# City of Cambell River ALDER STREET CORRIDOR REVIEW







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#### 1. Introduction

The City of Campbell River secured Boulevard Transportation, a division of Watt Consulting Group, to undertake a corridor review of Alder Street. The review was undertaken with input from residents, stakeholders and City staff, and reflects directions established in the Master Transportation Plan and Sustainable OCP.

The review seeks to craft a vision to balance all travel modes while recognizing Alder Street's dual role as a key north-south road <u>and</u> providing access to adjacent single-family homes. Specifically, the following objectives are addressed:

- 1. Provide for safe and efficient vehicle travel
- 2. Ensure on-street parking supply is sufficient, but not excessive
- 3. Provide safe, comfortable, and continuous sidewalks
- 4. Identify appropriate bicycle facilities to accommodate cyclists
- 5. Ensure public transit is accommodated with appropriate bus stop facilities
- 6. Assess opportunities for traffic calming and boulevards between sidewalks and the roadway

#### 1.1 Purpose

The purpose of the Corridor Review is work with staff and residents to establish a long-term vision for Alder Street that...

- ...provides clarity to Alder Street residents and others in Campbell River how Alder Street will look and function in the future
- ...allows the City to make infrastructure investments consistent with the a long-term plan for Alder Street
- ...allows the City to make investments in transportation infrastructure elsewhere in Campbell River with greater certainty on how Alder Street will function in future
- ...provides clarity to external agencies (ie. BC Transit, MoTI, etc) on the City's long-term plans for Alder Street

#### 1.2 Scope

The corridor review considers the entire 7.5-km length of Alder Street, from Dogwood Street in the south to St. Ann's Road in the north (adjacent City Hall). See *Figure 1*.



#### 1.3 Overview

This document is both a summary report of the corridor review process and a plan for the corridor. The document is organized as follows:

- **Section 2. Background** | Identifies relevant City documents and plans/policies affecting Alder Street, provides a summary of existing conditions, and highlights public feedback from the open house, survey, and social media.
- **Section 3. Functional Plan** | Describes the long-term vision for Alder Street, including the preferred cross-section option(s), concept plans for important/constrained locations, and design specifications for infrastructure items (ie. sidewalks, bus stops, etc).
- **Section 4. Implementation Plan** | Describes priority improvements and order-of-magnitude cost estimates.

### 2. Background

The following sections describe the physical condition of Alder Street (2.1), City documents with established directions relevant to this review (2.2), and feedback received from residents on issues and preferences for the corridor (2.3).

#### 2.1 Existing Conditions

A summary of existing conditions is provided below, with a detailed inventory and maps in Appendix A.

#### Land Use

The corridor is fronted primarily by single-family homes, with a small number of townhouse and condominium sites in the north end of the corridor. Civic sites include Southgate Middle School at Holm Road in the south end, Willow Point Sportsplex at Parkway Road, and Ecole Mer-et-Montagne opposite Garnet Road. Three parks front the corridor - Simms Creek Park, Coronation Park, Centennial Park.

There are approximately 396 driveways onto Alder Street, an average of approximately one driveway every 37m of street frontage (both sides).

#### Road Width

The legal right-of-way width is approximately 20.0m along most of the corridor, reduced to as low as 19.5m in certain areas and as wide as 25.0m south of Holm Road.

The existing road surface (ie. curb-to-curb) width is 13.4 to 13.9m south of Robron Road/Murphy Road and 11.5m to 12.5m north of Robron Road/Murphy Road. The roadway narrows to 9.0m between Evergreen Road and 1st Avenue.

#### Traffic

Alder Street generally accommodates approximately 7,000 to 9,000 vehicles per day north of Merecroft Road and approximately 6,000 vehicles per day or less south of Merecroft Road<sup>1</sup>. Traffic volumes are consistent with the City's guidelines for Minor Arterial roadways<sup>2</sup>.

Traffic control is limited to signals at Rockland Road and Hilchey Road, and four-way stops at Holm Road, Merecroft Road, and  $2^{nd}$  Avenue. The Master Transportation Plan recommends intersection upgrades (either signal or roundabout) at the Merecroft Road and  $2^{nd}$  Avenue intersections in future.

The Rockland Road, Merecroft Road, and Evergreen Road intersections are high collision locations, averaging between two and four collisions annually<sup>3</sup>.

#### Sidewalks

The corridor includes approximately 11.3km of sidewalk (either side), representing 78% of the corridor. The majority of sidewalks are 1.5m wide with a "barrier" curb separating it from the roadway. Certain sidewalk segments are separated from the roadway with a "mountable" curb that does not provide a barrier between pedestrians and vehicles and leads to potential for parking on the sidewalk. Other areas have utility poles in the sidewalk that reduce the functional sidewalk width.

<sup>&</sup>lt;sup>1</sup> 2010 daily traffic volumes, as referenced in the Master Transportation Plan, p103

<sup>&</sup>lt;sup>2</sup> Minor Arterial roads are expected to accommodate 5,000 – 15,000 vehicles daily, per Master Transportation Plan, Table 13

<sup>&</sup>lt;sup>3</sup> Collision statistics are based on the number of collisions reported to ICBC from 2003 to 2009, as referenced in the Master Transportation Plan, Map 10



A barrier curb (left) provides a physical barrier between the sidewalk and roadway, while a mountable curb (right) permits vehicles to mount the sidewalk.



An example of a utility pole in the sidewalk which reduces the functional width of the sidewalk and makes inaccessible for wheelchairs and other mobility devices

#### **Parking**

On-street parking is provided on both sides of the street the entire length of Alder Street, excepting north of 7<sup>th</sup> Avenue in the north end. Total supply is approximately 850 spaces.

Peak on-street parking utilization was determined to be approximately 9% overall<sup>4</sup>. The block between Marina Boulevard and Frances Road (west side only) was observed above 50% utilization, all others are at 35% utilization or lower. Parking utilization rates increase during peak periods adjacent schools, parks, and churches, however results generally confirm that on-street parking is available to residents and visitors in all areas.

#### **Public Transit**

The 1–Dogwood/Alder and 2–Alder/Dogwood routes travel the length of Alder Street and provide 35-minute service frequency (bi-directional) in the peak hour. The 3-Stories Beach, 5-Rockland, and 99-Carihi routes also provide service along portions of Alder Street.

A total of 38 bus stops are provided, 19 in each of the northbound and southbound directions. Most bus stops consist of a pole and identification sign, although recent upgrades have provided for a shelter and/or bench at 12 bus stop locations.

#### Cycling Facilities

Alder Street is identified as a "cycling route" and includes intermittent bicycle route signage. Dedicated cycling facilities (ie. bike lanes) are not provided (with the exception of the northern-most block), cyclists are expected to share the vehicle lane.

Parallel local bikeways are provided on Thulin Road/Murphy Street/Galerno Road to the east and Birch Street north of Rockland Road to the west. Both parallel routes provide connectivity between south Campbell River and downtown and are attractive alternate cycling routes due to lower traffic volumes. North-south multi-use pathways are provided on Dogwood Street south of Robron Road and adjacent to Highway 19a.

<sup>&</sup>lt;sup>4</sup> Utilization rate based on survey conducted Wednesday, February 19<sup>th</sup> at 6:00pm and increased by 10% to represent peak period, per time-of-day factor in the Urban Land Institute's *Shared Parking* handbook.

#### 2.2 City Documents

Established directions in the City's Sustainable Official Community Plan ("SOCP") and Master Transportation Plan were considered relative to Alder Street, as follows.

#### Sustainable Official Community Plan, 2012

The SOCP envisions a "...transportation system that provides safe, accessible, convenient, affordable choices with emphasis on high-quality walking, cycling, and transit options." The SOCP identifies a 2020 target of at least 12% of trips to work by alternative modes (walking, cycling, transit) and 2060 target 33% of trips to work by alternative modes.

The following are identified as desired outcomes:

- Improved pedestrian amenities around key pedestrian generators
- A safe, well-connected cycling network
- Frequent, direct, and convenient **transit** service between centres
- An enhanced road network to improve mobility and safety for all road users

The SOCP identifies Alder Street as a "minor arterial" roadway, a bicycle route, and an existing transit route.

The SOCP transportation objectives and policies are summarized in *Appendix B*.

#### Master Transportation Plan, 2012

The City's Master Transportation Plan was completed in 2012 and identifies Alder Street as one of five "major road enhancement" projects (which identified the need for this review). The Plan notes that the purpose of enhancing Alder Street is to reduce traffic volumes and improve safety and mobility for all road users, in conjunction with improvements to Dogwood Street to accommodate diverted traffic from Alder Street. The strategy for Alder Street does not include additional vehicle capacity.

Specific guidance from the Master Transportation Plan is provided in *Table 1*.

**Table 1.** Summary of Directions for Alder Street in the Master Transportation Plan

	Reference
Roadway	- Kelefellee
Alder Street identified as a "Minor Arterial", intended to accommodate 5,000 – 15,000 vehicles per day, have 2-lanes with turn lanes at key intersections, 14m pavement width, and sidewalks on both sides	Sec 6.3, p97 Table 13
Install traffic signals at 2nd Avenue and Merecroft Road when warranted. Roundabouts could also be considered, may require property acquisition	Sec 6.3, p104
Provide curb extensions at all major intersections and crosswalks along Alder St	Sec 6.3, p104
Sidewalks	
Sidewalks (1.8m) are to be provided on both sides and separated by a boulevard as possible	Sec 3.3, p25
Sidewalk widths should be 1.8m and preferably 2.0m in "priority pedestrian areas" (schools, parks) and no less than 1.5m in other areas	Sec 3.3, p31
Sidewalks should be prioritized near schools, parks, and the hospital	Sec 3.3, p27 Map 2
Consider narrower pedestrian crossings using intersection or mid-block curb extensions and median islands	Sec 3.3, p32
Install curb letdowns (ramps) at all intersections and aligned with crosswalks	Sec 3.3, p32
Bus Stops	
All bus stops should be accessible and design consistent with BC Transit's Infrastructure Design Guidelines	Sec 3.3, p34
Bus stops to be spaced 250 – 500m intervals	Sec 5.3, p76 Table 9
High activity bus stops to include shelter, bench, bike storage, rider information, and be universally accessible; low activity bus stops to have a bench and be universally accessible	Sec 5.3, p78 Table 11
Cycling Facilities	·
A "marked wide curb lane" cycling facility is to be provided as a minimum 4.3m vehicle travel lane with a "sharrow" paint marking at curb side to indicate the cyclist travel path	Sec 4.3, p50 Map 5
Provide cycling route signs that designate bicycle routes and wayfinding signs that indicate directions and travel distances to key destinations	Sec 4.3, p56/57
Others	
Trucks and dangerous goods will be discouraged on Alder Street (to be accommodated on Dogwood Street). Signage should be installed at Alder-Dogwood intersection to encourage trucks on Dogwood Street	Sec 6.3, p105

#### 2.3 Community Feedback

An open house was hosted Wednesday, March 12, 2014 at the Willow Point Sportsplex from 5:30pm to 7:30pm. Story boards were presented that outlined project objectives, background information (ie. sidewalks, parking) and preliminary options for the Alder Street corridor. An estimated 70 residents attended and members of the consulting team and City Transportation staff were on-hand to discuss the options. A survey was distributed to capture feedback. The survey and story boards were also available on the City's website for two weeks following the open house.

The following is a summary of key findings from the survey. A detailed public consultation summary was presented on the City's website and has been included as *Appendix C*.

- A total of 60 surveys were received, approximately two-thirds from residents on Alder Street and one-third from residents elsewhere in Campbell River.
- Generally, responses suggest accommodating pedestrians is highest priority. Nearly two-thirds
  of responses suggest that pedestrian facilities are very important and open-ended comments
  stated a desire for continuous sidewalks on both sides of Alder Street.
- On-street parking is also a high priority, particularly among Alder Street residents. Cross-section options with parking on both sides received highest support.
- The cross-section option for the south section with shared lanes (vehicle/bike), parking on both sides, traffic calming at intersections and no boulevard (Option B) received the most support. Support was particularly high among Alder Street residents (80%). The corresponding option for the north section received less support presumably because parking is reduced to one side (due to reduced right-of-way).
- Cycling accommodation received a low level of support and is noticeably lower priority among Alder Street residents than non-Alder Street residents. Cross-section options with full bike lanes received low support from Alder Street residents and higher support from non-Alder Street residents.
- Comments suggest concerns for vehicle speeds, traffic volumes, and a lack of police enforcement. Numerous respondents suggested a need for traffic calming and others suggested addressing surrounding roads to better accommodate through traffic (ie. Dogwood Street).
- Public transit is low priority and was given little consideration in survey responses. Similarly, boulevards separating the sidewalk from the roadway were presented as an option but received little support.

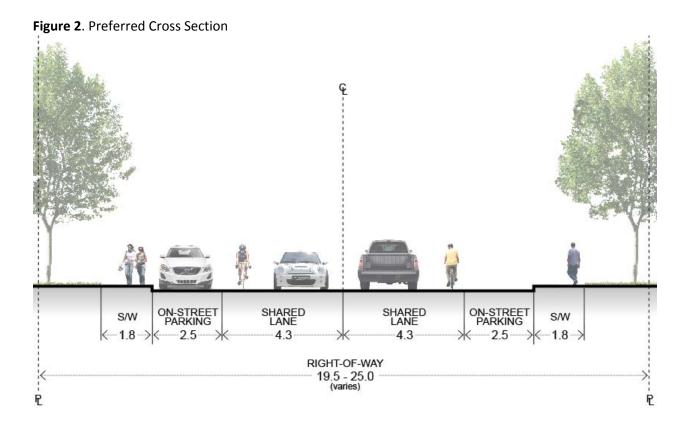
#### 3. Functional Plan

The following section presents the long-term vision for Alder Street. Any future infrastructure works will be consistent with the information and concepts presented in this section.

An implementation strategy is presented in *Section 4* that establishes priorities and actions for the City in working toward realizing the long-term corridor vision.

#### 3.1 Overview

The preferred cross section is a 4.3m shared vehicle/bicycle lane, 2.5m parallel on-street parking, and a 1.8m sidewalk. See *Figure 2*. At 4.3m, the shared lane provides sufficient width for vehicles and bicycles to operate side-by-side and prevent "dooring" from driver-side doors opening from parked vehicles conflicting with cyclists. This is a common design applied to cycling routes with insufficient width to accommodate separated vehicle and bicycle lanes. On-street parallel parking is provided on both sides, although may be reduced to one side where both sides is not needed or as an interim solution until widening occurs. All future road or sidewalk improvements will include barrier curbs to provide physical separation between the roadway and sidewalk. No new mountable curbs will be constructed on Alder Street.



#### Right-of-Way

The total cross section (17.2m) can be accommodated within the existing right-of-way along the entire corridor. No new property is required.

#### Road Width

Existing road width (i.e. curb-to-curb) is sufficient to accommodate the preferred cross section for the portions of Alder Street south of S Murphy Street. Existing road width is less than 13.6m north of S Murphy Street and cannot accommodate the preferred cross-section without compromising the cross-section or road widening. See *Map 1*. Road widening to accommodate on-street parking should not be a priority of the City as costs would be high, parking is readily available in all areas of Alder Street (see *Section 2.1*, p6) and the Master Transportation Plan provides clear direction to focus spending on improving pedestrian, cycling, and public transit infrastructure. Accordingly, the City will not pursue road widening to increase on-street parking capacity or to maintain parking on both sides where parking on one side is sufficient.

With the exception of Bathurst Road to 1<sup>st</sup> Avenue (discussed below), all portions of Alder Street north of S Murphy Street can accommodate two 4.3m shared lanes and on-street parking on one side. The City should restrict parking to one side in areas where two-sided parking is currently available. Generally, parking should be restricted to the west side as there are fewer driveways (more parking spaces) and less issues with adjacent grades.

The portion on Alder Street between Bathurst Road and 1<sup>st</sup> Avenue is less than 11.0m and should be widened to accommodate two 4.3m shared lanes and on-street parking on one side. Once this improvement has been made 4.3m shared lanes will be provided the length of Alder Street and bikeway treatments (shared lane markings, signage) will be applied the length of Alder Street, making it appropriate as a designated cycling route.

#### 3.2 Bicycles

Alder Street is identified as a bike route and will accommodate cyclists with a 4.3m shared lane that permits side-by-side vehicle and bicycle travel. This treatment will be applied the length of Alder Street once the Bathurst Road to 1<sup>st</sup> Avenue section has been widened and on-street parking restricted to one side north of S Murphy St to achieve 4.3m shared lanes (see above).

Until continuous 4.3m travel lanes are provided the length of Alder Street, it is recommended that a preferred north-south bikeway is identified that encourages cyclists to use Birch Street and Thulin Road as alternatives to Alder Street. See *Map 2*. These routes will be promoted using deliberate signs and pavement markings. See *Table 2*. The portion of Alder Street north of 7<sup>th</sup> Avenue will become part of the north-south bikeway, and should include appropriate signs and paint markings.

Table 2. Recommended Cycling Signage and Paint Markings

	Description	Reference
BIKE ROUTE	Bicycle Route signs are already in-place with arrow tabs identifying Alder Street and intersecting cycling routes. These signs will remain on Alder Street to identify it as a cycling route.	TAC, IB-23
Thulin →	Custom directional signs placed at key junctions along Alder Street to inform cyclists of the superior cycling opportunity on parallel routes.	Appendix D
SHARE THE ROAD	Share the Road signs should be used on Alder Street north of 7 <sup>th</sup> Avenue and south of Rockland Avenue to reinforce these sections as part of the preferred north-south bikeway.	TAC, WC-47
00	Shared lane markings ("sharrows") should be used on the portions of Alder Street that are part of the north-south bikeway (i.e. north of 7 <sup>th</sup> Ave and south of Rockland Ave) to indicate the cyclist positioning and highlight cyclist presence.	TAC, Bikeway Traffic Control Guidelines for Canada

#### 3.3 Traffic Calming

Curb extensions and raised median islands are recommended along Alder Street to shorten pedestrian crossing distances, define on-street parking and bus stops, improve driver sightlines, and manage vehicle speeds. It should be noted that curb extensions and raised median islands have the disadvantage of not allowing a through vehicle to pass a left or right turning vehicle resulting in slight reduction in capacity and may not be appropriate in all locations. Recommended typical designs for curb extensions and raised median islands are included in *Appendix D*.





Curb extensions (left) and raised median islands (right) will be used along Alder Street to enhance pedestrian crossings and manage vehicle speeds.

Curb extensions and raised median islands may be appropriate at many of the intersections on Alder Street. It is recommended that priority is given to areas adjacent schools, high volume crosswalk locations, and intersections with poor sightlines. See *Table 3*. Additional locations may be identified in future based on demonstrated need.

**Table 3**. Recommended Priority Traffic Calming Locations

ID	Location	Description
TC-1	Holm Road intersection	Raised median islands on Alder St both south and north side of Holm Rd to enhance crosswalk to Southgate School
TC-2	Yorkshire Drive intersection	Raised median island on Alder St south side of Yorkshire Dr to enhance crosswalk to Southgate School playing field
TC-3	Garnet Road intersection	Raised median island on Alder St north side of Garnet Rd to enhance crosswalk to Ecole Mer-et-Montagne
TC-4	S Murphy Street intersection	Curb extension on Alder St north of S Murphy St to reduce pedestrian crossing distance and increase pedestrian visibility
TC-5	Albatross Cres / McLean Rd intersection	Curb extensions on four corners to improve driver sightlines for vehicles turning off Albatross Cres and McLean Rd
TC-6	6 <sup>th</sup> Ave intersection	Curb extensions on Alder St at the crosswalk north of $6^{\text{th}}$ Ave to improve pedestrian visibility and decrease crossing distance
TC-7	4 <sup>th</sup> Avenue intersection	Raised median islands or curb extensions on Alder St on north and south side of $4^{\text{th}}\mbox{ Ave}$
TC-8	Cottonwood Dr intersection	Raised median island on Alder St south of Cottonwood Dr to enhance crosswalk and manage southbound vehicle speed

#### 3.4 Sidewalks

Sidewalks will be constructed along the entire length of Alder Street on both sides. All new sidewalks should be designed to 1.8m in width. Width may be reduced to 1.5m in constrained locations.

Existing sidewalks that are 1.5m or wider are considered adequate. Existing sidewalks less than 1.5m are inadequate and should be addressed. Areas with utility poles or other obstacles in the sidewalk should be addressed by constructing an extension at the back of the sidewalk (see photo) so that a continuous pedestrian clear width of 1.8m is achieved. Preferred solutions, where feasible, are to relocate the utility pole out of the sidewalk or create a boulevard space for the utility pole and relocate the sidewalk away from the roadway.



Sidewalk extensions should be built in locations where utility poles occupy the sidewalk (Credit: California Active Communities)

#### **Priority Sidewalk Improvements**

Priority should be given to addressing missing sidewalk segments, followed by rectifying inadequate sidewalks. Pedestrian priority areas identified in the Master Transportation Plan (schools, parks, recreation areas) should be prioritized, with consideration for construction cost and property impacts. All bus stops should be accessible by sidewalk. Providing connections to bus stops should be considered as part of the overall corridor sidewalk upgrades and, where possible, small sidewalk segments and/or crosswalks may be constructed at bus stops as an interim measure<sup>5</sup>.

<sup>&</sup>lt;sup>5</sup> The bus stop north of Cottonwood Drive (N5) is an example of a short sidewalk segment that has been installed to provide access to a bus stop.

Recommended sidewalk enhancement projects are low-cost sidewalk improvements to address current deficiencies and provide pedestrian access to bus stops. See *Table 4*.

Table 4. Recommended Sidewalk Enhancement Projects (low cost)

ID	Location	Comments
SW-E1	South of Rockland Ave, east side	Short sidewalk needed to connect bus stop (N7) to Rockland Avenue intersection
SW-E2	North of McLean St, east side	Short sidewalk to connect bus stop (N13), consider Alder St crosswalk at McLean/Albatross intersection to improve access
SW-E3	North of Merecroft Rd, east side	Short sidewalk to connect bus stop (N14) to Merecroft Rd intersection
SW-E4	North of Frances Rd to Robron Rd, east side	Five utility poles and one hydrant block the sidewalk, address by extending back of sidewalk to create 1.8m clear width

New sidewalk sections are higher-cost projects to address gaps in the existing sidewalk network. See *Table 5*. New sections will likely require deliberate budget, as costs are high.

Table 5. Recommended New Sidewalk Sections (high cost)

ID	Location	Length (est.)	Comments
SW-N1	Evergreen Rd to 4 <sup>th</sup> Ave, west side	720m	High priority due to frontage on Coronation Park and dense residential land use, may require retaining wall north of 2 <sup>nd</sup> Ave
SW-N2	S Murphy St to Merecroft Rd, east side	550m	Addresses unsafe roadside walking conditions on curve, may impact residential landscaping/driveways
SW-N3	Merecroft Rd to Evergreen Rd, east side	1,100m	Grade issues likely require retaining wall, may also impact residential landscaping / parking areas
SW-N4	5 <sup>th</sup> Ave to 6 <sup>th</sup> Ave, east side	350m	Grade issues likely require retaining wall, may encroach into boulevard and/or resident landscape/parking areas
SW-N5	2 <sup>nd</sup> Ave to 4 <sup>th</sup> Ave, east side	400m	Reconstruct sidewalk to avoid utility poles, provide barrier curb, and fix boulevard/vertical inconsistency between roadway and sidewalk
SW-N6	Cottonwood Dr to Rockland Rd, east side	600m	Low priority sidewalk as it borders Simms Creek Park, not active land uses

#### 3.5 Bus Stops

#### Spacing

All existing bus stops meet recommended bus stop spacing<sup>6</sup> and are located in appropriate locations. No new bus stop locations are needed.

#### Layout / Amenities

All bus stops should be designed for universal accessibility and include passenger amenities such as a shelter, seating, and garbage bin. Recommended bus stop design criteria are presented in *Appendix D*.

Bus stops should be designed in consideration of BC Transit's *Infrastructure Design Guidelines*, Chapter 3 - www.bctransit.com/corporate/resources/pdf/res-urban-64.pdf



Recent bus stop installations at Coronation Park and Evergreen Road (above) should be used as examples for future bus stop improvements

#### Priority Bus Stop Improvements

Priority bus stop improvement locations are based on need, anticipated number of boardings, and adjacent land uses with potential to generate transit trips (ie. schools, recreation, high density). It is recommended that bus stop upgrades are undertaken in order presented in *Table 6*. The City may consider working with the transit operator to conduct boarding/alighting counts to determine high boarding locations and adjust bus stop priority accordingly.

Each bus stop improvement will cost an estimated \$20,000 for a shelter, bench, and concrete pad. Locations requiring new sidewalks will have higher cost.

<sup>&</sup>lt;sup>6</sup> Based on BC Transit recommended spacing criteria in BC Transit, Infrastructure Design Guidelines, p14

Table 6. Priority Bus Stop Improvement Locations

ID	Location	Comments
N7	South of Rockland Rd, east side	Provide shelter; Construct sidewalk to Rockland Rd (see SW-E1)
N3	South of Buckingham PI, east side	Install shelter, bench, and concrete pad
<b>S</b> 3	North of Georgia Dr, west side	Install shelter and bench; Consider relocating 10-20m south to improve loading/unloading area and accommodate median island
S14	South of Evergreen Rd, west side	Install shelter, bench, and concrete pad
S20	North of 9 <sup>th</sup> Ave, west side	Install shelter
N14	North of Merecroft Rd, east side	Provide shelter and seating; Construct sidewalk to Merecroft Rd (see SW-E3)
S12	South of Merecroft Rd, west side	Install shelter, bench, and concrete pad
N12	North of Robron Rd, east side	Install shelter, bench, and concrete pad
S10	North of Robron Rd, west side	Install shelter, bench, and concrete pad
S19	North of 7 <sup>th</sup> Ave, west side	Install shelter and bench

#### 3.6 Truck Route Signage

Truck route signage is recommended at the Alder Street/Dogwood Street intersection to encourage commercial vehicles to use Dogwood Street, as identified in the Master Transportation Plan<sup>7</sup>. The Trucks Prohibited sign (TAC RB-92, MoTI R-120) with a "Deliveries Only" tab sign should be placed on Alder Street.

The City should monitor truck volumes and if the initial sign installation is unsuccessful, a custom information sign may be installed in advance of the intersection directing commercial vehicles to remain on Dogwood Street and prohibiting them on Alder Street.



Trucks Prohibited Sign (TAC RB-62, MoTI R-120)

<sup>&</sup>lt;sup>7</sup> Truck route signage recommendation based on the Master Transportation Plan, p105

#### 4. Implementation

The following section is an implementation strategy to achieve the long-term vision for Alder Street, including itemized improvements, prioritization, and order of magnitude cost estimates<sup>8</sup>.

Actions are prioritized as short-term (5 years), medium-term (10 years), and long-term (20 years). Each action is linked to a full description and/or code used in *Section 3*. Actions from Section 3 that are not included in the implementation plan may be addressed as budget is established or opportunities arise through land development or external funding.

#### 4.1 Short-term Actions (2020)

The primary recommended short-term action is enhancements to the portion of Alder Street between 4<sup>th</sup> Avenue and Bathurst Road, which will include road widening to create a continuous 4.3m shared vehicle-bicycle lane, new sidewalks along much of the west side, and traffic calming. Other short-term actions include improvements at Southgate School, bikeway treatments, and bus stop upgrades. Recommended short-term actions are summarized in *Table 7*.

Recommended short-term actions are highest priority and should be completed by 2020. All short-term actions should be pursued prior to addressing medium-term actions.

Table 7. Summary of Short-term Actions

Pro	ject	Description	Cost Estimate
1	4 <sup>th</sup> Ave - Bathurst Rd Enhancement	Road widening to accommodate 4.3m shared vehicle-bicycle lane between Bathurst Road and 1 <sup>st</sup> Avenue, install sidewalk between Bathurst Rd and 4 <sup>th</sup> Ave on the west side (SW-N1), traffic calming at 4 <sup>th</sup> Ave intersection (TC-7), bus stop upgrade south of Evergreen Rd west side (S14)	\$1.1 million
2	Southgate School Improvements	Install traffic calming at Holm Rd (TC-1) and Yorkshire Dr (TC-2) intersections, improve two adjacent bus stops (N3, S3)	\$90,000
3	Bikeway Improvements	Install signs and paint markings to encourage cyclists to use Thulin Road or Birch Street	\$10,000
4	Rockland Road Bus Stop Improvement	Provide sidewalk link from bus stop (N7) to Rockland Rd intersection (SW-E1), install bus shelter	\$30,000
5	Truck Route Sign	Install "Trucks Prohibited" sign and tab at south end of Alder Street to encourage trucks to use Dogwood Street	< \$1,000
6	McLean St / Merecroft Rd Bus Stop Sidewalk Accesses	Add short sidewalk segments north of McLean St east side (SW-E2, N13) and north of Merecroft Rd east side (SW-E3, N14) only if the S Murphy St - Bathurst St east side sidewalk (SW-N2) is not pursued (medium-term action, item 1)	\$15,000*

<sup>&</sup>lt;sup>8</sup> Cost estimates are based on typical design and linear costs, suitable for establishing budgets. Estimates do not address site specific design requirement or underground utilities. Further cost refinements suggested prior to design and construction.

#### 4.2 Medium-term Actions (2025)

The primary recommended medium-term action is enhancements to the portion of Alder Street between Bathurst Road and S Murphy Street, which will include new sidewalks, traffic calming at Albatross Crescent and South Murphy Street, and bus stop upgrades. Other medium-term actions include applying bikeway treatment, traffic calming at Ecole Mer-et-Montagne and bus stop upgrades. Recommended medium-term actions are summarized in *Table 8*.

Recommended medium-term actions should be completed by 2025. All medium-term actions should be pursued prior to addressing long-term actions.

**Table 8**. Summary of Medium-term Actions

Pro	ject	Description	Cost Estimate
1	Bathurst Rd – S Murphy St Enhancement	Install new sidewalks between S Murphy St and Bathurst Rd on the east side (SW-N2, SW-N3), traffic calming at Albatross Cres (TC-5) and S Murphy St intersections (TC-4), bus stop upgrades at Merecroft Rd (N14, S12)	\$500,000
2	Restrict On-Street Parking + Apply Bikeway Treatment	Restrict on-street parking to one side north of S Murphy St where required to achieve 4.3m shared lanes and install shared lane bikeway treatments on Alder Street once minimum 4.3m shared lanes are provided for the entire corridor, including the segment from Bathurst Street to 1st Avenue where road widening is required (short-term action, item 1)	\$25,000
3	Garnet Rd Traffic Calming	Install traffic calming at Garnet Rd (TC-3) to enhance pedestrian crossing to Ecole Mer-et-Montagne	\$30,000
4	North End Bus Stop Improvements	Improve southbound bus stops at 7 <sup>th</sup> Ave and 9 <sup>th</sup> Ave (S19, S20) by installing shelters, benches, and concrete pads	\$40,000
5	Robron Road Bus Stop Improvements	Improve northbound and southbound bus stops at Robron Rd (N12, S10) by installing shelters, benches, and concrete pads	\$40,000
6	Intersection Assessment	Re-assess level of service at 2 <sup>nd</sup> Ave and Merecroft Rd intersections to determine if signal or roundabout is required	n/a

#### 4.3 Long-term Actions (2035)

The primary recommended long-term action is enhancements to the portion of Alder Street between 6<sup>th</sup> Avenue and 2<sup>nd</sup> Avenue, which will include new sidewalks and traffic calming. Other long-term actions include traffic calming at the Willow Point Sportsplex, sidewalk improvements, and bus stop improvements. Recommended long-term actions are summarized in *Table 9*.

Recommended long-term actions should be completed by 2035.

**Table 9**. Summary of Long-term Actions

Pro	ject	Description	Cost Estimate
1	6 <sup>th</sup> Ave – 2 <sup>nd</sup> Ave Enhancement	Install sidewalk between 5 <sup>th</sup> Ave and 6 <sup>th</sup> Ave on the east side (SW-N4) and between 2 <sup>nd</sup> Ave and 4 <sup>th</sup> Ave on the east side (SW-N5), traffic calming at crosswalk north of 6 <sup>th</sup> Ave (TC-6)	\$150,000
2	Cottonwood Dr Crosswalk Traffic Calming	Install traffic calming at Cottonwood Dr (TC-8) to enhance pedestrian crossing to Willow Point Sportsplex	\$30,000
3	Simms Creek Sidewalk Link	Install sidewalk between Rockland Rd and Cottonwood on the east side of Alder Street, approximately 600m (SW-N6)	\$90,000
4	Robron Rd – Frances Rd Sidewalk Improvement	Create sidewalk extensions and/or new sidewalk to address utility poles and hydrants in the sidewalk between Robron Rd and Frances Rd (SW-E4)	\$50,000
5	Bus Stop Improvements	Identify five additional bus stop locations to improve with a shelter, bench, and concrete pad. Consider a survey to identify high ridership stops.	\$100,000
6	Sidewalk Extensions	Address locations with utility poles in the sidewalk by building extensions at the back of the sidewalk or relocating the sidewalk – Frances Rd to Rockland Rd east side, Parkway Rd to Yorkshire Dr both sides	Variable

#### 4.4 Road Widening Projects

As noted, it is not recommended that the City pursue road widening projects for the purposes of providing on-street parking. Road widening is expensive, on-street parking occupancy is low on Alder Street, and the Master Transportation Plan provides clear direction to prioritize spending on walking, cycling, and public transit facilities.

Road widening to achieve the preferred cross-section may be considered as other infrastructure projects are planned for the north half of Alder Street (S Murphy Street to 9<sup>th</sup> Avenue). Consideration should be given to including sidewalk, bus stop, and traffic calming action items (above) into any road widening project.

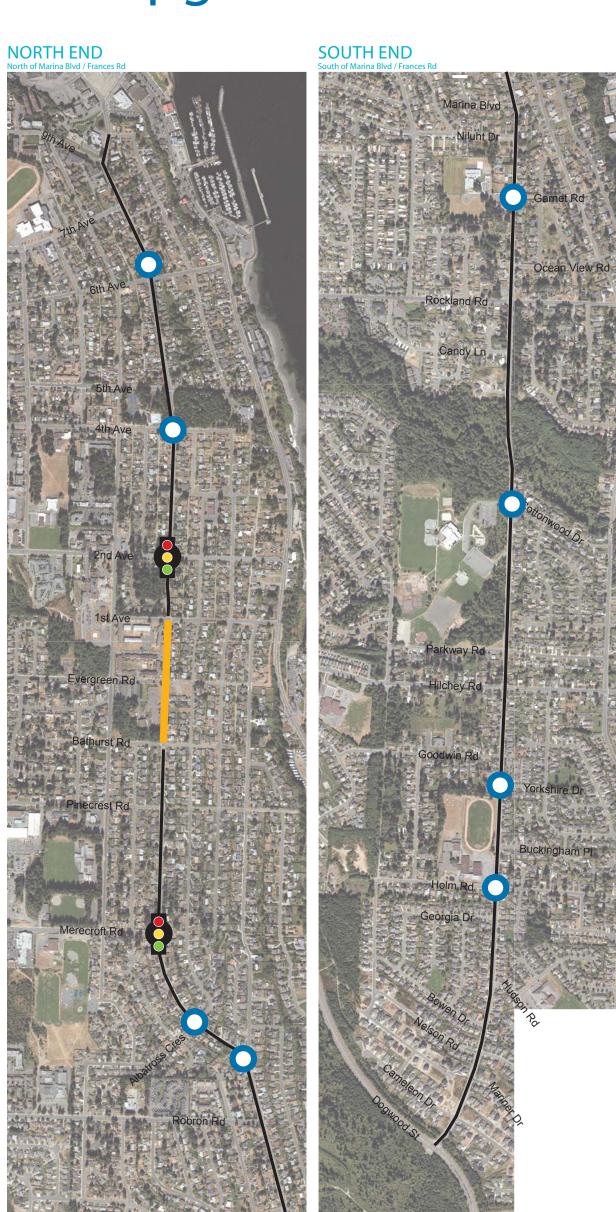
### Maps

- 1. Road Upgrades
- 2. North-South Bikeway
- 3. Sidewalk + Bus Stop Upgrades
- 4. Short-term Actions
- 5. Medium-term Actions
- 6. Long-term Actions



Map 1.

# Road Upgrades



#### **LEGEND**

Planned Road Widening



Traffic Calming

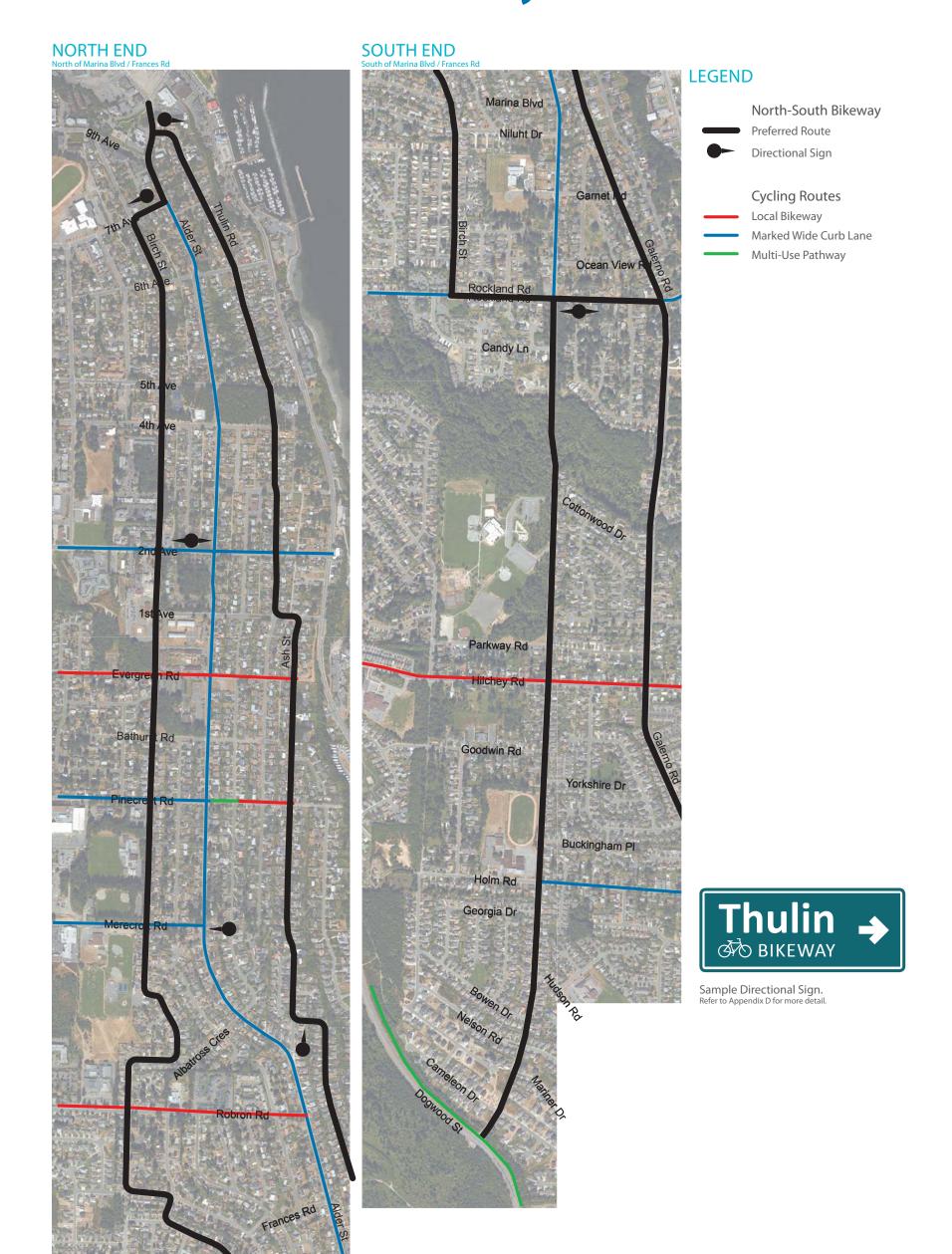


Intersection Upgrade (signal or roundabout)



Map 2.

# North-South Bikeways





Map 3.

# Sidewalk + Bus Stop Upgrades





#### **LEGEND**

Sidewalk Enhancement Low cost sidewalk improvements to address small network gaps or inadequate existing sidewalks

New Sidewalk Highest priority sidewalk improvements to address missing sidewalks or inadequate existing sidewalks (number indicates order of importance)

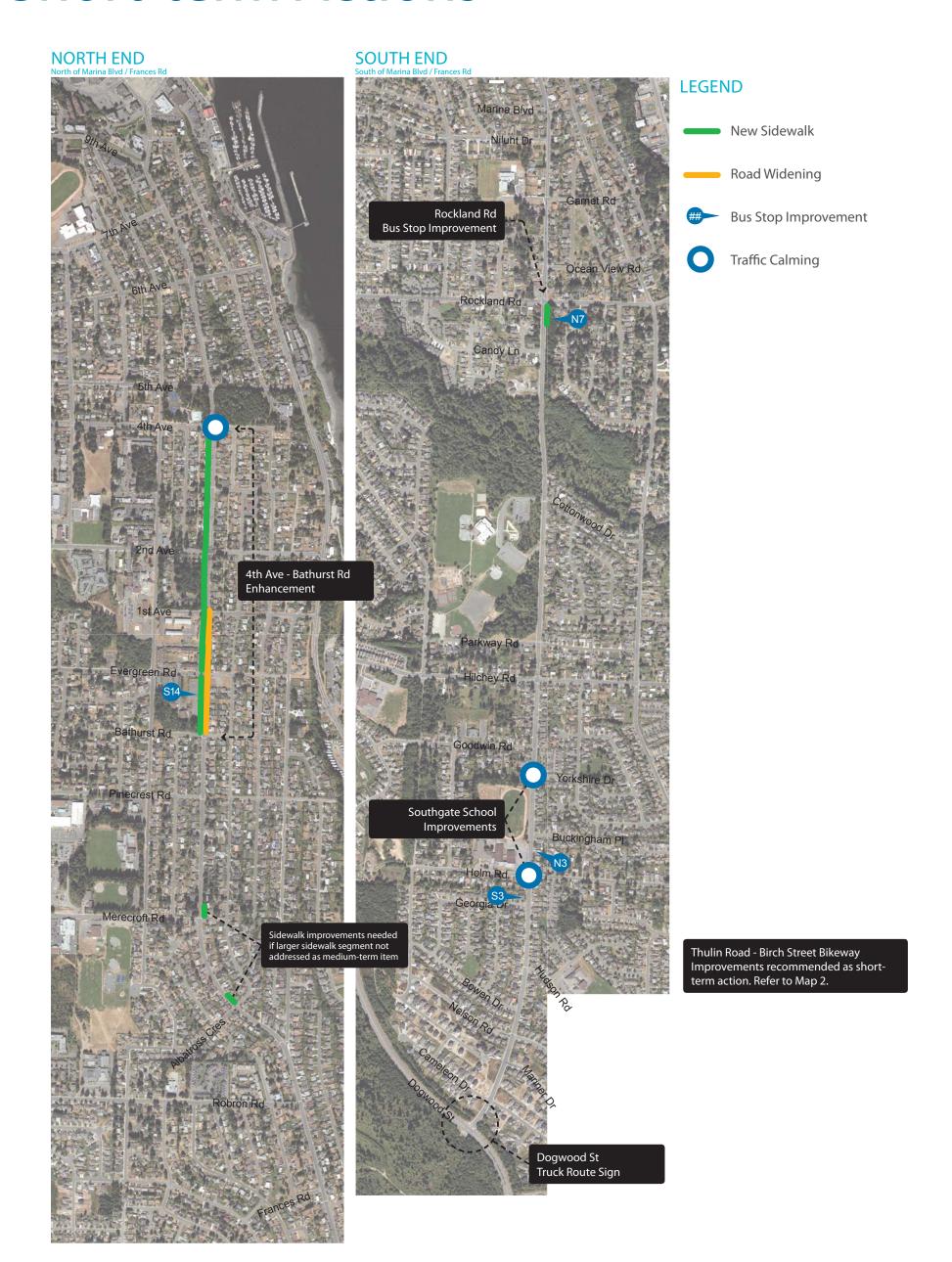
**Future Sidewalk** Lower priority sidewalk improvements to address inadequate existing sidewalks

**Priority Bus Stop Improvement** 



Map 4.

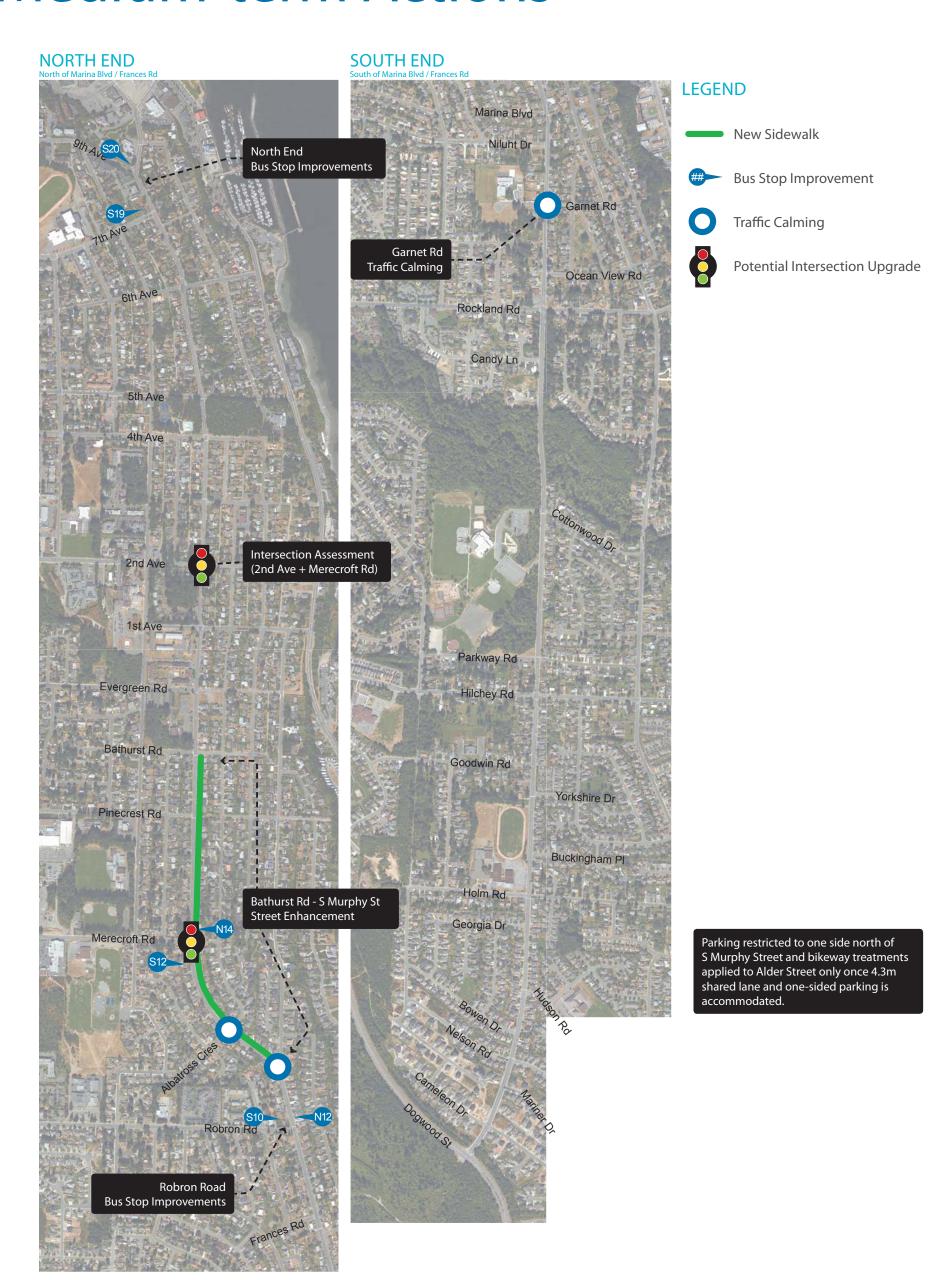
## **Short-term Actions**





Map 5.

## Medium-term Actions





Map 6.

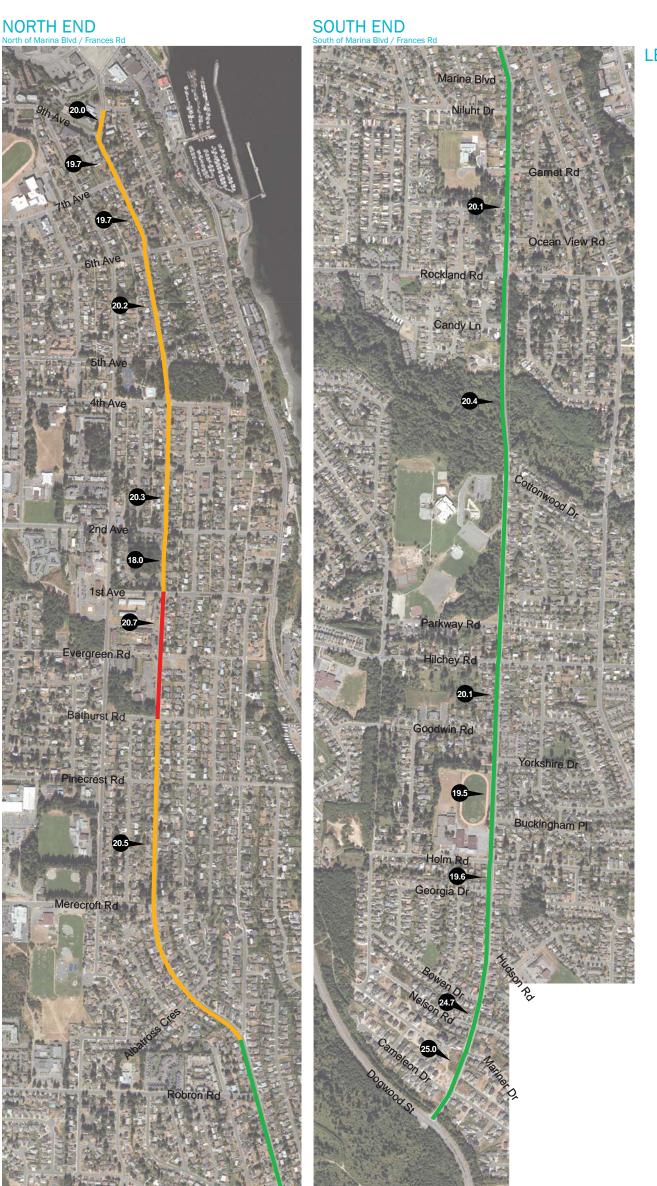
# Long-term Actions



Appendix A.
Summary of Existing Conditions



# Right-of-Way + Road Width



#### **LEGEND**

**Road Width** (curb-to-curb)
The estimated width of the paved road from one curb to the other

13.6m or more

11.0m or less

11.1 - 13.5m

Right-of-Way Width (approx.)
Alder Street legal property width, in

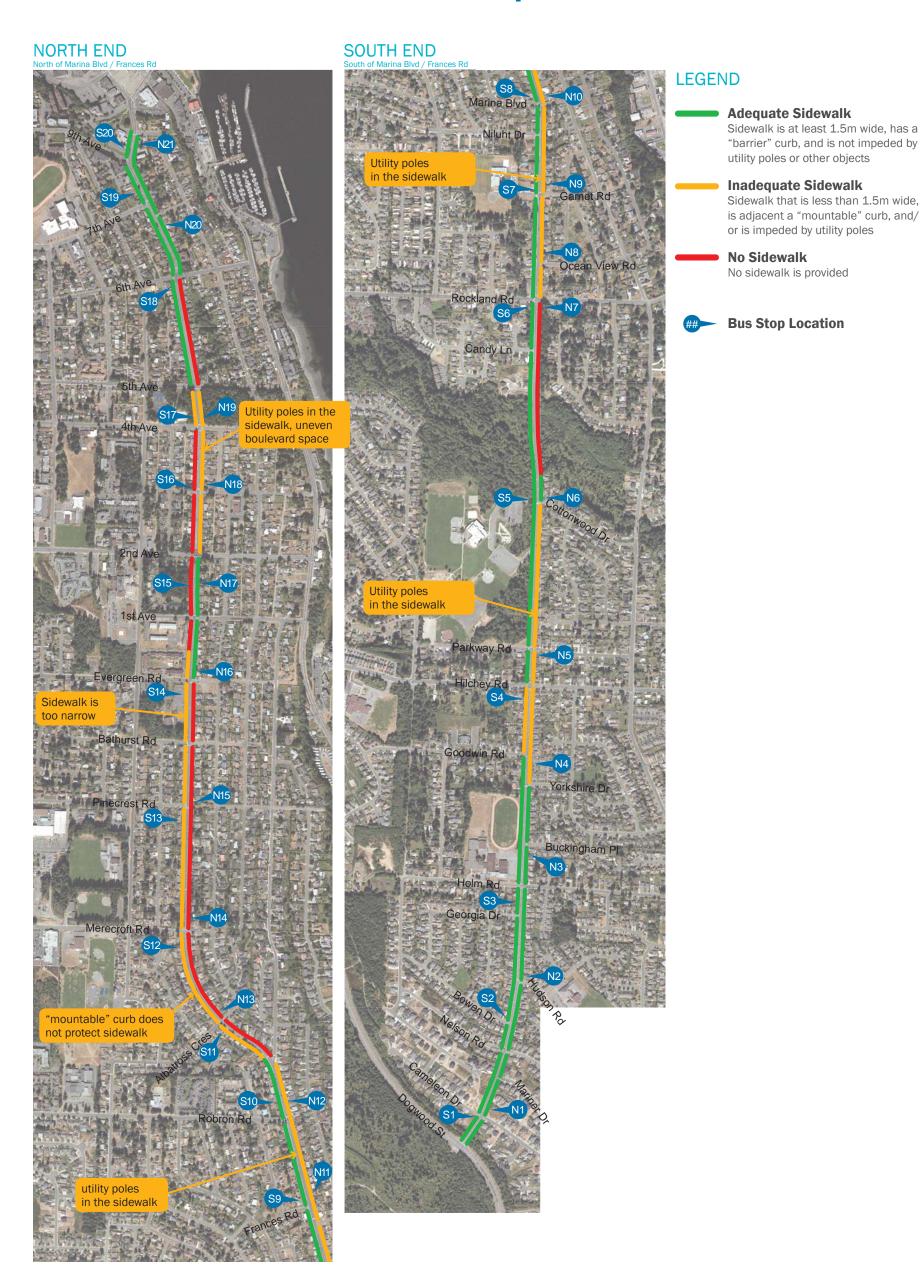


## **Traffic Control**



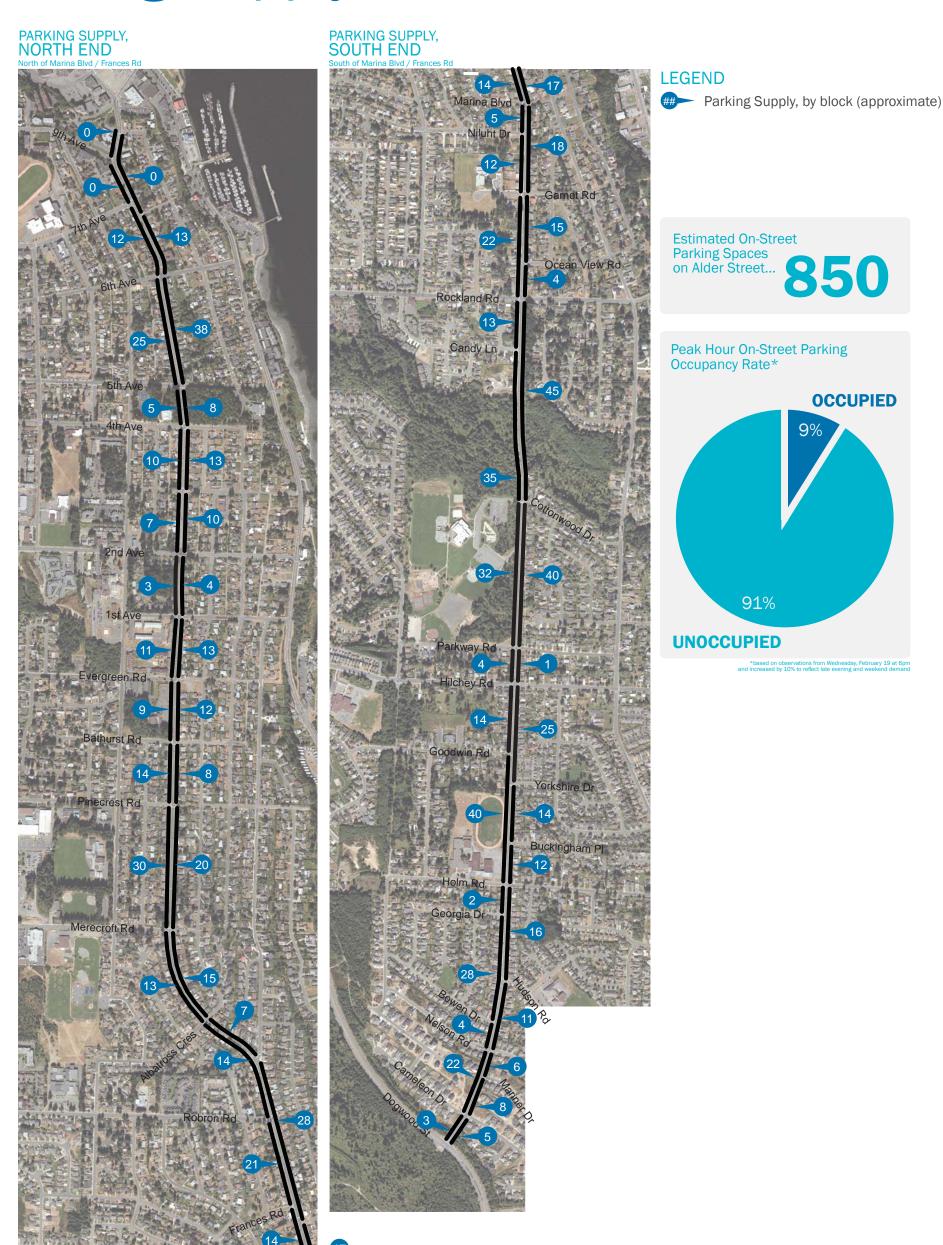


# Sidewalks + Bus Stops





# Parking Supply



#### **Sidewalk Inventory**

Alder Street Corridor Review

#### **WEST**

#### Est. Length Curb Width Location Notes (m) Type (m) Dogwood St - Cameleon Dr 115 1.7 **Barrier** Cameleon Dr - Nelson Rd 220 1.7 Barrier Nelson Rd - Bowen Dr 85 1.7 Barrier Bowen Dr - Georgia Dr 345 1.7 Barrier Georgia Dr - Holm Rd 95 1.7 Barrier Holm Rd - Goodwin Rd 420 1.7 **Barrier** Goodwin Rd - Hilchey Rd 220 1.7 Barrier Poles in s/w Hilchey Rd - Parkway Rd 115 1.7 Barrier Parkway Rd - Sportsplex drivewa 475 1.7 Barrier Sportsplex driveway - Candy Ln 490 1.7 Barrier Candy Ln - Rockland Rd 1.7 155 Barrier Rockland Rd - Garnet Rd 335 1.7 Barrier Garnet Rd - Nilhut Dr 195 1.7 Barrier Nilhut Dr - Marina Blvd 95 1.7 Barrier Marina Blvd - Frances Rd 300 1.7 Barrier Frances Rd - Robron Rd 290 1.7 Barrier Barrier, Barrier curb south of Murphy, 1.7, Robron Rd - Albatross Cres 400 1.5 Mount. mountable curb north Murphy Albatross Cres - Merecroft Rd 320 1.5 Mount.

#### **EAST**

Location	Length (m)	Est. Width (m)	Curb Type	Notes
Dogwood St - Nodales Dr	115	1.7	Barrier	
Nodales Dr - Mariner Dr	140	1.7	Barrier	
Mariner Dr - Nelson Rd	80	1.7	Barrier	
Nelson Rd - Hudson Rd	225	1.7	Barrier	
Hudson Rd - Holm Rd	305	1.7	Barrier	
Holm Rd - Buckingham Pl	140	1.7	Barrier	
Buckingham PI - Yorkshire Dr	185	1.7	Barrier	
Yorkshire Dr - Hilchey Rd	320	1.7	Barrier	Poles in s/w (north end)
Hilchey Rd - Parkway Rd	115	1.7	Barrier	Poles in s/w
Parkway Rd - Cottonwood Dr	475	1.7	Barrier	Poles in s/w
Cottonwood Dr - Rockland Rd	650	-	-	100m s/w (south end)
Rockland Rd - Ocean View Rd	115	1.6	Barrier	Poles in s/w
Ocean View Rd - Garnet Rd	225	1.6	Barrier	Poles in s/w
Garnet Rd - Marina Blvd	285	1.6	Barrier	Poles in s/w
Marina Blvd - Frances Rd	245	1.6	Barrier	Poles in s/w
Frances Rd - Murphy St	345	1.6	Barrier	Poles in s/w
Murphy St - McLean St	200	-	Mount.	
McLean St - Merecroft Rd	320	-	Mount.	

#### **Sidewalk Inventory**

Alder Street Corridor Review

#### **WEST**

Location	Length (m)	Est. Width (m)	Curb Type	Notes
Merecroft Rd - Pinecrest Rd	400	1.5	Mount.	
Pinecrest Rd - Bathurst Rd	205	1.5	Mount.	
Bathurst Rd - Evergreen Rd	195	1.2	Mount.	
Evergreen Rd - 1st Ave	200	1.5, -	Barrier, Mount.	Barrier curb and s/w south half, mountable curb no s/w north
1st Ave - Coronation Cres	60	-	Mount.	
Coronation Cres - Coronation Cr	80	-	Mount.	
Coronation Cres - 2nd Ave	60	-	Mount.	
2nd Ave - 3rd Ave	200	-	Mount.	
3rd Ave - 4th Ave	200	-	Mount.	
4th Ave - 5th Ave	140	1.8, 1.5	Mount.	
5th Ave - 6th Ave	350	1.5	Barrier	
6th Ave - 7th Ave	255	1.5	Barrier	
7th Ave - 9th Ave	150	1.5	Barrier	
9th Ave - St Anns Rd	190	1.5	Barrier	

#### **EAST**

Location	Length (m)	Est. Width (m)	Curb Type	Notes
Merecroft Rd - Pinecrest Rd	605	-	Mount.	
Pinecrest Rd - Bathurst Rd	205	-	Mount.	
Bathurst Rd - Evergreen Rd	195	-	Mount.	
Evergreen Rd - 1st Ave	200	1.5	Barrier	
1st Ave - 2nd Ave	200	1.5	Barrier	
2nd Ave - 3rd Ave	200	1.5+ (varies)	Mount.	Poles in s/w
3rd Ave - 4th Ave	200	1.5+ (varies)	Mount.	Poles in s/w, raised s/w blvd issue
4th Ave - 5th Ave	140	1.5+ (varies)	Mount.	Raised s/w blvd issue
5th Ave - 6th Ave	350	-	Mount.	
6th Ave - 7th Ave	210	1.6	Barrier	
7th Ave - 9th Ave	195	1.6	Barrier	
9th Ave - 9th Ave	90	1.6	Barrier	
9th Ave - St Anns Rd	100	1.6	Barrier	

## **Parking Inventory**

Alder Street Corridor Review

#### **WEST**

WES1			
Location	Total Spaces	Observed Vehicles (Wed Feb 19, 6pm)	Occupancy Rate (%)
Dogwood St - Cameleon Dr	3	0	0%
Cameleon Dr - Nelson Rd	22	0	0%
Nelson Rd - Bowen Dr	4	1	25%
Bowen Dr - Georgia Dr	28	3	11%
Georgia Dr - Holm Rd	2	0	0%
Holm Rd - Goodwin Rd	40	0	0%
Goodwin Rd - Hilchey Rd	14	0	0%
Hilchey Rd - Parkway Rd	4	0	0%
Parkway Rd - Sportsplex driveway	32	0	0%
Sportsplex driveway - Candy Ln	35	0	0%
Candy Ln - Rockland Rd	13	0	0%
Rockland Rd - Garnet Rd	22	0	0%
Garnet Rd - Nilhut Dr	12	0	0%
Nilhut Dr - Marina Blvd	5	0	0%
Marina Blvd - Frances Rd	14	2	14%
Frances Rd - Robron Rd	21	2	10%
Robron Rd - Albatross Cres	14	0	0%
Albatross Cres - Merecroft Rd	13	0	0%
Merecroft Rd - Pinecrest Rd	30	3	10%

#### **EAST**

Location	Total Spaces	Observed Vehicles (Wed Feb 19, 6pm)	Occupancy Rate (%)
Dogwood St - Nodales Dr	5	0	0%
Nodales Dr - Mariner Dr	8	2	25%
Mariner Dr - Nelson Rd	6	0	0%
Nelson Rd - Hudson Rd	11	2	18%
Hudson Rd - Holm Rd	16	3	19%
Holm Rd - Buckingham Pl	12	0	0%
Buckingham PI - Yorkshire Dr	14	0	0%
Yorkshire Dr - Hilchey Rd	25	3	12%
Hilchey Rd - Parkway Rd	1	0	0%
Parkway Rd - Cottonwood Dr	40	2	5%
Cottonwood Dr - Rockland Rd	45	0	0%
Rockland Rd - Ocean View Rd	4	1	25%
Ocean View Rd - Garnet Rd	15	3	20%
Garnet Rd - Marina Blvd	18	2	11%
Marina Blvd - Frances Rd	17	2	12%
Frances Rd - Murphy St	28	2	7%
Murphy St - McLean St	7	1	14%
McLean St - Merecroft Rd	15	4	27%
Merecroft Rd - Pinecrest Rd	20	7	35%

## **Parking Inventory**

Alder Street Corridor Review

#### **WEST**

WEST				LAGI			
Location	Total Spaces	Observed Vehicles (Wed Feb 19, 6pm)	Occupancy Rate (%)	Location	Total Spaces	Observed Vehicles (Wed Feb 19, 6pm)	Occupancy Rate
Pinecrest Rd - Bathurst Rd	14	0	0%	Pinecrest Rd - Bathurst Rd	8	1	13%
Bathurst Rd - Evergreen Rd	9	0	0%	Bathurst Rd - Evergreen Rd	12	0	0%
Evergreen Rd - 1st Ave	11	1	9%	Evergreen Rd - 1st Ave	13	1	8%
1st Ave - Coronation Cres	1	0	0%	1st Ave - 2nd Ave	4	0	0%
Coronation Cres - Coronation Cres	2	0	0%	2nd Ave - 3rd Ave	10	0	0%
Coronation Cres - 2nd Ave	0	0	n/a	3rd Ave - 4th Ave	13	1	8%
2nd Ave - 3rd Ave	7	0	0%	4th Ave - 5th Ave	8	0	0%
3rd Ave - 4th Ave	10	2	20%	5th Ave - 6th Ave	38	4	11%
4th Ave - 5th Ave	5	0	0%	6th Ave - 7th Ave	13	1	8%
5th Ave - 6th Ave	25	1	4%	7th Ave - 9th Ave	0	0	n/a
6th Ave - 7th Ave	12	2	17%	9th Ave - 9th Ave	0	0	n/a
7th Ave - 9th Ave	0	0	n/a	9th Ave - St Anns Rd	0	0	n/a
9th Ave - St Anns Rd	0	0	n/a				
Total (6pm observation)	424	17	4%		426	42	10%
Total (Increase by 10% for peak period*)	424	19	4%		426	46	11%
Total (both sides)					850	65	8%

**EAST** 

<sup>\* 10%</sup> based on Urban Land Institute "Shared Parking" handbook, table 2-5

## **Bus Stop Inventory**

Alder Street Corridor Review

## SOUTHBOUND (WEST)

ID	Location	Sign / Pole	Bench	Shelter	Notes
S1	South of Cameleon	Υ	N	N	
S2	North of Bowen	Υ	N	N	
S3	North of Georgia	Υ	N	N	
S4	South of Hilchey	Υ	N	N	Utility pole blocks the sidewalk
S5	At Sportsplex	Υ	Υ	Υ	Includes wait pad
S6	South of Rockland	Υ	Υ	N	
S7	North of Garnet	Υ	N	N	
S8	North of Marina	Υ	N	N	
S9	North of Frances	Υ	N	N	
S10	North of Robron	Υ	N	Υ	
S11	South of Albatross	Υ	N	N	
S12	South of Merecroft	Υ	N	N	
S13	South of Pinecrest	Υ	N	N	
S14	South of Evergreen	Υ	Υ	N	
S15	Between Coronation	Υ	Υ	Υ	Includes wait pad
S16	North of 3rd	Υ	N	N	Retaining wall and sidewalk wait area, but no sidewalk access
S17	North of 4th	Υ	N	Υ	
S18	South of 6th	Υ	N	N	
S19	North of 7th	Υ	N	N	
S20	North of 9th	Υ	Υ	N	

#### NORTHBOUND (EAST)

ID	Location	Sign / Pole	Bench	Shelter	Notes
N1	North of Nodales Dr	Υ	Υ	N	
N2	North of Hudson	Υ	N	N	
N3	South of Buckingham	Υ	N	N	
N4	South of Goodwin	Υ	N	N	
N5	South of Parkway	Υ	N	N	
N6	At Sportsplex	Υ	Υ	Υ	Pole in middle of sidewalk
N7	South of Rockland	Υ	Υ	N	No sidewalk or wait pad
N8	North of Ocean View	Υ	N	N	Only 7m long (between driveways)
N9	North of Garnet	Υ	N	N	
N10	North of Marina	Υ	N	N	ID sign hidden in bushes
N11	North of Frances	Υ	N	N	
N12	North of Robron	Υ	N	Υ	
N13	North of McLean	Υ	N	N	No sidewalk or waiting pad
N14	North of Merecroft	Υ	N	N	No sidewalk or waiting pad
N15	North of Pinecrest	Υ	N	Υ	Stop is within intersection (T-intersection, far side)
N16	North of Evergreen	Υ	N	N	
N17	Between Coronation	Υ	Υ	Υ	Includes wait pad behind sidewalk
N18	North of 3rd	Υ	N	N	
N19	North of 4th	Υ	Υ	Υ	
N20	South of 7th	Υ	N	N	Short (in length) between driveways
N21	South of 9th	Υ	N	N	

Appendix B.

Summary of SOCP Transportation Policies

## Summary of SOCP Transportation Objectives + Policies

The following summarizes the transportation <u>objectives</u> and <u>policies</u> from Section 7 of the Sustainable Official Community Plan (SOCP).

#### Objectives

- 7.1 Prioritize walking in Campbell River
- 7.2 Develop and improve the role of bicycle facilities to increase the cycling mode share
- 7.3 Increase the viability and attractiveness of transit, and increase its mode share
- 7.4 Improve the long-term street network for safe, multi-modal use in a fiscally responsible manner
- 7.5 Support walking, cycling, and transit use through transportation demand management

#### **Policies**

#### 7.1 Prioritize walking in Campbell River

- **7.1.1** Sidewalk coverage will be strategically increased as financial resources permit and as guided by the *Master Transportation Plan*.
- **7.1.2** Enhanced pedestrian treatments will be incorporated and prioritized into pedestrian precincts, as identified in the *Master Transportation Plan* "Pedestrian Priority Areas" Map. Enhanced pedestrian treatments include improved crossings, accessibility, and amenities such as signage and wayfinding, landscaping, benches, and lighting.
- **7.1.3** The development and improvement of the greenways loops and other greenways will be supported by the City and through partnerships with senior levels of government. Improvements include: continuous, accessible pathway along streets to support both pedestrians and cyclists; significant landscaping, narrow crossings; traffic calming; pedestrian rest areas and lighting; public art and interpretative signage; and alternative stormwater management techniques such as rain gardens and bioswales.

#### 7.2 Develop and improve the role of bicycle facilities to increase the cycling mode share

- **7.2.1** Enhancements to the bicycle network will be supported by the City and through developments and partnerships with senior levels of government, focusing on existing routes and planned routes as identified in the *Master Transportation Plan* "Long Term Bicycle Network" Map.
- **7.2.2** Comprehensive design guidelines will be developed and maintained for both on-street and offstreet bicycle facilities that support:
  - corridor treatments that include bicycle lanes, paved shoulders, marked wide curb lanes, local bikeways, and multi-use pathways; and
  - crossing treatments that include marked crossings, median islands, signalized crossings, bicycle loop detectors, bike boxes and grade-separated crossings.

- **7.2.3** Bicycle support strategies will be established by the City and through private developments and partnerships with senior levels of government to develop and enhance:
  - on-street bicycle parking with bicycle racks, corrals, shelters, and lockers;
  - wayfinding and route signage;
  - public bike sharing programs;
  - end-of-trip facilities;
  - bicycle-transit integration through racks on businesses and secure parking at major transit facilities and centres; and
  - education and awareness programs on cycling skills, safety, routes, destinations, parking, retailers, and others.

#### 7.3 Increase the viability and attractiveness of transit, and increase its mode share

- **7.3.1** Partnerships with BC Transit and land use regulations will be established and maintained to improve transit services by fostering the following as per the *Transportation Master Plan* "Long-Term Transit Strategy" Map:
  - the provision of a Frequent Transit Network (FTN) with more convenient, reliable, and frequent service throughout the entire day and on evenings, seven days per week, on Dogwood Corridor and Island Highway Corridor;
  - the provision of a Local Transit Network (LTN) with direct, relatively frequent service that runs all day and into the evening, on Alder Corridor, North Campbell River, Peterson-Downtown Circulator, and Jubilee; and
  - the provision of services that focus on the following targeted needs: regional services that provide connections between cities;
  - neighbourhood service areas; HandyDART services, and seniors transit.
- **7.3.2** Transit priority treatments will be established as financial resources permit, and include physical, operational, and regulatory improvements.
- **7.3.3** Partnerships with BC Transit will maintained to increase the attractiveness and accessibility of passenger facilities at transit exchanges, stops, and facilities, and to improve customer information and expand transit pass programs.

# **7.4** Improve the long-term street network for safe, multi-modal use in a fiscally responsible manner

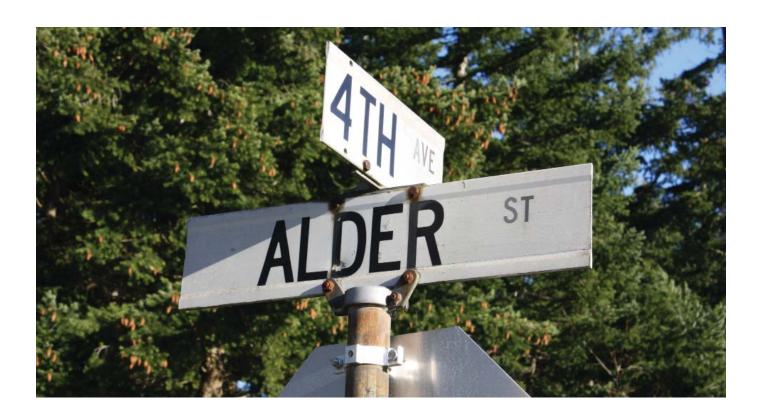
- **7.4.1** Short and long term decisions regarding the configuration and design of roads and supporting facilities, as well as relationships with adjacent land uses, will be guided by the *Master Transportation Plan* Roadway Classification Guidelines and "Updated Road Network Classification" Map.
- **7.4.2** New road construction, major road enhancements and improvements, neighbourhood traffic management must be consistent with priorities outlined in the *Master Transportation Plan*.

#### 7.5 Support walking, cycling, and transit use through transportation demand management

- 7.5.1 Land use decisions must support walking, cycling and transit, as provided in Part II of the SOCP.
- **7.5.2** Parking regulations will be updated and maintained to integrate parking management strategies, including but not limited to preferential parking areas for car sharing, on-street parking time limits, and parking requirement maximums or reduced and flexible bylaw requirements based on provision of other services such as shared parking, transit passes and bicycle parking.
- **7.5.3** The City will work with partners and local organizations to distribute information for purposes of educating and raising public awareness about walking, cycling, and transit as local transportation mode options.

Appendix C.

Summary of Survey + Open House Results



# Alder Street Corridor Review PUBLIC CONSULTATION SUMMARY

City of Campbell River, BC

April 2014



BOULEVARD TRANSPORTATION a division of Watt Consulting Group

201-791 Goldstream Ave | Victoria BC | V9B 2X5 www.blvdgroup.ca | www.wattconsultinggroup.com





#### OVERVIEW

An open house was hosted Wednesday, March 12 2014 at the Willow Point Sportsplex from 5:30pm to 7:30pm. Story boards were presented that outlined project objectives, background information (ie. sidewalks, parking) and preliminary options for the Alder Street corridor. Story boards are included in *Appendix A*. An estimated 70 residents attended and members of the consulting team and City Engineering staff were on-hand to discuss the options. A survey was distributed to capture feedback, included in *Appendix B*. The survey and story boards were also available on the City's website for two weeks following the open house.

A summary of key findings is below, with more detailed question-by-question results on the following pages.

#### **KEY FINDINGS**

- A total of 60 surveys were received, approximately two-thirds from residents on Alder Street and one-third from residents elsewhere in Campbell River.
- Generally, responses suggest accommodating pedestrians is highest priority. Nearly two-thirds of responses suggest that pedestrian facilities are very important and open-ended comments stated a desire for continous sidewalks on both sides of Alder Street.
- On-street parking is also a high priority, particularly among Alder Street residents. Cross-section options
  with parking on both sides received highest support.
- The cross-section option for the south section with shared lanes (vehicle/bike), parking on both sides, traffic calming at intersections and no boulevard (Option B) received the most support. Support was particularly high among Alder Street residents (80%). The corresponding option for the north section received less support presumably because parking is reduced to one side (due to reduced right-of-way).
- Cycling accommodation received a low level of support and is noticeably lower priority among Alder
  Street residents than non-Alder Street residents. Cross-section options with full bike lanes received low
  support from Alder Street residents and higher support from non-Alder Street residents.
- Comments suggest concerns for vehicle speeds, traffic volumes, and a lack of police enforcement.
   Numerous respondents suggested a need for traffic calming and others suggested addressing surrounding roads to better accommodate through traffic (ie. Dogwood Street).
- Public transit is low priority and was given little consideration in survey responses. Similarly, boulevards
  separating the sidewalk from the roadway were presented as an option but received little support.



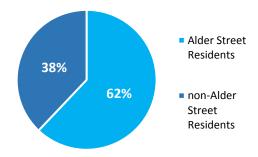


#### DETAILED RESULTS

Below are survey results for each question in more detail. Results have been presented for all responses and broken down as responses from Alder Street residents versus non-Alder Street residents.

### Q1. What community/neighbourhood do you live in?

	Count	Percentage
On Alder Street	36	62%
Within 2 blocks of Alder Street	16	28%
Other	6	10%



#### Q2. Are pedestrian facilities along Alder Street important for you?

#### **Total**

	Count	Percentage
Very important	36	63%
Somewhat important	19	33%
Not at all important	2	4%

#### Alder Street versus non-Alder Street Residents

	Alder	Street	Non-Alder Street		
	Count	Percentage	Count	Percentage	
Very important	24	67%	12	57%	
Somewhat important	11	30%	8	38%	
Not at all important	1	3%	1	5%	





## Q3. Are bicycle facilities along Alder Street important for you?

#### Total

	Count	Percentage
Very important	14	25%
Somewhat important	19	34%
Not at all important	23	41%

#### Alder Street versus non-Alder Street Residents

	Alder	Street	Non-Alder Street		
	Count	Percentage	Count	Percentage	
Very important	7	19%	7	35%	
Somewhat important	11	31%	8	40%	
Not at all important	18	50%	5	25%	

## Q4. Is on-street parking on Alder Street important for you?

#### Total

	Count	Percentage
Very important	19	34%
Somewhat important	17	30%
Not at all important	15	27%
N/A	5	9%

#### Alder Street versus non-Alder Street Residents

inder bureet versus non made bureet testaches					
	Alder	Street	Non-Alder Street		
	Count	Percentage	Count	Percentage	
Very important	17	49%	2	10%	
Somewhat important	12	34%	5	24%	
Not at all important	6	17%	9	43%	
N/A	0	0%	5	24%	

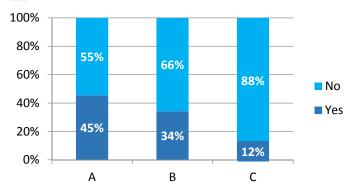




Q4a. Do you support the following cross section options for the North section of Alder Street

- A) Bike lanes, parking on one side, sidewalks on both sides
- B) Shared lanes, parking on one side
- C) Shared lanes, parking on one side, boulevards between road and sidewalk (likely requires re-grading and possible retaining structures in some sections)

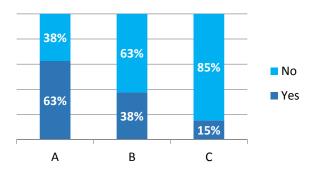
#### Total



#### **Alder Street Residents**

#### 100% 80% 60% 40% 20% 36% 32% 18% A B C

Non-Alder Street Residents



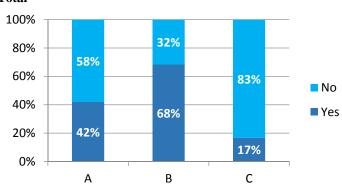




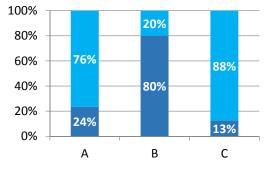
### Q4b. Do you support the following cross sections for the South section of Alder Street

- A) Bike lanes, parking on one side, no boulevard
- B) Shared lanes, parking on both sides, no boulevard
- C) Boulevard between the sidewalk and the road, shared lanes, parking on one side

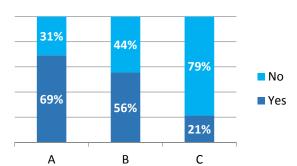
#### **Total**



#### **Alder Street Residents**



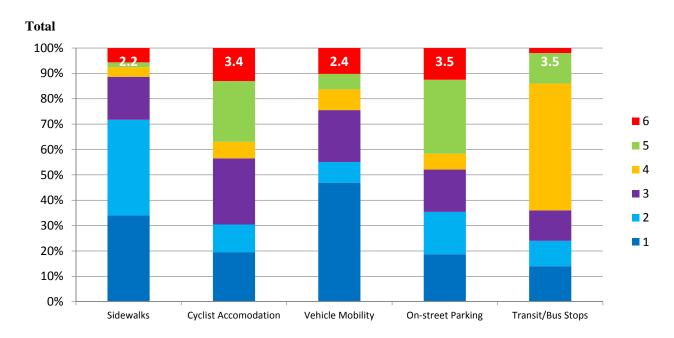
**Non-Alder Street Residents** 



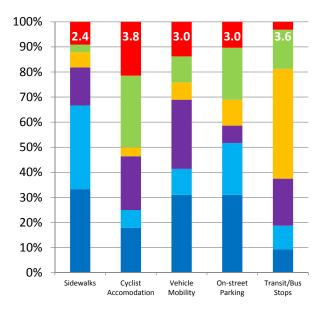




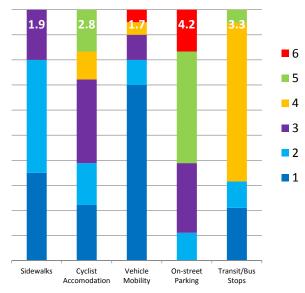
Q5. Please <u>Rank</u> your preference for the order of transportation aspects on Alder St, from most important to you to least important (with highest rank / preference being a "1", and lowest rank being a "6")?



#### **Alder Street Residents**



#### **Non-Alder Street Residents**



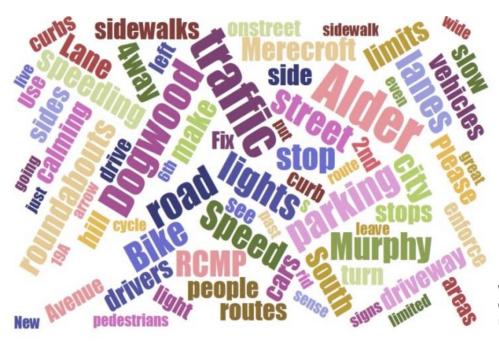




#### Q. Please feel free to add any additional comments, concerns, or ideas.

#### Common feedback (response frequency):

- Vehicle speeding (17), lack of police monitoring (11), safety concerns (9)
- Install traffic calming (14)
- Improve sidewalks, sidewalks on both sides (6)
- Improve cycling infrastructure (5), consider accommodating cyclists on quieter streets (8)
- Parking on both sides (5), remove on-street parking (2)
- More lighting (4)
- Remove stoplights (4), install more stop signs (3)
- Don't install boulevards (3)
- Fix Dogwood Street (3)
- Improve aesthetics (3)
- Designate emergency exit routes (2)
- Don't change Alder Street (2)



Word Cloud: Common open-ended responses





#### The following is a detailed summary of open ended responses:

Living at South Alder and South Murphy is very scary to access the road. I have never seen police monitoring speeding vehicles, enforce this please.

No crosswalk on 6th and Alder-provides pedestrians with a false sense of security; is on a curve, this site distance is limited; is at bottom of hill, thus cars are speeding even more; summertime bushes make it worse in from of Transition House-no one cuts them until we go to City Hall; sign placement is wrong. Curb extensions on every crosswalk especially in high walking areas.

Have RCMP set up radar on S. Alder, maybe 1 or 2 a month to reduce speeding vehicles

Boulevards are visually nice but take up necessary space. Please enhance cycling infrastructure, the bike lanes on Island Highway are great

I like the idea of variety for Merecroft, 2nd Avenue-definitely cycle paths or clearly marked shared roadways, any traffic calming measures that make sense. Please also do this for Dogwood!

Where South Alder and South Murphy join-we have had 6 incidents in the past 5 years where 2 of our parked cars in our driveway were hit by speeding traffic. Our neighbour has also been affected. It is only a matter of time until someone is killed.

We do not have any concerns with the traffic volume or movement of traffic. I believe many complaints have to do with people's inability to back out onto the street. A sidewalk on one side of the street is important as is parking in areas wide enough to create hazards for drivers. It may be that some areas currently are not wide enough for parking on street, if so this would be discouraged with appropriate road marking

Fix this light on Dogwood so I don't have to use Alder. Advanced green arrow northbound, then both green then delay green arrow southbound. Make them traffic sensitive and stop going green for cross traffic when there isn't any.

no center medians, curb extensions, bike lanes or boulevards on Alder

Additional stop signs will be imperative to improve safety on Alder. Speed due to driver complacency/lack of signage presents the biggest hazard.

#### Please make it beautiful!

Parking needed on both sides of the street; no parking-our driveways shall be widened, busy stretch-no bike lanes. Lights on Merecroft no circle-people just drive over them. Something needed to slowdown traffic. No trees near sidewalks-blocks traffic.

If my parking on Alder street is gone, my driveway can be used. This was done on Dogwood

I live across from Murphy Street where the horizontal wall rock curb was installed to slow traffic down Murphy; it is useless I have yet to witness vehicle slowing down to enter Murphy. I was using the crosswalk and the vehicle just managed to steer. That portion from Merecroft towards Rebron is a speedway, especially with people dropping kids off at school. People are using cellphones. I can't get out of my driveway, there are tailgaters.

Think about community mailboxes

Please commit to safety. Crosswalk near my house with narrowing and flashing lights. Would also like a 4-way stop at S McLean and Albatross. Speed is a great issue-decrease to 40.

No boulevard because we will have the same problems that have been caused by the other roads where this has been done.

Better lighting. Something to slow people down or go back onto Dogwood-what Dogwood was meant for new with 4 lanes.

There should be sidewalks and parking on each side of the road





Roads are all too narrow and City is a mess and the best you can do is Band-Aid back to life. Other than putting in sidewalks I think you should leave it alone

Put bike lanes on a quiet street-not Alder. Do not spend money on boulevards or curbs that make the street narrow. On street parking on both sides is very important. Speed monitors are good to slow down traffic as well as the occasional RCMP presence.

Traffic calming is not fair to drivers who are driving within reasonable limits-if speeding is a problem than enforce the rules. I would suggest replacing 4 way stops with roundabouts. 4 way stops currently have left turn lanes that confuse the issue-get rid of the left turn lanes. The aim of the road should be to move traffic, if you interfere with normal flows of traffic it will migrate to the backstreets. Decisions should be made in conjunction with Dogwood, the traffic light situation on Dogwood makes Alder a preferable route, and perhaps Dogwood should be a single lane with roundabouts where there are now traffic lights.

Please do not put up stoplights, that impedes traffic when there is no need

I would like to see some enforcement of speeding. We believe that most traffic has moved to Alder to avoid all the stops on Dogwood. Alder needs more stop signs and traffic calming.

It seems Alder is a speedway and could do with additional calming additions. 4-way stop at Merecroft is a good start.

End of bike path by Chanees is very dangerous-needs to be extended to 19A. Murphy needs fixing-change 4-way stops to round abouts; there is room if the City expropriates the corners. Remove center divider on 19A to allow Emergency Vehicles-to alleviate emergency vehicle traffic on Alder. Fix Dogwood. Remove traffic lights and use round abouts-they carry 30% more traffic. Stop using field stones within the 60 feet Road allowance. Use rolled curbs, not squared. Designate and mark emergency exit routes (earthquake)

With all the gravel on the sides of the road that the City has not cleared after City plows cleared the snow; it would be dangerous to put bike lanes on Alder.

Pedestrian curbs at corners could be a source of frustration for drivers wanting to turn right if a car is waiting to turn left. New street lights at Merecroft are an excellent idea. Traffic needs to be slowed down on Alder.

What about putting/completing the bike routes off Alder corridor similar to what they have in Vancouver.

Quite frankly, the City has limited understanding to the issues on Alder. There needs to be a major emphasis on speed, and police presence to enforce even the present limits.

I would like to see additional 4-way stops - Evergreen, Robron or Murphy, 6th Avenue.

This plan addresses the most unimportant issues. The issues are motorists who drive too fast and as a consequence make too much noise. They continue this behaviour when they leave Alder and drive toward Dogwood using connecting streets. None of these issues are addressed here. Fix Dogwood-enforce speed limits on Alder and on connectors to Dogwood.

#### Roundabouts

Add sidewalks there are none and get rid of utility posts in the sidewalk. Do nothing else-Alder moves well as it is. Bike route can be on the side streets.

Old Island Highway should be a 4-lane. Willis Road should be tied in with 2nd Avenue to take pressure off all North-South routes.

Make it one way north past 9th. No light at 2nd and Alder-it's the smooth running intersection.





I live on Alder at the top of the hill above City Hall. Last year our on-street parking was taken away so visitors have to park on 7th and walk. We have a short driveway which only allows for 1 vehicle. Would our block of Alder be a part of the upgrades? Does the hill make a difference in how that portion of Alder would be affected? Not having street parking has become an issue for us but having the center lane has made it easier coming in/out. Speed is also a problem as drivers have a tendency to speed up the hill then slowdown. I would like to see our street parking returned sidewalks along both sides and speed limits changed. Look at Dogwood.

The hill has become a speedway-not well lit with skateboarders, bikes and pedestrians not stopping at Candy Lane intersection, Cars can't see them at night. Please review lights on this section. Please consider a speed bump on corner of Candy Lane and Alder to slow traffic turning on Candy Lane from Alder.

Although making safe biking is very important-could bikes main routes be on a quieter road? Speed limits needs to be enforced consistently and to a level that slows down cars. Alder is a residential street-this has to be taken into consideration while achieving the goals of steady flow.

Please do not do what was done on Dogwood-too many lights. South Murphy-Boulevards and narrow roadside not work-I walk there every day and the traffic has not slowed down.

Change Dogwood lights to be equal time both ways at peak times and side road traffic to activate lights on demand not sit through a whole cycle on a Sunday morning ask yourself what is going on product of a dysfunctional system or city hall. Close Bathurst and repair negative cant on Alder street save lives and stop the roll over into the Church area. See or refer to RCMP reports.

As a resident of Murphy Street for the past 8 years, we have continually raised the issue of speed and volume along Murphy. We hope the suggested changes for Alder will push more traffic to Dogwood, but commuter traffic from Robron South avoids the stop signs at Merecroft and 2nd by cutting down Murphy to1st to access the Island Highway. There are no deterrents for commuters to use Murphy. Its wide open, not congested and fast. The City did not go far enough with traffic calming efforts. Stop signs should be installed at Lal and Pinecrest. The alternative is traffic circles, but this won't work for the buses that travel down Murphy. This bus should be rerouted as it is the old "Mill Route" Why does the bus travel along Murphy and not Alder when virtually no one uses any of the 3 bus stops. Please consider stop signs at both Lal and Pinecrest. I'm certain based on conversations with more than one half of the 100 households on Murphy that you will see little to no opposition to these low cost, highly effective traffic calming tools.

My concern is that there will be more traffic on South Murphy Street because of these changes on Alder. Since S Murphy still has a traffic problem, it would become worse as more people will use this road as a detour. Shared lanes with a boulevard sounds ridiculous if you are going to have a boulevard, it should be used as a bike lane. This survey was extremely difficult to find online and one should have been able to fill it out online. The bike lanes should actually be on other roads other than Alder if possible since it is a safer ride and more enjoyable ride.

There are already alternate bike routes parallel to Alder. I support more cycling accommodation in this City. I think it is very important. Alder is a main artery for motorists in the City. Especially with the Dogwood lights. If you congest Alder more with cycle lanes and traffic calming two side streets will become busier. Murphy Street has a huge problem of speeding because of people trying to get out of the congestion of Alder. The Murphy Street speeding has not been adequately dealt with. Something more has to be done to avoid a terrible accident.

I would suggest-4 way stops, south Mclean and Albatross together with listed crosswalks. Lights are easier to see, especially in the dark. 4way stops and light crosswalks at evergreen and south Alder. Lights for South Alder/Merecroft Crossing. Crossing Alder at 6th Avenue can be dangerous, because of the bend. It is my opinion that Alder/S. Alder is not safe for cyclists-the road is too narrow in many parts. A painted line does not ensure safety. There may be a few parts on Alder where on-street parking could be safe, but certainly not everywhere. Road too narrow for safety, definitely not safe on 400 block S. Alder.





Sidewalks are vital-I am a walker. There should be sidewalks on both sides of Alder/S Alder. Where there is a bus stop, there should be a sidewalk. Fifty/h must be enforced. Children have to cross this road, dodging traffic. Alder/S Alder is/was supposed to be residential. Highway 19A through Willow Point must be returned to Highway designation, not a "rockery". The lights on dogwood should be adjusted; To work properly these things will take the pressure off Alder/S Alder.

If this city has to be evacuated, chaos would ensue. Safety has got to be the number one priority above all else. Piles of rock=hazard. To widen Alder/S Alder, the 400 block of S Alder cannot accommodate widening.

I think it is more important to accommodate vehicle mobility, pedestrians and cyclist accommodating than worrying about on-street parking, or spending extra money on boulevards that are more costly and will require additional city staff hours to maintain. Housing along the corridor has driveways/parking on their lots and should not require a great deal of on-street parking, clearly illustrated by the current on-street parking usage referenced in the poster. On-street parking contributes to lack of visibility at pedestrian crosswalks currently along the corridor. Though I do not live in the area, i drop my child off at school and travel along Alder daily to work and see a definite need for bike lanes, as well as removing the hazard of vehicles parked directly in front of crosswalks, hindering the motorist's view of pedestrians waiting to cross. Also, providing designated bike lanes and creating a safer cycling route may encourage more people to leave their cars at home.

Cyclists can use quiet streets like Thulin or Birch or even our most beautiful Island Highway. Why give cyclists another option on a major street used by buses, emergency vehicles, commuters and locals backing out of their limited view driveways. I do however feel the sidewalks need desperate repair, I know of several holes in the sidewalk that could hurt someone. And since we are doing it lets underground the power lines

No more stop signs





# Appendix A OPEN HOUSE STORY BOARDS

## Overview

# 1

#### **BACKGROUND**

The City of Campbell River is reviewing opportunities to improve Alder Street to better balance vehicles, parking, pedestrians, cyclists, and public transit. The overall objective is to balance all travel modes while recognizing Alder Street's role as a key north-south road <u>and</u> providing access to adjacent single-family homes. Specifically, the corridor review will...

- 1. Ensure safe and efficient vehicle travel
- 2. Provide for sufficient on-street parking
- 3. Assess sidewalks to identify missing links and sidewalks in poor condition
- 4. Identify appropriate bicycle facilities
- 5. Ensure **public transit** is accommodated with improved bus stops
- 6. Opportunities for traffic calming and boulevards are considered

#### SUSTAINABLE OFFICIAL COMMUNITY PLAN (SOCP)

The Sustainable Official Community Plan (SOCP) provides the framework for future growth in Campbell River. The SOCP envisions the following:

"...a transportation system that provides safe, accessible, convenient, affordable choices with emphasis on high-quality walking, cycling, and transit options."

#### MASTER TRANSPORTATION PLAN

The Master Transportation Plan was completed in 2012 and identifies Alder Street as one of five "major road enhancement" projects. The Master Transportation Plan provides specific guidance for Alder Street, as follows:

- Alder Street is classified as a "minor arterial" road intended to accommodate 5,000 to 15,000 vehicles per day and provide limited access to adjacent properties
- Signalization or a roundabout is recommended at 2nd Avenue and Merecroft Road
- Sidewalks (1.8m) are to be provided on both sides and prioritized near Pinecrest / Robron Park, as well as near the four schools and hospital
- A "marked wide curb lane" cycling facility is to be provided as a minimum
  4.3 metre vehicle travel lane with a "sharrow" paint marking at the curb side to indicate the cyclist travel path
- Alder Street is identified as a "local transit network" along much of its length, consistent with the Transit Future Plan (2011)
- · Trucks and dangerous goods will be discouraged on Alder Street

#### **CONTACT**

Drew Hadfield, Transportation Manager City of Campbell River t. 250.286.5783 e. transportation@campbellriver.ca

#### STUDY AREA





Open House | March 12, 2014

# Issues / Opportunities





#### **SIDEWALKS**

Sidewalk widths vary and there are issues with utility poles (see above) and areas lacking sidewalks, particularly in the north portion of Alder Street.





#### **BUS STOPS**

Certain bus stops along the corridor lack sidewalks, making them uncomfortable for average transit riders and hazardous to riders with mobility challenges or relying on mobility aids.





#### **CURBS**

Non-mountable curbs (left) are in-place along much of Alder Street. However mountable curbs (right) exist in much of the north portion and provide a limited physical barrier at the roadway edge, leading to inappropriate parking and potential for vehicles parking on adjacent sidewalks or boulevards.



#### **ON-STREET PARKING**

Parking is permitted on both sides along most of the corridor and occupancy rates are generally well below 50%. The road feels wide when on-parking is unoccupied and can promote vehicle speeding.



#### **CYCLING ROUTES**

Alder Street has steep slopes, particularly north of Simms Creek (pictured) and in the south. Other, flatter routes with less traffic to the west and east may be more attractive cycling options.



#### **SCHOOL ZONE**

A rush of traffic, pick-ups/drop-offs, and students walking and cycling is experienced at Southgate Middle School at the beginning and end of each school day.

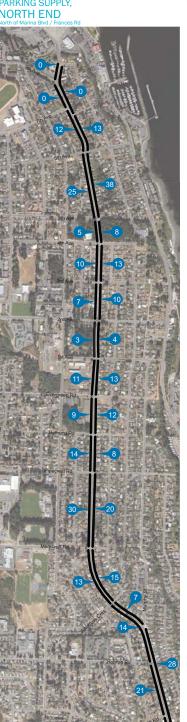






# **Parking**

PARKING SUPPLY, NORTH END



PARKING SUPPLY, SOUTH END



#### **LEGEND**

# Parking Supply, by block (approximate)

Estimated On-Street
Parking Spaces
on Alder Street...

850



#### **KEY FINDING**

No on-street parking section exceeds 50% occupancy during peak periods, suggesting that on-street parking needs could be met on one side if road space is needed to accommodate sidewalks, cycling facilities or boulevards.





# Sidewalks + Bus Stops







SOUTH END



#### **LEGEND**

#### Adequate Sidewalk

Sidewalk is at least 1.5m wide, has a "barrier" curb, and is not impeded by utility poles or other objects

#### Indequate Sidewalk

Sidewalk that is less than 1.5m wide, is adjacent a "mountable" curb, and/ or is impeded by utility poles

#### No Sidewalk

No sidewalk is provided

#### # Bus Stop Location



Sidewalks with "mountable" curbs do not provide a barrier between pedestrians and vehicles and may result in vehicles parked on the sidewalk.



Utility poles in the middle of the sidewalk make sidewalks uncomfortable for groups of pedestrians and unpassable for wheelchairs and most other mobility devices.

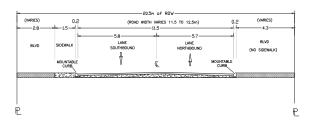




# Cross-Section Options, north section

#### **EXISTING**

The north section is generally a 20.5m right-of-way with at least 11.5m from curb-to-curb. Sidewalk widths vary from 1.8m to 1.2m and are missing in certain areas. The roadway includes 5.8m (each direction) for vehicle traffic and parking.











#### Option A: **BIKE LANES**

- Defined area for cyclists
- Clearly identifies the road as a cycling route
  Narrow vehicle lanes, slower vehicle speeds
- Low cost, uses existing curb-to-curb width

#### Disadvantages:

- Narrow lanes minimize the buffer between cyclists and drivers
- No boulevard between sidewalk and roadway
- Parking on one side of the street

#### Option B: SHARED LANES, PARKING 1-SIDE

- Shared lanes facilitate cars, cyclists, and buses
- Wide parking area (one side of the road)
- . Low cost, uses existing curb-to-curb width

- Not a continuously delineated cyclist area
- No boulevard between sidewalk and roadway
- Parking on one side of the street

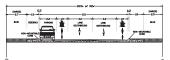
#### BOULEVARD, PARKING 1-SIDE, SHARED LANES

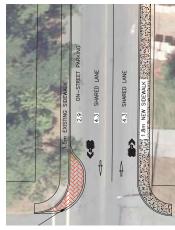
- Boulevard between roadway and sidewalk
- Shared lanes facilitate cars, cyclists, and buses
- Wide parking area (one side of the road)
- This option enhances all modes

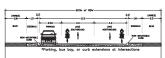
#### Disadvantages:

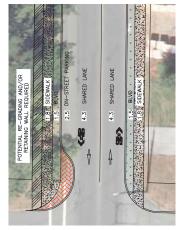
- More costly; widening required and potential regrading and/or retaining walls in many sections
- Not a continuously delineated cyclist area
- · Parking on one side of the street

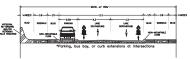












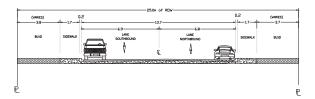




# Cross-Section Options, south section

#### **EXISTING**

The south section is generally a 25m right-of-way with 13.7m from curb-to-curb. This section generally has 1.7m sidewalks on both sides and the roadway includes 6.8m (each direction) for vehicle traffic and











#### Option A: **BIKE LANES**

- Defined area for cyclists
- Clearly identifies the road as a cycling route
- Low cost, uses existing curb-to-curb width

- Disadvantages:
   No boulevard between sidewalk and roadway
- Parking on one side of the street

#### Option B: SHARED LANES. PARKING BOTH SIDES

- Shared lanes facilitate cars, cyclists, and buses
- Wide parking area (one side of the road)
- · Low cost, uses existing curb-to-curb width

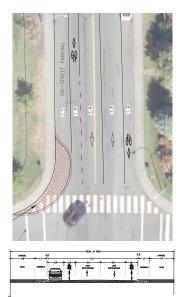
- Not a continuously delineated cyclist area
- No boulevard between sidewalk and roadway

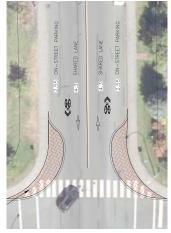
#### BOULEVARD, PARKING 1-SIDE, SHARED LANES

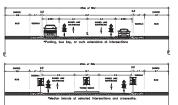
- Boulevard between road lanes and sidewalk
- Shared lanes facilitate cars, cyclists, and buses
- Wide parking area (one side of the road)
- This option enhances all modes

#### Disadvantages:

- Not a continuously delineated cyclist area
- Parking on one side of the street
- Higher cost due to curbs and drainage















# **Design Options**



#### TRAFFIC CALMING

Traffic calming may be installed at intersection to narrow the roadway and encourage slow driving. Consideration may be given to centre medians (top) and curb extensions (below), or both may be used in tandem with one another.

#### Centre Median



#### CYCLING FACILITIES

Alder Street is identified in the Master Transportation Plan as having a shared lane bicycle facility (ie. side-by-side with vehicles). Consideration may also be given to a bike lane.

#### Shared Lane (with "sharrow")



#### **BOULEVARDS**

Boulevards may be installed between the sidewalk and roadway to provide separation to increase pedestrian comfort and safety.



#### **Curb Extensions**



#### Bike Lane



#### **BUS STOPS**

Bus stops may be improved to include a sidewalk or concrete waiting area, shelter, benches, and rider information.



# **Next Steps**



Corridor Review Recommendations









# Appendix B





# ALDER ST CORRIDOR REVIEW MARCH 12 2014 OPEN HOUSE - EXIT SURVEY

Q.1	What community / neighbourhood do you live in?  O On Alder St (on what block):  O Within 2 blocks of Alder St (on what side road):  O Other				
Q.2					Are pedestrian facilities along Alder St important for you?
	O Very important	O Somewhat important	O Not at all important		
Q.3	Are bicycle facilities along Alder St important for you?				
	O Very important	O Somewhat important	O Not at all important		
Q.4	Is on-street parking on Alder St important for you?				
	O Very important	O Somewhat important	O Not at all important		
	O N/A (check if not ap	plicable i.e. not a local resident)			
Q.4a	Do you support the following cross section options for the <u>North</u> section of Alder St ( <u>Poster 5</u> ):				
	a) Bike Lanes, parking on one side, sidewalk both side: O Yes O No				
	b) Shared Lanes, parking on one side: O Yes O No				
	c) Shared Lanes, parking on one side, boulevards between road and sidewalk (likely requires re-grading				
	and possible retaining structures in some sections): O Yes O No				
Q.4b	Do you support the following cross section options for the <u>South</u> section of Alder St ( <u>Poster 6</u> ):				
	a) Bike Lanes, parking on one side, no boulevard: O Yes O No				
	b) Shared Lanes, parking on both sides, no boulevard: O Yes O No				
	c) Boulevard between the sidewalk and the road, Shared Lanes, parking on one side: O Yes O No				





Q.5	Please Rank your preference for the order of transportation aspects on Alder St, from most important to you to least important (with highest rank / preference being a "1", and lowest rank				
being a "6")?					
	Sidewalks				
	Cyclist accommodation				
	Vehicle Mobility				
	On-street Parking				
	Transit / Bus Stops				
	Other (please specify):				
Pleas	feel free to add any additional comments, concerns, or ideas.				
-					

## Appendix D.

Design Specifications (typical)

- 1. Bikeway Wayfinding Sign
- 2. Curb Extensions
- 3. Centre Median
- 4. Bus Stop

# Bikeway Directional Sign

Bikeway directional signs should be installed along Alder Street to direct cyclists toward preferred bikeway routes on Birch St and Thulin Rd/Ash Rd/Galerno Rd. A typical bikeway direction sign design should be developed for use on Alder Street and throughout the City, as discussed in the Master Transportation Plan (pg 56/57).

Below is an example bikeway directional sign.



Hospital

1.6 km

1.6

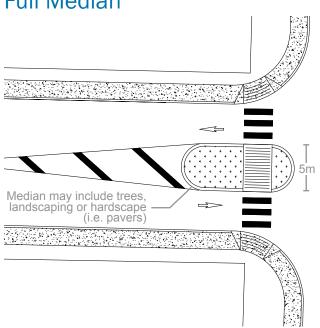
Preferred bikeway directional signs should use consistent colour, font, and symbology as found on the City's bicycle wayfinding signs.

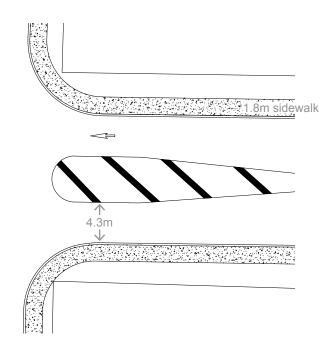


## Raised Centre Median

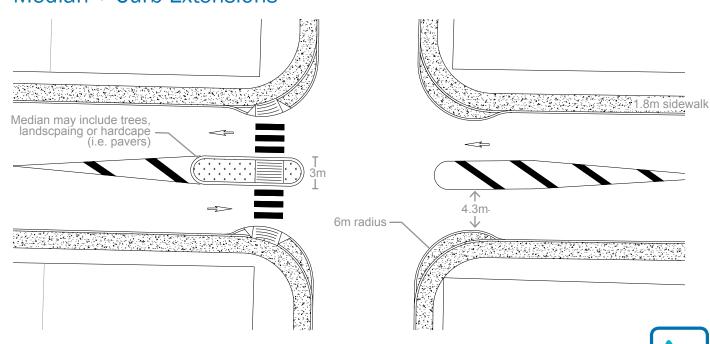
Raised centre medians may be used along Alder Street to manage vehicle speeds, formalize parking areas, and reduce pedestrian crossing distance. Typical raised centre median designs are provided below for median occupying the full available road width and a narrower median used in combination with small curb extensions.

## **Full Median**



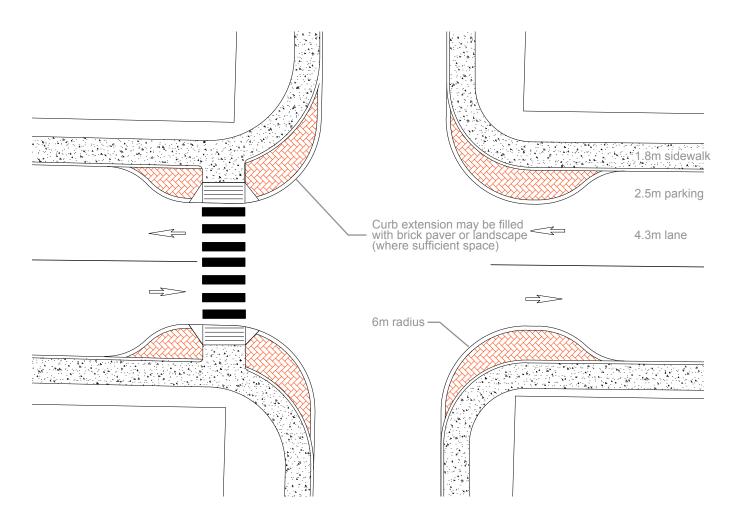


## Median + Curb Extensions



## **Curb Extensions**

Curb extensions may be used along Alder Street to manage vehicle speeds, formalize parking areas, and reduce pedestrian crossing distance. Typical curb extension design is provided below.



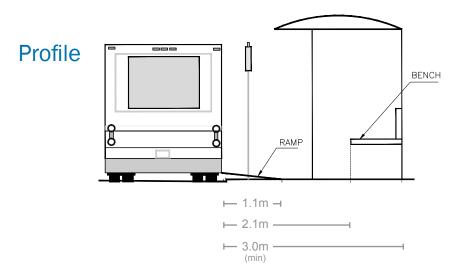
#### **Options**

- 1. Curb extensions may be used at an intersection without a crosswalk.
- 2. Curb extensions may be used only on one side of an intersection
- 3. Curb extensions may be used mid-block (i.e. at a mid-block crosswalk)



# Bus Stop Design

Design guidance for a typical bus stop is provided below based on BC Transit's *Infrastructure Design Guidelines*. All future bus stops on Alder Street (and elsewhere in Campbell River) should be based on these typical bus stop designs. Each application should be consider the site specific conditions and alter the design accordingly.



## Plan

