Municipality of Bluewater
Active Transportation Master Plan

Municipality of Bluewater
14 Mill Avenue
Zurich ON

Distribution List

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Record of Revisions

Revision	Date	Description
0	November 1, 2023	Initial Submission to the Municipality of Bluewater
1	November 30, 2023	Second Submission to the Municipality of Bluewater
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R.J. Burnside & Associates Limited

Report Prepared By:

Tricia Radburn, M.Sc.(Pl), MCIP, RPP
Senior Environmental Planner
TR:js/af

Report Reviewed By:

Alvaro Almuina, P.Eng., M.Eng., PMP, DCE
Vice President- Transportation Planning

Executive Summary

Active Transportation facilities are a key element in healthy vibrant communities. Residents, businesses and visitors can benefit from a well-connected active transportation network that offers free, healthy, outdoor activities that save money, provide mobility choices, free up road space, reduce pollution and promote economic vitality.

The Municipality of Bluewater Active Transportation Master Plan establishes a vision and goals for existing and future active transportation facilities. This plan builds upon existing and in-progress studies, including the Municipality's Recreation Master Plan, the Huron County Cycling Master Plan, Huron County Official Plan and Bayfield Secondary Plan. The purpose is to create an active transportation network for Bluewater that meets the needs of the municipality's residents, businesses and visitors for the next ten to 15 years.

The Municipality of Bluewater is a community that is growing with a population that is aging. The availability of safe infrastructure to support healthy lifestyles is important. According to an online survey, 80% of respondents indicated that they are supportive of the municipality developing more, and better-connected, active transportation facilities, such as sidewalks, cycling lanes, trails etc. When asked what prevents them from using active transportation, the majority of respondents indicated that safety was the leading barrier, following by the convenience of using a car.

To respond to community needs, a vision for active transportation within the Municipality of Bluewater was developed.

It is the Municipality's vision to provide opportunities for residents and visitors to travel to key destinations safely and efficiently within the municipality using active transportation.

Six key goals were identified to achieve this vision as follows:

Goal 1	Create Rural Active Transportation Networks
Goal 2	Improve Active Transportation Connectivity in Bayfield
Goal 3	Improve Active Transportation in Zurich and Hensall
Goal 4	Work with MTO to Construct Key Active Transportation Facilities
Goal 5	Include Active Transportation Facilities in New Developments
Goal 6	Foster Partnerships with Trail Organizations

It is envisioned that these goals will be achieved with the installation of sidewalks, multi-use trails, paved shoulders, and pedestrian crossings. To guide implementation of these facilities, design guidelines were identified. Whenever possible, the municipality should implement its active transportation infrastructure in accordance with Ontario Traffic Manual Book 18 – Cycling Facilities (June 2021) (OTM Book 18). In some instances, a made-in-Bluewater approach may be more appropriate. Design guidelines for Bluewater are provided in Appendix C of this Master Plan.

A high-level cost estimate to implement the plan is as follows:

Goals	Length (m)	Unit cost ($1,000)	Capital Cost ($1,000)
Goal 1: Build a Rural Active Transportation Network			
Action 1A: Develop Rural Cycling Routes			N/A
Action 1B: Create Community Connections			N/A
Goal 2: Improve Connectivity in Bayfield			
Action 2A: Utilize Unopened Road Allowances to Create a Local Trail Network	3,110	$0.08	$248.80
Action 2B: Improve AT Access to the Marina	790	$0.12	$94.80
Action 2C: Install Multi-use Trails in Key Locations	3,438	$0.20	$687.60
Goal 3: Improve Connectivity in Zurich			
Action 3A: Connect the Community Centre, Lions Park and Zurich Conservation Area	410	$0.20	$82.00
Action 3B: Connect the Arena, Community Centre and Park in Hensall	225	$0.20	$45.00
Action 3C: Connect Zurich and Hensall	900	$0.50	$450.00
Goal 4: Work with MTO to Construct Key Active Transportation Facilities			
Action 4A: Construct a Safe Hwy 21 Crossing in Bayfield	20	$0.04	$0.80
Action 4B: Improve the Hwy 21/Mill Rd. Intersection	20	$0.50	$10.00
Action 4C: Create an Active Transportation Corridor along Hwy 21	28,000	$0.50	$14,000.00
Goal 5: Include Active Transportation Facilities in New Developments			
Action 5A: Require New Subdivisions to Incorporate AT into Designs		N/A	
Goal 6: Foster Partnerships with Trail Organizations			
Action 6A: Work with Trail Organizations to Identify Partnership and Funding Opportunities		N/A	

Table of Contents

Tables

Figures

Appendices

Disclaimer

1.0 Introduction

Active Transportation facilities are a key element in healthy vibrant communities. Residents, businesses and visitors can benefit from a well-connected active transportation network that offers free, healthy, outdoor activities that save money, provide mobility choices, free up road space, reduce pollution, and promote economic vitality.

The Municipality of Bluewater Active Transportation Master Plan establishes a vision and goals for existing and future active transportation facilities. This plan builds upon existing and in-progress studies, including the Municipality's Recreation Master Plan, the Huron County Cycling Master Plan, Huron County Official Plan and Bayfield Secondary Plan. The purpose is to create an active transportation network for Bluewater that meets the needs of the municipality's residents, businesses and visitors for the next ten to 15 years.

This Master Plan recognizes that extensive work has been previously undertaken to identify walking and cycling routes as well as key destinations and connections. This Plan documents previous work and uses projected growth, population needs, direct input from the community and municipal staff to provide a vision, design standards, and to guide how recommendations could be built.

1.1 What is Active Transportation?

Active Transportation is defined as human-powered travel including, but not limited to, walking, cycling, inline skating, and travel with the use of mobility aids including motorized wheelchairs and other power-assisted devices moving at a comparable speed. Within the definition is the implied intent to travel from a specific location or destination to another, such as travel to work, shopping centers, places of worship, schools or other key destinations.

Active transportation has many benefits, some of which include:

- Improved community health: Active transportation provides an opportunity for residents to be physically active on a regular basis. Greater opportunities for physical activity will help contribute to a healthier Bluewater.
- Stronger social connections: Active transportation is accessible and facilitates social interactions. Planning a well-connected active transportation and recreational trails network can build connections between communities, thereby connecting the people of Bluewater.
- Reduced need for personal vehicles: Active transportation reduces road congestion and increases access for residents and visitors. The Bluewater Recreation Master

Plan revealed that residents were looking for alternatives to travel by car. Demand for cycling and walking facilities has increased.

- Improved environmental health: Active transportation reduces reliance on motorized vehicles thereby reducing greenhouse gas emissions. A well-connected active transportation and recreational trail network provides opportunities for non-motorized trips and will reduce auto-mobile dependence.
- Stronger local economy: Active transportation increases tourism opportunities for local businesses, saves money on gas and parking, and increases property values where streets accommodate active transportation. The Canadian Automobile Association estimates that owning and operating a car costs approximately $15,000 per year. In comparison, the cost of owning and operating a bicycle is restricted to an initial cost of approximately $150.00 to $1,000.00.

2.0 Community Profile

2.1 Community Demographics

The Municipality of Bluewater is located in Southern Ontario along the shores of Lake Huron. It is in relatively close proximity to major centers such as London (roughly 70 km to the south) and Kitchener / Waterloo (roughly 110 km to the east).

The Municipality was established in 2001 as a result of the amalgamation of a number of smaller communities – Hensall, Zurich and Bayfield, and the former Townships of Hay and Stanley.

The 2021 Statistics Canada Census reported the population of Bluewater to be 7,540 persons, which is a slight increase from previous populations – 7,136 residents during the 2016 Census period and 7,044 during the 2011 period.

The population forecast suggests that Bluewater's modest but steady growth will extend into the future, with the population estimated to reach 10,131 residents by 2047 as shown in Figure 2-1.

Figure 2-1: Historical and Projected Population, Municipality of Bluewater (2001 - 2047)

Source: Statistics Canada Census, 2001, 2006, 2011, 2016 & 2021 (excluding undercount), Municipality of Bluewater – 2022 Development Charges Background Study, B.M. Ross and Associates Limited.

Population demographics are an important consideration when planning an active transportation network. Although active transportation is more commonly used amongst younger populations, there has been a larger number of older adults and seniors participating in active transportation not only to go from destination to destination, but for maintaining their own personal fitness – emphasizing the need for safe active transportation infrastructure.

Overall, the Canadian population is aging. The baby boom generation has begun entering its senior years, underscoring the importance of considering this age cohort when planning for active transportation. Table 2-1 highlights that half of the age cohorts (Young Adults, Older Adults and Seniors) have experienced growth over the last 15 years, whereas the other half (Children, Youth and Mature Adults) have all seen their respective populations decline. Both Older Adults and Seniors experienced nearly a 50% rate of growth between 2006 and 2021; additionally, these age cohorts make up nearly half (46.2%) of Bluewater's population profile.

Table 2-1: Municipality of Bluewater Population by Age (2006 - 2021)

Age Category	2006	2021	% Change (2006-2021)	Proportion of 2021 Population
Children (0-9)	785	755	-3.8%	10.0%
Youth (10-19)	935	660	-29.4%	8.7%
Young Adults (20-34)	995	1,165	17.1%	15.4%
Mature Adults (35-54)	2,010	1,482	-26.3%	19.6%
Older Adults (55-69)	1,465	2,120	44.7%	28.1%
Seniors (70+)	945	1,365	44.4%	18.1%
Total	7,135	7,547	5.8%	100.0%

Source: Statistics Canada Census, 2006 & 2021 (excluding undercount).

Since 2006, the Municipality's median age has increased quite significantly and is higher than both the County and Province, as shown in Table 2-2.

Table 2-2: Median Age (2006 - 2021)

Location	2006	2011	2016	2021
Bluewater	44.6	47.9	50.4	52.0
Huron County	42.3	45.1	46.3	46.8
Ontario	39.0	40.4	41.3	41.6

Source: Statistics Canada Census Data, 2006 – 2021 (excluding undercount).

The Municipality of Bluewater is anticipated to continue to follow national aging trends. With an increasing number of Older Adults and Seniors, the Municipality can expect a greater demand for age-friendly active transportation options.

2.2 Transportation and Mobility

Within the Municipality of Bluewater, the majority of workers use a personal vehicle to travel to work. As of 2021, this was still applicable with 91.2% of the workforce relying on their own personal vehicle or as a passenger of another private vehicle (an increase of 3.3% from 2006). In 2021, 8.8% of residents walked or biked to work and no residents relied on public transit as their mode of transportation, as shown in Table 2-3. Travel by walking or cycling has decreased slightly since 2006 but is still higher in Bluewater than the provincial average.

Table 2-3 Transportation Modes (2006 - 2021)

Location	Private Vehicle		Public Transit		Walked / Biked	
	2006	2021	2006	2021	2006	2021
Bluewater	87.9%	91.2%	0.3%	0.0%	11.8%	8.8%
Huron County	88.4%	92.7%	0.3%	0.2%	11.4%	7.1%
Ontario	80.0%	85.6%	13.1%	8.8%	6.9%	5.6%

Source: Statistics Canada Census 2006 & 2021 (excluding undercount).
Note: "Other" mode of transportation has been omitted from this Table.

2.3 Existing Active Transportation Facilities

A number of trails exist throughout the Municipality. Most are associated with specific recreational properties including Conservation Areas and County Forest Tracts. Existing trails are shown in Figure 2-2.

There are a small number of sidewalks in the Municipality, including along Main St. in Bayfield and along several of the commercial and residential-lined roads in Zurich and Hensall.

A separated walking / cycling shoulder was recently constructed from Zurich to the Bluewater Rest Home along Zurich Rd. The facility appears to be successful and highly regarded in the community. The new facility with its buffered shoulder is shown in Figure 2-3.

There are currently no other cycling lanes, paved shoulders or multi-use trails in the Municipality.

Figure 2-2: Existing Trails

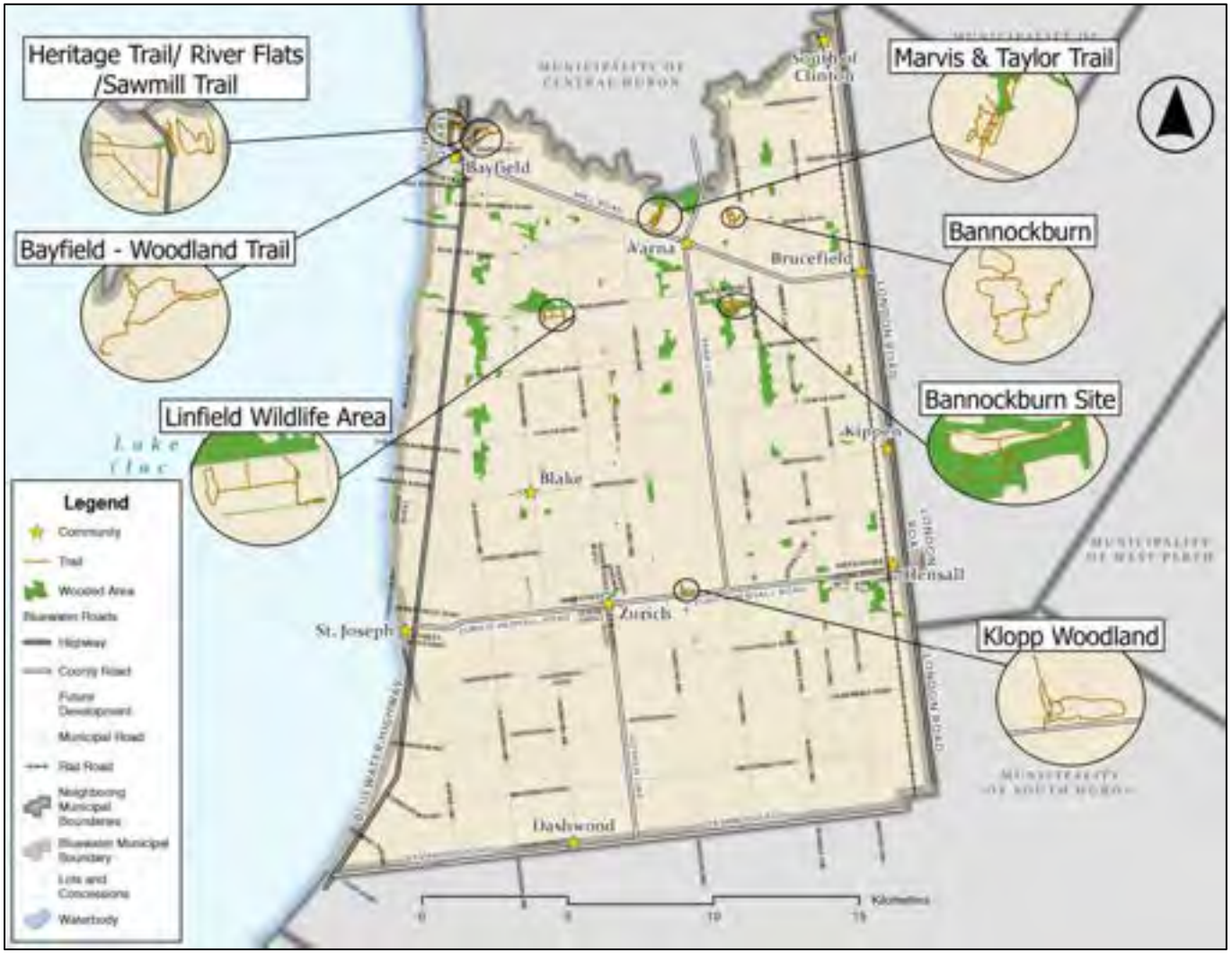


Figure 2-3: Buffered Shoulder in Zurich

Source: Google Maps Streetview

3.0 Supporting Studies and Plans

3.1 Huron County Official Plan

Section 3.2 of the Huron County Official Plan indicates that, "*Active Transportation including walking and cycling, and their corresponding trails, lanes and paths, are encouraged. The provision of trails and paths and other active transportation infrastructure will be a priority to increase safety and promote a healthy, active community.*"

There are also policies that support accessibility and accessible design for community facilities.

The Official Plan does not specify locations for active transportation facilities or provide design guidelines.

3.2 Bluewater Official Plan

Section 7.5.3.8 of the Bluewater Official Plan provides policies for village residential areas, including that, "*Street design shall form an integrated network of connected, direct and easy to follow routes which are built on existing networks, promote walking through the provision of sidewalks, trails and open space to link homes with shops, schools, parks and other important destinations. Streets shall be designed to be safe, pedestrian-scale and well maintained.*"

Similar to the Huron County Official Plan, active transportation routes or specific facilities are not identified.

The Municipality is expected to grow over the next ten to 15 years, with growth directed to the villages of Bayfield, Hensall and Zurich.

3.3 Bayfield Secondary Plan

The Bayfield Secondary Plan was approved by Council in February 2023. The Secondary Plan guides development in the village of Bayfield and includes some key recommendations regarding active transportation, including:

- That the Municipality continue to engage Ministry of Transportation staff in next steps for establishing a pedestrian crossing of Hwy 21 within the Village limits, preferably at Jane Street.
- That Municipal Staff to continue to engage Ministry of Transportation staff in assessing the Hwy 21, Mill Rd., Cameron St. intersection alignment and provide updates to the public on progress and opportunities for improved pedestrian safety.
- That Hwy 21 road speed reduction be pursued with Ministry of Transportation to extend 50 km/h zone within Bayfield Settlement Area.

- That the unopened road allowances be deemed not to be the location of future roads and be designated Open Space; these spaces are envisioned to be retained by the Municipality as pedestrian corridors, natural areas and also a space to accommodate linear infrastructure where necessary. This recommendation applies to:
  - Lidderdale Street between Jane and Victoria Streets
  - Margaret Street between Dow and Cameron Streets
  - Glass Street between Blair Street and John Avenue
  - Christy Street between Blair Street and John Avenue
  - Victoria Street between Blair Street and John Avenue
- That the connection between Tuyll and Troy Streets be redeveloped to accommodate both stormwater management as well as an active transportation corridor.
- That the establishment of a walking trail on the section of Paul Bunyan Road between Hwy 21 and Wildwood Line be considered within the Bluewater Master Recreation Plan process.

The construction of sidewalks in existing neighbourhoods was not recommended as a result of consultation undertaken for the Secondary Plan. The installation of sidewalks in new subdivisions was also not identified as a high priority but connections to key destinations are desired.

Future growth of the community is expected, with much of the growth focused on the southern portion of the village between Lidderdale St. and Hwy 21, north and south of Paul Bunyan Rd.

3.4 Bluewater Recreation Master Plan

The Municipality of Bluewater completed a Recreation Master Plan to guide Council and staff regarding the provision and sustainability of parks and recreation services. The Recreation Master Plan includes recommendations for trail development and improvement with relevance to active transportation. The following recommendations were made:

- Work with the Bayfield River Valley Trail Association (BRVA) and the Pioneer Park Association (PPA) to determine if a trail connection is possible along the top of Pioneer Park in Bayfield to replace the trail which historically ran along the beach. (The beach trail was removed as part of storm wall work in 2019.)
- Provide several trail connections in Zurich, including:
  - A connection from Parkside Ave. to the Ausable Bayfield Conservation Authority's woodland and trails via a small ROW owned by the municipality
  - Create a connection across County Rd. 84 (Zurich Main St.) to link the Zurich Arena and Park on the south side of County Rd. 84 with the Lions Park on the

north side of the road. Some additional sidewalk and a crosswalk at Parkside Avenue was recommended

- Create trails through unopened ROWs in Bayfield. This includes the unopened road allowances identified in the Secondary Plan.
- Connect settlements via trails between:
  - Bayfield and Zurich
  - Zurich and Hensall
  - Hensall and Exeter
    - These connections would primarily be through on-road connections or through private property as opportunities arise (i.e., through development approvals or scheduled infrastructure work) and would require permission of private property owners.
- Explore the possibility of a Hwy 21 active transportation route. This would require cooperation with the MTO and may include an off-road trail running along the highway.

3.5 Huron County Cycling Master Plan

Huron County is developing a new Cycling Master Plan, as of the time of this report. It is believed that the Master Plan will identify preferred cycling routes across the County, including through Bluewater.

4.0 Community Consultation

Public participation was an important component of the Master Plan. Community input was received through an online survey, open house and website posting. Details are provided in the following sections.

4.1 Community Survey

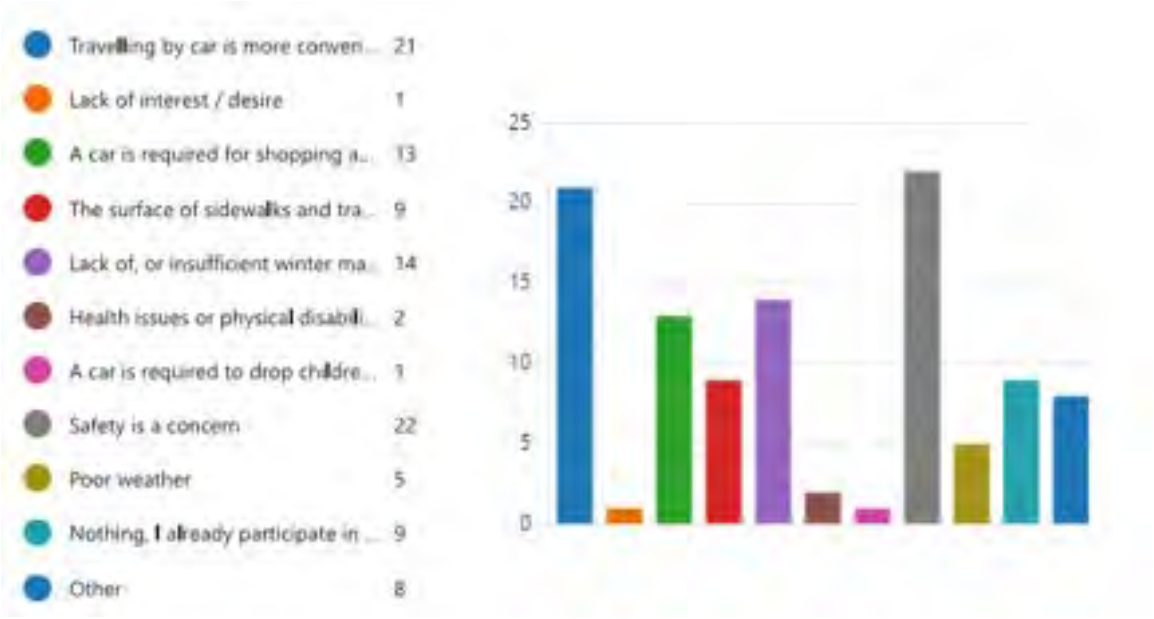
An online survey was conducted to gauge community members' interest in, and key concerns with, active transportation in Bluewater. The survey was available online and was circulated to key community groups via direct emails and was issued to the broader community through the municipality's social media feeds.

In total 45 responses were received. Overall 80% of respondents indicated that they are supportive of the municipality developing more, and better-connected, active transportation facilities, such as sidewalks, cycling lanes, trails etc. When asked what prevents them from using active transportation, the majority of respondents indicated that safety was the leading barrier, following by the convenience of using a car. Lack of winter maintenance on sidewalks and trails and the need for a car to transport loads, such as groceries, were also cited as reasons for not using active transportation. A summary of these responses in provided in Figure 4-1.

Figure 4-1: Responses to the question regarding the level of support respondents have for additional active transportation facilities.

As demonstrated by Figure 4-2, the majority of survey respondents use a personal vehicle to drive to a grocery store or od other household shopping. Many respondents are older and no longer in the workforce. However, for those that do work, the majority commute to work by car.

Figure 4-2: Responses to the question about the factors that prevent respondents from using active transportation.



All survey responses are provided in Appendix A.

4.2 Open House

An Open House was held on August 22, 2023, at the Stanley Community Centre in Varna. The Open House was arranged as a “drop-in” style session where representatives from the study team were available to answer questions and discuss the project with interested members of the public.

The open house began at 4:00 p.m. Display boards were placed around the room and representatives from the project team were available to answer any questions and discuss the project with attendees. A copy of the display boards is provided in Appendix B.

Fifteen people attended the Open House. Written comments were received from two individuals. Participants also added comments directly to information boards using sticky notes, as shown in Figure 4-3.

Comments received from Open House attendees are summarized in Table 4-1.

Figure 4-3: Examples of comments made by attaching sticky notes to Open House information boards.

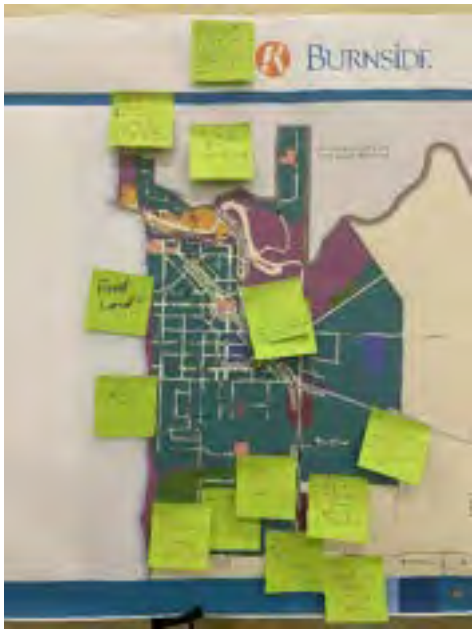


Table 4-1: Summary of Comments Received at the Open House

General Comments
Bluewater Recreation Master Plan shows trail routes on private property. Should not show unless property owners are notified and agree.
Add trails in greenspace along river corridors for all new subdivisions. Review South Huron County trail near Morrison Dam as example (Comment from ABCA).
Connect ABCA trails, where possible.
Improve signage / wayfinding for trails.
How can non-profits assist the municipality with the cost of trail construction and maintenance?
Any new off-road trails should be wide enough to support multi-modes of transportation.
Bayfield
Old River Road is narrow and windy and unsafe for pedestrians.
Need to improve parking on Jowett's Grove Road / Fisherman's Warf to make it safer for pedestrians. This is the main access to the marina. Could Jowett's Grove Road be made one-way?
Add sidewalk on Cameron St. between Tuyll St. and Hwy 21. Bus stop is on Cameron St. and safe access to bus stop is required.
Need safe crossing of Hwy 21 at Cameron St.
Need safe crossing of Hwy 21 at the Square / Howard St.
Need sidewalk from Paul Bunyan to the Foodland on Hwy 21. This is an important route between the Senior's home and the Foodland.
Pave Lidderdale Rd. from Bunyan Ave. to Crystal Springs Rd. and pave Crystal Springs Rd. from Lidderdale to Goshen Line. This creates a fully paved cycling loop around Bayfield.
The Square is difficult to maneuver safely on a bike with the parking etc. in the area.
Countryside
Add paved shoulder on Mill Rd. to Varna and Brucefield.
Add paved shoulders on Zurich-Hensall Rd. from Hensall to St. Joseph.
Could a trail be located within the Hydro corridor easement just west of Babylon Line?
Add paved shoulders on Goshen Line.
Add paved shoulders on Bronson Line.
Hensall
Add cycling route (paved shoulder) on London Rd. from Hensall to Exeter.
Ensure all new subdivisions have well-planned sidewalks and cycling facilities.
If the rail line through Hensall is no longer active, it could be converted to a trail.

Zurich
Add walking trail through ball diamond area and Zurich Conservation Area, connect to proposed new housing developments.
Ensure all new subdivisions have well-planned sidewalks and cycling facilities.
Lakeshore
Add paved shoulder on Hwy 21 / or add separated multi-use trail like one north of Grand Bend.
Work with Great Lakes Waterfront Trail- Bluewater is a missing gap in trail route.

4.3 Huron County Connects

A project summary was placed on the Huron County Connects website which allows the public an opportunity to provide online comments and digitally map key areas of concern. The site was made active in August 2023, and will remain open until the project closes. No comments or mapped areas of concern were received as of the publication of this report. However, the website provided a link to the online survey, described in Section 4.1 and may have directed interested parties to the survey.

5.0 Ten-Year Vision

The Municipality of Bluewater supports active transportation as a means to improve community health and reduce the number of short trips taken in a personal vehicle. Input received from the public indicated that safety for pedestrians and cyclists is of prime importance. There is a desire to have better separation between pedestrians, cyclists and vehicular traffic.

Therefore, the Municipality of Bluewater's vision is:

> *To provide opportunities for residents and visitors to travel to key destinations safely and efficiently within the municipality using active transportation.*

6.0 Implementing Active Transportation Network Recommendations

The following goals have been identified through this active transportation master plan process for active transportation in the Municipality of Bluewater:

Goal 1	Create Rural Active Transportation Networks
Goal 2	Improve Active Transportation Connectivity in Bayfield
Goal 3	Improve Active Transportation in Zurich and Hensall
Goal 4	Work with MTO to Construct Key Active Transportation Facilities
Goal 5	Include Active Transportation Facilities in New Developments
Goal 6	Foster Partnerships with Trail Organizations

Each goal is described in detail in the following sections, together with recommended actions to achieve each goal.

6.1 Goal 1: Build a Rural Active Transportation Network

Action 1A: Develop Rural Cycling Facilities

Huron County is developing a new Cycling Master Plan, as of the time of this report. It is believed that the Master Plan will identify preferred cycling routes across the County, including through Bluewater.

The Municipality of Bluewater should continue to work with the County to ensure that appropriate routes are identified. Bluewater should also work with the County to implement the Master Plan, once complete.

It is assumed that the Cycling Master Plan will recommend facilities such as paved shoulders on key rural roads. Facilities should be designed in accordance with OTM Book 18, the Cycling Master Plan and the recommendations provided in Section 7.0 of this report. The buffered shoulder in Zurich is an example of a successful design that can be utilized in other rural locations across the Municipality.

Participants at the Open House identified that the unpaved sections of Lidderdale St. south of Paul Bunyan Rd. and Crystal Springs Rd. from Lidderdale St. to Hwy 21, form part of a well-used cycling route. This local connection may or may not be identified in the County's Cycling Master Plan. Paving these sections of road may be warranted in the future, particularly as the southern portion of Bayfield is developed and traffic along these routes increase.

Action 1B: Develop Community Connections

Trail connections between communities and between recreational areas were proposed in the Bluewater Recreational Master Plan. Several of the proposed routes were located

on privately owned lands and could be implemented as part of future development plans initiated by landowners or through land use agreements or easements with landowner participation. Work should be undertaken to work with landowners to further develop trail routes. Alternatively, similar routes on public lands could be considered.

6.2 Goal 2: Improve Connectivity in Bayfield

There are several opportunities within the community of Bayfield to foster safer and better-connected sidewalks, trail sand cycling routes.

Action 2A: Use Unopened Road Allowances to Create Active Transportation Routes

The Municipality should maintain ownership of all unopened road allowances. Connecting trails should be developed within the following road allowances:

- Lidderdale Street between Jane and Victoria Streets
- Margaret Street between Dow and Cameron Streets
- Glass Street between Blair Street and John Avenue
- Christy Street between Blair Street and John Avenue
- Victoria Street between Blair Street and John Avenue

Trails should be designed to meet accessibility standards, where possible.

Additional unopened road allowances may permit trail construction east of Sarnia St. using the David St. E ROW and ROW between Bayfield and the Wildwood by the River camp, as shown on Figure 6-1. The feasibility of these routes requires further investigation due to the challenging terrain and potential construction and maintenance costs.

Action 2B: Provide an Active Transportation Connection to the Marina

The Bayfield Marina has achieved the status as a Blue Flag Marina, indicating that it complies with a number of stringent environmental, educational, safety and accessibility criteria. The designation is globally recognized and highly respected. One key area for improvement is in the connections between the marina and community for pedestrians and cyclists.

There is currently some access to the Bayfield Marina via the Mara Street Walkway located between Bayfield Terrace and Long Hill Rd. This walkway is informal with a steep slope with limited accessibility for those with physical mobility challenges. In addition, Long Hill Rd. has relatively high traffic volumes in the summer as a main access route to the marina. Parking for the marina is generally along the roadside. There are no sidewalks or cycling facilities provided.

It is recommended that the municipality work with the marina to provide formal parking and develop a sidewalk and / or cycling lane along Long Hill Rd.

The Mara Street Walkway should also be reviewed to determine if accessibility improvements are feasible.

Action 2C: Install Multi-use Trails in Key Locations

Most streets in Bayfield do not have sidewalks. With a growing population and increasing popularity as a tourist destination, a separation between pedestrians and vehicular traffic is becoming more important.

The Huron Shores Area Transit route includes two stops on Cameron St. and at the Square. In order to provide safe access to these transit stops, it is recommended that a multi-use trail be installed on Cameron St. from Hwy 21 to Lidderdale St. A connection to The Square is also recommended.

Additional connections could be made to create a connected multi-use trail system that provides an off-road pedestrian and cyclist route with north-south and east-west connections across Bayfield with links to key destinations such as the Community Centre and Arena, Agricultural Grounds, marina, Clan Gregor Square, transit stop and highway commercial district. Recommended connections are shown on Figure 6-1. Some connections require partnership with other agencies, such as MTO, Municipality of Central Huron and the County of Huron. Certain connections also require partnership with private landowners and would be created as properties are developed.

Sources:

1. Ministry of Natural Resources and Forestry, © King's Printer for Ontario.
2. Natural Resources Canada, © His Majesty the King in Right of Canada.

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Datum: North American 1983	
Coord. System: NAD 1983 UTM Zone 17N	
Projection: Transverse Mercator	
Central Meridian: 81°0'0.00"W	
False Easting: 500,000m	False Northing: 0m
Rotation: 0	Scale Factor: 0.99960

N
Grid North

- Existing Sidewalk/Trail
- Proposed Sidewalk/Multi-use Trail Requiring Partnership with Other Agencies or Property Owners
- Proposed Multi-use Trail
- Future Development Areas. Trails may be Ceated in Conjunction with the Development Process.

BURNSIDE

Client: **MUNICIPALITY OF BLUEWATER**

Map Title: **BLUEWATER ACTIVE TRANSPORTATION MASTER PLAN**
BAYFIELD ACTIVE TRANSPORTATION

Drawn	Checked	Date	Map No.
HN	TR	2023/11/27	6-1
Scale: H 1:5,500		Project No.: 300056588	

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6.3 Goal 3: Improve Connectivity in Zurich and Hensall

Action 3A: Connect the Community Centre, Lions Park and Zurich Conservation Area

The Recreation Master Plan recommended an active transportation connection in Zurich. The goal is to connect the Zurich Arena and Park on the south side of County Rd. 84 with the Lions Park on the north side of the road. Some additional sidewalk and a crosswalk at East Street are recommended. This recommendation is carried forward to this Master Plan with a proposed connection as shown in Figure 6-2. The sidewalk should be added at the time of any scheduled road reconstruction on East St.

Action 3B: Connect the Arena, Community Centre and Kin Park in Hensall

Similar to Zurich, there is currently no sidewalk providing pedestrian access to the Arena and Community Centre in Hensall or the adjacent park. Sidewalks are recommended along Brock St. and Oxford St. W from Brock St. to the playground. This sidewalk is shown in Figure 6-3. The sidewalk should be added at the time of any future reconstruction of Brock St. and Oxford St. W.

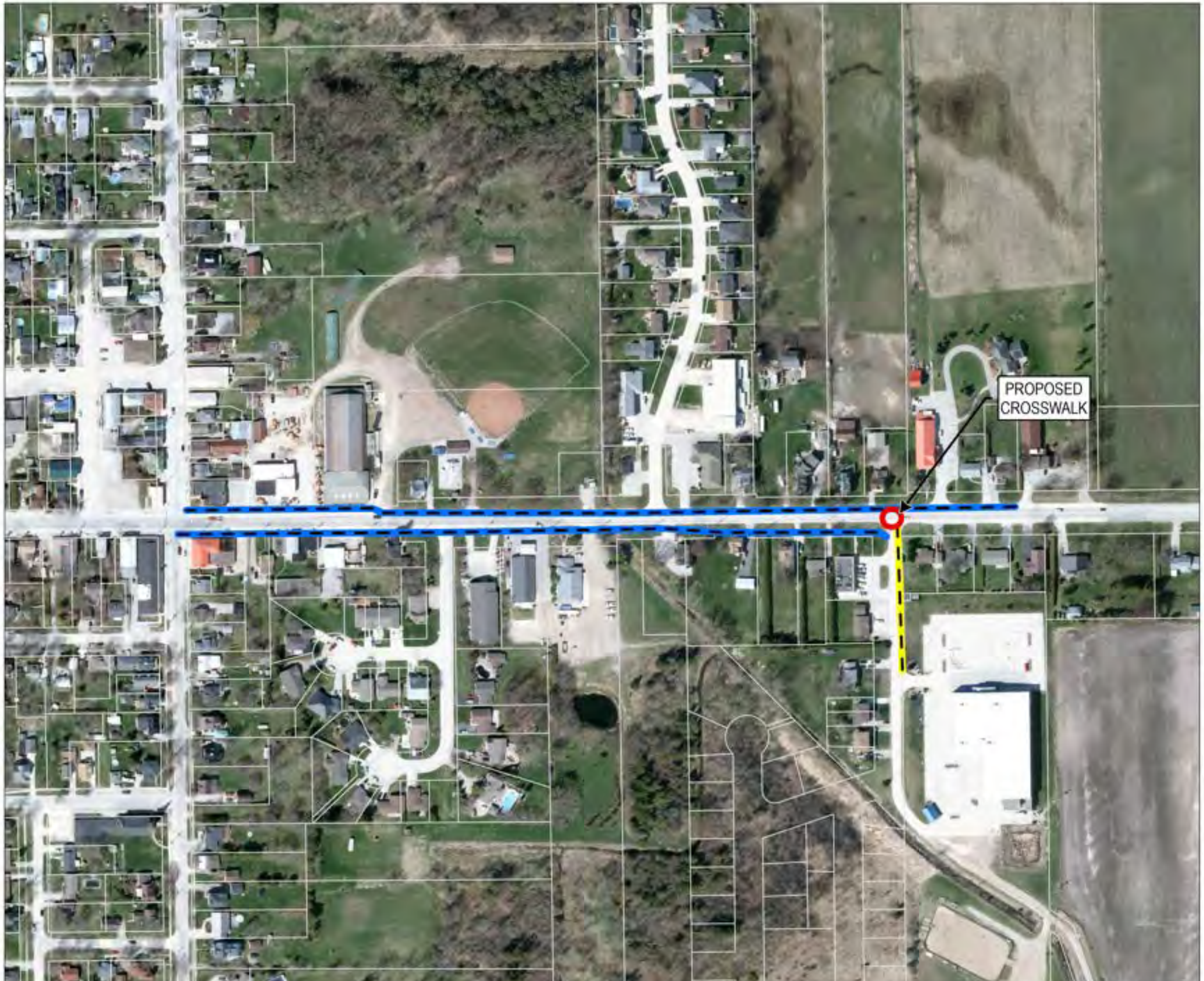
Action 3C: Connect Zurich and Hensall

A cycling connection between Zurich and Hensall was recommended in the Recreation Master Plan and was identified as an important link by participants at the Open House. A cycling route along County Rd. 84 between Zurich and Hensall would also provide a connection to the trails in the Klopp Tract, located on the north side of County Rd. 84 just east of Zurich.

County Rd. 84 has a relatively wide right-of-way which could likely support a separated multi-use trail, providing a buffer between the road and the trail. The design of this route can be further explored at the time of implementation.

Existing Sidewalk

Proposed Sidewalk



Sources:

1. Ministry of Natural Resources. © Queen's Printer for Ontario
2. Natural Resources Canada © Her Majesty the Queen in Right of Canada

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This map is the product of a Geographic Information System (GIS). As such, the data represented on this map may be subject to updates and future reproductions may not be identical.

Datum: North American 1983	
Coord. System: NAD 1983 UTM Zone 17N	
Projection: Transverse Mercator	
Central Meridian: 81°00'00"W	
False Easting: 500,000m	False Northing: 0m
Page Orientation: -7.26°	Scale Factor: 0.9996

True North

0 50 100 150 200

Metres

BURNSIDE

Client

MUNICIPALITY OF BLUEWATER

Figure Title

BLUEWATER ACTIVE TRANSPORTATION MASTER PLAN

ZURICH ACTIVE TRANSPORTATION

Drawn	Checked	Date	Figure No.
HN	TR	2023/11/30	6-2
Scale		Project No.	
H 1:2,750		300056588	

Proposed Sidewalk

Sources:

1. Ministry of Natural Resources. © Queen's Printer for Ontario
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Datum: North American 1983	
Coord. System: NAD 1983 UTM Zone 17N	
Projection: Transverse Mercator	
Central Meridian: 81°00.0W	
False Easting: 500,000m	False Northing: 0m
Page Orientation: -7.26°	Scale Factor: 0.9996

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True North

0 25 50 75 100
Metres

BURNSIDE

Client
MUNICIPALITY OF BLUEWATER

Figure Title
BLUEWATER ACTIVE TRANSPORTATION MASTER PLAN
HENSALL ACTIVE TRANSPORTATION

Drawn	Checked	Date	Figure No
HN	TR	2023/11/27	6-3
Scale		Project No.	
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6.4 Goal 4: Work with MTO to Construct Key Active Transportation Facilities

The intent of this goal is to work with the Ministry of Transportation on three locations that have been identified by the public as key priorities for active transportation.

Action 4A: Construct a Safe Hwy 21 Crossing in Bayfield

Hwy 21 bisects the community of Bayfield. There is currently no signalized intersection along Hwy 21 through the community. Discussions have been initiated with MTO to construct a pedestrian crossing in the vicinity of Clan Gregor Square and Howard St. E. with a trail connection through Clan Gregor Square. Those discussions should continue to secure funding to implement the project.

Action 4B: Improve the Intersection at Mill Rd. and Hwy 21

Deficiencies have been identified at this intersection. The Municipality should continue to work with MTO to improve safety for pedestrians.

Action 3C: Create an Active Transportation Corridor along Hwy 21

Hwy 21 is the western-most transportation the spans the full length of the municipality. It is the closest transportation corridor to the lakeshore and is highly desirable as an active transportation connection. There is an existing multi-use trail in the Hwy 21 right-of way south of Grand Bend. There is value in connecting this existing trail northward to Bayfield. The municipality should work with MTO to develop a multi-use trail or cycling lanes, as appropriate, from Grand Bend to Bayfield. A recommended multi-use trail design concept is shown in Section 7.0 of this report.

6.5 Goal 5: Include Active Transportation Facilities in New Developments

Action 5A: Require Active Transportation Facilities in New Subdivisions

New developments provide ample opportunity to develop new facilities and create connections with existing active transportation infrastructure. Sidewalks and / or multi-use trails are recommended within all new subdivisions in Bayfield, Hensall and Zurich.

In some cases, sidewalks may not be desirable or appropriate. Developers may work with the Municipality to create alternate active transportation facilities, such as multi-use trails with connections to broader active transportation routes. An example may be in Bayfield, north of Paul Bunyan Rd. between Lidderdale St. and Hwy 21. It is

recommended at the time of development that a trail network be created through wooded areas to connect to the highway commercial areas along Hwy 21.

6.6 Goal 6: Foster Partnerships with Key Trail Organizations

Action 6A: Develop and Maintain Partnerships

Trail organizations can provide key support to active transportation projects. The Municipality should continue to foster relationships with organizations such as the Bayfield River Valley Trail Association, Lions Club and Ausable Bayfield Conservation Authority. These organizations may be able to offer funding, trail expertise and volunteer man-power to assist with trail projects. Similarly, the municipality could support these organizations through grant funding support and in-kind works.

The Great Lakes Waterfront Trail is an initiative which is seeking to develop a cycling route around each of the Great Lakes. The Municipality of Bluewater represents a gap in the current trail route. Efforts to help close the gap should be initiated.

7.0 Design Guidelines

Whenever possible, the municipality should implement its active transportation infrastructure in accordance with Ontario Traffic Manual Book 18 – Cycling Facilities (June 2021) (OTM Book 18). A summary of those guidelines is provided in the following sections.

7.1 Accessibility

According to the Statistics Canada 2017 Canadian Survey on Disability, an estimated one in five Canadians aged 15 years and over had one or more disabilities that limited them in their daily activities. For many of these Canadians, their disability may limit their full participation in society.

The seven principles of universal design are described in Table 7-1 and should be considered when planning or designing any of the Active Transportation Network recommendations. The goal of universal design is to create inclusion for all.

Table 7-1: Principles of Universal Design

Principle	Description
Equitable Use	The design is useful and marketable to people with diverse abilities.
Flexibility in Use	The design accommodates a wide range of individual preferences and abilities.

Principle	Description
Simple and Intuitive Use	The design is easy to understand and use, regardless of the user's experience, knowledge, language skills or current concentration level.
Perceptible Information	The design communicates necessary information effectively to the user, regardless of ambient conditions or the user's sensory abilities.
Tolerance for Error	The design minimizes hazards and the adverse consequences of accidental or unintended actions.
Low Physical Effort	The design can be used efficiently, comfortably, and with minimal fatigue.
Size and Space for Approach and Use	Appropriate size and space is provided for approach, reach, manipulation, and use, regardless of user's body size, posture, or mobility.

7.2 Active Transportation Facilities

Based on the Active Transportation Network recommendations made, guidelines for active transportation facilities have been created which include paved shoulders, multi-use paths, and sidewalks.

Ancillary features such as benches, rest areas and lighting may be considered along active transportation routes, where appropriate. The guidance provided in OTM Book 18 should be followed to the extent possible.

A summary of the desired and minimum facility widths is shown in Table 7-2.

Table 7-2: Recommended Facility Widths

Facility	Desired Width	Suggested Minimum Width
Paved Shoulder	1.5 - 2.0 m	1.2 m
Multi-use Path	3.5 m	3.0 m
Sidewalk	1.8 - 2.0 m	1.5 m

7.2.1 Paved Shoulders

Paved shoulders are typically found on rural roads but can also be implemented on urban and suburban roadways. They can be considered accessible to bicycles if they provide sufficient operating space, pavement marking separation, and a smooth surface clear of snow and debris.

It is recommended that the width of the paved shoulder varies with the speed and volume of the roadway. Per OTM Book 18, the desired width of a paved shoulder is

1.5 m or more. However, in constrained areas, the minimum paved shoulder width can be 1.2 m.

7.2.2 Multi-Use Paths

An in-boulevard multi-use path is separated from the roadway both horizontally and vertically. Users of the multi-use path are separated from vehicles by a curb and either a strip of grass or pavement. Multi-use paths allow for two-way travel and can be used by both cyclists and pedestrians.

Per OTM Book 18, the desired width of a multi-use path is 3.5 m; however, the suggested minimum width is 3 m.

7.2.3 Sidewalks

Sidewalks are designed primarily for pedestrians and should be provided on at least one side of all streets. To allow for comfortable two-way travel, the desired sidewalk width is 1.8 m or more; however, the suggested minimum width is 1.5 m (Per Transportation Associate of Canada Geometric Design for Canadian Roads).

7.3 Street Typology

It is recommended that the Active Transportation Facilities be planned using a Complete Streets approach. The design process should follow the key decision steps:

1. Define the Roadway Environment: How does the roadway affect / interact with the adjacent land uses and environmental features?

2. Define Roadway Function: What modes of travel and boulevard elements are a high priority and explicitly accommodated?

3. Define Design Speed: What is the vision for the roadway and what is the appropriate operating and design speeds given the roadway environment and roadway function?

4. Define Typical Cross-section: Select roadway elements that comprise the cross-section based on preferred roadway typologies.

5. Define Design Domain: Select parameters for design elements that meet engineering minimums and are consistent with the design vision and speeds (e.g., lane widths, clear zones, intersection radii).

The following four street typologies have been developed based on typical roadway environments and the modes of travel supported by the Municipality. Notwithstanding the need to use OTM Book 18 as the primary source for active transportation, a set of

Active Transportation Design Guidelines have been created to address specific conditions within the municipality and in order to support some of the Active Transportation network recommendations made in the previous section. These made-for-Bluewater design guidelines are presented below. The Guidelines are applicable to both existing and new infrastructure developments and are flexible due to the urban and rural nature of the Municipality. These new Municipality of Bluewater design standards are provided in Appendix C.

7.3.1 Existing Roads

Many of the roads in the Municipality do not currently include sidewalks. Sidewalks can be added as a means to support active transportation. Local conditions will vary. Some existing road rights-of-way may be relatively narrow or include existing infrastructure and utilities that can limit how new sidewalks are planned and installed. A conceptual design for a narrow right-of-way is shown in Figure 7-1. The distance between any new sidewalks and the road should be maximized within the right-of-way, to the extent possible.

7.3.2 Bayfield

In Bayfield, there are many mature neighbourhoods that lack sidewalks. Previous consultation with residents has found that sidewalks are not preferred. However, there are a number of unopened road allowances and relatively wide road rights-of-way which would allow multi-use trails to be constructed, as discussed in Section 6.2. Multi-use paths can be constructed to encourage active transportation and provide a means of safe travel across the village by foot or bicycle. A typical layout is provided in Figure 7-2.

7.3.3 New Subdivisions

New subdivisions provide flexibility with street design and allow sidewalks to be incorporated using best practices and design guidelines. Higher priority can be given to cyclists and pedestrians in these areas. Sidewalks and cycling facilities should be included in subdivision plans. A typical layout is provided in Figure 7-3.

7.3.4 Rural Roads

Rural roads are within agricultural and natural areas. Their primary function is to move private and goods movement vehicles. Rural roads can incorporate paved shoulders to accommodate cyclists. A typical layout is provided in Figure 7-4.

7.3.5 Highway

Due to the high-speed nature of highways, multi-use paths are recommended to separate pedestrians and cyclists from the roadway. A typical layout is provided Figure

7-5. This is suitable for Class 1 and 2 highways, such as Hwy 21 between Bayfield and Grand Bend as well as County Rd. 84 between Zurich and Hensall.

Figure 7-1: Addition of Sidewalk to an Existing Road

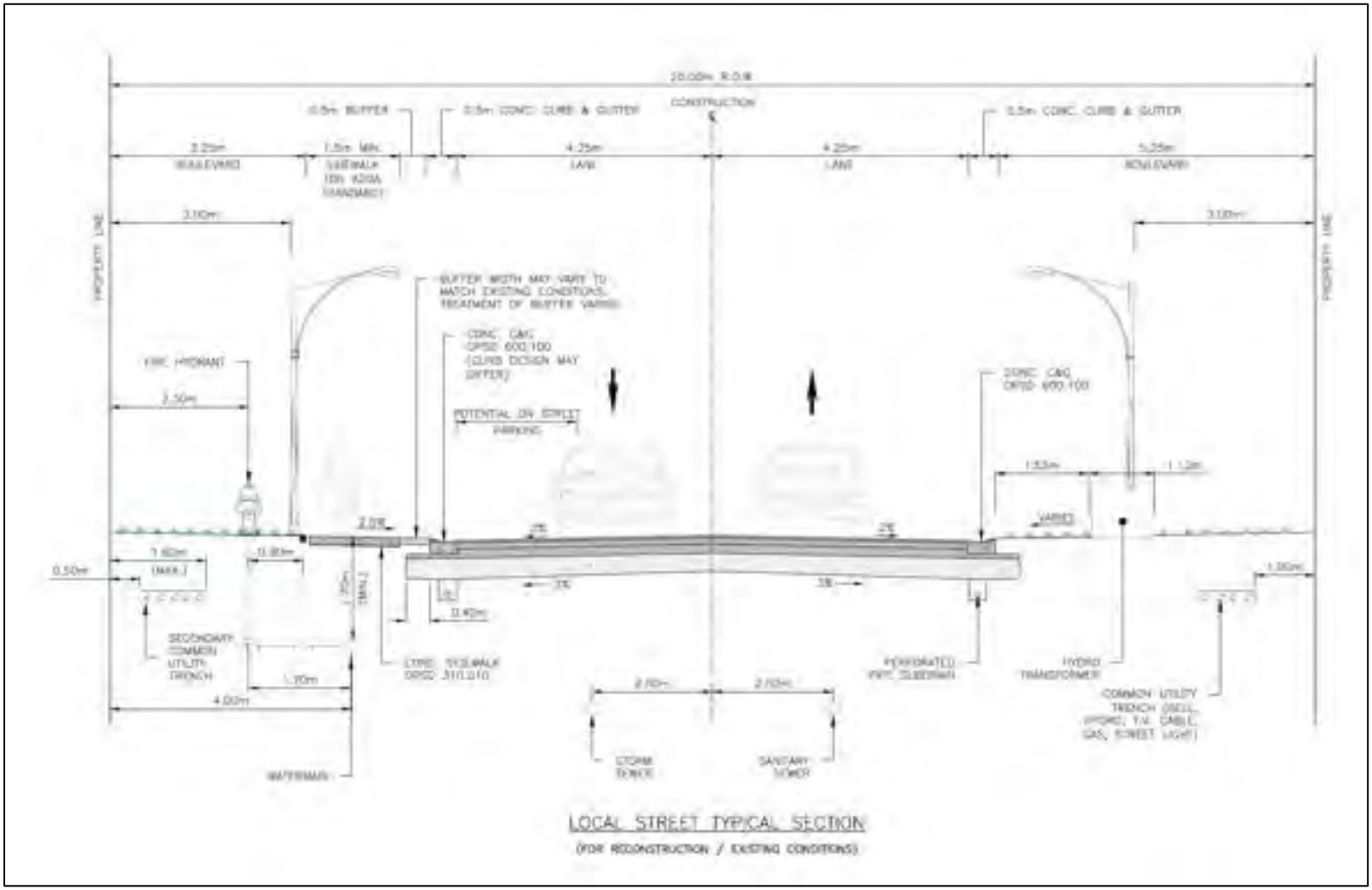


Figure 7-2: Multi-use Path Within Village Areas

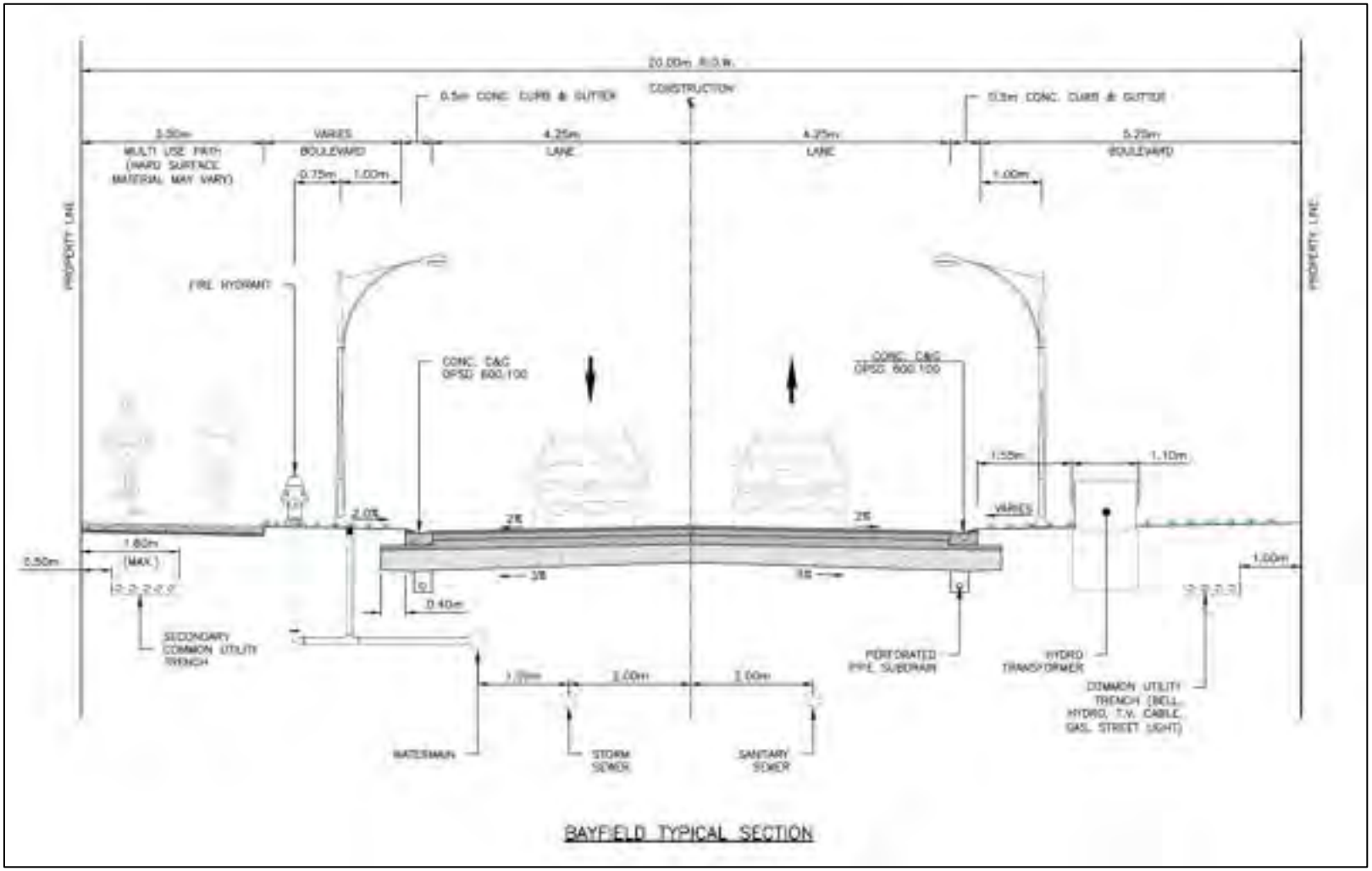


Figure 7-3: Road Cross-Section in New Subdivisions

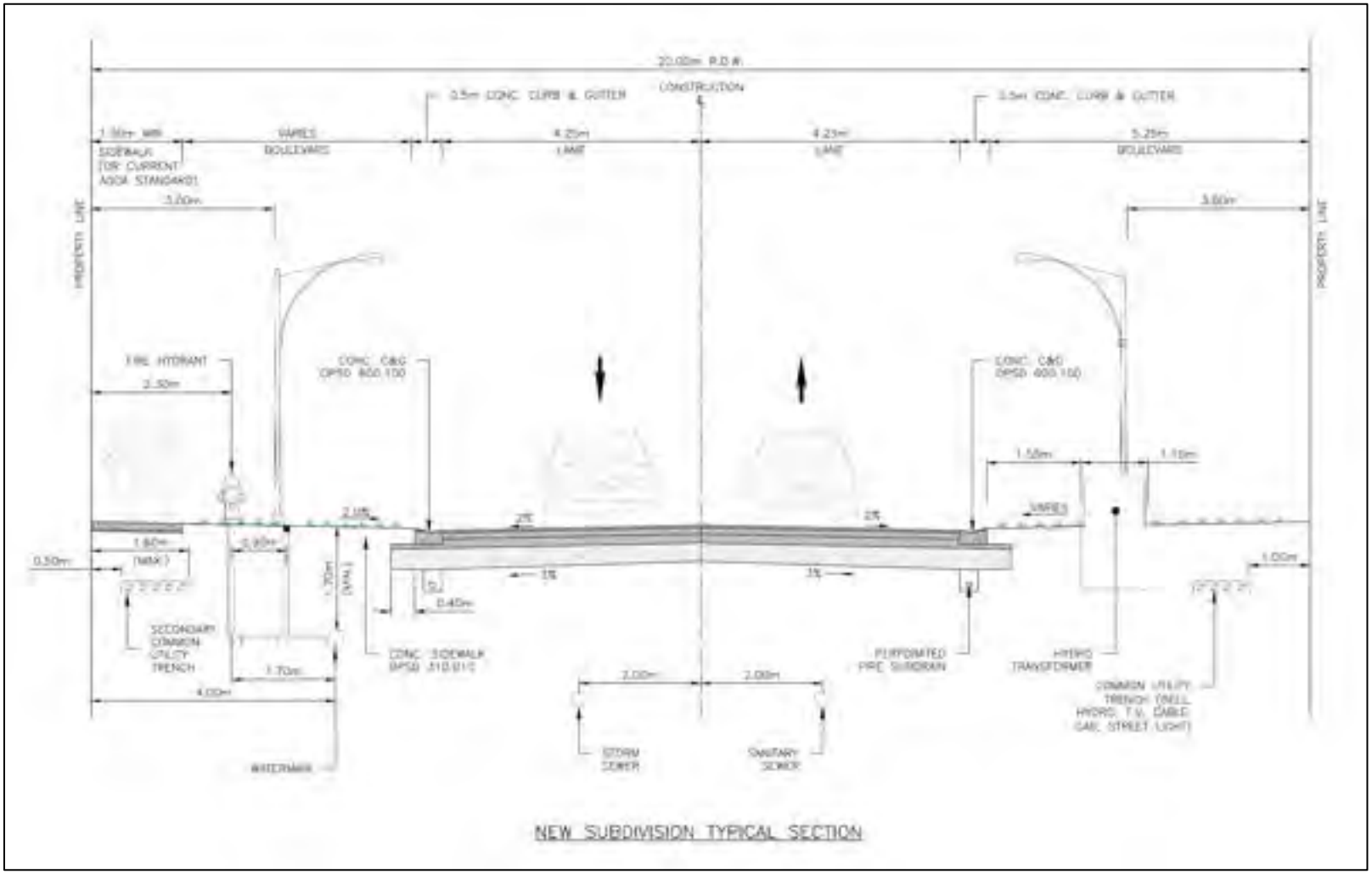


Figure 7-4: Paved Shoulders on Rural Roads

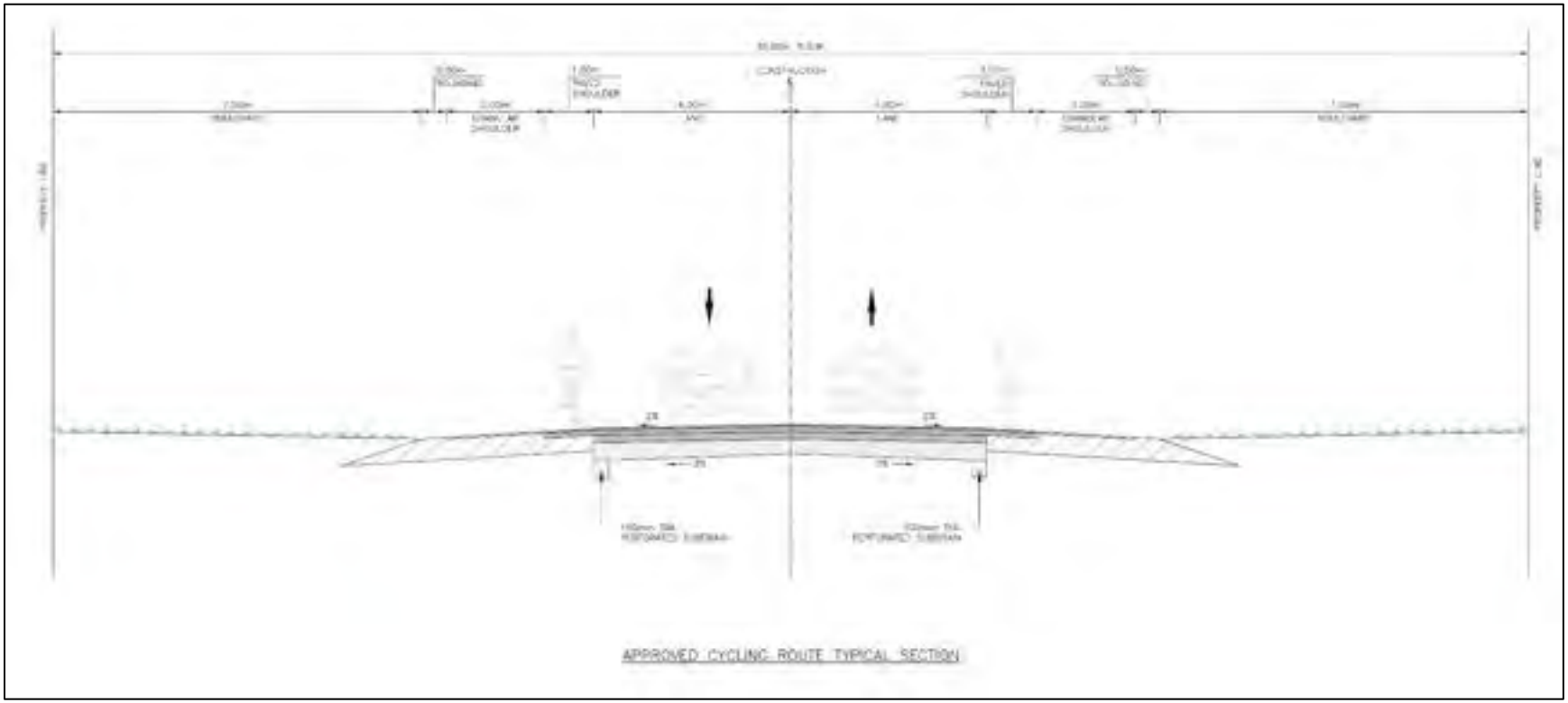
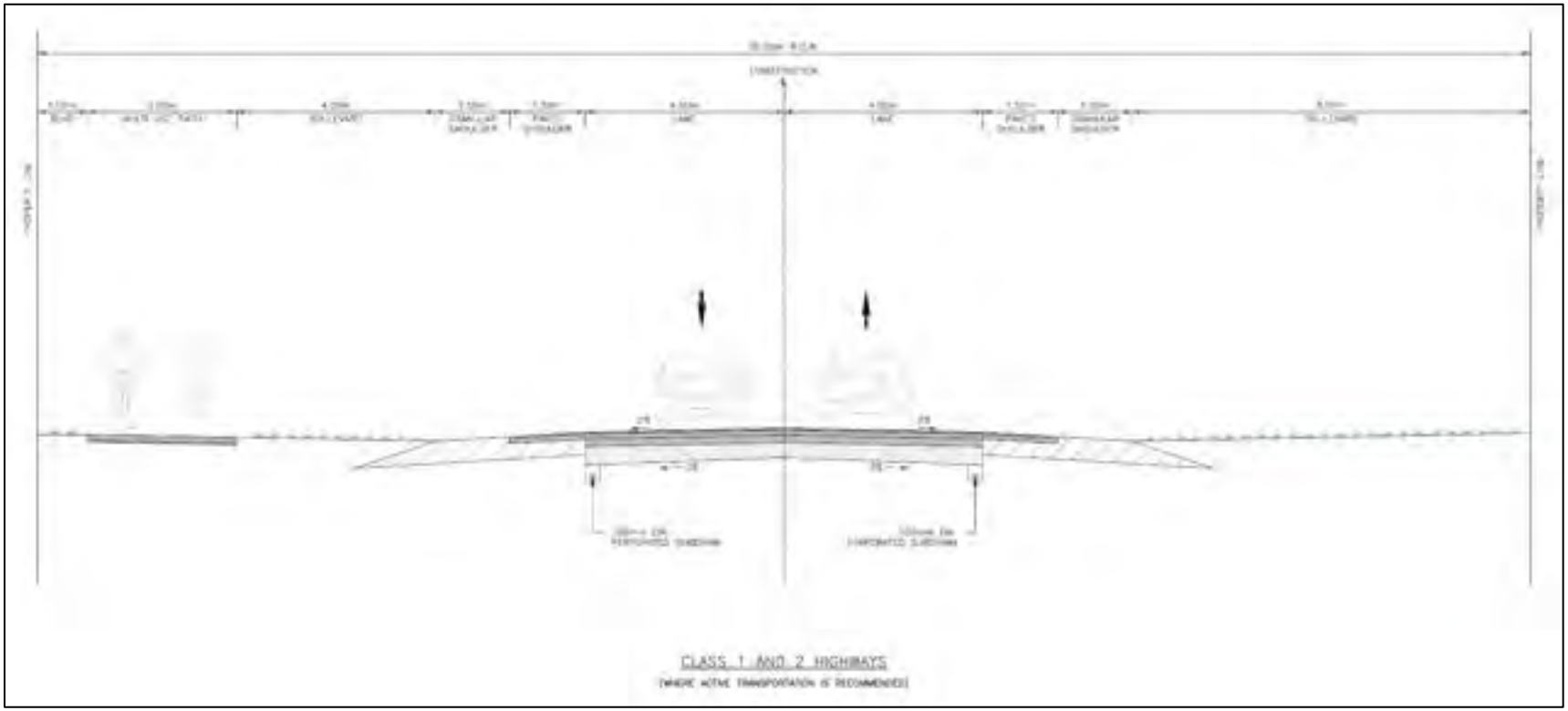


Figure 7-5: Multi-Use Trail Adjacent to Highways



8.0 Implementation Plan

The recommendations made in this Master Plan will be carried out over time. The following sections document project priorities, high level cost estimates, potential funding sources and partnership opportunities.

8.1 Prioritized Recommendations

Active Transportation improvements will occur over the next 15 years and beyond. A priority schedule is listed in Table 8-1.

Table 8-1: Priority Actions

Recommendations	High Priority (1-5 Years)	Moderate Priority (5-10 Years)	Low Priority (10-15 Years)
Goal 1: Build a Rural Active Transportation Network			
Action 1A: Develop Rural Cycling Routes	Ö	Ö	Ö
Action 1B: Create Community Connections		Ö	Ö
Goal 2: Improve Connectivity in Bayfield			
Action 2A: Utilize Unopened Road Allowances to Create a Local Trail Network	Ö	Ö	
Action 2B: Improve AT Access to the Marina		Ö	
Action 2C: Install Multi-use Trails in Key Locations	Ö	Ö	
Goal 3: Improve Connectivity in Zurich			
Action 3A: Connect the Community Centre, Lions Park and Zurich Conservation Area		Ö	
Action 3B: Connect the Arena, Community Centre and Park in Hensall		Ö	
Action 3C: Connect Zurich and Hensall		Ö	
Goal 4: Work with MTO to Construct Key Active Transportation Facilities			
Action 4A: Construct a Safe Hwy 21 Crossing in Bayfield	Ö		
Action 4B: Improve the Hwy 21/Mill Rd. Intersection	Ö		
Action 4C: Create an Active Transportation Corridor along Hwy 21		Ö	Ö
Goal 5: Include Active Transportation Facilities in New Developments			
Action 5A: Require New Subdivisions to Incorporate AT into Designs	Ö	Ö	Ö
Goal 6: Foster Partnerships with Trail Organizations			
Action 6A: Work with Trail Organizations to Identify Partnership and Funding Opportunities	Ö	Ö	Ö

8.2 Cost Estimate

A high-level review has been undertaken to estimate the financial investment requirements to achieve the recommendations of this Active Transportation Master Plan. A per kilometer cost for the various street typologies listed in Section 7.3 is provided in Table 8-2.

Table 8-2: Cost Per Unit

Road Typology	New Construction Cost (per km)	AT Infrastructure Only Cost (per km)
Existing Roads	$1.44M – $1.76M	$0.10M – $0.14M
New Subdivisions	$1.53M – $1.87M	$0.07M - $0.11M
Rural Roads	$1.31M – $1.60M	$0.16M - $0.24M
Highways	$3.15M – $3.85M	$0.40M - $0.60M

A high-level budget estimate for each of the goals made in Section 6.0 is provided in Table 8-3.

Table 8-3: Budget Estimate for Active Transportation Goals

Goals	Length (m)	Unit cost ($1,000)	Capital Cost ($1,000)
Goal 1: Build a Rural Active Transportation Network			
Action 1A: Develop Rural Cycling Routes			N/A
Action 1B: Create Community Connections			N/A
Goal 2: Improve Connectivity in Bayfield			
Action 2A: Utilize Unopened Road Allowances to Create a Local Trail Network	3,110	$0.08	$248.80
Action 2B: Improve AT Access to the Marina	790	$0.12	$94.80
Action 2C: Install Multi-use Trails in Key Locations	3,438	$0.20	$687.60
Goal 3: Improve Connectivity in Zurich			
Action 3A: Connect the Community Centre, Lions Park and Zurich Conservation Area	410	$0.20	$82.00
Action 3B: Connect the Arena, Community Centre and Park in Hensall	225	$0.20	$45.00
Action 3C: Connect Zurich and Hensall	900	$0.50	$450.00
Goal 4: Work with MTO to Construct Key Active Transportation Facilities			

Goals	Length (m)	Unit cost ($1,000)	Capital Cost ($1,000)
Action 4A: Construct a Safe Hwy 21 Crossing in Bayfield	20	$0.04	$0.80
Action 4B: Improve the Hwy 21/Mill Rd. Intersection	20	$0.50	$10.00
Action 4C: Create an Active Transportation Corridor along Hwy 21	28,000	$0.50	$14,000.00
Goal 5: Include Active Transportation Facilities in New Developments			
Action 5A: Require New Subdivisions to Incorporate AT into Designs		N/A	
Goal 6: Foster Partnerships with Trail Organizations			
Action 6A: Work with Trail Organizations to Identify Partnership and Funding Opportunities		N/A	

8.3 Potential Funding Sources

The following funding sources were identified for the Municipalities consideration to help fund recommended projects from this study:

- Development Charges – An update to the Municipalities Development Charges Study will summarize project's eligible for collection though development charges.
- Ontario's Rural Economic Development (RED) Program – Supports rural communities by funding programs that remove barriers to community economic development.
- Grants Ontario – A source of active grants provided by several Government of Ontario ministries.
- Trillium ROOTS Community Support Fund – Supports commitments to sustainability in rural Ontario. Focus area include environmental / sustainability and emergency response, both of which must be capital in nature. Requests for funding are reviewed quarterly.
- Ontario Trillium Foundation (OTF) – Canadian grant-making foundation that supports "seed", "grow", and "capital" grants. This can include conducting research or feasibility studies and pilot projects.
- Infrastructure Ontario's Loan Program – Provides long-term financing to eligible public-sector clients to support community-based infrastructure projects.
- Investing in Canada Infrastructure Program – Provides ling-term, stable funding from Infrastructure Canda through targeted funding streams, including Green Infrastructure, Community, Culture and Recreation, and Rural Communities.

- Green Municipal Fund – Grants and loans for municipal environmental projects, including transportation-related projects that support active transportation.

8.4 Partnerships

Partnerships are often necessary in trail and active transportation projects to resolve concerns or limitations with property ownership, expertise and financial burden. Potentially beneficially partnerships could be made with the following agencies and organizations:

- Ministry of Transportation
- Huron County
- Municipality of Central Huron
- Waterfront Regeneration Trust
- Bayfield River Valley Trail Association
- Lions Club
- Ausable Bayfield Conservation Authority

9.0 References

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BURNSIDE

[THE DIFFERENCE IS OUR PEOPLE]

Appendix A

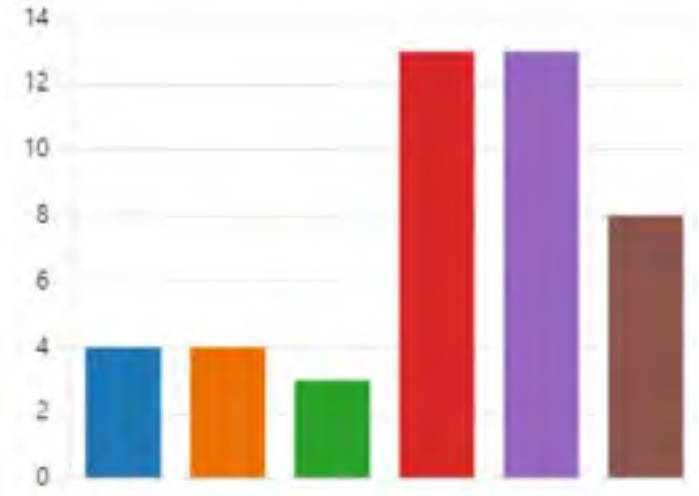
Survey Responses

Bluewater Active Transportation Master Plan Community Survey

45	11:33	Active
Responses	Average time to complete	Status

1. How often do you use active transportation to travel within Bluewater? "Active transportation" refers to getting to a destination without motorized transportation. Some examples are walking, biking, rollerblading, skateboarding, etc. to commute to work or to school, run errands, and more.

A few times a year	4
Once a month	4
Once a week	3
A few times a week	13
Daily	13
Never	8



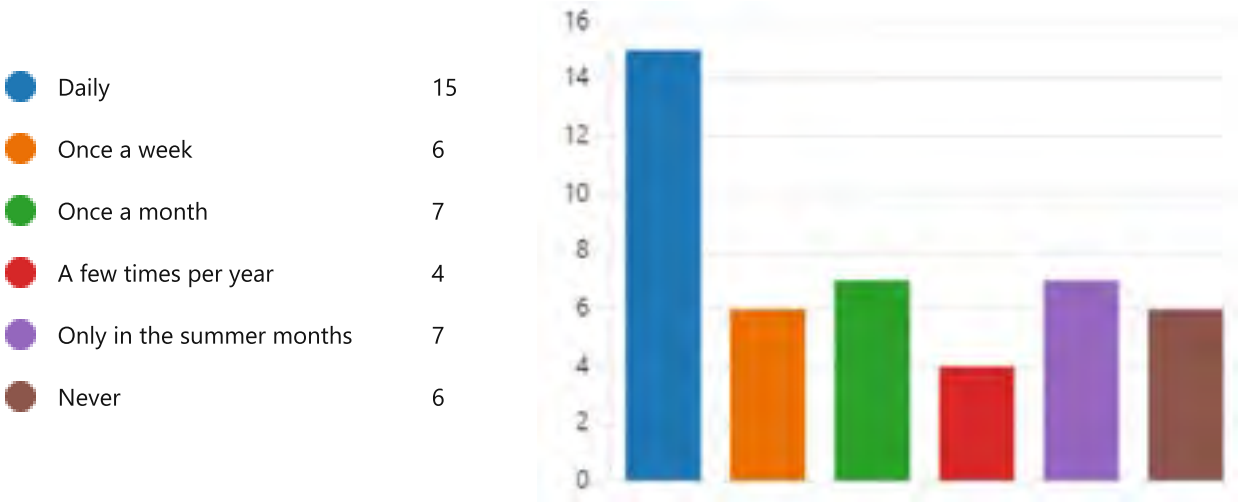
2. If you selected "Never" in the previous question, please explain why.

8
Responses

Latest Responses

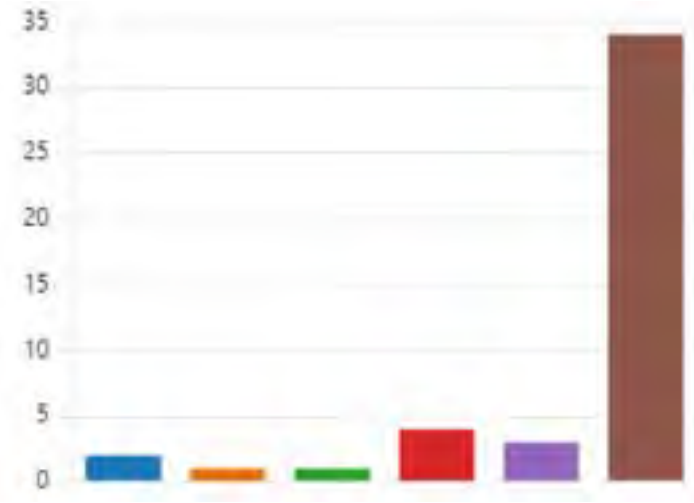
2 respondents (**25**%) answered **times** for this question.

3. How often do you use active transportation within Bayfield?



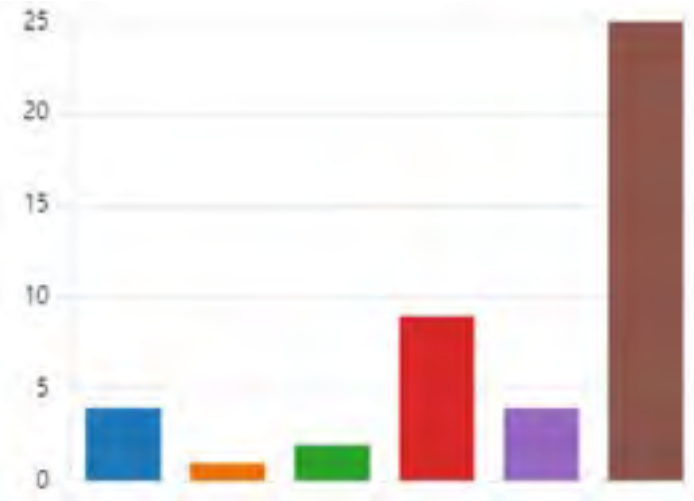
4. How often do you use active transportation within Hensall?

Daily	2
Once a week	1
Once a month	1
A few times per year	4
Only in the summer months	3
Never	34



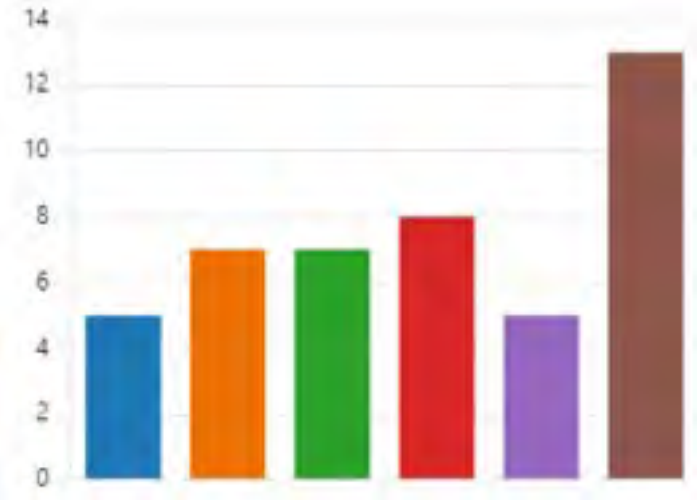
5. How often do you use active transportation within Zurich?

Daily	4
Once a week	1
Once a month	2
A few times per year	9
Only in the summer months	4
Never	25



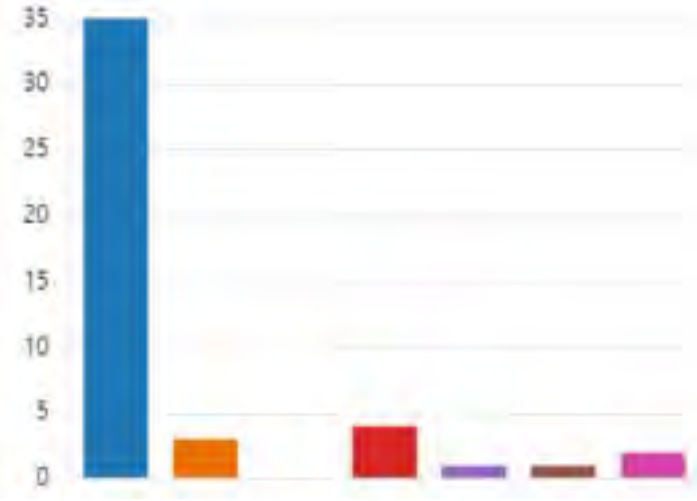
6. How often do you use active transportation within rural areas of Bluewater?

Daily	5
Once a week	7
Once a month	7
A few times per year	8
Only in the summer months	5
Never	13



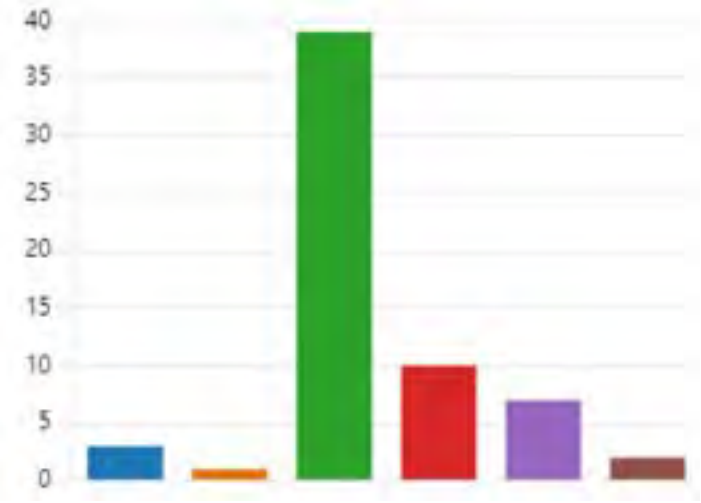
7. How do you typically get from home to school? Please select all that apply.

I do not go to school	35
School bus	3
Driven by a family member / frie...	0
Drive yourself	4
Cycling	1
Walking	1
Other	2



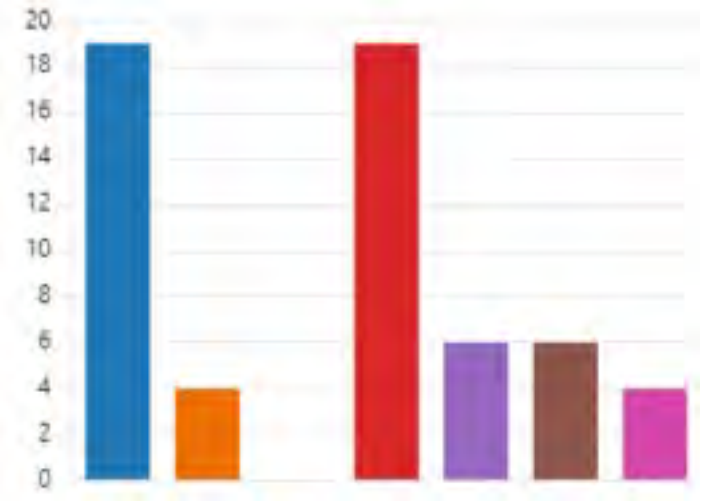
8. How do you typically get from home to local grocery / household shopping stores within Bluewater? Please select all that apply.

I do not typically do the househ...	3
Driven by a family member / frie...	1
Drive yourself	39
Cycling	10
Walking	7
Other	2



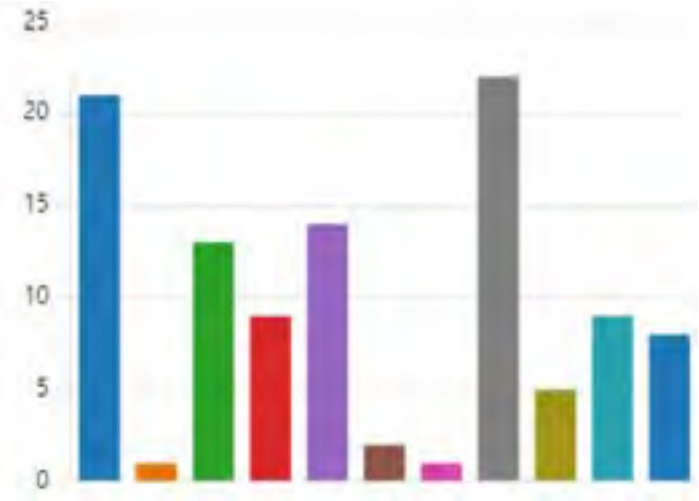
9. How do you typically get from home to work? Please select all that apply.

I do not work	19
I work from home	4
Driven by a family member / frie...	0
Drive yourself	19
Cycling	6
Walking	6
Other	4



10. What prevents you from using active transportation to travel within Bluewater? Please check all that apply.

Travelling by car is more conven...	21
Lack of interest / desire	1
A car is required for shopping a...	13
The surface of sidewalks and tra...	9
Lack of, or insufficient winter ma...	14
Health issues or physical disabili...	2
A car is required to drop childre...	1
Safety is a concern	22
Poor weather	5
Nothing, I already participate in ...	9
Other	8

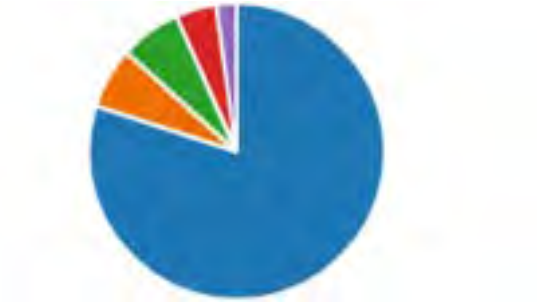


11. Would you be more likely to participate in active transportation if (please select all that would make a difference to you):

The condition of existing sidewa...	13
The condition of existing trails ...	20
New sidewalks / trails were built	25
Cycling lanes were built	34
Cycling lanes are delineated fro...	24

12. How supportive are you of the Municipality developing more, and better-connected active transportation infrastructure such as sidewalks, cycling lanes, trails, etc.?

Very supportive	36
Somewhat supportive	3
Neutral	3
Somewhat unsupportive	2
Very unsupportive	1



13. If you are **not** supportive of the Municipality developing more, and better-connected active transportation infrastructure, please explain why.

8
Responses

Latest Responses
"*Bayfield is fine the way it is thanks*"

4 respondents (**50**%) answered **Bayfield** for this question.

14. How could the Municipality improve trails and active transportation infrastructure?

38
Responses

Latest Responses

"*Safe access across roadways. Use of pedpedestrian pedestrian ...*

"*daily maintenance checks of trails and at minimum a daily ap...*

14 respondents (**37**%) answered **trails** for this question.

15. How could the Municipality better connect Conservation Areas and trails?

31
Responses

Latest Responses

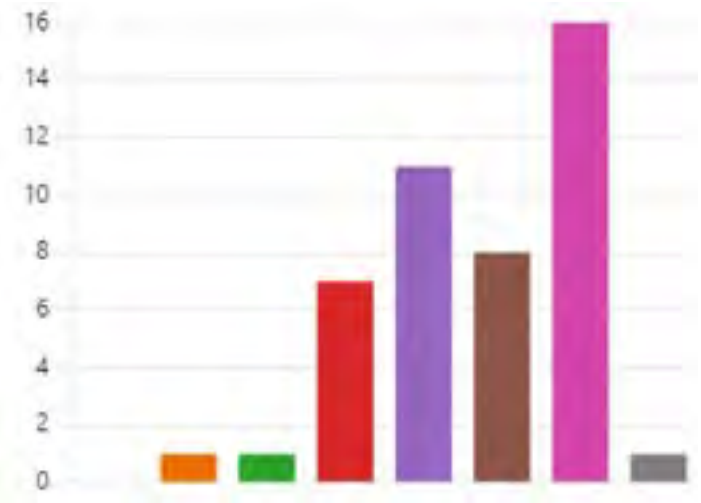
"*Pedestrian access walkways* "

"*build an interactive app with a colored map similar to the Ont...*

15 respondents (**48**%) answered **Trail** for this question.

16. Please identify your age group.

18 years and under	0
19 - 24 years old	1
25 - 34 years old	1
35 - 44 years old	7
45 - 54 years old	11
55 - 64 years old	8
65 years and older	16
Prefer not to answer	1



17. Are you a resident of Bluewater?

Yes	38
No	7

18. Are you a permanent Bluewater resident or seasonal?

Permanent	34
Seasonal	5

19. If you are a permanent or seasonal resident, please identify below which area of Bluewater you reside in.

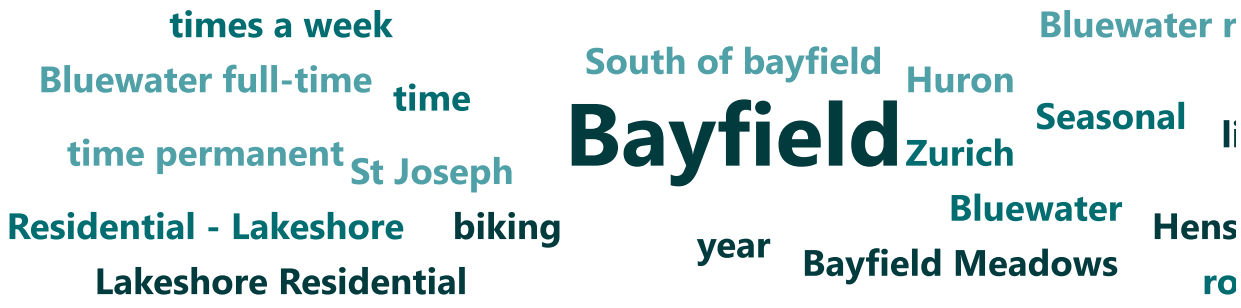
42
Responses

Latest Responses

"*Bayfield* "

"*I access Bluewater region on a daily basis. I live in vanastra bu...*

25 respondents (**60**%) answered **Bayfield** for this question.



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Appendix B

Open House Materials

Municipality of Bluewater

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Bluewater Active Transportation Master Plan

Public Open House
August 22, 2023

Welcome

- Please sign in
- Staff are here for your questions, comments or concerns
- Complete a comment sheet
- Public input is an important part of the Master Plan

Municipality of Bluewater

Burnside

What is Active Transportation?

Use of non-motorized forms of travel such as:

- Walking
- Cycling
- Skating
- Skateboarding
- Non-mechanized wheelchair

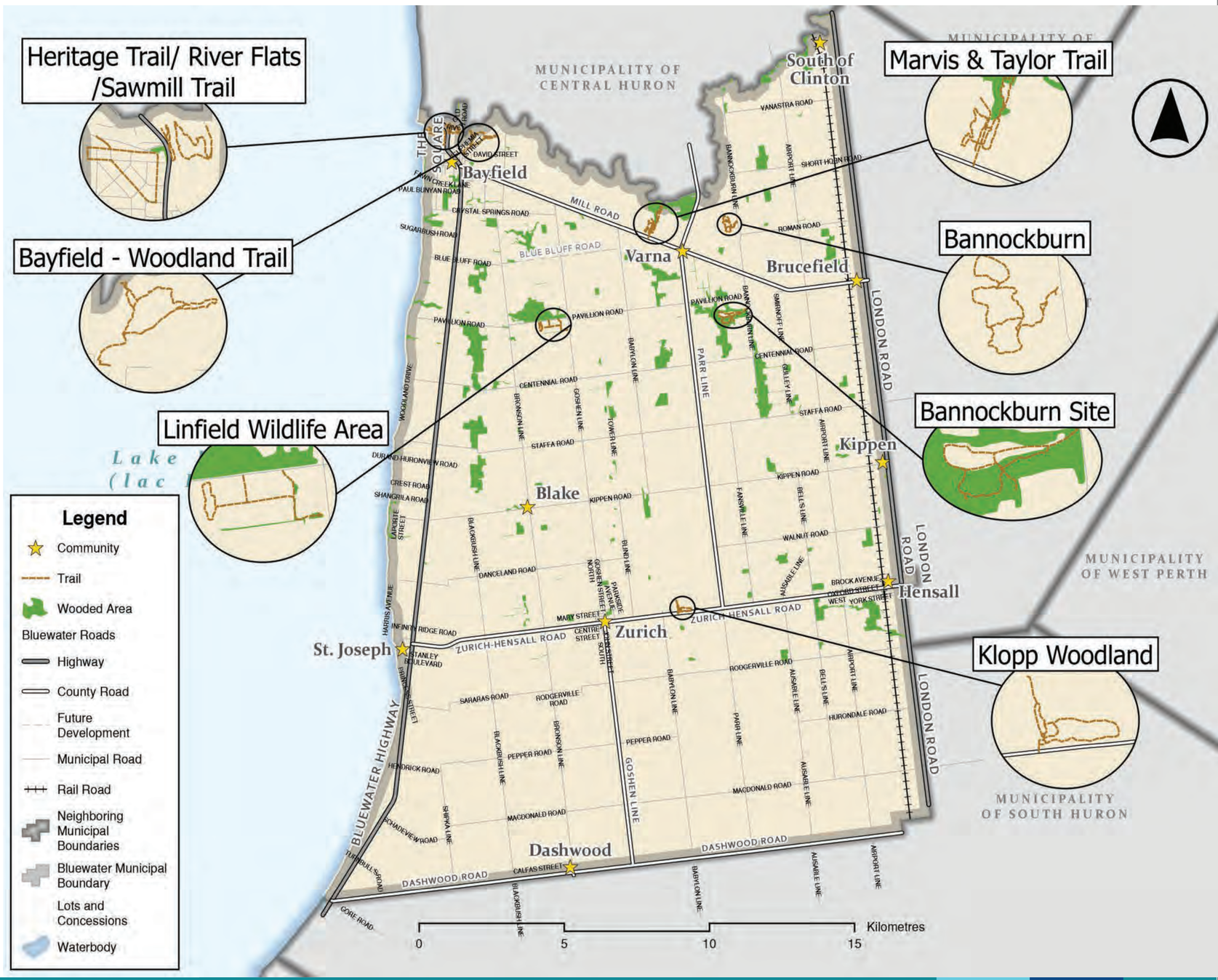
…and so on, to get from place to place, replacing the use of a car, public transit or other motorized means.

What is an Active Transportation Master Plan?

- A plan that identifies:
  - What existing active transportation infrastructure needs to be maintained or improved.
  - What new active transportation infrastructure is needed.
  - What key destinations should be connected by active transportation.
  - Design guidelines to visualize how active transportation facilities (i.e. bike lanes, separated trails etc.) should be constructed.
  - How all ages and abilities can be accommodated.
  - How projects should be prioritized.
  - How much funding is required.

Existing Active Transportation Facilities

- Current features include:
  - ~ 13 km of sidewalk; and
  - ~ 15 km of trails (primarily through Conservation Areas not owned or operated by the municipality)



Municipality of Bluewater

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Proposed on- and off-Road Trails

The Bluewater Recreational Master Plan identified trail connections (shown in yellow) using:

- unopened road allowances,
- road and rail rights-of-way,
- off-road locations along property lines

Municipality of Bluewater

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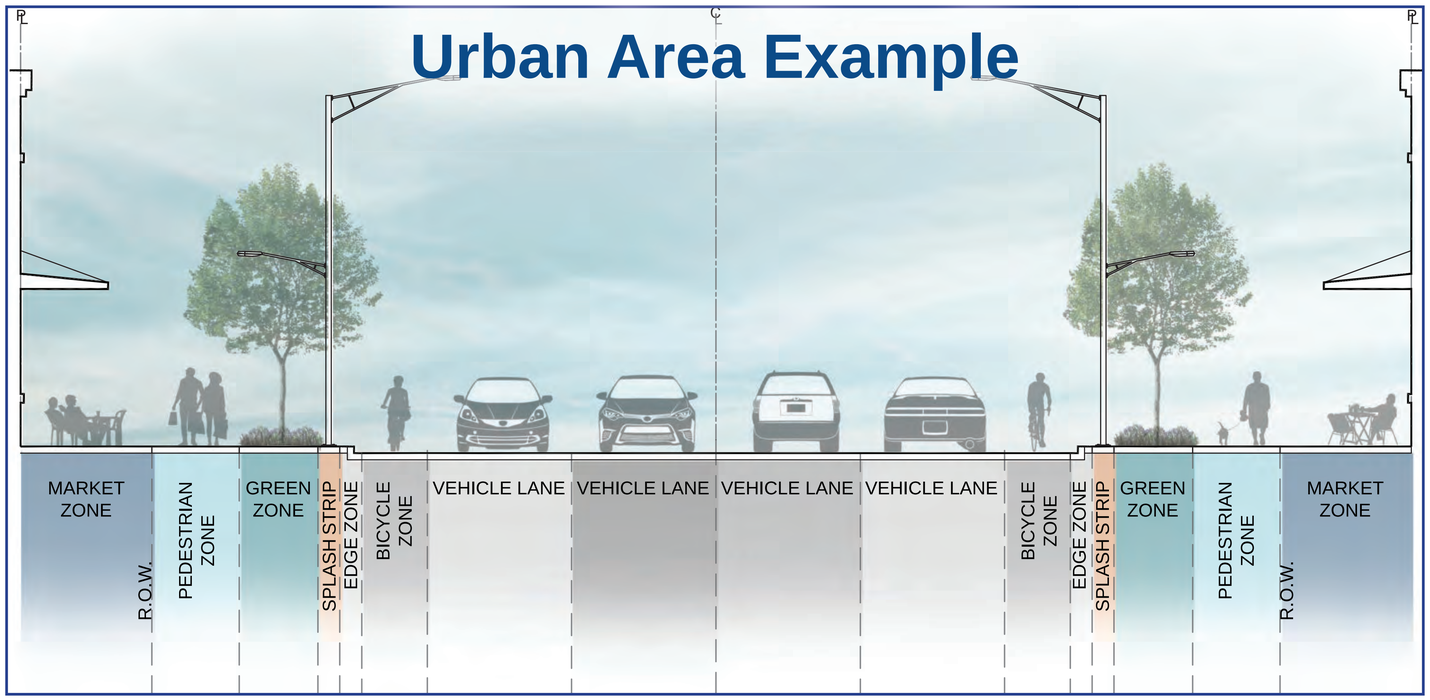
Active Transportation Design

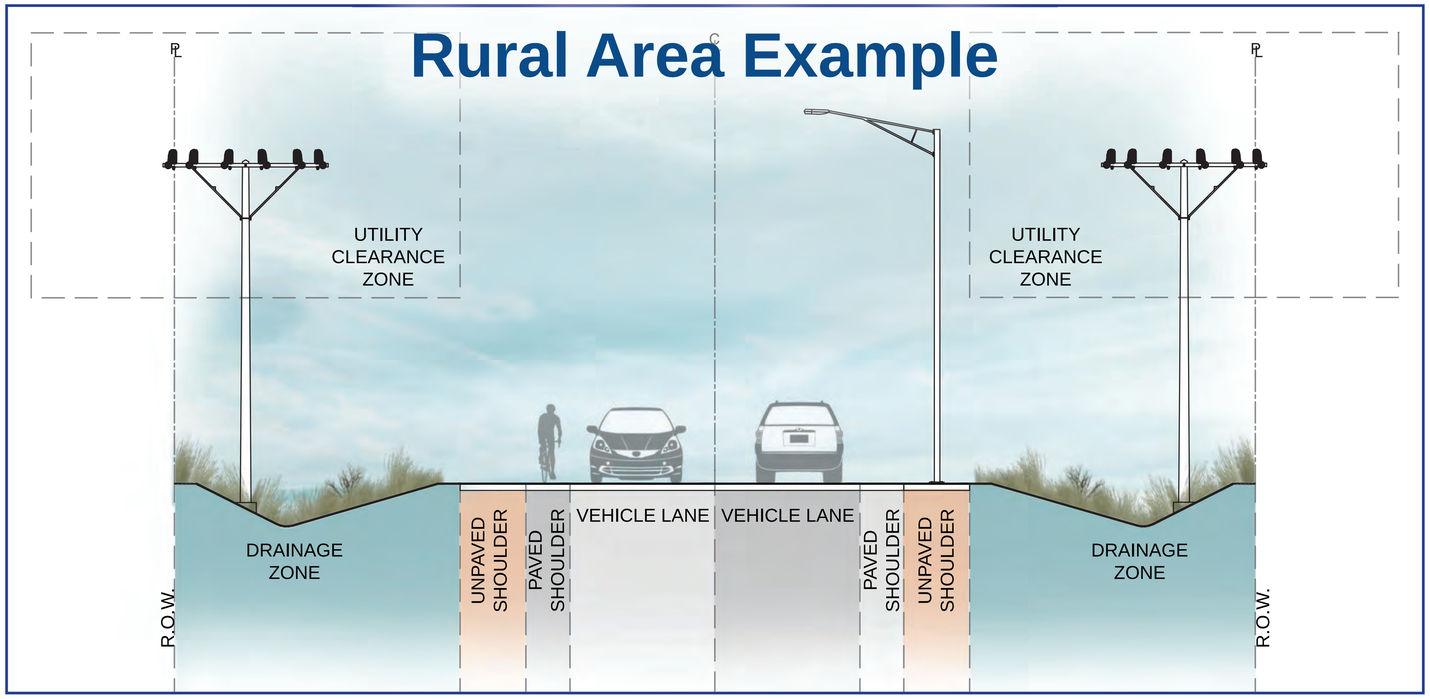
There are guidelines which outline how cycling features should be designed based on traffic volumes and speeds. To the right are examples of road designs for urban and rural areas.

Roads may be designed to include paved shoulders, bike lanes or separated bike lanes depending on traffic conditions.

Urban Area Example



Rural Area Example



Active Transportation Design

Ontario Traffic Manual Book 18 – Cycling Facilities ("OTM Book 18") provides practical guidance on the planning, design and operation of cycling facilities in Ontario. The guidance in this manual applies to on- and off-road facilities within the road right-of-way.

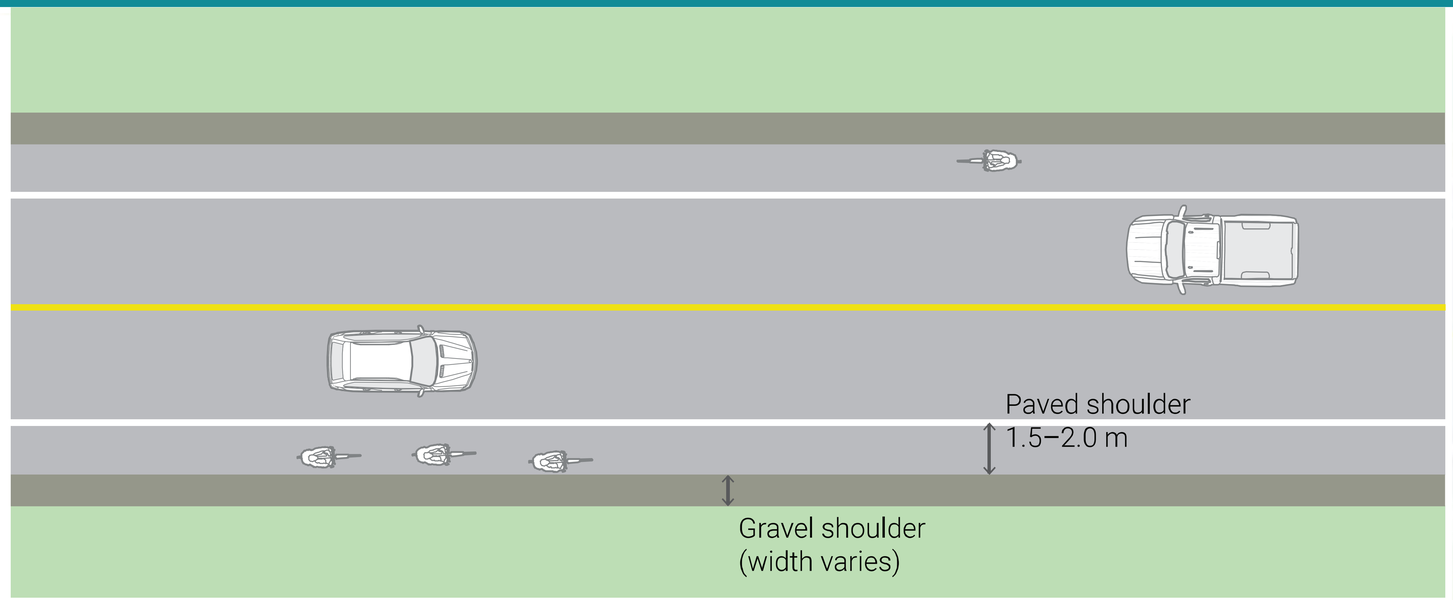


Figure 4.73 – Roadway with Paved Shoulders

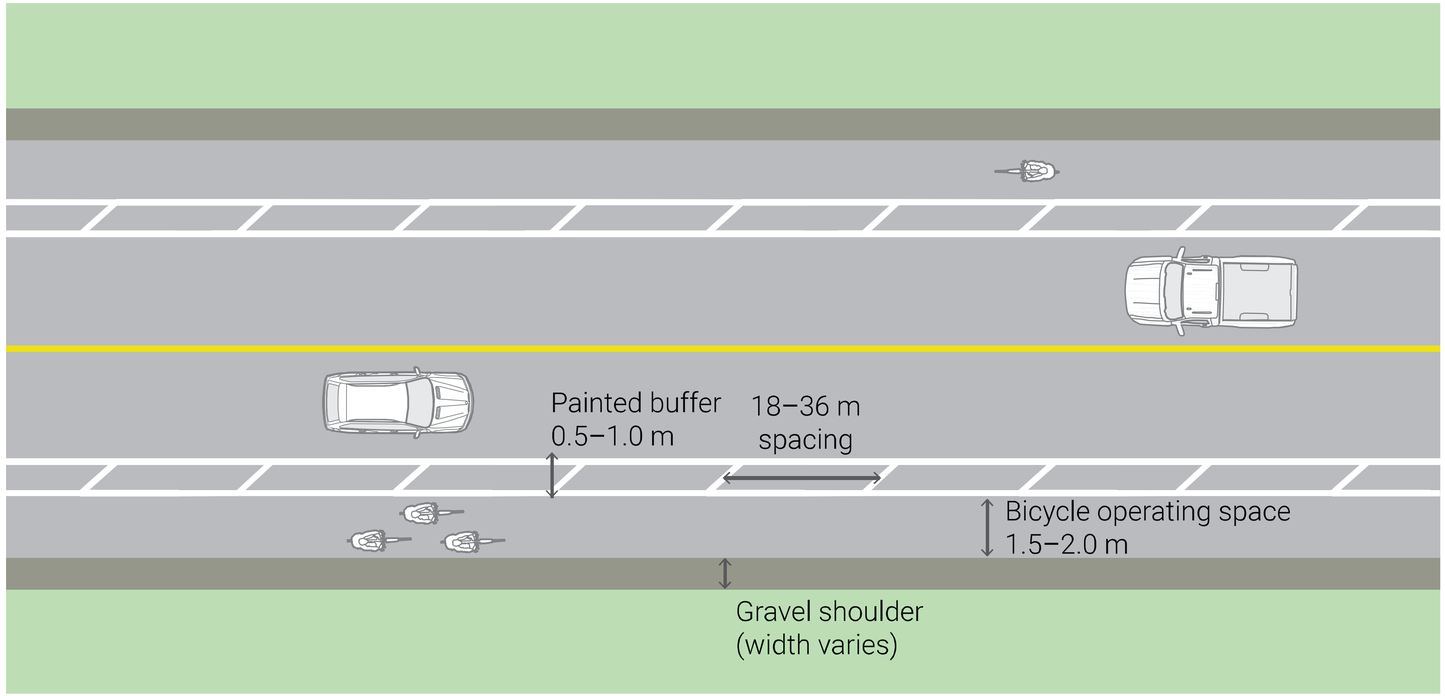
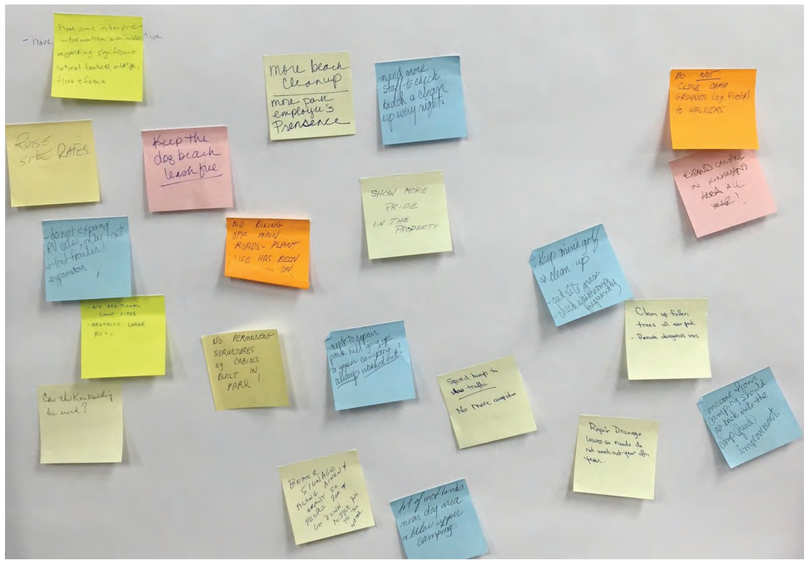


Figure 4.74 – Roadway with Buffered Paved Shoulders

Typical Rural Cross Sections per OTM Book 18

Let us Know What is Important to You

- Please write your thoughts on the sticky notes provided.
- Attach your sticky notes to the following boards, as shown to the right.
- Note that boards refer to specific geographic locations:
  - Bayfield
  - Hensall/Zurich
  - Other Rural/Village Areas



Municipality of Bluewater

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Bayfield: How easy is it to walk or cycle to the beach/ shopping/ restaurants/ other key destinations in Bayfield?

Please add your comments on sticky notes under the column that best reflects your answer to the question above.

Very Easy	Somewhat Easy	Difficult
Add your vote or comments here:	Add your vote or comments here:	Add your vote or comments here:

Bayfield: How could walking or cycling be improved in Bayfield?

Provide your comments below:

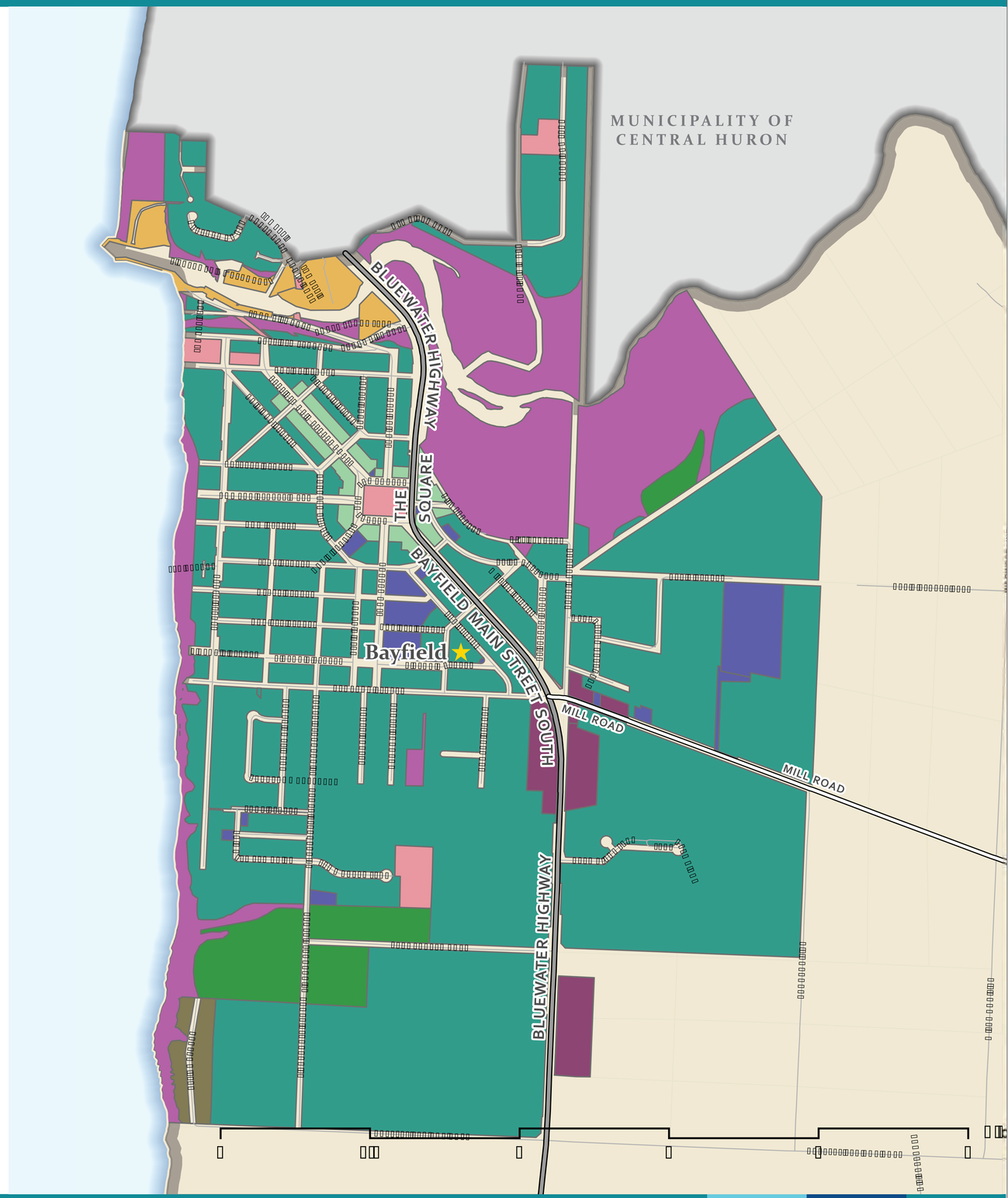
Municipality of Bluewater

BURNSIDE

Bayfield:

Please use sticky notes or markers to:

- Show locations where new active transportation infrastructure (ie sidewalks/ bike lanes/ trails) should be built.
- Show locations where there are barriers which prevent you from using active transportation.
- Show locations which destinations should be linked by an active transportation network.



Municipality of Bluewater

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Zurich: How easy is it to walk or cycle to existing trails/ shopping/ restaurants/ other key destinations in Zurich?

Please add your comments on sticky notes under the column that best reflects your answer to the question above.

Very Easy	Somewhat Easy	Difficult
Add your vote or comments here:	Add your vote or comments here:	Add your vote or comments here:

Zurich: How could walking or cycling be improved in Zurich?

Provide your comments below:

Zurich:

Please use sticky notes or markers to:

- Show locations where new active transportation infrastructure (ie sidewalks/ bike lanes/ trails) should be built.
- Show locations where there are barriers which prevent you from using active transportation.
- Show locations which destinations should be linked by an active transportation network.

Municipality of Bluewater

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Hensall: How easy is it to walk or cycle to existing trails/ shopping/ restaurants/ other key destinations in Hensall?

Please add your comments on sticky notes under the column that best reflects your answer to the question above.

Very Easy	Somewhat Easy	Difficult
Add your vote or comments here:	Add your vote or comments here:	Add your vote or comments here:

Hensall: How could walking or cycling be improved in Hensall?

Provide your comments below:

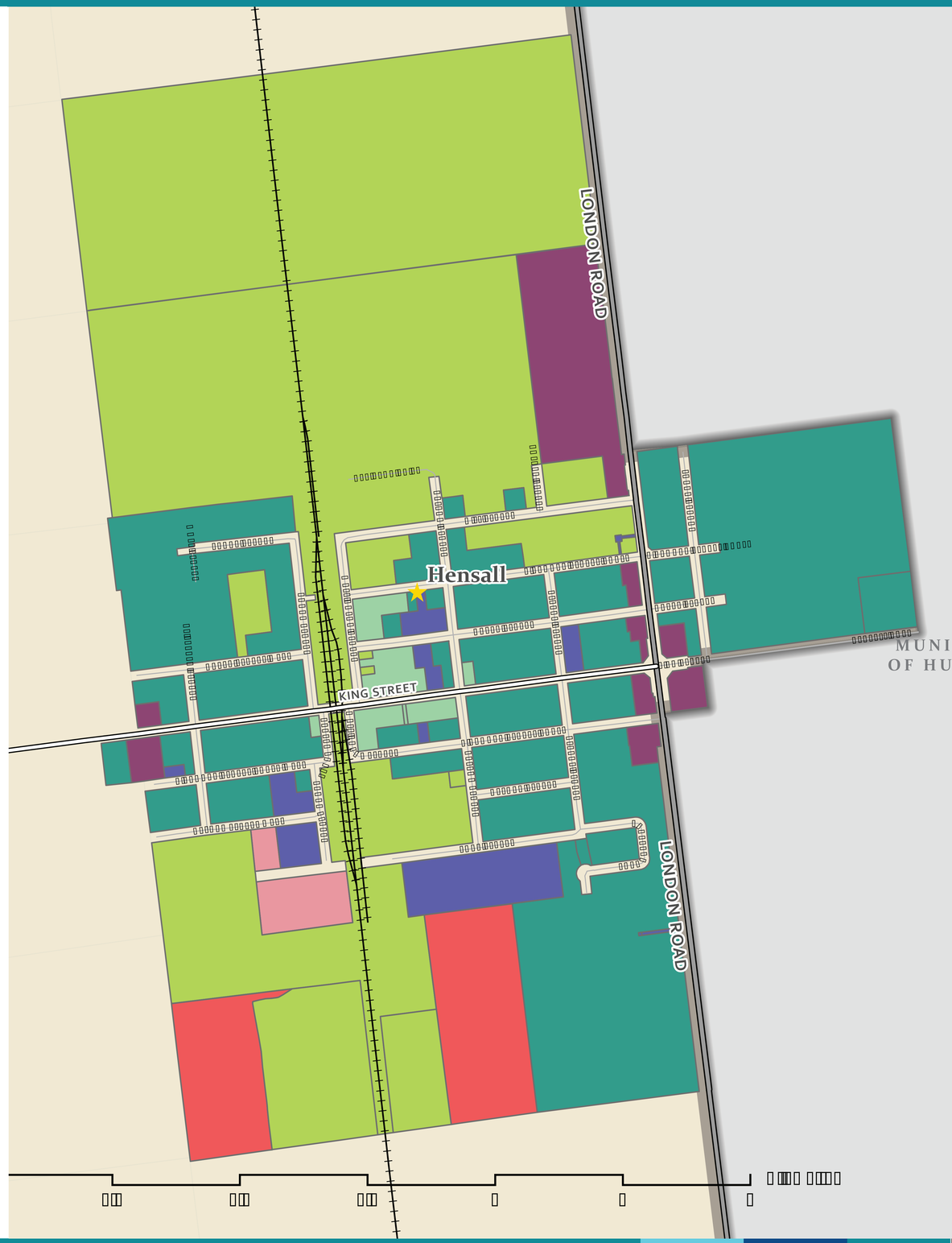
Municipality of Bluewater

BURNSIDE

Hensall:

Please use sticky notes or markers to:

- Show locations where new active transportation infrastructure (ie sidewalks/ bike lanes/ trails) should be built.
- Show locations where there are barriers which prevent you from using active transportation.
- Show locations which destinations should be linked by an active transportation network.



Municipality of Bluewater

BURNSIDE

Lakeshore: How easy is it to walk or cycle to existing trails/ shopping/ restaurants/ other key destinations along the lakeshore?

Please add your comments on sticky notes under the column that best reflects your answer to the question above.

Very Easy	Somewhat Easy	Difficult
Add your vote or comments here:	Add your vote or comments here:	Add your vote or comments here:

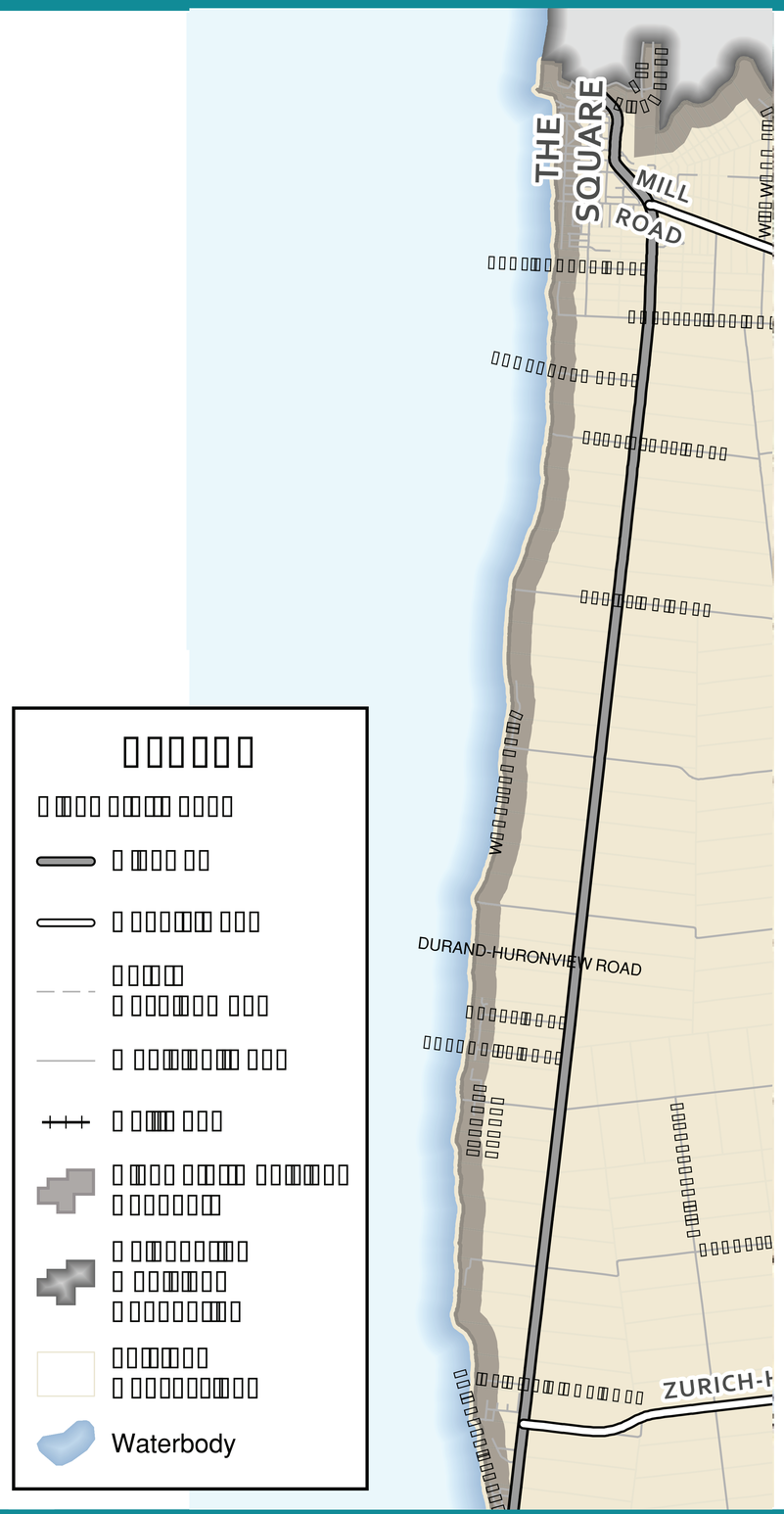
Lakeshore: How could walking or cycling be improved along the lakeshore?

Provide your comments below:

Lakeshore:

Please use sticky notes or markers to:

- Show locations where new active transportation infrastructure (ie sidewalks/ bike lanes/ trails) should be built.
- Show locations where there are barriers which prevent you from using active transportation.
- Show locations which destinations should be linked by an active transportation network.



North Lakeshore

South Lakeshore

Other Rural Areas: How easy is it to walk or cycle to existing trails/the beach/ shopping/ restaurants/ other key destinations in the other rural parts of Bluewater?

Please add your comments on sticky notes under the column that best reflects your answer to the question above.

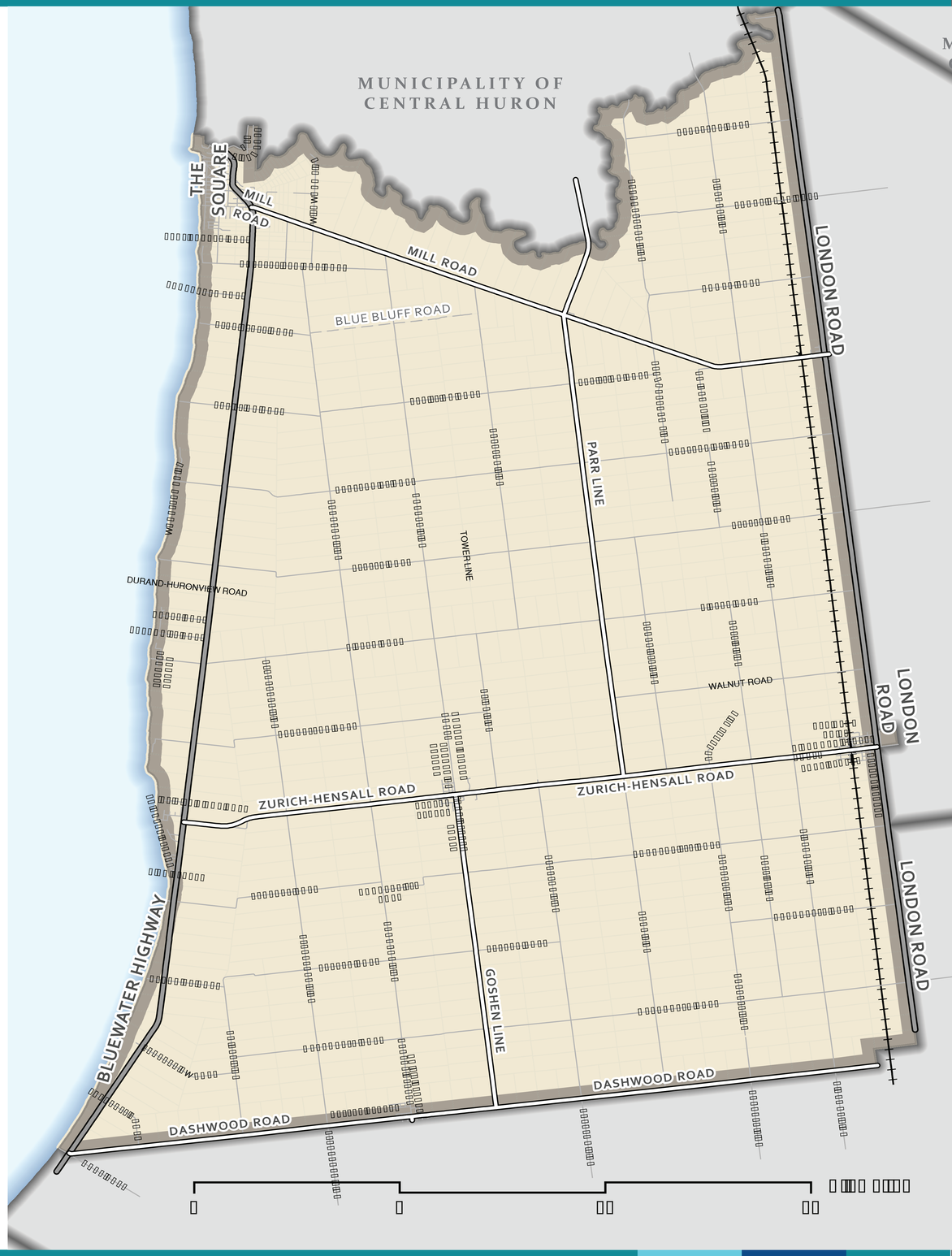
Very Easy	Somewhat Easy	Difficult
Add your vote or comments here:	Add your vote or comments here:	Add your vote or comments here:

Rural Areas: How could walking or cycling be improved in the other rural parts of Bluewater? Provide your comments below:

Other Parts of Bluewater:

Please use sticky notes or markers to:

- Show locations where new active transportation infrastructure (ie sidewalks/ bike lanes/ trails) should be built.
- Show locations where there are barriers which prevent you from using active transportation.
- Show locations which destinations should be linked by an active transportation network.



What Is Most Important for the Municipality to Do First?

Pave road shoulders between communities in rural areas?

Improve sidewalks?

Create cycling lanes or routes in Bayfield?

Other?

What is most important to you?
Paste your sticky notes here:

Master Plan Timeline

Review Existing Conditions

Open House & Public Survey

Develop Design Guidelines, Priorities & Cost Estimates

Public Review of Draft Report

Final Master Plan

Next Steps….

- Review comments and feedback generated from survey and open house;
- Compile and review information collected;
- Prepare Draft Master Plan;
- Provide opportunity for public and agency review; and
- Complete the Plan.

Thank you for participating in this workshop!

Your input will help shape the Master Plan.

Please fill out a comment sheet or complete an online survey by scanning your cellphone's camera at the QR code to the right.

Should you have any additional questions, please contact one of the project team members below:

Alex Basciano
Public Works Tech
Municipality of Bluewater
14 Mill Avenue
Zurich, ON N0M 2T0
519-236-4351 x 246
pwtech@municipalityofbluewater.ca

Tricia Radburn
Project Manager
R.J. Burnside & Associates Ltd.
292 Speedvale Avenue West, Unit 20
Guelph, ON N1H 1C4
519-823-4995
Tricia.Radburn@rjburnside.com

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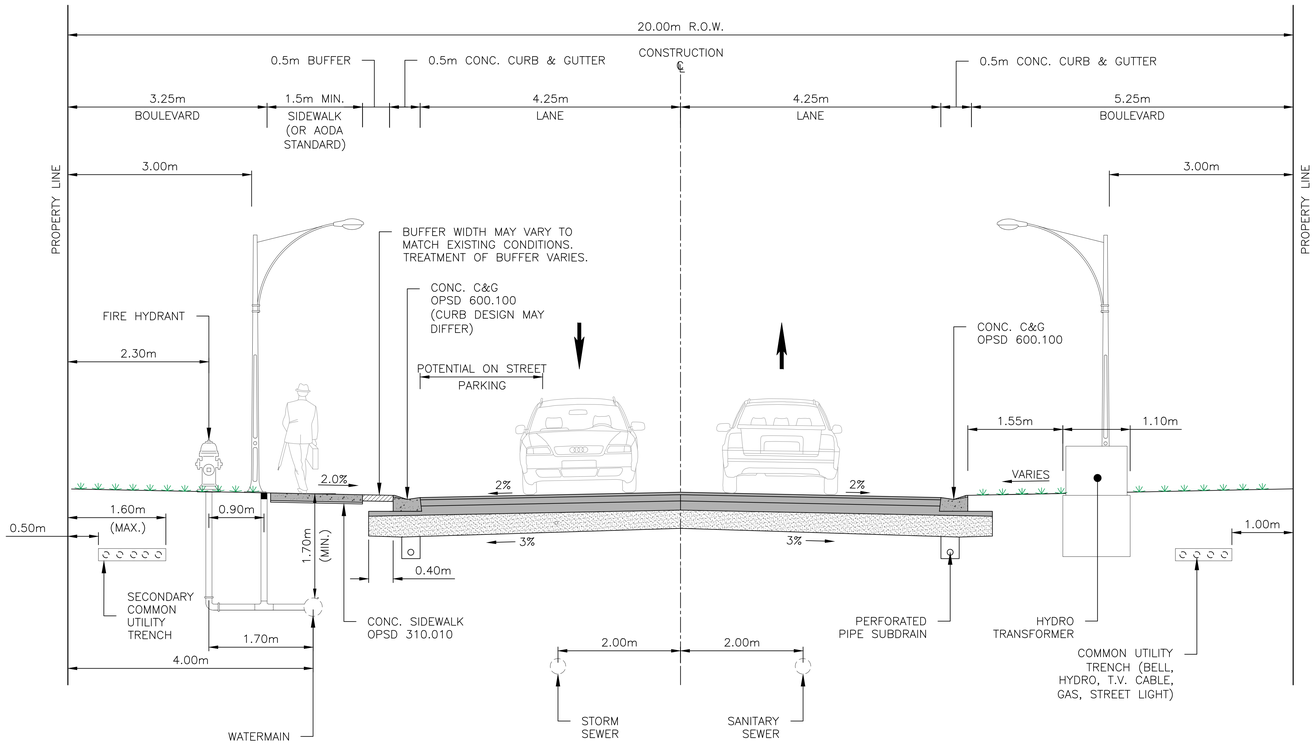
Appendix C

Design Standards



LOCAL STREET TYPICAL SECTION

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R.J. Burnside & Associates Limited
6990 Creditview Road, Unit 2
Mississauga, Ontario, L5N 8R9
telephone (905) 821-1800
fax (905) 821-1809
web www.rjburnside.com

Client
THE MUNICIPALITY OF BLUEWATER
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Drawing Title
BLUEWATER ACTIVE TRANSPORTATION MASTER PLAN
-
TYPICAL CROSS SECTIONS

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Project No.		Contract No.		Revision No.	
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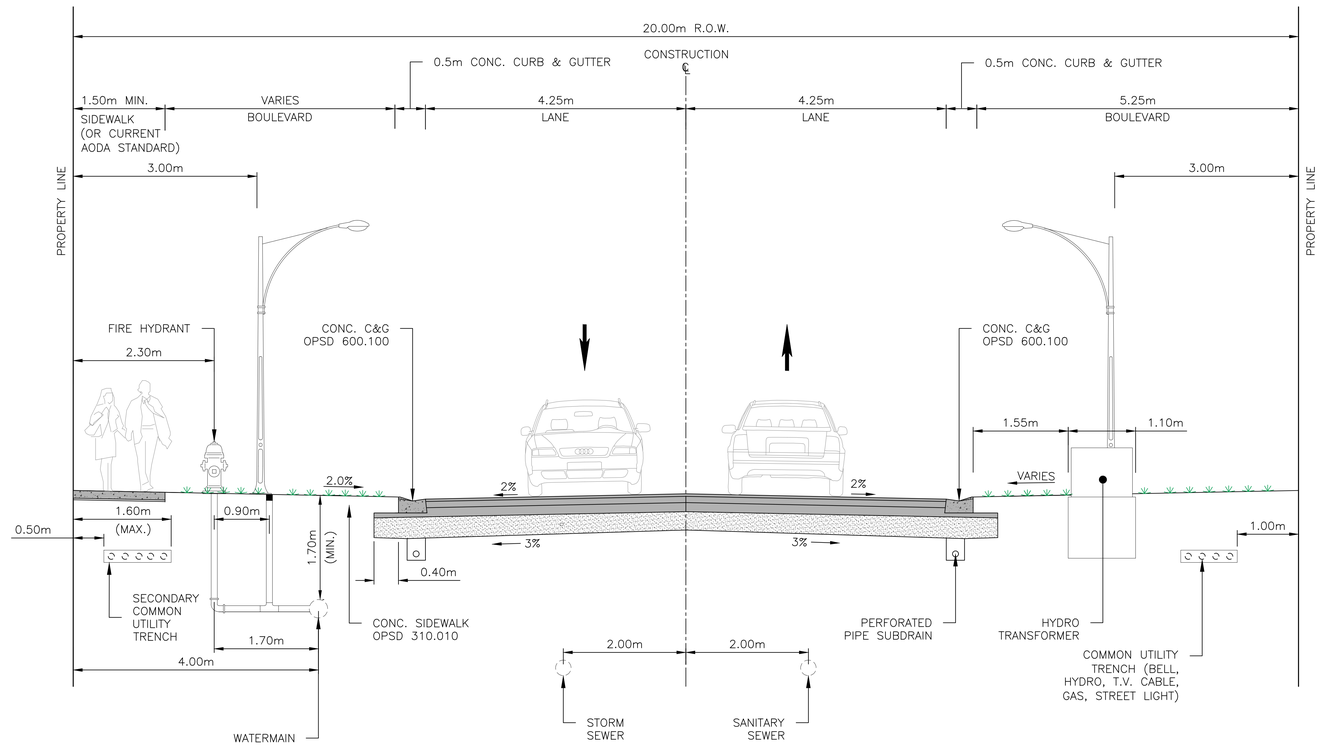

NEW SUBDIVISION TYPICAL SECTION

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Mississauga, Ontario, L5N 8R9
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TYPICAL CROSS SECTIONS

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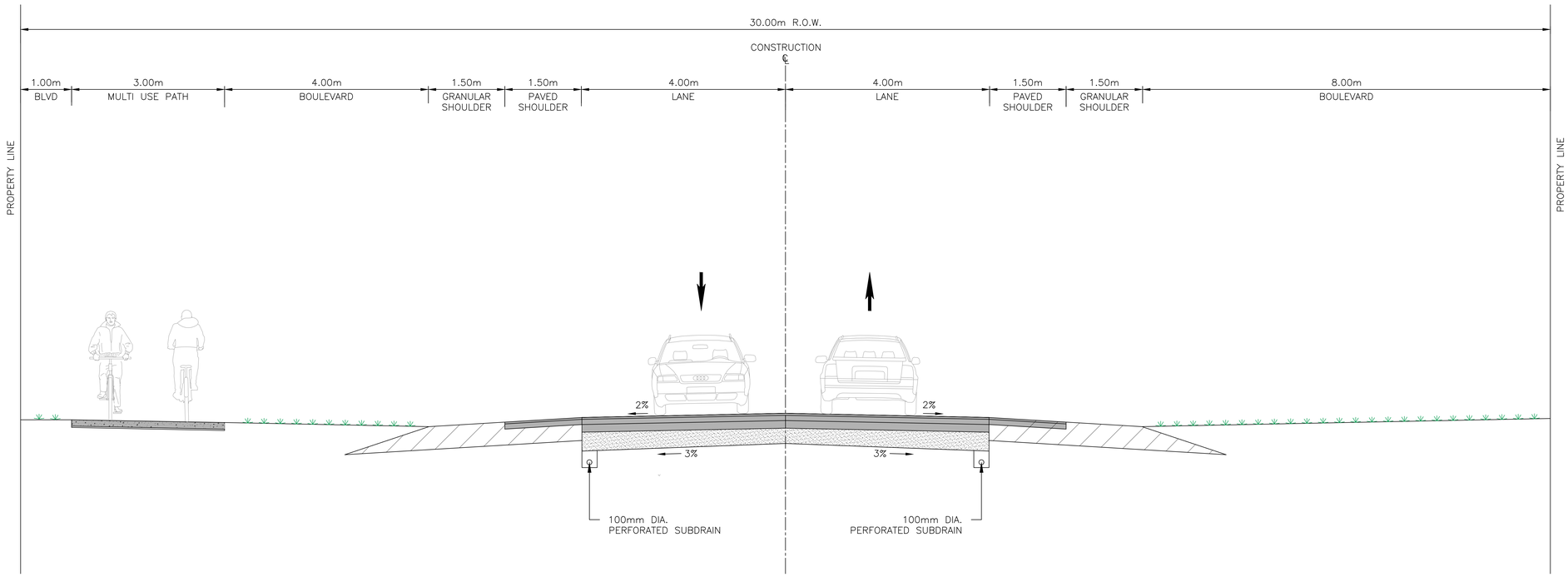

CLASS 1 AND 2 HIGHWAYS

(WHERE ACTIVE TRANSPORTATION IS RECOMMENDED)

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6990 Creditview Road, Unit 2
Mississauga, Ontario, L5N 8R9
telephone (905) 821-1800
fax (905) 821-1809
web www.rjburnside.com

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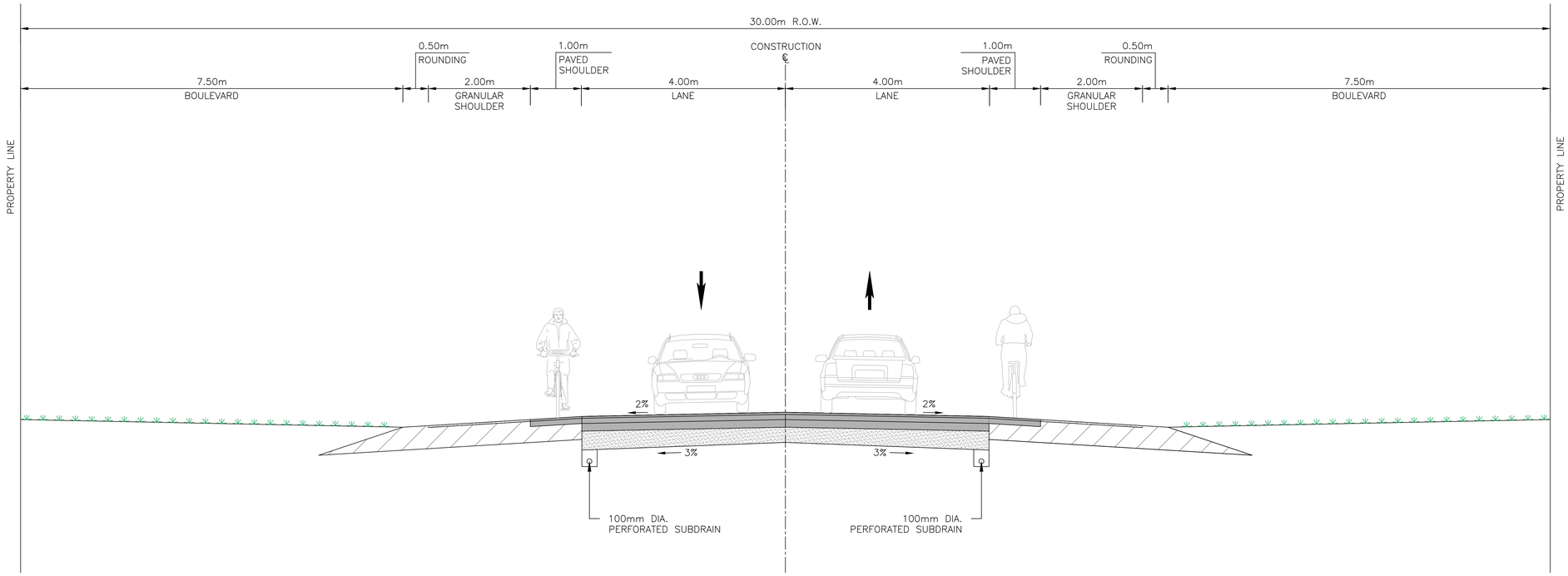

APPROVED CYCLING ROUTE TYPICAL SECTION

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Drawing Title
BLUEWATER ACTIVE TRANSPORTATION MASTER PLAN
-
TYPICAL CROSS SECTIONS

Drawn	Checked	Designed	Checked	Date	Drawing No.
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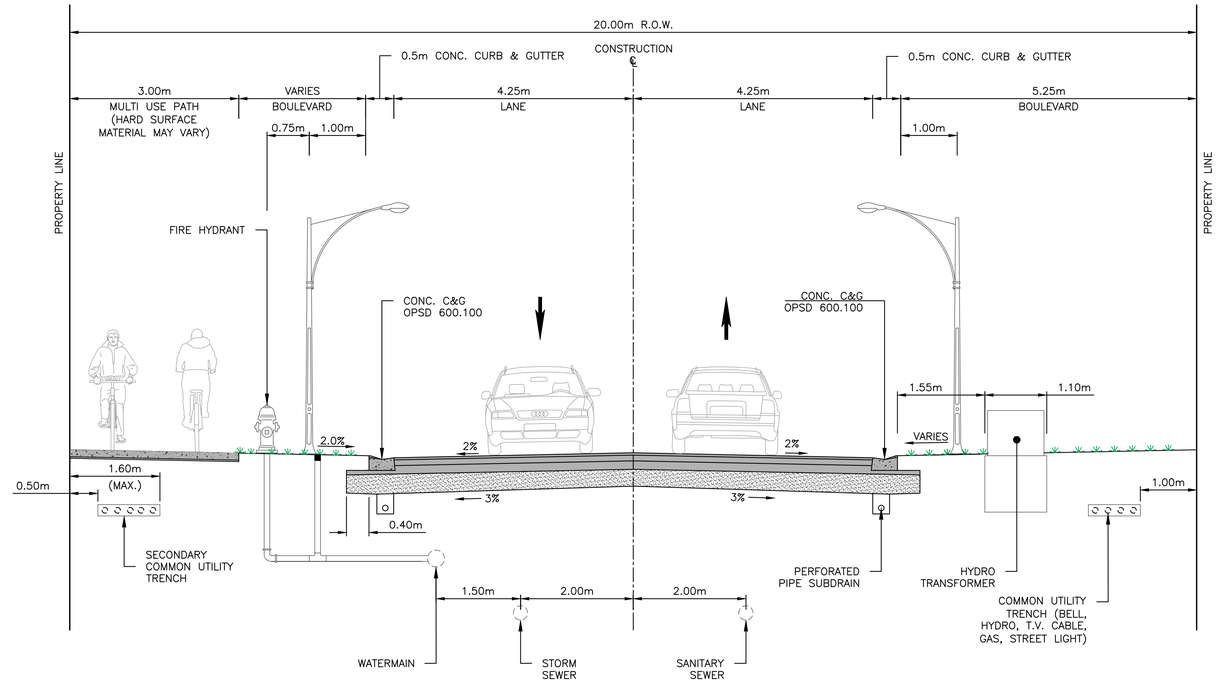

BAYFIELD TYPICAL SECTION

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6990 Creditview Road, Unit 2
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Drawing Title
BLUEWATER ACTIVE TRANSPORTATION MASTER PLAN
-
TYPICAL CROSS SECTIONS

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R.J. Burnside & Associates Limited