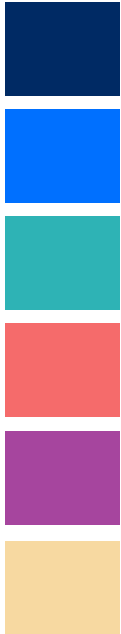


St. Catharines GO Transit Station Secondary Plan Study

Final | April 2018



Neighbourhood street adjacent to the existing VIA Rail and GO Service Station, St. Catharines.

This document was prepared for the City of St. Catharines
in association with the Region of Niagara by:

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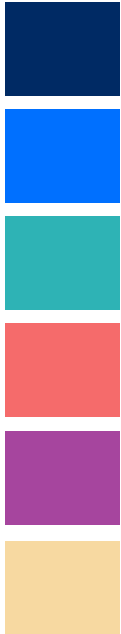


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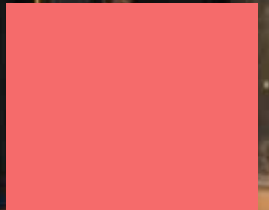
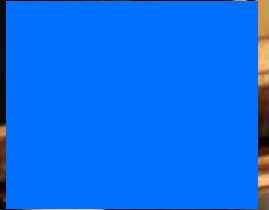
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View of residential neighbourhood on Permilla Street, across from Walkinshaw Park, St. Catharines.

1.0 INTRODUCTION



1.1 Background

“Transportation and transit are intrinsically linked to sustained economic prosperity” - Niagara GO Rail Business Case, October 2015

With a growing population, increased congestion and the need to support healthy lifestyles, communities are trying to attract higher order transit infrastructure investment. Regional transit supports a competitive business environment, improves connectivity and accessibility and can act as a catalyst to attract broader community investment, talent, growth and innovation. For Niagara Region, the extension of GO services from the Greater Toronto and Hamilton Area (GTHA) is critical for long term growth, prosperity and sustainability.

St. Catharines has been selected as one of four municipalities within the Region of Niagara that is being planned to accommodate GO train service to better connect Niagara to the Greater Golden Horseshoe, along with Grimsby, Beamsville and Niagara Falls. The four future GO transit stations were selected through the “2011 Niagara Rail Service Expansions – Environmental Study Review (ESR)” to provide direct transit connection between Niagara Falls and Hamilton’s West Harbour GO Transit Station, see **Figure 1.1**. Lincoln has also been recommended by Metrolinx for future station expansion in the 2011 ESR.

To support the Provincial investment in higher order transit, Niagara Region is undertaking a GO Hub and Transit Stations Study (GHTSS) of the four future GO transit Station Areas to prepare the lands for transit-oriented development and growth. The study includes the preparation of the following planning and design elements:

- Design vision and principles;
- **Secondary Plans (under Section 17 of the Planning Act) for the lands in and around the stations;**
- Conceptual Station Area plans;
- Market value assessments for Station Areas (focused on potential for redevelopment);
- Transportation plans for Station Areas, including lands in and around the stations;
- Functional design for proposed infrastructure, including station designs; and
- Implementation plans, including a Regional Official Plan Amendment (if required).

Recognizing the importance of partnership, in 2015, the Region signed four Memorandums of Understanding (MOU) with the Town of Grimsby, Town of Lincoln, City of St. Catharines and City of Niagara Falls to guide the conceptual transit station designs and create a planning and transportation framework for the area surrounding each of the four stations. The MOU’s outline the role of the Region in facilitating this project, along with the role of the participating municipality in implementing it.

The Niagara GHTSS is also being undertaken in coordination with the Region’s Municipal Comprehensive Review, the Regional Transportation Master Plan and the Regional Transit Investigation Study.

1.2 Purpose of the Plan

The purpose of this Secondary Plan Study is to establish a more detailed planning framework for the Secondary Plan Area in support of the general policy framework provided by the Official Plan. The Secondary Plan has been created to provide greater guidance with respect to land use, built form, urban design, the public realm and open space network, transportation including walking, cycling, and road infrastructure, municipal infrastructure improvements and implementation.

1.3 Secondary Plan Process

The Secondary Plan process is embedded within the broader Niagara GHTSS process, which involves six phases of work:

1. Study Context and Site Review
2. Visioning for Hub and Transit Stations
3. Preparation of Secondary Plans
4. Technical Analysis of Transportation Amenities and Transit Servicing
5. Station Area Design and Layout¹
6. Implementation Plan and Planning Framework Update

Phases 3 and 4 of the process were conducted concurrently.

¹ Note that Metrolinx is responsible for the Station Area Design aspects of this project.

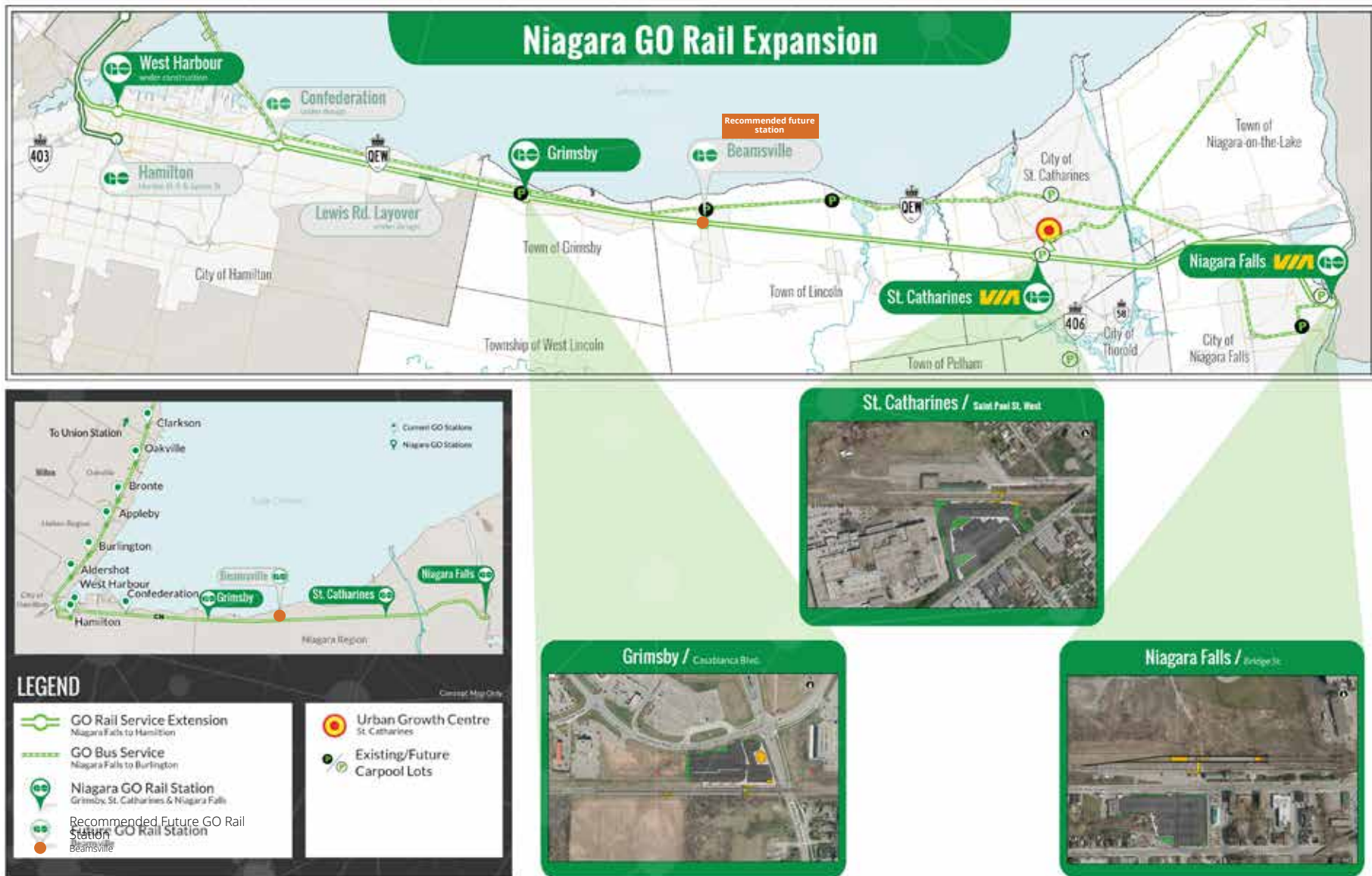


Figure 1.1 Niagara GO Rail Expansion Routes and Stations

Source: Niagara Region - from 2011 GO Transit ESR: Niagara Rail Service Expansion, RJ Burnside.

1.4 Organization

This Secondary Plan Study is divided into six main sections:

- Section 1 provides an introduction, describing the purpose and Secondary Plan Study process;
- Section 2 identifies the basis for the Study, documenting the context, key issues and opportunities;
- Section 3 outlines the vision and principles of the Secondary Plan;
- Section 4 includes the policies of the Secondary Plan, including land use, transportation and municipal infrastructure policies;
- Section 5 provides urban design guidelines including improvements to the Plan Area and guidelines for public and private realm design; and,
- Section 6 outlines the phasing strategy and policies for the build out, the implementation elements and tools and how policies of the Secondary Plan should be interpreted.

Footnotes, figures, graphics and images are provided for explanatory purposes only. The contents of Sections 3 to 6 will lead to the formation of an Official Plan Amendment to the City of St. Catharines Official Plan, to implement the Secondary Plan, as well as stand-alone Urban Design Guidelines

1.5 Integration with St. Catharines Official Plan

This Secondary Plan Study is being prepared to provide the details and context of the vision and policies of the Secondary Plan Area. It is written as a stand-alone study which will inform the Secondary Plan to be integrated into the City's Official Plan. The St. Catharines Official Plan includes general land use policies in Part D of the Plan, as well as specific policies for District Plans in Part E. The policies and schedules of this Secondary Plan Study will be integrated into the West District policies (Part E Section 15.3, Official Plan), by way of an Official Plan Amendment.

1.6 Authority

The Official Plan Amendment to implement the Secondary Plan Study will be prepared under Section 17 of the Planning Act and aligns with the policies of the City of St. Catharines Official Plan, the Region of Niagara Official Plan, the 2014 Provincial Policy Statement and the Growth Plan for the Greater Golden Horseshoe.



A photograph of the St. Catharines Train Station. The station building is on the left, featuring a large mural of historical figures and a sign that reads "ST. CATHARINES" and "The Coming and Going of the St. Catharines Train Station". A blue horizontal bar with white text is overlaid across the middle of the image. On the right side, there is a vertical stack of four colored squares: dark blue, teal, coral, and purple. In the foreground, a wooden bench with metal armrests sits on a concrete base. The ground is paved asphalt.

2.0 BASIS FOR THE PLAN

2.1 General Location

The St. Catharines GO Transit Station Secondary Plan Area is generally located in the central portion of the City, to the west of Twelve Mile Creek across from Downtown St. Catharines. Downtown St. Catharines is identified as an Urban Growth Centre (UGC) in the Province's Growth Plan for the Greater Golden Horseshoe. The Downtown St. Catharines UGC is considered to be the Region of Niagara's primary urban node and has Regional and Provincial significance in terms of growth, intensification and density. The 347 hectare Study Area encompasses the existing VIA train station, and extends to approximately Fourth Avenue to the

north, Twelve Mile Creek to the east, St. Paul Street West and Rykert Street to the south and Vansickle Road and First Street Louth to the west.

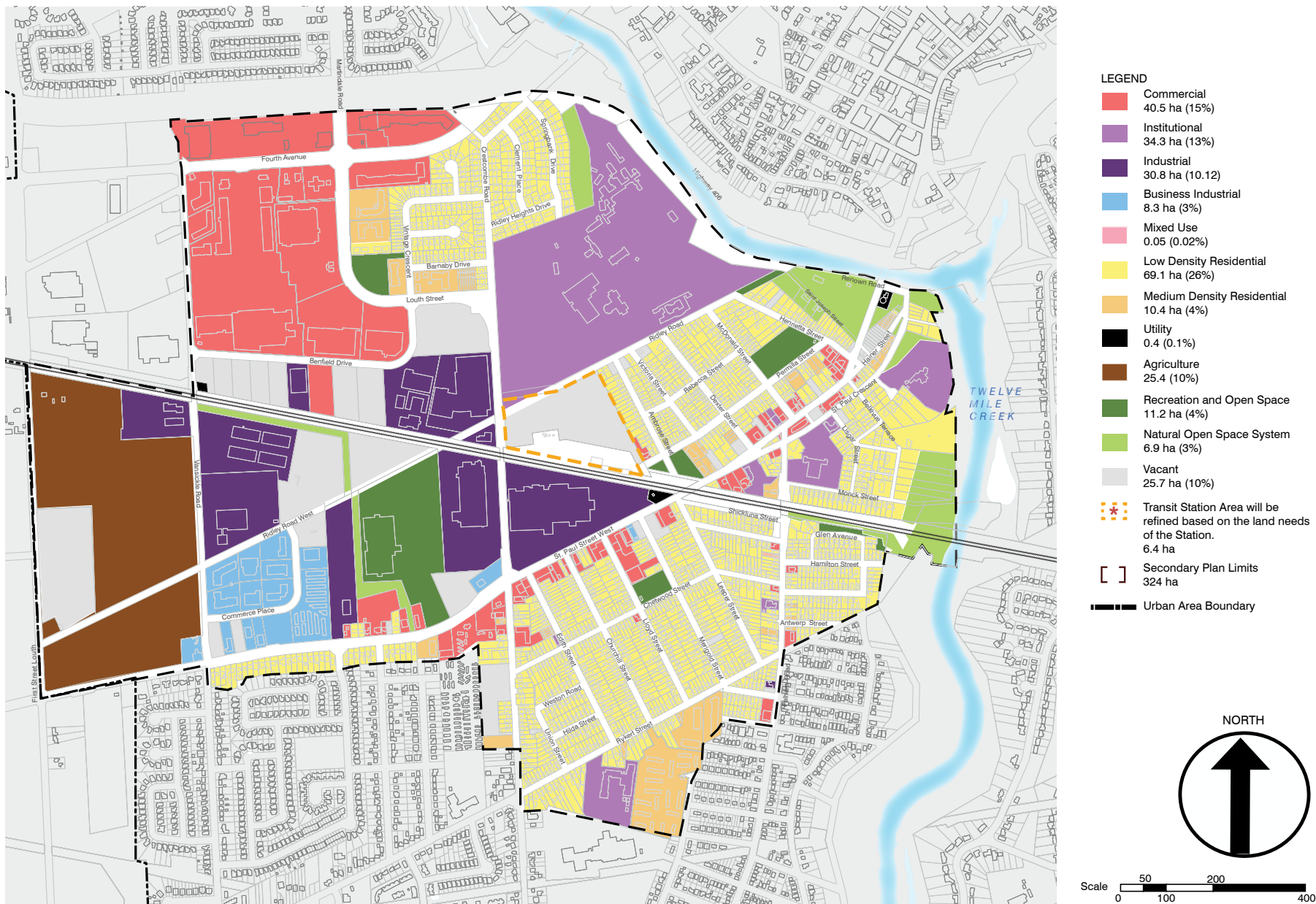
2.2 Existing Conditions

The Secondary Plan Area is fairly diverse, with a mix of commercial, recreational, industrial, institutional and residential uses (see **Figure 2.1**). The existing VIA station rail station (future GO Transit Station Area) is located to the east of Louth Street, with access off of St. Paul Street West via Great Western Boulevard (and a secondary access from Permillia Street). To the north of the Station Area lies Ridley College, one

of the oldest private schools in Canada. To the immediate south and west of the Station Area is a major manufacturing facility. To the immediate east of the Station Area is a relatively stable, low density residential neighbourhood. Beyond the immediate vicinity of the Station are several clusters of residential neighbourhoods (generally to the south of St. Paul Street West), a major retail commercial corridor along Louth Street and Fourth Avenue and a mix of industrial and vacant industrial lands to the west. It should be noted that the majority of lands within the Plan Area are built-up, leaving approximately 10% (26 ha) vacant.



Ridley College, the major institutional use in the northern portion of the Secondary Plan Area.



2.3 The Planning Context

The City of St. Catharines Official Plan was comprehensively reviewed and was formally adopted in 2012. This official plan proactively designated lands for intensification and mixed use development in and around the Station Area.

Figure 2.2 illustrates current planned land use for the Study Area. The predominant planned land use in the Study Area is residential, which accounts for approximately 115 hectares of the net area (excluding roads). This includes approximately 93 hectares of low density residential, 21 hectares of medium density residential, and 1 hectare of high density residential. There is also 18 hectares of mixed use lands primarily along St. Paul Street West, which is intended to provide for medium and high density housing, live-work accommodation, commercial, local office, institutional, indoor recreational and cultural uses that serve the neighbourhood and community population.

The designated employment area is estimated to cover 79 hectares of the net area and is located to the west of Louth Street. A large portion of the vacant lands are comprised of vacant employment lands located south of the CN rail corridor and east of First Street Louth. The third largest planned land use is commercial which makes up approximately 28 hectares of the Study Area located mostly north of Benfield Drive along Fourth Avenue.

The City of St. Catharines designates intensification areas on Schedule D of the Official Plan. The lands along St. Paul Street West and Louth Street within the Secondary Plan Area are within the designated intensification area, which supports redevelopment.

The City also identifies Major Transit Station Areas in section 5.8 of the Official Plan and

designates them on Schedule C and Schedule E6. The City's West Major Transit Station is identified as the City's primary rail terminus and shall be developed to support Provincial GO service, and other regional, provincial, national and international rail service. Connections to the City's transit system and facilities and amenities to provide lay-over services and multi-modal connections will be included, such as walking and cycling infrastructure, utilities, and adequate and accommodating parking for all users. Cultural expression and public art opportunities to signify the Garden City experience (as identified in the Official Plan) will be used to highlight the heritage character of the area. The policies also identify that lands within and

in the immediate vicinity of the City's Major Transit Stations are to be planned to support development for transit supportive medium and higher density residential uses together with an appropriate range and mix of commercial, employment, institutional and recreation uses.

Section 15.3.1 b) and 15.3.1 c) of the City's Official Plan identify lands around the Station Area as a Special Study Area to investigate opportunities for a range of medium to high density residential and mixed use development to support the future GO Transit services. This policy also provides direction for the completion of urban design strategies to guide development and redevelopment.



View of existing St. Catharines VIA Station.

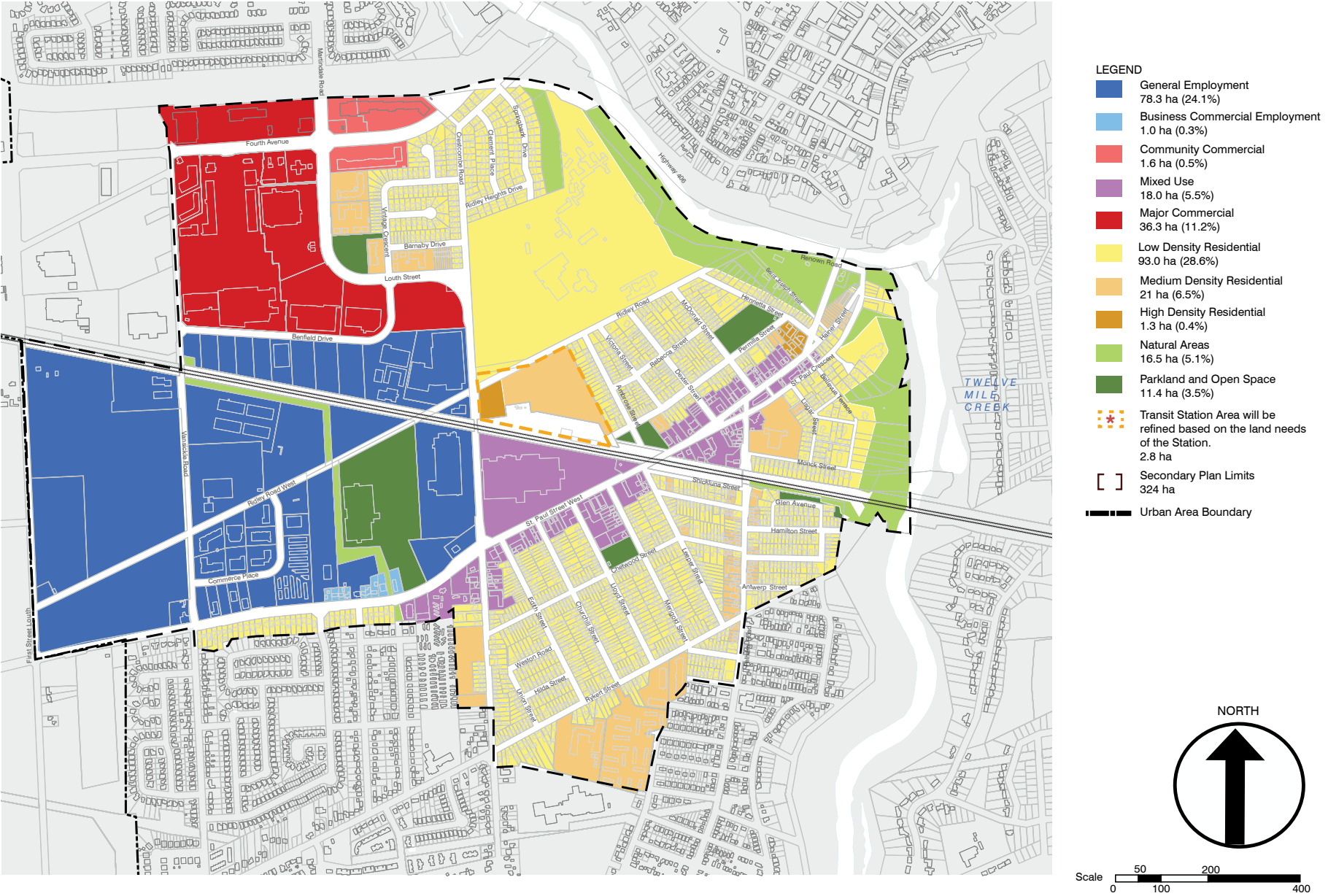


Figure 2.2 Current Official Plan Land Use



2

View looking across the Burgoyne Bridge at night time.

2.4 Key Issues and Opportunities

Through a review of existing policies, plans and site visit as well as discussions with stakeholders and the public, a number of key issues and opportunities for leveraging the GO Transit Station investment and improving the area were identified. The following provides a short overview of the key issues and opportunities for the St. Catharines GO Transit Station Area:

Issues

- There is a need for transit-oriented development in close proximity to the transit station to support transit ridership. It is critical that the Secondary Plan prevent the marginalization of development within the Study Area.
- Additionally, access from Great Western Street presents safety concerns as it merges with St. Paul West. Improvements will be required to ensure that access from St. Paul Street West to the Station Area is safe, comfortable, and convenient.
- Site access for commuters and transit buses will require specific attention given the location of the site and traffic limitations. There is need for infrastructure upgrades to key access routes, including along St. Paul Street West and Louth Street.
- Active transportation connections and sidewalks are needed along arterial, collector and local streets to improve pedestrian and cyclist safety including access over major barriers, such as Highway 406 and the CN Rail corridor.
- Recognition of low density stable neighbourhoods in the vicinity of the station, including those around Vantage

Park, Walkinshaw Park, Cameron Park and Lincoln Park, will require planning consideration. The permissions for land use and building heights should respect the established character of existing stable residential streets and focus opportunities for intensification along key corridors.

- The area includes some large scale, relatively stable employment uses as well as vacant employment lands. The plan maintains employment designations for existing, active employment users

and where possible, introduces policies for buffering new development from established employment uses.

- The close proximity of the station to established, low density residential neighbourhoods will likely require traffic calming solutions to manage the level of infiltration (traffic and parking). The opening day ridership forecasts are modest, however, over time the expectation is that there will be challenges with infiltration.



Stable residential neighbourhood looking west on Henrietta Street, St. Catharines.



2

Existing large scale retail uses along Fourth Avenue provides opportunity for intensification in the long term.

Opportunities

- The housing market in St. Catharines is evolving, as the supply of greenfield land has diminished. The expectation is that there will be an increased demand for medium and higher density forms of housing. The GO Transit Station is located in close proximity to the Downtown Urban Growth Centre (UGC) and should provide an opportunity for strategic intensification and also potential for mixed use development. The GO Transit Station site is an ideal site for intensification and the nearby St. Paul Street West Corridor also has potential. The St. Paul Street West corridor is identified in the City's Official Plan as an intensification corridor and there are a number of opportunities for lot consolidation and redevelopment along this corridor. There may also be opportunities for infilling and redevelopment within the retail commercial hub along Fourth Avenue and Louth Street.
- The area also includes one of the last remaining large tracts of vacant employment land within the City of St. Catharines. The lands to the west of Vansickle Road are close to the new hospital and are less than one kilometre from the Station Area. There may be an opportunity to promote denser forms of employment land development in this location. The Region is currently undertaking a Municipal Comprehensive Review which involves conducting a full Land Needs Assessment. The City is also undertaking an Employment Land Needs Assessment to evaluate employment land requirements on a City-wide basis. The Employment Land Needs Assessment

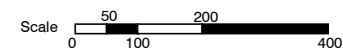
will inform the Region's MCR, including the land budget analysis and employment strategy work. This will help to inform the long term planning, use and density of development of these lands.

- There are a number of streets which could benefit from significant streetscape improvements. Louth Street, Ridley Road and St. Paul Street West are three examples of streets where sidewalk improvements, tree planting, lighting and bike facilities would help to create a more complete street environment. Ridley Road, as the main entranceway into the GO Transit Station offers an opportunity for a gateway development at the intersection of Louth and Ridley Road. There may also be an opportunity to realign Ridley Road, moving the intersection further north to increase the spacing between the rail corridor and the entrance to the Station Area.
- Ridley College is one of the City's iconic landscapes. The historic red brick buildings and wide open green campus offer inspiration for the theming of urban design improvements. The architecture and style of the historic and cultural buildings in the area should be leveraged to define a unique character for the area.
- The current VIA rail station building is designated as a heritage railway station (under the Heritage Railway Stations Protection Act) and there should be opportunities to draw upon the historic elements of the station's architecture, either through the design of GO facilities, new public spaces and/or new development in the vicinity of the station.

- With intensification there will also be opportunities to add new greenspace and/or public spaces into the area. The lands to the immediate east of current VIA Station site include a small neighbourhood greenspace (Cameron Park), which is bisected by Ambrose Street. There may be opportunities to consolidate the greenspace and improve the area as the station site evolves.
- It is anticipated that the station will attract some riders from communities in the southern extent of the Region. Residents in communities such as Thorold, Welland, and Pelham may commute to St. Catharines (or another GO Transit Station in the Region) to access transit service.

Development and Intensification Areas

There are a number of vacant, low coverage, and underutilized sites within the Study Area that provide ample opportunity for development, redevelopment, and intensification. **Figure 2.3** presents these development and intensification areas within the Study Area. These areas have been defined as either potential mixed use or employment development/redevelopment opportunities. There are a number of vacant employment sites that have the potential to accommodate new employment developments and a few occupied sites that could accommodate redevelopment or infill developments. In addition, there are a number of occupied sites that could support mixed use redevelopment or intensification and a couple of vacant sites that could accommodate mixed use development.



St. Catharines GO Transit Station Secondary Plan Study | Niagara Region



Fourth Avenue streetscape provides opportunities for transit oriented redevelopment and public realm improvements.



3.0 VISION & OBJECTIVES



3.1 St. Catharines GO Hub and Transit Station Area Vision for Change

St. Catharines is home to the Region's Urban Growth Centre (UGC); the Downtown UGC is the Region's top tier node and has Regional and Provincial significance in terms of growth and development focus. Rapid transit expansion to St. Catharines will support growth and economic development for the City, Region and Province.

The Study Area is currently occupied by Ridley College, existing stable residential, large scale retail, industrial uses, and other smaller scale non-residential uses. The future GO Transit Station will elevate its role in the City structure and make the area a destination and transfer point for a significant portion of local, inter/intra-regional multi-modal trips.

To support the Provincial transit infrastructure investment, the existing mixed use corridor will evolve to support the transit infrastructure investment, with concentration of transit oriented development in close proximity. Concentrated transit-supportive development in the area, particularly in close proximity to the transit station, will be a hub of activity, providing for a full range of residential, commercial, employment and community functions all coexisting in a mutually beneficial manner. Notwithstanding the change that the area will experience, existing stable residential, employment and institutional uses will be protected and enhanced through public realm improvements.

The station itself will define the area, being designed to integrate with the existing character while exemplifying high-quality iconic elements to represent its role as a key destination in the City. Existing connections will be improved and new connections will be developed to provide safe and convenient access to the station and from the station into the Downtown, employment areas, commercial areas, Ridley College and other key destinations for all modes of transportation.

The St. Catharines Secondary Plan Area has the potential to accommodate over 4,000 people and jobs by 2041.

3.2 St. Catharines GO Hub and Transit Station Secondary Plan Objectives

The objectives to guide change in the St. Catharines GO Transit Station Area include:

1. Support mixed-use intensification throughout the Plan Area
2. Balance modes of movement and improve connectivity to the Station
3. Create a well-designed and physically integrated transit station and hub
4. Protect existing stable neighbourhoods
5. Attract and accommodate a variety of employment uses
6. Maintain and leverage iconic presence of Ridley College and VIA Station buildings

**Visualization of possible future conditions at the Transit Station, along Ridley Road (below).
Current condition provided for context and reference purposes (right).**



1. Support mixed-use intensification throughout the Plan Area

The station area is being planned to accommodate significant population growth through transit-supportive development.



Example of medium density mixed-use development to facilitate intensified residential uses.

3

2. Balance modes of movement and improve connectivity to the Station

An enhanced public realm including improved cycling, pedestrian facilities and a finer-grained street network will prioritize non-auto movement and help connectivity between the GO Transit Station, other areas within the GTSSP and other areas within the City, including the Downtown.

3

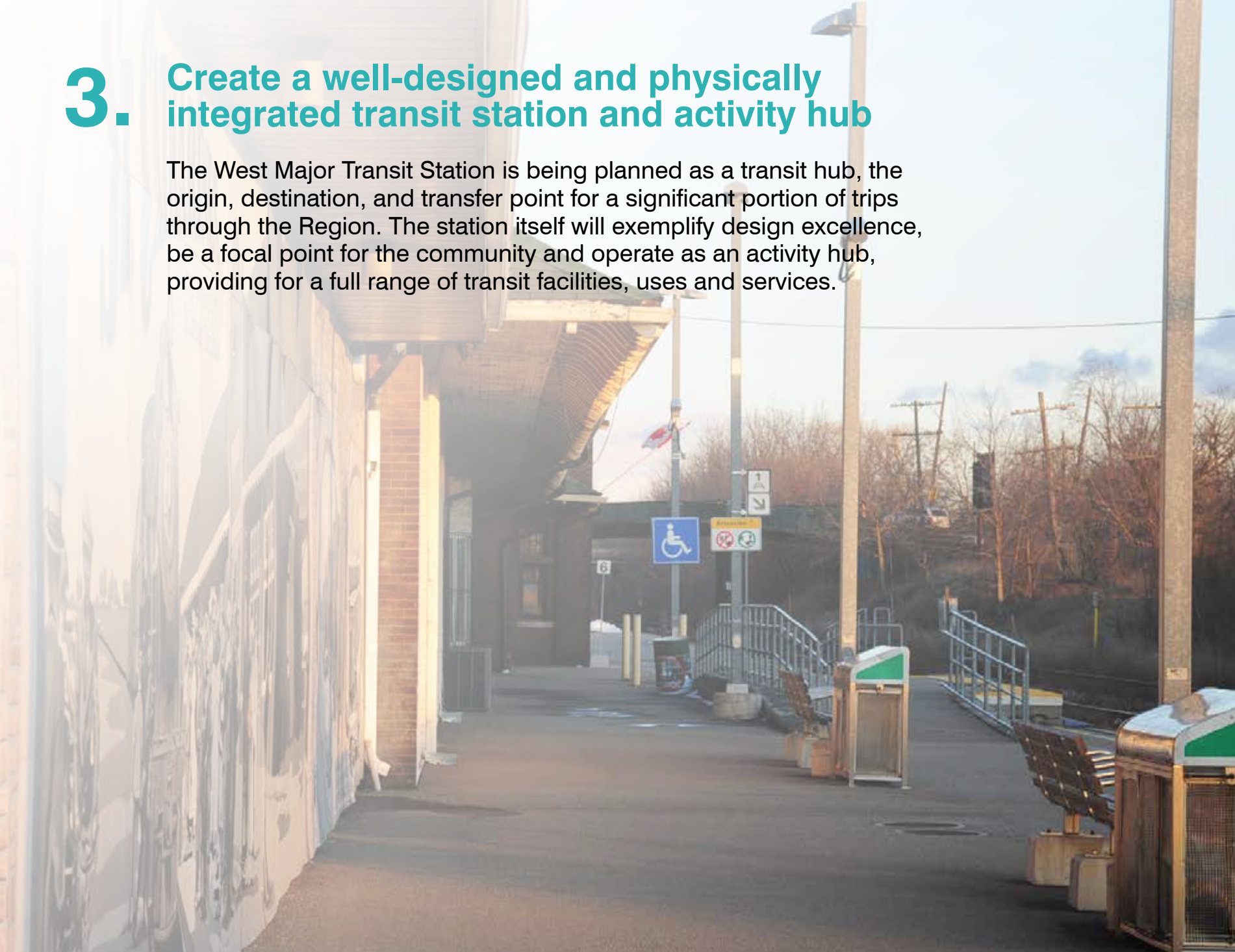


The example above shows a lively and active public realm linking a complete street with a transit station. While the image shows a subway station, a number of important elements are valid (landscaping, pedestrian safety, mid-rise development, green canopy, etc.).

3. Create a well-designed and physically integrated transit station and activity hub

The West Major Transit Station is being planned as a transit hub, the origin, destination, and transfer point for a significant portion of trips through the Region. The station itself will exemplify design excellence, be a focal point for the community and operate as an activity hub, providing for a full range of transit facilities, uses and services.

3



Existing traveler amenities at St. Catharines VIA Station, including accessibility ramps, seating and garbage receptacles.

4. Protect existing stable neighbourhoods

Residential neighbourhoods play an important role in the vibrancy of the area by providing ground-related housing, an important component of housing choice. Since new development in the area will largely be in the form higher density rental and condominium apartments, it is of particular importance to recognize the existing surrounding low density stable residential neighbourhoods.

Existing residential areas will be maintained with low density residential use permissions, traffic management measures and enhanced by pedestrian realm improvements and new active transportation connections. To support livability, neighbourhoods should have easy access to a range of community amenities and parkland.

3



Stable low-density housing on St Paul Street West, St. Catharines.

5. Attract and accommodate a variety of employment uses

Employment uses serve an important role in the creation of complete communities and support economic prosperity. The Plan aims to accommodate existing employment uses and attract new employment functions. To help attract and accommodate a variety of employment uses, public realm improvements should support economic attraction and transition uses should be introduced to manage land use compatibility.

3

Diverse employment opportunities are needed to serve the community over the long term.

6. Maintain and leverage iconic presence of Ridley College and VIA Station buildings

Ridley College is an important institutional use within the Plan Area with a number of iconic buildings representing culturally significant historic architectural styles. In addition, the existing VIA Station is designated as a heritage railway station under the Heritage Railway Stations Protection Act. The station area will leverage the physical design and architectural elements of these iconic buildings to define a unique character for the area.

3



View of historic Ridley College.

A large mural on a brick wall depicts a prehistoric scene. In the foreground, a white vintage car is parked on a road. Behind it, a line of dinosaurs, including a T-Rex and a Stegosaurus, are walking. A person is riding a dinosaur. The mural is set within an arched frame. The text "4.0 POLICIES" is overlaid on the right side of the image.

4.0 POLICIES

4.1 Secondary Plan Area Limits

The limits of the St. Catharines GO Transit Station Secondary Plan Area are depicted on **Schedule 1**. The Study Area extends approximately 800 metres around the station site and includes key properties that may redevelop as a result of the GO Transit Station as well as corridors that will form important transportation arts and connections to and from the station.

4.2 Land Use Policies

4.2.1 Land Use Structure

Lands within the Secondary Plan Area are designated one of the following land use categories, as depicted on **Schedule 2**:

- a. Low Density Residential
- b. Medium Density Residential
- c. High Density Residential
- d. Mixed Use 1
- e. Mixed Use 2
- f. Mixed Use 3
- g. General Employment
- h. Business Commercial Employment
- i. Parkland and Open Space
- j. Natural Areas

The Land Use Plan on Schedule 2 also includes the following policy overlay area:

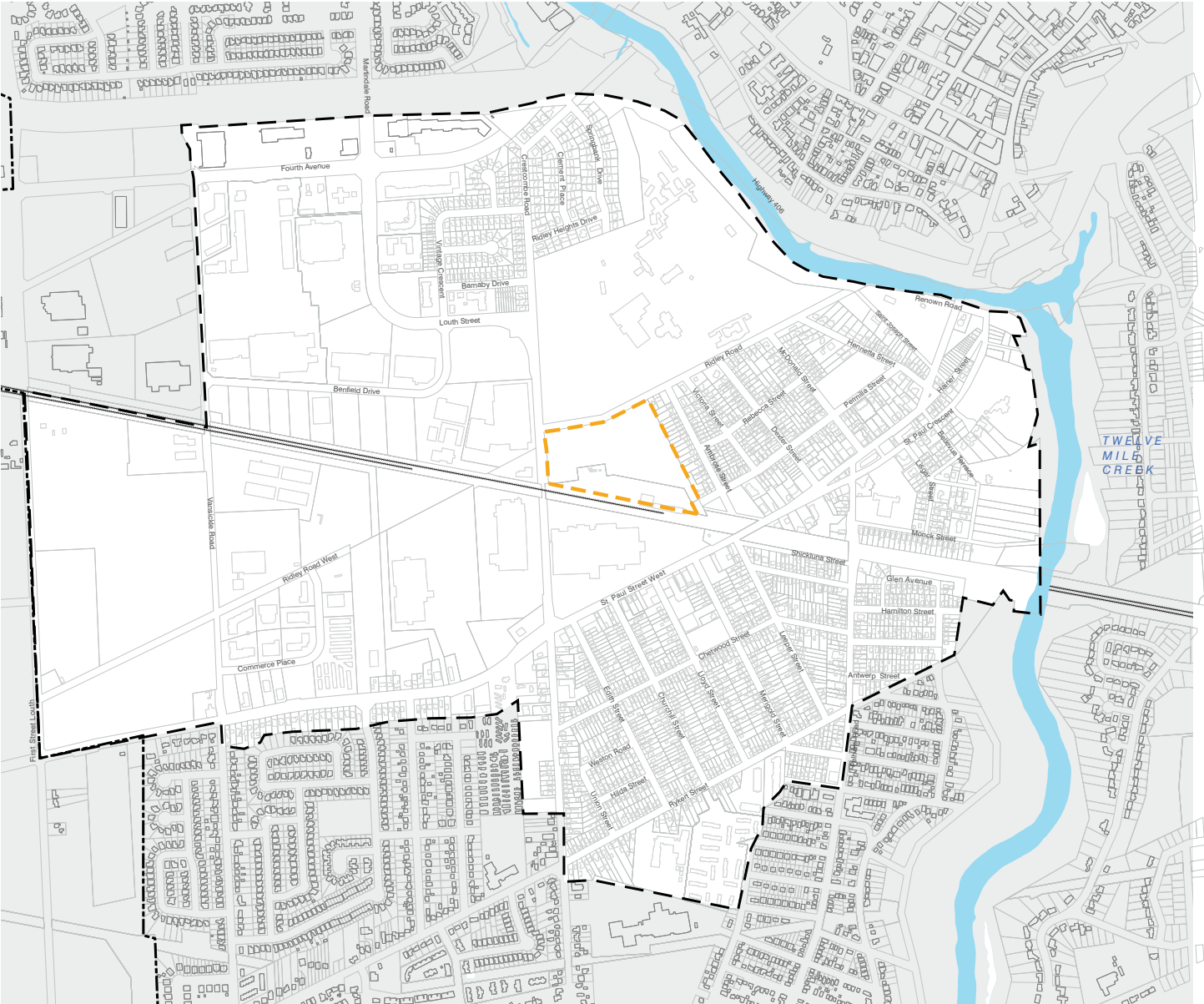
- k. Transit Station Site Overlay

4.2.2 Relationship with the St. Catharines Official Plan Land Use Categories and Permissions

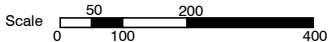
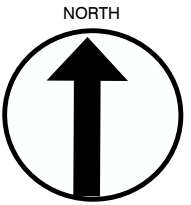
The land use designations for the Secondary Plan are intended to complement the broader land use designations provided in the St. Catharines Official Plan. The Secondary Plan will provide a more defined and refined land use planning framework and policies for the subject area than those established in the general policies of the Official Plan. Notwithstanding, in many cases the general policies of the Official Plan augment those to be contained in the Secondary Plan.

Except as otherwise provided for in this Secondary Plan Study, in the case of a conflict between the policies of the Secondary Plan and other policies contained within the Official Plan, the policies of the Secondary Plan prevail.

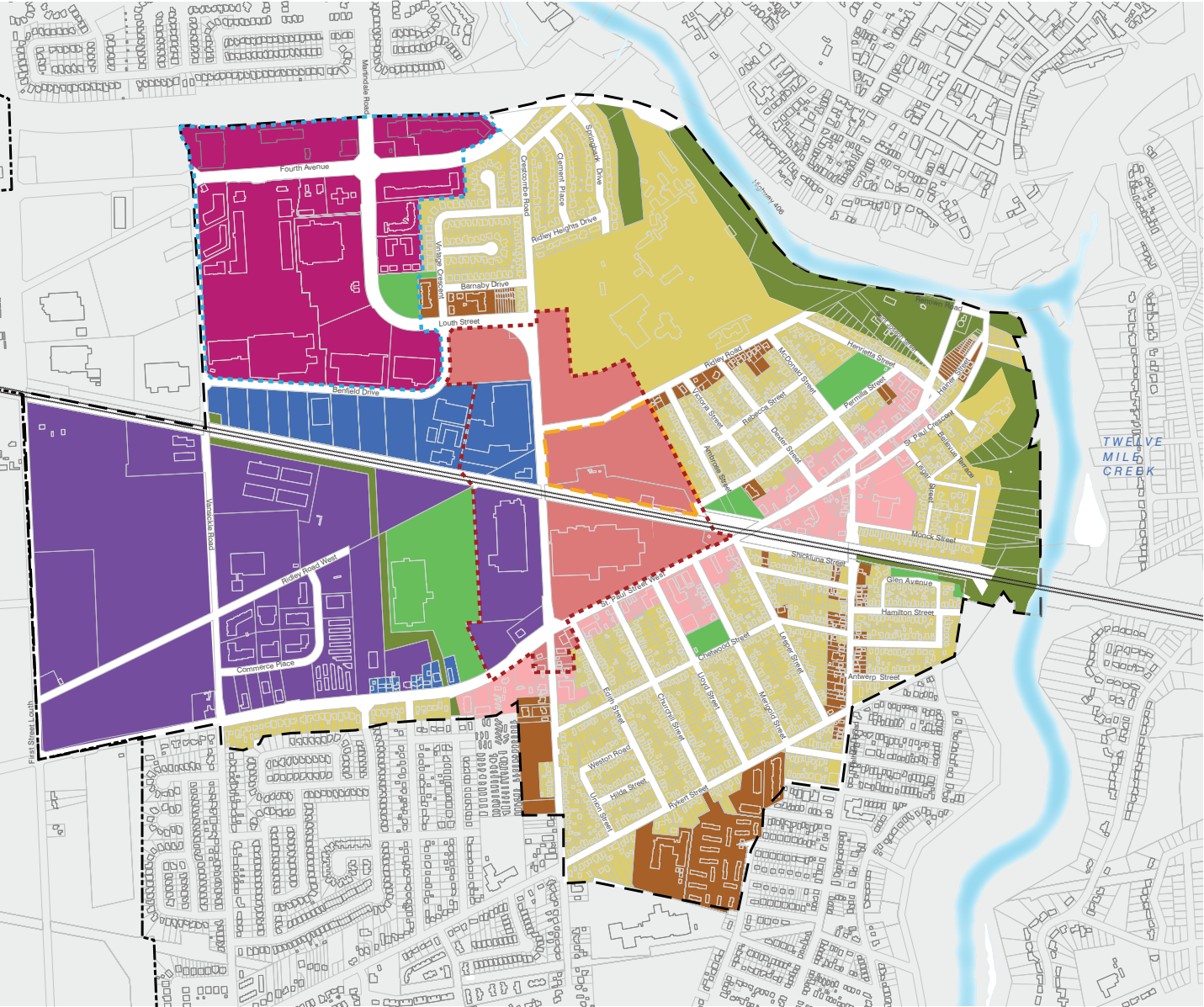
Schedule 1: Secondary Plan Area



- LEGEND
- Transit Station Area will be refined based on the land needs of the Station.
 - Secondary Plan Limits
 - Urban Area Boundary



Schedule 2: Land Use Plan



- LEGEND
- Low Density Residential
 - Medium Density Residential
 - High Density Residential
 - Mixed Use 1 (Low-Mid Scale Intensity)
 - Mixed Use 2 (Mid-High Scale Intensity)
 - Mixed Use 3
 - General Employment
 - Business Commercial Employment
 - Parkland and Open Space
 - Natural Areas
 - Transit Station Area will be refined based on the land needs of the Station.
 - Louth Centre Node
 - West Transit Station Area
 - Secondary Plan Limits
 - Urban Area Boundary



4.2.3 Low Density Residential

Planned Function

The planned function of the Low Density Residential designation is to provide opportunities for ground oriented housing in a low density format. The intention of this designation is to recognize the existing, established low density residential neighbourhoods within the Plan Area. Areas which are designated for low density residential development are expected to be maintained as low density areas and should not be the focus of significant intensification.

Permitted Uses

Permitted uses include residential uses as follows:

- a. Detached dwellings;
- b. Semi-detached dwellings;
- c. Duplex;
- d. Triplex;
- e. Quadruplex;
- f. Fourplex;
- g. Townhouses; and
- h. Ancillary uses, as outline in policy 8.3 of the St. Catharines Official Plan.

Density and Scale

The permitted density for new low density residential is up to a maximum of 32 units per hectare with a minimum net density of 20 units per hectare.



Example of low density residential development in the form of single family houses.

4.2.4 Medium Density Residential

Planned Function

The planned function of the Medium Density Residential designation is to provide opportunities for residential development in a medium density format in proximity to existing residential uses. A diversity of dwelling types is encouraged to support the City's range of accommodation options and housing intensification objectives.

Permitted Uses

Permitted uses include residential uses as follows:

- a. Detached dwellings;
- b. Semi-detached dwellings;
- c. Duplex;
- d. Triplex;
- e. Quadruplex;
- f. Fourplex;
- g. Townhouses; and
- h. Apartments.

Density and Scale

The permitted density for new medium development residential development shall range from a minimum residential density of 25 units per hectare up to a maximum of 99 units per hectare.



Example of medium density residential development in the form of stacked townhouses.

4.2.5 High Density Residential

Planned Function

The planned function of the High Density Residential designation is to provide opportunities for residential development in higher intensity development format. Diversity of dwelling types is encouraged to support the City's range of accommodation options.

Permitted Uses

Permitted uses are as follows:

- a. Triplex;
- b. Quadruplex;
- c. Fourplex;
- d. Townhouse; and,
- e. Apartment dwelling.

Density and Scale

Residential development within the High Density designation shall have a density of 85 units per hectare or more.



Example of high density residential development in the form of an apartment building.

4.2.6 Mixed Use 1

Planned Function

The Mixed Use 1 designation establishes opportunities for a broad range and mix of uses primarily intended to serve the immediate neighbourhood and community population. Mixed Use 1 designations are located along key corridors within the Plan Area, and provide for smaller scale, transit supportive uses, and street animated development in a medium density format designed to support the character of the surrounding neighbourhood.

Uses can be mixed across a parcel of land or mixed within a building. Commercial and other non-residential uses should be located on the ground floor of buildings close to the front property line to help frame and animate the street.

Permitted Uses

- a. triplex, fourplex, townhouse and low- and apartment dwellings;
- b. retail, service commercial, office, institutional, indoor recreation and community and cultural facilities;
- c. work-live accommodation is encouraged to locate in campus format to support integrated and shared support services and business incubation opportunities.

Density and Scale

Height will be restricted to ensure street animated development and to recognize the character of surrounding neighbourhoods. Residential development within the Mixed Use 1 designation shall be planned to meet a minimum density of 100 people and jobs per hectare.

Form of Mixed Use Development and Redevelopment

Large format uses are discouraged. Commercial, institutional and recreation buildings should not exceed 930 square metres in gross floor area, and where in excess of 620 square metres of gross floor area, shall only be permitted in combination with residential units.

Individual non-residential uses should not exceed 370 square metres in gross leasable floor area.

Retail and service commercial uses are permitted on the ground floor of a building; or on upper floors of a building where in conjunction with a retail or service commercial use on the ground floor.

Loading areas, outside storage not intended for retail display and sale of merchandise, and waste management facilities will be located away from, and screened from view of

pedestrian and vehicular activity areas, internal and external roads, and adjacent uses.

Outside areas intended for retail display or sale of merchandise will be regulated through the Zoning By-law to ensure ancillary use, minimize negative impacts on pedestrian, bike, transit and vehicular circulation, and enhance building, site and streetscape context sensitive design.

Exceptions

Vehicle sales and auto related service facilities are not permitted. Gas bars and car washes may be permitted subject to zoning by-law amendment as per Section 12.1 viii) of the Official Plan.

Notwithstanding the Mixed Use 1 designation on lands known as 1 Monck Street, the continuation of existing institutional uses is permitted subject to Section 8.3.2 of the Official Plan, except for 8.3.2 i) and ii).



Example of a medium density mixed-use building with ground level commercial and upper level residential uses.

4.2.7 Mixed Use 2

Planned Function

The Mixed Use 2 designation permits a broad range and mix of uses intended to serve the neighbourhood and community population, as well as an intra- and inter- regional population and market.

This designation provides opportunities for transit supportive medium and higher density residential and mixed use development, and larger scale developments intended to support the optimum development and use of the West Transit Station Area as set out on Schedule 2.

Lands designated Mixed Use 2 are wholly contained within the West Transit Station Area as set out in Part C, Section 5.8 ii) of the Official Plan, and identified on Schedule 2.

The Mixed Use 2 designation within this Area is the focus for medium and higher density residential development with a mix of small scale, ground oriented commercial, institutional, recreation and community and cultural uses; and accompanied by required transit station uses, functions and amenities.

Permitted Uses

Permitted uses include:

- a. triplex, fourplex, townhouse and apartment dwellings;
- b. retail, service commercial, office, institutional, indoor recreation and community and cultural facilities;
- c. work-live accommodation is permitted and encouraged to locate in campus format to support integrated and shared support services and business incubation opportunities

- d. transit station uses, functions and amenities.

Density and Scale

This designation is planned to accommodate a minimum development density equivalent to 150 people and jobs per hectare.

Form of Mixed Use Development and Redevelopment

- e. Retail and service commercial uses are permitted on the ground floor of a building; or on upper floors of a building where in conjunction with a retail or service commercial use on the ground floor.
- f. Loading areas, outside storage not intended for retail display and sale of merchandise, and waste management facilities will be located away from, and screened from view of pedestrian and vehicular activity areas, internal and external roads, and adjacent uses.
- g. Outside areas intended for retail display or sale of merchandise will be regulated through the Zoning By-law to ensure ancillary use, minimize negative impacts on pedestrian, bike, transit and vehicular circulation, and enhance building, site and streetscape context sensitive design.
- h. Commercial, institutional, recreation or cultural buildings should not exceed 930 square metres in gross floor area, and where in excess of 620 square metres of gross floor area, should only be permitted in combination with residential units.
- i. Individual non-residential uses should not 370 square metres in gross leasable floor area, except for required transit related uses.

Exceptions

Notwithstanding the Mixed Use 2 designation on lands known as 230 Louth Street and 200 St. Paul Street West, the continuation of existing General Employment uses are permitted subject to the applicable policies of the Official Plan.

- Vehicle sales and auto related service facilities are not permitted. Gas bars and car washes may be permitted subject to zoning by-law amendment as per Section 12.1 viii) of the Official Plan.
- The lands designated Mixed Use 2 at the northeast corner of Louth Street and Ridley Road should be developed at a maximum density range of 100 people and jobs per hectare.

4.2.8 Mixed Use 3

Planned Function

The Mixed Use 3 designation permits a broad range and mix of uses intended to serve the neighbourhood and community population, as well as an intra and inter- regional population and market.

Lands designated Mixed Use 3 are wholly contained within the Louth Centre Node as set out on Schedule 2, and is generally bound Highway 406 to the north, the rear lot lines of properties fronting on the east side of Louth Street, Benfield Drive to the east and south, and Vansickle Road to the west.

The Louth Centre Node has grown and developed as an established large scale commercial centre supporting a community and regional destination and marketplace.

The Mixed Use 3 designation within this Area is intended to support the maintenance of the large scale commercial centre within the Node. The designation also supports the integration and intensification of transit supportive medium and higher density residential uses, and mixed use development, to enhance the Node as a neighbourhood, community and regional destination and marketplace, and to support and strengthen the optimum use of the adjacent West Major Transit Station and surrounding lands.

Permitted Uses

Permitted uses include:

- a. fourplex and apartment dwellings;
- b. retail, service commercial, office, institutional, indoor recreation and community and cultural facilities;

- c. work-live accommodation is permitted and encouraged to locate in campus format to support integrated and shared support services and business incubation opportunities.

Density and Scale

This designation is planned to accommodate a minimum development density equivalent to 150 people and jobs per hectare.

Form of Mixed Use Development and Redevelopment

- a. Residential uses may be located in freestanding buildings or in upper storeys of mixed use buildings, and will provide adequate outdoor amenity space for residents.
- b. Freestanding residential buildings should not occupy more than 20 % of the individual lot area.
- c. Retail, service commercial and other non-residential uses are permitted on the ground floor of a building; or on upper floors of a building where in conjunction with a retail, service commercial and other non-residential use on the ground floor.
- d. New commercial, institutional, recreation or cultural buildings in excess of 1860 square metres in gross floor area shall only be permitted in conjunction with residential units in a mixed use building.
- e. Notwithstanding iii) above, existing non-residential buildings are permitted to expand for non-residential uses without a residential provision.
- f. Lands designated Mixed Use 3 within the Louth Centre Node as illustrated on Schedule E2 will be designed to support:

- development in campus and nodal format, supporting connectivity of uses, functions, infrastructure and amenities between properties;
- in future, a network of public streets as per Section 5.1.2 of this Study and identified on Schedule 7;
- integrated and shared access and parking;
- minimize strip and linear development, and private driveway access points along roads;
- well defined and clearly articulated street edges;
- adequate on-site parking to accommodate all uses;
- safe internal vehicular traffic circulation, and minimize traffic impacts on adjacent roads;
- safe, connected, convenient, accessible and barrier free pedestrian and bike networks within and adjacent to the Louth Centre Node;
- common, integrated landscape and design features;
- parking area landscaping and greening, and pod parking design;
- convenient, accommodating and accessible transit facilities.
- g. Loading areas, outside storage not intended for retail display and sale of merchandise, and waste management facilities will be located away from, and screened from view of pedestrian and

vehicular activity areas, internal and external roads, and adjacent uses.

- h. Outside areas intended for retail display or sale of merchandise will be regulated through the Zoning By-law to ensure ancillary use, minimize negative impacts on pedestrian, bike, transit and vehicular circulation, and enhance building, site and streetscape context sensitive design.

Exceptions

The northeast and southeast quadrants of Louth Street/Martindale Road and Fourth Avenue may be developed at a minimum density of 80 people and jobs per hectare.

There is no % lot area restriction for freestanding residential buildings on the properties known municipally as 412 and 448 Louth Street.



Example of a lively high density mixed use building with an activated street frontage.



4.2.9 General Employment

Planned Function

The General Employment is intended to provide for a full range of industrial operations, industrial service uses, knowledge based employment and business opportunities. In addition, a limited range of retail, service commercial, entertainment, recreation, institutional, and office uses primarily intended to serve and support the businesses and employees within the immediate employment area.

Permitted Uses

Permitted uses include:

- a. Industrial operations, transportation terminals, repair activities, service trades, construction activities, warehouse, storage, car wash;
- b. Knowledge based research, technology, service, communications, information, management uses, adult oriented uses;
- c. Major large scale recreation uses;
- d. Small scale subordinate retail, service commercial, office, indoor recreation, entertainment and institutional uses intended primarily to serve and support the business and employees within the immediate employment area.
- e. All uses shall generally be permitted only within enclosed buildings and may have outside storage and/or processing areas subject to the implementing zoning bylaw and only where adequately screened from view from lands designated residential, commercial or open space or lands used for large scale public institutional uses and where not located in a yard facing an arterial or collector road or provincial highway.



Example of high-end employment facility design.





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Existing industrial uses on St. Paul Street West, St. Catharines.

4.2.10 Business Commercial Employment

Planned Function

The Business Commercial designation is intended to provide for a range of industrial operations and industrial service uses, knowledge based employment and office uses, and a limited range of retail, service commercial, indoor recreation, entertainment, cultural and institutional and office uses to service employment uses and also the community at large.

Permitted Uses

Permitted uses include:

- a. Uses defined under section 10.3.1 and 10.3.2 of the St. Catharines Official Plan.
- b. Retail, service commercial, indoor recreation and institutional uses where they are subordinate to the principal employment use(s) of the property, do not include places of worship, elementary or secondary schools and the total combination of all such uses shall generally not exceed 30% of the total floor area of all buildings on the property.

- c. Hotels, convention centres and auto commercial uses, major large scale institutional uses, office.

All uses are permitted only within enclosed buildings. Limited outside storage may be permitted subject to zoning by-law regulation, and only where adequately screened from view, and should not be located in a yard facing a residential designation, or an arterial or collector road or Provincial highway.



Example of lower density business commercial area.

Photo Credit: Town of Jefferson

4

4.2.11 Parkland and Open Space

Please refer to section 13.1 of the St. Catharines Official Plan for the planned function and permitted uses within the Parkland and Open Space designation. New recreation and open spaces shall be provided for based on the public realm policies, as outlined in Section 5.0 (Urban Design Guidelines) of this Study.

In general, the public realm policies outlined in Section 5.0 are intended to ensure that a high quality public realm, open space, and protected environment is achieved. The policies define an open space framework that links outdoor spaces through the creation of new parks, gateways, streetscape improvements, and active transportation paths to create a unique, beautiful, and healthy public realm environment. The public realm guidelines also provides guidance and direction for future investment into new parks, trails, streetscapes, sidewalks, and green spaces.

4.2.12 Land Use Compatibility

Employment Uses

New development is subject to the Ontario Ministry of Environment and Climate Change D-6 Guidelines for Land Use Compatibility. New development should be oriented and designed to avoid land use compatibility and implications on surrounding employment uses.

4.2.13 Building Height

The planned maximum building heights are shown on **Schedule 3**. The height depicted on **Schedule 3** are intended to reflect the planned maximum number of storeys and the following policies apply:







- a. On a site-by-site basis, the City may allow for marginal taller buildings where the findings of supporting studies, such as an urban design study and light/shadow study can demonstrate that there are no negative impacts on adjacent properties; and

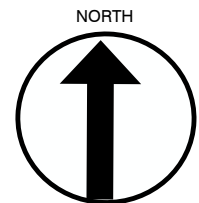
- b. The City may require a peer review of any studies which propose to exceed the planned building heights.




Example of active transportation connection through a park.

[illegible]

 Max. 3 Storeys
 Max. 4 Storeys
 Max. 6 Storeys
 Max. 10 Storeys
 Max. 16 Storeys
 Max. 20 Storeys
 Secondary Plan Limits
 Transit Station Area will be refined based on the land needs of the Station.
 Urban Area Boundary



Scale 

4.3 Policy Overlay Area

4.3.1 Transit Station Area

In addition to the policies in Section 4.0 of the City's Official Plan, and as defined in the Metrolinx Mobility Hub Guidelines, the Primary Transit Station Area includes the rapid transit station and associated facilities (e.g., parking, operations, etc.). The Transit Station overlay has been included to identify the site that will accommodate the Primary Transit Station Area and the immediate surrounding lands.

Development and redevelopment within the Transit Station Area overlay shall be evaluated having regard for the following additional policies:

- Offer a high level of accessibility with priority for high levels of pedestrian and transferring activity, while adequately balancing multiple modes of access to the station;
- Provide enhanced traveller amenities, including internal pedestrian pathways, secure bike parking, mixed uses, retail, shared commuter parking, etc;
- Maximize development opportunities and orient new buildings toward Louth Street, Ridley Road and new public roads;
- In addition to the policies of Part C, Section 3 Cultural Heritage of the Official Plan, character of new development shall complement the heritage railway station and the character of Ridley College;
- Building heights shall transition heights down from a maximum of generally up to 16 storeys at the corner of Ridley Road and Louth Street, to generally up to 6 storeys where adjacent to the Low Density Residential land use designation at the east boundary of the Transit Station Area. If necessary, building height and scale may be further reduced in the implementing Zoning By-law to achieve compatibility adjacent to the Low Density Residential land use designation;
- To achieve compatibility adjacent to the Low Density Residential area, increased yard setbacks may be required in the implementing Zoning By-law, where appropriate. The approved GTSSP Urban Design Guidelines will inform the Zoning By-law in this regard.
- Physical buffers such as landscaping, berms and fencing shall be required to mitigate development impact on the adjacent Low Density Residential area.
- Adequate wayfinding and signage solutions are required for the Transit Station site.
- Ensure that development proposals (transit station site or private developments) do not limit the development potential of surrounding lands. Land available for transit-supportive development adjacent to the transit station should be optimized. Proposals must consider how surrounding lands can be developed in an integrated manner within the Transit Station Area and the surrounding environment; and
- The height of parking structures will generally not exceed 5 storeys. Parking structures are to be located and designed in a manner so as to minimize



Existing VIA Station in St. Catharines.

compatibility issues with surrounding land uses, including but not limited to issues of:

1. Traffic and access
2. Shadow impacts
3. Light trespass

The transit station site should be planned to promote travel behaviour according to the following hierarchy:

- Vehicle trip reduction: encourage a mix of land uses within and around the station site, and enhance intermodal connection to avoid vehicle trips
- Walking and cycling: enhance access for pedestrians and cyclists, including a network that connects surrounding public streets and spaces
- Transit: provide efficient access and egress for transit vehicles
- Ridesharing: promote access for high occupancy vehicles such as carpools
- Car sharing and taxis: site design that facilitates efficient car sharing and passenger drop-off
- Single-occupancy vehicles: provide safe and efficient automobile parking and access, with a sufficient but not excessive amount of parking.



Example of mid-rise office buildings.

4.3 Transportation Policies

4.3.1 Transportation Network

The Secondary Plan Area is planned to be served by a multi-modal, integrated transportation network, which accommodates pedestrians, cyclists, transit users and automobiles. Presently, there are several transportation challenges in the area and the expectation is that there will continue to be challenges as the area grows. Accordingly, there is a need to plan for a variety of improvements

to better connect people to destinations and also allow people to move through the area in a safe and efficient manner without requiring an automobile. The expectation is that improvements will be required to enhance walking, cycling, transit and automobile networks within and around the area to ensure that an appropriate balance of transportation options are provided and non-auto modes are prioritized. The transportation network must provide for a better balance of the full range of transportation modes.

The transportation network and improvements identified in the Plan build on the City's and Region's planned transportation improvements, as outlined in a number of approved plans. The implementation of the proposed transportation infrastructure improvements should be undertaken as part of the Region's and City's Transportation Master Planning process/EA process and/or development approvals process (as the case may be). All transportation infrastructure should follow TAC and OTM standards and guidelines, as well as MTO's Transit Supportive Guidelines.



Shared roadway along St. Paul Street West, St. Catharines.

4.3.2 Improvements and Enhancements to Transportation Network

The Secondary Plan contemplates the following potential improvements to the transportation network:

- Active transportation improvements;
- Transit improvements; and,
- Road improvements and connections.

4.3.3 Planned Road Hierarchy

The planned road hierarchy is shown on **Schedule 4**, illustrating Arterial Roads, Collector Roads and Local Roads. The following policies describe the general planned function for each road type. Section 5.0 elaborates further on the unique functionality and design of the key streets within the Secondary Plan Area.

Arterial Roads (20-30 metre ROW)

Arterial Roads are generally under the jurisdiction of the Region of Niagara and are planned to accommodate 2 to 4 lanes of traffic within approximately 20 to 30 metre right of ways. Direct access to adjoining properties and on-street parking is generally restricted to allow for the movement of traffic through the area. The road allowance is planned to accommodate a complete street framework, including transit stops and passenger amenities, bicycle facilities such as bike lanes, shared use lanes, paved shoulders and bicycle parking facilities and sidewalks on both sides of the street, as well as streetscape elements such as boulevards, trees, and landscaping. On-street parking is generally not permitted on Arterial Roads. Regional Arterial Roads within Secondary Plan Area include:

- Fourth Avenue, between First Street Louth and Third Avenue (30.5 metre right of way);
- Louth Street, between St. Paul Street West and CN railway (26.2 metre right of way);
- Louth Street, between CN railway corridor and Fourth Avenue (21.6 metre right of way);
- Louth Street, between St. Paul Street West and Rykert Street (20.1 metre right of way);
- St. Paul Street West (26.2 metre right of way); and,
- Pelham Road (26.2 metre right of way).

Collector Roads (20 metre ROW)

Collector Roads are under the jurisdiction of the City and are planned to accommodate 2 lanes of traffic. Collector Roads are undivided with a road allowance width of 20 metres, allowing for the addition of turning lanes, bicycle lanes, boulevards, trees, landscaping, sidewalks on both sides of the street and utilities. On-street parking is generally not permitted on Collector Roads. Rykert Street is the only Collector Road within the Secondary Plan Area.

Local Roads (up to 20 metre ROW)

Local Roads provide access to properties and carry traffic predominantly of a local nature. Typically, roadways in this section carry low volumes of traffic short distances. Local roads generally are designed to accommodate on-street parking, sidewalks on both sides of the street and landscaping in the boulevards. All local road allowances are to be up to 20 metres in width.

4.3.4 Planned Road Improvements and Connections

Schedule 5 illustrates new connections, road widening and other road improvement opportunities which are intended to support the implementation of the Secondary Plan. The current road network has some challenges and some improvements will be required to address existing issues and to also accommodate intensification as well as provide safe and efficient access to the GO Transit Station. This will necessitate the need for improvements to the transportation network, including modifications to the improvements to the active transportation network, transit services and road network.

The following summarizes the key road-related improvements (note that a number of the improvements noted below also coincide with recommended streetscape improvements which are further addressed in Section 5):

1. Louth Street Potential Widening

Louth Street (Regional Road 38) is currently two lanes wide between Crestcombe Road and Rykert Street and four lanes wide between Fourth Avenue and Crestcombe Street. The street provides access and connectivity to a number of employment and large format retail areas in the area. Fourth Avenue connects Louth Street to Highway 406 at the north end of the street. Within the Secondary Plan Area, Louth Street connects to Ridley Road, which is intended to be the primary GO Transit Station access point.

Louth Street is expected to see increasing volumes over the planning horizon, in particular between St. Paul Street West and Fourth Avenue. Therefore, Louth Street may need to be



widened from two to four lanes between St. Paul Street West and Vintage Crescent. Additional operational improvements should also be considered, particularly at the intersection of Ridley Road. If a future widening occurs, the road shall be developed as a complete street.

2. Reconstruction of St. Paul Street West bridge and St. Paul Street West Potential Widening

St. Paul Street West (Regional Road 81) is currently a two lane road which provides access and connectivity to the Downtown to the east and employment lands to the west.

The Niagara Region is currently planning the reconstruction of the St. Paul Street West rail overpass bridge, which may affect access to the Transit Station site from St. Paul Street West via Great Western Street.

West of Louth Street, St. Paul Street West is expected to see increasing traffic volumes over the planning horizon, particularly between Louth Street and Vansickle Road. Therefore, St. Paul Street West may need to be widened in this section. Additional operational improvements should also be considered. If a future widening occurs, the road shall be developed as a complete street.

3. Potential reconfiguration of Ambrose Street, Permillia Street, Great Western Street and Cameron Park

As a result of the St. Paul Street West bridge reconstruction, access to the Station site from Great Western Street may be eliminated, or Great Western Street may be reduced to a westbound one way. At the time of the bridge redesign the City will consider the reconfiguration of Ambrose Street and Permillia Street in this area, as they relate to their connections to Great Western Street. As a result of potential closures

and reconfigurations in this area, there is an opportunity to expand Cameron Park. It is a priority of the Secondary Plan to see the use of Cameron Park maintained and improved.

4. Traffic Management Study Area

A Traffic Management Study Area has been identified on Schedule 5. The City will undertake this Study with the objective of limiting potential cut-through traffic and infiltration through the identified residential neighbourhood. The Study will make recommendations aimed at reducing the amount of infiltration through the neighbourhood, as well as mitigating any impacts that could occur.

The Study will consider the effects of other potential roadway improvements and connections, including the reconfiguration of Great Western Street, Ambrose Street and Permillia Street.

5. Realignment of Ridley Road

Ridley Road is planned to be the primary access point for the GO Transit Station, and provides development and intensification opportunities adjacent to the station. A realignment of Ridley Road should be considered to increase the separation distance between Ridley Road and the rail crossing on Louth Street. The intersection of Ridley Road and Louth Street should be redesigned to accommodate a right angle intersection at Louth Street and the need for a traffic signal shall be evaluated. Potential operational issues resulting from the realignment will also need to be assessed.

6. Intersection Improvements and Lane Widening at Martindale Road and Highway 406

The intersection of Fourth Avenue and Louth Street/Martindale Road will remain a key location under future traffic conditions examined

through this Study, and will operationally be approaching or at capacity, especially in the PM peak hour. The intersection should be considered for additional operational improvements, including the potential to widen the Martindale Road crossing over Highway 406 from two to four line, with the introduction of bike lanes.

7. Active transportation improvements to Fourth Avenue

The Fourth Avenue overpass and interchanges to Highway 406 are currently not pedestrian- or cyclist-friendly. Improvements to this area should prioritize the active transportation network while balancing pedestrian and cyclist safety with automobile access to the freeway.

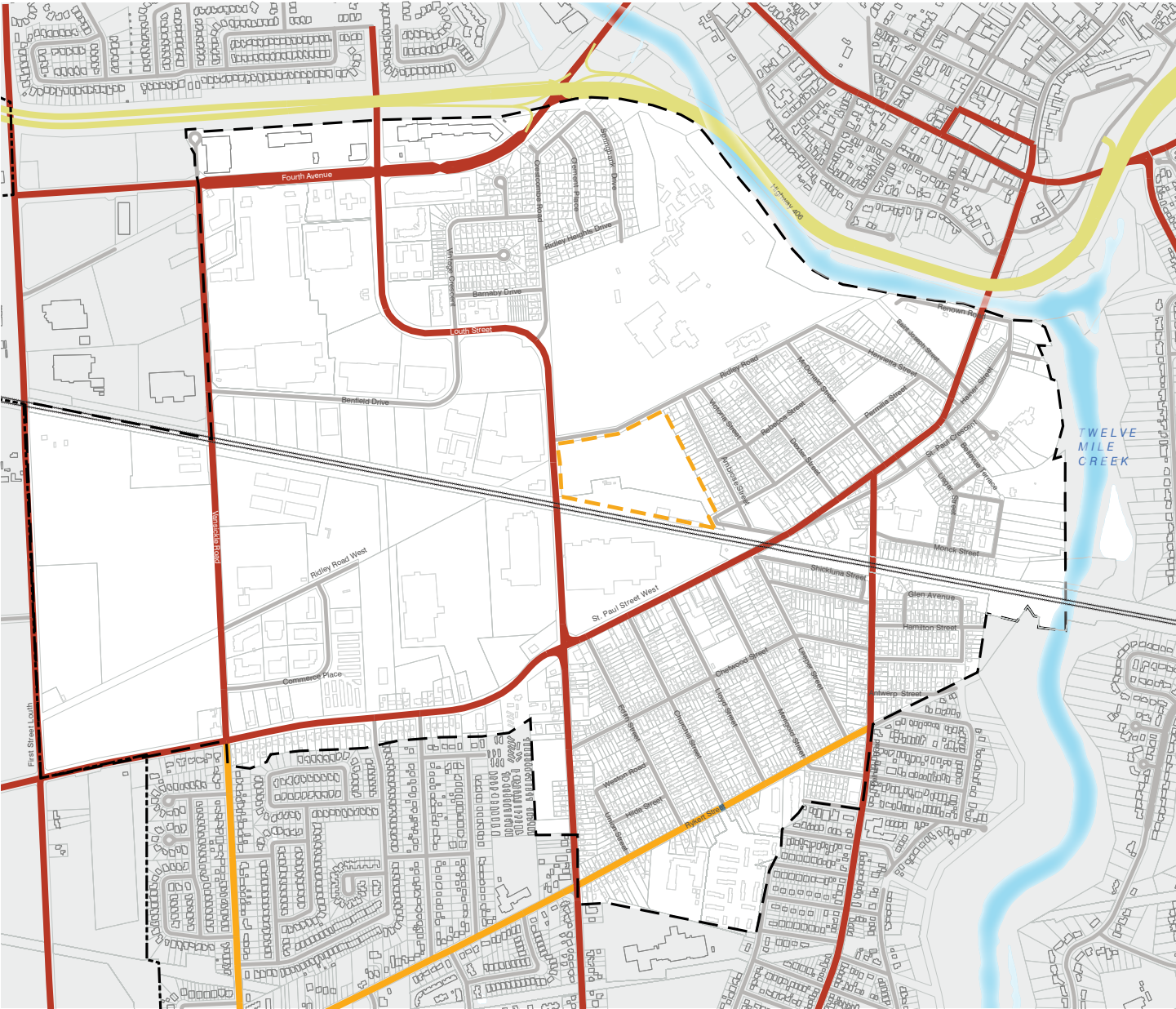
8. Geometric Improvements to Pelham Road

There is an opportunity to examine the intersection of St. Paul Street West and Pelham Road to improve the current configuration.

9. New street from Ridley Road to Station Site

A new public street may be needed to facilitate the movement of pedestrians and traffic from Ridley Road to the Station Site. The new road would serve as the primary means of access for vehicular traffic to the site. It shall be designed to enhance access for pedestrians and cyclists and provide efficient access and egress for transit vehicles. The new road allowance will be located in a manner so as to maximize development opportunities on remnant parcels. Operationally, the new road allowance will be located to achieve adequate separation distances from existing intersections.

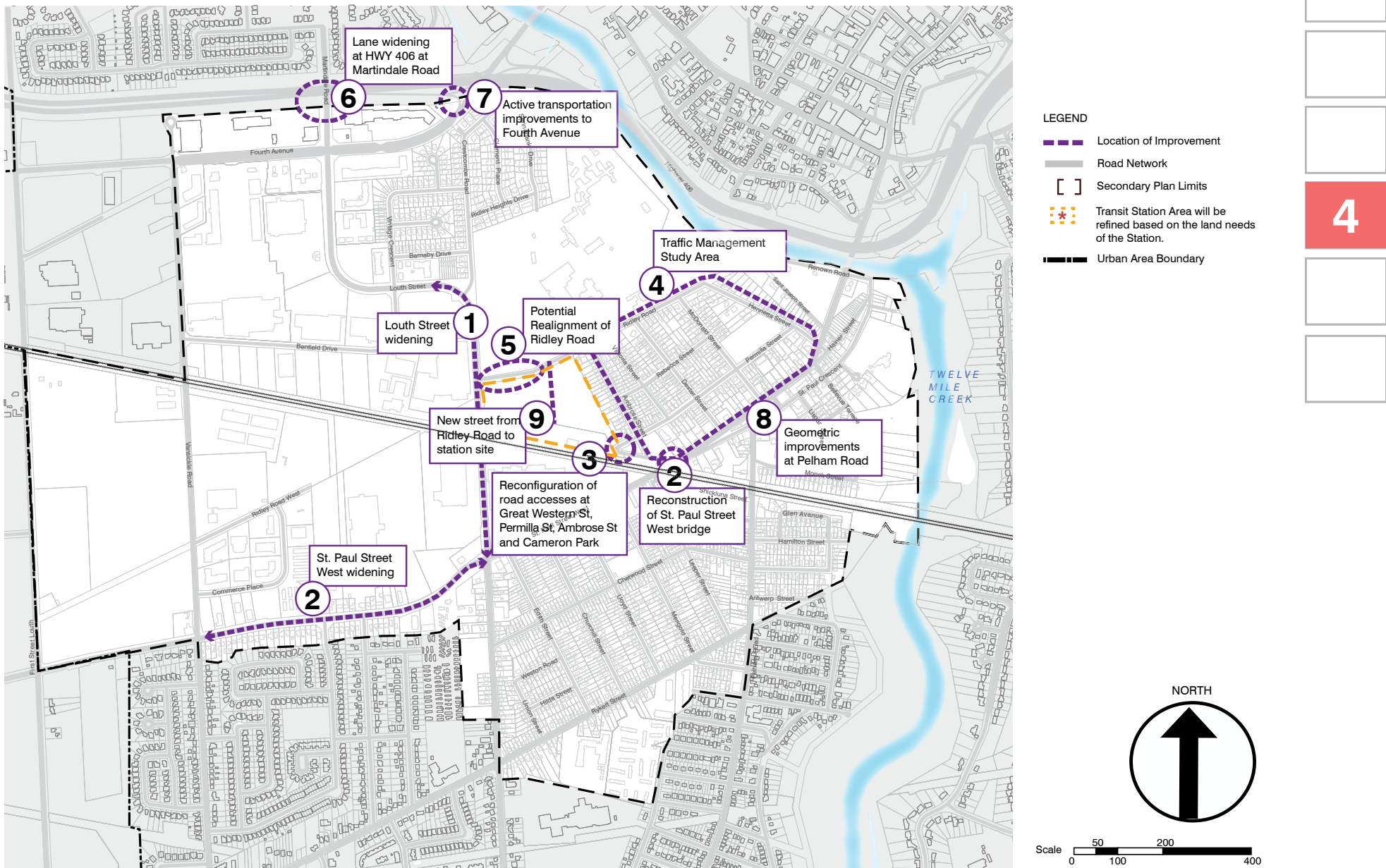
Schedule 4: Planned Road Network



- LEGEND**
- Provincial Highway
 - Highway Ramp Connections
 - Arterial Road
Width: 20-30m
 - Collector Roads
Width: 20m
 - Local Roads
Width: Up to 20m
 - [] Secondary Plan Limits
 - [X] Transit Station Area will be refined based on the land needs of the Station.
 - Urban Area Boundary
- Note: Numbers after street name on map indicate road width.



Schedule 5: New Road Connections and Improvements



4.3.5 GO Transit Station Area

The GO Transit Station Area is located to the east of Louth Street at the intersection of Ridley Road. The station includes lands on the north side of the CN rail corridor. The design of the Station Area will be planned to address the following elements:

- Access to the Station Area for pedestrians, cyclists, transit users, kiss and ride and carpool users;
- A sufficient supply of parking for commuters (it is a priority to save the size and shape of Cameron Park through the bridge redesign process);
- Wayfinding solutions;
- Buffering and landscaping for adjacent natural heritage features; and,
- Opportunities for universal access and incorporation of sustainable design measures.



Existing St Catharines VIA Station waiting area.

4.3.6 Active Transportation Network

The existing and planned Active Transportation Network is depicted on **Schedule 6**. The network is planned to improve connectivity for pedestrians and cyclists within the Secondary Plan Area and to surrounding areas.

4.3.7 Active Transportation Improvements

The active transportation network should provide direct and safe connections to the GO Transit Station, transit stops, multi-use trails, public spaces and parks, schools, mixed use areas, employment opportunities and recreational facilities. Amenities for cyclists and pedestrians (such as bike parking, seating, and shaded areas) should be located at key points along the network. There are a number of active transportation improvements proposed for the area, including the following:

- On-Road Bike Route/Lanes (on-road):
 - Ridley Road;
 - St. Paul Street West;
 - Louth Street;
 - Vansickle Road (between Ridley Road West and St. Paul Street West);
 - Henrietta Street (between Ridley Road and St. Paul Street West);
 - St. Paul Crescent; and,
 - Great Western Street.
- Multi-Use Trail (off road):
 - Multi-use Trail through the GO Transit Station between St. Paul Street and Ridley Road.



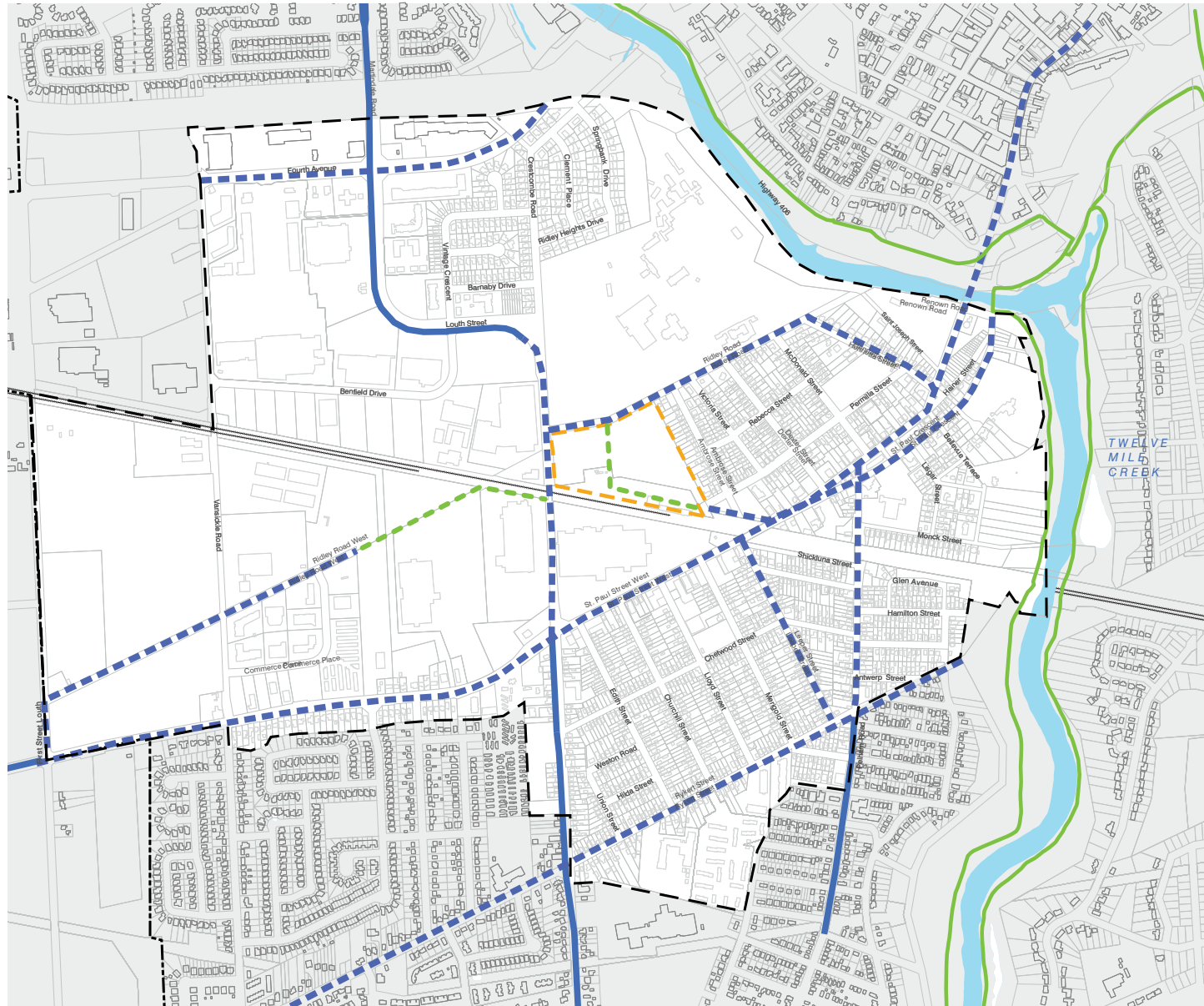
Example of sidewalk improvements to facilitate pedestrian access.



Example of active transportation connection across Burgoyne Bridge.

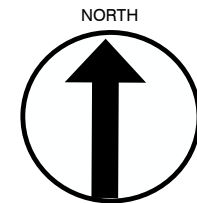


Schedule 6: Planned Active Transportation Network



LEGEND

- Existing Bike Route/Lane (On-Road)
- - - Planned Bike Route/Lane (On-Road)
- Existing Multi-Use Trail (Off-Road)
- - - Planned Multi-Use Trail (Off-Road)
- Secondary Plan Limits
- Transit Station Area will be refined based on the land needs of the Station.
- Urban Area Boundary



Scale
0 50 100 200 400



4.3.8 Traffic Management Study Area

The Secondary Plan Study has identified a traffic management study area for the residential neighbourhood between Ridley Road, St. Paul Street West, Ambrose Street and Henrietta Street. New traffic calming measures are intended to limit potential cut-through traffic between the Downtown and the GO Transit Station and reduce the impacts of traffic infiltration on this stable residential neighbourhood. While access to the GO Transit Station from St. Paul Street West is provided on the westbound approach, there is no direct eastbound access. This may result in an increased volume of cut-through, particularly during the PM peak period. The access routes to the Transit Station via Great Western Street as well as Ambrose Street may also be closed or changed to one-way.

The City will undertake a Traffic Management Study in this neighbourhood in order to reduce traffic infiltration and mitigate any potential impacts.

4.3.9 Secure Bike Parking Facilities

The implementing Zoning By-law should require the provision of secure bicycle parking facilities in a conspicuous location, long-term bike parking areas within buildings and onsite shower facilities and lockers for employees who bike to work. The City may allow for the reduction in the number of required parking spaces where bicycle parking facilities are provided.

4.3.10 Transportation Demand Management

Where a Transportation Demand Management (TDM) Plan is required as part of a complete application in accordance with Section 16.16 of the Official Plan, the TDM Plan will be to implement and promote measures to reduce the use of low-occupancy automobiles for trips and to promote cycling and walking. The City may develop of a city-wide TDM Strategy to provide guidance for future development on the integration of TDM and transit-supportive design best practices.

4.3.11 Traffic Impact

Future developments may require a Traffic Impact Assessment. Any Traffic Impact Assessment shall be subject to the Regional Traffic Impact Assessment Guidelines where a Regional road is impacted.

4.3.12 Parking

In addition to the policies of Section 5.4.2 of the Official Plan, parking requirements across the Secondary Plan Area may be minimized, and shared parking and access is encouraged in order to reduce street front parking areas and support transit friendly development;

4.3.13 Future Transit System

The local transit network should be refined to provide connections to the GO Transit Station, link the GO Transit Station with the downtown and bus terminal and provide an integrated transit network that allows efficient travel between modes.

4.4 Infrastructure

4.4.1 Water and Sanitary Servicing

As part of the implementation of the Secondary Plan Study, the City will work with the Region to ensure that there is adequate water and sanitary servicing and capacity to accommodate the long term planned development for the Secondary Plan Area.

4.4.2 Municipal Servicing Study

As part of the implementation of the Secondary Plan Study, the City will undertake an analysis of local infrastructure to ensure that adequate servicing is in place to accommodate the planned growth for the area. The City will update its municipal master servicing strategy as required.

4.4.3 Development Applications and Servicing Requirements

The City may also require development applications to be supported by site-specific servicing studies.

4.4.4 Sustainable Stormwater Management

The municipality encourages innovative measures to help reduce the impacts of urban runoff and maintain base groundwater flow. Such measures may include bioswales, permeable pavers, rain barrels and green roofs.

4.4.5 Coordination of Public Works

The City will work with the Region to ensure that planned public works for the area are coordinated to minimize the impacts of construction on the residents and businesses within the Secondary Plan Area. Coordination efforts will consider the phasing of streetscape improvements, any future road works and maintenance, as well as any upgrades to water and sanitary networks.



Example of bio-swales installed in a parking area to improve stormwater management.



Existing commercial on St. Paul Street, looking north off William Street, St. Catharines.



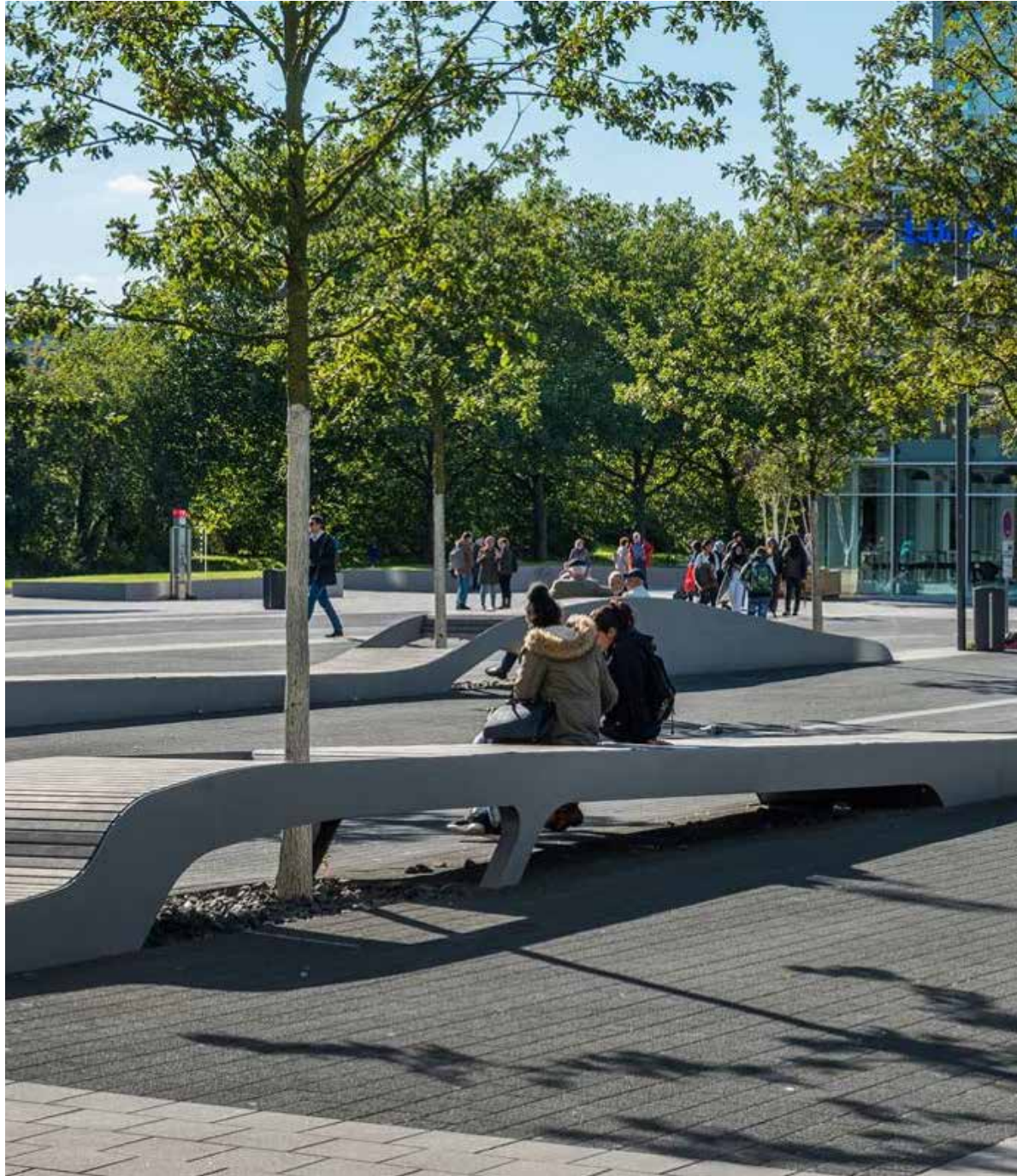
5.0 URBAN DESIGN

The following section provides the urban design policies and guidelines for the Secondary Plan Area. The purpose of these policies is to provide guidance for enhancing the character of the area, including both the private and public realm. The policies are intended to provide a degree of flexibility, allowing for a range of design styles and expressions which will contribute to creating a unique sense of place.

5.1 Urban Design Improvements

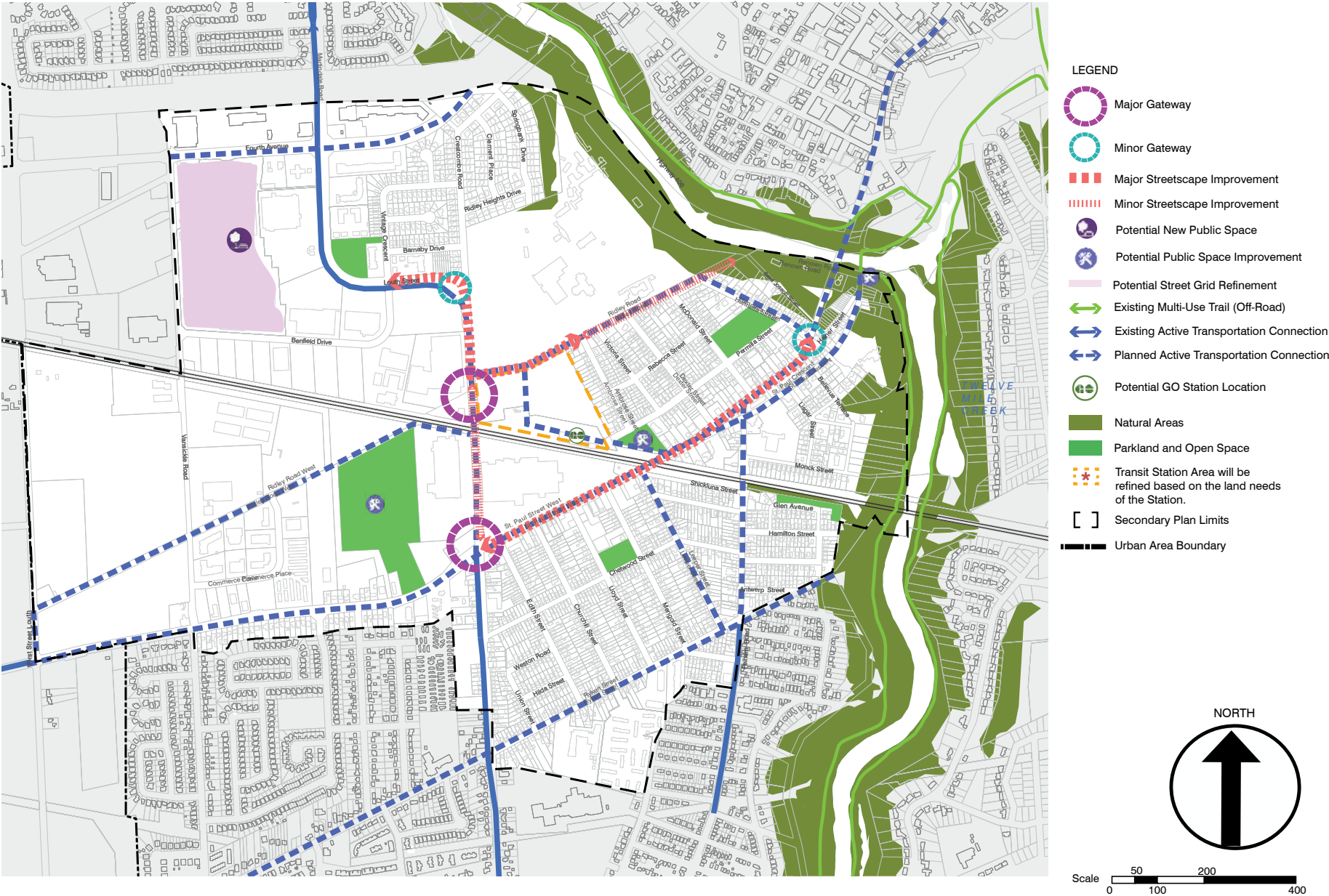
The urban design improvements are intended to enhance the attractiveness and functionality of the Secondary Plan Area. The planned Public Realm Improvement Plan is depicted on **Schedule 7** and considers the following:

- a. Major Gateway Improvement areas;
- b. Minor Gateway Improvement areas;
- c. Major Streetscape Improvement areas;
- d. Minor Streetscape Improvement areas;
- e. Potential New Public Spaces;
- f. Potential Public Space Improvements; and,
- g. Active Transportation Connections.



Example of creative public realm design to energize a space.

Schedule 7: Public Realm Improvement Strategy



5.1.1 Gateways

Gateways are intended to function as formal entranceways into the Secondary Plan Area and create a strong sense of place. Presently, the Secondary Plan Area does not feature any prominent public space treatments at gateway locations and accordingly, the Plan contemplates two levels of improvement:

- a. Major gateway improvement areas; and,
- b. Minor gateway improvement areas.

Gateways include lands within the right-of-ways and all abutting lands.

Major Gateway Improvement Areas

Major gateway improvements should include prominent signage, enhanced lighting, intensive landscaping (such as seasonal floral displays, tree planting), public art, cycling infrastructure and other types of public realm enhancements. Adjacent redevelopment should be designed to support the function of the gateway. Two major gateway improvement area has been identified:

- **Ridley Road and Louth Street:** As the Transit Station Area develops, there will be an opportunity to create a Major Gateway at the corner tying into the GO Transit Station itself and adjacent development. Currently this is the intersection of two streets with rural cross sections (without curb and gutter and sidewalks only on one side). In the future this intersection is envisioned to be one of two main focal points for the station hub area and utilize design excellence to elevate the profile of this area. These roads have been identified for major streetscape improvement as well, see section 5.1.2. The streetscape and gateway improvements should be coordinated.

- Future development shall consider the overall urban design intent and vision for the gateway intersection and reflect a human-scale form to improve the pedestrian quality of the streetscape. New development should be oriented close to the street edge and designed with active frontages such as retail and other entrances for an enhanced sense of place.
- **St. Paul Street West and Louth Street:** This is a major intersection within the Secondary Plan Area, as it connects two arterial streets quite close to the Transit Station Area. This intersection includes sidewalks (on all four sides), pedestrian refuge islands and clearly marked crosswalk areas. To develop St. Catharine's GO Transit Station Area into a Transit Hub, the use of public art, iconic features, enhanced lighting, landscaping and tree plantings should be used to elevate this intersection to be a Major Gateway for the area. St. Paul Street West has been identified for major streetscape improvement and Louth Avenue north of St. Paul has been identified for minor streetscape improvement, see section 5.1.2. The streetscape and gateway improvements should be coordinated.

Future development surrounding the Major Gateway shall consider the urban design intent of this gateway intersection and reflect a human-scale format to improve the pedestrian quality of the streetscape. New development should be oriented close to the street edge and designed with active frontages such as retail and other entrances for an enhanced sense of place.

Minor Gateway Improvement Areas

Minor gateway improvements should include a smaller scale of public realm enhancements, such as landscaping, public art, lighting, pedestrian and cycling supportive elements, and appropriately scaled wayfinding cues. The expectation is that Minor Gateway Improvements are for locations which require enhancements to address the public realm at prominent intersection, but would not necessarily imply prominent redevelopment opportunities on adjacent lands. Two minor gateway improvement areas have been identified:

- **St. Paul Street West and Henrietta Street:** The Burgoyne Bridge is a key connection to the Downtown core and provides a great opportunity to establish a gateway into the Plan Area. St. Paul Street has been identified for intensification and redevelopment, and the future development should consider the overall urban design intent and vision for this easterly gateway. St. Paul has also been identified as a major streetscape improvement area and all improvements should be coordinated to benefit the overall urban design of this important corridor.
- **Louth Street at Vintage Crescent/Benfield Drive:** The lands to the west of Louth Street between Fourth Avenue and Benfield Drive have been identified as an opportunity for intensification and redevelopment. The intersection of Louth Street at Vintage Crescent/Benfield Drive provides an opportunity for a northern gateway for the Transit Hub. Louth Street south of this intersection has been identified for streetscape improvements, as it will act as a key connection when accessing the Station Area from the north.

In addition, enhanced landscaping and tree plantings, pedestrian-scaled lighting, street furniture and new public spaces should be considered in these minor gateway improvement areas.

5.1.2 Streetscape Improvements

Streetscape improvements are intended to provide direction for future enhancements to the key roads within the Secondary Plan Area. Three levels of improvement area contemplated in the Plan:

- Major streetscape improvements areas;
- Minor streetscape improvements areas; and,
- Potential street grid refinement areas.

Streetscape improvements apply to the public land within the right-of-way.

Major Streetscape Improvement Areas

Major streetscape improvements are proposed for Ridley Road (east of Louth Street), Louth Street (between Vintage Crescent and Ridley Road) and St. Paul Street West (between Louth Street and Henrietta Street). Key improvements should include tree plantings on both sides of the street to provide shade and comfort for pedestrians, improved lighting and occasional street furniture, as well as completion of the sidewalk and cycling infrastructure for Ridley Road and Louth Street.

Minor Streetscape Improvement Areas

Minor streetscape improvements have been identified for Louth Street (between Ridley Road

and St. Paul Street West) and Ridley Road (between Ambrose Street and Saint Joseph Street). Key improvements should include tree plantings on both sides of the street to provide shade and comfort for pedestrians, as well as completion of the sidewalk network and delineation of the bike route/lane along Louth Street.

Potential Street Grid Refinement

A fine grained street network supports connectivity, accessibility and a compact built form and should be promoted as part of development opportunities within the Secondary Plan Area. A potential street grid refinement area has been identified on **Schedule 7** between Fourth Avenue and Benfield Drive west of Louth Street. Development and redevelopment in this area should evaluate the potential of incorporating a finer grained street network with consideration for pedestrian-scale block sizes, improved public realm, activated street networks and the orientation of adjacent buildings.

5.1.3 Potential New Public Spaces and Public Space Improvements

Where new major mixed use development or redevelopment is planned, new public spaces should be provided to enhance the pedestrian environment and provide amenities for residents, employees and visitors. Where public spaces exist, improvements should be made to better serve the existing and planned community. Public spaces shall be inclusive and barrier-free to all users while including a mix of design elements such as: enhanced landscaping, shade trees, ample seating, and public art. New public spaces should be located close to the street and be connected

to the pedestrian network, including existing or planned transit stops. **Schedule 7** identifies a potential new public space west of Louth Street, south of Fourth Avenue, and east of Vansickle Road within the potential street grid refinement area.

5.1.3.1 New Public Spaces

Schedule 7 of this Study identifies one new public space west of Louth Street, south of Fourth Avenue, and east of Vansickle Road within the potential street grid refinement area. As redevelopment occurs on these lands, the need for parkland will be evaluated more specifically.

5.1.3.1 Public Space Improvements

Schedule 7 of this Study identifies three potential public space improvements have been identified within the Secondary Plan Area, as follows:

- **Seymour Hannah Sports and Entertainment Centre** (north of St. Paul Street West and west of Louth Street, south of the rail line): This is a District Park and Playfield which has potential to accommodate additional amenities such as outdoor passive gathering spaces, picnic areas, public art and cultural heritage interpretations. Potential location of additional amenities includes south of the skateboard park, adjacent to the Haynes Cemetery or in the vicinity of Kiwanis Field.
- **Cameron Park** (north of St. Paul Street West and south of Permillia Street): As a result of the St. Paul Street West bridge reconstruction, access to Great Western Street may be eliminated or reduced

to one way. At the time of the bridge re-design the City will consider the reconfiguration of Ambrose Street and Permilla Street in this area, as they relate to their connections to Great Western Street and the station site. As a result of potential closures and reconfigurations in this area, there is an opportunity to enlarge Cameron Park.

It is a priority of the Secondary Plan to see the use of Cameron Park maintained and improved. Any improvements at Cameron Park should improve pedestrian and cyclist connections between St. Paul Street West and the GO Station site, and may include a gateway or plaza component heralding the entrance to the GO Station. Currently a small baseball diamond exists at the park.

Cameron Park shall continue to function as a Neighbourhood Park with additional amenities such as paths, benches, outdoor passive gathering spaces, floral beds, public art and cultural heritage interpretations. Given its proximity to the GO Station site, particular opportunity exists at Cameron Park to develop interpretative and/or signage material related to St. Catharines rail history.

- **Trailhead at St. Paul Crescent & Participark Trail:** The GTSSP and Urban Design Guidelines identify active transportation connections throughout the Plan Area and to the Participark Trail. The Participark Trail travels along the west bank of the 12 Mile Creek through the Plan Area and connects over the creek to the Merritt Trail system, at St. Paul Crescent. Although the City does

not currently own land in this area besides the public road allowances, a formal trailhead in this location is desirable, with amenities such as benches, shelter, water filling stations, parking and restrooms if feasible. It shall be a priority to improve the effectiveness of signage and wayfinding to this location.

5.1.4 Active Transportation Connections

Schedule 7 also identifies the existing and planned active transportation network, including new active transportation connections that are needed to achieve the future network. The active transportation connections are described further in section 4.3.7 of this Study.

5.1.5 Adjacent Development

Where new development or redevelopment is planned near a Gateway Improvement Area, the proposed development/redevelopment should be designed in a manner which enhances the function of the gateway, through:

- Complementary building orientation and massing;
- Enhanced architectural detailing;
- Linked private and public pedestrian connectivity;
- Enhanced private realm landscaping; and,
- Other elements as appropriate.

5.1.6 Implementation of Public Realm Improvements

The public realm improvements depicted on **Schedule 7** may be implemented through a future Community Improvement Plan, Public Realm Master Plan, the redevelopment approvals process or as part of other municipal works.

The improvements depicted on **Schedule 7** are intended to support growth and intensification within the Secondary Plan Area. Additional public realm improvements should be implemented through the development approvals process, based on the needs of the proposed development. Section 6 of this Study provides additional details regarding implementation.

5.2 Urban Design Guidelines for the Public Realm

5.2.1 Building Public Spaces for People

The primary existing land uses within the St. Catharines Secondary Plan Area include residential, industrial, institutional and commercial uses. Large format commercial uses predominate along Fourth Avenue and Louth Street. The major employer in the area is THK Rhythm Automotive Canada Limited and two major destinations include Ridley College and the Seymour Hannah Sports and Entertainment Centre.

Large surface parking lots, large format retail, vacant and underdeveloped lots and small, poorly defined sidewalks result in an underdeveloped public and private realm that can be improved through implementation of the following key directions.

5.2.1.1 Boulevard Design

Boulevards are the component of the public right-of-way from building face to street edge (see **Figure 5.1** and **Figure 5.2**).

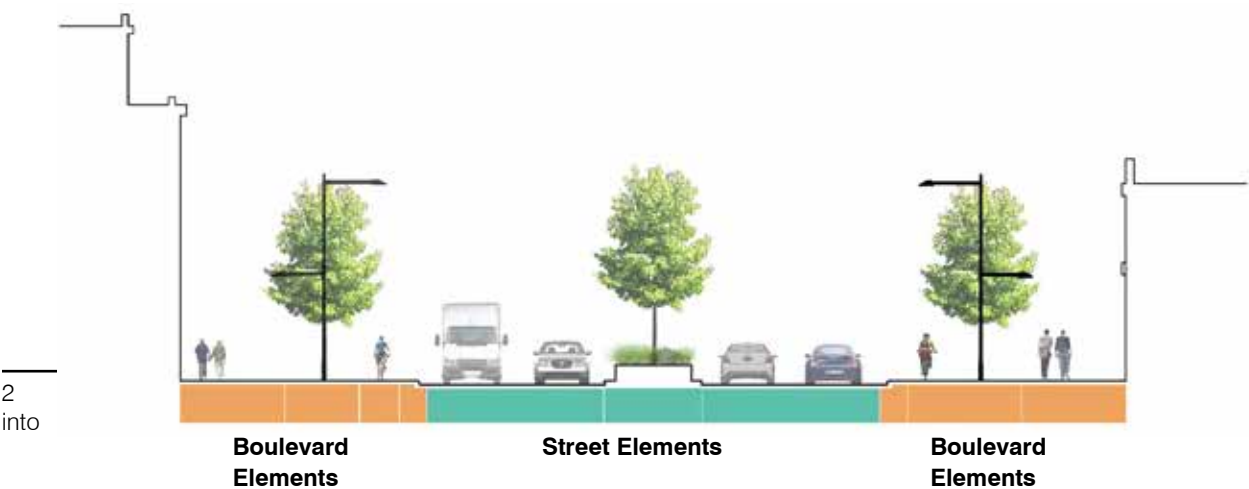
The design of the boulevard must accommodate pedestrian circulation and an attractive public realm. It should support its multi-purpose function; accommodating pedestrian circulation, adequate space for healthy tree growth, plants and other landscaping, bicycle parking, public art, transit shelters, street lighting, signage, street furniture, utilities and adequate space for commercial and social activity.

Within the Plan Area the boulevard width should reflect the character and function of the street. Where insufficient space exists within the right-of-way to achieve the minimum recommended boulevard width (see specific street cross sections), a combination of measures should be explored including setting buildings back at-grade and reduced lane widths.

- Development of these zones should adhere to the following guidelines:
- Patio and Marketing Zone*
- Elements that may be located within this zone include private seating areas, planters, signage², and temporary retail displays. In areas with retail at grade, this zone should be wider to accommodate active at-grade uses.
 - Elements within the patio and marketing zone should not impede the pedestrian clearway in any manner.
 - Overhanging signage and awnings can be installed if they do not impede pedestrian travel in any manner and meet local signage regulations.

Pedestrian Through Zone

- Pedestrian through zones shall have a minimum unobstructed width of 2.0 to 3.0 metres for sidewalks on Louth Street, St. Paul Street West and Ridley Road (where appropriate). Minimum widths for sidewalks on local roads are 1.5 metres and 1.8 metres for sidewalks with a curbface.



Boulevard elements are identified with orange and roadway elements are identified with green.

Sign variance would be needed to locate signage the road allowance.

- Pedestrian through zones may include demarcated areas along sidewalks where vehicles may encounter pedestrians along their route (i.e. at drive aisles, crosswalks and intersections). In this case the use of accent paving should be followed.
- Pedestrian through zones should be provided on both sides of the road.
- Should be designed to meet all AODA standards and be unobstructed both horizontally and vertically.
- Constructed of solid, stable, and textured material, such as concrete.

Planting and Furnishing Zone

- The width of the planting and furnishing zone may range between 1.0 to 3.0 metres depending on available space.
- The planting and furnishing zone will contain street furniture, street trees, street lighting and other fixed objects.
- In hardscaped areas, trees should be planted in continuous tree trenches utilizing soil cells to encourage longevity and viability. Soil cells can be extended under on street parking, multi-use paths and bike facilities where soil volume is critical.

- No elements located within the planting and furnishing zone should impede travel within the adjacent pedestrian through zone.
- The planting and furnishing zone can be hardscaped or softscaped or include a mix of both types of landscaping.
- The planting and furnishing zone should be located a minimum of 0.5 metres to a maximum of 1.2 metres from on-street parking.
- Snow storage will likely occur in this area and all elements should be designed to accommodate and withstand snow loading.
- Tree planting and landscaping should be optimized to provide sun protection and reduce heat island effect.

Edge Zone

- Located next to the curb.
- Should be a hard surface contiguous with the grade of the planting and furnishing zone. Should be constructed of durable materials appropriate for snow storage and street cleaning.
- Should not overlap with cycling facilities.
- May be designed with decorative paving.



Example of streetscape improvements including widened sidewalks, tree planting and pedestrian seating.



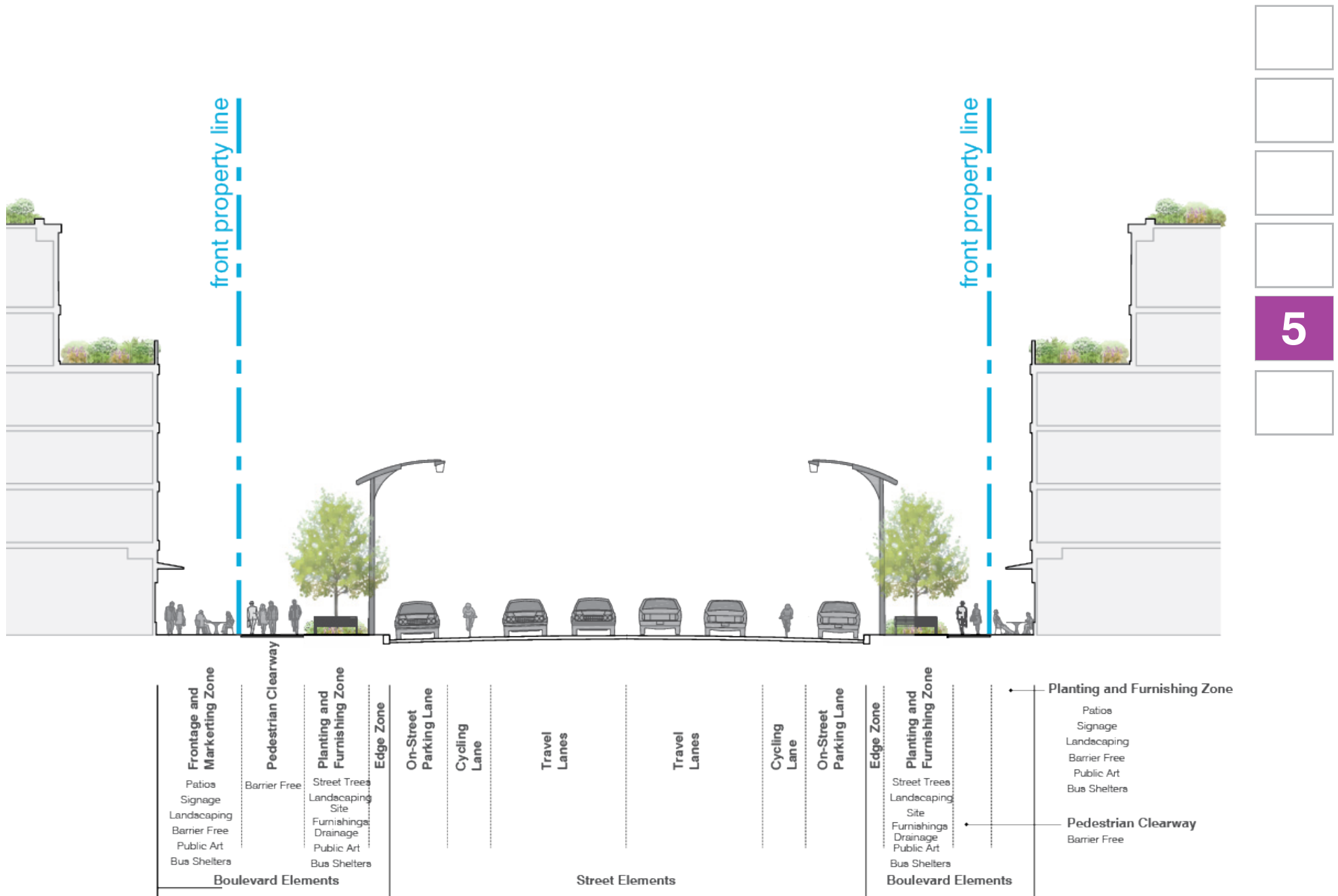


Figure 5.2 Example of typical street and boulevard elements within general right-of-way.

5.2.1.2 Ridley Road and Ridley Road West

Ridley Road will be a defining street within the Plan Area shaping the northern boundary of the Transit Station Area. Its proximity to both Ridley College and the GO Station requires that the future design of this street aligns with a mutual vision for the area.

Existing land uses abutting Ridley Road include Low Density Residential uses and Institutional uses in the form of Ridley College. Along Ridley Road West, abutting land uses include Industrial, Business Industrial, Recreation and Open Space, a Natural Open Space System, and some vacant lands abut Ridley Road West.

Ridley Road, east of Louth Street, has been envisioned as a key pedestrian corridor and will feature major streetscape improvements to create a high standard of design and improve accessibility for pedestrians, cyclists, and vehicles. A major gateway has been planned at the intersection of Ridley Road and Louth Street to enhance the prominence of the station, and should include appropriate gateway treatments as identified in Section 5.3.1.1 Gateway Features.

Since 1889 Ridley College has served a unique academic function in St. Catharines. Improving Ridley Road would provide a stronger public presence for the school. Redesign of the street should announce and celebrate the presence of both the adjacent GO Transit Station and Ridley College.

Ridley Road has a planned 20 metre public right-of-way as illustrated on Figure 5.3. The location of boulevard and street elements should be provided as illustrated.

The following includes supportive design recommendations:

- The intersection of Ridley Road and Louth Street should be strongly considered for signage and wayfinding as well as public art.
- GO parking shall be prohibited along the frontage of Ridley Road.
- Public art should reflect the history of Ridley College and St. Catharines as a growing city, adding to the identity and profile of the community.
- Public art should not interfere with the pedestrian through zone or vehicular traffic.
- Decorative lighting should be considered and used as appropriate.
- Decorative lighting should be located within the planting and furnishing zone.

- Where appropriate consolidate signage, wayfinding and public art within the decorative lighting pole.
- Accommodate a pedestrian clearway / sidewalk of 2.5 metres on both sides of the street.
- Accommodate a planting and furnishing and edge zone of 2.5 metres on both sides of the street.
- Accommodate vehicle travel lanes of 3.25 metres in both directions.
- Accommodate dedicated cycling lanes of 1.5 metres with .25 metre buffers on both sides of the street.
- Protect existing mature trees during construction.

A multi-use trail connection is planned between Ridley Road West, at its current terminus, and Louth Street, south of the rail tracks.



Existing view of Ridley Road, St. Catharines.

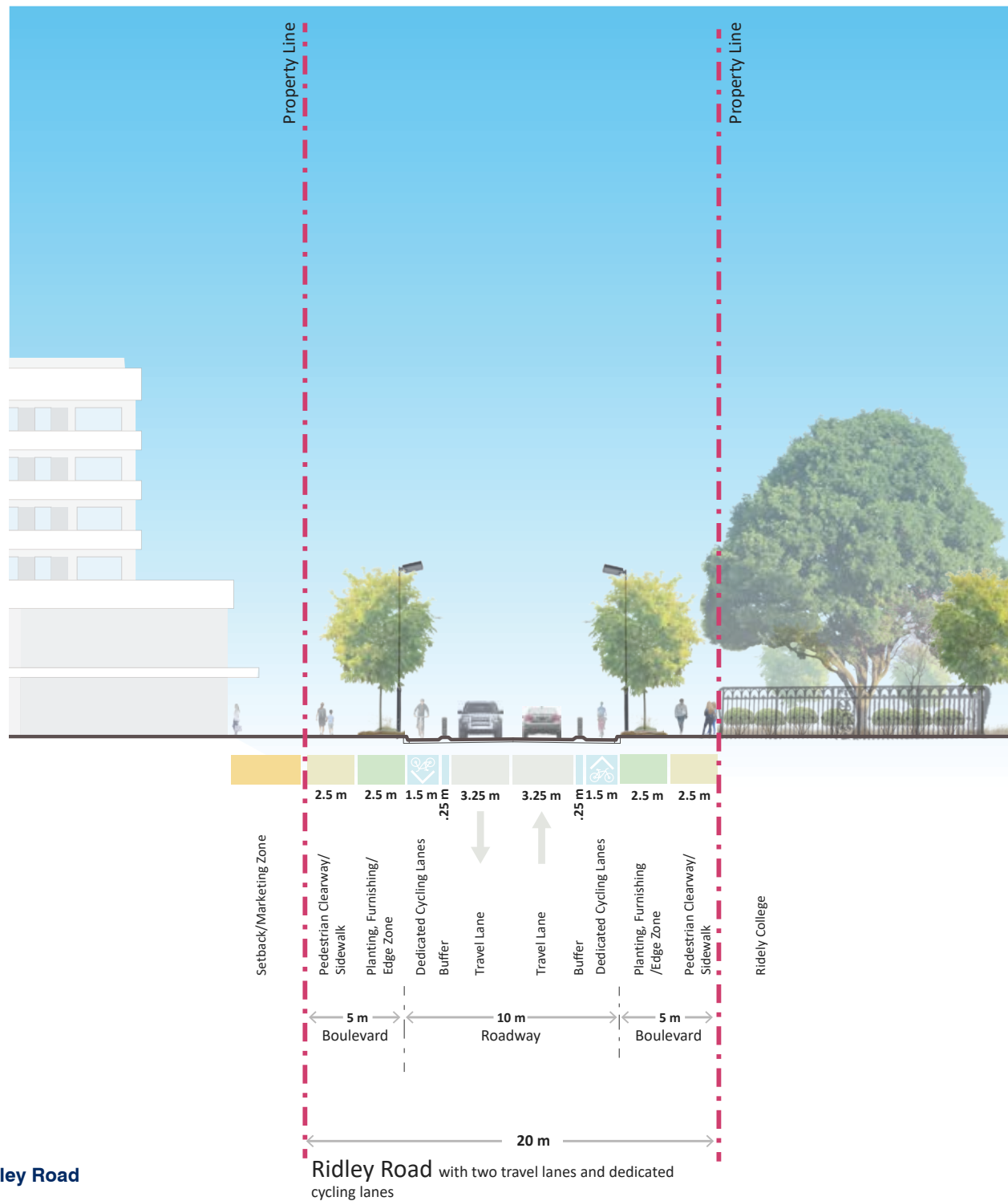


Figure 5.3 Cross Section - Ridley Road

5.2.1.3 Louth Street

Louth Street defines the western boundary of the Transit Station Area. Louth Street is intended to accommodate significant mixed use development. Currently to the north of St. Paul Street West, transportation modelling shows Louth Street is experiencing maximum vehicle capacity and is in need of streetscape improvements.

Existing land uses abutting Louth Street include Medium Density Residential, Low Density Residential, Institutional, Industrial, Commercial, and vacant land. Future land uses abutting Louth Street as per the Secondary Plan will include a variety of intensities of mixed use, employment uses, and low and medium density residential uses.

Louth Street abuts the Transit Station Area at its intersection with Ridley Road, and intersects with the rail corridor just south of Ridley. Active transportation is accessible along Louth Street north of Crestcombe Road, and south of St. Paul Street West. Future plans for the street include an extension of the active transportation corridor south of Crestcombe Road to St. Paul Street West with the aim to improve overall network connectivity (including bike lanes and pedestrian oriented street design).

Major streetscape improvements have also been planned along Louth Street, between Village Crescent and Ridley Road, and minor streetscape improvements between Ridley Road and St. Paul Street West to improve the character of the street and accessibility for multiple modes of transportation.

Three future gateways have been identified along Louth Street. These include one minor gateway at Crestcombe Road and major gateways at both Ridley Road and St. Paul Street West. Gateway design should adhere to the guidelines identified in Section 5.3.1.1 Gateways.

Excluding the patio and marketing zone, the design of Louth Street is to be accommodated within a 26 metre right-of-way as illustrated on Figure 5.4. The following provide specific design recommendations for Louth Street:

- Provide a pedestrian clearway / sidewalk of 2.0 metres on both sides of the street;
- All sidewalks should be constructed of brushed concrete and should be barrier-free;
- Provide planting, furnishing, and edge zones of 2.75 metres that include street trees and other vegetation;
- Provide one vehicle travel lane of 3.25 metres in each direction;
- Dedicated buffered cycling lanes of 1.5 metres with .25 metre buffers on both sides of the street;
- Facilitate pedestrian oriented street design to slow vehicles down and provide safe and attractive pedestrian crossings to access the GO Station; and
- Feature paving should be used to delineate areas of pedestrian priority at the Vintage Crescent, Ridley Road and St. Paul Street West intersections.

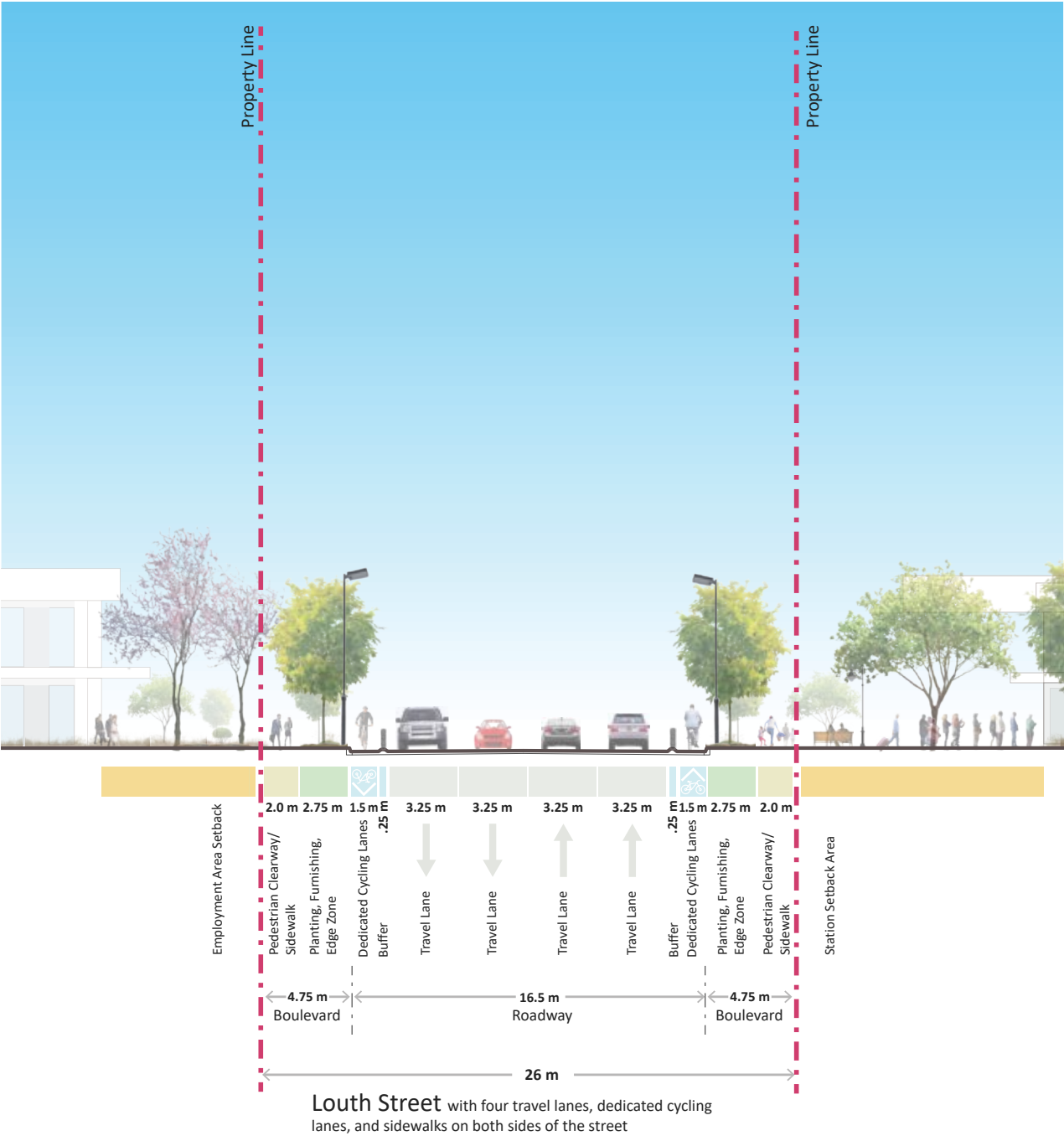


Figure 5.4 Cross Section - Louth Street

5.2.1.4 St. Paul Street West

St. Paul Street West is a critical street within the Plan Area and a key location for future intensification and urban design improvements. The street defines the southern boundary of the Station Area and intersects with the rail corridor just east of Leeper Street.

Existing land uses abutting St. Paul Street West include Low and Medium Density Residential, Commercial, Business Industrial, Institutional, Recreation and Open Space and the Natural Open Space System. Several vacant lots exist along the street, particularly on the north side of the street, and west of Louth Street.

The future use of this street will support a range of mixed uses, parks, open space and natural areas, as well as low density residential and employment uses to the west.

Major streetscape improvements will occur along St. Paul Street West, between Henrietta Street and Louth Street. New active transportation connections will connect with the existing network, improving accessibility around the Station Area. Cameron Park, along the north side of St. Paul Street West at Great Western Street, is being planned for public space improvements and new pedestrian connections will be required to facilitate pedestrian movement. Two gateway treatments have been envisioned along St. Paul Street West. This includes a minor gateway at Henrietta Street and a major gateway at Louth Street. These gateways should follow the guidelines in Section 5.3.1.1 Gateways.

Excluding the patio and marketing zone, redevelopment of St. Paul Street West (east of the rail overpass) will occur within a 26 metre

public right-of-way, as illustrated on Figure 5.5. The following text provides specific design recommendations for the redevelopment of the street:

- Provide pedestrian clearways /sidewalks of 2.0 metres on both sides of the street.
- All sidewalks should be constructed of brushed concrete and should be barrier-free.
- Provide a planting and furnishing and edge zone of 1.5 metres on both sides of the street.
- Provide one vehicle travel lane of 3.25 metres in each direction.
- Provide dedicated cycling lanes of 1.5 metres with .25 metre buffers on both sides of the street.
- Use signs and symbol markings for cycling facilities as per the Transportation Association of Canada (TAC) Bikeway Traffic Control Guidelines for Canada and OTM Book 5, 11 and 18.
- Feature paving should be used to delineate areas of pedestrian priority at the Henrietta Street and Louth Street intersections.
- Provide space for on-street parking.



Existing view of Burgoyne Bridge on St. Paul Street West, St. Catharines.

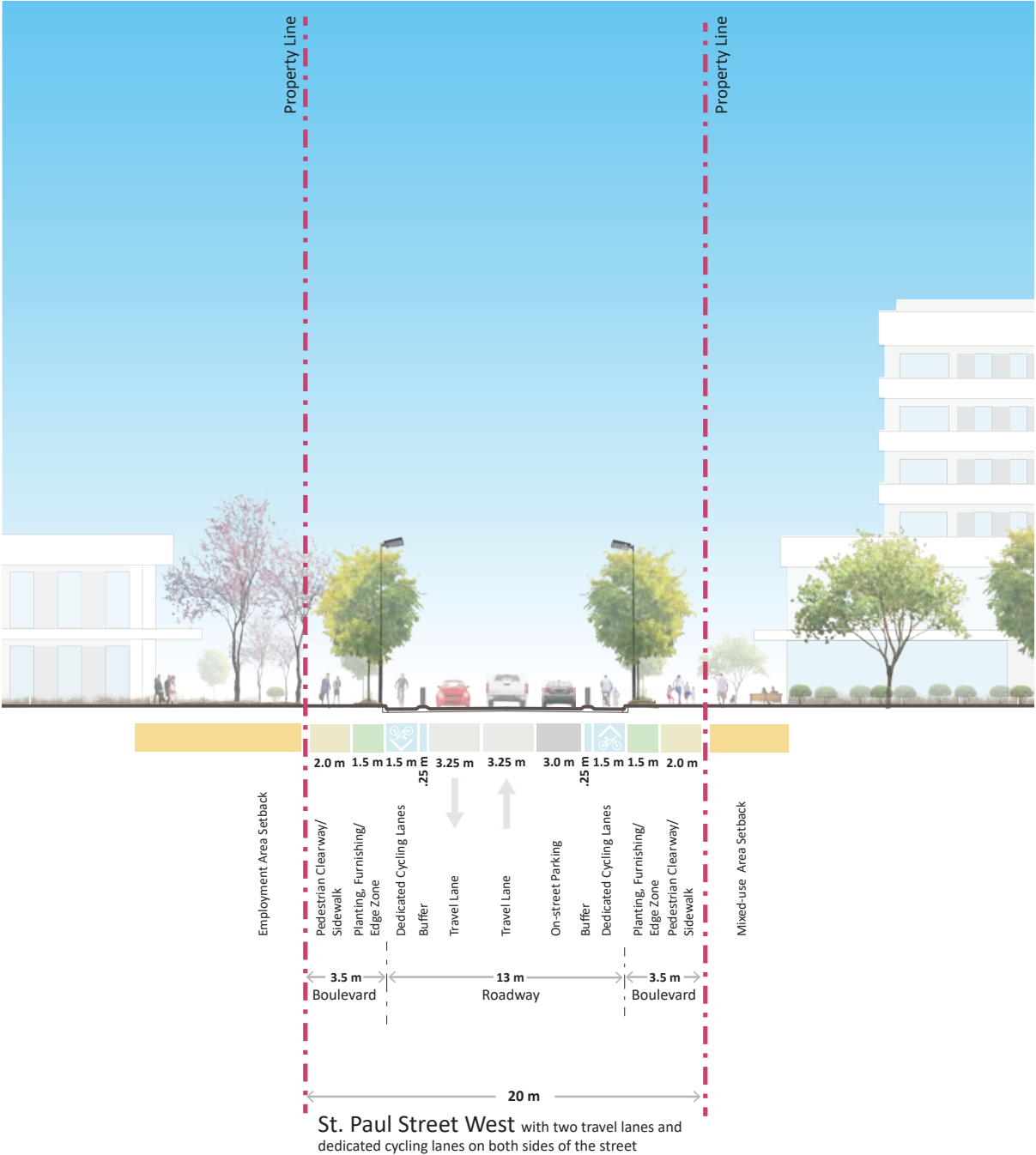


Figure 5.5 Cross Section - St. Paul Street West

5.2.1.5 Street Furniture

Street furniture consists of the benches and seats, two-stream waste receptacles, shelters, drinking fountains, weather protection, etc., that provide the setting for resting, sitting and eating and social encounters within the public realm. It is important to properly locate street furniture to not impede pedestrian movement. Preferably street furniture should be located within the Planting and Furnishing Zone (see Section 5.2.1.1).

Other guidelines for street furniture include:

- The City should select strategic locations for groupings of furniture that would benefit adjacent retail establishments and the public. For example, waste receptacles are appropriate near food establishments and benches are welcome near public spaces and cafes and patios. These locations may include the gateways along Louth Street and St. Paul Street West, as identified in **Schedule 7** of this Study.
- Groupings of benches should be located in new green/park spaces throughout the Plan Area.
- Street furniture should be designed with the aim of being accessible (e.g., arms on benches) for all including the disabled and elderly.
- Street furniture should be linked together where appropriate to stimulate social encounters.
- Pedestrian-scaled lighting.

5.2.1.6 Public Art

Public art installations can be stand alone or integrated into buildings, street furniture and other infrastructure. Public art has the capacity to animate public spaces. Bringing them to life. Public art can be temporary or permanent. It can reflect an area's natural setting, spirit, unique history or aspirations and can draw attention to universal themes or local, regional, national and global issues. Public art has the ability to inspire thought and reflection. Or it can just be fun.

The design of public art should:

- Be located in high use areas such as public parks, plazas, curb extensions, multi-use paths, etc. These locations could include gateways along Louth Street and St. Paul Street West, potential public space improvement areas north of St. Paul Street West, and the potential new public space along Vansickle Road, as identified in **Schedule 7** of the Plan.
- Limited near forms of traffic control (i.e.

stop signs) to minimize driver distractions and sight-line obstructions.

- Public art installations should be durable and easily maintained.

5.2.1.8 Semi-Public Open Spaces

The majority of open spaces within the Plan Area will be semi-public open spaces. Their function will be similar to that of public open spaces but the land may be under control of agencies such as Ridley College, Metrolinx or private developers via condominium corporations. Semi-public open spaces should be designed to:

- Provide direct access from adjacent public sidewalks.
- Be visible from active indoor areas.
- Include features (e.g. paving, seating, public art, etc.) constructed of materials equal in quality and appearance to those used in station entrances, main private buildings and nearby public spaces.



Existing public art on the Ridley College campus.

- Maximize sun exposure through the location and massing of taller building elements.
- Use hard and soft landscaping materials that are high quality, easily replaceable and low maintenance.
- Select site furnishings (e.g. play equipment, public art, shelters, signage, fencing, etc.).
- Use plant materials that are low maintenance, and pest and disease resistant.

5.2.1.9 Landscaping

Providing improved landscaping, along Ridley Road and within public and semi-public open spaces, will help create visual continuity throughout the Plan Area. Trees shall be



Plantings and street furniture contribute towards a strong public realm.

incorporated into public street design and will frame all streets and pathways. Trees provide shade and comfort and enhance the visual and environmental qualities of the street. To sustain trees, planting should occur in sufficiently deep and wide planting areas backfilled with appropriate soil. Native and disease-resistant species for street trees should be used, wherever possible, to promote long term growth. Enhanced landscaping will be a priority within areas identified for major and minor streetscape improvements, including St. Paul Street West, Ridley Road, Louth Street, and Ambrose Street, as per **Schedule 7**. The following are general landscaping guidelines that should be adhered to as the Plan Area develops:

- To allow for full growth and to ensure their long-term viability street trees should be planted with appropriate soil volume in continuous tree trenches.
- Where compaction of planting soil is anticipated, the use of soil cells should be considered.
- Only species that are tolerant of urban conditions should be used. Mono-culture planting may, in the case of disease, be entirely lost and is therefore strongly discouraged. Refer to Niagara Peninsula Conservation Authority's Native Plant Guide for information on appropriate native plants.
- Plantings should be selected that require little maintenance and do not require the use of pesticides and fertilizers.
- Shrub and ground cover planting should be utilized in open tree pits, provided the minimum pedestrian clearway dimension is available.
- Careful consideration should be given to the type and location of trees. Higher

branching trees should be positioned to ensure there is no interference with truck traffic. Sight lines should also be considered in the location of trees planted at intersections.

- Seasonal appeal, especially for the winter months should be considered for all planting.
- The planting of trees as infill along existing streets where the rhythm of existing trees is interrupted should be implemented.

5.2.1.10 Low-Impact Development (LID)

Low-Impact Development is an approach to managing stormwater run-off at the source by replicating natural watershed functions. It uses simple, cost-effective methods to capture, detain and treat stormwater. General guidelines include:

- Incorporate LID practices where possible and as appropriate. LID options include:
 - Bioswales or drainage swales;
 - Bioretention planters, units or curb extensions;
 - Perforated pipe systems;
 - Permeable paving; and
 - Pre-cast tree planters or soil cells.
- Where possible, replace unnecessarily paved areas with permeable materials (medians, dedicated parking lanes / lay-bys, traffic islands). However, do not use permeable materials within the pedestrian clearway.

5.3 Urban Design Guidelines for the Private Realm

5.3.1 Site Design

A Strong Neighbourhood Framework

Community design includes the location and orientation of buildings. When sited and designed correctly buildings should enhance the existing character of the street. This can be accomplished through protecting and directing views, providing a consistent street wall and relating buildings to the street and pedestrian activities.

The Plan Area includes significant lands with redevelopment potential. These lands include the following uses:

- Mixed Use between Fourth Avenue, Louth Street, Benfield Drive and Vansickle Road.
- Business Commercial South of Benfield Drive.
- General Employment south of the rail corridor, east of the Plan Area Boundary, north of St. Paul West and west of Vansickle Road.
- General Employment adjacent to the Seymour Hannah Sports and Entertainment Centre.

- Residential north of the Station Area.
- Mixed Use south of St. Paul Street West.

It is important that the design of these sites ensure that buildings contribute to a human scale while providing a fine grained street and block network. Building floor plates should be appropriate to support intensification and innovative employment and tourism uses as well as transit investment.

New buildings within the Plan Area should frame and address the street, while taller buildings and elements will be located to minimize shadow impacts and maximize solar exposure.



Example of public gathering space integrated with the design of built form.



Landscaping can be used to define site boundaries and provide a sense of enclosure.

5.3.1.1 Gateway Features

Two major gateways are proposed along Louth Street at the intersections of Ridley Road and St. Paul Street West. The demarcation of gateways are created through the provision of consistent elements such as signage and wayfinding, urban space, hardscaped or landscaped surfaces, public art and appropriate built form to provide orientation and to assist in defining a neighbourhood's distinct character. The design should:

- Create a sense of entrance and arrival, contributing to community image and identity, at a scale appropriate for the given context. Elements contributing to gateway features and design include: signage and wayfinding, trees and other landscaping, feature lighting, paving, seat walls and public art.

- Development at gateways should meet a high standard of design, recognizing their role as a gateway, and be appropriately oriented to the public realm.

5.3.1.2 Access and Entrances

Vehicular access to on-site parking, loading and servicing facilities should be located from secondary streets and rear lanes wherever possible. Where this is not possible, mid-block access can be considered in instances where:

- The driveway is located an appropriate distance from the nearest intersection or side street.
- Appropriate spacing between adjacent driveways is maintained resulting in no more than one driveway every 30 metres.
- Opportunities to consolidate shared access to minimize curb-cuts are prioritized.

- Consideration is provided to contain mid-block driveways within the building massing with additional floors built above.

5.3.1.3 Parking

As the Plan Area develops a variety of parking solutions will be appropriate to support increased densities. As a general rule, surface parking should be designed to minimize its visual impact and to allow for future intensification as a development site. As such, the layout of parking should consider site access, landscaping and site servicing that will permit the eventual redevelopment of these sites.

Surface Parking

- Surface parking lots should be divided into smaller "parking courts." Large areas of uninterrupted surface parking should be avoided.
- Surface parking areas should be located at the rear, or side-yard of a building and should not be placed between the front face of a building and the sidewalk.
- Driveways to parking should be from rear lanes and side streets wherever possible with adequate lighting and visibility.
- Shared parking and shared driveways between adjacent properties are encouraged. Where multiple access points currently exist, they should be consolidated where possible.
- Where appropriate, permeable paving should be considered to promote drainage.
- Use planting strips, landscaped traffic islands and/or paving articulation to define vehicle routes that include pedestrian walkways, improve edge



Example of sustainable landscape design in the form of a low-water rain garden.



Public realm with street furniture, street trees and other landscaping elements.

conditions and minimize the aesthetic impact of surface conditions.

- Distinctive pavement and pavement markings should be used to indicate pedestrian crossings and create an interesting visual identity.
- Clear, 1.5 metre (minimum) dedicated pedestrian routes should provide direct connections from parking areas to building entrances.
- Pedestrian-scaled lighting should be provided along pathways.
- Preferential parking (i.e. accessible parking stalls, bicycles, car-share, energy efficient vehicles) should be located close to building entrances.
- Parking along the GO rail tracks should be adequately screened with high-quality landscaping.
- Parking on corner lots is discouraged. However, where required, it should be screened by landscaping.

Landscaping for Parking

- High quality landscaping treatments should be used to define site boundaries, provide buffers between adjoining developments, and screen storage and utility areas.
- Parking should be screened from the public realm and designed to discourage vandalism and graffiti.
- Landscaped parking islands, of at least 3 metres wide, at the end of parking rows and pedestrian connections that contain salt tolerant shade trees are encouraged. Selection of plant materials should consider the following:
- Year-round maintenance;

- Seasonal variety;
- Hardiness and resistance to disease;
- Maintenance requirements; and
- Tolerance of plant materials to salt and urban conditions.

Bicycle Parking

- Bicycle parking should be provided at regular intervals along major roads, other areas of high pedestrian activity and located close to building entrances.
- Bicycle parking should not impede

pedestrian circulation. Post-and-ring and inverted 'u' parking, constructed of painted or galvanized steel, is preferred as larger units can impede pedestrian movement and snow clearing.

- Bicycle parking and storage facilities should encourage active transportation, including parking at the GO Transit Station, within public parks and open spaces and short term bicycle storage at employment areas.
- Provide secure and plentiful bicycle parking at the GO Transit Station

entrances.

- Provide sheltered bike areas that are integrated with the station design and located in highly visible areas in vicinity of platform access points.
- In addition to bicycle racks, bicycle lockers are strongly encouraged especially for large office developments and at the GO Transit Station.

Structured Parking

Parking lots are to be designed such that as the Plan Area intensifies surface parking lots can transition to structured parking if and when warranted. Structured parking should adhere to the following guidelines.

- Integrate above-ground parking structures into the streetscape through active-at grade uses, and attractive facades that animate the streetscape and enhance pedestrian safety. Where possible, locate structured parking away from public roads.
- Locate pedestrian entrances for parking structures adjacent to station entrances, main building entrances, public streets or other highly visible locations.
- Screen parking structures from view at sidewalk level through architectural detailing and landscaping.



Existing bicycle parking at the St Catharines Station.

5.3.1.4 Storage, Servicing and Loading

- Loading docks, outside storage and service areas are to be located in areas of low visibility such as at the side or at the rear of buildings.
- Where possible, accommodate garbage storage areas within the building. Where this is not possible, screen outdoor storage areas from public view through an attractive and integrated enclosure.
- Outside storage and servicing facilities should be constructed of materials to match or complement the building material.
- Service and refuse areas should be designed with a paved, impervious surface asphalt or concrete to minimize the potential for infiltration of human materials.
- Loading and service areas may occupy the full rear yard if adequate landscape edge and buffer treatments are provided.
- Service and refuse areas are not to encroach into the exterior side or front-yard set-back.

5.3.1.5 Front Property Setbacks

To promote more consistent street walls to and to create an active streetscape design should:

- Locate buildings at the front property line, or applicable set-back line.
- Provide additional setbacks in areas with retail at grade to accommodate a minimum 3.0 metre boulevard width for outdoor display areas, seating and landscaping.
- Where street oriented uses have a variety of setbacks, locate new buildings at a setback distance that reflects the average of adjacent buildings. Where existing major commercial streets have large front yard setbacks, redevelopment and intensification should be street oriented with reduced front yard setbacks.

5.3.1.6 Rear Setbacks and Transitions

Where sites abutting stable residential areas exist the following rear setbacks and transitions are required to minimize shadow and privacy issues on adjacent uses:

- Provide a 7.5 metre rear-yard setback from the abutting property line.
- Apply a 45-degree angular plane from the abutting property line for sites deeper than 36 metres.
- Apply a 45-degree angular plane from a height of 10.5 metres above the 7.5 metre setback line on properties less than 36 metres deep.

5.3.1.7 Sites Abutting Open Spaces

Where buildings are adjacent to open spaces (i.e. Transit Plazas, etc.) apply shadow testing on a case-by-case basis to ensure a minimum of five hours of sunlight per day from spring to fall.



5.3.2 Building Height and Massing

Getting the Right Fit

The majority of buildings within the Plan Area will be low to mid-rise with some taller buildings located near the intersection of Fourth Avenue and Louth Street/Martindale Road. Given the shorter lot depths along St. Paul Street and the required transition to stable neighbourhoods, consideration of shadow impacts is necessary. Building heights in these areas should not exceed 6 storeys as per Secondary Plan study guidance.

5.3.2.1 Building Design

The potential for taller buildings has primarily been identified north of Benfield Drive, along St. Paul Street West and between the Station Area and Ridley Road.

These buildings should:

- Focus residential mixed-use density, consistent with the Secondary Plan, to support the feasible integration of ground floor retail and amenity spaces.
- Generally be located at the front property line to create a continuous streetwall.
- Be aligned with street frontages along corner sites.
- Minor variations in setbacks are encouraged to facilitate wider boulevards, accommodate public amenity space and create a more interesting streetscape.
- Taller buildings (buildings over 5 storeys) should have a building base (podium).

- Taller buildings (buildings over storeys) should step back 3.0 metres above the building base.
- An additional setback should be determined by a 45-degree angular plane applied at a height equivalent to 80 percent of the width of the right-of-way (See Figure 5.6).
- Main building entrances should be directly accessible from the public sidewalk.

- The ground floor of all buildings with commercial uses should be 4.5 metres (floor-to-floor height) to accommodate internal servicing and loading, and future conversion to retail (where appropriate).
- Maximum building height should generally be no greater than that determined by a 1:1 ratio with the right-of-way width, except where greater heights are identified on Schedule 3 of this Study.

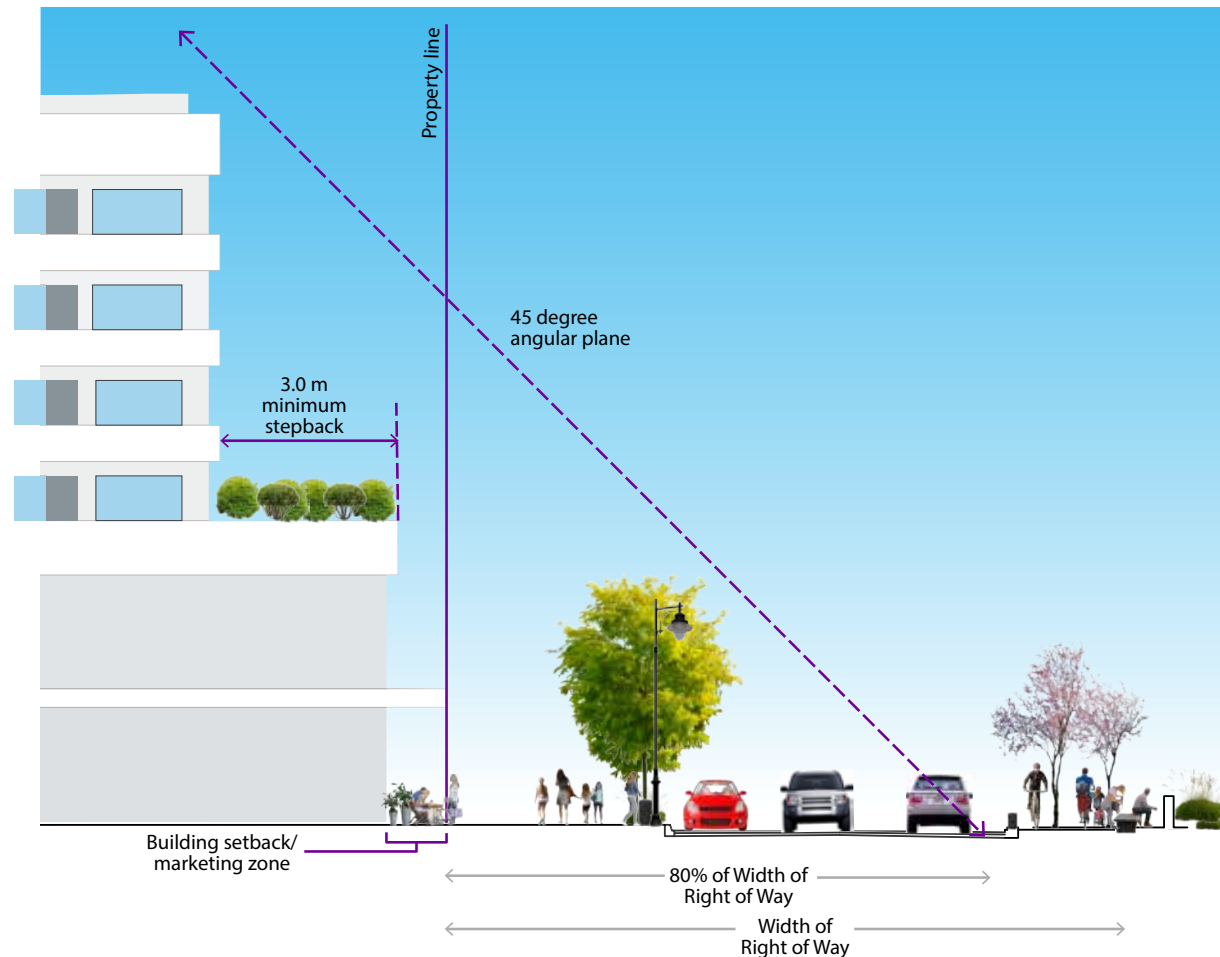


Figure 5.6 Schematic representation of building setback for a mid-rise building.

- Create appropriate transitions in built form to existing residential uses.
- 60 percent of the building frontage on the ground floor and at building base levels should be glazed to allow views of indoor uses and to create visual interest for pedestrians.
- Clear glass is preferred over tinted glass to promote the highest level of visibility, and mirrored glass should be avoided at street level.
- Balconies should be designed as integral parts of the building, which may include protruding balconies. Balconies should not be designed as an afterthought.

5.3.2.2 Building Podiums and Stepbacks

A clear building podium, defined by a front stepback, reinforces a consistent streetwall, helps to integrate new development into an existing lower building fabric, and creates a human-scaled building at grade.

- Taller buildings (buildings over 5 storeys) should have a building base (podium).
- As no established streetwall height exists within the Plan Area the height of the podiums should range between 3 to 4 storeys.
- Achieve a minimum building stepback of 3.0 metres beyond the podium. In special circumstances (e.g., to protect views) a setback of 5 metres may be appropriate.

5.3.2.3 Business Commercial

Business Commercial uses are located south of Benfield Drive and north of the rail corridor. These buildings should:

- Be located to address Benfield Drive, but may incorporate setbacks that provide attractive landscaping and tree-planting.
- The principle facades should incorporate large glazed areas and entrances, providing visibility between the building and the street.
- Parking should not be located between the principle facade and the adjacent street / sidewalk.
- Main entrances should be directly accessible from public sidewalks.
- Where possible, shared driveways should be provided.
- Open storage should be minimized. Where permitted, it should be screened from public view.
- Site design must define a well organized system of entrances, driveways and parking areas that minimizes conflicts between pedestrians, bicycles and vehicles.
- On large, flat roofs, opportunities for green roofs and or patios should be incorporated to create green spaces and usable outdoor amenity areas for employees. Roof top units should be screened from view.

5.3.2.4 General Employment

General Employment uses are located south of the rail corridor and west of Louth Street. These buildings should:

- Address the street to define a more urban street edge.
- The highest quality of building design should be applied to the building facades facing the public street or open space.

- Corner buildings should address both street frontages.
- Minimum amounts of parking should be located in the front yard.
- Where large parking fields are necessary, landscape elements should be introduced to break up large asphalt areas and identify pedestrian access to buildings.
- Outdoor storage should generally not be visible from the public street or open space. Where outdoor storage is required, it should be screened with fencing and/or landscaping.

5.3.2.5 Commercial Plaza

- Buildings should be and organized to define and frame abutting streets, internal drive aisles, sidewalks, parking and amenity spaces. Buildings thus require multiple active façades and entrances
- Building setbacks should be reduced to minimize distances between building entrances and abutting public street sidewalks.
- The large format 'super block' should be broken into functionally and visually smaller units by internal drive aisles, a network of connected walkways, and landscaping.
- The objective of infill development is to provide a strong street edge and frame main entries and drive aisles.
- Where infill development is situated immediately adjacent to or between existing buildings, the new buildings should respond to the existing buildings through appropriate transitional treatments.
- Appropriate design treatments include matching cornice lines, continuing a

colonnade, using similar materials, and similar building proportions.

- Drive through uses, such as a car wash or auto service station, should not be permitted for infill development.
- Infill development may be mixed use and should be at least 2 storeys to enable, for example, office space or residential units above street related commercial uses.
- Bicycle parking should be provided.

5.3.2.6 Facade Design

The aesthetic qualities of a building's facade are a vital factor in how the public perceives the building and how that building impacts their experience of the street.

- Facades facing streets, sidewalks and public open spaces should be composed of large areas of glazing to encourage pedestrian interaction and enhance safety.

- Extend finishing materials to all sides of the building, including building projections and mechanical penthouses.
- Avoid blank walls, or unfinished materials along property lines, where new developments are adjacent to existing smaller scaled buildings.
- Articulate the facades of large buildings to express individual commercial or residential units through distinct architectural detailing, including entrance and window design.
- Utilize a design and material quality that is consistent and complementary.
- Where lots have frontages on an open space, provide dual facades that address both frontages with an equal level of material quality and articulation.
- Emphasize the focal nature of corner buildings through elements such as projections, recesses, special materials,

and other architectural details.

- Provide weather protection through architectural details such as vestibules, recessed entrances, covered walkways, canopies and awnings.

5.3.3 Sustainability

Considering the Future

Buildings account for approximately 40 percent of green house gas (GHG) emissions in North America. Adopting sustainable practices in building design not only decreases GHG emissions but also lowers operating costs. Key considerations for achieving sustainable building design include:

- Building orientation;
- Sustainable landscape design;
- Urban heat island mitigation;
- Storm water management;
- Renewable energy;
- Green roofs;
- Building envelope design;
- Natural ventilation;
- Day light design;
- Dark sky design;
- Bird friendly design;
- Waste management; and
- Water use reduction and waste water technologies.

Sustainable objectives and guidelines are included throughout the document with key guidelines outlined in the following sections.



Existing commercial uses on St. Paul Street, Downtown St. Catharines.

5.3.3.1 Passive Solar Design

The locations of buildings to each other and to open spaces influences the amount of energy they consume as well as comfort and quality of interior and exterior spaces.

New development within the Plan Area should be massed to maximize opportunities for access to natural light and heating, cooling, security and views. Building design should analyze site characteristics and address existing conditions. For example:

- Intended uses within buildings should be

arranged to make the best use of natural conditions.

- The following climatic conditions should be analyzed when designing block layout, buildings and open spaces:
- Solar loss and gain;
- Temperature;
- Air quality;
- Wind conditions
- Cloud cover; and
- Precipitation.

- Within new developments, residential uses should maximize indirect natural light.
- Within new developments, retail or office uses that employ heat-producing machinery should face north.
- Trees and vegetation, operable windows, treated glass, roof coverings and other building elements should be selected to take advantage of natural means of regulating interior temperature, lighting and other environmental variables.



Existing facade of the Seymour Hannah Sports and Entertainment Centre.

5.3.3.2 Energy Efficiency

As mentioned earlier, buildings use a significant amount of energy and contribute to the production of GHG. Reducing energy use in buildings is therefore an important strategy to reduce the environmental impact of urban development.

Design should utilize life-cycle cost analysis to take long term energy costs into account. This will lead to adjustments in the orientation of buildings and the configuration of internal space to make the best use of natural processes to control interior environmental variables.

- Life-cycle cost analysis should be used to evaluate mechanical, electrical and plumbing systems.
- Buildings and windows should be oriented and designed to optimize natural means of heating, cooling, ventilating and lighting interior spaces.
- Street and pedestrian-scaled lighting systems should incorporate LED technology to reduce energy and maintenance demand.
- Development proposals are encouraged to explore the potential use of geothermal technology to reduce grid energy dependency.
- Inventories of all plumbing fixtures and equipment, as well as all heating, ventilation and air conditioning systems, should be summarized in building packages as well as a strategy for minimizing water demand.
- Canada Mortgage and Housing Corporation standards and design guidelines should be implemented and exceeded where appropriate.
- Buildings should consume energy at a rate that is at least 10 percent lower than specified by the Commercial Building Incentive Program (CBIP) administered by Natural Resources Canada.



Example of employment facility design and landscape elements.

5.4 Design Integration

5.4.1 Developing Accessible and Comfortable Communities

The transformation of the Plan Area into a vibrant, transit supportive community will be measured by transit ridership, the number of people on the streets, the vitality of new businesses, a more urban built form for new industrial and office commercial buildings, and an improved public realm.

The successful design of buildings, streets and open spaces will be reinforced by new comfortable, welcoming, weather protected and accessible connections between buildings that promote an inviting community atmosphere.

The guidelines in this section outline key considerations to support development of accessible and comfortable communities.

5.4.1.1 Accessibility

Complete Communities are accessible for all residents. While this includes ensuring residents have access to jobs and transit it also includes designing buildings and public spaces that allow for ease of movement for people of all ages and abilities.

A key to providing a high quality public realm is making it accessible to all people. The guidelines and requirements in the following documents provide more detailed information with respect to creating and promoting accessible environments and should be referred to in the design of all public and private spaces:

- Ontario Building Code
- Accessibility for Ontarians with Disabilities Act
- Principles of Universal Design

As well, recent changes to the Planning Act enable the City to secure facilities designed to have regard for accessibility for persons with disabilities through Site Plan Control.



Building accesses should be fully accessible.

5.4.1.2 Crime Prevention Through Environmental Design

All publicly accessible areas, including streetscapes, parks, parkettes, mid-block connections, forecourts and patios, should conform to the provisions recommended through CPTED (Crime Prevention Through Environmental Design). The application of CPTED principles should address items such as:

- Providing clear views to sidewalks and public areas.
- Taking advantage of passing traffic surveillance as a deterrent for unwanted activities.
- Identifying point of entry locations.
- Placing amenities such as seating and lighting in areas where positive activities are desired and expected.

5.4.1.3 Microclimate and Shadows

The design of buildings should be informed by their context including their impact on adjacent properties.

- The design of buildings within the Plan Area will be informed by shade and micro-climatic studies that examine wind mitigation, solar access and shadow impacts on adjacent streets, open spaces, buildings and associated properties.
- Building massing should allow ample sunlight to penetrate to the sidewalk

and adjacent public spaces, and should mitigate the impact of high winds to support pedestrian comfort.

- Where existing and future open spaces are adjacent to development sites, the scale of development will be restricted as determined through wind and shadow studies.
- Building and site design will provide semi-weather protected spaces that blend indoor and outdoor uses including deep canopies, overhangs, sheltered terraces, roof terraces, courtyards, forecourts

and gardens that optimize active use throughout the year.

- Building heights above four storeys will incorporate step backs to mitigate the perception of building height from the surrounding areas.
- Shadow studies for blocks and individual buildings should be undertaken on the equinoxes and solstices.



Example of protective shelter next to a public open space.



6.0 PHASING & IMPLEMENTATION

6.1 Phasing and General Timeline for Capital Improvements

This Secondary Plan Study identifies a number of capital improvements to the public realm and transportation network. **Table 6.1** outlines the timing - short, medium and long-term priorities to implement the capital improvements within the Secondary Plan Area. Short-term priorities are intended to be implemented within a 5 year timeframe. Mid-term priorities are intended to be implemented within a 10-year timeframe. Long-term priorities are intended to be implemented within a 20-year timeframe. Modifications to **Table 6.1** may be required due to shifts in capital planning, funding, or strategic priorities, and can be made without an amendment to the Secondary Plan.

Table 6.1 Phasing Plan for Capital Improvements

Capital Improvement	Details/Extent	Priority (short-, mid- or long-term)
New Road Connections and Roadway Improvements		
Louth Street widening	Crestcombe Road to St. Paul Street West.	Mid-Term
Reconstruction of St. Paul Street West bridge	Redesign and reconstruction of bridge/rail crossing, including active transportation improvements	Short-Term
Reconfiguration of road accesses at Great Western St., Permilla St., Ambrose St. and Cameron Park		Short-Term
Traffic Management Study Area	Residential area bounded by Ridley Road, St. Paul Street West, Henrietta Street, and Ambrose Street	Mid-Term
Potential realignment of Ridley Road and other potential improvements to Louth Street at Ridley Road		Short-Term
Lane widening at HWY 406 at Martindale Road		Mid-Term
Active transportation improvements to Fourth Avenue	Bike lanes and pedestrian-friendly paths on the bridge and interchanges to Highway 406	Mid-Term
Geometric improvements at Pelham Road	St. Paul Street West and Pelham Road	Mid-Term
New street from Ridley Road to Station site	Primary access road from Ridley Road to Station Site	Short-Term
Bike Lanes and Multi-Use Trail Improvements and Connections		
St. Paul Street West	Between Louth Street and the Burgoyne Bridge	Short-Term
St. Paul Street West	Between Louth Street and First Street Louth	Long-term
Ridley Road	Between Henrietta Street and Louth Street	Short-Term
Ridley Road West	Ridley Rd. West between Louth St and end of Ridley Rd. West.	Long-Term

Table 6.1: Phasing Plan for Capital Improvements (continued)

Capital Improvement	Details/Extent	Priority (short-, mid- or long-term)
Louth Street	Between Crestcombe Street and St. Paul Street West	Mid-Term
Fourth Avenue		Mid-Term
Pelham Road		Mid-Term
Henrietta Street		Mid-Term
St. Paul Crescent		Mid-Term
Transit Station Trail	Connecting St. Paul Street West via Great Western with Ridley Road	Short-Term
Ridley Road West Trail	Connecting Ridley Road West with Louth Street via the south side of the CN Rail corridor	Long-Term
Streetscape Improvements		
Ridley Road Major Streetscape Improvements	Between Louth Street and Ambrose Street	Short-Term
St. Paul Street West Major Streetscape Improvements	Between Henrietta Street and Louth Street	Mid-Term
Louth Street Major Streetscape Improvements	Between Vintage Crescent/Benfield Drive and Ridley Road	Mid-Term
Ridley Road Minor Streetscape Improvements	Between Ambrose Street and Saint Joseph Street	Mid-Term
Louth Street Minor Streetscape Improvements	Between Ridley Road and St. Paul Street West.	Mid-Term
Ambrose Street Minor Streetscape Improvement		Mid-Term
Gateway Features		
Ridley Road and Louth Street Major Gateway		Short-Term
St. Paul Street West and Louth Street Major Gateway		Mid-Term
St. Paul Street West and Henrietta Street Minor Gateway		Mid-Term
Crestcombe Road and Louth Street Minor Gateway		Mid-Term
Public Space		
New Public Space at Fourth Avenue and Louth Street	Southwest of Fourth Avenue and Louth Street within existing commercial node	Mid-Term
Public Space Improvement at Ambrose Street and Great Western Street	Cameron Park	Short-Term
Public Space Improvement west of Louth Street between St. Paul Street and Ridley Road West	Identified at the Seymour-Hannah Sports and Entertainment Centre	Mid-Term
Public Space Improvement at St. Paul Crescent by Twelve Mile Creek		Mid-Term

6.1.1 Municipal Capital Improvements

The City will prepare a phasing strategy as to assist with the implementation of this Secondary Plan Study. The Phasing Strategy should consider the following:

- a. The expecting timing of development, including the expected built-out of vacant lands and redevelopment of existing areas, to inform the timelines for capital improvements.;
- b. The timing of any potential transportation, infrastructure and public realm improvements; and,
- c. Any other projects or initiatives which may impact the timing of development, to inform the timelines for capital improvements.

Priority should be given to improvements in the West Transit Station Area identified, as identified on the Transportation Improvement Plan and Public Realm Improvement Plan that support transit oriented development and intensification in these areas.

6.2 General Implementation

The GO Transit Station Secondary Plan shall be implemented through a variety of tools, including but not limited to:

- a. The planning and development application process, through tools such as site plan approval, plans of subdivision and condominium and consents to sever;
- b. City of St. Catharines Transportation Master Plan;
- c. The City of St. Catharines Zoning by law;
- d. Community Improvement Plan; and,

- e. Other tools as described in this section.

6.3 Municipal Works within the Secondary Plan

All future municipal works undertaken by the City of St. Catharines within the Secondary Plan Area shall have regard for the policies of the Plan.

6.5 Zoning By-Law

The City will update its zoning by-law to ensure that the land use and design policies for this Secondary Plan Study are reflected in the City's zoning by-law.

6.6 Development Applications

Development applications shall be consistent with the policies of the Secondary Plan and City of St. Catharines Official Plan.

6.7 Community Improvement Plan

To assist and accelerate redevelopment and facilitate further public realm improvements within identified areas within the Secondary Plan Area, the City may consider modifying its Community Improvement Plan programs (CIP), creating a new CIP for intensification areas and preparing a Public Realm Master Plan for key areas within the Secondary Plan Area. The rationale for completing a Community Improvement Plan and Public Realm Master Plan as part of the Secondary Plan's implementation is to ensure that:

- The proposed public realm improvement projects are appropriately planned and

accounted for in the City and Regional capital budget, including any property acquisitions which may be required to complete the proposed streetscaping, public space and gateway improvements;

- Location of the proposed improvements can be confirmed through additional detailed analysis and site level review; and,
- There is a competitive suite of financial incentives to promote intensification and redevelopment, such as but not limited to incentives for greyfield and brownfield redevelopment, lot consolidation/ assembly, residential infilling and/or mixed use intensification, etc.

6.8 Signage and Wayfinding Strategy

Upon adoption of the Secondary Plan, the City will work with the Region of Niagara to prepare a signage and wayfinding strategy for St. Catharines. The purpose of the signage and wayfinding strategy is reduce visual pollution and improve wayfinding. The City can also refer to the Niagara Region's Transportation Master Plan Bikeways identification and Destination Wayfinding Signage for Cyclists document.

6.9 Coordination with the Regional Municipality of Niagara

6.9.1 General Coordination

The City will work with Niagara Region, who is the approval authority for the Secondary Plan, to ensure that the policies of the Plan are implemented, including any opportunities to implement the urban design and public realm

improvements through any future Regional works. The City also encourages Niagara Region to consider opportunities for affordable housing development within the Secondary Plan Area.

6.9.2 GO Transit Service

The City of St. Catharines will work collaboratively with Niagara Region and other appropriate agencies (including St. Catharines Transit and the Niagara Peninsula Conservation Authority) to ensure that the planning, design and implementation of the expanded GO transit service as well as upgrades to the VIA Rail station addresses the vision and policies of the Secondary Plan. It is expected that the City will collaborate with the Region and agencies to ensure that:

- a. The Station Area includes attractive, pedestrian friendly and transit supportive public spaces and connections;
- b. The Station Area is planned to address integrated and a diversity of mobility options and seamless access; and,
- c. The Station Area is designed to help support the mixed-use vision for the St. Catharine's Transit Hub.

6.10 Parkland Dedication

Lands conveyed to the City as parkland dedication on properties within the Secondary Plan Area will be taken, where suitable, to support potential new public spaces and public space improvements as identified on Schedule 7 and as detailed in this Study.

6.11 Monitoring Program

The City will prepare a monitoring program to track the implementation of the Secondary Plan and report on the progress of its implementation. The monitoring program should identify development statistics for residential intensification and the status of the various actions identified in the Plan (such as the Community Improvement Plan and various streetscape projects).

6.12 Updating the Plan

The City will comprehensively review the policies of this Secondary Plan at the 5 year review of the City's Official Plan. Depending on the outcomes of the review, the City may decide to update the Plan.

6.13 Boundaries

The boundaries shown on the Secondary Plan Maps are approximate, except where they meet with existing roads, Niagara Escarpment Conservation Area or other clearly defined physical features.