern for the Project. Noise impacts are not expected at the proposed development, as the applicable guideline limits are expected to be met at the existing residential homes located between the ToSPWUO, and proposed noise sensitive buildings of the Project. Therefore, air and noise impacts are not anticipated at the sensitive buildings of the Project and additional analysis is not considered necessary.

Township of Severn Public Works Yard (4251 Burnside Line)

The Township of Severn Public Works Yard (ToSPWY) is understood to be used for equipment storage and equipment preparation such as salt loading of trucks, etc. The facility is considered a Class II industry, due to the potential for outdoor storage and use during any hour of the day. The location of the facility is approximately 15 m from the Project property line of an access laneway/path, and approximately 800 m from the proposed sensitive buildings within the Project. Regardless, the facility is within the Class I industry AOI and MSD.

Air emissions are anticipated to include short-term idling vehicles, and dust generated from vehicle movements as the site is unpaved. Noise emissions are anticipated to include short term vehicle idling and periodic use of heavy equipment (eg. loaders). Facility operations are expected to be infrequent, short in duration and potentially occur during any hour of the day.

As existing residential buildings are located on the opposite side of Burnside Lane and in between the ToSPWY and the Project's proposed sensitive buildings, air and noise criteria are expected to be met at these closer receptors. In addition, the Project's closest proposed sensitive buildings are located approximately 800 m from ToSPWY. Therefore, given the large separation distance and intervening sensitive buildings, air and noise impacts are not anticipated at the Project's sensitive buildings and additional analysis is not considered necessary.

Walker Aggregates Orillia Pit 48 (4364 Uhthoff Line)

The facility is a sand and gravel quarry, operating under Class A Licence (>20,000 tonnes), with ALPS ID:3736 (Walker Pit). Products are understood to include boulders only, as indicated on the Walker Aggregates Simcoe County website. The facility is considered a Class II industry, as activity is expected to be periodic and infrequent, with limited heavy equipment use, the potential for outdoor storage and open processes. Should the quarry have frequent heavy equipment use, the facility would be considered a Class III industry. Regardless, the location of the facility is approximately 40 m from the Project property line, and within the Class II/Class III industry AOI and MSD.

Air emissions are expected to include heavy vehicles (ie. loaders, trucks) in operation. As existing residential buildings are located along the west side of Burnside Lane, between the Walker Pit and the Project, air emissions (including dust) and noise criteria are expected to be met at these closer intervening receptors. Therefore, air and noise impacts are not anticipated at the sensitive buildings of the Project and additional analysis is not considered necessary.

Charter Construction Ltd. Solar Facility (4436 Uthhoff Line)

A solar facility is located on the lands, operating under MECP EASR R-006-5421435457, filed June 9, 2014. The facility is considered to be a Class I industry due to the low activity on site. The location of the facility is approximately 40 m from the Project property line, and within the Class I industry AOI and MSD.

No air emissions are expected from the facility. Noise includes inverter hum for the various solar panel clusters, which are expected to meet the applicable guideline limits at the homes along Uthhoff Line. As the guideline limits are expected to be met at these closer existing noise sensitive homes, noise impacts are not anticipated at the Project. Therefore, additional analysis is not considered necessary for the solar facility.

KJ Beamish Hot Mix Asphalt Plant (4293 Fairgrounds Road)

The facility is a Hot Mix Asphalt Plant, operating under the MECP Amended ECA no. 5717-AA9PL8, dated December 21, 2016. The facility is considered a Class III industry due to the potential for air and noise impacts off site, 24/hr operation and outdoor storage. The location of the facility is 700 m from the Project property line and within the AOI and outside of the MSD.

Air emissions include combustion products (carbon dioxide, nitrous oxides and sulfur oxides), carbon monoxide, volatile organic compounds, methane, other hazardous air pollutants and fugitive dust. Noise emissions include process emissions, dust collectors, truck loading, truck idling and truck pass-bys. The facility has the potential to operate 24 hours per day, 7 days per week.

Air and noise emissions are expected to meet the applicable guideline limits at the existing homes along Uthhoff Line. As the guideline limits would be met at these closer existing homes, air and noise impacts are not anticipated at the Project. Therefore, additional analysis is not considered necessary for the hot mix asphalt plant.

Dufferin Aggregates Orillia (4293 Fairgrounds Road)

The facility is a sand and gravel quarry, operating under Class A Licence (>20,000 tonnes), with ALPS ID:3714. The facility is considered a Class III industry due to the potential for dust and noise impacts off site, 24/hr operation and outdoor storage. The location of the facility is 700 m from the Project property line and within the AOI and outside of the MSD.

Products include clear stone, gravel, sand & screenings, recycled asphalt product and asphalt millings. Air emissions are expected to primarily include fugitive dust from crushing operations, screens and truck traffic along unpaved roads. Noise emissions are expected to include crushers, screens, truck haul routes, loaders. Blasting may be carried out on site, with the potential for noise and vibration being generated. The facility has the potential to operate 24 hours per day, 7 days per week.

Air and noise emissions are expected to meet the applicable guideline limits at the existing homes along Uthoff Line. As the guideline limits would be met at these closer existing homes, air and noise impacts are not anticipated at the Project. Therefore, additional analysis is not considered necessary for the Dufferin Aggregates Orillia facility.

Kubota Materials Canada Corporation (25 Commerce Road)

Kubota Metals is manufacturing facility with operations including steel alloy castings and fabrication of custom-designed steel assemblies and potassium titanate (TXAX) fibres. The facility is currently operating under MECP ECA No. 0529-9GXLWV, dated July 15, 2014. The facility is considered a Class III industry due to the facility size, potential for air and noise impacts off site, and 24/hr operation. The location of the facility is 730 m from the Project property line and within the AOI and outside of the MSD.

Air emissions are anticipated from the Foundry facility operations (melting, casting, coating, fabrication, cleaning/finishing and laboratory analysis) and Potassium Titanate (TXAX) Fibres facility (mixing, melting, pre-immersing, fibrillation, stirring, filtration, calcination, sieving, packing and wastewater treatment).

Noise emissions are anticipated from rooftop process equipment and radiated noise emitted through open bay/access doors.

Air and noise emissions are expected to meet the applicable guideline limits at the existing homes along Burnside Line and West Street North. As the guideline limits would be met at these closer existing homes, air and noise impacts are not anticipated at the Project. Therefore, additional analysis is not considered necessary for the Kubota Metals facility.

3.3.2 Vacant Lands

On review of the City of Orillia Zoning By-Law 2014-44, future industrial lands are located to the south, between the Project lands and Highway 11. The lands are zoned M3-6 (Industrial Three – Business Park Industrial), and approximately 145 m from the Project property line. The allowed uses for the M3 zoning includes:

- Assembly Hall,
- Bottling Plant/Brewery or Winery
- Child care centre;
- Fitness Clubs, office space, retail
- Hotels, motels
- Light and medium industries
- Outdoor Storage
- Public Use
- Research and Development
- Warehousing
- Wholesale Use

In general, the above are considered to be Class I industries. As the Project is located outside of the 70 m AOI and 20 m MSD for Class I industries, air and noise impacts are not anticipated to be a concern for the Project.

Should a Class II industry be considered, the facility would be located within the 300 m AOI and outside of the 70 m MSD. As these facilities are expected to obtain either an MECP Environmental Compliance Approval (ECA) or an Environmental Sector Activity Registry (EASR) Registration, an assessment of air quality and noise emissions would be required. Class II industries are expected to be able to meet the applicable air quality criteria and obtain an ECA or EASR, and would not be a concern for the Project. Based on our experiences with the allowed uses and a potential Class II industry, noise impacts are expected to be met the development lands (approx. distance of 145 m) taking into consideration equipment location to minimize noise impacts on receptors, utilizing screening from the proposed facility, placement of equipment along the building side facing Highway 11 and/or the inclusion of noise controls (if needed).

Industrial vibration impacts are not anticipated, as these future facilities are not likely to include operations such as automotive parts manufacturing, therefore, additional vibration analysis is not considered necessary.

Based on the above, the conversion of the Project lands to residential is unlikely to adversely affect the ability of future industrial land uses on the vacant lots to obtain/maintain their required environmental permits and to operate. Therefore, air, noise and vibration impacts are not anticipated at the sensitive buildings of the Project and additional analysis is not considered necessary.

3.4 Transportation Corridors

Surrounding transportation sources include the following roadways:

- Highway 11, approx. 240 m south of the development;
- Uthoff Line, adjacent to the development to the west; and
- Burnside Line, adjacent to the development to the east.

Railways are not located within 1000 m of Project lands, and are not a concern for the development regarding noise and vibration.

Air Emissions

Transportation Related Air Pollution (TRAP) is considered a major local contributor to air pollution and can result in adverse health impacts for people living near highways and roadways, as noted in the 2017 Toronto Public Health 'Avoiding the Trap' Technical Report – Land Use Planning at the Project site Level'.

TRAP studies are typically completed if a development is located within 500m of a major highway (>100,000 veh/day), 150 m of highways (>50,000 veh/day) and 100 m for roadways (>15,000 veh/day).

As the 2019 Highway 11 volumes are approximately 34,000 vehicles per day and approximately 240 m from the development, impacts from air emissions from Highway 11 are expected to be minimal. Similarly, Uthoff Line and Burnside Line volumes are under 15,000 vehicles per day, where impacts from air emissions from these roadways are expected to be minimal. Therefore, a TRAP study is not considered necessary.

Noise Emissions

Roadway noise has the potential to impact the proposed development, due to the proximity of Highway 11, Uthoff Line and Burnside Line. An assessment of roadway noise is considered necessary to confirm if noise controls are required for the development.

Vibration

As no railways are located within the surrounding area, train vibration is not a concern for the development and an assessment of rail vibration is not necessary.

4.0 Concluding Comments

A land use compatibility assessment was completed for the Project, considering the potential for air quality, dust, odour, noise and vibration impacts from industrial and transportation source impacts on the Project.

4.1 Nearby Facilities

4.1.1 Existing

Various Class I, II and III facilities were identified to be within the AOI of the proposed development, where the development is located within the MSD for the ToSPWUO, ToSPWY and Walker Pit. As existing sensitive receptors are at closer, intervening locations, air and noise impacts are not anticipated at the sensitive buildings of the Project. Therefore, additional analysis is not considered necessary for the existing surrounding facilities.

4.1.2 Vacant Lands

Potential future industries within the currently vacant industrial lands to the south have the potential to include Class I and Class II industries, based on the allowed uses within the zoning and the small lot sizes.

As Class I industries would be located outside of the AOI and MSD, additional analysis is not considered necessary.

Should a Class II industry be considered, the facility is expected to obtain an MECP ECA or EASR, and is expected to be able to meet the applicable air quality criteria. Noise is expected to be met taking into consideration the appropriate equipment selection, placement and inclusion of noise controls (if needed), in the facility design.

Based on the above, the conversion of the Project lands to residential is unlikely to adversely affect the ability of future industrial land uses on the vacant lots to obtain/maintain their required environmental permits and to operate. As air, noise and vibration impacts are not anticipated at the sensitive buildings of the Project, an additional analysis is not considered necessary.

4.2 Transportation Sources

Roadway air emissions are not anticipated to be a concern for the Project given the roadway volumes and separation distances from the surrounding roadways. Therefore, a TRAP study is not considered necessary.

Roadway noise has the potential to impact the proposed development. An assessment of roadway noise impacts on the Project is considered necessary to confirm if noise controls are required for the development.

4.3 Closure

Based on our review, the Project is considered compatible with the surrounding land uses. The conversion of the Project lands:

- will not affect the compliance of local industrial facilities with applicable Provincial environmental policies, regulations, approvals, authorizations, and guidelines;
- are not likely to result in an increased risk of complaint and nuisance claims;
- are not likely to result in operational constraints for the surrounding industries and commercial operations;
- are not likely to result in constraints on surrounding industries to reasonably expand, intensify or introduce changes to their operations; and
- are not likely to result in constraints for new industries to reasonably be established in the surrounding industrial lands.

The following study is recommended:

- An Environmental Noise Study to address roadway noise from surrounding roadways, identifying potential noise control measures, ventilation and warning clause recommendations.

Please do not hesitate to contact us if there are any questions.

Yours Truly,

Thornton Tomasetti



Marcus Li, P.Eng.
Vice President

Reviewed by:
Robert Fuller, P.Eng.
Project Engineer

Disclaimer

This report is provided in accordance with the contractual agreement between TT and the Client. In addition to our contractual obligations TT notes the following general disclaimers and qualifications regarding the content of this report.

In preparing this report, TT has relied upon the accuracy and completeness of information provided by the Client and other third parties (manufacturers, other consultants, etc.) and accepts no responsibility for errors or omissions by other parties in the information provided to TT.

This report has been prepared solely for the benefit of the Client and the content of this report is intended for informational purposes only. This report shall not be relied upon by any other parties, including but not limited to other consultants retained by the Client, or utilized for any other purposes.

Ultimate responsibility for the design and construction remains solely with the architect/engineer of record and/or the contractor(s). Achieving the required mitigation requirements relies on correct incorporation of mitigation recommendations into Architectural and Mechanical drawings and specifications, as well as correct installation during construction. It is recommended that the implementation of mitigation measures be reviewed by a qualified consultant.

On request, TT will provide a proposal for additional work such as to peer review mitigation measures or observe on-site conditions as appropriate; however, notwithstanding the foregoing, it is expressly understood and agreed that TT shall not have control or charge of, and shall not be responsible for the acts or omissions, including but not limited to means, methods, techniques, sequences and procedures, of the Design Professionals and/or Contractors performing design and/or construction on the Project. Accordingly, TT shall not be held responsible for the failure of any party to properly incorporate the mitigation measures stated in this report.

Figures

Figure 1: Project Site Plan

Figure 2: Project Location & D-6 Areas of Influence

Client Name
LIV (Hawkridge) LP

Project Name
Hawkridge Golf Course

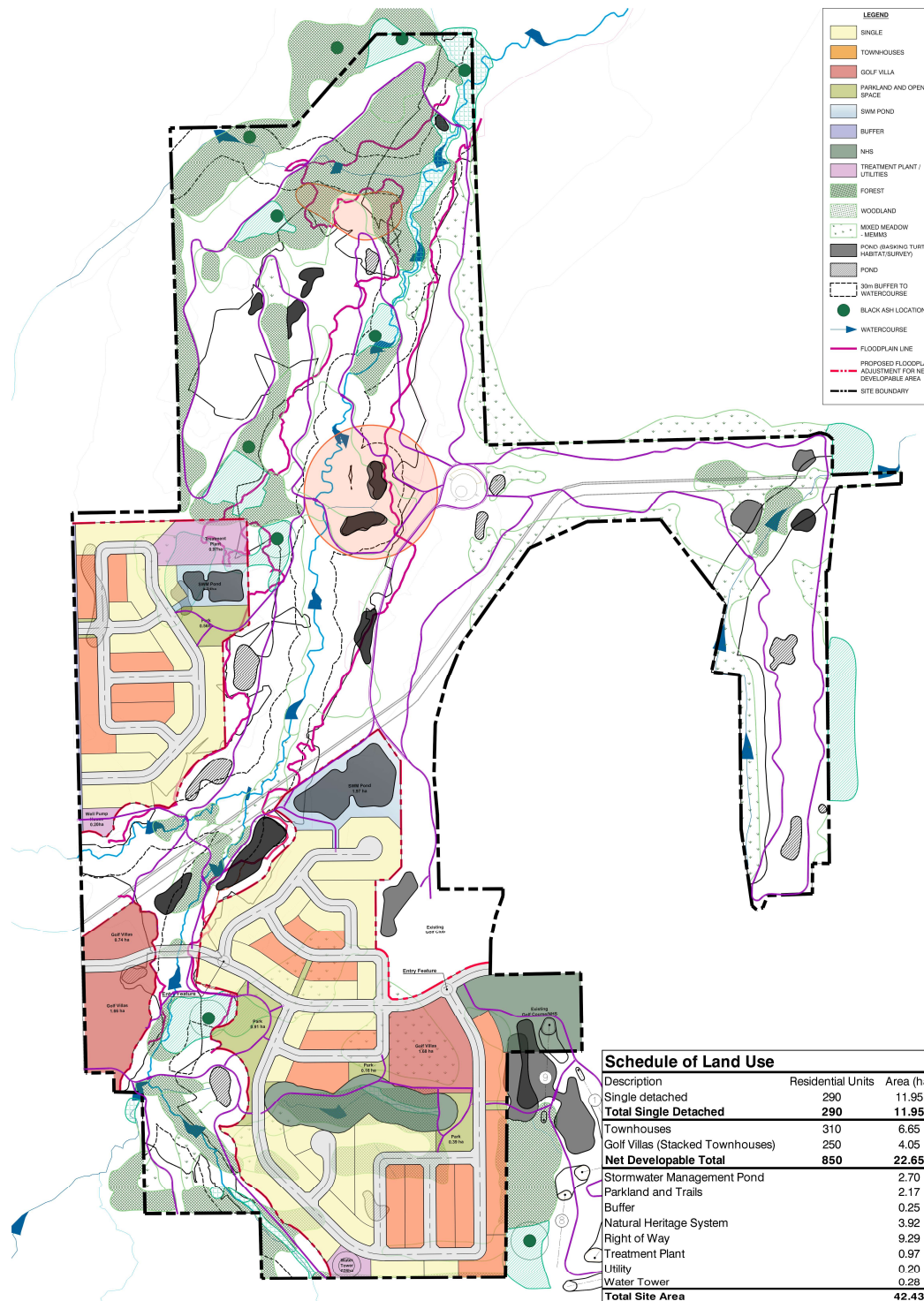
Notes:
1) Not to Scale

Figure Title
Project Site Plan

Produced By
MTL

TT Project #
24010598

Date
Sept 29, 2024



© 2024 Thornton Tomasetti LLP. Project: 24010598-001 (Site Plan). 11/24 Design: 11/24 Working Document: 11/24. All rights reserved.

Client Name
LIV (Hawkrigde) LP

Project Name
Hawkrigde Golf Course

Notes:

Industry IDs

- 1 - Twp of Severn Public Works and Utilities Office
- 2 - Cavana Ridge Spa/Wellness/ Salon
- 3 - Twp of Severn Public Works Yard
- 4 - Walker Agregates Orillia Pit 48
- 5 - Charter Construction Ltd. Solar Facility
- 6 - JG Stewart Construction
- 7 - Champlain Manor Retirement Residence
- 8- Walmart
- 9 - KJ Beamish Hot Mix Asphalt Plant
- 10 - Dufferin Aggregates Orillia
- 11 - Kubota Materials Canada Corporation
- A - Vacant Lands - Future Industrial Lands


 Existing Sensitive Buildings Surrounding Project

Figure Title
Project Location and D-6 Areas of Influence

Produced By
MTL

TT Project #
24010598

Date
Oct 3, 2024



Appendix A: Zoning Maps

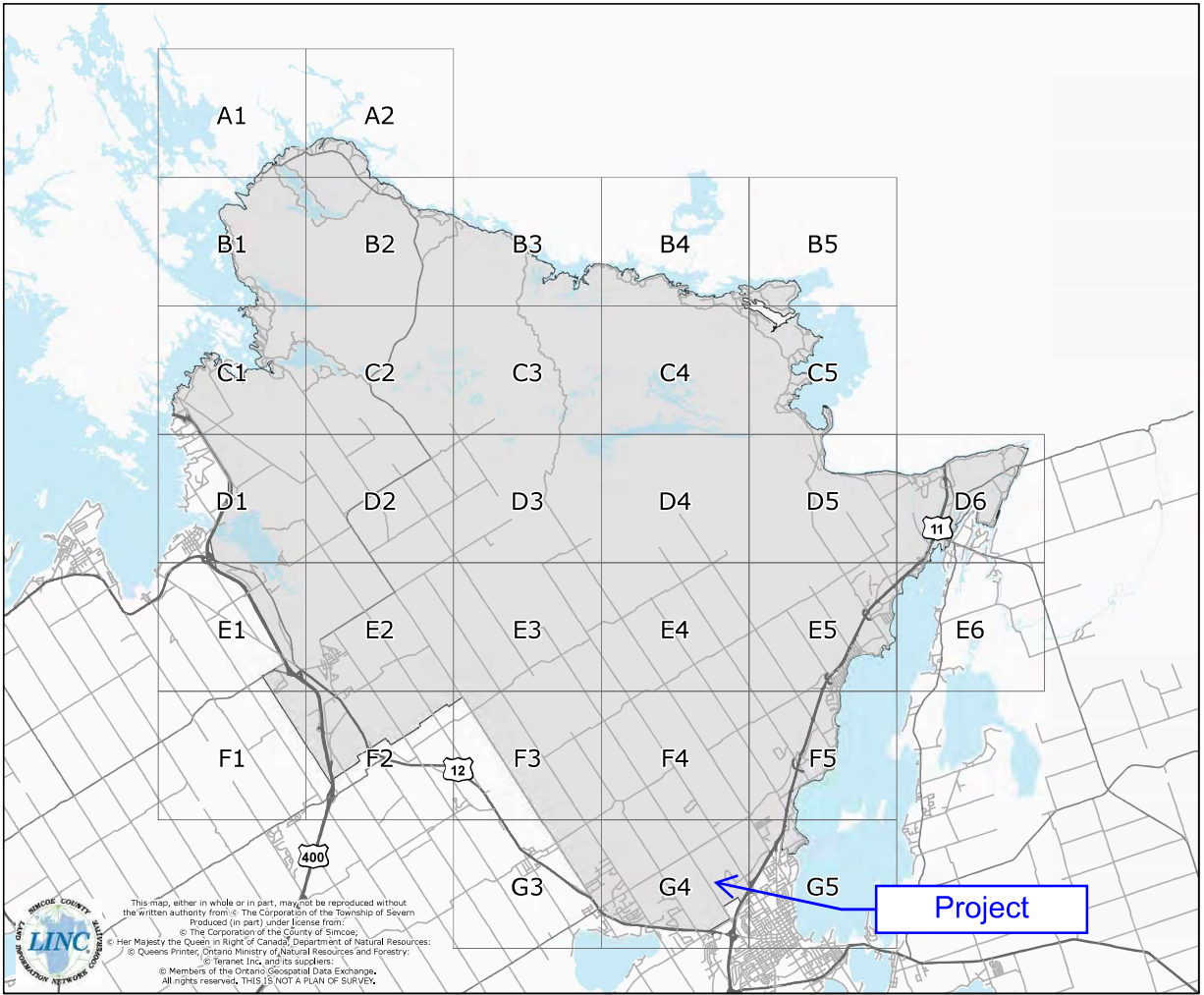
SECTION 2 ESTABLISHMENT OF ZONES

2.1 Zones

For the purposes of this By-law, the Township of Severn is divided into the following Zones:

Zone	Symbol
Agricultural and Rural Zones	
Agriculture	AG
Rural	RU
Residential Zones	
Residential Type One	R1
Residential Type Two	R2
Medium Density Residential	RM1
High Density Residential	RM2
Shoreline Residential Serviced	SR1
Shoreline Residential Non-Serviced	SR2
Shoreline Residential Restricted Access	SR3
Rural Residential	RR
Estate Residential	ER
Mobile Home Residential	MHR
Commercial Zones	
General Commercial	C1
Downtown Commercial	C2
Neighbourhood Commercial	C3

Highway Commercial	C4
Space Extensive Commercial	C5
Shopping Centre Commercial	C6
Rural Commercial	C7
Tourist Resort Commercial	C8
Recreational Commercial	C9
Shoreline Commercial	C10
Industrial Zones	
Light Industrial	M1
General Industrial	M2
Extractive Industrial	M3
Waste Management Industrial	M4
Miscellaneous Zones	
County Forest	CF
Crown Land	CL
Environmental Protection	EP
Greenlands	GL
Institutional	I
Open Space	OS



Township of Severn

Zoning By-law 2010-65

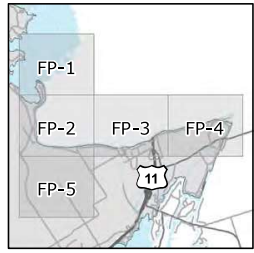
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Updated: 2020-07-15

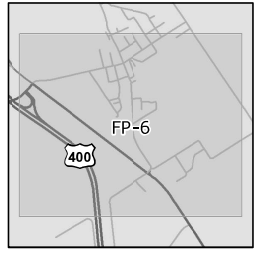
Zone Symbols

- AG - AGRICULTURE
- RU - RURAL
- R1 - RESIDENTIAL TYPE ONE
- R2 - RESIDENTIAL TYPE TWO
- RM1 - MEDIUM DENSITY RESIDENTIAL
- RM2 - HIGH DENSITY RESIDENTIAL
- SR1 - SHORELINE RESIDENTIAL ONE
- SR2 - SHORELINE RESIDENTIAL TWO
- SR3 - SHORELINE RESIDENTIAL THREE
- RR - RURAL RESIDENTIAL
- ER - ESTATE RESIDENTIAL
- MHR - MOBILE HOME RESIDENTIAL
- C1 - GENERAL COMMERCIAL
- C2 - DOWNTOWN COMMERCIAL
- C3 - NEIGHBOURHOOD COMMERCIAL
- C4 - HIGHWAY COMMERCIAL
- C5 - SPACE EXTENSIVE COMMERCIAL
- C6 - SHOPPING CENTRE COMMERCIAL
- C7 - RURAL COMMERCIAL
- C8 - TOURIST RESORT COMMERCIAL
- C9 - RECREATIONAL COMMERCIAL
- C10 - SHORELINE COMMERCIAL
- M1 - LIGHT INDUSTRIAL
- M2 - GENERAL INDUSTRIAL
- M3 - EXTRACTIVE INDUSTRIAL
- M4 - WASTE MANAGEMENT INDUSTRIAL
- CF - COUNTY FOREST
- CL - CROWN LAND
- EP - ENVIRONMENTAL PROTECTION
- GL - GREENLANDS
- I - INSTITUTIONAL
- OS - OPEN SPACE

Severn River Flood Plain



Coldwater Floodproofing Areas



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Coldwater

Washago

Westshore

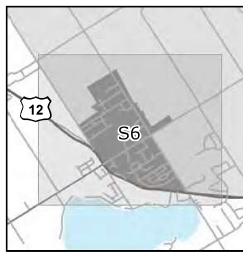
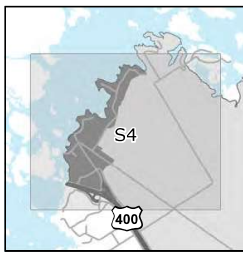
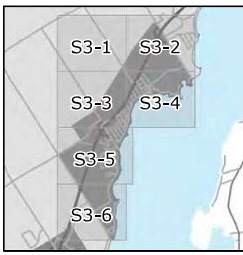
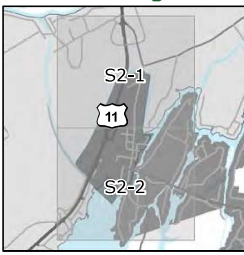
Port Severn

Ardrea

Marchmont

Fesserton

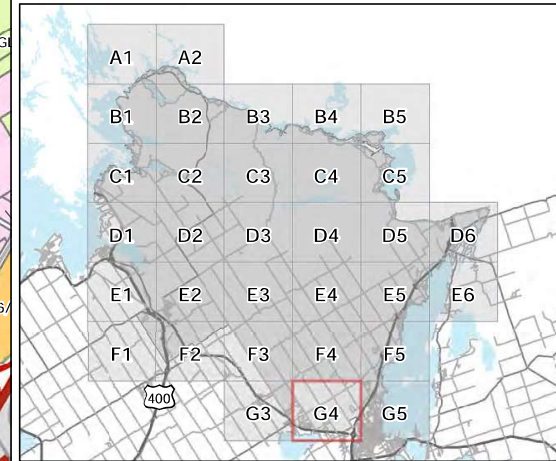
Severn Falls



Township of Severn Zoning By-law 2010-65

Schedule G4

Project



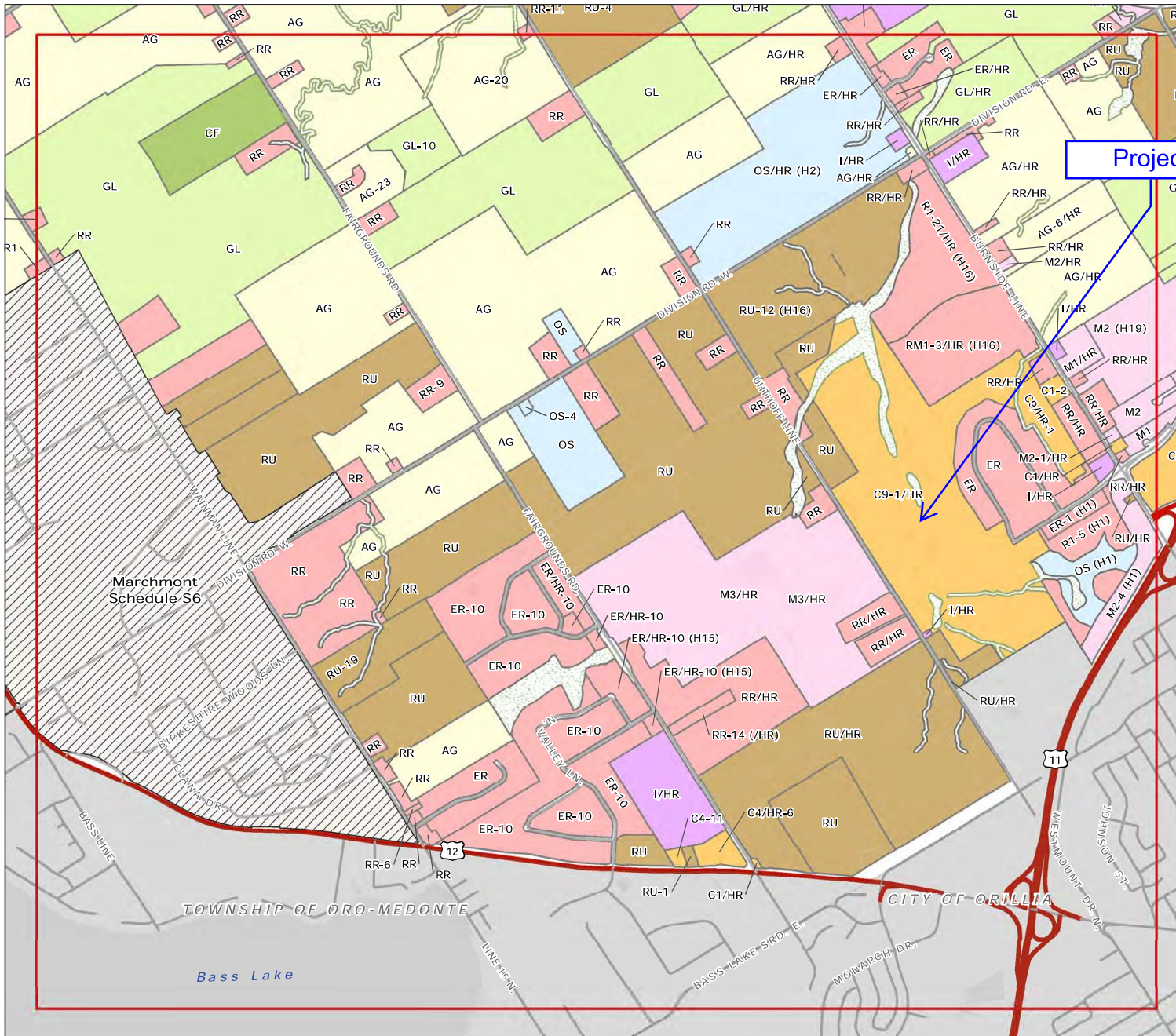
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Updated: July 15, 2020

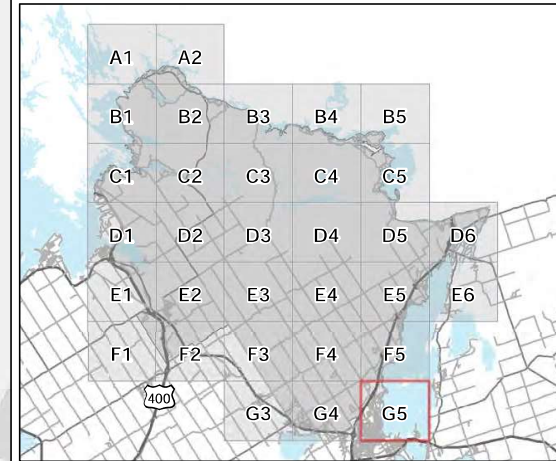


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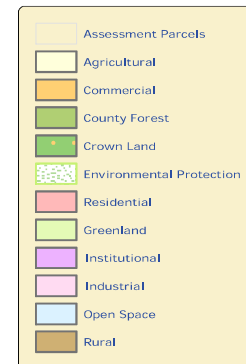


Township of Severn Zoning By-law 2010-65

Schedule G5



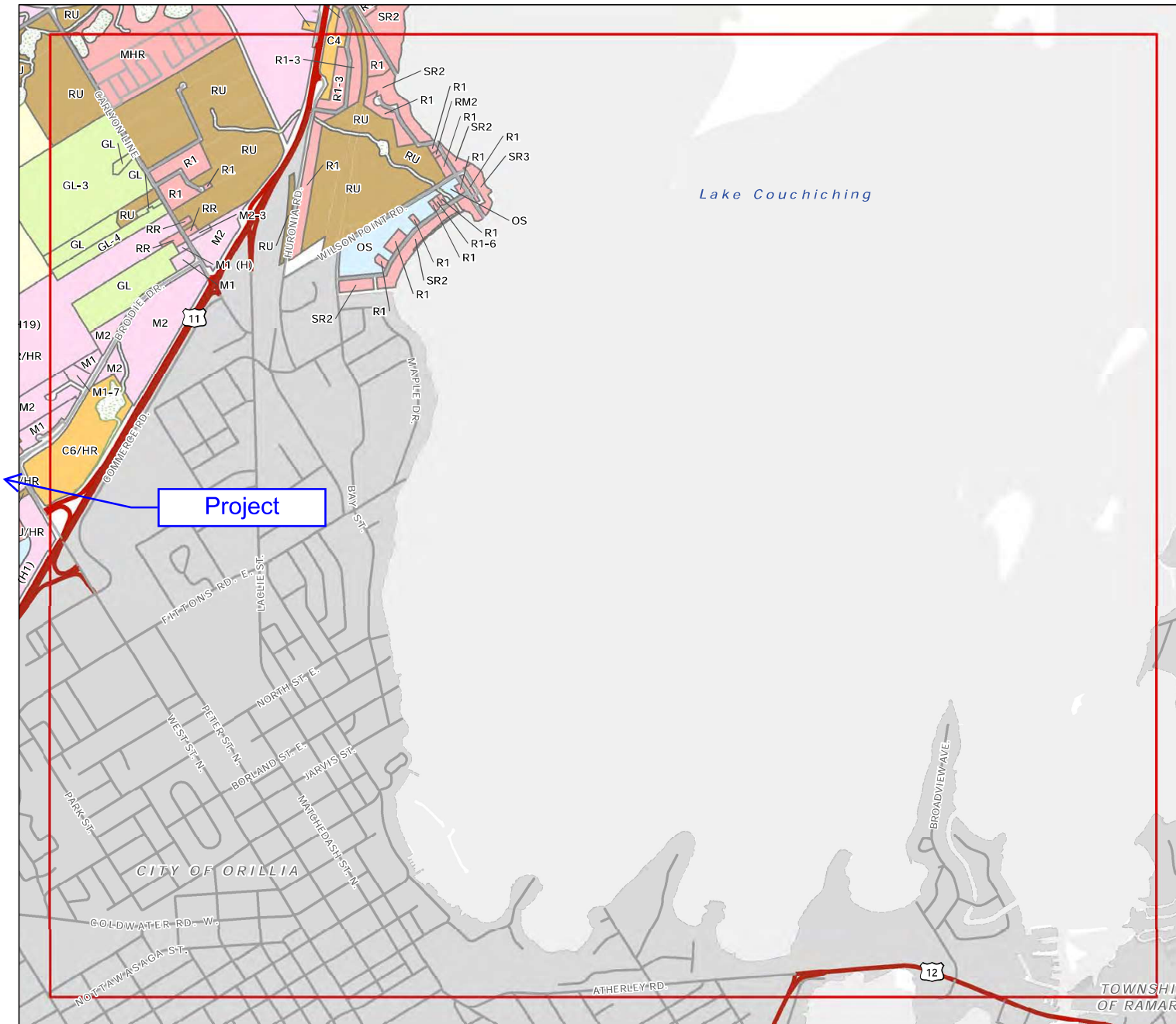
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Updated: July 15, 2020



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**SECTION 3
ESTABLISHMENT OF ZONES**

3.1 ZONES

The Provisions of this By-law apply to all lands within the limits of the City of Orillia. All lands in the City are within one or more of the following Zones:

ZONE	SYMBOL
Residential Zones	
Residential One	R1
Residential Two	R2
Residential Three	R3
Residential Four	R4
Residential Five	R5
Residential Six	R6
West Ridge Residential Zones	
West Ridge Residential One	WRR1
West Ridge Residential Two	WRR2
West Ridge Residential Three	WRR3
West Ridge Residential Four	WRR4
West Ridge Residential Five	WRR5
West Ridge Residential Six	WRR6
Commercial Zones	
Main Street Commercial	C1
Neighbourhood Commercial	C2
Arterial Commercial	C3
Mixed Use Intensification	C4
Community Commercial	C5
Downtown Shoulder Zones	
Downtown Shoulder One	DS1
Downtown Shoulder Two	DS2
Institutional and Health Care Zones	
Institutional One (School Zone)	I1
Institutional Two (Place of Worship)	I2
Institutional Three (Major Institutional)	I3
Health Care One (Hospital Zone)	HC1
Health Care Two (Health Care)	HC2

Industrial Zones

Industrial One (Light Industrial)	M1
Industrial Two (General Industrial)	M2
Industrial Three (Business Park Industrial)	M3
Industrial Four (Extractive Industrial)	M4
Industrial Five (Waste Disposal)	M5

Open Space, Rural and Environmental Protection Zones

Open Space One (Public Park)	OS1
Open Space Two (Private Open Space)	OS2
Rural	RU
Environmental Protection	EP

Overlay Zones

Shoreline Buffer Overlay Zone
Waste Disposal Assessment Overlay Holding Zone
Wellhead Protection and Intake Protection Overlay Zones
Flood Hazard Overlay Zone
Downtown Area Overlay Zones

3.2 LANDS UNDER WATER

All lands under water of the lakes and watercourses within the City are subject to this By-law in addition to the requirements of both federal and provincial legislation. All lands under water not Zoned Environmental Protection (EP) shall be Zoned Open Space (OS1), and may be used in accordance with the zoning of Abutting and appertaining lands and the regulations of this By-law and specifically Subsection 5.1.4.

3.3 ZONE SYMBOLS

The Zone symbols may be used in this By-law, and on the Schedules to this By-law, to refer to the Zone in which the lands are located and to the use of Lots, Buildings and Structures permitted by this By-law.

3.4 ZONE SCHEDULES

The Zones and Zone boundaries are shown on Schedule 'A' (Maps 1 to 40), Schedule 'B' and Schedule 'C', which form part of this By-law.

3.5 DETERMINING ZONE BOUNDARIES

When determining the location of Zone boundaries as shown on any Schedule forming part of this By-law, the following provisions shall apply:

- i) a boundary indicated as following a Highway, Street, Lane, railway Right-of-Way, Utility Corridor or Watercourse shall be the edge of such Highway, Street, Lane, railway Right-of-Way, Utility Corridor or Watercourse;



City of Orillia
ZONING BY-LAW
2014-44

SCHEDULE 'A'
Key Map



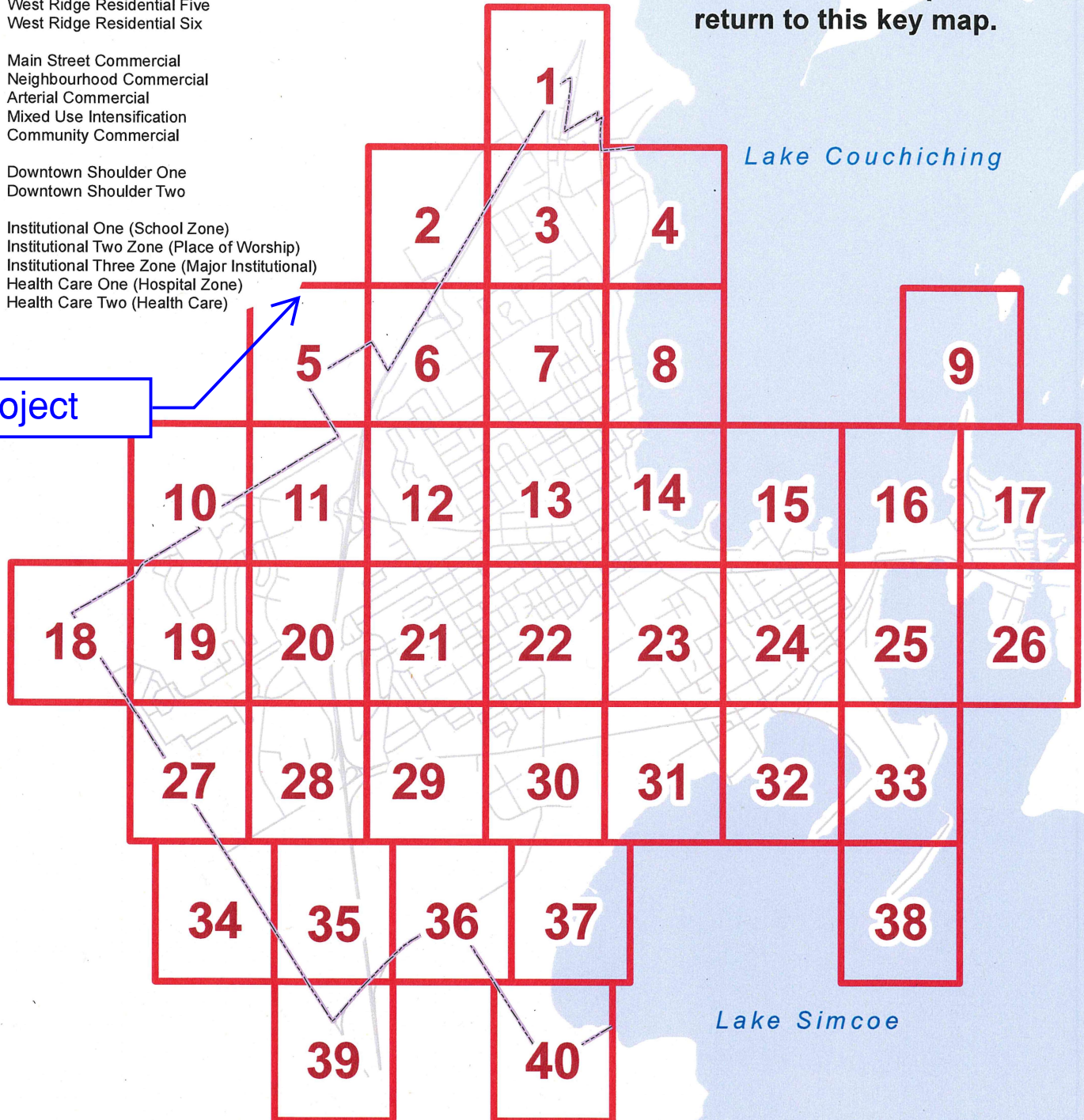
1:50,000

June 1, 2024

Zone Legend

- | | |
|---|--|
| R1 Residential One | M1 Industrial One (Light Industrial) |
| R2 Residential Two | M2 Industrial Two (General Industrial) |
| R3 Residential Three | M3 Industrial Three (Business Park) |
| R4 Residential Four | M4 Industrial Four (Extractive Industrial) |
| R5 Residential Five | M5 Industrial Five (Waste Disposal) |
| R6 Residential Six | |
| WRR1 West Ridge Residential One | OS1 Open Space One (Public Park) |
| WRR2 West Ridge Residential Two | OS2 Open Space Two (Private Open Space) |
| WRR3 West Ridge Residential Three | RU Rural |
| WRR4 West Ridge Residential Four | EP Environmental Protection |
| WRR5 West Ridge Residential Five | |
| WRR6 West Ridge Residential Six | |
| C1 Main Street Commercial | |
| C2 Neighbourhood Commercial | |
| C3 Arterial Commercial | |
| C4 Mixed Use Intensification | |
| C5 Community Commercial | |
| DS1 Downtown Shoulder One | |
| DS2 Downtown Shoulder Two | |
| I1 Institutional One (School Zone) | |
| I2 Institutional Two Zone (Place of Worship) | |
| I3 Institutional Three Zone (Major Institutional) | |
| HC1 Health Care One (Hospital Zone) | |
| HC2 Health Care Two (Health Care) | |

Click on the numbered square below to zoom to the map of that area. Use the yellow "Back to Key Map" button on the individual map to return to this key map.



Project

Lake Couchiching

Lake Simcoe



Legend

- Road
- - - Municipal Boundary
- ▭ Zone Boundary
- ▭ Parcel
- ▭ Waterbody
- ▭ Flood Hazard One (FH1)
- ▭ Flood Hazard Two (FH2)

- ▭ Wellhead Protection Zone
- ▭ Intake Protection Zone 1
- ▭ Intake Protection Zone 2
- ▭ Shoreline Buffer Overlay Zone
- ▭ Waste Disposal Assessment Overlay Holding Zone
- ▭ Dougall Canal Overlay Zone
- ▭ Waterfront Redevelopment Area Overlay Zone

City of Orillia Zoning By-law 2014-44

Consolidation Date: June 1, 2024

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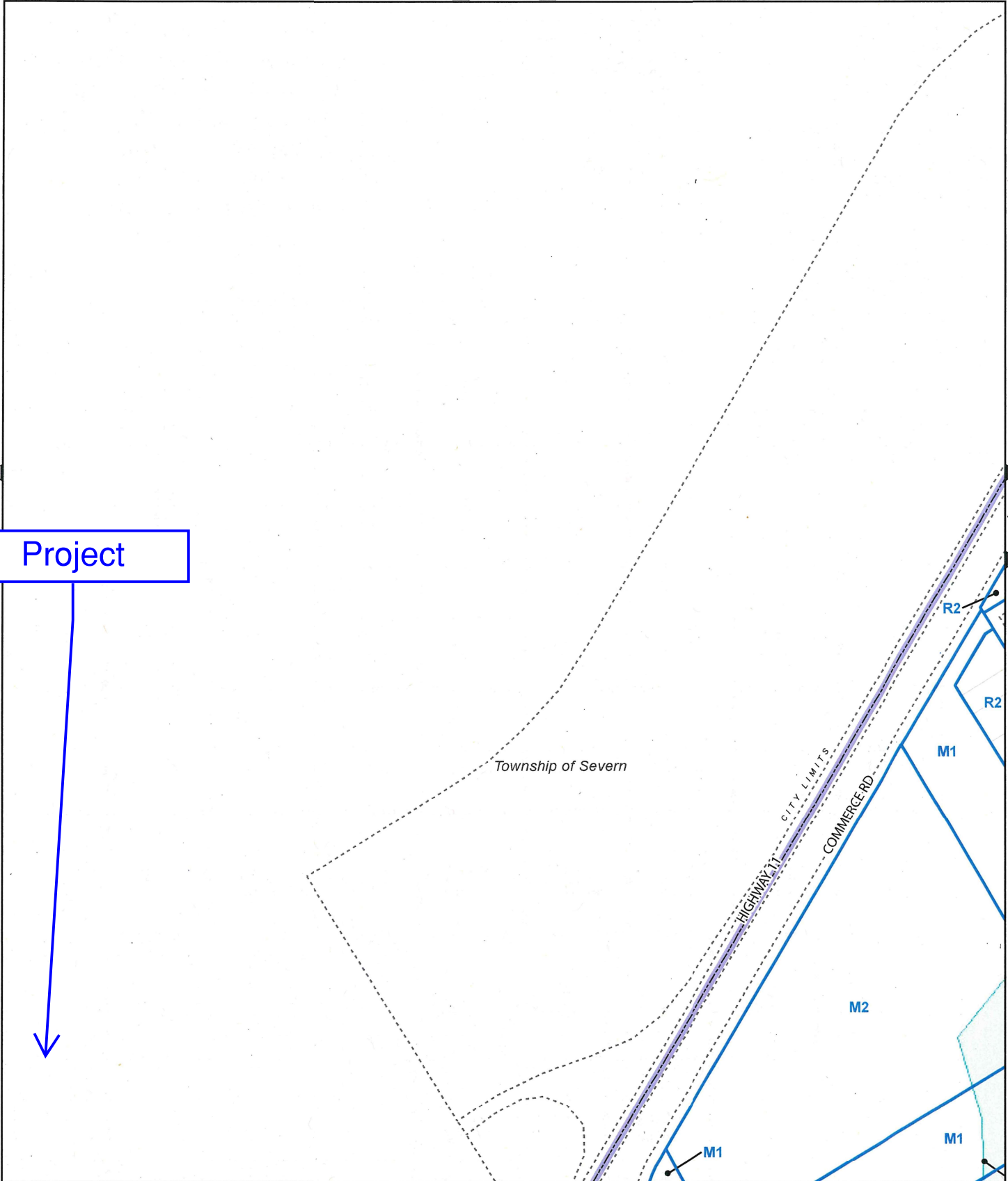


[Back to Key Map](#)



Map 2 of 40

Project



Map 6

Map 3



Legend

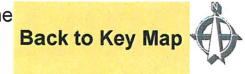
- Road
- Municipal Boundary
- ▭ Zone Boundary
- ▭ Parcel
- ▭ Waterbody
- ▭ Flood Hazard One (FH1)
- ▭ Flood Hazard Two (FH2)

- ▭ Wellhead Protection Zone
- ▭ Intake Protection Zone 1
- ▭ Intake Protection Zone 2
- ▭ Shoreline Buffer Overlay Zone
- ▭ Waste Disposal Assessment Overlay Holding Zone
- ▭ Dougall Canal Overlay Zone
- ▭ Waterfront Redevelopment Area Overlay Zone

City of Orillia Zoning By-law 2014-44

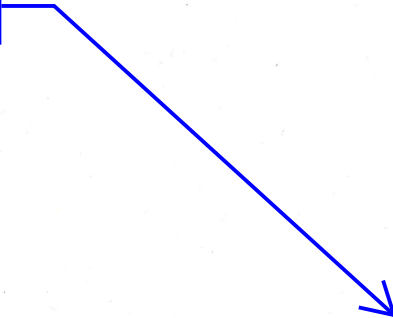
Consolidation Date: June 1, 2024

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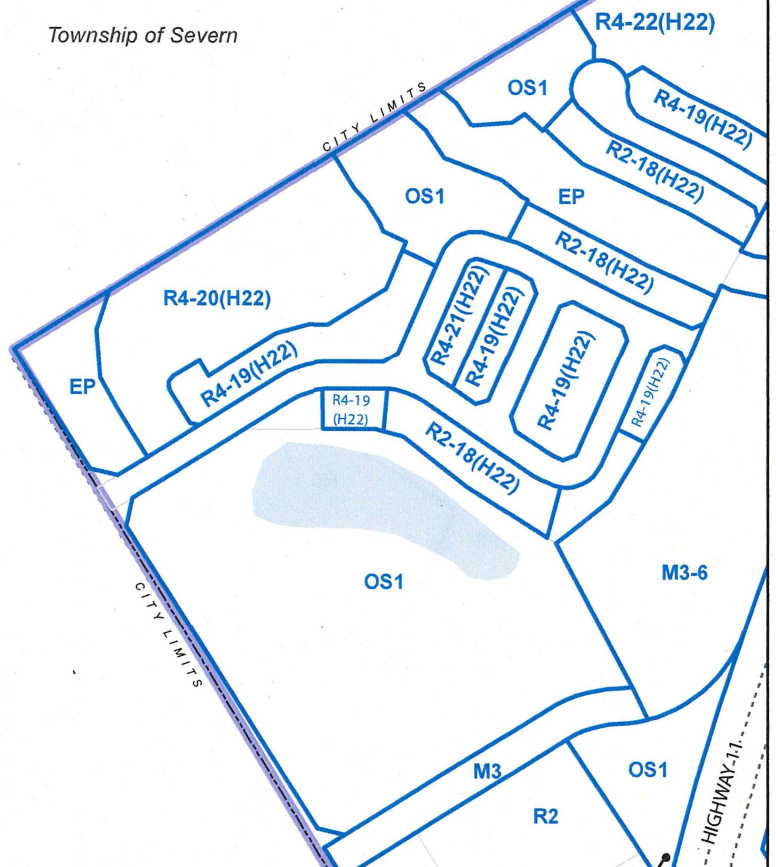


Map 5 of 40



Project





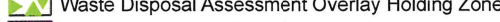
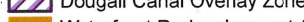



Township of Severn



Legend

-  Road
-  Municipal Boundary
-  Zone Boundary
-  Parcel
-  Waterbody
-  Flood Hazard One (FH1)
-  Flood Hazard Two (FH2)

-  Wellhead Protection Zone
-  Intake Protection Zone 1
-  Intake Protection Zone 2
-  Shoreline Buffer Overlay Zone
-  Waste Disposal Assessment Overlay Holding Zone
-  Dougall Canal Overlay Zone
-  Waterfront Redevelopment Area Overlay Zone



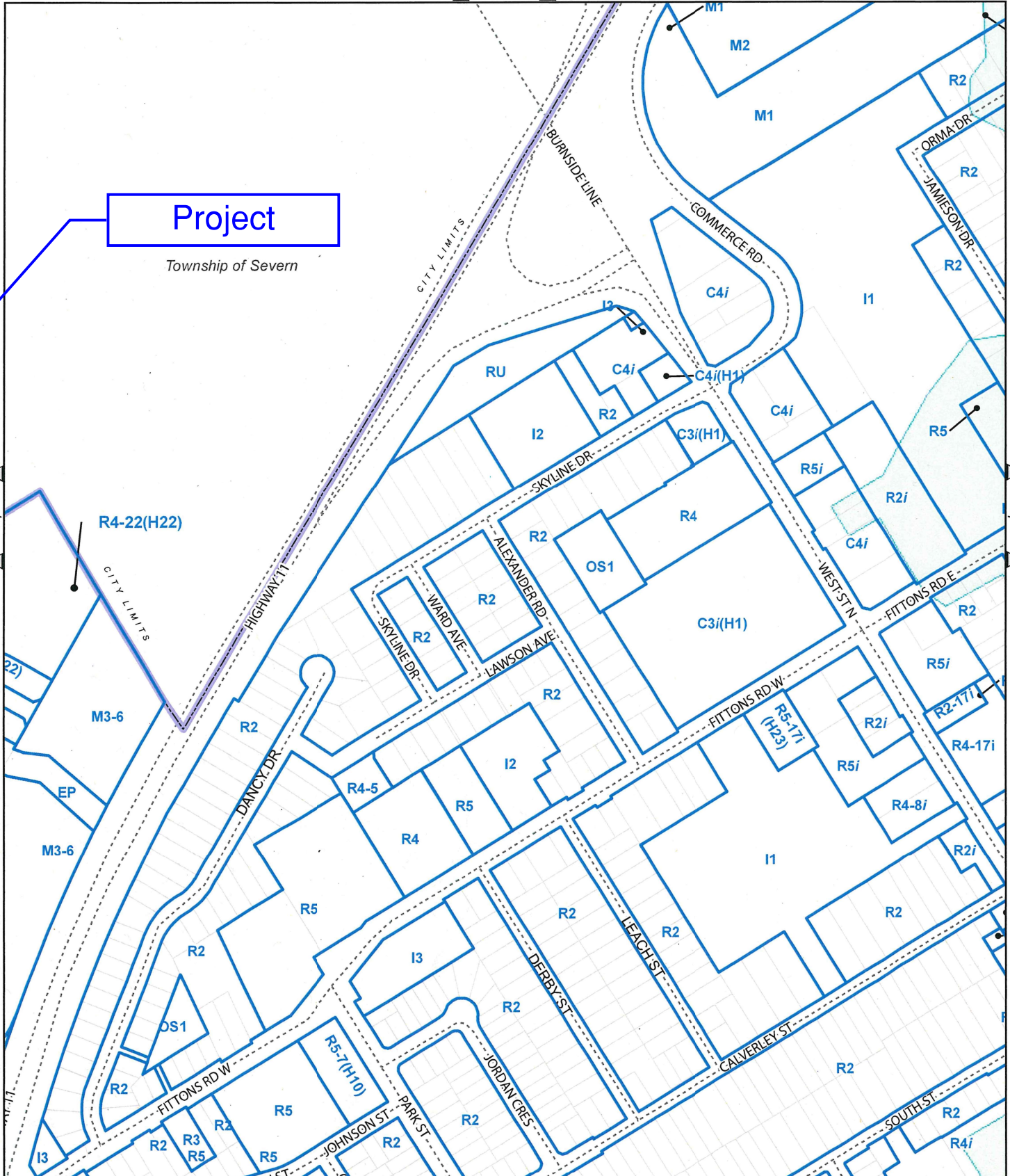
[Back to Key Map](#)



Map 2

Project

Township of Severn



Map 5

Map 7

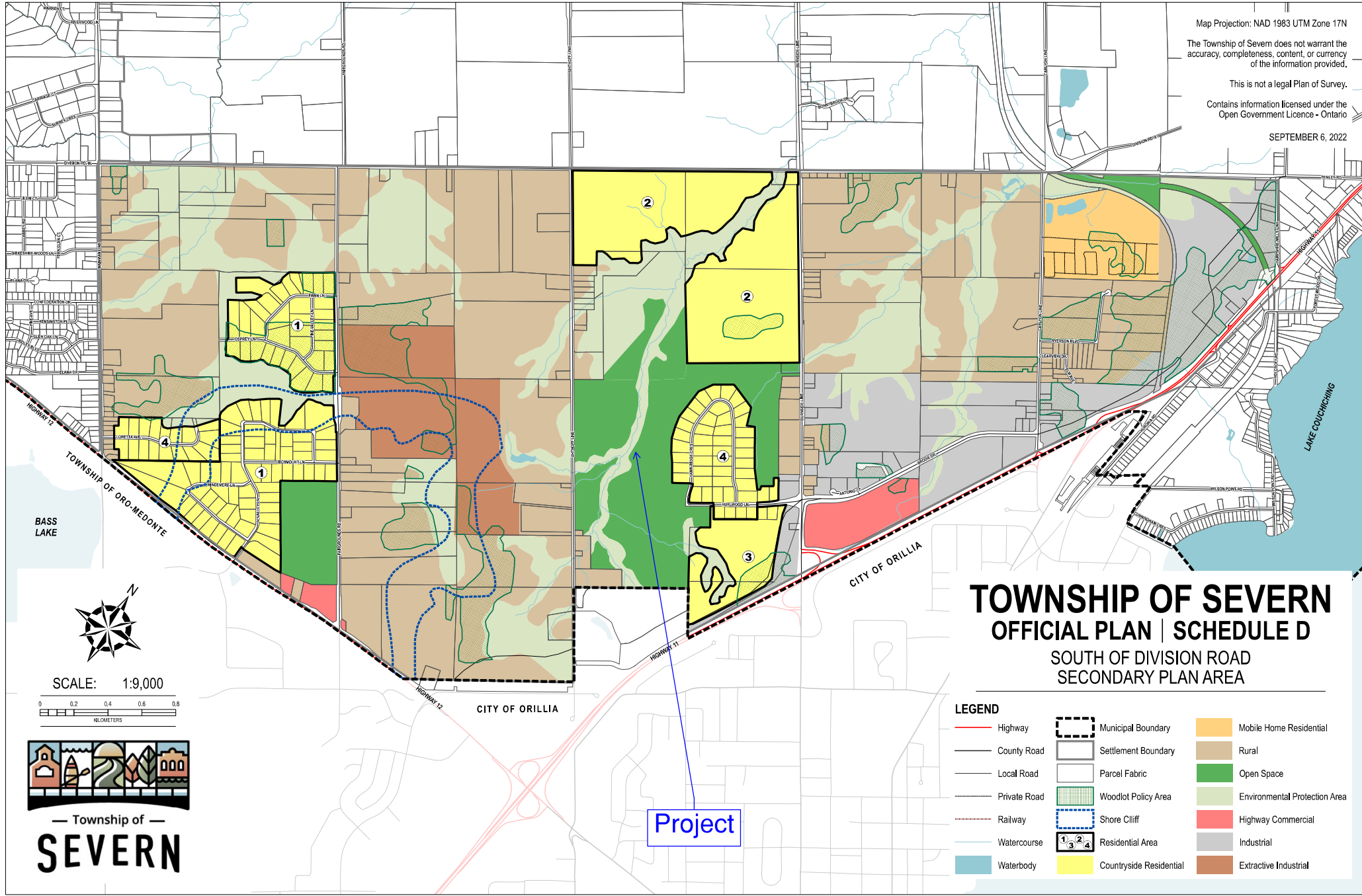
Map 12

Appendix B: Official Plan Maps

Map Projection: NAD 1983 UTM Zone 17N
 The Township of Severn does not warrant the accuracy, completeness, content, or currency of the information provided.

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SEPTEMBER 6, 2022



TOWNSHIP OF SEVERN

OFFICIAL PLAN | SCHEDULE D

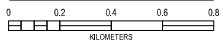
SOUTH OF DIVISION ROAD SECONDARY PLAN AREA

LEGEND

- Highway
- County Road
- Local Road
- Private Road
- Railway
- Watercourse
- Waterbody
- Municipal Boundary
- Settlement Boundary
- Parcel Fabric
- Woodlot Policy Area
- Shore Cliff
- Residential Area
- Countryside Residential
- Mobile Home Residential
- Rural
- Open Space
- Environmental Protection Area
- Highway Commercial
- Industrial
- Extractive Industrial



SCALE: 1:9,000



Township of
SEVERN

Project

Project



City of Orillia Official Plan

Schedule A Land Use

Downtown Area

Downtown Area (See Schedule "B" for designations)

Living Area

Stable Neighbourhood

Neighbourhood Greenfield

Intensification Area

Employment Lands

Business Park/Industrial

Light Industrial Services

Major Institutional

Community Commercial

Arterial Commercial

The Environment/Open Space

Parkland and Major Open Space

Environmental Protection Area

Potential Environmental Linkages

Highway Interchanges

Built Boundary

City Boundary

(defined in accordance with Policy 2.2.3.5 of the Growth Plan for the Greater Golden Horseshoe, 2006 issued on April 2, 2008)

Date Approved by Council: March 9, 2010
Date Approved/Modified: March 17, 2011
Date Approved by OMB: August 23, 2013

Consolidation Date: June 1, 2024

NOTE: Area Specific Policies apply to some properties west of Highway 11. Refer to Schedule "C" for details.

NOTE: Area Specific Policies apply to the Waterfront Redevelopment Lands. Refer to Schedule "C" for details.

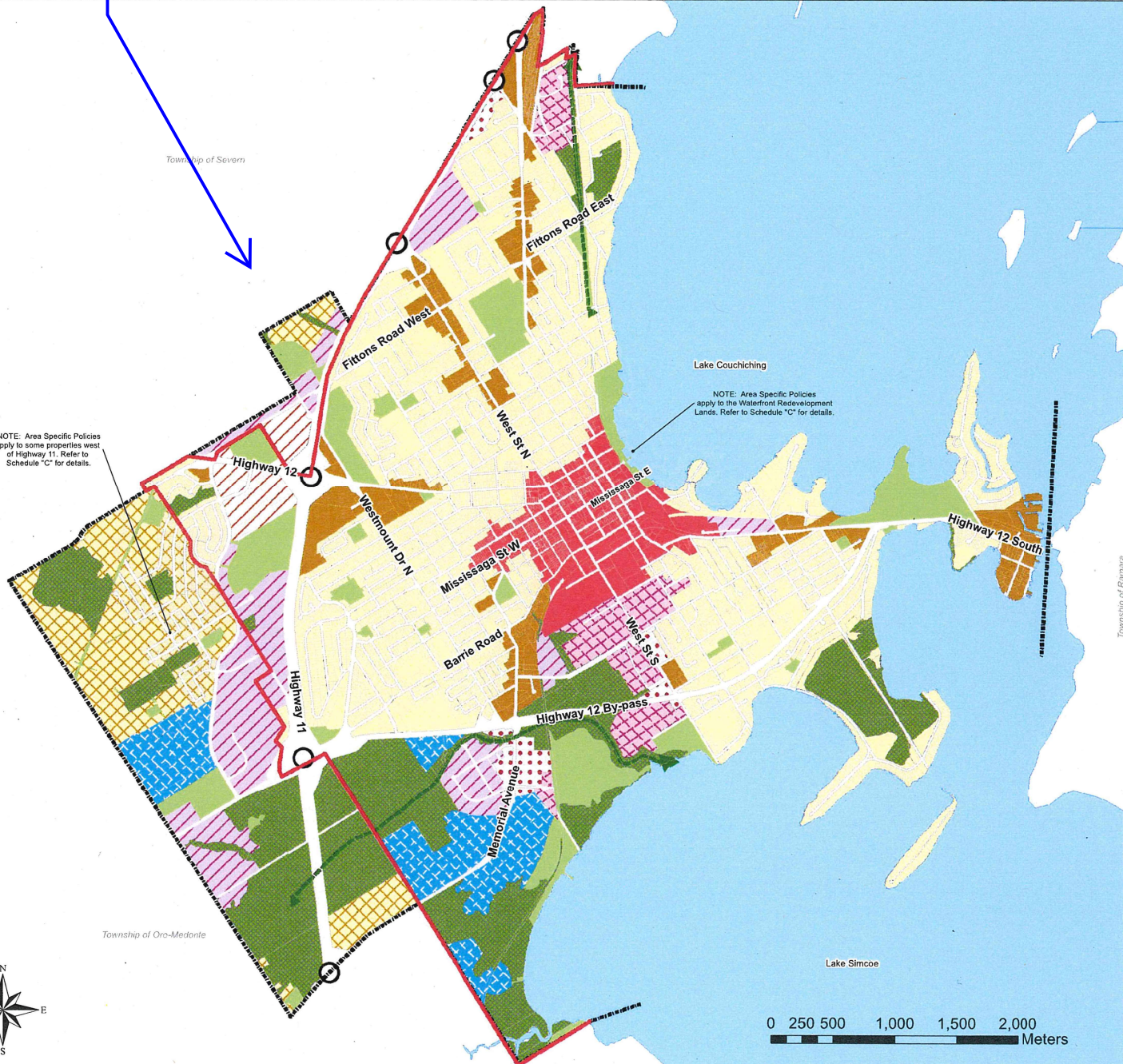
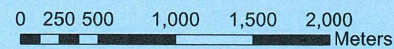
Township of Severn

Township of Oro-Medonte

Township of Ramore

Lake Simcoe

Lake Couchiching



Appendix C: D-6 Industry Review

**Table C.1: D-6 Review of Existing Industrial Facilities Surrounding the Project
HawkrIDGE Golf Course (24010598.01)**

MAP NUMBER	BUSINESS NAME	ADDRESS	APPROVAL TYPE	APPROVAL / REGISTRATION NUMBER	DESCRIPTION	D-6 CLASS	SEPARATION DISTANCE (m) ^[1]	AREA OF INFLUENCE (m)	MINIMUM SEPARATION DISTANCE (m)	WITHIN AREA OF INFLUENCE? (YES/NO)	WITHIN MINIMUM SEPARATION DISTANCE? (YES/NO)
1	Township of Severn Public Works and Utilities Office	1024 Hurlwood Ln, Severn, ON L3V 0Y6	CofA - Air	0183-6ZXRO5	<ul style="list-style-type: none"> - The building is understood to be an administrative office for the Public Works and Utilities Department, which is responsible for the operation and maintenance of the Township's infrastructure. An outdoor emergency generator is installed within an enclosure. - The generator is currently operating under MECP Certificate of Approval (Air) No. 0183-6ZXRO5, dated April 14, 2007. - Anticipated air emissions include combustion products. - Noise emissions are anticipated from regular testing of the emergency generator. - The facility is expected to be in use during regular business hours. - Existing residential homes are located on the adjacent property line to the west and on the opposite side of Bursinde Line to the east. 	Class I	0	70	20	Yes	Yes
2	Cavana Ridge Spa/Wellness/Salon	4260 Burnside Line, Severn, ON L3V 0W1	-	-	<ul style="list-style-type: none"> - A commercial building, consisting of a spa, wellness centre and salon. - Air and noise emissions are anticipated to include rooftop HVAC equipment and general exhaust fans (kitchen, room exhaust, etc.). - The building is in use during regular daytime business hours (10 am to 7 pm). - Existing residential homes are located on the adjacent property line to the north and on the opposite side of Bursinde Line to the east. 	N/A	0	-	-	-	-
3	Township of Severn Public Works Yard	4251 Burnside Line, Orillia, ON L3V 6H4	-	-	<ul style="list-style-type: none"> - The Township public works yard, used for equipment storage and preparation (eg. salt loading, etc.). - Air emissions are anticipated to include short-term idling vehicles, and dust generated from vehicle movements as the site is unpaved. - Noise emissions are anticipated to include short term vehicle idling and periodic use of heavy equipment (eg. loaders). - Facility operations are expected to be infrequent, short in duration and potentially occur during any hour of the day. - Existing residential homes are located on the adjacent property line to the south and on the opposite side of Bursinde Line to the west. 	Class II	15	300	70	Yes	Yes
4	Walker Agregates Orillia Pit 48	4364 Uthhoff Line Orillia, ON L3V 6H2	-	-	<ul style="list-style-type: none"> - The facility is a sand and gravel quarry, operating under Class A Licence (>20,000 tonnes), with ALPS ID:3736. Products are understood to include boulders. - Air and noise emissions are expected to include heavy vehicle (ie. loaders, trucks) in operation. - Hours of operation are anticipated to be daytime only. - Existing residential homes are located to the east along Uthhoff Line and to west along Fairgrounds Road. 	Class II	40	300	70	Yes	Yes
5	Charter Construction Ltd. Solar Facility	4436 Uthhoff Line Severn ON L3V 6H2	EASR - Solar Facility	R-006-5421435457	<ul style="list-style-type: none"> - A solar facility operating under MECP EASR R-006-5421435457, filed June 9, 2014. - No air emissions are expected from the facility. - Noise includes inverter hum for the various solar panel clusters. - The equipment is in use during daylight hours only. - Existing residential homes are located to the east along Uthhoff Line and to west along Fairgrounds Road. 	Class I	40	70	20	Yes	No
6	JG Stewart Construction	1118 Brodie Dr, Severn, ON L3V 0V2	-	-	<ul style="list-style-type: none"> - The facility is understood to be a storage yard for JG Stewart Construction. Services include crushing, washing and rentals of equipment. - Air emissions are expected to primarily include fugitive dust from periodic use of on-site heavy vehicles as the lands are unpaved. - Noise emissions are expected to include crushers, screens, truck haul routes, loaders. Blasting may be carried out on site, with the potential for noise and vibration being generated. - The facility is anticipated to be in use during regular business hours. - Existing sensitive buildings are located on the adjacent property line to the west, and to the east. 	Class I	233	70	20	No	No
7	Champlain Manor Retirement Residence	65 Fittons Rd W, Orillia, ON L3V 3V2	CofA - Air	8817-64PLRF	<ul style="list-style-type: none"> - An emergency generator is installed at the retirement residence. The generator is currently operating under MECP Certificate of Approval (Air) No.8817-64PLRF, dated Sept 13, 2004. - Anticipated air emissions include combustion products. - Noise emissions are anticipated from regular testing of the emergency generator. - Generator testing is expected during daytime hours only. - existing sensitive homes surround the building. In addition, the building itself is sensitive. 	Class I	600	70	20	No	No
8	Walmart	175 Murphy Road Orillia ON L3V 0B5	EASR - Heating	R-003-4554211071	<ul style="list-style-type: none"> - Walmart is a retail building for various consumer goods and groceries. The store is operating under and MECP EASR R-003-4554211071 for heating systems, filed December 8, 2015. - Air and noise emissions are anticipated to include rooftop HVAC equipment, cooling equipment, and loading dock (refrigeration trucks). - The facility is expected to be in use during regular business hours (7 am to 11 pm). - Existing residential homes are located to the east and north along Uthhoff Line. 	Class I	690	70	20	No	No

MAP NUMBER	BUSINESS NAME	ADDRESS	APPROVAL TYPE	APPROVAL / REGISTRATION NUMBER	DESCRIPTION	D-6 CLASS	SEPARATION DISTANCE (m) ^[1]	AREA OF INFLUENCE (m)	MINIMUM SEPARATION DISTANCE (m)	WITHIN AREA OF INFLUENCE? (YES/NO)	WITHIN MINIMUM SEPARATION DISTANCE? (YES/NO)
9	KJ Beamish Hot Mix Asphalt Plant	4293 Fairgrounds Rd, Orillia, ON L3V 6S1	Amended ECA - Air	5717-AA9PL8	- The facility is a Hot Mix Asphalt Plant, operating under the MECP Amended ECA no. 5717-AA9PL8, dated December 21, 2016. ' Air emissions include combustion products (carbon dioxide, nitrous oxides and sulfur oxides), carbon monoxide, volatile organic compounds, methane, other hazardous air pollutants and fugitive dust. -Noise emissions include process emissions, dust collectors, truck loading, truck idling and truck pass-bys. - The facility has the potential to operate 24 hours per day, 7 days per week. - Existing residential homes are located to the west/north/south along Fairgrounds Road and east along Uthoff Line.	Class III	700	1000	300	Yes	No
10	Dufferin Aggregates Orillia	4293 Fairgrounds Rd, Orillia, ON L3V 6S1	-	-	- The facility is a sand and gravel quarry, operating under Class A Licence (>20,000 tonnes), with ALPS ID:3714. Products include clear stone, gravel, sand & screenings, recycled asphalt product and asphalt millings. - Air emissions are expected to primarily include fugitive dust from crushing operations, screens and truck traffic along unpaved roads. - Noise emissions are expected to include crushers, screens, truck haul routes, loaders. - Blasting may be carried out on site, with the potential for dust, noise and vibration being generated. - The facility has the potential to operate 24 hours per day, 7 days per week. - Existing residential homes are located to the west/north/south along Fairgrounds Road and east along Uthoff Line.	Class III	700	1000	300	Yes	No
11	Kubota Materials Canada Corporation	25 Commerce Rd, Orillia, ON L3V 0Z2	Amended ECA - Air	0529-9GXLWV	- Kubota Metals is manufacturing facility with operations including steel alloy castings and fabrication of custom-designed steel assemblies and potassium titanate (TXAX) fibres. The facility is currently operating under MECP ECA No. 0529-9GXLWV, dated July 15, 2014. - Air emissions are anticipated from the Foundry facility operations (melting, casting, coating, fabrication, cleaning/finishing and laboratory analysis) and Potassium Titanate (TXAX) Fibres facility (mixing, melting, pre-immersing, fibrillation, stirring, filtration, calcination, sieving, packing and wastewater treatment). - Noise emissions are anticipated from rooftop process equipment and radiated noise emitted through open bay/access doors. - The hours of operation are understood to be 24 hours per day, 7 days per week. '- Existing residential buildings are located to the north (along Burnside Line), east, south and west, with a school located on the adjacent property to the south.	Class III	730	1000	300	Yes	No

Notes: [1] Measured from property-line to property-line