

CITY OF HAMILTON

Waterdown Transportation Management Plan

Final Report

February 16, 2022

City of Hamilton Transportation Planning Division 77 James Street North, Suite 400 Hamilton, Ontario L8R 2K3

Attention: Mr. Mohan Philip, P.Eng.

Project Manager

City of Hamilton, Waterdown Transportation Management Plan Final Report

Dear Mr. Philip:

Enclosed for your files is a digital copy of the final report on the Waterdown Transportation Management Plan.

Sincerely,

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Acronyms

TMP Transportation Management Plan

EA Environmental Assessment

GTA Greater Toronto Area

UHOP Urban Hamilton Official Plan

TDM Transportation Demand Management

GGH Greater Golden Horseshoe
PPS Provincial Policy Statement

TTS Transportation Tomorrow Survey

HSR Hamilton Street Railway

IPS Intersection Pedestrian Signal MPS Mid-block Pedestrian Signal

CUTA Canadian Urban Transit Association

RSH Revenue Service Hours

KPI Key Performance Indicators
ASD Alternative Service Delivery

IBC Initial Business Case

RTP Regional Transportation Plan

BRT Bus Rapid Transit
RFP Request for Proposal

TPAP Transit Project Assessment Process

ROW Right-Of-Way PNR Park and Ride

ADT Average Daily Traffic
AAA All Ages and Abilities

Executive Summary

The Waterdown TMP:

- Examines existing and future (to the year 2031) traffic operations and transportation capacity problems and opportunities in Waterdown; and
- Identifies and evaluates short and long-term infrastructure improvements to the road network, public transit and pedestrian/cycling facilities to address these problems.

Waterdown is a fast-growing community located north in the City of Hamilton and south-west of the Greater Toronto Area (GTA). Bordered on the south and east sides by the Niagara Escarpment, the community is somewhat geographically isolated from the rest of the City and neighbouring communities. Since 1996, the community's population has almost doubled to its current level of more than 20,000 people. Significant growth is expected over the next 10 years as new residents continue to be attracted by Waterdown's pleasant small-town atmosphere, cultural heritage resources and its picturesque setting in the Niagara Escarpment and Ontario's Greenbelt.

With this growth, Waterdown's transportation network capacity is being stressed, and complaints of congestion, neighbourhood traffic infiltration, speeding and safety concerns are common. The City of Hamilton retained Dillon Consulting Limited (Dillon) in January 2019, to prepare a Transportation Management Plan (TMP) for Waterdown. Completed as a Master Plan, the TMP followed Phases 1 and 2 of the Municipal Class Environmental Assessment (EA) process, as outlined in the Municipal Class EA, October 2000 (amended in 2007, 2011 and 2015).

The Waterdown TMP was completed in coordination with the Waterdown Community Node Secondary Plan Study and the Waterdown Village Built Heritage Inventory. The intent of the Waterdown TMP was to confirm the transportation infrastructure within Waterdown could support the long term intensification proposed by the Waterdown Community Node Secondary Plan Study.

Consultation

Consultation for the Waterdown TMP was extensive and was undertaken in accordance with the requirements of the Class EA process:

- The City of Hamilton maintained a project contact list. Notifications were circulated to members of the public, agencies, interest groups and Indigenous Communities throughout the project;
- Two Public Information Centres (PICs) were held during the course of the project. PIC 1 was a Community Workshop held on October 10, 2019. PIC 2 was a virtual meeting held on October 21, 2020;
- A Focus Group was established at the beginning of the TMP in collaboration with the parallel Waterdown Community Node Secondary Plan and Waterdown Village Built Heritage Inventory.
 The focus group consisted of representatives from a number of key area stakeholders. Three

meetings were held with focus group members throughout the project to gather input and review recommendations from the Study.

Problem and Opportunity Statement

The Problem/Opportunity Statement prepared during Phase 1 of the Class EA process was based on the overview of existing and future conditions and also reflected public and agency consultation completed as part of the TMP. The Problem/Opportunity Statement identified for the Waterdown TMP is:

Waterdown's transportation network capacity is becoming insufficient to accommodate current and future traffic volumes, resulting in congestion, safety concerns and traffic infiltration in residential neighbourhoods.

The Waterdown TMP Study was initiated to address short-term issues and identify long-term improvements needed for the road network, public transit, and pedestrian and cyclist facilities.

Identified Transportation Issues

- There is insufficient road capacity on Dundas Street between Highway 6 and Avonsyde Blvd. to serve existing peak hour demands and this issue will be exacerbated by continued growth in Waterdown;
- Road network adjustments are required in response to the planned Highway 5/ Highway 6 interchange;
- The Active Transportation Network in Waterdown is incomplete; and
- There are a number of local speeding, safety and operational concerns on the streets of Waterdown.

Preferred Solutions

Phase 2 of the Class EA process, "Alternative Solutions" consisted of the development and evaluation of alternative solutions to the transportation problems and opportunities identified in Phase 1.

Intersection improvements at Dundas Street/Mill Street and Dundas Street/Avonsyde Blvd. are recommended because they address localized capacity issues on the Dundas Street corridor. It is also noted that Dundas Street eastward from just west of Avonsyde Blvd. is proposed to be widened from 4 to 6 lanes. Widening of Dundas Street between Mill Street and Hamilton Street North to four lanes was also reviewed but not recommended due to its potential adverse impacts on public health and the character and heritage value of the historic downtown.

To adjust for the capacity constraints on Dundas St. that will remain without widening, the identified strategic intersection improvements will be supplemented by a range of transportation demand management solutions aimed at reducing car use. Recommended solutions involve improvements to transit and active transportation, like cycling and walking, to address current and long-term

transportation challenges. The success of the transportation demand management solutions will be facilitated by Waterdown's changing role from a "bedroom community" to more of a "complete community" where people live, work, shop and play. More local employment opportunities, like those provided by major companies that have recently been established in Waterdown, will allow people to live closer to their place of work, thereby reducing the strain on local and regional transportation networks. Specific intersection improvements and TDM strategies are identified in **Table E-1**.

Highway 5/ Highway 6 Interchange

The Highway 6/Highway 5 intersection is currently a signalized intersection. MTO is preparing a Class EA and Detailed Design Study of a new interchange at Highway 6/Highway 5, but the timing of construction has yet to be determined.

The following road network improvement is recommended in northwest Waterdown to accommodate and position the existing road network to account for the planned interchange construction, mitigate potential traffic infiltration through the Waterdown North residential developments, and to support future developments west of Clappison Avenue:

Extend Clappison Avenue from Parkside Drive to North Waterdown Drive

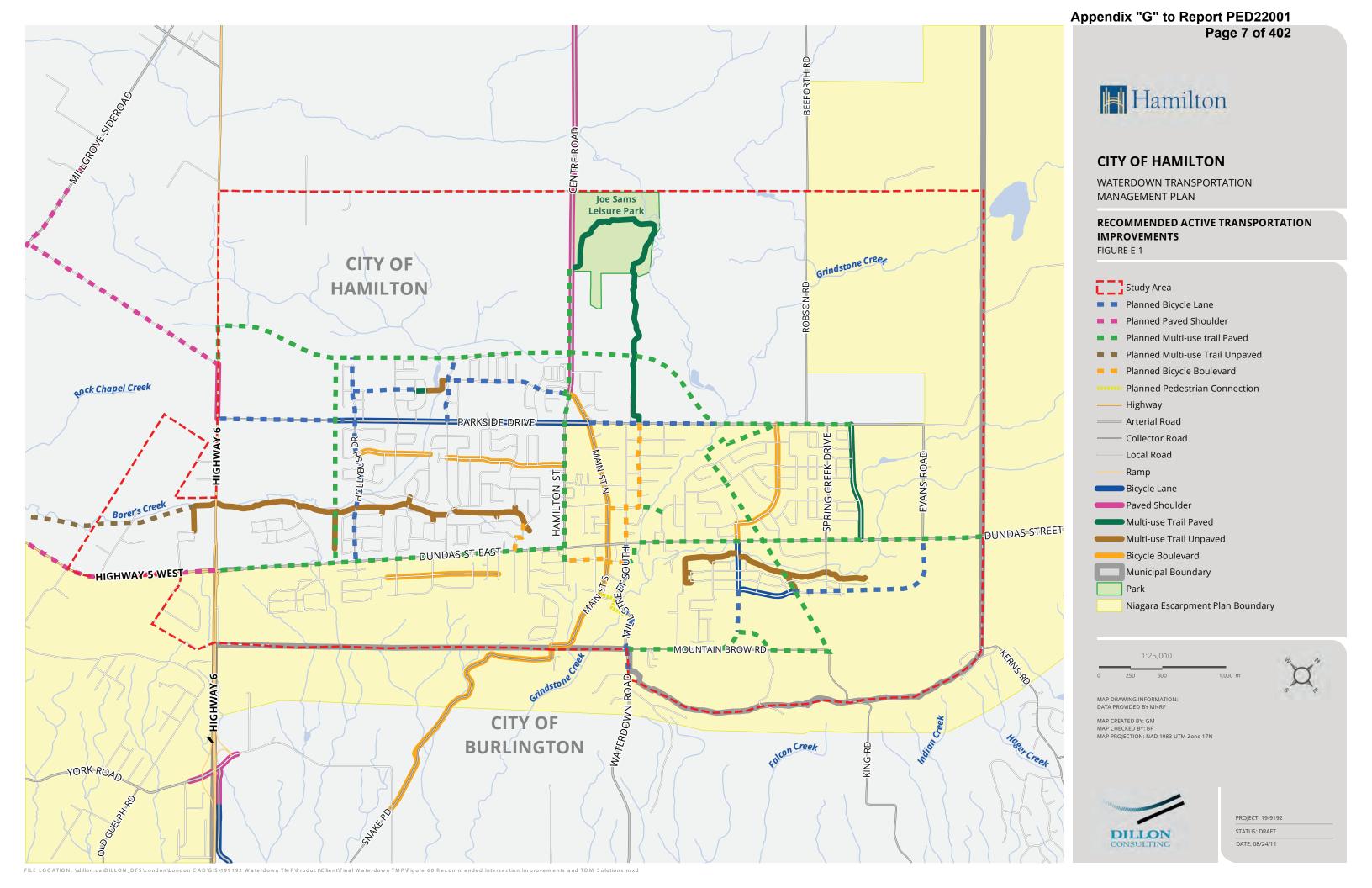
Active Transportation Network

Waterdown is a community that values and relies on its Active Transportation Network for commuting, shopping and recreational purposes. The decision to rely on sustainable transportation modes to reduce traffic demands on Dundas Street makes completing the Active Transportation Network to connect all areas of Waterdown a critical element of the TMP.

Figure E-1 shows the recommended AT network. **Figure E-2** shows the Road Network Improvement Map for Waterdown.

Local Traffic Operations and Safety Issues

Waterdown residents are very concerned about safety issues on local streets stemming from perceived traffic infiltration, speeding and peak hour traffic operations. A number of locations were identified for improvements based on residents' input received throughout the project, recommendations from City of Hamilton staff, and professional judgement. The recommended local improvements are shown in **Tables E-2 and E-3**.



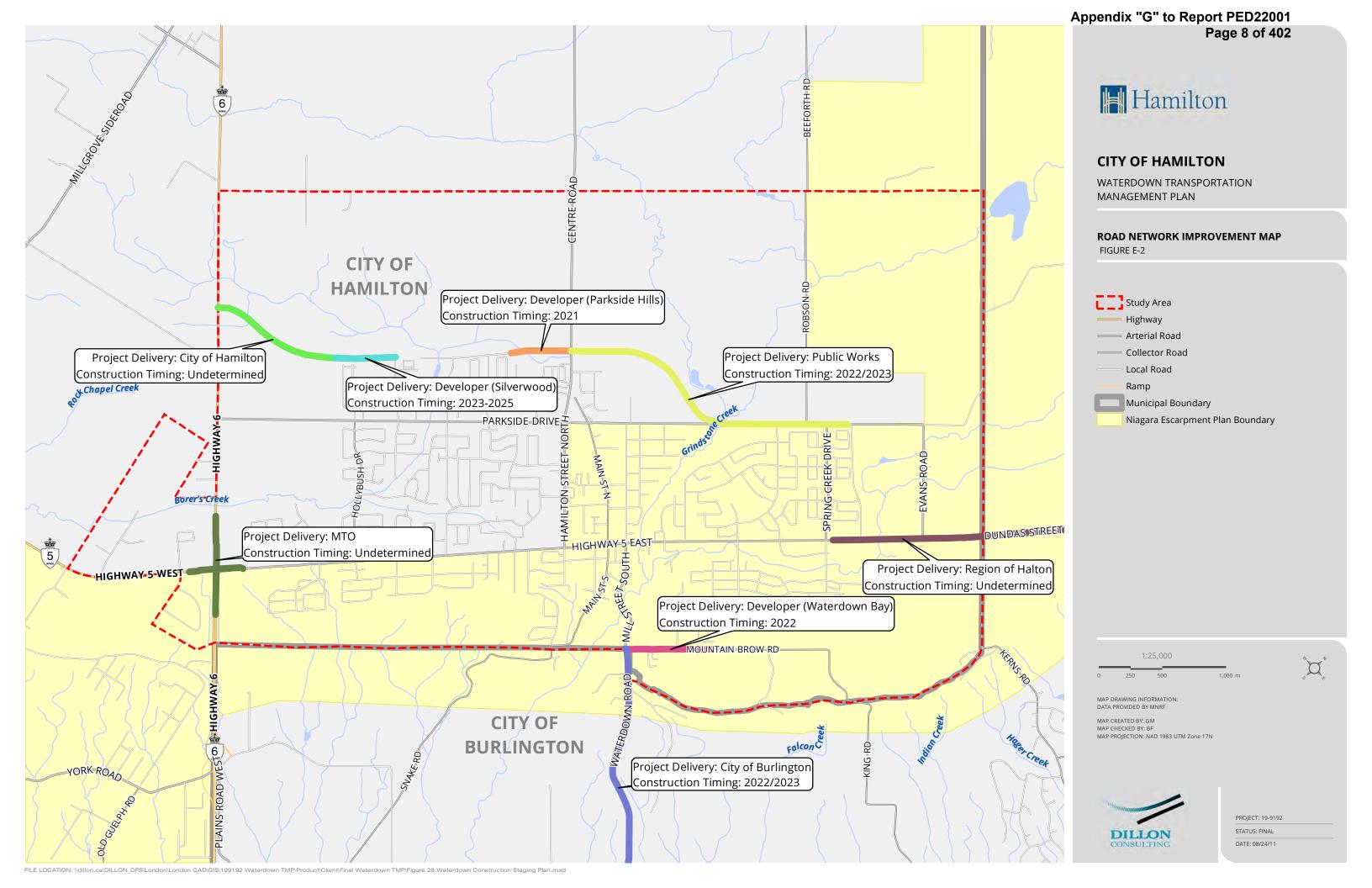


Table E-1: Recommended Intersection Improvements and TDM Solutions

Category	Recommended Improvements	Approximate Cost	Timeframe for Implementation	Municipal Class EA Schedule
	INTERSECTION IMPROVEMENTS			
Dundas Street/Mill Street Intersection	Adjust signal timing at intersection	N/A	1 to 5 years	Α
	TRANSPORTATION DEMAND MANAGEMENT			
Transit				
	Improve connection to community core	2,000 hrs / year (@ 120\$ / hr = \$240K +1 bus	1 to 5 years	A+
Improvements to Route 18	Expand hours of service, including Sunday service	7,000 hrs / year = \$840K	1 to 5 years	A+
	Increase frequency of buses to every 10 minutes instead of 15 minutes	10,000 hrs / year = \$1.2M + 2 buses	1 to 5 years	A+
	Before BLAST and Dundas BRT are built, provide an interim regional route along Dundas Street and Highway 6 to connect Waterdown, Burlington and downtown Hamilton (daily 15 minute service)	42,000 hrs / year (@120\$/hr) = \$5.0M + 8 buses	5 to 10 years	A+
New Regional Route	Continue discussions with Metrolinx regarding regional services along Dundas BRT	N/A	5 to 10 years	Α
	Maintain a connection between Waterdown and downtown Hamilton after Dundas BRT is operational	N/A	5 to 10 years	A+
Alternative Service	Designate Parkside Drive, West Employment Area and Skinner Road as ASD areas	12,300 hrs (@ 100\$/hr) = \$1.3M + 3 ASD vehicles	1 to 5 years	A+
Delivery (ASD)	ASD partnership discussions with major employers	N/A	1 to 5 years	Α
	Prepare implementation plan for ASD vehicles, drivers and technology	\$20K	1 to 5 years	A+

Category	Recommended Improvements	Approximate Cost	Timeframe for Implementation	Municipal Class EA Schedule
Charliana Chana and	Develop a transit node in community core with passenger amenities	\$650K per Platform Area x 2 = \$1.3M	1 to 5 years	A+¹
Stations, Stops and Terminals	Provide stops, benches and shelters at higher activity locations	\$280K per platform x 6 = \$1.7M	1 to 5 years	A+
	Prioritize ASD connection points and locations with an aging population	N/A	1 to 5 years	A+
Active Transportation				
Cualina	Review priority rankings of the most critical planned cycling facilities (Dundas Street, Parkside Drive, Hamilton Street)	N/A	1 to 5 years	А
Cycling	Review design of planned facilities using <i>Ontario Traffic Manual (OTM) Book</i> 18 – Cycling Facilities, or preferably Designing for AAA	N/A	1 to 5 years	А
New Multi-Use Trail	Evaluate feasibility of a crossing of Grindstone Creek at Church Street, for consideration in the Recreational Trails Master Plan Evaluate feasibility of a crossing from Sealy Park to west side of Grindstone Creek over the rail line for consideration in the Recreational Trails Master Plan	To Be Determined Based on Future Siting/EA Study	1 to 5 years	B, if less than \$2.4 M each
	Install public bicycle repair stations downtown and at community facilities	\$3,000 (each)	1 to 5 years	Α
Cycling and Walking	Expand Hamilton's Public Bike Share system (SoBi Hamilton) to serve transit riders, commuter cyclists, recreational cyclists and visitors	\$200,000²	5 to 10 years	А
Related Facilities	Update City sidewalk policy to require sidewalks on both sides of all roadways (crescents, cul-de-sacs and industrial roadways) to improve accessibility, especially the elderly and those with disabilities.	N/A	1 to 5 years	А
Other TDM Measures	City resources and tools to educate residents and employers about carpooling, teleworking, flexible hours, employer-sponsored transit pass subsidies, priority parking and other incentives	N/A	1 to 5 years	А

¹ This classification assumes that the node is not adjacent to a residential area, environmentally sensitive area, cultural heritage resources, and recreational or other sensitive land use.

² Costing includes bikes and docking stations only.

Table E-2: Priority Streets for Measures to Reduce Neighbourhood Traffic Infiltration

Priority	Approximate Cost	Municipal Class EA Schedule
Braehied Avenue (Riley Street – Parkside Drive)	\$18,000	А
Hollybush Drive (Dundas Street – Parkside Drive)	\$60,000	А
Main Street North (Dundas Street – Parkside Drive)	\$21,000	А
Main Street South (Dundas Street – Union Street)	\$6,000	А
Mill Street North (Dundas Street – Parkside Drive)	\$21,000	А
Riley Street (Dundas Street – Braeheid Avenue)	\$86,000	А
Barton Street (Hamilton Street South – Main Street South)	\$6,000	А
Cedar Street (Hamilton Street North – Main Street North)	\$7,000	А
Church Street (Main Street North – Mill Street North)	\$3,000	А
TOTAL	\$228,000	

Table E-3: Priority Streets for Traffic Calming Measures

Priority	Approximate Cost	Municipal Class EA Schedule
Avonsyde Boulevard (Dundas Street – Parkside Drive)	\$5,000	А
Braehied Avenue (Riley Street – Parkside Drive)	\$18,000	А
Burke Street (Skinner Road – Boulding Avenue)	\$2,000	А
Hollybush Drive (Dundas Street – Parkside Drive)	\$60,000	A
Main Street North (Dundas Street – Parkside Drive)	\$21,000	А
Nisbet Boulevard (Wimberly Avenue – Hamilton Street North)	\$80,000	А
Riley Street (Dundas Street – Braeheid Avenue)	\$86,000	A
Skinner Road (Burke Street – Mallard Trail)	\$5,000	А
Spring Creek Drive (Dundas Street – Parkside Drive)	\$20,000	А
Wimberly Avenue (Parkside Drive – North Waterdown Drive)	\$30,000	А
Boulding Avenue (Burke Street – Parkside Drive)	\$60,000	А
Chudleigh Street (Riley Street – White Oak Drive)	\$21,000	A
First Street (Dundas Street – Niska Drive)	\$9,000	A
Forest Ridge Avenue (Spring Creek Drive – Avonsyde Boulevard)	\$6,000	A
Laurendale Avenue (Niska Drive – Boulding Avenue)	\$21,000	A
Longyear Drive (Hollybush Drive – Brian Boulevard)	\$6,000	A
Niska Drive (First Street – Spring Creek Drive)	\$27,000	А
Rockhaven Lane (Braeheid Avenue – Hamilton Street North)	\$21,000	А
TOTAL	\$498,000	

Recommended Transportation Policy Solutions to Include in the Secondary Plan

As stated in **Section 1.0**, this TMP was completed in coordination with the Waterdown Community Node Secondary Plan Study and will be used to help inform policies within the secondary plan. **Table E-4** summarizes policy related recommendations from this TMP for inclusion in the secondary plan. The timeframe for implementation will be addressed in the Secondary Plan and as development in Waterdown proceeds over the next 10 years.

Table E-4: Recommended Transportation Policies

Recommended Transportation Policies

Support the development of active transportation facilities that are designed for all ages and abilities (AAA) to encourage trips by active transportation and transit through the Secondary Plan land-use recommendations.

Develop policy that requires development applications to review access management requirements as part of the application process. Development applications should prioritize improving access to transit network function and reducing conflicts between vehicular movements and the active transportation network.

Require missing sidewalks adjacent to new developments or re-development sites to be constructed as part of the development application process.

Plan for the creation of a transit node in the Waterdown Village Core Area to connect to future regional transit and potential ASD solutions. A transit node would also improve the profile of transit in the core while promoting intensification of the Secondary Plan Area.

Encourage the expansion of transit services and amenities within the public ROW within the Community Node area

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Public and Agency Consultation

1.0 Introduction

Waterdown is a fast-growing community located in the City of Hamilton. Since 1996, the community's population has almost doubled to its current population of more than 20,000. Significant growth is expected over the next 10 years as new residents continue to be attracted by Waterdown's pleasant small-town atmosphere, cultural heritage resources and its picturesque setting in the Niagara Escarpment and Ontario's Greenbelt. With this growth, however, Waterdown's transportation network capacity is becoming insufficient to accommodate current and future traffic volumes, resulting in congestion, neighbourhood traffic infiltration, speeding and safety concerns.

To address these issues, the City of Hamilton retained Dillon Consulting Limited (Dillon) in January 2019, to prepare a Transportation Management Plan (TMP) for Waterdown. Completed as a Master Plan, the TMP followed Phases 1 and 2 of the Municipal Class Environmental Assessment (EA) process, as outlined in the Municipal Class EA, October 2000 (amended in 2007, 2011 and 2015).

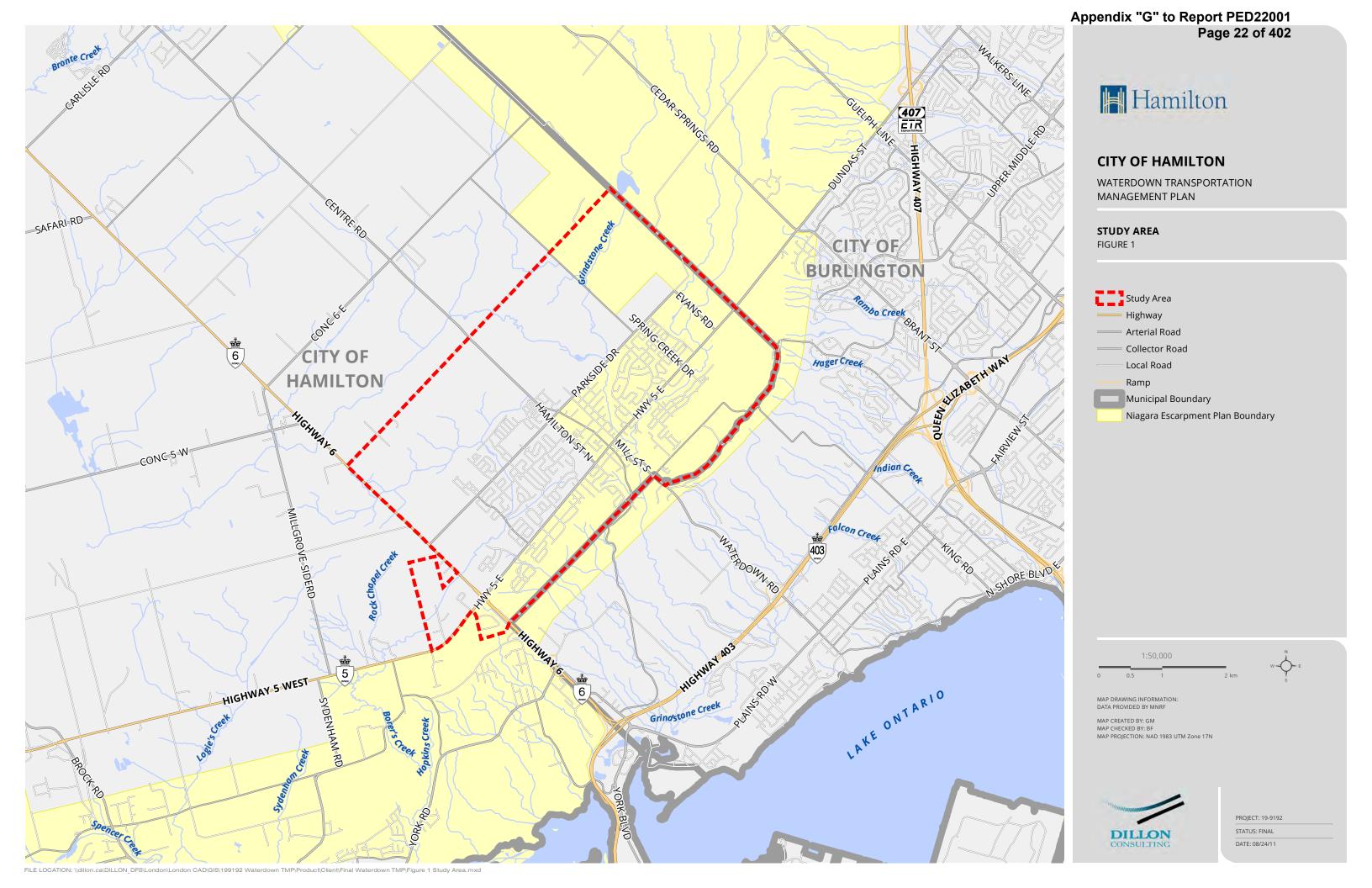
The purpose of the Waterdown TMP is to:

- Examine existing and future (to the year 2031) traffic and transportation problems and opportunities in Waterdown
- Identify and evaluate short and long-term infrastructure improvements to the road network, public transit and pedestrian/cycling facilities and safety issues to address these problems and meet future travel demands
- Develop a TMP that recommends a series of transportation infrastructure projects to be implemented in Waterdown over the next ten years.

The Waterdown TMP was completed in coordination with the Waterdown Community Node Secondary Plan Study and the Waterdown Built Heritage Inventory. The intent of the Waterdown TMP was to confirm the transportation infrastructure within Waterdown could support the long term intensification proposed by the Waterdown Community Node Secondary Plan Study.

1.1 Study Area

Waterdown is located north of the City of Hamilton (proper) and west of the Greater Toronto Area (GTA). Bordered on the south and east sides by the Niagara Escarpment, the community is somewhat geographically isolated from the rest of the City and neighbouring communities. As shown on **Figure 1**, the Study Area for the TMP includes the existing built-up area of Waterdown and surrounding undeveloped lands.



1.2 Background and Related Studies

Over the past two decades, the City of Hamilton has completed several transportation planning studies relevant to the Waterdown TMP, including the Waterdown/Aldershot Transportation Master Plan in 2008. The findings and recommendations of these studies were considered throughout the Master Plan process completed for the TMP. The following provides a brief overview of related studies.

1.2.1 Waterdown/Aldershot Transportation Master Plan, 2008

The most relevant background study is the Waterdown/Aldershot Transportation Master Plan, completed as a Master Plan under the Municipal Class EA. A joint project by the City of Hamilton, City of Burlington and Region of Halton, the Master Plan concluded that additional east-west and north-south capacity is required through Waterdown to service planned urban development. It also recommended a range of transportation demand management solutions to reduce car use.

Two major road projects were recommended by the Master Plan:

- A new east-west corridor from Brant Street to Highway 6 intended to function as a northern bypass of Waterdown's downtown for travellers passing through the area. The corridor follows existing Dundas Street, Avonsyde Boulevard and Parkside Drive and includes a new section of road north of Parkside Drive to Highway 6. Following the completion of the Master Plan, the new road was named North Waterdown Drive.
- A north-south corridor following Dundas Street, Burke Street, Mountain Brow Road and Waterdown Road to Highway 403. This corridor will improve access to Highway 403, Hamilton and Burlington and also function as a bypass of Waterdown's downtown.

An Environmental Study Report, following Phases 3 and 4 of the Municipal Class EA, was subsequently completed in 2012 by the City of Hamilton, City of Burlington and Halton Region for the two new corridors. More details on the current status of these improvements are included in **Section 2.10.2** of this report, Currently Planned Road Projects.

1.2.2 Waterdown Community Node Secondary Plan Study, On-Going

Recognizing the need to integrate land use planning with transportation planning, an important objective of the Waterdown TMP is to support the Waterdown Community Node Secondary Plan, currently underway. The Secondary Plan area covers the Community Node designated on Schedule E-Urban Structure, in the Urban Hamilton Official Plan (UHOP) and includes the historic downtown core along Dundas Street from east of Riley Street to Grindstone Creek. More details on the Secondary Plan are provided in **Section 2.2.2** of this report.

1.2.3 MTO, Highway 6/Highway 5 Interchange, Detailed Design Study, On-Going

The Highway 6/Highway 5 intersection is currently a signalized intersection. To deal with congestion at the intersection, MTO is currently preparing a Class EA and Detailed Design Study of a new interchange

to replace the signalized intersection. Changes to the local road network and a new commuter parking lot at Highway 6 are also being considered as part of the study.

The study is expected to be completed by 2022. Timing of construction has yet to be identified.

1.2.4 Truck Route Master Plan Review Study, On-Going

In 2020, the City of Hamilton initiated a review of the Truck Route Master Plan prepared in 2010. The review will identify opportunities for advancing the safe and efficient passage of trucks in Hamilton to support economic activities and the movement of goods, balanced with the needs of residents and communities. The final Master Plan will recommend changes to the City's existing designated truck route network. The existing truck route network in Waterdown is discussed in **Section 2.6** of this report.

1.2.5 City-Wide Transportation Master Plan Update, City in Motion, 2018

The City-Wide Transportation Master Plan Update guides transportation program development and identifies areas for investment to accommodate future growth in the City to 2031 and beyond. The goal of the Master Plan is to build a sustainable and balanced transportation system for all modes of transportation, promote a healthy and safe community and support economic prosperity and growth. Based on the vision of the Master Plan to "provide a comprehensive and attainable transportation blueprint for Hamilton as a whole that balances all modes of transportation to become a healthier city", the ultimate goals of the update were to:

- Reduce dependence on single occupant vehicles
- Promote accessibility
- Improve options for walking, cycling and transit
- Maintain and improve the efficiency of goods movement.

Completed as a Master Plan under the Municipal Class EA, the plan provides the need and justification for strategic road network improvements, transit, cycling, walking and goods movement.

1.2.6 Cycling Master Plan Update, Shifting Gears, 2018

As part of the 2018 City-Wide Transportation Master Plan Update, the City also updated the 2009 Cycling Master Plan, *Shifting Gears*. The objectives of *Shifting Gears* were to:

- Develop a city-wide cycling network for utilitarian, commuter and recreational cyclists by expanding on-road and off-road facilities, including Niagara Escarpment crossings
- Provide a cycling grid with a maximum 2 km spacing design in the urban area
- Design facilities that are appropriate for road traffic volumes and speed
- Provide convenient and all-season access to major residential and employment areas and transit nodes.

The findings of the 2018 study were incorporated into the City-wide Transportation Master Plan.

1.2.7 Recreational Trails Master Plan, 2016

The 2016 Recreational Trails Master Plan identified a network of trails in the City to provide a range of recreational opportunities. The Master Plan also includes links to on-road commuter systems to fully integrate the trail network with regional, provincial and national trail networks through and around the City. Improvements are identified on a ward by ward basis with detailed maps showing existing and planned trail network connections.

1.2.8 City of Hamilton, Transportation Demand Management (TDM) Land Development Guidelines, 2015

The City's TDM Land Development Guidelines is a tool for developers and the City to incorporate TDM measures into the development approvals process for new development and redevelopment. Initiated in 2015, the purpose of the guidelines is to encourage sustainable travel choices, such as walking, cycling, taking transit or carpooling, as alternatives to single-occupancy car trips, reduce the number of trips to work, shopping, etc. and decrease travel during peak hours.

1.2.9 Pedestrian Mobility Plan, 2012

The City's 2012 Pedestrian Mobility Plan focuses on balancing pedestrian and vehicular mobility by implementing a route accommodation decision-making process. To improve pedestrian safety and increase the number of walking trips, the process aims to integrate pedestrian improvements into all construction, reconstruction and maintenance activities associated with road projects. Applied City-wide, the goal of the route accommodation process is to help achieve the Transportation Master Plan's targets for reducing single occupancy vehicle trips.

1.3 Class Environmental Assessment Planning and Design Process

Municipal road and transit projects must meet the requirements of the Ontario *EA Act*. The Municipal Class EA applies to a group or "class" of municipal projects which occur frequently and have relatively minor and predictable impacts. These projects are approved under the *EA Act*, as long as they are planned, designed and constructed according to the requirements of the Class EA document.

The Class EA planning and design process is illustrated in Figure 2.

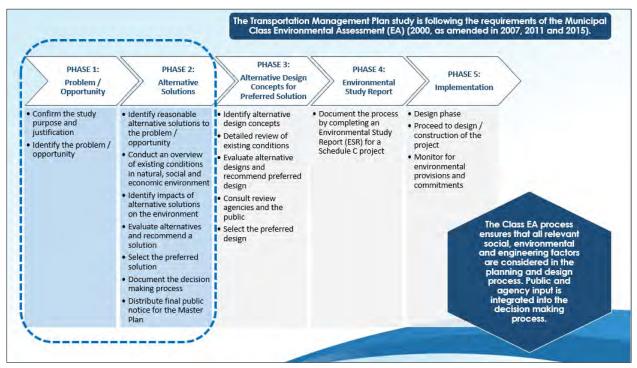


Figure 2: Class EA Planning and Design Process

The specific requirements of the Municipal Class EA depend on the type of project, its complexity and the significance of its environmental impacts. Three categories of projects are identified in the Class EA:

- <u>Schedule A</u> projects are the least complex and mostly consist of normal operational and maintenance activities. <u>Schedule A+</u> projects, such as streetscaping, localized operational improvements and changes to pavement markings for parking, turning lanes and bike lanes are also pre-approved but the public must be advised. Section A.1.2.2 of the Class EA includes various methods for public notification.
- Schedule B projects are more complex and generally include minor expansions to existing facilities. These projects are approved provided they follow Phases 1 and 2 of the Class EA process and are subject to an environmental screening. An example of a Schedule B road project is a new water crossing costing less than \$2.4M. The construction of a new transit station adjacent to a residential area or environmentally sensitive area is another example of a Schedule B project.
- <u>Schedule C</u> projects are the most complex and consist of new facilities or major expansions to existing facilities. These projects must follow all five phases of the Class EA process and require the preparation of an Environmental Study Report (ESR).

The Waterdown TMP was completed as a Master Plan under the Municipal Class EA. Integrating infrastructure planning with environmental assessment planning principles, a Transportation Master Plan typically includes a series of Schedule A, A+, B and C road and transit projects to be implemented

over an extended period of time. As required by the Class EA, the TMP followed Phases 1 and 2 of the Municipal Class EA process, as shown on **Figure 2**:

- Phase 1 of the Class EA process, "Problem/Opportunity", is summarized in **Section 3** of this report and involved the preparation of a Problem/Opportunity Statement
- Phase 2, "Alternative Solutions", is summarized in **Section 4**. Phase 2 consisted of:
 - The development of alternative solutions to the problems and opportunities identified in Phase 1
 - The preparation of an overview of existing conditions potentially affected by the alternative solutions, as summarized in **Section 2** of this report. The overview was also used to prepare the Problem/Opportunity Statement
 - Evaluations of the impacts of the alternative solutions on all aspects of the environment to identify recommended solutions. Recommended solutions were then carried forward and further developed into specific road and transit projects
 - At the end of Phase 2, specific road, transit and active transportation projects, along with safety improvements, were recommended for implementation. These projects, along with a time frame for implementation, were then "put together" to form the Waterdown TMP. A summary of the recommended projects is included in Section 6
- Public and agency consultation occurred throughout the project, as summarized in Section 5 of this report.

The Waterdown TMP followed Approach #2 for Master Plans, as outlined in the Municipal Class EA. Approach #2 requires that the TMP, accompanied by a Notice of Completion, be placed on the "public record" for 30 days to provide the public and agencies an opportunity to review the TMP and provide comments.

2.0 Existing and Future Conditions

Section 2 is an overview of existing and future conditions potentially affected by the alternative transportation solutions developed for the TMP.

2.1 Land Uses, Population Growth and Development Trends

A fast-growing community in the City of Hamilton, Waterdown currently functions as a "bedroom community" for its many residents who commute to work in nearby urban centres, such as downtown Hamilton, Burlington and Oakville. Significant growth has occurred in Waterdown over the past 25 years as new residents and businesses continue to be attracted by its pleasant small-town atmosphere, historically significant downtown and picturesque setting on the Niagara Escarpment. According to Statistics Canada census data, the population grew by 70% from 11,632 in 1996 to 19,818 in 2016.³

With a land area of only 10 km², Waterdown had a population density of 1,982 persons per km² in 2016. Development consists of the historic downtown core, centred on Dundas Street and Mill Street, surrounded by older residential neighbourhoods and newer suburban development. Commercial areas include the downtown, neighbourhood and community shopping plazas. Large format retail stores are located near Highway 6, north and south of Dundas Street, including the Flamborough South Centre. Waterdown has a compact urban form. Local attractions include the Souharrisen Natural Area, Niagara Escarpment and Smokey Hollow Falls on Grindstone Creek.

Waterdown has also recently attracted major companies, indicating that its role as a "bedroom community" is changing. Stryker Canada, one of the world's leading medical technology companies, established its headquarters in Waterdown in 2019 with 200 jobs. A new facility for L3 Wescam, a leader in aerospace, homeland security and defence technology, is currently under construction and is expected to employ 1,500 people. These local employment opportunities will allow more people to live closer to work, making transit and active transportation, like walking and cycling, viable alternatives to car use.

Waterdown is expected to continue to grow. The City of Hamilton's Growth-Related Integrated Development Study (GRIDS) indicates that Waterdown's population will increase by 63% from 19,818 residents in 2016 to 32,394 residents by the year 2031. According to GRIDS projections, employment is expected to grow by 7% from 2021 to 2031, when Waterdown will have 9,505 jobs.

³ 2016 census data is the most up-to-date data from Statistics Canada.

2.2 Future Land Uses

Section 2.2 provides an overview of municipal and provincial planning policies that apply to future land and transportation infrastructure development in Waterdown.

2.2.1 City of Hamilton Official Plan

The UHOP was adopted by Council in 2009. The plan provides direction and guidance on the management of the community, land use change and physical development to the year 2031. There are three Secondary Plans in Waterdown which are part of the UHOP, the West Waterdown Secondary Plan, the Waterdown North Secondary Plan, and the Waterdown South Secondary Plan:

- The West Waterdown Secondary Planning Area is located west of Hamilton Street between Dundas Street and Parkside Drive. Part of a recently developed area, the Secondary Plan provides for a mix of low and medium density residential uses, along with local and neighbourhood commercial uses, institutional uses and parks and open space.
- The Waterdown North Secondary Planning Area is a developing area bordered by the urban boundary on the north, Centre Road on the east, Parkside Drive on the south and a pipeline easement on the west. The goal of the Secondary Plan is to create a "compact, safe, functional and attractive urban environment" with a mix of housing types and a mixed use residential/commercial centre. Integrated pedestrian and cycling facilities and parks and open space are also encouraged. An important objective of the Secondary Plan is the implementation of North Waterdown Drive, as recommended by the Waterdown/Aldershot Transportation Master Plan.
- The Waterdown South Planning Area, south of Dundas Street to Mountain Brow Road, is located adjacent to the Niagara Escarpment. The Secondary Plan allows a range of residential uses and limited commercial uses that respect and enhance the escarpment, Grindstone Creek and other creeks and environment significant areas. Active transportation is encouraged by the plan.

The ongoing Waterdown Community Node Secondary Plan Study will result in the creation of a fourth Secondary Plan in the central Waterdown area. This area contains a concentration of services, shops, residential uses and other facilities serving as a focal point for the surrounding community. This study, currently underway, is described in the next section (Section 2.2.2).

Section C.4.0 of the UHOP refers to policies related to the integrated transportation network for the City of Hamilton. The options on the roadway network include, transit, active transportation (non-motorized movements), commercial vehicles and automobiles. As stated in this section, the transportation network and land uses are mutually inclusive; land uses are connected and accessible through the transportation network. Objectives and policies related to integrated transportation network, urban design and complete streets, barrier free transportation, new transportation corridors, active transportation networks, public transit networks and traffic management are outlined in Section C.4.0.

Schedule C, Functional Road Classifications, in the UHOP, classifies roads in Waterdown as follows:

- Highway 6 is a "Provincial Highway"
- Dundas Street is a "Major Arterial"
- North Waterdown Drive, Parkside Drive, Hamilton Street and Clappison Drive are "Minor Arterials"
- Main Street North is a "Collector"
- All other roads in Waterdown are local roads.

2.2.2 Waterdown Community Node Secondary Plan Study

An important objective of the Waterdown TMP is to support the Secondary Plan, currently underway. Public and focus group meetings held for the TMP were coordinated with the Secondary Plan Study to reach potential stakeholders interested in both projects. **Figure 3** shows the Secondary Plan Study Area.

The significant growth expected to occur in Waterdown over the next 20 years will impact the form and function of the downtown core. As noted on the City's website:

"The purpose of the Waterdown Community Node Secondary Plan Study is to create a clear vision for how the area should evolve in the future, and to establish policies to implement that vision. This will help manage change and redevelopment by providing direction on the desired mix of uses, height, density, built form, and urban design within the area."

https://www.hamilton.ca/city-planning/planning-community/waterdown-community-node-secondary-plan-study

Important goals of the Secondary Plan are to protect the heritage characteristics of the historic downtown, develop urban design guidelines for redevelopment, appropriately integrate older areas of Waterdown with newly developing areas and address concerns related to traffic and access in the area.

A Background Report on the Secondary Plan was prepared in 2018. The Secondary Plan is expected to be completed in 2022, in conjunction with the TMP.

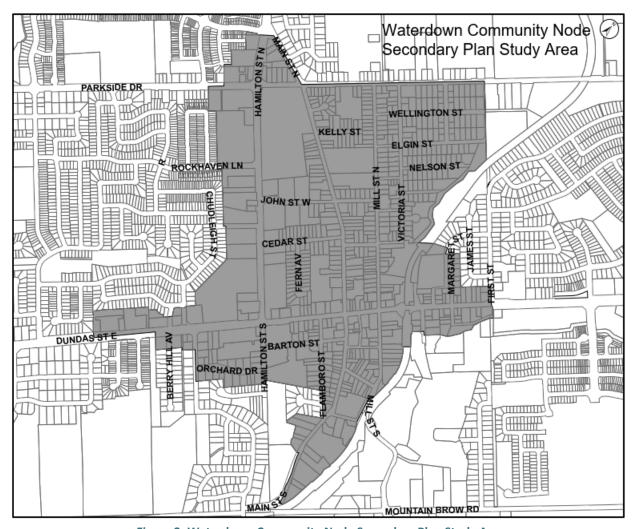


Figure 3: Waterdown Community Node Secondary Plan Study Area

2.2.3 Niagara Escarpment Plan

The community of Waterdown is surrounded on the south and east sides by the Niagara Escarpment. Under the jurisdiction of the Niagara Escarpment Commission, the Niagara Escarpment Plan designates the escarpment and the valleylands of Grindstone Creek, as "Escarpment Natural Area" and "Escarpment Protection Area". The rest of Waterdown is designated as "Urban Area" or "Escarpment Rural Area". The following policies are relevant to the Waterdown TMP:

- Any infrastructure, as defined by the Niagara Escarpment Plan, in Natural Areas must be planned and designed to minimize negative impacts on the escarpment environment. Infrastructure should avoid "Escarpment Natural Areas"
- Adequate public access, including trails, walkways, etc., should be provided from the "Urban Area" to the escarpment. Development in the "Urban Area" must meet the plan's criteria for protecting, restoring and, where possible, enhancing the escarpment environment.

2.2.4 The Greenbelt Plan

This Provincial Plan came into effect in 2017 and applies to a significant amount of land surrounding urban areas in the Greater Golden Horseshoe (GGH). The intent of the plan is to permanently protect the agricultural land base and ecological features and functions of the Greenbelt. A large portion of Waterdown, north of Dundas Street and west of Hamilton Road is part of the Greenbelt Plan but is designated "Towns and Villages" in the Greenbelt Plan. In these areas, the plan defers to local municipal Official Plans to govern land use.

2.2.5 Provincial Policy Statement, 2020

The new Provincial Policy Statement (PPS), issued under the *Planning Act*, came into effect on May 1, 2020. In the exercise of any authority that affects a planning matter, the *Planning Act* requires that decisions affecting these matters "shall be consistent" with the PPS. The PPS provides for appropriate development while protecting provincial interests, public health and safety and the quality of the natural and built environment.

The PPS emphasizes the importance of efficient development patterns that optimize the use of land, resources and public investment in infrastructure and public services. To accomplish this, the PPS promotes the concept of "complete communities" where people can live, work, shop and play. The policies encourage a mix of housing types, land uses, employment opportunities and an urban form that supports transit and active transportation, such as walking and cycling, before other modes of travel.

Section 1.6 of the PPS requires that planning for infrastructure, including transit and transportation corridors and facilities, be co-ordinated and integrated with land use planning and growth management. Relevant PPS policies for "Transportation Systems" (Section 1.6.7) and "Transportation and Infrastructure Corridors" (Section 1.6.8) include the following:

- Transportation systems should be safe, energy efficient, facilitate the movement of people and goods, and appropriate to address projected needs
- Efficient use should be made of existing and planned infrastructure through the use of transportation demand management strategies, where feasible
- As part of a multimodal transportation system, connectivity within and among transportation systems and modes should be maintained and, where possible, improved
- Planning authorities shall plan for and protect corridors and rights-of-way for transportation infrastructure to meet current and projected needs
- Major goods movement facilities and corridors shall be protected for the long term.

When planning transportation infrastructure, Section 1.6.8 of the PPS requires that consideration be given to the significant resources identified in Section 2 of the PPS, "Wise Use and Management of

Resources". Significant resources potentially affected by the alternative solutions identified and evaluated in the Waterdown TMP include:

- Natural heritage resources, such as the significant woodlands along Grindstone Creek. The PPS requires that these resources be protected
- Water resources, including surface water. The PPS requires that water quality be protected, improved or restored
- Cultural heritage resources, including significant built heritage resources and significant cultural landscapes. In Waterdown, these include designated heritage properties in the core and Mill Street Heritage Conservation District. The PPS requires that these resources, along with archaeological resources, be conserved.

2.3 Cultural Heritage Resources

2.3.1 Built Heritage and Cultural Heritage Landscapes

As noted in the Background Report on the Waterdown Community Node Secondary Plan, "the historic village of Waterdown is an old community, rich with history and heritage". Early development in the village was centred on Dundas Street and Mill Street and the Smokey Hollow mill site at Grindstone Creek Falls. Originally named the "Governor's Road", Dundas Street was a major military road laid out by Lt. Governor John Graves Simcoe in the 1790's from York (Toronto) to Dundas. The purpose of the road was to encourage settlement and deter Americans from expanding into Upper Canada. During the 19th century, the village became a thriving industrial and agricultural centre and was incorporated in 1878. By 1900, it had a population of 800 people.

First settled by United Empire Loyalists fleeing the United States, early Euro-Canadian settlement is represented in Waterdown by the surviving built heritage and street and lotting patterns, a significant concentration of pre-Confederation buildings and a variety of historical residential, commercial, institutional and industrial buildings. Significant cultural heritage resources identified in the Municipal Heritage Register, as of March 2021, included the following areas and properties designated under the *Ontario Heritage Act*:

- The Mill Street Heritage Conservation District with 111 properties is a significant cultural heritage landscape
- Seven individually designated properties are located in the core area, including two on Dundas
 Street East (Chestnut Grove at 315 and Waterdown Memorial Hall at 317), Hamilton Street
 North (Vimy Memorial Oak Tree at 79), two on Main Street North (Waterdown McGill House at
 173) and South (former Waterdown Post Office at 31) and one on Mill Street North (former East
 Flamborough Township Hall at 25)
- Two non-designated properties listed on the Municipal Heritage Register are located at 297 Dundas Street East and 307-309 Dundas Street East.

The City's on-going Waterdown Village Built Heritage Inventory identified several potential cultural heritage landscapes, as shown on **Figure 4**.

- The historic village of Waterdown, bordered by Parkside Drive, First Street, Mountain Brow Road and Hamilton Street
- The Souharrisen Natural Area consists of 55 acres of land along the south side of Dundas Street, east of Grindstone Creek. Dedicated by the Chief of the Mississaugas of the New Credit First Nation and the Lieutenant Governor of Ontario in 2014, it is a significant area with 104 indigenous archaeological sites. It also includes the foundations of an early 19th century dwelling that may have been used by Waterdown's first settlers
- Smokey Hollow, including the mill site and Grindstone Creek
- Main Street, Dundas Street, Board Street and Vinegar Hill.

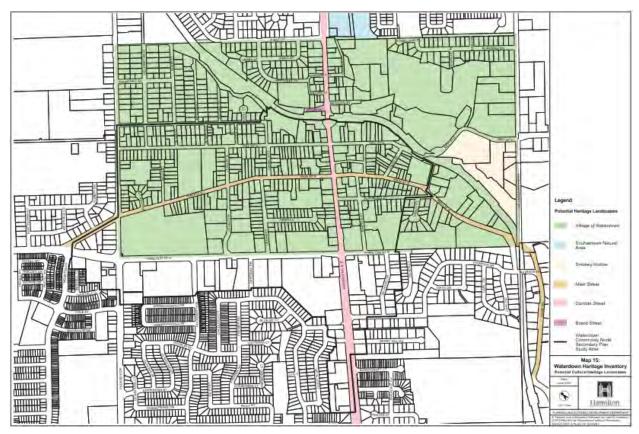


Figure 4: Waterdown Village Built Heritage Inventory

2.3.2 Archaeology

According to the UHOP Appendix F-4 and the Background Report on the Waterdown Community Node Secondary Plan, Waterdown and the surrounding area has potential for the discovery of archaeological resources, including Indigenous and Euro-Canadian sites based on the presence of significant resources like the Souharrisen Natural Area, water and food sources and early transportation routes.

The Waterdown-Flamborough area was home to the Chonnonton Nation, as early as 7,500 B.C. Devastated by European diseases brought by fur traders in the 1600's, they were driven out of the area during the Wendat-Haudenosaunee War around 1650.

2.4 Natural Heritage Resources

The UHOP designates Key Natural Heritage Features, such as "Significant Woodlands" along Grindstone Creek and Borer's Creek. The Niagara Escarpment is also designated as a key area. Other natural heritage features designated throughout Waterdown by the Official Plan include streams, core areas, linkages and parks and open space.

2.5 Existing Road Network

2.5.1 Public Concerns

A year prior to retaining Dillon to complete the Waterdown TMP, the City began gathering information on transportation related concerns from residents, business owners and media reports. Over 50 comments, complaints and concerns were received prior to the start of the study. The following list provides a high level overview of the concerns raised and was used as a basis for developing the TMP:

Traffic Congestion:

- Dundas Street between Hamilton Street and Mill Street AM and PM peak periods
- Mill Street (northbound) at Dundas Street PM peak period
- Right turn from Dundas Street onto Avonsyde Boulevard.

Neighbourhood Traffic infiltration:

- Spring Creek Drive
- Hollybush Drive
- Nisbet Boulevard
- Main Street North.

Speeding:

- Riley Street
- Brian Boulevard
- Main Street North.

Safety:

- Concerns for accessibility and pedestrian safety with requests for traffic calming measures
- Concerns on Mill Street South in the Smokey Hollow area
- Road curves Brian Boulevard
- School crossing Guy Brown School (Brian Boulevard at Longyear Drive)
- Left turn from Boulding Avenue onto Parkside Drive during PM peak period.

2.5.2 Methodology and Data Sources

A desktop analysis was completed to assess existing traffic conditions in Waterdown. Data sources included the following:

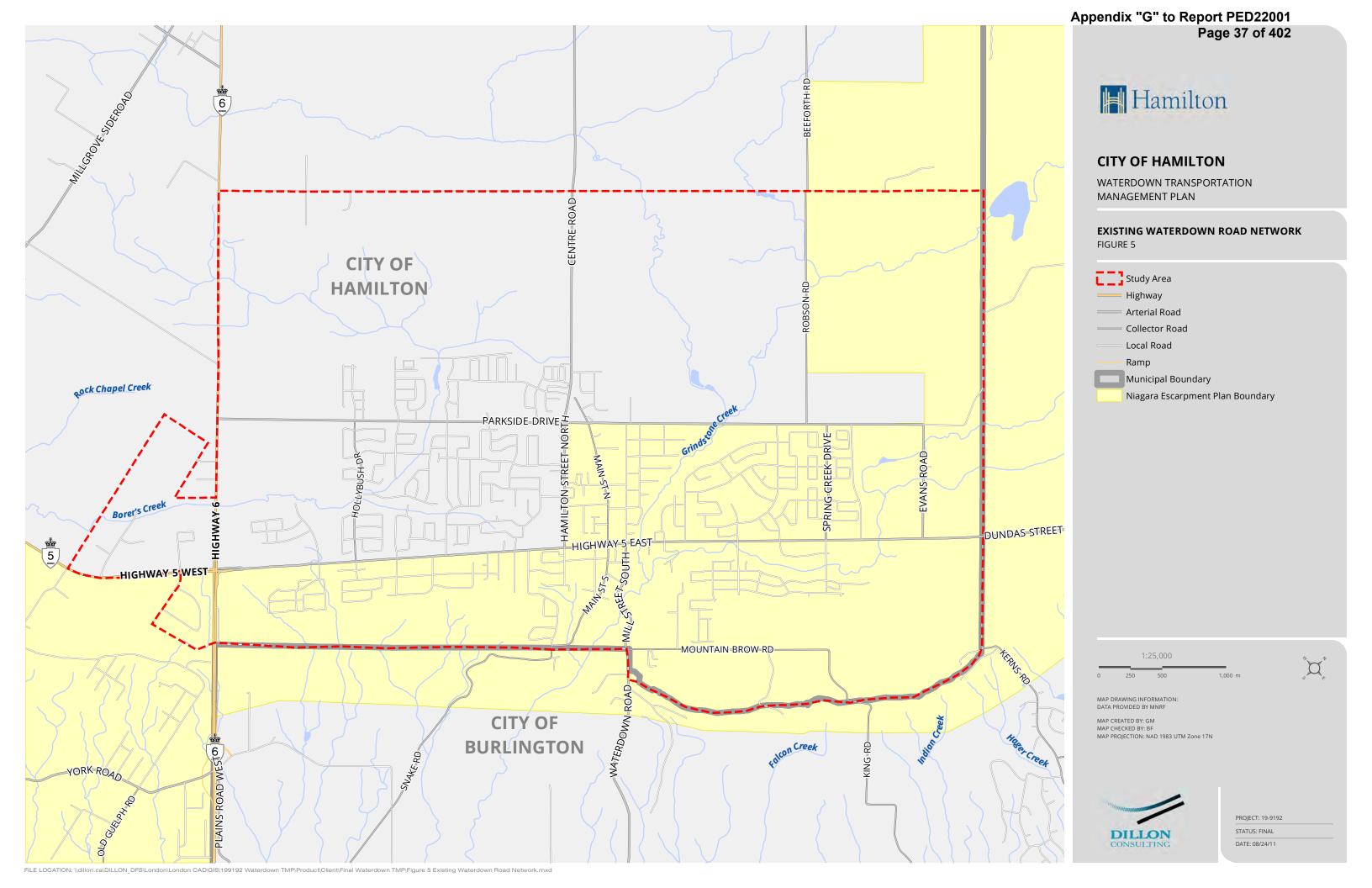
- <u>Traffic counts</u> provided by the City using the MS2 Transportation Data Management System.
 Traffic counts for the Waterdown TMP were collected in fall 2018. Two locations were collected in 2017 and increased by 2% to bring them on par with the 2018 counts.
- The 2016 Transportation Tomorrow Survey (TTS), consisting of travel information used to plan improvements to road and transportation facilities for pedestrians, cyclists, public transit users, goods movement, and drivers in the GGH Region.
- 2016 Canada Census data, including age, sex, income, journey to work, population, and dwelling counts. Since Waterdown is located in the City of Hamilton and does not have its own separate census tract, data was extracted from the three census tracts that make up the town (5370140.02, 5370140.03 and 5370140.04).
- <u>Streetlight Data</u> mines "big data" data sources from GPS and cellphone tracking data. This high-quality set of data can be queried for any time period for any size of area and with sufficient control to examine local and city-wide mobility issues. Since the data is collected over a very long period, it is possible to track the true "average" condition or break the data down into specific periods (e.g., average weekday afternoons in the summer, typical Wednesday AM peak period, etc.).

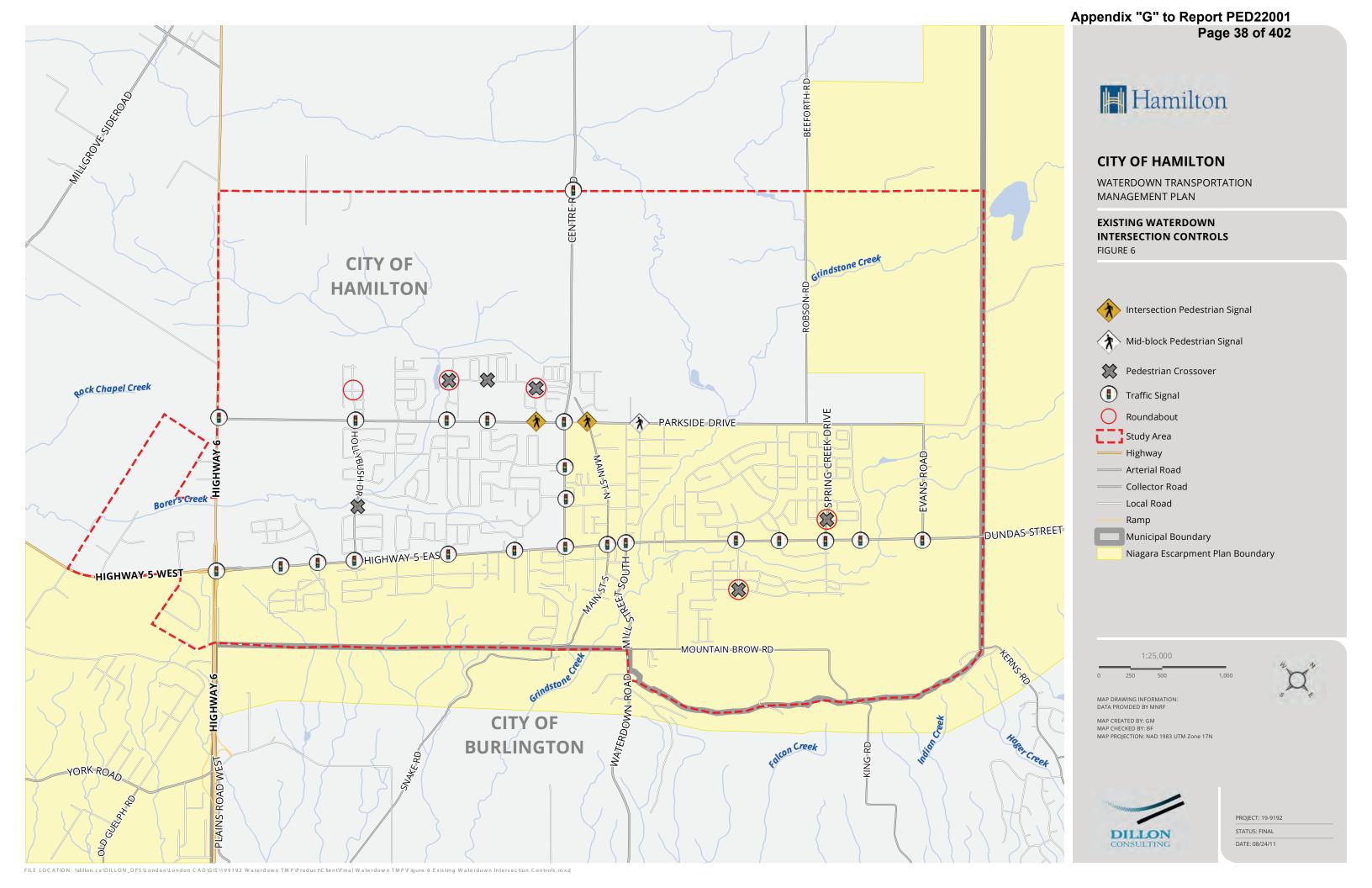
2.5.3 Existing Road Network

Figure 5 shows the existing road network in Waterdown. As shown:

- The historic village road network, roughly bounded by Hamilton Street, Parkside Drive, First Street and the Niagara Escarpment, is a grid street pattern, while the more recently developed areas surrounding the historic village are curvilinear in nature
- Primary east-west corridors are Dundas Street East (Highway 5 East) and Parkside Drive
- Primary north-south corridors are Highway 6 and Mill Street/Waterdown Road, and to a lesser degree Hamilton Street/Centre Road and Main Street/Snake Road
- Internally, travel in Waterdown is constrained by the tributaries of Borer's Creek and Grindstone
 Creek, while regional travel is restricted by the Niagara Escarpment south and east of the
 community.

Figure 6 shows existing intersection controls in Waterdown, including signalized intersections and roundabouts, as well as pedestrian crossovers, and mid-block and intersection pedestrian crossings. The remaining intersections are stop-controlled (not shown on the figure).





Dundas Street

Dundas Street East (Highway 5 East) is Waterdown's "High Street", home to the majority of independent and local businesses in the community. Many businesses are housed in historical buildings abutting the street (Image 1). Designated as a "Major Arterial" in the City's Official Plan, Dundas Street is the only east/west arterial road that travels entirely through Waterdown, connecting Flamborough and Highway 6 in the



IMAGE 1: Former Waterdown Memorial Hall, now the Waterdown Village Theatre, designated under Part IV of the Ontario Heritage Act

west with Burlington and Highway 407 in the east. Dundas Street has a five-lane cross-section through Waterdown with the exception of a 1 km section through historic Waterdown from Hamilton Street to just east of First Street. This section of Dundas Street varies in width, but generally has a three-lane cross section.

On-street parking is permitted in exclusive parking lay-bys on much of the historic village section of Dundas Street. There is no on-street parking in a live lane of traffic. Pedestrian crossings are provided at all signalized intersections. The posted speed limit on Dundas Street is 60 km/h except between Sunnycroft Court and Pamela Street where it is posted 50 km/h.

Hamilton Street Railway (HSR) Route 18 Waterdown has bi-directional service on Dundas Street, including 12 bus stops on the north side of the road and ten stops on the south side. Bus stops are within the existing cross section of the road.

Parkside Drive

Designated as a "Minor Arterial" in the City's Official Plan, Parkside Drive is an east/west roadway through the northern portion of Waterdown, terminating at Highway 6. The rural sections of Parkside Drive (Highway 6 to just west of Hollybush Drive and Main Street to Milburough Line/City of Burlington) have a two-lane cross section, while the urban section of Parkside Drive (just west of Hollybush Drive to Main Street) generally has a three-lane cross section. The urban section of Parkside Drive has multiple neighbourhood gateways, all controlled by signalized intersections.

Bicycle lanes were recently installed between Hollybush Drive and Hamilton Street. An Intersection Pedestrian Signal (IPS) is located at Parkside Drive and Main Street North and a Mid-block Pedestrian Signal (MPS) is located at Parkside Drive and the entrance to Waterdown Wetlands Trail/Alexander Place long term care facility. Additional pedestrian crossings are provided at all signalized intersections.

The posted speed limit on Parkside Drive is 50 km/h, except for the section between Highway 6 and Hollybush Drive where it is posted at 60 km/h. The urban section of Parkside Drive is dominated by

residential land uses, while the rural sections are mostly commercial, institutional and recreational land uses.

HSR Route 18 Waterdown has bi-directional service on Parkside Drive, including seven bus stops on the north side and nine stops on the south side. Bus stops are in the existing road cross section.

Highway 6

Highway 6 is a north-south Provincial Highway located along the western edge of Waterdown. It provides access to Highway 403 to the south and Highway 401 to the north. At its southern extent, Highway 6 is the boundary road between the City of Hamilton and City of Burlington.

Highway 6 between Highway 403 and the intersection with Highway 5 (Clappison's Corners) is a controlled-access freeway. This section of Highway 6 has a five-lane cross section, two southbound lanes and three northbound lanes, with the extra northbound lane provided for slow moving trucks climbing the escarpment.

The posted speed limit is 80 km/hr in this section, which reduces to 60 km/h in the immediate vicinity of Clappison's Corners. Just south of Clappison's Corners, commercial land uses access Highway 6 via Mountain Brow Road and/or have direct access.

North of Clappison's Corners, Highway 6 has a five-lane cross section with a centre turn lane. It has a posted speed limit of 80 km/h.

Mill Street/Waterdown Road

Mill Street is a local road that travels north-south through the centre of the historic village between Parkside Drive in the north and the Burlington boundary in the south where Mill Street becomes Waterdown Road. Mill Street is a two-lane residential road with a posted speed limit of 40 km/h between Parkside Drive and Dundas Street. Mill Street is part of a Heritage Conservation District between Union Street and Elgin Street.

On-street and boulevard parking are permitted on Mill Street between Dundas Street and Parkside Drive. Pedestrians are accommodated with sidewalks on both sides of the street, with pedestrian crossings provided at all stop-controlled intersections.

South of Dundas Street, Mill Street becomes a two-lane arterial road as it exits Waterdown and travels south. This section of Mill Street has a posted speed limit of 50 km/h and includes sharp curves and steep grades while travelling underneath the rail corridor before heading through Smokey Hollow. Pedestrian facilities (sidewalks) end at Union Street, as the corridor exits the urban area of Waterdown.

South of Mountain Brow Road (a boundary road with Burlington), Mill Street becomes Waterdown Road. Mill Street/Waterdown Road provides access to Highway 403.

Hamilton Street/Centre Road

Designated as a "Minor Arterial" in the City's Official Plan, Hamilton Street is a north-south road that runs through Waterdown from Silver Court in the south to just north of Nisbet Boulevard where it becomes Centre Road. North of Dundas Street, Hamilton Street has a three-lane cross section and a posted speed limit of 50 km/h. Hamilton Street/ Centre Road connect Waterdown directly to the communities of Flamborough Centre and Carlisle, north of Waterdown.

On-street parking is not permitted anywhere on Hamilton Street, with the exception of between Barton Street and Silver Court. Pedestrians are accommodated with sidewalks on both sides and there is an IPS at Hamilton Street and White Oak Drive. Pedestrian crossing locations are provided at all signalized intersections. Centre Road north of Main Street is a Greenbelt Cycling Route.

2.6 Truck Route Network

Since trucks are generally restricted to arterial roadways and provincial highways, there are few designated truck routes in Waterdown. The existing truck route network designated by the City includes Provincial Highways 6 and 5 (Dundas Street), Parkside Drive, Avonsyde Boulevard and Hamilton Street/Centre Road. As mentioned in **Section 1.2.4**, the City initiated a review of the Truck Route Master Plan in 2020.

2.7 Transit Network

2.7.1 Existing Transit Network and Metrics

Waterdown is serviced by HSR Route 18 – Waterdown. This route serves local and regional transit trips and connects to the GO Aldershot Station. There is no other transit service in Waterdown that provides direct connections to other areas in Hamilton, including the City's downtown core.

Waterdown Route 18

Route 18 operates from the Aldershot GO/VIA Station in Burlington to the Flamborough Business Park via a clockwise and counter-clockwise routing system through Waterdown. An excerpt of the HSR system map showing Route 18 is presented in **Figure 7**.

On weekdays, each direction of Route 18 operates on a 30-minute headway between 5:00 a.m. and 8:00 p.m⁴. However, due to the route's 'out-and-back' nature, the section along Mill Street South/Waterdown Road essentially operates on a 15-minute headway as both directions (clockwise and

⁴ Route 18 service span reduced, effective June 2020, as a result of Council approved mitigation measures that formed part of the 2020 Operating Budget. Service now terminates 1 to 1.5h earlier.

counter-clockwise) traverse this section in the same way. Route 18 operates at the same headway on Saturdays, but only between 8:00 a.m. and 8:00 p.m. There is no Sunday service.

At the Aldershot GO/VIA Station, regional transit connections can be made via GO Transit and VIA rail to destinations throughout Southern Ontario and beyond. Connections with Burlington Transit at Aldershot GO/VIA are limited to Routes 4 and 87 that serve various points within Burlington. Customers wishing to travel to/from Downtown Hamilton via Burlington Transit can transfer to Route 1 on Plains at Waterdown. **Table 1** estimates the current resource requirements for this transit service. The table does not reflect the June 2020 service reduction with fewer existing trips and service hours.

Table 1: Existing Route 18 Service

	Travel Time (min)	Layover	Headway (min)	Trips	Revenue Service Hrs	Total Vehicle Hrs	In-service Buses
Weekday	48	25%	15	60	48	60	4
Saturday	48	25%	15	46	37	46	4
Sunday/Holidays	-	-	-	-	-	-	-
Annual	-	-	-	17,438	13,950	17,438	

^{*}Route 18 daily trips reduced to 56 per Weekday and 42 per Saturday, effective June 2020.



Figure 7: Route 18 (HSR System Map Excerpt – December 29, 2019

HSR System-wide Metrics

The data in this section was extracted from the Canadian Urban Transit Association (CUTA) transit Factbooks, which compile reported transit metrics from transit providers across the country. The data in **Tables 2**, **3** and **4** identifies the *amount of service* (Revenue Service Hours (RSH) per capita), *service uptake* (Passengers per RSH; and Passengers per capita), and *average costs*, respectively, to provide transit across the HSR service area.

Table 2: HSR System Ridership and Service

Year Annual Boarding's		Annual Ridership	Annual Revenue Service Hours (RSH)	
2014	30,242,948	22,250,052	729,302	
2015	29,702,287	21,906,762	771,759	
2016	29,182,750	21,495,758	810,410	
2017	29,109,869	21,408,915	829,073	
2018	31,626,269	21,522,471	831,606	

Table 3: HSR System Performance Metrics

RSH/Capita	Ridership/Capita	Ridership/RSH	Year
1.49	45.41	30.51	2014
1.58	44.71	28.39	2015
1.65	43.81	26.52	2016
1.64	42.42	25.82	2017
1.59	41.11	25.88	2018

Table 4: HSR Financial Metrics

Year	Average Fare	Dir. & Aux. Op. Ex./ Tot. Veh. Hr.	Revenue/Cost
2014	\$1.65	\$101.67	47%
2015	\$1.68	\$96.48	47%
2016	\$1.80	\$102.49	45%
2017	\$1.91	\$102.26	47%
2018	\$2.01	\$114.41	45%

Ridership = Linked Trips ; a Linked Trip can have multiple Boarding's if the passenger transfers

The 2016 Waterdown population of 19,818 and 13,950 RSH on Route 18 results in **0.70 RSH/capita**, which is less than the HSR system-wide metric of **1.65 RSH/capita**. This data confirms that there is less transit service in Waterdown when compared with the HSR system as a whole.

Peer Group Transit Service Metrics

To provide a context for transit service provision and ridership uptake in the area, a review of peer group municipalities was undertaken. Focusing on areas adjacent to the GTA, the analysis highlights the variability through different population groups. The population group for Hamilton is Group 1, which represents a service area population of > 400,000. This is the largest of the population groups and includes areas with Rapid Transit facilities which can operate with increased efficiencies, accommodate larger passenger volumes, and attract additional ridership. Municipalities adjacent to the GTA in this group that operate similar to HSR without Rapid Transit include Brampton, and Waterloo Region (where operations are via a contracted service provider).

Given the character of the area, Waterdown is likely to operate a transit service that is more in line with smaller population groups. **Table 5** shows Peer Group municipalities and their 2018 Key Performance Indicators (KPI). Some services are provided by a contracted service provider which can influence the amount, type and cost of services provided.

The emergence of Alternative Service Delivery (ASD) for low density areas has enabled the use of smaller, more cost-effective vehicles, which can be operated "on-demand". This can facilitate less RSH when in-service vehicles are being better utilized (particularly in off peak periods when there can be few to no passengers on a fixed route bus). Also, in some cases, higher RSH can be provided by ASD with less operating costs due to the use of smaller vehicles.

Table 5: KPI – Peer Groups (2018 Ontario Urban Transit Factbook)

Population Group	Municipality	Ridership/RSH	Ridership/Capita	RSH/Capita
CTUDY ADEA	Hamilton	25.88	41.11	1.59
STUDY AREA	(Waterdown)			(0.70)
#1	Brampton	23.6	50.2	1.9
(>400,000)	Waterloo Region*	26.2	43.1	1.6
	Burlington	10.8	11.0	1.0
# 2 (150,000 – 400,000)	London	34.4	60.4	1.6
(130,000 400,000)	Oakville	11.7	15.0	1.0
	Guelph	27.0	43.2	1.4
# 3 (50,000 – 150,000)	Milton*	11.3	5.2	0.5
(30,000 – 130,000)	Brantford	19.8	16.2	0.8
#4 (<50,000)	Various**	14.7	8.6	0.6

Ridership = Linked Trips ; a Linked Trip can have multiple Boarding's if the passenger transfers

^{*}Contracted service provider

^{**} Average population group includes: Bancroft, Bracebridge*, Bradford West Gwillimbury*, Brockville, and Chatham-Kent*.

The peer group review shows that the amount of service provided by HSR for Hamilton is in line with Population Group 1. However, as expected, including areas such as Waterdown in the service area results in lower KPI for Hamilton.

The amount of service per capita ranges from 0.5 (in Milton) to 1.9 (in Brampton). It is not anticipated that HSR will be providing Waterdown with similar levels of service provided in Brampton where several fast, frequent ZUM BRT routes cover the service area.

To improve access and availability of transit for Waterdown residents and businesses, this report recommends that future service provision be improved from the existing Waterdown services (0.7 RSH/capita) to a target in the range of between 1.0 and 1.4 RSH/capita.

On Demand Transit Pilot Project

On September 7, 2021, HSR Route 18 Waterdown was changed to an on-demand service called HSR myRide, for a one year pilot. This on-demand model is a "stop to stop" service that dynamically adjusts the route as customers request to be picked up and improves the customer experience through more direct trips, quicker journeys and shorter wait times. The goal of myRide on-demand transit is to make trips on transit as quick and efficient as possible.

HSR myRide is be available for travel to or from designated bus stops within the service area, to a connecting Burlington Transit bus route and Aldershot GO Station, improving regional connectivity and travel choices. In addition to the 71 existing bus stops on HSR route 18, 80 new virtual stops have been created to provide customers with greater access to key destinations in Waterdown that are not accessible on the traditional fixed route.

The footprint of the area serviced by transit has been expanded to include; the rapidly growing commercial area and employment lands west of Clappison Avenue, the expanding residential area on the east end of Waterdown between Spring Creek Drive/Mallard Trail and Evans Road, as well as 3 key residential areas through the center of Waterdown that were previously outside of the 400m catchment are for transit.

2.7.2 Planned Transit Services and Facilities

Several plans have been prepared or are being developed that will increase transit service in the Waterdown area, including:

- Metrolinx Dundas BRT
- Hamilton BLAST Rapid Transit Network
- Regional Park-and-Ride Lots
- Waterdown Community Node Secondary Plan.

Metrolinx Dundas BRT

In 2020, Metrolinx approved the Initial Business Case (IBC) for the Dundas Street corridor. Integrating three in-development projects under the 2041 Regional Transportation Plan (RTP), the plan provides for BRT from Kipling Station to Waterdown. As outlined in the Dundas Connects Master Plan, approved by the City of Mississauga in 2018, the IBC provides for (**Figure 8**):

- Median-running guideway from Etobicoke Creek to The Credit Woodlands
- A reversible lane through Erindale Park from The Credit Woodlands to Mississauga Road
- Curbside transit lanes from Mississauga Road to Ridgeway Drive.

The IBC also includes the extension of the corridor through Halton to Waterdown to improve regional planning and connections moving forward. The Request for Proposal (RFP) for Preliminary Design of the corridor and Transit Project Assessment Process (TPAP) was released in 2020. The corridor was split into three segments:

- Kipling Station to Toronto/Mississauga boundary
- Toronto/Mississauga boundary to Oakville/Halton boundary
- Oakville/Halton boundary to Highway 6 in City of Hamilton.

Although the Metrolinx Dundas BRT route is being considered between Toronto and Highway 6 in Hamilton, there are currently no plans for exclusive BRT facilities on Dundas Street through Halton (Burlington) to Waterdown at this time.

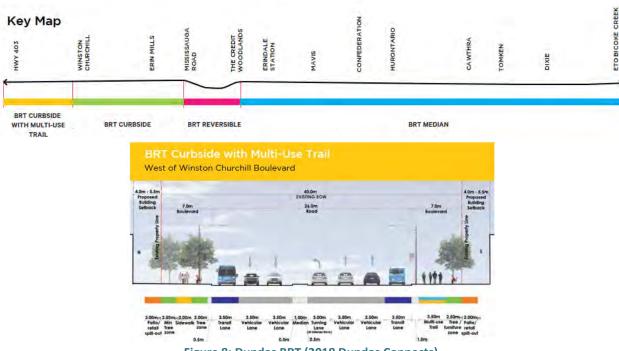


Figure 8: Dundas BRT (2018 Dundas Connects)

Hamilton BLAST Rapid Transit Network

The City of Hamilton has approved the development of the BLAST Rapid Transit Network to serve the area (**Figures 9** and **10**). The network consists of five lines, with the L line connecting Waterdown (Highway 6 and Dundas Street) to downtown Hamilton. No current HSR route provides this connection.

Hamilton's Ten-Year Local Transit Strategy (2015 to 2024) suggests increasing service on the L-line before the exclusive BRT is implemented (which is beyond the 25-year timeframe). The strategy also suggests adding express bus service within the corridor.

At this time, there are no approved near-term plans for a direct local service between Waterdown and Downtown Hamilton before the express route is implemented. Trips between Waterdown and Downtown Hamilton do require use of an additional service provider. However, should the HSR customer choose to use Burlington Transit Route 1, a single transfer is required. No additional fare is charged.



Figure 9: Hamilton BLAST Rapid Transit Network

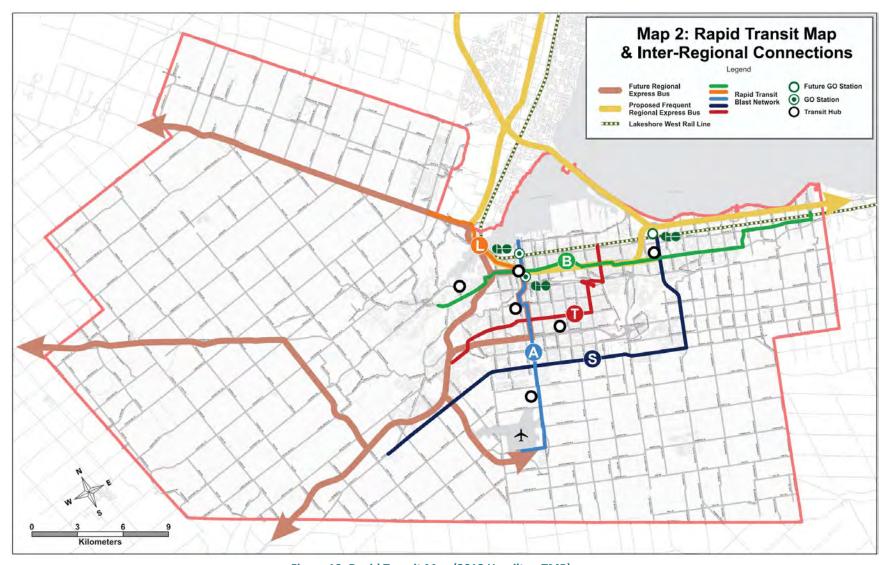


Figure 10: Rapid Transit Map (2018 Hamilton TMP)

Regional Park-and-Ride Lots

Currently, there are no Park and Ride lots in Waterdown. Area residents are served by the existing fixed transit service or they can use the Park and Ride at Aldershot Station. An MTO Carpool lot is located at Highway 6 and Highway 403, with space for up to 88 vehicles. This lot is not well connected to the area's transit network, however. A future MTO carpool lot is proposed at the Highway 6 and Dundas Street intersection.

Regional parking lots can facilitate access to transit for rural and other external residents. The implementation of the Dundas BRT with services to Waterdown provides a major east-west transit connection through Halton Region. Provision of future carpool lots and/or park-and-ride lots at strategic locations along the corridor could improve overall network mobility, particularly for users outside the urban transit service area.

The TMP recommends that future transit service consider improved connections to existing parking lots, as well as new lots as they are planned.

Waterdown Community Node Secondary Plan

The Waterdown Community Node Secondary Plan also deals with transit. As part of internal and external stakeholder consultation completed for both the TMP and Secondary Plan studies, the need for improved transit to support the Secondary Plan was identified, including:

- Improved connections to the major regional transit node at Aldershot Station
- Improved local transit services for access to the community core
- A new transit node in the core to connect to future regional transit and potential ASD. A major node would also improve the profile of transit in the core.

Another priority of the Secondary Plan is to protect heritage properties in the core Waterdown village area. Transit services and amenities can be provided within the public ROW with no adverse impacts on heritage value.

2.7.3 Future Transit Demand

Considerable growth is planned and expected to occur in Waterdown over the life of the TMP. By 2031, the population is forecast to grow by 63%, which will also increase transit demand. **Table 6** shows forecasted population and employment in Waterdown for the years 2021 and 2031.

Table 6: Forecast Population

		· · · · · · · · · · · · · · · · · · ·						
Employment Growth	Waterdown Employment		Waterdown Population	Year				
-	6,020	-	19,818	BASE 2016				
47%	8,865	46%	28,956	FORECAST 2021				
58%	9,505	63%	32,394	FORECAST 2031				

Mode Share

Figure 11 illustrates Waterdown's mode share for all trips while **Figure 12** shows mode share for commuter trips. Commuting trips are trips between home and the work place. Transit makes up a small fraction of overall (7%) and commuting (5%) travel in Waterdown. This is not surprising, since the current service primarily serves the regional GO Rail service in Aldershot and does not provide direct connections to employment locations where many Waterdown residents work.

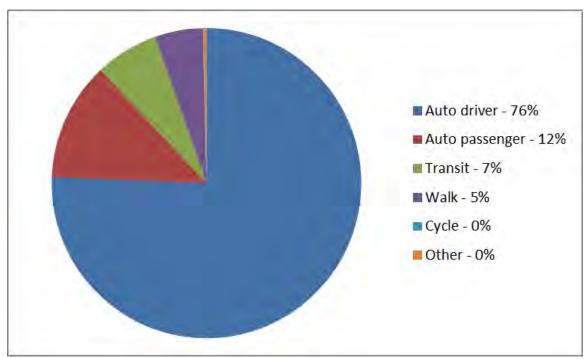


Figure 11: Waterdown Mode Share – All Trips (TTS 2016)

*Note: Transit includes School Bus

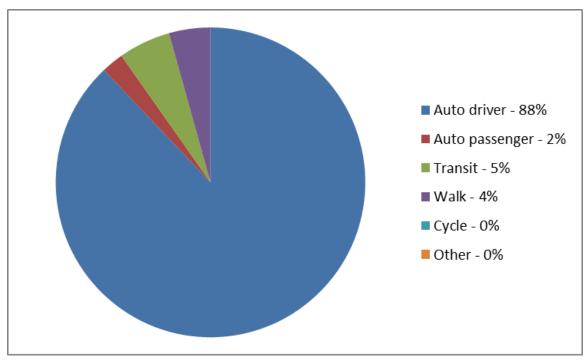


Figure 12: Waterdown Mode Share Commuter Trips (TTS 2016)

An existing transit mode share of 5% was reported for Waterdown, representative of a more suburban/rural community with little dependence on public transportation. As Waterdown grows, it is likely that a larger percentage of the population will need to rely on transit as a primary mode of transportation, due to multiple influencing factors such as:

- Increasing roadway congestion
- Limited space for destination vehicle parking
- Reduced car ownership
- GHG reduction and consideration for environmental sustainability
- Other cultural changes.

A 6% future transit mode share has been assumed to reflect these considerations.

Peak Period Transit Demand

The analysis of existing travel patterns showed that the majority of travel is to Burlington and downtown Hamilton. These trips are not very well served by transit since multiple transfers may be required, often between different service providers. The L-Line of BLAST will be implemented in the long term on Highway 6 bringing the rapid transit network in close proximity to Waterdown. The need to provide transit connections between Waterdown and downtown Hamilton would no longer be required if local Waterdown transit services provide frequent connections to the rapid transit network.

Population and employment growth, as well as the potential increase in mode shares (from 5% to 6%), will *double peak period transit demand* in Waterdown within the planning horizon. While there may be available capacity on the existing Route 18 to serve a portion of this growth, additional service will be required.

There are several approaches for increasing transit supply and service capacity in Waterdown, including enhancing existing services, streamlining routing, and better connecting people to their final destination.

2.8 Cycling and Active Transportation Network

Active Transportation includes all human powered forms of travel such as walking, cycling, in-line skating and skateboarding. Walking and cycling are the most popular and can be combined with other modes, such as public transit.

2.8.1 Network/Infrastructure

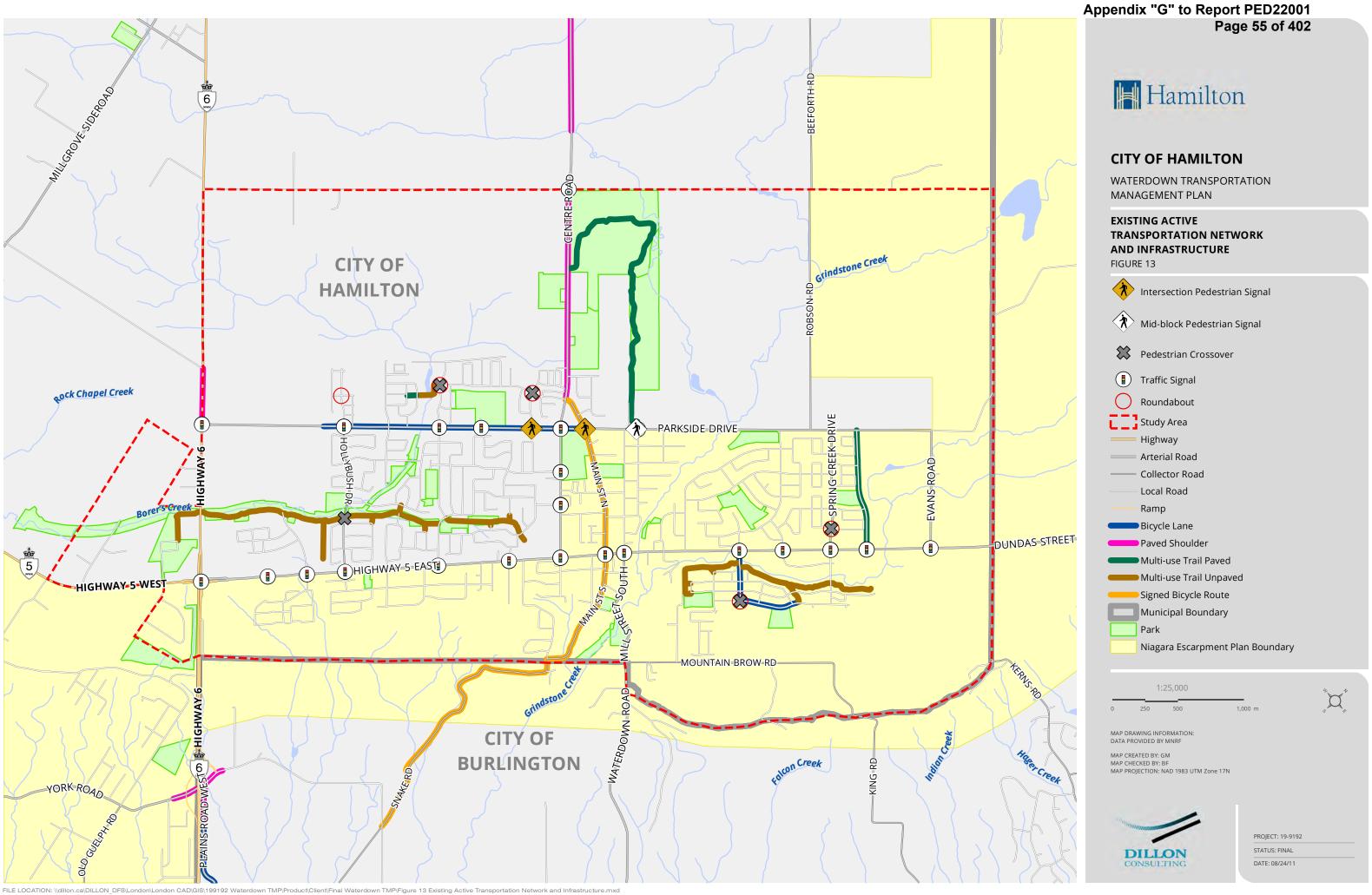
The existing active transportation network and infrastructure in Waterdown (excluding sidewalks) is shown on **Figure 13** and includes a multi-use recreation trails, bicycle lanes and Pedestrian Crossovers (PXO). Overall, infrastructure is limited, lacks continuity, and does not provide connections to places of employment, shopping, or transit. However, Waterdown's small geographical size and compact urban form makes almost all trips within town easily accomplished by bike along existing streets in less than 15 minutes.

The sidewalk network in Waterdown is extensive, but a number of streets lack sidewalks altogether or only have a sidewalk on one side of the street. Streets with sidewalks on on-side of the street required residents to walk on the street, or cross the street at an uncontrolled location to access the sidewalk on the other side. This is particularly problematic for the elderly and people with disabilities.

2.8.2 Bicycle Parking

Bicycle parking, an essential end-of-trip facility, is provided by the City of Hamilton in many areas of Waterdown, including in the street ROW, parks, recreation and community centres, libraries, and bus stops. The City has made the following bicycle parking program improvements:

- Bicycle parking requirements were incorporated in the Commercial and Mixed-Use Zoning Bylaw. Motor vehicle parking space requirements may be reduced if sufficient bicycle parking is provided
- The City's Bicycle Parking Strategy is continually reviewed and updated and serves as an overview of tasks and responsibilities
- In 2015, the City conducted a bicycle parking audit to evaluate the location, quantity and quality
 of existing bicycle parking in road ROWs, and identify potential opportunities for additional
 bicycle parking
- A new online bicycle parking request form is available from the City.



2.8.3 Transit Connectivity

The entire Hamilton Street Railway (HSR) and GO bus fleet is equipped with a two-bike capacity bike rack on the front of each bus. The City and HSR also recently expanded the 'Mountain Climber' program to include the Waterdown Road/Mill Street South Escarpment crossing (Route 18). The Mountain Climber program provides cyclists with a free transit ride between marked stops above and below the escarpment and was recently expanded in June 2021 to include an additional stop at the Aldershot GO/Via station.

2.9 Travel Demands

2.9.1 Primary Trip Markets

The majority of trips originating in Waterdown are destined for locations outside of town. **Figures 14** and **15** show destinations and the proportion of all daily trips originating in Waterdown based on the 2016 TTS. Although Waterdown is the number one destination, only 35% of trips originating in Waterdown were also destined there. The remaining 65% of trips were destined for various locations outside town, mostly to Hamilton (29%) and Halton Region (22%).

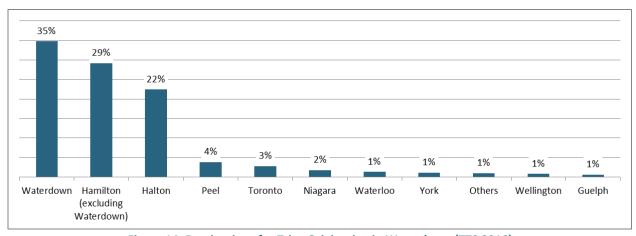


Figure 14: Destinations for Trips Originating in Waterdown (TTS 2016)

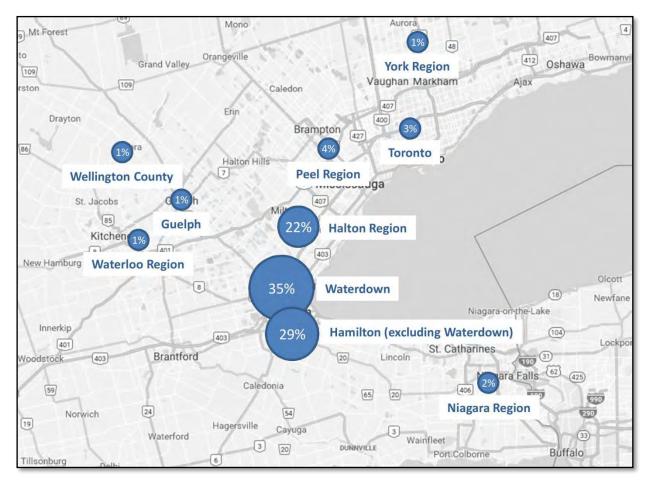


Figure 15: Destinations for Trips Originating in Waterdown

Approximately 10,900 daily round trips are made between Waterdown and Hamilton and approximately 8,400 daily round trips between Waterdown and Halton Region. Approximately 1,100 daily round trips (all modes) were made between Waterdown and Toronto in 2016.

2.9.2 Primary Employment Markets

The vast majority of employed Waterdown residents (81%) commute to locations outside town for employment with only 19% living and working in Waterdown. **Figure 16** illustrates employment locations and the proportion of Waterdown residents who commute based on the 2016 TTS. Halton Region employed the most Waterdown residents (28%), while 19% commuted to Hamilton and 10% commuted to Peel.

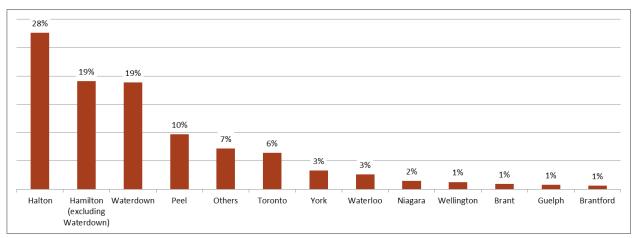


Figure 16: Employment Locations for Persons Residing in Waterdown (TTS 2016)

Using this data, 46% of employed Waterdown residents commute for at least 30 minutes (one-way), while 29% of commuters travel in excess of 1 hour (one-way)⁵. **Figure 17** shows employment locations.

⁵ Statistics Canada. Census Profile: 5370140.02 [Census tract], Ontario, 5370140.03 [Census tract], Ontario and 5370140.04 [Census tract], Ontario (table). 2016 Census of Population, 2017.

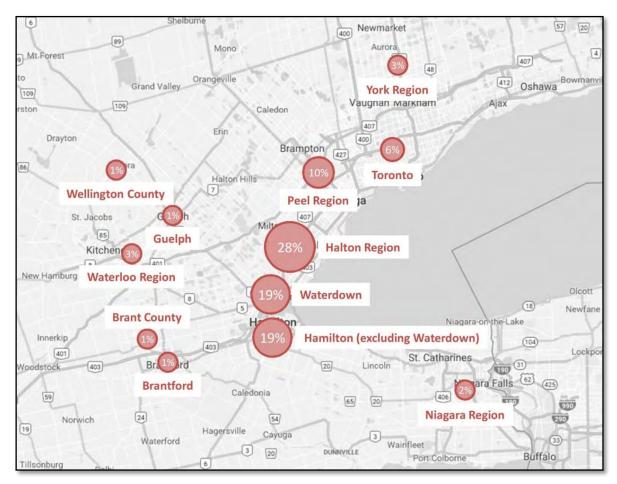


Figure 17: Employment Locations for Persons Residing in Waterdown

2.9.3 External Roadway Usage

Trip distribution patterns to and from roads connecting to the surrounding region for trips leaving Waterdown during the morning peak period (6:00 a.m. – 10:00 a.m.) are shown on **Figure 18**, with relative flows on **Figure 19**. As shown, the majority of trips leaving Waterdown during the morning peak period are using three main roadways: 39% on Dundas Street East (eastbound), 24% on Waterdown Road and 15% on Highway 6 (southbound).

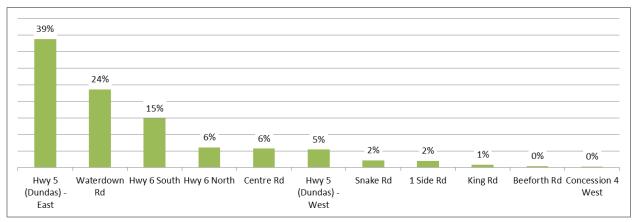


Figure 18: AM Roadway Usage: Trips Leaving Waterdown (StreetLight 2018)



Figure 19: AM Roadway Usage – Trips Leaving Waterdown – Relative Flows

Trip distribution patterns for trips entering Waterdown during the afternoon peak period (3:00 p.m. – 7:00 p.m.) are shown on **Figure 20** with relative flows on **Figure 21**. As shown, the majority of trips entering Waterdown during the afternoon peak period use three main roadways: 35% on Dundas Street East (westbound), 21% on Highway 6 (northbound) and 17% on Waterdown Road 17%.

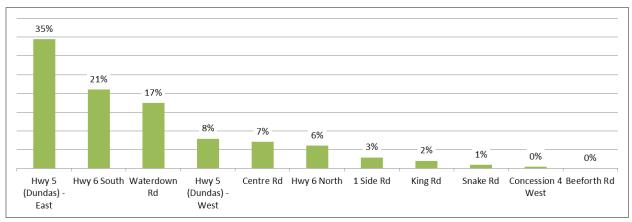


Figure 20: PM Roadway Usage – Trips entering Waterdown (StreetLight 2018)



Figure 21: PM Roadway usage – Trips entering Waterdown – Relative Flows

2.9.4 Origin/Destination Analysis

The following tables show the percentage of trips that originate outside of Waterdown compared to trips destined for locations in Waterdown during the AM and PM peaks. The tables list the major roadway origin/destination points surrounding Waterdown and show trip distribution between these points.

Table 7 indicates that 44% of trips entering Waterdown during the AM peak period via Highway 5 (Dundas Street) East are actually destined for Highway 5 (Dundas Street) West (30%), Mill Street South (9%), Highway 6 South (3%), or Highway 6 North (2%).

Similarly, 17% of trips entering Waterdown during the AM peak period via Highway 5 (Dundas Street) West are actually destined for Highway 5 (Dundas Street) East. When trips destined for Highway 6 (both north and south) are removed that number jumps to 48%. This means that half of the volume entering the west side of Waterdown on Dundas Street travels directly through town in the AM peak hour.

Table 7: Waterdown OD Analysis – AM (Streetlight 2018)

Origin\ Destination	Highway 5 (Dundas) – East	Mill Street	Highway 6 – South	Highway 5 (Dundas) – West	Highway 6 – North	Centre Road	1 Side Road	Waterdown
Highway 5 (Dundas) – East	-	9%	3%	30%	2%	1%	0%	54%
Mill Street	7%	-	5%	2%	2%	14%	0%	71%
Highway 6 – South	4%	0%	-	16%	56%	0%	0%	23%
Highway 5 (Dundas) – West	17%	2%	61%	-	4%	0%	0%	16%
Highway 6 – North	2%	3%	79%	7%	-	1%	0%	8%
Centre Road	14%	20%	2%	2%	1%	-	0%	62%
1 Side Road	13%	0%	0%	12%	0%	0%	-	75%

Table 8 indicates similar patterns are also occurring during the PM peak period. Twenty-five per cent of trips entering Waterdown during the PM peak period via Highway 5 (Dundas Street) East are actually destined for Highway 5 (Dundas Street) West (11%), Highway 6 South (6%), Mill Street South (5%), or Highway 6 North (3%).

Similarly, 22% of trips entering Waterdown during the PM peak period via Highway 5 (Dundas Street) West are actually destined for Highway 5 (Dundas Street) East. When trips destined for Highway 6 (both north and south) are removed that number becomes 41%.

Table 8: Waterdown OD Analysis - PM (Streetlight 2018)

Origin\ Destination	Highway 5 (Dundas) – East	Mill Street	Highway 6 – South	Highway 5 (Dundas) – West	Highway 6 – North	Centre Road	1 Side Road	Waterdown
Highway 5 (Dundas) – East	-	5%	6%	11%	3%	2%	0%	73%
Mill Street	4%	-	2%	3%	3%	7%	0%	80%
Highway 6 – South	3%	1%	-	17%	47%	1%	0%	31%
Highway 5 (Dundas) – West	22%	2%	40%	-	7%	0%	0%	30%
Highway 6 – North	3%	1%	77%	4%	-	1%	0%	14%
Centre Road	9%	10%	6%	2%	2%	-	1%	71%
1 Side Road	2%	2%	8%	11%	5%	6%	-	66%

2.9.5 Mode Share

Figure 22 illustrates Waterdown's mode share for all trips while **Figure 23** shows mode share for commuter trips between home and the work place.

At a total of 88% of all trips and 90% of commuting trips, travel in Waterdown is clearly dominated by the automobile. Waterdown's auto dependency is not surprising given its physical geography (isolated from Hamilton and Burlington by the Niagara Escarpment), limited transit and active transportation options and a general lack of local employment options. Active transportation only makes up 5% of all trips taken in Waterdown and 4% of commuting trips. Notably, cycling comprises 0% of all trips and commuting trips for Waterdown residents.

Transit also makes up a small fraction of overall (7%) and commuting (5%) travel in Waterdown. This is also not surprising, as transit mainly serves the regional GO Rail service in Aldershot and does not provide direct connections to Waterdown residents' employment locations.

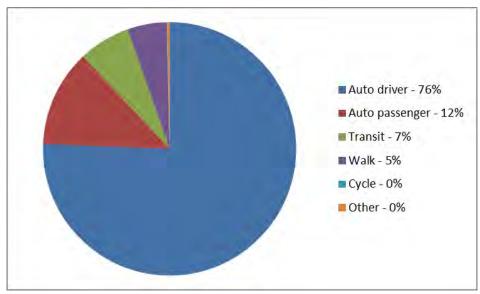


Figure 22: Waterdown Mode Share: All Trips (TTS 2016)

*Note: Transit includes School Bus

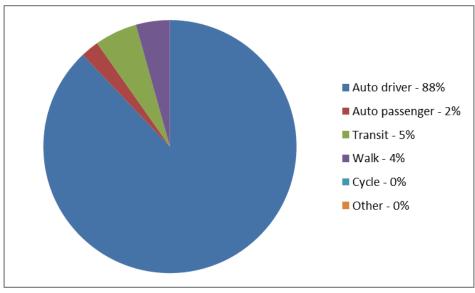


Figure 23: Waterdown Mode Share: Commuter Trips (TTS 2016)

2.9.6 Volume to Capacity Assessment

To determine the automobile carrying capacity of Waterdown's major roadways, existing peak hour traffic volumes on arterial roadways were compared with the roadway's planning capacity. Mid-block capacities relative to observed automobile volumes were analysed at 13 locations in Waterdown, as shown on **Figure 24**. Capacities were assigned to roadways based on their context, function, posted speed limit, and number of lanes and ranged from 900 to 1200 vehicles per hour per lane. The results are shown on **Table 9**.

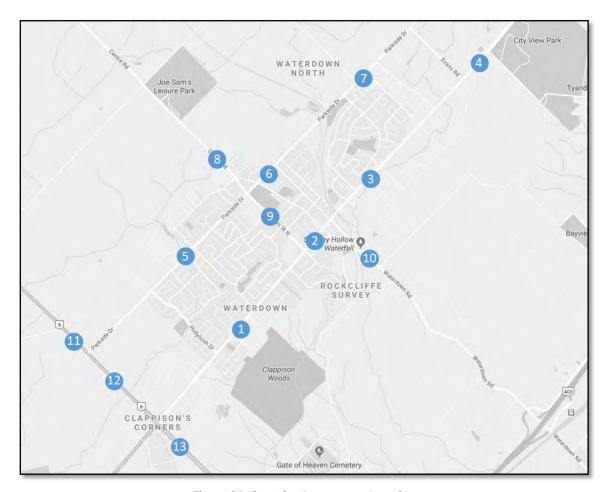


Figure 24: Capacity Assessment Locations

Table 9: Capacity Assessment Results

Street	Location	Period	Direction	# of Lanes	Total Capacity	Count	V/C Ratio
		AM	EB	2	2,000	705	0.35
	1 Most of Paradour Ave	AIVI	WB	2	2,000	787	0.39
	1 - West of Bayview Ave	D1.4	EB	2	2,000	1065	0.53
		PM	WB	2	2,000	1390	0.70
			EB	1	1,000	758	0.76
	2 Mari - Charle Charl	AM	WB	1	1,000	607	0.61
	2 - West of Mill Street	514	EB	1	1,000	706	0.71
		PM	WB	1	1,000	943	0.94
Dundas Street			EB	2	2,000	913	0.46
	2 11 1 5 1 5 1	AM	WB	1	1,000	587	0.59
	3 - West of Burke Street		EB	2	2,000	670	0.34
		PM	WB	1	1,000	843	0.84
			EB	2	2,400	1739	0.72
		AM	WB	2	2,400	468	0.20
	4 - West of Kerns Road		EB	2	2,400	1256	0.52
		PM	WB	2	2,400	1756	0.73
			EB	1	900	534	0.59
	5 - West of Wimberly Ave / Braeheid	AM	WB	1	900	317	0.35
	Ave		EB	1	900	341	0.33
	Ave	PM	WB	1	900	487	0.54
	6 - West of Mill Street	AM PM	EB	1	900	745	0.83
Parkside Drive			WB	1	900	306	0.34
			EB	1	900	345	0.38
			WB	1	900	781	0.87
	7 - West of Spring Creek Dr	AM	EB	1	1,100	750	0.68
			WB	1	1,100	166	0.15
		PM	EB	1	1,100	274	0.25
			WB	1	1,100	1074	0.98
		AM	NB	1	900	504	0.56
Centre Road	8 - North of Nisbet Blvd		SB	1	900	489	0.54
		PM	NB	1	900	430	0.48
			SB	1	900	455	0.51
		AM	NB	1	900	365	0.41
Hamilton Street	9 - North of John Street		SB	1	900	525	0.58
Tidiliniton otrect	3 North of John Street	PM	NB	1	900	639	0.71
			SB	1	900	653	0.73
		AM	NB	1	1,000	337	0.34
Mill Street	10 - North of Mountain Brow Road	, (141	SB	1	1,000	825	0.83
Willi Street	10 - North of Modificant Brow Road	PM	NB	1	1,000	730	0.73
		1 101	SB	1	1,000	465	0.47
		A N.4	NB	2	2,400	1393	0.58
	11 - North of Parkside Drive	AM	SB	2	2,400	1589	0.66
	11 - NOTHI OF PARKSIDE DRIVE	D1.4	NB	2	2,400	1630	0.68
		PM	SB	2	2,400	1689	0.70
		0.04	NB	2	2,400	1156	0.48
Highway 6	12 North of Duradas Charact	AM	SB	2	2,400	1472	0.61
	12 - North of Dundas Street	D* 4	NB	2	2,400	1742	0.73
		PM	SB	2	2,400	1674	0.70
			NB	3	4,500	1836	0.41
		AM	SB	2	3,000	2089	0.70
	13 - North of York Road		NB	3	4,500	2393	0.53
		PM	SB	2	3,000	2331	0.78

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The volume to capacity ratio (V/C ratio) demonstrates if the overall cross-section of the roadway provides sufficient automobile capacity during the peak hour. V/C ratios of less than 0.75 (i.e., 75% or less of the available capacity is being used) will generally function very well throughout the peak hour. V/C ratio values between 0.75 and 0.85 indicate there are occasional congestion issues; and values in excess of 0.85 indicate congestion issues throughout the peak hour. The colouring in **Table 9** indicates the breakpoints.

Overall, **Table 9** shows that planning capacity is sufficient for travel in Waterdown. For most roads, the volume to capacity ratio (V/C ratio) for existing conditions is less than 0.75, indicating that, for the most part, major roads in Waterdown have sufficient capacity and work well during the peak hour. There are, however, a number of pinch points in Waterdown with spot and corridor issues affecting automobile travel through the community. For instance, Dundas Street between Main Street and Burke Street (Locations 2 and 3) show V/C ratios of 0.84 and 0.94, respectively, during the PM peak hour in the westbound direction. This is the peak commuting direction and causes the queuing that occurs along this stretch on a daily basis.

Parkside Drive shows similar issues, as indicated by its westbound PM peak hour V/C ratios of 0.87 and 0.98 at Locations 6 and 7, respectively. As a single lane minor arterial along the north side of a residential area, Parkside Drive does not have enough remaining capacity to support further growth in automobile travel east of Mill Street.

Taken together for Dundas Street and Parkside Drive, westbound automobile capacity is strained in the central areas of Waterdown during the existing PM peak hour.

The AM peak hour generally operates very well across Waterdown along major routes. Issues that occur in the PM peak hour are less pronounced, but still present, at Locations 3 and 6 in the opposite (eastbound) direction, as commuters head to work east of Waterdown via Dundas Street. These two locations have V/C ratios of 0.76 on Dundas Street and 0.84 on Parkside Drive. This correlates with commuting patterns demonstrated in the Streetlight data and local knowledge.

Mill Street just north of Mountain Brow Road (Location 10) showed a V/C ratio of 0.83 in the southbound direction during the AM peak, demonstrating the importance of this connection for commuters headed to Burlington. Interestingly, the reverse trip northbound during the PM peak hour shows that the roadway itself has sufficient capacity (V/C ratio = 0.73).

In contrast to the known queuing issues northbound at the Dundas Street and Mill Street intersection, this would indicate that the capacity bottleneck occurs at the intersection, not due to the capacity of the corridor itself.

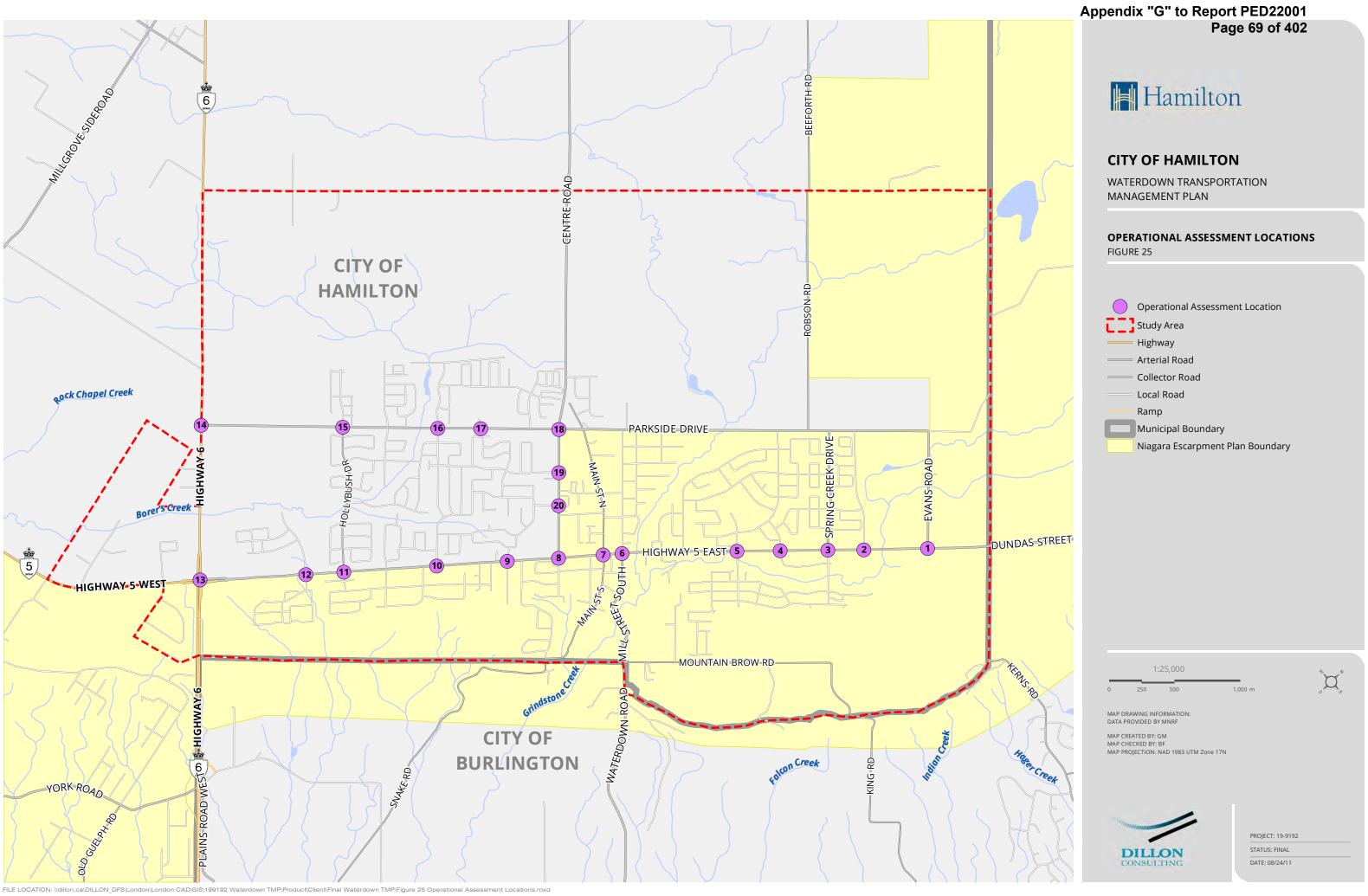
2.9.7 Operational Assessment

Intersection operations were examined at most of the signalized intersections in Waterdown, as shown on **Figure 25**. **Table 10** shows the results of the analysis, using Synchro 10 software and turning movement counts and/or signal timings obtained from the City of Hamilton.

Table 10: Existing Intersection Level of Service

	Interception	LOS			
	Intersection	AM	PM		
1	Dundas Street and Evans Road	В	В		
2	Dundas Street and Avonsyde Boulevard	В	В		
3	Dundas Street and Mallard Trail/Spring Creek Drive	В	Α		
4	Dundas Street and Riverwalk Drive/Pamela Street	Α	Α		
5	Dundas Street and Burke Street	Α	В		
6	Dundas Street and Mill Street	D	D		
7	Dundas Street and Main Street	Α	В		
8	Dundas Street and Hamilton Street	С	С		
9	Dundas Street and Berry Hill Avenue/Perrelli Street	Α	Α		
10	Dundas Street and Riley Street	Α	Α		
11	Dundas Street and Howlandmills Drive/Hollybush Drive	В	В		
12	Dundas Street and Clappison Avenue	С	С		
13	Dundas Street/Highway 5 and Highway 6	D	E		
14	Parkside Drive and Highway 6	В	В		
15	Parkside Drive and Hollybush Drive/Sadielou Boulevard	Α	Α		
16	Parkside Drive and Braeheid Avenue/Wimberley Avenue	Α	Α		
17	Parkside Drive and Keewaydin Street/Secondary School	В	В		
18	Parkside Drive and Hamilton Street	С	С		
19	Hamilton Street and Rockhaven Lane	В	Α		
20	Hamilton Street and White Oak Drive	В	С		

As shown on **Table 10**, overall intersection operations during the peak hour are generally good. In the AM peak hour, all intersections operate at LOS C or better, with the exception of Dundas Street/ Highway 5 and Highway 6, as well as Dundas Street and Mill Street, which both operate at overall LOS D. In the PM hour, these same two intersections operate worse than LOS C. The intersection of Dundas Street/Mill Street intersection operates at LOS D during the PM peak hour, while the Dundas Street/Highway 5 and Highway 6 intersection operates at LOS E with queuing and delays for most movements during peak hours. In fact, all protected left-turn movements at this intersection operate at LOS F during both the AM and PM peak hours.



2.9.8 Collision and Safety Analysis

A total of 348 reported collisions occurred in Waterdown over a five-year period from January 1, 2014, to December 31, 2018, as shown on **Table 11**. Overall, the annual number of collisions remained relatively static with the average year experiencing roughly 70 collisions. 2015 had the highest number of collisions at 77, while 2017 saw the fewest at 56.

Table 11: Waterdown annual Collisions (2014-2018)

Year	Number of Collisions					
2014	74					
2015	77					
2016	68					
2017	56					
2018	73					
Total	348					

As shown on **Figure 26**, the most common initial impact type for collisions in Waterdown is a rear end collision, comprising 32% of all collisions from 2014 to 2018. This is likely due to the stop-and-go nature of traffic along Dundas Street during the morning and afternoon commutes. Overall, most collisions occur on dry pavement.

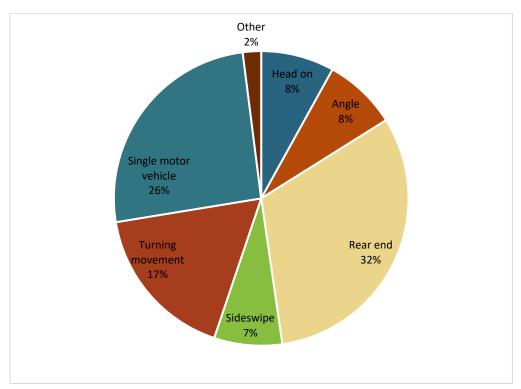


Figure 26: Waterdown Collisions by Initial Impact Type (2014-2018)

The majority (57%) of collisions in Waterdown from 2014 to 2018 were classified as 'property damage only' collisions. The remaining 43% were classified as 'non-fatal injury' (42%) and 'fatal injury' (1%) collisions. Two fatal collisions occurred over the past ten years, with both occurring in the last two years. **Table 12** shows collision rates per 100,000 population.

Table 12: Waterdown Annual Collisions Classification Rates (2014-2018)

Year	All Collisions	Collision Rate/ 100,000 Pop.	Non-fatal Injury Collisions	Non-fatal Injury Collision Rate/ 100,000 Pop.	Fatal injury Collisions	Fatal injury Collision Rate/100,000 Pop.
2014	74	380	32	164	0	0
2015	77	396	33	170	0	0
2016	68	349	35	180	0	0
2017	56	288	18	92	1	5
2018	73	375	28	144	1	5

^{*}Population is based on 2016 Canadian Census

When compared to the City of as a whole, Waterdown has significantly fewer collisions per 100,000 population. Waterdown's highest collision rate was 396 per 100,000 population in 2015, while the City's collision rate was nearly four times as high, at 1,566 per 100,000 population.

Collisions in Waterdown generally occur on the highway/arterial road network, with Highway 5 (Dundas Street) experiencing nearly half (49%) of all recorded collisions from 2014 to 2018. Parkside Drive and Hamilton Street are the second and third most common locations for collisions. Parkside Drive experienced 16% of total collisions, while Hamilton Street experienced 12%.

As shown on **Figure 27**, there are clear peaks in the number of collisions during the AM and PM peak periods (7:00 a.m. and 9:00 a.m. and 4:00 p.m. and 6:00 p.m., respectively), with a third peak around lunch time (12:00 p.m. and 1:00 p.m.).

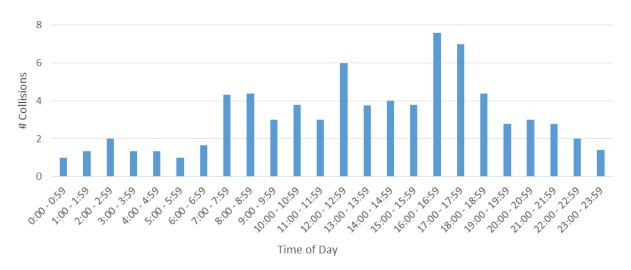


Figure 27: Waterdown Average Annual Collisions by Time of Day (2014-2018)

2.10 Transportation Modelling and Forecasts to 2031

2.10.1 Introduction

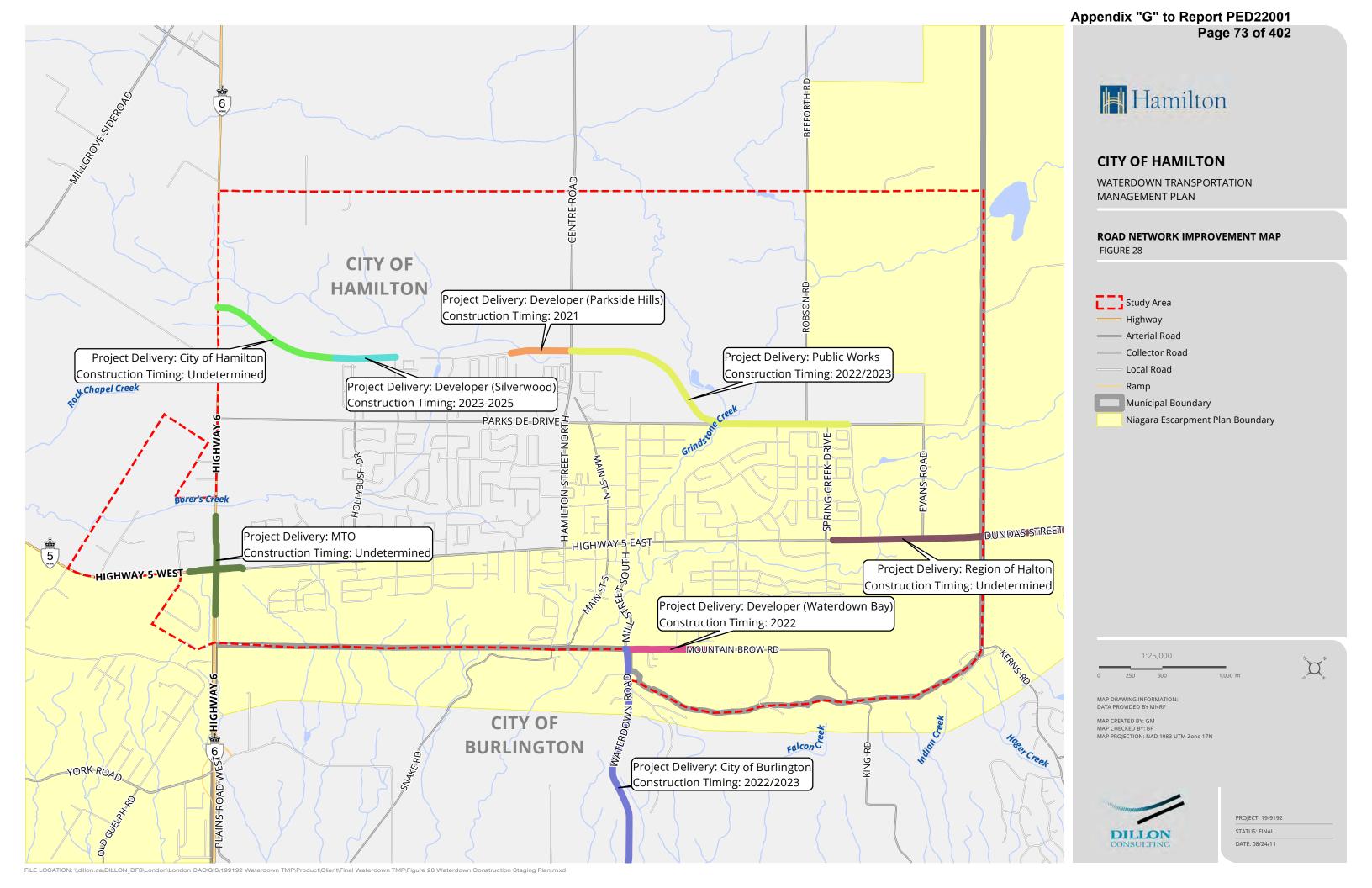
This section summarizes the transportation modelling and forecasts to the year 2031 completed for the TMP.

2.10.2 Currently Planned Road Projects

Figure 28 shows road projects which are planned or currently underway in Waterdown. These projects were taken into consideration for the transportation modelling completed as part of the Waterdown TMP.

North Waterdown Drive

As recommended by the Waterdown/Aldershot Transportation Master Plan, North Waterdown Drive, when completed, will provide additional east/west capacity through Waterdown. It will also provide convenient and direct access for new development along the corridor to Highway 6 and other parts of Waterdown.



An Environmental Study Report was prepared in 2012 for the following projects along the corridor:

- Improvements to Parkside Drive, west of Avonsyde Boulevard and a new section of road north of Parkside Drive to Centre Road. Part of the new east-west corridor along Parkside Drive/North Waterdown Drive, this project is currently in the detailed design stage. Construction is anticipated to begin in 2022/2023.
- A section of the new North Waterdown Drive from Mosaic Drive to Babcock Street was constructed by Parkside Hills (a developer) in 2020.
- The remaining sections of North Waterdown Road are currently in the planning or detailed design stages.

Waterdown Road Corridor

To improve access to Highway 403, Hamilton and Burlington, the Waterdown/Aldershot Transportation Master Plan recommended a new north/south corridor connecting Dundas Street to Highway 403 via Burke Street, Mountain Brow Road and Waterdown Road. The corridor will also provide additional north/south capacity and will divert traffic away from the busy intersection of Dundas Street and Mill Street. An Environmental Study Report was prepared in 2012 for the following projects along this corridor:

- Improvements to Dundas Street by the Region of Halton and City of Hamilton. Construction timing has yet to be determined
- Improvements to Burke Street have been constructed
- A new section of road connecting Burke Street with Mountain Brow Road is being constructed by a developer. This project is under construction with an anticipated completion/opening date of 2021
- Improvements to Waterdown Road will be constructed by the City of Burlington. Timing of these improvements are to be determined.

Highway 6/Highway 5 Interchange

MTO is currently preparing an EA and Detailed Design Study of a new interchange to replace the signalized intersection at Highway 6 and Highway 5. Changes to the local road network and a new commuter parking lot at Highway 6 are also being considered as part of the study. The timing of construction has yet to be determined.

2.10.3 Approach and Methodology

Transportation modelling and forecasting was completed in three phases:

• Phase 1, City-wide Model Confirmation/Validation, using the City of Hamilton model updated in 2016. With a horizon year of 2031, the model is used to forecast future demands for transportation infrastructure and test alternative future conditions related to changes in socio-economics, transportation infrastructure investment, transit service changes, and other large-scale city-building policy initiatives.

- <u>Phase 2</u>, Sub-area Model Creation and Calibration, to more precisely calibrate travel patterns for Waterdown and those passing through town. This work allowed the study team to assess various network alternatives for Waterdown.
- <u>Phase 3</u>, Travel Demand Forecasting. The city-wide and sub-area models, along with population and employment projections provided by the City, were used to forecast travel demand in Waterdown to the year 2031

More details on the approach and methodology are included in Dillon's Transportation Modelling and Forecasting Report, August 2020, under separate cover.

2.10.4 Travel Demand Forecasting

Travel demand in Waterdown was forecasted to the year 2031 AM and PM peak hours in three steps, including:

- Internal zone trip forecasting
- External zone trip forecasting
- Trip distribution.

2.10.4.1 Internal Zone Trip Forecasting

Changes in travel demand in Waterdown to 2031 were distributed to 11 zones in Waterdown, as shown on **Figure 29**. **Table 13** shows the projected number of residential units, population and jobs in the 11 zones in Waterdown for the years 2011, 2021, and 2031.

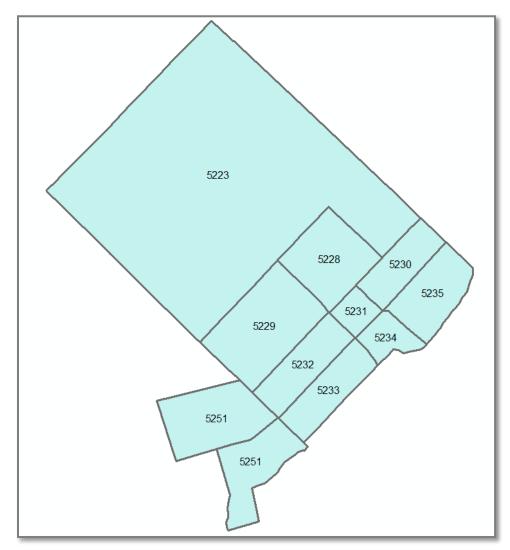


Figure 29: GRIDS Zone Structure for Waterdown

Table 13: GRIDS Residential Units, Population, and Employment Forecasts, 2011, 2021 and 2031

				2011		2021		2031				
TZ_GRIDS1	TZ_NEW	SUB_AREA	Acres	Units	Pop	Jobs	Units	Pop	Jobs	Units	Pop	Jobs
2629	5223	Flamborough	8,365	641	1,864	286	646	1,811	284	646	1,798	285
2630	5234	Flamborough	285	353	892	153	353	860	166	353	856	167
2632	5235	Flamborough	675	10	28	3	2,027	4,533	1,497	3,530	8,114	1,504
2633	5229	Flamborough	1,228	111	325	332	2,398	6,085	853	2,398	6,056	857
2671	5233	Flamborough	587	712	1,910	1,213	712	1,844	1,353	712	1,833	1,523
2672	5232	Flamborough	614	2,186	6,274	2,045	2,186	6,051	2,294	2,186	6,008	2,550
2673	5231	Flamborough	212	869	2,245	340	870	2,173	392	870	2,163	420
2674	5228	Flamborough	836	162	602	75	173	616	72	173	612	72
2675	5230	Flamborough	510	1,299	3,667	535	1,669	4,498	608	1,669	4,473	611
2696	5251	Flamborough	684	89	258	773	89	248	879	89	246	996
2676	5251	Flamborough	897	85	246	414	85	237	467	85	235	520
	TOTAL			6,517	18,311	6,169	11,208	28,956	8,865	12,711	32,394	9,505

As shown on **Table 13**, population and employment growth is expected to continue in Waterdown over the next ten years to 2031. The population will increase by 12% from 28,956 residents in 2021 to 32,394 residents in 2031. Employment will grow by 7% from 8,865 jobs in 2021 to 9,505 jobs by 2031. Growth is expected to slow down towards the end of the planning horizon as the community reaches full development.

Forecasted growth in Waterdown is concentrated in three of the 11 zones. Mature areas in the community are relatively stable with most zones showing slight reductions in population (with constant numbers of housing units) and slow growth in employment. Forecasts were completed for the Waterdown Community Node Secondary Plan area and compared with GRIDS, and the population and jobs estimated to 2031 do not differ significantly from the GRIDS 2031 estimates.

Forecasted population and employment were then distributed to the subarea model's finer zone system, as shown on **Tables 14 and 15**.

Table 14: Disaggregation of Population – GRIDS to Subarea Model

	GRIDS					SUBAREA MODEL																				
GRIDS		Popu	lation		Model		Popu	lation																		
Zone	2018	2031	Growth	Factor	Zone	Existing Dist.	Growth Dist.	Change	Factor																	
5223	1,810	1,800	-10	0.99	32	10%	10%	-1	0.99																	
3223	1,810	1,800	-10	0.99	N/A	90%	90%	-9	0.99																	
5234	860	860	0	1.00	8	100%	100%	0	1.00																	
5235	1,620	8,110	6,490	5.01	10	100%	60%	3,894	3.40																	
3233	1,020	8,110	0,490	3.01	11	0%	40%	2,596	Manual																	
5229	4,540	6,060	1,520	1.33	2	70%	25%	380	1.12																	
3229	4,340	0,000	1,320	1.33	21	30%	75%	1,140	1.84																	
					4	0%	0%	0	1.00																	
5233	1,840	1,830	-10	0.99	6	80%	80%	-8	0.99																	
					61	20%	20%	-2	0.99																	
					41	0%	0%	0	1.00																	
					42	0%	0%	0	Manual																	
F222	C 050	C 010	-40	-40	-40	-40	-40	-40	-40	0.00	5	40%	40%	-16	0.99											
5232	6,050	6,010								-40	-40	-40	-40	-40	-40	-40	-40	-40	-40	-40	0.99	51	17%	17%	-7	0.99
														52	25%	25%	-10	0.99								
					53	18%	18%	-7	0.99																	
					7	35%	35%	-4	1.00																	
5231	2,170	2,160	-10	1.00	71	30%	30%	-3	1.00																	
					72	35%	35%	-4	1.00																	
5228	620	610	-10	0.98	3	80%	80%	-8	0.98																	
5228	620	910	-10	0.98	31	20%	20%	-2	0.98																	
					9	40%	40%	-12	0.99																	
5230	4,500	4 470	-30	0.00	91	20%	20%	-6	0.99																	
3230	4,500	4,470	-30	0.99	92	20%	20%	-6	0.99																	
					93	20%	20%	-6	0.99																	
5251	250	250	0	1.00	1	100%	100%	0	1.00																	
5251	240	240	0		1	100%	100%	U	1.00																	
TOTAL	24,500	32,400	7,900	1.32		· · · ·																				

Table 15: Disaggregation of Employment – GRIDS to Subarea Model

	GRIDS					SUBAREA MODEL													
GRIDS		Emplo	yment		Model		Emplo	yment											
Zone	2018	2031	Growth	Factor	Zone	Existing Dist.	Growth Dist.	Change	Factor										
5223	280	290	10	1.04	32	10%	10%	1	1.04										
3223	280	230	10	1.04	N/A	90%	90%	9	1.04										
5234	170	170	0	1.00	8	100%	100%	0	1.00										
5235	0	1,500	1,500	_	10	100%	10%	150	Manual										
3233	0	1,500	1,300	_	11	0%	90%	1,350	Manual										
5229	280	860	580	3.07	2	100%	25%	145	1.52										
3223	200	800	360	3.07	21	0%	75%	435	Manual										
					4	100%	100%	170	1.13										
5233	1,350	1,520	170	170	1.13	6	0%	0%	0	1.00									
					61	0%	0%	0	1.00										
					41	50%	0%	0	1.00										
			260	260	260	260		42	0%	100%	260	Manual							
5232	2,290	2,550					260	260	260	1.11	5	25%	0%	0	1.00				
3232	2,290	2,330								200	200	200	200	200	200	200	200	200	200
					52	0%	0%	0	1.00										
					53	0%	0%	0	1.00										
					7	0%	0%	0	1.00										
5231	390	420	30	1.08	71	100%	100%	30	1.08										
					72	0%	0%	0	1.00										
5228	70	70	0	1.00	3	50%	50%	0	1.00										
3226	70	70	U	1.00	31	50%	50%	0	1.00										
					9	0%	0%	0	1.00										
5230	580	610	30	1.05	91	0%	0%	0	1.00										
3230	360	010	30	1.05	92	20%	100%	30	1.26										
					93	80%	0%	0	1.00										
5251	880	1,000	120	1.13	1	100%	100%	170	1.35										
5251	470	520	50	1.13	1	100/0	100/0	1/0	1.33										
TOTAL	6,760	9,510	2,750	1.41															

The resulting factors and distributions were then applied to the internal subarea model zones to create internal zone activity for the 2031 AM and PM peak hours.

2.10.4.2 External Zone Trip Forecasting

To create annual growth rates for the external zones to the subarea model, the final model assignment and trips produced by zones in the Study Area were examined to calculate the difference between 2011

and 2031. **Figure 30** shows the external zones. Snake Road and King Road are included in the subarea model, but not included in the city-wide model.

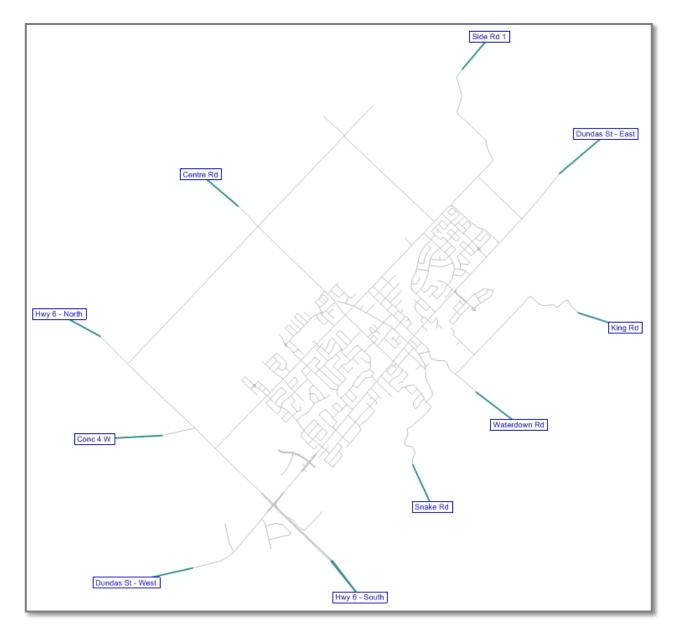


Figure 30: Subarea External Zones

Growth rates for external zones were calculated based on the assigned volume on the roadways that are cut by the border around the Study Area.

Table 16 shows the number of trips according to the 2011 and 2031 city-wide models at the roadways bordering the Study Area. It also shows the absolute change in demand and corresponding compound annual growth rate (CAGR) between the two model years.

Zone	2011 AM		2031	AM	CAC	GR			
Zone	Production	Attraction	Production	Attraction	Production	Attraction			
Hwy 6 - North	1,168	900	1,944	823	2.7%	-0.5%			
Centre Rd	208	188	616	185	5.9%	-0.1%			
Side Rd 1	0	78	93	120	N/A	N/A			
Dundas St - East	995	2,127	1,197	2,648	1.0%	1.2%			
Waterdown Rd	122	488	121	1,426	0.0%	5.8%			
Hwy 6 - South	1,488	1,745	1,230	2,347	-1.0%	1.6%			
Dundas St - West	1,054	520	1,236	474	0.8%	-0.5%			
Conc 4 W	325	187	444	174	1.7%	-0.4%			
TOTAL	5,360	6,233	6,881	8,197	1.3%	1.5%			

Table 16: External Zones – Growth in Travel Demand (2011-2031)

Based on the level of calibration of the city-wide model in the vicinity of Waterdown, with a single east-west screenline to the west of Highway 6, a single growth rate was applied to external trips to offset any inaccuracies in the larger model's processes. Using this method, the compound annual growth rates (CAGR) applied to external trips were 1.3% for productions and 1.5% for attractions. Since the city-wide model simulates only the AM peak hour, the same CAGRs were applied to the external zones in the PM peak hour, but reversed. This assumes that the growth in drivers headed in one direction in the morning will be equivalent to those returning in the afternoon.

2.10.4.3 Trip Distribution

Growth factors for the internal and external zones were applied to the 2018 AM and PM peak hour zone totals to develop origin/destination matrices for 2031. These new production and attraction totals represent 2031 travel activity within Waterdown.

To show how the community will develop over the coming years, the forecasting process created different rates of growth throughout Waterdown. A Fratar trip distribution process was used to establish travel patterns in different areas of the community. Using this method, AM and PM peak hour origin/destination tables were produced for 2031.

2.10.4.4 Summary of Travel Demand Forecasting

In summary, the travel demand forecasting to 2031 shows:

- There are approximately 40% more vehicle trips in the PM peak hour in the Study Area than in the AM peak hour (18,540 vs. 13,270). This will add significant pressure on available roadway capacity in the PM peak hour
- There is a reduction in the proportion of vehicle trips (-10% in both AM and PM) passing
 completely through the Study Area (i.e., from external zone to external zone), despite an overall
 increase in activity originating at external points. This is likely due to increases in the number of
 jobs within the community, which provide more opportunities for residents in nearby
 communities to travel to and from Waterdown for work.

• Similarly, there is a slight increase in the proportion of trips that remain internal to Waterdown (4% in AM and 6% in PM). This can likely be attributed to an increase in the number of jobs in Waterdown.

2.10.5 Signalized Intersection Analysis

Table 17 shows forecasted operations to 2031 of the 20 existing signalized intersections in Waterdown. The intersections were assessed using projected 2031 traffic volumes based on existing turning movement counts and projected VISUM link values with growth rates along corridors factored in, where necessary.

Table 17: Future (2031) Intersection Level of Service

		Lo	OS .
Inte	ersection	AM	PM
1	Dundas Street & Evans Road	В	В
2	Dundas Street & Avonsyde Boulevard	В	В
3	Dundas Street & Mallard Trail / Spring Creek Drive	C	В
4	Dundas Street & Riverwalk Drive / Pamela Street	c	В
5	Dundas Street & Burke Street	В	С
6	Dundas Street & Mill Street	F	F
7	Dundas Street & Main Street	В	С
8	Dundas Street & Hamilton Street	c	С
9	Dundas Street & Berry Hill Avenue / Perrelli Street	A	A
10	Dundas Street & Riley Street	A	À
11	Dundas Street & Howlandmills Drive / Hollybush Drive	В	В
12	Dundas Street & Clappison Avenue	c	D
13	Dundas Street / Highway 5 & Highway 6	Ė	F
14	Parkside Drive & Highway 6	В	C
15	Parkside Drive & Hollybush Drive / Sadielou Boulevard	Α	Α
16	Parkside Drive & Braeheid Avenue / Wimberley Avenue	В	A
17	Parkside Drive & Keewaydin Street / Secondary School	В	В
18	Parkside Drive & Hamilton Street	c	С
19	Hamilton Street & Rockhaven Lane	А	A
20	Hamilton Street & White Oak Drive	В	С

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As shown on the table, the two intersections of Dundas Street and Mill Street and Dundas Street/Highway 5 and Highway 6 are forecasted to operate at overall LOS E or LOS F during peak hours in 2031. All other intersections are expected to operate at overall LOS C or better but there are some movements which will operate at LOS D or LOS E. These issues can be addressed by making minor improvements at the affected intersections.

3.0 Phase 1, Problem/Opportunity

Phase 1 of the Class EA process for the Waterdown TMP consisted of "Problem/Opportunity" identification and provided the justification for future transportation improvements. The Problem/Opportunity Statement prepared during Phase 1 was based on the overview of existing and future conditions included in **Section 2** of this report. It also reflects public and agency consultation completed as part of the TMP. Consultation for the project is summarized in **Section 5**.

3.1 Summary of Existing/Future Transportation Problems and Opportunities

Existing and future transportation problems/opportunities in Waterdown can be summarized as follows:

Population and Employment Trends

- Significant population and employment growth is expected in Waterdown:
 - o Waterdown's population will increase by 63% from 19,818 in 2016 to 32,394 in 2031
 - o Employment will grow by 7% from 8,865 in 2021 to 9,505 in 2031.
- Improvements to the road network, transit, cycling and active transportation facilities are required to service this growth.

Natural and Cultural Heritage Resources

- Waterdown's significant natural resources, built heritage resources, cultural heritage landscapes and archeological resources require protection/conservation.
- The public stressed the need to protect/conserve these resources.

Trucks

- Few truck routes are designated in Waterdown. The City of Hamilton is currently reviewing the Truck Route Master Plan
- Truck traffic on Dundas Street East is an area of public concern.

Transit

- Improvements to local and regional transit services are required to meet peak transit demand which is expected to double by the year 2031
- Park and Ride facilities, connected to transit, are also required
- The public highlighted the need for improved local and regional connections, including a new transit node in the core to connect to future regional transit.

Cycling and Active Transportation

- Active transportation infrastructure is limited, lacks continuity and is not connected to places of employment, shopping or transit
- A number of streets in Waterdown have no sidewalks

• Throughout the project, the public expressed concerns about safety on many streets in Waterdown.

Road Network and Capacity Analysis

- Most trips are destined for locations outside Waterdown. Eighty per cent of residents commute
 to work in places outside Waterdown. Only 7% commute by transit, 5% by walking and 0% by
 cycling
- Waterdown has a high rate of cut-through traffic during the AM and PM peak periods
- Overall, Waterdown currently has sufficient capacity during peak commuting hours with localized issues on:
 - Dundas Street, west of Mill Street, eastbound in the AM peak and westbound in the PM peak. Another pinch point is west of Burke Street, westbound in the PM peak
 - o Mill Street, north of Mountain Brow Road, southbound during the AM peak period
 - Parkside Drive, west of Mill Street and west of Spring Creek Drive. The planned North
 Waterdown Drive is expected to relieve this
- The public expressed many concerns about traffic congestion on Dundas Street and Mill Street and neighbourhood traffic infiltration and speeding on many streets throughout Waterdown.

Intersection Analysis

- Overall, current intersection operations are good, except for:
 - Dundas Street and Mill Street (LOS D during AM and PM peaks)
 - Dundas Street at Highway 5 and 6 (LOS D during AM peak and LOS E during PM peak)
- Future (2031) intersection operations are good except for:
 - Dundas Street and Mill Street (LOS E during peak hours)
 - o Dundas Street/Highway 5 and Highway 6 (LOS E or LOS F during peak hours)
 - All other intersections are expected to operate at overall LOS C or better but there are some movements which will operate at LOS D or LOS E.

3.2 Problem and Opportunity Statement

Waterdown's transportation network capacity is becoming insufficient to accommodate current and future traffic volumes, resulting in congestion, safety concerns and traffic infiltration in residential neighbourhoods.

The Waterdown TMP Study was initiated to address short-term issues and identify long-term improvements needed for the road network, public transit, and pedestrian and cyclist facilities.

4.0 Phase 2, Alternative Solutions

Phase 2 of the Class EA process, "Alternative Solutions" consisted of the development and evaluation of alternative solutions to the transportation problems and opportunities identified in Phase 1. Preferred solutions were chosen at the end of Phase 2.

4.1 Alternative Solutions

To address the problems and opportunities summarized in **Section 3.1**, alternative solutions were categorized into three main "buckets", including solutions that address:

- 1. Network capacity
- 2. Transportation Demand Management
- 3. Safety.

Alternative solutions were then developed for each category.

4.2 Evaluation Criteria

The following criteria were used to evaluate the alternative solutions developed for the TMP:

Transportation

- Pedestrians
- Cyclists
- Transit Passengers
- Mobility
- Delay
- Emergency Services.

Public Health

- Air Quality
- Safety
- Social Interaction
- Transportation equity
- Active Transportation.

Physical Environment

- Cultural Heritage
- Green space
- Streetscape and public spaces.

Costs

- Capital
- Operations/Maintenance
- Economic benefits.

4.3 Network Capacity Solutions

In discussion with City staff, three alternatives were identified to improve network capacity in Waterdown:

- Improve the Dundas Street/Mill Street intersection by adjusting the signal timing
- Improve the Dundas Street/Avonsyde Blvd. intersection by adding an exclusive westbound right turn lane and provide overlapping phasing

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• Increase vehicle capacity on Dundas Street between Mill Street and Hamilton Street North by widening the street to four lanes.

Table 18 shows an evaluation of the three options.

Table 18: Evaluation of Alternative Network Capacity Solutions

Issue/Opportunity: Network Capacity								
Alternative Solution		Transportation	Public Health	Physical Environment	Costs	Recommended		
	Adjust Signal Timing at Dundas Street/Mill Street	Good	Neutral	Neutral	Excellent	Yes		
Intersection	Add exclusive westbound right turn at Dundas Street/Avonsyde Blvd. and overlapping phasing	Good	Neutral	Fair	Fair	Yes		
Strategic	Increase vehicle capacity on Dundas Street between Mill Street and Hamilton Street North	Good	Poor	Poor	Poor	No		

As shown on **Table 18**, intersection improvements at Dundas Street/Mill Street and Dundas Street/Avonsyde Blvd. are recommended because they address localized capacity issues on the Dundas Street corridor. It is also noted that Dundas Street eastward from just west of Avonsyde Blvd. is proposed to be widened from 4 to 6 lanes as shown in **Figure 28**. When this work is completed, the third westbound lane (curb lane) will become an exclusive right turn lane to Avonsyde Blvd. at the Dundas Street intersection; therefore further evaluation and recommendations for this improvement are not included in this TMP. Dundas Street/Mill Street intersection improvements are recommended through this TMP because it has a relatively low cost and only has minor impacts on transportation considerations, public health and the physical environment.

Although the widening of Dundas Street between Mill Street and Hamilton Street North provides relief for daily peak hour automobile congestion through downtown Waterdown, it was not recommended based on the following considerations:

- Active Transportation and Transit: The widening will leave very little right-of-way left for opportunities to provide enhanced cycling/walking facilities and transit services along Dundas Street
- "Public Realm": The widening reduces the attractiveness of the downtown for walking and spending time there
- **Public Health**: The widening is an automobile-oriented solution has adverse impacts on air quality and poses potential safety concerns for pedestrians and cyclists
- Character and Heritage Value: The widening has adverse impacts on the character and heritage value of Waterdown's downtown. Widening the street to four lanes would strip the downtown of these attributes. Heritage resources described in **Section 2.3** would be adversely affected.
- **Downtown's Future Potential**: The widening impacts the downtown's future potential to become a tourist attraction as a heritage area. As the downtown becomes more pedestrian oriented and its heritage value enhanced, more and more uses that depend on foot traffic will be attracted to the downtown. This, in turn, will increase its value as a heritage area.
- Parking: The widening requires the removal of all on-street parking, adversely affecting
 downtown businesses. Currently, the downtown has some commercial uses that depend on foot
 traffic but most appear to depend on car access. However, as mentioned, if the downtown's
 heritage value is enhanced, more and more foot traffic will be attracted to the downtown.
- **Cost**: The widening has a high cost.

At the Public Information Centres held for the project, many residents expressed opposition to the widening. Public consultation is summarized in **Section 5** of this report.

4.4 Transportation Demand Management Solutions

Urban sprawl has resulted in extensive automobile use leading to a host of problems. These include traffic congestion, long commutes, pollution, loss of resources and rising public costs, along with health problems. Instead of focusing on automobile-oriented solutions, like widening Dundas Street and other

roads, the Waterdown TMP focuses on TDM solutions aimed at reducing car use and increasing transit and active transportation.

4.4.1 Transit

4.4.1.1 Service Expansion Alternatives

As transit demand grows in Waterdown, transit service will need to be expanded accordingly. This includes expanding service areas to cover new development, increases in service frequency and new routes to better connect and serve Waterdown.

Service Coverage

The City's Ten-Year Local Transit Strategy recommends that transit service be expanded to ensure that 90% of residents are within 400 m of weekday peak transit service. **Figure 31** shows the existing 400 m catchment for Route 18. This route serves existing development in Waterdown but not areas currently proposed for development. In addition, some areas in the centre of Waterdown are slightly beyond the 400 m catchment, including a portion of Hamilton Street and Main Street. Also, Route 18 provides no coverage west of Highway 6.

Planned development north of Parkside Drive and South of Dundas Street may require modifications to existing Route 18 or a new route to provide transit service within a reasonable distance. Although a separate local transit route could be operated with connections to local facilities, schools, and community/shopping centres, it would likely duplicate much of the service area of Route 18, and require passengers to transfer to other routes for regional connections.

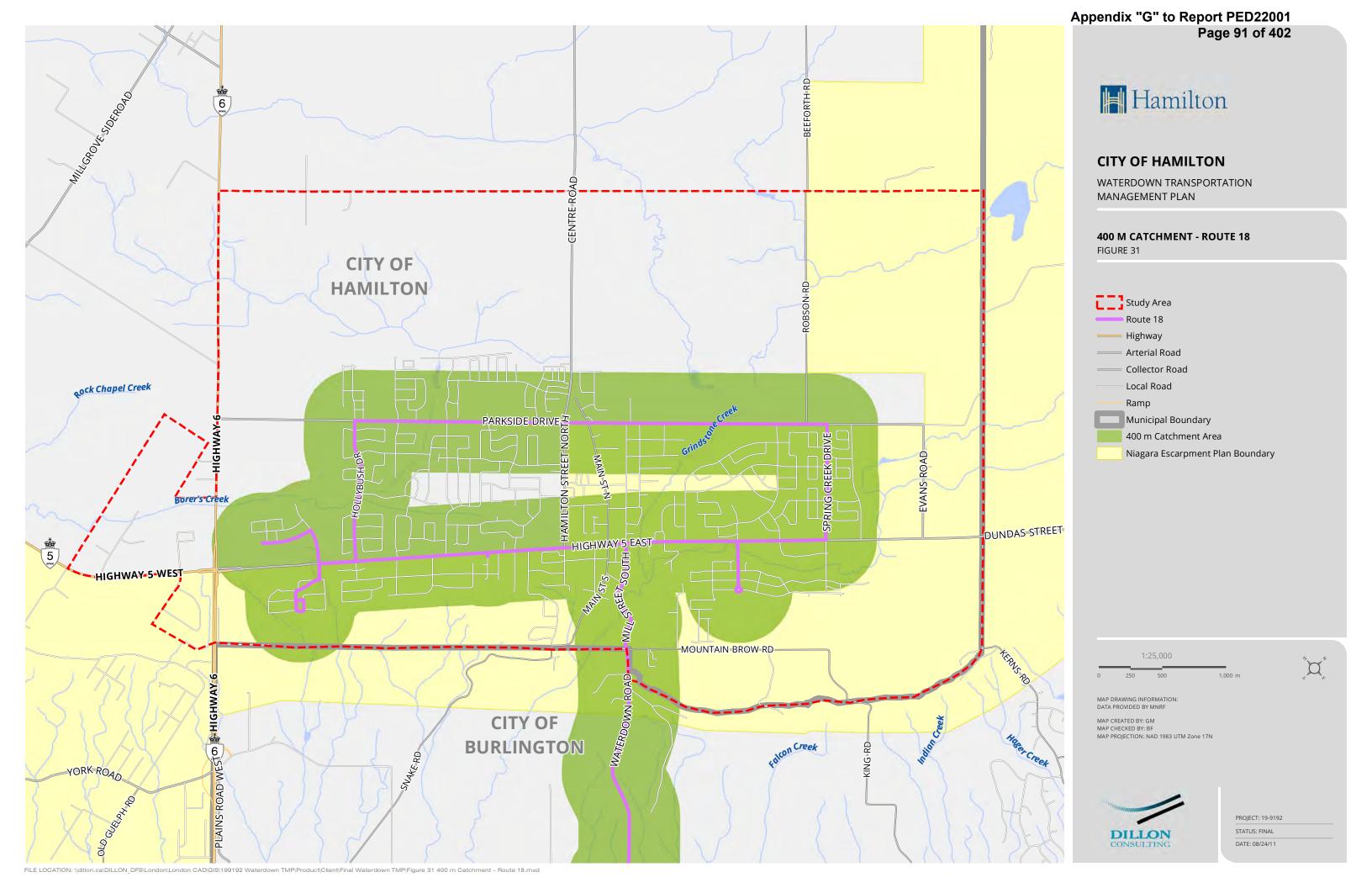
Alternative Service Delivery, as seen with the current HSR myRide pilot project, is useful in low density and low demand areas as a cost-effective approach to maintaining coverage without the need for fixed transit service. ASD can also be used as an interim transit service in new development areas before a fixed service is justified. In addition, it can improve first-mile-last-mile service for residents, thereby making transit a more attractive option.

Future service coverage should consider:

- Areas of planned population and employment growth
- Strengthening of the community core through the Community Node Secondary Plan
- Regional travel demand.

This can be accomplished with:

- Revisions to the existing transit routing for Route 18
- Leveraging planned and/or adding new regional transit service
- Use of ASD models.



Amount of Service

The amount of transit service provided is measured by the number of hours a transit vehicle is circulating on area roadways. Service can be added by increasing service frequency, expanding the hours of service, expanding service to Sundays, and adding new routes.

The amount of transit service that should be provided was estimated using existing Waterdown and HSR transit metrics for annual revenue vehicle service hours per capita. As noted, there is less transit service in Waterdown (per capita) than HSR system wide. To service Waterdown's projected population and maintain the existing amount of service per capita requires a 63% increase in service hours. Recognizing that transit demand is expected to increase at a higher rate than population growth, there is a need to provide more service to serve the annual demand.

Table 19 shows three options for determining the amount of transit service required in the future:

- Option A, Maintain Waterdown RSH/Capita = 0.70 RSH per capita
- Option B, Increase service to meet Peer Group Municipalities = 1.2 RSH per capita
- Option C, Provide more service in line with HSR RSH/Capita = 1.64 RSH per capita.

	Table 13. Existing Notice 10 Service									
Year	Waterdown Population	Waterdown Employment	A Maintain Servic (0.70 RSH/	e	B Increase to Peer Group Average (1.2 RSH/capita)		C Increase to HSR Average (1.64 RSH/capita)			
2016	19,818		13,950							
2021	28,956	8,865	20,300		34,800		47,500			
2031	32,394	9,505	22,700		38,900		53,200			
2016 - 2031	+ 12,576		+8,750	+63%	+24,950	+179%	39,250	+281%		

Table 19: Existing Route 18 Service

In the future, additional transit service will be provided along the Dundas Street Corridor (as part of the regional Dundas BRT) to serve the community and regional connections. Although this service will increase transit service supply in Waterdown, it does not serve the local connection between Waterdown and downtown Hamilton where there is a current deficiency (in advance of "L" line implementation of the BLAST network).

Increased transit service in Waterdown requires improvements/modifications to the existing local Route 18, regional transit connections, and increased service coverage for low-demand/low-density areas with ASD. As shown on **Table 19**, between 8,000 and 40,000 hours of service is required to accommodate population growth and align with the amount of service provided in other parts of Hamilton. Since additional regional bus service (Dundas BRT) will accommodate some of the Waterdown transit demand, 25,000 additional hours of service is an appropriate target for serving Waterdown demand over the life of the TMP.

Route Alternatives

This section evaluates the following options for improving transit service provision in Waterdown:

- Option A, Increase Service on Route 18
- Option B, Modify Route 18
- Option C, Improve Regional Transit Connections
- Option D, Introduce Alternative Service Delivery (ASD).

Option A, Increase Existing Service on Route 18

Route 18 can be improved by extending the service to capture development areas or by adding more service. The existing 15-minute frequency, with trips alternating direction, effectively operates at 30-minute headways per direction around the loop. Improving service frequency to 20 minutes per direction is a much more attractive service for local connections, with average wait times of less than 10 minutes.

The service can also be extended into evenings and on Sundays, enabling residents to rely more on public transit. Annual revenue service hours to provide the service are as follows:

Table 20: Increase Existing Service on Route 18

	Annual Revenue Service Hours	Total Annual Service Hours
Improved service frequency (from 15 min to 10 min)	+6,700 hrs	+11,800
Expanded hours of service (15 min from 8:00 p.m. to midnight)	+4,400 hrs	+8,800
Expanded Sunday service (15 min from 8:30 to 8:00 p.m.)	+2,300 hrs	+6,200
Total	+13,400 hrs	+20,100

Two more buses will be required to provide this service.

Option B, Modify Route 18

As mentioned, some areas in Waterdown are not provided with transit service within a 400 m catchment. Also, several development areas also fall beyond the existing catchment. To maintain 90% coverage, transit service may need to be rerouted to travel further into these areas.

Route 18 currently completes several "off-line" loops to serve lower density areas west of Hollybush Drive and along Burke Street. Although these route deviations can be extended as development grows, this can cause route circuity with longer routes, increased travel time, and reduced reliability.

One opportunity for expanding Route 18 to cover emerging development areas is a route extension of between 2 km and 6 km with buses potentially operating on Nisbet Boulevard and Skinner Road. The

route would need to deviate from Parkside Drive and Dundas Street to serve these areas, with buses likely operating at slower speeds (Figure 32).

Adding 6 km to the route length, with a 5% decrease in speeds results in:

Table 21: Modified Route 18 (6 km route extension)

Route	Frequency	Annual Revenue Service Hours	Total Annual Service Hours	Buses Required
Adding 6 km to the route length	Base service frequency (15 min)	17,900 hrs / year (+4,400 hrs)	25,300 hrs / yr (+8,400)	6 buses (+2 peak buses)
Adding 6 km to the route length	Improved frequency, hours, and Sunday service	36,000 hrs / yr (+22,500 hrs)	46,400 hrs / yr (+29,600 hrs)	8 buses (+4 peak buses)

Existing Route 18 has approximately 25% of the route travel time as recovery time. Future services assume a minimum 10% recovery time with an additional 5 minute recovery per 60 minutes of running time. (A 64 minute estimated running time was used with an additional 11.4 minute recovery time)

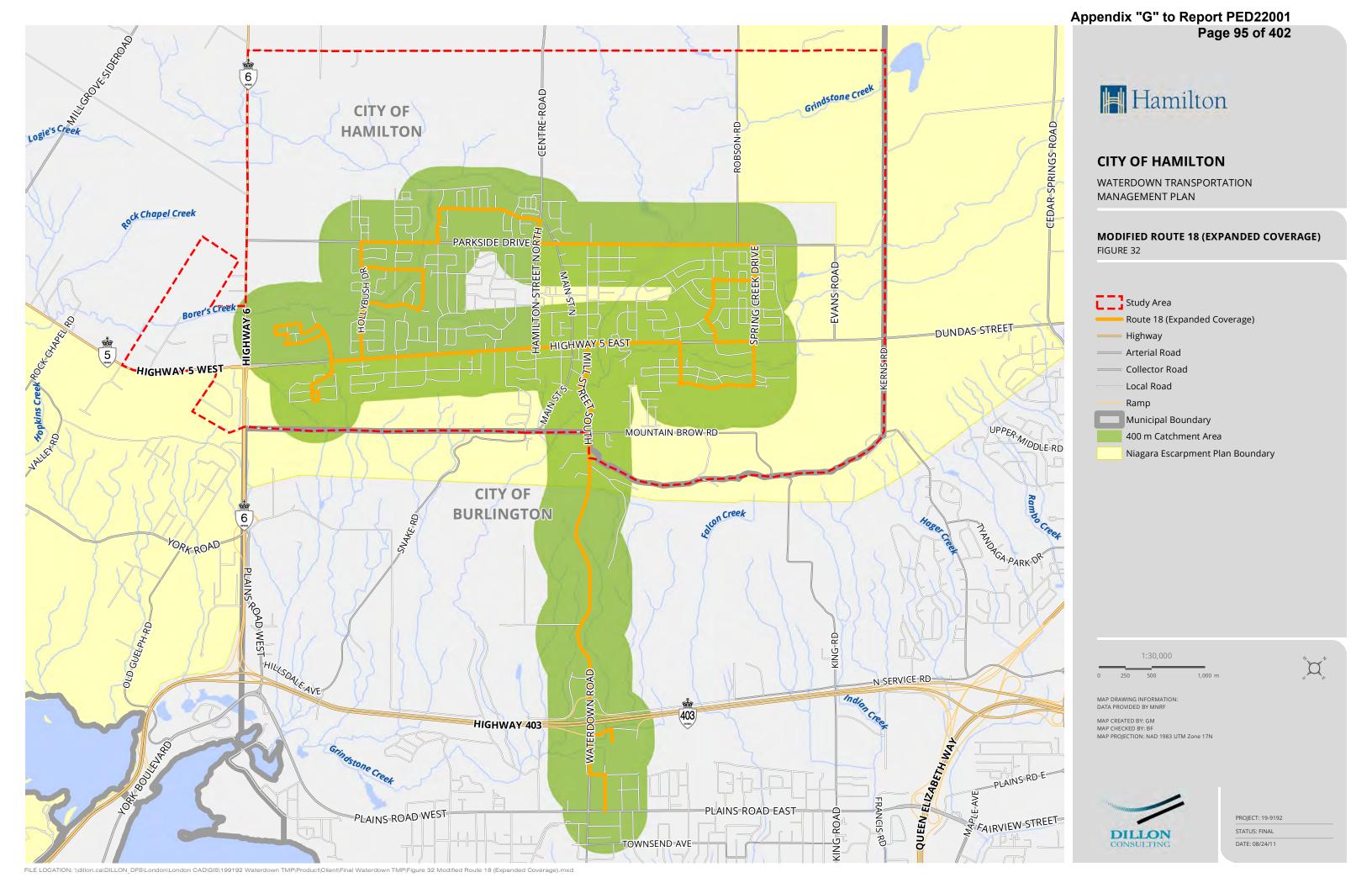
To better serve the community core, the directional loop could be broken into two parts, east and west of Main Street and Hamilton Street. As shown on **Figure 33**, each part of the route can be focused on the community core. The route could also serve regional connections to Aldershot Station.

This proposed routing would add approximately 2 km to the length of the existing single direction loop, and speeds would be decreased slightly due to the operation on Main Street.

Table 22: Modified Route 18 (2 km route extension)

Route	Frequency	Annual Revenue Service Hours	Total Annual Service Hours	Buses Required
Adding 2 km to the route length	Base service frequency (15 min)	15,400 hrs (+1,900 hrs)	21,000 hrs (+4,200 hrs)	5 buses (+1 peak bus)
Adding 2 km to the route length	Improved frequency, hours, and Sunday service	31,000 hrs (+17,500 hrs)	40,200 hrs (+23,300 hrs)	7 buses (+3 peak buses)

A revised route that provides additional coverage to emerging development areas, as well as improves access to the community core, could be implemented by combining the previous two scenarios. An increase in route length of 8 km, with potential slower operating speeds would result in:



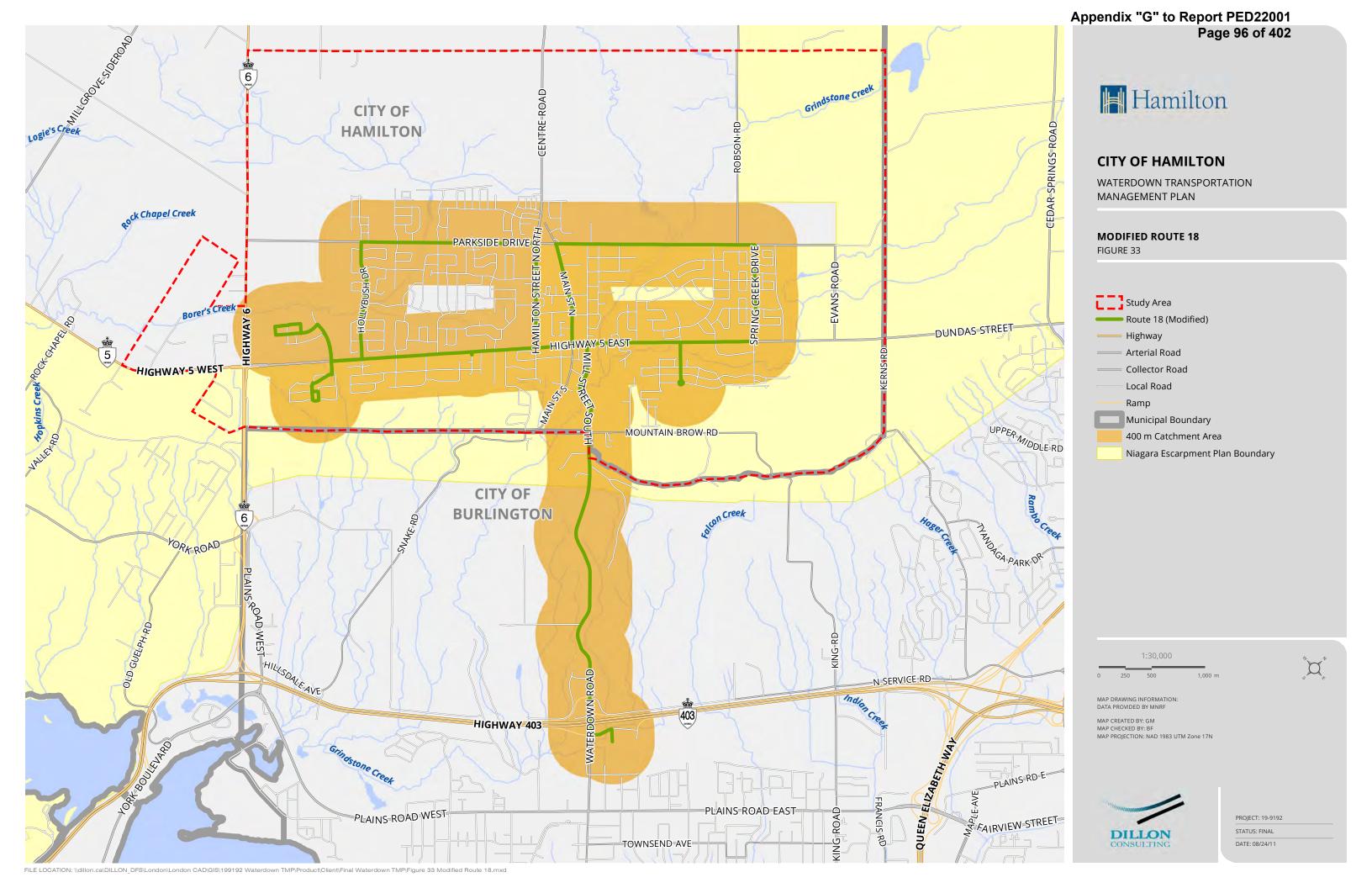


Table 23: Modified Route 18 (8 km route extension)

Route	Frequency	Annual Revenue Service Hours	Total Annual Service Hours	Buses Required
Adding 8 km to the route length	Base service frequency (15 min)	19,105 hrs (+5,600 hrs)	25,300 hrs (+8,400 hrs)	(+1 peak bus)
Adding 8 km to the route length	Improved frequency, hours, and Sunday service	38,400 hrs (+25,000 hrs)	46,400 hrs (+29,600 hrs)	(+4 peak buses).

A round trip travel time of over 65 minutes is required for this route (with an additional 12 minutes of recovery time), potentially contributing to increased variability. The increased travel time and route circuity could be negatively perceived if there is little transit demand accommodated in the expanded service areas. Alternatively, the route can be split into two separate routes serving the east and west sides of Waterdown, but this would require transfers for passengers travelling and is not recommended.

The TMP recommends that Route 18 be modified to better serve the community core. Opportunities to expand the service, such as ASD, can be explored to ensure good community coverage. Increased fixed route services can also be explored if higher than expected transit demand occurs.

Option C, Improve Regional Transit Connections

Planned transit infrastructure and services for accommodating regional travel demand include the Dundas BRT and Hamilton's BLAST rapid transit network. It is currently unknown if, where, and how the two systems will connect or the timing of implementation.

Most people in Waterdown work out of town in downtown Hamilton, Burlington and Oakville. For these work trips to be accommodated by transit, a reasonable alternative to the car is required. Until BLAST is implemented, the network between Waterdown and downtown Hamilton will continue to be deficient. To serve employment areas and emerging development, an interim route could be provided along Highway 6/Plains Road to connect the west side of Waterdown to downtown Hamilton. This near-term transit route would benefit employment growth, allowing employees to avoid transfers to/from Route 18.

Recognizing that the timing of the Dundas BRT is also unknown, regional connections to Burlington could be improved in the interim. A new regional route was identified from the GO Park and Ride lot on Dundas Street at Highway 407 through Waterdown to Highway 6. Although this route would not expand coverage in Waterdown (as it would duplicate portions of Route 18), it would better distribute passenger demand, with potentially less need for bus-bus transfers.

Operation of Option C along Dundas Street into Burlington would be subject to cross-boundary discussions with the City of Burlington to determine how the additional net operating cost would be

managed. The recent introduction of all-day GO Rail service from West Harbour Station to Aldershot Station may provide some customers requiring an attractive way to travel to/from Waterdown-Downtown Hamilton with an alternative. It is understood that a regional service on Dundas may seem redundant with the introduction of all-day go service; however that would still rely on connections through Aldershot Station. While this may be suitable for longer regional trips, it would not provide easy transit connections to the surrounding adjacent community, and would limit user options making transit seem less attractive. It is recommended to continue to pursue discussions with Metrolinx and City of Burlington to better integrate transit to /from Waterdown.

To serve regional trips in advance of BLAST and Dundas BRT, the TMP recommends a regional route that connects Burlington, Waterdown and downtown Hamilton via Dundas Street and Highway 6, as shown on **Figure 34**. This route will ensure that residents maintain good access to the Aldershot GO train Station via the existing Route 18, with added connections to downtown Hamilton, as well as the GO Bus network at the GO Bus Park and Ride (PNR).

Annual revenue service hours to provide the service is as follows:

Annual Total Round Trip Distance Span **Frequency** Revenue Annual **Buses Travel Time Hours** Hours Weekday from 5:00 15 min 31,312 hrs 38,000 hrs eight buses a.m. - midnight 20.6 km (one way Saturday from 5:00 15 min 5,415 hrs 6,572 hrs eight buses from GO 99 minutes + a.m. - midnight 407/Dundas PNR to 15 min layover Sunday from 8:30 a.m. Hamilton DT) 4,700 hrs eight buses 15 min 5,704 hrs -8:00 p.m. Total 15 min 41,427 hrs 50,276 hrs

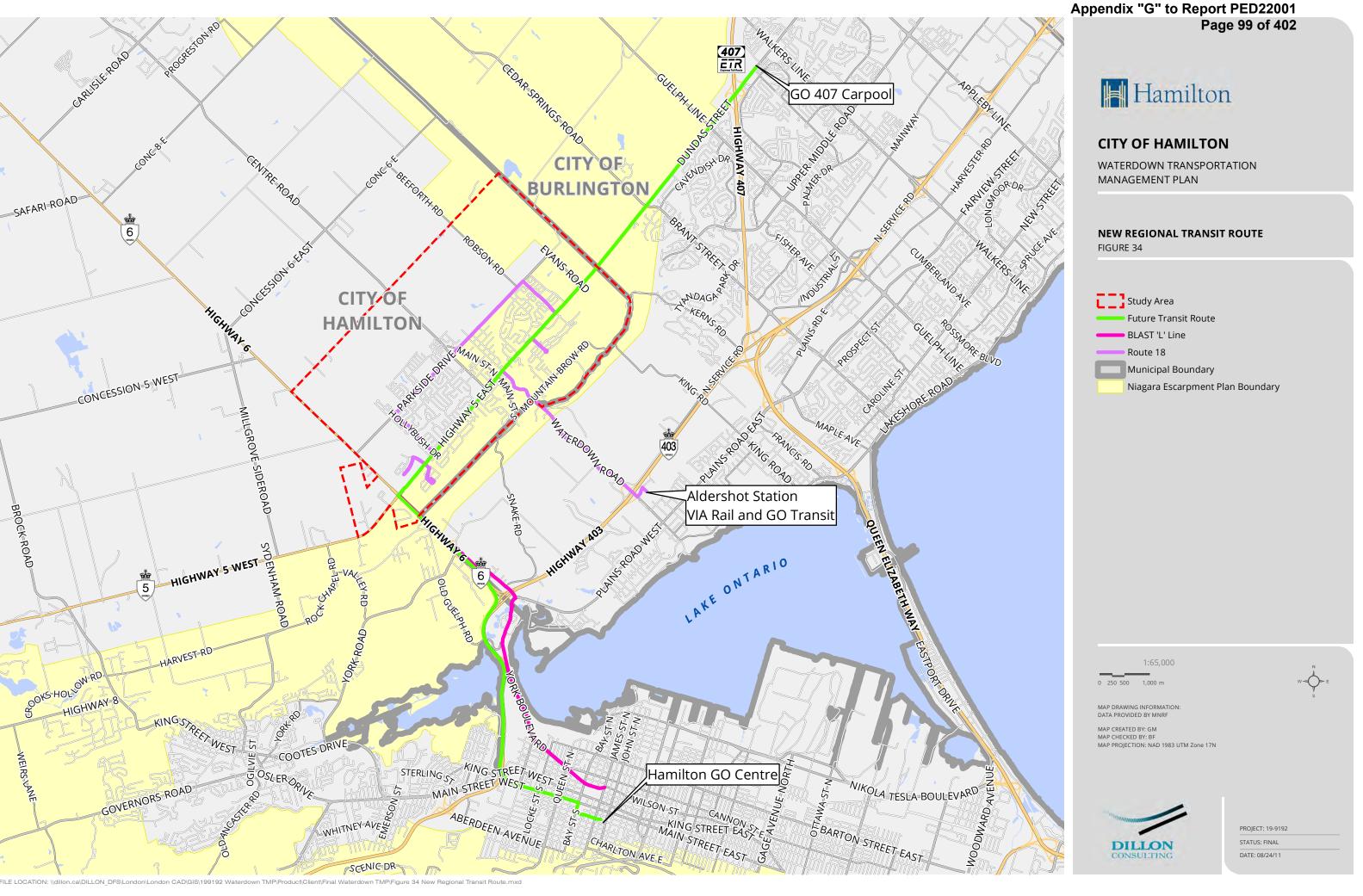
Table 24: New Regional Transit Route

The hours of service noted for implementing this route would accommodate passenger demand beyond the Waterdown limits, and should be explored in partnership with Metrolinx.

Option D, Introduce Alternative Service Delivery

ASD models offer municipalities and transportation operators a different way of providing public transportation. ASDs are typically characterized by one or more of the following:

- The use of technology, such as a mobile application, to book, pay for and track trips
- Smaller vehicles, like sedans, minivans, and shuttle buses, that provide demand-responsive service in lower demand neighbourhoods, employment areas or off-peak periods of the day
- The use of third-party providers on an emergent or dedicated basis.



A variety of dynamic transit service options are used by public transit agencies around the world. Examples of ASD models are First Mile/Last Mile, Microtransit, Flexible Routing, Specialized Transit (Paratransit) Integration, Guaranteed Ride Home and Trip Planning Integration. These models can also be overlapped to provide a dynamic transit solution.

Despite the obvious advantages of an ASD model, the following conditions must be met for ASD to be a reasonable alternative to a traditional fixed route service:

- The relative cost of the service should not exceed the cost of operating a conventional fixed-route in the same area
- The planned development area is located on fringe of an urban area, is low-density and expected to have low-ridership demand.

If the ASD service achieves high ridership and demonstrates that the area can support a fixed route service, it can be replaced with a fixed route.

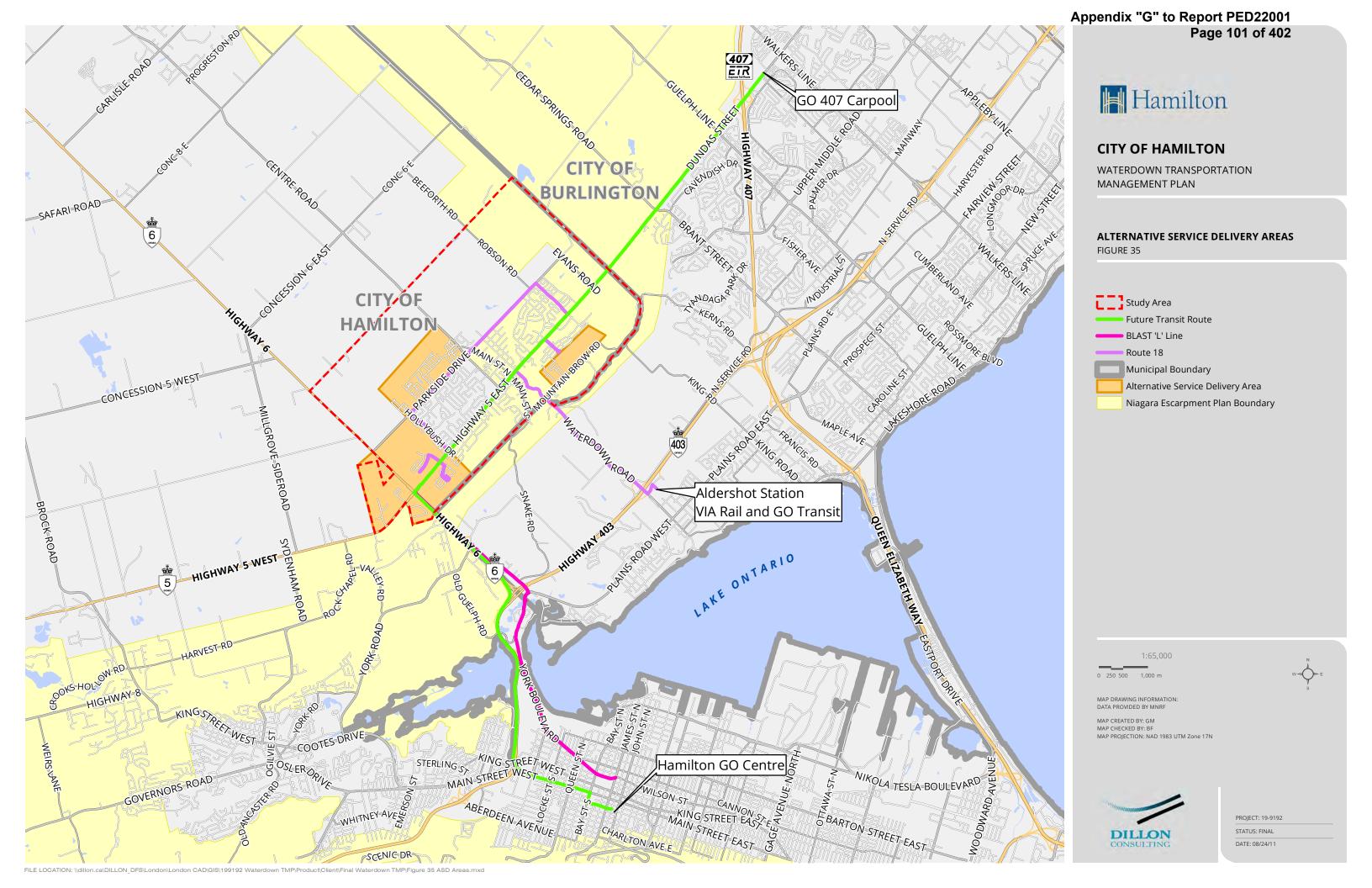
The primary ASD for persons with disabilities, DARTS, is currently available throughout the Waterdown urban area and in the rural areas of Flamborough. The recommendation is that ASD service should be provided for all residents regardless of ability.

As shown on **Figure 35**, three development areas in Waterdown have been identified for introduction of the ASD model:

- North of Parkside Drive
- West Employment Area
- Skinner Road.

Outside the ASD service area, the ASD service will have designated fixed stops to facilitate connections to local and regional bus services. This will allow the people who live or work in ASD zones to conveniently connect to the rest of the transit system. A central transit station could be located in the community core to allow for transfers between routes, including ASD services. Other potential service features include:

- In the three development areas, customers with disabilities would be provided with access to the primary ASD service or some form of equivalent service
- If the ASD service accommodates shift workers in overnight hours where there are limited available local or commuter connections, partnerships could be developed with employers to plan, operate and fund a service to provide a "guaranteed ride home".
- It is estimated that a single ASD vehicle can be justified in each of the three development areas
- Assuming that a single ASD vehicle is required on weekdays between 6:00 a.m. and 8:00 p.m., and on Saturday from 8:30 a.m. to 8:00 p.m., approximately 12,300 hours of service is required. Further service through the overnight may be required, and should be developed in partnership with local employers.



4.4.1.2 Stations, Stops and Transit Priority

A major component of a transit system is the stations, stops, and any transit priority to be accommodated in the ROW.

Given the village nature of Waterdown, there is no major transit infrastructure. Bus stops are provided in mixed traffic. Select stops are provided with a bench, and at some stops, a shoulder is available for buses to serve passengers without blocking other vehicles.

Bus bays are not suggested to be provided along high profile corridors in an attempt to minimize delays for transit caused by the need to re-enter the traffic stream. Where several bus routes converge, where there are time points, or where transit dwell times may be lengthy, bus bays should still be considered to maintain efficient use of the street. It is anticipated that the node in the centre of Waterdown will serve more than 1 bus route, may be a timepoint, and may serve a more elderly clientele resulting in longer dwell times. Further discussion with HSR will be required as part of defining station requirements within Waterdown.

As transit ridership grows in town, provision of benches and shelters at higher activity locations should be reviewed. Benches may become more important as the population ages and residents become more reliant on public transportation. In particular, benches and/or shelters should be considered at:

- Community Node
- ASD connection points.

A focused transit stop in the community core has several benefits, including:

- Creating a more visible and identifiable transit point of access
- Facilitating transfers between regional and local services
- Potential for vehicle lay-by (for ASD connections).

Additional amenities that could be considered are variable message displays and schedule information, ticketing machines, shelters, and benches.

Benches, shelters and other amenities could also be provided where ASD services connect to fixed route transit. Since wait times may be more variable due to the on-demand nature of ASD connections, these amenities can make passenger trips more comfortable, increasing the attractiveness of transit.

Transit priority measures, such as a designated transit lane, are often considered when transit vehicle delays are excessive and transit passenger demand in a corridor is equivalent to or exceeds the vehicle lane capacity. Transit demand in Waterdown does not justify the need for designated transit lanes on the local Waterdown transit route. Provision of transit priority on Dundas Street will be considered as part of the Dundas BRT study.

4.4.1.3 Transit Recommendations

Population and employment growth in Waterdown require transit service improvements in the future. Along with a mode shift from auto to more sustainable options, this growth requires between 8,000 and 40,000 additional hours of transit service to serve Waterdown residents by 2031. A target of 25,000 additional hours of service was set as an appropriate target. This can be achieved by:

Improvements to Route 18

- Improve connection to community core
- Expand hours of service, including Sunday service
- Increase frequency with buses every 10 minutes instead of 15 minutes.

New Regional Route

- Until the planned BLAST and Dundas BRT facilities are built, consider providing an interim
 regional route that connects Waterdown to Burlington and downtown Hamilton, improves
 regional connections and serves employment areas. Figure 35 shows a potential route along
 Dundas Street and Highway 6
- Continue discussions with Metrolinx regarding regional services along the Dundas BRT
- Maintain a connection between Waterdown and downtown Hamilton once the Dundas BRT is operational.

ASD Areas

- Designate areas for ASD transit. Recommended areas are north of Parkside Drive, the West Employment Area and Skinner Road
- Continue discussions with major employers regarding opportunities for ASD partnerships
- Prepare implementation plan for ASD vehicles, drivers and technology.

Stations, Stops and Terminals

- Develop a transit node in the community core with passenger amenities
- Provide stops, benches and shelters at higher activity locations, as required
- Prioritize ASD connection points and locations with an aging population.

4.4.2 Active Transportation

4.4.2.1 Planned Cycling and Active Transportation Facilities

The City's planned cycling network is shown in the 2018 Cycling Master Plan. The network planned for Waterdown, along with city-wide priority rankings based on the 2018 Cycling Master Plan, is illustrated on **Figure 36**. Bike lanes planned on Parkside Drive (between just west of Hollybush Drive and Main

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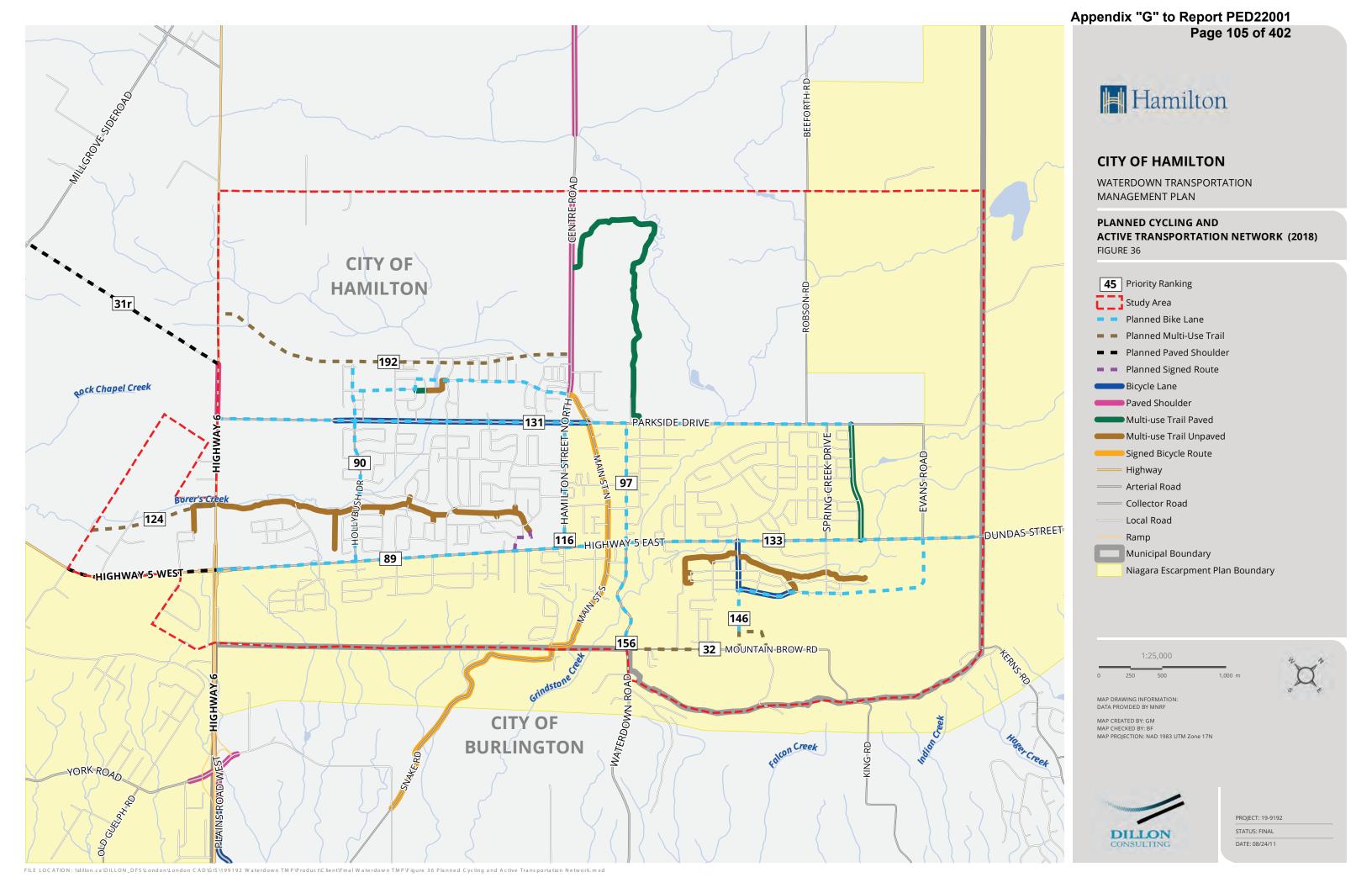
Street North) and a short section of multi-use trail immediately west of Highway 6 have been completed. The study recommended the following two active transportation facilities

- Multi-use path on the west side of Hamilton Street/Centre Road from Dundas Street East to North WaterdownDrive
- Multi-use path on Dundas Street East from Hamilton Street westwards to new Levitt Road

The following City of Burlington planned active transportation projects have direct connections to Waterdown:

- Planned multi-use trail on the south side of Dundas Street between the Hamilton/Burlington boundary and Cedar Springs Road/Brant Street
- Planned multi-use trail on the west side of Waterdown Road between Mountain Brow Road and Craven Avenue.

The planned cycling network for Waterdown and area is robust. When completed, it will provide active transportation connections to/from all four corners of Waterdown to local and regional destinations, including places of employment, shopping and transit connections. However, the priority ranking of the facilities most critical for connecting Waterdown residents to employment and shopping (Dundas Street, Parkside Drive and Hamilton Street) are ranked 89, 116, 131 and 133, respectively, out of a total of 202 projects across the city.



4.4.2.2 Proposed Design Concepts

The planned network from the 2018 Cycling Master Plan was established in 2009. Much has changed in the past 10 years in Waterdown, along with technical design guidance for cycling and active transportation facilities. To determine if the planned facility types are still appropriate, several were re-screened using the 'Desirable Cycling Facilities Pre-Selection Nomograph', shown on **Figure 37**.

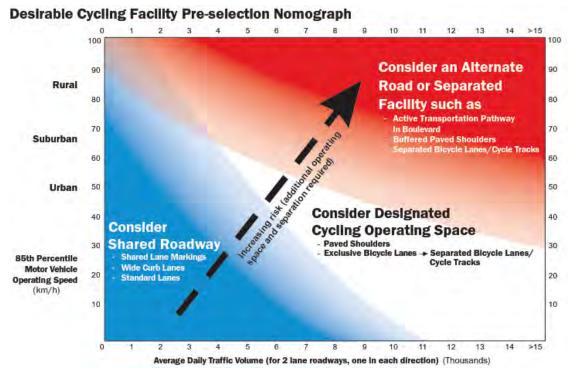


Figure 37: Desirable Cycle Facility Pre-Selection Nomograh

Source: Ontario Traffic Manual Book 18

The Nomograph plots 'Average Daily Traffic (ADT) Volume (for a two-lane roadway, one lane in each direction)' along the 'x' axis, and '85th Percentile Motor Vehicle Operating Speed' along the 'y' axis. Based on the values plotted on the 'x' and 'y' axis, the Nomograph suggests one of three broad operating environment categories: Shared Roadway (blue), Designated Cycling Operation Space (White), or Separated Facility or Alternative Road (Red). **Table 25** displays the results of the re-screening.

Table 25: Proposed Design Concepts for Planned Cycling Infrastructur	Table 25: Prop	osed Design	Concepts f	for Planned	Cycling In	frastructure
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Priority Ranking	Street	From	То	2009 Design Concept	Curb lane ADT ¹	Posted Speed ²	2021 Design Concept
89	Dundas Street	Highway 6	Hamilton Street	Bike lane	14,100³	50 km/h or 60 km/h	Separated Facility ⁴
90	Hollybush Drive	Parkside Drive	Dundas Street	Bike lane	5,400	50 km/h	Designated operating Space ⁵
116	Hamilton Street	Nisbet Blvd.	Dundas Street	Bike lane	13,400	50 km/h	Separated Facility
131	Parkside Drive	Main Street	Avonsyde Blvd.	Bike lane	9,500	50 km/h	Separated Facility
133	Dundas Street	Hamilton Street	Burlington boarder	Bike Lane	11,500	50 km/h or 60 km/h	Separated Facility

Notes:

Table 25 shows that the planned facilities along Dundas Street, Parkside Drive and Hamilton Street should all be designed to a higher standard than originally planned in 2009. Roadway conditions, especially speed and volumes, indicate that separated facilities are necessary unless an alternative roadway can be identified.

According to a survey completed by the City, more than half of Waterdown residents (50-60%) are classified as people who are "Interested but Concerned" about cycling, meaning they would like to cycle to work or shopping but have safety concerns. In addition, many residents have expressed concerns about the safety of walking. As a result, designing active transportation facilities for all Ages and Abilities (AAA) is required to increase the number of residents who feel comfortable with cycling and walking as an alternative mode of transportation. This is particularly important considering the magnitude of projected development in Waterdown and limited opportunities for providing additional roadway capacity.

4.4.2.3 Additional & Revised Cycling and Active Transportation Facilities

The following additional and revised cycling and active transportation facilities were considered as part of the Waterdown TMP.

¹ ADT counts on four lane roads are divided in half to represent the traffic volume in the curb lane directly adjacent to the bicycle facility.

² Posted speed is used as a conservative proxy for 85th percentile motor vehicle operating speed as it is generally acknowledged that the 85th percentile motor vehicle operating speed is higher than the posted speed limit (NCHRP Report 504).

³ ADT derived from turning movement count.

⁴ Separated Facility typically includes in-boulevard multi-use trails, buffered paved shoulders, separated bike lanes or cycle tracks.

⁵ Designated Operating Space typically incudes paved shoulders or bike lanes.

Active Transportation Crossing of Grindstone Creek

One of the additional facilities, as shown on **Figure 38**, includes an active transportation crossing of Grindstone Creek in the residential areas northeast of Mill Street and Dundas Street. The proposed crossing would provide convenient access between residential areas, significantly reducing the distance required to cross the creek. It would also greatly improve walking and cycling access from the neighbourhoods east of the creek to commercial areas along Hamilton Street North and to Mary Hopkins elementary school which has a catchment area that falls on both sides of the creek.

Three possible crossing locations were evaluated, including crossings between Wellington Street and Laurendale Avenue (via the Hydro corridor), Nelson Street and Lauendale Avenue, and Church Street and Margret Street (via Margret Street Park). Based on the following advantages, the crossing between Church Street and Margret Street was identified as the most viable:

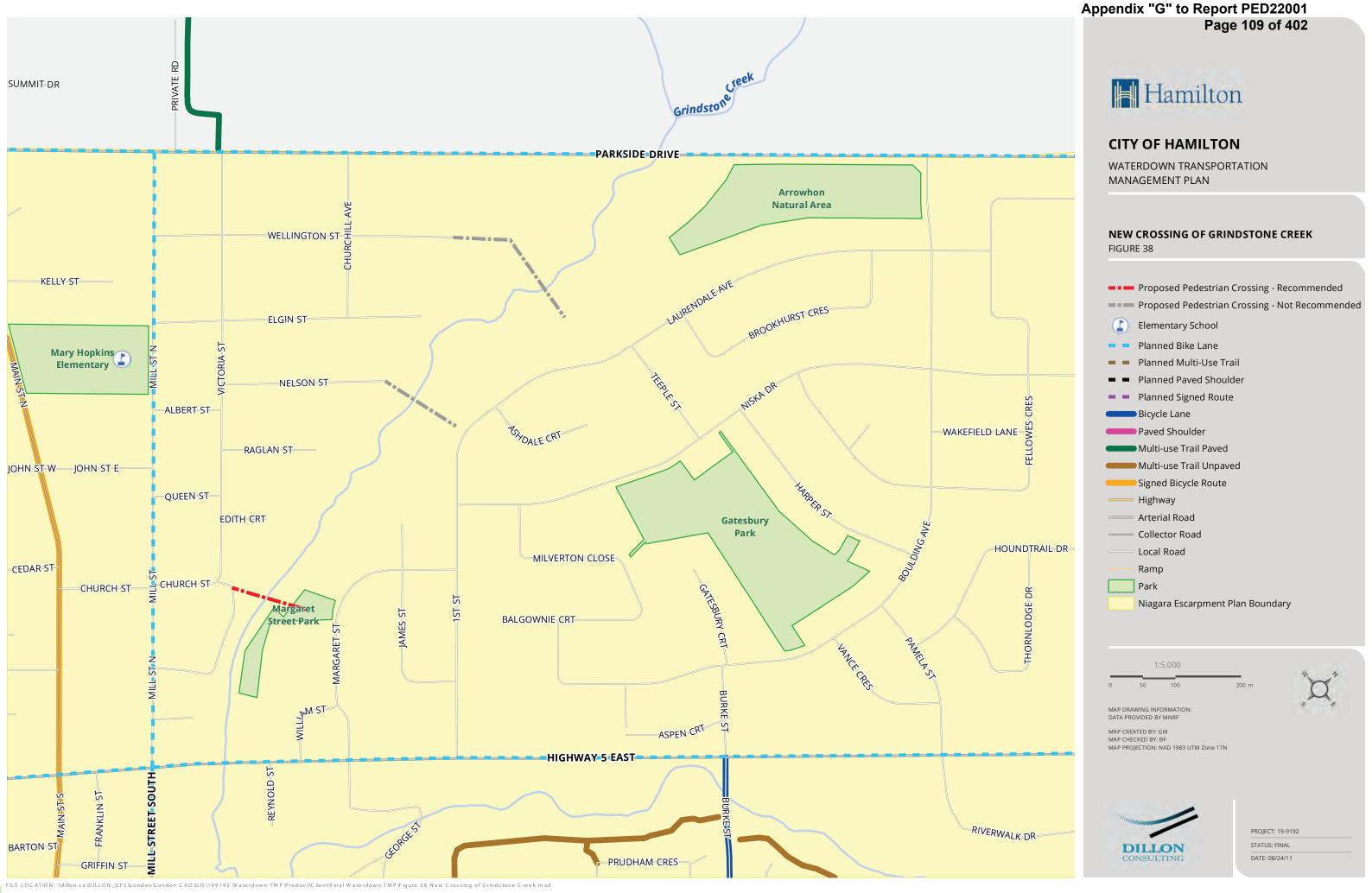
- The connection to Church Street provides the most direct connections to the commercial areas on Hamilton Street
- The proximity of the Church Street crossing to Dundas Street provides an attractive vehicle-free east-west corridor
- The connection to Church Street provides the most direct connection through central Waterdown, via Church Street and Cedar Street, to connect to the central trail system through Rockcliffe Gardens Park
- The trail could eventually be extended to (and through) the employment and commercial lands adjacent to Highway 6.

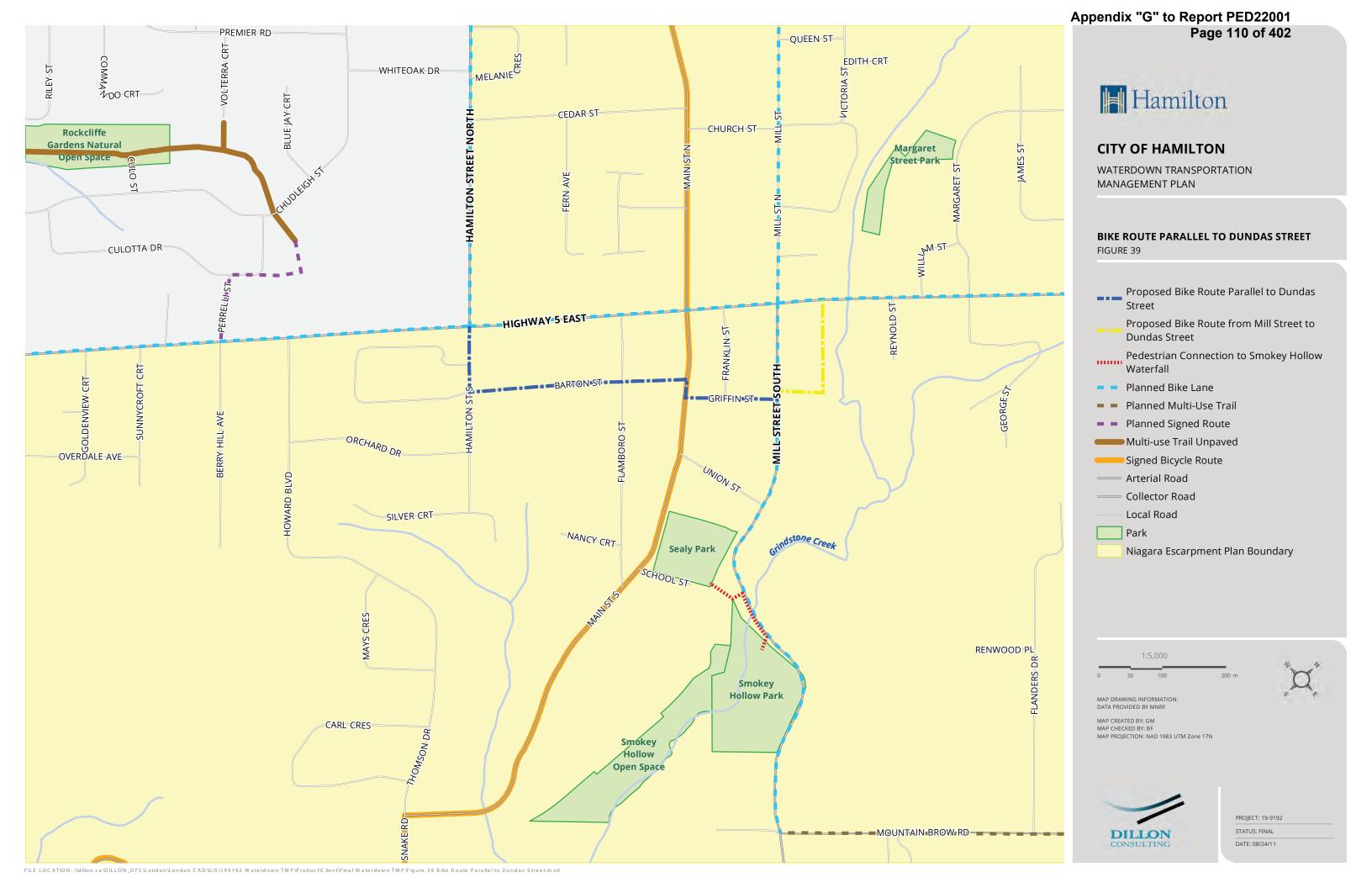
The proposed crossing of Grindstone Creek is <u>recommended</u> as it contributes to addressing the problem statement for the project. However, the proposed crossing of Grindstone Creek should be further studied as part of the City's upcoming review of the Recreational Trails Master Plan to confirm location and potential impacts of the crossing.

Bike Route Parallel to Dundas Street

The 2018 Cycling Master Plan includes a separated cycling facility along Dundas Street. However, the constricted right-of-way of Dundas Street may not provide sufficient space for such a facility. Based on this, a new connection parallel to Dundas Street was developed, as shown on **Figure 39**.

The bike route shown in blue on **Figure 39** follows Barton and Griffin Streets. As shown by the upper yellow line, it also includes a new connection from the east end of Griffin Street to a new crossing of Grindstone Creek on the south side of Dundas Street. This route provides east-west access between Mill Street and Hamilton Street while avoiding a very busy and constrained section of Dundas Street. Based on these considerations, the Bike Route Parallel to Dundas Street is <u>recommended</u> as it contributes to addressing the problem statement for the project. However, further investigation is needed in the future to determine how the proposed facility will tie into Dundas Street and to arrange access for the route behind existing private properties.





Pedestrian Connection to Smokey Hollow Waterfall

Also shown on **Figure 39**, indicated by the lower red line, is a new pedestrian connection from Main Street South, through Sealey Park and over Grindstone Creek to the Smokey Hollow Waterfall, an important recreation destination. This connection provides a significantly safer and more convenient access to the waterfall for Waterdown residents. The pedestrian connection to Smokey Hollow Waterfall is <u>recommended</u> as it contributes to addressing the problem statement for the project. However, the proposed pedestrian connection to Smokey Hollow Waterfall should be further studied as part of the City's upcoming review of the Recreational Trails Master Plan to confirm location and potential impacts of the crossing.

4.4.2.4 Active Transportation Recommendations

Planned growth in Waterdown requires additional active transportation facilities. These new facilities will play a key role in helping to reduce automobile demand. Significant improvements are, however, required to make cycling and walking a reasonable alternative to car use. To meet these demands, the TMP recommends the following:

Planned Cycling Facilities

The City review the priority rankings of planned facilities in the City's Cycling Mater Plan to
evaluate if initiatives for Waterdown can be advanced. When constructed, the Master Plan's
extensive cycling network will provide connections to/from all four corners of Waterdown to
local and regional destinations, including places of employment, shopping and transit
connections. However, the most critical facilities (Dundas Street, Parkside Drive and Hamilton
Street) have low priority rankings.

Design Standards

 The City review all planned cycling projects using Ontario Traffic Manual (OTM) Book 18 – Cycling Facilities, as a minimum design standard. Designing for AAA, a national and international best practice, is recommended.

New Active Transportation Facilities

- Bike Route on Barton Street and Griffin Street between Hamilton Street and Mill Street.
- Pedestrian Connection to Smokey Hollow Waterfall via Main Street South / Sealy Park.
- Active Transportation Crossing of Grindstone Creek between Church Street and Margret Street.

Cycling and Walking Related Facilities

- Install public bicycle repair stations at locations throughout Waterdown, including downtown and community facilities.
- Expand Hamilton's Public Bike Share system (SoBi Hamilton) to Waterdown to serve transit riders, commuter cyclists, recreational cyclists and visitors to Waterdown.

Prioritize filling in sidewalk gaps in existing and mature residential neighbourhoods (using
existing methods) to improve accessibility for all residents, especially the elderly and those with
disabilities. Infilling of sidewalk gaps shall be completed in accordance with Heritage
Conservation District approval requirements and with respect to Cultural Heritage landscape
designations.

Other Measures to Reduce Car Use

 City resources and tools to educate residents and employers about carpooling, teleworking, flexible work hours, employer-sponsored transit pass subsidies, priority parking and other Incentives for carpools and cyclists.

4.5 Solutions to Improve Safety

This section identifies solutions for improving road safety along many corridors throughout Waterdown. As outlined in **Section 2.5.1** and **Section 5** of this report, Waterdown residents are very concerned about safety issues on many streets stemming from traffic infiltration, speeding and peak hour traffic operations.

The locations identified for improvements were based on residents' input received throughout the project, recommendations from City of Hamilton staff, and professional judgement.

4.5.1 Neighbourhood Traffic Infiltration

"Infiltration" of traffic into a neighbourhood occurs when drivers use local roadways as cut-through routes to avoid congestion on arterials and collectors. Measures to reduce infiltration typically involve reducing the travel speed, limiting turning movements, or other traffic calming measures that reduce the attractiveness of the route as a cut-through.

Table 26 shows the recommended measures to reduce traffic infiltration on streets throughout Waterdown.

Table 26: Recommended Measures to Reduce Traffic Infiltration

Roadway (in alphabetical order)	Measures			
Barton Street (Hamilton Street South – Main Street South)	Traffic calming (speed cushions) along corridor			
Braeheid Avenue (Riley Street – Parkside Drive)	Traffic calming (speed cushions) along corridor Upgrade school crosswalk to Type-D PXO and raised crosswalk			
Cedar Street (Hamilton Street North – Main Street North)	Remove all-way stop at Cedar Street and Fern Avenue Traffic calming (speed cushions) along corridor			
Church Street (Main Street North – Mill Street North)	Traffic calming (speed cushion) along corridor			
Evans Road (Dundas Street – Parkside Drive)	Already traffic-calmed. No further measures recommended			

Roadway (in alphabetical order)	Measures		
Griffin Street (Main Street South – Mill Street South)	Already traffic-calmed. Turning restrictions already in place during PM peak restricting northbound left from Mill Street South to Griffin Street. No further measures recommended		
Hamilton Street South (Dundas Street – Barton Street)	All-way stop recently added at Barton Street & Hamilton Street South intersection. No further measures recommended		
Hollybush Drive (Dundas Street – Parkside Drive)	Traffic calming (raised centre islands) along corridor within portions of painted median. Upgrade pedestrian crossover (PXO) to raised crosswalk. On-street bike lanes to narrow travel lanes		
Main Street North (Dundas Street – Parkside Drive)	Traffic calming (speed cushions) along corridor		
Main Street South (Dundas Street – Union Street)	Painted yellow centreline. Traffic calming (speed cushions) along corridor		
Mill Street North (Dundas Street – Parkside Drive)	Traffic calming (speed cushions) along corridor		
Riley Street (Dundas Street – Braeheid Avenue)	Traffic calming (speed cushions) along corridor. Curb extensions at intersections to delineate parking area and narrow road width.		
Union Street (Main Street South – Mill Street South)	Raised median on Mill Street South recently added to physically restrict movements to right-in, right-out only		

4.5.2 Neighbourhood Speeding/Traffic Calming

Neighbourhood speeding issues are raised by residents who perceive that passing vehicles are regularly exceeding the posted speed limit along various corridors within Waterdown. The measures recommended in **Table 27** involve changes to roadway width, speed cushions, and other approaches to reduce vehicle operating speeds.

Table 27: Recommended Measures to Reduce Speeding

Roadway (in alphabetical order)	Measures Additional speed limit signage along corridor. Permanent speed reader (speed display) boards in both directions.		
Avonsyde Boulevard (Dundas Street – Parkside Drive)			
Boulding Avenue (Burke Street – Parkside Drive)	Curb extensions at intersections to delineate on-street parking areas and narrow road width.		
Braeheid Avenue (Riley Street – Parkside Drive)	Traffic calming (5 speed cushions) along corridor. Upgrade existing school crosswalk to Type-D PXO raised crosswalk.		
Brian Boulevard (Ryans Way – Braeheid Avenue)	Already traffic-calmed. No further recommendations.		

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Roadway (in alphabetical order)	Measures			
Burke Street (Skinner Road - Boulding Avenue)	Pavement markings as per ultimate design. Remove existing school crosswalk on south leg of Humphry Street/Burke Street intersection. Add pedestrian crossovers (PXO) at all legs of roundabout at Burke Street and Skinner Road.			
Chudleigh Street	Traffic calming (7 speed cushions) along corridor.			
First Street (Dundas Street – Niska Drive)	Traffic calming (3 speed cushions) along corridor.			
Forest Ridge Avenue (Spring Creek Drive – Avonsyde Boulevard)	Traffic calming (2 speed cushions) along corridor.			
Hollybush Drive (Dundas Street – Parkside Drive)	Traffic calming (raised centre islands) along corridor within portions of painted median. Upgrade existing pedestrian crossover (PXO) to raised. On-street bike lanes to narrow travel lanes.			
Laurendale Avenue (Niska Drive – Boulding Avenue)	Traffic calming (7 speed cushions) along corridor.			
Longyear Drive (Hollybush Drive – Brian Boulevard)	Traffic calming (centreline flexposts) along corridor.			
Main Street North (Dundas Street – Parkside Drive)	Traffic calming (7 speed cushions) along corridor.			
Nisbet Boulevard (Wimberly Avenue – Hamilton Street North)	Pavement markings as per ultimate design (centreline, on-street bike lanes, etc). Curb extensions at intersections to delineate parking area and narrow road width. Convert existing raised crosswalk on west leg of Nisbet Boulevard and Babcock Street to a raised pedestrian crossover (PXO).			
Niska Drive (First Street – Spring Creek Drive)	Traffic calming (9 speed cushions) along corridor.			
Riley Street (Dundas Street – Braeheid Avenue)	Traffic calming (2 speed cushions) along corridor. Curb extensions at intersections to delineate parking area and narrow road width.			
Rockhaven Lane (Braeheid Avenue – Hamilton Street North)	Traffic calming (7 speed cushions) along corridor.			
Skinner Road (Burke Street – Mallard Trail)	Pavement markings as per ultimate design (centreline, on-street bike lanes, etc.). Convert existing school crosswalk to a raised pedestrian crossover (PXO) fronting St. Thomas Catholic Elementary School.			
Spring Creek Drive (Dundas Street – Parkside Drive)	Traffic calming (6 speed cushions) along corridor. Introduce painted yellow centreline.			

The traffic infiltration and traffic calming measures identified in **Section 4.5.1** and **Section 4.5.2** and other recommendations made in this report to reduce traffic congestion and implement transportation demand management measures will work together to further reduce neighbourhood traffic infiltration.

4.6 Strategic Network Capacity Alternatives

As outlined in **Section 4.3** of this report, improvements to the Dundas Street/Mill Street intersection and the Dundas Street/Avonsyde Blvd. intersection were recommended to increase network capacity in Waterdown. Widening Dundas Street between Mill Street and Hamilton Street North to four lanes was not recommended due to its potential adverse impacts.

To more thoroughly address the issue of network capacity for vehicular traffic, five strategic network alternatives were developed and reviewed. As shown on **Figure 40**, the five alternatives are:

- The Highway 6/Highway 5 intersection is currently a signalized intersection. To deal with congestion at the intersection, MTO is currently preparing a Class EA and Detailed Design Study of a new interchange at Highway 6/Highway 5 to replace the signalized intersection. The timing of construction has yet to be determined. Three alternatives were developed to increase capacity on the west side of Waterdown in the vicinity of the planned interchange:
 - o <u>Alternative 1</u>, Extend Clappison Avenue from North Waterdown Drive to Parkside Drive
 - o Alternative 2, Delay the North Waterdown Drive connection to Highway 6
 - o Alternative 3, Close Parkside Drive at Highway 6.
 - o Alternative 4, Connect Main Street North to Centre Road/Hamilton Street North
 - o Alternative 5, Convert Mill Street South to one-way (four options).

4.6.1 Future Base Network

As outlined in **Section 2.10.2**, several road improvements are planned for implementation prior to the 2031 horizon, as shown on **Figure 41**. Testing of the strategic network alternatives assumed that the following improvements are part of the future base network:

- North Waterdown Drive, a new east/west roadway, from Parkside Drive to Highway 6, including neighbourhood connections
- New north/south road from Dundas Street, along Burke Street to Mountain Brow Road, Part of the planned Waterdown Road Corridor, this project also removes a section of Mountain Brow Road between the north/south bypass and King Road
- New Mountainview Heights neighbourhood road connections to Dundas Street and a connection to the new north/south road
- Clappison Avenue Extension to Parkside Drive.

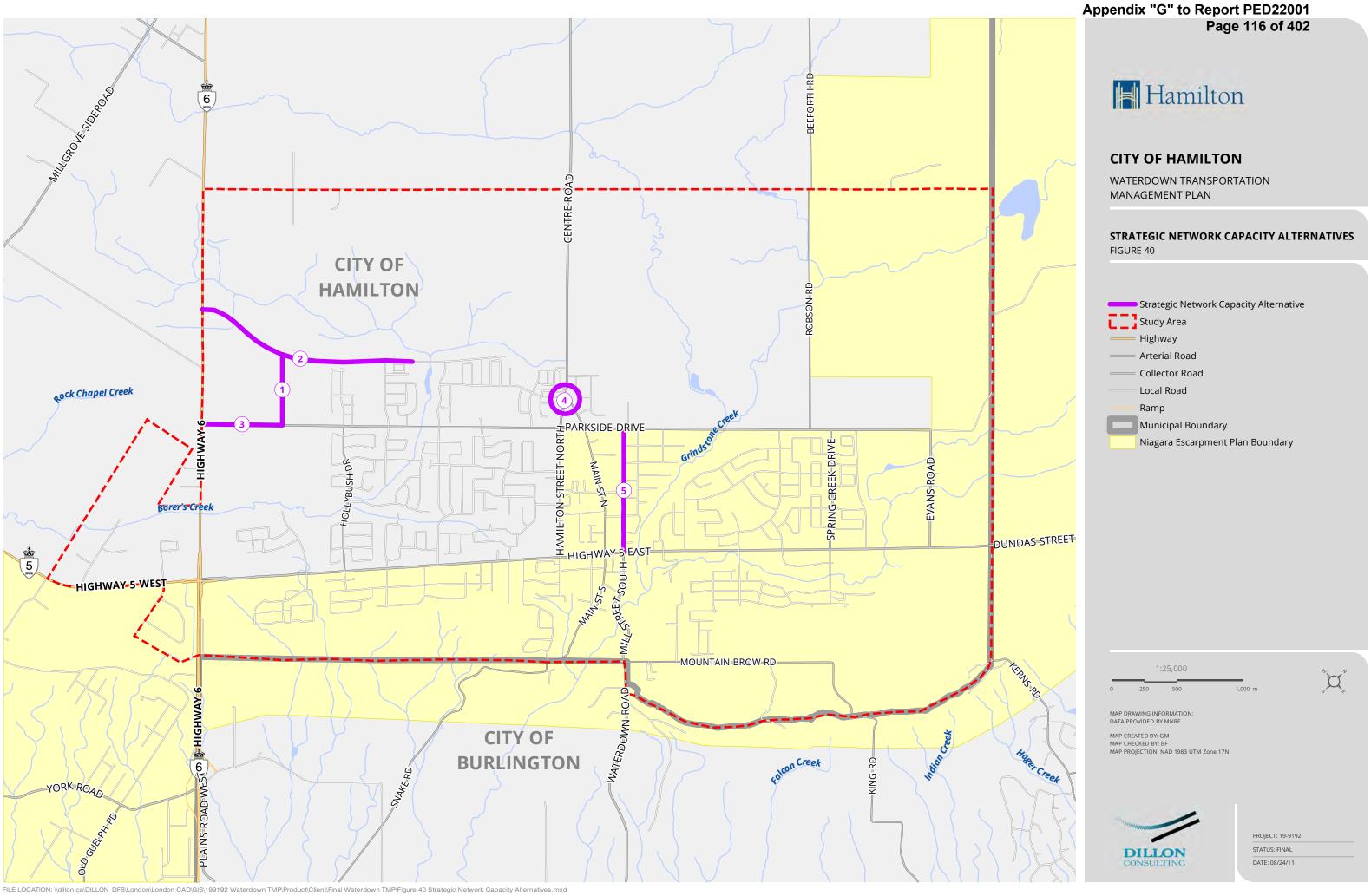




Figure 41: Future Base Network Changes

Figures 42 and **43** show roadway volumes and volume to capacity ratio (v/c ratio) for the 2031 AM and PM peak hours, respectively, for the future base network. The v/c ratio in both figures shows very few capacity issues in Waterdown, as a whole:

- the AM network shows no roadways in Waterdown with a v/c ratio higher than 0.8, meaning there is sufficient capacity for cars on the vast majority of roads
- Overall, the PM assignment shows that very few roadways have a v/c ratio higher than 0.85, although there are some links with v/c ratios in excess of the available capacity.

Capacity problems shown on the figures are:

- Volumes along Dundas Street in the downtown (between Mill Street and Hamilton Street) were
 in the range of 750-800 vehicles in each direction. Although movement between intersections
 causes congestion in the area, the strategic analysis shows that it will likely not be significant
- Through the downtown core, volumes exceed 1000 vehicles in the westbound direction between Mill Street and Hamilton Street. Two significant commuting corridors (Dundas Street and Mill

- Street/Waterdown Road) come together at a signalised intersection causing congestion. Delays moving through the area are a daily occurrence during the PM peak hour
- Of particular concern during the PM hour, is westbound travel along Dundas Street with v/c ratios exceeding 1.0 east of Evans Road (at the entrance to the new Mountainview Heights subdivision) and through the downtown
- East of Evans Road, Dundas Street may be over capacity outside Waterdown due to the significant new demand created by the Mountainview Heights subdivision. This is similar to existing travel patterns in Waterdown where the largest group of commuters leave to the east in the AM (39%) and return from the east in the PM (35%)
- The northbound direction on Mill Street was also shown to operate in excess of available capacity.



Figure 42: Future Base Network – Volumes and V/C Ratio – 2031 AM



Figure 43: Future Base Network - Volumes and V/C Ratio - 2031 PM

Figure 44 shows the routes taken by vehicles travelling westbound on Dundas west of Evans Road in the 2031 PM peak hour. The figure illustrates the following about westbound travel in Waterdown during the PM peak hour:

- Approximately 14% of westbound vehicles travel completely through Waterdown to points west, south, and north of the community. Most leave the Study Area via Highway 5 west
- Travel to destinations north of Waterdown make up approximately 2% of traffic entering from the east. This is in line with existing travel patterns shown by cell phone and GPS tracking.
 Notably, most of these vehicles travel along Robson Road and Concession 5 to access Highway 6 northbound
- Approximately 25% of the 1,580 westbound vehicles travel to the new Mountainview subdivision
- The remainder of demand travelling westbound (approximately 60%) on this section of Dundas Street travel to destinations in Waterdown.

Since the AM peak hour shows no significant capacity issues at a strategic level, the analysis of the five strategic network alternatives focuses mostly on PM peak hour performance.

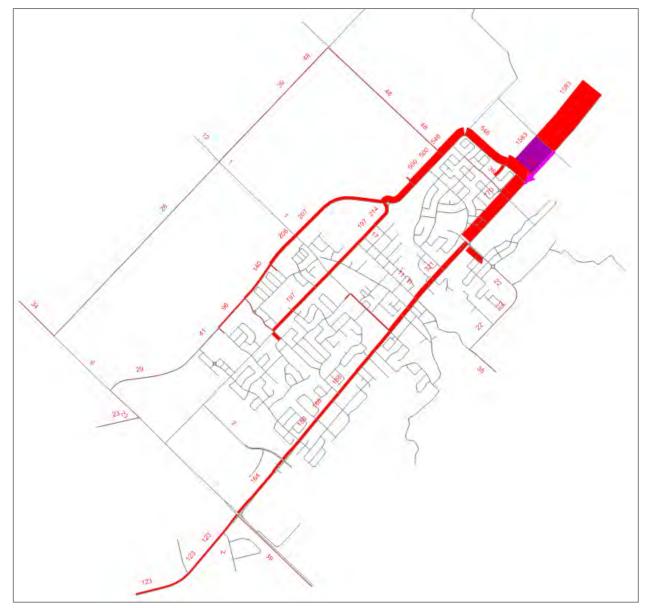
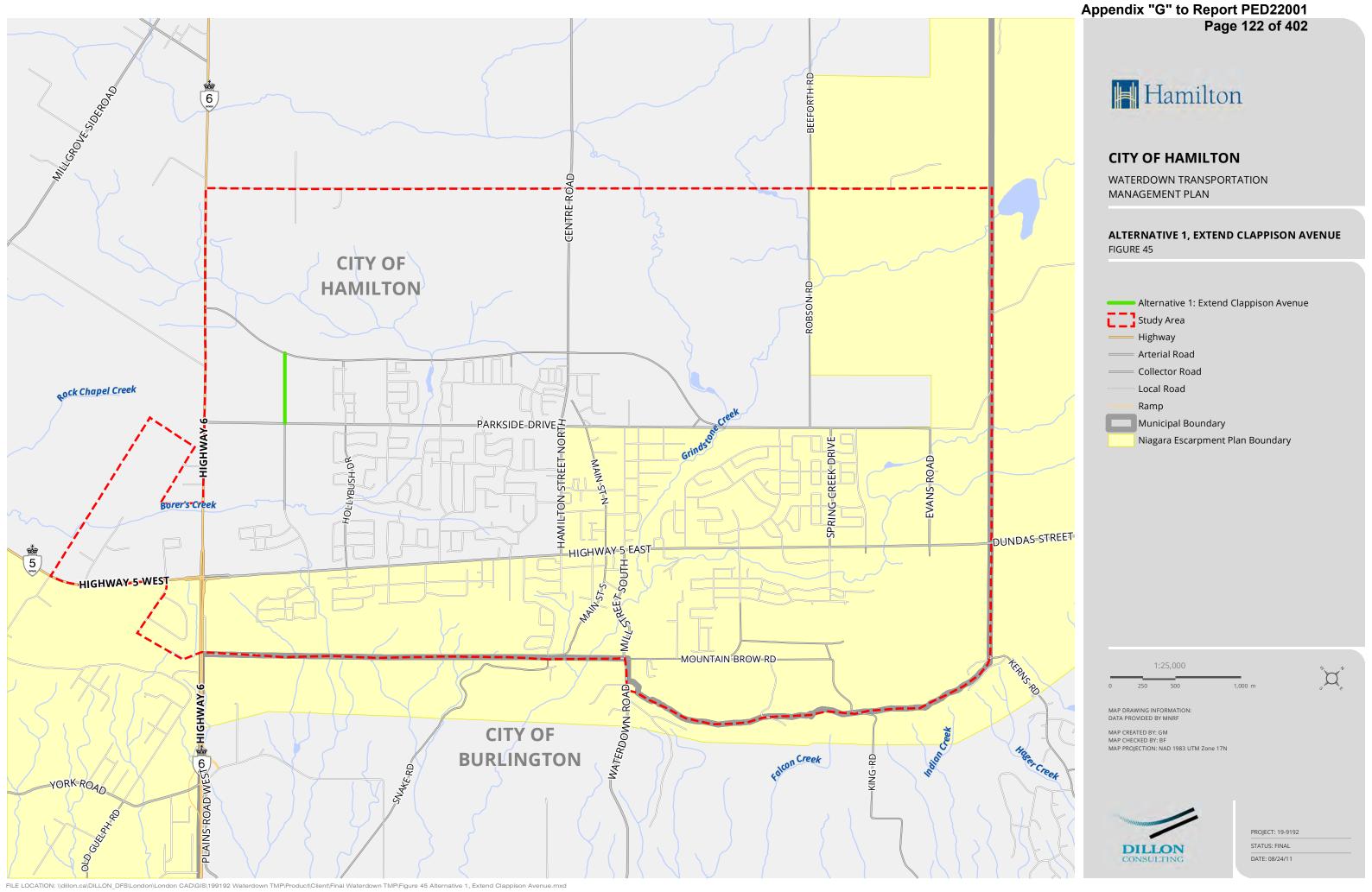


Figure 44: Travel Routes for Westbound Vehicles on Dundas Street – West of Evans Road

4.6.2 Evaluation of Alternatives

4.6.2.1 Alternative 1 – Extend Clappison Avenue from Parkside Drive to the future North Waterdown Drive

Alternative 1 extends Clappison Avenue from Parkside Drive to the future North Waterdown Drive, as shown on **Figure 45**. Similar to the section of Clappison Avenue to the south, the extension will be a signalised arterial with a four-lane cross-section with a capacity of 2000 vehicles per direction.



2031 PM Peak Hour Future Base

2031 PM Peak Hour Alternative 1

Figure 46 shows the volume and v/c ratios in the vicinity of the extension for the 2031 PM peak hour.

Figure 46: Alternative 1 - Volume and V/C Ratio - 2031 PM Peak Hour

As shown on the figure:

- There are no significant capacity issues in the area
- The extension of Clappison Avenue reassigns some vehicle trips, since vehicles in the vicinity –
 mostly travelling to/from the commercial area between Parkside Drive and Dundas Street find
 the extension attractive to access Highway 6 further north
- Since the extension will be useful for northbound vehicles on Highway 6 destined further east on North Waterdown Drive, there will be 200 fewer vehicles northbound and 100 fewer vehicles southbound on Highway 6 between Parkside Drive and North Waterdown Drive. Conversely, North Waterdown Drive causes an increase in eastbound and westbound travel west of the extension, as these vehicles find a slightly different path through the network.

The extension of Clappison Avenue provides a small amount of additional redundancy in the area. The benefit of this extension includes improved network connectivity, network redundancy to mitigate traffic infiltration through the Waterdown North residential developments (Sadielou Boulevard, Hollybush Drive, Mosaic Drive and Wimberly Drive) and reduces the need for an extension of North Waterdown Drive to connect to Highway 6 which is a large cost investment for the City of Hamilton. While the extension of Clappison Avenue is not needed for improved mobility, the benefits for network redundancy support this connection. Based on this, the extension is recommended.

4.6.2.2 Alternative 2 – Delay North Waterdown Drive Connection to Highway 6

Alternative 2 examines the utility of delaying the extension of North Waterdown Drive to Highway 6, as shown on **Figure 47**. This alternative assumes that the full length of North Waterdown Drive is not complete by 2031.

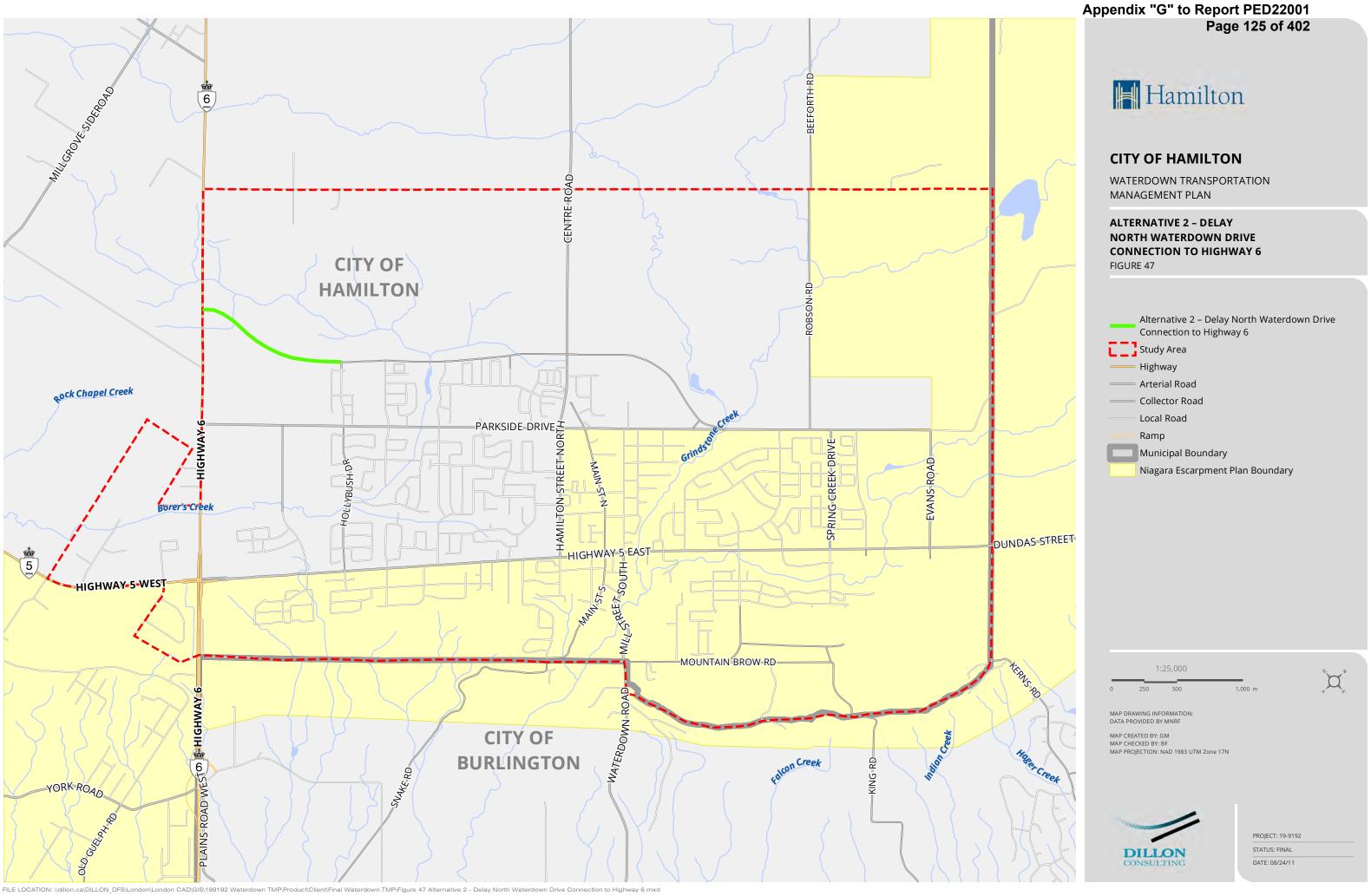


Figure 48 shows the volume and v/c ratios on roadways in the vicinity of the modification for the 2031 PM peak hour.

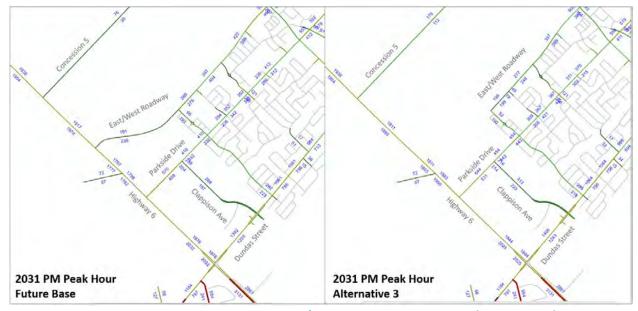


Figure 48: Alternative 2 - Volume and V/C Ratio - 2031 PM Peak Hour (change 3 to 2)

As shown in the figures, the removal of the connection to Highway 6 pushes the volume using the connection to Concession 5 and Parkside Drive, the nearest parallel routes. Both facilities have sufficient capacity to absorb the increased volume without a connection to Highway 6. With the removal of the connection to Highway 6, the rest of North Waterdown Drive will serve as local access only for the north side of the developed area. This reduces the volume along the corridor by approximately 100 vehicles per direction in the PM peak hour.

Highway 6 south of Parkside Drive and Dundas Street is unaffected by the change. This shows that North Waterdown Drive has little to do with travel on Dundas Street. As mentioned, the demand for travel between Highway 6 north of Waterdown and Dundas Street to the east of Waterdown only makes up 2-3% of travel in either direction in both the AM and PM peak hours.

To illustrate the utility of the connection within the context of the larger network, **Figures 49 and 50** show route selection for vehicles using the connection during the 2031 PM peak hour.



Figure 49: Travel Routes for Eastbound Vehicles on North Waterdown Drive – East of Highway 6



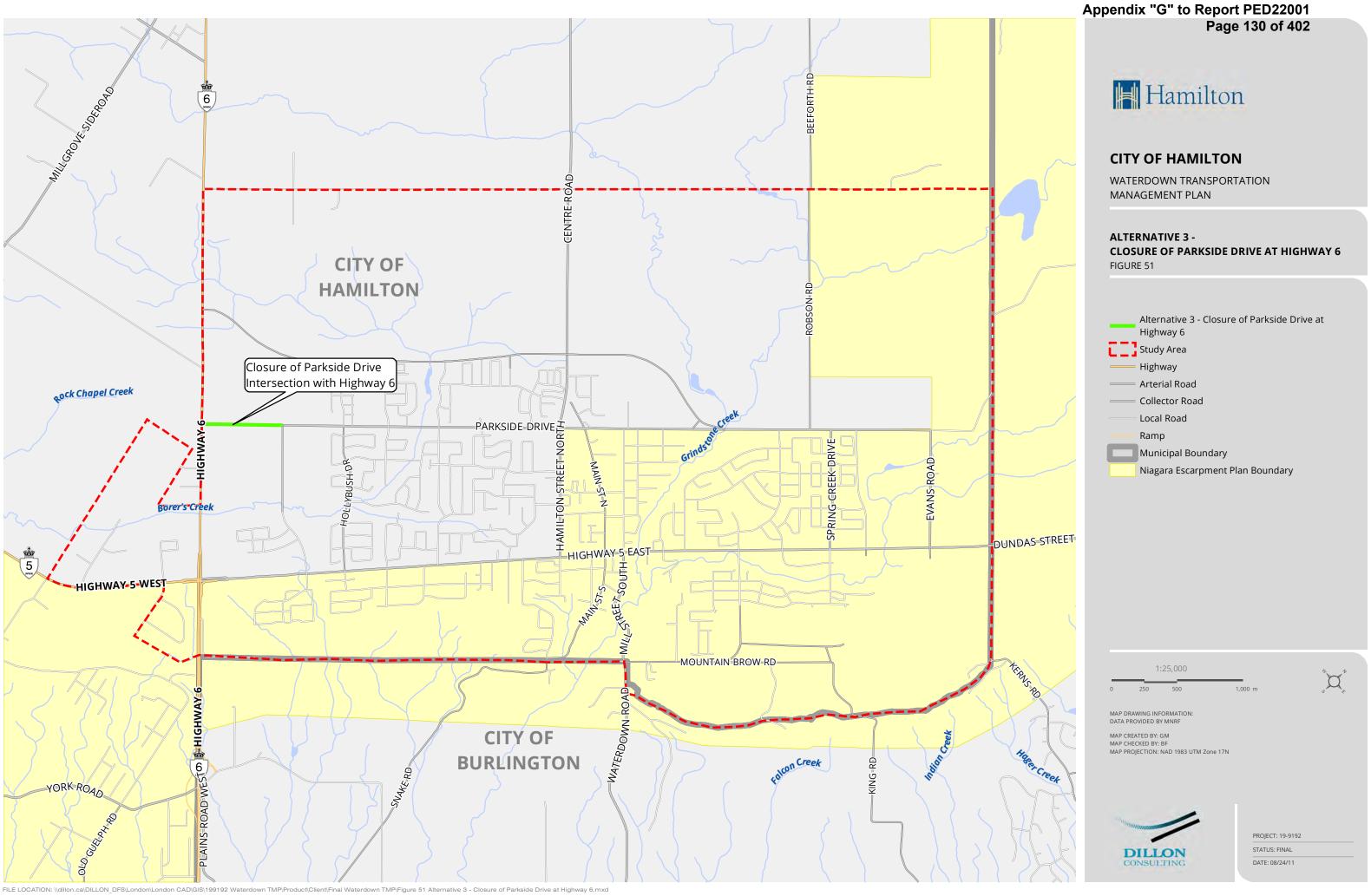
Figure 50: Travel Routes for Westbound Vehicles on North Waterdown Drive- East of Highway 6

As shown by the figures, North Waterdown Drive will provide access to the newly developed northern portions of Waterdown. Also, some users from other locations in Waterdown will use the roadway thereby removing some volume, mostly from Parkside Drive. In both directions, there are approximately 30 vehicles that travel fully through Waterdown between Highway 6 to the north and Dundas Street to the east.

According to forecasted 2031 travel patterns, North Waterdown Drive and the connection to Highway 6 will not significantly reduce volume on Dundas Street through the downtown core. Therefore, Alternative 2 is <u>not recommended</u> however, it is acknowledged that implementation of Alterative 2 may be delayed as a result of property acquisition processes.

4.6.2.3 Alternative 3 – Close Parkside Drive at Highway 6

Similar to Alternative 2, Alternative 3 removes a connection to Highway 6, as shown in Figure 51.



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Figure 52 presents the volume and v/c ratio for roadways in the vicinity of Alternative 3.

2031 PM Peak Hour

Future Base

Figure 52: Alternative 3 - Volume and V/C Ratio - 2031 PM Peak Hour

2031 PM Peak Hour

Alternative 3

As shown on the figure, the removal of the Parkside Drive connection to Highway 6 causes a shift of approximately 570 westbound vehicles and 410 eastbound vehicles to other corridors. North Waterdown Drive receives approximately 215 westbound vehicles, and 60 eastbound vehicles during the PM peak hour. It was still shown to operate at a v/c ratio of less than 0.5 in both directions, indicating that it will operate well during the PM peak hour. Dundas Street receives the remainder of diverted volume, pushing the v/c ratio for the westbound direction higher than 0.85 during the PM peak hour. This shows that there will likely be minor daily congestion on the westbound section approaching Highway 6.

The removal of the connection to Highway 6 also increases northbound and southbound volume on Clappison Drive since vehicles will access Highway 6 from Dundas Street instead of from Parkside Drive. This increases the future westbound left turn from Dundas Street to southbound Highway 6 by 190 vehicles during the PM peak hour. Since the intersection already has a double left turn in the westbound direction, this movement will likely experience congestion during peak hours. Additional capacity for westbound left turns will likely be required, either by adjustments to signal controls or physical intervention.

The closure of the Parkside Drive connection to Highway 6 did not significantly negatively affect roadways in the vicinity but Dundas Street westbound may experience additional congestion as it approaches Highway 6. There is also potential for increased operational issues at the Dundas Street/Highway 6 intersection. For these reasons, Alternative 3 was <u>not recommended</u> as a strategy to improve network capacity.

4.6.2.4 Alternative 4 – Connect Main Street North Centre Road/Hamilton Street North

Alternative 2 restores the former connection between Main Street and Centre Road/Hamilton Street north of Parkside Drive. Currently, Main Street ends as a cul-de-sac just east of Hamilton Street. With this alternative, Main Street will be connected as the fourth leg of the intersection of Hamilton Street and Nisbet Boulevard, as shown on **Figure 53**.

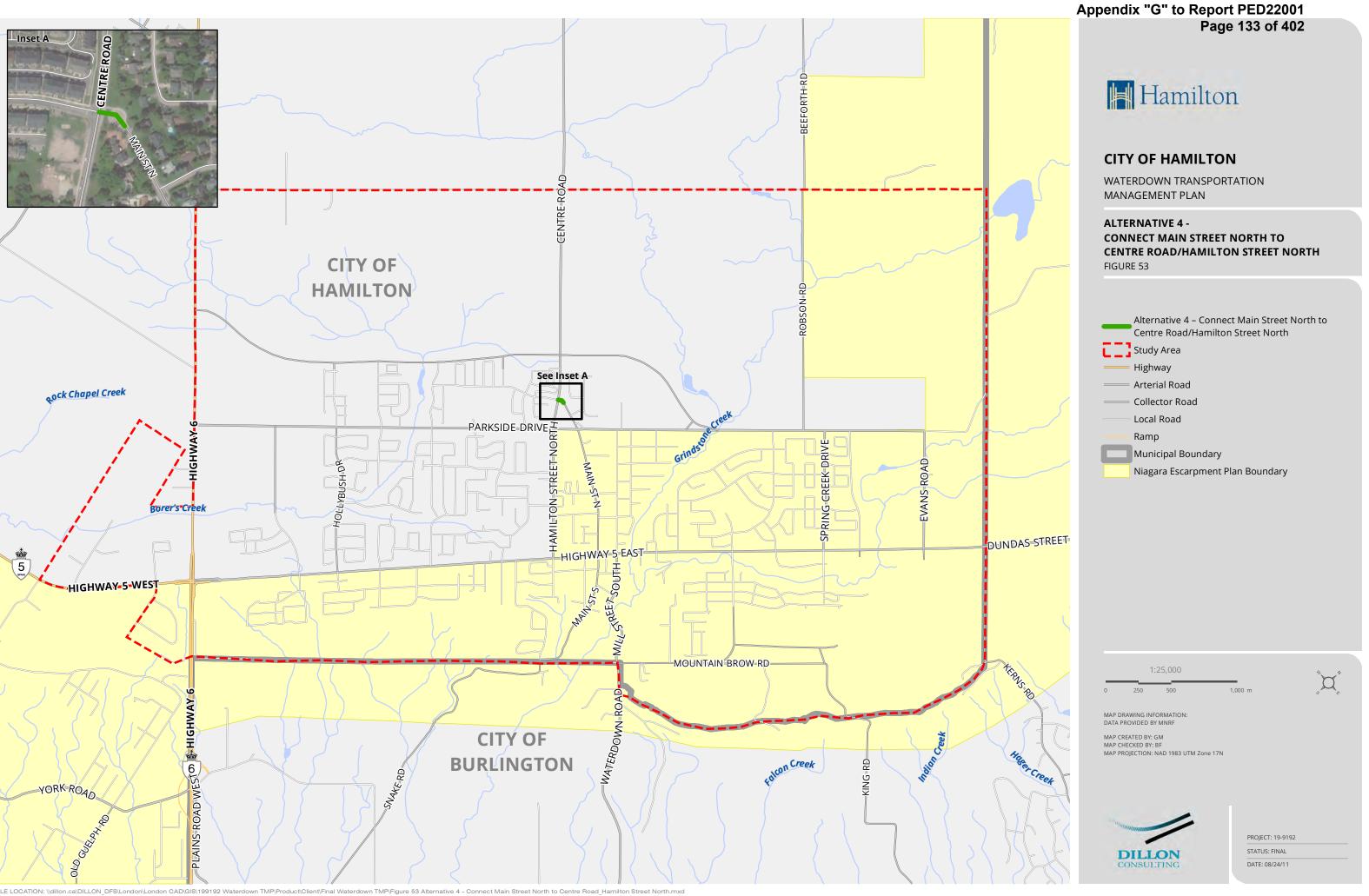


Figure 54 shows volumes and v/c ratios in the vicinity of the new connection. As shown:

- The new connection provides some localised shifts in volume. Volume on Main Street south of Parkside Drive increases significantly in the northbound direction (60 vehicles or approximately 85%). This provides a slight benefit to Hamilton Street, as volume is reduced on the busiest segment in the vicinity of White Oak Drive. However, this section operates under the available capacity without the extension of Main Street
- There was no change to eastbound or westbound volumes on Dundas Street showing that the connection does not serve a strategic purpose for those moving north-south through the area
- The most significant impact on volumes is on the section of Main Street between Parkside Drive and Nisbet Boulevard where there would be a tenfold increase in traffic. Residents who formerly lived on a quiet cul-de-sac would now live on an active through route, greatly changing the character of the neighbourhood.



Figure 54: Alternative 4 - Volume and V/C Ratio - 2031 PM Peak Hour

Overall, the new connection does not significantly improve mobility or access in the area. The segments most affected by shifts in travel patterns did not need relief or additional capacity. The new connection will increase through volumes on lower order facilities and reduce volumes on Hamilton Street, which, as a major arterial, should serve this purpose instead. For these reasons, Alternative 4 was <u>not recommended</u> as a strategy to improve network capacity.

4.6.2.5 Alternative 5 – Convert Mill Street to One-Way

Alternative 5 investigated options for converting Mill Street to a one-way street, as shown on **Figure 55**. The following four options were developed:

- Southbound Only between Parkside Drive and Dundas Street
- Northbound Only between Parkside Drive and Dundas Street
- Southbound Only between Church Street and Dundas Street

• Northbound Only between Church Street and Dundas Street.

South of Dundas Street, Mill Street provides an essential connection to employment, shopping, and other communities south of Highway 403 and to the east. A portion of Mill Street South, south of Dundas Street is also in the Heritage Conservation District. North of Dundas Street, Mill Street is a designated Heritage Conservation District. Although the character of the street north of Dundas Street changes to a residential collector with schools, churches, and homes lining the street, it provides more of an arterial function. This is not compatible with the Heritage Conservation District and the residential character of the area. Based on this, there may be some benefit to limiting traffic on Mill Street by converting parts of it to a one-way street.

While Options 1 and 2 provide a consistent directionality to Mill Street between Dundas and Parkside Drive, Options 3 and 4 limit access to Mill Street while maintaining a two-way operation to the north for the convenience of residents and businesses.

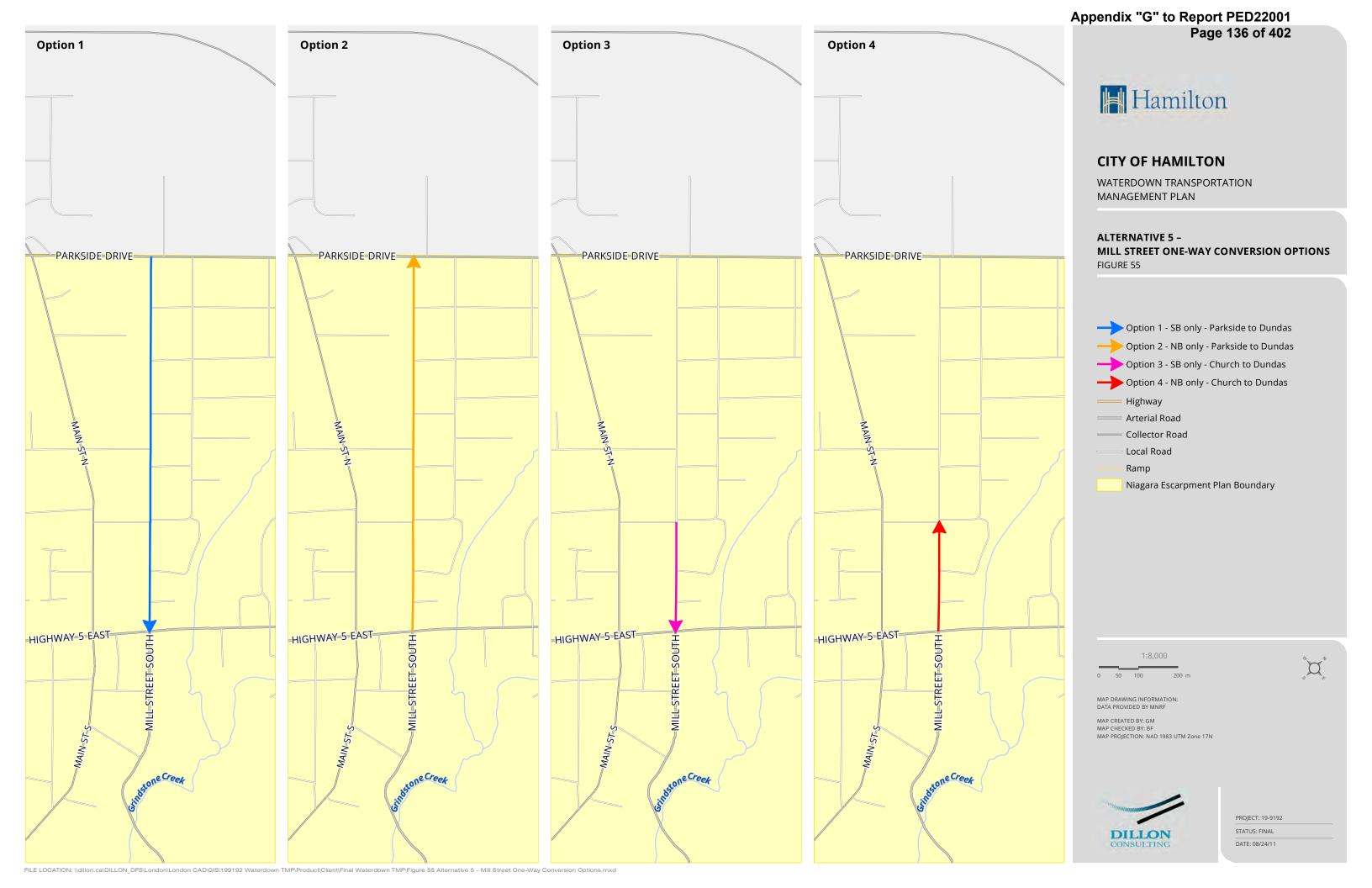


Figure 56 presents side-by-side volume and v/c ratio results from the model's assignment of the Future Base model and Options 1 and 2 – the two full-length options.

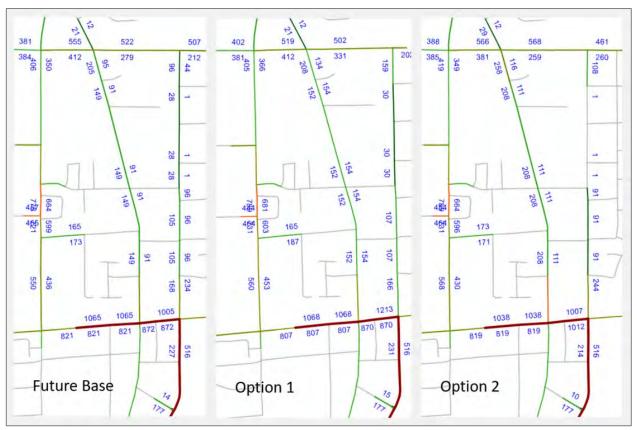


Figure 56: Alternative 5 - Volume and V/C Ratio - 2031 PM Peak Hour - Options 1 and 2

As shown on the figure, volume along Mill Street in the Future Base scenario is not significant in the PM peak hour. The volume travelling all the way through the corridor between Parkside Drive and Dundas Street is minimal. Main Street to the west, provides distance and time savings for vehicles headed between points in the northwest and Mill Street south of Dundas Street, thus acting as a more attractive through route.

Although neither option changes the volume on Mill Street significantly, both options push volume to Main Street, depending on the direction of the restriction. However, if the goal is to minimize overall traffic on Mill Street, Option 1 provides the largest diversion of traffic to other corridors. The one-way street's impact on convenience for residents, students, and businesses may not prove to be worth the effort, however.

Figure 57 shows the volume and v/c ratio for Options 3 and 4 in the vicinity of Mill Street.

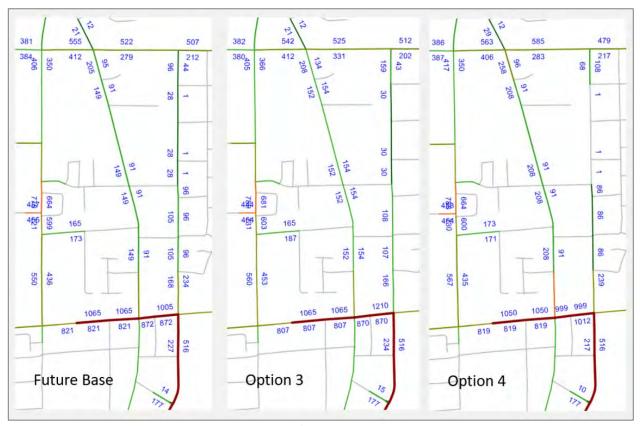


Figure 57: Alternative 5 - Volume and V/C Ratio - 2031 PM Peak Hour - Options 3 and 4

Apart from slight differences at the north end of the corridor, Options 3 and 4 are indistinguishable from Options 1 and 2. Providing a short segment of one-way roadway at the south end was shown to be equally as effective in diverting traffic from the corridor as the full-length options.

Logically, providing a short southbound section south of Church Street (Option 3) would make the most sense. Mill Street is continuous north-south across Dundas Street, so it would be tempting for motorists heading northbound to continue straight up to Parkside Drive to avoid congestion on Dundas Street. In the southbound direction, Mill Street already requires motorists to divert away from more direct routes, which decreases its utility for southbound through trips.

Treatment of the southbound section could be accomplished through narrowing the section to a single southbound lane. This would provide an attractive gateway treatment at the south end of the neighbourhood and inhibit northbound motorists from travelling through the area. It would also eliminate the 'race track' effect that multi-lane one-way streets can often take on, as motorists can easily overtake slower vehicles. This is not appropriate in a residential area.

Implementing a short southbound section of one-way street on Mill Street from Church Street to Dundas Street appears to be the most effective at reducing through traffic, while minimizing impacts on

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local residents and businesses. However, since none of the options address network capacity problems, changing Mill Street to a one-way street was <u>not recommended</u> as part of the Waterdown TMP.

4.6.3 Summary of Strategic Network Capacity Alternatives

Table 28 is a summary of the evaluation of the strategic network capacity alternatives.

Table 28: Supplementary Network Capacity Opportunities

Issue/Opportunity: Capacity (Supplementary Opportunities)

	Transportation	Public Health	Physical Environment	Costs	Recommended		
Alternative 1 - Addition of Clappison Avenue between Parkside Drive and North Waterdown Drive*	Good	Fair	Neutral	Fair	Yes		
Alternative 2 – Delayed implementation of connection to Highway 6	Good	Neutral	Good	Good	No		
Alternative 3 - Closure of Parkside Drive at Highway 6	Fair	Fair	Good	Fair	No		
Alternative 4 - Main Street North connection to Centre Road/Hamilton Street North	Poor	Poor	Neutral	Fair	No		
Alternative 5							
Option 1 - Mill Street southbound-only between Parkside Drive and Dundas Street	Good	Good	Neutral	Poor	No		
Option 2 - Mill Street northbound-only between Parkside Drive and Dundas Street	Fair	Good	Neutral	Poor	No		
Option 3 - Mill Street southbound-only between Church Street and Dundas Street	Good	Good	Neutral	Fair	No		
Option 4 - Mill Street northbound-only between Church Street and Dundas Street	Fair	Good	Neutral	Fair	No		

4.7 Land Use Sensitivity Test

A land use sensitivity test was performed for two large developments in the west end of Waterdown, one currently under construction and one which has been applied for but has not received approval. The purpose of the test was to determine the impact of the developments on future forecasted travel demands on the surrounding road network. The developments include:

- L3 Harris (Wescam), the company's new headquarters, is currently under construction at 36 Dundas Street East adjacent to Clappison Avenue. Wescam is a leader in aerospace, homeland security and defence technology. With 1,500 employees, the headquarters is expected to generate 700 trips in the AM peak hour and 709 trips in the PM peak hour
- iConnect, currently in the application stage, is located north of Dundas Street East between Clappison Avenue and Highway 6. iConnect is marketed as a complete community where people can live, work, shop and play. The application includes 1,822 residential units, a seniors' complex with 165 units and a 20,550 sq. ft. shopping centre. This development is expected to generate 527 vehicle trips in the AM peak hour and 684 in the PM peak hour.

The two developments add 1,297 and 1,393 trips to the AM and PM peak hour assignments, respectively. These trips were distributed in the model and assigned to roadways in the surrounding road network. **Figures 58 and 59** present the assigned volume and v/c ratio for the AM and PM peak hour, respectively.

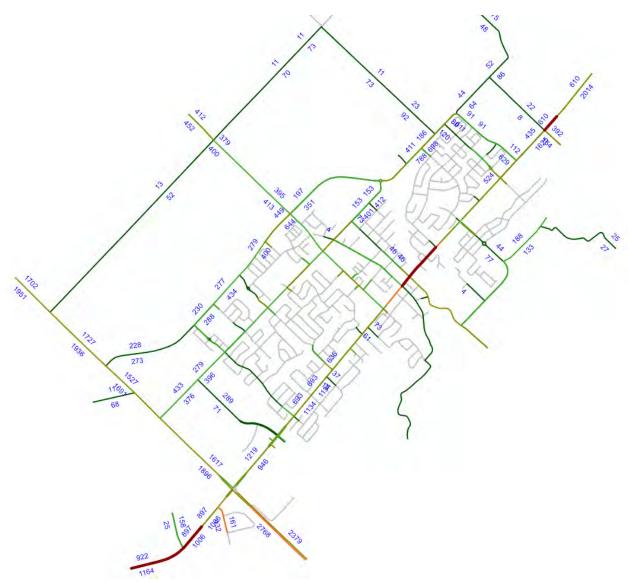


Figure 58: Volume and V/C Ratio – Land Use Sensitivity Test – 2031 AM



Figure 59: Volume and V/C Ratio – Land Use Sensitivity Test – 2031 AM

As shown on the figures, with the two new major developments, the section of Dundas Street East in the vicinity of Clappison Avenue functions within the available link capacity during the AM and PM peak hours. The overall network functions well in both periods. The developments are expected to have the following impacts:

- The most significant change occurs during the AM peak hour, when the section of Dundas Street East through downtown Waterdown exceeds the available capacity in the eastbound direction
- Additional pressure is also placed on the segments of Highway 6 south of Highway 5, and Highway 5 west of Highway 6 in both periods, if the MTO interchange is not constructed in the near future.

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Although the two new developments will have some impacts on Dundas Street East and Highways 5 and 6, both are consistent with the concept of "complete communities", as encouraged by the Provincial Policy Statement. Significant employment opportunities will be provided by Wescam. The iConnect community is marketed as a complete community where people can live, work, shop and play. As Waterdown as a whole continues to develop as more of a complete community, the impacts on Dundas Street and the highways may be mitigated. In the meantime, the results of the sensitivity test underscore the importance of providing safe, convenient, and attractive infrastructure and service for sustainable modes (transit, walking and cycling) throughout Waterdown.

5.0 Public and Agency Consultation

This section of the TMP summarizes the public and agency consultation completed during the Class EA process. Consultation was undertaken in accordance with the requirements of the Class EA process. The City of Hamilton maintained a project contact list and circulated project notifications to members of the public, agencies, interest groups and Indigenous Communities throughout the project, as outlined below. Public and agency consultation materials referred to in **Section 5** are included in **Appendix B**.

The City of Hamilton website for the Waterdown TMP is: www.hamilton.ca/waterdownTMP2019. A second website was also launched providing information for multiple Waterdown planning studies: www.hamilton.ca/waterdown

5.1 Notice of Study Commencement

A Notice of Study Commencement for the Waterdown TMP, "Let's Talk! Waterdown", was posted by the City on its website and social media. The notice was also distributed by the City to the project contact list.

The notice introduced three new studies, including the Waterdown Community Node Secondary Plan Study, Waterdown Village Built Heritage Inventory and Waterdown TMP. The notice explained the Master Plan process under the Municipal Cass EA, the purpose of the TMP and City contacts. It also advised that the City is holding a Community Workshop to discuss the three studies on October 10, 2019.

A combined survey for the Waterdown Community Node Secondary Plan Study, Waterdown Village Built Heritage Inventory and Waterdown TMP was also available online from February 2019 to November 2019, to collect input on the three studies. Twelve comments were received related to the Waterdown TMP.

5.2 Technical Advisory Committee Meetings

An internal Technical Advisory Committee (TAC) was established at the beginning of the project, consisting of representatives of the City of Hamilton departments, Hamilton Street Railway (HSR) and Dillon Consulting Limited. The intent of the TAC meetings were to bring together internal departments and agencies to comprehensively review recommendations and findings of the study, collectively. Meetings were held before Public Information Centres (PIC) 1 and 2 and prior to finalizing the Transportation Management Plan to discuss work completed, review findings to ensure all concerns were addressed across multiple departments and proactively address compounding concerns heard from residents in the Waterdown area.

5.3 Focus Group

A Focus Group was established at the beginning of the project in collaboration with the parallel Waterdown Community Node Secondary Plan and Waterdown Village Built Heritage Inventory. The focus group consisted of representatives from:

- Waterdown Business Improvement Area
- Private developers
- Waterdown Mill Street Heritage Committee
- Hamilton Municipal Heritage Committee
- Local business owners/managers
- Parent/Council school representatives
- Active Sustainable School Transportation parent committee
- City of Hamilton and Dillon Consulting Limited staff.

Three meetings were held with focus group members throughout the project.

5.3.1 Focus Group Meeting #1

Focus Group Meeting #1 was held January 30, 2019. Overview presentations on the Secondary Plan, Transportation Management Plan, and Waterdown Village Built Heritage Inventory were given by staff from the City and Dillon Consulting Limited.

Dillon provided background information about the TMP, highlighting that the plan will recommend future transportation projects, including short and long-term considerations. The study is currently in the early stages, and is following phases 1 and 2 of the Municipal Class Environmental Assessment (MCEA). Some improvements will be implemented through later Capital Project Delivery phases.

The TMP is intended to accommodate intensification and population growth in Waterdown. Dillon is currently reviewing studies completed to date. The TMP will build on those studies and the planned transportation projects.

Following the TMP presentation two brainstorming exercises were carried out: a visioning exercise led by the City, and a mapping exercise led by Dillon. For the visioning exercise, the focus group was asked to write one or two words or phrases that capture their vision for Waterdown in twenty years. The following transportation-related visions were provided:

- Accessible
- Pedestrian- and cyclist-friendly
- Better sidewalks / complete sidewalks
- Less traffic on Waterdown core residential streets
- Less cut-through traffic
- Better traffic flow
- Control destination traffic / in and out of Waterdown

- Give an option to stay out of the core
- Mid-rise on arterial roads to increase local bus
- Live/work walkability.

For the mapping exercise, the focus group was asked to write their three biggest transportation-related issues in Waterdown on sticky notes and post them on a map of the study area. The majority of issues were focused around Mill Street between Smokey Hollow Conservation Area and Parkside Drive:

- Aggressive driving
- Speed of cars driving through core residential streets
- Volume of traffic in the core
- Can't back out of your driveway because of volume and speed of traffic
- Safe pedestrian access to Smokey Hollow Conservation Area
- Mill Street / Highway 5 intersection.

Three issues were noted in other parts of Waterdown:

- Build the bypass now as opposed to three years from now
- Divert truck traffic (posted at the intersection of Highway 5 and 6)
- Eliminate Dundas Street as a truck route force trucks to Parkside Drive.

5.3.2 Focus Group Meeting #2

Focus Group Meeting #2 was held on September 30, 2019. Similar to the first focus group meeting, staff from the City provided updated on the Waterdown Community Node Secondary Plan and the Waterdown Village Built Heritage Inventory studies.

Dillon Consulting Limited provided a presentation on work completed to date for the TMP. The presentation displays included:

- Study Area
- Study Process
- Existing Conditions Findings
- Summary of What We've Heard
- Problem and Opportunity Statement
- Next Steps
- Discussion

Following the presentation a discussion was held to confirm the findings to date.

Generally speaking, focus group members agreed with the background existing conditions findings and development of the problem statement for the project.

5.3.3 Focus Group Meeting #3

Focus Group Meeting #3 was held September 23, 2020. Dillon Consulting Limited provided a presentation on work completed to date for the TMP. The presentation displays included:

- Overview of the project
- Transportation modelling and analysis results
- Alternative solutions
- Comparative evaluation
- Preferred Solutions
- Next Steps.

Generally, focus group members were supportive of the project findings. Support was received for not widening Dundas Street. Comments received from focus group members included:

- Concerns about bus scheduling and specifically that buses returning to Waterdown from Burlington and the GTA do not run and residents are forced to use other methods of transportation (e.g. Uber).
- Focus group members noted they are against the widening of Dundas and the removal of
 parking spots along the street. Currently, the parked cars provide some buffer between
 pedestrians and traffic and if this is removed, then safety is a concern.
- Support of not widening Dundas Street. Support of the Active Transportation System and hope the Barton Street corridor can accommodate cycling paths and an improved pedestrian path.
 Mill Street corner was raised as an area of concern as it is dangerous for pedestrians.
- The group noted that the North Waterdown Drive connection is key to solving transportation issues.
- Supportive of transit recommendations for more service options.
- Thanked team for listening about not widening Dundas Street.

5.4 Flamborough Community Council

Throughout the study process two presentations were made to the Flamborough Community Council to provide project information and updates.

The first presentation was made on November 21, 2019, to provide an overview of the project's Problem and Opportunity Statement, alternatives being considered and a summary of comments heard from members of the public throughout the study process to date.

The second presentation was made on September 16, 2021, to provide an overview of the project findings and an anticipated timeline for the release of the Transportation Management Plan.

5.5 Public Information Centre 1, Community Workshop

5.5.1 PIC 1 Presentation and Public Input

PIC 1 was a Community Workshop held on October 10, 2019, at St. Thomas the Apostle Parish Hall in Waterdown from 6:00 p.m. to 8:00 p.m. As mentioned, the notice, "Let's Talk! Waterdown", was advertised on the City's website and social media, distributed to the contact list and advertised in the Flamborough Review community paper.

The PIC was held as part of a workshop to introduce three City of Hamilton planning studies in the community, as noted in **Section 5.1** of this report. The objectives of PIC 1 were to obtain public input on work completed to date, including the Problem and Opportunity Statement, existing transportation issues and potential solutions. About 90 residents signed the record of attendance.

The PIC was held in an open house format with information panels for attendees to review and included summaries of the Study Area, the study's goals and objectives and the Class EA Master Plan process. The panels also covered existing transportation conditions in Waterdown, including congestion through the centre of town along Dundas Street and Parkside Drive during the AM and PM peak hours. A draft of the study's Problem and Opportunity Statement was presented, along with the PIC's objectives and the "Next Steps" in the Class EA process.

Maps displayed at the workshop showed existing and planned road improvements in Waterdown and "What We've Heard" about existing transportation issues, including congestion and traffic infiltration, speeding, road safety and road design. Other maps showed potential solutions to these issues, grouped under the headings of active transportation, network improvements, neighbourhood traffic infiltration and speeding. Using sticky notes, attendees were invited to note their transportation issues and comments on the maps. White boards and markers were also provided for additional comments.

In addition to the sticky notes and whiteboard, comment forms, requesting comments by November 1, 2019, were also provided. Three different comment forms were distributed, dealing with active transportation, local road/neighbourhood road improvements and the road network. The City received 36 completed forms. Public input on existing transportation issues and potential solutions is summarized on **Table 29**.

Table 29: Summary of Issues and Potential Solutions, Public Information Centre 1

Existing Transportation Issues	Potential Solutions
 Congestion and Road Network/Design Dundas Street from Hamilton Street to Mill Street during AM and PM peak periods Mill Street northbound at Dundas Street, during PM peak period Right turn from Dundas Street onto Avonsyde Boulevard Excessive truck traffic on Dundas Street, Mill Street and Clappison Corner. 	No support for and, in some cases, strong opposition to Dundas Street widening to four lanes. Reroute truck traffic to 5 th Concession and 6 th Concession and provide bike lanes, sidewalks and on-street parking on Dundas Street. Support for extending Clappison Drive to Highway 6. Limited support for Main Street North connection to Centre Road/Hamilton Street North. Support for future Highway 6/Highway 5 interchange and construction in near future. Limited support for changing Mill Street to a one-way street.
Neighbourhood Traffic Infiltration - Spring Creek Drive Hollybush Drive Nisbet Boulevard Mill Street Main Street North.	Support for traffic calming measures (speed cushions, centre islands, curb extensions, etc.) on these streets and others throughout Waterdown.
Speeding Riley Street Brian Boulevard Main Street North.	Reduce speed limits on all residential streets to 40 km/hr. Reduce speed limits on Dundas Street and sections of Concession 6 and Millgrove Sideroad.
 Safety Mill Street South in Smokey Hollow area Road curves on Brian Boulevard School crossing at Guy Brown School on Brian Boulevard at Longyear Drive Left turn from Boulding Avenue onto Parkside Drive during PM peak period. 	Traffic signals/stop signs and pedestrian crossovers suggested for many intersections.
Cyclist safety concerns on Parkside Drive, Dundas Street, Waterdown Road and Snake Road Pedestrian accessibility/safety concerns on Hamilton Street, Centre Road, trail to Smokey Hollow Waterfall, Dundas Street, Parkside Drive and many intersections.	Provide a network of bike lanes throughout Waterdown. Suggested pedestrian accessibility/safety improvements, including pedestrian cross-overs, at many locations.

Existing Transportation Issues	Potential Solutions
Transit Issues	Focus more on transit services for local travel. Transit currently focuses on
 Transit system does not serve local transit users. 	regional travel.

All of the issues and potential solutions noted by the attendees were considered in the finalization of the Problem/Opportunity Statement prepared as part of Phase 1 and the identification and evaluation of alternative solutions during Phase 2 of the Class EA process.

The City addressed the public's comments on its website for the project under "Frequently Asked Questions". The website also includes a table prepared by the City, "Waterdown Transportation Issues Summary", dated June 28, 2019.

5.5.2 PIC 1, Agency Comments

The Ministry of Environment, Conservation and Parks (MECP), West Central Region, was the only agency that submitted comments on PIC 1. In a letter dated October 8, 2019, MECP recommended that the PIC 1 materials be sent to the Mississauga's of the Credit First Nation, Six Nations of the Grand River and Haudenosaunee Confederacy Chiefs Council. The letter also described the Ministry's requirements for completing a Notice of Completion for the TMP and applying for a Species at Risk permit or authorization under the *Ontario Endangered Species Act*.

To meet MEPC's guidelines for Consultation with Aboriginal Communities, the City sent the PIC materials to the three First Nations in November 2019. No responses were received.

5.6 Public Information Centre 2

PIC 2 was a virtual meeting held on October 21, 2020, from 5:30 p.m. to 7:30 p.m. The purpose of PIC 2 was to present and obtain public input on the transportation solutions recommended by the Waterdown TMP.

5.6.1 PIC 2 Notice

The Notice for PIC 2 was published in the Flamborough Review on October 8 and 15, 2020, posted on the City's website and social media and distributed to the contact list.

The notice advised participants that the PIC 2 presentation slides could be reviewed from October 14 to November 11, 2020, with comments due by midnight on November 11, 2020. It also included instructions for joining and participating in the virtual meeting online or by phone. A website was provided for pre-registration.

5.6.2 PIC 2 Presentation and Attendance

The displays presented at PIC 2 summarized the following:

- Study Area and the objectives of the Waterdown TMP
- The Class EA process for a Master Plan
- Problem and Opportunity Statement
- Current transportation issues, including congestion, neighbourhood traffic infiltration, speeding and safety

- Road network and capacity analysis, along with an intersection analysis
- Alternative solutions presented in three "buckets", including network capacity, transportation demand management and safety
- Criteria used to evaluate alternative solutions
- Recommended network capacity solutions, including improvements to the Dundas Street/Mill Street and Dundas Street/Avonsyde Blvd. intersections. Widening Dundas Street between Mill Street and Hamilton Street North was not recommended due to its adverse impacts
- Recommended transportation demand management solutions, involving improvements to transit and active transportation facilities, and a new active transportation crossing of Grindstone Creek at Church Street
- Five supplementary network capacity scenarios were presented, including extending Clappison Avenue, delay the connection of Waterdown Drive to Highway 6, close Parkside Drive at Highway 6, connect Main Street North to Centre Road/Hamilton Street and four options for converting Mill Street to one-way. None were recommended since they do not address congestion or capacity issues
- Safety improvements throughout Waterdown to reduce neighbourhood traffic infiltration and speeding
- A map showing recommended improvements
- Next steps in the Master Plan process.

Overall, the Virtual Information Meeting was well attended with a total of 60 individuals listening to the presentation.

5.6.3 PIC 2, Public Comments, Written Submissions

As shown on **Table 30**, written comments were received from 7 residents and Flamborough Connects bus service.

Most of the comments related to neighbourhood traffic infiltration, speeding and safety issues, especially for pedestrians. Other concerns included illegal parking, illegal turns and the significant amount of truck traffic on Dundas Street. Two residents disagreed with the recommendation to not widen Dundas Street since it is Waterdown's major traffic problem.

The City responded to all comments received following the PIC.

5.6.4 PIC 2, Agency Comments

Agency comments received following PIC 2 are shown on **Table 30**. The Halton Region Conservation Authority, Ministry of Sport, Tourism and Culture and Hydro One provided comments. The City replied to the comments in April 2021.

Table 30: PIC 2 Agency and Public Comments, Written Submissions

Date	Agency/Public	Comments	Response		
		Agency Comments			
Oct. 29, 2020	Logan McClevis, Hydro One Networks Inc. SecondaryLandUse@ HydroOne.com	Asked for confirmation that the City is not considering a bicycle bridge/path over Grindstone Creek.	City responded in November, 2020		
Nov. 6, 2020	Emma Defields, Halton Region Conservation Authority, edefields@hrca.on.ca Asked several questions about the active transportation works planned as part of the TMP.				
Nov. 10, 2020	Joseph Harvey, Ministry of Heritage, Sport, Tourism and Culture Industries, Joseph.Harvey@ontario.ca MHSCT provided advice on incorporating heritage considerations into the TMP for the Master Plan process, archaeological resources, built heritage resources, cultural landscapes and EA documentation.		City Responded in 2021		
Nov. 17, 2020	Hydro One Networks Inc., Toronto	Improvements proposed as part of the TMP potentially impact Hydro One high voltage transmission facilities in the Study Area.	City responded in April 2021		
		Public Comments			
Nov. 13, 2020	Amelia Steinbring, Executive Director, Flamborough Connects, amelia@flamborough connects.ca	Flamborough Connects provides bus services, such as bi-weekly grocery shopping trips, for isolated rural residents without transportation. Offered to support and collaborate with the TMP.	City responded in April 2021		
Sept. 24, 2020	Waterdown Resident	Thanked City and Dillon for "putting cultural and social issues first" in the Traffic Study.	For information only		
Nov. 6, 2020	Waterdown Resident	Bus route shown at PIC 2 (Oct. 21, 2020) along Parkside Drive and Main St. N. is impossible since the intersection has been dead-ended for more than a year.	City responded in April 2021		
Nov. 9, 2020 Waterdown Resident		Disagrees with PIC 2's recommendation to not increase capacity on Dundas Street since this is the Study Area's most significant problem. Also, the widening will have minimal negative impacts on the street's heritage value and current businesses.	City responded in April 2021		
Nov. 10, 2021	Waterdown Resident	Request for pedestrian crossing in close proximity to townhouses on Avonsyde Blvd.	City responded in September 2021		
Nov. 11, 2020	Waterdown Resident	Involved in Waterdown Area Transportation Master Plan (WATMP) EA process since 2005. Disagrees with recommendation to not increase capacity on Dundas Street. Made some suggestions regarding lane directions and parking during rush hours.	City responded in April 2021		

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Date	Agency/Public	Comments	Response
PIC 2 Comment Form	Waterdown Resident	"Overall, the work done for this is impressive." Comments include: • Agrees with increased public transportation and suggested direct service to and from Hamilton • Requested a pedestrian crosswalk on Hamilton Street between the plazas • Heavy trucks and vehicles should be banned from Dundas Street once the by-pass is built The crosswalk at Mill Street and Dundas Street should be moved to make pedestrians more visible.	City Responded in 2021
PIC 2 Comment Form	Waterdown Resident	 Supports speed reader boards on Avonsyde Blvd. A crosswalk is needed at 230 Avonsyde Blvd. near the townhouses due to volume and speed of traffic. 	

6.0 Transportation Management Plan

6.1 Overview of Transportation Management Plan

Currently, the most significant traffic congestion in Waterdown occurs on Dundas Street between Mill Street and Hamilton Street North in the peak commuting directions, including eastbound in the morning and westbound in the afternoon. With current and planned road improvements, augmented with transportation demand management solutions, the 2031 forecasted demand for automobile transportation in Waterdown is within available capacity to support the continued growth of Waterdown and intensification planned through the Waterdown Community Node Secondary Plan.

Widening of Dundas Street is not recommended due to its high cost and adverse impacts on public health and the character and heritage value of the historic downtown. Widening Dundas Street also reduces the attractiveness of walking in the downtown and limits opportunities to provide cycling and transit facilities along the road. Instead of widening Dundas Street, intersection improvements are recommended at the Dundas Street/Mill Street intersection and the Dundas Street/Avonsyde Boulevard intersection.

Instead of focusing on automobile-oriented solutions, such as widening Dundas Street and other roads, the Waterdown TMP focuses on a range of transportation demand management solutions aimed at reducing car use. Recommended solutions involve improvements to transit and active transportation, like cycling and walking, to address current and long-term transportation challenges. Measures to address traffic infiltration and reduce speeding on Waterdown's streets are also covered by the TMP.

6.2 Waterdown Transportation Management Plan

6.2.1 Recommended Intersection Improvements and TDM Solutions

Recommended intersection improvements and transportation demand management solutions are listed in **Table 31**, along with the approximate cost and timeframe for implementation. The table also shows the classification of the projects under the Municipal Class EA. **Figure 60** provides a high level overview of the recommended intersection improvements and the updated Active Transportation plan for Waterdown.

The success of the transportation demand management solutions shown on **Table 31** will be facilitated by Waterdown's changing role from a "bedroom community" to more of a "complete community" where people live, work, shop and play. More local employment opportunities, like those provided by major companies that have recently been established in Waterdown, will allow people to live closer to their place of work, thereby reducing the strain on local and regional transportation networks.

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These land use trends allow transit and active transportation to become more reasonable alternatives to car use in Waterdown. Waterdown is expected to continue to evolve as a complete community, as encouraged by the Provincial Policy Statement and the City's Official Plan.

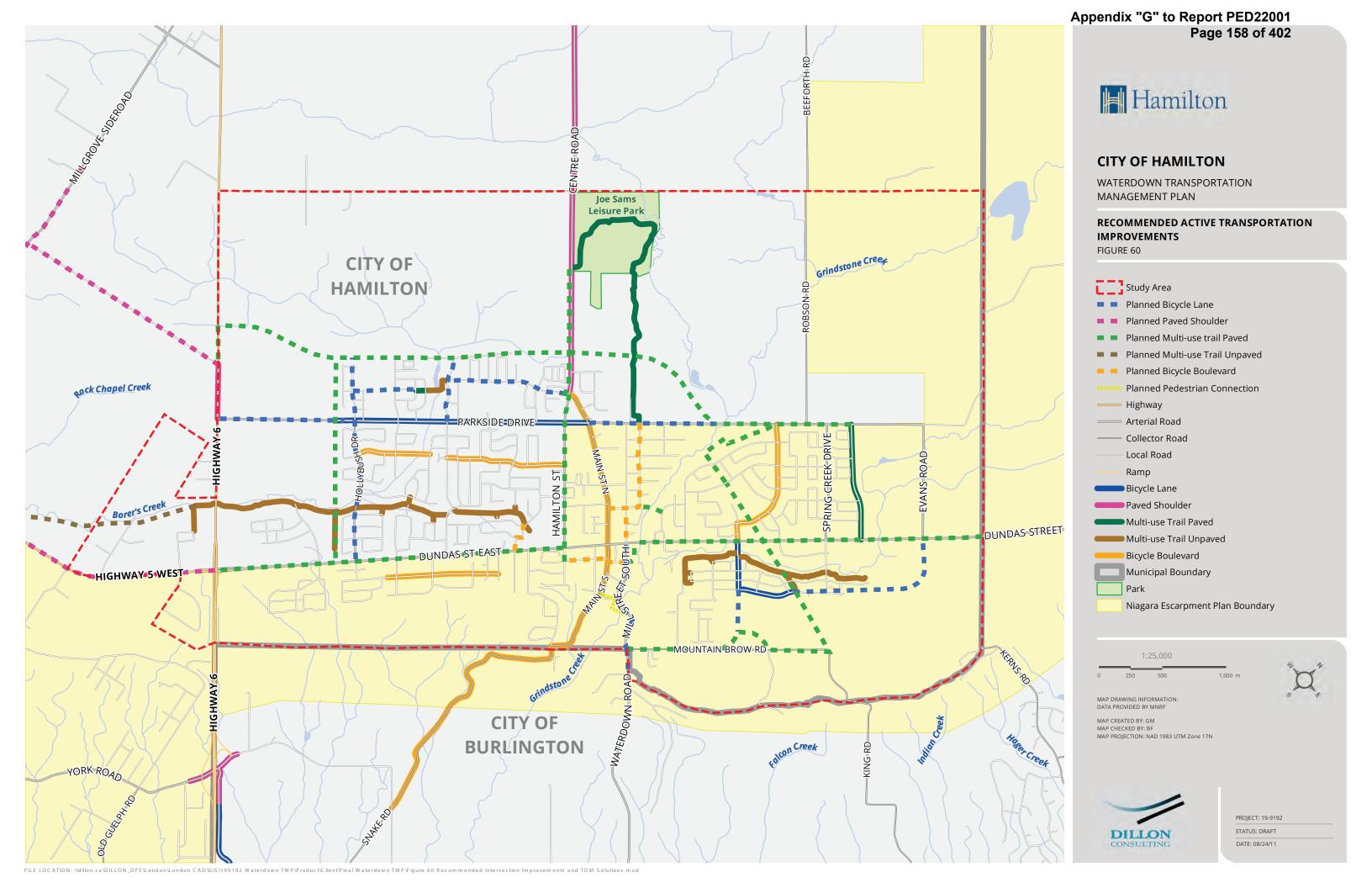


Table 31: Recommended Intersection Improvements and TDM Solutions

	Table 31: Recommended Intersection Improvements and TL	JIVI Solutions		
Category	Recommended Improvements	Approximate Cost	Timeframe for Implementation	Municipal Class EA Schedule
	INTERSECTION IMPROVEMENTS			
Dundas Street/Mill Street Intersection	Adjust signal timing at intersection	N/A	1 to 5 years	А
	TRANSPORTATION DEMAND MANAGEMENT			
Transit				
	Improve connection to community core	2,000 hrs / year (@ 120\$ / hr = \$240K +1 bus	1 to 5 years	A+
Improvements to Route 18	Expand hours of service, including Sunday service	7,000 hrs / year = \$840K	1 to 5 years	A+
	Increase frequency of buses to every 10 minutes instead of 15 minutes	10,000 hrs / year = \$1.2M + 2 buses	1 to 5 years	A+
	Before BLAST and Dundas BRT are built, provide an interim regional route along Dundas Street and Highway 6 to connect Waterdown, Burlington and downtown Hamilton (daily 15 minute service)	(@120\$/hr) =	5 to 10 years	A+
New Regional Route	Continue discussions with Metrolinx regarding regional services along Dundas BRT	Approximate Cost Implementation N IMPROVEMENTS N/A 1 to 5 years DEMAND MANAGEMENT 2,000 hrs / year (@ 120\$ / hr = \$240K +1 bus 7,000 hrs / year = \$840K 10,000 hrs / year = \$1.2M + 2 buses vide an interim regional connect Waterdown, is minute service) Ing regional services along and downtown Hamilton Area and Skinner Road as Area and Skinner Road as N/A Timeframe for Implementation 1 to 5 years 1 to 5 years 1 to 5 years 5 to 10 years 5 to 10 years 1 to 5 years 42,000 hrs / year (@120\$/hr) = \$5.0M + 8 buses N/A 5 to 10 years 1 to 5 years	А	
	Maintain a connection between Waterdown and downtown Hamilton after Dundas BRT is operational		5 to 10 years	A+
Alternative Service Delivery (ASD)	Designate Parkside Drive, West Employment Area and Skinner Road as ASD areas	100\$/hr) = \$1.3M +	1 to 5 years	A+
· · /	ASD partnership discussions with major employers	N/A	1 to 5 years	А
	Prepare implementation plan for ASD vehicles, drivers and technology	\$20K	1 to 5 years	A+

Category	Recommended Improvements	Approximate Cost	Timeframe for Implementation	Municipal Class EA Schedule
	Develop a transit node in community core with passenger amenities	\$650K per Platform Area x 2 = \$1.3M	1 to 5 years	A+ ⁶
Stations, Stops and Terminals	Provide stops, benches and shelters at higher activity locations	\$280K per platform x 6 = \$1.7M	1 to 5 years	A+
	Prioritize ASD connection points and locations with an aging population	N/A	1 to 5 years	A+
Active Transportation				
Cipling	Review priority rankings of the most critical planned cycling facilities (Dundas Street, Parkside Drive, Hamilton Street)	N/A	1 to 5 years	Α
Cycling	Review design of planned facilities using <i>Ontario Traffic Manual (OTM)</i> Book 18 – Cycling Facilities, or preferably Designing for AAA	N/A	1 to 5 years	Α
New Multi-Use Trail	Evaluate feasibility of a crossing of Grindstone Creek at Church Street for consideration in the Recreational Trails Master Plan Evaluate feasibility of a crossing from Sealy Park to west side of Grindstone Creek over the rail line for consideration in the Recreational Trails Master Plan	To Be Determined Based on Future Siting/EA Study	1 to 5 years	B, if less than \$2.4 M each
	Install public bicycle repair stations downtown and at community facilities	\$3,000 (each)	1 to 5 years	А
Cycling and Walking Related Facilities	Expand Hamilton's Public Bike Share system (SoBi Hamilton) to serve transit riders, commuter cyclists, recreational cyclists and visitors	\$200,000 ⁷	5 to 10 years	А
	Update City sidewalk policy to require sidewalks on both sides of all roadways (crescents, cul-de-sacs and industrial roadways) to improve accessibility, especially the elderly and those with disabilities.	N/A	1 to 5 years	А

⁶ This classification assumes that the node is not adjacent to a residential area, environmentally sensitive area, cultural heritage resources, and recreational or other sensitive land use.

⁷ Costing includes bikes and docking stations only.

Category	Recommended Improvements	Approximate Cost	Timeframe for Implementation	Municipal Class EA Schedule	
Other TDM Measures	City resources and tools to educate residents and employers about carpooling, teleworking, flexible hours, employer-sponsored transit pass subsidies, priority parking and other incentives	N/A	1 to 5 years	А	

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As shown on **Table 31**, all of the recommended projects, except for one, are Schedule A or A+ projects, which are pre-approved under the Municipal Class EA. Schedule A+ projects require that the City issue a public notice, such as a notice to adjacent owners, a notice posted at the site or a posting on the City's website.

The recommended crossing of Grindstone Creek at Church Street is classified as a Group B project if it costs less than \$2.4 million and a Schedule C project is more than \$2.4 million. This project is, however, subject to further study in the upcoming review of the Recreational Trails Master Plan. If recommended by the Master Plan, the City will prepare a Schedule B environmental screening or a Schedule C Environmental Study Report, as required by the Class EA.

6.2.2 Recommended Safety Improvements

Figure 61 shows safety improvements recommended throughout Waterdown, including measures to reduce neighbourhood traffic infiltration and speeding.

6.2.2.1 Measures to Reduce Neighbourhood Traffic Infiltration

Neighbourhood traffic infiltration occurs when local roadways are used as cut-through routes to avoid congestion on collectors and arterials. **Table 26** in **Section 4.4.1**, includes measures to reduce infiltration on 13 streets throughout Waterdown that are affected by infiltration. These measures include speed cushions, raised centre islands, raised crosswalks and other measures to reduce the attractiveness of the route as a cut-through.

The following table groups the 13 streets into Priority 1 Streets, where the measures will be implemented over the next five years, and Priority 2 Streets, where the measures will be implemented in five to ten years. Approximate costs, along with the Municipal Class EA schedule are also shown.

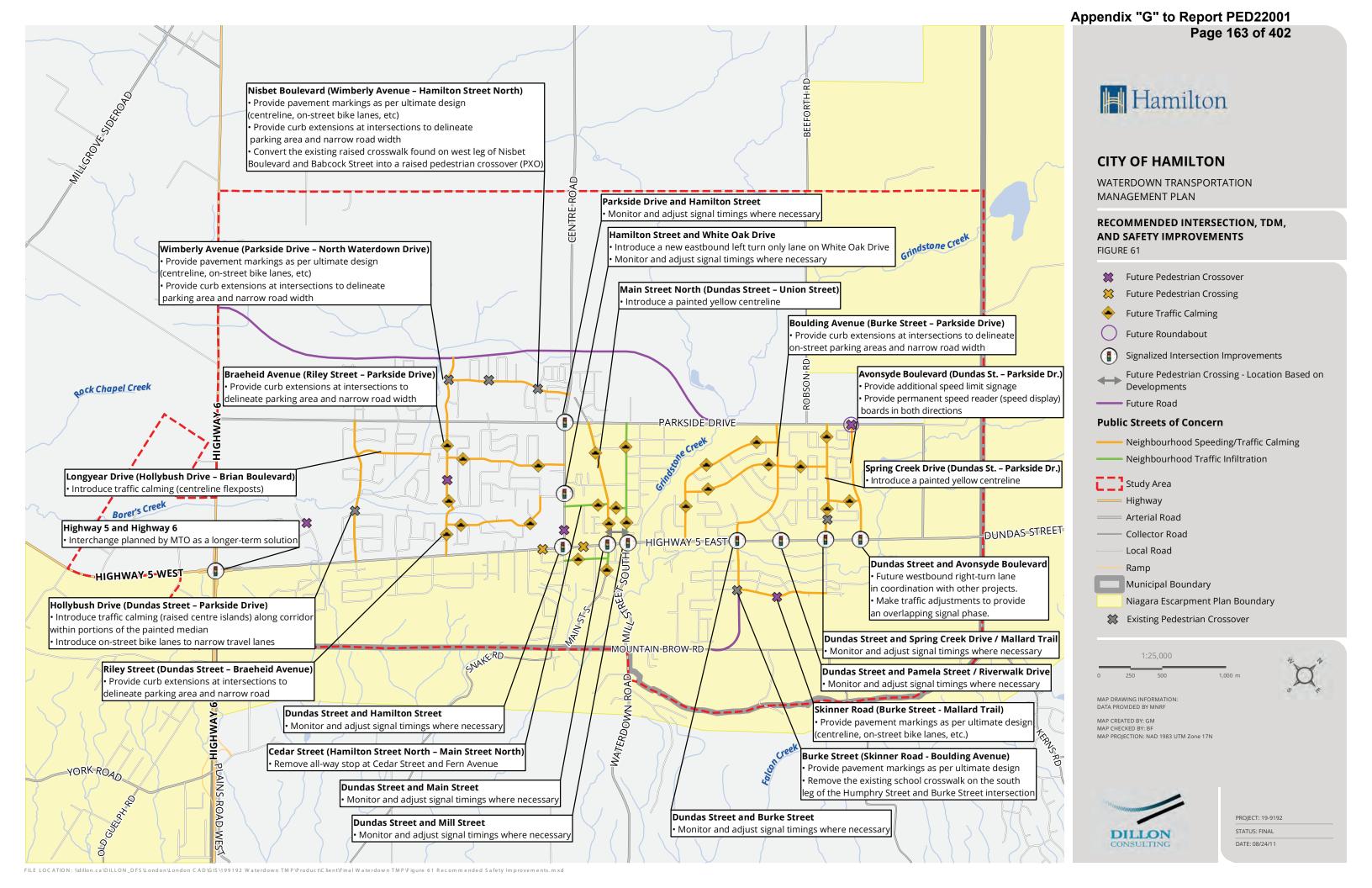


Table 32: Priority 1 Streets and Priority 2 Streets for Measures to Reduce Neighbourhood Traffic Infiltration

Priority	Approximate Cost	Municipal Class EA Schedule
Priority 1 (1 to 5 years) Streets:		
Braehied Avenue (Riley Street – Parkside Drive)	\$18,000	Α
Hollybush Drive (Dundas Street – Parkside Drive)	\$60,000	А
Main Street North (Dundas Street – Parkside Drive)	\$21,000	А
Main Street South (Dundas Street – Union Street)	\$6,000	А
Mill Street North (Dundas Street – Parkside Drive)	\$21,000	Α
Riley Street (Dundas Street – Braeheid Avenue)	\$86,000	А
Priority 2 (5 to 10 years) Streets:		
Barton Street (Hamilton Street South – Main Street South)	\$6,000	А
Cedar Street (Hamilton Street North – Main Street North)	\$7,000	Α
Church Street (Main Street North – Mill Street North)	\$3,000	Α
TOTAL	\$228,000	

Within the next 1 to 5 years, the approximate costs for these various Priority 1 improvements is estimated at \$212,000, while the priority two projects would only cost an estimated \$16,000.

All of the measures shown are Schedule A pre-approved projects under the Municipal Class EA.

6.2.2.2 Measures to Reduce Neighbourhood Speeding

Table 27 in **Section 4.4.2** includes measures to reduce neighbourhood speeding issues on 18 streets throughout Waterdown where residents expressed concerns about speeding. The measures include a variety of ways to reduce operating speeds for vehicles, such as changes to roadway width, speed readers, speed cushions, curb extensions, centreline flexposts, etc.

Table 33 groups the 18 streets into Priority 1 Streets, where the measures will be implemented over the next five years, and Priority 2 Streets, where the measures will be implemented in five to ten years. Approximate costs, along with the Municipal Class EA schedule are also shown.

Table 33: Priority 1 Streets and Priority 2 Streets for Traffic Calming Measures

Priority	Approximate Cost	Municipal Class EA Schedule
Priority 1 (1 to 5 years) Streets:		
Avonsyde Boulevard (Dundas Street – Parkside Drive)	\$5,000	А
Braehied Avenue (Riley Street – Parkside Drive)	\$18,000	А
Burke Street (Skinner Road – Boulding Avenue)	\$2,000	А
Hollybush Drive (Dundas Street – Parkside Drive)	\$60,000	А
Main Street North (Dundas Street – Parkside Drive)	\$21,000	А
Nisbet Boulevard (Wimberly Avenue – Hamilton Street North)	\$80,000	А
Riley Street (Dundas Street – Braeheid Avenue)	\$86,000	А
Skinner Road (Burke Street – Mallard Trail)	\$5,000	А
Spring Creek Drive (Dundas Street – Parkside Drive)	\$20,000	А
Wimberly Avenue (Parkside Drive – North Waterdown Drive)	\$30,000	А
Priority 2 (5 to 10 years) Streets:		
Boulding Avenue (Burke Street – Parkside Drive)	\$60,000	А
Chudleigh Street (Riley Street – White Oak Drive)	\$21,000	А
First Street (Dundas Street – Niska Drive)	\$9,000	А
Forest Ridge Avenue (Spring Creek Drive – Avonsyde Boulevard)	\$6,000	А
Laurendale Avenue (Niska Drive – Boulding Avenue)	\$21,000	А
Longyear Drive (Hollybush Drive – Brian Boulevard)	\$6,000	А
Niska Drive (First Street – Spring Creek Drive)	\$27,000	А
Rockhaven Lane (Braeheid Avenue – Hamilton Street North)	\$21,000	А
TOTAL	\$498,000	

Within the next 1 to 5 years, the approximate costs for these various Priority 1 improvements is estimated at \$327,000, while the Priority 2 projects would only cost an estimated \$171,000. However

some of the improvements are duplicated under Neighbourhood Traffic Infiltration and Neighbourhood Speeding / Traffic Calming.

All of the measures shown are Schedule A pre-approved projects under the Municipal Class EA.

6.2.3 Recommended Transportation Policy Solutions to Include in the Secondary Plan

As stated in **Section 1.0**, this TMP was completed in coordination with the Waterdown Community Node Secondary Plan Study and will be used to help inform policies within the secondary plan. **Table 34** summarizes policy related recommendations from this TMP for inclusion in the secondary plan. The timeframe for implementation will be addressed in the Secondary Plan and as development in Waterdown proceeds over the next 10 years.

Table 34: Recommended Transportation Policies

Recommended Transportation Policies

Support the development of active transportation facilities that are designed for all ages and abilities (AAA) to encourage trips by active transportation and transit through the Secondary Plan land-use recommendations.

Develop policy that requires development applications to review access management requirements as part of the application process. Development applications should prioritize improving access to transit network function and reducing conflicts between vehicular movements and the active transportation network.

Require missing sidewalks adjacent to new developments or re-development sites to be constructed as part of the development application process.

Plan for the creation of a transit node in the Waterdown Village Core Area to connect to future regional transit and potential ASD solutions. A transit node would also improve the profile of transit in the core while promoting intensification of the Secondary Plan Area.

Encourage the expansion of transit services and amenities within the public ROW within the Community Node area

6.3 Thirty-Day Public and Agency Review Period

The Waterdown TMP followed Approach #2 for Master Plans, as outlined in the Municipal Class EA. Although all of the projects recommended in the TMP are Schedule A projects, the City of Hamilton will place the TMP, along with a Notice of Completion, on the "public record" for 30 days to provide the public and agencies an opportunity to review the TMP and provide comments.

DILLON CONSULTI NG LIMITED LONDON, ONTARIO



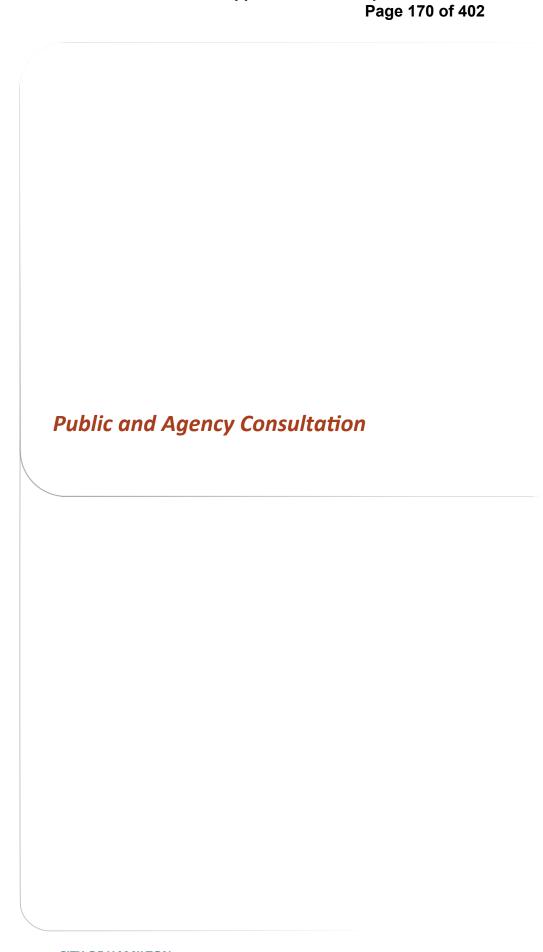
Transportation Modelling and Forecasts to 2031 Screenline Results

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				Eastbound / Northbound						Westbound / Southbound				
Record	Number	Name	Direction	Modelled	Counted	Diff	% Diff	GEH	Direction		Counted	Diff	% Diff	GEH
101	1	Hamilton Burlington	1	4903	4599	304	7%	4.4	2	4128	3879	249	6%	3.9
102	1	Hamilton Burlington	1	1498	802	696	87%	20,5	2	292	315	-23	-7%	1.3
201	2	QEW Burlington	1	5850	5585	265	5%	3.5	2	4478	3806	672	18%	10.4
202	2	QEW Burlington	1	459	890	-431	-48%	16.6	2	0	189	-189	-100%	19.
601	6	Highway 6 (West side)	1	+	265	-	-	-	2	-	89	-	-	-
602	6	Highway 6 (West side)	1	- - (-	173	-	-	-	2		37	-	-	-
603	6	Highway 6 (West side)	1	-	892	-	-	-	2		685		-	-
604	6	Highway 6 (West side)	1	1035	802	233	29%	7.7	2	787	482	305	63%	12.
605	6	Highway 6 (West side)	1	325	138	187	136%	12.3	2	187	60	127	212%	11.
606	6	Highway 6 (West side)	1	420	143	277	194%	16.5	2	70	93	-23	-25%	2.5
607	6	Highway 6 (West side)	1	146	165	-19	-12%	1.5	2	222	92	130	141%	10.
608	6	Highway 6 (West side)	1	- 2.7	50	-	-	-	2	-	19	-	-	-
609	6	Highway 6 (West side)	1	354	113	241	213%	15.8	2	164	36	128	356%	12.
610	6	Highway 6 (West side)	1	130	121	+	-	-	2	+	93	-	-	-
611	6	Highway 6 (West side)	1	450	44	406	923%	25.8	2	330	24	306	1275%	23.
612	6	Highway 6 (West side)	1	-	30		-		2		12	-	-	-
613	6	Highway 6 (West side)	1	423	66	357	541%	22.8	2	43	50	-7	-14%	1.0
614	6	Highway 6 (West side)	1	¥	42	-	-	-	2	-	42	-	-	-
615	6	Highway 6 (West side)	1	-	37	-	-	-	2	-	8	-	-	-
616	6	Highway 6 (West side)	1	0	59	-59	-100%	10.9	2	0	22	-22	-100%	6.0
701	7	Highway 403 (S/E sides)	1	1976	1944	32	2%	0.7	2	1338	1190	148	12%	4.
702	7	Highway 403 (S/E sides)	1	4.2	-	-	-		2	3624	2630	994	38%	17.
703	7	Highway 403 (S/E sides)	1	3863	3324	539	16%	9.0	2	-	-	-	-	-
704	7	Highway 403 (S/E sides)	1	801	436	365	84%	14.7	2	1154	916	238	26%	7.4
705	7	Highway 403 (S/E sides)	1	2125	3212	-1087	-34%	21.0	2	2959	3151	-192	-6%	3.5
706	7	Highway 403 (S/E sides)	1	605	433	172	40%	7.5	2	228	425	-197	-46%	10.
707	7	Highway 403 (S/E sides)	1	294	371	-77	-21%	4.2	2	97	158	-61	-39%	5.4
708	7	Highway 403 (S/E sides)	1	412	622	-210	-34%	9.2	2	283	516	-233	-45%	11.
709	7	Highway 403 (S/E sides)	1	89	271	-182	-67%	13.6	2	68	355	-287	-81%	19.
710	7	Highway 403 (S/E sides)	1	:	176	+	-	14	2	-	0	-	-	-
711	7	Highway 403 (S/E sides)	1	128	327	-199	-61%	13.2	2	466	482	-16	-3%	0.7
712	7	Highway 403 (S/E sides)	1	251	121	130	107%	9.5	2	160	141	19	13%	1.5
713	7	Highway 403 (S/E sides)	1	333	314	19	6%	1.1	2	196	327	-131	-40%	8.3
714	7	Highway 403 (S/E sides)	1	0	7	-7	-100%	3.7	2	0	9	-9	-100%	4.
-				-	1			-	-		-	-		
715	7	Highway 403 (S/E sides)	1	176	14	162	1157%	16	.6	.6 2	.6 2 49	.6 2 49 28	.6 2 49 28 21	.6 2 49 28 21 75%

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					Eastboun	d / Northb	ound				Westbo	und / Sout	hbound	
Record	Nu <u>mb</u> er	Name	Direction	Mo <u>dell</u> ed	Counted	Diff	% Diff	<u>GEH</u>	Direction .	Mo <u>dell</u> ed	Counted	D <u>if</u> f	% Diff	GEH
1101	11	Milton West End	1	218	219	-1	0%	0.1	2	96	92	4	4%	0.4
1102	11	Milton West End	1	4	110	-		-	2	-	61	-	-	-
1103	11	Milton West End	1	158	30	128	427%	13.2	2	88	11	77	700%	10.9
1104	11	Milton West End	1	-	12	-		-	2	- 1	6	-	-	-
1105	11	Milton West End	1	455	152	303	199%	17.4	2	69	56	13	23%	1.6
1106	11	Milton West End	1	0	10	-10	-100%	4.5	2	0	10	-10	-100%	4.5
1201	12	Highway 5 (south side)	1		137	- 00		- 8-	2	-3-	181	-8	1 6 1	-
1202	12	Highway 5 (south side)	1	547	245	302	123%	15.2	2	359	126	233	185%	15.0
1203	12	Highway 5 (south side)	1	-	29	-	-	-	2	-	51		100	-
1204	12	Highway 5 (south side)	1	4	8	-	-	4	2	-	6	-	-	-
1205	12	Highway 5 (south side)	1	315	206	109	53%	6.8	2	84	138	-54	-39%	5.1
1206	12	Highway 5 (south side)	1	-	-		-	-	2	-		8		
1207	12	Highway 5 (south side)	1	247	41	206	502%	17.2	2	20	40	-20	-50%	3.7
1208	12	Highway 5 (south side)	1	297	466	-169	-36%	8.7	2	224	273	-49	-18%	3.1
1209	12	Highway 5 (south side)	1	379	351	28	8%	1.5	2	265	249	16	6%	1.0
1210	12	Highway 5 (south side)	1	63	48	15	31%	2.0	2	1	24	-23	-96%	6.5
1211	12	Highway 5 (south side)	1	274	13	261	2008%	21.8	2	207	12	195	1625%	18.6
1212	12	Highway 5 (south side)	1	34	73	-39	-53%	5.3	2	15	50	-35	-70%	6.1
1213	12	Highway 5 (south side)	1	-	4	-	-	-	2	-	6	-	-	-
1214	12	Highway 5 (south side)	1	-	12	-	-	-	2	-	8	-	-	-



Appendix "G" to Report PED22001

Appendix B

Notice of Commencement and Public Information Centre #1



Learn about the latest **City of Hamilton** planning initiatives in your neighbourhood.

The City is holding a

COMMUNITY WORKSHOP

to introduce several studies. We need you to tell us your vision for the area and help us understand the strengths of your community.

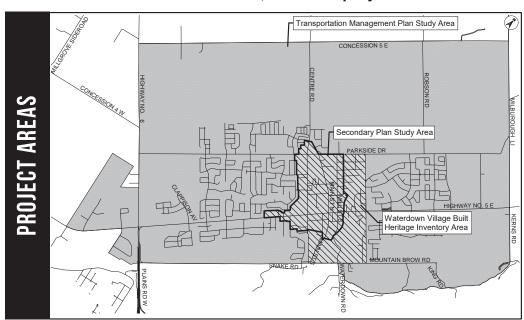
THURSDAY OCTOBER 10, 2019

@6:00 - 8:00 PM

ST. THOMAS THE APOSTLE PARISH HALL 715 Centre Road

Introductions at 6:30 PM, Workshop at 7:00 PM

Visit www.hamilton.ca/waterdown, to see all projects



FOR MORE INFORMATION CONTACT **PROJECTS**

WATERDOWN COMMUNITY NODE SECONDARY PLAN STUDY

The City's Official Plan identifies the central Waterdown area as a Community Node. It serves as a focal point for the surrounding community. The purpose of this study is to create a plan to help manage change and redevelopment in this area. We want to hear from you about your future vision for central Waterdown.

WATERDOWN COMMUNITY TRANSPORTATION MANAGEMENT STUDY

(MUNICIPAL CLASS ENVIRONMENTAL ASSESSMENT) NOTICE OF COMMENCEMENT AND PUBLIC INFORMATION CENTRE #1

This study is being completed following the requirements of Phase 1 and 2 of the Municipal Class EA process. The purpose of this study is to review the existing transportation network and identify areas for improvements to address existing and future transportation needs. This work will build on road improvements already planned or in progress. The PIC will outline proposed transportation solutions and seek your input on the solutions developed to date.

WATERDOWN VILLAGE BUILT HERITAGE INVENTORY

This inventory includes the survey and evaluation of each property in the study area to identify what has heritage value or interest. Preliminary findings and an overview of the historical evolution of Waterdown Village will be available at the workshop.

ROBERT CLACKETT MCIP RPP

905-546-2424 ext. 1274 waterdownnodeplanning@hamilton.ca www.hamilton.ca/waterdownnode

MOHAN PHILIP M. Eng., P. Eng.

City of Hamilton 77 James Street North, Suite 400 Hamilton, ON L8R 2K3 905-546-2424 ext. 3438 transportation@hamilton.ca www.hamilton.ca/waterdownTMP2019

ALISSA GOLDEN MCIP RPP

905-546-2424 ext. 4654 Alissa.Golden@hamilton.ca www.hamilton.ca/heritageinventory

CAN'T ATTEND? WE STILL WANT TO HEAR FROM YOU!

Materials and presentations will be posted online after the meeting. Please fill out our online survey at www.hamilton.ca/waterdown and/or send us written comments by mail or email by November 1, 2019.





CITY OF HAMILTON

WATERDOWN TRANSPORTATION MANAGEMENT PLAN

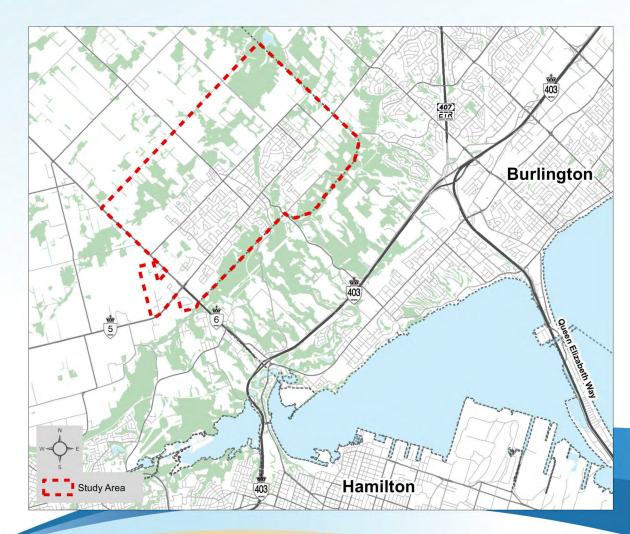
Public Information Centre #1

October 10, 2019



Study Area / Objectives

- Study will support the Waterdown Community Node Secondary Plan
- Being completed in collaboration with the Waterdown Village Built Heritage Inventory
- Waterdown Transportation Management Plan Goals:
 - Identify solutions to address short and long-term transportation issues
 - Protect for future needs
 - Program solutions for implementation



Study Process

The Transportation Management Plan study is following the requirements of the Municipal Class Environmental Assessment (EA) (2000, as amended in 2007, 2011 and 2015). We are here PHASE 3: PHASE 1: PHASE 2: PHASE 4: PHASE 5: **Alternative Design** Problem / Alternative **Environmental Concepts for Implementation** Solutions Opportunity **Study Report Preferred Solution** Confirm the study · Identify reasonable Identify alternative Document the process Design phase purpose and alternative solutions to design concepts by completing an Proceed to design / iustification the problem / **Environmental Study** Detailed review of construction of the Report (ESR) for a opportunity Identify the problem / existing conditions project Schedule C project opportunity Conduct an overview · Monitor for **Evaluate alternative** of existing conditions designs and environmental in natural, social and provisions and recommend preferred economic environment design commitments Identify impacts of Consult review alternative solutions agencies and the on the environment public The Class EA process Evaluate alternatives Select the preferred ensures that all relevant and recommend a design social, environmental solution and engineering factors Select the preferred are considered in the solution planning and design Document the decision process. Public and making process agency input is integrated into the Distribute final public decision making notice for the Master Plan process.

Existing Conditions

- 88% of all travel for Waterdown residents is by car (90% for commuters).
- 65% of all trips made by Waterdown residents are to areas outside of Waterdown. 81% of commuters leave and return to Waterdown on a typical workday.
- There are few options for travel by sustainable modes (walking, cycling, and transit) that connect to useful destinations.
- The three most important corridors used to access the surrounding region for Waterdown residents are Dundas Street (east side), Mill Street, and Highway 6 South.

- Depending on the time of day and peak direction of travel, 25-50% of the traffic entering Waterdown is passing through.
- There is daily congestion through the centre of town along Dundas Street and Parkside Drive, as commuters leave and return to town.



Problem and Opportunity Statement

Waterdown's transportation network capacity is insufficient to accommodate current and future traffic volumes, resulting in congestion, safety concerns, and traffic infiltration into residential neighbourhoods and the downtown core.

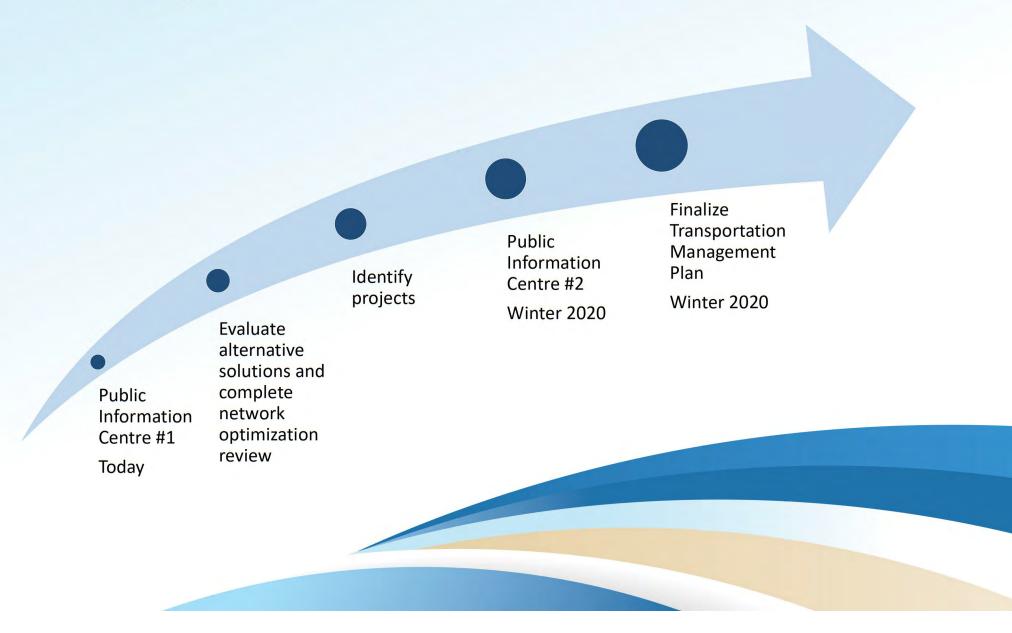
The Waterdown Transportation Management Plan Study was initiated to address short-term issues and identify long-term improvements needed for road network, public transit, and pedestrian and cyclist facilities.

Today's PIC Objectives

We Want Your Input!

- Obtain feedback on the Problem and Opportunity Statement
- Present summary of issues heard to date and collect additional comments
- Present potential solutions to address:
 - Gaps in Active Transportation facilities
 - Concerns raised by the public regarding operational issues (speeding, pedestrian crossings, etc.)
 - Larger network opportunities to reduce congestion
- Collect feedback for consideration in the next phase of the Study.

Next Steps



Waterdown Survey Answers – Transportation Questions

5. What are the top three transportation issues you have observed in Waterdown?

Waterdown road is the only road other than hwy 6 that provides a north to south exit from the town. It is also a school route. It is in horrible shape and in need of redesign and rebuild as repairs or patching has been proven not a solution.

Hwy 5/Dundas st in town is over used by vehicles going east-west and is over capacity. during busy hours you can hardly make a turn into a subdivision. Parkside is used as an alternative to Dundas and much like Dundas, you can not make it out of the subdivision due to high volume traffic.

Speed limit too high in the Core (should be 40 or lower)

Some streets could be identified as one-way.

Little facility for alternate travel modes (cycling in particular)

Unbelievably BAD planning!

- 1. The entire "bypass" is comical. When the north route up Waterdown Rd. cuts east to go north through the new subdivision, you will actually have to go EAST on Dundas before cutting North again to go WEST through the top of Waterdown?
- 2. There is no regard for people who live in west Waterdown who travel North/South to Aldershot/Burlington: a. King Rd/Mountainbrow is being closed as an access route (although when the new subdivision is completed apparently we will be able to very inconveniently stumble our way through residential streets and traffic circles before connecting with King Road again); the Waterdown Rd. expansion keeps getting watered down (needs to be FOUR lanes); and absolutely inane traffic restrictions in the south core prior to Dundas (which NO ONE adheres to because they make no sense (i.e., no left turn from 4-6pm onto Griffin St.!!)).
- 3. The new "bypass" route up Avonsyde has ONE lane northbound and THREE lanes southbound at Dundas? Why? Will this change when the final bypass routes are all completed?

HWY 5

I live on the north side of Dundas st east between Kerns and Evans rd. When I am coming from Waterdown (towards Burlington) looking to turn left into my driveway I have nearly been rear ended. People start driving 80km/h at the light at the pioneer station and they don't pay attention. I could be waiting for oncoming traffic at a full stop and cars coming from behind me cut off outer lane traffic to get around me and then hopefully the car behind that person can get around or stop. I wish there was a centre turning lane because that would be most safe. Quite often I just drive down to brant and turn around to then turn right into my driveway instead of risking getting into an accident with my 3 and 1 year olds in the car. I feel like with all the new development in the area this problem is only going to get worse and there will be no safe way to turn left into my own driveway.

a safe way to walk or bike around the town. Waterdown is small enough that one could choose to leave their vehicle at home or reduce ownership (one instead of two). public transit for those who can't walk, bike or drive.

Walking on the sidewalk along HWY 5 through town and to Clappisons is very dangerous - I would not go there with a child or a stroller. - or a mobility scooter. The trail following the creek through town could be paved all the way to HWY6 and then under it to connect with the Arena, plus the employment lands on the other side of HWY 5 (a stop light is coming there).

Lack of infrastructure to support the increased population has caused horrific traffic congestion around Waterdown which is a huge issue. Public transportation is sorely lacking and poorly promoted. Little to no bike lanes make cycling a dangerous proposition. Speed limits in town need to be reduced and more traffic calming measures need to be installed.

Roads are not equipped for the current volume of traffic in town Current bus system is under utilized-often seen driving around empty

- 1. CONGESTION
- 2. POORLY PLANNED NEW STREETS....TOO NARROW, NO TURN LANES, AND AN ABYSMAL LACK OF PROPER SIGNAGE AND UP TO DATE ROADWAY MARKINGS.
- 3. THE RIDICULOUS TIME IT HAS TAKEN TO CREATE AND IMPLEMENT A BY-PASS ROUTE

Speed, Volume and Frustration of drivers

Too much volume. Mill st

Speeding Mill st

Big trucks on streets that shouldn't be. Mill st

- 1. VOLUME & Speed
- 2.VOLUME & Speed
- 3. VOLUME & Speed

Dundas; Mill; Main; Church; John; Parkside;

Traffic, especially on Dundas and Parkside. No crosswalk yet at Parkside and main, on Dundas going west when it drops down to one lane

- -speed of cars on residential streets
- -volume of traffic moving through the Waterdown Core at rush hour
- -dangerous driving by people flying through residential "shortcuts"

Volume and speed of traffic cutting through the old core to avoid the gridlock on Dundas street. Road infrastructure is not being built to accommodate the increased traffic do to the massive construction occurring in the area.

traffic on Dundas especially heading into gta in morning or heading out of gta in afternoon

- -Lots of new development but the transportation infrastructure required to support the development has not been built.
- -Too many traffic signals at locations which are not warranted (i.e. Parkside Drive).
- -Gaps in the cycling infrastructure, i.e. small parts of the cycling network are being built but ending in area's that don't have any cycling infrastructure (ex. Avonsyde Boulevard north and south end)

I live 2 actual minute, from my drive day to the border from burlington by car but if I can't drive and need to bus it takes over an hour for some places

I live on nisbet Blvd where the street length is half a kilometer with no stop signs. Cars typically speed at 50 or 60 km/h on a posted 40 zone. The street odometer reader in front of my house shows these chronic fast speeds. We need stop signs or a solution to stop the fast speeders. There was a death in waterdown last year due to speeding and a child crossing. We need to avoid this and keep our kids safe.

- 1. Empty buses
- 2 jammed dundas st and Waterdown at traffic hour.
- 3. Parkside is getting worse too.
- 1. Lack of reliable, timely, connected transit. I would love to see a more direct route into Hamilton and a route along Hamilton street to cut the amount of time on the bus 2.Bottleneck downtown (Dundas Street from Evans Road to the library)
- 3. Conflict points at Sobey's shopping center

Empty buses circling the area are a constant reminder if the ineptitude if the city

No direct access to/from Downtown Hamilton

Scheduling for access to Aldershot is very narrow (ends early, no Sunday...)
One bus line trying to do it all - with multiple large corporations settling in the Industrial Park on the Waterdown/Dundas Border along Highway 5, this is not going to work, particularly that attracting people to work there will be difficult.

A bypass is needed. It is not a viable option to considered restricting traffic without considering the through traffic. it will cause frustration and greater traffic congestion if a bypass is not completed first prior to considering local traffic calming / speed restrictions.

- 1. Going south-west on Parkside Drive and Hwy 5 in the evening during the week is so backed up heading into the village that I do not bother with ever attempting to go and eat or shop in the Waterdown core or further west (Canadian Tire, etc.) after work during the week.
- 2. Parkside Drive has slow moving tractors and cyclists using the road between Main Street and Avonsyde during peak rush hour traffic, slowing down car traffic to a crawl and causing further congestion on what is already a massively congested road during rush hour times.
- 3. Transport trucks cut through the main "village" using Hwy 5. Hwy 5 between

Hamilton Street and Burke Street clearly cannot support large transport trucks with the current spacing between the lights and general design with parking, etc. They exacerbate congestion as they are slow moving, since they get stopped at the many lights in the core node, and take up much of the length of road.

- 1. NOISE and speeding of traffic on Dundas and Parkside a walk along Dundas no longer allows for a conversation due to the noise and a walk to the library usually means we use the back entrance even though the boulevard there does have a bit of a spacer from the road that is the exception.
- 2. In the Braeheid survey we enjoy the walking options of trails and alleyway shortcuts that greatly encourage us to walk however we do NOT find the same options being incorporated anywhere else in the community and certainly NOT within the study node area.
- 3. Volume of traffic (truck and vehicular) is already crazy and only going to increase with the development

I feel that roundabouts should have been put on Parkside instead of traffic lights. Parkside is so busy and an arterial road that stopping traffic with so many new lights was a waste. The goal ia to keep traffic flowing and studies have shown that they are safer than lights. That being said, the light at the YMCA and schools should be one.

1) Lack of planning for traffic from new builds

A road parallel to Hwy 5 and Parkside that went over the railway tracks and Grindstone creek should have been built prior to any new subdivisions in the east end which would eliminate the need to widen the old highway 5 through Vinegar Hill 2) A large community Centre including a library ,multi use gymnasium, a section for a Gymnastics Centre besides the regular gym that citizens use for Baby toddlers drop in, racquetballs, badminton, etc

Plus heated warm multi use swimming pool for all ages with change rooms I'm thinking of Glen Abbey on Third Line where. I drive 3 times a week to swim as it's 90 degrees and it's great for all ages to just enjoy the water without standing in line freezing like at the present Y pool -

This again was done

Half-as—d in my opinion as a small library was built with 2 rooms for seniors The second room for exercise is small and after being there for 6 yrs or more they just realized there's no accessible washroom so the seniors (myself included as I belong to the Art group, all have to drive to Clappison Arena for activities all summer

3) Parkside Dr should be 4 lanes and it's ridiculous that it's stalled for a second time by a resident who doesn't want it improved because he'd lose his ability to the odd time park a car on shoulder

All these homes have big driveways

It's laziness on one resident stopping the bettter flow of traffic

Elitist politicians—

Need the by-pass completed ASAP - divert traffic from downtown Waterdown to increase walkability and welcoming, vibrant business district Keep heavy trucks out of Village

Address short turn lights and speed of vehicles at the Mill Street north intersection at Dundas - very unsafe corner.

Too much truck traffic, lengthy delays coming back into town, pollution increases, too many driveways coming along Hamiliton Strret. EXCESSIVE speeders along Chudleigh Street even with 40 posted I have witnessed 60-80 on the street on a regular basis. The current stop signs do not prevent these reckless drivers. Speed bumps might work. I have lived here 30 years and the streets have become dangerous to the residents.

Excessive use of a large bus going around Waterdown empty most of the time There should be small mini vans like DARTS have that make more sense in a community of young families and old people who depend on cars so there's not a great need for a big bus

A mini bus wouldn't impact the residents at all so then you could run a mini bus up Mill St and Main St That way people in the village could access the Go easier and other parts of Waterdown

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Getting to and from down town Hamilton and Burlington with pubic transit is challenging.

Driving through downtown core is near impossible.

Hwy 6 & Dundas dangerous with trucks

- 1. The bus system is designed only for commuters,
- 2. it doesn't connect to Hamilton (it sort of but it takes 2-3 bus ride to get to Hamilton and west dale) The absence of connectivity to Hamilton
- 3. It doesn't serve locals to get mobile around town without having to drive

As a result, the bus system is very underused.

Dundas st impassable at rush hr side streets are being used to avoid Dundas not enough parking supplied in for new developments (1.25 spots per unit and almost everyone has 2 cars

- 1. Traffic congestion on Hwy 5 and Parkside Drive is very bad between Avonsyde Drive and Hamilton Street. The Hwy 5 / Hwy 6 intersection at Clappison's Corners is also very congested. The planned bypass to the north needs to be built ASAP. A bypass to the south would also help to relieve congestion.
- 2. There is a lot of speeding and driving through red lights. There is only 1 red light camera to control this. There should be more red light cameras and more police presence because these do make the roads safer.

Traffic there is a huge need for more major roads for traffic to flow east and west

Slow downs on Highway 5 east in the evening, too much traffic in downtown core, backup along mill at 5 turning west,

It this small community would be soo much more with prioritizing safe walking and cycling options. Most journeys within the town are close enough to leave the car at home. ONLY when it is safe and easy, will that happen.

Grid lock on Hwy 5 east eastbound when highway has issues

There is not enough parking in Waterdown Village. It is my understanding that Dundas St (Hwy 5) will be made into 4 lanes of traffic and the removal of the current parking spots. I have customers calling or commenting that they tried to get to my shop but were unable to find parking.

Too much traffic - volume, Loud big trucks.

Too much traffic - volume, Loud big trucks.

Buses that are oversized for the current passenger loads and not making enough money to cover the cost of a driver. Who does the economics for these services that I'm paying for? Time to study ridership and cost! Uber paid for by the City would be better until Uber cost exceeds the cost of a bus and driver.

Hwy 5 is a daily bottleneck during rush hours and weekends are periodic traffic nightmares. Parkside is now much, much better west of Hamilton Street but needs attention to the east.

Just high traffic volume.

Congested traffic and parking (because signs were changed to take off "boulevard parking designation) on Main Street just south of Church Street. Parkside Drive rush hours now makes making left turns from side streets difficult and dangerous. Bicycle pelatons on Parkside Drive are often a cause of dangerous driving from both types of transport. Corner of Victoria Street and Elgin Street (and Victoria and Wellington Street) need 4-way Stop signs because of many accidents and near accidents because people either run the stop signs, or because they mistakenly assume they are 4-way stops.

Backlog between Picards Peanuts and Hamilton Street daily.

I now daily need to take Dundas to Avonsyde up to parkside, back down south on hamilton street to access my house on Orchard Drive.

The core is so unsafe. Main St. Is so narrow and drivers use mill and main to forgo hwy 5. Its a disaster! Buses are empty. Hwy 5 during rush hour starts to bottle neck east of waterdown at Pamela.

Far more traffic than the village can sustain. Too many speeders and too many trucks. Far too many construction vehicles because too much construction. Nithing should have been built until roads were completed. Bypass is a joke and you are planning to ruin Clappison!!

Getting into, and out of Waterdown during "rush hour", or at any time when there are traffic problems on the QEW. Highway 5, and Parkside are impassable between the hours of 6:30 - 9:00 am, and 3:30 - 6:30 pm. In addition, Waterdown road is extremely busy between 4:00 pm and 6:30 pm.

Need bus transportation between Waterdown and Carlisle. Kids from Waterdown go to school with kids in Carlisle, and City buses would be a great addition. Also bicycle routes between. Centre Road is too narrow to allow kids to bike between the two communities, so driving is the only option.

Traffic is ridiculous along Parkside and Hwy 5 and 6. All the new residences will make it 1000x worse and yet nothing is being done. Where is the bypass that was promised? Speeding and accidents are more frequent. Would love to see transit loop just for Waterdown for seniors between a 9am and 2pm for a \$10 monthly pass. Would encourage ridership.

Truck traffic Thur core is awful. Need a truck ban. Traffic calming south of the core does not work. Should expand the core to include the south side of griffin and turn that road into a two way road with full access to mill if it is all commercial then the traffic there would then be a good thing

- ..Hwy 5 bottleneck
- ..Waterdown Rd. 1 lane only
- ..Parkside half completed dangerous straightward west drive. You can't construct half of a roundabout and expect safe turns onto roadway. I don't drive a truck and someone clipped my car headon rounding turn and hit and run. I was NOT on the wrong side of the line.

Poor engineering and construction.

Make it straight....and build your roundabout later. This is dangerous. John street being used as cut thru blocking building entrance and exit. Paint road lines to NOT BLOCK leaving people trapped and late for work causes serious issues for me.

- 1) Congestion on Dundas Street where it narrows to one lane.
- 2) Too much traffic on Parkside (especially near the schools).
- 3) Congestion on Centre Road, which will get even worse with all the new townhomes going in just north of Parkside.

Downtown Waterdown is so congested especially at rush hours. Highway 5 is the only main artery in and out. The past 6 months Barton street has been a by pass and causes a lot of traffic in a small area not to mention the new building construction in same area. With a growing population Waterdowns infrastructure is not equipped to handle all the traffic.

The big transport trucks barrelling through the core on Dundas

The high excessive speed at which vehicles drive through the Core. On Dundas

The lack of parking in the downtown core which affects the independent businesses

The big transport trucks barrelling through the core on Dundas

The high excessive speed at which vehicles drive through the Core. On Dundas

The lack of parking in the downtown core which affects the independent businesses

Lack of reasonable bussing. Anyone working in Hamilton has to go to Burlington first to go to Hamilton. This is ridiculous since we are part of Hamilton.

- 1)Not pedestrian friendly. Particularly in the retail area in the west end.
- 2)bike lanes don't connect to the core or other retail area

Red light runners

Too many cars on Dundas and Parkside (congestion in city as a whole)

Stop light and alternative route issues waterdown road and Dundas

Road conditions waterdown road specifically

Too many traffic lights in succession on parkside.

Too many stop signs which create a community of law-breakers with disdain for the law. Not enough yield signs in place of stop signs. No electric charging stations I am aware of. Now is the time to improve this - not after all electric vehicles become the mainstay. Lack of public transit options to commute to work. Taking public transit to work is almost totally impractical for the majority of people.

Clappison corners. South on hwy 8.

Rock chapel. Turning on to dundas. Too many people turning left.

Traffic is dense - should include advance turning greens all the time at Waterdown road and mill street south bound.

There should be a turning lane on Dundas to avonsyde to help with the flow of traffic.

Congestion in the core, we need a bypass to eleviate the traffic issues, widening Hwy5 in the core is not the solution as it removes much needed parking and brings vehicles closer to the sidewalks ultimately risking pedestrian safety.

My top transportation issue is that there is NO direct connection to the City of Hamilton. Waterdown should have a bus route connecting it to the main MacNab terminal. I'm sure just as many people drive to Hamilton each day as drive to Aldershot GO terminal.

Highway 5 is incredibly congested and I do not see an end in sight. We're told that the passthrough will be built eventually but that there are lots of hurdles still in the way. I think it's a crime to allow the housing to continue to be built up around the area and yet not have a way for people to quickly and safely get from Hamilton, Oakville or Burlington. The life lost on Evans road is tragic and one that could have easily been prevented. We shouldn't forget that and let it be one of the reasons we fight harder to get the pass through implemented asap. We've lived close to the downtown core for almost 15 years now and sadly I'm worried that we might have to leave due to the congestion. I also think it's important to have transportation directly from Waterdown to Hamilton especially given the number of people that commute for work or for University/High School.

significant congestion on Dundas during peak hours; traffic on Dundas during peak hours affects Parkside and Avonsyde; need east-west transit improvements.

Bussing to downtown Hamilton needs to be implemented. Having buses to Aldershot only is not acceptable.

Single lane east of Hamilton street on higway 5 needs to be 2 lanes each direction. Bypass needs to be completed.

Amount of truck traffic through village on Highway 5 adding to an already congested downtown. Sometimes 6 trucks at a time going in one direction and blocking up core traffic.

Proposal to make Mill Street a one way north and Main a one way south is a very bad idea in the main village core. It will become

a total traffic road for traffic north and south and cause extreme traffic diverting on side roads to enable people to go north and south from side streets to access these roads. We will lose our feeling of community and will feel like more like an expressway.

Volume of large trucks, stone haulers, concrete, delivery vehicles primarily on Dundas. Usually 4 or 5 at the same time using both lanes. Volume of traffic up core streets, Mill and Main particularly, trying to avoid Dundas and Parkside or using these two streets as shortcuts.

The bottleneck on Dundas through the downtown.

The new lack of an alternative to Waterdown Road (with King road being closed).

The lack of bicycle lanes, especially getting down Waterdown road into Burlington.

The loss of King road for cyclists has made things more dangerous.

Mainly w3st bound congestion at Hwy 5 in the late afternoon.

Speeding vehicle on Water down Rd and Snake Rd.

No pedestrian access to the Falls.

6. Do you feel there are any barriers to walking, cycling or transit within Waterdown that prevent you from using or accessing those methods of transportation?

Yes. Parkside is very dangerous for cycling as is not wide enough and also does not have sidewalks across it's length. Dundas is very busy at all times and Waterdown road is dangerous, not enough width and no sidewalks.

Yes. Tremendously.

No. What we have now is more than adequate and caters well enough to cyclists and transit riders. Rather than reducing roads and lanes to have more access for cyclists, why not WIDEN current roads to make bike lanes so that it does not negatively impact the VAST MAJORITY of citizens in this town who DRIVE to and from work.

Walking on the sidewalk along HWY 5 through town and to Clappisons shopping areas(and through out that area) is very dangerous - I would not go there with a child or a stroller. - or a mobility scooter. Hamilton street is also not a comfortable place to walk and even less for cycling.

Transit is coming along but more frequent connections to CITY center will be very helpful.

The trail following the creek through town could be paved all the way to HWY6 and then under it to connect with the Arena, plus the employment lands on the other side of HWY 5 (a stop light is coming there).

I used to cycle all the time. I never do now. Too much traffic moving way to fast with no courtesy shown to cyclists, make it a very dangerous journey. Public transit requires to long a wait for a bus (up to a 1/2 hour in bad weather). Lack of police enforcement for drivers ignoring stop signs etc. can make pedestrian traffic risky.

Transit system has limited destinations. It is more convenient to drive into Burlington or Hamilton vs taking the bus to the Aldershot Go station and transferring there.

I CRINGE WITH FEAR EVERYTIME I AM FORCED TO WATCH PEDSESTRIANS, SMALL CHILDREN, AND THE ELDERLY ATTEMPT TO WALK ALONG DUNDAS HIGHWAY SPECIFICALLY ON THE NORTH SIDE EAST AND WEST OF THE NEW LIBRARY...LITERALLY INCHES AND FEET FROM 100,000 LB GRAVEL AND TRANSPORT TRUCKS ...THE THOUGHT PROCESS OF PUTTING THIS STRUCTURE AND FACILITY IN THE PRESENT LOCATION JUST DEFIES LOGIC....AND SUBSEQUENTLY THE SAME MISTAKE SHOULD NOT BE MADE AGAIN FOR THE NEWER DEVELOPMENTS AND PEDESTRIAN/BICYCLING AMENITIES.

Walking to Smokey Hollow is not feasible, cycling on Dundas is too dangerous

Corner of Mill Street/ Waterdown Road and Highway 5/Dundas Street is a pedeftrian accident waiting to happen. Too dangerous to walk or cycle across. Dundas Street is NEVER pleasant to walk. The trucks barrel along and often go through amber lights turning red, especially at the Main St. intersection.

There is no public transportation to the Mississauga Area. I would love to commute via public transportation but don't have the opportunity.

Yes. Roads are very dangerous due to aggressive driving, speed and volume of traffic because of the lack of road infrastructure to accommodate the increased traffic from people moving to the new subdivisions being built around the original Village of Waterdown.

yes, I live in east Waterdown and would like to take stroller to downtown Waterdown but only crossing of grindstone creek at Dundas or Parkside which are high traffic areas

-There are gaps in both the cycling and pedestrian infrastructure, i.e. sidewalk and cycling facilities ending with no infrastructure provided to serve these modes (again Avonsyde Boulevard north and south end the Multi-use trail ends abruptly, sidewalk ends west of Hollybush Dr. abruptly). There should also be more though put into connecting local cycling facilities to regional routes such as Dundas St. (and providing facilities that are safe on the regional routes)

Yes, I live at spring creek and everything is quite far from where I like but buses are quite accessible and useful so it's not so bad

Yes, on parkside going towards kern road. Also, we need the street opened beside Styker to ease the traffic to those plazas and throughout waterdown.

No point for me to take the bus since I am working in Hamilton and the only bus goes in town is to Aldershot.

No evening bus service

Not enough separated bike lanes along major arterial roads (Parkside, Hamilton, Dundas, etc.)

The paths to shopping centers (Clappison's Corners) are not maintained during the winter or even spring (flooding) which prevents me from biking to shop.

Traffic congestion due to insufficient infrastructure for the development

We have zero bicycle paths that are protected from vehicles - even the most recent path on Parkside is simply painted; there are no barriers to vehicles. It could have easily been a path adjacent to the sidewalk, and those paths could easily be built throughout town to encourage cycling.

We need some crosswalk flashers where pedestrian traffic is light but likely (John and Hamilton, John and Mill, Queen and Mill for example). Recent improvements along Parkside make it much better for pedestrian traffic.

as a driver I find the roads to narrow to accommodate both a vehicle and cyclist without potential safety concerns like going into on coming traffic in order to give the necessary space which is impossible sometime considering the hilly roads. Especially when the cyclist ride in large groups. if the road is widened cyclist can be accommodated or just like we have no truck allowed roads that are too narrow may need no cyclist groups allowed.

- 1. On Parkside Drive, sidewalks should extend past Boulding and connect with the sidewalk along Avonsyde.
- 2. Parkside Drive is heavily cycled, the bike lane ending at Main Street should extend all the way down the length of Parkside.
- 3. HSR has never been very useful. Taking the bus to the Aldershot station is a good idea, but it takes too long compared to just driving and parking there. Perhaps it can be more "express" by skipping some stops for the morning and evening commute. In addition, there is no way to take HSR to hubs like downtown or McMaster University (no way that any sane person would do). With Waterdown growing by adding young families who will one day have children going to McMaster, it would be important to have a reasonable way to take HSR there.

Volume of traffic with few crosswalks on Hamilton street is a definite detractor. Pedestrian shortcuts are missing in the study node.

Lack of sidewalks on Centre Road to Joe Sams (and the Catholic church/school where blood drives and voting are held) is annoying. We are forced to drive when we would walk.

There is no way for anyone from the core to walk down to Smokey Hollow (which is a lovely area) - you are forced to drive for safe passage and yet there is never parking (the overflow situation always looks hazardous); providing safe cycling/walking access would be HUGE.

Need more of the

No- the only thing anyone that I talk with about traffic everywhere in Hamilton especially in Waterdown is the overuse of speed bumps and No Left Turns installed to slow traffic

This idea that a speed bump 50 metres from a 4 way slows traffic is a waste of money No car can speed between these two installations

It's purely for the residents on Mill St who want to deter cars taking this road to get from Waterdown Rd to Parkside Dr and home

There's another 2 bumps in front of Mary Hopkins school within 15 m of each other and then a couple metres is a 3 way

Kids take buses here

They can cross at the 3 way

There's no speeding here and I drive up and down it every day

You get dirty looks from any resident on their yard just because you're driving your car on this road

They've become power maniacs and use Judi and her elitist politics because she has friends on this street from the Lions club which her husband is a longtime member As well this happen Grifffin St 2 speed bumps and only 6 houses

Union St No Left Turns off Waterdown Rd

As well as no Left Turns onto Griffin at rush hour

This causes long snaking lines of disgruntled drivers just trying to get home They won't use the bypass at Mountain Brow as many are going to the new condos at Barton St

Judi herself told me she met with residents of these two streets befthe condos and towns were built on Barton where the old Catholic elementary school was

They of course all voted to install No Left Turns

They are not a Gated Community nor is Mill St

Cars should have the rich to drive down any street

It's always been a busy cross traffic street

If anyone bought on these streets they should know that

It lasts 2 hrs

Absolutely the speed and volume on Dundas Street - need the B	y-pass
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No

Ther excessive installation of bike lanes is ridiculous

Maybe in Hamilton but I drive to work and see few bikes on Cannon And York blvd where car lanes have been displaced at the expense of bike lanes

In the core where I live and have for 4 decades, I see little use of bikes

You get athletic types on Saturday or Sunday going on bike runs and they disobey the rules of the road (unless you're now going to change these rules) wherein anyone

riding a bike is to ride in single file and follow the road rules

These bike riders ride in packs of 5-6 or more and use up the whole lane I think they feel that cars will hit them so better to act like a mass of a car Unfortunately that's not safe

I used to ride miles to swim and school when young in all kinds of traffic If you stay to the shoulder then cars have space to pass

Bikers- bicyclists - feel like they can do whatever they want and ride 2 abreast We don't need bike lanes on every street in the Core

This will ruin our village Kidd ride on the sidewalk or road and we haven't had any accidents

Cars are respectful of a biker if they are also respectful of road rules

The Core has no room for wide boulevards with wide sidewalks and bike lanes It just going to take away the lovely trees to make way for sidewalks that presently are not a problem

Why change it

You could put on new sidewalks to replace the old but leave speed bumps 3 way stops at every little side street

There's no barriers

We live in Canada remember

It's freex cold or hot and humid and raining or snowing

People use cars

We built a big parking lot at Memorial Park

It was supposed to keep cars from parking on Main St

It's crazy but cars still park on Main and unload little kids onto the street because it's closer to the playground than the parking lot by maybe 20 m

So you can have all these lanes for bikes etc and people still will drive their cars

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Generally yes.

Most roads are deteriorating. Embarrassing and dangerous!!

The traffic on main route Dundas street is heavy, and vehicles are over speed. It doesn't feel safe to walk especially with children.

The bus fare system is not working for local residents who wants to get around town. I know people who works in town earning minimum wage walks to work. Usually the distance is 2-3 bus stops away, but paying 3.50 for that make people rather to walk, even in winter time. While the bus is empty most of the time.

traffic calming is just a pain for all parties

- 1. There are not enough sidewalks and they are not safe enough for pedestrians. Crossovers are not clearly marked and motorists are ignoring pedestrians crossing the street. They are also driving too fast.
- 2. There are not enough bicycle lanes. Given the volume of traffic and the speed motorists are driving, it is not safe to ride a bike along the major streets.

No

Barriers to safe walking along Waterdown Rd approaching Smokey Hollow Fallsneeds sidewalks as on weekends lots of people park on Union and walk to the Falls

Safe infrastructure for cycling and walking. Inadequate transit. Transit needs better connectivity to, downtown, GO services, Burlington.

Yes the volume of traffic is to much don't feel Safe.

Yes the volume of traffic is to much don't feel Safe.

Traffic speed and volume along Hwy 5 makes it a very uninviting breezy/windy, noisy, dusty walk route. The sidewalks that were added are very nice but the roadway kills the experience. Hamilton Street and Parkside have similar issues but to a far lesser degree due to lower speeds and space between the road and pedestrians. The City should be demanding that developers and the City itself install boulevards, bornes, vegetation/trace/bushes between residential and Hung's like 5 for aesthetics.

berms, vegetation/trees/bushes between residential and Hwy's like 5 for aesthetics, noise and dust reduction. And, where possible have those barriers between the road and sidewalks.

Not overly.

You can not walk safely to the Grind Stone Falls because of the train bridge. Cycling on Parkside needs their own lanes to be safe.

We dont need transit. Bus is always empty. Newcomers should have moved here knowing it is country living. Cyclists need to follow rules of the road or stay off. Families are nit safe walking our streets anymore because we have no police presence. We need decent representation of our community to save it!

Highway 5 is not a safe road to cycle on. There are far too many dump trucks, and transport trucks. And even though there are now bike lanes on Parkside, the high rate of speed used by dump trucks makes it extremely dangerous.

See above. We don't have good bike routes to get from A to B. For example downtown core to Starbucks/Walmart.

Transit use can be encouraged for seniors. Would be a "first"?

The bus only goes to the go station. There is no other transit into Hamilton. Need a better walking connection to the falls

Yes

Serious issues here with all our roads.

There is no bus directly to the downtown core of Hamilton. Waterdown is very pedestrian friendly. There is no way you can add bike lanes without making traffic horrendous.

Yes not enough buses

Not enough parking. Spots

No bicycle lanes

Walking is loud and having to dodge huge oversized trucks does not make for an enjoyable walk to shops or restaurants therefore having. To drive to feel safe and then to find not enough parking

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Lack of buss routes, and how long it takes to actually use the bus.

Trails not maintained and do not connect to retail.

Dundas is unwalkable at times do to snow cleared from the road.

Bike lanes don't connect to retail areas

Selfish and aggressive drivers in many communities create a disproportionate amount of risk. Driving instruction should be expanded to include the safety and moral implications of driving aggressively. Russian and other dashcam videos should be analyzed in a group setting for new drivers to understand how quickly events can unfold and the long term health and financial implications of an accident on victims.

Dundas is too loud and busy to walk or bike on

The core neighborhood has the snow plow we delayed and only and sidewalks are slow as well - I would recommend having these be city cleared in the core heritage outline you're looking at (so Victoria Street over to Hamilton street ideally). This allows more walking opportunities.

School zones need more crossing guards and even bus-only road closures during drop-off times. I encourage my children to walk to school in Waterdown, but they have many stories of cars driving quickly around schools and through stop signs (particularly at Hollybush Dr and Longyear Dr, and at Longyear Dr and Brian Blvd.) When I hear these stories it makes me feel like I need to drive them to school for their safety, which does not help to make school drop-off times any less congested or more safe.

There needs to be a red light camera installed at the intersection of Burke and Highway 5. I cannot allow my daughter to cross that street alone to get to the school as people do not observe the traffic light.

no.

Transit is inadequate. Coverage is poor. Frequency is poor. Having buses go to Aldershot and not downtown terminal in Hamilton is not acceptable.

Traffic and the speed that people travel at, along with their sense of self entitlement to the way they treat walkers, cycler's and other motorists.

Cycling can be a big problem given the lack of lanes, and a safe route down the escarpment into Burlington. Snake Road is a great cycling route for enjoyment/training, but a terrible route for commuting to Burlington. Reopening ridge road and King Road to cycling would give safe access to the bicycle lanes in Burlington.

The main routes are to busy with speeding vehicles. Dundas is too wide especially for seniours and toddlers.

7. Do you have any other comments you would like to provide?

Waterdown is a beautiful town that is growing. Considering the high property taxes we pay, we deserve a better transportation system. Adding another 15,000 people to the town with only one road going north-south out of town is not acceptable. Critical and high risk road that needs immediate redesign and rebuild is Waterdown road.

We need to think of a future Waterdown in a historical context. Building for cars and trucks will keep us 20 years behind the times. A Waterdown with transit and cycling is a Waterdown for the future. Community Car and Bicycle Share is a gap in our town that needs filling. Treating Waterdown as "other" to Hamilton is a mistake. The issues are the same and should be addressed somewhat similarly.

Please ensure that whatever changes occur throughout the new vision include and support DRIVERS in this community.

Please, please please make the Multi use path that starts along Avonsyde and follows the bypass all the way to HWY6 a continuous off road route for ALL ages to enjoy both for recreation and transportation. If there is any break in continuity, you immediately make it unsafe for the 8 and 80 yo. and users are lost. A signalled pedestrian crossing point to access Sams park will make the park a walk and bikeable destination, reducing congestion and pollution.

The trail following Grindstone creek through town could be paved all the way to HWY6 and then continue under it to connect with the Arena, plus the employment lands on the other side of HWY 5 (a stop light is coming there).

Waterdown is growing too quickly. It needs to slow down. Infrastructure needs to be in place before growth happens. Heritage needs to be protected and take priority over the demands of developers. Heritage districts need to remain just that - Heritage districts! Please save these buildings, the green space and the tree canopy.

Thank you!!

The history of the "core" of Waterdown needs to preserved while increasing capacity in town. If higher story buildings are built, more of the older homes being rezoned and commercial properties being erected or multiple dwellings built on the land, or homes in the core that are not currently considered in the "heritage district" are allowed to be demolished and the land re-built on will greatly impact on what residents feel the "quaint" town should look like. Although transportation and roads in town are being looked at and re-designed there is nothing that can be done in the main part of the core. Increasing commercial capacity will only add to the current traffic issues. My home is in the core of town but not in the heritage designated area and if more business are able to creep up the street, multiple dwellings allowed to be built on empty lots adjacent to me, or the older buildings along Dundas st that are not heritage protected are taken down to build "newer" buildings I will likely choose to move out of Waterdown.

ONE OF THE MOST DISCUSSED AND CONTROVERSIAL ISSUES, THAT MANY OF US RESIDENTS HAVE HERE IN THE CORE AREA IS THE 'PARKING', THE RECENT INFLUX OF NEW PERMITS ALLOWING NEW BUSINESS TO BE APPROVED AND OR BUILT WITH A COMPLETE DISREGARD FOR OVERFLOW PARKING IS A SHAME...GRANTING A PERMIT FOR A RESTAURANT OR A BUSINESS THAT RELIES TOTALLY ON STREET PARKING, EVEN FOR IT'S OWN EMPLOYEES, AND THE RESULTANT IMPACT IT HAS ON NEARBY RESIDENTIAL PROPERTIES, IS A RECIPE FOR ANGER AND TOTAL FRUSTRATION FOR THE MANY LOCAL RESIDENTS.

My husband and I are "heritage" people. We moved to Waterdown as it had alot of history and that history was visible. We loved the fact that everyone could walk to the downtown core. Notwithstanding that development is a natural process, we strongly want to try to preserve that tiny bit of the core and heritage areas such that the resident of Waterdown have a place that is unique and personal to them.

The residential areas - especially the Heritage District - needs stronger, written, legislated protection from development to preserve its charm and character. A freeze should be placed on development until roads and infastructure can catch up. More electrical outlets should be installed in the business/ commercial sectirs for hybrid and electric vehicles.

More trees should be planted on all boulevards and public spaces.

More land should be designated for green spaces.

Large trucks should be re-routed away from the core (especially the gravel trucks). Listen to the people who live and work here - not the developers who only want to make a buck and move on.

Embrace and protect our historical homes and buildings.

Mimic the architectural character of our historical buildings in all new builds. Protect our farmland from development. We want to be able to locally source our food.

Waterdown is at maximum development now. Please stop building!!!

There are unmaintained fitness stations on the Waterdown North/ John MacLennan wetland Trails. They are at the point where they are almost unsafe.

Protect our historic village. Protect the integrity of the community of Waterdown. Calm the traffic before another child is killed. Reduce/stop vehicles speeding through traffic on residential streets; particularly Mill and Main. Stop ignoring Mill and Main; start ticketing vehicles, city of Hamilton could make a lot of money on Mill. Make it impossible for cars to speed through residential streets. Increase police presence for residential streets, especially Mill and Main.

The rezoning of downtown Waterdown from 3 storeys to 6 storeys should have an exemption 570 put in place, similar to Ancaster's, within the entire Mill Street Heritage District, Dundas Street and Main Street.

Can we get better buses or other means of transportation from Waterdown to Burlington and Burlington to Waterdown as well, I like on spring creek, go to school in Dundas and work in Burlington, transportation is quite awful

Please don't widen streets, I would like to see better investments in cycling and transit

There are developers who own very old commercial buildings and are waiting for allowances to be made, so they can sell to developers, demolish the buildings and build anew, along Main Street in particular. I hope the City will not allow this to happen.

Downtown Waterdown can be as attractive to tourists as promoted areas of Hamilton if the resources and efforts are provided to promote it and include it in Hamilton's promotional materials and messaging. The City should not expect to have great initiatives (free bus up the mountain for cyclists, for example) and not implement them City-Wide (we have a mountain too), and then expect Waterdowners to feel as though they are part of a City. We are distinct, for sure, and are geographically isolated, but can share in being a historic town that is part of the vision of the future.

I hope the strategy looks at the

- 1. solving congestion first
- 2. State of Infrastructure second (sustainability concept as well) prior to considering spending money on bike lanes and transit.

The charm of Waterdown is it's small town feel. The growth it is seeing is eroding some of this feel due to poor planning to coordinate growth with transportation accommodations. The core "village" is becoming little more than a cut through for people trying to avoid Hwy 403. All these plans for East-West bypass, North-South bypass, Waterdown Road expansion, Hwy5/6 interchange sound great, but without actual action it is becoming too little too late as massive surveys and high density town houses are quickly going up along Hwy 5 without the infrastructure to support it.

We (family of 3) live in the Braeheid survey and recently moved from two cars to one because of the number of shops and services we can reach right here in our community on foot (we walk to doctor, dentist, library, pub, lawyer, grocery/food stores). We walk to the Sobey's plaza for groceries (via sidewalk OR tree lined trails along running water if we desire); we can also walk trails (or sidewalk) to the 'outer fringes' such as Canadian Tire - keep those side trails OPEN - we shouldn't have to walk out to Dundas and that noisy, too-fast flow - keep your pedestrians motivated and encouraged.

We walk weekly to dance class on Mill Street, and almost as often to the pub or optometrist.

We can't walk to the waterfalls, we can't walk "downtown" and stop to sit in a park near the shops on Dundas - that would be ideal.

We are also concerned that the plan seems to be looking at the same streets for truck and bicycle traffic and it sounds as though there will be considerations to build/develop within the study area that might significantly degrade the look of the "village" and the atmosphere that we would rather see expanded!

It would have REALLY been nice if residents had been officially informed of this and not had to stumble across this request for input. It appears the deadline is past and yet I have only just learned of this.

Builders take priority over any plans to make living in Waterdown enjoyable Commuting is terrible and getting worse

You cannot shop between 3-7 in the plazas because of trading Hwy 5 and Parkside Judi is only one Councillor and obviously gets overturned no matter how she may want to control developers

Now 2000 units at Clappison Crn and Hwy 5

She can say it's in the other end but you cannot stop people going to Grindstone Creek trail or to Shoppers or Florist on Parkside or visit people in Burlington Perhaps they'll go to Shoppers then down Waterdown Rd

So this concrete thinking is the basis of our gridlock , poor air quality, increased temperatures in Waterdown

Also there's a large bus driving around town all day that's empty or 4 people on it Why??

Use an electric van or mini bus ,I'm sure they are easily purchased to use on the village routes

Perhaps they could then go into subdivisions or the Core to pick up people wanting better transport

Switch the big bus to downtown Hamilton and give us one of the really nice Darts vans that I see at the General

Perhaps a bus that goes to the General Hospital every hour so many people use that hospital

Look at what people's needs are not jus- let's drive a big bus around Waterdown to show we do have transit

It's ridiculous planning

Put some one on that bus for a week and do a survey

Then perhaps a more appropriate transit vehicle could be used and not polluting us I've lived here a long time and I'm not opposed to developing Waterdown But get nice designed townhouses along the highway, not placed close to the highway and perhaps a nice buffer planned before approving the build so that instead of walking out the front door and facing zooming traffic there'd be budged and trees on a boulevard

That's poor planning and money from fast developers just throwing up a unit I also want to comment on how citizens don't find out about any pllanning unless you happen to catch it on your phone or review

It should be repeated a few times

We're not home every day or have a chance to read paper or articles once Waterdown needs set meetings with everyone before things such as speed bumps are installed

The idea that slow traffic is safe Travis not in the highway acin fact slo driving by the use oh impediments such as bumps and parking cars on both sides of Main St N contribute to accidents and car damage and constant replacement of bumps from snowplough damage

Lack of public realm space within old Village. It would be nice to see increased sidewalk / patio space built into any new developments. Would be great to have more public gathering places where walkers, cyclists could rest, enjoy the Village

We have seen over the 30 years that traffic and pollution has increased to an uncomfortable level. Also that the character of Waterdown is being lost to larger buildings that detract from the historical/Victorian character of Waterdown that would attract more tourism and visitor revenue for what is considered a beautiful part of the GTA. We must not let politics over rule what residents need to get away from their daily work grind. Thank you.

Need to get bypass and hwy 6&5 intersection complete.

There has to be bus to Hamilton, the demand and voices have been there for more than a decade but have never been taken seriously.

Family passes and monthly passes for local residents, let say a certain fare for unlimited rides or 30 rides or so. These will be extra income to HSR, and also really benefit who needs transportation.

We are concerned that road infrastructure is taking a back seat to development. This is doing things backwards and will just lead to more congestion.

Don't make the mistakes that Oakville and Burlington have done with their downtowns. They have grown too quickly and small business and shops have been driven out by high rents, lack of parking and traffic congestion. Residents in the core are burdened with noise and lack of parking. It is not too late to prevent this from happening in Waterdown.

Looking forward to the bypass MUPath. If it stays on the town side of bypass road 100percent of the time, it will be a well used route for travel, and exercise by ALL users.

Waterdown used to be a beautiful village- now its starting to look like Mississauga/Brampton. Stop being greedy Hamilton.

Waterdown used to be a beautiful village- now its starting to look like Mississauga/Brampton. Stop being greedy Hamilton.

Parkside west is a great improvement however I'm very concerned that within 3 years this road will become a rumble strip due various road excavations (hookups, etc.) and very poor road repair to restore to new status. This problem is rampant throughout all of Hamilton and our Waterdown area. As a tax payers it burns me that road surfaces can't be restored properly. I'm hopeful that won't be the case on Parkside but, I'm not betting on it. Hire contractors or train city workers to repair things right "first time, ONE time".

Expansion of Waterdown Core and Node has always been a poorly planned effort with the soul purpose of expanding development without first providing the infrastructure or consulting with local residents (who moved here because the area WASN'T expanding and it was a quaint semi-rural "Village."

I moved here from Toronto and was used to traffic, congestion and driver and pedestrian concerns. I have to say that I feel Waterdown had bee terribly neglected and have never seen a town so far behind with road planning. It will be much more difficult now with all the residential growth to rectify the infrastructure.

Police! Every road outside of core has skid marks and racing. Thefts are crazy. Speeding on Hwy 6 needs to be looked at. Maybe if we took care of our resudents and made people follow the law, less folks would be breaking them. Our reputation is that you never get caught in Waterdown! Its very sad.

Hamilton is being far too reactive, and not proactive enough, in bringing Waterdown's transportation infrastructure up to the level that is already required. Considering the disproportionately high property tax rate in this area, this is infuriating.

Police station needed.

Encourage more unique stores vs big box ones to preserve small community feel. More running and walking trails incorporated to encourage wellness. Build one story homes for seniors

Wonderful that these studies are underway. This is a special place thT could be made so much better

Why are we not being heard and our roads can't even be paved or filled in? Waterdown Rd dangerously wavey wth

Dundas is serious pot holes and rip ups everywhere.

All our roads and thefts and burglarized homes are leaving us scared and not wanting to run into beggars in our Village now

Need a better option to head East. Dundas St is way too congested. It forces people to take Parkside which is residential and resulted in the death of a child a couple of years ago. We need another option before even more commuters move here. Perhaps a car pool lot with a go bus to the aldershot station or an HSR bus that goes to the Hamilton downtown with a stop at the Hamilton GO station would help alleviate traffic from the TO commuters.

They development outside of the core isn't helping the core in support of small businesses it will fend people off and away from visiting a crowded inaccessible downtown core and businesses will suffer

While developing is important we need to use the core space better more parking More residential units while keeping the "look of downtown Waterdown"

They development outside of the core isn't helping the core in support of small businesses it will fend people off and away from visiting a crowded inaccessible downtown core and businesses will suffer

While developing is important we need to use the core space better more parking More residential units while keeping the "look of downtown Waterdown"

Stop over building, it shouldn't be about trying to fit as many people you can into the community when some of us still don't even have city water or sewer but are forced to pay taxes as though we have those services. In the event of a fire I know I'll have to watch my house burn because you don't have a hydrant near by and I will have to wait for tanker trucks to fill up as my house burns down, yet the new developments have these services. Take care of the people already here if you want our support.

Stop building residential developments without adding addition transportation routes. It is moving beyond an inconvenience to a safety issue

We need to have a visionary approach to community transit and use more predictive, proactive and preventative planning methodologies.

Parking in the downtown core has become a real issue, as a owner of property in the core that has parking for my clients I see many other using this parking and going elsewhere, if the plan is to remove street parking along Hwy5 I cant see how anyone will be able to find parking for shops and services without using private spots creating potential backlash.

Waterdown is a quickly-growing community. It's sad that we don't have a City of Hamilton Recreation Centre, for those who cannot afford monthly YMCA memberships plus class fees (e.g. for music lessons).

Would like to get involved with local planning committees and reviews of planning applications where possible.

Lack of community center with regular public programs needs to be addressed.

It seems that handling the congestion in the village has come as somewhat of an afterthought. All of these issues should have been looked at before building permits were issued to developers to build hundreds and hundreds of homes. What did the city think would happen when all of these new people arrived. As a resident of Waterdown for over 35 years It disappoints me greatly to see the way that things are being done.

I would like to see a vision crated to guide the development in the core of Waterdown. In particular, to see it develop like other small Ontario cores did, like Dundas. So no strip malls, and keep any new buildings right up the sidewalk to promote walkability.

Closing Kern and King Rd was shortsighted. They need to reopen. The chevron by Sign one need to be removed so two lane traffic can proceed. Waterdown Road and Smokey Hollow are charming and tourist draws. Parking should be added to the hub on Dundas cobblestone core roadway with no curbs like Sums of north of Queen in TO and Holland would help all forms of traffic. Wildlife tunnels and bridges would be a help. The garden medians should be removed on the east side of the bridge so two lanes of uninterrupted vehicles can go into town. This would resolve alot of slow down and improve flow.



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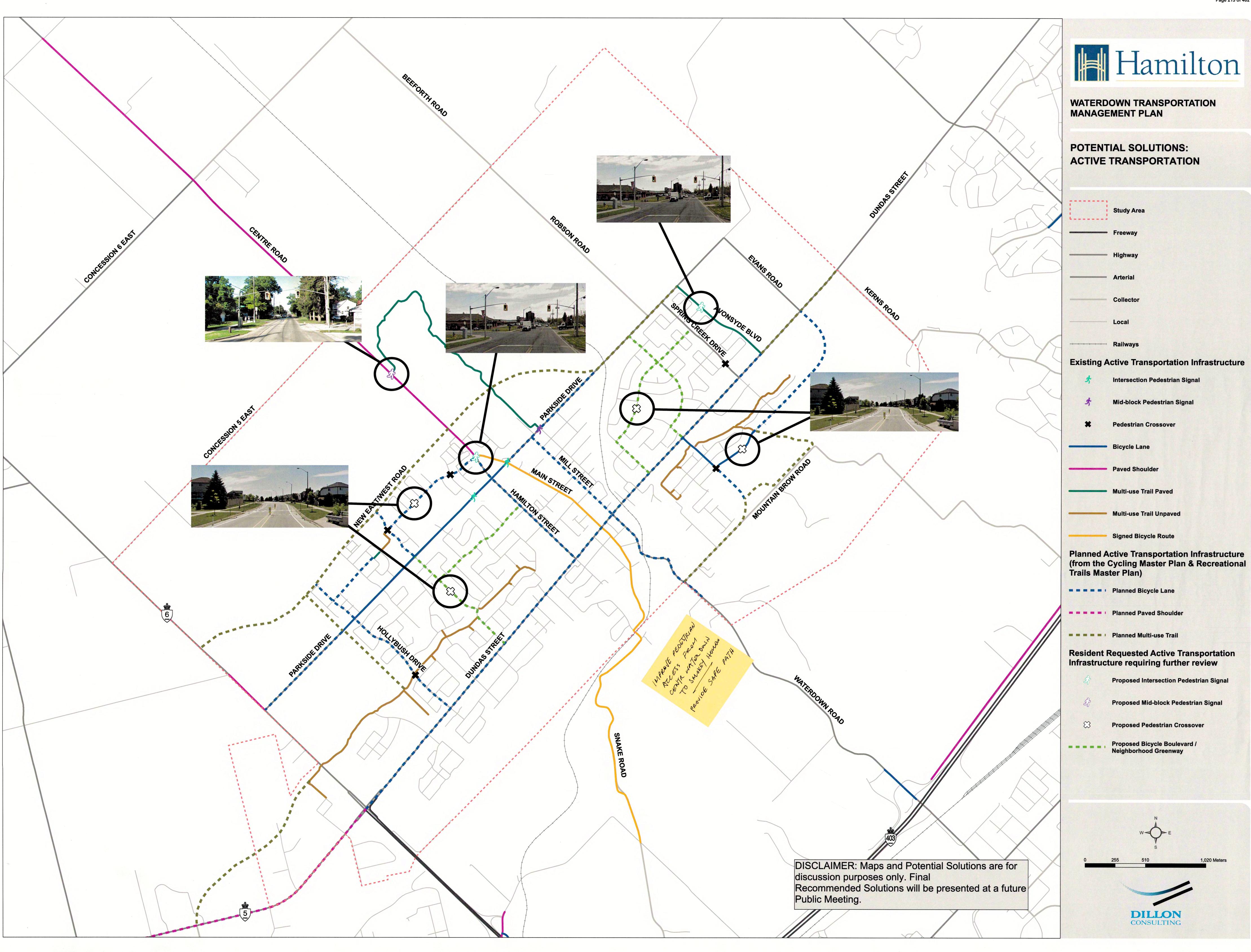


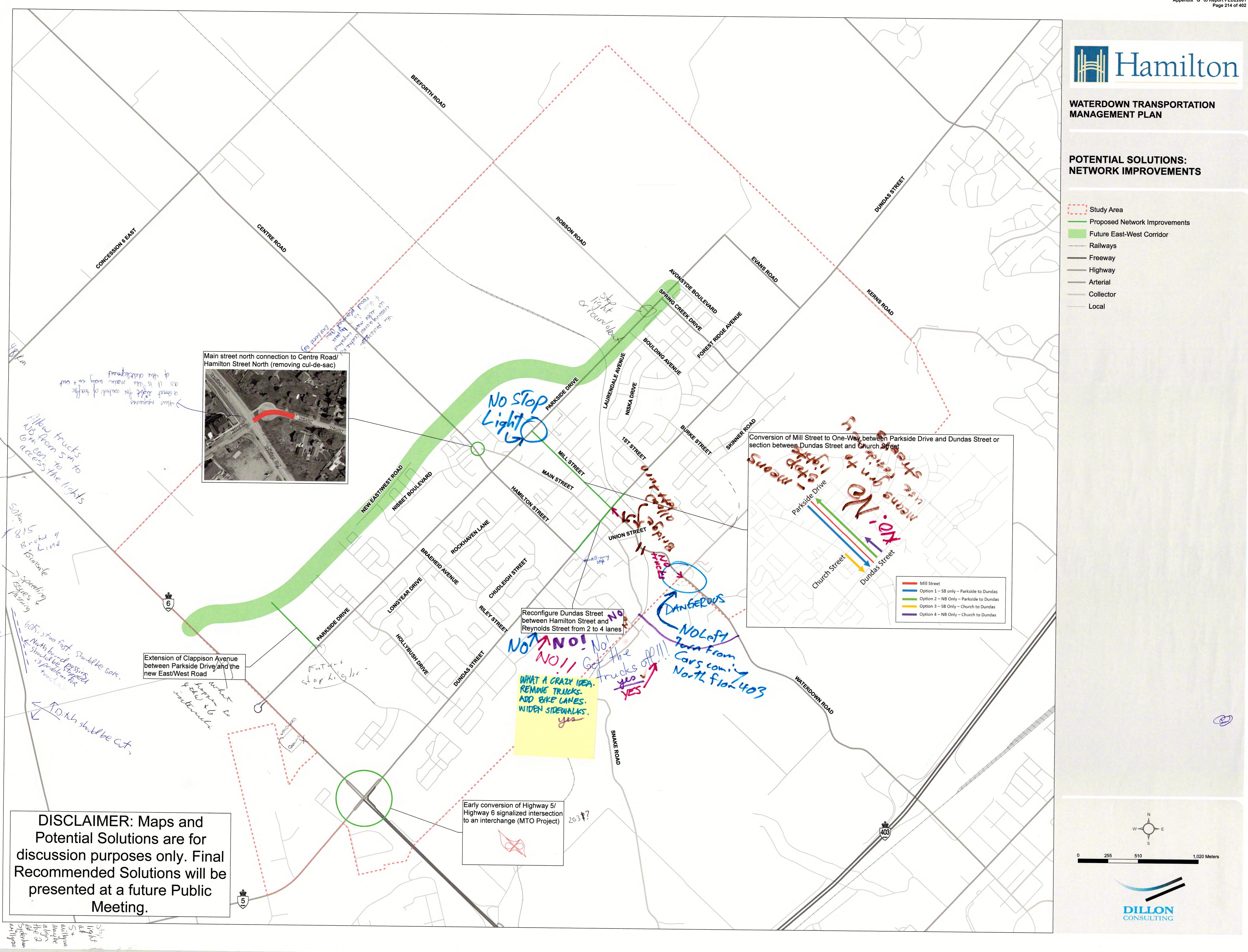
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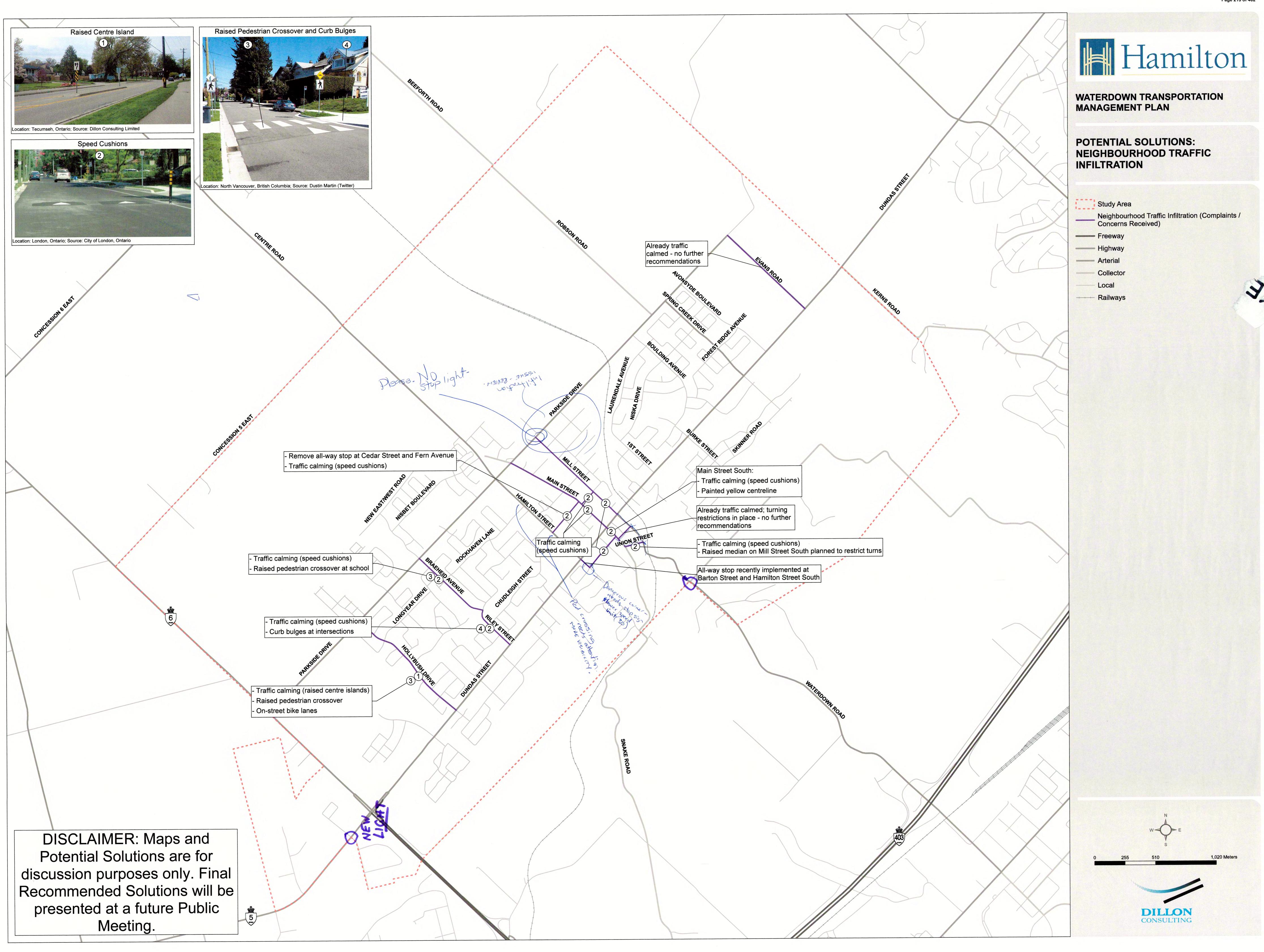
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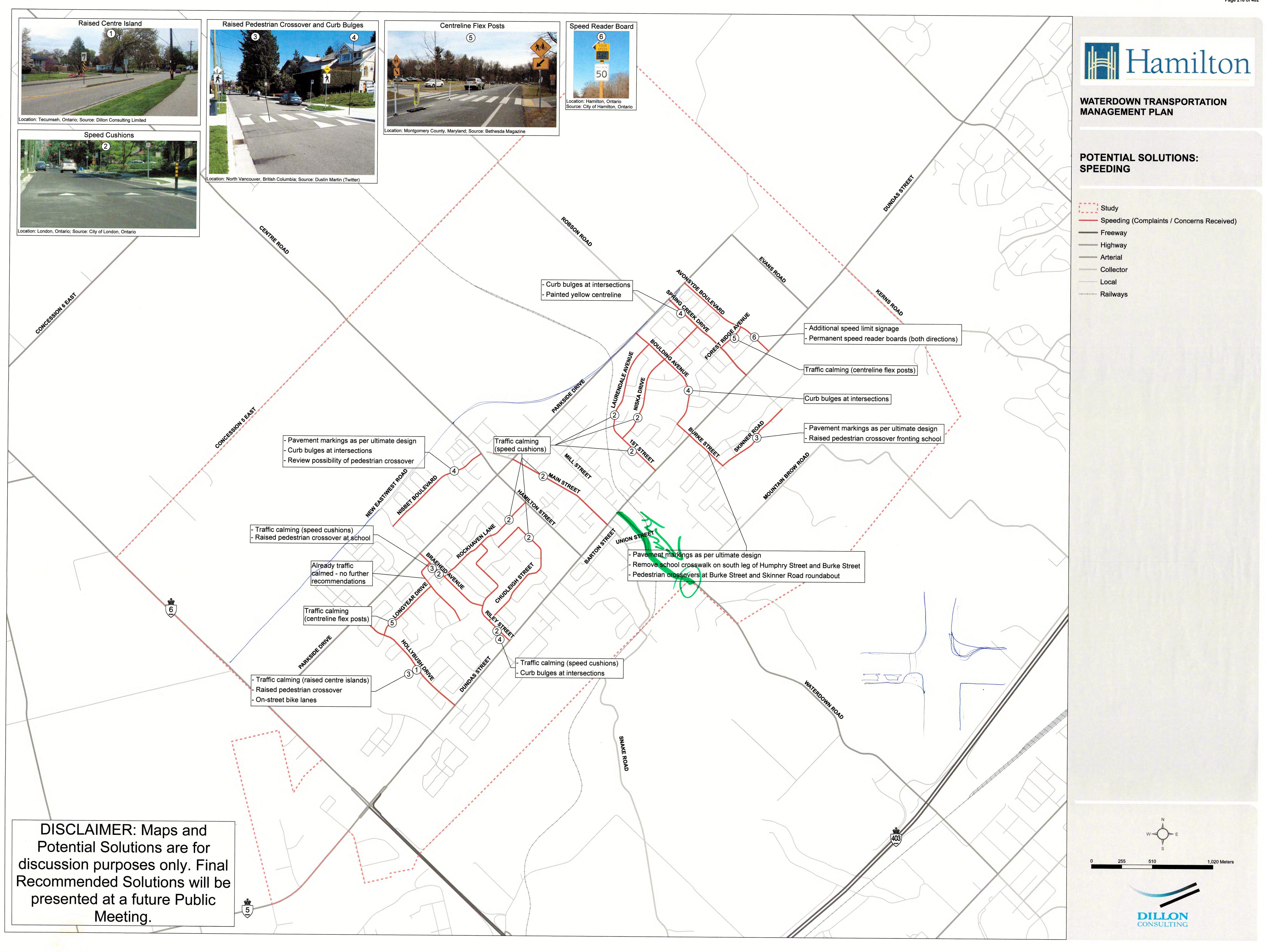
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Our comments here

*- Ban truck traffic on Dandes + redirect to /11/ "Bypass" East I wat Bad

- Address dangerous corners + Robson Rd+ Pakside.

- Robson Rd & Parkside intersection DANGEROUS!!!!

- ROAD BUMPS ARE NOT EFFECTIVE - "SCURB PLANTERS" DO WORK.

- PEDESTRIAN CROSSINGS SHOULD BE AUTOMATIC WITH A GREEN SIGNAL- YOU SHOULDN'T BE REQUIRED TO PUSH A BUTTON.

> Remove "No Left Turn 4-6pm on Griffin 11/1

- SNAKE ROAD IS A MAJOR CYCLIST ROLLTE. NOSOLS Connection TARU HAMILTON ST. I VIA OKCHARD.

- NO. ENFORCE THE RESTRICTION. KIDS LIVE ON THIS STREET. THE NO LEFT RESTRICTION IS THERE FOR A REASON!

1) THERE ARE SCHOOLS ON MAIN/MULL N WHICH ARE NOW THE BYPASS BECAUSE OF THIS CIOSURE.

· Build it right and once. Remove traffic

Ramove all Loavy Truck Traffic & on Dundas ST. Through village

· Check out Kerns Rd. (N only beyond Cityview Park) Does limiting Smoky Hollow/Mill St N of Mountain Brown 25 7?

Your comments here

Appendix "G" to Report PED22001
Page 219 of 402

problems: Buses are empty while local residents are walking to work

(How about a special fare System to Waterdown residents? Make the transit serve locals instead of just commuters.)

Need to be able to bike Safely on Waterdown Rd. and Snake Rd.

Waterdown pays taxes to Hamilton yet the orly way into Hamilton by bus is to pay Hamilton transit within waterdown to burlington, then pay Burlington transit to Hamilton. Do we belong to burlington or Hamilton? Why does waterdown not Still get a tax break Jeither this or go provide waterdown residents with passes for the burlington transit?

. No need for buses expet to move people out tinto other one or Go Station + memore congestion.

Otherise more buses = more traffic congestion.

· Bikes en Dundas + Retside at dengrous - no room curenty.

Bicycle lanes on Parkside (east of Hamilton St). Per the bicycle Master Plan are required (and not cancelled)

Your comments here

MAKE MILL STREET ONE WAY (TAKE YOUR PICK-WHICH DIRECTION) FROM DUNDAS ST. TO PARKSIDE

. Need to bar truck traffic from Donder St to force to by pass //

- require her business to have parting or put in City porking lots new restaurants + shapping.

- Badidea to make Main or Mill 58 or NB only.
- not bypass but east/west corridore... will this name traffic lights and development along the road
- will there be a bridge tunnel across the leisure path from Parkside to 5th 7
- what happens to 4th Con W. at #6- you have to have down sto EF landers,

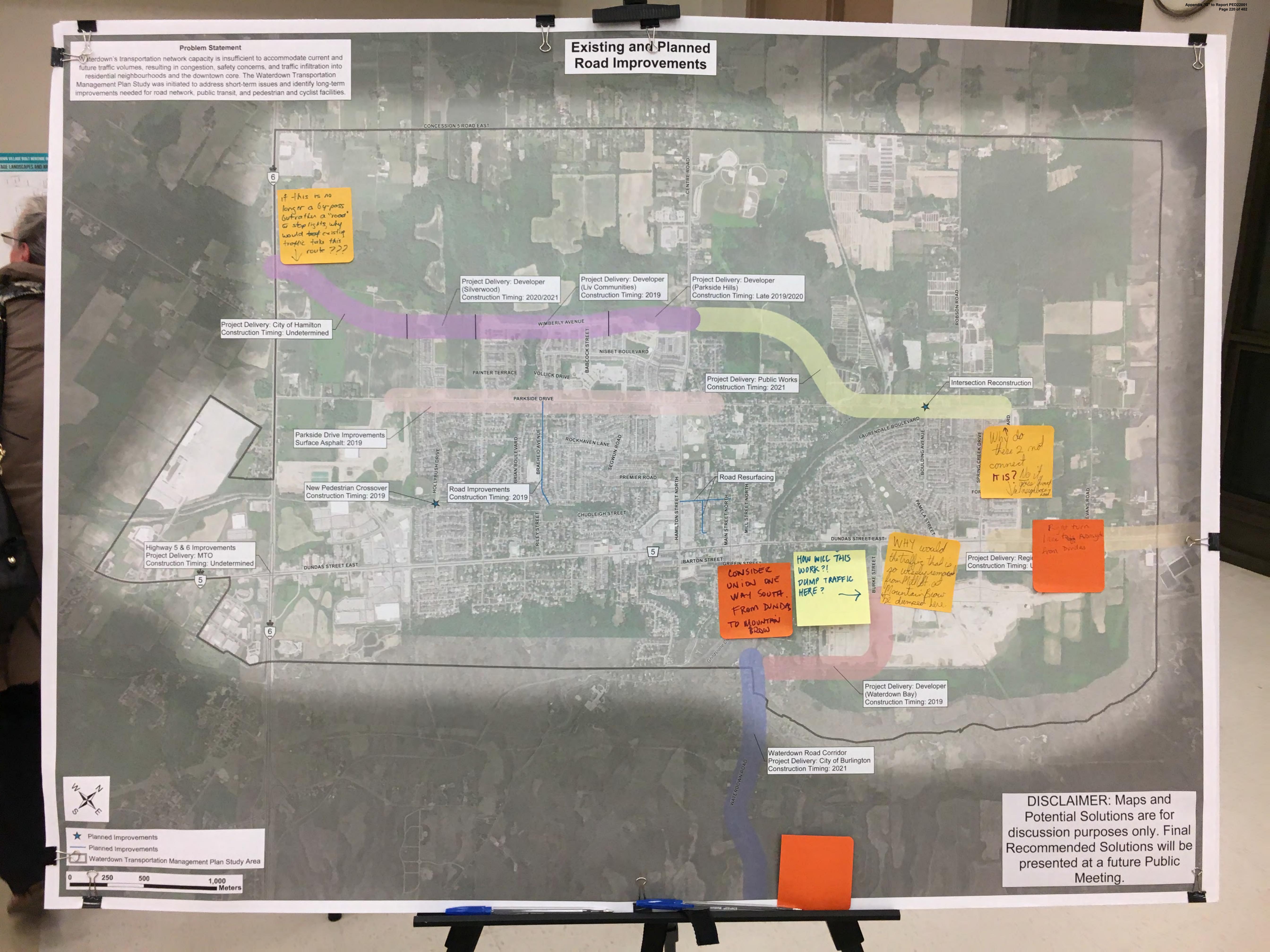
- No troffic coloning. Do the right thing and correct. Build it once a build it right NIIN

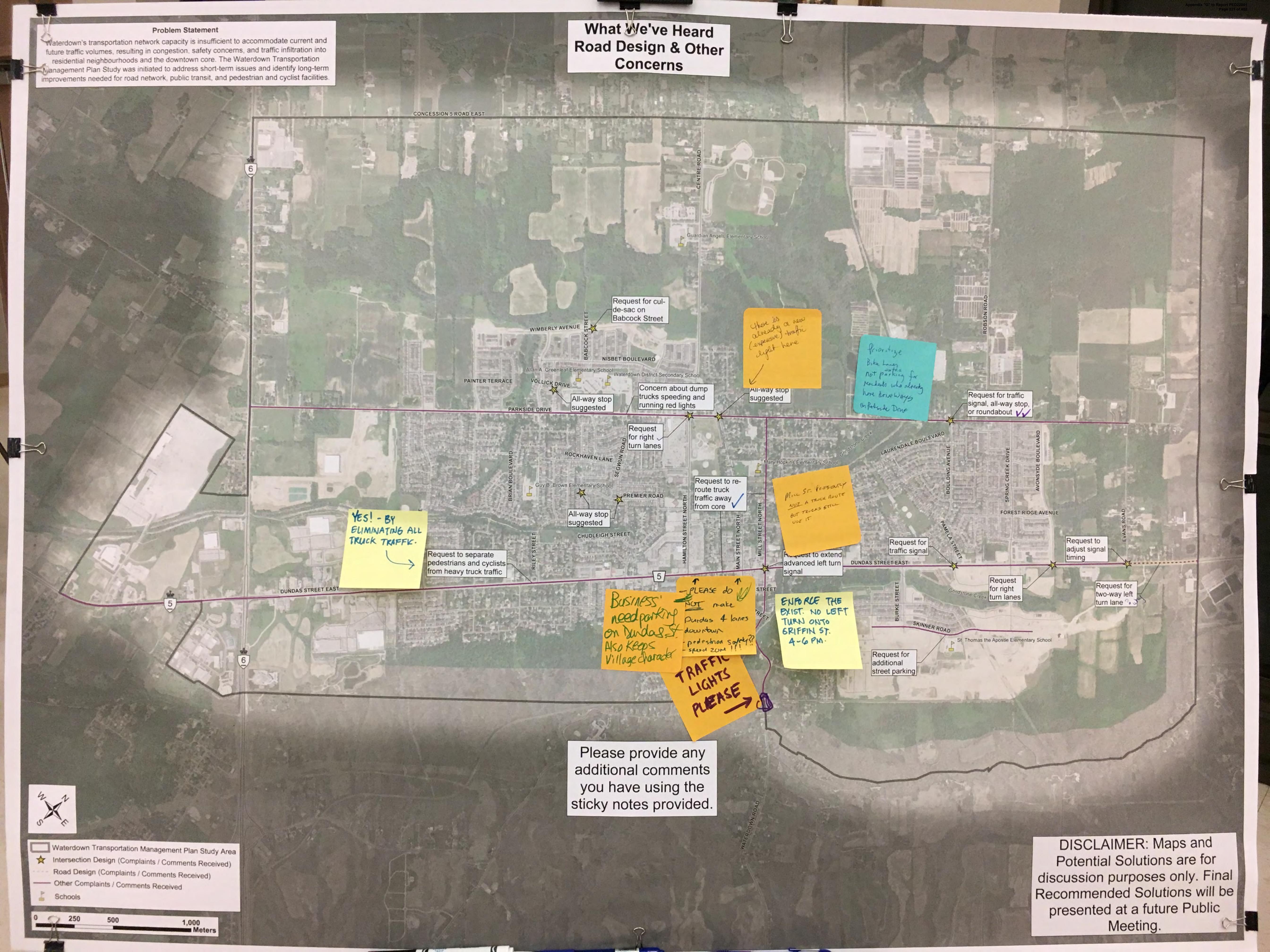
- Divert all Leavy Truck Traffic from approx.

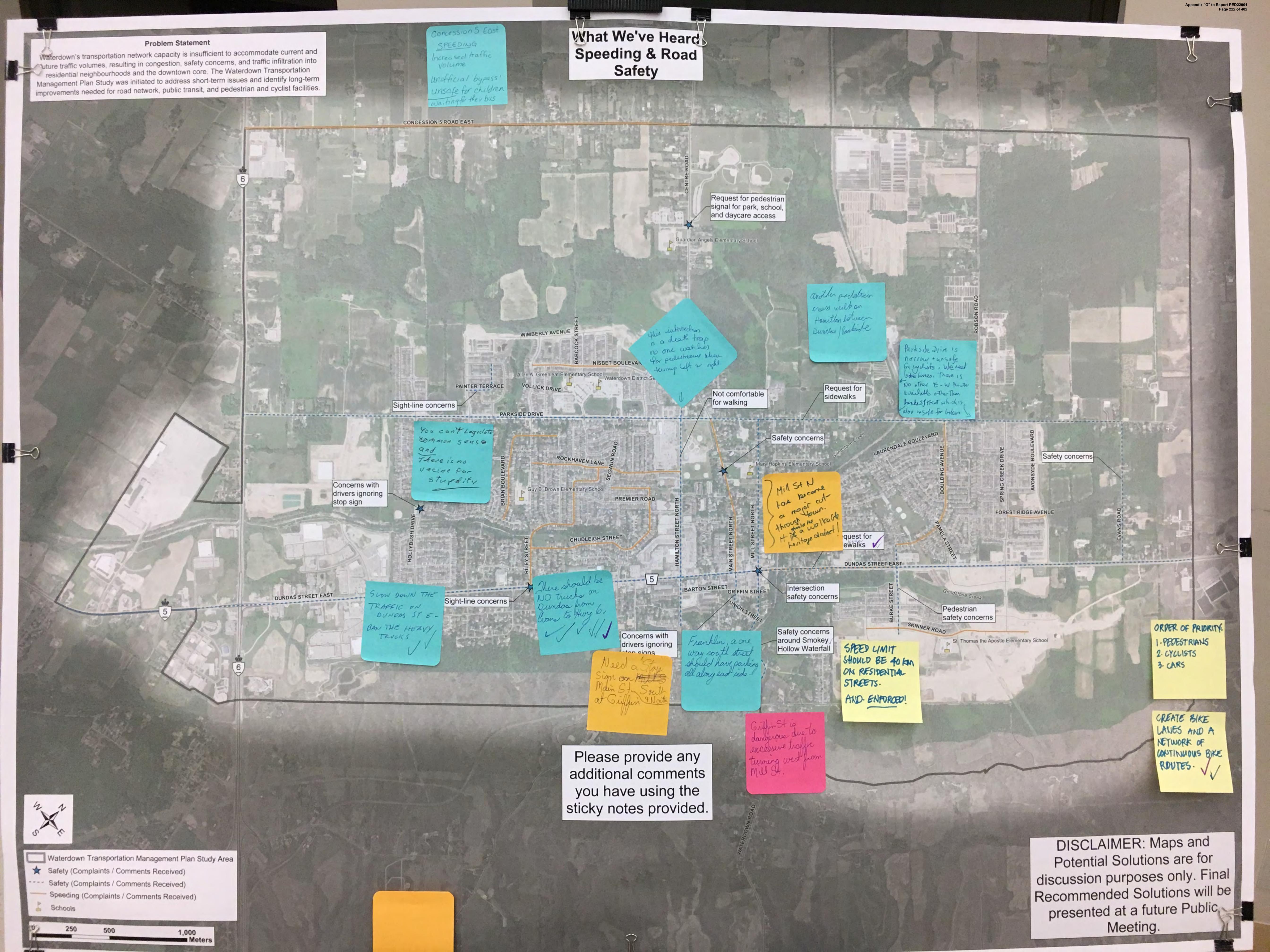
Dundo + Kearns Rds to Spring Creek Drive

on end on we new bapass to they \$16.

+ lanes will create a desolate environment - Preserve the downtown core. eg- Dundas. for pedestrians.







Ministry of the Environment, Conservation and Parks Drinking Water and Environmental Compliance Division West Central Region

119 King Street West, 12th Floor Hamilton, Ontario L8P 4Y7

Tel.: 905 521-7640 Fax: 905 521-7820 Ministère de l'Environnement de la Protection de la nature et des Parcs Division de la conformité en matière d'eau potable et d'environnement Direction régionale du Centre-Ouest

119 rue King Ouest, 12e étage Hamilton (Ontario) L8P 4Y7

Tél.: 905 521-7640 Téléc.: 905 521-7820



October 8, 2019

Mr. Mohan Philip City of Hamilton

Dear Mr. Philip:

Re: Waterdown Community Transportation Management Plan Response to Notice of Commencement

Ministry of the Environment, Conservation and Parks (MECP) acknowledges that the City of Hamilton has indicated that its study is following the master planning process to complete Phases 1 and 2 under the provisions of the MEA Class EA. It is understood that the purpose of the master planning exercise is to enable the City to evaluate the current transportation system and identify and prioritize a range of specific projects that will optimize the transportation system for current and future development.

The Crown has a legal duty to consult Aboriginal communities when it has knowledge, real or constructive, of the existence or potential existence of an Aboriginal or treaty right and contemplates conduct that may adversely impact that right. Before authorizing this project, the Crown must ensure that its duty to consult has been fulfilled, where such a duty is triggered. Although the duty to consult with Aboriginal peoples is a duty of the Crown, the Crown may delegate procedural aspects of this duty to project proponents while retaining oversight of the consultation process.

Your proposed project may have the potential to affect Aboriginal or treaty rights protected under Section 35 of Canada's *Constitution Act* 1982. Where the Crown's duty to consult is triggered in relation to your proposed project, **the MECP is delegating the procedural aspects of rights-based consultation to you through this letter.** The Crown intends to rely on the delegated consultation process in discharging its duty to consult and maintains the right to participate in the consultation process as it sees fit.

Based on the location of this project, it is recommended that you notify and initiate a consultative process with the following indigenous communities:

- Mississaugas of the Credit First Nation
- Six Nations of the Grand River
- Haudenosaunee Confederacy Chiefs Council

Steps that you may need to take in relation to Aboriginal consultation for your proposed project are outlined in the "Code of Practice for Consultation in Ontario's Environmental Assessment Process" which can be found at the following link:

https://www.ontario.ca/document/consultation-ontarios-environmental-assessment-process Additional information related to Ontario's Environmental Assessment Act is available online at: www.ontario.ca/environmentalassessments

You are instructed to contact the Director of Environmental Approvals Branch under the following circumstances subsequent to initial discussions with the communities identified by MECP:

- Aboriginal or treaty rights impacts are identified to you by the communities;
- You have reason to believe that your proposed project may adversely affect an Aboriginal or treaty right;
- Consultation has reached an impasse; or
- A Part II Order request or elevation request is expected for projects identified by the Master Plan that fulfil EA requirements.

The Director of the Environmental Approvals Branch can be notified either by email with the subject line "Potential Duty to Consult" to MOECCpermissions@ontario.ca or by mail or fax at the address provided below:

Email:	MOECCpermissions@ontario.ca
	Subject: Potential Duty to Consult
Fax:	416-314-8452
Address:	Environmental Approvals Branch
	135 St. Clair Avenue West, 1 st
	Floor
	Toronto, ON, M4V 1P5

MECP will then assess the extent of any Crown duty to consult for the circumstances and will consider whether additional steps should be taken, including what role you will be asked to play in them.

While Master Plans themselves are not subject to Part II Orders, any Schedule B projects identified and for which the Master Plan completes the EA process would be subject. As of July 1st 2018, a standardized form is to be used by anyone who believes that the environmental assessment process was incomplete, incorrect or that it failed to follow the required process. The required form can be found on the Forms Repository website (http://www.forms.ssb.gov.on.ca/) by searching "Part II Order" or "012-2206E (the form ID number). Once completed, the form is then to be sent to both the Minister

and Director of the Environmental Assessment and Permissions Branch. Their addresses are:

Minister
Ministry of the Environment, Conservation and Parks
Floor 5
777 Bay St., Toronto, ON M7A 2J3,
Minister.mecp@ontario.ca

Director, Environmental Assessment and Permissions Branch Ministry of the Environment, Conservation and Parks 135 St. Clair Ave. West, 1st Floor Toronto, ON M4V 1P5 MOECCpermissions@ontario.ca

The procedure for making a Part II Order request must be clearly included in the final Notice of Completion and on the project specific website that the City has established for this project.

With respect to any Species at Risk, MECP now has responsibility for the administration of the Ontario Endangered Species Act (ESA). If you believe that you may need an ESA permit or authorization for the implementation for this project, please visit https://www.ontario.ca/page/species-risk to learn more about protecting and recovering species at risk, then navigate to the Resources and Permits section, including Register or Get a Permit for more information about permits and authorizations under the ESA. You only need an authorization under the ESA (e.g. a permit or other type of authorization if your work is going to contravene the ESA (e.g. if the activity you are proposing is going to kill, harm or harass a species at risk or damage or destroy their habitat. If the work can be undertaken in a manner that does not contravene the ESA, this is known as "avoidance" of impacts and it is the ideal scenario and will not require undertaking the process of obtaining an authorization.

We have developed a guide to help clients work through the preliminary screening process including providing advice to clients on how they can gather information from publicly available sources. It you are seeking information regarding species at risk likely to occur at, or near your area of study for this EA, please send an email to sarontario@ontario.ca and include "Request for preliminary screening guide" in the email subject line. To provide the most efficient service, it is recommended clients read this guide and explore application information sources prior to contacting the ministry to begin discussions with the Permissions and Compliance team.

If during the course of your site visit(s) you encounter any known species at risk, please visit https://www.ontario.ca/page/report-rare-species-animals-and-plants for information on how to report a species at risk sighting.

Appendix "G" to Report PED22001 Page 226 of 402

Your are also reminded to continue sending notices related to this EA to the WCR mail box: eanotification.wcregion@ontario.ca Should you have questions, please contact me either at (905) 521-7864 or at Barbara.slattery@ontario.ca

With regards,

EA/Planning Coordinator

Barbara Slattery

Encl.

Public Information Centre October 10, 2019 Comment Form - Active Transportation

Agency: (If applicable)	
Name:	
Mailing Address:	
I/we prefer to receive information by email.	
-mail:	
re there any locations not identified where you feel a pedestrian crossing should be onsidered?	
re there any gaps in the existing or planned Active Transportation Network that you	
ould like to see addressed?	
Sufficient parking solution for	1
Sufficient parking solution for waterfall hikers. potentials along Mountain Brow to hop of or Side trail down hill?	7
of Cide Hail down hill?	/
the state of the s	

What forms of Active Transportation do you use most often?

	Walking	
	Biking	
	Skateboarding	
	In-line Skating/Rollerblading	
	Jogging/Running	
Do	you have any comments/suggestio	ns regarding local public transit in Waterdown?
Ge	neral Active Transportation Comme	ents/Questions/Concerns:
Ple	ase deposit this form in the comment I	box or return this form by November 1, 2019 to:
Atte	ention:	
77	y of Hamilton James Street North, Suite 400 milton, Ontario, L8R 2K3	Tel: 905-546-2424 Ext. 3438 Email: transportation@hamilton.ca

Public Information Centre October 10, 2019 Comment Form - Active Transportation

Agency:
(If applicable)
Name:
Mailing Address:
☐ I/we prefer to receive information by email.
E-mail:
Are there any locations not identified where you feel a pedestrian crossing should be considered?
Hamilton street between across the two malls!
(There is a LOT of informal jaywalking and with both
shopping strips having exits just offset from each other
it is dangerous)
Are there any gaps in the existing or planned Active Transportation Network that you would like to see addressed?
Malking / pedestrian access to Grindstone Falls from "center town"

What forms of Active Transportation do you use most often?

Walking V	sidusalles a	reek trails, core streets
☐ Biking	J. College S. C.	reek fimis wie stroots
☐ Skateboarding		
☐ In-line Skating/Rollerb	plading	
☑ Jogging/Running	Memorial 1	Park, creek trails
Do you have any comme	ents/suggestions re walk, we	egarding local public transit in Waterdown? do use to get to Aldershet
General Active Transpor	tation Comments/0	Questions/Concerns:
Please deposit this form in	ı the comment box c	r return this form by November 1, 2019 to:
Attention:		
City of Hamilton 77 James Street North, St. Hamilton, Ontario, L8R 2K		Tel: 905-546-2424 Ext. 3438 Email: transportation@hamilton.ca

Public Information Centre October 10, 2019 Comment Form - Active Transportation

Agency: (If applicable)	
Name:	
Mailing Address:	
☐ I/we prefer to	receive information by email.
E-mail:	
Are there any locati	ons not identified where you feel a pedestrian crossing should be
considered?	
PIS adv	se or confirm if news article
quolina	Consider Partitage about
no lover	putting in byled lakes on
Pure of	Fast of Howether St is valed
This up on a	de was blierly approved !
It uppers	its concellator, s due to a few
residents	WINTERN PARKING SPORES
Are there any gaps	in the existing or planned Active Transportation Network that you
would like to see ac	idressed?
÷	

What forms of Active Transportation do you use most often?

	Walking	
	Biking	
	Skateboarding	
	In-line Skating/Rollerblading	
	Jogging/Running	
Do	you have any comments/suggestic	ons regarding local public transit in Waterdown?
Ge	neral Active Transportation Commo	ents/Questions/Concerns:
-		
Ple	ase deposit this form in the comment	box or return this form by November 1, 2019 to:
Atte	ention:	
77	of Hamilton James Street North, Suite 400 milton, Ontario, L8R 2K3	Tel: 905-546-2424 Ext. 3438 Email: transportation@hamilton.ca

Public Information Centre October 10, 2019 Comment Form - Active Transportation

Agency:	
Mailing Address:	
I/we prefer to	receive information by email.
E-mail: _	
(If applicable) Name: Mailing Address: I/we prefer to receive information by email.	
Are there any gaps would like to see ac	in the existing or planned Active Transportation Network that you Idressed?
N.A.	

What forms of Active Transportation do you use most often?

	Walking
	Biking
	Skateboarding
	In-line Skating/Rollerblading
	Jogging/Running
Do	you have any comments/suggestions regarding local public transit in Waterdown?
	peral Active Transportation Comments/Questions/Concerns: Painted bike lanes are not safe. Only safe sign is separate bike lane with its own signal. post at how they are built in Europe (Netherlands)
	use deposit this form in the comment box or return this form by November 1, 2019 to:
77 .	of Hamilton Tel: 905-546-2424 Ext. 3438 ames Street North, Suite 400 Email: transportation@hamilton.ca nilton, Ontario, L8R 2K3

Public Information Centre October 10, 2019 Comment Form - Active Transportation

Agency: (If applicable)	
Name:	
Mailing Address:	-
	_
I/we prefer to receive information by email.	
E-mail:	-
Are there any locations not identified where you feel a pedestrian crossing should be considered?	
across to foe Soums Park @ Centre Road	_
P. T. wall throught the path of Joe Same	-
Parly. The sque was roused to the City	
but there is no archion	_
Are there any gaps in the existing or planned Active Transportation Network that you would like to see addressed?	
	_

What forms of Active Transportation do you use most often?

Walking	
Biking	
□ Skateboarding	
☐ In-line Skating/Rollerblading	
☑ Jogging/Running	
Do you have any comments/suggesti	ions regarding local public transit in Waterdown?
General Active Transportation Comm	ents/Questions/Concerns:
Please deposit this form in the comment	t box or return this form by November 1, 2019 to:
Attention:	
City of Hamilton 77 James Street North, Suite 400	Tel: 905-546-2424 Ext. 3438 Email: transportation@hamilton.ca
Hamilton, Ontario, L8R 2K3	Email tanoportation enantition.ca

Public Information Centre October 10, 2019 Comment Form - Active Transportation

Agency: (If applicable)	_
Name:	
Mailing Address:	_
I/we prefer to receive information by email.	
E-mail:	_
Are there any locations not identified where you feel a pedestrian crossing should be considered?	
Are there any gaps in the existing or planned Active Transportation Network that you would like to see addressed?	
	_

What forms of Active Transportation do you use most often?

Walking		
☐ Biking		
□ Skateboarding		
☐ In-line Skating/Rollerblading		
□ Jogging/Running		
Do you have any comments/suggestions regar At the manent, our transit is dos	igned for commuter, which y	n? esutts
residents		 -
General Active Transportation Comments/Que	stions/Concerns:	
OBUSES are empty most of time	while residents are & stud	ents
are walking to work within		
fare system is not working.		
Suggestion: a bus pass the	at is for waterdown resid	lents.
let's say - a monthly p	cass for unlimited ride (n	of the
HSRone, but for within wa		
- student pass,	Kids ride free, senior s	pecial
(2) Connection to Hamilton, westdate,		P
same fare ticket can link to go Bu	18.	This may not
Please deposit this form in the comment box or re	turn this form by November 1, 2019 to:	generate
Attention:		but the las
City of Hamilton 77 James Street North, Suite 400 Hamilton, Ontario, L8R 2K3	Tel: 905-546-2424 Ext. 3438 Email: transportation@hamilton.ca	is empty anyway

Public Information Centre October 10, 2019 Comment Form - Active Transportation

	Agency:
(1)	applicable)
	Name:
Maili	g Address:
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	/we prefer to receive information by email.
E-mail:	
Are the	re any locations not identified where you feel a pedestrian crossing should be
consid	ered?
	1.
Are the	re any gaps in the existing or planned Active Transportation Network that you ike to see addressed?
_	

What forms of Active Transportation do you use most often?

0	Nalking	
	J Biking	
	3 Skateboarding	
	In-line Skating/Rollerblading	
	Jogging/Running	
Do	Oo you have any comments/suggestions regarding lo	cal public transit in Waterdown?
8	3 is Rouse to University	4
	or link point in	Ch to
	Comed Do bus Ser	via
Ge	General Active Transportation Comments/Questions/	Concerns:
		Tes pe
-		
-		
Ple	Please deposit this form in the comment box or return this	form by November 1, 2019 to:
Atte	Attention:	
77		05-546-2424 Ext. 3438 : transportation@hamilton.ca

Public Information Centre October 10, 2019 Comment Form - Active Transportation

Agency: (If applicable)			-	
(ii applicable)				
Mailing Address:				
I/we prefer to re	eceive informa	tion by email.		
E-mail:				
Are there any location considered? Avangyle Sa		Parks is		
Are there any gaps in would like to see add Ason Syde Bride	record?	•		

What forms of Active Transportation do you use most often?		
☑ Walking		
☐ Biking		
☐ Skateboarding		
☐ In-line Skating/Rollerblading		
☐ Jogging/Running		
Do you have any comments/suggestions	regarding local public transit in Waterdown?	
General Active Transportation Comments	s/Questions/Concerns:	
Please deposit this form in the comment box	x or return this form by November 1, 2019 to:	
Attention:		
City of Hamilton 77 James Street North, Suite 400 Hamilton, Ontario, L8R 2K3	Tel: 905-546-2424 Ext. 3438 Email: transportation@hamilton.ca	

Public Information Centre October 10, 2019 Comment Form - Active Transportation

Agency:	
(If applicable)	
Name	
Name	
Mailing Address:	
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(<u>-</u>	
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T / Nove must su to u	- cive information by amail
I/We prefer to r	eceive information by email.
E-mail:	
1.0	
Are there any location considered?	ns not identified where you feel a pedestrian crossing should be
A .	the land of the second
A+ Robson	n Vall + Pour keide DR
	n the existing or planned Active Transportation Network that you
would like to see add	iressed?
Tull	trattic light a Robert Rolf Parkiet
100111	104.16 113013 (0 1100)50011(0 100)
	traffic lights @ Robson Rol & Parkille OR a roundabout.

What forms of Active Transportation do you use most often?

	□ Walking	
	□ Biking	
	☐ Skateboarding	
	☐ In-line Skating/Rollerblading	
	□ Jogging/Running	
Do	Do you have any comments/suggestions regarding l	ocal public transit in Waterdown?
Ge	General Active Transportation Comments/Questions	/Concerns:
9		
Ple	Please deposit this form in the comment box or return thi	s form by November 1, 2019 to:
Atte	Attention:	
77		905-546-2424 Ext. 3438 I: transportation@hamilton.ca

Public Information Centre October 10, 2019 Comment Form - Active Transportation

Agency: (If applicable)	
-	
☐ I/we prefer to	receive information by email.
E-mail:	
Are there any location considered?	ons not identified where you feel a pedestrian crossing should be
Are there any gaps i would like to see ad	n the existing or planned Active Transportation Network that you dressed?

What forms of Active Transportation do you use most often?

	Walking
	Biking
	Skateboarding
	In-line Skating/Rollerblading
	Jogging/Running
Do	you have any comments/suggestions regarding local public transit in Waterdown?
\overline{k}	Lo mare taxos to party tat.
•	
Ge	eneral Active Transportation Comments/Questions/Concerns:
•	Tate you like in your hards to bike an Dardes or Portside This is a community + read to have enough poods in
	Trisisa commenty + read to have enough poods &
<u>_</u>	, but to frustrate drilles + feer enough space on the
	rado fr bite laros.
V	no more fraftic coloning - addens the volume is some
/	led a tree by ano" - no deresport anil to sa dan
4,1,11111111111111111111111111111111111	"Vatric"
Dia	and a deposit this form in the comment have as sature this form by Nevember 1, 2010 to

Please deposit this form in the comment box or return this form by **November 1, 2019** to:

Attention:

City of Hamilton 77 James Street North, Suite 400 Hamilton, Ontario, L8R 2K3 Tel: 905-546-2424 Ext. 3438 Email: transportation@hamilton.ca

Public Information Centre October 10, 2019 Comment Form – Road Network

Agency: (If applicable)
Name:
Mailing Address:
I/we prefer to receive information by email.
E-mail:
What are your thoughts on the potential reconfiguration of Dundas St. E. (from Hamilton St. to Reynold St.) to accommodate four (4) lanes of traffic?
Of the network solutions identified, which ones do you support (check all that apply)? Extension of Clappison Avenue between Parkside Drive and the East/West Road
Main Street North Connection to Centre Road/Hamilton Street North (removing Cul-de-Sac)
Early conversion of Highway 5/Highway 6 signalised intersection to an Interchange (MTO Project)
Conversion of Mill Street to One-Way between Parkside and Dundas St. or section between Dundas St. and Church St.

What are the biggest transportation concerns in the Waterdown neighbourhood?
Speed
Congostion in downtown Waterdown
General Comments/Questions/Concerns:
Get truck fraffic off of Dundas St though Workerdown. Make to new east-west road north a proper
Workerdown.
Make To new east-west road north a proper
bypus.
V.
Please deposit this form in the comment box or return this form by November 1, 2019 to:
City of Hamilton 77 James Street North, Suite 400 Hamilton, Ontario, L8R 2K3 Tel: 905-546-2424 Ext. 3438 Email: transportation@hamilton.ca

Public Information Centre October 10, 2019 Comment Form – Road Network

Agency: (If applicable)
Name:
Mailing Address:
I/we prefer to receive information by email.
E-mail:
What are your thou ghts on the potential reconfiguration of Dunda s St. E. (from Hamilton St. to Reyn <u>old St.) to accommodate four (4) lanes of traffic?</u>
y No passing lines should be on Mills rove Sol. Rolf
Cars & tractors pullant of shelton Lane &
rear unissing collisions,
Also reduce speed town 60t to 501
+
Of the network solutions identified, which ones do you support (check all that apply)?
☐ Extension of Clappison Avenue between Parkside Drive and the East/West Road
☐ Main Street North Connection to Centre Road/Hamilton Street North (removing Cul-de-Sac)
☐ Early conversion of Highway 5/Highway 6 signalised intersection to an Interchange (MTO Project)
Conversion of Mill Street to One-Way between Parkside and Dundas St. or section between Dundas St. and Church St.

What are the biggest transportation concerns in the Waterdown neighbourhood?				
General Comments/Questions/Concerns:				
	*			

Please deposit this form in the comment box or return this form by November 1, 2019 to:

City of Hamilton 77 James Street North, Suite 400 Hamilton, Ontario, L8R 2K3

Tel: 905-546-2424 Ext. 3438 Email: transportation@hamilton.ca

Public Information Centre October 10, 2019 Comment Form – Road Network

Agency: (If applicable)
Name:
Mailing Address:
☐ I/we prefer to receive information by email.
E-mail:
What are your thoughts on the potential reconfiguration of Dundas St. E. (from Hamilton St. to Reynold St.) to accommodate four (4) lanes of traffic? East What transit Jounday ST Burlington
Of the network solutions identified, which ones do you support (check all that apply)? □ Extension of Clappison Avenue between Parkside Drive and the East/West Road
☐ Main Street North Connection to Centre Road/Hamilton Street North (removing Cul-de-Sac)
Early conversion of Highway 5/Highway 6 signalised intersection to an Interchange (MTO Project)
Conversion of Mill Street to One-Way between Parkside and Dundas St. or section between Dundas St. and Church St.

Wh	at are the biggest tran	sportation concerns in th	e Waterdown neighbourhood?		
Ge	General Comments/Questions/Concerns:				
0	EAT	NET	RAA)		
	1/2	ANSIT	ALORTH		
		EDALG.	DUNDAS		
9	Nerth	West	Tans/+ to		

Please deposit this form in the comment box or return this form by November 1, 2019 to:

City of Hamilton 77 James Street North, Suite 400 Hamilton, Ontario, L8R 2K3

Tel: 905-546-2424 Ext. 3438 Email: transportation@hamilton.ca

Attention: Mohan Philip, P. Eng., Project Manager

Sin OEN 4401

Public Information Centre October 10, 2019 Comment Form – Road Network

Agency: (If applicable)	
Name:	Sicre
Mailing Address:	
	
•	
☐ I/we prefer to	receive information by email.
E-mail:	
	this on the potential reconfiguration of Dundas St. E. (from Hamilton accommodate four (4) lanes of traffic? COMMODATE AND
	~~ , , ,
Of the network solu	tions identified, which ones do you support (check all that apply)?
□ Extension of Clar	ppison Avenue between Parkside Drive and the East/West Road
	n Connection to Centre Road/Hamilton Street North (removing Cul-de-Sac)
☐ Early conversion Project)	of Highway 5/Highway 6 signalised intersection to an Interchange (MTO
☐ Conversion of Mi Dundas St. and Chur	Il Street to One-Way between Parkside and Dundas St. or section between ch St.

What are the biggest transportation concerns in the Waterdown neighbourhood?			
L. CC: 11			
traffic through core			
neral Comments/Questions/Concerns:			
	A TO LO COLO		
AND THE RESERVE AND ADDRESS OF THE PARTY OF			

City of Hamilton 77 James Street North, Suite 400 Hamilton, Ontario, L8R 2K3

Tel: 905-546-2424 Ext. 3438 Email: transportation@hamilton.ca

Public Information Centre October 10, 2019 Comment Form – Road Network

Agency: (If applicable) Name:	_
Mailing Address:	
I/we prefer to receive information by email.	_
E-mail;	-
What are your thoughts on the potential reconfiguration of Dundas St. E. (from Hamilton St. to Reynold St.) to accommodate four (4) lanes of traffic?	
THIS IS A BAD IDEA!	
UNDAS STE. IS ALREADY TOO MUCH TRUCK	
TRAPPIC.	
THE NEW BRIDGE SHOULD NOT BE INCREA	SER
IN WIDTH	
Of the network solutions identified, which ones do you support (check all that apply)?	-
Extension of Clappison Avenue between Parkside Drive and the East/West Road Nois Street North Connection to Contro Boad/Hamilton Street North (removing Cul. do Sac	
 Main Street North Connection to Centre Road/Hamilton Street North (removing Cul-de-Sac Early conversion of Highway 5/Highway 6 signalised intersection to an Interchange (MTO Project) 	<u>/</u>
Conversion of Mill Street to One-Way between Parkside and Dundas St. or section betwee Dundas St. and Church St.	n

what are the biggest transportation cor	ncerns in the Waterdown neighbourhood?
TOO MUCH TRAFFIC	ON DUNDAS ST.E.
NEZO BY-PASS COON	PEDESTRIAN SHEET ON
NEED TO IMPROVE 1	PEDESTRIAN SAFEY ON
BUNDAS STE.	
General Comments/Questions/Concern	
4 CANES ON DUNDA.	3 STE HAMILTON-RETNOLDS
IS A VERY BAD	1DEA!! D TO REDUCE LAWES.
IE AWYTHING - NEE	D TO REDUCE LAWES.
NEW BRIDGE OVER	GRINDSTON CREEK
SHOULD NOT BE 10	GRINDSTON CREEK NCREASED IN WIDTH!
	Transaction of the second
Please deposit this form in the comment be	ox or return this form by November 1, 2019 to:
City of Hamilton	Tel: 905-546-2424 Ext. 3438
77 James Street North, Suite 400	Email: transportation@hamilton.ca

Hamilton, Ontario, L8R 2K3

Public Information Centre October 10, 2019 Comment Form – Road Network

Agency: (If applicable)
(If applicable)
Name:
Mailing Address:
I/we prefer to receive information by email.
-mail:
that are your thoughts on the potential reconfiguration of Dundas St. E. (from Hamilton t. to Reynold St.) to accommodate four (4) lanes of traffic?
CATERDOWN HERITAGE AREM
f the network solutions identified, which ones do you support (check all that apply)?
Extension of Clappison Avenue between Parkside Drive and the East/West Road
Main Street North Connection to Centre Road/Hamilton Street North (removing Cul-de-Sac)
Early conversion of Highway 5/Highway 6 signalised intersection to an Interchange (MTO roject)
Conversion of Mill Street to One-Way between Parkside and Dundas St. or section between undas St. and Church St.

General Cor	nments/Question	s/Concerns:
MORE	PUBLIC	TRANSPORTATION GO SERVI
		HAMILTON.
		GAIFFIN TO WEST TURNS FROM

Please deposit this form in the comment box or return this form by November 1, 2019 to:

Tel: 905-546-2424 Ext. 3438

Email: transportation@hamilton.ca

City of Hamilton 77 James Street North, Suite 400 Hamilton, Ontario, L8R 2K3

Public Information Centre October 10, 2019 Comment Form – Road Network

Agency: (If applicable)	
Mailing Address:	
0.0	
☐ I/we prefer to	receive information by email.
E-mail:	
St. to Reynold St.) to	thts on the potential reconfiguration of Dundas St. E. (from Hamilton accommodate four (4) lanes of traffic?
	cions identified, which ones do you support (check all that apply)?
	Connection to Centre Road/Hamilton Street North (removing Cul-de-Sac)
	of Highway 5/Highway 6 signalised intersection to an Interchange (MTO
	I Street to One-Way between Parkside and Dundas St. or section between ch St.

What are the biggest transportation concern	ns in the Waterdown neighbourhood?
0	
General Comments/Questions/Concerns:	a another corridor to
Burlington / Aldershot GT	a conother corridor to
the approved plan w/ M	Jater domes !-
V	
·	
Please deposit this form in the comment box or	r return this form by November 1, 2019 to:
City of Hamilton 77 James Street North, Suite 400 Hamilton, Ontario, L8R 2K3	Tel: 905-546-2424 Ext. 3438 Email: transportation@hamilton.ca

Public Information Centre October 10, 2019 Comment Form – Road Network

(If applicable)		
	Name:	
Ma	ailing Address:	
		
V	I/we prefer to receive information by email.	
-m	ail:	
/ la -	at are your thoughts on the potential reconfiguration of I	Dundae St. F. (from Hamilton
	o Reynold St.) to accommodate four (4) lanes of traffic?	Juliuas St. L. (IIOIII Hallillitoii
P	SAD IDFA!	
IL	n's is the core, we want to wal	k and enion the
1	1 1 1 11 11 0 1	wa short run of
	on town. I can't think of he	wa start take of
1	lanes could improve anything, es	pecially when IT
hi	165 back to 2 lanes.	
		1. (- b b b - b b - b - o o o b A A
)f t	he network solutions identified, which ones do you supp	oort (check all that apply)?
	Extension of Clappison Avenue between Parkside Drive and	
	Main Street North Connection to Centre Road/Hamilton Stre	
	Early conversion of Highway 5/Highway 6 signalised interse ect)	ction to an Interchange (MTO
]	Conversion of Mill Street to One-Way between Parkside and	Dundas St. or section between
มมก	das St. and Church St.	

Volume and truck traff	ncerns in the Waterdown neighbourhood?
General Comments/Questions/Concerns building without have of the required approver	s: ing traffic handling as part
Please deposit this form in the comment bo	ox or return this form by November 1, 2019 to: Tel: 905-546-2424 Ext. 3438

Hamilton, Ontario, L8R 2K3

Public Information Centre October 10, 2019 Comment Form – Road Network

(If applicat	
Nar	me:
Mailing Addre	ss:
☐ I/we prefe	er to receive information by email.
E-mail:	
St. to Reynold S	St.) to accommodate four (4) lanes of traffic?
edesta wal	NO!
Of the network	Solutions identified, which ones do you support (check all that apply)
Of the network	Solutions identified, which ones do you support (check all that apply) Clappison Avenue between Parkside Drive and the East/West Road
Of the network	Solutions identified, which ones do you support (check all that apply) Clappison Avenue between Parkside Drive and the East/West Road North Connection to Centre Road/Hamilton Street North (removing Cul-de-
Of the network	Solutions identified, which ones do you support (check all that apply) Clappison Avenue between Parkside Drive and the East/West Road

what are the biggest transportation cond	erns in the waterdown neighbourhood?
Volume	
speed	
safety concer	15
	3
congestion	
General Comments/Questions/Concerns	
Mill St cannot	be concidered on
A 8 10	
"artenal" road. H	tis in a horitage
and 2004 bit	0
district and is a	neichbourhood.
The Tara is a	ME STACE TOO
	(vc
	The second
Please deposit this form in the comment box	x or return this form by November 1, 2019 to:
City of Hamilton	Tel: 905-546-2424 Ext. 3438
77 James Street North, Suite 400 Hamilton, Ontario, L8R 2K3	Email: transportation@hamilton.ca

Public Information Centre October 10, 2019 Comment Form – Road Network

	Name:	
N	Mailing Address:	
tu	I/we prefer to receive information by email.	
-		
E-r	-mail:	
\A/L	hat are your thoughts on the potential reconfiguration of Dundas St. E.	(from Han
	t to Reynold St.) to accommodate four (4) lanes of traffic?	(IIOIII Haii
TI	his is an unbeleinably stupid idea!? How abo	nt we
10		
10	picycle lanes, widen sidewalks and restrict C	ban) 1
tr	raffic	
-		
Of	f the network solutions identified, which ones do you support (check all	l that annly
1		
	Extension of Clappison Avenue between Parkside Drive and the East/Wes	
VU	Main Street North Connection to Centre Road/Hamilton Street North (remo	
7 0		robongo (N
70	Early conversion of Highway 5/Highway 6 signalised intersection to an Intersection	erchange (iv
Pro	roject)	

	Trucks traffic volume	
	racle of accommodation (ie-none) for bicycles	
	ral Comments/Questions/Concerns:	
ti	he road improvement plan is decades behind esidential development. Someone should be held	
R	sidential development. someone should be held	
	countable for letting this happen. Now, options	
N	re restricted, and expensive.	
R	load improvements are disconnected - there is n	W
	ontinuity. Traffic will weave through residenti	
5	treets (as it does now), but in greater volume.	1
		-

Tel: 905-546-2424 Ext. 3438 Email: transportation@hamilton.ca

Attention: Mohan Philip, P. Eng., Project Manager

City of Hamilton 77 James Street North, Suite 400 Hamilton, Ontario, L8R 2K3

Public Information Centre October 10, 2019 Comment Form – Road Network

Agency:			
(If applicable)			
Name:			
Mailing Address:			
	-		
	-		
I/we prefer to receive information by email.			
E-mail:			
hat are your thoughts on the potential reconfiguration of Dundas St. E. (from Hamilt	on		
t. to Reynold St.) to accommodate four (4) lanes of traffic?			
1.1			
Vora had Idoce - this would	1		
destant the Village			
os sizog en ortage			
	-		
f the network solutions identified, which ones do you support (check all that apply)?			
Extension of Clappison Avenue between Parkside Drive and the East/West Road			
Main Street North Connection to Centre Road/Hamilton Street North (removing Cul-de-S	ac)		
Early conversion of Highway 5/Highway 6 signalised intersection to an Interchange (MTC			
roject)			
 Conversion of Mill Street to One-Way between Parkside and Dundas St. or section betw undas St. and Church St. 	een		

What are the biggest transportation concerns in the Waterdown neighbourhood?

Too Many heavy	conditions, elc, etc
Croating unsafe	conditions, elc, elc
General Comments/Questions/Concerns:	

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Email: transportation@hamilton.ca

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Agency:			
(If applicable)			
Name:			
Mailing Address:			
☐ I/we prefer to receive information by email.			
E-mail:			
What are your thoughts on the potential reconfiguration of Dundas St. E. (from Hamilton St. to Reynold St.) to accommodate four (4) lanes of traffic?			
ABSOLUTECY NO WAY.			
WILL PUIN *VILLAGE SMALL TOWN APPEAL. 4 LAMES OF TRAFFIC THROUGH SMALL VILLAGE			
W 75 LUPICROUS!			
Of the network solutions identified, which ones do you support (check all that apply)? Is this the Extension of Clappison Avenue between Parkside Drive and the East/West Road > new term for			
Main Street North Connection to Centre Road/Hamilton Street North (removing Cul-de-Sac)			
Early conversion of Highway 5/Highway 6 signalised intersection to an Interchange (MTO Project)			
☐ Conversion of Mill Street to One-Way between Parkside and Dundas St. or section between Dundas St. and Church St. ►/O			

what are the biggest transportation concerns in the waterdown neighbourhood?		
INTERSECTION MILLS	TREET / HWY 5	
THIS SECTION OF HW	O HAPPEN - GET	TRUCKS OF
11110 02011011 01 110		
General Comments/Questions/Concerns:		
	V2	
Please deposit this form in the comment box	or return this form by Novemb e	er 1, 2019 to:
City of Hamilton 77 James Street North, Suite 400 Hamilton, Ontario, L8R 2K3	Tel: 905-546-2424 Ext. (Email: transportation@h	3438

Public Information Centre October 10, 2019 Comment Form – Road Network

Agency: (If applicable)
Name:
Mailing Address:
√ I/we prefer to receive information by email.
E-mail:
What are your thoughts on the potential reconfiguration of Dundas St. E. (from Hamilton St. to Reynold St.) to accommodate four (4) lanes of traffic?
15 you are joing to take all Dunday Parking may Relike
Too much now commercial blac clappion - 2222 traffic
Pathoton double acceptate pay for exprisonment! Tope will be
Of the network solutions identified, which ones do you support (check all that apply)?
☐ Extension of Clappison Avenue between Parkside Drive and the East/West Road
☐ Main Street North Connection to Centre Road/Hamilton Street North (removing Cul-de-Sac)
☐ Early conversion of Highway 5/Highway 6 signalised intersection to an Interchange (MTO Project)
Conversion of Mill Street to One Way between Parkside and Dundas St. or section between Dundas St. and Church St. White

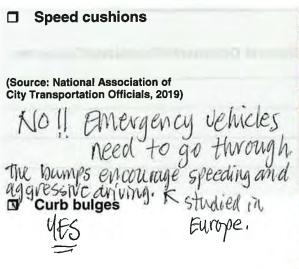
What are the biggest transportation concer	rns in the Waterdown neighbourhood?
General Comments/Questions/Concerns:	
Hey will see & then construction they will see & then construction of the then construction that makes have comples & demonstration of the construction of the constru	present to the ottenders what. Amue from there - it would be redible to the objective. Mildren during 6-8 and want
consider no truck was	
- How to motivate Trucks A	and burningents 5, but they will not
go to by pass to me conta	ming
- 45 minutes from Walkers Line -	to Charleigh Really?
Please deposit this form in the comment box o	or return this form by November 1, 2019 to:
City of Hamilton 77 James Street North, Suite 400 Hamilton, Ontario, L8R 2K3	Tel: 905-546-2424 Ext. 3438 Email: transportation@hamilton.ca

Public Information Centre October 10, 2019 Comment Form - Local Road/Neighbourhood Road Improvement

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Agency: (If applicable)	
Name: _	
Mailing Address:	
I/we prefer to receive information by email.	<u> </u>
E-mail:	

By checking the boxes below, tell us what type of traffic calming measures you would support in your neighbourhood. Check all that apply.









CAN'T SEE THEM IN THE SNOW (Source: Project for Public Spaces, 2008)	inella di seria di se
☐ Raised pedestrian crossing	
(Source: U.S. Department of Transportation Federal Highway Administration, 2017)	
☑ Centre Islands	
HES	ng salik 123
(Source: Drdul, R., Wikipedia, n.d.)	Sy discking the year magnetic
Local Road/Neighbourhood Road In	nprovement General Comments/Questions/Concerns:
>	
Please deposit this form in the comme	nt hox or return this form by November 1, 2019 to:

Please deposit this form in the comment box or return this form by **November 1, 2019** to:

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Agency: (If applicable)		
Name:		
Mailing Address:		
☐ I/we prefer to i	eceive information by email.	
E-mail:		
your neighbourhood.	Check all that apply.	calming measures you would support in
(Source: National Association City Transportation Officials	on of c, 2019)	
Curb bulges		
t crosswa	ek.	a T
(Source: Martin, D., Twitter,	n.d.)	

☐ Line Painting	
(Source: Project for Public Spaces, 2008)	Sure Sala
□ Raised pedestrian crossing	
(Source: U.S. Department of Transportation Federal Highway Administration, 2017)	
Centre Islands	4
Centre lane of Durdas Atreet East	in out in the parties of the parties
(Source: Drdul, R., Wikipedia, n.d.)	By checking in your naighboul
Local Road/Neighbourhood Road Improvement	ent General Comments/Questions/Concerns:
Discoordance it this forms in the	
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77 James Street North, Suite 400 Hamilton, Ontario, L8R 2K3	Email: transportation@hamilton.ca

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Agency: (If applicable)	
Name:	
Mailing Address:	
☐ I/we prefer to receive information I	by email.
E-mail:	
By checking the boxes below, tell us what your neighbourhood. Check all that apply	t type of traffic calming measures you would support in
☐ Speed cushions	
(Source: National Association of City Transportation Officials, 2019)	
☐ Curb bulges	
(Source: Martin, D., Twitter, n.d.)	

☐ Line Painting

(Source: Project for Public Spaces, 2008)

☐ Raised pedestrian crossing

(Source: U.S. Department of Transportation Federal Highway Administration, 2017)

Centre Islands

DUNDAS ST E EAST OF GRINDSTONE CREEK

(Source: Drdul, R., Wikipedia, n.d.)







Local Road/Neighbourhood Road Improvement General Comments/Questions/Concerns:

PROVIDE MORE CROSS WACKS ON DIMPASSTE EAST OF WATERDOWN CENTRE

Please deposit this form in the comment box or return this form by November 1, 2019 to:

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Agency: (If applicable)	
Name: _	
Mailing Address: _	
I/we prefer to receive information by email.	
E-mail:	

By checking the boxes below, tell us what type of traffic calming measures you would support in your neighbourhood. Check all that apply.



(Source: Martin, D., Twitter, n.d.)



Don't like Wase □ Line Painting

(Source: Project for Public Spaces, 2008)

☐ Raised pedestrian crossing

(Source: U.S. Department of Transportation Federal Highway Administration, 2017)

Centre Islands

Possible of upon with.

(Source: Drdul, R., Wikipedia, n.d.)







Local Road/Neighbourhood Road Improvement General Comments/Questions/Concerns:

Stop signs are NOT "calming", drivers speed between
the stops.

The "cushions" are preferred to "bumps"

Centre Islands - as long as the road width works (ie:

Hollybush works - Riley would not)

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Public Information Centre October 10, 2019 Comment Form - Local Road/Neighbourhood Road Improvement

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Mailing Address:	
I/we prefer to receive information	n by email.
E-mail:	
By checking the boxes below, tell us wh your neighbourhood. Check all that app	at type of traffic calming measures you would support in ly.
☐ Speed cushions	
(Source: National Association of City Transportation Officials, 2019)	
□ Curb bulges	
(Source: Martin, D., Twitter, n.d.)	

☐ Line Painting	
(Source: Project for Public Spaces, 2008)	District States Christian
☐ Raised pedestrian crossing	
Source: U.S. Department of Transportation Federal Highway Administration, 2017)	
☐ Centre Islands	
massla	Paralle Programme Comments
Source: Drdul, R., Wikipedia, n.d.)	By chycleng the your numbers of the calming in
∟ocal Road/Neighbourhood I	Road Improvement General Comments/Questions/Concerns:
ne route of	Barton/Lon Hamilton St. S./ /Lon Howard is a heavy

Howard is a heavy
is a thoroughtare
Road. (and Snake
road!!) Already a 40km/h 20ne
return this form by November 1, 2019 to: which
Tel: 905-546-2424 Ext. 3438 hoone
Email: transportation@hamilton.ca

Public Information Centre October 10, 2019 Comment Form - Local Road/Neighbourhood Road Improvement

Agency: (If applicable)	
Name:	
Mailing Address:	
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E-mail:	
By checking the boxes below, tell us wh your neighbourhood. Check all that app	nat type of traffic calming measures you would support in ly.
☐ Speed cushions	
(Source: National Association of City Transportation Officials, 2019)	
City Transportation Officials, 2019)	
	The state of the s
S. Curk hulasa	
□ Curb bulges	
(Source: Martin, D., Twitter, n.d.)	

☐ Line Painting	
(Source: Project for Public Spaces, 2008)	Bump
☐ Raised pedestrian crossing	
(Source: U.S. Department of Transportation Federal Highway Administration, 2017)	
☐ Centre Islands	
ni hoqqua thiow-uoy, sonuasam gr	dinin-summer of the property o
(Source: Drdul, R., Wikipedia, n.d.)	nodmina num

Local Road/Neighbourhood Road Improvement General Comments/Questions/Concerns:

> huck ban down town
> hus school traffic calming
does not work

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Public Information Centre October 10, 2019 Comment Form - Local Road/Neighbourhood Road Improvement

(If applicable) Name:	
Mailing Address:	
☐ I/we prefer to receive informatio	n by email.
E-mail:	
By checking the boxes below, tell us who your neighbourhood. Check all that app	nat type of traffic calming measures you would support in bly.
Speed cushions	
(Source: National Association of City Transportation Officials, 2019)	
□ Curb bulges	
(Source: Martin, D., Twitter, n.d.)	The state of the s

(Source: Project for Public Spaces, 2008)

Raised pedestrian crossing

(Source: U.S. Department of Transportation Federal Highway Administration, 2017)

Centre Islands

(Source: Drdul, R., Wikipedia, n.d.)

Local Road/Neighbourhood Road Improvement General Comments/Questions/Concerns:



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Name:	
Mailing Address:	
I/we prefer to receive information by email.	
E-mail:	

By checking the boxes below, tell us what type of traffic calming measures you would support in your neighbourhood. Check all that apply.



Line Painting (Source: Project for Public Spaces, ☐ Raised pedestrian crossing (Source: U.S. Department of Transportation Federal Highway Administration, 2017) Centre Islands (Source: Drdul, R., Wikipedia, n.d.)

Local Road/Neighbourhood Road Improvement General Comments/Questions/Concerns:

Speed Radal on Hoorisyde Block
Jesulus of Parkside + Dondas

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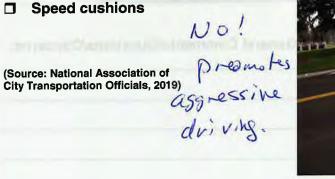
City of Hamilton Waterdown Transportation Management Plan

Public Information Centre October 10, 2019 Comment Form - Local Road/Neighbourhood Road Improvement

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(If a	Agency: applicable)			
	Name:			
Mailing	g Address:			
⊡ 1/	we prefer to receive informa	tion by email.		
E-mail:	4			
			-	

By checking the boxes below, tell us what type of traffic calming measures you would support in your neighbourhood. Check all that apply.





□ Curb bulges

No!

(Source: Martin, D., Twitter, n.d.)





☐ Line Painting	
(Source: Project for Public Spaces, 2008)	sum .
ing Committee the Confection will be collected in	The Market White
Raised pedestrian	
crossing	
+ centre line posts	
(Source: U.S. Department of Transportation Federal Highway Administration, 2017)	
Centre Islands	
	Chy chocking th
(Source: Drdul, R., Wikipedia, n.d.)	Nonceauthorn
IN Speed Reader B	pard
Local Road/Neighbourhood Road Impro	ovement General Comments/Questions/Concerns:
Please deposit this form in the comment be	ox or return this form by November 1, 2019 to:
City of Hamilton	Tel: 905-546-2424 Ext. 3438
77 James Street North, Suite 400	Email: transportation@hamilton.ca
Hamilton, Ontario, L8R 2K3	

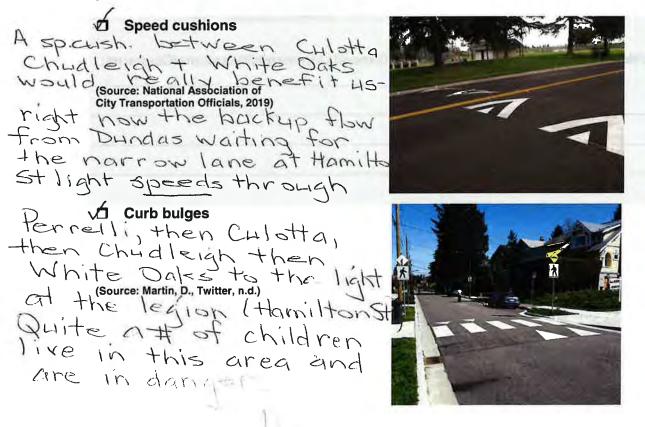
Attention: Mohan Philip, P. Eng., Project Manager

City of Hamilton Waterdown Transportation Management Plan

Public Information Centre October 10, 2019 Comment Form - Local Road/Neighbourhood Road Improvement

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Agency: (If applicable)	
Name:	
Mailing Address:	
I/we prefer to receive information by email.	
E-mail:	
By checking the boxes below, tell us what type of traffic calming your neighbourhood. Check all that apply.	ng measures you would support in



☐ Line Painting	
	AND THE RESERVE OF THE PERSON
(Source: Project for Public Spaces, 2008)	Journs 1
	Httmat-result
☐ Raised pedestrian crossing	
(Source: U.S. Department of Transportation Federal Highway Administration, 2017)	
☐ Centre Islands	
(Source: Drdul, R., Wikipedia, n.d.)	E-malfi School Street School School Street School Street School Street School Street School School Street School Street School Street School Street School Street School School Street School Street School Street School Street School School Street School Street School School School School Street School Street School Street School School Street School Street School Street School S
Local Road/Neighbourhood Road Improve	ement General Comments/Questions/Concerns:
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City of Hamilton Waterdown Transportation Management Plan

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Agency: (If applicable)	
Name: _	
Mailing Address:	
I/we prefer to receive information by	y email.
-mail:	

By checking the boxes below, tell us what type of traffic calming measures you would support in your neighbourhood. Check all that apply.

☐ Speed cushions

(Source: National Association of City Transportation Officials, 2019)



Curb bulges

(Source: Martin, D., Twitter, n.d.)



☐ Line Painting

(Source: Project for Public Spaces, 2008)

☐ Raised pedestrian crossing

(Source: U.S. Department of Transportation Federal Highway Administration, 2017)

Centre Islands

(Source: Drdul, R., Wikipedia, n.d.)



Local Road/Neighbourhood Road Improvement General Comments/Questions/Concerns:
My Concern is the increased vehicular traffic on Concession 5 East
There is a divarnatic increase in the number of vehicles that utilize
our concession. And they speed. It is unsafe for our children
who are all bused to school. People speed while our children woult
for the bus. We have small road shoulders & no sidewalks therefore
people should take care.

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Agency: (If applicable)	
Name:	
Mailing Address:	
I/we prefer to receive informatio	n by email.
E-mail:	
By checking the boxes below, tell us whyour neighbourhood. Check all that app	hat type of traffic calming measures you would support in bly.
☐ Speed cushions	
(Source: National Association of City Transportation Officials, 2019)	
☐ Curb bulges	
(Source: Martin, D., Twitter, n.d.)	

☐ Line Painting

(Source: Project for Public Spaces, 2008)

☐ Raised pedestrian crossing

(Source: U.S. Department of Transportation Federal Highway Administration, 2017)

Centre Islands

(Source: Drdul, R., Wikipedia, n.d.)



Local Road/Neighbourhood Road Improvement General Comments/Questions/Concerns:

· · · · · · · · · · · · · · · · · · ·
Concession 5 Rd (Centre-HWBG) is used as the
Waterdown Bypass. Vehicle traffic is often speeding,
kids are not safe to walk an shoulders (too small).
Anxious/hurry drivers pass care at excessive
speed regurarily C.50+ kph over speed limit -6
Please deposit this form in the comment box or return this form by November 1, 2019 to:

City of Hamilton 77 James Street North, Suite 400 Hamilton, Ontario, L8R 2K3

Attention: Mohan Philip, P. Eng., Project Manager

Tel: 905-546-2424 Ext. 3438 Email: transportation@hamilton.ca

widen Shoulder addstopligh @HWY6

City of Hamilton Waterdown Transportation Management Plan

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Agency: (If applicable)	
Name:	
Mailing Address:	
I/we prefer to receiv	e information by email.
E-mail:	
By checking the boxes belower neighbourhood. Check	w, tell us what type of traffic calming measures you would support in all that apply.
Speed cushions Descripted (Source: National Association of	
City Transportation Officials, 2019) CLUM CITY OF STEERING AHEM DUNGOS OF STEERINGS	ds CARS tolumb sim
Curb bulges (Source: Martin, D., Twitter, n.d.)	OMP h actual
16-100 sail Dresentation	(then)
have one lean, for Petter informed residuals ha	porte to
Shime is last infor	sorte to 's comment to !

☐ Line Painting	
(Source: Project for Public Spaces, 2008)	sums 1
☐ Raised pedestrian crossing	
(Source: U.S. Department of Transportation Federal Highway Administration, 2017)	
☐ Centre Islands	
(Source: Drdul, R., Wikipedia, n.d.)	
Local Road/Neighbourhood Road	Improvement General Comments/Questions/Concerns:
Please deposit this form in the com	ment box or return this form by November 1, 2019 to:
City of Hamilton	Tel: 905-546-2424 Ext. 3438
77 James Street North, Suite 400 Hamilton, Ontario, L8B 2K3	Email: transportation@hamilton.ca

Attention: Mohan Philip, P. Eng., Project Manager





ISSUE / THEME	RELEVANT LOCATION(S)	DETAILS
	Throughout Waterdown; particularly	
	south of Dundas Street, on Union	Existing traffic calming is insufficient to prevent cut-through traffic. More traffic
TDAFFIO CALAMAIO	Street and Griffin Street	calming is needed (ex: speed humps, police enforcement).
TRAFFIC CALMING		
	Throughout Waterdown; particularly	Existing traffic calming south of the core is illogical, ineffective, and benefits a
	south of Dundas Street - Union Street,	small minority of residents at the expense of many others. It should be
	Griffin Street	removed.
	Throughout Waterdown; Dundas	Lack of alternate routes routes throughout Waterdown - particularly east-west
	Street in particular	routes
CONGESTION /	Dundas Street, particularly from Mill	Congestion issues - consider removing traffic calming south of the core to
HIGH TRAFFIC	Street to Burke Street	alleviate congestion
VOLUMES	Parkside Drive	Congestion issues
	Mill Street	Congestion issues
	Main Street	Cut-through traffic avoiding Dundas Street or Hamilton Street
	Throughout Waterdown; particularly	
	an issue on a number of residential	
	streets such as Burke Street, Nisbet	
	Boulevard, and the area south of the	
	core	Shortcutting through residential neighbourhoods to avoid traffic
	Brian Boulevard	Traffic calming added to address speeding issue
	Riley Street between Chudleigh Street	
	and Scott Street	Speed hump recommended
CDEEDING / DOAD	Mill Street South	Safety concerns around Smokey Hollow
	Burke Street	Resident almost hit by automobile several times; stroller was hit once
SAFETY CONCERNS	Dundas Street from Waterdown Road	
	to Burke Street	Request for community safety zone
	Nisbet Boulevard	Cut-through traffic from Parkside Drive - traffic calming suggested
	Waterdown core	Lower speed limits and install more traffic calming
	Mill Street	Road safety concerns
		Safety issue - insufficient sight lines; roadway cannot handle traffic volumes nor
	Dundas Street at Riley Street	expected increase from development in the area
1	Rockhaven Lane	Speed issues

Updated June 28, 2019 1 of 4



ISSUE / THEME	RELEVANT LOCATION(S)	DETAILS
	Main Street	Cut-through traffic avoiding Dundas Street or Hamilton Street
	Boulding Avenue	Cut-through traffic avoiding Dundas Street - speeding and ignoring stop signs
	Parkside Drive	Busy, not wide enough, lack of sidewalks
	Dundas Street	Busy, not wide enough, lack of sidewalks
	Waterdown Road	Busy, not wide enough, lack of sidewalks
	Throughout Waterdown	Insufficient cycling facilities - not enough bike lanes
	Throughout Waterdown; particularly	Dangerous situation due to traffic volume and speed, including heavy trucks -
CYCLIST SAFETY /	on Highway 5	specifically around new library on Highway 5
	Hamilton Street	Not comfortable for walking
COMFORT	Joe Sams Leisure Park	Add a pedestrian signal to access the park
	Smokey Hollow	Walking to Smokey Hollow is not feasible
	Mill Street at Dundas Street	Dangerous for pedestrians and cyclists
		Safety issue caused by parking on both sides of street. Resident's children
		unable to see over cars to cross safely to sidewalk on other side of street (street
	Painter Terrace	has sidewalk on one side).
		Traffic signal, three-way stop, or roundabout suggested - high traffic volume and
	Parkside Drive at Boulding Avenue	speed; dangerous left turn
	Dundas Street East at Pamela Street	Traffic signal suggested
	Vollick Drive at Cathedral Court	
	Riley Street at Premier Road	
		All-way stop suggested
TRAFFIC CONTROL	Hamilton Street South at Barton Street	
DEVICES	Riley Street at Premier Street	
5211020	Dundas Street	Crosswalk(s) suggested
	Parkside Drive and Main Street	Crosswark(s) suggested
		Adjust signal timing to deter motorists from using Evans Road as opposed to
	Dundas Street at Evans Road	Avonsyde Boulevard
		Advanced left turn signal for traffic coming northbound from Mill Street onto
	Mill Street at Dundas Street	Dundas Street is too short
	Dundas Street East, between Evans	
ROAD DESIGN	Road and Kerns Road	Two-way left-turn lane recommended
	Highway 5	General issues with design of roadway
	Parkside Drive at Hamilton Street	Add right turn lanes

Updated June 28, 2019 2 of 4



Waterdown Transportation Issues Summary

ISSUE / THEME	RELEVANT LOCATION(S)	DETAILS
	Dundas Street at Avonsyde Boulevard	Add right turn lanes
		Dump trucks speeding and running red lights - schools, YMCA and residential
	Parkside Drive	nearby
TRUCK TRAFFIC	Dundas Street	Separate pedestrians and cyclists from heavy truck traffic
	Waterdown core / Dundas Street / Mill	
	Street	Re-route heavy trucks away from the core
	Premier Road at Segwun Road	All-way stop suggested
PARKING	Skinner Road	Lack of street parking - removed to add bicycle lanes
TARRING		Lack of street parking - influx of new permits for businesses impacts area
	Waterdown core	residents
		Increase frequency of service, particularly for connections to Hamilton city
TRANSIT ISSUES	Throughout Waterdown	centre
110 110011 100010	Throughout Waterdown	Transit system is under-utilized - limited destinations and inconvenient transfer
		at Aldershot GO Station
	ΓΕ Ν/Α	The bypass route is illogical and will not be used - King / Mountain Brow Road
		shound not be closed as an access route
D)/D 4 00 D 0 L ITE		Waterdown Road needs to be 4 lanes
BYPASS ROUTE		Bypass is long overdue
		Why does the bypass route up Avonsyde have 1 lane northbound and 3 lanes
		southbound at Dundas? Will this change when the final bypass is completed?
SCHOOL SAFETY		
CONCERNS	Throughout Waterdown	Speed and volume of traffic around schools; truck traffic
COLLISIONS	Evans Road	Fatal collision involving 10-year old girl in May 2017
ROAD		
MAINTENANCE	Waterdown Road	Needs to be redesigned and rebuilt
COMMUNITY CAR		
SHARE	Throughout Waterdown	Develop a community car share and bicycle share
JIIAIL	mioughout waterdown	Develop a community car share and bicycle share
SUPPORT DRIVERS		
JOIN SIN BINIVERO	Throughout Waterdown	Changes need to support drivers - cycling and transit facilities are adequate

Updated June 28, 2019 3 of 4



Waterdown Transportation Issues Summary



ISSUE / THEME	RELEVANT LOCATION(S)	DETAILS
NEW TRAIL	N/A	Trail following the creek through town could be paved to Highway 6 and under it to connect with arena and employment lands on other side of Highway 5.
NEW TRAIL		Create a multi-use path that starts on Avonsyde Boulevard and follows the bypass route to Highway 6. This should be a continuous, off-road route.
ELECTRIC VEHICLE CHARGING STATIONS	Throughout Waterdown	Install electric vehicle charging stations in business and commercial areas

Updated June 28, 2019 4 of 4

Appendix B

Focus Group Meeting #1





Waterdown Transportation Management Plan

Focus Group Meeting #1

Brandon Fox, BES, MCIP, RPP
Dillon Consulting Limited

January 30, 2019

Presentation Overview

- Introduce the project
- Outline of study progress to date
- Obtain your input to help shape the Management Plan.



Transportation Management Plan

Transportation Management Plan (TMP):

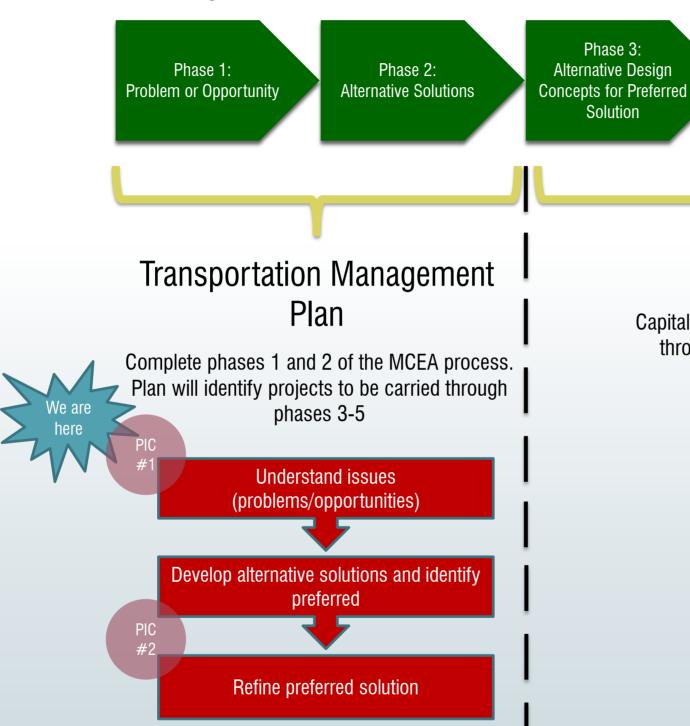
- A study that is a broad and strategic level of assessment
- Identifies transportation improvements over the short term (5 years) and long term (5 to 20 years)
- Integrates municipal transportation planning with environmental assessment objectives and land use planning
- Fulfills the requirement of Phases 1 and 2 of the Municipal Class Environmental Assessment Process
- Makes recommendations for future projects and their staged implementation
- Addresses all modes of transportation
- Provides a transportation system that is sustainable, integrated and encourages a healthy and active lifestyle.



Municipal Class Environmental Assessment Process

Phase 3:

Solution



Capital Project Delivery

Phase 4:

Environmental Study

Report

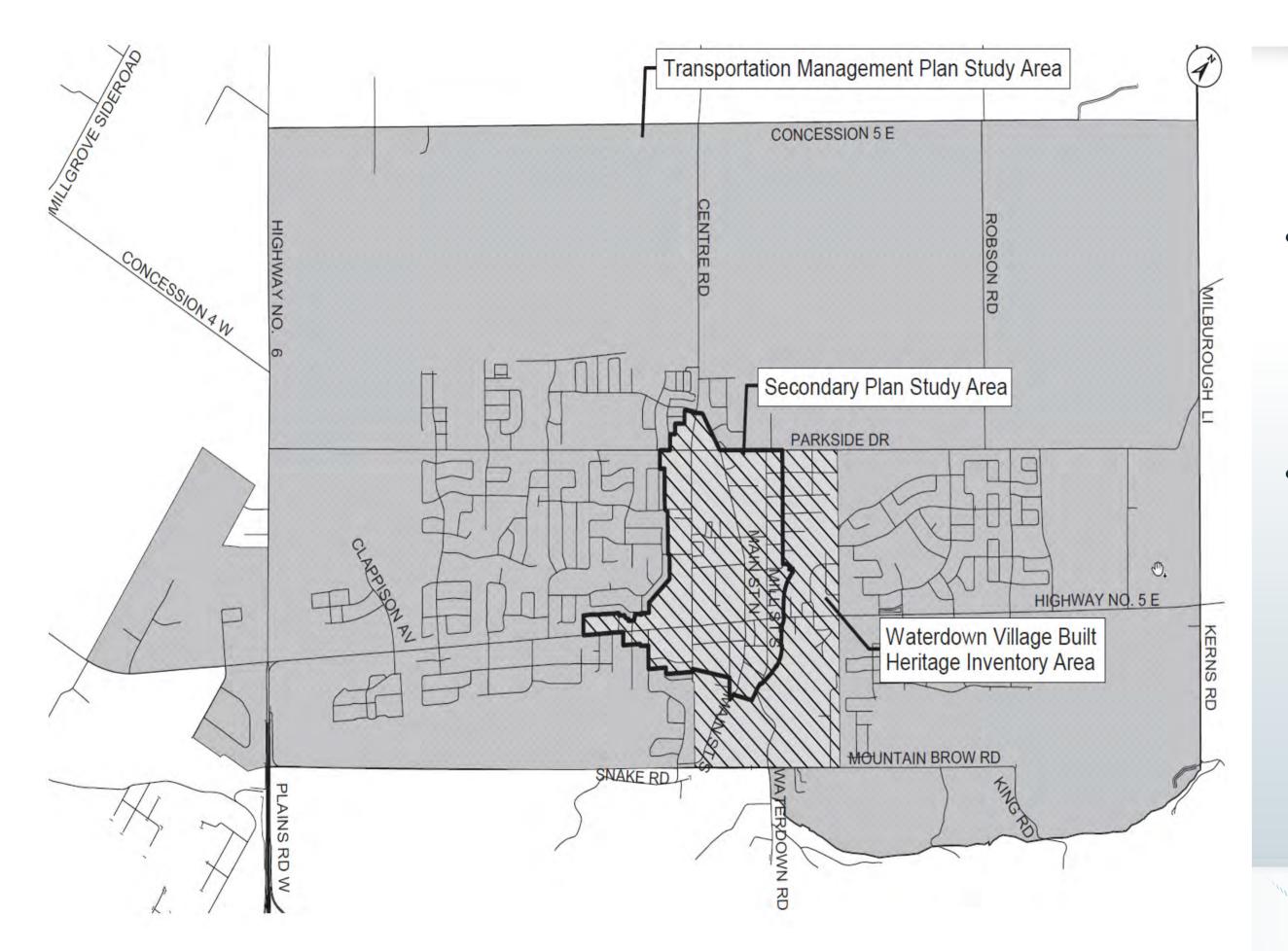
Capital improvements identified in the TMP will go through delivery process to implementation, subject to City budget and approval.

Study Process



Phase 5:

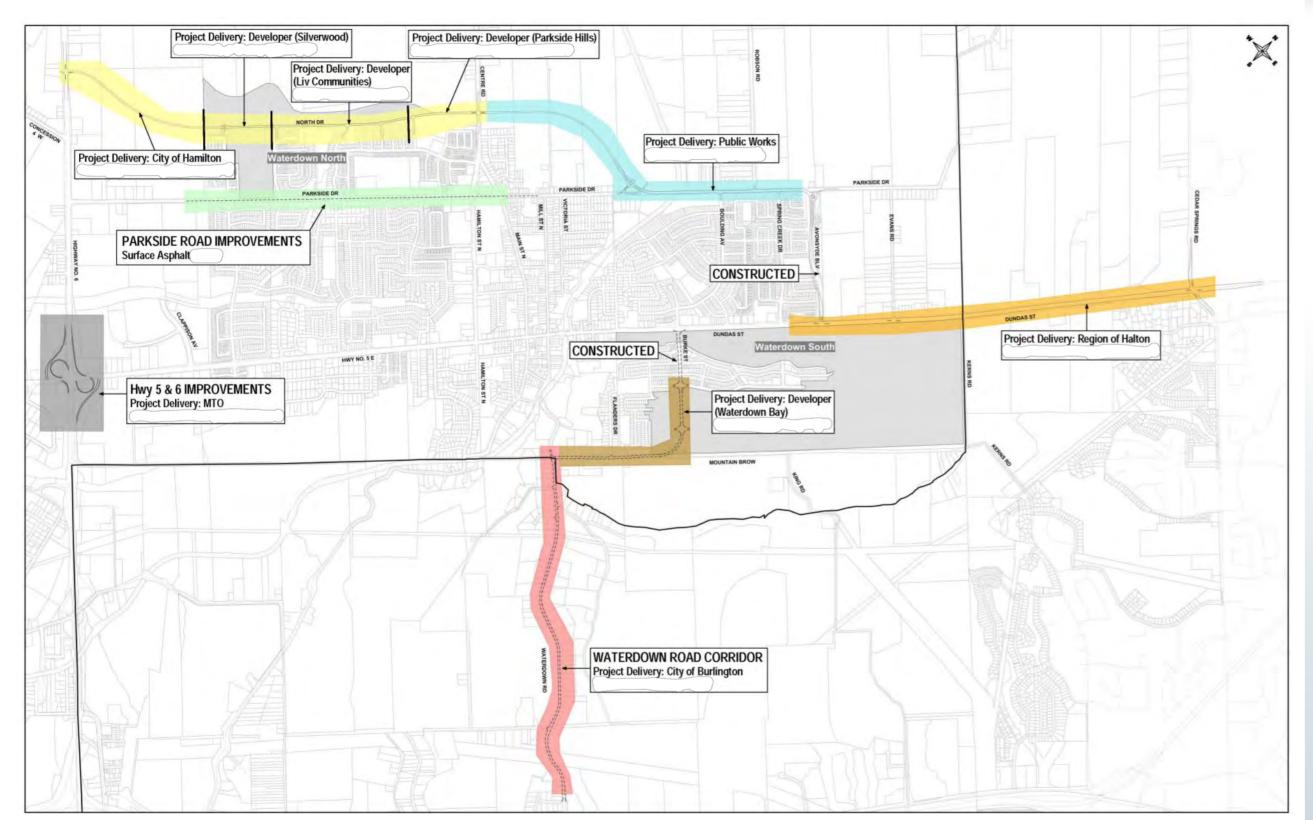
Implementation



Study Area

- Potential land use intensification in secondary plan area
- Population growth will lead to increase traffic in future





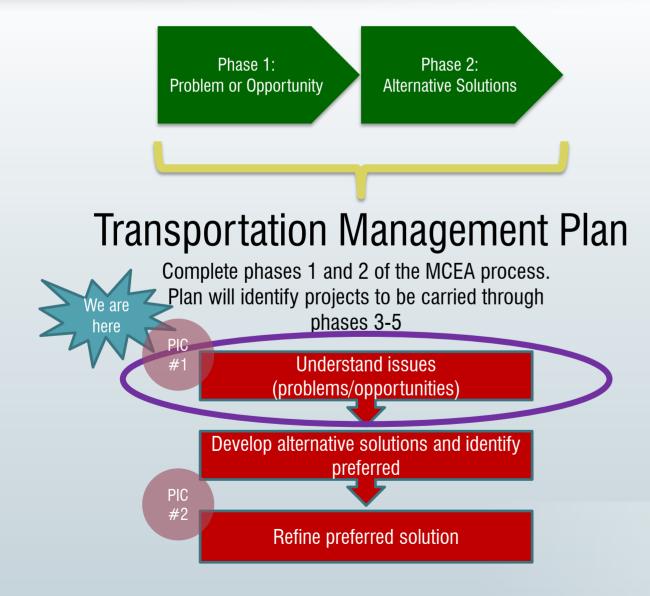
Source: Watedown/Aldershot Transportation Master Plan, 2016

Background Review

- ~20 previous relevant studies and reports
- Build on previous studies completed



Mapping Exercise



Add your ideas to the map using the "post-it" notes:

Things to consider:

- Where are there problems with transportation in the study area
- Are there locations where transportation could be improved
- Good places to walk, poor places to walk and important walking destinations
- Good places to ride a bicycle, poor places to ride a bicycle and important cycling destinations
- School issues (cross walks, "kiss and ride" stops, etc.)
- Where transit service and stops are good and where they need to be improved
- Parking problems
- Problems with truck routes
- Locations where traffic moves too slow (congestion), cuts through or speeds
- Locations that may not be a problem now but you think could be a problem in the future as population and employment grow.



Thank You!

- Thanks for your participation today and throughout this study. Your input is an important component of this study.
- Comments from today will:
 - be used to define the problem/opportunity statement
 - act as baseline information to help develop alternative solutions.

Next Steps:

- Public Information Centre #1, February 12, 2019
- Focus Group Meeting #2, Fall 2019
- Public Information Centre #2, Fall 2019.



Questions, Comments, Thoughts?

Mohan Philip, M.Eng., P.Eng. Brandon Fox, BES, MCIP, RPP

Project Manager Project Manager

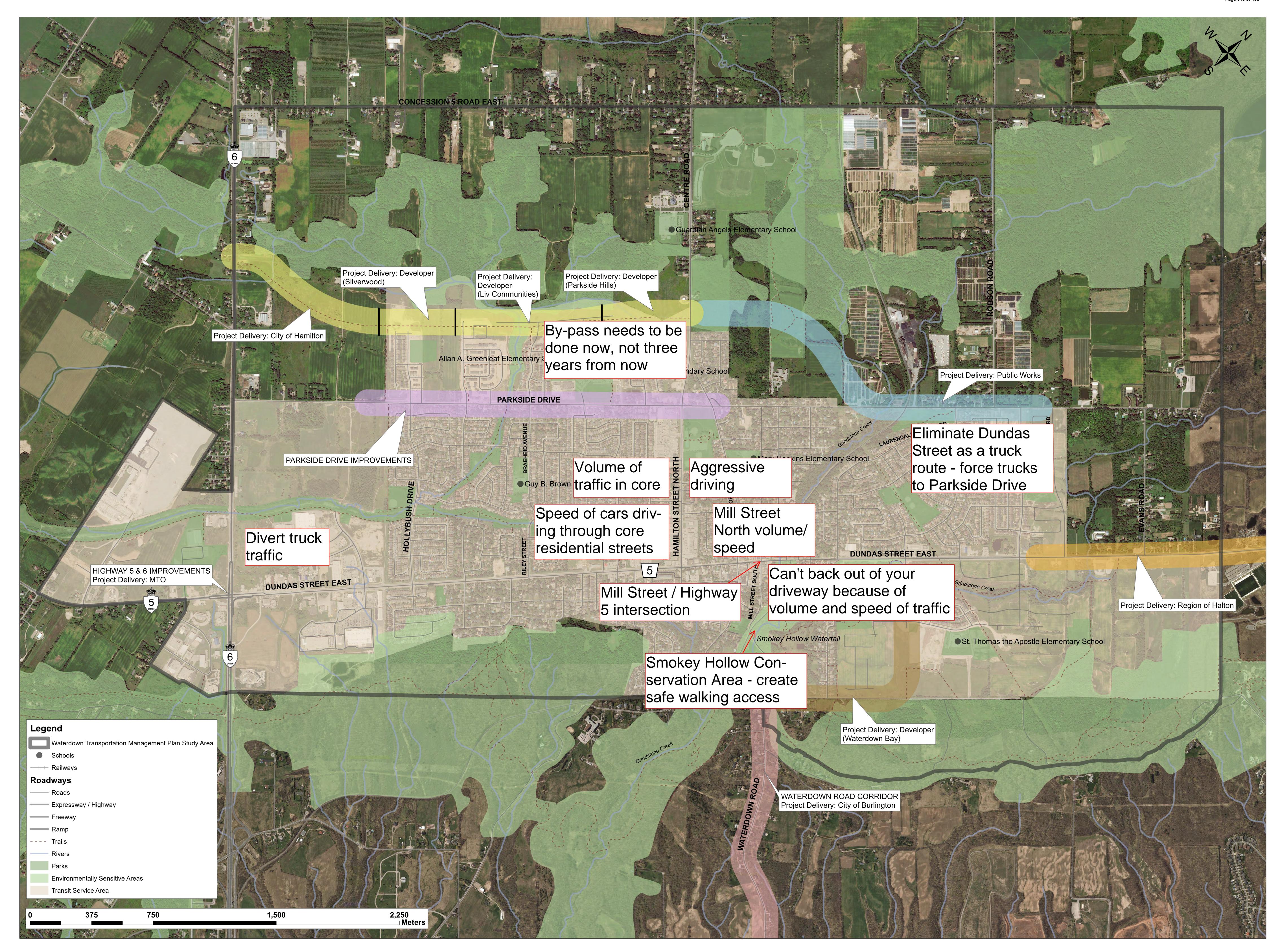
City of Hamilton Dillon Consulting Ltd.

Phone: 905-546-2424 Ext. 3438 Phone: 519-438-1288 Ext. 1307

Project updates and information can also be found online throughout the Study at:

www.hamilton.ca/waterdownTMP2019





Appendix B

Focus Group Meeting #2





CITY OF HAMILTON

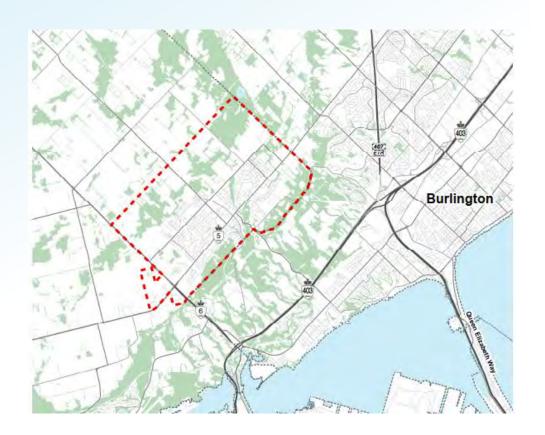
TRANSPORTATION MANAGEMENT PLAN

WATERDOWN Focus Group Meeting #2 September 30, 2019



Study Area/ Objectives

- Study will support Waterdown Community Node Secondary Plan
- In collaboration with the Waterdown Village Built Heritage Inventory
- Waterdown Transportation Management Plan Goals:
 - Address current and long-term transportation problems
 - Protect for future needs
 - Identify improvements work and their timing.



Study Process

PHASE 1:
Problem/Opportunity

PHASE 2: Alternative Solutions PHASE 3:
Alternative
Design Concepts
for Preferred
Solution

PHASE 4: Environmental Study Report

PHASE 5: Implementation

- Confirm the study purpose and justification
- Identify problem/opportunity
- Identify reasonable alternative solutions to the problem/opport unity
- Conduct an overview of existing conditions in natural, social and economic environment
- Identify impact of alternative solutions on the environment
- Evaluate alternatives and recommend a solution
- Select the preferred solution
- Document the decision making process
- Distribute final public notice for Master Plan

- Identify alternative design concepts
- Detailed review of existing conditions
- Evaluate alternative designs and recommend preferred design
- Consult review agencies and the public
- Select the preferred design

- Document the process by completing an Environmental Study Report
- (ESR) for a Schedule C project
- Design phase
- Proceed to design/constructi on of the project
- Monitor for environmental provisions and commitments

The Transportation Master Plan study is following the requirements of the Municipal Class Environmental Assessment (EA) (2000, as amended).

The Class EA process ensures that all relevant social, environmental and engineering factors are considered in the planning and design process. Public and agency input is integrated into the decision making process

Existing Conditions

- 88% of all travel for Waterdown residents is by car (90% for commuters)
- 65% of all trips made by Waterdown residents are to areas outside of Waterdown. This is magnified for commuters, as 81% of commuters leave and return to Waterdown on a typical workday
- There are few options for travel by sustainable modes (walking, cycling, and transit) that connect to useful destinations or provide the service that Waterdown residents require
- The three most important connections to the surrounding region for Waterdown residents are Dundas Street (east side), Mill Street, and Highway 6 South

- Depending on the time of day and peak direction of travel, 25-50% of the traffic entering Waterdown is passing through
- There is daily congestion through the centre of town along Dundas Street and Parkside Drive, as commuters leave and return to town
- There are a numerous operational and safety issues that are of concern for residents

What We've Heard...

- Traffic congestion issues:
 - Dundas Street
 - Parkside Drive
 - Mill Street
 - Main Street.
- Traffic Infiltration issues:
 - Nisbet Boulevard
 - Main Street
 - Griffin Street
 - Union Street
 - Spring Creek Drive
 - Evans Road
 - Boulding Avenue
 - Hollybush Drive.



What We've Heard...

- Speeding Complaints:
 - Nisbet Boulevard
 - Brian Boulevard
 - Rockhaven Lane
 - Main Street
 - Riley Street
 - Boulding Avenue.
- Safety Concerns:
 - Dundas Street request for sidewalks
 - Hamilton Street complaints of pedestrians not being comfortable walking
 - Parkside Drive request for sidewalks
 - General drivers ignoring stop signs on Griffin and Union Streets.



What We've Heard...

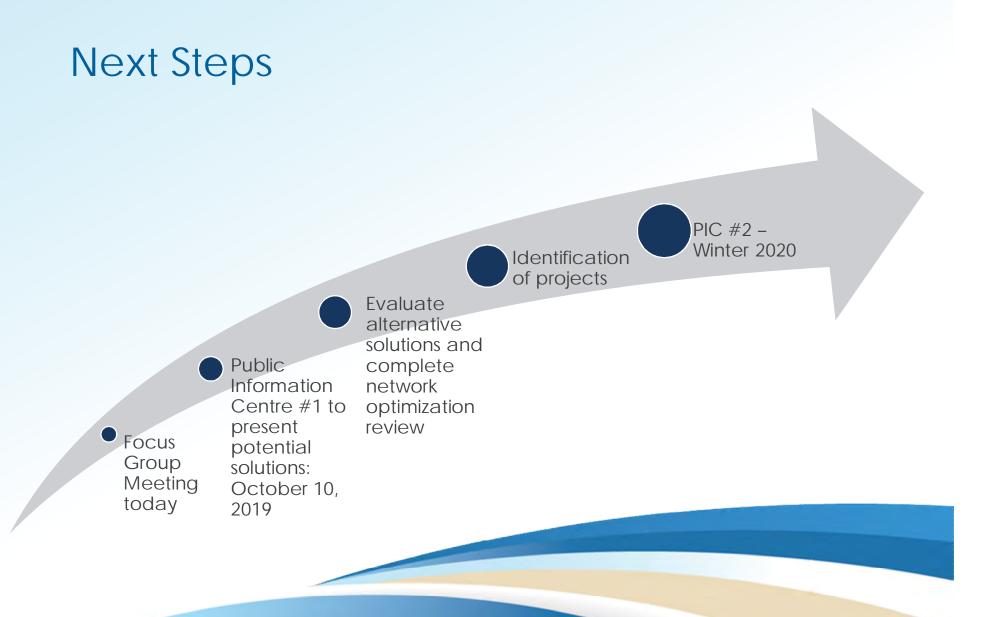
- Road Design Suggestions
 - Numerous requests for traffic signals, stopsigns throughout Waterdown
 - Request for right turn lanes at Hamilton Street/Parkside Drive
 - Request for re-routing truck traffic outside of core
- Other Issues:
 - Nisbet Boulevard



Problem and Opportunity Statement

Waterdown's transportation network capacity is insufficient to accommodate current and future traffic volumes, resulting in congestion, safety concerns, and traffic infiltration into residential neighbourhoods.

The Waterdown Transportation Management Plan Study was initiated to address short-term issues and identify long-term improvements needed for road network, public transit, and pedestrian and cyclist facilities.



Appendix B

Focus Group Meeting #3





CITY OF HAMILTON

TRANSPORTATION MANAGEMENT PLAN

WATERDOWN

Community Focus Group Meeting #3

September 23, 2020

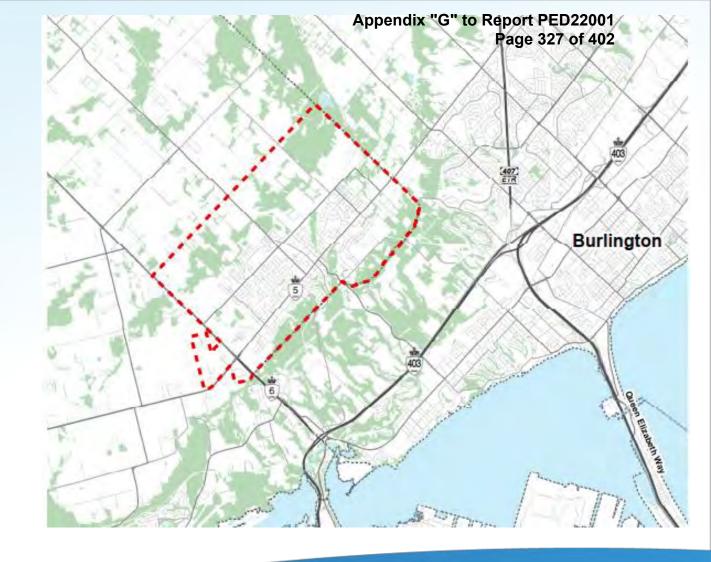


Today's Agenda

- Project Overview and Class Environmental Assessment Status
- Existing Transportation Issues and Analysis
- Alternative Solutions
- Comparative Evaluation
- Preferred Solution(s)
- Discussion

Study Area/ Objectives

- Study will support Waterdown Community Node Secondary Plan
- In collaboration with the Waterdown Village Built Heritage Inventory
- Waterdown Transportation Management Plan Goals:
 - Address current and long-term transportation problems
 - Protect for future needs
 - Identify improvement works and their timing.



Study Process

PHASE 1: Problem/Opport unity PHASE 2: Alternative Solutions

- Confirm the study purpose and justification Id
- Identify problem/opportunity
- Identify reasonable alternative solutions to the problem/opportunity
- Conduct an overview of existing conditions in natural, social and economic environment
- Identify impact of alternative solutions on the environment
- Evaluate alternatives and recommend a solution
- Select the preferred solution Document the We are

here

- Document the decision making process
- Distribute final public notice for Master Plan

PHASE 3:

Alternative Design Concepts for Preferred Solution

- Identify alternative design concepts
- Detailed review of existing conditions
- Evaluate alternative designs and recommend preferred design
- Consult review agencies and the public
- Select the preferred design

PHASE 4: Environmental Study Report

- Document the process by completing an Environmental Study Report (ESR) for a Schedule C project
- Design phase
- Proceed to design/construction of the project

PHASE 5:

Implementation

 Monitor for environmental provisions and commitments The Transportation Master Plan study is following the requirements of the Municipal Class Environmental Assessment (EA) (2000, as amended).

The Class EA process ensures that all relevant social, environmental and engineering factors are considered in the planning and design process. Public and agency input is integrated into the decision making process

Problem and Opportunity Statement

Waterdown's transportation network capacity is becoming insufficient to accommodate current and future traffic volumes, resulting in congestion, safety concerns, and traffic infiltration into residential neighbourhoods.

The Waterdown Transportation Management Plan Study was initiated to address short-term issues and identify long-term improvements needed for road network, public transit, and pedestrian and cyclist facilities.

Transportation Issues – Highlights of What We've Heard

Congestion Issues:

- Dundas Street between Hamilton Street and Mill Street – AM and PM peak periods
- Mill Street (NB) at Dundas Street PM peak period
- Right turn from Dundas Street onto Avonsyde Boulevard

Neighbourhood Traffic infiltration

- Spring Creek Drive
- Hollybush Drive
- Nisbet Boulevard
- Main Street North

Speeding

- Riley Street
- Brian Boulevard
- Main Street North

Safety

- Concerns on Mill Street South in the Smokey Hollow area
- Road curves Brian Blvd
- School crossing Guy Brown School (Brian Boulevard @ Longyear Drive)
- Left turn from Boulding Avenue onto Parkside Drive during PM peak period.

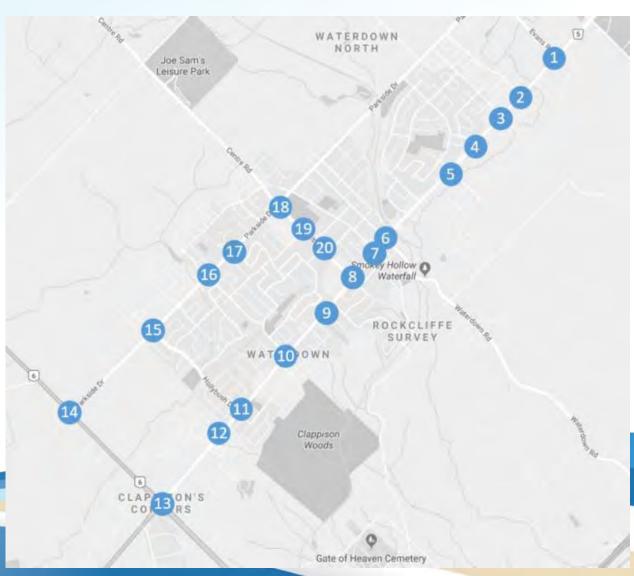
Road Network and Capacity Analysis

- Overall sufficient capacity for driving during peak commuting hours with localised issues
- Addition of new East/West Roadway (North Waterdown Drive) relieves capacity pressures on Parkside Drive
- Most significant congestion location:
 - Dundas Street between Mill Street and Hamilton Street North.
 - Issues in the peak commuting directions: eastbound in the morning, and westbound in the afternoon.



Intersection Analysis

- Forecasted 2031 turning movement volumes at 20 signalized intersections for analysis
- Two intersections showed signs of congestion during the peak commuting hours:
 - 6 Dundas Street / Mill Street LOS F/F
 - 13 Dundas Street / Highway 6 LOS E/F
- Some individual movements with issues
 - 2 Dundas / Avonsyde Westbound right in PM



Alternative Solution "Buckets"

Transportation Demand Management

Safety

Evaluation Criteria

- Transportation
 - Pedestrians
 - Cyclists
 - Transit Passengers
 - Mobility
 - Delay
 - Emergency Services
- Public Health
 - Air Quality
 - Safety
 - Social Interaction
 - Transportation equity
 - Active Transportation

- Physical Environment
 - Cultural Heritage
 - Green space
 - Streetscape and public spaces
- Costs
 - Capital
 - Operations / Maintenance
 - Economic benefits

Network Capacity

Issue / Opportunity: Capacity

Alternative Solution		Transportation	Public Health	Physical Environment	Costs	Recommended
Intersection	Adjust Signal Timing at Dundas St./Mill St.	Good	Neutral	Neutral	Excellent	Yes
	Add exclusive westbound right turn at Dundas St./ Avonsyde Dr. and overlapping phasing	Good	Neutral	Fair	Fair	Yes
Strategic	Widen Dundas Street between Mill Street and Hamilton Street North	Good	Poor	Poor	Poor	No

Alternatives 1 and 2 recommended as they address localized capacity issues on the Dundas Street corridor with minor anticipated impacts

Network Capacity (Cont'd)

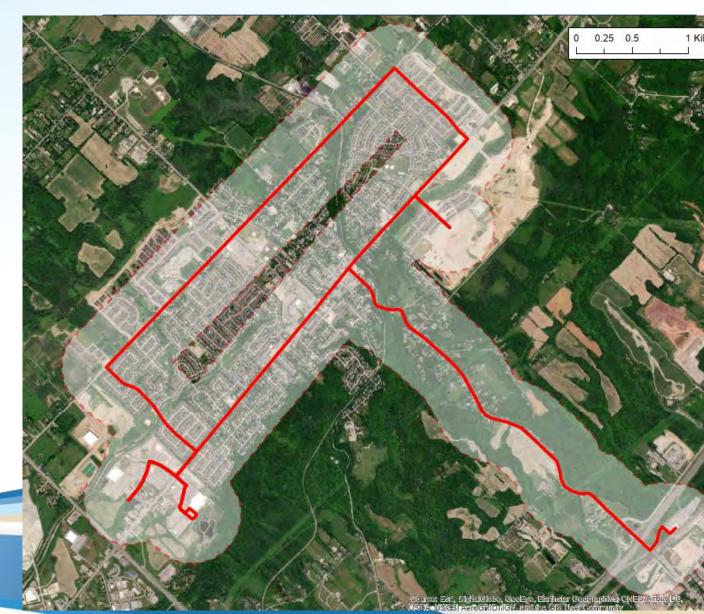
- Widening of Dundas Street between Mill Street and Hamilton Street North – NOT RECOMMENDED
 - Reason to recommend:
 - Provides relief for daily peak hour congestion
 - Reasons not to recommend
 - Potential impacts on Downtown
 - Heritage area
 - Minimization of Public Realm
 - Removal of on-street parking
 - Strips downtown core of character and value
 - Impacts to other travel modes
 - Reduces possibilities for cycling infrastructure on Dundas Street
 - Reduces attractiveness for walking and spending time downtown
 - Reduces possibilities for transit priority
 - Auto-focused solution
 - Impacts on public health, physical environment, and costly
 - Public and stakeholder concerns
- Need a range of smaller solutions that work together

Transportation Demand Management

Issue / Opportunity: Transportation Demand Management							
Alternative Solution		Transportation	Public Health	Physical Environment	Costs	Recommended	
	Increase amount of transit service (more buses on existing Route 18)	Good	Good	Neutral	Fair	Yes	
Transit	Improve transit coverage (modify Route 18)	Excellent	Good	Neutral	Fair	Yes	
	Improve Regional Transit Connections	Good	Good	Neutral	Fair	Yes	
	Introduce Alternative Service Delivery	Excellent	Good	Neutral	Fair	Yes	
Active Transportation	Implement connected cycling network	Excellent	Excellent	Good	Fair	Yes	
	Improve walking network	Excellent	Excellent	Excellent	Fair	Yes	

Increase Service on Route 18

- Existing Route 18 Waterdown
 - Alternating clockwise and counter-clockwise routing
 - Aldershot GO/VIA Station to the Flamborough Business Park
- Transit Plan
 - Improved service frequency from 30 min to 20 min per direction
 - Expanded hours of service
 - Include Sunday service



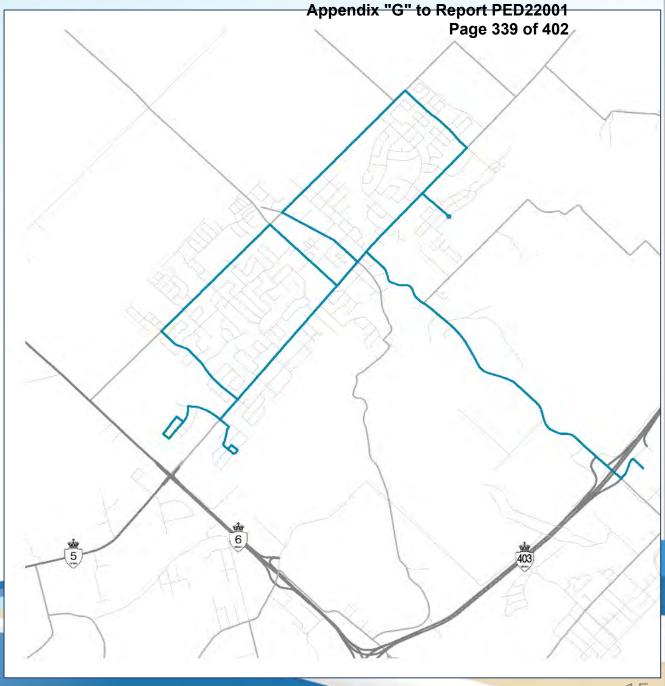
Modify Route 18

Objectives

- Improved Service Connections to Community Core as part of Community Core Secondary Plan
- Improves connections with other planned transit services

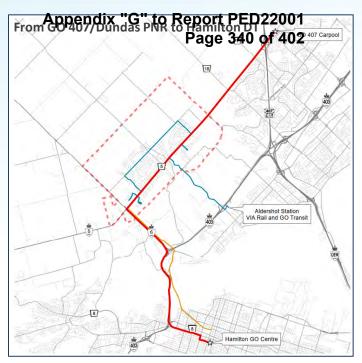
• Transit Plan

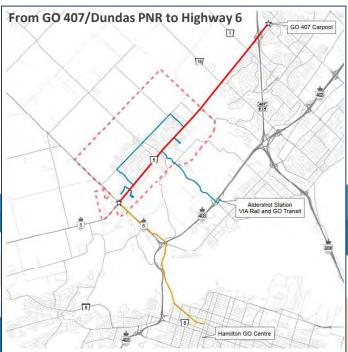
- Add approx. 2 km in route length
- Includes 20 min service frequency per direction, expanded hours, and Sunday service.



Add new Regional route

- Under Study / Already Planned Services
 - Dundas BRT
 - BLAST Rapid Transit Network
- Objective
 - Improve regional connections for Waterdown Residents
 - Improve employee access
- Transit Plan
 - Provide Regional Route between GO 407 Carpool Lot and Downtown Hamilton (pre BLAST)
 - Provide Regional Route between GO 407 Carpool Lot and Highway 6 (Post BLAST)
 - 15 minute Weekday, Saturday and Sunday
- * Continue coordination with ongoing Dundas BRT





Alternative Service Delivery (ASD)

Objective

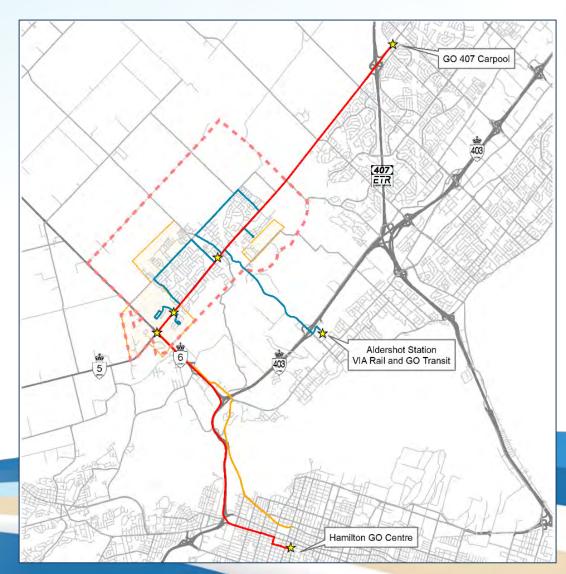
- Expand service to development areas to meet 400 m catchment service standard
- Uses technology, smaller vehicles, and sometimes third party providers to "dynamically" serve customers

ASD Conditions

- The relative cost of the service should not exceed the cost of operating a conventional fixed-route in the same area;
- The planned development area will be low-density, which is anticipated to result in low-ridership demand; and/or
- The planned development area will be located on the fringe of the urban area.

Transit Plan

- Establish 3 ASD areas where passengers are provided with ASD with connections to key transfer points
- Continue partnerships with employers to coordinate shift-workers, and provide guaranteed ride homes (outside of normal service hours)



Active Transportation

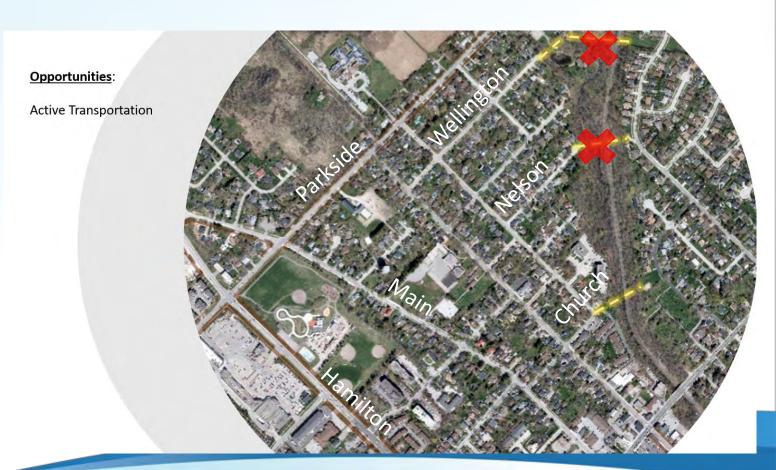
Waterdown Planned Cycling and AT Network

- The planned cycling and AT network for Waterdown and the adjacent area is robust
- The priority ranking of critical facilities on Dundas St., Parkside Dr. and Hamilton St. are low:
 - 89, 116, 131 and 133 out of a total of 202 projects across the city
- The planned cycling and AT network is from the 2018 CMP, which was updated from the plan established in 2009
 - Significant changes to both the conditions within Waterdown and the technical design guidance for cycling and active transportation facilities



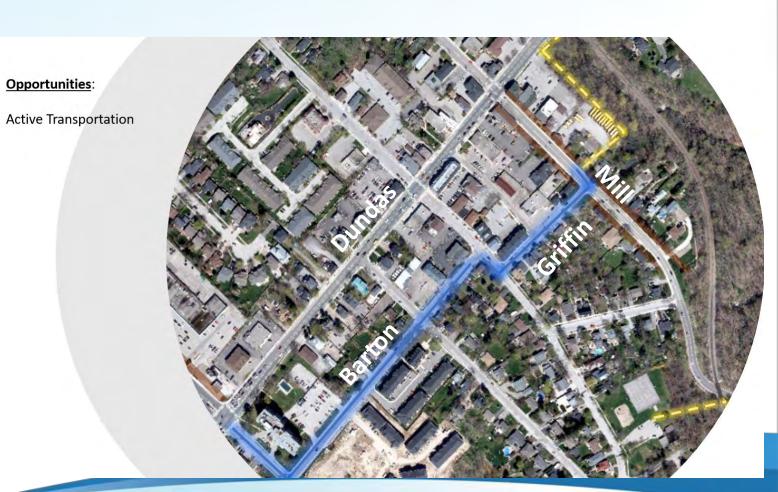
Active Transportation

- Supplemental cycling connections
- Crossing of Grindstone Creek



Active Transportation

- Supplemental cycling connections
- Crossing of Grindstone Creek
- Parallel to Dundas Street
 - Barton / Griffin
 - Connection to Dundas via private land
- Connection to Smokey Hollow Waterfall



Supplementary Network Capacity **Scenarios**

New interchange at Highway 5 / Highway 6 – West **Side Access Options**

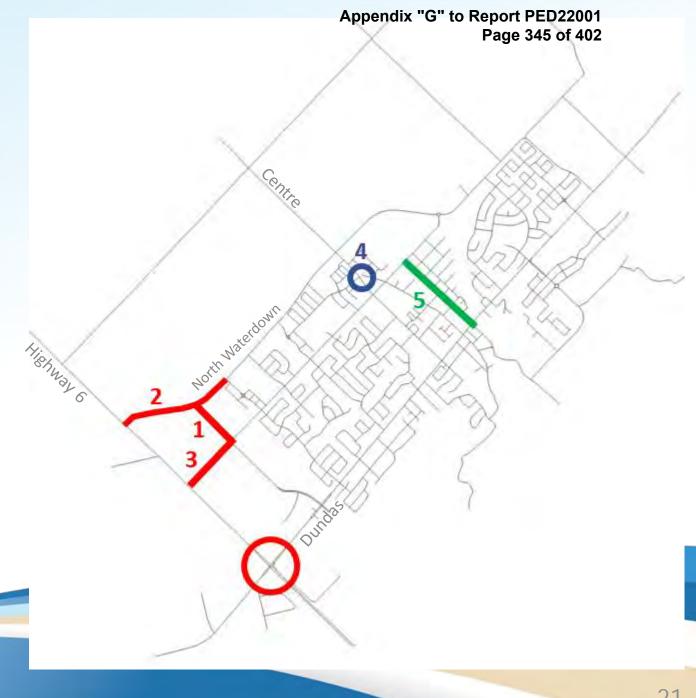
- 1 Addition of Clappison Avenue between Parkside Drive and North Waterdown Drive
- 2 Delayed implementation of connection to Highway 6
- **3** Closure of Parkside Drive at Highway 6

New Connection

4 Main Street North connection to Centre Road/Hamilton Street North

Access Changes

- **5** Conversion of Mill Street to one-way (four options)
 - a) Southbound-only between Parkside Drive and Dundas Street
 - b) Northbound-only between Parkside Drive and Dundas Street
 - c) Southbound-only between Church Street and Dundas Street
 - d) Northbound-only between Church Street and Dundas Street



Supplementary Network Capacity Opportunities

Issue / Opportunity: Capacity (Supplementary Opportunities)						
Opportunity	Transportation	Public Health	Physical Environment	Costs	Recommended	
1 - Addition of Clappison Avenue between Parkside Drive and North Waterdown Drive	Fair	Fair	Neutral	Fair	No	
2 – Delayed implementation of connection to Highway 6	Fair	Neutral	Good	Good	No	
3 - Closure of Parkside Drive at Highway 6	Fair	Fair	Good	Fair	No	
4 - Main Street North connection to Centre Road/Hamilton Street North	Poor	Poor	Neutral	Fair	No	
5a - Mill Street southbound-only between Parkside Drive and Dundas Street	Good	Good	Neutral	Poor	No	
5b - Mill Street northbound-only between Parkside Drive and Dundas Street	Fair	Good	Neutral	Poor	No	
5c - Mill Street southbound-only between Church Street and Dundas Street	Good	Good	Neutral	Fair	No	
5d - Mill Street northbound-only between Church Street and Dundas Street	Fair	Good	Neutral	Fair	No	

None were recommended for implementation as they do not address the fundamental problem of congestion and capacity issues in Waterdown. The solutions may have localized improvements, but do not address the network capacity problem.

Safety

Solutions to reduce traffic infiltration through neighbourhoods, as well as to reduce vehicle speeds are being brought forward:

- Traffic Calming
 - Speed cushions, raised centre islands, raised pedestrian crossovers, centreline flex posts, curb extensions
- Converting existing school crosswalks to pedestrian crossovers





Safety





Additional solutions:

- Pavement Markings
 - Painted centrelines, on-street bike lanes
- Adding pedestrian crossovers at roundabouts
- Providing additional speed limit signs and speed feedback signage





Discussion

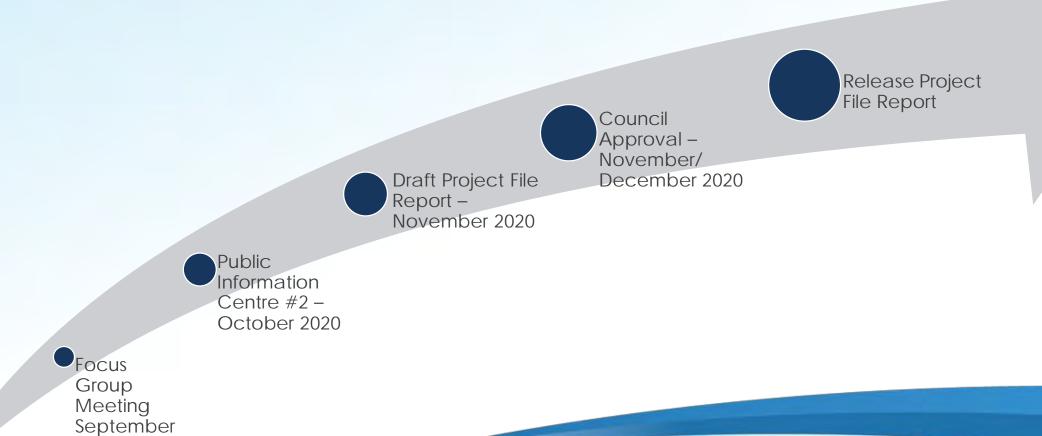
Do you feel the transit solutions and increased service will aid in getting people out of their cars and onto transit?

Do you feel the active transportation system is comprehensive enough for users to complete in-town trips via cycling or alternative means instead of vehicle trips?

Do you feel that not widening Dundas Street is the right solution for the residents of Waterdown?

Next Steps

23, 2020



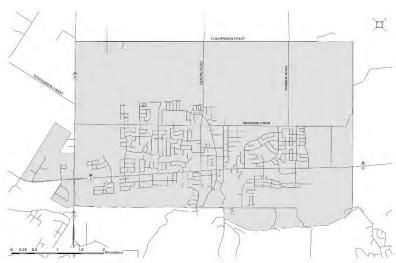
Appendix B

Notice of Commencement and Public Information Centre #2



Waterdown Transportation Management Planage 352 of 402 Notice of Public Information Centre #2

The purpose of the Waterdown
Transportation Management Plan
Study is to review the existing
transportation network and identify
areas for improvements to address
existing and future transportation
needs. The study is being completed
following the requirements of Phase 1
and 2 of the Municipal Class EA
process. Public Information Centre #2
will present the recommended
solutions for the project.



How to Participate:

There are two ways to participate. All consultations are being held virtually to protect the health and safety of Hamilton residents and our staff.

Review Online Materials Anytime

Visit the **PROJECT WEBSITE** anytime from **October 14 to November 11, 2020,** to view the information display panels. A comment form will be available until midnight on November 11. Materials are available 24 hours a day, 7 days a week.

The project website is:

www.hamilton.ca/waterdownTMP2019

Join the Virtual Information Meeting

There will be a LIVE Information Meeting held on Wednesday, October 21, 2020, from 5:30 pm to 7:30 pm. The project team will provide an overview presentation of the project and answer your questions. Individuals can participate online or by phone. Pre-registration is required and can be done at the below website:

www.hamilton.ca/waterdownTMP2019

Additional information about this study is available on the project website. If you have any questions or comments about the study or would like to be added to the project mailing list, please contact:

Mohan Philip, M.Eng., P.Eng. Project Manager, Transportation Planning City of Hamilton transportation@hamilton.ca

Do you have any accessibility requirements in order to be able to review the material and comment on the study? Please contact Mohan Philip via email or by phone at 905-546-2424 Ext. 3438.

Information will be collected in accordance with the Freedom of Information and Protection of Privacy Act. With the exception of personal information, all comments will become part of the public record.

This Notice was published in the Flamborough Review on October 8, and 15, 2020.



CITY OF HAMILTON

TRANSPORTATION MANAGEMENT PLAN

WATERDOWN

Public Information Centre #2

October 21, 2020

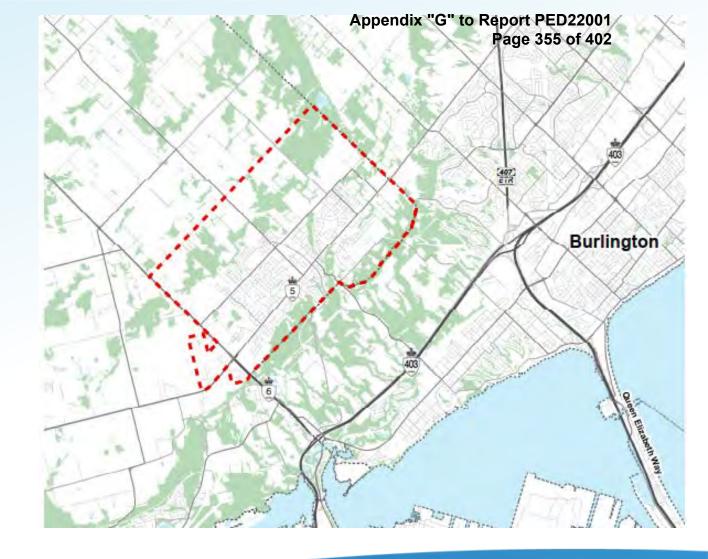


Today's Agenda

- Project Overview and Class Environmental Assessment Status
- What We've Heard
- Alternative Solutions
- Comparative Evaluation
- Preferred Solution(s)
- Discussion

Study Area/ Objectives

- Study will support Waterdown Community Node Secondary Plan
- In collaboration with the Waterdown Village Built Heritage Inventory
- Waterdown Transportation Management Plan Goals:
 - Address current and long-term transportation problems
 - Protect for future needs
 - Identify improvement works and their timing.



Study Process

PHASE 1: Problem/Opport unity PHASE 2: Alternative Solutions

- Confirm the study purpose and justification
- Identify problem/opportunity

 Identify reasonable alternative solutions to the problem/opportunity

- Conduct an overview of existing conditions in natural, social and economic environment
- Identify impact of alternative solutions on the environment
- Evaluate alternatives and recommend a solution
- Select the preferred solution

We are

here

- Document the decision making process
- Distribute final public notice for Master Plan

PHASE 3:

Alternative
Design Concepts
for Preferred
Solution

- Identify alternative design concepts
- Detailed review of existing conditions
- Evaluate alternative designs and recommend preferred design
- Consult review agencies and the public
- Select the preferred design

PHASE 4: Environmental Study Report

 Document the process by completing an Environmental Study Report (ESR) for a Schedule C project

- PHASE 5: Implementation
- Design phaseProceed to design/construction of the project
- Monitor for environmental provisions and commitments

The Transportation Master Plan study is following the requirements of the Municipal Class Environmental Assessment (EA) (2000, as amended).

The Class EA process ensures that all relevant social, environmental and engineering factors are considered in the planning and design process. Public and agency input is integrated into the decision making process

Problem and Opportunity Statement

Waterdown's transportation network capacity is becoming insufficient to accommodate current and future traffic volumes, resulting in congestion, safety concerns, and traffic infiltration into residential neighbourhoods.

The Waterdown Transportation Management Plan Study was initiated to address short-term issues and identify long-term improvements needed for road network, public transit, and pedestrian and cyclist facilities.

Transportation Issues – Highlights of What We've Heard

Congestion Issues:

- Dundas Street between Hamilton Street and Mill Street – AM and PM peak periods
- Mill Street (NB) at Dundas Street PM peak period
- Right turn from Dundas Street onto Avonsyde Boulevard

Neighbourhood Traffic infiltration

- Spring Creek Drive
- Hollybush Drive
- Nisbet Boulevard
- Main Street North

Speeding

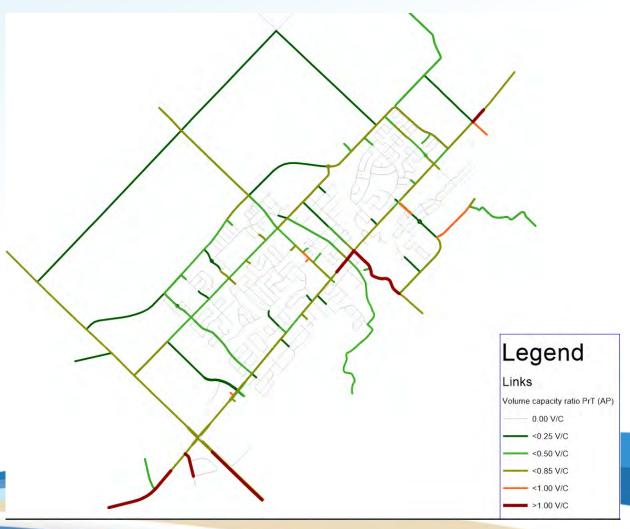
- Riley Street
- Brian Boulevard
- Main Street North

Safety

- Concerns on Mill Street South in the Smokey Hollow area
- Road curves Brian Blvd
- School crossing Guy Brown School (Brian Boulevard @ Longyear Drive)
- Left turn from Boulding Avenue onto Parkside Drive during PM peak period.

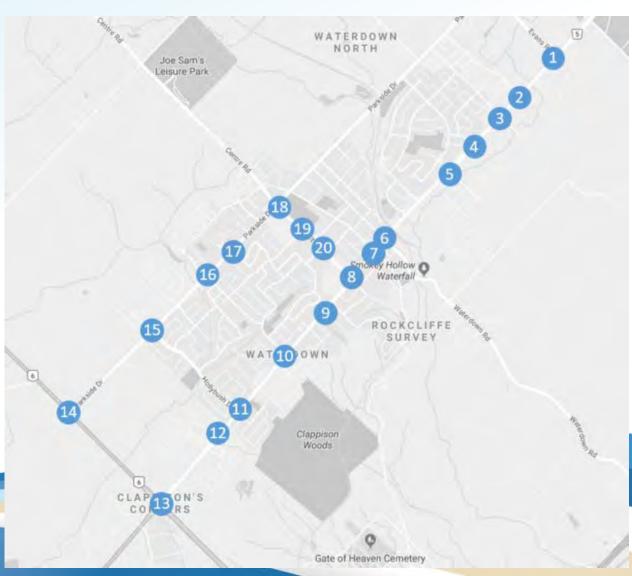
Road Network and Capacity Analysis

- Overall sufficient capacity for driving during peak commuting hours with localised issues
- Addition of new East/West Roadway (North Waterdown Drive) relieves capacity pressures on Parkside Drive
- Most significant congestion location:
 - Dundas Street between Mill Street and Hamilton Street North.
 - Issues in the peak commuting directions: eastbound in the morning, and westbound in the afternoon.



Intersection Analysis

- Forecasted 2031 turning movement volumes at 20 signalized intersections for analysis
- Two intersections showed signs of congestion during the peak commuting hours:
 - 6 Dundas Street / Mill Street LOS F/F
 - 13 Dundas Street / Highway 6 LOS E/F
- Some individual movements with issues
 - 2 Dundas / Avonsyde Westbound right in PM



Alternative Solution "Buckets"

Transportation Demand Management

Safety

Evaluation Criteria

- Transportation
 - Pedestrians
 - Cyclists
 - Transit Passengers
 - Mobility
 - Delay
 - Emergency Services
- Public Health
 - Air Quality
 - Safety
 - Social Interaction
 - Transportation equity
 - Active Transportation

- Physical Environment
 - Cultural Heritage
 - Green space
 - Streetscape and public spaces
- Costs
 - Capital
 - Operations / Maintenance
 - Economic benefits

Network Capacity

Issue / Opportunity: Capacity

Alternative Solution		Public Health	Physical Environment	Costs	Recommended
djust Signal Timing at Dundas ./Mill St.	Good	Neutral	Neutral	Excellent	Yes
dd exclusive westbound right turn Dundas St./ Avonsyde Dr. and verlapping phasing	Good	Neutral	Fair	Fair	Yes
crease vehicle capacity on undas Street between Mill Street	Good	Poor	Poor	Poor	No
k k v	just Signal Timing at Dundas /Mill St. d exclusive westbound right turn Dundas St./ Avonsyde Dr. and erlapping phasing	just Signal Timing at Dundas /Mill St. d exclusive westbound right turn Dundas St./ Avonsyde Dr. and erlapping phasing grease vehicle capacity on	just Signal Timing at Dundas /Mill St. d exclusive westbound right turn Dundas St./ Avonsyde Dr. and erlapping phasing Good Neutral Rease vehicle capacity on	just Signal Timing at Dundas /Mill St. Good Neutral Neutral Hubilc Health Environment Neutral Neutral Fair Good Neutral Fair Frairerease vehicle capacity on	just Signal Timing at Dundas /Mill St. Good Neutral Neutral Fair Fair Fair Fair Frair Frair Frair Frair

Alternatives 1 and 2 recommended as they address localized capacity issues on the Dundas Street corridor with minor anticipated impacts

Network Capacity (Cont'd)

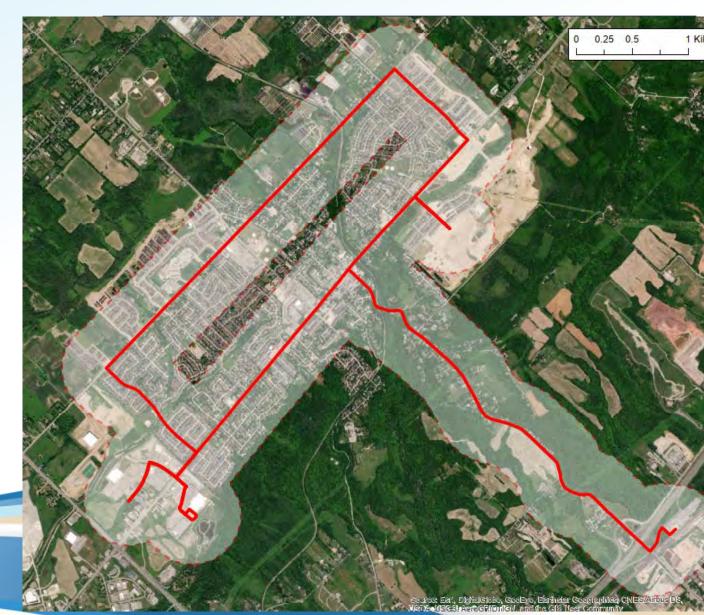
- Increase vehicle capacity on Dundas Street between Mill Street and Hamilton Street North – NOT RECOMMENDED
 - Reason to recommend:
 - Provides relief for daily peak hour congestion
 - Reasons not to recommend
 - Potential impacts on Downtown
 - Heritage area
 - Minimization of Public Realm
 - Removal of on-street parking
 - Strips downtown core of character and value
 - Impacts to other travel modes
 - Reduces possibilities for cycling infrastructure on Dundas Street
 - Reduces attractiveness for walking and spending time downtown
 - Reduces possibilities for transit priority
 - Auto-focused solution
 - Impacts on public health, physical environment, and costly
 - Public and stakeholder concerns
- Need a range of smaller solutions that work together

Transportation Demand Management

Issue / Opportunity: Transportation Demand Management						
Alternative Solution		Transportation	Public Health	Physical Environment	Costs	Recommended
Transit	Increase amount of transit service (more buses on existing Route 18)	Good	Good	Neutral	Fair	Yes
	Improve transit coverage (modify Route 18)	Excellent	Good	Neutral	Fair	Yes
	Improve Regional Transit Connections	Good	Good	Neutral	Fair	Yes
	Introduce Alternative Service Delivery	Excellent	Good	Neutral	Fair	Yes
Active Transportation	Implement connected cycling network	Excellent	Excellent	Good	Fair	Yes
	Improve walking network	Excellent	Excellent	Excellent	Fair	Yes

Increase Service on Route 18

- Existing Route 18 Waterdown
 - Alternating clockwise and counter-clockwise routing
 - Aldershot GO/VIA Station to the Flamborough Business Park
- Transit Plan
 - Improved service frequency from 30 min to 20 min per direction
 - Expanded hours of service
 - Include Sunday service



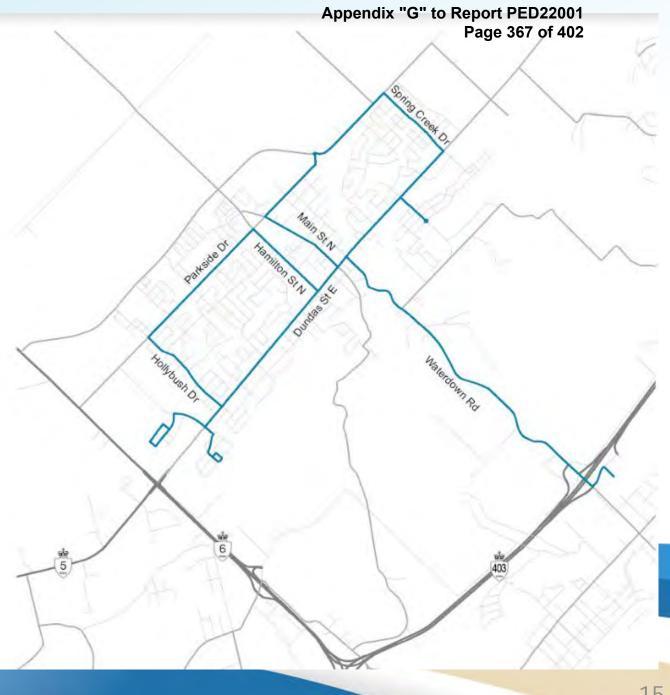
Modify Route 18

Objectives

- Improved Service Connections to Community Core as part of Community Core Secondary Plan
- Improves connections with other planned transit services

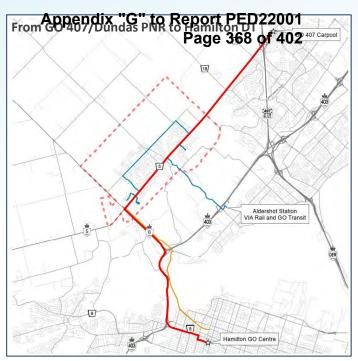
Transit Plan

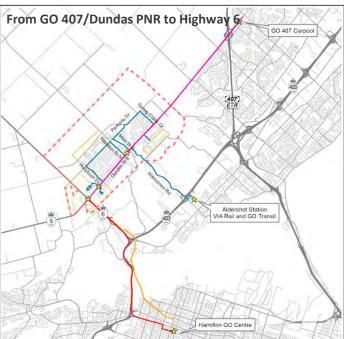
- Add approx. 2 km in route length
- Includes 20 min service frequency per direction, expanded hours, and Sunday service.



Add new Regional route

- Under Study / Already Planned Services
 - Dundas BRT
 - BLAST Rapid Transit Network
- Objective
 - Improve regional connections for Waterdown Residents
 - Improve employee access
- Transit Plan
 - Provide Regional Route between GO 407 Carpool Lot and Downtown Hamilton (pre BLAST)
 - Provide Regional Route between GO 407 Carpool Lot and Highway 6 (Post BLAST)
 - 15 minute Weekday , Saturday and Sunday
- * Continue coordination with ongoing Dundas BRT





Alternative Service Delivery (ASD)

Objective

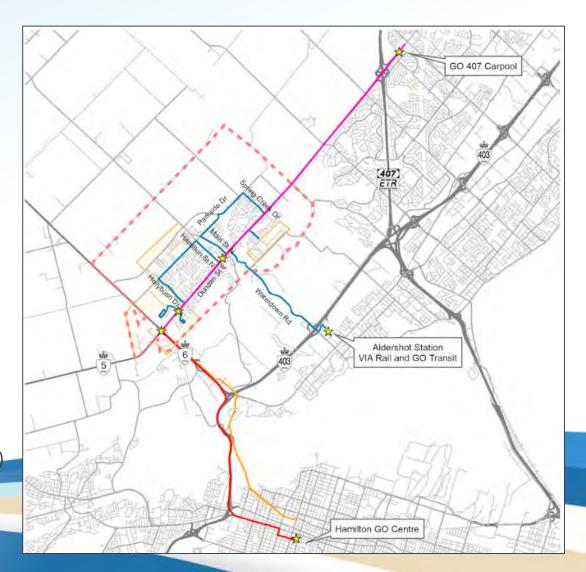
- Expand service to development areas to meet 400 m catchment service standard
- Uses technology, smaller vehicles, and sometimes third party providers to "dynamically" serve customers

ASD Conditions

- The relative cost of the service should not exceed the cost of operating a conventional fixed-route in the same area;
- The planned development area will be low-density, which is anticipated to result in low-ridership demand; and/or
- The planned development area will be located on the fringe of the urban area.

Transit Plan

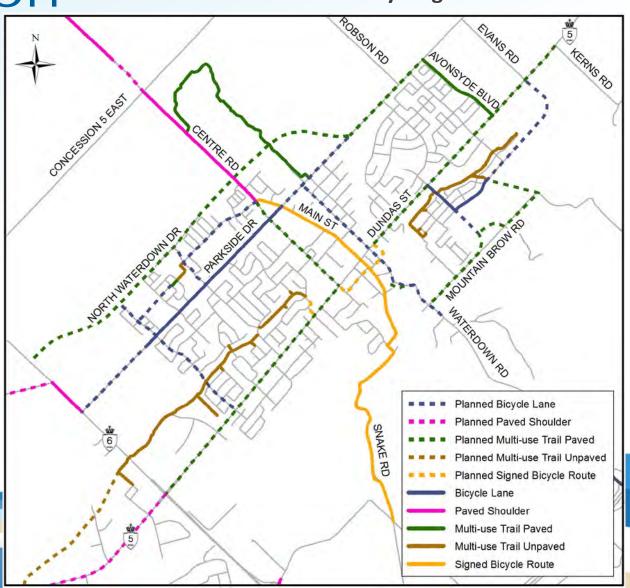
- Establish 3 ASD areas where passengers are provided with ASD with connections to key transfer points
- Continue partnerships with employers to coordinate shift-workers, and provide guaranteed ride homes (outside of normal service hours)



Active Transportation

Waterdown Planned Cycling and AT Network

- The planned cycling and AT network for Waterdown and the adjacent area is robust
- The priority ranking of critical facilities on Dundas St., Parkside Dr. and Hamilton St. are low:
 - 89, 116, 131 and 133 out of a total of 202 projects across the city
- The planned cycling and AT network is from the 2018 CMP, which was updated from the plan established in 2009
 - Significant changes to both the conditions within Waterdown and the technical design guidance for cycling and active transportation facilities



Active Transportation

- Supplemental cycling connections
- Crossing of Grindstone Creek



Active Transportation

- Supplemental cycling connections
- Crossing of Grindstone
 Creek
- Parallel to Dundas Street
 - Barton / Griffin
 - Connection to Dundas via private land
- Connection to Smokey Hollow Waterfall



Supplementary Network Capacity **Scenarios**

New interchange at Highway 5 / Highway 6 – West **Side Access Options**

- 1 Addition of Clappison Avenue between Parkside Drive and North Waterdown Drive
- 2 Delayed implementation of connection to Highway 6
- **3** Closure of Parkside Drive at Highway 6

New Connection

4 Main Street North connection to Centre Road/Hamilton Street North

Access Changes

- **5** Conversion of Mill Street to one-way (four options)
 - a) Southbound-only between Parkside Drive and Dundas Street_
 - b) Northbound-only between Parkside Drive and Dundas Street
 - c) Southbound-only between Church Street and Dundas Street
 - d) Northbound-only between Church Street and Dundas Street



Supplementary Network Capacity Opportunities

Issue / Opportunity: Capacity (Supplementary Opportunities)					
Opportunity	Transportation	Public Health	Physical Environment	Costs	Recommended
1 - Addition of Clappison Avenue between Parkside Drive and North Waterdown Drive*	Fair	Fair	Neutral	Fair	No*
* The addition of Clappison Ave. between Parkside Dr. and North Waterdown Dr. is not recommended to address the current problem statement. However, the addition may be required as a component of the new Highway 5/6 Interchange planned by MTO. Under this scenario, additional investigation is required to determine impacts to the local road network from the Highway 5/6 interchange at that time.					
2 – Delayed implementation of connection to Highway 6	Fair	Neutral	Good	Good	No
3 - Closure of Parkside Drive at Highway 6	Fair	Fair	Good	Fair	No
4 - Main Street North connection to Centre Road/Hamilton Street North	Poor	Poor	Neutral	Fair	No
5a - Mill Street southbound-only between Parkside Drive and Dundas Street	Good	Good	Neutral	Poor	No
5b - Mill Street northbound-only between Parkside Drive and Dundas Street	Fair	Good	Neutral	Poor	No
5c - Mill Street southbound-only between Church Street and Dundas Street	Good	Good	Neutral	Fair	No
5d - Mill Street northbound-only between Church Street and Dundas Street	Fair	Good	Neutral	Fair	No

None were recommended for implementation as they do not address the fundamental problem of congestion and capacity issues in Waterdown. The solutions may have localized improvements, but do not address the network capacity problem.

Safety

Solutions to reduce traffic infiltration through neighbourhoods, as well as to reduce vehicle speeds are being brought forward:

- Traffic Calming
 - Speed cushions, raised centre islands, raised pedestrian crossovers, centreline flex posts, curb extensions
- Converting existing school crosswalks to pedestrian crossovers





Safety



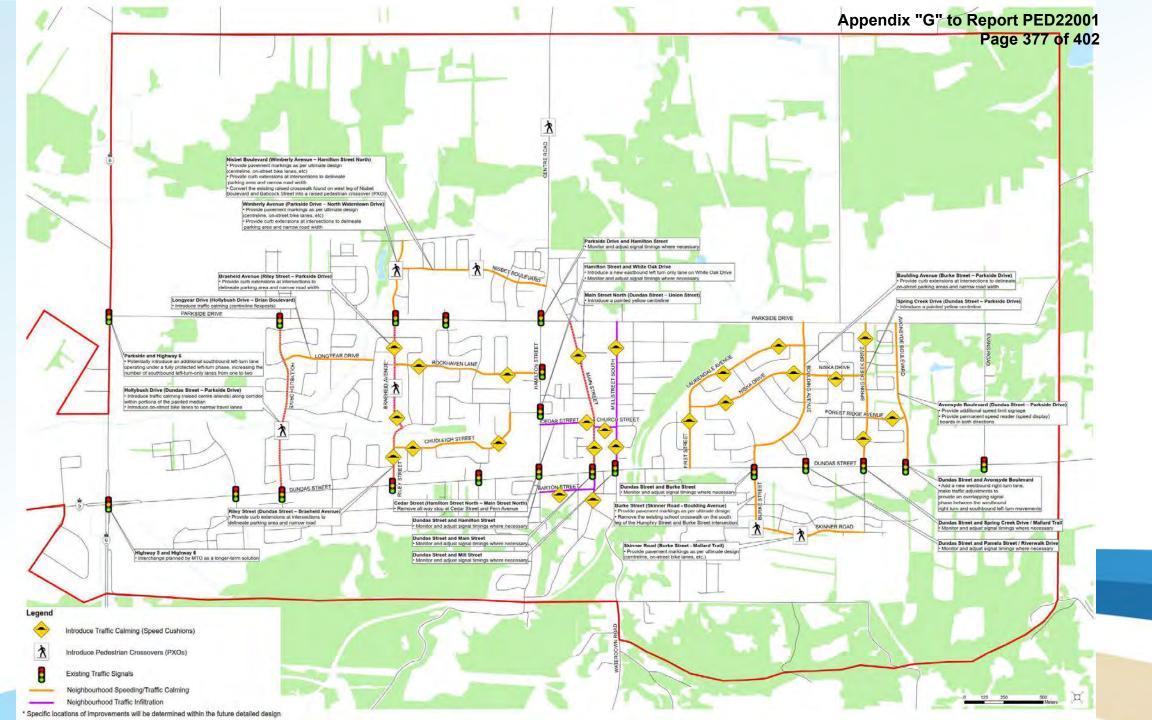


Additional solutions:

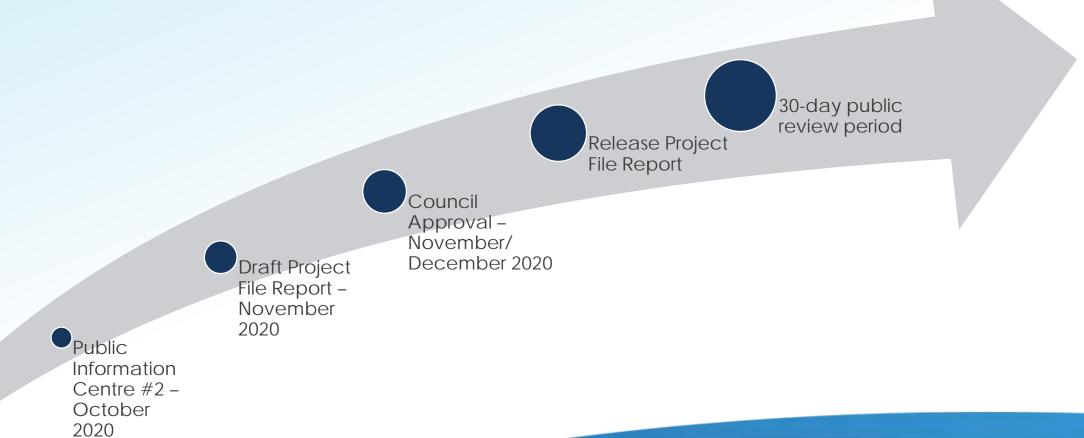
- Pavement Markings
 - Painted centrelines, on-street bike lanes
- Adding pedestrian crossovers at roundabouts
- Providing additional speed limit signs and speed feedback signage







Next Steps





Fox, Brandon <bfox@dillon.ca>

RE: Confirming Scope: Waterdown Transportation Management Plan

1 message

Philip, Mohan < Mohan. Philip@hamilton.ca>

Tue, Nov 3, 2020 at 11:57 AM

To: "SecondaryLandUse@HydroOne.com" <SecondaryLandUse@hydroone.com>

Cc: "Fox, Brandon" <bfox@dillon.ca>, Jeff Axisa <jaxisa@dillon.ca>, "Molloy, Steve" <Steve.Molloy@hamilton.ca>

Hi Logan,

Thanks for your participation in the transportation study. Regarding the pedestrian/cycling bridge across Grindstone Creek, our initial assessment determined the location to be at the Church St. However further detailed investigations are need in the future to confirm this. If for any reason this location is not suitable, then the City will consider it at the Nelson Road location. The chances of considering Wellington St. location is very less.

Hope	this	hel	ps.
------	------	-----	-----

Thanks

Mohan Philip

From: SecondaryLandUse@HydroOne.com <SecondaryLandUse@HydroOne.com>

Sent: October 29, 2020 2:43 PM

To: Transportation <transportation@hamilton.ca>

Subject: Confirming Scope: Waterdown Transportation Management Plan

Good Afternoon,

I am writing to verify a detail in the PIC 2 Presentation material for the Waterdown Transportation Management Plan. Can you confirm that the City of Hamilton has no intention to pursue a bicycle bridge/path on Wellington St crossing the Grindstone Creek (Slide 16)?

Thanks and have a great day,

Logan McClevis

Hydro One Networks Inc SecondaryLandUse@HydroOne.com

Ministry of Heritage, Sport, Tourism and Culture Industries

Programs and Services Branch 401 Bay Street, Suite 1700 Toronto, ON M7A 0A7 Tel: 416.786.7553

Ministère des Industries du Patrimoine, du Sport, du Tourisme et de la Culture

Direction des programmes et des services 401, rue Bay, Bureau 1700 Toronto, ON M7A 0A7 Tél: 416.786.7553



November 10, 2020

EMAIL ONLY

Mohan Philip, M.Eng., P.Eng. Project Manager City of Hamilton mohan.philip@hamilton.ca

MHSTCI File: 0010276

Proponent: The City of Hamilton

Subject : Notice of Public Information Centre 2 - MCEA Master Planning

Approach 2

Project : Waterdown Transportation Management Plan

Location : Waterdown, City of Hamilton

Dear Mohan Philip:

Thank you for providing the Ministry of Heritage, Sport, Tourism and Culture Industries (MHSTCI) with the Notice of Public Information Centre for this project. MHSTCI's interest in this master plan relates to it's mandate of conserving Ontario's cultural heritage, which includes archaeological resources, built heritage resources and cultural heritage landscapes.

MHSTCI understands that master plans are long range plans which integrate infrastructure requirements for existing and future land use with environmental assessment planning principles. The Municipal Class Environmental Assessment (MCEA) outlines a framework for master plan and associated studies which should recognize the planning and design Process of this Class EA and should incorporate the key principles of successful environmental assessment planning identified in Section A.1.1. The master planning process will, at minimum, address Phases 1 and 2 of the Planning and Design Process of the MCEA.

This letter provides advice on how to incorporate consideration of cultural heritage in the abovementioned master planning process by outlining the technical cultural heritage studies and the level of detail required to address cultural heritage in master plans. In accordance with the MCEA, cultural heritage resources should be identified early in the process in order to determine known and potential resources and potential impacts.

Master Plan Summary

The City of Hamilton has initiated a transportation management study for the Waterdown area. This study is being completed following the requirements of Phase 1 and 2 of the Municipal Class EA process.

Recommendations for Master Planning Approach 2

MHSTCI understands that the level of investigation, consultation and documentation in this master plan is sufficient to fulfill the requirements for Schedule B MCEA undertakings and would provide the basis for future investigations for the specific Schedule C MCEA undertakings identified within it. In regards to cultural heritage resources the master plan should;

- identify existing baseline environmental conditions,
- identify expected environmental impacts and,
- Include measures to mitigate potential negative impacts.

Archaeological Resources

Schedule B MCEA undertakings included as part of the master plan should be screened using the City of Hamilton's Archaeological Management Plan. If the EA project area exhibits archaeological potential, then an archaeological assessment (AA) should be undertaken by an archaeologist licensed under the *Ontario Heritage Act* and submitted for MHSTCI review prior to the completion of the master plan.

The master plan should provide guidance on the need for further archaeological assessments by acknowledging that the city contains archaeological resources and areas of archaeological potential and by stating that future projects must consult the City of Hamilton's Archaeological Master Plan.

Built Heritage Resources and Cultural Heritage Landscapes

A Cultural Heritage Report: Existing Conditions and Preliminary Impact Assessment will be undertaken for the entire study area during the planning phase and will be summarized in the EA Report. This study will:

- Describe the existing baseline cultural heritage conditions within the study area by identifying all known or potential built heritage resources and cultural heritage landscapes, including a historical summary of the study area. MHSTCI has developed screening criteria that may assist with this exercise: <u>Criteria for Evaluating for Potential Built Heritage</u> Resources and Cultural Heritage Landscapes.
- 2. <u>Identify preliminary potential project-specific impacts</u> on the known and potential built heritage resources and cultural heritage landscapes that have been identified. The report should include a description of the anticipated impact to each known or potential built heritage resource or cultural heritage landscape that has been identified.
- 3. Recommend measures to avoid or mitigate potential negative impacts to known or potential built heritage resources and cultural heritage landscapes. The proposed mitigation measures are to inform the next steps of project planning and design.

For Schedule B MCEAs undertaken as part of the master plan, where a known or potential built heritage resource or cultural heritage landscape may be directly and adversely impacted, and where it has not yet been evaluated for Cultural Heritage Value or Interest (CHVI), completion of a Cultural Heritage Evaluation Report (CHER) is required to fully understand its CHVI and level of significance. The CHER must be completed as part of the final EA report. If a potential resource is found to be of CHVI, then a Heritage Impact Assessment (HIA) will need to be undertaken and included in the final EA report. Our Ministry's Info Sheet #5: Heritage Impact Assessments and

<u>Conservation Plans</u> outlines the scope of HIAs. Please send the HIA to MHSTCI for review and make it available to local organizations or individuals who have expressed interest in review.

While some cultural heritage landscapes are contained within individual property boundaries, others span across multiple properties. For certain cultural heritage landscapes, it will be more appropriate for the CHER and HIA to include multiple properties, in order to reflect the extent of that cultural heritage landscape in its entirety.

Community input should be sought to identify locally recognized and potential cultural heritage resources. Sources include, but are not limited to, municipal heritage committees, community heritage registers, historical societies and other local heritage organizations. Where applicable, the findings of the Waterdown Village Built Heritage Inventory should be used to support the identification of Cultural Heritage Resources.

Cultural heritage resources are often of critical importance to Indigenous communities. Indigenous communities may have knowledge that can contribute to the identification of cultural heritage resources, and we suggest that any engagement with Indigenous communities includes a discussion about known or potential cultural heritage resources that are of value to them.

Environmental Assessment Reporting

Technical cultural heritage studies are to be undertaken by a qualified person who has expertise, recent experience, and knowledge relevant to the type of cultural heritage resources being considered and the nature of the activity being proposed. Please advise MHSTCI whether any technical heritage studies will be completed for this master plan and provide them to MHSTCI before issuing a Notice of Completion.

Thank you for consulting MHSTCI on this project. Please continue to do so through the master plan process and contact Dan Minkin for any questions or clarification.

Sincerely,

Joseph Harvey
On behalf of

Dan Minkin Heritage Planner Heritage Planning Unit Dan.Minkin@ontario.ca

It is the sole responsibility of proponents to ensure that any information and documentation submitted as part of their EA report or file is accurate. MHSTCI makes no representation or warranty as to the completeness, accuracy or quality of the any checklists, reports or supporting documentation submitted as part of the EA process, and in no way shall MHSTCI be liable for any harm, damages, costs, expenses, losses, claims or actions that may result if any checklists, reports or supporting documents are discovered to be inaccurate, incomplete, misleading or fraudulent.

Please notify MHSTCI if archaeological resources are impacted by EA project work. All activities impacting archaeological resources must cease immediately, and a licensed archaeologist is required to carry out an archaeological assessment in accordance with the *Ontario Heritage Act* and the Standards and Guidelines for Consultant Archaeologists.

If human remains are encountered, all activities must cease immediately and the local police as well as the <u>Registrar, Burials of the Ministry of Government and Consumer Services</u> must be contacted. In situations where human remains are associated with archaeological resources, MHSTCI should also be notified to ensure that the site is not subject to unlicensed alterations which would be a contravention of the *Ontario Heritage Act*.

November 17, 2020

Re: Waterdown Transportation Management Plan

Attention:
Mohan Philip, M.Eng., P.Eng.
Project Manager, Transportation Planning
City of Hamilton

Thank you for sending us notification regarding (Waterdown Transportation Management Plan). In our preliminary assessment, we have confirmed that Hydro One has existing high voltage Transmission facilities within your study area (see map attached). In particular the greatest risk to Hydro Assets is from the pedestrian/cycling bridge across Grindstone Creek, Wellington St alternative. As such, we must stay informed as more information becomes available so that we can advise if any of the alternative solutions present actual conflicts with our assets, and if so; what resulting measures and costs could be incurred by the proponent. Note that this response does not constitute approval for your plans and is being sent to you as a courtesy to inform you that we must continue to be consulted on your project.

In addition to the existing infrastructure mentioned above, the applicable transmission corridor may have provisions for future lines or already contain secondary land uses (e.g., pipelines, watermains, parking). Please take this into consideration in your planning.

Also, we would like to bring to your attention that should (Waterdown Transportation Management Plan) result in a Hydro One station expansion or transmission line replacement and/or relocation, an Environmental Assessment (EA) will be required as described under the Class Environmental Assessment for Minor Transmission Facilities (Hydro One, 2016). This EA process would require a minimum of 6 months for a Class EA Screening Process (or up to 18 months if a Full Class EA were to be required) to be completed. Associated costs will be allocated and recovered from proponents in accordance with the Transmission System Code. If triggered, Hydro One will rely on studies completed as part of the EA you are current undertaking.

Consulting with Hydro One on such matters during your project's EA process is critical to avoiding conflicts where possible or, where not possible, to streamlining processes (e.g., ensuring study coverage of expansion/relocation areas within the current EA). Once in receipt of more specific project information regarding the potential for conflicts (e.g., siting, routing), Hydro One will be in a better position to communicate objections or not objections to alternatives proposed.

If possible at this stage, please formally confirm that Hydro One infrastructure and associated rights-of-way will be completely avoided, or if not possible, allocate appropriate lead-time in your project schedule to collaboratively work through potential conflicts with Hydro One, which ultimately could result in timelines identified above.

Appendix "G" to Report PED22001 Page 384 of 402

In planning, note that developments should not reduce line clearances or limit access to our infrastructure at any time. Any construction activities must maintain the electrical clearance from the transmission line conductors as specified in the Ontario Health and Safety Act for the respective line voltage.

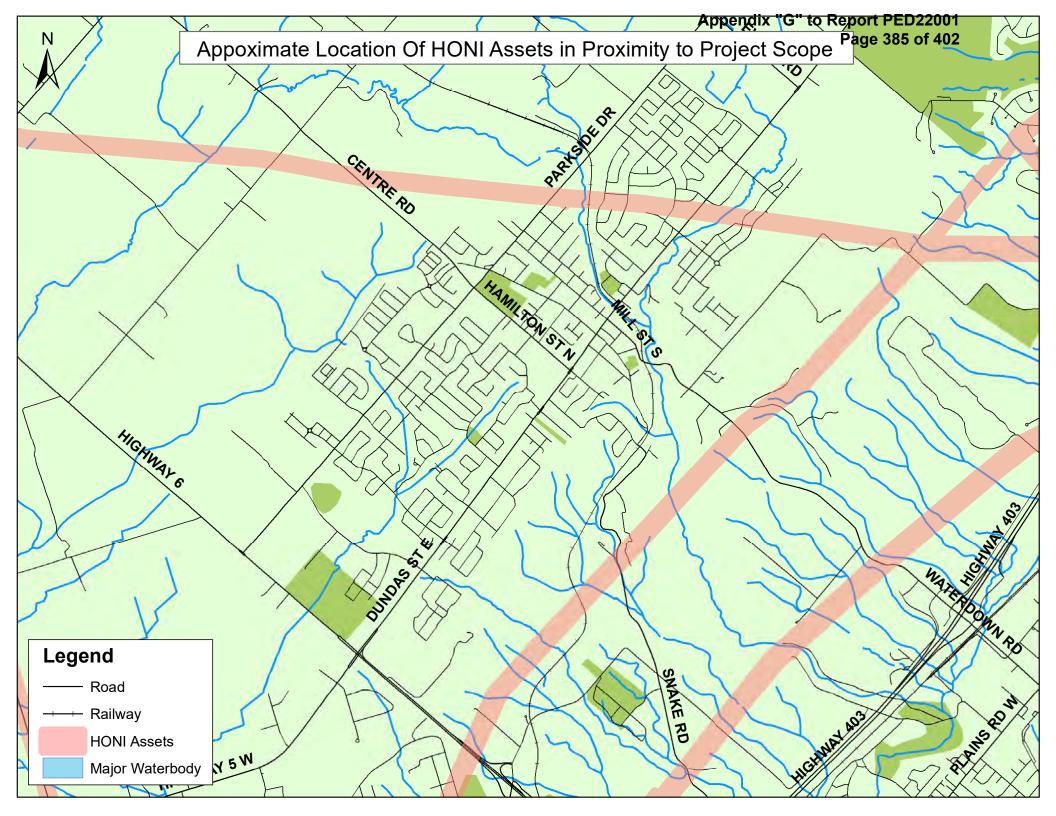
Be advised that any changes to lot grading or drainage within, or in proximity to Hydro One transmission corridor lands must be controlled and directed away from the transmission corridor.

Please note that the proponent will be held responsible for all costs associated with modifications or relocations of Hydro One infrastructure that result from your project, as well as any added costs that may be incurred due to increased efforts to maintain said infrastructure.

We reiterate that this message does not constitute any form of approval for your project. Hydro One must be consulted during all stages of your project. Please ensure that all future communications about this and future project(s) are sent to us electronically to secondarylanduse@hydroone.com

Sent on behalf of,

Secondary Land Use
Asset Optimization
Strategy & Integrated Planning
Hydro One Networks Inc.



Memorandum

Date: April 13, 2021

To: Logan McClevis
Secondary Land Use Asset Optimization
Strategy and Integrated Planning
Hydro One Networks Inc.
483 Bay Street, Toronto, ON

cc: Steve Molloy, Brandon Fox, Jeff Axis, Janet Smolders

From: Mohan Philip, Project Manager, City of Hamilton

Subject: City of Hamilton, Waterdown Transportation Management Plan (WTMP)

Thank you for your letter dated November 17, 2020, regarding the potential for conflicts between works proposed as part of the WTMP and Hydro One's high voltage transmission lines in the Study Area.

The project team identified three alternative locations for an active transportation crossing of Grindstone Creek. Those are at Wellington Street, Nelson Street and Church Street. Slide 19 of the Public Information Centre displays (available on the City's website at www.hamilton.ca/waterdownTMP2019) shows the three alternative locations considered for the crossing. As noted in your letter, the Wellington Street alternative poses the greatest risk to Hydro assets. The location at Church Street was recommended in consideration of its low impact on the property and environment. Further detailed investigations will be undertaken in the future.

Dillon Consultant is currently preparing the WTMP Study Report. The report is expected to be available for public and agency review later this year. The report will address Hydro One's interests as follows:

- The existing conditions inventory will describe Hydro One's assets and "secondary land uses", as shown on the map attached to your letter
- Evaluations of the alternatives identified in the TMP will cover potential impacts on these assets
- To provide appropriate lead time, any potential impacts will be discussed with Hydro One in advance of the review period of the TMP

We look forward to Ontario Hydro's continuing involvement with the TMP.

MP/

Appendix "G" to Report PED22001 Page 387 of 402

From: Transportation < transportation@hamilton.ca>

Sent: November 9, 2020 6:48 AM

To: Philip, Mohan

Subject: FW: Waterdown Transportation Management Plan Comments

FYI

Tiffany Wolsey

On behalf of Transportation Planning

The City of Hamilton encourages physical distancing, wearing a mask in an enclosed public space, and increased handwashing. Learn more about the City's response to COVID-19 www.hamilton.ca/coronavirus.

Sent: November 8, 2020 12:00 PM

To: Transportation < transportation@hamilton.ca>

Cc: Yong-Lee, Sally <Sally. Yong-Lee@hamilton.ca>; Partridge, Judi < Judi. Partridge@hamilton.ca>; Saad, Farida

<Farida.Saad@hamilton.ca>

Subject: Waterdown Transportation Management Plan Comments

Good Morning!

I have unsuccessfully tried to email an attachment of my comments to the October 21st presentation on the Waterdown Transportation Management Plan, As such below are my comments to the presentation:

I have reviewed the Transportation Management Plan Presentation of October 21st and have the following comments:

Page 3 states one of the objectives of the study is to "address current and long term transportation problems". On page 6 the report states one of the Congestion Issues as "Dundas Street between Hamilton Street and Mill Street – AM and PM peak periods."

The original Waterdown Aldershot Master Transportation Plan, identified the same issue. Waterdown needs to address the need for "one more lane of East and West road capacity". The flawed results of the Waterdown Aldershot Master Transportation Plan was to build a new "bypass road" north of Parkside Drive. This recommended bypass road is going through the Ontario Greenbelt, including through a Provincially Significant wetland. That solution, will not solve the long term problem of traffic volumes on Dundas Street in downtown Waterdown. This is already well recognized because:

• There is no scheduled plan by the City to even complete the new "bypass "road to highway 6. (Why – because they know the need / demand is not there.)

1

Appendix "G" to Report PED22001 Page 388 of 402

• Your report also confirms that this new bypass road (called Waterdown North) as a solution only to address future congestion of Parkside. (Page 7.)

Your study was the opportunity to solve the current and long term congestion on Dundas Street. Instead your report has simply stated that increasing capacity on Dundas Street to solve the problem, is NOT Recommended, with NO detailed evaluation. You stated while it would be a "GOOD" solution for solving the transportation issue, you also stated it is a "Poor" solution since it affects Public Health, Physical Environment and Costs.

It reality, it would be an EXCELLENT solution that solves the objective of your study and solves the failures of the Waterdown Aldershot Master Transportation Plan.

While I would agree that there would be implications that need to be addressed / mitigated to Public Health, the Physical Environment and Costs, your report simply states this solution is POOR and fully dismisses this solution. I believe this dismissal is outside of your mandate because your offered solutions DO NOT SOLVE THE PROBLEM. (Your reports recommendation of extra adding Transit including cycling and walking, while having a general theoretical merit, is NOT solving the basic vehicle traffic problems.)

On page 12 you have provided all one line negative reasons why you do not recommend it. You need to provide the public / politicians with a detailed ANALYSIS of this solution, detailing and rating the plus and minuses of all the issues so they can be fairly reviewed balanced against this EXCELLENT solution.

Some of your stated negative impacts are minimal and or not even true. For example:

- Removal of on-street parking: It is well known that widening Dundas Street to 4 lanes and allowing the parking during non-peak traffic hours (on the outside lanes) would actually INCREASE on street parking from what is currently there.
- Impact on Heritage area: If Dundas Street is widened to 4 lanes (which it basically already is in the majority of these two blocks between Mill and Hamilton Street once the parking boulevards are removed), NO heritage building are physically affected.
- Strips downtown core of character and Value: This core area of Waterdown HAS no foot traffic gathering character. It does not have enough closely spaced buildings to support the quantity of businesses that could welcome and cater to a friendly public gathering / shopping area. While there are some existing businesses that would benefit from foot traffic (ie coffee shop, book store, cupcake shop, dress store...) the majority of others do not depend on foot traffic (judo school, bicycle shop, real estate, kitchen store, Dr. Offices, banks...). NOTE: Areas like Downtown Dundas that have a couple of BLOCKS of stores spaced 10 to 20 feet along their main road can justify keeping and building on a character for foot traffic. Downtown Waterdown, (which is really only has some foot traffic business between Mill Street and Main Street) does not have the existing building / businesses to evolve into a foot traffic area.

Granted, all of the above are simply my quick opinions but is does show that your "NOT Recommended Reasons" are simply white washing the opportunity to properly study this solution.

In summary, unless your report properly evaluates the widening the Dundas Street with unbiased facts presented to the public / politicians, for THEM to make the final decision, it is just another waste of an opportunity to eliminate the traffic problem in Downtown Waterdown.

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Appendix "G" to Report PED22001 Page 390 of 402

From: Emma DeFields <edefields@hrca.on.ca>

Sent: November 6, 2020 6:47 PM

To: Philip, Mohan

Subject: RE: Waterdown Transportation Study, PIC Notice

Good afternoon Mohan,

Conservation Halton staff is in the process of reviewing the PIC material for the Waterdown Transportation Study, and I have a few questions to assist in our review:

- Slide 18: Will planned active transportation works (bicycle land/paved shoulder/trails/routes) all be within
 existing road/trail footprints? Will the works be expanding into undeveloped areas either within or outside of
 existing Right of Ways? For example, will bike lanes just be painted on existing roads, or will the road need to
 expand to accommodate the bike lane?
- Slide 19: Have various options for crossings been explored through this study, including possible options that avoid new creek crossings?
- Slide 20: Can you please confirm where the crossing(s) of Grindstone Creek is/are being proposed?
- Slide 21: Is the new interchange at Highway 5 / Highway 6 being evaluated through this Transportation Study or through a different study?

I would be happy to set up a phone call if that's the easiest way to go through my questions. Thanks very much and I look forward to working with you.

Emma

Emma DeFields, MES, MCIP, RPP

Environmental Planner

Conservation Halton

2596 Britannia Road West, Burlington, ON L7P 0G3 905.336.1158 ext. 2335 | Fax 905.336.6684 | edefields@hrca.on.ca conservationhalton.ca

Conservation Halton's Administration Office is currently closed to the public due to COVID-19. For more information and updates on Conservation Halton's planning and permitting services, please visit https://conservationhalton.ca/planning-permits.

From: Philip, Mohan < Mohan. Philip@hamilton.ca>

Sent: October 8, 2020 9:28 AM

To: Philip, Mohan < Mohan. Philip@hamilton.ca > Subject: Waterdown Transportation Study, PIC Notice

Hi,

1

Appendix "G" to Report PED22001 Page 391 of 402

Please find attached notice for Public Information Centre (PIC) #2 to be held on October 21, 2020 at 5.30 pm. Pre-registration is required to participate and can be done at the project website www.hamilton.ca/waterdownTMP2019

Thank you,

Mohan Philip, M. Eng., P.Eng. Project Manager Transportation Planning PED Dept., City of Hamilton

CAUTION: This email originated from outside of the organization. Do not click links or open attachments unless you recognize the sender and know the content is safe.



Fox, Brandon <bfox@dillon.ca>

RE: Waterdown Community Transportation Management Plan

1 message Philip, Mohan < Mohan. Philip@hamilton.ca> Mon, Apr 19, 2021 at 11:38 AM , "Fox, Brandon" <bfox@dillon.ca>, "jsmolders@Dillon.ca" <jsmolders@dillon.ca>, Cc: lan Borsuk <iborsuk@dillon.ca>, "Axisa, Jeff" <jaxisa@dillon.ca> Dear Thank you for your email expressing your support for the TMP. As you know, the Recommended Plan presented at Public Information Centre 2 on October 21, 2020, focuses on a range of solutions to address current and future transportation problems. These include transportation demand management measures, such as increasing transit use and active transportation (cycling and walking). 'Flamborough Connects' bus services to rural residents with no access to a car will play an important role in implementing this recommendation. Dillon Consultant is currently preparing the TMP Study Report. The report is expected to be available for public and agency review later this year. We appreciate your support and look forward to 'Flamborough Connects' continuing involvement with the TMP. Sincerely, Mohan Philip, M. Eng., P.Eng. **Project Manager** Transportation Planning PED Dept., City of Hamilton. Sent: November 12, 2020 2:22 PM To: Philip, Mohan < Mohan. Philip@hamilton.ca> ; Partridge, Judi <Judi.Partridge@hamilton.ca> **Subject**: Waterdown Community Transportation Management Plan Hello Mohan, I just wanted to follow up from the meeting on October 21 regarding Waterdown transportation. Thank you for convening

an informative and well presented opportunity for residents to participate in this important issue.

Flamborough Connects has been supporting the transportation needs of isolated rural residents for every ten years. Hopefully soon, we will resume our collaborative service with DARTS to coordinate bi-weekly grocery shopping buses for several rural riders without transportation. To meet current needs, we are now in the process of launching a volunteer driver program.

Flamborough Connects understands the complex transportation needs of this community and how the lack of public transit can both isolate and contribute to poor health outcomes – regardless of age.

We welcome innovative and creative solutions to this issue – particularly for those outside HSR serviced Waterdown – and are happy to meet, consult and support your efforts.

Many thanks and stay safe,



www.flamboroughconnects.ca



Facebook: Flamborough Connects

Instagram: flamboroughconnects

Twitter: InfoFlamborough



Fox, Brandon

 fox@dillon.ca>

RE: Comment Form from Rick Breznik, Citizen of Waterdown on the Oct 21 2020 WTMP Virtual PIC #2

1 message

Philip, Mohan < Mohan. Philip@hamilton.ca>

Wed, Apr 14, 2021 at 11:26 AM

Cc: "Fox, Brandon" <bfox@dillon.ca>, "Axisa, Jeff" <jaxisa@dillon.ca>, "jsmolders@Dillon.ca" <jsmolders@dillon.ca>, "Partridge, Judi" <Judi.Partridge@hamilton.ca>, "DiGiantomasso, Christine" <Christine.DiGiantomasso@hamilton.ca>, "Molloy, Steve" <Steve.Molloy@hamilton.ca>



Thank you for your comments and suggestions. We note that you disagree with the recommendations, presented at Public Information Centre on October 21, 2020, to not provide additional lanes on Dundas Street at the downtown area.

Congestion along Dundas Street between Hamilton and Mill Streets is a issue during the AM and PM peak periods. Although adding lanes on Dundas Street would provide relief for daily peak hour congestion, the City has decided not to include it as part of the Recommended Plan due to its potential adverse impacts on the character and heritage value of the downtown's Heritage Conservation District, heritage buildings and cultural landscape. It would also remove on-street parking for downtown businesses.

An auto-focused solution has impacts on public health and the physical environment, it reduces the possibility of providing cycling facilities on Dundas Street and decreases the attractiveness of the downtown for walking and spending time there. The downtown currently has some commercial uses that depend on pedestrians but most appear to depend on car access. As the downtown becomes more pedestrian oriented and its heritage character enhanced, more pedestrians will be attracted to the downtown. This, in turn, will increase its value as a heritage area.

Instead of adding lanes on Dundas Street and other roads, the Recommended Plan focuses on a range of solutions to address current and long-term transportation problems. These include transportation demand management measures, such as increasing transit use and active transportation (cycling and walking). The Recommended Plan also includes measures to reduce neighbourhood speeding and traffic infiltration throughout Waterdown.

In response to your suggestions regarding changes to parking and lane directions during rush hours:

- Parking on Dundas Street is essential to supporting local businesses as part of the Business Improvement Area (BIA). Removing on-street parking was considered but not recommended.
- Regarding lane direction, traffic flow through this area is roughly equal in each direction. Changing or reprioritizing lane direction would not significantly improve traffic congestion issues through this area.

Dillon Consultant is currently preparing the TMP study report. The report is expected to be available for public and agency review later this year. We appreciate your input and look forward to your continuing involvement with the Waterdown TMP.

Sincerely,

Mohan Philip, M. Eng., P.Eng.

Project Manager Transportation Planning PED Dept., City of Hamilton From: Sent: November 11, 2020 10:54 AM To: Transportation <transportation@hamilton.ca>; Bfox@dillon.ca Cc: Partridge, Judi < Judi.Partridge@hamilton.ca>; Saad, Farida < Farida.Saad@hamilton.ca>; Jacob, Susan <Susan.Jacob@hamilton.ca>; Yong-Lee, Sally <Sally.Yong-Lee@hamilton.ca> Subject: RE: Comment Form from Citizen of Waterdown on the Oct 21 2020 WTMP Virtual PIC #2 Please see revised commentary pdf by SO. My apologies. In previous document it states Locke St as a comparison. That should state Queen St in Hamilton as a comparison. From: Sent: November 11, 2020 10:51 AM To: transportation@hamilton.ca; Bfox@dillon.ca Cc: Judi Partridge <judi.partridge@hamilton.ca>; Saad, Farida <Farida.Saad@hamilton.ca>; Jacob, Susan <Susan.Jacob@hamilton.ca>; ; Yong-Lee, Sally <Sally.Yong-Lee@hamilton.ca> Subject: Comment Form from Citizen of Waterdown on the Oct 21 2020 WTMP Virtual PIC #2 Dear City Staff, Dillon Consulting, Councillor Judi Partridge, and Rick Breznik I wish to add my comments based on my participation in the recent PIC meeting on the Waterdown Transportation Master Plan. I as well as the have been involved intensively in the WATMP EA process from as far back as 2005 for myself at least that far back if not more. We both served on Stakeholder Advisory Committees and we still have individual outstanding issues that continue to need to be addressed with the Project Team on the bypass. Although other stakeholders may not like what has had to say in his commentary, I must say it one of the best commentaries I have read in recent years about the problems on Dundas St. His commentary is fair I believe and it is willing to look at alternatives that were not adequately analyzed by the Project Team. I would also suggest to staff to is a Professional Engineer by training and has done an excellent job as an independent forensic reviewer of the EA, its data, and has given valuable feedback to the City that has made an impact in the final EA for the WATMP. He once again has provided excellent feedback.

My suggestions or concerns to add to his suggestions are:

- 1. Dundas St. was once a 4 lane road with on -street parking. The parking was never prohibited at rush hours like it is on King St in downtown Hamilton for example such as between Bay St and Hess St. I ask why had this never been tried in Waterdown? I have lived here since 1986 and I do not recall any prohibited parking hours in downtown Waterdown.
 - a. If you would not be willing to do this, why not consider at least the westerly direction changed back to two lanes heading west during rush hours with parking available at all other hours. Even this one additional lane for 2 hours a day along with changes on Vinegar Hill would help to get people home sooner after work and cause less stress.
- 2. Vinegar Hill to make a 4 lane Dundas St at rush hour work (heading west no parking at rush hour) or a 3 lane (2 lanes west - no parking at rush hour and 1 lane heading east), Vinegar Hill/Dundas St needs to be converted to 2 lanes heading West and 1 lane only heading East. It is current only a one lane each way with a single turning lane. One example in Hamilton where a 2 lane one direction, 1 lane in other direction seems to be working is on Queen St North in Hamilton where it was recently converted to 2 lanes heading southerly to the mountain and one lane heading northerly to Main St. I have driven on it recently and it seems to be a sensible solution. Traffic in neither direction requires a vacant centre lane in which to make a turn.

I will leave these ideas and suggestions with you and I would hope you would give them consideration.

Regards, L8B 0N3



Fox, Brandon

 bfox@dillon.ca>

RE: Oct 21 virtual public meeting

1 message

Philip, Mohan < Mohan. Philip@hamilton.ca>

Thu, Apr 8, 2021 at 10:55 AM

To:

Cc: "Fox, Brandon" <bfox@dillon.ca>, Tim Kooistra <tkooistra@dillon.ca>, "Axisa, Jeff" <jaxisa@dillon.ca>



Thank you for your messages with your comments on Public Information Centre (PIC) 2. Your comment suggest that Mill Street South be changed to southbound one-way from either Dundas, Griffin or Union Streets.

Slide 21 of the PIC displays included three scenarios for increasing network capacity, including four options for converting Mill Street to a one-way street, north of Dundas. As shown in the evaluation on Slide 22, these options were not recommended since they do not address the fundamental problem of congestion and capacity issues in Waterdown. Although they may result in some localized improvements, they do not address network capacity problems.

Your suggestion that Mill Street be converted to one-way southbound from either Dundas, Griffin or Union Streets was reviewed by City staff who noted that this change would increase traffic on Union and Griffin Streets. Also, Mill Street/Waterdown Road is the main access route to Highway403 and for Aldershot GO/VIA Station. Our expectation is that once the Mountain Brow-Burke Street route is constructed and opened to traffic there will be a reduction in traffic volume on Mill St. South. This should result in reduced traffic pressure at the Dundas-Mill St. intersection and the immediate surroundings.

Dillon Consultant is currently preparing a draft of the WTMP study report. The report is expected to be available for public and agency review later this year. We look forward to your continuing involvement with the Waterdown Transportation Study.

Sincerely,

Mohan Philip, M. Eng., P.Eng.

Project Manager

Transportation Planning

PED Dept., City of Hamilton

From: Sent: October 22, 2020 12:02 PM

To: Transportation <transportation@hamilton.ca>

Subject: Oct 21 virtual public meeting

Hi Mohan...

At last night's virtual meeting I made a brief suggestion in the chat area and based on the responses I felt that I needed to elaborate a bit.

My suggestion was to make Mill Street south a one-way traffic route in the southerly direction from either Dundas, Griffin or Union Streets. From a traffic flow Dundas would be the safest by not capturing unaware traffic at the other two locations.

Staff response to the suggestion was that making Mill St. south a one-way south route would put more traffic pressures onto Union & Griffin. I believe the opposite to be true. With Mill Street remaining two-way going north, all the morning rush that goes down to the Go station would remain dispersed between the various route going south.

The big change will result in driving the end of day northern traffic away from Mill, Union and Griffin by forcing all traffic, all day, to turn east at Mountain Brow and follow the soon to be available by-pass route to go north.

In addition, by stopping southerly traffic below Dundas, it would eliminate the safety hazards for both pedestrian as well a cyclers going down into Smokey Hollow. Southerly traffic can easily be pushed into the left (now the northerly) lane going south thus allowing for a low profile separated bike and pedestrian walkway under the rail bridge. In this scenario only a handful of local residents are inconvenienced. Griffin St. as is presently the case with Union St., traffic will no longer be able to go north but will have substantially reduced daily traffic.

Removing traffic going north on Mill St, south will also eliminate the law breakers from turning onto Griffin between the 4 to 6pm restriction. It will also eliminate the hazards of traffic jamming at the corner of Griffin and Main when parked cars are located at that corner of Griffin.

And lastly, the Mill Street residents will only need to put up with Go traffic going south in the morning, without the repeat in the evening.



Fox, Brandon

 bfox@dillon.ca>

RE: Proposed bus route for Waterdown.

1 message

Philip, Mohan < Mohan. Philip@hamilton.ca>

Thu, Mar 25, 2021 at 3:05 PM

Cc: "Fox, Brandon" <bfox@dillon.ca>, "jsmolders@Dillon.ca" <jsmolders@dillon.ca>

Dear

Thank you for your input into the study.

The westbound bus route along Parkside Drive, as shown at Public Information Centre #2 on October 21, 2020, turning north on Main Street North, is not possible since Main Street has been dead-ended before it reaches Centre Road. Slide 15 of the Public Information Centre displays (available on the City's website at https://urldefense.proofpoint.com/v2/url? u=https-3A www.hamilton.ca waterdownTMP2019&d=DwIGaQ&c=JnLCALisrKxQZnQdpANaBZUceEgEGD 7wjEyj 0JcDA&r=n44ueZQcQq8uvpfGhBHiPw&m=GLI8hREkDHOH2QEB3jMBNV-pd64dHY-KY0kHpmcZUqs&s= wkFn2eEcX3Hi2l SlgJpPoMDjypdAxuzab6fVwdjFuo&e=) shows proposed modifications to Route 18 with the westbound bus route along Parkside Drive turning left at Main Street before it reaches Centre Road.

Please note that the Transportation Master Plan (TMP) and Environmental Screening Report is under preparation. The report is expected to be available for the Municipal Class Environmental Assessment 30-day public and public review period later this year. We look forward to your continuing involvement with the TMP.

Sincerely,

Mohan Philip, M. Eng., P.Eng. **Project Manager** Transportation Planning PED Dept., City of Hamilton

----Original Message-----

From:

Sent: November 6, 2020 1:36 PM

To: Transportation To: Transportation@hamilton.ca> Subject: Proposed bus route for Waterdown.

Mr. M. Philip

Project Mgr., transportation planning

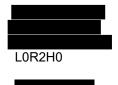
Dear Sir,

I left a short message for you earlier today, so this is merely a followup message.

You have the bus route currently mapped out to go west along Parkside and turn north on Main St. N.

Main St. N., north of Parkside has been "Dead-ended" before it reaches Centre Rd. so the proposed route is impossible. That intersection has been closed for almost a year now. In short, Main St. N. no longer meets Centre Rd. and ergo cannot meet up with the proposed street on the west side of Centre Rd.

Sincerely,



Page 400 of 402



Fox, Brandon <bfox@dillon.ca>

RE: Waterdown Transportation Management Plan Comments WATERDOWN:

1 message

Philip, Mohan < Mohan. Philip@hamilton.ca>

Tue, Apr 13, 2021 at 3:01 PM

To: '

Cc: "Fox, Brandon" <bfox@dillon.ca>, "Axisa, Jeff" <jaxisa@dillon.ca>, "jsmolders@Dillon.ca" <jsmolders@dillon.ca>

Dear

Thank you for your comments and suggestions. We understand that you disagree with the recommendations, presented at Public Information Centre on October 21, 2020, to not widen Dundas Street.

As noted in your email, congestion along Dundas Street between Hamilton and Mill Streets is an issue during the AM and PM peak periods. Although widening Dundas Street would provide relief for daily peak hour congestion, the City has decided not to include it as part of the Recommended Plan. The main reason for this recommendation is due to the widening's potential adverse impacts on the character and heritage value of the downtown's Heritage Conservation District, heritage buildings and cultural landscape. It would also remove on-street parking for downtown businesses.

In addition to being very costly, an auto-focused solution also has impacts on public health and the physical environment, reduces the possibility of providing cycling facilities on Dundas Street and decreases the attractiveness of the downtown for walking and spending time there. As you noted, the downtown currently has some commercial uses that depend on pedestrians but most appear to depend on car access. As the downtown becomes more pedestrian oriented and its heritage character enhanced, more and more pedestrians will be attracted to the downtown. This, in turn, will increase its value as a heritage area.

The Recommended Plan focuses on a range of solutions to address current and long-term transportation problems. These include transportation demand management measures, such as increasing transit use and active transportation (cycling and walking). The Recommended Plan also includes measures to reduce neighbourhood speeding and traffic infiltration throughout Waterdown.

Your email also mentions the North Waterdown Drive, previously planned as part of the original Waterdown Aldershot Master Transportation Plan to connect North Waterdown Drive to Highway 6. Slide 7 of the PIC 2 displays states that the new road will relieve capacity pressures on Parkside Drive. Three options for this connection and an evaluation of the options are shown on Slides 21 and 22. North Waterdown Dr. is an approved project and is currently under various stages of implementation. Our study recommends not to delay the road connection to Highway 6, as indicated in Slide 22.

Dillon Consultant is currently preparing a the TMP study report. The report is expected to be available for public and agency review later this year. We appreciate your long standing participation in transportation planning projects in Waterdown and look forward to your continuing involvement with the TMP.

Sincerely,

Page 401 of 402

Mohan Philip, M. Eng., P.Eng.

Project Manager

Transportation Planning

PED Dept., City of Hamilton

From:

Sent: November 8, 2020 12:00 PM

To: Transportation <transportation@hamilton.ca>

Cc: Yong-Lee, Sally <Sally. Yong-Lee@hamilton.ca>; Partridge, Judi <Judi.Partridge@hamilton.ca>; Saad, Farida

<Farida.Saad@hamilton.ca>

Subject: Waterdown Transportation Management Plan Comments

Good Morning!

I have unsuccessfully tried to email an attachment of my comments to the October 21st presentation on the Waterdown Transportation Management Plan, As such below are my comments to the presentation:

I have reviewed the Transportation Management Plan Presentation of October 21st and have the following comments:

Page 3 states one of the objectives of the study is to "address current and long term transportation problems". On page 6 the report states one of the Congestion Issues as "Dundas Street between Hamilton Street and Mill Street – AM and PM peak periods."

The original Waterdown Aldershot Master Transportation Plan, identified the same issue. Waterdown needs to address the need for "one more lane of East and West road capacity". The flawed results of the Waterdown Aldershot Master Transportation Plan was to build a new "bypass road" north of Parkside Drive. This recommended bypass road is going through the Ontario Greenbelt, including through a Provincially Significant wetland. That solution, will not solve the long term problem of traffic volumes on Dundas Street in downtown Waterdown. This is already well recognized because:

- There is no scheduled plan by the City to even complete the new "bypass "road to highway 6. (Why because they know the need / demand is not there.)
- Your report also confirms that this new bypass road (called Waterdown North) as a solution only to address future congestion of Parkside. (Page 7.)

Your study was the opportunity to solve the current and long term congestion on Dundas Street. Instead your report has simply stated that increasing capacity on Dundas Street to solve the problem, is NOT Recommended, with NO detailed evaluation. You stated while it would be a "GOOD" solution for solving the transportation issue, you also stated it is a "Poor" solution since it affects Public Health, Physical Environment and Costs.

It reality, it would be an EXCELLENT solution that solves the objective of your study and solves the failures of the Waterdown Aldershot Master Transportation Plan.

While I would agree that there would be implications that need to be addressed / mitigated to Public Health, the Physical Environment and Costs, your report simply states this solution is POOR and fully dismisses this solution. I believe this dismissal is outside of your mandate because your offered solutions DO NOT SOLVE THE PROBLEM. (Your reports recommendation of extra adding Transit including cycling and walking, while having a general theoretical merit, is NOT solving the basic vehicle traffic problems.)

On page 12 you have provided all one line negative reasons why you do not recommend it. You need to provide the public / politicians with a detailed ANALYSIS of this solution, detailing and rating the plus and minuses of all the issues so they can be fairly reviewed balanced against this EXCELLENT solution.

Some of your stated negative impacts are minimal and or not even true. For example:

• Removal of on-street parking: It is well known that widening Dundas Street to 4 lanes and allowing the parking during non-peak traffic hours (on the outside lanes) would actually INCREASE on street parking from what is

6/21/2021 Dillon Consulting Limited Mail - RE: Waterdown Transportation Management Planton ments to Bonart PED 2200

currently there.

- Impact on Heritage area: If Dundas Street is widened to 4 lanes (which it basically already is in the majority of these two blocks between Mill and Hamilton Street once the parking boulevards are removed), NO heritage building are physically affected.
- Strips downtown core of character and Value: This core area of Waterdown HAS no foot traffic gathering character. It does not have enough closely spaced buildings to support the quantity of businesses that could welcome and cater to a friendly public gathering / shopping area. While there are some existing businesses that would benefit from foot traffic (ie coffee shop, book store, cupcake shop, dress store...) the majority of others do not depend on foot traffic (judo school, bicycle shop, real estate, kitchen store, Dr. Offices, banks...). NOTE: Areas like Downtown Dundas that have a couple of BLOCKS of stores spaced 10 to 20 feet along their main road can justify keeping and building on a character for foot traffic. Downtown Waterdown, (which is really only has some foot traffic business between Mill Street and Main Street) does not have the existing building / businesses to evolve into a foot traffic area.

Granted, all of the above are simply my quick opinions but is does show that your "NOT Recommended Reasons" are simply white washing the opportunity to properly study this solution.

In summary, unless your report properly evaluates the widening the Dundas Street with unbiased facts presented to the public / politicians, for THEM to make the final decision, it is just another waste of an opportunity to eliminate the traffic problem in Downtown Waterdown.