

GRIMSBY BEACH LAND USE STUDY

PLANNING REPORT AND RECOMMENDATIONS

Date:
October 2021

Prepared for:
Town of Grimsby

Prepared by:
**MacNaughton Hermsen Britton Clarkson
Planning Limited (MHBC)**

**CROZIER ENGINEERING,
TARANDUS ASSOCIATES and
SHOREPLAN**



Tarandus Associates Limited
Environmental Consultants



EXECUTIVE SUMMARY

Background

- The Grimsby Beach Land Use Study (the “Study”) was commenced following the passing of Interim Control By-law 20-05 (“ICBL”) on February 3, 2020, which paused new development in the Grimsby Beach area (the “Study Area”) in order to address the issues and concerns with the land use planning policies and zoning regulations for the area. The study is to provide a comprehensive review of the area and recommendations for an implementable land use planning framework to manage change within the area.
- The Study consists of five phases. Each phase includes technical research and review, engagement with the community, and meetings with the Stakeholder Advisory Committee (SAC) and the Technical Advisory Committee (TAC).

Planning Approaches and Tools

- In determining the most appropriate land use planning framework and implementation tools for Grimsby Beach to address the key findings and community input, an assessment of tools was undertaken and summarized in both the Background Report and in information sheets on land use, zoning, urban design, cultural heritage and tree protection.

Recommended Planning Approach – Secondary Plan

- It is recommended that a Secondary Plan be developed for Grimsby Beach with implementing zoning and support through additional tools that can provide goals, objectives and policies specific to the unique natural and cultural heritage character of the area.

Growth Management

- Based on the historical development in the area, as well as the existing vacant lots, it is estimated that limited development may occur to 2051. This includes the provision of secondary suites.

Cultural Heritage

- A combination of tools under both Part IV of the Ontario Heritage Act and the Planning Act can provide for an appropriate level of protection of the area while allowing flexibility

for compatible replacement housing, alterations and some new development. It is recommended that the Town continue to list and designate properties under Part IV of the Ontario Heritage Act and support the creation of a Secondary Plan for the Grimsby Beach Study Area.

Urban Design

- Through the creation of a Secondary Plan for Grimsby Beach it is appropriate to provide further urban design policy direction that reflects the unique characteristics of Grimsby Beach. The design policies should be integrated with policies related to cultural heritage. Within the proposed Grimsby Beach Secondary Plan, design policies should recognize the unique considerations of each of the proposed character areas.

Character Areas

- Grimsby Beach was determined to be made up of three character areas: The Core Area, Northwest Area and the South Area. Each of the defined areas should be recognized in the Secondary Plan and additional supportive policies should be provided to ensure any new development or replacement housing maintains and enhances the existing character and historic importance of the character area.

Servicing

- A detailed review of existing and required servicing and infrastructure needs, including stormwater management, is provided in the report based on anticipated growth in addition to recommendations for general servicing policies to be added to the Secondary Plan. A Draft Infrastructure Plan will also provide direction for required servicing to support the Study Area.

Transportation

- Based on the review of the existing conditions in the Study Area, a number of conclusions and recommendations related to transportation are provided that address the existing road network and active transportation. These recommendations include general policies to be provided in the proposed Secondary Plan. Parking is also specifically addressed based on the issues raised in relation to public parking in the area. Additional recommendations are provided for signage for both streets and parking areas.

Natural Heritage

- The protection and enhancement of the natural heritage areas of the Study Area should be reinforced in the recommended land use policies within the proposed Secondary Plan. This includes the protection of the shoreline areas and further assessment of the conditions and erosion within the hazard and shoreline areas.

Tree Protection and Canopy Replacement

- Based on the assessment of the various tools available to the municipality to address tree protection, it is recommended that a full range of tools and implementation programs be considered and summarized in a Tree Strategy for the area. In terms of land use planning policies, a number of additional policies are recommended to reflect the importance of trees and tree protection as an integral part of the character of Grimsby Beach and will be incorporated into the Secondary Plan.

Parks and Open Space

- A Public Realm Master Plan is recommended to be developed to provide strategic direction as it relates to improvements to existing public open spaces, opportunities for improved wayfinding, the creation of gateway features, park amenities related to tourism and recreation, and other desirable elements within the Grimsby Beach public realm.

Implementation Policies

- Additional implementation policies specific to Grimsby Beach should be included in the Secondary Plan. These policies are critical to identify how additional planning processes and approvals are to be carried out within the Grimsby Beach area based on the importance of the unique natural and cultural heritage character of the area.

Zoning

- It is recommended that updated zoning be provided for the Northwest and South Areas through a new Grimsby Beach One (GB1) zone be introduced to better reflect the existing residential areas and provide zoning provisions for lot area, lot frontages, setbacks and coverage that will maintain the current lotting fabric and development.
- It is further recommended that the Core Area should remain in the existing Grimsby Beach (GB) zone to reflect the unique characteristics of the area through the continuation of the legacy zoning as it includes many of the original smaller tent lots and homes.

Additional Supportive Tools

- In addition to the Secondary Plan and updated Zoning By-law, a set of Draft Urban Design and Heritage Guidelines are proposed to be developed to support the new Secondary Plan. These will be provided with a Draft Tree Strategy that is intended to comprehensively identify the full range of tools and programs to address tree maintenance and protection and tree replacement. In support of the Secondary Plan, a Draft Infrastructure Plan and Fiscal Impact Assessment will also be provided to confirm water and wastewater servicing for the area.

TABLE OF CONTENTS

1.0	INTRODUCTION	1
2.0	STUDY PROCESS	3
2.1	Study Boundary	3
2.2	Study Process Completed to Date	5
3.0	PLANNING APPROACHES AND TOOLS	7
3.1	Land Use	8
3.2	Zoning	8
3.3	Cultural Heritage	8
3.4	Urban Design	9
3.5	Tree Protection	10
4.0	SECONDARY PLAN FRAMEWORK	11
4.1	Land Use	12
4.2	Growth Management	13
4.3	Cultural Heritage	14
4.4	Urban Design	16
4.5	Character Areas	16
4.6	Conclusion	20
5.0	SERVICING	21
5.1	Assumptions for Growth	22
5.2	Water Supply and Distribution	22
5.3	Sanitary Services	24
5.4	Stormwater Management	26
5.5	Utilities	28
5.6	Conclusions and Recommendations	29
6.0	TRANSPORTATION	30
6.1	Existing Road Infrastructure	31
6.2	Existing Active Transportation	32
6.3	Connectivity and Transit	33
6.4	Traffic Data	33
6.5	Input Parameters and Assumptions	33
6.6	Critical Movement Classifications	34
6.7	Intersection Operations	34
6.8	Existing Parking	36
6.9	Existing Sign Inventory	36
6.10	Stopping Sight Distance	37
6.11	Transportation Conclusions and Recommendations	37
7.0	NATURAL HERITAGE	38
7.1	Tree Protection and Canopy Replacement	39
8.0	IMPLEMENTATION POLICIES AND FUTURE DIRECTION	40
9.0	SECONDARY PLAN	44
9.1	Goal and Objectives	45
9.2	Existing Active Transportation	47
9.3	Character Areas	51
9.4	Land Use Policies	54
9.5	Implementation Policies	54
10.0	ZONING	57
11.0	CONCLUSIONS AND RECOMMENDATIONS	64

LIST OF TABLES AND FIGURES

FIGURE 1	Grimsby Beach Land Use Study Work Program
FIGURE 2	Study Area
FIGURE 3	Character Areas
FIGURE 4	Postcards
FIGURE 5	Brampton Design Objectives and Principles
FIGURE 6	Oakville Design Guidelines for Stable Residential Communities
FIGURE 7	St. Catharines Traditional Neighbourhood Design Guidelines
FIGURE 8	Summer Houses - Grimsby Beach, Lawren Harris (1926)
FIGURE 9	Official Plan Map (Schedule A)
FIGURE 10	Official Plan Map (Schedule B-2)
FIGURE 11	Grimsby Beach Sign
FIGURE 12	Grimsby Beach Residences
FIGURE 13	Road Configurations
FIGURE 14	Views of Lake Ontario
FIGURE 15	Grimsby Beach Residence
FIGURE 16	Road in Grimsby Beach
FIGURE 17	Existing Road Configurations
FIGURE 18	No Parking Sign
FIGURE 19	Grimsby Beach Residence
FIGURE 20	Grimsby Beach Residence
FIGURE 21	Views and Vistas
FIGURE 22	Shoreline View
FIGURE 23	Town of Grimsby Zoning By-law No. 14-45
FIGURE 24	Proposed Zoning Change Map
TABLE 1	Estimated Potential Units
TABLE 2	Cultural Heritage Attributes - Core Area
TABLE 3	Cultural Heritage Attributes - South Area
TABLE 4	Cultural Heritage Attributes - Northwest Area
TABLE 5	Estimated Design Water Demand
TABLE 6	Estimated Sanitary Sewage Design Flows
TABLE 7	Existing Peak Hour Factors
TABLE 8	Existing Levels of Service
TABLE 9	Grimsby Beach (GB)
TABLE 10	Public Open Space (O2)
TABLE 11	Convenience Commercial (CC)
TABLE 12	Hazard Overlay Zones (HA)
TABLE 13	Average Lot Frontages and Areas
TABLE 14	Proposed GB1 Zone

APPENDICES

APPENDIX A	Background Servicing Information
APPENDIX B	Background Transportation Information
APPENDIX C	Draft Secondary Plan
APPENDIX D	Draft Zoning By-law Amendment

1.0

INTRODUCTION

The Grimsby Beach Land Use Study (the “Study”) was commenced following the passing of Interim Control By-law 20-05 (“ICBL”) on February 3, 2020, which paused new development in the Grimsby Beach area (the “Study Area”) in order to address the issues and concerns with the land use planning policies and zoning regulations for the area. While the Town’s current Official Plan provides a general policy direction for ensuring that low density residential areas remain stable, it does not provide specific policies or direction for the protection and maintenance of the unique built form and long-standing cultural heritage of the Grimsby Beach area. Given the scale of the area, there have also been concerns regarding the level of potential intensification and the capacity of existing transportation and servicing systems in the area.

The purpose of the Study is to provide a comprehensive review of the area and provide recommendations for an implementable land use planning framework to manage change within the area. Given the unique cultural and natural heritage characteristics of the Town, and Grimsby Beach in particular, the Study objective is to consider a balance between cultural and natural heritage preservation with potential replacement housing and overall neighbourhood change, to ensure that any specific character defining attributes of the area are protected and enhanced. A number of options were considered to determine the most appropriate land use planning framework which included the development of a Secondary Plan and supportive zoning by-law changes, along with implementation tools including urban design and heritage guidelines.

2.0

STUDY PROCESS

2.0 STUDY PROCESS

The Study consists of five phases (See **Figure 1** below). Each phase includes technical research and review, engagement with the community, and meetings with the Stakeholder Advisory Committee (SAC) and the Technical Advisory Committee (TAC).

The completion of this report and the recommended draft policy directions represents the completion of several tasks in phases 3 and 4 of the Study process as provide in Figure 1 below.

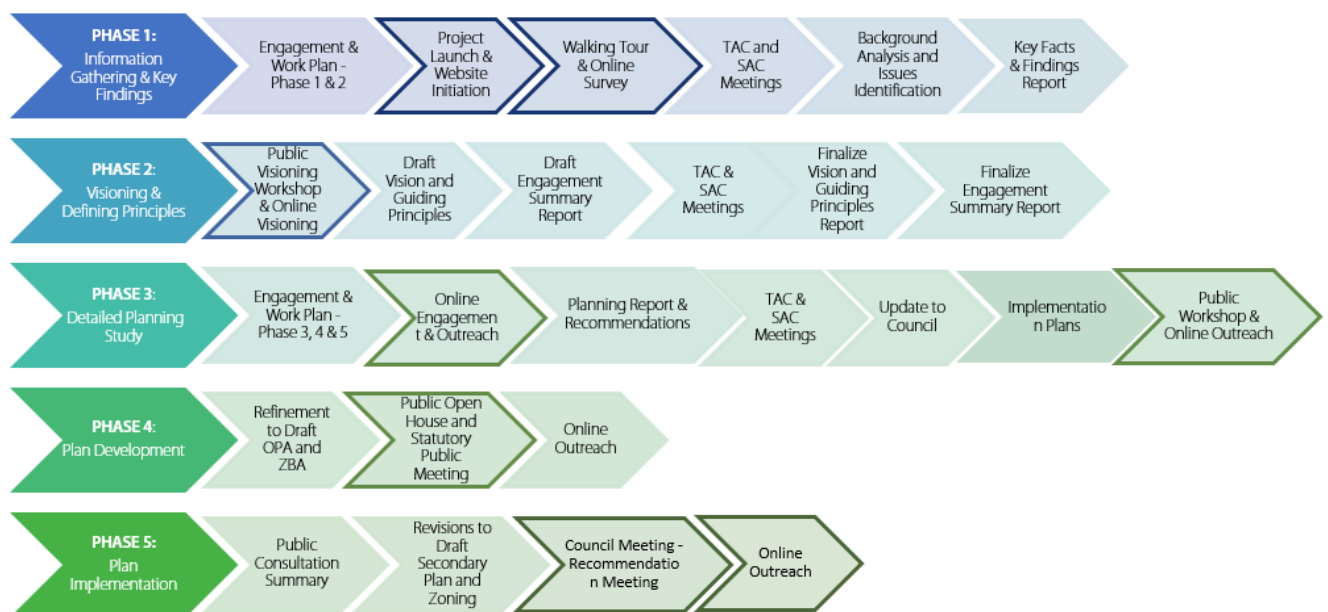


Figure 1 - Grimsby Beach Land Use Study Work Program

2.1 STUDY BOUNDARY

The Study Area as originally defined was revised based on community feedback during early public engagement. The Study Area is generally bound by Lake Ontario to the north, Baker Road North to the west, Park Road North to the east, and the QEW to the south. The community expressed that additional areas should be considered due to their significance with respect to Grimsby Beach and its history. In addition to the study boundary adjustment, Grimsby Beach has been divided into three distinct character areas which were identified in the Background Report. The character areas are based on their unique characteristics which have resulted from existing settlement patterns. The character areas include: The Core Area, Northwest Area and the South Area. These areas are now included in the Study boundary and the updated Study Area is recommended as the boundary to be used for in the report to address the policy directions.

The updated Study Area is highlighted in Figure 2. Figure 3 illustrates the proposed character areas.



Figure 2 - Study Area

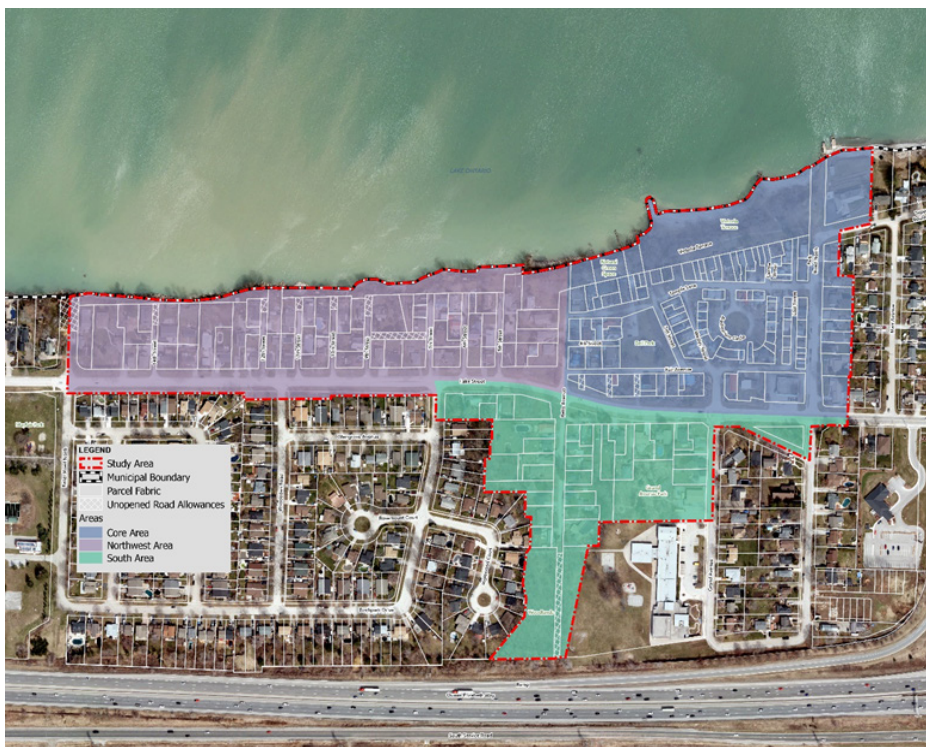


Figure 3 - Character Areas

2.2 STUDY PROCESS COMPLETED TO DATE

The first two phases of the study were focused on background research, technical assessments and initial community consultation. During phase 1 of the Study, walking tours were held in the community as well as stakeholder interviews and a community survey. Phase 1 concluded with the preparation of a **Background Report** which can be found at the following link :<https://www.letstalkgrimsby.ca/19134/widgets/82918/documents/55570>. The Background Report was used to inform the later stages of the Study process.

The Background Report provided the following:

- An identification of the historical and physical neighbourhood context within Grimsby Beach;
- A summary of input and feedback from the community and stakeholders that identified opportunities and challenges in the area;
- An identification of the changes occurring in the area and an understanding of what factors are influencing change;
- A summary of the land use planning policy and regulatory framework that currently applies to the area;
- A summary of the heritage policies applicable to the area and the current identified cultural heritage resources;
- An assessment of the current neighbourhood character features;
- An assessment of current traffic and parking conditions;
- An assessment of the existing servicing and infrastructure for the area including stormwater management;
- An assessment of the existing natural heritage features and condition of the shoreline area;
- A summary of the planning processes and the tools that can be considered to manage the change occurring in Grimsby Beach and a description of best practices; and,
- A summary of the existing conditions and key findings as well as the identification of areas for further consideration in the next phases of the study.

Several of the key findings from the Background Report and noted areas for further consideration are addressed later in this report.

The second phase of the study was focused on presenting the Background Report and Key Findings to the community and developing a vision and objectives for the area. During phase 2, two Visioning Workshop sessions were held with the community which included a presentation of the Background Report and key findings and a summary of the identified goals and objectives for the area as provided through the initial consultation and survey. During the workshop sessions, participants were asked to provide input on the proposed vision and objectives for the area. The visioning workshops also included a presentation on the various planning approaches and heritage tools that could be used to develop a planning framework specific to the area as well as various other tools such

as urban design guidelines and tree preservation by-laws that could be used to implement the preferred land use planning framework. An additional community survey was provided to obtain further input on the various options and approaches and tools for the area.

Throughout both phases 1 and 2, the Let's Talk Grimsby webpage for the Study was used to post information and reports, the information sheets on the various planning approaches with municipal examples and copies of all presentations including narrated videos from the visioning workshop sessions. Survey links were also posted on the webpage as well as opportunities to post comments, ask questions and provide general feedback.

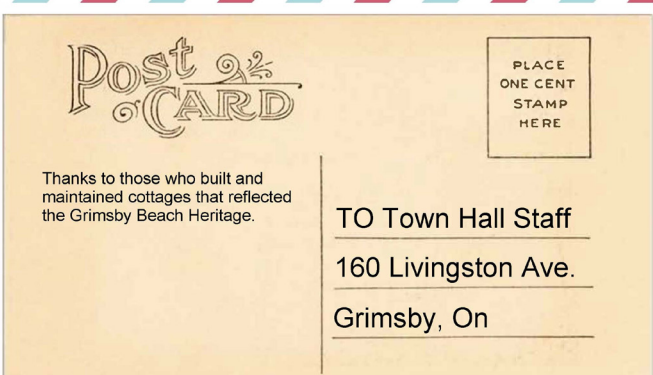
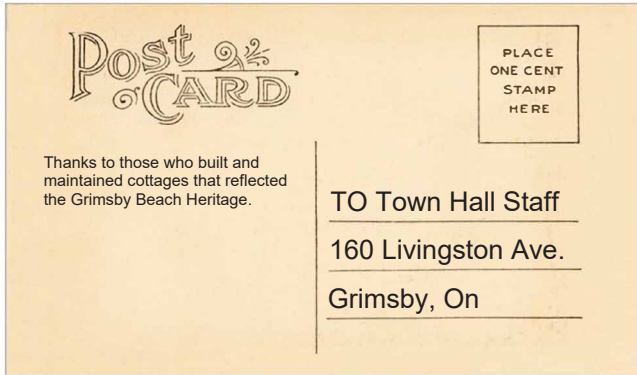


Figure 4 - Postcards created during the visioning workshop sessions.

3.0

PLANNING APPROACHES AND TOOLS

In determining the most appropriate planning approach and implementation tools for Grimsby Beach to address the key findings and community input, an assessment of those tools was undertaken and summarized in both the Background Report and in information sheets presented at the Visioning Workshop sessions as well as through the second community survey. For each of the planning approaches and tools a description of the approach and tool was provided, a range of options was provided and described in terms of the nature of the approach (i.e. was it a prescriptive or flexible approach), what were the benefits and challenges with the approach and where and how has the approach been used in a similar context or municipality. For each of the approaches and tools a number of questions were asked as to which approach the community felt was the best suited to address the challenges and issues in Grimsby Beach and which approach best addressed the key findings from the Background Report and best responded to the vision and objectives for the area.

The information sheets for each approach and tool are also provided on the Let's Talk Grimsby Webpage <https://vimeo.com/532396151>.

As noted, the planning approaches and tools were considered through the Background Report and further discussed through the Visioning Workshops and the online survey. As a result of the assessment and input of the approaches in phase 2 of the study, the following additional assessment is provided with a recommendation for the consideration of a preferred approach and recommended implementation tools for Grimsby Beach.

3.1 LAND USE

The recommended land use planning approach for the Grimsby Beach is to develop a Secondary Plan which can address a number of general and functional policies specific to the area including the area's distinctive character, transportation network, servicing, natural features and the management of change. The best approach for Grimsby Beach is one that can provide clear and concise policies specific to the area and address how change will be managed given its unique characteristics including its unique historical lotting pattern. A set of new policies in the form of a Secondary Plan, to be provided as an amendment to the current Official Plan, can best achieve the requirements to address the land use matters identified through the Study and can create a policy framework that is specific to the area and the objectives identified by the community. The recommended approach has been used successfully in similar contexts by other municipalities.

3.2 ZONING

While the current Zoning By-law is very specific to Grimsby Beach, updates to the current zoning are recommended to implement the policies recommended through the new proposed Secondary Plan. The updated zoning provisions should continue to reflect the characteristics of the area while allowing for some change through replacement housing that is in keeping with the character of the area. Considerations for different zoning regulations for each of the character areas should also be explored to address the differences in each of the areas.

3.3 CULTURAL HERITAGE

The existing cultural heritage character of Grimsby Beach is rooted in its historic use as a Methodist Campground and later, a seasonal recreational community. The Grimsby Beach area includes a combination of both built and natural heritage features which contribute to the unique character of the area. Grimsby Beach has evolved over time, where some of the original settlement patterns remain, and some have been changed as the area developed into a year-round residential community. The existing character of the area is that of an organically-evolved residential community rich in a variety of architectural styles and built forms along the shore of Lake Ontario.

As noted earlier, through the Background Report and community input, three character areas were defined within the Grimsby Beach Study Area, each with their own unique natural and heritage attributes. In order to guide change in the area, it is recommended that the description of these areas within Grimsby Beach be defined and recognized within the new Secondary Plan policies. The intent is to create a set of policies which complement the character of the overall area while providing specific policies for each character area, as well as policies to address municipal improvements and infrastructure, alterations, infill and new residential development.

While there are a range of approaches and tools that can be used to address cultural heritage within the Study Area, many can be used together. The proposed approach and recommended policies to address cultural heritage are further detailed in the cultural heritage section of the report. It is recommended that new updated policies be provided through the Secondary Plan that specifically identify the importance of the area's heritage character,

protects key views, and adds policies designed to conserve and enhance the heritage attributes of the area. These policies will continue to align with the current listed and designated properties and it is recommended that additional properties and landscape features, be considered for listing and designation through the Town's municipal wide heritage update.

3.4 URBAN DESIGN

As part of the new Secondary Plan policies, an approach to urban design should be to include new policies as well as a set of area specific design and heritage guidelines to further support the existing character and heritage of Grimsby Beach. Key to the guidelines is a flexible approach to allow for some unique design features as reflected in many of the recently renovated homes in the area and not to overly prescribe a "one size fits all" approach to the area. Several areas similar to Grimsby Beach have utilized a similar approach to their Secondary Plans and design guidelines that are focused on the conservation and enhancement of the unique character and differences of an area and such an approach has been successfully implemented.

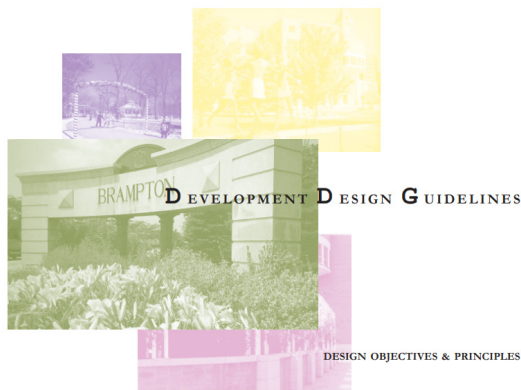


Figure 5 - Brampton Design Objectives and Principles



Design Guidelines for Stable Residential Communities

Figure 6 - Oakville Design Guidelines for Stable Residential Communities

Residential • Single • Small Lot Infill
Traditional Neighborhood
Lot frontage more than 9m and less than 12m, lot area not greater than 370m²

Objectives

- Create dwellings that are compatible with the neighborhood in scale, function and character
- Create pedestrian friendly neighborhood
- Minimize the visual impact of attached garages on the streetscape
- Strengthen the dwelling's relation with the public street frontage
- Promote creative and high quality architecture
- Integrate high quality landscaping and environmentally sustainable design

Guidelines

Building					
1. Zoning Provision Building setbacks (in metres) shall be as follows:					
Street type	Front yard	Flanking yard	Side yard	Rear yard	
Local	3-5	3-5	min. 1.2	min. 5	
Collector	4-6	4-6	min. 1.2	min. 5	
Arterial	5-7	5-7	min. 1.2	min. 5	

2. Zoning Provision
Building height limit shall be 11m to the mid point of the roof.

3. Zoning Provision
Maximum building lot coverage shall be 45%.

4. The scale of a new or infill residence should not overwhelm or overshadow adjacent buildings.

5. The main front entrance should face the street or be clearly visible from the street and should be emphasized by special architectural elements (e.g. a porch).

6. The street facing façade should present an active public face, featuring a variety of forms, colors, materials, architectural details and styles. At least 40% of front wall area (except garage door) should be windows, doors, front porches or balconies, proportionately integrated with the building.

7. Front and side façades of a corner building should address both streets with continuous and consistent architectural design.

8. Special architectural features such as a corner window or a wrap-around porch can be used on a corner building to enhance its significance.

An example of an appropriate facade design
This facade lacks a front porch and a window on the lower right section.

Figure 7 - St. Catharines Traditional Neighbourhood Design Guidelines

3.5 TREE PROTECTION

It was clearly stated throughout the Study that tree protection and tree replacement would need to be an integral part of any Study recommendations. Based on the excellent feedback and work completed by the community, a multi-pronged approach to tree protection should be further advanced. Within the Secondary Plan, additional land use policies that specifically address tree protection should be included with further direction set out in the design and heritage guidelines. Additional community programs are also recommended, many of which can be part of broader Town wide education and sustainability initiatives.



Figure 8 - Summer Houses - Grimsby Beach, Lawren Harris (1926).

4.0 SECONDARY PLAN FRAMEWORK

The following section of the report provides an assessment of key elements of Secondary Plan framework proposed for Grimsby Beach. It considers the physical context, the land use planning policies and implementation tools, based on the policy and regulatory review from the Background Report, within which land use planning in Grimsby Beach can and should be addressed.

4.1 LAND USE

Grimsby Beach is largely characterised by its Low Density Residential, Parks and Open Space, and Environmental Conservation designations within the Urban Settlement Area (As shown on Schedule A – Municipal Structure (Figure 4) and B-2 Land Use – Urban Settlement Area (East) (Figure 5) in the current Town of Grimsby Official Plan. Additionally, the Grimsby Beach Neighbourhood is characterized by a number of local roads, and a collector road, Lake Street, which also features trails and bike routes (Schedule C – Transportation & Trails).

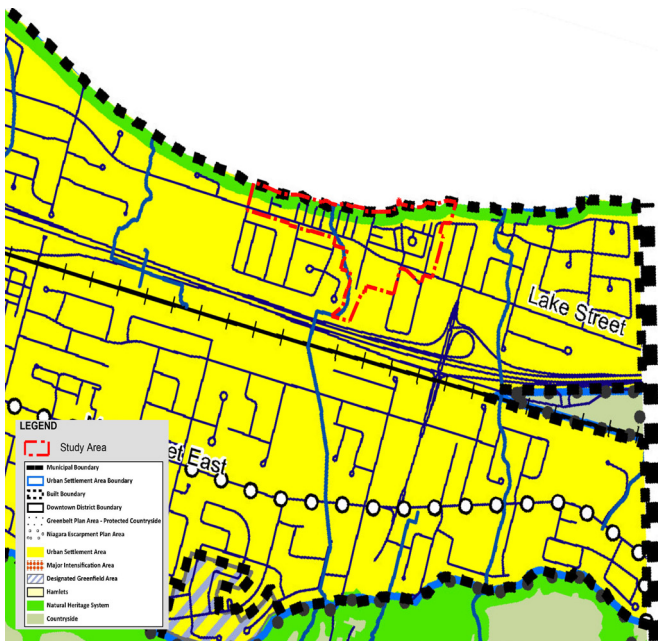


Figure 9 - Official Plan Map (Schedule A)

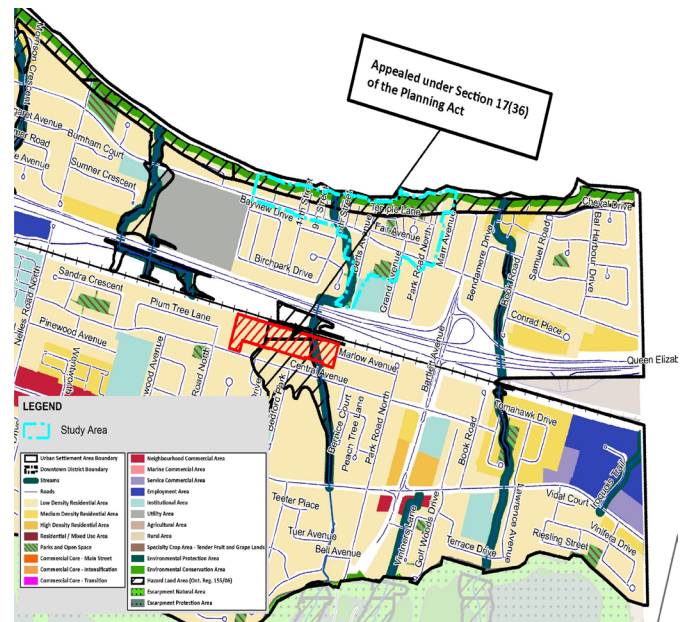


Figure 10 - Official Plan Map (Schedule B-2)

Section 2.3 of the Grimsby Official Plan addresses policies related to stable residential neighbourhoods and reflects the importance of ensuring these neighbourhoods remain stable and that change is in keeping with the established character of the neighbourhoods. Section 2.3.2.1 states that “stable residential neighbourhoods represent the existing residential neighbourhoods within the built boundary. These areas are intended to remain stable with change that is in keeping with the established character of the neighbourhoods.” The policies go on to state in Section 2.3.2.10 that “Outside of the major intensification areas and the Employment Areas, the majority of the Urban Settlement Area within the built boundary is considered a stable residential neighbourhood. Stable residential neighbourhoods are intended to retain their existing character with limited change. This does not mean that new housing must mimic the character, type and density of existing housing but rather it shall fit into and reinforce the stability and character of the neighbourhood. Within this area, infill and intensification may be permitted where it respects the scale and built form of the surrounding neighbourhood, conforms to the land use policies of Section 3.4, and meets the compatibility criteria in Section 3.4.7.”

Rather than continuing to be referenced as part of a larger stable residential area, Grimsby Beach should have its own set of policies based on its unique physical and historical context. It should also be directed by a clear set of goals and objectives as expressed by the community.

The Low Density Residential designation and policies should continue to apply to the Grimsby Beach area with some amendments provided through the proposed new Secondary Plan policies. Additional policies are recommended to better reflect the more defined character areas.

The permitted land uses and policies within the Secondary Plan will generally continue to apply in accordance with Section 3.4.2.1. However, some exceptions should be considered to better reflect the current land uses and compatibility with surrounding lands uses. The existing local convenience/service retail uses located on Lake Street should be recognized. The potential noise sources located to the south (QEW Highway) and potential noise and odour impacts from the southwest (Baker Road Treatment Plant) should be noted in the policies to ensure any potential development addresses noise and air quality issues. The proposed new land use policies are outlined in the proposed policy section of this report.

The policies found in Section 3.4.7 of the Official Plan will continue to apply but added policies are to be provided in the Secondary Plan specifically related to new dwellings and replacement housing. Section 3.4.7.4 (f) which addresses future architectural design guidelines is amended to be updated and replaced within the Secondary Plan.

In addition to the Low Density Residential designation, the Grimsby Beach area also includes the Environmental Conservation Area and Hazard Land Area (as delineated through Ontario Regulation 155/66) designation along the shoreline and the Environmental Protection Area designation through the centre of the area. These designations are intended to remain and are addressed further in the Natural Heritage section of this report. Two Parks and Open Space area designations are also provided in the Grimsby Beach Study Area and these are to be retained with added supportive policies in the Secondary Plan.

4.2 GROWTH MANAGEMENT

The draft Secondary Plan draws its direction from the Background Report work and consultations in Phase 1 and 2 of the Study. In order to preserve the cultural heritage and character of the existing community, new growth in the Study Area should be well defined to consider minor infill development consisting of new units on vacant lots, lot severances in accordance with new character area policies and secondary suites. Intensification appropriate for

the Grimsby Beach context may include minor lot consolidation, secondary suites and infill. New growth should be evaluated based on the character and context of where the change is proposed. Replacement housing while not defined as intensification should also be carefully considered with an emphasis on the consideration of cultural heritage resources. This is further addressed in the next section of the report.

As noted, the existing Low Density Residential designation should be retained with the added character policies that will assist to manage any future growth or change. Based on the historical development in the area, as well as the existing vacant lots, the following potential for new units are estimated to 2051. It should be noted that the number of new secondary suites will be dependent on the ability to accommodate the units based on current zoning provisions and building code requirements. Many areas, based on constraints and the existing zoning, may not be able to accommodate secondary suites.

Table 1: Estimated Potential Units

Current Units *	166
Current Population (based on 2.91 PPU)	483
Potential New Units to 2051	
Vacant Lots **	6
New lots/units ***	5
Secondary Suites ****	4
Total New Units	15
2051 Units	181
2051 Population	527

* Background report identified 150 units for original study area

**Based on developable vacant lots

***Based on historical consent activity

****Based on assumed rate of uptake and zoning requirements

As noted, a modest increase in units is anticipated in the Grimsby Beach Area through 2051 which represents a slight increase to the historical development. It is anticipated that the majority of this change and new development will occur in the west and south character areas.

4.3 CULTURAL HERITAGE

While Section 8.0 of the Town of Grimsby Official Plan provides policies for the wise management of cultural heritage resources, it does not include policies which are specific to managing cultural heritage resources located within the Study Area. Section 8.15 (f) of the Official Plan identifies that heritage plans and programs are encouraged which prioritize the recognition and enhancement of the special character of Grimsby Beach.

The Grimsby Beach Background Report considered the various background studies and reports undertaken in the Grimsby Beach neighbourhood. These studies and reports done for the Grimsby Beach Area have provided a good base of information to consider as well as the implementation of additional tools for the protection of cultural heritage resources.

The Background Report supported the identification of Grimsby Beach as an area with distinguishable character and sense of place. This includes (but is not limited to) consideration of the “Grimsby’s Special Places: Significant Cultural Heritage Landscapes in the Town of Grimsby” document (2015) which identifies key heritage attributes of the area which warrant conservation.

The Background Report also provided a historical summary which is informative in understanding how the area has evolved over time from a Methodist Campground to a seasonal recreational park and to its existing use as a year-round residential community along the shoreline of Lake Ontario. The understanding of how the area has evolved over time aids in the identification of cultural heritage attributes and enables the creation of policies which are appropriate for change management.

The Background Report provides a review of planning tools which are available under the Ontario Heritage Act as well as the Planning Act. The Ontario Heritage Act enables a municipality to list properties on the Heritage Register and designate properties under Part IV and/or Part V of the Ontario Heritage Act. The designation of significant cultural heritage resources under Part IV allows the creation of a By-law which is intended to conserve the attributes of an individual property. A Part V designation enables the designation of multiple properties as a Heritage Conservation District. Change within a Heritage Conservation District (HCD) is informed through an accompanying HCD Plan. The policies and guidelines of an HCD Plan can be as restrictive or prohibitive as the municipality and community desires.

The conservation of cultural heritage resources may also be facilitated under the legislated framework of the Planning Act. The Background Report provided an overview of these tools, which included Zoning By-laws, Official Plan Amendments, Site Plan Control, Secondary Plans and Special Policy Areas. Based on the current legislated planning processes and tools which address change management, several municipalities have undertaken studies to implement new policies for specific areas that are reflective of older, established neighbourhoods, many of which also exhibit natural and cultural heritage features. The policies and guidelines for “Character Areas” or “Established Neighbourhoods” can range from a highly restrictive and prescriptive approach to a more flexible, permissive approach.

The use of tools under the Planning Act can also allow for flexibility. This is appropriate for an area such as Grimsby Beach which is valued (in part) for its variety and lack of replication. The use of tools under the Planning Act allows for the creation of policies and guidelines which both identify the cultural heritage character and attributes of the area without the requirement of designating all properties within the Study Area as a Heritage Conservation District under the Ontario Heritage Act. While there may be value in exploring the planning tools for Grimsby Beach under Part V of the Ontario Heritage Act in the future and possibly as part of the Town’s Cultural Heritage Master Plan, the combination of tools under both Part IV of the Ontario Heritage Act and the Planning Act through the introduction of a Secondary Plan can also provide an appropriate level of protection of the area while allowing flexibility for compatible replacement housing, alterations and some new development. It is strongly recommended that the Town continue to list and designate properties under Part IV of the Ontario Heritage Act in the area to support the proposed policies in the Secondary Plan for the Grimsby Beach Study Area and protect the historic dwellings.

It should also be noted that the majority of study area exhibits a high potential for archaeological resources as all of the lands are within 300 m of the Lake Ontario Shoreline. Policy objectives to reflect these resources should be provided in the Secondary Plan and the need for future development applications to be subject to possible further study requirements.

4.4 URBAN DESIGN

Urban design is addressed within Section 7.0 of the Town of Grimsby Official Plan, primarily as it relates to streetscape design. These policies are general in nature and are not specifically applicable to the Grimsby Beach area. Additional urban design direction is provided in the Official Plan as it relates to specific Secondary Plan areas. Through the creation of a Secondary Plan for Grimsby Beach it is appropriate to provide further urban design policy direction that reflects the unique characteristics of Grimsby Beach. The design policies should be integrated with policies related to cultural heritage. Within the proposed Grimsby Beach Secondary Plan, design policies should recognize the unique considerations of each of the proposed character areas.

4.5 CHARACTER AREAS

As previously stated, Grimsby Beach was used as a religious gathering place in the mid-19th century, which became known as the “Methodist Campground”. The campground became a seasonally-occupied recreational landscape and evolved to include amenities suited to its historic use. The area was subdivided to include “tent lots” located around the amphitheatre and “temple” structure. These tent lots and the original circulation and settlement patterns continue to play a role in the development of the area. Grimsby Beach evolved to include wood frame cottages in the latter half of the 19th century. Amenity areas and infrastructure was constructed to compliment the changing needs of the area. The functional needs of the religious and social gatherings influenced and shaped the physical features of the area over time. The existing settlement patterns and lotting of Grimsby Beach have resulted in the creation of three distinct character areas, each with their own unique characteristics.

The existing land use patterns of Grimsby Beach are that of a year-round residential community with commercial and recreational uses and a distinct cultural heritage. As a result of its historic development Grimsby Beach can be divided into three areas, each having its own unique character. These areas are defined as the Core Area, South Area and the Northwest Area (see Figure 3).



Figure 11 - Grimsby Beach sign



Figure 12 - Grimsby Beach Residences

4.5.1 Core Area

The Core Area is the most historically established portion of the Grimsby Beach area as part of the mid-19th century Methodist Campground. The use of the landscape evolved and expanded over time from a Methodist Campground to a popular summer resort, known as a Grimsby Park, the Chautauqua of Canada, and (presently) the Grimsby Beach neighbourhood with year-round residential use. The area is easily discernible from surrounding areas for its lotting and the concentration of cottages dating to the late 19th century. These cottages are constructed within close proximity to each other along narrow lanes and are set amongst mature trees and natural features, maximizing views of parks, open spaces, or the lake. These cottages have unique and unifying characteristics, such as their wood-frame construction, porches, and gingerbread (bargeboard) detailing. In recent years, some of these houses have been intricately painted in a variety of bright colours. Grimsby Beach includes the remnants of other built features as a result of the late 19th and early 20th century use of the landscape, including the remains of the wharf, memorial cairn, pillars, and the Bell Park Bell.



Figure 13 - Methodist Campground Bell



Figure 14 - Views of Lake Ontario

4.5.2 South Area

The South Area (south of Lake Street) and associated lotting patterns were created by 1885 as part of the “Grimsby Park New Survey”. The intent of the new subdivision was to provide additional lots for the construction of seasonal cottages. Today, this area includes a range of architectural styles and built forms, ranging from the 1870s to the present. The area is characterised by L-shaped and rectangular shaped lots which have been adapted from the 1885 Plan of Subdivision. The lots are larger and the houses are further apart, with a range of setbacks. Some mature trees are present, similar to that of the core heritage area. The South area includes the Grimsby Beach Tree Stand, which is designated under Part IV of the Ontario Heritage Act as it includes lands part of the former Picnic area. The lots located east of east of Park Road North were subdivided at some point between approximately 1922 and 1954. The character of the lots and built form east of Park Road North are therefore different than the area located south of Lake Street.

4.5.3 Northwest Area

The Northwest Area and the numbered streets were created by 1885 as part of the “Grimsby Park New Survey”. The intent of the new subdivision was to provide additional lots for the construction of seasonal cottages. The lots located east of Betts Avenue were generally part of a grid-like pattern running on either side of what is now 5th Street, 6th Street, 7th Street, 9th Street, 10th Street, 11th Street and 12th Street. Many of these lots have since been consolidated with adjacent parcels to create larger lots. This area was never developed as originally intended. Fewer Victorian cottages were constructed in this area, likely due to the decline of the use of the area as a seasonal recreational area by the early 20th century. As infill occurred (primarily in the latter half of the 20th century), views of the lake were removed. The redevelopment in this area resulting in a mix of the orientation of dwellings and many replacement dwellings.

A summary of cultural heritage attributes within the three character areas is also provided in the Urban Design and Heritage Guidelines and can be summarized as follows:

Table 2: Cultural Heritage Attributes - Core Area

Category	Heritage Attributes
Topography and Natural Features	<ul style="list-style-type: none"> • Shoreline of Lake Ontario and beach areas; and, • Gently rolling topography with sandy soils.
Vegetation on Public and Private Lands	<ul style="list-style-type: none"> • Native species of trees such as white pine, sugar maple, shagbark hickory and white oak which grow into maturity and provide a dense tree canopy; and, • Other native species and gardens/landscaping.
Lot Fabric and Circulation Patterns	<ul style="list-style-type: none"> • Narrow, organically evolved laneways with unique patterns and orientations resulting from the use of the landscapes part of the Methodist Campground; • Rear lanes; • Small "tent lots"; • Unique pie-shaped lot fabric surrounding Auditorium Circle (originally located to surround the former temple); and, • Lots oriented towards the Lakefront (i.e. Victoria Terrace).
Built Features of the 19th and 20th Centuries	<ul style="list-style-type: none"> • Properties currently identified on the Town of Grimsby Heritage Register; • Mid to late 19th century Victorian cottages; • 20th century cottages indicative of a second wave of growth; and, • Other built features and structures of the 19th and early 20th century which are remnants of the Methodist Campground and Grimsby Park era.
Public Spaces	<ul style="list-style-type: none"> • Bell Park; and, • Victoria Terrace.
Significant Views and Vistas	<ul style="list-style-type: none"> • Views along streets to Lake Ontario; and, • Views from public spaces which contribute to the area's unique heritage character.

Table 3: Cultural Heritage Attributes - South Area

Category	Heritage Attributes
Topography and Natural Features	<ul style="list-style-type: none"> Gently rolling topography with sandy soils.
Vegetation on Public and Private Lands	<ul style="list-style-type: none"> Native species of trees such as white pine, sugar maple, shagbark hickory and white oak which grow into maturity and provide a dense tree canopy; and, Other native species and gardens/landscaping.
Lot Fabric and Circulation Patterns	<ul style="list-style-type: none"> Rectangular and L-shaped lots adapted from the 1885 Plan of subdivision which are larger than that of the core area; Orientation to Lake Street, Betts Avenue and Grand Avenue; Range of setbacks; and, Larger front and rear yards, with houses spaced further apart.
Built Features of the 19th and 20th Centuries	<ul style="list-style-type: none"> Properties currently identified on the Town of Grimsby Heritage Register; Mid to late 19th century Victorian cottages; 20th century cottages indicative of a second wave of growth.
Public Spaces	<ul style="list-style-type: none"> Grimsby Tree Stand (Designated Part IV)
Significant Views and Vistas	<ul style="list-style-type: none"> Views along Betts Avenue and Birchpark Drive towards Lake Ontario.

Table 4: Cultural Heritage Attributes - Northwest Area

Category	Heritage Attributes
Topography and Natural Features	<ul style="list-style-type: none"> Shoreline of Lake Ontario and erosion area
Vegetation on Public and Private Lands	<ul style="list-style-type: none"> Native species of trees such as white pine, sugar maple, shagbark hickory and white oak which grow into maturity and provide a dense tree canopy; and, Other native species and gardens/landscaping.
Lot Fabric and Circulation Patterns	<ul style="list-style-type: none"> Narrow streets oriented north-south; and, Rectangular-shaped lots adapted from the 1885 Plan of subdivision which are larger than that of the core area.
Built Features of the 19th and 20th Centuries	<ul style="list-style-type: none"> Properties currently identified on the Town of Grimsby Heritage Register; Mid to late 19th century Victorian cottages; 20th century cottages indicative of a second wave of growth; and, Other built features and structures of the 19th and early 20th century which are remnants of the Methodist Campground and Grimsby Park era.
Significant Views and Vistas	<ul style="list-style-type: none"> Views along streets towards Lake Ontario; and, Views of Lake Ontario from the termination of streets.

4.6 CONCLUSION

Each of the defined areas should be recognized in the proposed Secondary Plan and additional supportive polices should be provided to ensure any new development or replacement housing maintains and enhances the existing character and historic importance of the character area. The policy recommendations for the character areas should also include a map to illustrate the location of protected views and gateways.



Figure 15 - Grimsby Beach Residence

5.0 SERVICING

As part of phase 1 of the Study, C.F. Crozier & Associates Inc. (Crozier) completed a review of the existing servicing infrastructure (water, sanitary and stormwater management) in the Study Area, the results of which were summarized in the Functional Servicing Report, Grimsby Land Use Study (March 12, 2021, Revision 1). This report was attached as an Appendix to the Background Report and used to inform phase 2 of the Study.

Phase 3 of the Study provides a more detailed study which includes the development of a Secondary Plan and a Draft Public Infrastructure Plan to adequately service the planned population of the Study Area.

The following section of the report summarizes the results of the existing servicing infrastructure in the Study Area and provides a draft framework for the Public Infrastructure Plan. Crozier completed the following tasks as part of this section of the report:

- An estimate of loading and demand for water and wastewater servicing based on the anticipated population and land use data for the Study Area.
- A review of the existing municipal sanitary, water and storm services in the Study Area to determine whether the infrastructure can support the potential growth in the area.
- An identification of any constraints or upgrades required.
- A determination of the high level servicing options to address existing and future infrastructure requirements.
- An identification of any opportunities and constraints related to stormwater drainage and servicing.
- The provision of recommendations to help guide the Secondary Plan policies, allowable densities and the constraints of the existing servicing.

5.1 ASSUMPTIONS FOR GROWTH

New growth in the Study Area will consist of minor infill development consisting of new units on vacant lots, lot severances in accordance with the new policies and possible secondary suites. The existing Low Density Residential designation will be retained with the added character area policies that will manage any further growth or change. It is anticipated that up to fifteen (15) new residential units may be added through potential growth.

For the purposes of the creation of the Draft Infrastructure Plan, it has been assumed that the Study Area may consist of up to 181 residential units, with an occupancy rate of approximately 2.91 Persons Per Unit (P.P.U.) for a total planned population of approximately 527 people to the year 2051.

5.2 WATER SUPPLY AND DISTRIBUTION

Water supply to the Grimsby Beach Study Area is supplied via a two tier municipally owned system. Niagara Region owns and maintains the Grimsby Water Treatment Plant (WTP) as well as reservoirs and pumping stations. The Town of Grimsby owns and maintains the water distribution system and fire hydrants. The characteristics of the existing water infrastructure were documented through a review of the 2016 Water and Wastewater Master Servicing Plan Update (2016 MSPU) and the use of as-built drawings and Geographic Information System (GIS) data as provided by the Town of Grimsby.

5.2.1 Existing Water Servicing

Treated water is supplied to the Study area from the Grimsby Beach WTP, located approximately 5 km west of the Study area. According to the 2016 MSPU, Grimsby WTP will reach 80% capacity in 2027 and will require an upgrade by 2041 to meet projected population increases and demand. Note the projected population increase for the Study Area based on the draft Secondary Plan policies is within the projected increases of the 2016 MSPU. Upgrades to the Park Road Booster Pumping Station (BPS) and a new reservoir immediately south of the Park Road BPS will add 15,000 m³ of storage.

The majority of the watermains currently present in the Study Area comprise of either 150 mm diameter Ductile Iron or 200 mm diameter PVC watermain. Narrow streets such as Waterfront Trail, 11th and 14th Street are serviced by 25 mm and 38 mm diameter Type 'K' Copper watermains. Several homes on Victoria Terrace (# 37, 39, 41, 43, & 45) north of Temple Lane are serviced by a 38 mm copper water service extension. 1 Betts Avenue is also connected to this water service. It is reported that the lands on which this water service extension lies is not owned by the municipality and the Town of Grimsby is unaware of an easement in favour of the Town.

Hydrant flow tests for hydrants in the Study Area were also reviewed to understand the sufficiency of fire protection. According to the information provided, the majority of the fire hydrants have a fire flow rate of 95 L/s, with a few having a range of 63 to 95 L/s. A fire flow rate of 75 L/s is commonly used for residential zones. Therefore, the Study Area appears to be sufficiently protected in the event of fire.

Private water service laterals for the majority of the properties in the Study Area comprise of 25 mm Type K copper piping with the exception of properties on Betts Avenue and Lake Street between Betts Avenue and Grand Avenue which are serviced by PEXA Polyethylene water laterals.

As demonstrated in the FSR, the existing water infrastructure is generally adequately sized to provide domestic and fire demand needs to the Study Area.

5.2.2 Future Water Demand

The future water demands for the Study Area were calculated with reference to the Niagara Region Design Criteria. An average daily water demand of 300 L/capita/day was used in conjunction with a projected population occupancy density of 2.91 P.P.U. for the projected 181 units in the Study Area. Table 2 summarizes the estimated water demands for the projected population and the calculations are attached in Appendix A1.

Table 5: Estimated Design Water Demand

Standard	Average Daily Demand	Maximum Daily Demand	Peak Hourly Demand
Niagara Region Design Standards	1.83 L/s	3.66 L/s	7.32 L/s

Using the Niagara Region Design Criteria for domestic water demand, the estimated average daily demand is 1.83 L/s and peak hourly water demand is 7.32 L/s.

Given the limited amount of new development proposed for the Study Area it is not anticipated that this additional growth will have a significant impact on the conclusions and recommendations of the 2016 MSPU and subsequent updates, however the small increase in development should be considered when upgrades to the WTP are required in future.

5.2.3 Proposed Draft Water Infrastructure Plan

An analysis of the existing water servicing infrastructure indicates that with the exception of low fire flows reported at three hydrants in the vicinity of Betts Avenue and Fair Avenue and small diameter water mains in a small number of narrow streets, the existing water servicing infrastructure in the majority of the Study Area is adequately sized to service the projected increase in population.

It is recommended that any future development on Waterfront Trail west of Temple Lane, 11th and 14th Street require an upgrade to the existing water main on these streets, unless hydraulic modelling can demonstrate future developments will maintain adequate water pressure to the existing watermain. This is to ensure that future development in this area does not have an adverse effect on the water pressure and supply to neighbouring lots. It is recommended that the existing 25 mm Type K copper water main be upgraded to 150 mm PVC water main in these areas.

There are six (6) homes that are serviced through Victoria Terrace north of Temple Lane with an existing 38 mm copper water service which may be located on lands not owned by the Town of Grimsby. Five of these homes have frontage on Betts Avenue, Temple Lane or 3rd Street. Consideration should be given to servicing these lots from the watermain on Temple Lane if redevelopment of these lots is proposed.

There are 3 low flow areas along 11th Street and on Betts Avenue with an available fire flow of less than 50 L/s, as reported by the most recent hydrant flow tests. The watermain on Betts Avenue is 150 mm and is adequately sized. The watermain on 11th Street is undersized and should be upgraded. There is more than adequate flow to meet peak domestic demand. The construction of the storage reservoir and BPS upgrades at Park Road may help to alleviate the low fire flow issues, however future development in these specific areas should further examine the fire flow rates in order to ensure a fire flow rate of 95 L/s is maintained in all areas. Hydrant flow tests should be completed on a regular basis in this area to identify any concerns or issues.

No other water servicing upgrades are recommended at this time. Development in the Study Area may require an additional review of the available flows and pressures in the water main to ensure a sufficient supply of water is available for domestic and fire protection needs for new units. A Draft Infrastructure Plan is provided in Appendix A3.

5.2.4 Future Private Water Service Laterals

Where new infill development or severances are proposed, a new private water service lateral will be required. It is recommended that all new private water service laterals consist of a minimum diameter of 25 mm Muncipex type pipe and should adhere to the most current Town of Grimsby and Niagara Region water servicing standards.

5.3 SANITARY SERVICES

The wastewater infrastructure in the Town of Grimsby is also operated under a two-tier system. Niagara Region owns and maintains the wastewater treatment plants (WWTP's) and sewage pumping stations, and the Town of Grimsby owns and maintains the wastewater collection system. The characteristics of the existing sanitary infrastructure was documented through a review of the 2016 Water and Wastewater Master Servicing Plan Update (2016 MSPU) and the use of as-built drawings and Geographic Information System (GIS) data as provided by the Town of Grimsby. It should be noted that the 2016 MSPU is currently being updated.

5.3.1 Existing Sanitary Services

Wastewater from the Study Area is collected through a series of sanitary sewers and conveyed to a 1050 mm trunk sewer on Lake Street. The wastewater is then directed to the Baker Road Wastewater Treatment Plant (WWTP) located immediately west of the Study Area in the southwest intersection of Baker Street and Lake Street. According to the 2016 MSPU, the Baker Road WWTP can accommodate projected population growth to 2051. Again, the projected population increase for the Study area based on the draft Secondary Plan policies is within the projected increases of the 2016 MSPU. Potential upgrades are being considered in order to increase capacity to accommodate projected population growth to 2041. A capacity issue related to wet weather flows has been identified in the catchment area for the Baker Street WWTP. Several options are being considered to address the issue. Any options should consider the projected increase in population for the Study area.

The majority of the sanitary sewers in the Study area have a diameter of 200 mm and a slope of 0.4% or higher, resulting in a minimum capacity of 21 L/s. As detailed in the Functional Servicing Report (FSR), the estimated sanitary demand for existing conditions is estimated to be approximately 9 L/s, therefore, the existing sanitary sewers have adequate capacity for existing conditions. All of the sanitary sewers discharge to the 1050 mm trunk sewer of Lake Street which has a capacity of 930 L/s. Total sanitary sewage flows from the Study area accounts for approximately 1.1% of the total pipe capacity in the trunk sewer.

Private sanitary service laterals generally comprised of 100 mm concrete or PVC connections, with the exception of 6 properties fronting on Fair Avenue which have 150 mm diameter connections.

Closed circuit television (CCTV) condition assessments have also been completed for many of the sanitary sewers in the Study area. Of the sewers examined, 80% of them were shown to be in good to perfect working conditions.

5.3.2 Future Sanitary Demand

The Niagara Region Design Criteria was referenced to calculate the sanitary sewage design flows for the future growth of the Study Area and a unit sewage flow of 275 L/capita/day was used. Infiltration flow and a peaking factor were applied to the unit sewage flow to obtain the total estimated design sewage flow. Table 3 summarizes the estimated sanitary sewage design flows. Calculations are provided in Appendix A2.

Table 6: Estimated Sanitary Sewage Design Flows

Standard	Average Sewage Flow	Peaking Factor	Peak Sewage Flow	Infiltration Flow	Total Sewage Flow ¹
Niagara Region Design Standards	1.68 L/s	3.96	6.64 L/s	3.92 L/s	10.56 L/s

1. Total sewage flow includes peak sewage flow and infiltration flow.

Therefore, of the future total sewage flow for the Study area is 10.56 L/s, as determined in accordance with the Niagara Region Design Criteria and the draft Secondary Plan policies.

5.3.3 Proposed Draft Sanitary Infrastructure Plan

The proposed population will slightly increase the operating capacity of the sewers from 9 L/sec to 10.56 L/s. As noted above, the minimum capacity of the existing sanitary sewers in the Study Area is 21 L/s, therefore, the existing sanitary sewers have adequate capacity to accommodate future projected growth in the Study Area.

The projected population increase in the Study Area will account for 1.2% of the overall capacity of the 1050 trunk sewer on Lake Street, an increase of 0.1%. Again, it is noted that the Study Area is on the downstream end of the sewer shed for the Baker Road WWTP, and upstream flows may affect the available capacity in the trunk sewer. However, the relatively minor increase in flows from the Study Area is not expected to have an impact on the capacity of this sewer.

No upgrades or changes to existing sanitary infrastructure are recommended at this time. However, it is recommended that the Town continue to complete CCTV condition inspections and assessments as the infrastructure ages.

5.3.4 Future Private Sanitary Service Laterals

Where new infill development or severances are proposed, a new private sanitary lateral with a minimum diameter of 100 mm is recommended. Where renovations or rebuilds are proposed on existing lots with existing service connections, best efforts should be taken to maintain the existing sanitary connection to the existing sewer i.e. avoid new service connections if possible. All future sanitary connections are to adhere to the most current Town of Grimsby and Niagara Region servicing standards, as applicable.

5.4 STORMWATER MANAGEMENT

The Study Area is located within the Niagara Peninsula Conservation Authority (NPCA) and is directly adjacent to Lake Ontario along the northern boundary. Publicly available topographic mapping shows that the Study Area generally gently slopes from south to north toward the shoreline. Stormwater management in the Study Area is regulated by the Town of Grimsby and Niagara Region through the Town of Grimsby Storm Drainage Policy and Criteria and Town-Wide Stormwater Quality Master Plan and Town Master Drainage Plan (1989). The NPCA also regulates stormwater management within regulated features.

Much of the Study Area is within the regulated area of the NPCA, and the NPCA Stormwater Management Guidelines also apply. According to the NPCA Stormwater Management Guidelines quantity controls are not required, as the Study Area, is located directly adjacent to the Lake. Stormwater and drainage may be directed to the Lake without any quantity controls due to the “beat the peak” approach, which seeks to direct stormwater flows as they occur directly to an outlet in order to minimize any upstream constrictions or ponding. However, stormwater quality and erosion impacts to the shoreline at the outlets must be considered in accordance with NPCA policies.

Drainage within the Study Area generally conforms with the 1989 Master Drainage Plan, therefore the Region’s role in new development would be limited to development applications that require an Official Plan amendment, or do not comply with the Master Quality and Drainage Plan. Any new applications for development within the Study Area would be reviewed and approved on a lot by lot basis by the Town of Grimsby, Niagara Region and the NPCA within the regulated area to ensure they meet the requirements of the Master Quality and Drainage Plan and do not exceed the capacity of the existing infrastructure, where a stormwater connection is available and protect environmental features.

5.4.1 Existing Stormwater Management Infrastructure

As detailed in the functional servicing section of the Background Report, stormwater conveyance in the Study Area largely consists of overland flow that is conveyed to Lake Ontario via ditches and storm sewers. There are no conventional stormwater management facilities such as ponds or super pipes. Drainage is generally in accordance

with the 1989 Master Drainage Plan, which identifies three main drainage areas within the Study Area. A large drainage feature traverses the Study Area from south to north and outlets to Lake Ontario between 7th Street and 9th Street in the centre of the Study Area along the shore. This drainage feature collects all of the stormwater runoff of Sub-Catchment 178 and its parent Catchments and discharges it to Lake Ontario at Node 275 (Outlet No 27) via a 1200 mm diameter storm sewer. Ditches along the north and south side of Lake Street west of Betts Avenue and east of 11th Street discharge to this storm sewer. The contribution of the Study Area to this storm sewer is considered relatively minor given the size of the upstream catchment area.

To the east and west of Sub-Catchment 178, the Study Area lies within two areas characterised by overland (uncontrolled) flows to the Lake, as shown on the 1989 Master Drainage Plan. The ditches on Lake Street east of Betts Avenue direct surface runoff to the east towards a 450 mm diameter sewer that ultimately outlets to Lake Ontario at Park Road North, on the eastern boundary of the Study Area. This outfall is not noted on the Master Drainage Plan and lies within an overland flow area located between Sub-Catchment Areas 182 and 178. The diameter, slope and construction of outfall is not recorded and should be examined further if future growth or development is proposed in this area.

From 12th Street westward, the ditches connect to a 600 mm diameter storm sewer running along Lake Street from 14th Street to Baker Road North which ultimately discharges to Lake Ontario via a 900 mm storm sewer and outfall. The Baker Street outfall is not noted on the Master Drainage Plan and lies within an uncontrolled flow area located between Sub-Catchment Areas 164 and 178. It is unknown how much of the overland drainage area is captured by this outfall. The contributing flow from the Study Area is relatively minor. The capacity of this storm sewer network and outfall should be examined more closely should future growth or development be proposed in this portion of the Study Area.

There are also a series of storm sewers of unknown diameter and slope along Auditorium Circle, 3rd Street, Temple Lane and Fair Avenue which appear to collect surface runoff and discharge to Lake Ontario through an unnamed outfall. According to the as-built drawings, this outfall is equipped with a 150 mm wide grouted rip rap gutter as a means of erosion control prior to being discharged to the Lake. A capacity analysis of this storm sewer network and the outfall could not be completed due to the lack of information available. Any future development will require the storm sewer system to be reviewed to confirm that the capacity and outfall condition is sufficient.

Properties with frontage on Lake Ontario convey stormwater directly to the Lake via overland flow. Erosion control is extremely important in these areas. Erosion control is also important at all known outlets to Lake Ontario. The erosion threshold of the receiving watercourse should be examined and used to determine the potential increase in local peak flows. As noted in the Background Report the existing outlets appear to have sufficient erosion protection at this time.

5.4.2 Future Stormwater Management Considerations

Capacity analysis of the existing storm sewers in the Study area could not be completed due to the lack of available information. Therefore, recommendations for stormwater infrastructure upgrades cannot be made at this time. It is recommended that the existing stormwater management infrastructure be maintained as is, and that further studies (condition assessments etc.) be undertaken to determine the size, slope and condition of the existing storm sewers in the Study Area.

Given the limited amount of future growth expected, it is anticipated that most of the stormwater infrastructure that currently services the Study Area will suffice for future needs, as long as appropriate actions are taken to mitigate increased run off potential to avoid surcharging existing storm sewers in future. Erosion protection at the outlets should also be considered. Any future development should take into account the following recommendations which should be incorporated into the Secondary Plan policies:

- Best efforts to be taken to match post to pre development flows for properties which discharge surface runoff to an existing storm sewer. Low impact Development approaches such as soak-away pits or French drains should be considered to divert runoff away from the storm sewer where possible.
- Development resulting in significant increase in runoff (more than 10%) directed to storm sewers in the Auditorium Circle area may require a downstream sewer analysis, including erosion protection at the outfall, to mitigate the risk of surcharging the storm sewer system.
- Developments considered to be significant in scope (increase of impervious area by 10%) may require a stormwater brief demonstrating best efforts were taken or considered to mitigate runoff potential.
- All new infill and or severance developments resulting in runoff directly outletting to Lake Ontario will require an erosion and sediment control plan. (See Appendix A3 for details)
- Quality Control measures consistent with NPCA guidelines are required for developments discharging directly to Lake Ontario.

The stormwater infrastructure in the area is owned and maintained by the Town of Grimsby. All future stormwater infrastructure must conform to the most recent Town standards and are subject for review and approval by the Town, the Region and the NPCA, where applicable.

Although quantity control is not required in the Study Area, it is recommended that future development make best efforts not to increase runoff potential in order to mitigate erosion of the shoreline and maintain current storm sewer operating capacity.

5.5 UTILITIES

The assessment of existing utility infrastructure and provision for future needs is outside of the scope or work to be completed within the Study. However, during Phase 1 information was provided by Grimsby Power regarding hydro services. Hydro is provided to the Study Area via overhead lines. In most case poles are owned by Grimsby Power, although some are shared with other utilities such as Bell Canada. Some poles in the Study Area are due to be replaced. Where possible, poles to be replaced will be the same size and height as existing, however primary poles must be larger (40 - 45 feet). Currently Grimsby Power is not considering replacing overhead lines with underground service lines, given the high cost, anticipated high groundwater table and limited space in much of the Study Area.

Other utilities (gas, telephone, internet etc.) were not reported on during the Study period. Hydro or other utilities are not addressed in the draft infrastructure plan. This information could be provided by a third party, and included as part of an updated infrastructure plan.

5.6 CONCLUSION AND RECOMMENDATIONS

The following conclusions and recommendations regarding servicing for the Grimsby Beach Study Area are provided and where applicable, land use policies should reflect these recommendations:

- Based on the future population of the Study Area to 2051 is estimated to be approximately 527 people, based on a population density of 2.91 persons per unit and 181 units.
- The existing Grimsby Beach WTP has sufficient capacity to accommodate the projected growth in the Study Area to 2051. A new reservoir and booster station upgrades at Park Road are expected to alleviate minor pressure issues in parts of the Study Area.
- The Baker Street WWTP has sufficient capacity to accommodate the projected growth in to 2031. Improvements required to 2051 will consider the minor increase in population of the Study Area. A capacity issue related to wet weather flows has been identified in the catchment area for the Baker Street WWTP. Several options are being considered to address the issue. Any options should consider the projected increase in population for the Study Area.
- The existing water infrastructure is adequately sized to accommodate future growth with minor areas of improvement (see below).
- The existing sanitary infrastructure is adequately sized to accommodate future growth. No upgrades are proposed at this time.
- Stormwater infrastructure largely consists of ditches and storm sewers that outlet to Lake Ontario. Quantity Control is not required in the Grimsby Beach Area. Stormwater management constraints for future development should be assessed on a lot-by-lot basis.

Recommendations for servicing improvements to support infill development are as follows:

- All new development should be serviced by a minimum of 25 mm diameter private water service lateral meeting the most current Town of Grimsby and Niagara Region Standards.
- Existing watermains on Waterfront Trail, 11th Street and 14th Street should be upgraded to 150 mm diameter if development is proposed in these areas, unless hydraulic modelling can demonstrate the existing main is sufficient.
- Future development along 11th Street and on Betts Avenue should include a review of the available fire flow in order to ensure a fire flow rate of 95 L/s is maintained in all areas.
- All new developments should be serviced by a minimum 100 mm diameter or larger private sanitary service lateral and should conform to the most current Town of Grimsby and Niagara Region standards.
- Future developments in properties fronting on Lake Ontario will require Erosions and Sediment Control plans to mitigate erosion to the shoreline.
- Future development should make best effort to maintain pre to post development flows. Low impact development techniques should be utilized wherever possible to control water quality and mitigate increased runoff directed to storm sewers or ditches.
- Development resulting in significant increase in runoff (more than 10%) directed to storm sewers in the Auditorium Circle area may require a downstream sewer analysis, including an analysis of the erosion protection at the outfall.
- The Town should continue to complete CCTV condition inspections and assessments as the infrastructure ages.

6.0

TRANSPORTATION

A Secondary Plan is required to guide future redevelopment in the Grimsby Beach area. Developing the new planning policies for the area requires the assessment of the existing municipally owned transportation infrastructure and its capacity. Much of the information summarized in this section of the report is a recap of the technical work completed in phase 1 of the Study and provided in the Background Report and appendices. It is included here for ease of reference together with updated information on sight lines and signage. Additional policy recommendations are also provided for active transportation and connectivity within the Study Area.

6.1 EXISTING ROAD INFRASTRUCTURE

Boundary Road Network

To provide clarity throughout this report and in the supporting analysis, Lake Street, South Service Road, and Queen Elizabeth Way have been assigned an east-west orientation. Baker Road, Birchpark Drive, Betts Avenue, Park Road, and Bartlett Avenue have been assigned a north-south orientation.

Lake Street is an east-west roadway with a two-lane cross-section. Lake Street is under the Town of Grimsby jurisdiction and is defined as a Collector Road (per Schedule C-Transportation & Trails of The Town of Grimsby's Official Plan (2012)). The roadway has a rural cross-section west of Grand Avenue. The posted speed limit is 50 km/h throughout the Study Area, and parking is prohibited on either side of the road. Raised crosswalks in the north-south direction are present at Lake Street's intersections with Baker Road and Grand Avenue.

Baker Road is a north-south roadway with a two-lane urban cross-section. Baker Road is under the Town of Grimsby jurisdiction and is defined as a Local Road (per Schedule C-Transportation & Trails of The Town of Grimsby's Official Plan (2012)). Baker Road turns to Birchpark Drive and continues in an east-west direction. Birchpark Drive then turns and intersects with Lake Street in a north-south direction.

Betts Avenue is a north-south roadway with a two-lane rural cross-section on the south side of Lake Street. Betts Avenue is a single northbound only lane with an urban cross-section on the north side of Lake Avenue. Betts Avenue is under the Town of Grimsby jurisdiction and is defined as a Local Road (per Schedule C-Transportation & Trails of The Town of Grimsby's Official Plan (2012)). Northside of Lake Street, Betts Avenue is a one-way only street with entry only.

Park Road is a north-south roadway with a two-lane urban cross-section. Park Road is under the Town of Grimsby jurisdiction and is defined as a Local Road (per Schedule C-Transportation & Trails of The Town of Grimsby's Official Plan (2012)).

Bartlett Avenue is a north-south roadway that intersects with Lake Street. North of Lake Street, Bartlett Avenue has a two-lane urban cross-section and a four-lane cross-section south of Lake Street. Bartlett Avenue is under regional jurisdiction south of Lake Street while north of Lake Street, Bartlett Avenue is under the Town's jurisdiction. Bartlett Avenue provides access under the QEW and also access to/from the QEW.

Figure 17 shows the existing configurations along with the intersection control type for all the study intersections.



Figure 16 - Road in Grimsby Beach

6.2 EXISTING ACTIVE TRANSPORTATION

As part of the review for existing conditions, existing sidewalks, bike lanes and trails have been reviewed.

Lake Street has exclusive bike lanes on both sides of the road and a sidewalk running parallel to the roadway, with an approximate 4.5 metres buffer, on the south side of the road, west of Grand Avenue. West of Grand Avenue, Lake Street has shared bike lanes in both directions. Sidewalks are available on both sides of the road with no buffer (directly adjacent to the travelled lane). On-street parking is prohibited on either side of the road. Schedule C of the Official Plan also shows a Waterfront Trail that runs along Lake Street. Figure 6 also shows the available bike lanes along Lake Street.

Baker Road has sidewalks available on one side with an approximate buffer of 3.0 metres from the travelled lane, where residential homes are present. There are currently no signs pertaining to any cycling restrictions along Baker Road.

Betts Avenue does not have sidewalks or cycling facilities available on either side. There are no signs related to parking restrictions on either side of the road.

Park Road has sidewalks available on the west side throughout the Study Area. Parking is permitted along the west side of the roadway. There are currently no signs pertaining to any cycling restrictions along Park Road.

Bartlett Avenue has no sidewalks available at the north of Lake Street, south of Lake Street, sidewalks are available on the west side of Bartlett Avenue.

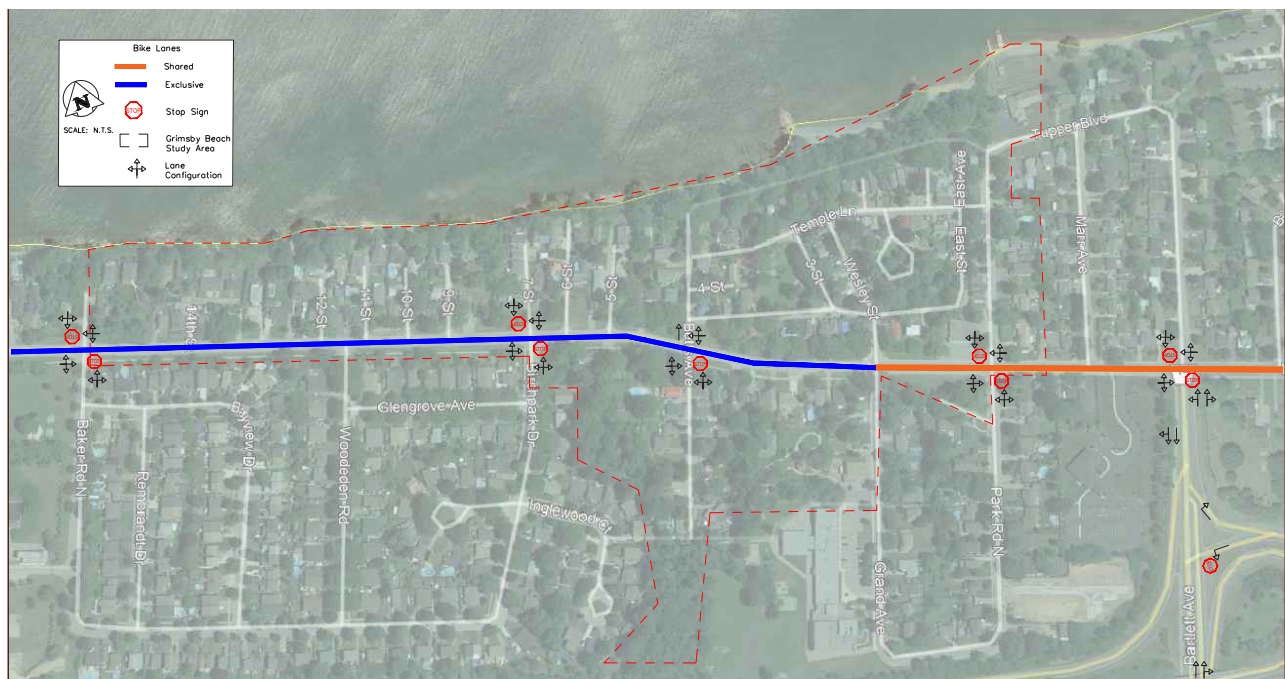


Figure 17 - Existing Lane Configurations

6.3 CONNECTIVITY AND TRANSIT

In addition to the road network, there are a number of public connections through the Grimsby Beach Study Area that are important for pedestrian and cycling movement. These public connections for active transportation should be supported and enhanced through policies in the Secondary Plan. Additional mapping of the connections should also be included as part of the Town’s Transportation Master Plan updates.

Grimsby is currently operating under an on-demand transit model as part of the Niagara Region On-Demand Transit pilot, which provides coverage across all areas of the community regardless of the specific urban or rural nature of a given neighbourhood. This pilot project will end late in 2022.

6.4 TRAFFIC DATA

Turning movement counts at the intersections noted in Table 4 were conducted by Spectrum Traffic Inc. on Thursday, October 1, 2020, and on Saturday, October 3, 2020, from 7:00 a.m. to 7:00 p.m. Due to time constraints and traffic data availability counts during the summer peak were unavailable. It should be noted traffic counts were taken during a global pandemic. Traffic counts may not be reflective of a typical October in the study area but provide for sufficient data for the study purposes.

Traffic data contained in the appendices to the Background Report provides a summary of the turning movement counts. Peak hour factors used for analysis were calculated based on existing traffic and are summarized in Table 4.

Table 7: Existing Peak Hour Factors

Intersection	Weekday a.m. Peak Hour Factor	Weekday p.m. Peak Hour Factor	Saturday Peak Hour Factor
Lake Street at Baker Road North	0.88	0.94	0.91
Lake Street at Birchpark Drive	0.85	0.96	0.84
Lake Street at Betts Avenue	0.82	0.94	0.91
Lake Street at Park Road	0.80	0.89	0.88
Lake Street at Bartlett Avenue	0.84	0.91	0.91
Bartlett Avenue at Queen Elizabeth Way Ramp	0.94	0.97	0.99
Bartlett Avenue at South Service Road	0.94	0.90	0.90
South Service Road at Queen Elizabeth Way Ramp	0.89	0.90	0.96

6.5 INPUT PARAMETERS AND ASSUMPTIONS

Existing traffic conditions at signalized and unsignalized intersections were analyzed using Synchro Version 10.0, which incorporates the methodology outlined in the Highway Capacity Manual (HCM 2010). Analysis parameters and assumptions include the following:

- Existing peak hour factors for all intersections.
- Ideal saturation flow rate based on the Synchro default value of 1,900 vehicles per hour per lane (vphpl) for all movements; and,
- Default lane widths for all lanes on all approaches.

The intersection operations are reported in two ways:

- The volume to capacity (v/c) ratio which is represented numerically for signalized and unsignalized intersections; and,
- The level of service (LOS) is indicated by a letter and is based on the average control delay per vehicle.

The intersection assessment is based on the method outlined in the "Highway Capacity Manual, 2010" using Synchro 10 modelling software. Intersections are assessed using a Level of Service metric, with ranges of delay assigned a letter from "A" to "F." For stop-controlled intersections, a Level of Service "A" or "B" would typically be measured during off-peak hours when lesser traffic volumes are on the roadways. Levels of Service "C" through "F" would typically be measured in the commuter peak hours when more significant vehicle volumes cause longer travel times. The Level of Service (LOS) definitions for signalized and stop control intersections were included in Appendix to the Background Report.

6.6 CRITICAL MOVEMENT CLASSIFICATIONS

The following movements have been assumed to be critical movements for the purposes of this review:

- Through movements; and shared through-turning movements operating with volume to capacity (v/c) ratios equal to or above 0.90;
- Overall intersection operation with volume to capacity (v/c) ratios equal to or above 0.90; and,
- Exclusive turning movements operating with volume to capacity (v/c) ratios equal to or above 1.00.

6.7 INTERSECTION OPERATIONS

The existing traffic volumes were analyzed using Synchro 10.0 software. The intersection capacity analysis, based on the existing road network configuration, existing signal timing plans and existing traffic volumes, are summarized in Table 5. Critical movements, if any, are bolded. Detailed intersection capacity and queuing analysis reports under the existing conditions were provided in the Appendices to the Background Report.

The results concluded that all study intersections operate with a Level of Service of "D" or better. No individual movements are operating above capacity. A maximum average delay of 31 seconds is observed at the intersection of South Service Road at Queen Elizabeth Way Ramp during the weekday p.m. peak period. Operational analysis of existing traffic volumes indicates that reserve capacity is available for future traffic volume growth on the boundary road network.

Table 8: Existing Levels of Service

Intersection	Peak hour	Level of Service (Average Delay per Vehicles)	Maximum V/C Ratio(s) (Approach)
Lake Street at Baker Road North (Stop Controlled)	Weekday A.M.	A (9.5 s)	0.03 (NB)
	Weekday P.M	B (10.8 s)	0.05 (NB)
	Saturday Mid-Day	B (10.3 s)	0.05 (NB)
Lake Street at Birchpark Drive (Stop Controlled)	Weekday A.M.	B (10.6 s)	0.60 (NB)
	Weekday P.M	A (9.8 s)	0.04 (NB)
	Saturday Mid-Day	B (10.3 s)	0.04 (NB)
Lake Street at Betts Avenue (Stop Controlled)	Weekday A.M.	A (9.1 s)	0.00 (NB)
	Weekday P.M	B (10.0 s)	0.01 (NB)
	Saturday Mid-Day	B (11.3 s)	0.01 (NB)
Lake Street at Park Road N (Stop Controlled)	Weekday A.M.	B (11.1 s)	0.04 (NB)
	Weekday P.M	B (11.4 s)	0.03 (SB)
	Saturday Mid-Day	B (10.7 s)	0.05 (SB)
Lake Street at Bartlett Avenue (Stop Controlled)	Weekday A.M.	B (14.9 s)	0.21 (NBTL)
	Weekday P.M	B (13.7 s)	0.28 (NBTL)
	Saturday Mid-Day	B (13.9 s)	0.24 (NBTL)
Bartlett Avenue at Queen Elizabeth Way Ramp (Stop Controlled)	Weekday A.M.	B (12.4 s)	0.18 (WBL)
	Weekday P.M	B (12.8 s)	0.20 (WBL)
	Saturday Mid-Day	B (11.9 s)	0.14 (WBL)
Bartlett Avenue at South Service Road (Stop Controlled)	Weekday A.M.	A (9.0 s)	0.27 (WBL)
	Weekday P.M	B (12.4 s)	0.56 (WBT)
	Saturday Mid-Day	A (13.1 s)	0.48 (WBT)
South Service Road at Queen Elizabeth Way Ramp (Stop Controlled)	Weekday A.M.	C (16.3 s)	0.25 (SBL)
	Weekday P.M	D (31.0 s)	0.64 (SBL)
	Saturday Mid-Day	C (15.0 s)	0.30 (SBL)

Note 1: The Level of Service of a Stop-Controlled intersection is based on the critical approach's delay. The Level of Service of a signalized intersection is based on the average control delay per vehicle. Niagara Region provided existing signal timings.

Note 2: All v/c ratios greater than 0.85 are highlighted.

Note 3: NB = North Bound, SB = South Bound, NBTL = North Bound Through Left, WBL = North Bound Left, WBT = West Bound Through, SBL = South Bound Left

6.8 EXISTING PARKING

There is limited parking available in the Study Area. There is a single municipal parking lot at Bell Park which has eight (8) parking spots available. Additionally, there is a small parking lot on Temple Lane that has six (6) parking spots available. Many of the public roads within the Study Area have prohibited parking. On-street parking is available along one side of the roadway for Birchpark Drive and Park Road.

Parking for residents is provided within existing driveways and within attached or detached garages. Due to the historical development and lotting patterns, particularly in the Core Area, many lots do not have adequate parking available to them on their property as the homes themselves take up much of the available lot space. This means that the overflow parking from residential use in the area is limited to space on the street or in the municipal lots, providing little parking space for visitors to the area. Off-site/on street parking is available on one side of most roadways which is also limited due to narrow lanes and roads in the Core area and to a lesser extent in the Northwest area.

The South and Northwest area’s lotting patterns provide for slightly larger driveways and wider roadways, offering some additional parking space for residents. Additional parking is available within the school parking lot area for access to the Tree Stand.

Several issues related to parking were raised during the early stages of the Study and the Town has commenced a separate review of parking and street signage with an additional area assessment in the Core (<https://www.letstalkgrimsby.ca/grimsby-beach-residents-survey>).

6.9 EXISTING SIGN INVENTORY

A review of existing signage for streets and parking in the Study Area was conducted. All available signage, as of May 2021, has been shown in Appendix B. While there is sufficient signage provided to show all parking restrictions, there is minimal signage showing the location of the municipal parking lot on Bell Street and the parking lot on Temple Lane. Recommended locations of new signage are also shown in the drawings provided in Appendix B1.



Figure 18 - No parking sign

6.10 STOPPING SIGHT DISTANCE

The Transportation Association of Canada (TAC) Geometric Design Guide for Canadian Roads (GDGCR) provides minimum stopping sight distance requirements for level roadways. The posted speed in the Study Area is 50 km/h. Accordingly, a design speed of 60 km/h was selected, reflecting a traffic engineering convention of a 10 km/h increase to the posted speed limit for lower speed roads.

Per TAC GDGCR Table 2.5.2, the minimum stopping sight distance for a roadway with a design speed of 60 km/h is 85 metres. Given the flat vertical profile and straight horizontal alignment throughout the site, stopping sight distance of at least 85 metres is available to motorists at all intersections along Lake Street. Insufficient sightlines are existing at some intersections along Betts Avenue and Temple Lane. Convex mirrors are provided in an effort to negate the sightline deficiencies. Additionally, operating speeds along Temple Lane and Betts Avenue are not expected to reach the design speed under any conditions.

The stopping sight distance outlined above are based on car operations and sufficient stopping sight distance is available for all major intersections in the Study Area. Excerpts from TAC GDGCR have been included as Appendix B2.

6.11 TRANSPORTATION CONCLUSIONS AND RECOMMENDATIONS

Based on the review of the existing transportation conditions in the Study Area, the conclusions and recommendations related to transportation are as follows:

Conclusions:

- Bicycle lanes, along with a Waterfront Trail, currently exist on Lake Street.
- Turning movements counts were collected on a typical weekday and Saturday from 7:00 a.m. to 7:00 p.m.
- Operational analysis indicates that all existing intersections operate with acceptable delays and well under capacity.

Recommendations

- Limited parking is available in the Study Area with approximately 14 municipal parking spots divided between Bell Park and Temple Lane. Proposed new parking signage is recommended in Appendix B1. Further considerations for on-street parking may also be provided through the Town's separate assessment of parking.
- Additional policies should be provided in the Secondary Plan to define the current transportation network including updated mapping for the area and the Active Transportation Network including potential enhanced linkages.

7.0

NATURAL HERITAGE

In the Background Report an assessment of the existing natural heritage areas including the shoreline was undertaken. This work also included an initial tree inventory to identify the range of tree species located within the Grimsby Beach Study Area. In addition to the technical work undertaken, considerable input was received through the public engagement and consultations regarding the importance of protecting and enhancing the natural heritage features and areas that are a distinctive part of Grimsby Beach.

The current land use designations that delineate and protect the natural heritage areas that include the Environmental Conservation Area, Hazard Area and Environmental Protection Area. A number of additional policies are recommended to highlight the importance of these features within the Study Area and to reinforce the protection of these features in accordance with Provincial and Regional policies and the policies and requirements of the NPCA. These policies are detailed in the proposed Secondary Plan policies.

In addition to recommended policies within the proposed Secondary Plan, additional recommendations were identified in the Background Report for further consideration including:

- Genetic testing of the Butternut tree in Grimsby Beach as part of the Tree Strategy for Grimsby Beach to determine if the tree is purebred or hybrid to indicate whether it is a species at risk.
- A more detailed assessment of the shoreline areas that exhibited poor conditions recognizing the limitations of privately owned areas.

These specific further considerations should form part of additional work to be completed by the Town in conjunction with the NPCA and/or the Region of Niagara.

7.1 TREE PROTECTION AND CANOPY REPLACEMENT

One of the most significant issues raised through the public engagement process for the Study was the importance of the current mature tree canopy within Grimsby Beach and the need to protect and enhance tree canopy with protection policies and programs as well as programs to replenish and add to the existing canopy.

Based on the assessment of the various tools available to the municipality to address tree protection, it was recommended that additional policies to reflect the importance of trees and tree protection as an integral part of the character of Grimsby Beach be incorporated into the Secondary Plan and that the Town develop a tree strategy.

8.0

**IMPLEMENTATION
POLICIES AND
FUTURE DIRECTIONS**

In addition to Secondary Plan policies specific to growth management, character areas, servicing, transportation, natural heritage and tree protection, there should be implementation policies specific to Grimsby Beach. These policies are critical to identify how additional planning processes and approvals are to be carried out within the Grimsby Beach area based on the importance of the unique natural and cultural heritage character of the area. Most importantly within these implementation policies are policies that will be used to assess applications for replacement housing, alterations and additions to housing including secondary suites, as well as potential minor lot division and lot consolidation through the consent process. Policies that provide evaluation criteria for development are recommended to ensure that the consideration of new development is assessed to address compatibility with the character of the Grimsby Beach area.

Policies related to site plan approval and implementing zoning are also recommended to be added to the Secondary Plan.



Figure 19 - Grimsby Beach Residence

In addition to the new Secondary Plan policies, it is also recommended that the Town pursue a deeming by-law to limit the use of the older M-Plans as a means to by-pass the consent process. A 'deeming by-law' removes lands (lots or blocks) from a registered plan of subdivision, providing the plan of subdivision has been registered for more than 8 years. A deeming by-law can remove all of the lots or blocks of land within a registered plan, or only some of the lots or blocks within a plan of subdivision. Past examples of deeming by-laws passed in the Study Area are set out in the Background Report and noted as follows:

Town Plan 64		
By-law	Plan and Lots merged	Address
86-21	Lots 194, 201 and 204	
87-121	Lots 252 to 255	
89-108	Lots 260, 261, 262, 263 and 264	
90-32	Lots 173, 174 and 175	253 Lake Street
90-89	Lots 275, 276, 277, 278 and 279	1 Twelfth Street
96-71	Lots 378 and 379	Betts Avenue
96-126	Lots 357, 358, 359 and 360	18 Betts Avenue
97-49	Lots 228, 229, 230 and 231	8 Ninth Street
97-79	Lots 340, 341 and 344	268 Lake Street
98-50	Lots 259 and Part of Lots 256,257 and 258	1 Eleventh Street
98-99	Lots 158, 159, 160, 161,162,163 and 164	1 Fifth Street
05-32	Lots 356, 361 and Part of Lots 355 and 362	16 Betts Avenue
08-33	Lots 205, 206, 207 and 208	1 Seventh Street
Town Plan 45 and 45a		
By-law	Plan and Lots merged	Address
92-43	Lots 6,7 and 8	397 Park Road North
94-51	Lots 46, 47 and 54	4 Fourth Street
98-82	Lots 9 and 10	5 East Street
00-1	Lots 34 and 35 and Part of Lots 36; and Lots 38 and Part of Lot 39	45 Victoria Street
Plan 106		
By-law	Plan and Lots merged	Address
03-38	Lots 806, 839, 840 and 841	1 Fourteenth Street

As there are several areas within Grimsby Beach that are still subject to past M-Plans, where an existing house may in fact be developed on one or more small lots or the original tent lots, a deeming by-law could be drafted for those older M-Plans to reflect the current lotting fabric. This will require coordination with a surveyor to confirm the lots that need to be addressed. Without a deeming by-law, such smaller lots can be re-established without the



Figure 20 - Grimsby Beach Residence

9.0

SECONDARY PLAN

Based on the assessment of the land use approaches as noted in Section 2, it is recommended that the new Secondary Plan consist of the following:

- Goal and Objectives
- General Policies
- Character Areas and Policies
- Land Use Policies
- Implementation Policies

The Secondary Plan should be framed in a similar structure to the existing Secondary Plans provided within the current Official Plan and include narrative policy to identify the importance of the Grimsby Beach context. An updated schedule to define the Secondary Plan area boundary and the character areas is also recommended. Additional implementation tools are also recommended and discussed further in Section 9.5 of this report. Those tools include Urban Design and Heritage Guidelines, an Infrastructure Plan, as well as a Tree Protection and Tree Planting Strategy.

9.1 GOAL AND OBJECTIVES

The vision for the Grimsby Beach area, as articulated through the public engagement process, can be generally defined by the following goals:

1. Maintaining and conserving the character of Grimsby Beach and its uniqueness
2. Protecting the shoreline and the natural and environmental features
3. Protecting and replenishing trees and canopy cover
4. Maintaining and enhancing parks, public open space areas and connections
5. Identifying and conserving significant cultural heritage resources

In translating these goals into an overall goal and vision, consistent with Provincial and Regional policies, to be incorporated into the Secondary Plan, the following goal is recommended:

The goal of the Grimsby Beach Secondary Plan is to guide change that maintains and enhances the unique character of the area while protecting and conserving the natural and cultural heritage features and existing built form of the area including the shoreline, trees, open spaces and parks.

In order to clearly articulate each of the goals, it is further recommended that a series of objectives be provided to reinforce the importance of each goal and how it can be achieved. The following key objectives for guiding and managing change are recommended as follows:

1. Maintaining and conserving the character of Grimsby Beach and its uniqueness by:

- i. Establishing and defining character areas and providing policies to guide changes in those areas;
- ii. Providing for limited growth through development that is reflective of the character areas; and,
- iii. Providing policies to protect and enhance the unique characteristics of the area.

2. Protecting the shoreline and the natural and environmental features of the area by:

- i. Ensuring natural features and buffers to those areas are identified and protected; and,
- ii. Providing policies to protect and stabilize the shoreline areas and reduce erosion.

3. Protecting and replenishing trees and canopy cover by:

- i. Including policies that recognize trees as a key element to the character of the area;
- ii. Ensuring the tree canopy is enhanced and committing to a greening strategy;
- iii. Protecting existing trees, ensuring that trees are maintained and preventing the unnecessary removal of trees; and,
- iv. Acknowledging trees as green infrastructure.

4. Maintaining and enhancing parks, public open space areas and connections by:

- i. Identify parks and open space areas as key elements to the character of the area;
- ii. Maintaining and enhancing the area's open spaces, parks, streets, public realm and trail connections;
- iii. Reinforcing the views and vistas as defined within the area;
- iv. Ensuring safe and effective traffic and pedestrian movement throughout the area; and,
- v. Creating a wayfinding/signage strategy to provide environmental cues while enhancing community identity.

5. Identifying and conserving significant cultural heritage resources by:

- i. Preparing a conservation management plan;
- ii. Employing the design and heritage guidelines when considering new development; and,
- iii. Continuing to list and designate significant cultural heritage properties.

9.2 GENERAL POLICIES

It is recommended that the Secondary Plan provide for some key general policies to be applied to the entire area. These general policies should address growth management, servicing, transportation, natural heritage, cultural heritage and urban design. Each of these policies are intended to reinforce the objectives of the plan and provide clear policy specific to the Grimsby Beach context. Key considerations for the recommended functional policies can be summarized as follows:

Growth Management

Growth within the Grimsby Beach area is anticipated to be limited to infill and secondary suites (where all other requirements are met) due to the unique natural and heritage characteristics of the area. Where lot consolidation and redevelopment is proposed, it will be required to be assessed in accordance with all applicable policies of the Secondary Plan.

The Secondary Plan policies should provide growth management policies that identify the anticipated types of new development within the Secondary Plan area and specifically within each character area. New development and redevelopment is to be assessed in accordance with the policies of the Secondary Plan for the protection of significant cultural and natural heritage resources and the protection and enhancement of the character of the overall area and each of the character areas. New development will also be assessed in accordance with the implementation policies that specifically address land division and site plan which are further outlined in a later section of this report.

Servicing

Any new development within the Grimsby Beach area should be provided on full municipal services and shall require an assessment of current servicing as part of the application review process. Stormwater management quality controls should also be incorporated with any new development where appropriate.

New development shall adequately address stormwater management to prevent degradations of natural areas. Water quantity, quality, water balance, and erosion concerns shall be addressed through Stormwater Management Plans provided with development applications and shall address considerations for Low Impact Development principles and criteria established by the Town, Region and NPCA. Opportunities to provide SWM controls to currently uncontrolled areas, especially public roads, should also be evaluated as part of future Town studies.

Transportation

The current road network within the Grimsby Beach area is recognized in the current Official Plan transportation schedule and consists of Lake Street, as a collector road that traverses the area, and a series of local roads, many of which are narrow and reflective of the original planned areas.

The existing road network to serve the current community should be maintained and upgraded with improvements for safety that include signage and sightlines as recommended in the technical work completed by Crozier. Improvements to existing parking areas should also be further explored. This work can be incorporated into the Town's ongoing work program for area improvements.

Active transportation should be encouraged by improving pedestrian connections including movements into and out of the area and the expansion and enhancement of the existing public walkway network.

Natural Heritage

The natural heritage areas within Grimsby Beach should reflect the Provincial, Regional and local designations and policies in addition to the policies and regulation of the NPCA.

The natural areas shall include the following features and associated buffer areas as defined and mapped in the Town of Grimsby Official Plan. Additional policies should be provided specific to the protection of the features within Grimsby Beach including:

- *Hazard Lands*
- *Shoreline*
- *Significant Woodlands*

Tree Protection

Trees are a distinctive landscape and character feature within Grimsby Beach. An objective in the Secondary Plan should be to encourage the preservation of existing trees, as much as possible recognizing the health of trees may be affected by natural causes, and the planting of new trees.

The wooded areas in the South Area consist of both the designated Grand Old White Oak Tree Stand and the existing woodlot within the Environmental Protection Area. Both areas should continue to be protected through the existing land use designations.

A Tree Strategy for the Grimsby Beach area should be undertaken which identifies significant natural resources and provides guidance on the removal and re-planting of trees and vegetation on public and private lands as well as public programs to support tree canopy enhancement and tree planting. The tree strategy should provide guidance on appropriate species for planting as defined by the Region of Niagara in its Master Tree Planting List and with emphasis on native species of trees such as white pine, sugar maple, shagbark hickory and white oak which grow into maturity and provide a dense tree canopy

Parks and Open Space

The Grimsby Beach area contains several public park areas that are part of the original planned areas (Bell Park, Victoria Terrace, Grimsby Beach Park, Old Oak Stand and Auditorium Circle) and many additional woodlots (Phelps Avenue, Birch and Betts Avenue) and publicly accessible areas including community gardens. These areas are an integral part of the community and attract visitors to the area. These areas should be maintained to ensure accessible public access with improved signage as well as signage to direct parking to locations that do not impede resident parking needs. The park areas should be enhanced with additional tree planting through future Town programs. Sustainable elements should also be incorporated into any park or parking area upgrades.

One of the key issues raised through the community engagement is the clarification of what areas within the Study Area are public versus private. There appear to be public areas with private encroachments or easements and other areas where ownership or public access is not known. Specific legal access and encroachments would need to be confirmed through a legal title review and is outside of the scope of the Study. However, there are several areas where public access should be confirmed and a Public Realm Master Plan is recommended to be developed to provide strategic direction as it relates to improvements to existing public open spaces, opportunities for improved wayfinding, the creation of gateway features, park amenities related to tourism and recreation, and other desirable elements within the Grimsby Beach public realm.

Cultural Heritage

Grimsby Beach is an area with distinguishable character and sense of place and a rich history. The general policies should also include a narrative description of the existing designated properties and unique cultural heritage attributes.

The general policies should include the following:

- Recognizing Grimsby Beach as an area of unique cultural heritage character.
- Establishing policies to define cultural heritage landscape features.
- Establishing guidelines for urban design within the Grimsby Beach area, which include guidelines specific to each of the identified character areas and:
 - Balance the conservation of cultural heritage resources with the need for appropriate redevelopment and residential infill;
 - Provide guidelines for alterations and additions to significant cultural heritage resources; and,
 - Provide guidelines for the conservation of heritage features and fabric.
- Establishing a Public Realm Master Plan which will provide strategic direction as it relates to improvements to existing public open spaces, opportunities for improved wayfinding, the creation of gateway features, park amenities related to tourism and recreation, and other desirable elements within the Grimsby Beach public realm.
- Identifying views and vistas within the Grimsby Beach area as identified on Figure 7 and highlighting the importance of these views. The protection of those views shall be implemented through the Urban Design Guidelines;
- Encouraging that the conservation of significant cultural heritage resources adheres to the principles and guidelines of the Parks Canada Standards & Guidelines for the Conservation of Historic Places in Canada (2010);
- Continuing to identify and protect significant cultural heritage resources and under the legislated processes of the Ontario Heritage Act;
- Discouraging the demolition of significant cultural heritage resources;

- Requiring the submission of a Heritage Impact Assessment for properties located on, or adjacent to properties included on the Town of Grimsby Heritage Register within the Grimsby Beach area;
- Requiring a Heritage Impact Assessment for any public works initiatives, including infrastructure or streetscape improvements, at the direction of Town staff, to ensure the cultural heritage character and identified heritage attributes of Grimsby Beach are conserved and enhanced;
- Identifying the potential for archaeological resources;
- Encouraging the conservation of mature trees and vegetation on public and private lands which contribute to the character of the area;
- Preparation of a Tree Strategy which includes a Tree Management Plan for the Grimsby Beach area which identifies culturally significant natural resources and provides guidance on the removal and re-planting of trees and vegetation on public and private lands;
- Conserving the historic lotting, circulation, and street patterns of the core area, northwest area and south area, while recognizing the need for appropriate changes to lot fabric, municipal services and amenities which facilitates context - sensitive redevelopment, streetscape improvements and infrastructure; and,
- Maintaining the low-scale cottage character of Grimsby Beach and promote streetscape improvements, including public art, street furniture, historic plaques, way-finding signage, interpretive panels, kiosks, and amenity area features.

The functional policies should also state that heritage plans and programs are encouraged which prioritize the recognition and enhancement of the special character of Grimsby Beach.

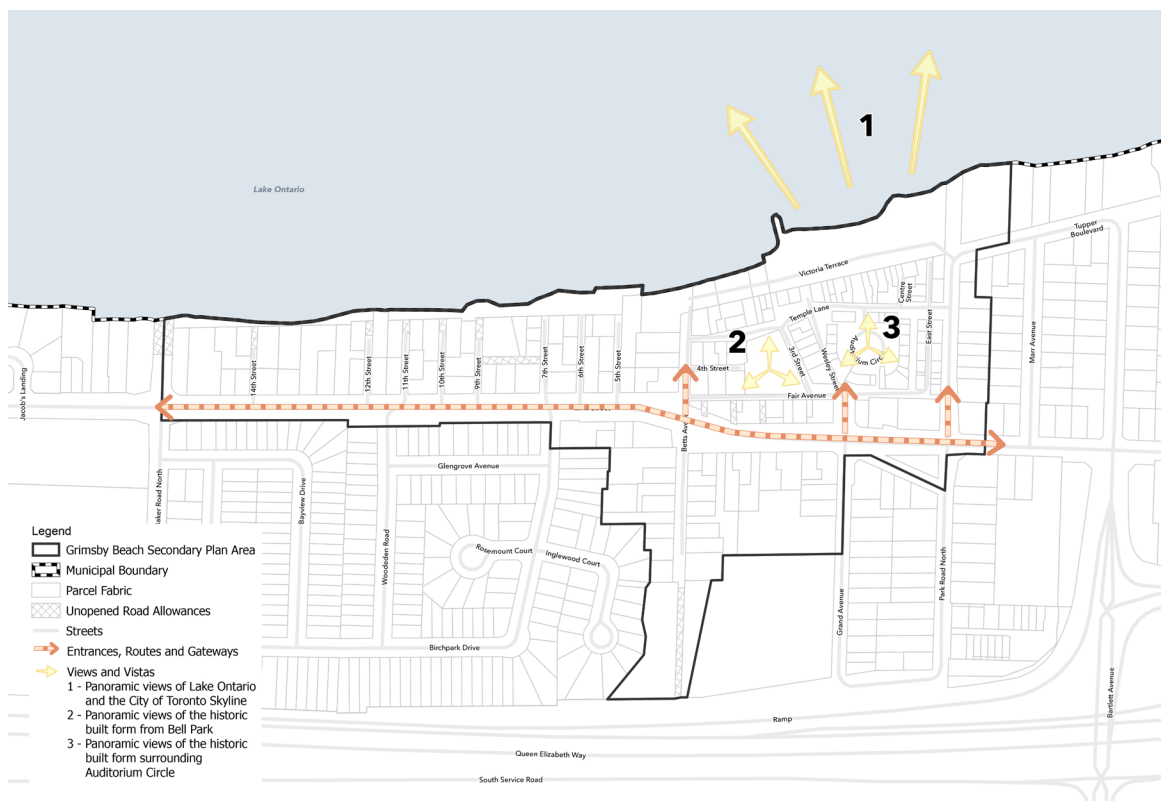


Figure 21 - Views and Vistas

Urban Design

Design policies within Grimsby Beach are intended to support the area's design objectives and define the primary design elements and expectations that shall apply to all areas as well as specific policies and guidelines for the character areas. These may include policies related to the public realm, built form, open space, landscape design, streetscapes, accessibility, sustainability, gateway features, signage, utilities and lighting. These policies should highlight that replication of design is not desired as a design principle in the Grimsby Beach context based on the unique mix and range of designs.

Development and replacement housing within the Grimsby Beach area shall be directed through the supportive design policies and guidelines.

9.3 CHARACTER AREAS

The character areas of Grimsby Beach have been defined as the Core Area, South Area and Northwest Area as shown on Figure 3. Each of these areas is to be defined in the Secondary Plan and policies are to be added to protect and enhance the character of each area.

All development shall recognize, be sensitive to and be compatible with existing built form and context of the character areas and to conserve the heritage character of each area. Applications for replacement housing and infill will require consideration of the policies in the Character Areas and specifically policies to address the following:

- compatibility with building orientation and building setbacks;
- scale, massing, building height, and built form features that are compatible with the characteristics of the character area;
- compatible scale and height for accessory structures;
- the preservation of landscaped open space and the protection of existing trees; and,
- avoidance of adverse impacts on adjacent properties.

The following policies are recommended to be incorporated into the proposed draft Secondary Plan for Grimsby Beach within the section dealing with Character Areas:

Core Area

Within the Core Area the Secondary Plan policies shall:

- Require replacement housing or new housing to be developed in accordance with the zoning by-law and in conformity with the proposed Urban Design and Heritage Guidelines;
- Require the submission of a Heritage Impact Assessment for applications submitted under the Planning Act within the Core Area at the discretion of staff;

- Heritage Impact Assessments shall consider whether or not any proposed development results in adverse impacts to the identified heritage impacts of the Core Area and provide development alternatives and mitigation recommendations;
- Encourage improvements to Bell Park which may include new lighting, additional landscaping, pedestrian walkways and upgraded play equipment and seating;
- Provide for improvements to the beach area including improvements to pedestrian access, landscaping and seating;
- Consider improvements to the public realm, which may be set out in a Grimsby Beach Public Realm Master Plan.
- Require the completion of an Urban Design Brief in support of new housing, replacement housing, additions, and alterations, and new or enlarged accessory buildings subject to site plan approval. The Urban Design Brief should address the following matters:
 - Lot design (for new or replacement housing) including conceptual building placement relative to surrounding properties;
 - The sensitive use of vegetation and the extent of new landscaping; and
 - Building elevations illustrating architectural style and heights.
- Protect significant views and vistas as defined in the area mapping which include:
 - Panoramic views of Lake Ontario and the skyline of the City of Toronto which are available along the Grimsby Beach shoreline (see Figure 7) This includes protection of kinetic vantage points available along the Grimsby Beach shoreline.
 - Panoramic views of the historic built form surrounding Auditorium Circle from vantage points available along Auditorium Circle and within Auditorium Circle park (see Figure 7);
 - Panoramic views of the historic built form from Bell Park from vantage points available within Bell Park (see Figure 7).

Northwest Area:

Within the Northwest Area the Secondary Plan policies shall include the following:

- Conserve the identified heritage attributes of the Northwest Area;
- Require any amendments to zoning provisions or minor variances to be compatible with the existing character of the area;
- Require consent applications for the creation of new lots, to meet the minimum lot area and frontage requirements of the zoning by-law;

- Ensure that new or replacement housing conforms to the Urban Design and Heritage Guidelines for Grimsby Beach;
- Consider improvements to the public realm, which may be set out in a Grimsby Beach Public Realm Master Plan.
- Require the completion of an Urban Design Brief in support of any new housing, replacement housing, additions, and alterations, and new or enlarged accessory buildings along Betts Avenue subject to site plan approval. The Urban Design Brief should address the following matters:
 - Lot design (for new or replacement housing) including conceptual building placement relative to surrounding properties;
 - Confirmation that significant views identified on (see Figure 7) will not be compromised;
 - Tree preservation and tree replacement;
 - The sensitive use of vegetation and the extent of new landscaping; and
 - Building elevations illustrating architectural style and heights.
- Conserve the identified heritage attributes of the northwest area;

South Area:

Within the South Area the Secondary Plan the policies shall include the following:

- Conserve the identified heritage attributes of the South Area;
- Require any amendments to zoning provisions or minor variances to maintain and enhance the existing character of the area;
- Require consent applications for the creation of new lots, to meet the minimum lot area and frontage requirements of the zoning by-law;
- Ensure that new or replacement housing conforms to the Urban Design and Heritage Guidelines;
- Consider improvements to the public realm, which may be set out in a Grimsby Beach Public Realm Master Plan. Such improvements may include:
 - The provision of an enhanced gateway feature (signage and/or landscaping) within the triangular parcel between Phelps Avenue and Lake Street;
 - Improved visibility and wayfinding as it relates to the tree stand and Grand Avenue Park.
 - A future expansion of Grand Avenue Park should the Beach Hall be removed or relocated;
 - The creation of a community focal point through the clustering of the existing Grand Avenue Public School, Grand Avenue Park and existing/future trail connections..

9.4 LAND USE POLICIES

The Low Density Residential area designation should continue to apply to the Grimsby Beach area with a number of minor modifications. The changes should be incorporated to better reflect existing uses, built form and density.

The land use designations applicable to the natural heritage areas and parks areas should remain.

9.5 IMPLEMENTATION POLICIES

A number of additional implementation policies specific to Grimsby Beach should be provided in the Secondary Plan including the following:

Zoning

A holding provision may be applied to lots where a zoning amendment is proposed to require a functional servicing study to be completed to ensure appropriate servicing is provided. Where minor variances are sought, conditions of approval shall ensure adequate servicing is available and can be provided.

Site Plan

While it is assumed that a 15% increase in floor area would be deemed “development” under Section 41 of the Planning Act, a policy that requires site plan approval for all areas within the Core Area may be more appropriate. This would leave the determination to whether the change is “development” in accordance with the Planning Act and not restrict site plan only to developments with 15% Gross Floor Area increases. The following updated policies are recommended and may require additional changes to the Town’s Site Plan Control By-law:

- Development in Grimsby Beach shall be subject to site plan approval. The Town of Grimsby shall enter into Site Plan Agreements with owners of development proposals in accordance with the Planning Act. Such agreements shall provide the Town with controls over development proposals regarding siting, massing, access, and exterior design, including without limiting the character, scale, appearance and design features of buildings.
- Site Plan Agreements may also include provisions regarding the architectural details, colours and building materials per the Design and Heritage Guidelines for Grimsby Beach to be used in a development proposal. Specifically, agreements may contain clauses stating that the architectural details, colour and the materials used in a development proposal shall be to the satisfaction of the Town.

Existing Vacant Lots

Where vacant parcels are proposed to be developed or redeveloped, new housing shall be developed in conformity with the policies of the Secondary Plan, provisions of Zoning By-law 14-45, as amended, and evaluated through the site plan process in accordance with the Urban Design and Heritage Guidelines to ensure compatible and appropriate design.

Consent

The following policies should be added to the implementation section of the Secondary Plan:

- Parcels of land created through consent shall conform with the provisions of the Zoning By-Law and the policies of the Grimsby Beach Secondary Plan.
- When considering applications for consent for a land severance, following criteria are required to be met:
 - provisions of the Planning Act;
 - development on a new lot or a retained parcel where costs for road or service improvements are required shall be provided by the applicants;
 - maximized tree protection and where trees cannot be maintained a tree replacement plan;
 - compatibility with adjacent properties;
 - avoidance of impacts on adjacent properties and the surrounding area; and,
 - conformity with the policies in the Secondary Plan that require the character of the area to be protected and enhanced.

Development Application Requirements

Additional policies in the implementation section of the Secondary Plan shall set out the required studies that may also be required with development applications.

Applications for consent shall require a Heritage Impact Assessment which considers the impact of consent on the identified heritage attributes and unique character of the area.

Development applications may require the completion of a land use compatibility assessment related to noise and/or air quality/odour impacts associated with the QEW Highway and the Baker Road Treatment Plant.

Due to the presence of potential archaeological resources within the area additional archeological studies may also be required as part of any future development application.



Figure 22 - Shoreline view

10.0 ZONING

Local zoning regulations set out provisions to regulate the use of land, buildings and structures. Zoning By-law 14-45, as amended, provides zones and regulations applicable to the Grimsby Beach area. As shown in Figure 8, a number of zones apply to properties in the Study area. As a whole, the Study area is predominantly zoned Grimsby Beach (GB), with the exception of a few properties zoned Public Open Space (O2), and the corner of Lake Street and Park Street which is zoned Commercial Convenience (CC). It should be noted that much of the beach front is zoned with a hazard overlay and, as such, regulations under the hazard overlay zones will be included in the review of beach front properties.



Figure 23 - Town of Grimsby Zoning By-law No. 14-45 (Source: MHBC, 2021)

The following tables outlines the current development standards in the Grimsby Beach (GB), Public Open Space (O2) and Commercial Convenience (CC) zones:

Table 9: GRIMSBY BEACH (GB)

Regulations	Grimsby Beach (GB) Requirements
Permitted Uses (Section 7.1.1)	<ul style="list-style-type: none"> • Bed and Breakfast • Group Home • Single Detached Dwelling • Home Office (as an accessory use) • Secondary Suite (as an accessory use)
7.2.2.4 a)	The minimum lot size, minimum lot frontage and minimum front yard, rear yard and side yard setbacks shall be the lot size, lot frontage and front yard, rear yard and side yard setbacks existing on the date this by-law came into effect.
7.2.2.4 b)	The maximum Gross Floor Area shall be the existing Gross Floor Area on the date this by-law came into effect, except the Gross Floor Area may be increased by 15% through an increase in height or dwelling depth to the rear, subject to an approved site plan application.
Max Building Height (Section 7.2.1)	9m

Table 10: PUBLIC OPEN SPACE (O2)

Regulations	Public Open Space (O2) Requirements
Permitted Uses (Section 12.1.1)	<ul style="list-style-type: none"> • Accessory residential and commercial uses • Arena • Athletic fields • Boat launching ramp • Campground • Community Recreational Centre • Lawn bowling green • Outdoor natural rink • Outdoor swimming pool • Park • Picnic area • Playground • Restaurant (as an accessory use within a community recreational centre) • Retail store (as an accessory use within a community recreational centre) • Shelters and docking facility • Special event use (accessory use) • Tennis court • Trails and pedestrian rest area
Minimum Front Yard (Section 12.2.1)	15 m
Minimum Exterior Side Yard	15 m
Minimum Interior Side Yard	7.5 m. or 15 m. to a Residential Zone
Minimum Rear Yard	7.5 m. or 15 m. to a Residential Zone

Table 11: COVENIENCE COMMERCIAL (CC)

Regulations	Convenience Commercial (CC) Requirements
Permitted Uses (Section 9.1.1)	<ul style="list-style-type: none"> • Bakery shop • Bank • Convenience store • Clinic • Day care facility • Dwelling unit (permitted only at/above second story) • Gas station • Laundromat • Personal service shop • Take out restaurant
Minimum Lot Area (Section 9.2.1)	700m ²
Maximum lot coverage (Section 9.2.1)	30%
Minimum Lot Frontage (Section 9.2.1)	15m
Minimum Front Yard (Section 9.2.1)	3m
Minimum Interior Side Yard (Section 9.2.1)	3 m. except 0 metres where abutting another commercial use
Minimum Rear Yard (Section 9.2.1)	7.5 m., except 10.5 m. to a Residential Zone
Maximum Height (Section 9.2.1)	8.5m
Maximum Gross Floor Area (9.2.2.3)	500m ²

Table 12: HAZARD OVERLAY ZONES (HA)

Regulations	Hazard Overlay (HA) Requirements
Permitted Uses (Section 13.1.1)	<ul style="list-style-type: none"> • Agricultural use, excluding buildings • Athletic fields • Boat launching ramp • Conservation use • Docking facility • Flood and erosion protection work • Forestry use • Golf courses excluding buildings • Park • Picnic area • Playground • Trail and pedestrian rest area

Section 13.1.8	Where a Hazard Overlay Zone is shown on the schedules in Section 15, it includes hazards associated with watercourses (riverine erosion, flooding hazard) and the Lake Ontario shoreline. Along a watercourse, the Hazard Overlay Zone includes the greater of: the stable top of bank for erosion hazards, or the flooding hazard of a watercourse. Along Lake Ontario, the Hazard Overlay Zone includes the greater of the flooding hazard, erosion hazard or dynamic beach hazard associated with Lake Ontario.
Section 13.1.9	Notwithstanding the permitted uses in the applicable underlying zones shown on the schedules in Section 15, where a lot is also subject to a Hazard Overlay Zone, no uses and no building or structure or an expansion to an existing building or structure shall be permitted unless a permit for development or site alteration is issued by the Niagara Peninsula Conservation Authority. Those uses permitted in Table 28 may require a permit. Where a permit is issued by the Niagara Peninsula Conservation Authority, the requirements of the underlying zone shall apply to the extent permitted by the permit issued by the Niagara Peninsula Conservation Authority.

The current GB1 zone essentially reflects legacy zoning meaning that any changes to what existed prior to the enactment of Zoning By-law 14-45 in 2014, will likely require zoning relief through an amendment to the GB1 zone or through minor variances.

10.1 PROPOSED ZONING AMENDMENTS POLICIES

All lands within the Study Area zoned O2 Zone, CC Zone and located in the Hazard Land Overlay Zone should remain in those zones. The lands that were added to the Study Area Boundary to the east of Park Road North and to the south of the original boundary should also remain in their current O2, RD3.25 and RD3.35 zones, respectively. These properties will however now be included in the new Secondary Plan and the policies of that plan shall apply to those areas.

An assessment of all three Character Areas was undertaken to determine the current lot sizes and areas as well as the current setbacks, coverage and other zoning provisions in each area. The existing zoning categories were also reviewed to determine the most appropriate zoning for the area that would provide for appropriate standards reflective of the area’s characteristics and not resulting in significant oversized or undersized lots. The intention through the review was to also minimize the number of legal non-conforming lots.

Based on the assessment undertaken, it is recommended, based on the average lot areas and lot frontages provided in the South and Northwest Areas, that these areas be moved into a new zone reflective of the RD3 Zone standards. These standards best reflect the existing conditions in these areas. Also, as set out in the Background Report chart (as provided in Table 10), the variation in lot sizes reflective of the Core Area justify that the Core Area should remain in the existing Grimsby Beach (GB) zone to reflect the unique characteristics of the area through the continuation of the legacy zoning. This will ensure replacement housing, infill and change is carefully considered in relation to the existing development on existing lots. An additional provision for minimum coverage (25%) is also recommended to be provided for vacant lots in the Core Area.

It is also recommended that the Town pursue a deeming by-law to limit the use of the older M-Plans in the Core area as a means to control the consent process in the area.

Table 13: Average Lot Frontages and Areas

Character Area	Average Lot Frontage	Average Lot Area
Core	13.6 m	231 square metres
South	16.75 m	692 square metres
Northwest	27.17 m	715 square metres

As noted, for the South and Northwest areas, it is recommended that the RD3 zone provisions be applied in a new Grimsby Beach One (GB1) zone be introduced to better reflect the existing residential areas and provide zoning provisions for lot area, lot frontages, setbacks and coverage that will maintain the current lotting fabric and development. The new Grimsby Beach One Zone should be considered as follows:

Table 14: PROPOSED GRIMSBY BEACH ONE (GB1)

Regulations	Grimsby Beach One (GB1) Requirements
Permitted Uses	<ul style="list-style-type: none"> • Bed and Breakfast • Group Home • Single Detached Dwellings • Home Office (as an accessory use) • Secondary Suite (as an accessory use)
Minimum Lot Area	550 square metres
Maximum Lot Coverage	25%
Minimum Lot Frontage	15m
Minimum Front Yard	The minimum front yard shall be the lesser of: a) the current front yard or b) the average of the front yard of two adjacent properties. Where there are no existing neighbouring dwellings, the minimum front yard shall be 4.5 m; or c) where there is only one building on the adjacent properties, the current front yard of the one building.
Minimum Side Yard (Interior)	1.8 m
Minimum Side Yard (Exterior)	6 m
Minimum Rear Yard	The minimum rear yard shall be the greater distance of: a) 7.5 m, or b) 25% of the depth of the lot.
Minimum Depth	20 m
Maximum Height	9 m (With added notation for prohibition of flat rooves as provided in parent by-law)

Zoning provisions related to accessory building and structures as well as parking will continue to be provided in the Town of Grimsby Zoning By-law 14-45.

SCHEDULE XX

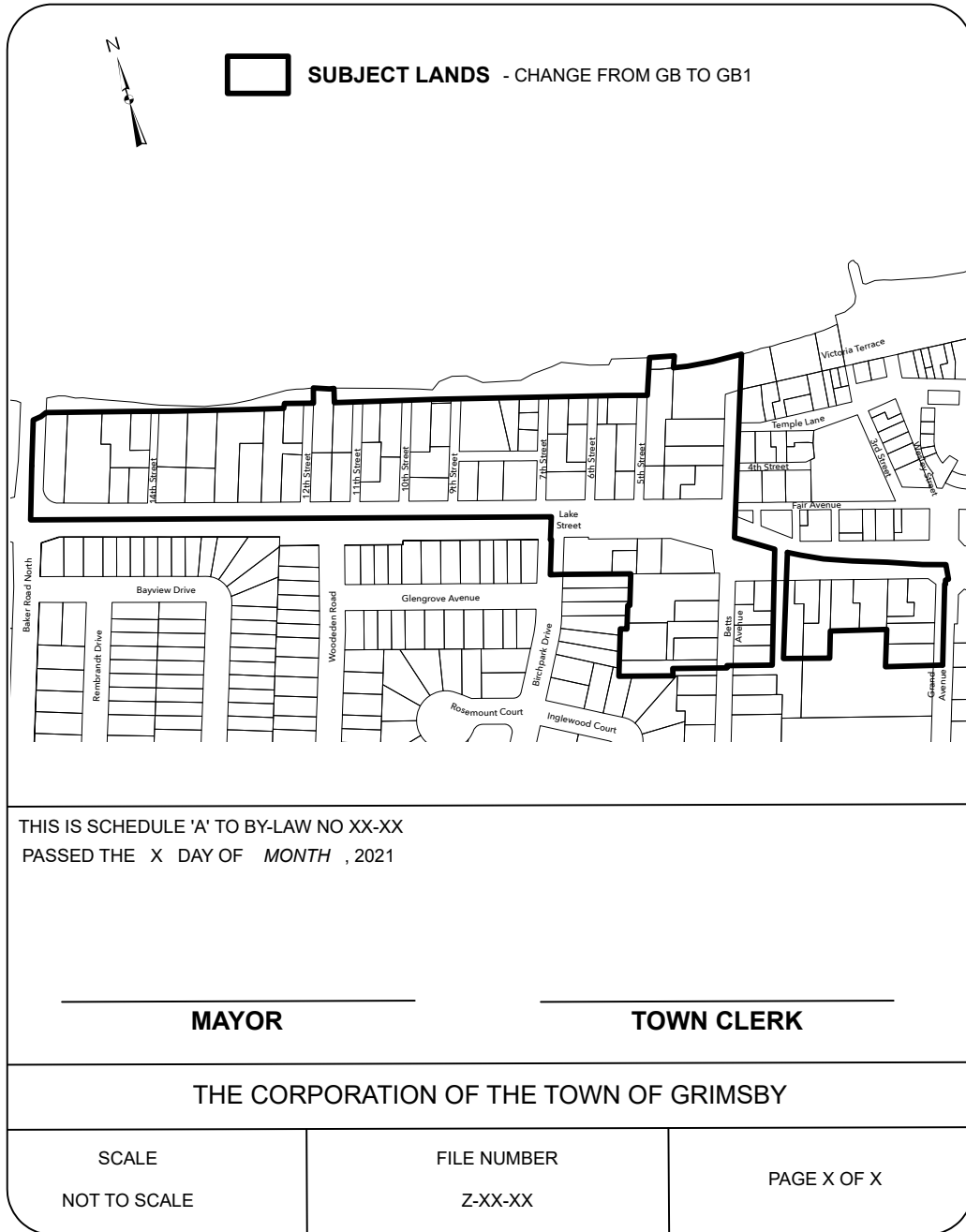


Figure 24 - Proposed Zoning Change Map

11.0

**CONCLUSIONS AND
RECOMMENDATIONS**

In order to effectively manage growth and change in the Grimsby Beach Area, an assessment of the existing physical and policy context was completed which was summarized in the Background Report that also addressed issues of land use, cultural heritage, neighbourhood character, transportation and parking, servicing and natural heritage. The community were engaged early in the Grimsby Beach Study to ensure their issues and comments were identified and their vision, goals and objectives for the area were reflected in the development of a guiding vision for planning in the area.

In addition to the Background Report, the Secondary Plan was informed by an evaluation and assessment of the range of planning tools available to address land use, zoning, cultural heritage, urban design and tree protection. This assessment was also informed by public input to consider what approaches and tools were the most appropriate for Grimsby Beach.

The recommended Secondary Plan policies and proposed zoning revisions for Grimsby Beach as set out in this report, address land use, growth management, cultural heritage, urban design and the unique character areas within Grimsby Beach. The Secondary Plan also addresses natural heritage including tree protection, servicing, transportation and implementation policies for the area. A copy of a draft Secondary Plan is provided in Appendix C. A copy of the draft zoning amendments is provided in Appendix D. Both the draft Secondary Plan and the Zoning By-law will be presented as part of a public workshop in the fall.

In addition to the Secondary Plan and updated Zoning By-law, a set of Draft Urban Design and Heritage Guidelines are proposed to be developed to support the new Secondary Plan. These will be provided with a Draft Tree Strategy that is intended to comprehensively identify the full range of tools and programs to address tree maintenance and protection and tree replacement. In support of the Secondary Plan, a Draft Infrastructure Plan and Fiscal Impact Assessment will also be provided to confirm water and wastewater servicing for the area. Drafts of these documents will also be provided for review and comment.

This planning report and the Secondary Plan also reference a number of additional recommendations for studies that will be carried out separately by the Town and/or others at a future date and may be integrated into other Town wide or area studies and projects. These include:

- Additional analysis of storm sewers in the Auditorium Circle, including an analysis of the erosion protection at the outfall;
- Installation of new signage for streets and parking areas;
- Further assessment of the identified poorer conditions in some shoreline areas to assess existing structures;
- Establishment of a Deeming By-law;
- Updates to the Town's Site Plan Control By-law; and,
- Establishment of a Public Realm Master Plan to identify all public areas and recommend improvements existing public open spaces.



MHBC
P L A N N I N G
U R B A N D E S I G N
& L A N D S C A P E
A R C H I T E C T U R E

KITCHENER
WOODBRIDGE
LONDON
KINGSTON
BARRIE
BURLINGTON

APPENDIX **A**

Background Servicing Information

APPENDIX **A1**

Water Demand



Projected Domestic Water Demand

Site Area: 18.2
 Approx. Area Lost to Public Open Space: 4.7
 Remaining Area: 13.5 ha
 Population Density: 2.91 persons/unit
 Number of units: 181
 Population: 527

Design Parameters

Average Demand (L/capita/d)
300

Water Demand:

Average Daily Demand = 158,013 L/day
1.83 L/s

Peaking Factors (Residential)

Max Day = 2.0
 Peak Hour = 4.0

Average Day = 1.83 L/s
 Max Day = **3.66** L/s
 Peak Hour = **7.32** L/s

Notes & References

Region of Niagara Development Charge Background Study Appendix A

 Niagara Region Water & Wastewater Master Servicing Plan (2016) Volume 3

Niagara Region Water & Wastewater Master Servicing Plan (2016) Volume 3

Max Day = Average Day Demand * Max Day
 Peak Hour = Average Day Demand * Peak Hour

Municipality	Average Daily Water Demand (L/s)	Max Day Demand (L/s)	Peak Hourly Demand (L/s)
Niagara Region	1.83	3.66	7.32

APPENDIX **A2**

Sanitary Demand

Projected Domestic Sanitary Flow

Site Area: 18.2
 Approx. Area Lost to Public Open Space: 4.7
 Remaining Area: 13.5 ha
 Population Density: 2.91 persons/unit
 Number of units: 181
 Population: 527

Notes & References

Region of Niagara Development Charge
 Background Study Appendix A

Design Parameters

Average Flow (L/capita/d)
275

Niagara Region Water & Wastewater Master Servicing Plan (2016) Volume 4

Sanitary Design Flow:

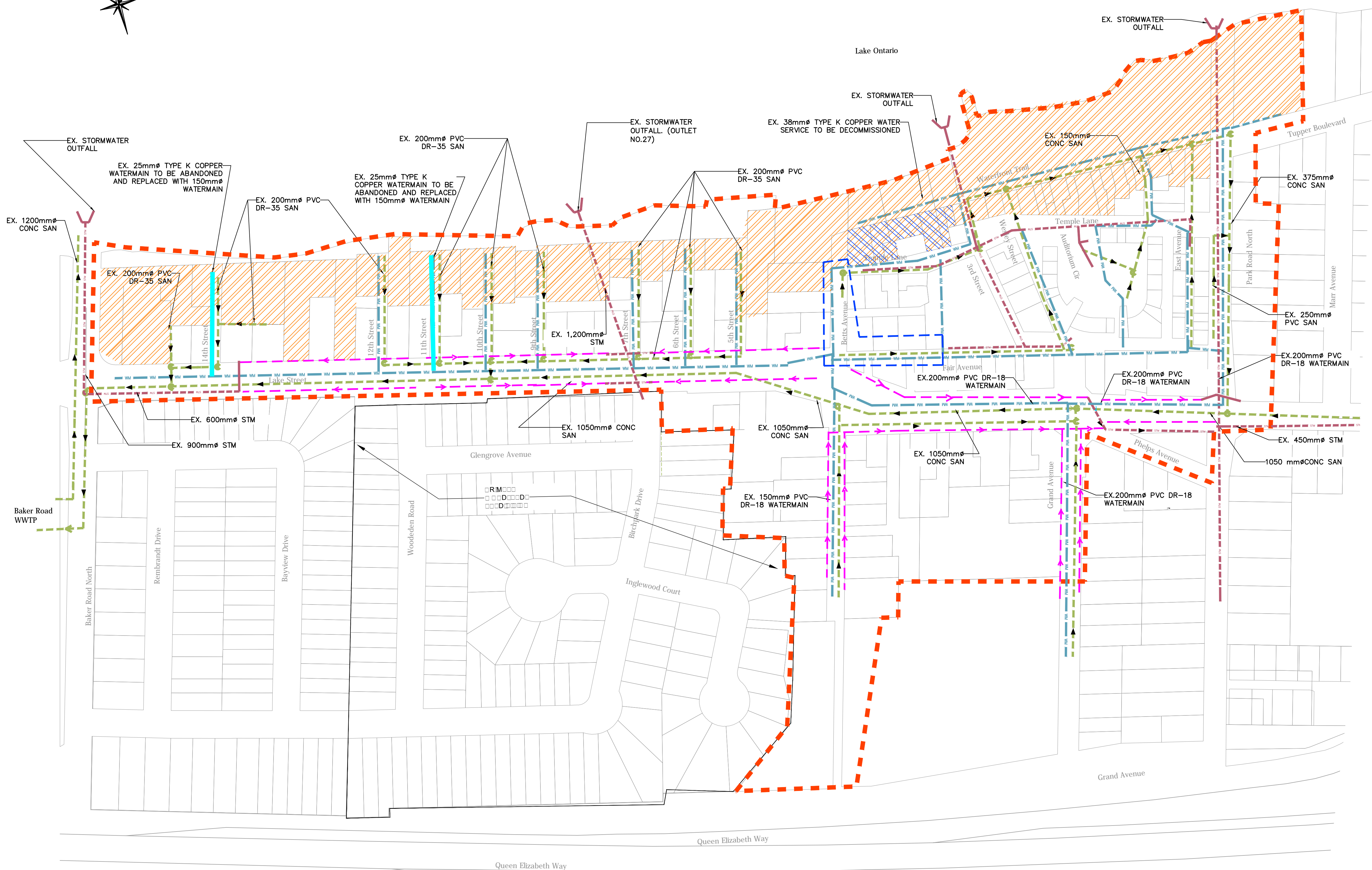
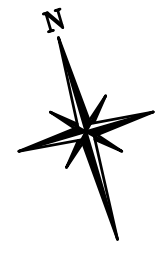
	Average Daily Flow =	275.0	L/capita/d	Average Daily Flow = Average Daily Flow (L/cap./day) * population / 86400
	Average Daily Flow =	1.68	L/s	
Harmon Peak Factor:	M =	3.96		$M = 1 + 14 / (4 + (p/1000)^{.5})$
	Peak Flow =	6.64	L/s	Peak Flow = Average Daily Flow * M
Infiltration Flow:	Infiltration =	0.29	L/s/ha	Niagara Region Water & Wastewater Master Servicing Plan (2016) Volume 4
	Total Infiltration =	3.92	L/s	
	Total Peak Flow =	10.56	L/s	Total Peak Flow = Peak Flow + Total Infiltration

Summary Table

Average Daily Flow (L/s)	Peaking Factor	Peak Flow (L/s)	Infiltration Flow (L/s)	Total Peak Flow (L/s)
1.68	3.96	6.64	3.92	10.56

APPENDIX **A3**

Draft Infrastructure Plan



LEGEND

- LAND PARCEL
- - - - - LIMIT OF STUDY AREA
- EXISTING SANITARY SEWER (200mm CONCRETE PIPE UNLESS STATED OTHERWISE)
- WM EXISTING WATERMAIN (150mm DUCTILE IRON UNLESS OTHERWISE STATED)
- PROPOSED WATERMAIN
- - - - - EXISTING STORM SEWER
- EXISTING DITCH
- LOW FIRE-FLOW AREA (PER HYDRANT FLOW TEST)
- EXISTING OVERLAND FLOW ROUTE
- PROPOSED EROSION CONTROL AREA
- PROPOSED LOTS TO BE PROVIDED WATER SERVICE FROM TEMPLE LANE

NOTE:

EROSION CONTROL MEASURES DETAILS FOR FUTURE PROPOSED DEVELOPMENT PARCELS WILL BE PROVIDED IN THE DETAIL DESIGN OF THE FUTURE DEVELOPMENT BASED ON THE PROPOSED REDEVELOPMENT OF EACH PARCEL.

THE LOCATION AND SIZE OF EXISTING SERVICES ARE APPROXIMATE AND ARE FOR INFORMATION AND DISCUSSION PURPOSES. THE EXACT LOCATION AND SIZE WILL BE PROVIDED DURING THE DETAILED DESIGN STAGE OF THE FUTURE DEVELOPMENT PARCELS.



1. THIS SKETCH IS CREATED REFERENCING FROM TOWN OF GRIMSBY ZONING MAP SCHEDULE 7A.
2. THE SKETCH IS FOR CONCEPTUAL PURPOSES ONLY.
3. WATER SERVICES ILLUSTRATED ARE PROVIDED BY TOWN OF GRIMSBY GIS MAPPING AND ARE NOT TO SCALE.

SERVICING INFRASTRUCTURE SCHEMATIC

GRIMSBY BEACH LAND USE STUDY

CROZIER & ASSOCIATES
Consulting Engineers

15 Martin Street
Scarborough, Ontario M1S 1X4
Tel: (416) 291-1111
Fax: (416) 291-1112
www.crozier.ca

Project No. 529-5712
Date: 04/22/2020
Scale: 1:1500
Sheet: 5 of 10
FIG 1

APPENDIX **B**

Background Transportation Information

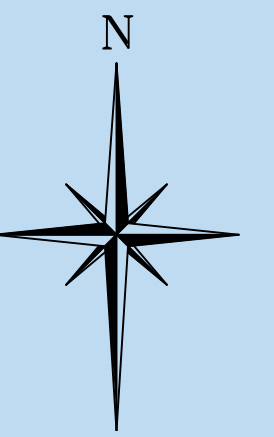
APPENDIX **B1**

Available Signage

APPENDIX D

Available Signage

DRAFT



- NOTES:
1. THIS DRAWING IS THE EXCLUSIVE PROPERTY OF C.F. CROZIER & ASSOCIATES INC. AND THE REPRODUCTION OF ANY PART WITHOUT PRIOR WRITTEN CONSENT OF THIS OFFICE IS STRICTLY PROHIBITED.
 2. THE CONTRACTOR SHALL VERIFY ALL DIMENSIONS, LEVELS, AND DATUMS ON SITE AND REPORT ANY DISCREPANCIES OR OMISSIONS TO THIS OFFICE PRIOR TO CONSTRUCTION.
 3. THIS DRAWING IS TO BE READ AND UNDERSTOOD IN CONJUNCTION WITH ALL OTHER PLANS AND DOCUMENTS APPLICABLE TO THIS PROJECT.
 4. DO NOT SCALE THE DRAWINGS.
 5. ALL EXISTING UNDERGROUND UTILITIES TO BE VERIFIED IN THE FIELD BY THE CONTRACTOR PRIOR TO CONSTRUCTION.
 6. ALL WORK SHALL BE DONE IN ACCORDANCE WITH BOOK 5 (REGULATORY SIGNS) AND BOOK 11 (PAVEMENT, HAZARD & DELINEATION MARKINGS)
 7. REFER TO FIGURE 5 FOR DETAILED DESCRIPTIONS OF ALL SIGNS

No.	ISSUE	DATE: 06/02/2021
0	ISSUED FOR 1st SUBMISSION	06/02/2021

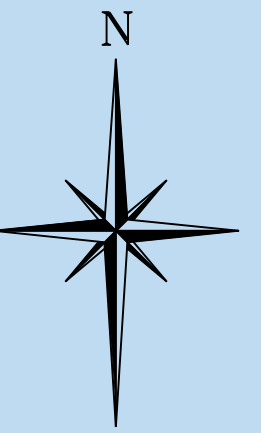
Project
PUBLIC INFRASTRUCTURE PLAN

Drawing
SIGNAGE PLAN 1

CROZIER
CONSULTING ENGINEERS

2800 High Point Drive
Suite 100
Milton, ON L9T 6P4
905-875-0026 T
905-875-4915 F
www.ccrozier.ca

Drawn By	I.L.	Design By	Project	0529-5712
Check By	K.S.	Check By	Scale	N.T.S. Drawing
				FIG01



- NOTES:
1. THIS DRAWING IS THE EXCLUSIVE PROPERTY OF C.F. CROZIER & ASSOCIATES INC. AND THE REPRODUCTION OF ANY PART WITHOUT PRIOR WRITTEN CONSENT OF THIS OFFICE IS STRICTLY PROHIBITED.
 2. THE CONTRACTOR SHALL VERIFY ALL DIMENSIONS, LEVELS, AND DATUMS ON SITE AND REPORT ANY DISCREPANCIES OR OMISSIONS TO THIS OFFICE PRIOR TO CONSTRUCTION.
 3. THIS DRAWING IS TO BE READ AND UNDERSTOOD IN CONJUNCTION WITH ALL OTHER PLANS AND DOCUMENTS APPLICABLE TO THIS PROJECT.
 4. DO NOT SCALE THE DRAWINGS.
 5. ALL EXISTING UNDERGROUND UTILITIES TO BE VERIFIED IN THE FIELD BY THE CONTRACTOR PRIOR TO CONSTRUCTION.
 6. ALL WORK SHALL BE DONE IN ACCORDANCE WITH BOOK 5 (REGULATORY SIGNS) AND BOOK 11 (PAVEMENT, HAZARD & DELINEATION MARKINGS)
 7. REFER TO FIGURE 5 FOR DETAILED DESCRIPTIONS OF ALL SIGNS

No	ISSUE	DATE: 06/02/2021
0	ISSUED FOR 1st SUBMISSION	06/02/2021

Project: PUBLIC INFRASTRUCTURE PLAN

Drawing: SIGNAGE PLAN 2

CROZIER
CONSULTING ENGINEERS

2800 High Point Drive
Suite 100
Milton, ON L9T 6P4
905-875-0026 T
905-875-4915 F
www.cfcrozier.ca

Drawn By: I.L.	Design By:	Project: 0529-5712
Check By: K.S.	Scale: N.T.S.	Drawing: FIG02



- NOTES:
1. THIS DRAWING IS THE EXCLUSIVE PROPERTY OF C.F. CROZIER & ASSOCIATES INC. AND THE REPRODUCTION OF ANY PART WITHOUT PRIOR WRITTEN CONSENT OF THIS OFFICE IS STRICTLY PROHIBITED.
 2. THE CONTRACTOR SHALL VERIFY ALL DIMENSIONS, LEVELS, AND DATUMS ON SITE AND REPORT ANY DISCREPANCIES OR OMISSIONS TO THIS OFFICE PRIOR TO CONSTRUCTION.
 3. THIS DRAWING IS TO BE READ AND UNDERSTOOD IN CONJUNCTION WITH ALL OTHER PLANS AND DOCUMENTS APPLICABLE TO THIS PROJECT.
 4. DO NOT SCALE THE DRAWINGS.
 5. ALL EXISTING UNDERGROUND UTILITIES TO BE VERIFIED IN THE FIELD BY THE CONTRACTOR PRIOR TO CONSTRUCTION.
 6. ALL WORK SHALL BE DONE IN ACCORDANCE WITH BOOK 5 (REGULATORY SIGNS) AND BOOK 11 (PAVEMENT, HAZARD & DELINEATION MARKINGS)
 7. REFER TO FIGURE 5 FOR DETAILED DESCRIPTIONS OF ALL SIGNS
 8. SIGNAGE SHOWN IN RED IS RECOMMENDED SIGNS FOR WAYFINDING PURPOSES

No	ISSUE	DATE: 06/02/2021
0	ISSUED FOR 1st SUBMISSION	06/02/2021

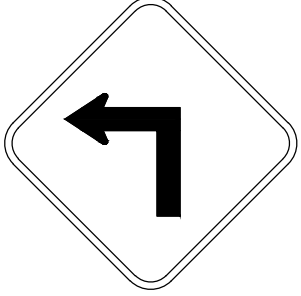

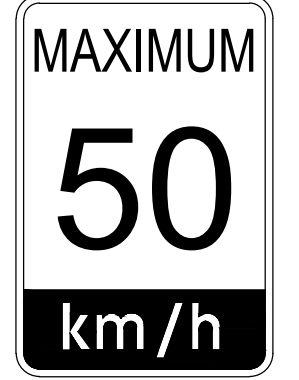
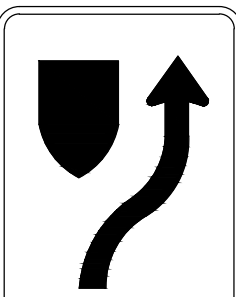

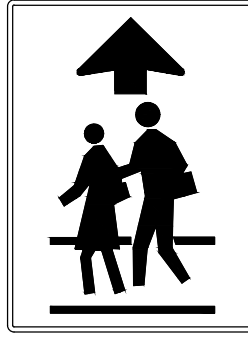
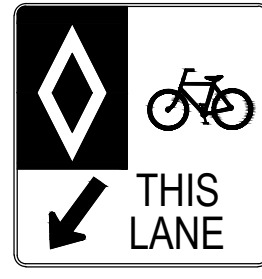
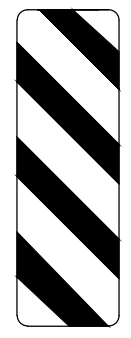
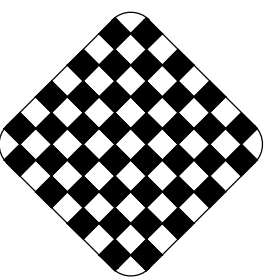
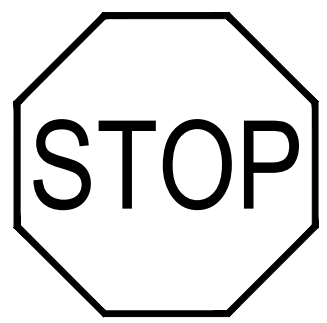

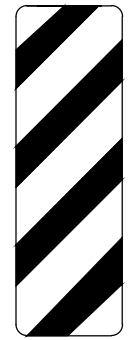

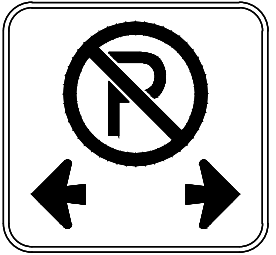


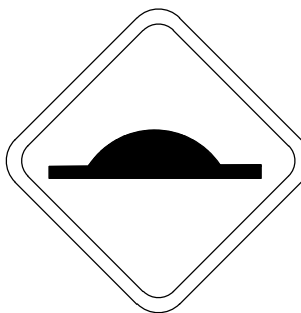
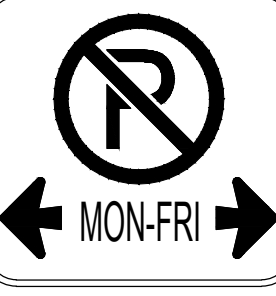



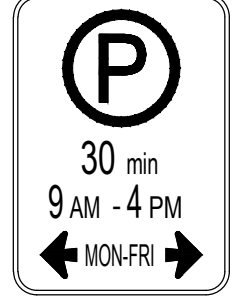
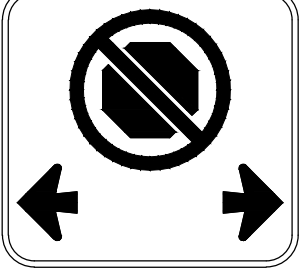
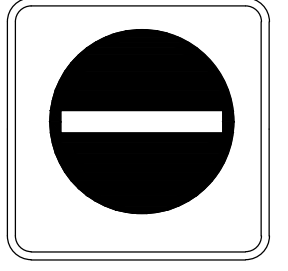
Project
PUBLIC INFRASTRUCTURE PLAN

Drawing
EXISTING AND RECOMMENDED SIGNAGE PLAN

CROZIER
CONSULTING ENGINEERS

2800 High Point Drive
Suite 100
Milton, ON L9T 6P4
905-875-0026 T
905-875-4915 F
www.cfcrozier.ca

Drawn By I.L.	Design By	Project 0529-5712
Check By K.S.	Check By	Scale N.T.S.
		Drawing FIG03

	Wa-1(L/R) TURN SIGN (60X60cm)	60X60cm	OTM BOOK 6		Wc-7 PEDESTRIAN AHEAD SIGN	75X75cm	OTM BOOK 6		Rb-1A MAXIMUM SPEED SIGN WITH KM/H INCLUDED	60X75cm	OTM BOOK 5		Rb-25 TWO-WAY TRAFFIC SIGN	60X75cm	OTM BOOK 5
	Wa-7t ADVISORY SPEED TAB SIGN	45X45cm	OTM BOOK 6		Wc-2A SCHOOL CROSSING SIGN	60X90cm	OTM BOOK 6		Rb-84A RESERVED BICYCLE LANE SIGN (GROUND-MOUNTED)	60X60cm	OTM BOOK 5		Wa-32L OBJECT MARKER SIGN (ONE DIRECTION) (LEFT VERSION)	30X90cm	OTM BOOK 6
	Wa-10B CHECKBOARD SIGN	90X90cm	OTM BOOK 6		Ra-1 STOP SIGN	60X60cm	OTM BOOK 5		Rb-84t RESERVED BICYCLE LANE SIGN TAB (BEGINS)	30X60cm	OTM BOOK 5		Wa-32R OBJECT MARKER SIGN (ONE DIRECTION) (RIGHT VERSION)	30X90cm	OTM BOOK 6
	Wa-31 NO EXIT SIGN (45X45cm)	45X45cm	OTM BOOK 6		Rb-51 NO PARKING SIGN	30X30cm	OTM BOOK 5		Rb-84t RESERVED BICYCLE LANE SIGN TAB (ENDS)	30X60cm	OTM BOOK 5		WC-19 SHARE THE ROAD SIGN	60X60cm	OTM BOOK 6
	Wa-74 SPEED HUMPS	45X45cm	OTM BOOK 6		Rb-51A NO PARKING SIGN (WITH DAYS)	30X30cm	OTM BOOK 5		WC-19t SHARE THE ROAD TAB	30X60cm	OTM BOOK 6		Rb-21 ONE-WAY SIGN (30X90cm)	30X90cm	OTM BOOK 5
	Wa-74t SPEED HUMPS TAB SIGN	22.5X45cm	OTM BOOK 6		Rb-53 PARKING RESTRICTED SIGN (WITH DAYS, TIMES AND DURATION)	30X45cm	OTM BOOK 5		Rb-55 NO STOPPING SIGN	30X30cm	OTM BOOK 5		Rb-19 DO NOT ENTER SIGN	60X60cm	OTM BOOK 5

- NOTES:
- THIS DRAWING IS THE EXCLUSIVE PROPERTY OF C.F. CROZIER & ASSOCIATES INC. AND THE REPRODUCTION OF ANY PART WITHOUT PRIOR WRITTEN CONSENT OF THIS OFFICE IS STRICTLY PROHIBITED.
 - THE CONTRACTOR SHALL VERIFY ALL DIMENSIONS, LEVELS, AND DATUMS ON SITE AND REPORT ANY DISCREPANCIES OR OMISSIONS TO THIS OFFICE PRIOR TO CONSTRUCTION.
 - THIS DRAWING IS TO BE READ AND UNDERSTOOD IN CONJUNCTION WITH ALL OTHER PLANS AND DOCUMENTS APPLICABLE TO THIS PROJECT.
 - DO NOT SCALE THE DRAWINGS.
 - ALL EXISTING UNDERGROUND UTILITIES TO BE VERIFIED IN THE FIELD BY THE CONTRACTOR PRIOR TO CONSTRUCTION.
 - ALL WORK SHALL BE DONE IN ACCORDANCE WITH BOOK 5 (REGULATORY SIGNS) AND BOOK 11 (PAVEMENT, HAZARD & DELINEATION MARKINGS)
 - REFER TO FIGURE 5 FOR DETAILED DESCRIPTIONS OF ALL SIGNS

No.	ISSUE	DATE: 06/02/2021
0	ISSUED FOR 1st SUBMISSION	06/02/2021

PUBLIC INFRASTRUCTURE PLAN

SIGN DETAILS



2800 High Point Drive
Suite 100
Milton, ON L9T 6P4
905-875-0026 T
905-875-4915 F
www.cfcrozier.ca

Drawn By	I.L.	Design By		Project	0529-5712
Check By	K.S.	Scale	N.T.S.	Drawing	FIG04

APPENDIX E

TAC GDGCR Excerpts

DRAFT

stream. Where local residential roads intersect truck routes or arterials, the intersections are often specifically designed not to accommodate trucks easily, thereby discouraging trucks from travelling through the residential area.

In industrial areas, large tractor-trailer combination trucks are prevalent along all roads, including locals. Thus, all industrial intersections are designed to accommodate the turning movements of these large vehicles. Two- and three-centred curves are common for the curb returns at industrial intersections. Raised channelizing islands are typically omitted within industrial areas in recognition of low pedestrian volumes and other considerations such as right-of-way and construction costs. The absence of raised islands also provides more maneuvering area for the turning movements of large trucks.

2.5 SIGHT DISTANCE

2.5.1 INTRODUCTION

The ability to see ahead is of critical importance in the safe and efficient operation of a vehicle. Motor vehicles are operated by drivers who have significant differences in their level of experience, ability, and training. Sufficient sight distance must be provided to allow for drivers of all skill and training levels to stop or maneuver around obstacles on the roadway surface and make safe turns.

Depending on the specific circumstances, the designer may use different measurements of sight distance, including: stopping sight distance, passing sight distance, and decision sight distance. Each of these is described in detail in subsequent sections of this chapter. Intersection sight distance is addressed in **Chapter 9**.

In many applications, one of these types of sight distance will govern, and the designer need satisfy only one requirement. In other cases, such as vertical alignment design, a designer must optimise the design to achieve a satisfactory balance between provision of passing opportunities in some locations and adequate stopping sight distances in others. Where an intersection unavoidably falls on a crest curve, the designer sometimes needs to consider the interaction between stopping, decision, and intersection sight distances to achieve a suitable design.

2.5.2 CRITERIA USED IN CALCULATING SIGHT DISTANCE

Several variables are used by the designer when determining sight distance required for different applications. These are:

- Perception-reaction time (see **Section 2.2.5.5**)
- Driver eye height (see **Section 2.4.3.3**)
- Vehicle operating speed (see **Section 2.3.2**)
- Object height
- Deceleration rate.

The last two variables are discussed below.

2.5.2.1 Object Height

In calculating sight distance, the designer must consider the type of object that is likely to be encountered on the roadway, which a driver will have to avoid by stopping or maneuvering. Because of the potential variation in object type, selection of object height has significantly more impact on sight distance requirements than, for example, driver eye height.

Table 2.5.1 presents commonly used object heights for various design scenarios.

Table 2.5.1: Object Height Design Domain

Object Height (m)	Applicability
0.00	Stopping sight distance for: <ul style="list-style-type: none"> Risk of road washouts Pavement markings in critical locations
0.15	Stopping sight distance for: <ul style="list-style-type: none"> Risk of fallen trees or rocks Risk of log or construction debris fallen from truck Risk of fallen person Decision sight distance for most applications (see Section 2.5.5)
0.38	Stopping sight distance for: <ul style="list-style-type: none"> Vehicle tail or brake light from 1999 TAC <i>Geometric Design Guide for Canadian Roads</i> This value can be used if a more conservative approach is required.
0.60	Stopping sight distance for: <ul style="list-style-type: none"> Vehicle tail or brake light Research indicates that 95% of tail light heights and 90% of headlight heights exceed this value. This value has been used in this guide to determine stopping sight distance requirements outlined in Tables 2.5.2 and 2.5.3
1.30	Passing sight distance for: <ul style="list-style-type: none"> Top of car*

* Note: Some jurisdictions use an object height of 1.15 m for the top of a car, based on the premise that a driver needs to see at least 150 mm of the vehicle to discern its presence. This is supported by a study of driver visual capabilities which suggested that a high contrast object 150 mm high is the minimum height detectable at AASHTO stopping sight distances, and that drivers do not have the capability to recognize objects that are less than 300 mm in height, regardless of contrast, at or beyond minimum stopping sight distances.⁵¹ This practice is not widely used.

In applying object heights less than 0.15 m the following points should be considered.

- The frequency of collisions occurring as a result of vehicles striking objects less than 0.15 m in height has been shown to be very low.⁵²
- As discussed above, a driver's ability to discern small objects at a distance is limited.
- In general, a driver must see at least the top 0.15 m of an object in order to detect its presence.
- If such an object is of limited lateral size (e.g., a rock) a driver may well be able to take evasive action rather than stop, particularly on a roadway with low traffic volumes.
- Evasion might not be possible if the object were a fallen tree, but in many parts of the country this is an unlikely hazard since trees are not present or because local jurisdictions do not allow trees to remain close to the roadway. In areas where logging trucks are present, the designer should consider the possibility of a log falling onto the roadway from a truck.

The designer should adopt an object height based on the probability of a particular object occurring on the roadway, as shown on **Table 2.5.1**. If fallen trees or rocks are a real risk, an object height of 0.15 m is recommended. Otherwise, for stopping sight distance, a tail light height of 0.60 m is recommended. For passing sight distance, an object height of 1.30 m will allow the driver to discern the top of an oncoming typical car. A zero object height is recommended where road washouts are a serious risk, for example on approaches to bridges and culverts in mountainous areas. It is only recommended for pavement markings in critical situations such as at intersections or interchanges, as the driver's ability to discern the markings cannot be relied upon, and traffic signs should be used instead.

2.5.2.2 Deceleration Rate

Approximately 90 percent of all drivers decelerate at rates greater than 3.4 m/s². Such deceleration is within a driver's capability to stay within their lane and maintain steering control during the braking maneuver on wet surfaces. Therefore 3.4 m/s² is a comfortable deceleration for most drivers and is recommended as the deceleration threshold for determining stopping sight distance.⁵³

Most vehicle braking systems and the tire-pavement friction levels of most roadways are capable of providing a deceleration rate of at least 3.4 m/s². Also, the friction available on most wet pavement surfaces and the capabilities of most vehicle braking systems can provide braking friction that exceeds this deceleration rate.

2.5.3 STOPPING SIGHT DISTANCE

Braking distance is the distance that it takes to stop a vehicle once the brakes have been applied. On a level roadway this distance can be determined using the following formula:

$$d_b = 0.039 \frac{V^2}{a} \quad (2.5.1)$$

Where:

- d_b = Braking distance (m)
- V = Design speed (km/h)
- a = Deceleration rate (m/s²)

Stopping sight distance is the sum of the distance travelled during the perception and reaction time and the braking distance.

$$SSD = 0.278Vt + 0.039 \frac{V^2}{a} \quad (2.5.2)$$

Where:

- SSD = Stopping sight distance (m)
- t = Brake reaction time, 2.5 s
- V = Design speed (km/h)
- a = Deceleration rate (m/s²)

Table 2.5.2 gives the minimum stopping sight distances on level grade, on wet pavement, for a range of design speeds. These values are used for vertical curve design, intersection geometry and the placement of traffic control devices. The stopping sight distances quoted in Table 2.5.2 may need to be increased for a variety of reasons related to grade and vehicle type as noted below.

Table 2.5.2: Stopping Sight Distance on level roadways for Automobiles⁵⁴

Design speed (km/h)	Brake reaction distance (m)	Braking distance on level (m)	Stopping sight distance	
			Calculated (m)	Design (m)
20	13.9	4.6	18.5	20
30	20.9	10.3	31.2	35
40	27.8	18.4	46.2	50
50	34.8	28.7	63.5	65
60	41.7	41.3	83.0	85
70	48.7	56.2	104.9	105
80	55.6	73.4	129.0	130
90	62.6	92.9	155.5	160
100	69.5	114.7	184.2	185
110	76.5	138.8	215.3	220
120	83.4	165.2	248.6	250
130	90.4	193.8	284.2	285

Note: Brake reaction distance predicated on a time of 2.5 s; deceleration rate of 3.4 m/s² used to determine calculated sight distance.

The Effect of Grade

Braking distances will increase on downgrades and decrease on upgrades. When the roadway is on a grade, formula 2.5.1 for braking distance is modified as follows:

$$d_b = \frac{V^2}{254 [(a/9.81) + G]} \quad (2.5.3)$$

Where:

- d_b = Braking distance (m)
- V = Design speed (km/h)
- a = Deceleration rate (m/s^2)
- G = Grade (m/m) (G is positive if vehicles uphill and negative if downhill)

It has been noted that many drivers, particularly those in automobiles, do not compensate completely (i.e., by acceleration or deceleration) for the changes in speed caused by grade. It should also be noted that in many cases the sight distance available on downgrades is greater than on upgrades, which can help to provide the necessary corrections for grade. The following Table 2.5.3 summarizes the stopping sight distances on grades for a variety of design speeds.

Table 2.5.3: Stopping Sight Distance on Grades⁵⁵

Design Speed (km/h)	Stopping Sight Distance (m)					
	Downgrades (%)			Upgrades (%)		
	3	6	9	3	6	9
20	20	20	20	19	18	18
30	32	35	35	31	30	29
40	50	50	53	45	44	43
50	66	70	74	61	59	58
60	87	92	97	80	77	75
70	110	116	124	100	97	93
80	136	144	154	123	118	114
90	164	174	187	148	141	136
100	194	207	223	174	167	160
110	227	243	262	203	194	186
120	263	281	304	234	223	214
130	302	323	350	267	254	243

2.5.3.1 Stopping Sight Distance: Variations for Trucks

The stopping sight distance outlined in Tables 2.5.2 and 2.5.3 are based on passenger car operations and do not explicitly consider design for truck operations. In general trucks need longer stopping sight distances for a given speed than passenger vehicles. However, one balancing factor is that a truck driver can generally see further than a passenger car driver due to an eye height advantage. As a result, a separate stopping sight distances for trucks are not generally used in highway design.

In some instances the higher eye height is not an advantage or maybe a disadvantage — for example, trucks have no advantage when a sightline obstruction is located on inside of a horizontal curve. Also, trucks are at a disadvantage on sag vertical curves where visibility is “cut off” by an overpass and at the end of long downgrades. In these situations it is desirable to provide stopping sight distances that exceed the values in Tables 2.5.2 and 2.5.3.

2.5.4 PASSING SIGHT DISTANCE

Passing sight distance is used for rural two-lane roads to allow drivers to pass slower traffic by using the opposing lane. The driver of the passing vehicle must be able to see far enough ahead to complete the maneuver without interfering with traffic in the opposing lane.

Passing sight distance should be based on the length needed to complete a passing maneuver as shown in Figure 2.5.1, which divides the required sight distance into four elements.

- d_1 - Initial maneuver distance. The initial maneuver period consists of a perception and reaction time and the time it takes for the passing driver to move the vehicle from a trailing position to a position of encroachment into the opposing lane of traffic.
- d_2 - Distance travelled while the passing vehicle occupies the opposing lane.
- d_3 Clearance length. The distance between the opposing vehicle and the passing vehicle at the end of the passing vehicle’s maneuver. Observed distances vary from 30 m to 90 m, depending on design speed.
- d_4 - Distance travelled by the opposing vehicle after being seen by the passing vehicle. The opposing vehicle is assumed to be travelling at the same speed as the passing vehicle, therefore this distance is equal to two-thirds of d_2 .

APPENDIX **B2**

TAC GDGCR Extracts

APPENDIX E

TAC GDGCR Excerpts

DRAFT

stream. Where local residential roads intersect truck routes or arterials, the intersections are often specifically designed not to accommodate trucks easily, thereby discouraging trucks from travelling through the residential area.

In industrial areas, large tractor-trailer combination trucks are prevalent along all roads, including locals. Thus, all industrial intersections are designed to accommodate the turning movements of these large vehicles. Two- and three-centred curves are common for the curb returns at industrial intersections. Raised channelizing islands are typically omitted within industrial areas in recognition of low pedestrian volumes and other considerations such as right-of-way and construction costs. The absence of raised islands also provides more maneuvering area for the turning movements of large trucks.

2.5 SIGHT DISTANCE

2.5.1 INTRODUCTION

The ability to see ahead is of critical importance in the safe and efficient operation of a vehicle. Motor vehicles are operated by drivers who have significant differences in their level of experience, ability, and training. Sufficient sight distance must be provided to allow for drivers of all skill and training levels to stop or maneuver around obstacles on the roadway surface and make safe turns.

Depending on the specific circumstances, the designer may use different measurements of sight distance, including: stopping sight distance, passing sight distance, and decision sight distance. Each of these is described in detail in subsequent sections of this chapter. Intersection sight distance is addressed in **Chapter 9**.

In many applications, one of these types of sight distance will govern, and the designer need satisfy only one requirement. In other cases, such as vertical alignment design, a designer must optimise the design to achieve a satisfactory balance between provision of passing opportunities in some locations and adequate stopping sight distances in others. Where an intersection unavoidably falls on a crest curve, the designer sometimes needs to consider the interaction between stopping, decision, and intersection sight distances to achieve a suitable design.

2.5.2 CRITERIA USED IN CALCULATING SIGHT DISTANCE

Several variables are used by the designer when determining sight distance required for different applications. These are:

- Perception-reaction time (see **Section 2.2.5.5**)
- Driver eye height (see **Section 2.4.3.3**)
- Vehicle operating speed (see **Section 2.3.2**)
- Object height
- Deceleration rate.

The last two variables are discussed below.

2.5.2.1 Object Height

In calculating sight distance, the designer must consider the type of object that is likely to be encountered on the roadway, which a driver will have to avoid by stopping or maneuvering. Because of the potential variation in object type, selection of object height has significantly more impact on sight distance requirements than, for example, driver eye height.

Table 2.5.1 presents commonly used object heights for various design scenarios.

Table 2.5.1: Object Height Design Domain

Object Height (m)	Applicability
0.00	Stopping sight distance for: <ul style="list-style-type: none"> • Risk of road washouts • Pavement markings in critical locations
0.15	Stopping sight distance for: <ul style="list-style-type: none"> • Risk of fallen trees or rocks • Risk of log or construction debris fallen from truck • Risk of fallen person Decision sight distance for most applications (see Section 2.5.5)
0.38	Stopping sight distance for: <ul style="list-style-type: none"> • Vehicle tail or brake light from 1999 TAC <i>Geometric Design Guide for Canadian Roads</i> • This value can be used if a more conservative approach is required.
0.60	Stopping sight distance for: <ul style="list-style-type: none"> • Vehicle tail or brake light • Research indicates that 95% of tail light heights and 90% of headlight heights exceed this value. • This value has been used in this guide to determine stopping sight distance requirements outlined in Tables 2.5.2 and 2.5.3
1.30	Passing sight distance for: <ul style="list-style-type: none"> • Top of car*

* Note: Some jurisdictions use an object height of 1.15 m for the top of a car, based on the premise that a driver needs to see at least 150 mm of the vehicle to discern its presence. This is supported by a study of driver visual capabilities which suggested that a high contrast object 150 mm high is the minimum height detectable at AASHTO stopping sight distances, and that drivers do not have the capability to recognize objects that are less than 300 mm in height, regardless of contrast, at or beyond minimum stopping sight distances.⁵¹ This practice is not widely used.

In applying object heights less than 0.15 m the following points should be considered.

- The frequency of collisions occurring as a result of vehicles striking objects less than 0.15 m in height has been shown to be very low.⁵²
- As discussed above, a driver's ability to discern small objects at a distance is limited.
- In general, a driver must see at least the top 0.15 m of an object in order to detect its presence.
- If such an object is of limited lateral size (e.g., a rock) a driver may well be able to take evasive action rather than stop, particularly on a roadway with low traffic volumes.
- Evasion might not be possible if the object were a fallen tree, but in many parts of the country this is an unlikely hazard since trees are not present or because local jurisdictions do not allow trees to remain close to the roadway. In areas where logging trucks are present, the designer should consider the possibility of a log falling onto the roadway from a truck.

The designer should adopt an object height based on the probability of a particular object occurring on the roadway, as shown on **Table 2.5.1**. If fallen trees or rocks are a real risk, an object height of 0.15 m is recommended. Otherwise, for stopping sight distance, a tail light height of 0.60 m is recommended. For passing sight distance, an object height of 1.30 m will allow the driver to discern the top of an oncoming typical car. A zero object height is recommended where road washouts are a serious risk, for example on approaches to bridges and culverts in mountainous areas. It is only recommended for pavement markings in critical situations such as at intersections or interchanges, as the driver's ability to discern the markings cannot be relied upon, and traffic signs should be used instead.

2.5.2.2 Deceleration Rate

Approximately 90 percent of all drivers decelerate at rates greater than 3.4 m/s². Such deceleration is within a driver's capability to stay within their lane and maintain steering control during the braking maneuver on wet surfaces. Therefore 3.4 m/s² is a comfortable deceleration for most drivers and is recommended as the deceleration threshold for determining stopping sight distance.⁵³

Most vehicle braking systems and the tire-pavement friction levels of most roadways are capable of providing a deceleration rate of at least 3.4 m/s². Also, the friction available on most wet pavement surfaces and the capabilities of most vehicle braking systems can provide braking friction that exceeds this deceleration rate.

2.5.3 STOPPING SIGHT DISTANCE

Braking distance is the distance that it takes to stop a vehicle once the brakes have been applied. On a level roadway this distance can be determined using the following formula:

$$d_b = 0.039 \frac{V^2}{a} \quad (2.5.1)$$

Where:

- d_b = Braking distance (m)
- V = Design speed (km/h)
- a = Deceleration rate (m/s²)

Stopping sight distance is the sum of the distance travelled during the perception and reaction time and the braking distance.

$$SSD = 0.278Vt + 0.039 \frac{V^2}{a} \quad (2.5.2)$$

Where:

- SSD = Stopping sight distance (m)
- t = Brake reaction time, 2.5 s
- V = Design speed (km/h)
- a = Deceleration rate (m/s²)

Table 2.5.2 gives the minimum stopping sight distances on level grade, on wet pavement, for a range of design speeds. These values are used for vertical curve design, intersection geometry and the placement of traffic control devices. The stopping sight distances quoted in Table 2.5.2 may need to be increased for a variety of reasons related to grade and vehicle type as noted below.

Table 2.5.2: Stopping Sight Distance on level roadways for Automobiles⁵⁴

Design speed (km/h)	Brake reaction distance (m)	Braking distance on level (m)	Stopping sight distance	
			Calculated (m)	Design (m)
20	13.9	4.6	18.5	20
30	20.9	10.3	31.2	35
40	27.8	18.4	46.2	50
50	34.8	28.7	63.5	65
60	41.7	41.3	83.0	85
70	48.7	56.2	104.9	105
80	55.6	73.4	129.0	130
90	62.6	92.9	155.5	160
100	69.5	114.7	184.2	185
110	76.5	138.8	215.3	220
120	83.4	165.2	248.6	250
130	90.4	193.8	284.2	285

Note: Brake reaction distance predicated on a time of 2.5 s; deceleration rate of 3.4 m/s² used to determine calculated sight distance.

The Effect of Grade

Braking distances will increase on downgrades and decrease on upgrades. When the roadway is on a grade, formula 2.5.1 for braking distance is modified as follows:

$$d_b = \frac{V^2}{254 [(a/9.81) + G]} \quad (2.5.3)$$

Where:

- d_b = Braking distance (m)
- V = Design speed (km/h)
- a = Deceleration rate (m/s^2)
- G = Grade (m/m) (G is positive if vehicles uphill and negative if downhill)

It has been noted that many drivers, particularly those in automobiles, do not compensate completely (i.e., by acceleration or deceleration) for the changes in speed caused by grade. It should also be noted that in many cases the sight distance available on downgrades is greater than on upgrades, which can help to provide the necessary corrections for grade. The following Table 2.5.3 summarizes the stopping sight distances on grades for a variety of design speeds.

Table 2.5.3: Stopping Sight Distance on Grades⁵⁵

Design Speed (km/h)	Stopping Sight Distance (m)					
	Downgrades (%)			Upgrades (%)		
	3	6	9	3	6	9
20	20	20	20	19	18	18
30	32	35	35	31	30	29
40	50	50	53	45	44	43
50	66	70	74	61	59	58
60	87	92	97	80	77	75
70	110	116	124	100	97	93
80	136	144	154	123	118	114
90	164	174	187	148	141	136
100	194	207	223	174	167	160
110	227	243	262	203	194	186
120	263	281	304	234	223	214
130	302	323	350	267	254	243

2.5.3.1 Stopping Sight Distance: Variations for Trucks

The stopping sight distance outlined in Tables 2.5.2 and 2.5.3 are based on passenger car operations and do not explicitly consider design for truck operations. In general trucks need longer stopping sight distances for a given speed than passenger vehicles. However, one balancing factor is that a truck driver can generally see further than a passenger car driver due to an eye height advantage. As a result, a separate stopping sight distances for trucks are not generally used in highway design.

In some instances the higher eye height is not an advantage or maybe a disadvantage — for example, trucks have no advantage when a sightline obstruction is located on inside of a horizontal curve. Also, trucks are at a disadvantage on sag vertical curves where visibility is “cut off” by an overpass and at the end of long downgrades. In these situations it is desirable to provide stopping sight distances that exceed the values in Tables 2.5.2 and 2.5.3.

2.5.4 PASSING SIGHT DISTANCE

Passing sight distance is used for rural two-lane roads to allow drivers to pass slower traffic by using the opposing lane. The driver of the passing vehicle must be able to see far enough ahead to complete the maneuver without interfering with traffic in the opposing lane.

Passing sight distance should be based on the length needed to complete a passing maneuver as shown in Figure 2.5.1, which divides the required sight distance into four elements.

- d_1 - Initial maneuver distance. The initial maneuver period consists of a perception and reaction time and the time it takes for the passing driver to move the vehicle from a trailing position to a position of encroachment into the opposing lane of traffic.
- d_2 - Distance travelled while the passing vehicle occupies the opposing lane.
- d_3 Clearance length. The distance between the opposing vehicle and the passing vehicle at the end of the passing vehicle’s maneuver. Observed distances vary from 30 m to 90 m, depending on design speed.
- d_4 - Distance travelled by the opposing vehicle after being seen by the passing vehicle. The opposing vehicle is assumed to be travelling at the same speed as the passing vehicle, therefore this distance is equal to two-thirds of d_2 .

APPENDIX C

Secondary Plan

AMENDMENT NO. XX
TO THE OFFICIAL PLAN
FOR THE TOWN OF GRIMSBY

INITIATED BY
TOWN OF GRIMSBY

TABLE OF CONTENTS

PART I: THE CERTIFICATION

Certification Page
Adopting By-law of the Town of Grimsby

PART II: THE PREAMBLE

1. Title
2. Purpose of this Amendment
3. Location of this Amendment
4. Basis of this Amendment

PART III: THE AMENDMENT

1. The Amendment
2. Schedules of the Amendment

PART I: THE CERTIFICATION

“The enacting portion attesting the Official Plan status of the document”

PART I: THE CERTIFICATION

THE CORPORATION OF THE TOWN OF GRIMSBY

DRAFT BY-LAW NO. ___-___

A BY-LAW

TO AMEND THE TOWN OF GRIMSBY OFFICIAL PLAN, AS AMENDED

WHEREAS the Council of The Corporation of the Town of Grimsby deems it expedient to amend The Town of Grimsby Official Plan, as amended

THEREFORE, THE COUNCIL OF THE CORPORATION OF THE TOWN OF GRIMSBY ENACTS AS FOLLOWS:

1. That Amendment No.XX to the Official Plan of the Town of Grimsby, being the attached text and schedules, is hereby adopted.
2. That the Town Clerk is hereby authorized and directed to make application to the Region of Niagara for the approval of Amendment No. XX to the Official Plan of the Town of Grimsby.
3. That this By-law shall not come into force or take effect until Amendment No. XX to the Official Plan for the Town of Grimsby is approved by the Region of Niagara

Read a first time this ___ day of _____, 20__.

Read a second and third time and finally passed this ___ day of _____, 20 ____.

Mayor

Clerk

PART II: THE PREAMBLE

“An introduction to the Amendment and a summary of its background and basis”

The Preamble does not constitute part of the Amendment

PART II: THE PREAMBLE

1.0 TITLE

This Amendment shall be known as:

Amendment No. X
to the Official Plan
of the Town of Grimsby

2.0 PURPOSE OF THIS AMENDMENT

The purpose of the Grimsby Beach Secondary Plan is to provide policies and directions to manage growth and development in Grimsby Beach. The policies and direction were developed through the Grimsby Beach Land Use Planning Study which included a number of technical studies and engagement sessions with the community. The Grimsby Beach Secondary Plan provides a detailed planning framework for the Grimsby Beach study area in support of the general policy framework provided in the Town of Grimsby Official Plan. The detailed policies are intended to guide and manage change while conserving and enhancing the cultural heritage resources and character of Grimsby Beach. Additional policies and schedules are provided to define and conserve the natural heritage areas within Grimsby Beach. Additional documents have also been developed that support the implementation of the Secondary Plan, which include an Infrastructure Plan, a Scoped Impact Fiscal Assessment, a Tree Strategy and Urban Design and Heritage Guidelines for Grimsby Beach.

3.0 LOCATION OF THIS AMENDMENT

Grimsby Beach is a unique area within the Town of Grimsby that has distinctive natural and cultural heritage features. The Grimsby Beach area is situated within the recognized territory of the Anishinaabe (Anishinabek Nation). The area was also historically used as a religious gathering place in the mid-19th century and became known as the “Methodist Campground”. Over time, its use and its location along the shoreline has influenced and shaped the physical features, lotting patterns and development of the area. The existing settlement patterns of Grimsby Beach are illustrated through three distinct character areas, the Core Area, South Area and Northwest Area, each with their own unique characteristics and policy approaches.

Grimsby Beach is generally bound by Lake Ontario to the north, Baker Road North to the west, Park Road North to the east, and the QEW to the south. Grimsby Beach has a variety of natural amenities, including the beach, park areas and additional open spaces such as community gardens.

4.0 BASIS OF THIS AMENDMENT

4.1 Issues identified

Through the Study process a number of issues were identified that required further consideration. These issues have been addressed through the policies in the Secondary Plan.

The issues and matters addressed include the following:

- A review and analysis of the existing policy and regulatory framework applicable to the Secondary Plan at the Provincial, Regional and local level;
- Input from the community and stakeholders, identifying the issues and concerns within the Grimsby Beach area including land ownership, parks, parking, traffic, tree protection, tourism, scale and design of housing, protection of character, area boundary, natural heritage, cultural heritage, shoreline protection and erosion;
- An identification of both the current and potential changes occurring in the area;
- An identification of character areas and associated policies to address change in these areas; and,
- A review of land uses, transportation, servicing, stormwater, natural heritage, tree canopy and tree protection, and the recommended policies and implementation tools and programs to address them.

4.2 The Town of Grimsby Official Plan

The Town of Grimsby Official Plan designates Grimsby Beach as *Low Density Residential, Parks and Open Space and Environmental Conservation*. The Secondary Plan provides policies specific to Grimsby Beach and all development will be subject to the policies in the approved Secondary Plan.

4.3 The Niagara Region Official Plan

The Niagara Region Official Plan provides an approach to managing population and employment growth; protecting the natural environment, resources and farmland, and providing sufficient infrastructure. The plan sets the criteria for the management of growth throughout the Region. Grimsby Beach is within the Built Up area of the Niagara Region Official Plan. In the Niagara Region Official Plan, Built up Areas are defined as lands within the developed Urban Area.

PART III: THE AMENDMENT

“The operative part of this document which amends the original Official Plan”

13.0 GRIMSBY BEACH SECONDARY PLAN

13.1 PURPOSE

The Grimsby Beach Secondary Plan provides policies and direction with respect to the area located along the Lake Ontario shoreline both north and south of Lake Street as designated on Schedule D of the Official Plan.

Grimsby Beach is a unique area within the Town of Grimsby that has distinctive natural and cultural heritage features. The Grimsby Beach area is situated within the recognized territory of the Anishinaabe (Anishinabek Nation). The area was also historically used as a religious gathering place in the mid-19th century and became known as the “Methodist Campground”. The campground became a seasonally-occupied recreational landscape and evolved to include amenities suited to its historic use. The functional needs of the religious and social gatherings as well as the natural shoreline influenced and shaped the physical features, lotting patterns and development of the area over time. The existing settlement patterns of Grimsby Beach are illustrated through three distinct character areas, each with their own unique characteristics.

13.2 GOAL

The goal of the Grimsby Beach Secondary Plan is to proactively guide change that maintains and enhances the unique character of the area while protecting and conserving the natural and cultural heritage features and existing built form of the area including the shoreline, trees, open spaces and parks.

13.3 OBJECTIVES

Given the unique cultural and natural heritage characteristics of Grimsby Beach, the overall objective for the area is to ensure a balance between cultural and natural heritage preservation with potential replacement housing and change, to ensure that any specific character defining attributes of the area are protected and enhanced.

The specific objectives for the Grimsby Beach Secondary Plan are as follows: :

Maintaining and conserving the character of Grimsby Beach and its uniqueness by:

- i) Establishing and defining three character areas and providing policies to guide change in those areas;
- ii) Providing for limited change through development that is reflective of the character areas; and,
- iii) Providing policies to protect and enhance the unique characteristics of the area.

Protecting the shoreline and the natural and environmental features of the area by:

- i) Ensuring those features and buffers are identified and protected; and,
- ii) Ensuring shoreline areas are protected and stabilized to reduce erosion.

Protecting and replenishing trees and canopy cover by:

- i) Recognizing trees as a key element to the character of the area;
- ii) Ensuring the tree canopy within the area is enhanced;
- iii) Protecting existing trees, ensuring that they are maintained, and preventing the unnecessary removal of trees; and,
- iv) Acknowledging trees as green infrastructure.

Maintaining and enhancing parks, public open space areas and connections by:

- i) Identifying parks and open space areas as key elements that define the character of the area;
- ii) Maintaining and enhancing the area's open spaces, parks, streets, public realm and trail connections;
- iii) Protecting and reinforcing the views and vistas as defined within the area;
- iv) Ensuring safe and effective traffic and pedestrian and cycling movement throughout the area; and,
- v) Creating a wayfinding/signage strategy to provide environmental cues while enhancing community identity.

Identifying and conserving significant cultural heritage resources by:

- i) Supporting conservation through the preparation of a conservation management plan;
- ii) Employing the urban design and heritage guidelines when considering development; and,
- iii) Continuing to list and designate significant cultural heritage properties as appropriate.

13.4 GENERAL POLICIES

The Grimsby Beach Secondary Plan shall be read in conjunction with the Grimsby Official Plan, Zoning By-law 71-74 (as amended), the Regional Official Plan, Niagara Escarpment Plan, Growth Plan, Greenbelt Plan and Provincial Policy Statement, all of which are in force and affect land use in Grimsby Beach.

The lands within the Grimsby Beach Secondary Plan are shown on Schedule X and designated in accordance with the land use as shown on Schedule L.

The land use designation policies as set out in the Official Plan shall apply to the lands within the Grimsby Beach Secondary Plan area unless otherwise provided for in the Secondary Plan. In the case of conflict between the policies of the Official Plan and the policies of the Secondary Plan, the Secondary Plan policies shall take precedence.

13.4.1 Land Use Designations and Policies

The land use designations as set out on Schedule L include:

- i) Low Density Residential as set out in Section 3.4.2 of the Official Plan;
- ii) Environmental Conversation Area as set out in Section 3.1.2 of the Official Plan;
- iii) Environmental Protection Area as set out in Section 3.1.1;
- iv) Hazard Land Overlay as set out in Section 3.2 of the Official Plan.
- v) Parks and Open Space as set out in Section 3.8 of the Official Plan; and,
- vi) Institutional as set out in Section 3.10.

The land use policies in the respective sections noted above shall continue to apply to the lands as designated on Schedule L.

13.4.2 Managing Change

Change and growth within the Grimsby Beach area is anticipated to be limited in relation to other parts of the Town due to its existing built context as well as the unique natural and heritage characteristics of the area.

The population within Grimsby Beach is expected to remain relatively stable with limited projected growth to 2051.

All changes and new development shall be assessed in accordance with the Character Area policies of the Secondary Plan and will require the protection of significant cultural and natural heritage resources and the protection and enhancement of the defined character areas.

13.4.3 Character Areas

Grimsby Beach is a unique area with a defined, established character that shall be conserved, maintained and enhanced. Within Grimsby Beach there are also distinctive character areas that are further defined as the Core Area, South Area and Northwest Area as shown on Schedule L-1. The policies related to the character areas shall be read in conjunction with the land use designation policies.

All development shall be compatible with the existing built form and character of the Grimsby Beach area.

Replacement housing and infill shall address the policies specific to the individual character areas and shall be evaluated through the consideration of the following criteria:

- i) Development shall be compatible with and reflect the character of the individual area, building orientation and building setbacks;
- ii) The scale, massing, building height, and built form features of development shall be compatible with the characteristics of the area;
- iii) Accessory buildings and structures shall be of a compatible scale and height in relation to the principle buildings and the surrounding context;
- iv) Landscaped open space and trees shall be protected and enhanced;
- v) Development shall avoid adverse impacts on adjacent properties including privacy and overlook;
- vi) The design of driveways and garages shall be compatible with the site and residential design, so as to not visually dominate the residential lot or dwelling; and,
- vii) Development shall protect and enhance views and vistas within the Secondary Plan area.

A description of each of the character areas as well as additional land use, urban design, cultural heritage and implementation policies shall apply to each of the defined character areas as set out in the following policies. The requirements for a Heritage Impact Assessment as set out in the character policies for each area will be dependent on the nature and scale of the proposed changes. A list of cultural heritage attributes for each area is further defined in the Urban Design and Heritage Guidelines for Grimsby Beach.

13.4.3.1 Core Area

13.4.3.1.1 Description

The Core Area is the oldest and most significant established portion of the Grimsby Beach area as part of the mid. 19th century Methodist Campground. The existing settlement patterns are directly related to its historic use as a seasonal campground. The area evolved from this use, primarily for tents, to cottages, to the existing uses where, in some cases, areas that once contained multiple tents now contain a single residence. The settlement patterns include the location, orientation, and size of lots as well as their relationship to circulation patterns and the public realm, including rear lanes. The use of the landscape evolved and expanded over time from a Methodist Campground to a popular summer resort, known as Grimsby Park, the Chautauqua of Canada, and (presently) the Grimsby Beach neighbourhood with year-round residential use.

The Core Area is easily discernible from surrounding areas for its concentration of cottages dating to the late 19th century. Some of the cottages are constructed within close proximity to each other along narrow lanes and are set amongst mature trees and natural features, maximizing views of parks, open spaces, and the lake, while others enjoy generous setbacks. The cottages have unique and unifying characteristics, such as their wood-frame construction, porches, and gingerbread (bargeboard) detailing. In recent years, some of these houses have been intricately painted in a variety of bright colours. Grimsby Beach includes the remnants of other built features as a result of the late 19th and early 20th century use of the landscape, including the remains of the wharf, memorial cairn, pillars, and the Bell Park Bell.

13.4.3.1.2 Land Use

Replacement housing or new housing, additions, and alterations, and new or enlarged accessory buildings in the Core Area shall be sensitive to, and compatible with the:

- i) height, massing, and scale of the buildings in the immediate area;
- ii) the unique architectural character and heritage attributes of significant cultural heritage resources within the immediate area including, but not limited to, buildings and built landscape features;
- iii) streetscape and landscape features in the immediate area, including the built fabric of the street that contributes to the heritage character of the area while ensuring adequate areas for safe active transportation, off-street parking and vehicular movement;
- iv) lotting pattern and building setbacks in the immediate area; and,
- v) patterns and sizes of landscaped open space in the immediate area.

Notwithstanding the current density policies for the Low Density Residential areas in the Official Plan, density in the Core Area is reflected by the existing lotting and development. Replacement housing or new housing on vacant lots will retain the

existing densities. New lots will be required to meet the Low Density Residential area policies and Zoning.

13.4.3.1.3 Urban Design and Cultural Heritage

- i) Replacement housing or new housing shall be required to be developed in accordance with the Zoning By-law and in conformity with the Urban Design and Heritage Guidelines for Grimsby Beach;
- ii) The unique architectural character and heritage attributes of significant cultural heritage resources within the Core Area shall be conserved;
- iii) Significant views and vistas as provided on Schedule L-2 shall be protected including:
 - a. Panoramic views of Lake Ontario, the former pier and the skyline of the City of Toronto from and towards the Lake which are available along the Grimsby Beach shoreline. This includes protection of kinetic vantage points available along the Grimsby Beach shoreline.
 - b. Panoramic views of the historic built form into and from Auditorium Circle from vantage points available along Auditorium Circle and within Auditorium Circle Park.
 - c. Panoramic views of the historic built form to and from Bell Park; and,
 - d. Views along Victoria Terrace and Betts Avenue;
- iv) Improvements to Bell Park and Victoria Terrace shall be encouraged which may include new lighting, additional landscaping, pedestrian walkways and upgraded play equipment and seating.

13.4.3.1.4 Implementation

- i) Where vacant parcels are proposed to be developed, or redeveloped, new housing shall be developed in conformity with the policies of this Secondary Plan, provisions of Zoning By-law 14-45, as amended, and evaluated through the site plan process in accordance with the Urban Design and Heritage Guidelines for Grimsby Beach to ensure compatible and appropriate design.
- ii) A Heritage Impact Assessment shall be required for applications under the *Planning Act* that impact cultural heritage;
- iii) Heritage Impact Assessments shall consider whether or not any proposed development results in adverse impacts to the identified heritage impacts of the Core Area and provide development alternatives and mitigation recommendations; and,
- iv) An Urban Design Brief may be required to be completed in support of new housing, replacement housing, additions, and alterations, and new or enlarged accessory buildings and structures. The Urban Design Brief shall analyse how a proposal conforms to the Urban Design and Heritage Guidelines for Grimsby

Beach. Additionally, the Urban Design Brief should address the following matters:

- a. Lot design (for new or replacement housing) including conceptual building placement and setbacks relative to surrounding properties;
- b. Design of vehicular access, driveways and garages;
- c. The sensitive use of vegetation and the extent of new landscaping; and,
- d. Building elevations illustrating architectural style and heights, materials and colours.

13.4.3.2 Northwest Area

13.4.3.2.1 Description

The Northwest Area and the numbered streets were created in 1885 as part of the “Grimsby Park New Survey”. The intent of the new subdivision was to provide additional lots for the construction of seasonal cottages. The lots located east of Betts Avenue were generally part of a grid-like pattern running on either side of what is now 5th Street, 6th Street, 7th Street, 9th Street, 10th Street, 11th Street and 12th Street. Many of these lots have since been consolidated with adjacent parcels to create larger lots. Fewer Victorian cottages were constructed in this area, likely due to the decline of the use of the area as a seasonal recreational area by the early 20th century. As infill occurred (primarily in the latter half of the 20th century), views of the lake were removed. The redevelopment in this area resulted in a mix of the orientation of dwellings and many replacement dwellings.

13.4.3.2.2 Land Use

- i) Development within the Northwest Area shall be compatible with the existing character of the Northwest Area and,
- ii) Development shall maintain all required setbacks and buffers to the Hazard Areas and Environmental Protection Areas and minimize adverse impacts to the shoreline and reduce erosion.

13.4.3.2.3 Urban Design and Cultural Heritage

- i) Identified heritage attributes of the Northwest area shall be conserved; and,
- ii) Development shall be undertaken in accordance with the Urban Design and Heritage Guidelines for Grimsby Beach.

13.4.3.2.4. Implementation

- i) New lots created through consent should meet the minimum lot area and frontage requirements of the Zoning By-law No. 14-45;

- ii) A land use compatibility assessment related to noise and/or air quality/odour impacts associated with the QEW Highway and the Baker Road Treatment Plant may be required to be completed with a development application;
- iii) An Urban Design Brief in support of any new housing, replacement housing, additions, and alterations, and new or enlarged accessory buildings may be required. The Urban Design Brief shall analyse how the proposal conforms to the Urban Design and Heritage Guidelines for Grimsby Beach. Additionally, the Urban Design Brief should address the following matters:
 - a. Lot design (for new or replacement housing) including conceptual building placement and setbacks relative to surrounding properties;
 - b. Design of vehicular access, driveways and garages;
 - c. Confirmation that significant views identified on Schedule L-2 will not be compromised;
 - d. Tree preservation/replacement;
 - e. The sensitive use of vegetation and the extent of new landscaping; and,
 - f. Building elevations illustrating architectural style and heights, colours and materials.

13.4.3.3 South Area

13.4.3.3.1 Description

The South Area (south of Lake Street) and associated lotting patterns were created in 1885 as part of the “Grimsby Park New Survey”. The intent of the new subdivision was to provide additional lots for the construction of seasonal cottages. Today, this area includes a range of architectural styles and built forms. The area is characterized by L-shaped and rectangular shaped lots which have been adapted from the 1885 Plan of Subdivision. The lots are larger and the houses are further apart, with a range of setbacks. Many mature trees are present, similar to that of the Core Area. The South Area includes the Grimsby Beach Tree Stand, which is designated under Part IV of the *Ontario Heritage Act* as it includes lands part of the former Picnic area. The lots located east of Park Road North were subdivided between approximately 1922 and 1954. The character of the lots and built form east of Park Road North are therefore different than the area located south of Lake Street.

13.4.3.3.2 Land Use

- i) Development within the South Area shall be compatible, with, and sensitive to, the immediate character of the South Area; and,
- ii) Development shall maintain all required setbacks and buffers to the Environmental Protection Areas.

13.4.3.3.3 Urban Design and Cultural Heritage

- i) Development shall be undertaken in accordance with the Urban Design and Heritage Guidelines for Grimsby Beach;
- ii) Improvements to the public realm, shall be considered and may include:
 - a. The provision of an enhanced gateway feature (signage and/or landscaping) within the triangular parcel between Phelps Avenue and Lake Street;
 - b. Improved visibility and wayfinding as it relates to the Tree Stand and Grand Avenue Park;
 - c. A future expansion of Grand Avenue Park should the Beach Hall be removed or relocated;
 - d. The creation of a community focal point through the clustering of the existing Grand Avenue Public School, Grand Avenue Park and existing/future trail connections;
 - e. Any additional direction or requirements as set out in a Public Realm Master Plan for Grimsby Beach; and,
- iii) Identified heritage attributes in the South Character area shall be conserved.

13.4.3.3.4 Implementation

- i) New lots created through consent should meet the minimum lot area and frontage requirements of the Zoning By-law No. 14-45;
- ii) A land use compatibility assessment related to noise and/or air quality/odour impacts associated with the QEW Highway and the Baker Road Treatment Plant may be required to be completed with a development application;
- iii) An Urban Design Brief in support of any new housing, replacement housing, additions, and alterations, and new or enlarged accessory may be required. If the Urban Design Brief shall analyse how the proposal conforms to the Urban Design and Heritage Guidelines for Grimsby Beach. Additionally, the Urban Design Brief should address the following matters:
 - a) Lot design (for new or replacement housing) including conceptual building placement and setbacks relative to surrounding properties;
 - b) Design of vehicular access, driveways and garages;
 - c) Confirmation that significant views identified on Schedule L-2 will not be compromised;
 - d) Tree preservation/replacement;
 - e) The sensitive use of vegetation and the extent of new landscaping; and,
 - f) Building elevations illustrating architectural style and heights, colours and materials.

13.4.4 Servicing

Servicing shall be undertaken in accordance with the servicing policies in Section 5.0 of the Official Plan and the following:

- i) Any new development within the Grimsby Beach Secondary Plan Area shall require an assessment of current servicing as part of a development application and reference the Infrastructure Plan supporting the Secondary Plan;
- ii) Prior to development being approved, applicable capacity for water and wastewater is to be confirmed to the satisfaction of the Town and the Region;
- iii) New development shall adequately address stormwater management to prevent degradation of natural areas. Stormwater management quality controls should be incorporated with new development;
- iv) Water quantity, quality, water balance, and erosion concerns shall be addressed with any new development applications and Low Impact Development principles and criteria established by the Town, Region and NPCA shall be considered; and,
- v) Opportunities to provide stormwater management controls to currently uncontrolled areas, especially public roads, should also be evaluated as part of future studies in the area.

13.4.5 Transportation

The current road network within the Grimsby Beach Secondary Plan Area is recognized in the Official Plan on Schedule C and consists of Lake Street, as a collector road and a series of local roads, many of which are narrow and reflective of the original planned areas.

- i) The existing road network to serve the community should be maintained and upgraded with improvements for safety that include sightline improvements and added signage and wayfinding as recommend in the Grimsby Beach Land Use Study and the Urban Design and Heritage Guidelines for Grimsby Beach.
- ii) Active transportation as provided in Section 5.6 of the Official Plan is encouraged by improving pedestrian and cycling connections including movements into, within and out of the area and the expansion and enhancement of the existing public walkway and trail network as well as enhanced linkages where appropriate.

13.4.6 Natural Heritage

The natural heritage areas within the Grimsby Beach Secondary Plan Area are to be protected and maintained in accordance with Provincial, Regional and local designations and policies in addition to the policies and regulations of the NPCA.

- i) The natural areas shall include features and associated buffer areas as defined and mapped in the Town of Grimsby Official Plan and on Schedule L.
- ii) No new development or site alteration shall be permitted within the protected shoreline area or hazard lands associated with the stable top of bank along the shoreline of Lake Ontario.

- iii) Significant woodlands within the designated Environmental Protection Area and the Environmental Conservation Area shall be maintained and protected and include adequate setbacks and buffers to these features.
- iv) Measures to reduce soil erosion and siltation through appropriate erosion and sediment control measures shall be implemented through development and protection programs.
- v) All future environmental work undertaken to assess and improve shoreline protection shall consider the impacts to the natural heritage system and ensure appropriate mitigation.

13.4.7 Tree Protection and Enhancement

Trees are a distinctive landscape and character feature within the Grimsby Beach Secondary Plan Area. A key objective in the Secondary Plan is to encourage the preservation of existing trees and the planting of new trees through infill development and replacement housing through the site plan approval process where applicable.

- i) The wooded areas within the Grimsby Beach area and in the South Character Area consist of both the designated Grand Old White Oak Tree Stand and the existing woodlot within the Environmental Protection Area. Both areas should continue to be protected through the existing land use and heritage designations.
- ii) An overall Tree Strategy shall be developed and used to address tree protection and tree canopy enhancement and provide guidance for additional plans and programs.
- iii) A Tree Management Plan for the Grimsby Beach area shall be undertaken which provides guidance on the maintenance, removal and re-planting of trees and vegetation on public and private lands.

13.4.8 Parks, Open Spaces and Trails

The Grimsby Beach Secondary Plan area contains several public park areas, open spaces, community gardens, walkways and trails that are part of the original planned areas (Bell Park, Victoria Terrace, Auditorium Circle, Grimsby Beach Park, Grand Old White Oak Tree Stand and Grand Avenue Park). These public areas are an integral part of the community and attract visitors to the area.

- i) Public areas should be maintained to ensure safe access with improved signage and wayfinding.
- ii) Park areas should be enhanced with additional tree planting through Town programs.
- iii) Improved visual and physical access to open space areas, community gardens, trails and parks should be implemented where feasible.

- iv) A Public Realm Master Plan shall be developed to provide strategic direction as it relates to improvements to existing public open spaces, opportunities for improved wayfinding, lighting (for safety and night sky friendly design), the creation of gateway/entry features, park amenities related to tourism and recreation, potential additional areas for public parking and other desirable elements.

13.4.9 Cultural Heritage

The following cultural heritage policies shall apply to Grimsby Beach:

- i) The history of Grimsby Beach shall continue to be promoted, interpreted and commemorated with the provision of opportunities for tourism and the enhancement of the area's identity;
- ii) The historic lotting, circulation, and street patterns of the Core, Northwest and South Character areas, shall be conserved while recognizing the need for municipal services and amenities which facilitates context sensitive new development and redevelopment, and streetscape and infrastructure improvements;
- iii) Urban Design and Heritage Guidelines for Grimsby Beach shall be established for the Grimsby Beach Secondary Plan area, which include guidelines specific to each of the identified character areas and which:
 - a) Balance the conservation of cultural heritage resources with the need for appropriate alterations and residential infill;
 - b) Address alterations and additions to significant cultural heritage resources; and,
 - c) Provide for the conservation of heritage features and lot fabric.
- iv) Views as identified on Schedule L-2 should be protected and implemented through the application of the Urban Design and Heritage Guidelines for Grimsby Beach;
- v) The conservation of significant cultural heritage resources shall adhere to the principles and guidelines of the Parks Canada Standards & Guidelines for the Conservation of Historic Places in Canada (2010), as amended;
- vi) Significant cultural heritage resources shall continue to be identified and protected under the legislated processes of the *Ontario Heritage Act*;
- vii) The demolition of significant cultural heritage resources shall be avoided;
- viii) An assessment of potential archaeological resources may be required due to the high potential for archeological findings within 300 metres of the Lake Ontario shoreline;

- ix) A Heritage Impact Assessment shall be submitted for properties located on, or adjacent to properties included on the Town of Grimsby Heritage Register within the Grimsby Beach area; and,
- x) A Heritage Impact Assessment shall be submitted for any public works initiatives, including infrastructure or streetscape improvements, at the direction of Town staff, to ensure the cultural heritage character and identified heritage attributes of Grimsby Beach are conserved and enhanced.

13.4.10 Urban Design

Development and replacement housing within the Grimsby Beach area shall be directed through the supportive design policies and guidelines provided in the Urban Design and Heritage Guidelines for Grimsby Beach.

The following urban design objectives shall apply to all areas within Grimsby Beach:

- i) To respect site context and enhance sense of place that results in compatible development that fosters the existing sense of identity.
- ii) To identify and enhance key design priority areas including gateways and priority lots.
- iii) To promote connectivity and interaction that provides universal access and emphasizes pedestrian accessibility, safety and comfort.
- iv) To maintain built form design that reflects the low-scale cottage character of Grimsby Beach.
- v) To promote streetscape improvements, including public art (including Indigenous art), street furniture, street lighting, historic plaques, way-finding signage, interpretive panels, kiosks, and amenity area features.

13.5 IMPLEMENTATION

13.5.1 Development applications shall address the requirements of the Urban Design and Heritage Guidelines for Grimsby Beach.

13.5.2 Development applications shall be assessed based on the policies of the Secondary Plan and evaluated based on the submission of the following requirements:

- i) a conceptual site plan which illustrates the proposed development, provision for access and parking;

- ii) where there is evidence of environmental features or functions on a site that has not been evaluated, an EIS will be required to be prepared by a qualified biologist and/or other appropriate qualified professional in consultation with the Town, and where appropriate, Niagara Region, Niagara Peninsula Conservation Authority and the Ministry of Natural Resources;
- iii) a servicing plan related to proposed water supply and sewage disposal which confirms the available capacity for municipal servicing;
- iv) a plan to address stormwater management, prepared in accordance with Policy 7.A.2.6 of the Niagara Region Policy Plan, Section 5.3.1 of the Town of Grimsby Official Plan, and any other policies, guidelines and documents and a sediment and erosion control plan which demonstrates that:
 - a) planning, design and construction practices will minimize vegetation removal, grading and soil compaction, sediment erosion and impervious surfaces;
 - b) where appropriate, an integrated treatment approach shall be used to minimize stormwater management flows and structures through such measures as *lot* level controls and conveyance techniques such as grass swales; and,
 - c) applicable recommendations, standards or targets within watershed plans and water budgets are complied with.
- v) a land use compatibility assessment related to noise and/or air quality/odour impacts associated with the QEW Highway and the Baker Road Treatment Plant may be required to be completed;
- vi) an archeological assessment may also be required as part of any future development application; and,
- vii) other studies that may be identified through the pre-submission consultation meeting as set out in Section 9.11 of the Official Plan.

Study requirements may be scoped depending on the type of development application.

13.5.3 Approval of all *development* applications shall:

- i) be based on stormwater management that is designed to avoid, minimize and/or mitigate stormwater volume, contaminant loads and adverse impacts to receiving water courses in order to:
 - a. maintain groundwater quality and flow and stream baseflow;
 - b. protect water quality;
 - c. minimize the disruption of pre-existing (natural) drainage patterns wherever possible;
 - d. prevent any increase in flood risk; and,
 - e. protect aquatic species and their habitat.

- ii) reflect the recommendations of any required evaluation of environmental features and functions;
- iii) ensure that the site has access to a public road, and where *development* fronts on Lake Street, that access is limited to existing access points;
- iv) ensure any new lots are serviced from road frontages and not from the rear of lots;
- v) be in conformity with all policies of this Plan, the Urban Design and Heritage Guidelines for Grimsby Beach, and in compliance with the applicable zoning;
- vi) ensure the protection of any significant cultural heritage resources; and,
- vii) promote the use of building design, site planning and landscape design which ensures a design in accordance with the policies of Section 12.6, the design policies of this Secondary Plan and the Urban Design and Heritage Guidelines.

13.6.4 Zoning

The implementing Zoning By-law shall be used to implement the objectives and policies of the Secondary Plan by regulating the use of land, buildings and structures in accordance with the provisions of the *Planning Act* and may be more restrictive than the policies of the Secondary Plan. It is not intended that the full range of uses or the maximum density permitted by the land use designations be permitted in the Zoning By-law in all locations based on the physical context and the existing character of the area.

Minor variances from the implementing Zoning By-law associated with new housing, replacement housing, additions, alterations, and new or enlarged accessory buildings, shall consider, where applicable;

- i) compatibility with existing building orientation and building setbacks;
- ii) that the scale, massing, building height, and built form features are compatible with the existing character of the neighbourhood;
- iii) the preservation of landscaped open space areas and the protection of existing trees; and,
- iv) that adverse impacts on adjacent properties are minimized.

13.6.5 Site Plan

Site Plan control is a key tool to implement the Urban Design policies of the Secondary Plan and the Urban Design and Heritage Guidelines for Grimsby Beach. The guidelines shall form the basis for site plan approval including the review and approval of building elevations to the satisfaction of the Town. The Town shall also require an Urban Design Brief to support site plan applications.

- i) Development in Grimsby Beach shall be subject to site plan approval. The Town of Grimsby shall enter into Site Plan Agreements with owners of development proposals in accordance with the Planning Act and the Town's

Site Plan Control By-law. Such agreements shall provide the Town with controls over development proposals regarding siting, massing, access, and exterior design, including without limitation the character, scale, appearance and design features of buildings and landscapes.

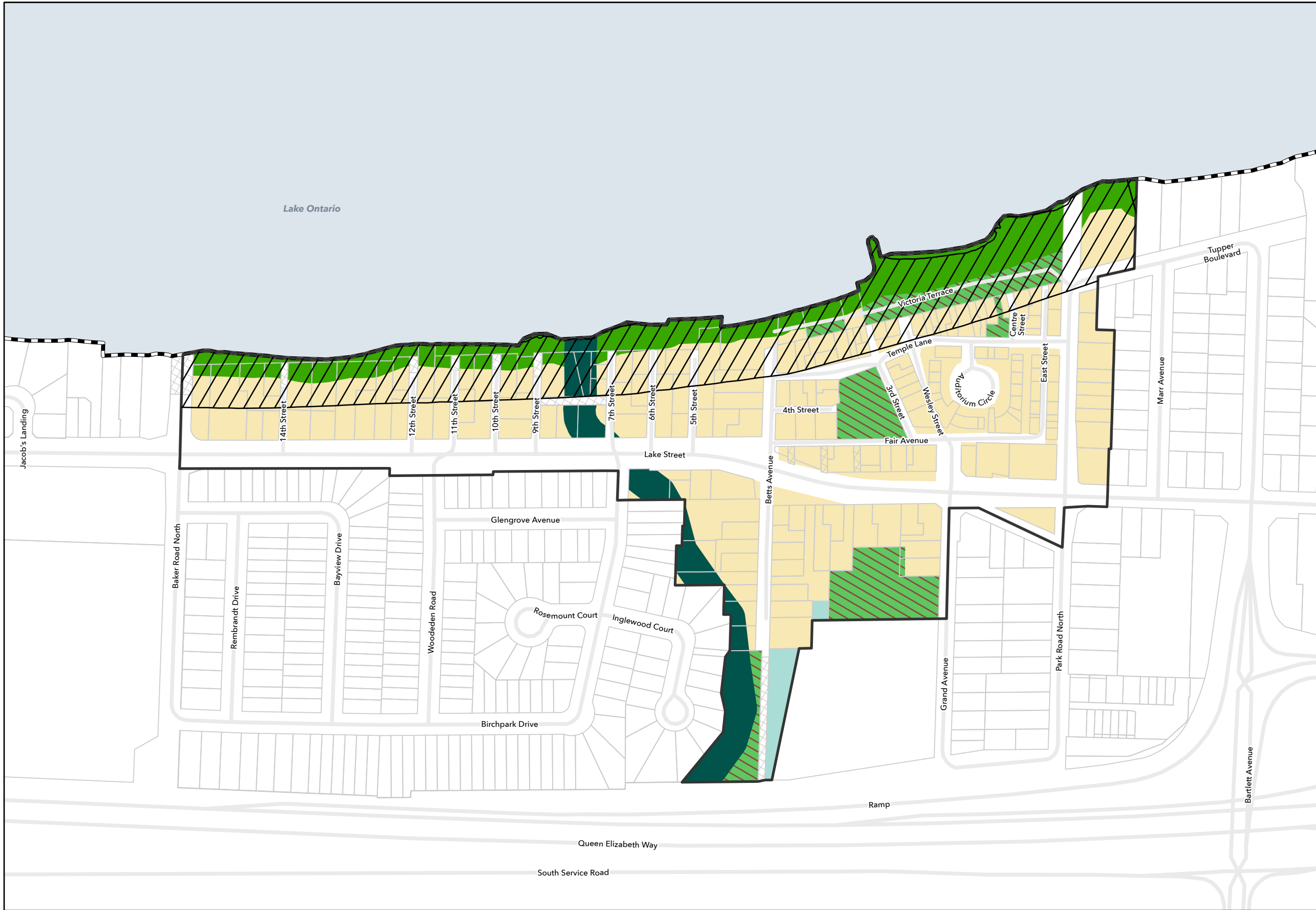
- ii) Site Plan Agreements may also include provisions regarding the architectural details, colours and building materials to be used in a development proposal. Specifically, agreements may contain clauses stating that the architectural details, colour and the materials used in a development proposal shall be to the satisfaction of the Town.












13.6.6 Lot Creation

- i) Parcels of land created through consent shall conform with the provisions of the Zoning By-Law and the policies of the Grimsby Beach Secondary Plan.
- ii) When considering applications for consent for a land severance, following criteria are required to be met:
 - a) provisions of the Planning Act;
 - b) development on the new lot or the remaining parcel shall not pose any costs for road or service improvements for the municipality;
 - c) maximized tree protection and where trees cannot be maintained a tree replacement plan;
 - d) the compatibility with, and neutral impact of the proposed use on adjacent properties; and,
 - e) conformity with the policies in the Secondary Plan that require the character of the Grimsby Beach area and specific character areas to be protected and enhanced.
- iii) Applications for consent shall require a Heritage Impact Assessment which considers the impact of consent on the identified heritage attributes and unique character of the area.

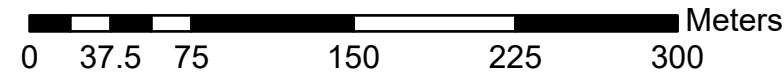
13.6.7. Existing Vacant Lots

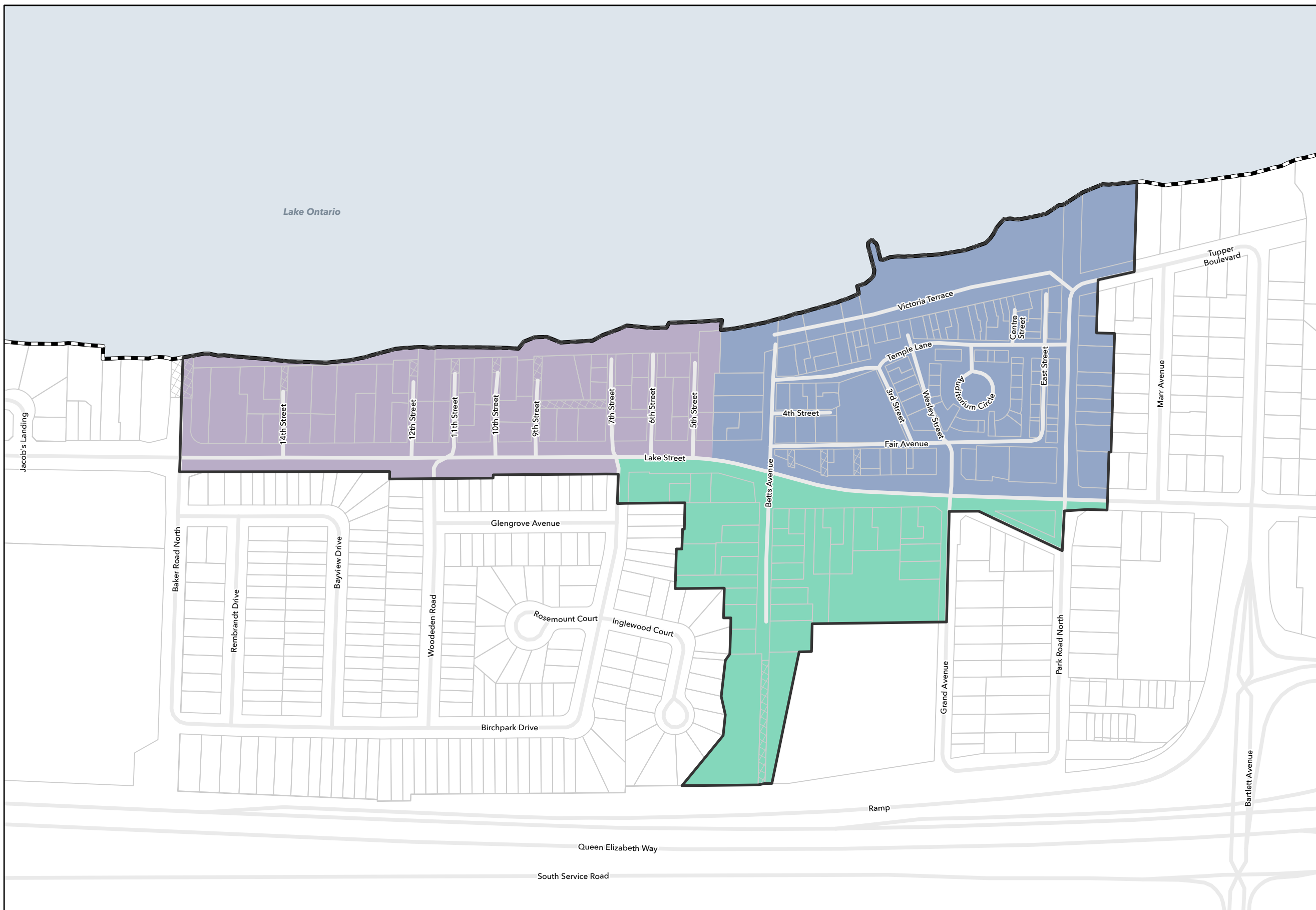
Where a vacant parcel of land in accordance with S. 50(3) of the Planning Act is proposed to be developed, or redeveloped, new housing shall be developed in conformity with the policies of this Secondary Plan, provisions of Zoning By-law 14-45, as amended, and evaluated through the site plan process in accordance with the Urban Design and Heritage Guidelines for Grimsby Beach to ensure compatible and appropriate design.



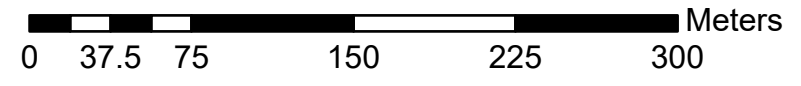
- Legend**
-  Grimsby Beach Secondary Plan Area
 -  Municipal Boundary
 -  Parcel Fabric
 -  Unopened Road Allowances
 -  Streets
 -  Low Density Residential Area
 -  Institutional Area
 -  Parks and Open Space
 -  Environmental Conservation Area*
 -  Environmental Protection Area*
 -  Hazard Land Area (Ont. Reg. 155/06)

*Designations are approximate and require consultation with the Niagara Peninsula Conservation Authority



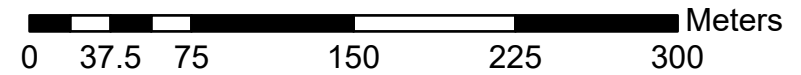


- Legend**
- Grimsby Beach Secondary Plan Area
 - Municipal Boundary
 - Parcel Fabric
 - Unopened Road Allowances
 - Streets
- Character Areas**
- Core Area
 - Northwest Area
 - South Area



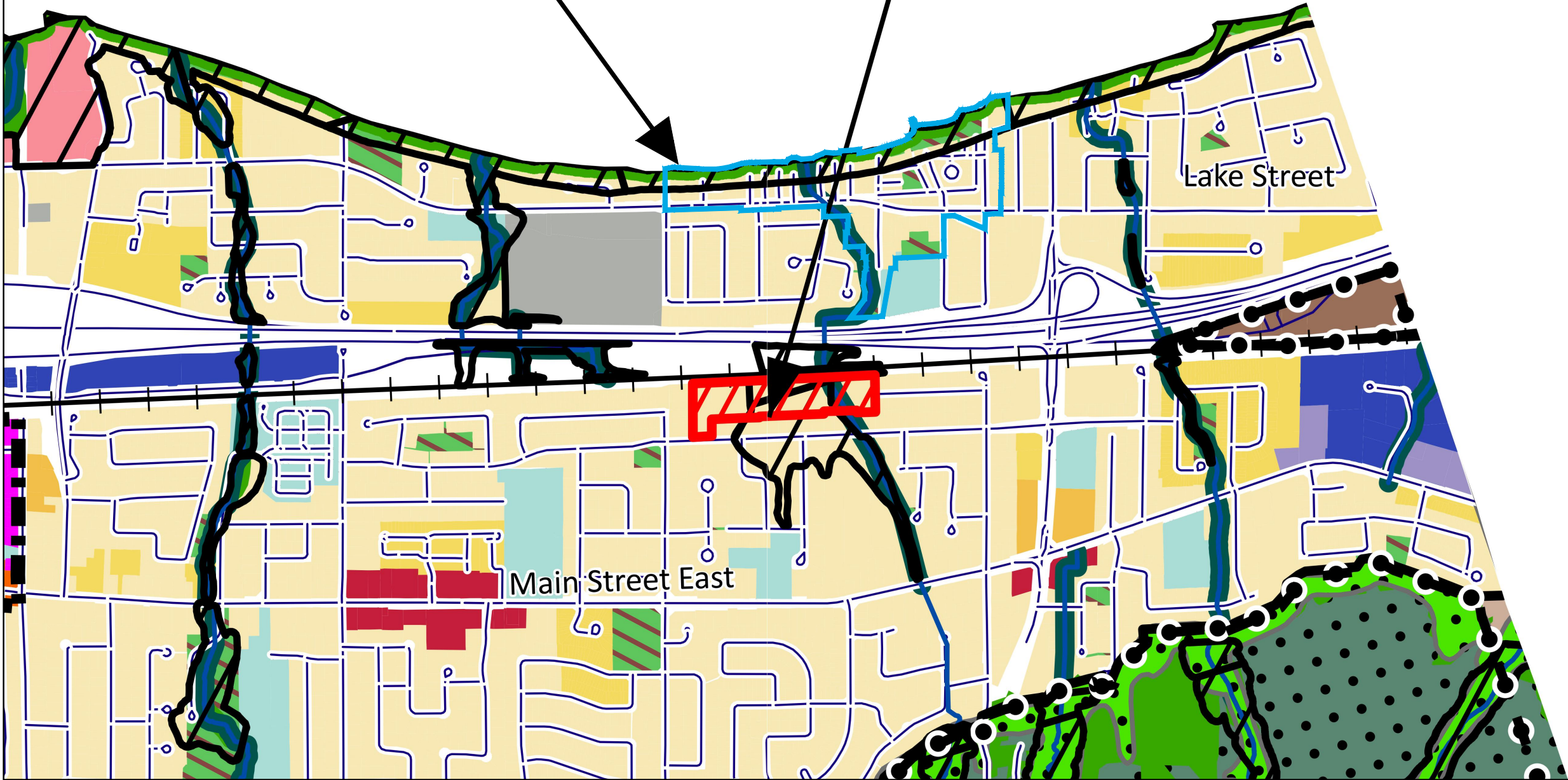


- Legend**
- Grimsby Beach Secondary Plan Area
 - Municipal Boundary
 - Parcel Fabric
 - Unopened Road Allowances
 - Streets
 - Entrances and Routes
 - Gateways
 - Views and Vistas
 - 1 - Panoramic views of Lake Ontario, the former pier and the City of Toronto Skyline
 - 2 - Panoramic views of the historic built form from and to Bell Park
 - 3 - Panoramic views of the historic built form surrounding Auditorium Circle (in and out)
 - 4 - Victoria Terrace
 - 5 - Betts Avenue



Grimsby Beach Secondary Plan Area (See Schedule X)

Appealed under Section 17(36) of the Planning Act



- Legend**
- +— CN Railway
 - Streams
 - - - Greenbelt Plan Area Boundary
 - ▭ Urban Settlement Area Boundary
 - ▨ Downtown District Boundary
 - ▭ Hamlet Area Boundary
 - ▭ Secondary Plan Boundary
 - ▨ Hazard Land Area (Ont. Reg. 155/06)
 - Escarpment Natural Area
 - Escarpment Protection Area
 - Escarpment Rural Area
 - Environmental Protection Area
 - Environmental Conservation Area
 - Low Density Residential Area
 - Medium Density Residential Area
 - High Density Residential Area
 - Residential / Mixed Use Area
 - ▨ Parks and Open Space
 - Downtown - Main Street
 - Downtown - Intensification
 - Downtown - Transition
 - Neighbourhood Commercial Area
 - Marine Commercial Area
 - Service Commercial Area
 - Employment Area
 - Institutional Area
 - Utility Area
 - Agricultural Area
 - Rural Area
 - Specialty Crop Area - Tender Fruit and Grapes
 - Transit Station Area
 - ▨ Transit Station Overlay
 - Hamlet Residential Area

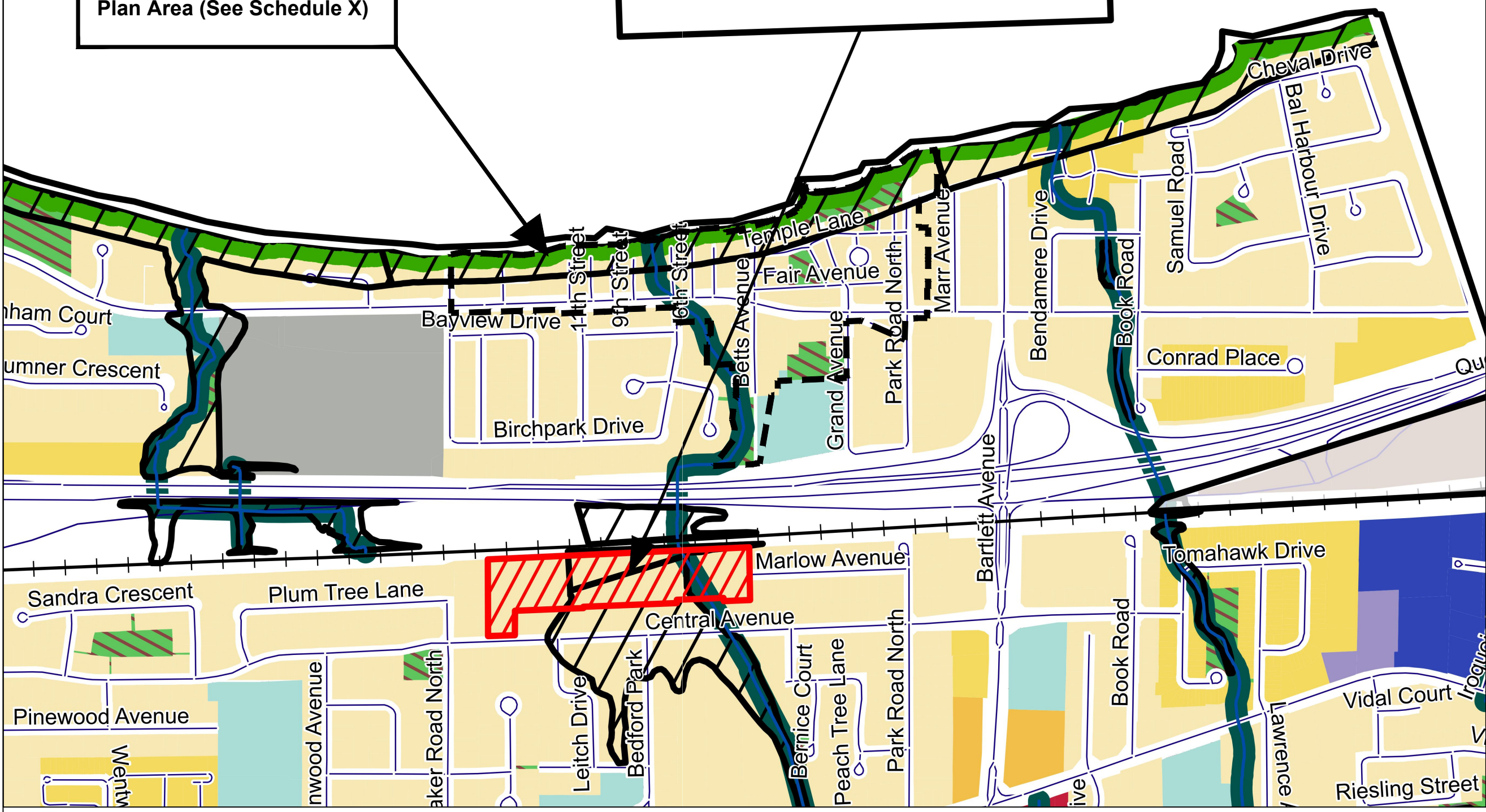
The hazard lands shown on this map are approximate. For an accurate source of mapping please contact the local conservation authority.



Grimsby Beach Secondary Plan Area (See Schedule X)

Appealed under Section 17(36) of the Planning Act

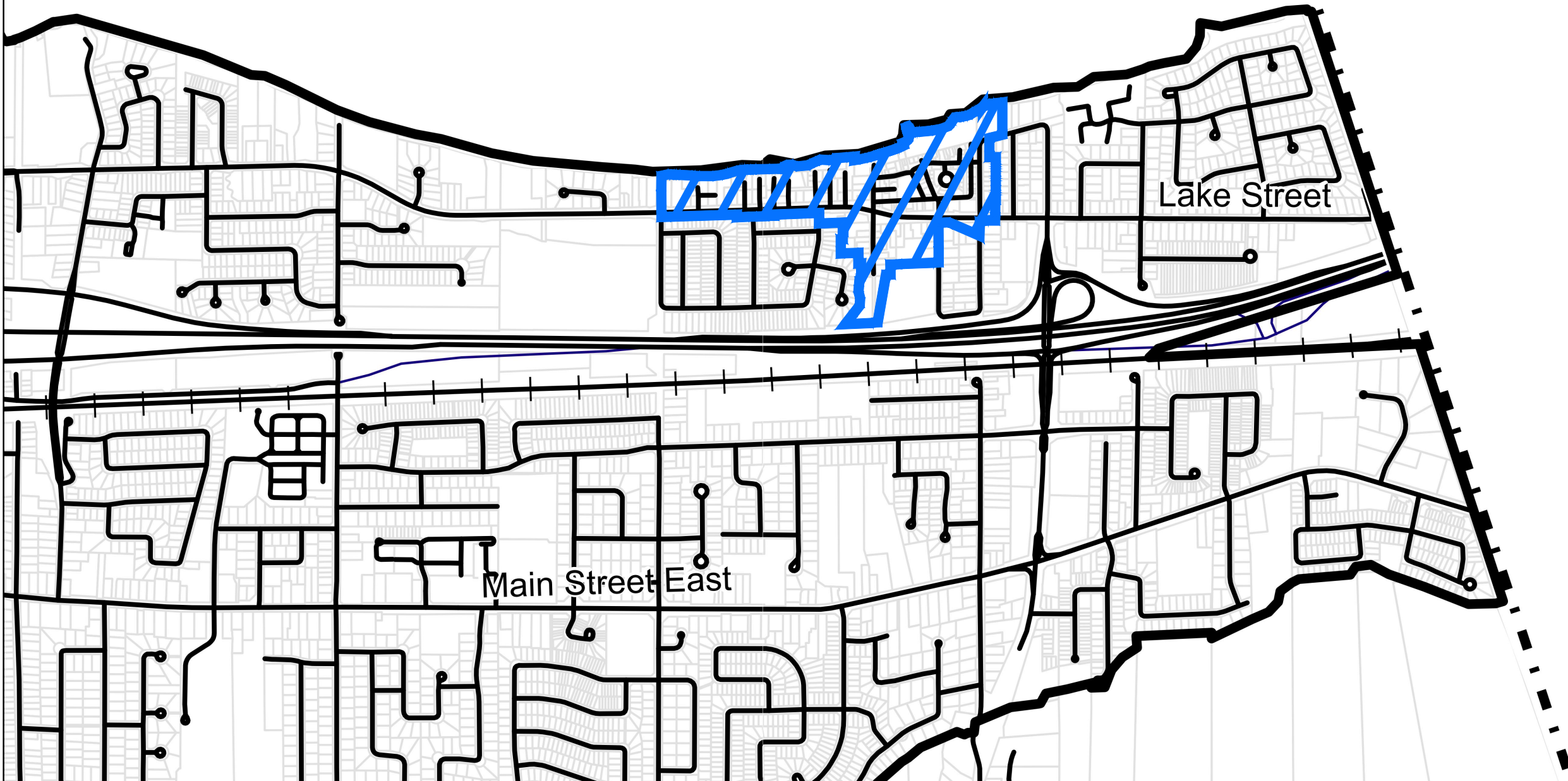
- Legend**
- CN Railway
 - Urban Settlement Area Boundary
 - Downtown District Boundary
 - Secondary Plan Boundary
 - Streams
 - Roads
 - Low Density Residential Area
 - Medium Density Residential Area
 - High Density Residential Area
 - Residential / Mixed Use Area
 - Parks and Open Space
 - Commercial Core - Main Street
 - Commercial Core - Intensification
 - Commercial Core - Transition
 - Neighbourhood Commercial Area
 - Marine Commercial Area
 - Service Commercial Area
 - Employment Area
 - Institutional Area
 - Utility Area
 - Agricultural Area
 - Rural Area
 - Specialty Crop Area - Tender Fruit and Grape Land
 - Environmental Protection Area
 - Environmental Conservation Area
 - Hazard Land Area (Ont. Reg. 155/06)
 - Escarpment Natural Area
 - Escarpment Protection Area



The hazard lands shown on this map are approximate. For an accurate source of mapping please contact the local conservation authority.



- Legend
- Municipal Boundary
 - Urban Settlement Area Boundary
 - CN Railway
 - Roads
 - Hamlet Area Boundary
 - Grimsby Beach
 - Waste Disposal Assessment Area
 - Closed Sanitary Landfill Site
 - Mineral Aggregate Area



APPENDIX **D**

Zoning By-law Amendment

THE CORPORATION OF THE TOWN OF GRIMSBY

DRAFT BY-LAW NO. __-__

A BY-LAW

TO AMEND BY-LAW NO. 14-45, AS AMENDED

WHEREAS the Council of The Corporation of the Town of Grimsby deems it expedient to amend By-law No. 14-45, as amended

THEREFORE, THE COUNCIL OF THE CORPORATION OF THE TOWN OF GRIMSBY ENACTS AS FOLLOWS:

1. Schedule 6-A is hereby amended by changing the zoning of the lands identified on Schedule A to this by-law from *Grimsby Beach (GB) Zone* to *Grimsby Beach One (GB1) Zone*.
2. Table 1: Zone Symbols, in Section 2.4.1 is amended by adding the following column:

Grimsby Beach One	GB1
--------------------------	------------

3. Section 7.1.1 is amended by adding Grimsby Beach One (GB1) after Grimsby Beach (GB) in the list of zones.
4. Table 10: Permitted Uses in Residential Zones, in Section 7.1.1, is amended by adding a column beside the GB column entitled GB1 which provides for the following permitted uses:

Use	GB1
<i>Bed and Breakfast</i>	√
<i>Group Home</i>	√
<i>Home Occupation</i>	*
<i>Secondary Suite</i>	*
<i>Single Detached Dwelling</i>	√

5. Table 11: Regulations Applying to Residential Zones, in Section 7.2.1, is amended by adding a revised height for the GB zone and a new GB1 zone with the following provisions:

Zone/Uses	Min. Lot Area (sq. m.)	Maximum Lot Coverage	Minimum Lot Frontage	Minimum Front Yard	Minimum Exterior Side Yard	Minimum Interior Side Yard	Minimum Rear Yard	Minimum Building Depth	Max. Height
GB	See Section 7.2.2.4							NR	8 m
GB1	500	30%	15 m	Q2	6 m	1.8 m	Q3	20 m	9 m (1)

Note reference to footnote (1): *Flat and mansard roofs are prohibited except for development as part of a plan of subdivision draft approved after the date of the passing of this by-law. This prohibition applies to the overall roof structure of the dwelling and does not apply to additions, porches or similar portions of the dwelling.*

6. Section 7.2.2.4 is amended by adding the following:

b) The maximum Gross Floor Area shall be the existing Gross Floor Area on the date this by-law came into effect, except the Gross Floor Area may be increased by 15% through an increase in height or dwelling depth to the rear, subject to an approved site plan application. Such an increase in height should not exceed the maximum height in the GB zone.

c) Where development is proposed on an existing vacant lot in the GB zone, the maximum lot coverage shall be 30% for lots equal to or greater than 300 square metres and 35% for lots less than 300 square metres.

d) New lots created shall comply with the GB1 zone provisions.

Read a first time this ___ day of _____, 20___.

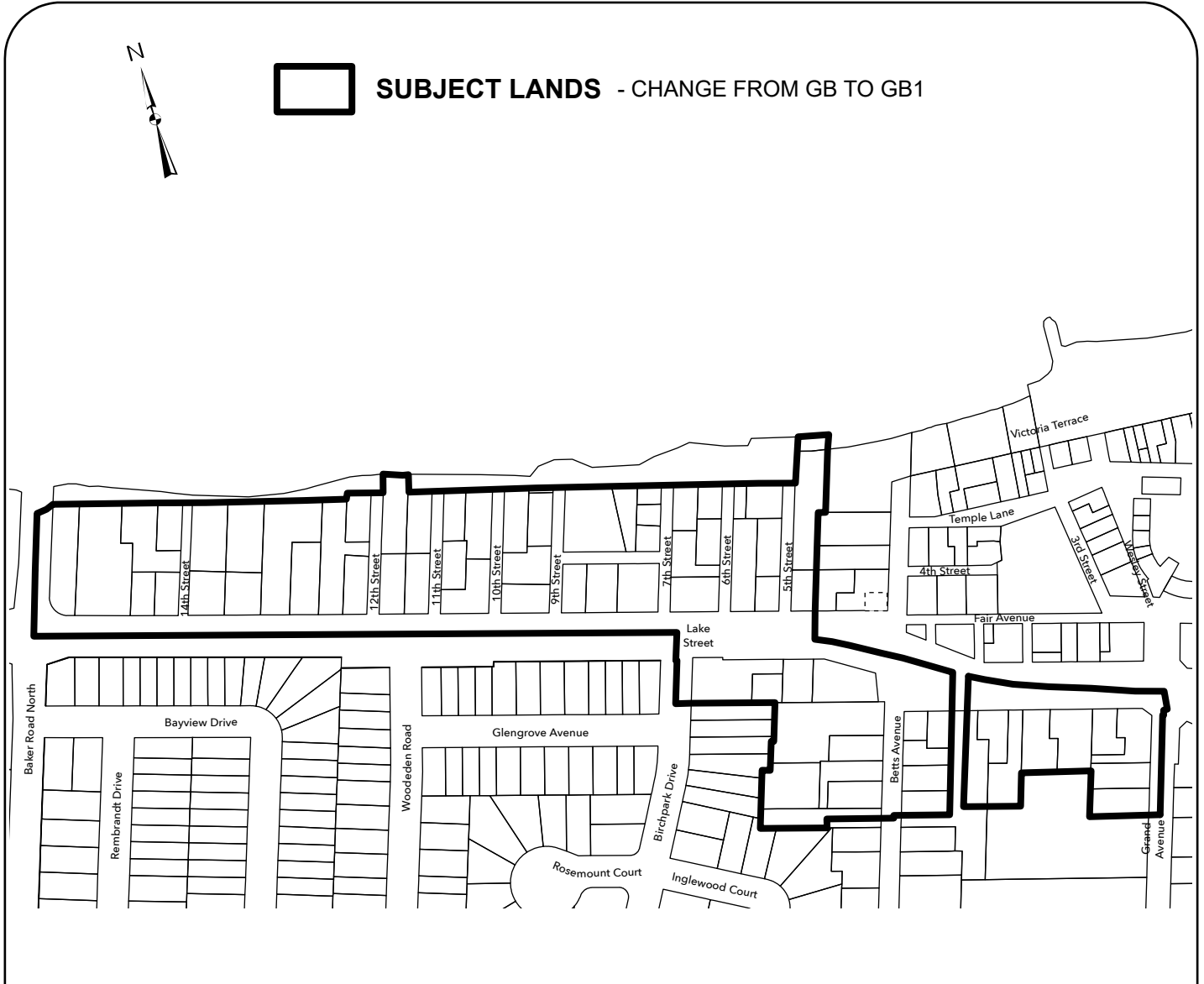
Read a second and third time and finally passed this ___ day of _____, 20 ___.

Mayor

Clerk



SUBJECT LANDS - CHANGE FROM GB TO GB1



THIS IS SCHEDULE 'A' TO BY-LAW NO XX-XX
 PASSED THE X DAY OF MONTH , 2021

MAYOR

TOWN CLERK

THE CORPORATION OF THE TOWN OF GRIMSBY

SCALE
 NOT TO SCALE

FILE NUMBER
 Z-XX-XX

PAGE X OF X

