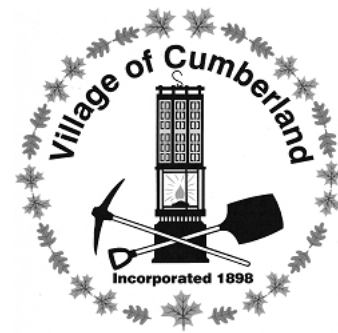


The Corporation of the Village of Cumberland  
Regular Council Meeting Agenda

Monday, January 9, 2023, 5:30 p.m.  
Council Chamber, 2675 Dunsmuir Avenue



We are honoured to gather on the unceded traditional territory of the K'ómoks First Nation.  
The public may view the meeting live on the [Village of Cumberland YouTube channel](#)

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Pages

1. Call To Order

2. Agenda

2.1 Agenda for Regular Council Meeting, January 9, 2023

**Recommendation:**

THAT Council approve the agenda for the January 9, 2023 Regular Council Meeting.

3. Minutes

3.1 Adoption of Minutes

4

**Recommendation:**

THAT Council adopt the following minutes:

- Committee of the Whole Meeting, November 8-10, 2022
- Committee of the Whole Meeting, November 18 & 25, 2022
- Regular Council Meeting, December 12, 2022
- Special Council Meeting, January 4, 2023

3.2 Receipt of Committee Minutes

19

**Recommendation:**

THAT Council receive the following minutes:

- Advisory Planning Commission, December 8, 2022

4. Delegations

4.1 1st Cumberland Scouts - Canadian World Jamboree Contingent  
Angie Prescott - 1st Cumberland Scouter

22

**Recommendation:**

THAT Council receive the delegation of the 1st Cumberland Scouts - Canadian World Jamboree Contingent.

5. Correspondence

**6. Unfinished Business**

**7. Reports**

- 7.1 Development Variance Permit Application 2712 Dunsmuir Avenue 23  
Prepared by Meleana Searle, Planner

**Recommendation:**

THAT Council refer the development variance permit application to reduce the required number of off-street parking stalls from eight to zero, the number of commercial loading spaces from two to zero, and the number of class two bicycle parking stalls from seven to zero on the property described as Lot B District Lot 21 Nelson District Plan EPP61337 (2712 Dunsmuir Avenue) to the Advisory Planning Commission.

- 7.2 Development Permit – Proposed Lot 2 (2794 Beck Avenue) 44  
Prepared by Meleana Searle, Planner

**Recommendation:**

THAT Council approve the development permit (2022-07-DP) for the property described Lot A Section 34 Township 10 Comox District Plan EPP93477 (2794 Beck Avenue).

- 7.3 Council Policy on Development Variance Permits for Parking in the VCMU- 149  
1 Zone  
Prepared by Karin Albert, Senior Planner and Meleana Searle, Planner

**Recommendation:**

THAT Council adopt the Council Policy on Review of Development Variance Permits for Parking in the Village Core Commercial Mixed-Use (VCMU-1) Zone.

- 7.4 Rural Economic Diversification and Infrastructure Program 155  
Prepared by Kaelin Chambers, Economic Development Officer

**Recommendation:**

THAT Council approve the application for \$97,125 to the Rural Economic Diversification and Infrastructure Program for completion of the Village of Cumberland Investment and Development Readiness Project, with the Village cash contribution of \$10,000 and in-kind contribution of \$9,713.

- 7.5 Council Monthly Reports 210

**Recommendation:**

THAT Council receive the monthly reports for information.

**8. Bylaws**

- 8.1 Development Cost Charges Bylaw 1173, 2022 217  
Prepared by Rob Crisfield, Manager of Operations

**Recommendation:**

THAT Council adopt the Development Cost Charges Bylaw 1173, 2022.

**9. New Business**

**10. Notices, Motions and Announcements**

Matters considered here may include notices or motions to hold a meeting of the Committee of the Whole, a Village Hall meeting, a Public Hearing, and noticed of motion introduced by a Council Member.

- Accessibility and Inclusion Select Committee, January 16, 2023 3pm

**11. Question Period**

A member of the public may only inquire about items included on the agenda for that meeting during a question period.

- Please send questions by email to [info@cumberland.ca](mailto:info@cumberland.ca) using subject line "Question Period"; Note: please limit to questions only - comments will not be read.

**12. Adjournment**

**The Corporation of the Village of Cumberland  
Committee of the Whole Meeting Minutes  
Council Orientation Sessions**



**November 8, 2022 at 9 a.m. – Noon  
Council Chamber, 2675 Dunsmuir Avenue**

Council Present: Mayor Vickey Brown  
Councillor Neil Borecky  
Councillor Troy Therrien

Regrets: Councillor Jesse Ketler  
Councillor Sean Sullivan (due to illness)

Staff Present: Michelle Mason, Chief Administrative Officer  
Rachel Parker, Corporate Officer  
Kevin McPhedran, Interim Deputy Chief Administrative Officer  
Courtney Simpson, Manager of Development Services  
Rob Crisfield, Manager of Operations

Mayor Brown called the meeting to order at 9:05 a.m.

Ms. Mason reviewed orientation schedule, noted that questions would be held and noted that Council determines services and services levels. Staff reviewed municipal operations and services.

Matters for review at Council member's request:

- Structural review on municipal buildings
- Campground operational season
- Bylaw enforcement tools
- How comprehensive development agreements work with bylaws and zoning
- Request for Cayet comprehensive development agreement information

The meeting was adjourned at 12 noon.

**November 9, 2022 at 9 a.m. - 3 p.m.**  
**Council Chamber, 2675 Dunsmuir Avenue**

Council Present: Mayor Vickey Brown  
Councillor Neil Borecky  
Councillor Troy Therrien  
Councillor Jesse Ketler (arrived at 2 p.m.)

Regrets: Councillor Sean Sullivan (due to illness)

Staff Present: Michelle Mason, Chief Administrative Officer  
Rachel Parker, Corporate Officer

Mayor Brown reconvened the meeting at 9:00 a.m.

Ms. Habkirk, consultant, reviewed the focus of the session on Council roles and responsibilities to address how to get things done or on the table, responding to public expectations, the importance of effectively communicating to residents what the Council/Village is doing, and how to balance the range of issues from smaller matters to the larger community vision.

Ms. Habkirk asked what Council members want to achieve by end of term. Responses included

- get some things done, for example, addressing climate change, bike lanes to Courtenay, housing
- find a way that everyone can be heard through common goals

Ms. Habkirk noted the importance of a functioning Council that can manage the rate of change to reduce conflict amongst residents so that residents feel good about who is representing them.

Discussion took place on what member expects of each other in decision-making. Ideas included respect and integrity, ability to work together and listen to differing points of view, respect for all residents and willingness to listen and engage with the community, and goal for members to feel good and have confidence in decisions. Discussion also took place on member's expectations of staff to offer a variety of options to solve matters, respect Council members, and able to understand Council's goals, and be willing to work with Council to figure out what Council wants to accomplish and work on same goals.

Discussion then took place on how Council will know it has been successful at the end of the term. Members suggested showing accomplishments and measuring achievements and conveying that to the community, having customer satisfaction, having Council members all on board with strategic goals and reducing emerging items in order to stay on track. The importance of clearly communicating clearly communication priorities to staff was discussed. If priorities are shifting or not resourced appropriately, Council is less likely to be successful. It is important for Council to be flexible to be responsive to community need, but not too flexible. It was suggested to leave some room for emerging priorities. Discussion took place on how this might be done, including reducing services, seeking out other revenue sources, and providing services through others.

Ms. Habkirk recommended that members anticipate struggles around the Council table and to develop ways to work together and perform in order to drive goals forward and overcome friction. Discussion took place on a framework for prioritizing or making decisions, based on strategic priorities, master planning documents, policies, economic and social values; having basic criteria for making critical decisions, e.g. having all members present for critical decisions. Ms. Habkirk recommended that members may wish to discuss what values members will use to make consensus decision, which may mean changing the decisions the majority of Council wishes, may set out which kind of decisions Council will have all members agree with, and think about principles that guide decision-making, such as making sure members have enough information, to take time to make decisions, what will it take for Council to make quality decisions. Members also discussed examples of codes of conduct of Squamish and Abbotsford, the California Council of Excellence.

Members then discussed options for providing services, exploring participating in more regional services, contract services, financial risks, risks associated with wildfire and climate change, and the relationship with land use planning policy. Discussion then took place on conflict of interest, the priority and ability to make change by being on Council, and participation in the community.

The meeting was recessed for lunch at noon.

Ms. Parker reviewed basic council meeting procedure and agenda process and Ms. Mason offered an overview of financial administration for the Village.

Councillor Ketler arrived at the meeting at 2 p.m.

Members discussed requesting more information on these matters:

- Cayet development and Coal Valley development comprehensive development agreements
- Assessment of the Private Managed Forest Land and tree values
- Bevan Road utilities water latecomer background
- List of Village-owned lands available for affordable housing development
- Tax sale – policy to bid
- Nikkei Park acquisition through subdivision

The meeting adjourned at 3 p.m.

**November 10, 2022 at 9 a.m. - noon**  
**Council Chamber, 2675 Dunsmuir Avenue**

Council Present: Mayor Vickey Brown  
Councillor Neil Borecky  
Councillor Jesse Ketler  
Councillor Troy Therrien

Regrets: Councillor Sean Sullivan (due to illness)

Staff Present: Michelle Mason, Chief Administrative Officer  
Rachel Parker, Corporate Officer  
Kevin McPhedran, Interim Deputy Chief Administrative Officer  
Courtney Simpson, Manager of Development Services  
Rob Crisfield, Manager of Operations

Mayor Brown reconvened the meeting at 9:05 a.m.

Ms. Simpson introduced Nancy Henderson, consultant from Urban Systems. Ms. Henderson review the provincial context with focus on affordable housing, and noted the importance to look at provincial land use mandates and try to align with the province to order to obtain support for senior government amenity funding applications. Examples include complete communities funding and increasing housing density. The challenge of aligning with policies intended for larger communities was noted.

Ms. Henderson then reviewed the development application modernization update, and noted the additional costs associated with development, the importance to retain community character and heritage, and the desire for community to be engaged in land use planning. Ms. Henderson highlighted the broader environment factors, higher volumes of applications that bogs down the process, issues with financing infrastructure upgrades, and the importance of complete master planning and knowing financing tools. Discussion took place on mixed development and complete communities.

Ms. Henderson then reviewed the demand for faster approvals from applications and that Cumberland is very vision and community-focused, and slower processes allow municipalities to update plans. Noted were that each application doesn't need all requirements, and that additional requirements add to cost of housing, development cost charges cannot be applied to existing housing stock, and that taxpayer must fund growth if DCCs are not adequate, and to have regular discussions with the development industry and explain the expectations of the municipality. Discussion took place on sharing developer feedback with members of Council.

Ms. Henderson recommended that the Village be partners with applicants in achieving its vision, to be willing to deny applications if the vision is not met, and to be able to let applicants know what it would take to approve an application, and not to focus on the most vocal applicants. Advice was received to listen to developers, but not to react, to be firm, fair and

consistent and if goals are steady, staff will be able to communicate the goals with applicants with confidence. Council's role is to have a clear vision through policies and bylaws. It was noted to evaluate advisory committees through strategic priority setting.

Ms. Henderson reviewed the current status of the modernization project and next steps, which include updating the development procedures bylaw, applicant materials and application forms.

The legislative framework for land use applications was reviewed and the difference between discretionary and non-discretionary approvals was noted.

A recess was taken for lunch.

The review continued with overview of the regional growth strategy and official community plan. Ms. Henderson recommended that engagement on OCP review should be strategic in order to be effective as cost is a factor. It was noted not to delay in order to complete detailed plans. Discussion took place on the OCP as a policy document rather than regulatory, and that OCP implementation plans are important. It was noted that the OCP guides the subdivision approving officer.

Discussion took place on how the requirement for infrastructure upgrades can be a difficult question for municipalities. Questions should be asked whether existing taxpayers should fund infrastructure upgrades. Municipalities should be clear on development in master plans. Other options for development finance tools were discussed.

Development application processes were reviewed, as well as options for downzoning and associated costs. Discussion took place on public information meetings, which are not recommended for non-discretionary applications such as development permits as it can lead to community expectations that cannot be met through the application as policy is set in the OCP. In regard to public hearings and the option not to hold one for an application, it was recommended that the Council can reconsider depending on the response from the community on a particular application and the important of early community engagement to help determine this.

Discussion took place on advisory committees and the use of task force was recommended for limited scope tasks. The question was raised on how to receive community input on development permits and rezonings where a public hearing is not held, and it was clarified that gaining community input on the vision in the OCP is very important, in particular form and character, and environmental protection requirements.

A discussion took place on how streamlining development applications could ensure that bylaws are complied with to prevent neighbourhood conflicts. It was recommended that this be considered during the development procedure bylaw review through reviewing how input is obtained early in the application process to drive the standards in the community, and the



willingness to change development permit guidelines. Staff procedures and training will also be reviewed to prevent technical errors

Committee members asked for more information on the next session on:

- emphasis on form and character in the heritage area
- heritage in Village core
- small housing

Members also asked for more information from staff on the Trilogy/Cayet, Coal Valley Estates, and Maple Street developments and amenities provided.

The meeting was adjourned at 12:02 pm

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Mayor

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Certified Correct by Corporate Officer

**The Corporation of the Village of Cumberland  
Committee of the Whole Meeting Minutes  
Council Orientation Sessions**



**November 18, 2022 at 1:30 p.m.  
Council Chamber, 2675 Dunsmuir Avenue**

Council Present: Mayor Vickey Brown  
Councillor Neil Borecky  
Councillor Jesse Ketler  
Councillor Sean Sullivan  
Councillor Troy Therrien

Staff Present: Michelle Mason, Chief Administrative Officer  
Kevin McPhedran, Interim Deputy Chief Administrative Officer  
Rachel Parker, Corporate Officer  
Courtney Simpson, Manager of Development Services  
Kaelin Chambers, Economic Development Officer

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Mayor Brown called the meeting to order at 1:37 p.m. and acknowledged that the meeting was taking place on the unceded traditional territory of the K'ómoks First Nation.

**Council Orientation - Capital and Operating Projects, Part I**

Staff reviewed capital and operating projects based on the current Council strategic priorities, as well as emerging and operational activities.

Discussion took place on

- K'ómoks First Nation Guardian Watchmen Program funding
- Climate change impacts on renewal of municipal facilities
- Community greenhouse gas emissions – look to CVRD GHG data
- Use of Climate Capital projects
- Geothermal energy study (use LGcAP) Springhill, Nova Scotia
- Car share networks for parking in lieu fund
- Subdivision bylaw stormwater green infrastructure

The meeting was adjourned at 4:05 p.m.

**November 25, 2022 at 9 a.m.**  
**Council Chamber, 2675 Dunsmuir Avenue**

Council Present: Mayor Vickey Brown  
Councillor Neil Borecky  
Councillor Jesse Ketler  
Councillor Sean Sullivan  
Councillor Troy Therrien

Staff Present: Michelle Mason, Chief Administrative Officer  
Kevin McPhedran, Interim Deputy Chief Administrative Officer  
Rob Crisfield, Manager of Operations  
Courtney Simpson, Manager of Development Services

Mayor Brown reconvened the meeting at 9:04 a.m.

**Council Orientation - Capital and Operating Projects, Part II**

Staff continued review of capital and operating projects based on the current Council strategic priorities, as well as emerging and operational activities.

**Closure of the Meeting to the Public**

The Committee closed the meeting to the public at 10:22 a.m. under section 90(1) of the Community Charter to continue Council Orientation and consider

- labour relations or other employee relations,
- law enforcement, if the council considers that disclosure could reasonably be expected to harm the conduct of an investigation under or enforcement of an enactment,
- the receipt of advice that is subject to solicitor-client privilege, including communications necessary for that purpose
- the security of the property of the municipality,
- the acquisition, disposition or expropriation of land or improvements, if the council considers that disclosure could reasonably be expected to harm the interests of the municipality, or
- discussions with municipal officers and employees respecting municipal objectives, measures and progress reports for the purposes of preparing an annual report under section 98 [*annual municipal report*].

The meeting was adjourned at 12:25 p.m.

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Mayor

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Certified Correct by Corporate Officer

**The Corporation of the Village of Cumberland**  
**Regular Council Meeting Minutes**



**December 12, 2022, 5:30 p.m.**  
**Council Chamber, 2675 Dunsmuir Avenue**

Council Present: Mayor Vickey Brown  
Councillor Neil Borecky  
Councillor Jesse Ketler  
Councillor Troy Therrien

Regrets: Councillor Sean Sullivan (away due to illness)

Staff Present: Kevin McPhedran, Interim Deputy Chief Administrative Officer  
Rob Crisfield, Manager of Operations  
Rachel Parker, Corporate Officer

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**1. Call To Order**

Mayor Brown called the meeting to order at 5:30 p.m. and recognized the unceded traditional territory of the K'ómoks First Nation and expressed gratitude for their care and stewardship of this land since time immemorial.

**2. Agenda**

2.1 Agenda for Regular Council Meeting, December 12, 2022

Motion 22-592

**Moved by:** Therrien

**Seconded by:** Borecky

THAT Council approve the agenda for the December 12, 2022 Regular Council Meeting.

**Carried Unanimously**

**3. Minutes**

3.1 Adoption of Minutes

Motion 22-593

**Moved by:** Borecky

**Seconded by:** Therrien

THAT Council adopt the following minutes:

- Committee of the Whole, November 28, 2022
- Regular Council Meeting, November 28, 2022

**Carried Unanimously**

**4. Delegations**

None

**5. Correspondence**

None

**6. Unfinished Business**

None

**7. Reports**

7.1 No. 2 Dam: Project Orientation Presentation

Motion 22-594

**Moved by:** Ketler

**Seconded by:** Therrien

THAT Council receive a presentation on the No. 2 Dam project from Tim Ennis of Latitude Conservation Solutions, Village consultant for engagement services for project.

**Carried Unanimously**

7.2 Wastewater Upgrade Project – Contract Value Increase for Project Manager and Direct Award for Geotechnical Work

Motion 22-595

**Moved by:** Borecky

**Seconded by:** Ketler

THAT Council authorize staff to increase the contract value for Colliers Project Leaders from \$235,000 to a value not to exceed \$438,600 (excluding GST) for Project Management Services for the Wastewater Upgrade Project; and

THAT Council authorize the CAO or designate to execute the revised contract value; and

THAT Council authorize a direct award contract in the amount of \$55,800 to WSP Canada Inc. for geotechnical engineer consulting services per section 5.9 (x) of Council Policy 3.3 – Purchasing Management Services.

**Carried Unanimously**

7.3 Funding Contribution to K’ómoks First Nation Guardian Watchmen Program

Motion 22-596

**Moved by:** Ketler

**Seconded by:** Therrien

THAT Council receive the “Funding Contribution to K’ómoks First Nation Guardian Watchmen Program” report.

**Carried Unanimously**

7.4 Rural Cumberland Fire Protection Agreement Proposed Extension

Motion 22-597

**Moved by:** Ketler

**Seconded by:** Borecky

THAT Council enter into an agreement with the Comox Valley Regional District to provide fire protection services to the Rural Cumberland Fire Protection Service Area for a one-year term commencing January 1, 2023; and authorize the Mayor and Chief Administrative Officer to execute the agreement.

**Carried Unanimously**

7.5 Association of Vancouver Island and Coast Communities (AVICC) Resolutions

Motion 22-598

**Moved by:** Borecky

**Seconded by:** Ketler

THAT Council direct staff to prepare resolutions on the Watershed Security Fund application to lands in Private Managed Forest Lands and on representation on the Private Managed Forest Land Council for submission to the 2023 Association of Vancouver Island Coastal Communities conference.

**Carried Unanimously**

7.6 Council Member Appointments

Motion 22-599

**Moved by:** Ketler  
**Seconded by:** Therrien

THAT Council appoint Councillor Borecky to the Heritage Committee and Councillor Therrien as alternate.

**Carried Unanimously**

**8. Bylaws**

8.1 2022 – 2026 Financial Plan Amendment Bylaw No. 1180, 2022

Motion 22-600

**Moved by:** Ketler  
**Seconded by:** Borecky

THAT Council adopt the "2022 – 2026 Financial Plan Amendment Bylaw No. 1180, 2022".

**Carried Unanimously**

8.2 Revenue Anticipation Borrowing Bylaw No. 1181, 2022

Motion 22-601

**Moved by:** Therrien  
**Seconded by:** Borecky

THAT Council adopt the "Revenue Anticipation Borrowing Bylaw No. 1181, 2022".

**Carried Unanimously**

8.3 Water Rates Amendment Bylaw No. 1182, 2022

Motion 22-602

**Moved by:** Borecky  
**Seconded by:** Ketler

THAT Council adopt the "Water Rates Amendment Bylaw No. 1182, 2022".

**Carried Unanimously**

8.4 Sanitary Sewer Rates Amendment Bylaw No. 1183, 2022.

Motion 22-603

**Moved by:** Therrien  
**Seconded by:** Borecky

THAT Council adopt the "Sanitary Sewer Rates Amendment Bylaw No. 1183, 2022".

**Carried Unanimously**

8.5 Solid Waste Amendment Bylaw No. 1184, 2022.

Motion 22-604

**Moved by:** Ketler  
**Seconded by:** Therrien

THAT Council adopt the "Solid Waste Collection Fees Amendment Bylaw No. 1184, 2022".

**Carried Unanimously**

**9. New Business**

None

**10. Notices, Motions and Announcements**

Matters considered here may include notices or motions to hold a meeting of the Committee of the Whole, a Village Hall meeting, a Public Hearing, and noticed of motion introduced by a Council Member.

- Committee of the Whole Budget Meetings: January 4, 11, 18 at 9 a.m.

**11. Question Period**

There were no questions received.

**12. Adjournment**

The meeting was adjourned at 6:42 p.m.

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Mayor



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Certified Correct by Corporate Officer

**The Corporation of the Village of Cumberland  
Special Council Meeting Minutes**



**January 4, 2023 at approximately 2 p.m.  
following the Committee of the Whole Meeting  
Council Chambers, 2675 Dunsmuir Avenue**

Council Present: Mayor Vickey Brown  
Councillor Neil Borecky  
Councillor Troy Therrien  
Councillor Jesse Ketler

Regrets: Councillor Sean Sullivan (due to illness)

Staff Present: Michelle Mason, Chief Administrative Officer

Mayor Brown called the meeting to order at 2:11 p.m. and recognized that the Village is located in the unceded traditional territory of the K'ómoks First Nation.

**1. Approval of Agenda  
Ketler/Therrien**

THAT Council approve the agenda for the Special Council Meeting, January 4, 2023.

**Carried Unanimously**

**2. Closed Portion  
Borecky/Therrien**

THAT Council close the meeting to the public pursuant to Section 90 of the *Community Charter* to consider:

(c) labour relations or other employee relations.

**Carried Unanimously**

**3. Adjournment**

The meeting was adjourned at 4:00 p.m.

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Mayor

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Certified Correct by Corporate Officer



# Village of Cumberland

## *Advisory Planning Commission*

### Minutes

The meeting of the APC was held on Thursday December 8, 2022 at Village of Cumberland Council Chambers, commencing at 4:00 pm.

**PRESENT:** Nick Ward, Chair  
Debbie Bowman, Secretary  
Jason Ross  
Genevieve Burdett  
Jaye Mathieu  
Ryan Camp

**ABSENT:** Janet Bonaguro

**GUESTS \ STAFF:** Karin Albert, Senior Planner  
Meleana Searle, Planner

**OBSERVERS:** N/A

#### 1. **CALL TO ORDER**

The meeting of the APC was held on Thursday December 8, 2022 at Village of Cumberland Council Chambers, commencing at 4:00pm. We are honoured to gather on the unceded traditional territory of the K'ómoks First Nation.

#### 2. **APPROVAL OF AGENDA**

Camp/Ross: THAT the agenda be approved with addition of member introductions after approval of the minutes.

**CARRIED UNANIMOUSLY**

#### 3. **APPROVAL OF MINUTES**

Ward / Mathieu: THAT the minutes of the meeting held Sept.8, 2022 be approved as presented.

**CARRIED UNANIMOUSLY**

#### 4. REFERRALS FROM COUNCIL

##### a) Council Policy of Development Variance Permits for Parking in the VCMU-1 Zone

Mathieu / Bowman: THAT the Advisory Planning Commission receive the staff report titled "Council Policy of Development Variance Permits for Parking in the VCMU-1 Zone".

#### CARRIED UNANIMOUSLY

#### DISCUSSION

1. Karin Albert provided an overview of the Council Policy on Development Variance Permits for Parking in the VCMU-1 Zone.
  - At this time the cash in lieu fund for parking is just over \$127,000.
  - Cost to apply for any non-residential variance is \$1,200.
2. APC Discussion
  - a. Residential parking requirements
    - i. Membership agrees it is important to have sufficient residential parking.
    - ii. General agreement with the bylaw as it is written.
    - iii. Affordable/below market value housing development is one area where parking requirements could be waived.
  - b. Commercial parking requirements
    - i. It was noted that it is usually not possible for a new business to create more parking.
    - ii. Furthermore, most businesses would apply for a variance.
    - iii. It was also noted that the cost of the parking requirements cash in lieu would be prohibitive for most small business owners.
    - iv. The idea that small business owners could find downtown Cumberland unattractive to their business because of the parking requirements is not acceptable to the membership.
    - v. Membership is in agreement that having to park and walk a few blocks to a destination is not a problem for most and could even be seen as a positive thing for the other downtown businesses.
    - vi. Membership recognizes that, considering the guidelines presented in the report, it would be unusual for a business to not be granted a variance.
    - vii. Future Zoning Bylaw updates should make commercial spaces exempt from parking requirements with the exception of accessible parking spaces.

Camp/Bowman: That the Advisory Planning Commission recommends support of the Council Policy for Development Variance Permits for Parking in the VCMU-1 Zone - section 3 - with the exceptions for residential parking requirements only being made for development of affordable / below market value housing.

**CARRIED UNANIMOUSLY**

Burdett/Mathieu: That the Advisory Planning Commission recommends support of the Council Policy for Development Variance Permits for Parking in the VCMU-1 Zone - section 4.

**CARRIED UNANIMOUSLY**

Bowman/Ross: That the Advisory Planning Commission recommends that in the future it be considered that no parking requirements exist for commercial businesses in the VCMU-1 Zone.

**CARRIED UNANIMOUSLY**

**5. NEXT MEETING**

The next APC meeting is Thursday, January 12, 2023 at 4:00 pm.

**6. TERMINATION:**

Camp/Burdett: THAT the meeting be adjourned.

Time: 6:00 pm

Certified Correct:  _____	Confirmed:  _____
Chair	Deputy Corporate Officer

## Melissa Roeske

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**Subject:** Request for 1st Cumberland Scouts Contingent to present to council

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**From:** Angie Prescott [REDACTED] >

**Sent:** November 3, 2022 4:54 PM

**To:** Village of Cumberland <[info@cumberland.ca](mailto:info@cumberland.ca)>

**Subject:** Request for 1st Cumberland Scouts Contingent to present to council

Hi there – we were hoping to have a few of our 1<sup>st</sup> Cumberland Scouts come and present to the council about their upcoming trip to South Korea as part of the Canadian World Jamboree Contingent.

Of the 230 youth from across Canada who have been selected as part of the Canadian contingent, NINE of them are from 1<sup>st</sup> Cumberland Scouts. Many of these youth have been scouting in Cumberland for more than 8 years and our community has watched them grow up year after year as they enthusiastically participated in events such as the annual toy drive, hike for hunger, apple day, shoreline clean up, mile of flowers, and countless other service and fundraising events.

It would be great to have these youth present to Cumberland Village Council so they can share in their excitement and pride. They will be representing the Village of Cumberland at an event with over 50,000 youth from around the world and we'd love to hear ideas you may have on how to share the beauty of Cumberland with our world scouting community. We are also looking for fundraising opportunities and would appreciate any and all suggestions and recommendations from Council members.

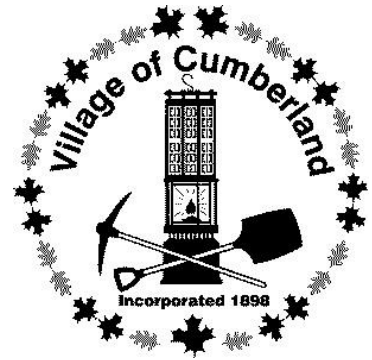
We can be available for any meeting date. Thanks so much for your consideration and support.

Angie Prescott – 1<sup>st</sup> Cumberland Scouter

Angie Prescott MA(CYC)

This message is intended for the use of the individual or entity to which it is addressed and may contain information that is privileged, confidential and exempt from disclosure under applicable law. If the reader of the message is not the intended recipient, you are hereby notified that any dissemination, distribution or copying of this communication is strictly prohibited. If you receive this communication in error please notify us immediately by telephone @ (250)286-0611 or by email.

# COUNCIL REPORT



REPORT DATE: 12/14/2022  
MEETING DATE: 1/9/2023

File No. 2022-08-DV

TO: Mayor and Councillors  
FROM: Meleana Searle, Planner  
SUBJECT: Development Variance Permit Application 2712 Dunsmuir Avenue

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## RECOMMENDATION

THAT Council refer the development variance permit application to reduce the required number of off-street parking stalls from eight to zero, the number of commercial loading spaces from two to zero, and the number of class two bicycle parking stalls from seven to zero on the property described as Lot B District Lot 21 Nelson District Plan EPP61337 (2712 Dunsmuir Avenue) to the Advisory Planning Commission.



**Subject Property**

## PURPOSE

The Village received an application for a development variance permit at 2712 Dunsmuir Avenue. The applicant is proposing to reduce the required number of off-street parking spaces from eight to zero, commercial loading spaces from two to zero and class two bicycle parking spaces from seven to zero.

## PREVIOUS COUNCIL DIRECTION

None.

## BACKGROUND

### *Proposed Development*

The subject property, built in 1894, has significant cultural and heritage value to the community. The applicants are proposing a full restoration of the building, which has an estimated cost of approximately four million dollars. As the building covers 100% of the property, and the applicants are not proposing to demolish any portion of the structure, off-street parking isn't possible. The initial work, which does not require a Heritage Alteration Permit (HAP), includes main floor interior renovations to accommodate the owner's retail business (NOBL Wheels) and a new durable metal roof.

## ***Official Community Plan***

The Official Community Plan Bylaw No. 990, 2014 (OCP) designates Cumberland's downtown commercial core as a heritage conservation area. The historic form and scale of the commercial buildings is integral to the Village's appearance and ambience. The objective of the Heritage Conservation Area designation of the commercial core is to ensure that "revitalization or new development in the downtown area is compatible with the scale and character of the existing downtown heritage character" (OCP, p. 157).

Pursuant to the Official Community Plan (OCP), the subject property at 2712 Dunsmuir Avenue is in the Heritage Conservation Area and is subject to a Heritage Alteration Permit (HAP). However, the phase one work being complete by the applicant falls under the exemptions and therefore a HAP is not required at this time.

## ***Zoning Bylaw***

The subject property is zoned VCMU-1 – Village Core Commercial Mixed-Use, which permits a variety of commercial, professional, residential, and accessory uses.

The Zoning Bylaw No. 1027, 2016 (Zoning Bylaw) requires one employee parking space, seven visitor spaces and two commercial loading spaces for the 669.0m<sup>2</sup> retail area. The parking is required by the principal use changing from office to retail minor. Retail minor is defined as "the use of a building having a total floor area less than 2,800.0m<sup>2</sup> but equal to or greater than 300.00m<sup>2</sup> for the retail sale and rental of consumer goods."

The applicant is also required to provide eight class one and seven class two bicycle parking stalls. Class 1 bicycle stalls are to be located in a secured or controlled area protected from inclement weather and are intended to serve residents or employees. Class two bicycle parking stalls can be unsecured or in an uncontrolled area and are intended for short-term parking needs.

## **ANALYSIS**

### ***Land use justification***

Best practices for evaluating development variance permit applications typically look for an acceptable land use justification such as:

- i. the ability to use or develop the property is unreasonably constrained or hindered by having to comply with the bylaw requirement;
- ii. there is a net benefit to the community or immediate area that would be achieved through the variance approval; or,
- iii. the proposed variance would allow for more efficient and effective use and development of the subject property.

The subject property was constructed in 1894 (128 years ago), before parking was considered and zoning regulations were adopted. As the existing building covers 100% of the property, a cash-in-lieu payment is the only option other than demolishing part, or all, of the building to accommodate the parking requirements.

The proposed variance could have a direct impact on the preservation of the building which has significant cultural value to the community. The statement of significance, complete in 2019, identifies 2712 Dunsmuir Avenue as having historical, cultural, social, heritage and aesthetic values that characterise the ebbs and flows of the economic life of Cumberland.



In 2003, the Heritage BC issued the report: *Incentives for Heritage Conservation: A Survey of British Columbia's Local Governments*. The report found that local governments must take a more active role in promoting heritage conservation in their communities. The information received from the survey illustrates that many communities feel that they do not have the means or sufficient community interest to provide incentives for heritage conservation. However, not all incentives require a large budget or excessive planning. One example given of an incentive that can be used by local government is Zoning Concessions. The report suggests that local governments relax or vary any of the provisions of their land-use regulations to help incentivize developers to preserve heritage buildings.

The proposed variance would allow for more effective and efficient development of the property by allowing the property owner to invest the cash-in-lieu funds into the restoration of the building.

### *Impacts of the Variance*

Where a land use justification for a proposed variance has been demonstrated, the application should then be evaluated based upon the impact(s) (positive or negative) of the variance.

Impact(s) may be classified into the following three general categories:

- i. Aesthetic impact. This includes the impact of the proposed variance on the streetscape, the views from adjacent properties, compatibility with neighbourhood design standards, etc.
- ii. Functional impact. This includes the impact of the proposed variance on the function of the property for the permitted uses and the potential impact of the variance on the function of adjacent properties, or road right-of-ways.
- iii. Environmental impact. This includes the impact of the proposed variance on the long term sustainability of the natural environment or the direct impact on a specific feature of the natural environment.

The proposed variance would have a positive impact on the aesthetics of the building and streetscape as the building would be retained, restored and no longer vacant.

Functional impacts of the variance include a potential increase in traffic and parking on the streets adjacent to the subject property. Eight class one bicycle parking stalls will be provided inside the building reducing the need to provide an additional seven bicycle stalls outside. As the building covers 100% of the property an outdoor bicycle rack would need to be placed on the Village sidewalk. The Village currently does not have a standard for bicycle racks or a placement plan. The Village does not recommend installing bicycle racks on the sidewalk outside the subject property at this time.

There is no easily quantifiable impact to the environment. However, employees and customers may be more inclined to walk or bike to the subject property if parking is not as readily available. Additionally, as discussed in their rationale letter (Attachment 2) NOBL Wheels promotes employees to bike to work by offering financial incentives to do so.

### *Future Development*

As mentioned in the applicant's letter, they intend to complete a full restoration of the building. Future phases of development will include expanding the interior renovations to the upper floors and making improvements to the exterior of the building. Options for securing restoration and preservation of the heritage building, such as through a Heritage Revitalization Agreement (HRA),

can be discussed at a future development phase. At this time the recommendation is to support opening of the retail business. The proposed parking variance would only apply to the area of the occupancy permit for the portion of the building being used for the first phase of interior renovations.

**PUBLIC NOTIFICATION AND REFERRALS**

Pursuant to the requirements of the Village of Cumberland Development Procedures and Fees Bylaw No. 1073, 2018:

1. The Applicant has placed the required signage on site.
2. Village staff prepared a notice of Council consideration of a Development Variance Permit which was mailed to owners and occupants of properties within 75.0 metres on October 24, 2022, meeting the Bylaw minimum of 10 days before Council considers the application.

At the time of this report, staff have received feedback from four members of the public. See Attachment 3 – Public Feedback.

**ALTERNATIVES**

1. THAT Council approve the development variance permit to vary the required number of parking stalls from six to zero on the property described as Lot B District Lot 21 Nelson District Plan EPP61337 (2712 Dunsmuir Avenue).
2. THAT Council deny the development variance permit to vary the required number of parking stalls on the property from six to zero on the property described as Lot B District Lot 21 Nelson District Plan EPP61337 (2712 Dunsmuir Avenue).

**STRATEGIC OBJECTIVE**

- Healthy Community
- Quality Infrastructure Planning and Development
- Comprehensive Community Planning
- Economic Development

**FINANCIAL IMPLICATIONS**

Approval of the variance would mean that the Village would not receive a cash-in-lieu payment of \$80,000.

**OPERATIONAL IMPLICATIONS**

The review of development variance permit applications is part of the services provided by Development Services.

**CLIMATE CHANGE IMPLICATIONS**

The proposed variance does not have an easily quantifiable impact on factors contributing to climate change.

**ATTACHMENTS**

1. 2022-08-DV DRAFT
2. Letter from Applicant
3. Public Feedback

**CONCURRENCE**

Courtney Simpson, Manager of Development Services **CS**

Respectfully submitted,

***M. Searle***

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Meleana Searle  
Planner

***M. Mason***

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Michelle Mason  
Chief Administrative Officer



**TO:** 1984 Holdings Ltd.

**OF:** 2712 Dunsmuir Avenue, Cumberland, BC, V0R 1S0

This Development Variance Permit (2022-08-DV) is issued subject to compliance with all of the bylaws of the Village of Cumberland applicable thereto, except as specifically varied or supplemented by this Permit for the purposes of operating a retail minor use.

1. This Development Variance Permit applies to and only to those lands within the Village of Cumberland described below, and only applies to the area of the occupancy permit for the 670.0m<sup>2</sup> portion of the building shown in the attached plans. This permit does not apply to any expansion of occupancy, use, or change of use to buildings, structures and other development thereon:

**Legal Description:** LOT B DISTRICT LOT 21 NELSON DISTRICT PLAN EPP61337

**Folio:** 516 00022.000 **PID:** 030-314-747

**Civic Address:** 2712 Dunsmuir Avenue

2. The land described herein shall be developed strictly in accordance with the following terms and conditions and provisions of this Permit: The Zoning Bylaw No.1076, 2016 is varied as follows:

Section 6.3.3 Parking requirements are reduced to zero spaces for the employee and visitor retail minor use at 2712 Dunsmuir Avenue.

Section 6.4.3 The class two bicycle stalls are not required.

Section 6.13 The off-street commercial loading stalls are not required

3. **Security**

None.

4. **Expiry**

Subject to the terms of the Permit, if the Applicant of this Development Variance Permit does not substantially start any construction with respect to which the Permit was issued within 2 years after the date it is issued, the Permit lapses.

5. **Timing and Sequencing of Development**

None.

6. **List of Reports or Plans attached as Schedules**

Schedule A – Building Permit Floor Plan

7. **Contaminated Sites Regulation**

This Permit is issued pursuant to the requirements of the *Environmental Management Act*, whereby the Applicant has completed a “Site Declaration” for the subject property.

8. This Permit is **not** a Building Permit.

CERTIFIED as the DEVELOPMENT VARIANCE PERMIT approved and issued by resolution of the Council of the Corporation of the Village of Cumberland on January 9, 2022.

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Corporate Officer

# Schedule A - Building Permit Floor Plan

## BUILDING STATISTICS

**BUILDING AREA:**  
885 m<sup>2</sup>

**BUILDING HEIGHT:**  
2 STOREY

**BUILDING CONSTRUCTION:**  
COMBUSTIBLE AND NON-COMBUSTIBLE  
(WOOD FRAME, BRICK, CONCRETE BLOCK)

**BUILDING IS SPRINKLERED:**  
NO

## 2018 BCBC SUMMARY

APPLICABLE: Div. B, Part 3

**OCCUPANCY CLASSIFICATION:**  
ART CLES 3.2.2.68 (GROUP E, UP TO 2 STOREYS)

### SECTION 3.1 - GENERAL

**[3.1.17] OCCUPANT LOAD**  
60 MAX

### SECTION 3.2 - BUILDING FIRE SAFETY

**[3.2.1.1] EXCEPTIONS IN DETERMINING BUILDING HEIGHT**

- 2) EXISTING MEZZANINE LESS THAN 60% OPEN TO BELOW (EXISTING - 3.56%, SEE MEZZANINE PLAN)
- 7) ENCLOSED SPACE WITHIN MEZZANINE REDUCED FROM 63% TO 34% (SEE MEZZANINE PLAN)

**[3.2.4] FIRE ALARM SYSTEM**  
NOT REQUIRED

**[3.2.3.66] FIRE RESISTANCE RATINGS:**  
MAXIMUM BUILDING AREA: 500 m<sup>2</sup> (FACING 3 STREETS)

FLOORS - 45 MIN  
ROOF - 0 HR  
LOAD BEARING - 45 MIN

### SECTION 3.3 - SAFETY WITHIN FLOOR AREAS

**[3.3.1.3] MEANS OF EGRESS**  
PROVIDED FROM ALL FLOOR AREAS

**[3.3.1.5] EGRESS DOORWAYS**  
REQUIRED: 2  
PROVIDED: 3

### SECTION 3.4 - EXITS

**[3.4.2] NUMBER AND LOCATION OF EXITS FROM FLOOR AREAS**  
FLOOR AREAS ARE SERVED BY TWO EXITS  
THE EXITS WILL MEET THE REQUIREMENTS OF THIS SECTION

**[3.4.2.1] - TRAVEL DISTANCE**

TRAVEL DISTANCE PERMITTED: 40 M  
TRAVEL DISTANCE PROVIDED: 24.9 M

**[3.4.2.2] EGRESS FROM MEZZANINE**

DISTANCE LIMIT PERMITTED: 25 M  
DISTANCE LIMIT PROVIDED: 15.2 M

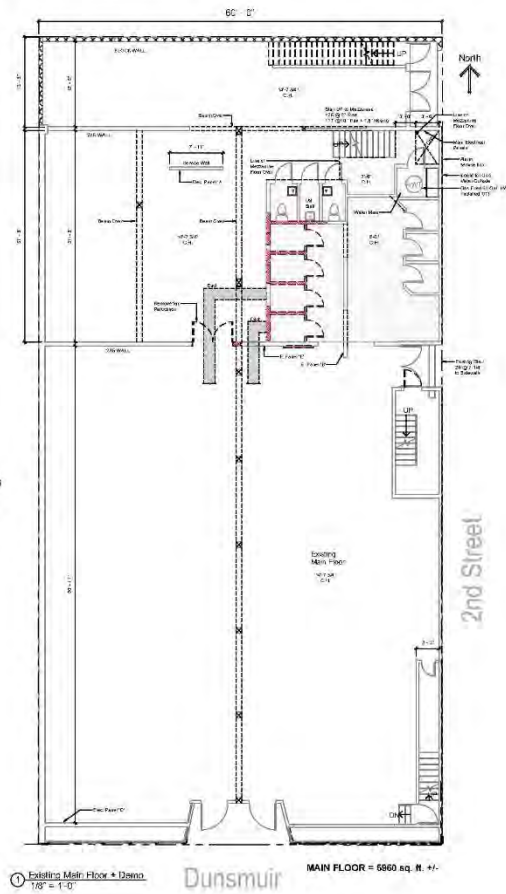
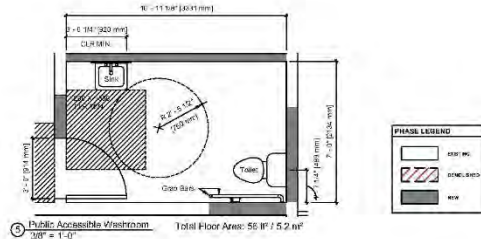
### SECTION 3.8 - ACCESSIBILITY

ACCESS FOR PERSONS WITH DISABILITIES  
WILL MEET THE REQUIREMENTS OF  
SECTION 3.8

**[3.8.2.8] ACCESSIBLE WASHROOM REQUIRED**  
REQUIRED: 1  
PROVIDED: 1

## CONSULTANT DRAWINGS

- A101 - FLOOR PLANS
- S11 - MAIN FLOOR REMEDIATION PLAN
- S12 - TRUSS REMEDIATION DETAILS
- S13 - COLLAR BEAM RELOCATION DETAILS
- M-F - MECHANICAL HVAC NEW WORK
- E01 - SITE PLAN
- E02 - POWERS AND SYSTEMS
- E03 - LIGHTS AND CEILING
- E04 - ELECTRICAL DEMO PLAN



# NOBL WHEELS TENANT IMPROVEMENT

(NOTE: ONLY MAIN FLOOR TO BE RENOVATED)

CIVIC: 2706 Dunsmuir Avenue, Cumberland, BC  
LEGAL DESCRIPTION: Westley and Easterly 1/2 of Lot 6, Block 3, District Lot 21, Nelson District, Plan 522

## CONSULTANTS

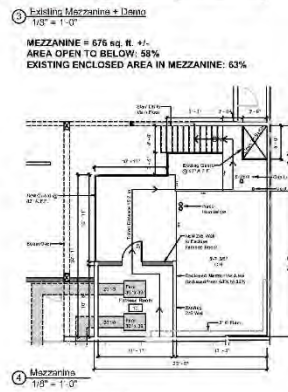
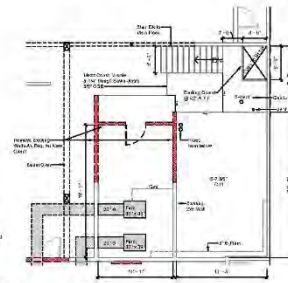
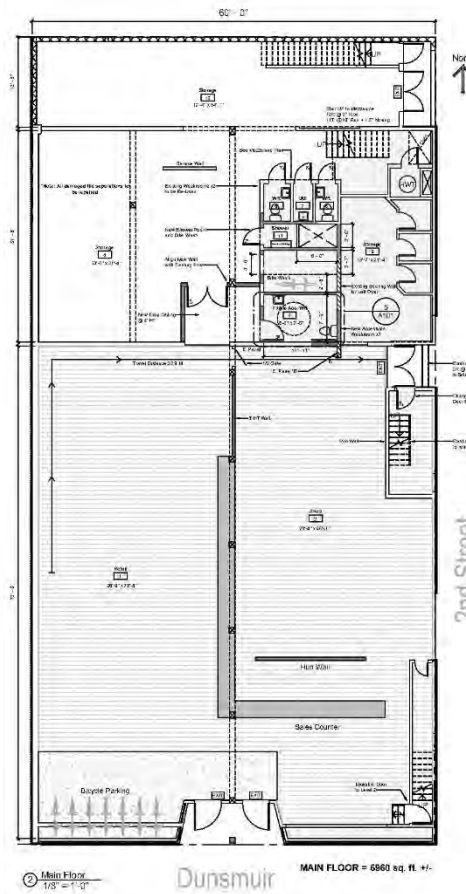
**PRIME CONSULTANT & ARCHITECT**  
MacDonald Hagerly Architects, Ltd.  
Martin Hagerly, Architect A.B.C.  
E - Martin@MHArchitects.ca  
T - 594.345.9733

**STRUCTURAL**  
H&I - Home Structural Inc.  
Eric Heldema  
E - eheldema@honestructural.com  
T - 250.288.6506

**MECHANICAL**  
SIMCN Consulting Ltd.  
Blake Simmons, P.Eng  
E - bsimco@simcn.ca  
T - 780.591.9615

**ELECTRICAL**  
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Brian Muir  
E - brian@muireng.ca  
T - 250.350.0970

**GENERAL CONTRACTOR**  
AFC Construction  
guth@a101construction.com  
E - guth@a101construction.com  
T - 250.997.1789



NO.	DATE	REVISION
1	12/10/24	ISSUE FOR PERMIT
2	12/19/24	ISSUE FOR INFORMATION
3	12/19/24	ISSUE FOR INFORMATION
4	12/19/24	ISSUE FOR INFORMATION
5	12/19/24	ISSUE FOR INFORMATION



Nobl  
2706 Dunsmuir Ave  
Tenant Improvement

ANS D  
FLOOR PLANS

A101

To whom it may concern,

### **PREAMBLE**

We have spent the last year reviewing and detailing out a number of different plans for the building. Despite it being less expensive to start from scratch, our long term vision is to complete a full restoration. We aspire to maintain and enhance the building's heritage and character while bringing it up to a higher safety standard, and to maintain it such that it lasts another 100 years.

The complete vision will take years to complete and will ultimately cost close to 4 million dollars all-in.

Phase 1 of our project is designed to have our business operating in the building within 2022, so that we can have a spring "launch" in 2023, just in time for the cycling season. As you'll see in the renovation plan, we are putting on a durable new roof, and performing the interior upgrades needed to suit our business.

This initial renovation is budgeted at \$500,000. Investing this amount of money in the building should provide you with some assurance that demolishing the building in favor of building something from scratch is out of the question. We think the property is vital to Cumberland's identity. The cycling community is growing stronger and we feel we'll be able to run a profitable business in Cumberland for many years. By continually investing in the building over time, we hope to see this building thrive and become a centerpiece that residents are proud of.

### **BICYCLE PARKING**

Our interior plans show bike parking inside of the building for consumers as well as staff. Half of the front of the building is dedicated to bicycle parking. We noticed the parking calculations had an amount of required bicycle parking spots. We hope that our interior parking—which we believe is far superior and will be preferred by the public due to the value of most bikes—satisfies this need and we hope this can be confirmed. Based on feedback from the cycling community, our existing customers, as well as staff, we know that most are not interested in leaving \$5,000-\$10,000 (or more) bikes outside, unattended, but rather would be excited at the prospect of rolling them in through our front door, putting it on a rack, and knowing that it's safe.

### **JOB CREATION**

Creating jobs in Cumberland is an exciting prospect for us. We already employ many staff that call Cumberland home, and we expect to continue to create jobs in the area. As you will have noted, our plans include a shower area and changeroom, and our goal is to encourage our staff

to ride their bikes to work. We are reinforcing this healthy practice by paying staff a bonus, based upon how much mileage they walk or ride on their way to work.

We believe we are bringing something valuable and unique to the village. We are creating jobs, improving the aesthetics in a core area of town, filling a key vacant building (one rich with history), and most importantly, we are investing in preserving the heritage that draws so many to Cumberland. This isn't a short play for us as we know the investment this will take—both in time and in financial resources.

### **PARKING REQUIREMENTS**

As a small business, our vision carries considerable financial risk for us. We have considered the alternatives and believe the most viable approach is to improve the property in stages.

One of the largest stumbling blocks for us is the financial cost associated with meeting the parking requirements of the Village. In reality, we could continue to rent in Courtenay (our current location) for many years (close to a decade) before we exceed the cost associated with meeting the parking requirements here in town.

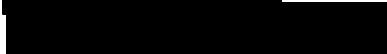
When we consider the parking requirements cost, and then consider the fact that we're investing so much, taking on all of the risk, creating so many local jobs, supporting other local businesses, paying our staff extra to ride bikes to work (currently, with plans to continue this incentive), and the fact that we're going to attract customers who show up on bikes over vehicles, we would like to request a variance on this requirement.

We know that our success depends on our ability to get up and running in a cost-effective manner. We know that our building remains an eyesore for everyone, but that with our investment, it will be a highlight and centerpiece in town that all residents are proud of.

It is our request that the council considers a variance on this requirement down to zero, so that we can repatriate those funds into the improvements we have planned.

Thank you for your consideration as we work towards preserving and restoring part of Cumberland's heritage for all to enjoy.

Thank you



1894 Holdings Ltd.



## Meleana Searle

---

**From:** [REDACTED]  
**Sent:** October 28, 2022 12:13 PM  
**To:** Planning  
**Subject:** Re: 2712 Dunsmuir

Dear Meleana,

I am writing in support of the variance application regarding parking spaces for 2712 Dunsmuir Ave. I am all for waiving the fee for the parking spaces so that the money can go towards restoring this beautiful historic building.

Thank you!

Sincerely,

[REDACTED]  
[REDACTED] 2nd Street

## Meleana Searle

---

**From:** [REDACTED]  
**Sent:** November 1, 2022 11:10 AM  
**To:** Planning  
**Subject:** file 2022-08-DV

Hi Meleana,

I received your letter regarding the development variance permit for 2712 Dunsmuir Avenue. I am emailing to comment that I am not in favour of waiving the cash-in-lieu fee for parking.  
Regards

[REDACTED]



November 2022

To whom it may concern;

Please find this letter in opposition to development variance permit, file 2022-08-DV, 2712 Dunsmuir Avenue.

While I respect the costs of restoration on the large Big Store building to be robust, the neighbourhood and community at whole should not bear these costs, in the form of waving parking-in-lieu fees. These fees have been considered by staff and council as the cost to the community to fail to provide parking, to support the growing parking needs of the Village. Further, a variance of these in lieu fees was recently denied to the project across the street, 2714 Dunsmuir Ave.

While this building was at 100% of lot use prior to current ownership, I invite the current owners to consider removing the addition to the building, which extends into the alley and is not bylaw conforming. Removing that section of the building, which is younger than the rest of the building and doesn't have any bearing on the heritage nature of the structure, would allow the building to align with the rest of the structures in the alley and could create the parking spaces the bylaws asks of a business of its nature.

The alley in this block is problematic, with the Big Store building literally bearing some of the brunt of the commercial transport in the block. Delivery vehicles working to supply Dwain's Liquor Store, The Waverley Hotel and the BC Liquor Store all use the alley, the frequency in which vehicular damage happens should be pause for concern. The addition on this building contributes to the challenge of the area, creating too tight of a space for large vehicles to safely exit the alley onto Second St, resulting in the gutters on the building needing regular replacement, after being mashed by transport trailers. If parking is at capacity more often on this street, the alley exit will be more challenging for these large vehicles to manoeuvre safely.

As a residential homeowner on Second St, I was dismayed the August 15, 2022 Heritage Committee minutes called Second St a commercial street, which was also referenced in the September 21 Regular Council Meeting; *Second Street streetscape*

- *Second Street is also a commercial street. Would like to see an option to animate Second Street. E.g. consider moving the interior patio, which would be in the shade most of the day, to front Second Street and be associated with commercial unit CRU- 3.*

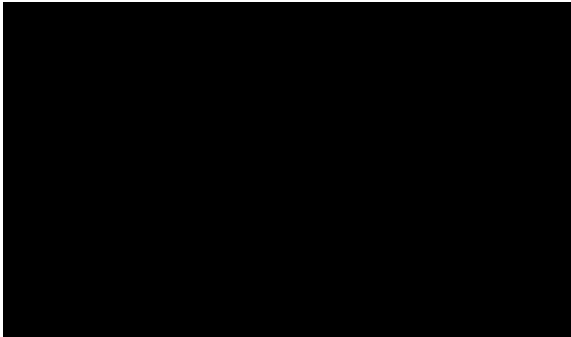
The single family home, with Second St frontage, my family has occupied since 2013 was built in 1930, yet, in the absence of a parking plan with residential parking provisions, I often come home with groceries and can't park in front of my home, to unload. To add the pressure of a shortfall of six parking spaces on the block is going to add to the clash of residential peace vs commercial pursuits.

After years of watching the Big Store building fade, I am so happy to see life and action in the space, once again. The business planning to move into the space has so much potential to contribute to the rich community that is Cumberland. This contribution should also include

either six parking spaces by removing the addition on the building and easing alley pressures as well, or the stated parking-in-lieu fees, as per schedule.

Thank you for time of council and staff, in your deliberations.

If anyone would like to connect about further, please do not hesitate.



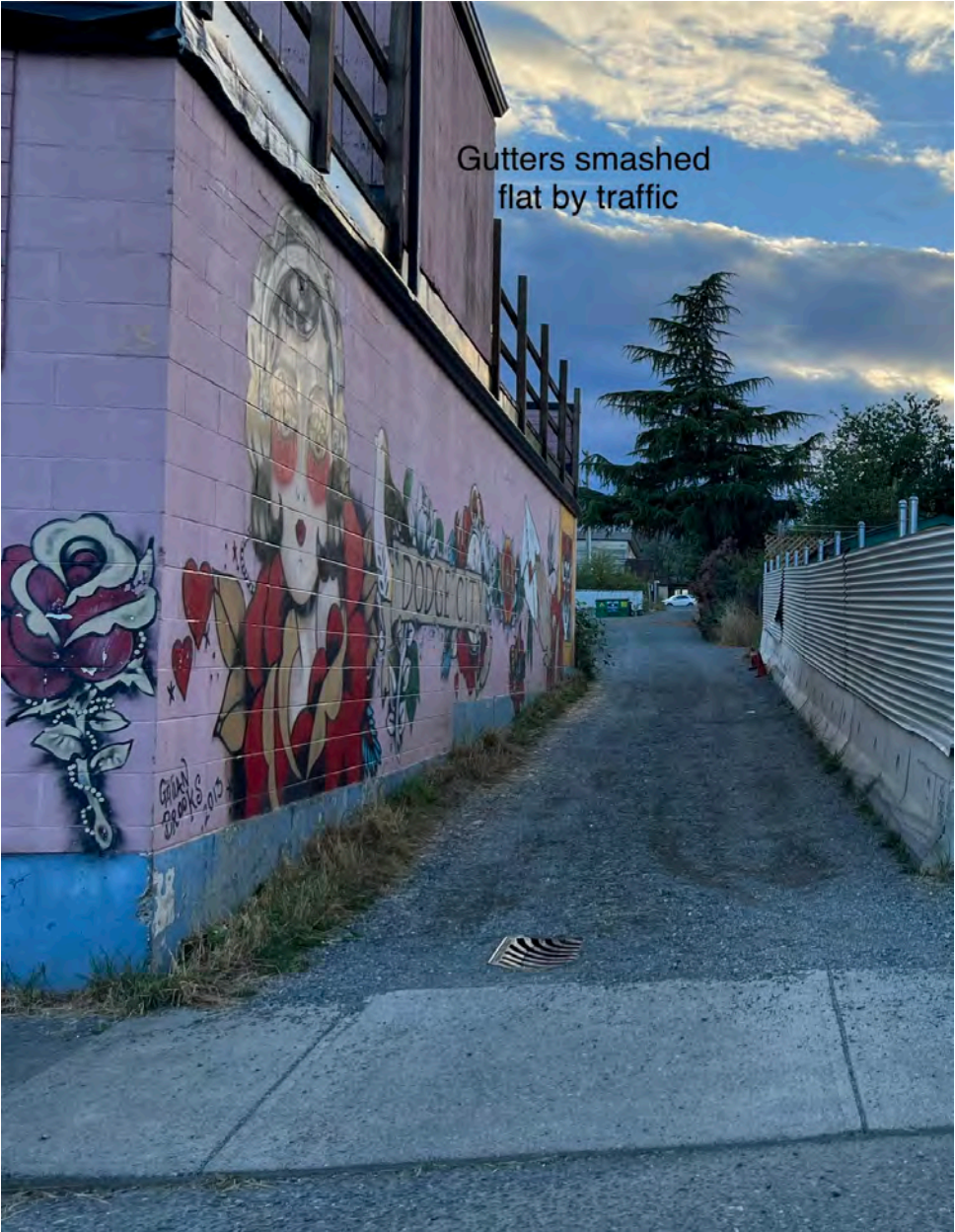
January 7, 2022 - delivery vehicle stuck in alley, trailer caught on the Big Store addition.



Building, prior to 2013, note the gutters missing from the section closest to Second St.



Fall 2022, gutters smashed flat by transport trailers, after installation prior to current owners taking possession

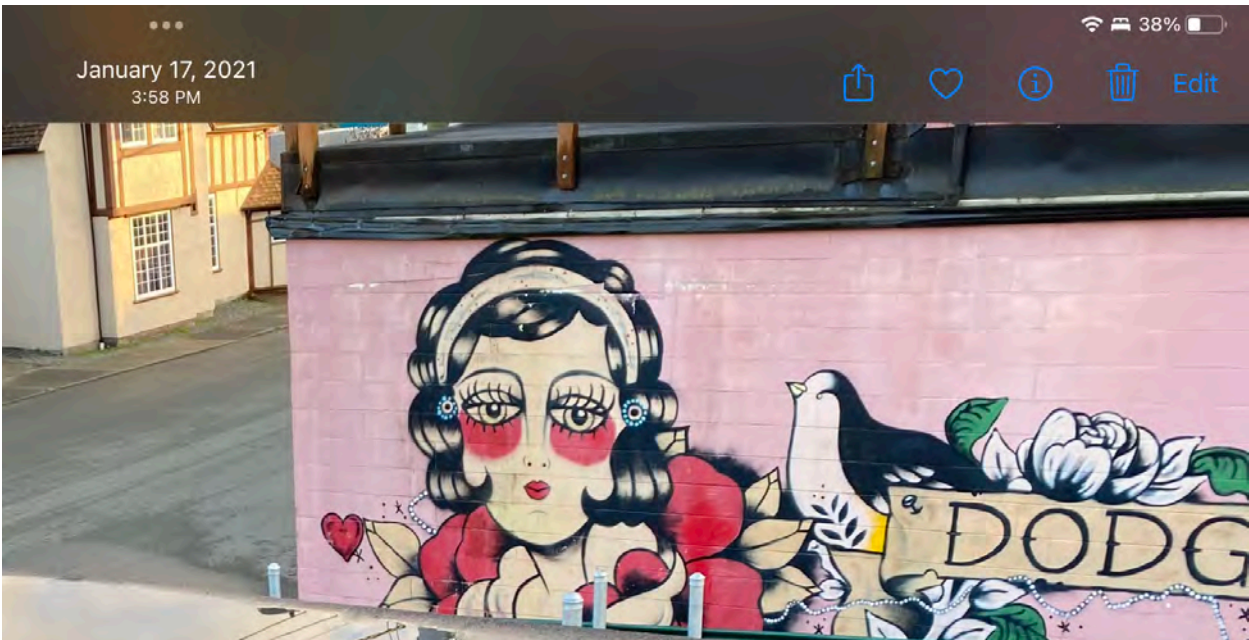


July 23  
9:34 AM



Various states of gutter damage

The white marks in the hair area are where the transport trailer strikes the building.



September 23, 2020  
6:03 PM



Gutter damaged, watch the water pour out the end



May 29, 2020  
3:20 PM



More ongoing gutter damage in various states

## Meleana Searle

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**From:** [REDACTED]  
**Sent:** November 3, 2022 9:09 AM  
**To:** Planning  
**Cc:** Vickey Brown; [REDACTED]  
**Subject:** Variance Permit for 2712 Dunsmuir

For your consideration,

As a neighbouring commercial property owner, I support the granting of this Variance to reduce the number of parking spaces from six to zero and waive the cash-in-lieu of parking requirements for 2712 Dunsmuir Ave. I also challenge the Village to permanently remove any parking or other bylaw requirements on heritage buildings that are difficult if not impossible to fulfill. This could be done by simply "grandfathering" these buildings to keep doing what they have been doing, in some cases for over 120 years.

Requiring a Variance for a heritage building built before the adaptation of the current bylaw is nothing short of kafkaesque. This building, and many others on Dunsmuir, was designed, built and used for decades when people predominantly walked the village core instead of driving. Forcing these carbon friendly buildings to now have parking when there is little or no land to do this, is overly bureaucratic and creates an administrative burden for both the Village and the owner. From a bystanders view, it could appear that this is nothing but an attempt by the Village to extract funds from the property owner.

Increasing financial, regulatory (Bylaw and Building Code) and bureaucratic burdens on a property directly threatens the life of a heritage building. Preserving an old building should be easier and cheaper than building new, but this is currently not the case. The Heritage committee should create "carrots" to encourage owners to rehabilitate buildings instead of the current "stick" method to try and force compliance. The Village currently has no stated financial or bylaw exemptions in place for Heritage buildings, but instead imparts increased fees and added processes, like this Variance.

So does the Village value heritage buildings more than parking? Do we live in an era where the Village facilitates the preservation and re-use of our past and proactively fights climate change, or does the Village want to continue to enforce dated bylaws that favour suburban sprawl, the destruction of heritage buildings and increased carbon usage? I am reminded of the phrase "the greenest building is the one already built".

I challenge the new Village administration to quickly draft and approve bylaws that take an economical and common sense approach to the preservation of Heritage buildings by reducing unnecessary administrative requirements and economic barriers. Remove things like hard parking requirements that change with usage and cannot be met with existing buildings and lots. Offer upfront incentives to property owners to preserve heritage buildings and streamline the process of getting the many vacant and underused properties on Dunsmuir back into their intended commercial use.

Sincerely,

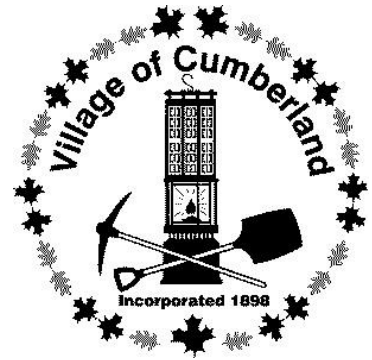
[REDACTED]

[REDACTED]

[REDACTED]



# COUNCIL REPORT



REPORT DATE: 12/14/2022  
MEETING DATE: 1/9/2023

File No. 2022-07-DP

TO: Mayor and Councillors  
FROM: Meleana Searle, Planner  
SUBJECT: Development Permit – Proposed Lot 2 (2794 Beck Avenue)

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## RECOMMENDATION

THAT Council approve the development permit (2022-07-DP) for the property described Lot A Section 34 Township 10 Comox District Plan EPP93477 (2794 Beck Avenue).

## PURPOSE

The purpose of this report is to seek Council approval of a development permit to allow the construction of a storage facility and caretaker's suite on Proposed Lot 2 (2794 Beck Avenue).



**Subject Property**

## BACKGROUND

### *Proposed Development*

The proposal is to construct a storage facility, office and caretaker's suite. The property is currently under active subdivision. The proposed development complies with current zoning and siting of the buildings complies with setbacks from proposed lot lines. Allowing processing of the development permit prior to completion of the subdivision allows the applicant to advance establishing their business in the Village of Cumberland. Council may approve the development permit, but it can only be issued after the subdivision completes.

Construction of the Tree Island Yogurt facility is underway on Proposed Lot One. Only one building can be approved for construction prior to subdivision. A development permit for Drewry Electrical on Proposed Lot Six was approved by Council on April 25, 2022 and a development permit for Proposed Lot 4 was approved on September 6, 2022. Issuance of these permits will be held in abeyance until after the subdivision is complete. Further building permits cannot be issued until the subdivision completes.

### *Bevan Industrial Lands*

The Bevan Industrial Lands Concept Plan and Report (Concept Plan) was developed by the Village in cooperation with Hancock Timber in 2019-2020 with input from key stakeholders in the

community. The Bevan Industrial Lands contain approximately 500 hectares (1,235 acres) of land and represent the largest supply of industrial lands in the Comox Valley. The Concept Plan was approved by Village Council on September 14, 2020. Council's 2021 review of its 2020 to 2023 Strategic Priorities confirmed Economic Development as one of its key priority areas with the focus being on "Bevan Industrial Area Development."

### ***Official Community Plan***

Pursuant to the Official Community Plan (OCP), the proposed development is subject to two development permit areas (DPAs): DPA #1 -Environmental Protection and DPA #5 – Industrial.

The subject property is within Development Permit Area #1 (DPA #1) – Environmental Protection and is identified as a connectivity area. The primary function of this development permit area is to ensure that natural resources are protected, connectivity restored and maintained, and development impacts mitigated, including allowing decision makers to have the ability to secure the necessary information and be able to place conditions on development.

The subject property is also in Development Permits Area # 5 – Industrial. The intent of this DPA is to enhance the visual quality of developments located along main thresholds to the community and to ensure that industrial development limits visual impact on adjacent uses. It is also an objective of the Village to encourage development that incorporates energy and water conservation principles as well as designs that work towards reducing greenhouse gas emissions.

### ***Zoning Bylaw***

The subject property is zoned I-2 – Heavy Industrial, which permits a large variety of industrial principal uses. Office and residential is permitted as an accessory use if it is an integral part of the principal use. The maximum size of a dwelling unit in this zone is 90.0m<sup>2</sup> (987.7ft<sup>2</sup>).

### ***Village of Cumberland Strategic Priorities***

The Village of Cumberland Strategic Priorities guide the Village's corporate management and decision-making. The primary purpose of the Strategic Priorities is to communicate the priorities of Council and the community and to focus and coordinate the resources of the Village of Cumberland Council and staff. The Village of Cumberland seeks to support the local economy by facilitating and leveraging the energy and resources in the private and non-profit sectors. One of the identified priorities is economic development, specifically the development of the Bevan Industrial Lands

## **ANALYSIS**

### **Environmental Protection Area – DPA 1**

The applicant has provided a bio-inventory and impact assessment report prepared by a registered professional biologist (R.P. Bio). The report outlines that there are no waterbodies on or within 100m of the project area, no plant species at risk, no invasive species designated noxious, no wildlife or wildlife habitat features and no environmentally sensitive areas. The report identifies that project development is expected to have a relatively minimal impact on the larger watershed area. Requirements of the development permit are that work is completed outside of the bird breeding season.

Connectivity for this area is being addressed through the current subdivision. On the north side of proposed Lots 1-3, a 3.0 metre wide bioswale will provide a connectivity corridor for wildlife. Fencing of these lots will be required to be on the inside of the bioswale to minimize fragmentation of the corridor. The application complies with all guidelines of Development Permit Area #1- Environmental Protection.

### Industrial – DPA 5

The property owner is proposing two storage buildings with a total of 48 units, including an office and a caretaker's suite. The buildings are oriented parallel to Beck Avenue which preserves the view corridors to the mountains and glacier. The building rooflines have been articulated to complement the mountain backdrop. The office and caretaker's suite will be slightly taller and clad in contrasting colours to the storage units to provide visual interest.

Fencing is proposed for the area surrounding the storage units. However, it will be kept to a minimum to leave the back of the property open as part of a larger, contiguous, wildlife corridor. This corridor aligns with Proposed Lot 1 (Tree Island Yogurt) and will align with any future development on Proposed Lot 3.

The site features landscaping throughout and includes a rooftop patio with mountain and glacier views for the caretaker. The application complies with all guidelines of Development Permit Area #5 - Industrial.

## **PUBLIC NOTIFICATION AND CONSULTATION**

As required by the *Village of Cumberland Procedures and Fees Bylaw No. 1073, 2018* the applicant has placed the required sign on-site.

Pursuant to the requirements of the *Local Government Act*, a notice of Council consideration of the Development Permit was mailed on December 12, 2022, to the owners of adjacent properties within 75.0metres. At the time of this report no submissions have been received by staff.

Staff recommends that Council does not require a neighbourhood public meeting. Although the *Village of Cumberland Procedures and Fees Bylaw No. 1073, 2018* states that Council may require that the applicant hold a neighbourhood public meeting, because Council has limited discretion when approving development permits, public meetings for development permit applications are generally not recommended.

## **REFERRALS**

No referrals are recommended for this application. The proposed industrial buildings are consistent with the Bevan Lands Concept Plan approved by Council in 2020. The preparation of the Concept Plan included a component of public engagement, and the development of the Bevan Industrial Lands is a Council strategic objective.

## **ALTERNATIVES**

1. THAT Council refer the development permit application for the property described as Lot A Section 34 Township 10 Comox District Plan EPP93477 (2794 Beck Avenue) to the Advisory Planning Commission for comment.
2. THAT Council request further information or clarification or request the applicant to make changes to the plans. If changes are requested, specific direction about the type of

alterations should be presented including reference to the relevant development permit area guideline or guidelines.

#### **STRATEGIC OBJECTIVE**

- Healthy Community
- Quality Infrastructure Planning and Development
- Comprehensive Community Planning
- Economic Development

#### **FINANCIAL IMPLICATIONS**

None.

#### **OPERATIONAL IMPLICATIONS**

The review of Development Permit applications is part of the services provided by the Development Services Department.

#### **CLIMATE CHANGE IMPLICATIONS**

The proposed development permit is located within an existing industrial node. Efforts to mitigate climate change through the reduction of greenhouse gas emissions include: the building being solar ready, provision of indoor secured bike parking, and electric vehicle plugs-in.

#### **ATTACHMENTS**

1. 2022-07-DP DRAFT

#### **CONCURRENCE**

Courtney Simpson, Manager of Development Services **CS**

Respectfully submitted,

***M. Searle***

---

Meleana Searle  
Planner

***M. Mason***

---

Michelle Mason  
Chief Administrative Officer



# Corporation of the Village of Cumberland

## DEVELOPMENT PERMIT

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**TO:** Acciano Development Inc.

**OF:** 3879 Warren Ave, Royston, BC V0R 2V0

1. This Development Permit (2022-07-DP) is issued subject to compliance with all of the bylaws of the Village of Cumberland applicable thereto, except as supplemented by this permit for the purposes of developing two storage facilities, office and caretaker's suite on Proposed Lot 2.
2. This Development Permit applies to and only to a portion of those lands within the Village of Cumberland described below:

**Legal Description:** Lot A Section 34 Township 10 Comox District Plan EPP93477

**Folio:** 516 29039.521      **PID:** 031-308-937

**Civic Address:** Proposed Lot 2 (2794 Beck Avenue)

3. The land described herein shall be developed substantially in compliance with the following terms and conditions and provisions of this permit:

### **DPA#1 Environmental Protection Permit Area**

- a) All work will be completed outside of the breeding bird season (March 15 – August 31) to minimize impacts to wildlife. If work cannot be completed outside of the breeding bird season, then pre-clearing nest and small wildlife sweeps will be conducted and protective buffers maintained around active nests, as directed by a Qualified Environmental Professional. Recommendations for appropriate timing of works, and associated mitigations, are provided in section 5.5 of the Bioinventory Report.
- b) An additional invasive species survey should be conducted during the growing season and prior to development proceeding to identify whether species not identified in the fall of 2019 currently exist in the project area, as per Bio-Inventory and Impact Report section 4.4.2.3.

### **DPA#5 Industrial Development Permit Area**

- i On-site topsoils to be conserved and re-used on site.



- c) **Landscaping**
  - i Watering shall be via an on-site irrigation system with an automated 'smart' controller.
  - ii Efforts shall be made to restore native vegetation on site post re-grading.
  - iii Signage shall be subject to the applicable bylaw provisions.
- d) **Building Form and Character**
  - i The proposed building will be constructed substantially in compliance with the drawings attached as Schedule A.
  - ii The building shall be designed to be solar ready. This includes providing a conduit to the roof for future solar panel installation.
  - iii A minimum of one 240 volt EV plugs is to be provided.
  - iv All on-site lighting is to be fully shielded (full cut off).

**4. Landscape Security**

- a) A security in an amount equal to 125% of the cost estimate for the approved landscape plan shall be received before the Permit is granted.
- b) When the plan has been completely implemented the Owner shall request an inspection. If found to be compliant, a refund of 75% of the security received shall be made.
- c) The remaining 25% will be held back for one year at which time the Owner will request an inspection. If the landscaping is to the satisfaction of the Village, the holdback will be returned to the person who paid it. If any of the plants have not survived, they shall be replaced by the Owner as per the approved landscape plan, or failing this, the Village may use the holdback to replace the plants. Any amount of the security not used for the purpose it was intended will be returned to person who paid it.

**5. Expiry**

Subject to the terms of the permit, if the Owner of this Development Permit does not substantially start any construction with respect to which the permit was issued within 2 years after the date it is issued, the permit lapses.

**6. Timing and Sequencing of Development**

None

**7. List of Reports or Plans attached as Schedules**

1. Schedule A - Site Plan
2. Schedule B - Elevations
3. Schedule C – Bio-inventory and Impact Assessment, Sept.3, 2019
4. Schedule D – Landscape Plan
5. Schedule E – Stormwater Management Plan

**8. Contaminated Sites Regulation**

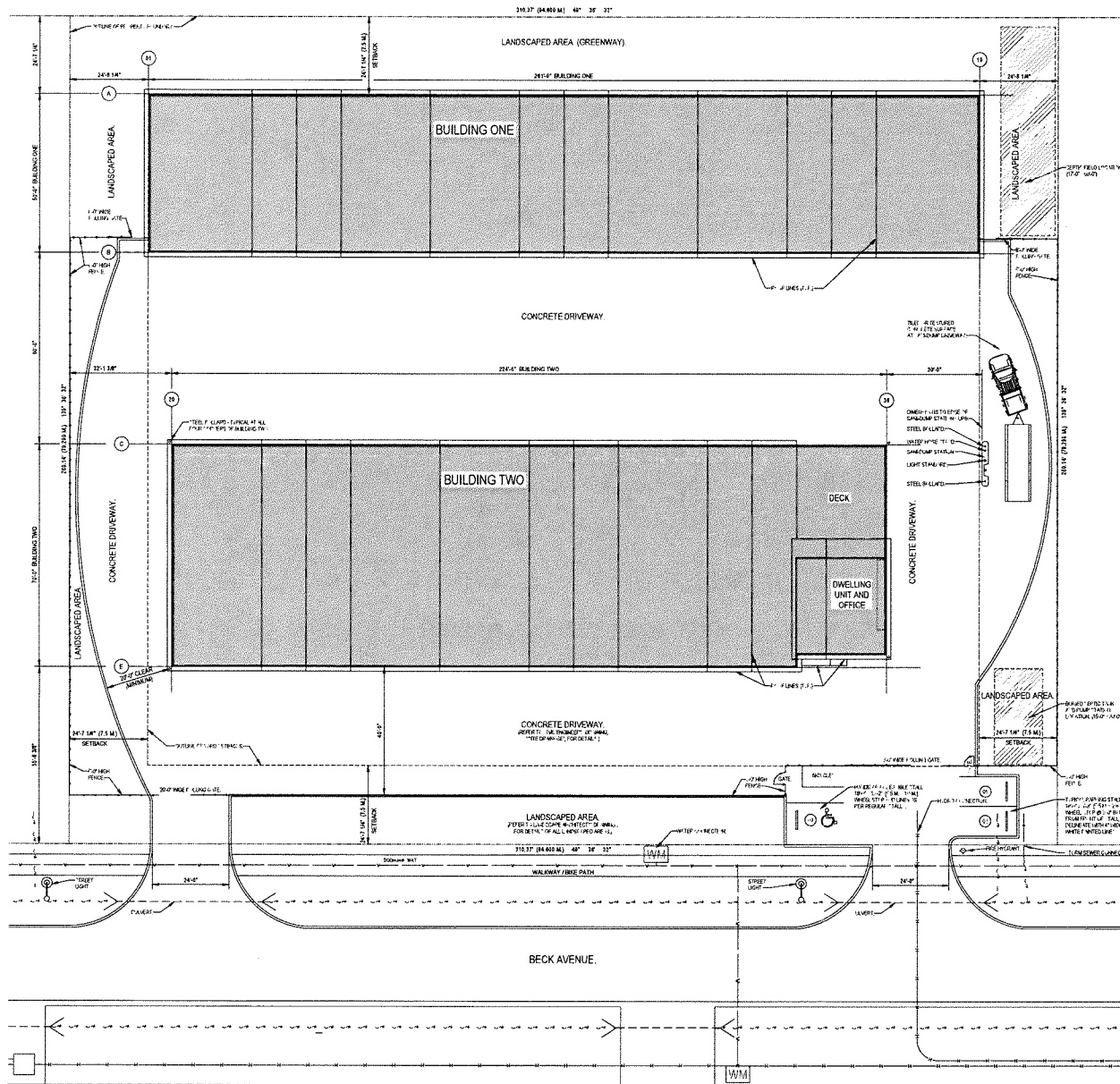
This permit is issued pursuant to the requirements of the *Environmental Management Act*, whereby the Owner has completed a “Site Declaration” for the subject property.

- 9.** This Permit is **not** a Building Permit.

**CERTIFIED** as the **DEVELOPMENT PERMIT** granted by resolution of the Council of the Corporation of the Village of Cumberland on January 9, 2022.

---

Corporate Officer



**VILLAGE OF CUMBERLAND BYLAW REVIEW**

Description	New storage facility with attached residence.
Legal Address	Lot 2, Subdivision Plan of Part of Section 34, Township 16, County District, Plan 0524 (Except East Part shown indicated in red on Plan 2: 1st and 2nd parts in Plan 0550112 and 0590067, 27th Block Avenue, Cumberland).
City Address	Work between Apts 1-041 31 requires CEP Hearing. Duplex.
Other Restrictions	Heavy Residential (H2).
Zone	CPA 1 Environmental Protection
DP Area	CPA 2 Environmental Protection
DP 1 Submitter	DP 1 Submitter
Permitted Use	Outdoor Storage, Warehouse
Accessories Buildings	Office & Residence (subject to principal use)
Storage Units	Building One: 1012 sq. m (10,920 sq. ft.) Building Two: 1448 sq. m (15,640 sq. ft.) Office: 21.2 (22.4 sq. ft.)
Floor Area	Residence: Total: 255.2 m <sup>2</sup> (2,745 sq. ft.)
Area of Lot	6,780 sq. m (7500 sq. ft.)
Floor Area Ratio	Permitted: 0.56 = 40,368 sq. ft. Proposed: 0.38 = 30,255 sq. ft.
Lot Coverage	Permitted: 90% = 148,432 sq. ft. Proposed: 2,280 m <sup>2</sup> (7500 m <sup>2</sup> ) = 28.1%
Building Height	Permitted: 11.8 m (39 feet) (highest point of roof) Residence: 4.5 m Other Uses: 4.5 m
Setbacks	Principal Building: All set back: 7.5 m Accessory Buildings: All set back: 7.5 m Parking clear way 9.3m at lot line, (4.0C bylaw 3.9 (m)(b)) As proposed:
Landscaping	Proposed in rear (north) set back. Self Service Facility: Min. 2,220/100 sq. m of Office if less 3,531/100 sq. m of Office Cleaning: 1 required (3 provided (garage)) Office: 1 required (3 provided (including accessible))
Openway	Accommodate parking required 1 space
Parking	Class 1 - One required (1 provided in Office - w/ car Garage) Class 2 - Two Required (2 provided in Office - w/ car Garage)
Bicycle Parking	Permitted on property line Bike Rack Min. height 2.5 m (8.2 ft), Max. height 3.5 m (11.8 ft)
Fencing	

**BUILDING CODE ANALYSIS**

Code Reference	Part Three: BC Building Code 2018
Type of Project	New Construction of a Storage Warehouse
Major Occupancies	Group F2 Medium Hazard Industrial
Other Occupancies	Group D Business & Personal Services (Office) Group C Residential (Code above office)
Classifications	3.2.2.76 - Group F, Division 2, Up to 3 Storeys Contributable or Non-contributable
Permitted Construction	Fire Resistance Rating Floor Assemblies: Not less than 45 minutes Loadbearing: Not less than 45 minutes or non-combustible 60 min. FR required between each assembly Walls: 2x4 Wood studs @ 16" o.c. @ 2" o.c. 1/2" Type X GWB each side, no woodwork and bearing on steel
Warehouse (3.3.5.3)	Building Area (3.1.4.2)
Occupancy Fire Separations	Building 1: 1,212 sq. ft. (132,954 sq. ft.) Building 2: 1,500 sq. ft. (162,882 sq. ft.) Total: 2,712 sq. ft. (295,836 sq. ft.)
Prohibitions (3.1.3.1)	Between F2 and D - none (3.1.3.1) Between F2 and C - 1/2 hours One residential suite allowed in an F2 occupancy Storage: 2,100 sq. ft. (244,444 sq. ft.) Office: 12.2 sq. ft. (3 x 13 persons) Residence: 3 persons (subject to IRC code)
No. Storeys (3.2.1.1)	Warehouse: One Residence & Office Three: One
Fire Alarm (3.2.2.10)	One Not required
Tower Emission (3.4.2.3(1))	Travel distance to an exit or not more than 30 m. One hour required (3.2.2.3)
Sanction Room Separation	Storage: 40 - 10 x 20 (2) = 18 each sq. = 2 Firemark, 3 Main, plus 1 Unmarked. One unmarked and 3 marked = 3 permits provided. Workshops (3.7.2.2)
Accessibility (3.8.2.1.8)	Residence: One per dwelling. Two provided. Prohibit for all spaces except the 2nd floor residence.

REVISIONS

NO.	DATE	DESCRIPTION	BY
01	12/11/21	REV. 1/10/21	PHI
02	05/01/22	REV. 1/10/21	PHI
03	05/01/22	REV. 1/10/21	PHI
04	05/01/22	REV. 1/10/21	PHI
05	05/01/22	REV. 1/10/21	PHI
06	05/01/22	REV. 1/10/21	PHI

**PHI ARCHITECTURE INC.**  
27th Block Avenue, Station, BC, V0R 2V0  
pippo7@powandocinet.net 250.753.0437

**DRAWING INDEX**

- DP1: SITE PLAN
- DP2: BUILDING ONE FLOOR PLAN,  
BUILDING TWO FLOOR PLAN
- DP3: EXTERIOR ELEVATIONS,  
OUTDOOR FURNISHINGSCHEDULE  
SOUTHEAST PERSPECTIVE.

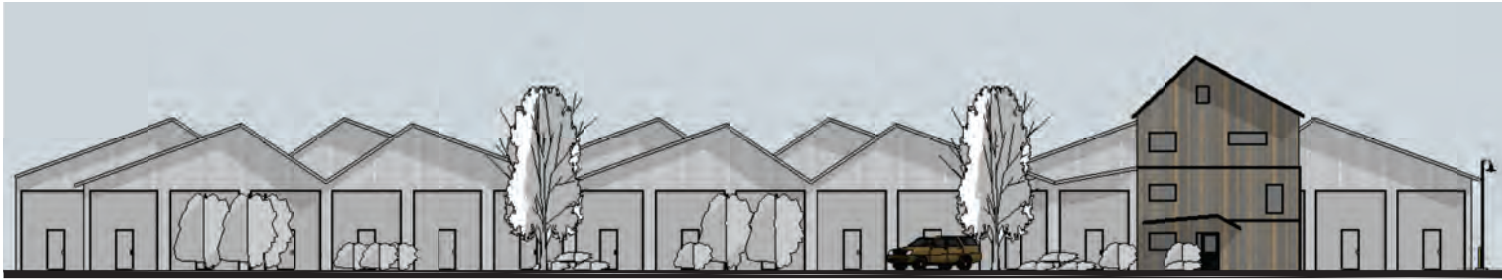
**CUMBERLAND STORAGE**

27th Block Avenue  
CUMBERLAND, BC

**SITE PLAN.**



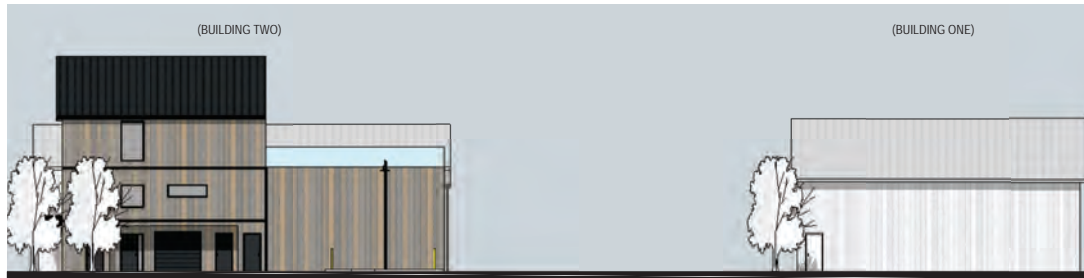
FILE	1275 - Cumberland St DP Aug	DATE	15 MAY 2022
BY	DM	DATE	15 MAY 2022
PROJECT NUMBER	1275	DRAWING NUMBER	DP 1 of 3



SOUTH (BECK AVENUE) ELEVATION



WEST ELEVATION



EAST ELEVATION

ROOF:	WESTFORM METALS PROLOK 12. STORAGE: STONE GREY. RESIDENCE: BLACK.	WINDOWS:	VINYL BLACK.
ROOF FLASHING:	TO MATCH ROOF.	OVERHEAD DOORS:	LIGHT GREY.
SOFFITS:	STORAGE: WHITE. RESIDENCE: BLACK.	DOORS:	STORAGE: LIGHT GREY. RESIDENCE: BLACK.
WALLS:	WESTFORM METALS HF-12W 24 GAUGE. STORAGE: CANYON AND STONE GREY (REAR WALLS) ALTERNATE: CEMENT FIBRE PANELS IN SIMILAR COLOUR. RESIDENCE: PONDEROSA ALTERNATE: CEMENT FIBRE PANELS IN SIMILAR COLOUR.		

EXTERIOR FINISH SCHEDULE



SOUTHEAST PERSPECTIVE

**REVISIONS**

NO.	DATE	DESCRIPTION	BY
01	01 Nov. 2022	RFI issued for review	JP
02	03 Nov. 2022	Issued for development permit	JP



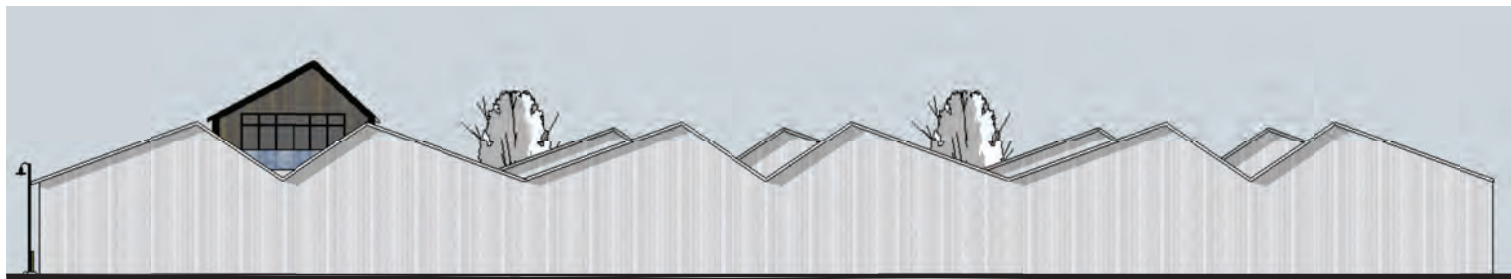
**PHI ARCHITECTURE INC**  
 PHILLIPA ATWOOD ARCHITECT  
 PHILLIPA ARCHITECTURE INC. 100% L1EED AP  
 Five Little Bear Way, Royston, BC, V0R 2V0  
 pippa@pawoodarchitect.ca 250.703.0433

PROJECT: **CUMBERLAND STORAGE**

27th BECK AVENUE  
CUMBERLAND, BC

DRAWING NAME: **EXTERIOR ELEVATIONS, EXTERIOR FINISH SCHEDULE, SOUTHEAST PERSPECTIVE.**

FILE:	1275 - Cumberland Stor OP.dwg	SCALE:	3/32"=1'-0"
DRAWN BY:	GW	DATE:	28 OCTOBER, 2022
PROJECT NUMBER:	1275	DRAWING NUMBER:	DP 3 of 3



NORTH ELEVATION

# Tree Island Subdivision

## Bio-inventory and Impact Assessment

### Version 2



Prepared for:

**Acciano Development Inc.**  
3747 Island Hwy S  
Courtenay, BC, V9N 9T4

September 3, 2019

Prepared by:

**Ecofish Research Ltd.**



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Published by Ecofish Research Ltd., Suite F, 450 8<sup>th</sup> St., Courtenay, B.C., V9N 1N5

For inquiries contact: Technical Lead [documentcontrol@ecofishresearch.com](mailto:documentcontrol@ecofishresearch.com) 250-334-3042

**Citation:**

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**Certification:** *Certified – stamped version on file*

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Wildlife Biologist/ Terrestrial Ecologist

Rachel Day, M.Sc., P.Geo. #37677  
Environmental Professional

**Disclaimer:**

This report was prepared by Ecofish Research Ltd. for the account of Acciano Development Inc. (Tree Island Yogurt). The material in it reflects the best judgement of Ecofish Research Ltd. in light of the information available to it at the time of preparation. Any use which a third party makes of this report, or any reliance on or decisions to be made based on it, is the responsibility of such third parties. Ecofish Research Ltd. accepts no responsibility for damages, if any, suffered by any third party as a result of decisions made or actions, based on this report. This numbered report is a controlled document. Any reproductions of this report are uncontrolled and may not be the most recent revision.

## EXECUTIVE SUMMARY

Acciano Development Inc is proposing to subdivide a 6.9 ha parcel (the Project area) within an area zoned for industrial use on Bevan Road in Cumberland, BC. Acciano Development Inc. retained Ecofish Research Ltd. to complete a bio-inventory for the Project as per the requirements of the Corporation of the Village of Cumberland Official Community Plan Bylaw No. 990. The bio-inventory covers the entire Project area proposed to be subdivided and the impact assessment is specific to the administrative subdivision and servicing.

A desktop background review and reconnaissance-level site survey were completed in March 2019 by a professional geoscientist and a professional biologist/professional forester to identify Environmentally Valuable Resources (EVRs) and Environmentally Sensitive Areas (ESAs) that may be present on or within 100 m of the Project area. The results of the bio-inventory and impact assessment for the Project area are presented for terrain and soils, hydrology and water quality, fish and aquatic ecosystems, terrestrial ecosystems and plants, and wildlife and wildlife habitat.

Topography of the Project area is relatively smooth and flat with well drained soils. Surface water is expected to infiltrate through the soil towards the unconfined sand and gravel aquifer (Aquifer No. 417) underlying the Project area. There are no waterbodies (e.g., streams, wetlands) or aquatic ecosystem areas mapped on or within 100 m of the Project area and no surface or groundwater was observed during the site survey. The nearest aquatic ecosystem is a fish-bearing wetland approximately 340 m from the Project area boundary. Roadside ditches between the Project area and Bevan Road were dry during the site survey; however, it is possible that during extremely heavy rains, water from the Project area may shed to these ditches, and that these ditches may be connected to wetlands or streams.

The Project area was logged in 2014/2015 and currently supports vegetation characteristic of the provincially red-listed western hemlock – Douglas-fir / Oregon beaked moss ecological community; including relatively rare western white pine, however, the ecological value of the young vegetation remaining after logging is lower than if the vegetation was at a later seral stage. No plant species at risk are documented to occur in the Project area, and none are expected. No invasive species designated as noxious under the *BC Weed Control Act* were identified in the Project area; however, other non-native invasive species were detected in the Project area (e.g., Scotch Broom, bull thistle, oxeye daisy, dandelion and clover).

No wildlife species at risk or wildlife habitat features have been detected on or within 100 m of the Project area. Use of the Project area for foraging by Mule Deer and a few avian species was confirmed during the site survey. Some avian species may also use the Project area for nesting. Although no wildlife trails were observed, wildlife (e.g., Mule Deer, Roosevelt Elk) likely pass through this area as they travel between seasonal foraging and breeding habitats and water sources. No amphibians or reptiles were observed during the site survey; however, Western Toads and other amphibian species may migrate across or seek cover in downed wood or soil in the Project area.

No ESAs or EVRs requiring buffers were identified on or within 100 m of the Project area, thus no restricted development or buffer zones have been designated.

Overall, in the context of the Project area being recently logged, in the vicinity of an active waste management facility, adjacent to a busy gravel road and active gravel mine, and being located over 340 m from an aquatic ecosystem, sensitive terrestrial ecosystem, park or protected area, Project development is expected to have a relatively minimal impact on the larger watershed area. Standard construction environmental best management practices for a Project of this size and type are expected to adequately mitigate potential impacts.

Appendix A details how Bylaw No. 990 conditions for DPA#1 Connectivity areas have been met by the development design and this bio-inventory, and recommends conditions of the development.



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- Appendix D. At-risk wildlife and plant species considered**

## 1. INTRODUCTION

Acciano Development Inc. is proposing to subdivide 6.18 ha of land (the Project/ Project area) on Bevan Road in Cumberland, BC (Map 1) into six properties. Acciano Development Inc. retained Ecofish Research Ltd. to complete a bio-inventory for the Project as per the Corporation of the Village of Cumberland (Village of Cumberland) Official Community Plan (OCP) requirements.

The subdivision includes the administrative creation of lots and physical servicing (i.e., installation of roads, power and water) of lots, as well as a greenway along Bevan Road (Drawing 1).

### 1.1. Bio-inventory Scope and Objectives

A bio-inventory is required for the Project under Bylaw No. 990 of the Village of Cumberland's OCP (VOC 2014a) and Develop with Care: Environmental Guidelines for Urban and Rural Land Development (MFLNRO 2014). The bio-inventory will contribute to the development permit application information required by the Village of Cumberland for permitting the Project. The bio-inventory and impact assessment cover the entire Project area proposed to be subdivided and serviced.

Specifically, the objectives of this bio-inventory are to:

- Describe the baseline environmental conditions of the proposed Project area;
- Assess the potential impacts of the proposed Project on environmentally valuable resources (EVRs) and environmentally sensitive areas (ESAs) including sensitive ecosystems and terrestrial ecosystems at risk, aquatic and riparian ecosystems, species at risk, and wildlife and wildlife habitat features;
- Determine mitigation measures to minimize potential Project impacts. Mitigation measures may include establishing protective buffers or working within timing windows to minimize effects associated with species' sensitive life history periods; and
- Assess the proposed development against DPA#1 Connectivity Area requirements.

### 1.2. Project Location and Zoning

The Project area is defined as Parcel 006-688-527 (Lot D), Section 34, Township 10, Comox District, located at approximately 10U 351569, 5501388, on Bevan Road in Cumberland, BC (Figure 1, Map 1, Drawing 1). Under the OCP, the Project area is zoned as an Industrial Area (Map C in the Official Community Plan) and is mapped as an Environmental Development Permit (DPA#1) Connectivity Area (Map E in the Official Community Plan) (VOC 2014b). The location and zoning of the Project area are summarized in Table 1.

### 1.3. Regional Ecological Context

The Project area falls within the Comox Valley Regional District (CVRD) and South Island Forest District, approximately 1 km northeast of Comox Lake and 5 km west of the Salish Sea. The Project area is approximately 2.5 km northwest of the developed urban core of Cumberland, BC and

approximately 500 m north of the Comox Valley Waste Management Centre, which includes the regional landfill (Map 1).

Environmentally, the Project area is within the Coastal Western Hemlock biogeoclimatic zone, Very Dry Maritime subzone, Eastern variant (CWHxm1) and the Nanaimo Lowlands Ecoregion. The CWHxm1 occurs at lower elevations (up to 700 m) on the east side of Vancouver Island and is characterised by warm, dry summers, and moist, mild winters with little snowfall (Green and Klinka 1994). Vegetation growth is constrained by water deficits over the long growing season. CWHxm1 zonal sites are typically dominated by Douglas-fir (*Pseudotsuga menziesii*), with western hemlock (*Tsuga heterophylla*) and some western redcedar (*Thuja plicata*). Dominant understory species of the CWHxm1 include salal (*Gaultheria shallon*), dull Oregon-grape (*Mahonia nervosa*), red huckleberry (*Vaccinium parvifolium*), step moss (*Hylocomium splendens*) and Oregon beaked moss (*Kindbergia oregana*).

The regional context of the Project area is summarized in Table 1.

**Table 1. Project location and context.**

Parameter	Details
<b><u>Location and Zoning</u></b>	
Municipality	The Corporation of the Village of Cumberland
Parcel Identifier	006-688-527
Legal Property Description	Section 34, Township 10, Comox District
Area	6.9 hectares
Property Center Coordinates	UTM Zone 10U Easting 351569 Northing 5501388
Municipal Zoning	Industrial (I)
Development Permit Area	DPA#1 Environmental Protection DPA Connectivity Area
<b><u>Regional Ecological Context</u></b>	
Regional District	Comox Valley Regional District
Forest District	South Island Forest District
Ecoregion	Eastern Vancouver Island
Ecoprovince	Georgia Depression
Ecosection	Nanaimo Lowlands
Biogeoclimatic Zone	Coastal Western Hemlock Zone Very dry maritime eastern variant (CWHxm1)

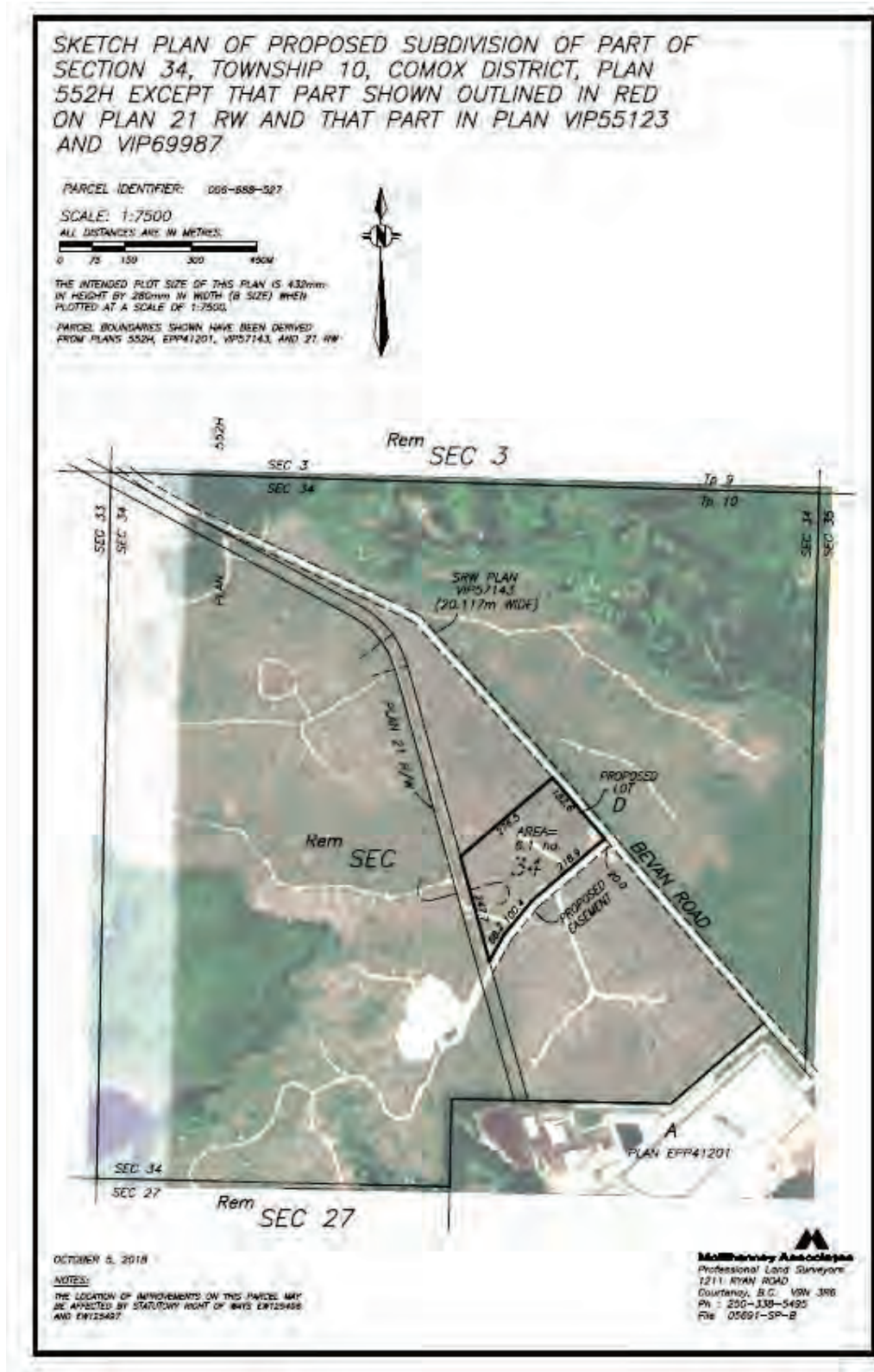
#### 1.4. Project Area-specific Context

The Project area-specific context, as investigated and described by LEA (2019) and Ryzuk Geotechnical (2019), and supported by Project specific work, is summarized here. The Project area is currently undeveloped, except for logging that occurred in approximately 1913 and 2014/2015. The Project area does not appear to have been used for illegal dumping and no contaminated site concerns were identified (Delaney, pers. comm. 2019).

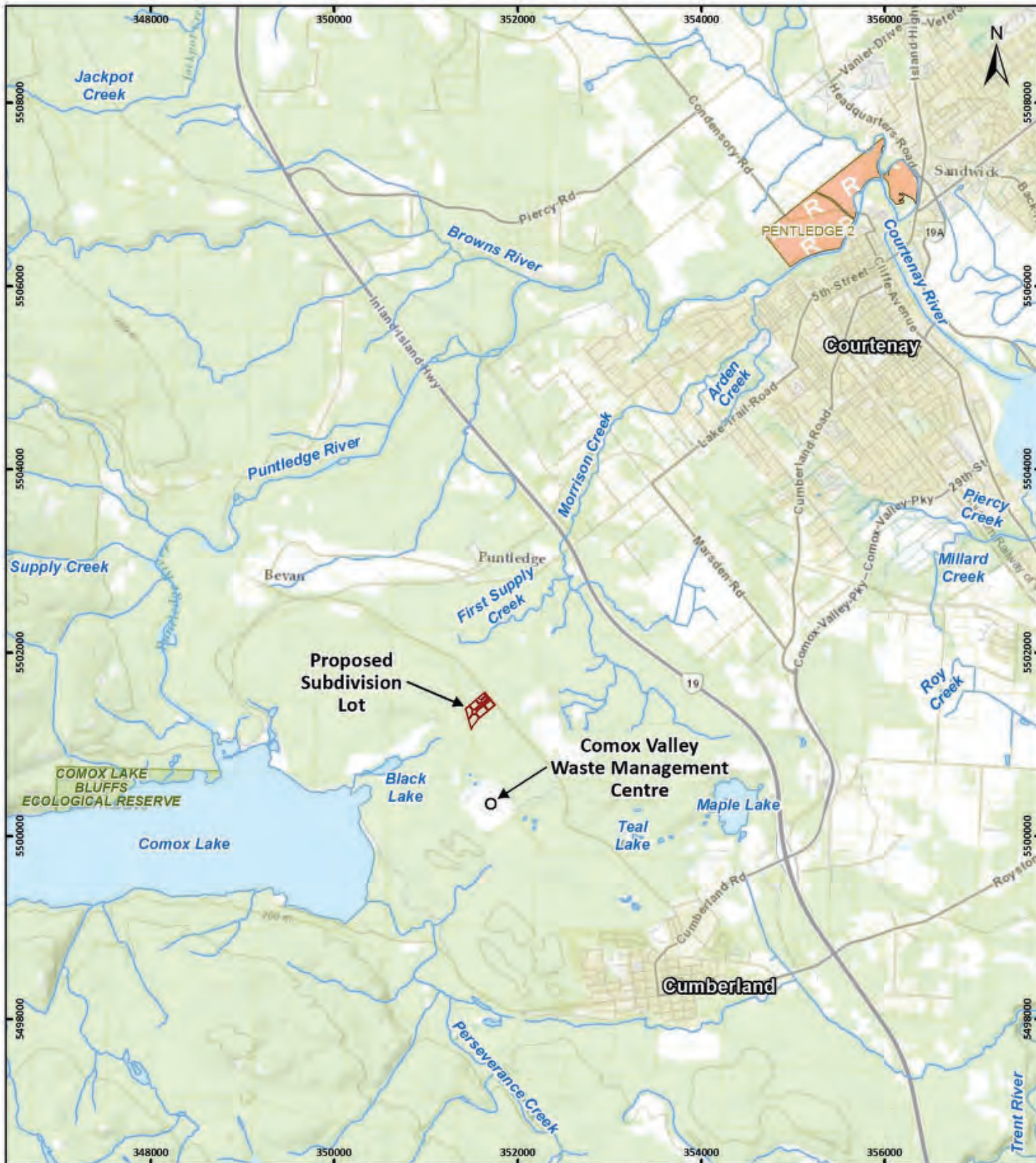
To the west, the Project area is bounded by a railway right-of-way (ROW) that was used to transport coal from approximately 1849 to 1964, and on the far side of the ROW an active gravel pit has existed since approximately 2015. Thus, this gravel pit currently nearly abuts the Project area boundary. The remaining parcels surrounding the Project area are undeveloped except for logging that occurred from approximately 1996 to 2015. The road and associated laydown area to the south of the Project area were cleared and constructed between 2007 and 2012, and the adjacent lands, except for a narrow strip of trees on the opposite side of Bevan Road, were logged between 2004 and 2012 (CVRD 2019a).








Figure 1. Plan of Lot D of Section 34, Township 10, Comox District (McElhanney 2018; date of background imagery unknown).

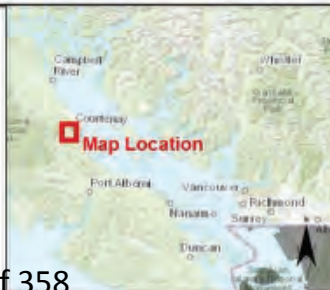


# Project Location



## Legend

-  Proposed Subdivision Lot
-  Streams
-  Parcel Boundary
-  Parks and Protected Areas
-  First Nation Reserve



**MAP SHOULD NOT BE USED FOR LEGAL OR NAVIGATIONAL PURPOSES**



NO.	DATE	REVISION	BY
1	2019/04/20	Initial Production	CGP
2			
3			
4			
5			

Date Saved: 09/04/2019  
Coordinate System: NAD 1983 UTM Zone 10E



Map 1

## 2. REGULATORY CONTEXT

### 2.1. Municipal

The OCP for the Village of Cumberland, including Bylaw No. 990, is enabled by the provincial *Local Government Act* (2015). In the OCP, the Village of Cumberland designated environmental protection Development Permit Areas (DPA#1) (VOC 2014a). Specifically, DPA#1 identifies sensitive aquatic and terrestrial ecosystem areas, as well as connectivity areas, for which development restrictions apply. The OCP and *Local Government Act* require that any alteration to the land in a Development Permit Area is prohibited unless the owner first obtains a development permit from the Village of Cumberland. The application for a development permit in DPA#1 areas must include a bio-inventory following the procedures detailed in *Develop with Care: Environmental Guidelines for Urban and Rural Land Development* (MFLNRO 2014) and fulfill the general requirements and applicable habitat-specific supplemental requirements (i.e., for aquatic or terrestrial ecosystem areas or connectivity areas) in the OCP, as listed in Section 10.1.5 and Section 10.1.6, respectively. A detailed summary of these requirements and how they are addressed in this report is provided in Appendix A.

### 2.2. Provincial

Provincial environmental legislation that may be relevant to Project development includes the:

- *Wildlife Act* (1996) which contains provisions to generally protect wildlife and wildlife habitat, including prohibitions against destroying a bird or its egg, the nest of an Eagle, Peregrine Falcon, Gyrfalcon, Osprey, Heron or Burrowing Owl, or the nest of any bird when the nest is occupied by a bird or its egg.
- *Water Sustainability Act* (2014) which regulates water withdrawal and physical works in and about streams;
- *Riparian Areas Protection Act* (1997) which, if enabled by municipal legislation (in this case, Village of Cumberland Bylaw No. 990), regulates development adjacent to streams through the establishment of riparian buffers to protect aquatic habitats through the *Riparian Areas Regulation (RAR)*; and
- *Weed Control Act* (1996) which requires land occupiers to control noxious weeds on their property.

### 2.3. Federal

Federal environmental legislation potentially relevant to Project development includes the:

- *Fisheries Act* (1985) which protects fish and fish habitat;
- *Migratory Birds Convention Act* (1994) (MBCA) which contains provisions to protect all migratory birds by prohibiting disturbance to nests or eggs and from polluting waters or areas frequented by migratory birds; and

- *Species at Risk Act* (2002) (SARA) which prohibits the destruction, harassment, capture or possession of species listed as threatened, extirpated or endangered and protects their critical habitat if it is on federal land, or if the species is aquatic or protected under the MBCA.

### 3. METHODS

For each of the subject areas below (terrain and soils, hydrology and water quality, fish and aquatic ecosystems, terrestrial ecosystems and plants, wildlife and wildlife habitat) the background review included a desktop review of documents previously developed for the Project (i.e., LEA 2019), and publicly available provincial databases, maps and reports.

A reconnaissance-level site survey was completed on March 26, 2019 by a professional geoscientist and a professional biologist/professional forester to identify EVRs and ESAs, including species at risk or of regional concern, sensitive ecosystems, hydrological features, fish and aquatic ecosystems, or geographical features that may be present in or within 100 m of the Project area as well as document the general environmental characteristics of the site. The survey was based on *Develop with Care* (MFLNRO 2014) and standard provincial methodologies for environmental data collection (MOF 2010). The entire Project area was surveyed for EVRs and ESAs and detailed environmental data were collected within three wildlife habitat plots (WHP) (Map 2). The locations of the three WHP were selected to be representative of the Project area. Within each WHP, data on site characteristics, soils, hydrology, vegetation, and wildlife use were collected, as outlined in the following sub-sections. Water quality was not assessed as there was no standing water or water within 0.5 m of the surface to assess.

#### 3.1. Terrain and Soils

##### 3.1.1. Background Review

Terrain and soils information available on iMapBC (DataBC 2019) and in background reports, including surficial geology and soils, was reviewed on and within 100 m of the Project area.

##### 3.1.2. Reconnaissance-level Site Survey

Terrain and soil field surveys were conducted to provide an overview of the environmental condition of the site. The surveys included measurements of slope and aspect, and a description of microtopography and slope position. Soil pits/auger holes were dug to 30 cm depth. Soils were classified by standard metrics including: texture, colour (Munsell 2009), nutrient regime, moisture regime, coarse fragment content and organic layers. These metrics are indicators of the productivity of the site.

#### 3.2. Hydrology and Water Quality

##### 3.2.1. Background Review

Freshwater atlas (e.g., streams, wetlands, watershed boundaries) and aquifer data publicly available on iMapBC (DataBC 2019) and iMapCVRD (CVRD 2019a) and background reports were reviewed on and within 100 m of the Project area.

### 3.2.2. Reconnaissance-level Site Survey

A reconnaissance-level site survey was conducted to examine any site drainage features, water shedding, collecting and conveyance areas. Surface and groundwater sources and flow, or lack thereof, were identified. *In situ* water quality measurements were not taken as no water was present on site.

## 3.3. Fish and Aquatic Ecosystems

### 3.3.1. Background Review

Freshwater atlas (e.g., streams, wetlands) and fish distribution data publicly available on iMapBC (DataBC 2019) and iMapCVRD (CVRD 2019a) and background reports were reviewed on and within 100 m of the Project area.

### 3.3.2. Reconnaissance-level Site Survey

A reconnaissance-level site survey was conducted to search for any aquatic ecosystems, or connections to aquatic ecosystems within 100 m of Project area.

## 3.4. Terrestrial Ecosystems and Plants

### 3.4.1. Background Review

#### 3.4.1.1. Ecosystems at Risk and Sensitive Ecosystems

Publicly available provincial and municipal databases were reviewed to identify at-risk terrestrial ecosystems that may occur in the Project area. The BC Conservation Data Center (CDC) database was searched for federally and provincially listed terrestrial forested ecosystems (ecological communities) at risk that are known to occur in the CVRD and CWHxm1 (CDC 2019a). Sensitive Ecosystem Mapping for the area conducted by the Canadian Wildlife Service (1991, 1999) and updated for the Comox Valley (2011, 2014) was reviewed (CVRD 2019a) to identify if any sensitive ecosystems are known to occur on, or within 100 m, of the Project area. Vegetation Resource Inventory (VRI) ecosystem mapping has not been completed for the area, and any Terrestrial Ecosystem Mapping (TEM) that may have been conducted by private forest companies is not publicly available. Historic orthophotographs were also reviewed to provide insight to the ecological and disturbance history of the Project area (CVRD 2019a).

#### 3.4.1.2. Plant Species at Risk

The BC Species and Ecosystems Explorer (CDC 2019a) was searched for federally and provincially listed plant species at risk that occur in the CVRD CWHxm1.

#### 3.4.1.3. Invasive Species

Provincial (i.e., Invasive Alien Plant Program, DataBC 2019) and municipal (CVRD 2019a) databases were searched for nearby occurrences of invasive plant species.

### 3.4.2. Reconnaissance-level Site Survey

#### 3.4.2.1. Ecosystems at Risk and Sensitive Ecosystems

Ecosystems were characterized from WHP (plot) data and a walkthrough of the Project area as per provincial methods for describing terrestrial ecosystems and conducting ecosystem mapping (MOF 2010, RIC 2000) by a qualified terrestrial ecologist experienced in air photo interpretation and familiar with ecosystems in the CWHxm1. As the entire assessment area (the Project area plus 100 m buffer) was determined to be the same ecosystem (BEC zone, site series and vegetation community) and of a similar age class, no ecosystem mapping was conducted.

#### 3.4.2.2. Plants Species at Risk

A reconnaissance-level site survey was conducted to identify potential plant species at risk and associated suitable habitat within the Project area. As the field survey was conducted just after snow melt, before herbaceous species would be expected to be detectable, the focus of the survey was to support an assessment of the likelihood of occurrence of plant species at risk in the Project area.

#### 3.4.2.3. Invasive Plant Species

Invasive plant species were searched for within the Project area, and if found, density and distribution were recorded and the species was classified by control priority, as per provincial legislation (i.e., *BC Weed Control Act*) and provincial and regional guidance (i.e., Invasive Alien Plant Program and Coastal Invasive Species Committee).

### 3.5. Wildlife and Wildlife Habitat

#### 3.5.1. Background Review

A list of wildlife species that are provincially or federally designated as at risk and potentially occur in within the CWH biogeoclimatic zone and Comox Valley Regional District (with the exception of marine and fully aquatic species) was compiled from the BC Species and Ecosystem Explorer (CDC 2019a). Wildlife species at risk and other species of regional importance were ranked for likelihood of occurrence within each assessment area, as per defined criteria below. The likelihood of occurrence ranking reflects publicly available wildlife occurrence data (i.e., CDC 2019a, DataBC 2019, E-Fauna BC 2019), personal communications, general knowledge acquired from working and living in the CVRD, and species-specific wildlife habitat suitability as assessed during the field surveys. Criteria are as follows:

- Confirmed. The species has been detected within the assessment area. Species presence information was observed during the field surveys and/or recorded from the desktop review.
- High. The current range and distribution of the species overlaps the assessment area. Highly suitable habitat is present within the assessment area; however, we have not detected the species directly during field visits or indirectly through the desktop review.

- Moderate. The current range and distribution of the species overlaps the assessment area. Sufficiently suitable habitat is present within the assessment area; however, we have not detected the species directly during field visits or indirectly through the desktop review.
- Low. The current range and distribution of the species overlaps or borders the assessment area; however, sufficiently suitable habitat is not present. We have not detected the species directly during field visits or indirectly through the desktop review.
- Negligible. The current range, distribution, or habitat requirements of the species do not overlap or border the assessment area. It is unlikely that the species is ever present within the assessment area.

Provincial and federal wildlife habitat designations (i.e., Critical Habitat for Federally-Listed Species at Risk, Ungulate Winter Ranges, and Wildlife Habitat Areas) were also reviewed for potential overlap with the Project area.

Wildlife species and habitat information collected during field surveys and the desktop review was evaluated to predict the likelihood of impacts of the proposed works. Moreover, the information collected and collated was used to characterize wildlife habitat and identify sensitive sites that may require special consideration during construction.

#### 3.5.2. Reconnaissance-level Site Survey

Wildlife habitat suitability was considered for all species at-risk and informed the likelihood of occurrence rankings (Section 3.5.1). Targeted species-specific wildlife surveys were not considered necessary and were not conducted because of the relatively low quality of habitat and likelihood of occurrence and detection of wildlife species at risk during the survey period; however, any wildlife species or wildlife sign (e.g., tracks, scat) that were detected were recorded as incidental observations. The survey was scheduled to meet Project timelines and did not occur during the peak avian breeding season or amphibian migration period.

## 4. RESULTS

### 4.1. Terrain and Soils

#### 4.1.1. Background Review

The topography of the Project area is described as relatively smooth and flat at an elevation of approximately 160 meters above sea level (LEA 2019, Ryzuk 2019).

Surficial geology is consistent for the entire Project area and consists of loamy sand of a glaciofluvial origin. These soils are classified as well drained, indicating that water is removed from the soil readily in relation to supply (DataBC 2019, Ryzuk 2019). A study of 24 test pits conducted by Ryzuk (2019) found all 2.3 m deep pits to be dry.

Based on the lithology of the nearest water well, located within 500 m of the Project area in the northern part of the landfill, sand with gravel is present from surface to a depth of 19.2 m below ground level (LEA 2019).

No coal was detected along the surface of the old railway ROW west of the Project area; however, there is potential for subsurface soil contamination from metals, polycyclic aromatic hydrocarbons (PAH), and light and heavy polycyclic aromatic hydrocarbons (LEPH/HEPH), in the vicinity of the entire old railway ROW (LEA 2019). The site is not considered a contaminated site (Delaney pers. comm. 2019).

#### 4.1.2. Reconnaissance-level Site Survey

Field observations confirmed information collated during the background review (Appendix B, Appendix C). The Project area was observed to be relatively smooth and flat (Figure 2). Soils were typically light reddish-brown (7.5YR 3/4) with a thin layer of overlying organic matter (< 10 cm) (Figure 3). Soils were typically a sandy to silty loam with a high percentage of coarse fragments (65-85%). The soil nutrient regime was generally classified as medium and the moisture regime was classified as sub-mesic to mesic. Soils were observed to be slightly moist, likely associated with recent snow melt (within the week prior). A higher organic matter content in the upper layer (FH/Ah) and slightly coarser sand was observed in soils in the middle of the Project area.

Due to the flat nature of the Project area, it is expected to have high stability and low erosion potential.

**Figure 2. Overview of general site topography on March 26, 2019.**





**Figure 3.** Soil auger sample on March 26, 2019.



## 4.2. Hydrology and Water Quality

### 4.2.1. Background Review

There are no waterbodies (e.g., streams, wetlands) or aquatic ecosystem areas mapped on or within 100 m of the Project area (DataBC 2019a, CVRD 2019a, VOC 2014c). The east side of the Project area is within the First Supply Creek watershed (Puntledge Watershed) and the west side is within the Comox Lake watershed (DataBC 2019 and LEA 2019) (Map 2). The Project area does not lie within a mapped floodplain (DataBC 2019 and LEA 2019).

Waterbodies located near the Project area include a pond area approximately 400 m to the southwest at the landfill, a tributary of Black Lake approximately 340 m to the west, First Supply Creek approximately 375 m to the northeast, and Nellie Creek approximately 520 m to the east (LEA 2019) (Map 3). First Supply Creek and Nellie Creek are tributaries of Morrison Creek.

Current climate data for the Comox Lake watershed (which will include higher precipitation and lower temperatures than the Project area due to the Project area being located in the lower elevations and in the rain shadow of the watershed) compiled by the Pacific Climate Impacts Consortium (PCIC) report on climate change states that annual precipitation in the Comox Lake watershed is 2,700 mm. The heaviest precipitation occurs during the fall and winter months (October through March, when precipitation exceeds 250 mm/month), while drier conditions prevail during the summer (May through September, when precipitation is < 100 mm/month). The Comox Lake watershed experiences mild temperatures, with an annual average of 6°C and monthly temperatures that are

above freezing for the majority of the year, ranging from a high of approximately 15°C in July and August and dipping slightly below freezing only in December and January. Snowfall in the lower elevations of the watershed (including the Project area) is transient.

The Pacific Climate Impacts Consortium (PCIC) projected changes in average (mean) temperature, precipitation and several derived climate variables from the baseline historical period, 1961-1990, to the 2050's for the Comox Valley region (Schnorbus 2018). The annual mean temperature is predicted to increase by 1.5°C by the 2050's. Annual precipitation is predicted to increase by 6%, with much of that increase occurring in winter (5%), while summer precipitation is predicted to decrease by 17%. Increase in winter precipitation is expected to occur as rainfall, as snowfall is predicted to be reduced by 36% in winter and 52% in spring.

Surface water is expected to infiltrate rapidly through the soil towards the unconfined sand and gravel aquifer (Aquifer No. 417) underlying the Project area (LEA 2019, Ryzuk 2019). Aquifer No. 417 is classified as IIIA aquifer, indicating a low density and moderate to high productivity with a high vulnerability from surface sources (DataBC 2019). Aquifer No. 417 is approximately 14.9 km<sup>2</sup>. The aquifer lies within the Capilano Sediments litho stratigraphic unit (glacially lain matrix, reddish-brown in colour with a coarse, sandy texture). Depth to water in the aquifer ranges from 2.44 to 20.42 m (DataBC 2019). Recharge to the aquifer is likely from precipitation (DataBC 2019). Nearby wells (No. 115760 and No. 115769), located at the Comox Waste Management Centre, indicate static water levels of 25.9 m and 19.5 m below top of casing, respectively. Due to the unconfined nature of Aquifer No. 417, there may be hydrologic connectivity with Aquifer No. 951, which underlies Morrison headwaters.

A groundwater well drilled by Drill Well Enterprises Ltd. exists in the northeast corner of the Project area (10U 351641 E, 5501543 N; Province of BC Well Identification Number 54689). Data from the well including a pump test conducted by Drill Well and groundwater quality analysis conducted by Maxxam are presented in Wedler (2019b). The well is not yet registered in the Provincial Groundwater wells database.

#### 4.2.2. Reconnaissance-level Site Survey

No surface or groundwater was observed at the time of the reconnaissance-level site survey (Figure 2). As a result, no *in situ* water quality measurements were taken. No surface hydrological features (e.g., water shedding, collection and conveyance areas) were observed on the Project area. Surface water is expected to infiltrate through the well drained soil towards the unconfined aquifer. Roadside ditches between the Project area and Bevan Road were dry during the site survey; however, it is possible that during extremely heavy rains, water from the Project area may shed to these ditches, and that these ditches may be connected to wetlands or streams. It is expected that water would run west in the Bevan ditches to the low point of land at the provincially mapped watershed boundary and then infiltrate north towards First Supply Creek.

### 4.3. Fish and Aquatic Ecosystems

#### 4.3.1. Background Review

There are no waterbodies (e.g., streams, wetlands) or aquatic ecosystem areas mapped on or within 100 m of the Project area (DataBC 2019, CVRD 2019a, VOC 2014b). The nearest aquatic ecosystem (and confirmed fish-bearing waterbody) is approximately 340 m from the Project area (DataBC 2019, CVRD 2019a).

#### 4.3.2. Reconnaissance-level Site Survey

No surface water or evidence of ephemeral aquatic ecosystems were observed on or within 100 m of the Project area, with the possible exception of roadside ditches along Bevan Road, which were dry at the time of the survey (see Section 4.2.2).

### 4.4. Terrestrial Ecosystems and Plants

#### 4.4.1. Background Review

##### 4.4.1.1. Ecosystems at Risk and Sensitive Ecosystems

The Project area is situated in the CWHxm1 biogeoclimatic zone. All but one of the naturally occurring terrestrial ecosystems (ecological communities) in the CWHxm1 are considered at risk (red or blue-listed) (CDC 2019a). However, the conservation value of forested ecosystems increases as they mature to older structural stages (e.g., old growth forest vs. short shrub) and the vegetation composition trends towards the climax ecosystem which is more representative of the described ecological community (CDC 2019b).

Sensitive Ecosystem Inventory (SEI) mapping for the Comox Valley (CVRD 2019a) does not show any sensitive ecosystems on, or within 100 m of the Project area. The closest mapped sensitive ecosystems are wetlands located approximately 340 m northeast and southwest of the Project area (CVRD 2019a).

A review of historic orthophotographs confirm that the Project area has been subject to recent (2014/2015) logging activity (Section 1.4) (Map 2).

##### 4.4.1.2. Plant Species at Risk

No plant species at risk are documented to occur on the Project area, and none are expected as most plant species at risk that are known to occur in the CWHxm1 and Comox Valley Regional District are associated with shallow soil and wetland ecosystems (CDC 2019a, Appendix D).

##### 4.4.1.3. Invasive Plant Species

No invasive noxious plant species have been documented to occur on or within 100 m of the Project area. Spotted knapweed (*Centaurea stoebe* ssp. *micranthos*), which is considered noxious by the provincial *Weed Control Act*, is the only invasive plant species documented in the vicinity of the Project area. The nearest spotted knapweed occurrence is approximately 900 m southeast of the Project area along Bevan Road at the Comox Valley Waste Management Centre (CVRD 2019a, Map 1).

#### 4.4.2. Reconnaissance-level Site Survey

##### 4.4.2.1. Ecosystems at Risk and Sensitive Ecosystems

Results of the field survey confirmed that the entirety of the Project area, as well as a 100 m buffer surrounding the Project area, is comprised of the provincially red-listed western hemlock – Douglas-fir / Oregon beaked moss (*Tsuga heterophylla* – *Pseudotsuga menziesii* / *Eruhyinchium*) ecosystem. This is the zonal (average) ecosystem that occurs in the CWHxm1 on sites with a very poor to medium nutrient regime and sub-mesic to mesic moisture regime. However, because the entirety of the Project area was recently logged (for the second time in recent history) and is in a shrub seral stage, with only a few residual standing young trees, the ecological value is lower than if the vegetation was at a later seral stage.

Vegetation on the Project area was mostly comprised of young planted and naturally regenerating trees (4-7 years old) and understory shrubs (30-50% cover), as well as herbs (8-20% cover) and mosses (25-35% cover). Some patches of young western redcedar, up to 2 m tall, and dispersed approximately 40-year-old western white pine (*Pinus monticola*) and western redcedar trees, up to 20 m tall (~1% cover), were retained during recent forest harvesting. The majority of the young planted and naturally regenerating trees were Douglas-fir, followed by western white pine, western hemlock and western redcedar. The shrub layer was dominated by salal, followed by Oregon grape and red huckleberry. The herb layer included trailing blackberry (*Rubus ursinus*), twinflower (*Linnaea borealis*), grasses and small sedges. The moss layer was dominated by step moss. It is of note that mature western white pine is rare in the CWH after a white pine blister rust spread through BC in approximately 1930 (Hunt 2009). The Project area supports an unusually high abundance of young specimens of the species. This species root systems are particularly sensitive and located close to the soils surface (MFLNRO 2019).

No ESAs were detected on or within 100 m of the Project area. Specifically, there were no mature terrestrial areas or aquatic ecosystem areas.

##### 4.4.2.2. Plant Species at Risk

No plant species at risk were detected during the reconnaissance-level field survey. Furthermore, none of the plant species at risk present within the CVRD and CWHxm1 (Appendix D) are expected to occur within the Project area based on habitat characteristics observed in the field (i.e., young seral stage, zonal site series).

##### 4.4.2.3. Invasive Plants

No invasive species designated as noxious under the *BC Weed Control Act* were identified in the Project area. However, Scotch broom (*Cytisus scoparius*), a species designated as ‘strategic control’ by the Coastal Invasive Species committee (CISC 2016), was detected on dry disturbed sites including along current and deactivated roads. The ‘control’ designation means that the species should be locally controlled when it poses a threat to sensitive ecosystems or other objectives such as ecosystem restoration. Bull thistle (*Cirsium vulgare*) and oxeye daisy (*Leucanthemum vulgare*), which have recently been removed from the Coastal Invasive Species committee priority lists, were detected sporadically

around the Project area, and along disturbed roadsides and other places with soil disturbance, respectively. Other non-native species that are not identified as priority invasive species such as dandelion and clover also occur in the Project area.

Invasive species surveys were conducted prior to leaf-out of most species. Therefore, an additional invasive species survey should be conducted during the growing season and prior to development proceeding (e.g., June) to identify whether other species currently exist in the Project area.

#### 4.5. Wildlife and Wildlife Habitat

##### 4.5.1. Background Review

##### 4.5.1.1. Species at Risk and of Regional Concern

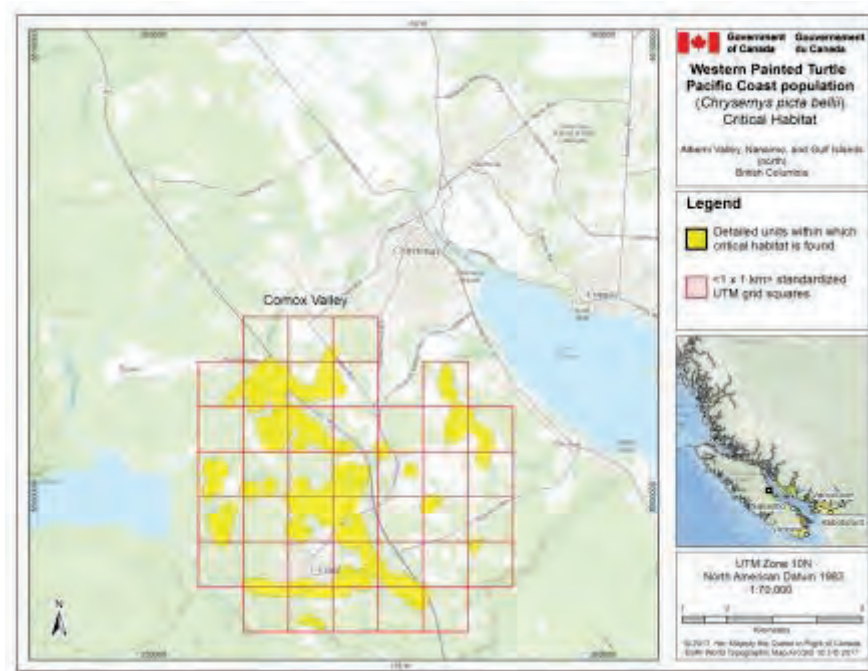
A list of wildlife species at risk and their likelihood of occurrence in the Project area is included in Appendix D.

#### *Herpetofauna*

There are no records of amphibian species at risk on or within 100 m of the Project area; however, two amphibian species at risk, Western Toad (*Anaxyrus boreas*) and Northern Red-legged Frog (*Rana aurora*), have been recorded within 5 km, along with other amphibian species that are not considered at risk (DataBC 2019).

There are no records of reptile species at risk on or within 100 m of the Project area; however, Western Painted Turtles (*Chrysemys picta*) have been documented within 5 km of the Project area (DataBC 2019) and critical habitat has been identified in several locations nearby (ECCC 2018), but not overlapping the Project area (Figure 4).

Figure 4. Mapped critical habitat for Western Painted Turtle (ECCC 2018).



### Birds

There are no records of avian species at risk on or within 100 m of the Project area (DataBC 2019); however, several avian species at risk have been recorded within 5 km of the Project area. One avian species at risk, Common Nighthawk (*Chordeiles minor*), has been detected in nearby areas (English, pers comm. 2018) during a province-wide survey program. Common Nighthawks nest on the ground from mid-May to late July (BSC 2019). Western Screech-owls (*Megascops kennicottii kennicottii*), Northern Goshawks (*Accipiter gentilis laingi*), and Great Blue Herons (*Ardea herodias fannini*) have also been recorded within 5 km of the Project area. Western Screech-owls nest in cavities in deciduous and mixed wood riparian forests. Northern Goshawks nest and forage in mature and old-growth forest. Great Blue Herons usually nest colonially in mature trees. Therefore, there is no suitable nesting habitat for these species in the Project area. The closest Bald Eagle (*Haliaeetus leucocephalus*) nest (an EVR) is located approximately 900 m southeast of the Project area (WISA 2019) (but there is no nesting habitat in the Project area) (Map 4).

### Mammals

There are no records of mammal species at risk on or within 100 m of the Project area (DataBC 2019). Furthermore, no ungulate winter range or wildlife habitat areas have been legally designated or proposed in the vicinity of the Project area (DataBC 2019). However, it is expected that Elk (*Cervus elaphus roosevelti*) migrate north-south through the area as Comox Lake provides a movement obstacle for the species to the west and the Highway 19 provides an obstacle to the east.

### *Invertebrates*

There are no records of invertebrate species at risk on or within 100 m of the Project area (DataBC 2019); however, one invertebrate species at risk, the Common Wood-nymph (*Ceryonis pegala incana*), has a moderate likelihood of occurring in the Project area based on known distribution and habitat requirements including roadsides and clearcuts (Appendix D). The foodplants of the larval Common Wood-nymph are thought to be grasses (E-Fauna BC 2019).

#### 4.5.1.2. Wildlife Habitat Features

No wildlife habitat features have been provincially mapped on or within 100 m of the Project area (Wildlife Habitat Features Layer; DataBC 2019). Wildlife habitat features include structures that are critical to wildlife species such as nest sites or locally important mineral licks. Wildlife habitat features may include wildlife trees, dens or nest sites, mineral licks, basking sites, caves, cliffs, rocky outcrops, aquatic areas, or structures potentially used for bat or avian nesting or roosting.

No aquatic habitats are located on or within 100 m of the Project area (Sections 4.2.2 and 4.3.2).

### 4.5.2. Reconnaissance-level Site Survey

#### 4.5.2.1. Species at Risk and of Regional Concern

### *Herpetofauna*

No herpetofauna were detected during the field survey. The Project area and surrounding 100 m do not contain moderate or high value amphibian habitat such as wetlands, streams, abundant moist woody debris, or old-growth forest. The lack of surface water on the Project area makes it unsuitable for Western Painted Turtles or breeding Northern Red-legged Frogs and Western Toads. The Project area also does not contain mature forest habitat (including substantial leaf litter and coarse woody debris) required by Wandering Salamander (*Aneides vagrans*). Nevertheless, Western Toads and other amphibian species may migrate across or seek cover in downed wood or soil in the Project area.

### *Birds*

No avian species at risk were detected in the Project area. One Pileated Woodpecker (*Dryocopus pileatus*) was observed feeding on one of the second growth (approximately 20 cm dbh) western redcedar on the Project area. Droppings at the base of the tree indicated the tree was used for perching by other avian species as well, indicating the value of these residual trees on the landscape. Several Bald Eagles and Common Ravens (*Corvus corax*) were observed in the Project area, likely attracted to the area by human food waste at the Comox Valley Waste Management Centre. None of the trees in the Project area were large enough to provide raptor or cavity nesting habitat. Dark-eyed Juncos (*Junco hiemalis*), a songbird that nests in short shrubs, were observed within suitable habitat in the project area. Habitat is likely suitable for Common Nighthawk nesting, however, it is unlikely to provide high to moderately suitable nesting habitat for other avian species at risk.

### *Mammals*

No high or moderate value habitat for mammal species at risk was present in the Project area. Abundant Mule Deer (*Odocoileus hemionus*) sign was observed within the Project area indicating that Mule Deer likely forage on the young vegetation in the area. Roosevelt Elk may occasionally pass through or near the Project area. Although the Project area contains ungulate foraging habitat it has been recently logged and thus does not contain suitable winter foraging habitat or thermal cover, which is largely characterized by a snow-intercepting canopy and is considered to be limiting seasonal habitat for ungulates.

### *Invertebrates*

It is unlikely that invertebrate species at risk would be detected without the use of targeted surveys, which were not conducted during the reconnaissance-level site survey. Nevertheless, clearcut and roadside habitat is not thought to be limiting for the one invertebrate species at risk with a moderate likelihood of occurring in the Project area, the Common Wood-nymph.

#### 4.5.2.2. Wildlife Habitat Features

No significant wildlife habitat features were observed in the Project area and the Project area is not expected to contain any significant wildlife habitat features. The larger residual young standing trees in the Project area were observed to be used for avian foraging and perching (Section 4.5.2.1). No wildlife trails were observed during the reconnaissance-level site survey; however, wildlife likely pass through this area as they travel between seasonal foraging and breeding habitats and water sources.

## **5. IMPACT ASSESSMENT FOR THE SUBDIVISION AND INSTALLATION OF SERVICING**

The development permit application to subdivide Lot D into six properties (Map 2, Drawing 1) involves the administrative exercise of subdivision and land development for installing services (i.e., water, sewer, road access to lots, road drainage) (Wedler 2019), as well as dedication and construction of a greenway. The total area of the subdivision is planned to be 6.18 ha, with the total area of asphalt planned to be 2,742 m<sup>2</sup>, with servicing installation requiring ground disturbance to a maximum depth of 2 m with an average depth of 1.2 m, and an asphalt pumphouse of 3 m x 5 m. In addition, a greenway path is planned to run along Bevan Road as requested by the Village as the park dedication. The total greenway area is planned to be 886 m<sup>2</sup>. As the Project area is within an area zoned as DPA#1 Connectivity area, the development is assessed against relevant bylaw requirements in Appendix A.

At this stage in design development, general potential impacts from the construction and operation of services can be well predicted and general mitigations are provided. Once the servicing contracts have been awarded and detailed designs confirmed, detailed mitigations for some potential impacts must be confirmed and written into future plans, such as an Erosion and Sediment Control Plan and detailed site plans, as per Appendix A to be in compliance with Bylaw No. 990. A summary of potential



impacts of installing servicing for each of the five environmental resource categories is provided below.

#### 5.1. Terrain and Soils

Terrain and soils may be lost, altered or degraded through soil removal, vegetation clearing and grubbing, regrading, excavating, infilling and compaction from machinery and vehicles associated with installation of servicing, construction of roads, and the greenway. Standard mitigation measures to minimize these impacts include minimizing site disturbance outside of the permanent footprint, stockpiling top soils for use in reclamation, and decompacting, rehabilitating and revegetating areas within the temporary construction footprint as soon as possible after construction.

As the Project area is flat, and installation of servicing will not result in ground disturbance below a depth of 2 m, with most servicing at a depth of 1.2 m, Ryzuk (2019) recommended that if trenching is done at a ratio of 1:1 (horizontal: vertical) the potential for erosion or slope instability is low. However, an Erosion and Sediment Control (ESC) will be developed and followed for this work.

Soil may also be contaminated through accidental spills of fuels or other hazardous materials. Standard mitigation measures to minimize the risk of accidental spills include double containment of hazardous materials stored in stationary equipment capable of holding 110% of the fluid contents, maintaining a large spill kit on site and immediately cleaning up accidental spills, placing a containment tray under machinery and vehicles not in use for an extended period of time, and ensuring equipment arrives on site in a clean condition and is well maintained to be free of leaks.

Specific potential impacts and conceptual mitigations are provided in Table 2.

Based on the implementation of prescribed mitigation measures and the scale and location of the anticipated works and activities associated with Project construction and operation, no residual impact to ESAs or EVRs is anticipated. Soil alteration is expected to be limited to the Project area and there is only a low likelihood of accidental spills of fuels or other hazardous materials.

**Table 2. Potential impacts and conceptual mitigations for terrain and soils.**

Environmentally Valuable Resource	Potential Impact	Effect Pathway	Mitigation	Residual Impact	Relevant Legislation and Best Management Practices
Soils	Soil loss, alteration or degradation, soil erosion	Clearing, grubbing, regrading, excavating, infilling, and soil compaction from machines and vehicles	Clearing, grubbing, site regrading, excavating, infilling and other site disturbance will be minimized to the extent possible, especially outside of the permanent footprint of impervious surfaces.	Soil alteration within the permanent Project footprint	Develop with Care (MFLNRO 2014)
			The area of machine use will be minimized to the extent possible, especially outside of the permanent footprint of impervious surfaces.		
			Top soils will be stockpiled separately and used to cover exposed mineral soils and for onsite landscaping during site reclamation, if applicable. Stockpiled soils will be covered during wet weather.		
			A sediment and erosion control plan will be developed and implemented for all ground works.		
			Temporarily disturbed areas will be rehabilitated and revegetated, as soon as possible. Rehabilitation will include decompacting soils that were compacted within the temporary construction footprint, if applicable.		

Table 2. Continued.

Environmentally Valuable Resource	Potential Impact	Effect Pathway	Mitigation	Residual Impact	Relevant Legislation and Best Management Practices
Soils (continued)	Soil contamination	Accidental spills of fuels or hazardous materials	Accidental spills onto soil or vegetation will be immediately cleaned using appropriate methods and materials (all contaminated soil will be excavated and removed from site to a certified treatment facility with chain of custody documents kept). A large spill kit will be available on site. Stationary equipment containing hazardous fluids will be in double containment capable of holding 110% of the fluid contents. Machines and vehicles not in use for an extended time will have a containment tray placed under the engine. Equipment will arrive on site in a clean condition and will be well maintained and free of fluid leaks.	Low likelihood of accidental spills contaminating soil	Develop with Care (MFLNRO 2014)

## 5.2. Hydrology and Water Quality

No watercourses occur on the property; however, hydrology and water quality may be altered through impacts to the aquifer and aquatic ecosystems that may be connected to the Project area by surface or subsurface hydrological pathways.

There may be surface connection between the Project area and aquatic ESA's through roadside ditches. The total asphalt area of proposed roads is 2,742m<sup>2</sup>. Although the infiltration rate is expected to be very high (Ryzuk 2019, Lewkowich 2019), during extremely heavy rains, water may be shed from roads in the Project area into roadside ditches adjacent to Bevan Road. Water from these ditches is expected to run northwest towards First Supply Creek. Similarly, potential impacts to the aquifer include an alteration of the infiltration rate or ground water flow patterns resulting from the alteration of landscape slopes and the construction of impervious surfaces. Roadside ditches installed in the Project area will be designed to maximize infiltration thus minimizing the amount of water that leaves the Project area through surface pathways. The specific performance target for onsite rainwater capture and control will be to maintain pre-development flows from the subdivision up to the 5-year design storm. It is proposed that road drainage be managed with rock filled French drains. These have the complimentary effects of providing detention of run-off from the roads, treatment of the rain run off, and detention with infiltration into surrounding soils. Standard mitigation measures to minimize these impacts include managing rainwater in accordance with provincial and federal BMPs (MWLAP 2002a,b, DFO undated). It is also recommended that the Water Balance Model Express online tool, developed for the CVRD (2019b), be consulted to identify specific Low Impact Development (LID) design features that will minimize impacts to hydrology and water quality, such as rain gardens, infiltration swales and chambers. Existing groundwater hydrology will be maintained to the extent possible and natural hydrological patterns will be restored where practicable. The amount of runoff from roads expected to run off the Project area and infiltrate on site should be provided prior to construction and the potential effects of the calculated amount of runoff assessed.

The aquifer and aquatic ecosystems may also be impacted through pollution of ground or surface water resulting from stormwater run off or accidental spills during construction or operation. To avoid potential impacts from accidental spills or wastewater runoff, any concrete or other toxic runoff during construction will be contained and collected so that it does not enter any roadside ditch and any runoff into ditches connected to wetlands or streams will meet BC Approved Water Quality Guidelines for Aquatic Life, Wildlife and Agriculture (MOECCS 2018). An Erosion and Sediment Control Plan will be developed and implemented during construction. All infrastructure will meet or exceed Village requirements including installation of oil-grit separators in storm drains positioned to catch water from all hard-surfaced areas to mitigate potential contamination of the aquifer. This infrastructure is demonstrated to capture 90% of total suspended solids (TSS) and hydrocarbons in the first (most contaminated) storm after prolonged dry periods and all of the TSS and hydrocarbons in subsequent rain events.

Aquatic ecosystems potentially connected during extremely heavy rains to roadside ditches adjacent to the Property may be impacted through the introduction of sediment as a result of clearing, grubbing, regrading, excavating and infilling. To minimize these impacts, standard erosion and sediment control measures will be implemented to control source erosion and prevent sediment from entering roadside or railway ditches. If surface water is present in ditches adjacent to the Project area and these ditches are connected to aquatic ecosystems an Erosion and Sediment Control (ESC) Plan should be developed and implemented. Mitigation measures in the ESC may include minimizing the amount of disturbed ground at any one time and quickly providing surface protection (e.g., mulch, vegetation). In addition, stockpiled soil will be covered with a secured tarp or plastic to prevent runoff, as well as to avoid colonization by invasive plant species. Mitigation measures implemented to minimize impacts to terrain and soils will also minimize impacts to hydrology and water quality.

Water servicing for the property will initially be from an existing well (# 54689) drilled on the property into aquifer 417. This is an unconfined aquifer in the Comox Lake Watershed. This aquifer may be connected to an adjacent aquifer which feeds the Morrison Headwaters, an ecologically sensitive system. Water will not be withdrawn from the well at this phase except for testing. Furthermore, a provincial *Water Sustainability Act* permit is required for future groundwater use from this well. The Province will require confidence that watershed level effects are low before issuing a permit. The permit application for well use cannot be submitted until the property is transferred to the applicant.

Specific potential impacts and conceptual mitigations are provided in Table 3.

Based on the implementation of prescribed mitigation measures and the scale and location of the anticipated works and activities associated with Project construction and operation, minimal residual impact to ESAs or EVRs is anticipated. Soil alteration is expected to be limited to the Project area and there is only a low likelihood of accidental spills of fuels or other hazardous materials. Potential impacts to water infiltration and flow are expected to be small and there is low likelihood of accidental spills that may contaminate ground or surface water. Little to no water is expected to be withdrawn from the aquifer.

**Table 3. Potential impacts and conceptual mitigations for hydrology and water quality.**

Environmentally Valuable Resource	Potential Impact	Effect Pathway	Mitigation	Residual Impact	Relevant Legislation and Best Management Practices
Aquifer and aquatic ecosystems	Pollution of ground water (i.e., aquifer) or surface water	Wastewater discharge during construction or operation	Mitigation measures implemented to minimize impacts to terrain and soils will also minimize impacts to hydrology and water quality. Development and Adherence to an Erosion and Sediment Control Plan (ESC)	Low likelihood of accidental spills or other pollution contaminating ground water or surface water	Develop with Care (MFLNRO 2014)  Federal <i>Fisheries Act</i> , Provincial <i>Water Sustainability Act</i>
			Any runoff from the site will meet BC Approved Water Quality Guidelines for Aquatic Life, Wildlife and Agriculture before entering any ditch that may be connected to a watercourse or other aquatic feature. Any concrete or other toxic runoff will be contained and collected so that it does not enter any ditch that may be connected to a stream or wetland.		BC Approved Water Quality Guidelines: Aquatic Life, Wildlife and Agriculture (MOECCS 2018)
	Accidental spills of fuels or hazardous materials		Any spills will be contained and cleaned up immediately.		

**Table 3. Continued.**

Environmentally Valuable Resource	Potential Impact	Effect Pathway	Mitigation	Residual Impact	Relevant Legislation and Best Management Practices
Aquifer and aquatic ecosystems (continued)	Introduction of sediment to surface water bodies	Earthworks including clearing, grubbing, regrading, excavating, and infilling	<p>If there is surface water in roadside or railway ditches (any time of year) and these are connected to a stream or wetland, then an Erosion and Sediment Control Plan (ESC) will be developed and implemented to prevent sediment contributions to local streams (depending on connectivity to streams, storm water systems and season of construction). Emphasis will be on source erosion control by minimizing the amount of disturbed ground at any one time and quickly providing surface protection with vegetation, mulch etc. Stockpiled soil will be covered with a secured tarp or plastic to prevent runoff.</p>	Low likelihood of sediment entering streams or wetlands	

Table 3. Continued.

Environmentally Valuable Resource	Potential Impact	Effect Pathway	Mitigation	Residual Impact	Relevant Legislation and Best Management Practices
Aquifer (continued)	Alteration of infiltration rate and flow patterns	Alteration of landscape slopes and construction of impervious surfaces	Rainwater will be managed in accordance with provincial and federal BMPs (MWLAP 2002, DFO undated). The Water Balance Model Express online tool, developed for the Comox Valley Regional District, will be consulted to minimize impacts to hydrology and water quality. This will include managing rainwater on site and maintaining pre-development drainage flows to the extent possible (i.e., effort will be made to infiltrate 90% or more of mean annual rain water within the footprint of the lot using Low Impact Development (LID) BMP's such as permeable paving, rain gardens, infiltration swales and chambers. Existing groundwater hydrology will be maintained to the extent possible. Natural hydrology patterns will be restored where practicable.	Relatively minor impact to water infiltration and flow	Stormwater Planning: A Guidebook for British Columbia (MWLAP 2002) Standards and Best Practices for Instream Works: Urban Stormwater Management (DFO undated)
Aquifer	Alteration of water level in aquifer or adjacent aquifers	Withdrawal from aquifer	No water will be withdrawn from aquifer at this phase.	None	<i>Water Sustainability Act</i>



### 5.3. Fish and Aquatic Ecosystems

There are no expected impacts to fish and aquatic ecosystems. Mitigation measures implemented to minimize impacts to hydrology and water quality (Table 3) will also minimize impacts to fish and aquatic ecosystems, which are potentially connected by surface flows to roadside ditches between the Project area and Bevan Road during extremely heavy rains, and to adjacent watersheds through subsurface flows.

### 5.4. Terrestrial Ecosystems and Plants

Potential impacts to an at risk ecological community includes habitat loss and/ or disturbance and colonization by invasive species. Within the servicing construction footprint, the shrub stage (approximately five years old) of the provincially red-listed western hemlock – Douglas-fir / Oregon beaked moss ecological community will be cleared. Some young western white pine trees (approximately 40 years old), which are not provincially or federally designated as at risk, but are relatively rare due to a historic pathogen epidemic will also be cleared within the construction footprint. Standard BMPs and mitigation measures, including retaining older trees within temporary clearing areas where feasible and revegetating temporary clearing areas with native vegetation as soon as possible, will minimize potential impacts. Areas temporarily disturbed during installation of servicing will be revegetated with native local seed mix or stock if they will not be further developed within a year or before the rainy season (i.e., October-April) to mitigate invasive species colonization and runoff. The risk of colonization of invasive species from machinery, vehicles or crew member belongings will be minimized by standard construction BMPs, such as ensuring machinery and construction crews entering and leaving the site are free of soil and vegetation that may contain invasive plant species or their seeds. If noxious weeds (as per the *BC Weed Control Act*) or high priority weeds (as per the Coastal Invasive Species Committee (CISC 2016)) colonize the Property they will be controlled as per the *Weed Control Act* and BMPs. Mitigation measures implemented to minimize impacts to terrains, soils, hydrology and water quality will also minimize impacts to terrestrial ecosystems and plants.

Specific potential impacts and conceptual mitigations are provided in Table 4.

Based on the implementation of prescribed mitigation measures, the scale and location of the anticipated works and activities associated with Project construction and operation, and the current condition of habitat on the Property, no residual impact to ESAs or EVRs is anticipated. Habitat loss will be limited to the Project area and there is only a low likelihood of introduction of invasive species, or spread of invasive species currently established on and around the Property due to Project construction or operation.

**Table 4. Potential impacts and conceptual mitigations for terrestrial ecosystems and plants.**

Environmentally Valuable Resource	Potential Impact	Effect Pathway	Mitigation	Residual Impact	Relevant Legislation and Best Management Practices
At risk ecological communities and plants	Disturbance and/or loss of the provincially red-listed western hemlock - Douglas-fir/ Oregon beaked moss ecological community Loss of young western white pine (relatively rare but not considered at risk)	Clearing, grubbing, regrading, excavating, infilling, and soil compaction from machines and vehicles	Mitigation measures implemented to minimize impacts to terrains, soils, hydrology and water quality will also minimize impacts to terrestrial ecosystems and plants. Provincial BMPs (MFLNRO 2014) will be followed to the extent practical to minimize impacts. Project design will minimize Project footprint. Where vegetation clearing is required, mature trees and western white pine will be retained wherever possible. Machine operations and construction activities will be conducted in a manner that minimizes impacts to vegetation, with the intent that vegetation will only be cleared from sites required for construction use.	Loss of young provincially red-listed western hemlock - Douglas-fir / Oregon beaked moss ecological community and western white pine within the Project footprint and minimized disturbance in temporarily disturbed areas	Develop with Care (MFLNRO 2014)

Table 4. Continued.

Environmentally Valuable Resource	Potential Impact	Effect Pathway	Mitigation	Residual Impact	Relevant Legislation and Best Management Practices
At risk ecological communities and plants (continued)	Disturbance and/ or loss of the provincially red-listed western hemlock - Douglas-fir/ Oregon beaked moss ecological community Loss of young western white pine (relatively rare but not considered at risk) (continued)	Clearing, grubbing, regrading, excavating, infilling, and soil compaction from machines and vehicles (continued)	Machinery will avoid roots of retained trees where possible and temporary fencing will be placed around retained trees to protect root structures (MFLNRO 2014). Specifically, disturbance should be minimized within at least the extent of the trees branches (i.e., the tree's drip line), or within a radius 18 times the tree trunk diameter at breast height. Temporary fencing will be bright orange or another highly visible colour with a minimum height of 1.2 m and supported by poles a maximum distance of 2.5 m from one another. Tree protection plans will be communicated to the construction crew.  Use of root barriers and retaining walls will be used as needed to prevent tree-infrastructure conflicts.  Coarse woody debris and organic materials will be stockpiled and used for onsite landscaping during site reclamation, if applicable.		

Table 4. Continued.

Environmentally Valuable Resource	Potential Impact	Effect Pathway	Mitigation	Residual Impact	Relevant Legislation and Best Management Practices
At risk ecological communities and plants (continued)	Disturbance and/or loss of the provincially red-listed western hemlock - Douglas-fir/ Oregon beaked moss ecological community Loss of young western white pine (relatively rare but not considered at risk) (continued)	Clearing, grubbing, regrading, excavating, infilling, and soil compaction from machines and vehicles (continued)	Organic debris may be piled for burning. Some piles may be left unburned to serve as wildlife habitat where feasible. If debris piles are burned, burning will be of short duration (i.e., < 72 hours) and will be carried out in accordance with permits obtained for that purpose. Debris pile burning would also require a Fire Preparedness Plan to be prepared that outlines measures that must be followed during burning. Other debris disposal options that may be considered include: removal, chipping, scattering or burying. Construction waste will be removed from the site and recycled or appropriately disposed of. Temporarily disturbed areas will be rehabilitated and revegetated with native vegetation, as soon as possible, where feasible.		<i>Environmental Management Act</i> Open Burning Smoke Control Regulation

Table 4. Continued.

Environmentally Valuable Resource	Potential Impact	Effect Pathway	Mitigation	Residual Impact	Relevant Legislation and Best Management Practices
At risk ecological communities and plants (continued)	Colonization by invasive species	Introduction of invasive species from machinery, vehicles or crew member clothing	All excavators and other equipment will be pressure washed to removal all soil and vegetation before arriving at site to avoid introducing invasives. Invasive plants and soil contaminated with the weeds and roots will be removed and disposed of at the landfill or buried under adequate fill (i.e. 3-5 m depending on species). If noxious or high priority invasives plants (BC Weed Control Act or Coastal Invasive Species Committee respectively) are already present, machines will be pressure washed before demobilizing from the site. Exposed soil will be densely planted as soon as practical or covered (i.e., with weed barrier and mulch). An invasive species survey should be conducted in the growing season prior to construction to document invasive species and any management recommendations made by a QEP, as well as post construction to verify that no species were introduced.	Low likelihood of introduction of invasive species or spread of invasive species currently established on and around the Property	Provincial <i>Weed Control Act</i> ; Coastal Invasive Species Committee (CISC 2016)

### 5.5. Wildlife and Wildlife Habitat

Potential impacts to wildlife and wildlife habitat include disturbance or accidental mortality of wildlife, and human-wildlife conflict. Amphibians, reptiles, birds and/or their eggs and/or nests, and other small wildlife with low motility may be destroyed through accidental physical impact during vegetation clearing or from machinery, vehicles or workers. To minimize these potential impacts vegetation clearing and maintenance and potential debris pile burning will not occur during the breeding bird season (March 15 – August 31), if feasible. If not feasible, pre-clearing nest and small wildlife sweeps will be conducted and protective buffers maintained around active nests, as directed by a QEP. If amphibians or reptiles are encountered within the construction area and are at risk of physical impact they will be salvaged and relocated to habitat of equal or higher quality. All terrestrial and semi-aquatic wildlife are at risk of accidental mortality or harm from Project vehicles along roads and may be subject to the effects of accidental spills of fuels or hazardous materials. Standard construction BMPs will minimize this risk (e.g., Project vehicles will follow posted speed limits and use caution). Mitigation measures implemented to minimize impacts to terrain, soils, hydrology, water quality, terrestrial ecosystems and plants will also minimize impacts to wildlife and wildlife habitat.

Wildlife habitat alteration will occur from construction and operation of the facility. Impacts will be partially mitigated by minimizing facility lighting, using wildlife friendly fencing where appropriate for wildlife to pass, and minimizing ground disturbance.

The Project is situated in an area that may be frequented by large mammals including Mule Deer, Roosevelt Elk, Cougars (*Puma concolor*) and American Black Bears (*Ursus americanus*) which may interact and come into conflict with facility workers. All wildlife observations and encounters in the Project area will be reported to the QEP. Speed limits within the Project area will be below 20 km/hr. To minimize the risk of human-wildlife conflict, landscaping will be designed so that cover is not available for large mammals near areas of human activity. In addition, all bear/ wildlife attractants on site will be stored indoors or in animal-proof waste containers and plants that may attract bears, such as berry producing shrubs and fruit-bearing trees, will not be planted in the Project area.

Specific potential impacts and conceptual mitigations are provided in Table 5.

Based on the implementation of prescribed mitigation measures, the scale and location of the anticipated works and activities associated with Project construction and operation, and the current condition of habitat in the Project area, no residual impact to ESAs or EVRs is anticipated. Habitat loss is expected to be limited to the permanent Project footprint and there is only a low likelihood of wildlife mortality through physical impact, accidental spills of hazardous materials and human-wildlife conflict.

Table 5. Potential impacts and conceptual mitigations for wildlife and wildlife habitat.

Environmentally Valuable Resource	Potential Impact	Effect Pathway	Mitigation	Residual Impact	Relevant Legislation and Best Management Practices
Wildlife and Wildlife Habitat			Mitigation measures implemented to minimize impacts to terrain, soils, hydrology, water quality, terrestrial ecosystems and plants will also minimize impacts to wildlife and wildlife habitat.		
Birds and bird nests	Disturbance or mortality to birds and/or their eggs and/or nests (as defined by relevant legislation)	Clearing of vegetation or disturbance from nearby construction activities	Vegetation clearing and maintenance and debris pile burning will not occur during the breeding bird season (March 15 - August 31), when feasible. If not feasible, pre-clearing nest sweeps will be conducted and protective buffers maintained around active nests, as directed by a QEP, prior to the removal or clearing of vegetation.	Low likelihood of mortality to birds and/or their eggs and/ or of nesting habitat	Provincial <i>Wildlife Act</i> and <i>Wildlife Amendment Act</i> , Federal <i>Species at Risk Act</i> , Federal <i>Migratory Bird Act</i> ; Develop with Care (MFLNRO 2014)
Amphibians, reptiles and small mammals	Mortality of amphibians, reptiles or other small wildlife with low motility	Accidental physical impact from machinery, vehicles or workers	Amphibian, reptile and small mammals will be discouraged or salvaged from the footprint of the proposed facility and relocated to habitat of the same or better quality prior to vegetation clearing or earthworks. Exclusion fencing may be installed around the work area, as directed by a QEP, to prevent the re-introduction of small terrestrial wildlife species into the work area following the salvage. If wildlife migrations through Property (e.g., Western Toad) are encountered, a QEP will be retained direct mitigations.	Low likelihood of mortality to amphibians, reptiles and small mammals	Provincial <i>Wildlife Act</i> and <i>Wildlife Amendment Act</i> , Federal <i>Species at Risk Act</i>

Table 5. Continued.

Environmentally Valuable Resource	Potential Impact	Effect Pathway	Mitigation	Residual Impact	Relevant Legislation and Best Management Practices
General wildlife	Mortality or harm to wildlife	Accidental physical impact from machinery, vehicles or construction crew members	Construction and crew vehicles will follow posted speed limits. If wildlife are encountered on the road they will be provided with ample time and space to move off of the road before the vehicle proceeds.	Low likelihood of mortality to wildlife	Provincial <i>Wildlife Act</i> and <i>Wildlife Amendment Act</i> , Federal <i>Species at Risk Act</i>
		Accidental spills of fuels or hazardous materials into aquatic habitat	Runoff from the site must meet BC Guidelines for Aquatic Life before entering any ditch that may be connected to a watercourse or aquatic feature.		Federal <i>Fisheries Act</i> , Provincial <i>Water Sustainability Act</i> , BC Guidelines for Aquatic Life
	Habitat alteration	Change of use of habitat due to facility	Lighting will be designed to provide the minimum necessary for safety purposes and to minimize light intrusion throughout the parcel.  Fencing should be designed according to the guidelines described in A Landowners Guide to Wildlife Friendly Fences: How to Build Fence with Wildlife in Mind, Montana Fish Wildlife and Parks, if it is intended for wildlife to pass through the area.  The minimum amount of area will be disturbed as practicable including the building footprint, roads and pathways. Thus, habitat structures and connectivity to adjacent lands will be maintained as practicable.		Develop with Care (MFLNRO 2014)



**Table 5. Continued.**

Environmentally Valuable Resource	Potential Impact	Effect Pathway	Mitigation	Residual Impact	Relevant Legislation and Best Management Practices
General wildlife (continued)	Human-wildlife conflict	Conflict arising from interaction of human workers and/or materials with large mammals that may frequent or pass through the area including Mule Deer, Roosevelt Elk, Cougars and American Black Bears.	Landscaping will be designed so that cover is not available for large mammals near areas of human activity.	Low likelihood of human-wildlife conflict	
		Wildlife (especially American Black Bear) may be attracted to food products or waste, and vegetation planted on the Property.	All bear attractants on site will be stored indoors or in animal-proof waste containers. Plants that may attract bears, such as berry producing shrubs and fruit-bearing trees, will not be planted on the Property.		

## 6. CLOSURE AND NEXT STEPS

This report fulfills the requirement of a bio-inventory for the Project area to be subdivided, as per the Village of Cumberland's OCP requirements (Bylaw 990; VOC 2014a) and Develop with Care (MFLNRO 2014).

Appendix A provides an assessment of how the development Project and this bio-inventory meet DPA#1 bylaw requirements for a Connectivity Area and should be used alongside the referenced sections of this report to guide formation of permit conditions, if issued.

Overall, in the context of the Project area being recently logged, in the vicinity of an active waste management facility, adjacent to a busy gravel road and active gravel mine, and being located over 340 m from an aquatic ecosystem, sensitive terrestrial ecosystem, park or protected area, land development for servicing is expected to have a relatively minimal impact on the larger watershed area as detailed in Section 5. No ESAs or EVRs requiring buffers were identified on or within 100 m of the Project area, thus no restricted development or buffer zones have been designated.

**REFERENCES**

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## PROJECT MAPS

TREE ISLAND

Wildlife Habitat Plots

- Legend**
- Wildlife Habitat Plot
  - Proposed Subdivision Lot
  - Parcel Boundary

\* The locations of the Proposed Subdivision Lot and Parcel Boundary are approximate.



MAP SHOULD NOT BE USED FOR LEGAL OR NAVIGATIONAL PURPOSES

NO.	DATE	REVISION	BY
1	2019/03/18	1413_TREE ISLAND/Map/Map_3167_20190903	CSA
2			
3			
4			
5			

Drawn: 03/18/2019  
 Coordinate System: NAD 1983 UTM Zone 10N

Map 2





**TREE ISLAND**  
**Watersheds and Adjacent Waterbodies**

- Legend**
- Well Location
  - Proposed Subdivision Lot
  - Major Contour
  - Minor Contour
  - Parcel Boundary
  - Streams
  - Watersheds

\* The locations of the Proposed Subdivision Lot and Parcel Boundary are approximate.



**MAP SHOULD NOT BE USED FOR LEGAL OR NAVIGATIONAL PURPOSES**

NO.	DATE	REVISION	BY
1	01/03/2018	1st Issue, Preliminary Presentation	COVA
2			
3			
4			
5			

Drawn: 01/03/2018  
 Coordinate System: NAD 1983 UTM Zone 10N



Map 3



**TREE ISLAND**  
**Terrestrial and Aquatic Features**

- Legend**
- Proposed Subdivision Lot
  - Major Contour
  - Minor Contour
  - Bald Eagle Nest
  - Confirmed and Unknown Fish Presence
  - Fish presence
  - Unknown Fish Presence
  - Sensitive Ecosystem Inventory
  - Wetland
  - Riparian
  - Older Second Growth Forest
  - Streams
  - Parcel Boundary



**MAP SHOULD NOT BE USED FOR LEGAL OR NAVIGATIONAL PURPOSES**

Scale: 1:15,000

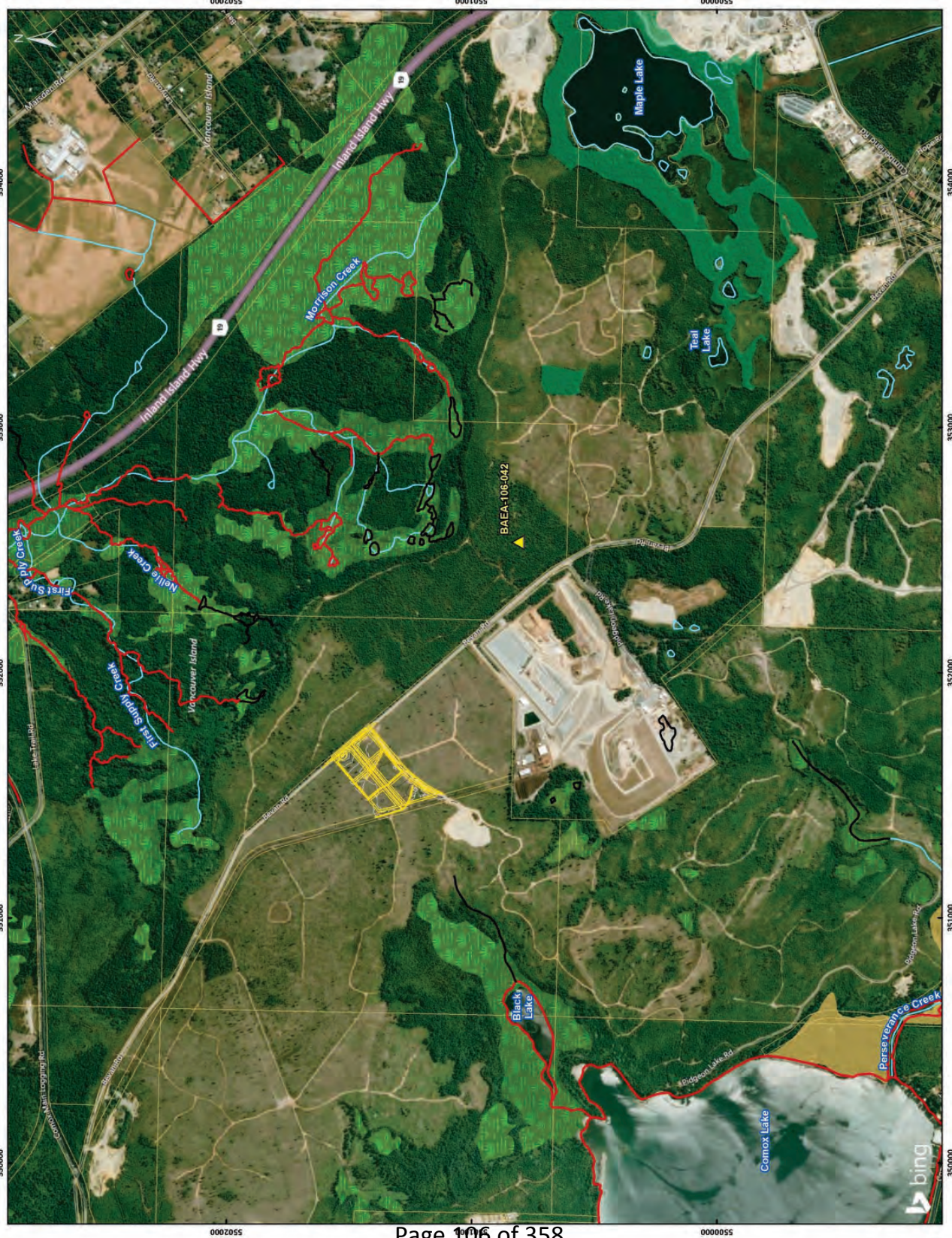
0 100 200 300 400 500 600 700 800 m

NO.	DATE	REVISION	BY
1	2010/03/14	1st. Rev. (Revised)	COCA
2			
3			
4			
5			

Drawn: 2010/03/14  
 Coordinate System: NAD 1983 UTM Zone 10N

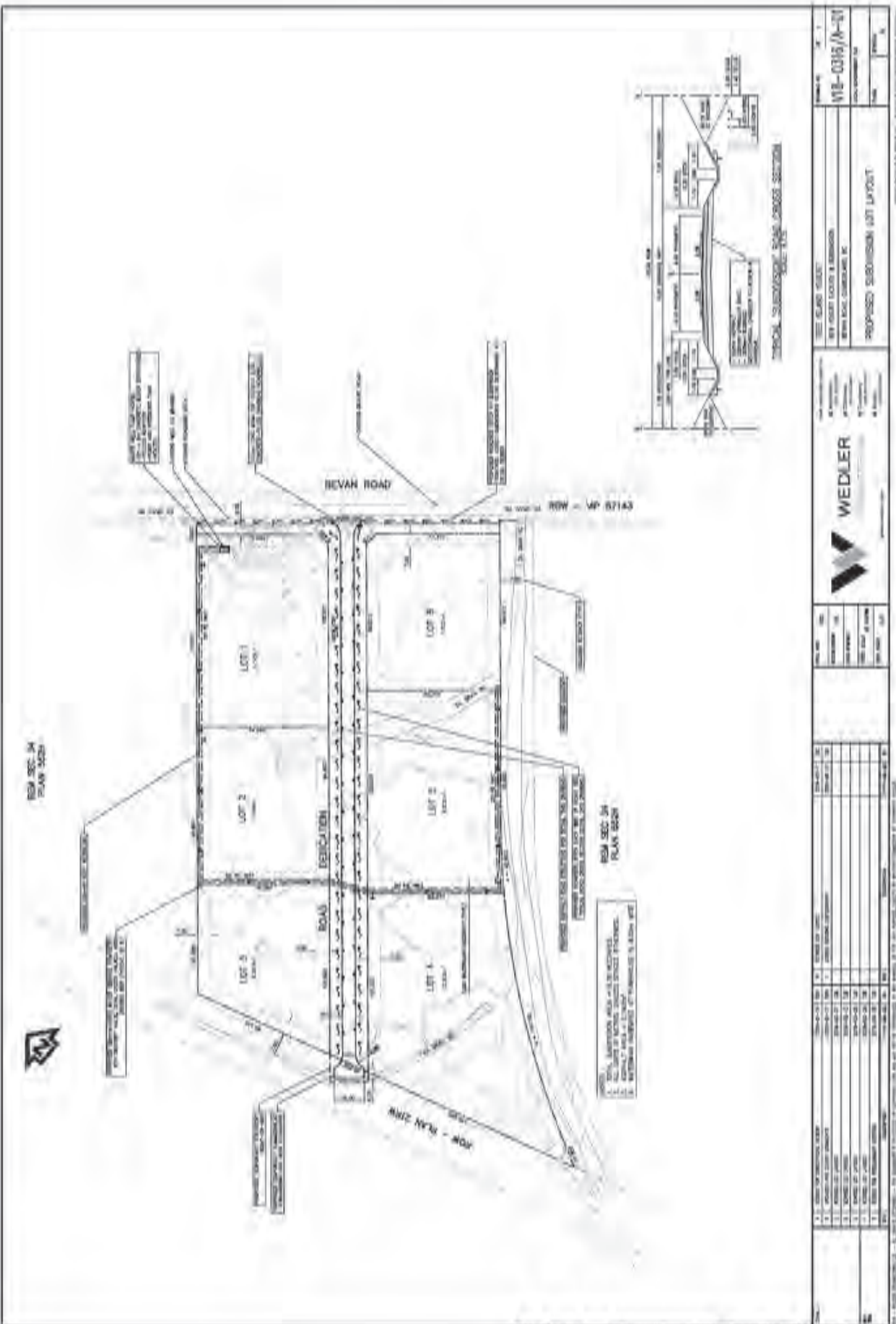
**ECOFISH**  
 CONSULTANTS

Map 4



Path: I:\Projects-Active\1413\MXD\Overview\1413\_TRI\_TerrestrialMaps\_3167\_20180710.mxd

## DRAWINGS



		SHEET NO. 1 <b>ME-0315/A-01</b> BEVAN ROAD, CHARLottesville, VA PROPOSED SUBDIVISION LOT LAYOUT
1.1. AREA OF PROJECT 1.2. AREA OF LOT 1 1.3. AREA OF LOT 2 1.4. AREA OF LOT 3 1.5. AREA OF LOT 4 1.6. AREA OF LOT 5	2.1. AREA OF LOT 1 2.2. AREA OF LOT 2 2.3. AREA OF LOT 3 2.4. AREA OF LOT 4 2.5. AREA OF LOT 5	3.1. AREA OF LOT 1 3.2. AREA OF LOT 2 3.3. AREA OF LOT 3 3.4. AREA OF LOT 4 3.5. AREA OF LOT 5

## APPENDICES

**Appendix A. Village of Cumberland Bylaw 990 requirements and how they are addressed in this report**

**LIST OF TABLES**

Table 1. Development Permit Area #1 Environmental Protection Guidelines – General Requirements. .... 1

Table 2. Development Permit Area #1 Environmental Protection Guidelines – Connectivity Areas. .... 9







Table 1. Continued.

OCF Section	DP Language	Addressed in this report	Status
10.1.5	<b>DPA#1 EP Guidelines – General Requirements</b>		
3	The bio-inventory shall: a) Be in accordance with Develop with Care 2012: Environmental Guidelines for Urban and Rural Land Development in British Columbia (DWC) or most current edition, and with reference to Appendix B: Bio-inventory Terms of Reference. b) Locate the parcel relative to watershed area(s) and describe the hydrological features of the parcel—including water shedding, collecting and conveyance areas. c) Examine the natural environmental features within the parcel—including rare and threatened plant communities, endangered species listed under the <i>Provincial Wildlife Act</i> and the <i>Federal Species At Risk Act</i> (SARA) and any identified critical habitats for those species, and other important habitat features. d) Provide a description and map(s) showing the boundaries of Environmentally Sensitive Areas—including 30.0 metres from the natural boundary of terrestrial areas, and 30.0 metres from the natural boundary of watercourses, wetlands and lakes, and 30.0 metres from the top of the bank of a watercourse, where a bank is within 15.0 metres of the natural boundary of the watercourse). Determine the restricted development and buffer zones on the parcel through an explanatory, reference or legal survey plan prepared by a BC Land Surveyor that shows these boundaries (refer to Section 4, Table 4.1 <b>Develop With Care</b> for recommended target buffer distances for biodiversity conservation). e) Examine the impact of the proposed development on the soils, vegetation, watercourses, wildlife, and hydrology in all restricted development and buffer zones; and provide development pattern and servicing recommendations to minimize these impacts. f) Examine pre-development water quality and quantity on the site and provide mitigation and enhancement strategies to maintain pre-development water quality and quantity for the restricted development zones and buffer areas.	Develop with Care (2012, 2014) was followed for the current study, as per Section 1.1. A map of the Project area relative to the watershed areas is provided in the Project Maps section at the end of the report and the hydrological features of the land are described in Section 4.2. The natural environmental features of the Project area are examined within the report, as per Section 4.4 and 4.5. No Environmentally Sensitive Areas were detected within the Project area, nor are any Terrestrial or Aquatic Ecosystem Areas identified in the OCP, as per Section 5. Therefore, no restricted development or buffer zones are necessary to protect ESAs in the Project area or within 100 m of the Project boundary. No restricted development or buffer zones identified in the Project area, as per Section 5. Groundwater quality data provided by Maxxam is presented in Wedler (2019b) and regional precipitation water quantity is described, as per Section 4.2. No surface or groundwater (examined to 2.3 m depth) observed during Ecofish or Ryzduk survey, thus no surface water quality or quantity data collected, as per Section 4.2, nor are restricted development zones or buffers exist within the Project area or within 100 m of the Project area, as per Section 5. Some pre-development water quantity data can be derived from the well pump test data that was collected during construction of the well as per Wedler 2019b.	Complete Complete Complete Complete N/A Complete

Interpretation: 'Complete' means that the condition has been addressed and no further work is required, this may be because the work is complete and no further work is required or because any risk to potential ESA's/EVR's is low. 'N/A' means that the condition does not apply because the site conditions that the condition applies to are not present on site, 'I' means that the condition does not require action or a commitment at this time; have been appropriately mitigated; 'Partial - future phase' means that bio-inventory requirement has been met for the current phase but needs to be reviewed in a future phase in consideration of detailed development design when sufficient design detail becomes available to fully address the condition; 'Future phase' means that the detailed development design is required to address the condition. 'Not Required' means this has been specifically stated by Village staff.

Table 1. Continued.

OCP Section	DP Language	Addressed in this report	Status
10.1.5	DPA#1 EP Guidelines – General Requirements	<p>The bio-inventory shall:</p> <p>g) Examine the impact of the proposed development on the larger watershed area(s) including watercourses, habitat connectivity, water quality and quantity upstream and downstream, and possible cumulative hydrological impacts that may result; and provide development pattern and servicing recommendations to minimize them.</p>	Complete
3		<p>Section 5 of the bioinventory report provides an examination of the impact of the current proposed development on the natural environment in the Project area and the greater watershed. The potential impacts of the proposed development on the larger watershed are expected to be low. The potential impacts on groundwater recharge and/or watercourses &gt; 100 m from the property as a result of impervious surfaces due to development are expected to be low. Infiltration capacity in the Project area is already high and infrastructure will be designed to maximize infiltration. However there is potential for stormwater runoff into existing ditch systems located on Bevan Road and into downstream waterbodies, especially for a storm larger than a current 5-year storm. Runoff is expected to flow to the northwest (i.e., First Supply Creek/ Punledge watershed) based on 1 m contours. Water quality and quantity effects from runoff will be mitigated with stormwater infrastructure designed to Village standards, development of an Erosion and Sediment Control plan and adoption of other current best management practices, as per Section 5.2. No water is expected to be withdrawn at this phase thus watershed level effects from water withdrawal were not assessed, however, they will be assessed by the Province and project biologists as a component of the Water Sustainability Act application process. Wildlife may cross the Project area, however, the Project area does not contain known specific characteristics favorable for wildlife to use as a corridor as compared to the surrounding area. Impacts assessed and recommendations provided in Sections 5.4 and 5.5.</p> <p>All work will be completed outside of the breeding bird season (March 15 - August 31) in order to minimize impacts to wildlife. If work cannot be completed outside of the breeding bird season, then pre-clearing nest and small wildlife sweeps will be conducted and protective buffers maintained around active nests, as directed by a QEP. Recommendations for appropriate timing of works, and associated mitigations, are provided in Sections 5.5.</p>	Complete
h)		<p>Recommend appropriate timing of works associated with development in order to minimize impacts to wildlife during migration, breeding, birthing, and rearing seasons.</p>	

<sup>1</sup> Interpretation: 'Complete' means that the condition has been addressed and no further work is required, this may be because the work is complete and no further work is required or because any risk to potential ESA's/EVR's is low. 'N/A' means that the condition does not apply because the site conditions that the condition applies to are not present on site, 'I' means that the condition does not require action or a commitment at this time; have been appropriately mitigated; 'Partial - future phase' means that bio-inventory requirement has been met for the current phase but needs to be reviewed in a future phase in consideration of detailed development design when sufficient design detail becomes available to fully address the condition; 'Future phase' means that the detailed development design is required to address the condition. 'Not Required' means this has been specifically stated by Village staff.



Table 1. Continued.

OCP Section	DP Language	Addressed in this report	Status
10.1.5	<b>DPA#1 EP Guidelines – General Requirements</b>		
4	The detailed bio-inventory is used to create the site plan. The site plan and development design must include:		
	a) Detailed drawings or plans clearly describing the proposed structures and the materials and type of construction to be employed, including a cross section of the proposed structure and its layout on the ground;	The conceptual and design drawings of the subdivision are included in the 'Drawings' section of the bio-inventory.	Complete
	b) A detailed description of existing structures near the proposed structure or area of work;	No structures are currently present on or in the vicinity of the Project area. The closest structure is the waste management facility, located approximately 500 m to the southwest of the Project area, and gravel roads which abut the north and east sides of the Project area, as per Section 1.3 and 1.4.	Complete
	c) A detailed drawing or plan clearly describing any area of the removal of rock, gravel, or soil;	Groundworks will be conducted for servicing the subdivision, as per the 'Drawings' section of the report. Detailed designs for the removal of rock, gravel and soil are not provided at this time.	Complete
	d) The reason and purpose of the work;	The purpose of work is to subdivide and service the land, as described in Section 1.	Complete
	e) The name of the contractor, if any, who will do the work;	The contractor has not yet been identified.	Not Required
	f) Time required for completion in calendar days;	The time required for completion of subdivision and servicing development has not yet been identified.	Not Required
	g) Any further information required by the Village to ensure compliance with this bylaw, including construction design or structural details of any part of the proposed works;	Design drawings for the subdivision including for servicing are provided in the 'Drawings' section of the bio-inventory. The Village has not requested additional information at the time of submission of this report.	Partial - future phase
	h) A description of how environmental protection DPA requirements will be met, and how any issues identified in the bio-inventory will be mitigated, and how recommended mitigation measures will be achieved;	Description of how DPA requirements will be met and recommendations for mitigations are provided in Section 5 of the bio-inventory and in this table.	Complete
	i) Any replanting prescription for vegetation in disturbed areas that is prescribed by the bio-inventory report;	No replanting prescriptions are provided at this time, however revegetation of temporarily disturbed areas, including for greenway construction, should be done as soon as practicable following disturbance to minimize colonization of invasive species.	Not Required
	j) A copy of any applicable federal and provincial approvals.	Provincial approvals will be required for potable water through the <i>Water Sustainability Act</i> for water extracted from the ground, and sewer through the <i>Waste Management Act</i> . The WSA application will be submitted following acquisition of the Project area by the applicant (estimated as September 30, 2019), as required by the province. Further, no water will be withdrawn at this phase.	Future phase

<sup>1</sup> Interpretation: 'Complete' means that the condition has been addressed and no further work is required, this may be because the work is complete and no further work is required or because any risk to potential ESA's/EVR's is low. 'N/A' means that the condition does not apply because the site conditions that the condition applies to are not present on site, '-' means that the condition does not require action or a commitment at this time; have been appropriately mitigated; 'Partial' - future phase' means that bio-inventory requirement has been met for the current phase but needs to be reviewed in a future phase in consideration of detailed development design when sufficient design detail becomes available to fully address the condition; 'Future phase' means that the detailed development design is required to address the condition. 'Not Required' means this has been specifically stated by Village staff.

Table 1. Continued.

OCP Section	DP Language	Addressed in this report	Status
10.1.5 DPA#1 EP Guidelines – General Requirements	As a condition of the development permit and in accordance with the bio-inventory for the project, the Village may require monitoring of the development by a qualified professional such as a professional engineer or biologist.	A Qualified Environmental Professional will be retained to ensure development is conducted in accordance with the Development Permit, the bioinventory, and applicable BMP's. The QEP will conduct surveys for active bird nests and other wildlife with low mortality (i.e., amphibians and reptiles) prior to any vegetation removal or grubbing in the breeding bird season (April 15 - August 31), as per Sections 5.	Complete
6	Should damage occur to an environmentally sensitive area during development, the Village shall require, at the developer's cost: a) A Professional assessment and report on the damage incurred along with recommended mitigations; b) Full mitigation and rehabilitation of the impacted ESA.	No ESAs were found to occur on the property. However, a QEP will be retained to ensure development is conducted in accordance with the Development Permit, the bioinventory, and applicable BMP's. If damage occurs to an ESA the QEP will provide an assessment of the damage and recommend mitigations, as per Section 5. If damage occurs to an ESA, the QEP will oversee mitigation and rehabilitation of the impacted ESA.	Complete
7	Development design must reflect the objectives and guidelines of the <u>Standards and Best Practices for Instream Works</u> , <u>Land Development Guidelines for the Protection of Aquatic Habitat</u> , <u>Stormwater Management-A Guidebook for British Columbia</u> , <u>Develop with Care Environmental Guidelines for Urban and Rural Land Development in British Columbia</u> (Section 3 - Guidelines for Ecosystems and Species Protection and Section 4), <u>Access Near Aquatic Areas: A Guide to Sensitive Planning, Design and Management</u> and other best management practices guides produced by the provincial government.	Subdivision servicing should follow the BMPs and reflect the objectives and guidelines of Stormwater Management: A Guidebook for British Columbia and Develop with Care Environmental Guidelines for Urban and Rural Land Development in British Columbia (Section 3 - Guidelines for Ecosystems and Species Protection and Section 4), as per Section 5.2. No aquatic ecosystem areas or features occur within the Project area thus the remaining listed guidance does not apply.	Partial - future phase

<sup>1</sup> Interpretation: 'Complete' means that the condition has been addressed and no further work is required, this may be because the work is complete and no further work is required or because any risk to potential ESA's/EVR's is low. 'N/A' means that the condition does not apply because the site conditions that the condition applies to are not present on site. 'I' means that the condition does not require action or a commitment at this time; have been appropriately mitigated; 'Partial - future phase' means that bio-inventory requirement has been met for the current phase but needs to be reviewed in a future phase in consideration of detailed development design when sufficient design detail becomes available to fully address the condition; 'Future phase' means that the detailed development design is required to address the condition. 'Not Required' means this has been specifically stated by Village staff.

Table 1. Continued.

OCF Section	DP Language	Addressed in this report	Status
10.1.5	<b>DPA#1 EP Guidelines – General Requirements</b> 8 Plan, design, and implement land development and subdivision in a manner that: a) Supports the maintenance and restoration of natural system functions including watercourse, and groundwater recharge; hydrology b) Preserves natural features including soil, watercourses, groundwater, and native shrubs, groundcover and tree cover; c) Maintains connectivity and linkages with adjacent sensitive ecosystems and other habitat areas and minimizes fragmentation; d) Protects endangered, threatened, or vulnerable species or plant communities by avoiding disturbance to sites where rare plants are growing and where rare natural plant communities occur; e) Maintains critical habitat structures such as old trees, snags, trees with cavities, and ephemeral wetlands.	No watercourses occur in the Project area. Roadside ditches will be designed to maximize infiltration, as per Section 5.2. The subdivision will include ground disturbance for servicing and greenway construction. Natural features or the functions of natural features will be preserved where feasible and/or planned, as per Section 5.1. No sensitive ecosystems or important habitat areas were detected on or immediately adjacent to the Project area, as per Section 4.4 and 4.5. No park dedication to protect connectivity through the area is provided by the development as the park dedication is being allotted to a greenway for human travel. Prior to future development in the area, connectivity corridors for wildlife between key habitats including Comox Lake and Morrison headwaters should be planned and set No mature communities at risk or rare plants were detected in the Project area as per Section 4.4. No critical habitat structures were identified in the Project area, as per Section 4.4.	Complete Complete Complete
9	Retain mature vegetation wherever possible and incorporate it into the design of the project.	No mature vegetation occurs in the Project area as per Section 4.4. Vegetation will be disturbed for servicing during subdivision. Young trees that were left after the property was last logged should be left standing outside of the footprint required for construction of servicing, as per Section 5.4.	Complete
10	Demonstrate that a diligent effort has been made in site design to: a) Preserve both the natural vegetation and tree cover; or b) Restore historical forest densities and hydrological function.	Historical forest densities and hydrological function will not be restored as the Project area is zoned for and planned to be an industrial area. However, BMPs for stormwater management will be followed to minimize alteration to hydrological function, as per Section 5.2.	Complete Complete

<sup>1</sup> Interpretation: 'Complete' means that the condition has been addressed and no further work is required, this may be because the work is complete and no further work is required or because any risk to potential ESA's/EVR's is low. 'N/A' means that the condition does not apply because the site conditions that the condition applies to are not present on site, '-' means that the condition does not require action or a commitment at this time; have been appropriately mitigated; 'Partial - future phase' means that bio-inventory requirement has been met for the current phase but needs to be reviewed in a future phase in consideration of detailed development design when sufficient design detail becomes available to fully address the condition; 'Future phase' means that the detailed development design is required to address the condition. 'Not Required' means this has been specifically stated by Village staff.

Table 1. Continued.

OCF Section	DP Language	Addressed in this report	Status
10.1.5	<b>DPA#1 EP Guidelines – General Requirements</b>		
11	Prevent disturbance of nesting sites and breeding areas. Animals must have access to the habitat that supports their reproduction in order to ensure future generations.	No specific nesting sites or breeding areas were identified in or immediately adjacent to the Project area as per Section 4.5. Nevertheless, all work should be completed outside of the breeding bird season (March 15 - August 31) in order to minimize potential impacts to wildlife. If work cannot be completed outside of the breeding bird season, then pre-clearing surveys for active bird nests and other wildlife with low motility (i.e., amphibians and reptiles) will be conducted and protective buffers maintained around active nesting sites and breeding areas, as directed by a QEP. Recommendations for appropriate timing of works, and associated mitigations, are provided in Sections 5.5.	Complete
12	Schedule work during times when impacts to wildlife will be minimal, including: <ul style="list-style-type: none"> <li>a) Outside of known wildlife migration seasons.</li> <li>b) Outside of breeding, birthing, and rearing seasons (refer to Section 4 of 2012 Develop with Care Manual for breeding season least risk windows).</li> </ul>	No high or moderate value migration habitat was detected in the Project area, as per Section 4.5. All work should be completed outside of the breeding bird season (March 15 - August 31) in order to minimize impacts to wildlife. If work cannot be completed outside of the breeding bird season, then pre-clearing nest and small wildlife sweeps will be conducted and protective buffers maintained around active nests, as directed by a QEP. All wildlife sightings should be provided to the QEP. Recommendations for appropriate timing of works, and associated mitigations, are provided in Sections 5.5.	Complete
13	Preserve existing and potential connections to adjacent Terrestrial, Aquatic and Connectivity Areas by maintaining native shrub, groundcover and tree cover between habitats.	There are no Terrestrial or Aquatic Ecosystem areas adjacent to the Project Area, as per Section 4 and Map 4.	Complete
14	Prevent foreign material from entering into any restricted development areas, including—without limitation—greases, oils, gasoline, sediments, and other contaminants during and after the construction phase of the proposed development.	No restricted development or buffer zones identified on or adjacent to the Project area, as per Section 5.	N/A
15	Design lighting on developments to provide the minimum necessary for safety purposes and to avoid light intrusion throughout the parcel.	No lighting will be installed for the subdivision.	Complete
16	Any fencing should be designed according to the guidelines described in <b>Δ Landowners Guide to Wildlife Friendly Fences: How to Build Fence with Wildlife in Mind</b> , Montana Fish Wildlife and Parks.	No fencing will be installed for the subdivision.	Complete
17	Manage rainwater in accordance with the Water Balance Model or the most recent integrated watershed management or rainwater policy and design manual. This includes managing rainwater on site and maintaining pre-development drainage flows.	Subdivision servicing and site design will follow BMP's for rainwater management. Specifically, roads and ditches will be designed to manage most rainwater on site and maintain pre-development infiltration, as per Section 5.2.	Complete

<sup>1</sup> Interpretation: 'Complete' means that the condition has been addressed and no further work is required, this may be because the work is complete and no further work is required or because any risk to potential ESA's/EVR's is low. 'N/A' means that the condition does not apply because the site conditions that the condition applies to are not present on site, '-' means that the condition does not require action or a commitment at this time; have been appropriately mitigated; 'Partial' - future phase' means that bio-inventory requirement has been met for the current phase but needs to be reviewed in a future phase in consideration of detailed development design when sufficient design detail becomes available to fully address the condition; 'Future phase' means that the detailed development design is required to address the condition. 'Not Required' means this has been specifically stated by Village staff.

Table 1. Continued.

OCF Section	DP Language	Addressed in this report	Status
<b>10.1.5 DPA#1 EP Guidelines – General Requirements</b>			
18	Encroachment into the DPA by all development activities will not exceed that indicated in the site plan approved in the development permit. All development activities will avoid or minimize disturbance in the DPA beyond the building footprint. This may mean adjusting conventional practices with respect to locating machinery and stockpiles relative to excavations, use of hand labour as opposed to machinery, etc.	Development will not encroach on land outside of the Project area, unless permission provided in writing by landowner. Currently encroachment is planned for a hammerhead in the Village ROW as per the Drawing.	-
19	Prior to any development activity, the boundaries of restricted development and buffer zones identified in the bio-inventory will be clearly marked with a bright orange or other highly visible temporary fence with a minimum height of 1.2 meters and supported by poles a maximum distance of 2.5 meters from one another. This fence will remain in place throughout clearing, site preparation, construction, or any other form of disturbance.	No restricted development or buffer zones are identified in the Project area, as per Section 5.	N/A
20	Ensure that the roots of trees are protected during construction. The roots of mature trees typically extend from 1–3 times the height of the tree from the tree's trunk and are found within 30.5–38.1 centimeters of the soil surface. Damage to these roots (especially in mature trees) can impede the tree's ability to obtain water and nutrition and can cause it to fall or blow over. Communicate tree protection plans to everyone involved in the project.	No mature trees exist on the property. Young trees (i.e., 30-80 years old) that will not be removed for the facility will be protected from construction activities. Trees that are within planned retention areas will be protected with orange drift fence as per Section 4.4.	Complete
21	Any trail or pathway development must: <ul style="list-style-type: none"> <li>a) Minimize the impacts of recreational use on restricted development zones and adjacent natural areas and systems;</li> <li>b) Adhere to the Village's trail and pathway design and construction practices for ESADP Areas;</li> <li>c) Be designed to prevent motorized vehicle use to the maximum extent possible.</li> </ul>	No restricted development zones exist in the Project area. Recreational use will be restricted to the greenway location chosen by the Village, as per Map 2. No maintenance of natural areas is included in the site plan. The greenway will adhere to the Village's trail and pathway design and construction practices for ESADP Areas, as per Section 5. The subdivision is zoned industrial and requires motorized vehicle use. There is a dedicated greenway that will facilitate access by alternate methods.	Complete
22	When establishing watercourse and riparian buffer zones, consider the needs of all species and not just fish. For example, SPEAs established using the Riparian Areas Regulation methodology focus on the needs of salmon and trout and may not adequately protect other species such as amphibians, birds, and small mammals.	No watercourse or riparian buffer zones occur in the Project area or in the near vicinity, as per Section 4.3 and Map's 2-4.	N/A

<sup>1</sup> Interpretation: 'Complete' means that the condition has been addressed and no further work is required, this may be because the work is complete and the condition does not apply because the site conditions that the condition applies to are not present on site, 'I' means that the condition does not require action or a commitment at this time; have been appropriately mitigated; 'Partial - future phase' means that bio-inventory requirement has been met for the current phase but needs to be reviewed in a future phase in consideration of detailed development design when sufficient design detail becomes available to fully address the condition; 'Future phase' means that the detailed development design is required to address the condition. 'Not Required' means this has been specifically stated by Village staff.

**Table 2. Development Permit Area #1 Environmental Protection Guidelines – Connectivity Areas.**

OCF Section	DP Language	Addressed in this report	Status
10.1.6.3	<b>DPA#1 EP Supplemental Guidelines – Connectivity Areas</b>		
1	<p>The following requirements apply to all development permit applications in all Connectivity Areas.</p> <p>a) Locate development within the parcel where it will cause the least impact to natural habitat and the movement of native fauna between adjacent areas</p> <p>b) New road development within Connectivity Areas should be avoided to the maximum extent possible</p> <p>c) If new road development cannot be avoided, the length and width of road development must be minimized and:</p> <p>i) Appropriate wildlife crossing infrastructure as determined by the mitigation measures described in the bio-inventory must be designed and installed, using best practices for mitigating the effects of roads on local species</p> <p>ii) Establish Wildlife Traffic Zones with appropriate traffic warning signage and reduced speeds to mitigate dangers to the public and wildlife mortality threats</p> <p>d) The location of recreational trails and pathways shall be in accordance with current Best Management Practices in British Columbia, including but not limited to <u>Develop with Care 2012—Environmental Guidelines for Urban and Rural Land Developments in British Columbia and Environmental Best Management Practices for Urban and Rural Land Development</u> (Section 3 Site Development and Management and Fact Sheet #5-Parks).</p> <p>e) To the maximum extent possible, the distribution and intensity of native vegetation and cover should be maintained throughout the property.</p> <p>f) Conserve trees in communities (groups of trees along with their associated understory) rather than isolating individual specimens. Groups of trees form a larger intact ecosystem and are more likely to maintain the important characteristics of the ecosystem over time than a few scattered trees. However, some ecosystems are characterized by or may contain some isolated trees and their conservation as well is important.</p>	<p>The Project area is comprised of relatively uniform ecological characteristics. The development makes use of existing disturbance. Future development in Bevan area should include dedicated areas for wildlife movement through watershed.</p> <p>Roads have been minimized to the extent possible.</p> <p>Roads have been minimized to the extent possible.</p> <p>Speed limits should be set and posted to minimize the likelihood of collisions with wildlife, as per Section 5.5.</p> <p>Appropriate speed limits (20 km/ hr) will be posted to mitigate dangers to humans and wildlife, as per Section 5.5.</p> <p>The Bevan greenway will be constructed in accordance with current best management practices and Village requirements, as per Section 5.</p> <p>Subdivision, servicing and greenway construction will cause ground disturbance. The function of natural cover, such as infiltration will be restored to the extent possible</p> <p>Subdivision, servicing and greenway construction will require land disturbance. Vegetated areas will be preserved during this phase where practicable.</p>	<p>Complete</p> <p>Complete</p> <p>Complete</p> <p>Complete</p> <p>Complete</p> <p>Complete</p> <p>Complete</p> <p>Complete</p>

<sup>1</sup> Interpretation: 'Complete' means that the condition has been addressed and no further work is required, this may be because the work is complete and no further work is required or because any risk to potential ESA's/EVR's is low. 'N/A' means that the condition does not apply because the site conditions that the condition applies to are not present on site, 'I' means that the condition does not require action or a commitment at this time; have been appropriately mitigated; 'Partial - future phase' means that bio-inventory requirement has been met for the current phase but needs to be reviewed in a future phase in consideration of detailed development design when sufficient design detail becomes available to fully address the condition; 'Future phase' means that the detailed development design is required to address the condition. 'Not Required' means this has been specifically stated by Village staff.





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Table 1. Site description data.

Site	Site Series	Meso Slope Position	Structural Stage	Seral Stage	Estimated Age (years)	Canopy Closure (%)	Slope (%)	Exposure	Micro-topography	Elevation (masl)
TRI-WHP01	01	Level	Low Shrub	Establishment	4	+ (<1%)	1	full sun	smooth	164
TRI-WHP02	01	Level	Tall Shrub	Establishment	7	+ (<1%)	1	full sun	smooth	164
TRI-WHP03	01	Level	Low Shrub	Establishment	5	+ (<1%)	1	full sun	smooth	164

Table 2. Ground cover data.

Site	Ground Cover					
	Rock	Water	Organic Matter	Bedrock	Mineral Soil	Decaying Wood
TRI-WHP01	Trace	Nil	Nil	Nil	Dominant	Subdominant
TRI-WHP02	Nil	Nil	Trace	Nil	Dominant	Subdominant
TRI-WHP03	Nil	Nil	Trace	Subdominant	Dominant	Nil

Table 3. Soil characteristics data.

Site	Soil Moisture	Soil Nutrient	Soil Texture	Coarse Fragment	Soil Colour <sup>1</sup>	Humus Form	Comment
TRI-WHP01	submesic	medium	silt loam	65-85%	medium (soil color 7.5 3/4)	Lignomodor	The humus form is ~2 cm FH that is loose, friable and has low mycelia content. The soil was slightly moist, at time of survey but is very well drained due to abundance of coarse fragments up to 7 cm diameter.
TRI-WHP02	mesic	medium	silt loam	10-35%	medium	Lignomodor	Organic layers comprised of a 8 cm LFH, mostly comprised of FH, that was friable and wood with some charcoal. Mineral soils create a stronger cast than other sites, the site has higher sand content than other sites and more deeper fine roots than TRI-WHP01.
TRI-WHP03	submesic	medium	silt loam	35-65%	medium (soil color 7.5 3/4)	Lignomodor	Soils very similar to TRI-WHP01, with an approximately 2 cm very friable FH overlaying a B layer. Small gravels present.

<sup>1</sup>Soil color is the Munsell soil colour hue value and chroma.

Table 4. Vegetation composition data.

Site	Trees		Tall Shrubs		Short Shrubs		Herbs		Mosses and Lichens	
	Coverage (%)	Dominant Species	Coverage (%)	Dominant Species	Coverage (%)	Dominant Species	Coverage (%)	Dominant Species	Coverage (%)	Dominant Species
TRI-WHIP01	1-5%	sparse residual white pine ~40 years old	1-5%	western redcedar understory retention; dead conifers (not included in cover estimate)	25-50%	salal, Oregon grape, blackcap raspberry, red huckleberry	5-25%	trailing blackberry, grasses and small sedges, twinflower, fireweeds	5-25%	step moss, others
TRI-WHIP02	1-5%	white pine	5-25%	Douglas-fir, western hemlock, western redcedar; dead woody shrubs (not included in cover estimates)	25-50%	salal, red huckleberry, Douglas-fir, Oregon grape	5-25%	bracken fern	25-50%	step moss, others
TRI-WHIP03	1-5%	western redcedar, white pine	0%	-	25-50%	salal, red huckleberry, Oregon grape, Douglas-fir, western hemlock, white pine	5-25%	-	25-50%	step moss, others

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1. TRI-WHP01

Figure 1. View north from plot centre, March 26, 2019.



Figure 2. View southwest from plot centre, March 26, 2019.





Figure 3. View of soils, March 26, 2019.



## 2. TRI-WHP02

Figure 4. View north from plot centre, March 26, 2019.



Figure 5. View south from plot centre, March 26, 2019.

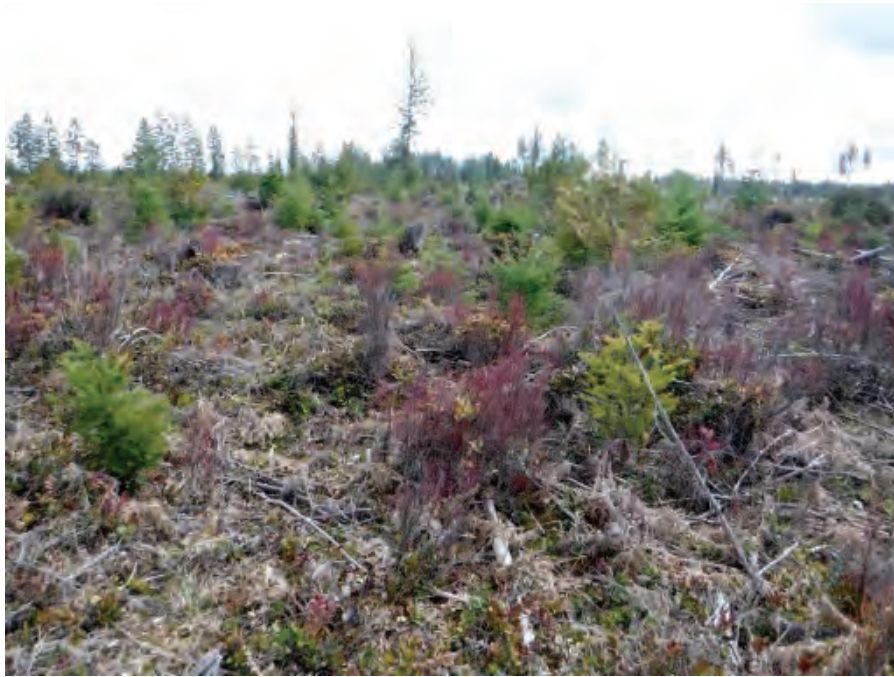


Figure 6. View of B-layer soils, March 26, 2019.



Figure 7. View of organic soil layers, March 26, 2019.



### 3. TRI-WHP03

Figure 8. View north from plot centre, March 26, 2019.



Figure 9. View of soils, March 26, 2019.



Figure 10. Largest tree on property, with evidence of woodpecker feeding and droppings indicating it has been used for avian perching, March 26, 2019.



Appendix D. At-risk wildlife and plant species considered

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Table 1. Avian species at risk within the CWH Biogeoclimatic Zone and Comox Valley Regional District (CDC 2019).

Common Name	Scientific Name	Likelihood of Interaction by Season <sup>1</sup>			Federal Designation		Provincial Designation		
		Pre-field Occurrence <sup>1</sup>	Breeding Period	Overwintering Period	Other (e.g., migrating, foraging)	COSEWIC Status	SARA Status	BC List	Identified Wildlife <sup>2</sup>
Band-tailed Pigeon	<i>Patagioenas fasciata</i>	Moderate	Low	-	Low	SC (Nov 2008)	1-SC (Feb 2011)	Blue	
Barn Owl	<i>Tyto alba</i>	Low	Low	-	Low	T (Nov 2010)	1-T (Jun 2018)	Red	
Barn Swallow	<i>Hirundo rustica</i>	Moderate	Low	-	Low	T (May 2011)	1-T (Nov 2017)	Blue	
Black Swift	<i>Cypseloides niger</i>	Low	Low	-	Low	E (May 2015)		Blue	
Caspian Tern	<i>Hydroprogne caspia</i>	Negligible	Negligible	Negligible	Negligible	NAR (May 1999)		Blue	
Common Nighthawk	<i>Chordeiles minor</i>	Moderate	High	-	High	SC (May 2018)	1-T (Feb 2010)	Yellow	
Double-crested Cormorant	<i>Phalacrocorax auritus</i>	Negligible	Negligible	Negligible	Negligible	NAR (May 1978)		Blue	
Evening Grosbeak	<i>Coereba cristata</i>	High	Moderate	-	Moderate	SC (Nov 2016)		Yellow	
Great Blue Heron, <i>fannini</i> subspecies	<i>Ardea herodias fannini</i>	Low	Negligible	Negligible	Negligible	SC (Mar 2008)	1-SC (Feb 2010)	Blue	Y (May 2004)
Green Heron	<i>Butorides virescens</i>	Low	Negligible	Negligible	Negligible			Blue	
Marbled Murrelet	<i>Brachyramphus marmoratus</i>	Low	Negligible	Negligible	Negligible	T (May 2012)	1-T (Jun 2003)	Blue	Y (May 2004)
Northern Goshawk, <i>laini</i> subspecies	<i>Accipiter gentilis laini</i>	Moderate	Negligible	Low	Low	T (Apr 2013)	1-T (Jun 2003)	Red	Y (May 2004)
Northern Pygmy-Owl, <i>swarthi</i> subspecies	<i>Glaucidium gnoma swarthi</i>	High	Negligible	Low	Low			Blue	Y (Jun 2006)
Olive-sided Flycatcher	<i>Contopus cooperi</i>	Moderate	Low	Low	Low	SC (May 2018)	1-T (Feb 2010)	Blue	
Peregrine Falcon, <i>pealei</i> subspecies	<i>Falco peregrinus pealei</i>	Low	Negligible	Low	Low	SC (Dec 2017)	1-SC (Jun 2003)	Blue	
Purple Martin	<i>Progne subis</i>	Low	Negligible	-	Low			Blue	
Short-eared Owl	<i>Asio flammeus</i>	Low	Low	Low	Low	SC (Mar 2008)	1-SC (Jul 2012)	Blue	Y (May 2004)
Western Screech-Owl, <i>kennicottii</i> subspecies	<i>Megascops kennicottii kennicottii</i>	High	Negligible	Low	Low	SC (Mar 2012)	1-T	Blue	

<sup>1</sup> Confirmed - The species has been detected within the Project area. Species presence information was recorded during the field surveys and/or gleaned from the background review. High - The current range and distribution of the species overlap the Project area. Highly suitable habitat is present within the Project area; however, the species has not been detected. Moderate - The current range and distribution of the species overlap the Project area. Sufficiently suitable habitat may be present within the Project area; however, the species has not been detected. Low - The current range and distribution of the species may overlap or border the Project area; however, it is unlikely that sufficiently suitable habitat is present. The species has not been detected. Negligible - The species is likely to occur within the Comox Valley.

<sup>2</sup> Identified under the Identified Wildlife Management Strategy.

**Table 2. Herpetofauna and mammal species at risk within the CWH Biogeoclimatic Zone and Comox Valley Regional District (CDC 2019).**

Common Name	Scientific Name	Pre-field Likelihood of Occurrence <sup>1</sup>	Likelihood of Interaction by Season <sup>1</sup>			Federal Designation		Provincial Designation	
			Breeding Period	Overwintering Period	Other (e.g., migrating, foraging)	COSEWIC Status	SARA Status	BC List	Identified Wildlife <sup>2</sup>
Northern Red-legged Frog	<i>Rana aurora</i>	Moderate	Low		Moderate	SC (May 2015)	1-SC (Jan 2005)	Blue	Y (May 2004)
Wandering Salamander	<i>Aneides vagrans</i>	Low-Moderate	Low	Low	Low	SC (May 2014)	1-SC (Feb 2018)	Blue	
Western Toad	<i>Anaxyrus boreas</i>	Moderate	Low	Moderate	Moderate	SC (Nov 2012)	1-SC (Jun 2018)	Yellow	
Western Painted Turtle, Pacific coast population	<i>Chrysemis picta</i>	Low	Negligible	Negligible	Low	T (2016)	1-E (2007)	Red	
American (Common) Water Shrew, <i>brooksi</i> subspecies	<i>Sorex palustris brooksi</i>	Moderate	Low	Low	Low			Red	Y (Jun 2006)
Ermine, <i>angustinae</i> subspecies	<i>Mustela erminea angustinae</i>	Moderate	Moderate		Low			Blue	
Keen's (Long-eared) Myotis	<i>Myotis keenii</i>	Moderate	Low		Moderate	DD (Nov 2003)	3 (Mar 2005)	Blue	Y (May 2004)
Little Brown Myotis	<i>Myotis lucifugus</i>	High	Low		Moderate	E (Nov 2013)	1-E (Dec 2014)	Yellow	
Townsend's Big-eared Bat	<i>Corynorhinus townsendii</i>	Moderate	Low		Moderate			Blue	
Roosevelt Elk	<i>Cervus elaphus roosevelti</i>	Moderate	Low	Low	Moderate				
Vancouver Island Marmot	<i>Marmota flaviventris</i>	Negligible	Negligible	Negligible	Negligible				
Wolverine, <i>nanounerensis</i> subspecies	<i>Gulo gulo nanounerensis</i>	Negligible	Negligible	Negligible	Negligible	SC (May 2014)	1-SC (Jun 2018)	Red	Y (May 2004)

<sup>1</sup> Confirmed - The species has been detected within the Project area. Species presence information was recorded during the field surveys and/or gleaned from the background review. High - The current range and distribution of the species overlap the Project area. Highly suitable habitat is present within the Project area; however, the species has not been detected. Moderate - The current range and distribution of the species overlap the Project area. Sufficiently suitable habitat may be present within the Project area; however, the species has not been detected. Low - The current range and distribution of the species may overlap or border the Project area; however, it is unlikely that sufficiently suitable habitat is present. The species has not been detected. Negligible - The species is likely to occur within the Comox

<sup>2</sup> Identified under the Identified Wildlife Management Strategy.



Table 3. Invertebrate species at risk within the CWH Biogeoclimatic Zone and Comox Valley Regional District (CDC 2019).

Common Name	Scientific Name	Likelihood of Occurrence <sup>1</sup>	Federal Designation		Provincial Designation	
			COSEWIC Status	SARA Status	BC List	Identified Wildlife <sup>2</sup>
Threaded Vertigo	<i>Nearctula rowellii</i>	Low	SC (Apr 2010)	1-SC (Jul 2012)	Blue	Blue
Western Thorn	<i>Carychium occidentale</i>	Low			Blue	Blue
Evening Fieldslug	<i>Deroceras lespertieri</i>	Low	DD (Nov 2003)		Red	Red
Prairie Fossaria	<i>Galba bulimoides</i>	Negligible			Blue	Blue
Sunset Physa	<i>Physella virginea</i>	Negligible			Blue	Blue
Broadwhorl Tightcoil	<i>Pristiloma johnsoni</i>	Low			Blue	Blue
Wrinkled Marshsnail	<i>Stagnicola caperata</i>	Negligible			Blue	Blue
Alkali Bluet	<i>Enallagma dausum</i>	Negligible			Blue	Blue
Blue Dasher	<i>Pachydiplax longipennis</i>	Negligible			Blue	Blue
Autumn Meadowhawk	<i>Sympetrum vicinum</i>	Negligible			Blue	Blue
Western Pine Elf, sheltensis	<i>Calliphrys eryphon sheltensis</i>	Low			Blue	Blue
Common Wood-nymph, incana subspecies	<i>Cerylonis pegala incana</i>	Moderate			Red	Red
Common Ringlet, insulana subspecies	<i>Coenonympha tullia insulana</i>	Low			Red	Red
Sand-verbena Moth	<i>Copablepharon fuscum</i>	Negligible	E (Nov 2013)	1-E (Jul 2005)	Red	Red
Properthus Duskywing	<i>Erynnis properthus</i>	Negligible			Red	Red
Edith's Checkerspot, taylori subspecies	<i>Euphydryas editha taylori</i>	Negligible	E (May 2011)	1-E (Jun 2003)	Red	Red
Dun Skipper	<i>Euphyes vestris</i>	Low	T (Apr 2013)	1-T (Jun 2003)	Red	Red
Western Branded Skipper, oregonia	<i>Hesperia colorado oregonia</i>	Low	E (Nov 2013)		Red	Red
Clodius Parnassian, claudianus subspecies	<i>Parnassius clodius claudianus</i>	Low			Blue	Blue
Rocky Mountain Parnassian, olympianus	<i>Parnassius smintheus olympianus</i>	Low			Blue	Blue
Greenish Blue, insulanus subspecies	<i>Plebejus saepiolus insulanus</i>	Low	E (May 2012)	1-E (Jun 2003)	Red	Red

<sup>1</sup> Confirmed - The species has been detected within the Project area. Species presence information was recorded during the field surveys and/or gleaned from the background review. High - The current range and distribution of the species overlap the Project area. Highly suitable habitat is present within the Project area; however, the species has not been detected. Moderate - The current range and distribution of the species overlap the Project area. Sufficiently suitable habitat may be present within the Project area; however, the species has not been detected. Low - The current range and distribution of the species may overlap or border the Project area; however, it is unlikely that sufficiently suitable habitat is present. The species has not been detected. Negligible - The species is likely to occur within the Comox Valley Regional District; however, suitable habitat is not present and the species is very unlikely to occur within the Project area.

Table 4. Plant species at risk within the CWH Biogeoclimatic Zone and Comox Valley Regional District (CDC 2019).

English Name	Scientific Name	Likelihood of Occurrence	Provincial Designation		Federal Designation	
			BC List	COSEWIC	SARA	SARA
banded cord-moss	<i>Entosthodon fascicularis</i>	Negligible	Blue	SC (May)	1-SC (Aug 2006)	
black knotweed	<i>Polygonum paronychia</i>	Negligible	Blue			
Henderson's checker-mallow	<i>Sidalcea hendersonii</i>	Negligible	Blue			
heterocodon	<i>Heterocodon rariflorus</i>	Low	Blue			
Macoun's meadow-foam	<i>Limnanthes macounii</i>	Low	Red	T (Nov 2004)	1-T (Aug 2006)	
Nuttall's quillwort	<i>Isoetes nuttallii</i>	Low	Blue			
poverty clover	<i>Trifolium depauperatum</i> var.	Low	Blue			
purple sanicle	<i>Sanicula bipinnatifida</i>	Low	Red	T (May 2001)	1-T (Jun 2003)	
slimleaf onion	<i>Allium amplexens</i>	Low	Blue			
Vancouver Island beggarticks	<i>Bidens amplissima</i>	Negligible	Blue	SC (Nov)	1-SC (Jun 2003)	
western cowbane	<i>Oxypolis occidentalis</i>	Low	Blue			
western wahoo	<i>Enonymus occidentalis</i> var.	Low	Red			
white-top aster	<i>Sericocarpus rigidus</i>	Moderate	Blue	SC (Apr)	1-SC (Jun 2003)	
yellow montane violet	<i>Viola praemorsa</i> var.	Low	Red	E (Nov 2007)	1-E (Jun 2003)	
yellow sand-verbena	<i>Abronia latifolia</i>	Negligible	Blue			
curve-leaved cow-hair moss	<i>Ditrichum schimperi</i>	Moderate	Blue			
long-beaked water feathermoss	<i>Platyhypnidium riparioides</i>	Negligible	Blue			

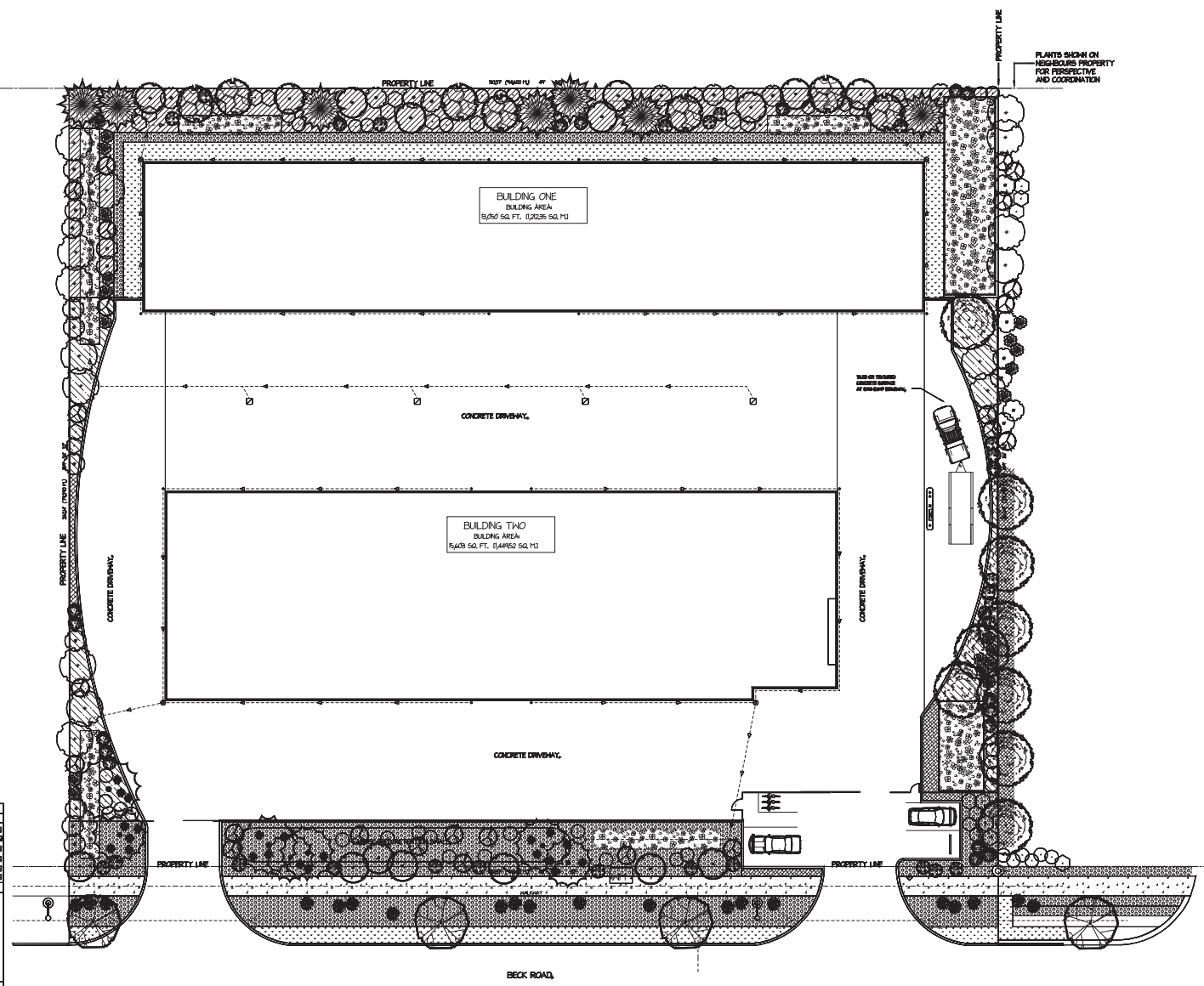




- 3 *Arbutus menziesii*
- 7 *Platanus occidentalis*
- 3 Street trees to be determined
- 7 *Prunus emarginata*
- 1 *Hibiscus abelii*
- 17 *Rosa rugosa*
- 20 *Philadelphus lewisii* (various)
- 15 *Vaccinium parvifolium*
- 27 *Rosa gymnocarpa*
- 17 *Rosa nitida*
- 36 *Symphoricarpos alba*
- 7 *Pinus menziesii*
- 7 *Pinus menziesii*
- 16 *Amelanchier alnifolia*
- 5 *Hibiscus abelii*
- 22 *Vaccinium ovatum*
- 22 *Polystichum muricatum*

- FESCUE GRASS BLEND WITH WILDFLOWERS**  
2627 sqm (3043 sqft)
- PLANT MIX 1**  
6764 sqm (7227 sqft)  
4 - 122 m o/c
- PLANT MIX 2**  
424 sqm (4591 sqft)  
4 - 122 m o/c
- PLANT MIX 3**  
254 sqm (2747 sqft)  
4 - 122 m o/c
- GRANDCOVER**  
40 *Arctostaphylos uva-ursi*  
308 sqm (334 sqft)  
3 - 025 m o/c
- 44 *Gaultheria shallon*
  - 44 *Hibiscus nervosus*
  - 44 *Aconitum canadense*
  - 54 *Adonis vernalis*
  - 54 *Aquilegia formosa*
  - 54 *Dianthus barbatus*
  - 54 *Gaultheria shallon*
  - 54 *Hibiscus nervosus*
  - 36 *Adonis vernalis*
  - 36 *Paulownia tomentosa*
  - 36 *Symphoricarpos mollis*

Qty	Botanical Name	Common Name	Size/Condition
16	<i>Amelanchier alnifolia</i>	SASKATON BERRY	# 5 pot. spacing as per drawing
3	<i>Arbutus menziesii</i>	PACIFIC MADROSE TREE	# 2 pot. spacing as per drawing
3	Street Trees	To be determined	5 cm cal. spacing as per drawing
7	<i>Pinus menziesii</i>	WHITE PINE	# 5 pot. spacing as per drawing
7	<i>Prunus emarginata</i>	BITTER CHERRY	# 5 pot. spacing as per drawing
7	<i>Platanus occidentalis</i>	DOUGLAS FIR	# 5 pot. spacing as per drawing
15	<i>Hibiscus abelii</i>	NATIVE OCEANBERRY	# 2 pot. (Ø9 - 120 m o/c)
20	<i>Philadelphus lewisii</i> (various)	COASTAL FLYCK ORANGE	# 2 pot. (Ø9 - 120 m o/c)
17	<i>Rosa rugosa</i>	RED FLOWERING CURRANT	# 2 pot. (Ø9 - 120 m o/c)
27	<i>Rosa gymnocarpa</i>	BULSHIP ROSE	# 1 pot. (Ø9 - 120 m o/c)
17	<i>Rosa nitida</i>	NOTKA ROSE	# 1 pot. (Ø9 - 120 m o/c)
36	<i>Symphoricarpos alba</i>	NATIVE SMOKEBERRY	# 1 pot. (Ø9 - 120 m o/c)
22	<i>Vaccinium ovatum</i>	EVERGREEN HUCKLEBERRY	# 1 pot. (Ø9 - 120 m o/c)
15	<i>Vaccinium parvifolium</i>	RED HUCKLEBERRY BUSH	# 1 pot. (Ø9 - 120 m o/c)
36	<i>Adonis vernalis</i>	COFFIN YARROW	SP4 - 10cm pot. (Ø9 - 025 m o/c)
54	<i>Adonis vernalis</i>	VANILLA LEAF	SP4 - 10cm pot. (Ø9 - 025 m o/c)
36	<i>Angelica mangrifolia</i>	FRASLEY DRIFTING	SP4 - 10cm pot. (Ø9 - 025 m o/c)
54	<i>Aquilegia formosa</i>	WESTERN COLLIERINE	SP4 - 10cm pot. (Ø9 - 025 m o/c)
44	<i>Aconitum canadense</i>	M.D. GINGER	SP4 - 10cm pot. (Ø9 - 025 m o/c)
54	<i>Dianthus barbatus</i>	NATIVE BLUEBERRY HEART	SP4 - 10cm pot. (Ø9 - 025 m o/c)
22	<i>Polystichum muricatum</i>	SHOED FERN	# 1 pot. (Ø9 - 120 m o/c)
40	<i>Arctostaphylos uva-ursi</i>	RAMONICK	SP4 - 10cm pot. (Ø9 - 025 m o/c)
30	<i>Gaultheria shallon</i>	SALA	SP4 - 10cm pot. (Ø9 - 120 m o/c)
36	<i>Hibiscus nervosus</i>	LOCH OREGON GRAPE	SP4 - 10cm pot. (Ø9 - 025 m o/c)
36	<i>Paulownia tomentosa</i>	OREGON BOLLWEAF	SP4 - 10cm pot. (Ø9 - 025 m o/c)
36	<i>Symphoricarpos mollis</i>	CREeping SMOKEBERRY	SP4 - 10cm pot. (Ø9 - 025 m o/c)



**BC LANDSCAPE STANDARDS**  
All contractors to meet the requirements as set out in the BC Landscape Standards, 2002 edition, prepared by the B.C. Society of Landscape Architects and the B.C. Landscape and Nursery Association 2004.  
Copies of the BC Landscape Standards are available through the BC LMA office at 1-604-574-7772  
Contractor to consult with designer regarding any discrepancies.  
Contractor to consult with designer if plant substitutions are required due to availability.  
Contractor is responsible for obtaining written confirmation of utility locations prior to commencing dig.  
Contractor is responsible for providing one year of maintenance and one year warranty on all materials and workmanship, from completion of landscape.  
Refer to landscape specifications supplied with this plan at building permit. Inset, if you did not receive the specifications, please contact the designer.

**TOP SOIL REQUIREMENTS:**  
Minimum depth for shrub beds 450mm (Ø7)  
Minimum depth for grandcovers 300mm (Ø7)  
Minimum depth for mulch 75mm (Ø7)  
Minimum depth for lawn areas 300mm (Ø7)  
Trees as per detail on these drawings.

**LANDSCAPE AREA**  
PLANT MIX ONE 6764 sqm 7227 sqft  
PLANT MIX TWO 424 sqm 4591 sqft  
PLANT MIX THREE 254 sqm 2747 sqft  
ARCTOSTAPHYLOS 308 sqm 334 sqft  
FESCUE LAWN AREA 3263 sqm 3500 sqft  
FESCUE & WILDFLOWERS 2627 sqm 3043 sqft  
TOTAL LANDSCAPE 14988 sqm 20870 sqft

**PROJECT:**  
CLIFTERLAND STORAGE  
2704 BECK ROAD  
CLIFTERLAND, B.C.

**ARCHITECT:**  
PHI ARCHITECTURE INC.  
PHI ARCHITECTURE INC.  
2704 BECK ROAD  
CLIFTERLAND, B.C.

**LANDSCAPE DESIGNER:**  
MYSTIC WOODS  
LANDSCAPE DESIGN  
PHONE 250-260-8277  
design@mysticwoods.ca

**DRAWN BY:**  
Carlyne Matheson CLD, GP  
Certified Landscape Designer  
Qualified Plantman  
Member of the  
BC LMA / CLMA

**LANDSCAPE ARCHITECT:**  
ALBION HENNETT BCCLA  
766 Lois Road  
Coxton, B.C. V9M 3V6  
PHONE 250-256-0225  
ahennett@gruif.com  
REVIEWED AND APPROVED BY:  
Albion Hennett BCCLA  
Landscape Architect  
Member of the BCCLA

**SCALE:** 1:200

**DATE:** September 4, 2022  
Issued September 12, 2022 For review  
Issued September 20, 2022 For review  
Issued Oct 19, 2022 For Development Permit  
Issued

**"Not for Construction"**  
LANDSCAPE DRAWINGS TO BE PROVIDED FOR BUILDING PERMIT  
L3 - CONSTRUCTION PLAN  
L4 - SPECIFICATIONS

**DRAWING:**  
LANDSCAPE PLANTING PLAN

**DRAWING #:** L2 of 2

# K. Woods P.Eng.

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2351 Barbara Road, Courtenay, B.C., V9J 1L9

250-897-8584 [kenwoodspeng@gmail.com](mailto:kenwoodspeng@gmail.com)

**Date:** July 27, 2022

**Project:** **Stormwater Management  
Infiltration and Storage of Runoff**

**Street Address:** **Lot 2, Beck Avenue, Cumberland, B.C.**

**Legal Description:** Lot 2 of Lot A, Section 34, Township 10, District Plan EPP93477

**PID** 031-308-937

**Folio #** 29039.521

**Attention:** Brian Balfe  
Bal Air Ltd.  
1970 Toronitz Road, Comox, B.C.  
250-897-4299  
[brian.balfe@rbc.com](mailto:brian.balfe@rbc.com)

## Purpose:

To develop a site-specific plan to reduce rainwater runoff and limiting post development water flows to pre-development water flows. The June 2008 publication "Beyond the Guidebook, Rainwater Management, An Introduction to the Guidebook for British Columbia" recommends the following measures:

- Rainfall Capture – keep rain onsite by means of 'rainfall capture' measures such as rain gardens and infiltration soakaways.
- Runoff Control – delay overflow runoff by means of detention storage ponds which provide runoff control.
- Flood Mitigation – reduce flooding by providing sufficient hydraulic capacity to 'contain and convey'

This report will address on-site rainfall capture and some runoff control in order to minimize the impacts of the proposed development.

## Pre-Development Site Description:

The property at Lot 2 Beck Avenue is 1.8 acres. The land was commercially logged of timber about 2015. Prior to the purchase of this land by the current owner, the land has been stripped of all vegetation. There are stockpiles of gravel and other landfill over much of the subject property.

Surficial geology consists of Glaciofluvial deposits, a massive sand and gravel deposit related to the outwash from previous glaciations. The in-situ sand and gravel deposit has a high infiltration capacity which absorbs most of the rain falling onsite. Major storm events may cause overland flows to the Bevan Road ditch system. Any water flow appearing in the Bevan Road ditch flows in a northwest direction toward the Bevan Wetlands.

The property is in the Northwest Watershed adjacent to the Morrison Creek Watershed.

The property has no standing or flowing water - no creeks, no rivers, no ponds. As expected, no water table was found in any test pits during geotechnical assessment of the site as the sand and gravel deposits are deep.

The scope of the project does not warrant a hydrological study.

#### Soil Description:

Ryzuk Geotechnical Engineering and Materials Testing conducted a geotechnical assessment of the site in December 2020.

There were 24 test pits dug on the property. The 24 test pits were dug to a depth of approximately 1.2 m to 1.6 m, a maximum depth at 2.3 meters. All test pits reported relatively consistent material results with minor variations in layer thickness and depth

The soils are identified as:

- Surficial layer of 0.2 to 0.3 meters of topsoil or disturbed organic ground cover from recent logging activities
- 2<sup>nd</sup> layer is 0.3 to 0.7 meters of native, dense, native brown, sand and gravel, with trace cobble, silt, and organics.
- 3<sup>rd</sup> layer a dense to very dense grey sand and gravel with a trace of cobble
- Maximum test pit depth of ~2.3 meters
- Ground water was not observed in any of the test pits
- Gravel deposits in this area are over 30 meters deep

Test Pit TP18-22 and TP18-15 appear to be on Lot 2 and reported relatively consistent material results. Both Test Pits report 0 m to 0.2 meters Topsoil / disturbed material, 0.2 to 0.9 meters reddish brown sand and gravel with trace cobble, 0.9 to 1.2 grey sand and gravel with trace cobble.

#### Post Development Site Conditions:

A new storage project consisting of two large buildings containing individual garages of various sizes. The two buildings and paved areas will cover most of the property. Landscape areas follow the perimeter of the property line.

The impervious surfaces will cause runoff which will be contained through rainfall capture, runoff control, and flood mitigation.

In Ryzuk Geotechnical's report, as well as Wedler Engineering, "the in-situ soils are well suited for dispersing storm runoff through infiltration and percolation. The in-situ soils can easily provide infiltration storage for the resulting increase in run-off. This will ensure minimal impacts in the "larger

watershed area(s) including watercourse, habitat connectivity, water quality and quantity upstream and downstream..." and therefore, minimal "...cumulative hydrological impacts".

Also, the receiving roadside ditch will be regraded and designed to have the capacity to handle up to 100-year storm events.

### **Methodology - Proposed Storage / Infiltration System:**

To collect rainwater flows from impervious surfaces of the buildings and driveways and direct the rainwater flows to combined storage and infiltration systems of the appropriate size considering the Target Flow Rate and the Rate of Infiltration.

As the two storage buildings are very long (260') and the foundations are relatively shallow the two storage buildings will be divided into 4 collection and infiltration/storage trenches. This will allow the drain leader pipe slope of 1% to remain within the height of the foundation wall, assuming a minimum 2 ft (0.6 m) tall foundation wall. Having several infiltration/storage trenches dispersed around the property allows for a larger area of infiltration.

The confined concrete driveway surfaces between building #1 and #2 will use a series of 4 catch basins to collect surface rainwater. The catch basins are evenly spaced at a distance, so the paved surface has gentle slopes rather than severe depressions for drainage.

Driveway areas adjacent to landscape areas will slope toward the landscape area where swales with natural vegetation will be used to capture runoff for containment and infiltration.

### **Hydraulic Conductivity:**

Ryzuk Geotechnical completed permeameter testing on the very dense sand and gravel to estimate the hydraulic conductivity of the course granular material. The resulting calculated saturated hydraulic conductivity of the soil is  $2.5 \times 10^{-2}$  cm/sec.

Percolation Test conducted by K. Woods showed a percolation rate of less than 30 seconds per inch, which relates to a Kfs range of 8000 mm/day to 17,000mm/day (percolation test pit 12" x 12" x 16" deep).

Permeameter Testing and Percolation Testing both indicate the fast absorption of water in a vertical direction. The gravel deposits in the area are very deep which will absorb a vast amount of water.

### **Rate of Infiltration to Soil:**

Soils:	Glaciofluvial deposit, 0 to ~30+ meters depth
Water Table:	Seasonal water table not observed
Drainage Horizon:	Sand and Gravel.
Roof Area:	~200 m2 total

<b>Test Pit:</b>	1' x 1' x 16" deep	.3048m x .3048m x .4064m
Test Pit Infiltration Area:	6.32 ft <sup>2</sup>	0.588 m <sup>2</sup>
Water Level Drop:	(less than) 30 seconds for 2.36 L/1" drop	
Time 1" Drop:	30 seconds	
<u>Infiltration Rate:</u>	Liters/ square meter/ 15 min: 120 L/m <sup>2</sup> /15mins	

**Target Flow Management Rate:**

The target flow rate for onsite retention of a Tier A Event, which is 50% of the Mean Annual Rainfall, is about 20 mm on the east side of Vancouver Island (see Table 6-1 from Stormwater Planning: A Guidebook for BC). Tier 'A' Events represents over 70% of the total annual rainfall (Figure 6-4).

**Trench Size – Infiltration/Storage:**

**Building #1:**

Infiltration to soil:

Impervious area (roof)		1212 m <sup>2</sup>
Roof Rain Volume: 10 mm /m <sup>2</sup> /15 mins. X 1212 m <sup>2</sup>		12,120 L/15 mins
Trench Infiltrative area per linear meter (2.0 wide x 1.0 deep)		4.0 m <sup>2</sup> / m
Infiltration per m	4.0 m <sup>2</sup> / m x 120 L / M <sup>2</sup> / 15 mins	480 L / m
Length of trench	(12120 – (4 x 480))/480	21 m
Storage Volume @ 30% void for 1.5" drain rock		12.5 m <sup>3</sup>

Target Flow Management Rate:

Impervious area (roof)	1212 m <sup>2</sup>
Tier 'A' Events	24.0 m <sup>3</sup> / 24 hrs.

**Building #1 Trench Design:**

The 261' long x 50' wide building is divided into two infiltration systems to facilitate the slope length of drainpipe.

Building #1 East infiltration trench and Building #1 West infiltration trench would have the same dimensions of 2.0 m wide x 1.0 m deep x 10.5 m long. Trench dimensions are measured below the



perforated dispersal pipe. The water storage volume for each trench is 6.25 m<sup>3</sup> each trench for a total of 12.5 m<sup>3</sup> storage capacity. The smaller storage volume compared to the Target Flow Rate is mitigated by the high infiltration rates of the deep gravel deposit.

Use 4" PVC-CSA drain leader around the building foundation to the 36" id x 3' deep catch basin, then use 6" PVC-CSA from the CB through the infiltration trench. Use two 45-degree fittings in place of 90-degree corners.

### **Building #2:**

#### **Infiltration to Soil:**

Impervious area (roof)		1450 m <sup>2</sup>
Roof Rain Volume: 10 mm /m <sup>2</sup> /15 mins. X 1212 m <sup>2</sup>		14,500 L/15 mins
Trench Infiltrative area per linear meter (2.0 wide x 1.0 deep)		4.0 m <sup>2</sup> / m
Infiltration per m	4.0 m <sup>2</sup> / m x 120 L / M <sup>2</sup> / 15 mins	480 L / m
Length of trench	(14500 – (4 x 480)) / 480	26 m
Storage Volume @ 30% void for 1.5" drain rock		16 m <sup>3</sup>

#### **Target Flow Management Rate:**

Impervious area (roof)	1450 m <sup>2</sup>
Tier 'A' Events - water volume	29 m <sup>3</sup> / 24 hrs.

#### **Building #2 Trench Design:**

The 225' long x 70' wide building is divided into two infiltration systems to facilitate the slope length of drainpipe.

Building #2 East Infiltration Trench and Building #2 West Infiltration Trench would have the same dimensions of 2.0 m wide x 1.0 m deep x 13 m long. Trench dimensions are measured below the perforated dispersal pipe. The water storage volume for this trench is ~8 m<sup>3</sup> each trench for a total of 16 m<sup>3</sup> storage capacity. The smaller storage volume compared to the Target Flow Rate is mitigated by the high infiltration rates of the deep gravel deposit.

Use 4" PVC-CSA drain leader around the building foundation to the 36" id x 3' deep catch basin, then use 6" PVC-CSA from the CB through the infiltration trench. Use two 45-degree fittings in place of 90-degree corners.

**Concrete Driveway Area 'A':** (the paved area between Building #1 and Building #2)

**Infiltration to Soil:**

Impervious area (roof)	1255 m <sup>2</sup>
Roof Rain Volume: 10 mm /m <sup>2</sup> /15 mins. X 1212 m <sup>2</sup>	12550 L/15 mins
Trench Infiltrative area per linear meter (2.0 wide x 1.0 deep)	4.0 m <sup>2</sup> / m
Infiltration per m      4.0 m <sup>2</sup> / m x 120 L / M <sup>2</sup> / 15 mins	480 L / m
Length of trench      (12550 – (4 x 480)) /480	22 m
Storage Volume @ 30% void for 1.5" drain rock	13 m <sup>3</sup>

**Target Flow Management Rate:**

Impervious area (roof)	1255 m <sup>2</sup>
Tier 'A' Events - water volume	25 m <sup>3</sup> / 24 hrs.

**Driveway Area 'A' Trench Design:**

The 225' long x 60' wide Driveway Area 'A' collects rainwater flows via 4 - 36" id x 3' deep catch basins connected to a drain pipe directing the water flows westward to the landscape area at the north west portion of the property. The concrete drive is sloped at a minimum 1% toward the Catch Basins from the buildings and a minimum ½% slope between the catch basins (see design drawing). The drainpipe has a minimum of 1% slope for the 4" and 6" PVC-CSA pipe. Use 4" PVC -CSA for the first 3 catch basins and 6" PVC-CSA from the third CB through the Infiltration Pit. Use two 45-degree fittings in place of 90-degree corners.

Concrete Driveway Area 'A' Infiltration Trench would have the dimensions of 2.0 m wide x 1.0 m deep x 22 m long. Trench dimensions are measured below the perforated dispersal pipe. The storage volume for this trench is 13 m<sup>3</sup> storage capacity. The smaller storage volume compared to the Target Flow Rate is mitigated by the high infiltration rates of the deep gravel deposit.

**Unconfined Concrete Driveways:** (paved driveways open to landscaped areas)

The concrete driveways, other than Area 'A', are unconfined by buildings meaning the driveway can slope toward landscape areas. The downslope away from the buildings is 1% minimum.

The driveway, and or parking areas, is to be graded to drain into a bio-swale in the landscape area between Beck Avenue and Building #2 (see drawing). Landscape vegetation in swale will help maintain the swale shape and function. The bio-swale is approximately 35 meters long constructed on the west side of Infiltration Trench #4 in the same landscape area parallel to Beck Avenue.

### **Erosion and Sediment Control:**

- Construct permanent or temporary fencing around sensitive features (i.e., septic disposal field)
- Retain vegetation where possible
- Retrain natural soils for use onsite
- Retain sediment laden surface water in retention ponds and/or interception methods
- Retain undisturbed soils in landscape areas

### **Recommendations:**

A qualified professional to determine the suitable bearing soil for the buildings, compaction of any structural fill used for the buildings, and compaction of the driveway materials before paving.

To achieve satisfactory drainage flow on the property the elevation for the building floor slabs should be established as the highest elevation relative to the driveway top of pavement, slope of pavements to the landscape areas, and the finally related to the Beck Avenue elevation access to the property.

These elevations should be established by a qualified professional.

### **Conclusion:**

Providing the above design and recommendations are followed and constructed by a qualified contractor to the bylaws of the Village of Cumberland, the Stormwater flows on Lot 2 Beck Avenue can be safely and satisfactorily contained and infiltrated.

### **Limitations:**

- The recommendations and scope of this report are based upon data provided by visual inspections of the site that did not include subsurface investigations.
- The recommendations provided are provided based upon conditions presented during the visual inspection and are consistent with general engineering practices.
- No other warranty, expressed or implied, is made.
- Due to geological variation and randomness of soil formations, no guarantee of soil conditions is made or implied, away from the areas inspected during the site visit. Conditions of subgrades and soils are known only at sites inspected and when exposed. If other conditions or soils become known during further construction or unanticipated conditions become evident, the recommendations may be altered or modified in writing by the undersigned engineer.

### **Acknowledgements:**

This report has been completed by Ken Woods, P. Eng., a Professional Engineer in good standing with Engineers and Geoscientists of B.C. and acknowledges that this report may be requested by the building inspector at the Village of Cumberland prior to the issuance of building permits. Building officials and approving officers may rely on this report for application of building permits. The report

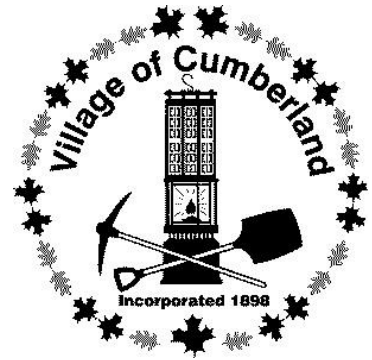
has been prepared for, and at the expense of, the client and have not acted on behalf of the Village of Cumberland in any way.

Yours truly,



Ken Woods, P.Eng.  
Permit to Practice: 1002513

# COUNCIL REPORT



REPORT DATE: 12/15/2022  
MEETING DATE: 1/9/2023

File No. 6400/6950/Parking

TO: Mayor and Councillors  
FROM: Karin Albert, Senior Planner and Meleana Searle, Planner  
SUBJECT: Council Policy on Development Variance Permits for Parking in the VCMU-1 Zone

## RECOMMENDATION

THAT Council adopt the Council Policy on Review of Development Variance Permits for Parking in the Village Core Commercial Mixed-Use (VCMU-1) Zone.

## PURPOSE

The purpose of this report is to seek adoption of a policy that will provide staff with guidelines for reviewing and evaluating development variance permit applications for parking in the VCMU-1 Zone.

## PREVIOUS COUNCIL DIRECTION

Date	Resolution
November 28, 2022	THAT Council refer the Council Policy on Review of Development Variance Permits for Parking in the Village Core Commercial Mixed-Use (VCMU-1) Zone to the Advisory Planning Commission for comment.
June 9, 2022	THAT Council direct staff to draft a policy for consideration of development variance permit applications for parking associated with existing businesses and/or heritage buildings in the VCMU-1 zone.

## BACKGROUND

The 2021 increase of the parking cash-in-lieu amount from \$3,800 to \$10,000 per space in the VCMU-1 zone is putting financial strain on new tenants in that zone if their proposed new commercial use exceeds the parking spaces available on the property. Staff have seen a recent rise in small business owners not being able to meet the parking requirements associated with their business and, therefore, having to make parking cash-in-lieu payments prior to receiving their business licence and being able to open their business. The parking cash-in-lieu amounts due put a large financial burden on small businesses. As a consequence, some find a space for their business elsewhere while others seek a development variance permit.

At their November 28, 2022 meeting ([item 7.1 p. 12](#)), Council referred the draft Council Policy on the Review of Development Variance Permits for Parking in the VCMU-1 zone to the Advisory Planning Commission (APC) for comment.

The APC passed three resolutions at their December 8, 2022 meeting (draft minutes included in this Council package). Firstly, the Commission recommended that the section of the draft policy that speaks to residential parking in the VCMU-1 be amended to consider development variance applications for reduced parking requirements for affordable housing developments.

The APC supported the policy provisions related to reviewing development variance applications for commercial uses as presented.

Finally, the APC recommended that during a future Zoning Bylaw update, commercial uses be exempt from parking requirements. However, APC members also discussed that the parking requirements for accessible stalls should be retained.

## **ANALYSIS**

The proposed Council Policy provides a framework for evaluating parking variances in the VCMU-1 zone. The goal of the policy is to ensure that reductions in parking requirements benefit the downtown core and/or the community at large by supporting small and/or unique businesses, the creation of space for arts and culture, and the retention or enhancement of the character and diversity of the downtown core.

### ***Policy Amendments***

In follow-up to the discussions at the APC meeting, staff added section 4 to the Policy to identify that the review of applications to reduce parking requirements for affordable housing units would consider lower vehicle ownership of low-income tenants, financial strain on the affordable housing development, and need for a municipal contribution to strengthen funding applications for senior government grant programs (Attachment 1 – Council Policy).

Upon further review of the draft Policy, staff also added section 5 and amended section 6 to clarify that new developments are expected to meet parking requirements for both residential and commercial uses and that parking variances are primarily intended to support new and existing businesses (Attachment 1 – Council Policy).

### ***Security and Timing for Parking Cash-in-lieu***

The possibility of requiring a security for parking cash-in-lieu as part of a Heritage Alteration Permit (HAP) was investigated. The purpose of the security would be to hold additional funds for parking cash in lieu, and, once the use of the commercial space is known, refund any overpayment to the applicant. A security can only be held until the actions that the permit authorizes are complete; it could not be held indefinitely if a commercial space was unoccupied, so is unlikely to solve the problem.

Staff is looking into whether parking cash in lieu can be charged at issuance of occupancy permit instead of building permit. This would reduce the instances when developers do not yet know what the commercial uses in their development might be and increase the accuracy of parking cash in lieu calculations.

**PUBLIC NOTIFICATION AND CONSULTATION**

The development of the proposed Council Policy was informed by comments received from existing business owners and discussions with commercial tenants during the processing of development applications and business licence applications in the downtown core. The draft policy was referred to the APC for comment. There is no statutory requirement for consultation on a Council policy.

**ALTERNATIVES**

- 1. THAT Council direct staff to adopt the proposed Council Policy on Review of Development Variance Permits for Parking in the VCMU-1 zone with the following edits: (a) \_\_\_\_\_; (b) \_\_\_\_\_...
- 2. THAT Council direct staff to provide additional information related to the proposed parking policy in an upcoming staff report.
- 3. Not proceed with any action at this time.

**STRATEGIC OBJECTIVE**

- Healthy Community
- Quality Infrastructure Planning and Development
- Comprehensive Community Planning
- Economic Development

**FINANCIAL IMPLICATIONS**

The effect of the policy may be a reduction in parking cash-in-lieu received by the Village. On the other hand, the policy may result in more small businesses being able to occupy commercial spaces in the downtown core. This would add to the vibrancy and economic resilience of the downtown core and strengthen the local economy.

**OPERATIONAL IMPLICATIONS**

Developing policy is part of the regular services provided by the Development Services Department. Since the policy provides an indication of the likely success of a development variance application to reduce parking cash-in-lieu, it may increase the number of applications received for commercial parking but may reduce the number of applications received for residential parking.

**CLIMATE CHANGE IMPLICATIONS**

Making it easier for businesses to occupy commercial spaces in the downtown core reduces travel distances for Cumberland residents to those businesses, potentially resulting in less local transportation related greenhouse gas emissions. Less availability of parking in the downtown core may result in more walking or bicycle trips by employees and customers of downtown businesses further reducing transportation related greenhouse gas emissions.

**ATTACHMENTS**

1. Council Policy on Review of Development Variance Permits for Parking in the VCMU-1 zone

**CONCURRENCE**

Courtney Simpson, Manager of Development Services **CS**

Respectfully submitted,

***K. Albert***

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Karin Albert  
Senior Planner

***M. Searle***

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Meleana Searle  
Planner

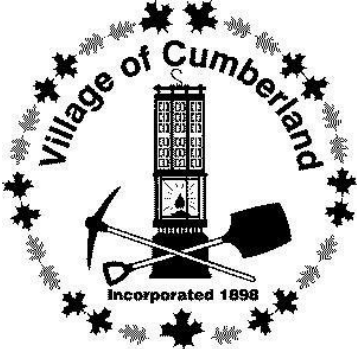
***M. Mason***

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Michelle Mason  
Chief Administrative Officer



# COUNCIL POLICY



Title:	Review of Development Variance Permits for Parking in the VCMU-1 zone	No.	13.4
Adopted Date:		Section:	Planning and Development
Amended Date:		Motion No:	23-XXX

**Purpose**

The purpose of this policy is to provide guidelines for staff review and evaluation of development variance permit applications for parking in the VCMU-1 zone.

The intent is to support entrepreneurship, support a diverse range of small local businesses and services, arts and culture and encourage the retention of heritage buildings and diversity of character in the Village downtown core, while balancing the need for vehicle parking spaces.

**Policy Provisions**

1. Reduction of vehicle parking requirements through development variance permit in the VCMU-1 zone result in fewer parking spaces provided and reduced revenue to the parking cash-in-lieu fund. Therefore, applications for variances should demonstrate that a reduction in parking requirements benefits the downtown core and/or the community at large.
2. Applications should demonstrate that the ability to use or develop the property is unreasonably constrained or hindered by having to comply with the parking requirement or cash-in-lieu option.

Residential Parking

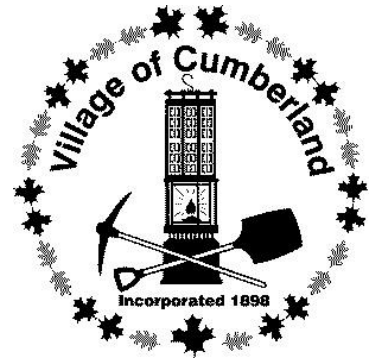
3. Variances to reduce parking requirements for residential development are generally not recommended since residential parking can occupy a space for an entire day or multiple days and reduce the availability of short-term parking for customers of businesses along Dunsmuir Avenue.
4. The review of development variance permit applications to reduce residential parking requirements for affordable housing units, where the owner has entered into a housing agreement with the Village, will consider:

- a. Possible lower vehicle ownership of low income tenants;
- b. Impact of the parking cash-in-lieu amount on the financial feasibility of the affordable housing development.
- c. Requests for municipal contributions to affordable housing developments by funding agencies.

### Commercial Parking

5. New developments are generally expected to meet parking requirements for both residential and commercial uses.
6. The review of an application for a variance to commercial parking requirements in the VCMU-1 zone **by a tenant or an owner intending to change an existing or establish a new commercial use** will be evaluated based on the following impacts and benefits of the application.
  - i. *Supporting Small Businesses, Services, Arts and Culture*
    - a. The addition or expansion of a small, local business start-up or development
    - b. Creation of an arts and culture space
    - c. Provision of a needed business or service in the Village
  - ii. *Heritage Conservation*
    - a. Retention of heritage buildings and structures, preferably through a heritage revitalization agreement
    - b. Retention of heritage trees
  - iii. *Promotes Retention and Diversity of Character*
    - a. Provision of outdoor seating
    - b. Provision of outdoor plazas or courtyards
    - c. Planting or retention of shade trees
    - d. Provision of active transportation facilities such as e-bike plug-ins or covered public bicycle parking
    - e. Provision or retention of accessible parking space on-site
    - f. Provision of electric vehicle or carshare parking

# COUNCIL REPORT



REPORT DATE: December 28, 2022

MEETING DATE: January 9, 2023

TO: Mayor and Councillors

FROM: Kaelin Chambers, Economic Development Officer

SUBJECT: Rural Economic Diversification and Infrastructure Program

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## RECOMMENDATION

THAT Council approve the application for \$97,125 to the Rural Economic Diversification and Infrastructure Program for completion of the Village of Cumberland Investment and Development Readiness Project, with the Village cash contribution of \$10,000 and in-kind contribution of \$9,713.

## PURPOSE

The purpose of this report is to provide Council with information relating to the grant funding application submitted by staff to the Rural Economic Diversification and Infrastructure Program (REDIP) and seek council's support and/or direction in utilizing the potential funding towards the planning of future industrial and/or commercial development and/or improvements in the Village.

## PREVIOUS COUNCIL DIRECTION

Date	Resolution
March 8, 2021	THAT Council support Investment Attraction Action Plan and direct staff to incorporate the information and/or recommendations within future economic development plan/strategies and report back to Council on their implementation.

## BACKGROUND

REDIP supports rural economic development projects that promote economic capacity building, economic diversification, resilience, clean economy opportunities, and infrastructure development.

Under REDIP, the Village is eligible to submit into the REDIP Economic Diversification stream (REDIP-ED) as a community with a population of 25,000 or less and being located outside of Metro Vancouver and the Capital Regional District.

REDIP-ED has two types of grants (see Table 1). The Development grant, which the Village has applied into, aims to support the planning of programs, services, and infrastructure projects up to \$100,000 (max). The Implementation grant aims to fund the implementation of programs or services, or the construction of infrastructure resulting in new, upgraded or preserved local asset(s) (max funding \$1,000,000).

**Table 1 REDIP- ED Eligible Projects**

	<b>Development</b>	<b>Implementation</b>
<b>Soft Infrastructure</b>	<ul style="list-style-type: none"> <li>• Feasibility studies.</li> <li>• Business plans.</li> <li>• Program design.</li> <li>• Service planning.</li> </ul>	<ul style="list-style-type: none"> <li>• New or enhanced programs or services related to related to workforce development, business development, and industry/sector development, retention, and expansion.</li> </ul>
<b>Hard Infrastructure</b>	<ul style="list-style-type: none"> <li>• Infrastructure design including architecture, engineering, assessment costs, and planning.</li> </ul>	<ul style="list-style-type: none"> <li>• Construction of a new asset or the upgrading of an existing asset to support the development, stability, and scaling up of businesses.</li> <li>• Assets to support sector development, and investment attraction</li> </ul>

Applicants to REDIP-ED must provide 20% of the total project budget as their financial contribution (up to \$200,000 max). The applicant financial contribution may come from:

- Applicants’ own funds, including funds obtained through financing
- Funds from not-for-profit organizations, such as development trusts
- Funds from partners
- In-kind contributions

The applicant’s in-kind contributions:

- May be up to 50% of the applicant’s financial contribution
- May include goods and services donated to a project by the eligible applicant and/or eligible partners (e.g., staff time, use of space or equipment).
- Must be valued at fair market value

Applications were to be submitted by January 4, 2023.

With limited time to collaborate on, and complete the project application, staff submitted to REDIP for funding on December 23, 2022, to complete the Village of Cumberland Investment and Development Readiness Project.

Although the application process did not require confirmation and/or any form of resolution on behalf of Council, as per the Delegation of Authority bylaw, Council needs to approve all grants greater than \$50,000. Although the grant has been submitted, Council still has the option to not approve the application; however, staff do not recommend this as the initiatives that this grant would fund are integral to the future planning for the Village.

Since 2016, the Village has been very successful in accessing and utilizing the Province’s rural economic development funding programs in both creating, implementing, and advancing the Cumberland Economic Development Strategy (2018-2023).

### **The Village of Cumberland Investment and Development Readiness Project**

The Village of Cumberland Investment and Development Readiness Project will guide how the Village can strategically facilitate private commercial development, such as the Bevan Industrial Lands. It will also provide the organization with guidance in managing its land portfolio, specifically the Union Road Lands, through land value capture and disposition, for the redevelopment of civic facilities and facilitate new commercial development in the community.

By acting on recommendations born from the Economic Development Strategy (2018), Bevan Industrial Lands Concept Plan (2020), Investment Attraction Action Plan (2020), and Municipal Facilities Update (2022), staff are seeking to gain a better understanding of the economic, commercial, and industrial potential of the Village’s employment lands, by:

- Identifying and tracking key industrial, commercial and investment lands and/or properties. This includes utilized, vacant and underutilized commercial and/or industrial lands, their servicing characteristics, and locational attributes.
- Quantifying the industrial and/or commercial land use demand in the Village to evaluate how/where the current supply of investment land can accommodate future demand/interest.
- Establishing a projection of potential demand of new development on municipal services and budgets and identify whether the property tax revenues from new and/or future developments will balance out incurred costs.
- A land use plan for Village-owned land at Union Road to outline land value capture prior to disposition. This includes a plan for future use, Official Community Plan and Zoning Bylaw amendment, and servicing, prior to disposition of surplus land.
- The plan for disposition of surplus land at Union Road will allow for planning to begin for moving the public works facility out of the downtown core.

The Project will be coordinated/managed by Village staff and lead by qualified professional to complete the needed project components. The Project will consider and include three specific study components to achieve the intended outcomes.

#### Industrial, Commercial and Investment Lands Assessment

An Industrial, Commercial and Investment (ICI) lands assessment will identify and inventory key industrial, commercial and investment lands and properties in the Village. This includes utilized, vacant and underutilized commercial and/or industrial lands, their servicing characteristics, and locational attributes.

#### Fiscal Impact Analysis on New or Proposed Development

A Fiscal Impact Analysis (FIA) will be completed to estimate the public cost of new development, by undertaking a projection of the direct, current, and public costs and revenues associated with new and/or proposed growth/development such as the Bevan Lands. An FIA will also inform if/how property tax revenues from new and/or future developments will balance out incurred costs of operating/maintaining the required services and infrastructure.

## Development and Servicing Strategy for Village Owned Lands at Union Road

To be developed in four phases: due diligence land analysis (environmental and civil engineering), concept development, appraisal and financial feasibility modelling, and community engagement planning. This Strategy will also provide guidance on how the Village can best capture value through zoning and servicing, prior to disposition.

### **ALTERNATIVES**

1. THAT Council direct Staff to not proceed with the Project at this time and look at future funding opportunities.

### **STRATEGIC OBJECTIVE**

- Healthy Community
- Quality Infrastructure Planning and Development
- Comprehensive Community Planning
- Economic Development

### **FINANCIAL IMPLICATIONS**

The overall budget to complete the described works is \$116,838. Of this, \$97,125 is being sought from the REDIP-ED funding stream. The Village contribution is to be \$10,000 with a further \$9,713 provided as in-kind.

- Staff have identified approximately \$20,000 in carry over funding from 2022 that can/will be utilized towards the Village's financial contribution to the Project.

Please note that a request of \$62k has also been included within the 2023 budget process to complete the Union Lands Servicing Strategy (includes the \$20k carry over funding from 2022). Staff have identified these as priority works and recommend their completion regardless of the funding outcome.

The application budget also considers and includes funding to facilitate the participation of K'omoks First Nation in the Project should they express interest.

Funding awards will be announced on March 31, 2023.

### **OPERATIONAL IMPLICATIONS**

The Economic Development Officer will lead the ICI and FIA components of the Project and the Manager of Development Services will oversee the Union Road Servicing Strategy, both with support from consultants. The initiative will also impact work plans for the Village's operations, finance, and planning departments.

### **CLIMATE CHANGE IMPLICATIONS**

Climate Change considerations will be part of the Development and Servicing Strategy for Village Owned Lands at Union Road. Future servicing will be planned following best engineering practices that are regularly updated to account for expected impacts of climate change. Discussion of future

land use will be informed by climate adaptation principles such as compact, complete communities that reduce the need for automobile travel and enable active transportation, and low-carbon buildings.

**ATTACHMENTS**

1. REDIP Program Guide
2. Village of Cumberland 2022 REDIP Application

**CONCURRENCE**

Courtney Simpson, Manager of Development Services **CS**

Respectfully submitted,

**K. Chambers**

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Kaelin Chambers  
Economic Development Officer

**M. Mason**

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Michelle Mason  
Chief Administrative Officer



PROGRAM GUIDE



# Rural Economic Diversification and Infrastructure Program

R E D I P









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## Program Overview |

The Rural Economic Diversification and Infrastructure Program (REDIP) supports rural economic development projects that promote economic capacity building, economic diversification, resilience, clean economy opportunities, and infrastructure development.

Applications must be submitted through the online system at [gov.bc.ca/redip](http://gov.bc.ca/redip). Intake opens November 15, 2022.

Submit the complete application package by January 4, 2023 by 1:00PM PST. Applications will not be accepted after this date.

Both MS Word and PDF versions of the application form is available to help with preparing an application. If further support is required, refer to page 18, [Application Support](#).

# Funding Categories |



## Economic Capacity (REDIP-EC)

Helps communities build internal capacity for economic development.

Maximum Funding Per Project	Up to \$50,000/year for two years*
Percentage of Project Costs Eligible for Funding	100%

*\*Successful applicants may receive up to \$50,000 in year one. Remaining funding are released in year two upon submission of a progress report.*

## Economic Diversification (REDIP-ED)

Funds projects that promote economic diversification and development.

### Development Grant

Maximum Funding Per Project	\$100,000
Percentage of Project Costs Eligible for Funding	80%

### Implementation Grant

Maximum Funding Per Project	\$1 million
Percentage of Project Costs Eligible for Funding	80%



## Forest Impact Transition (REDIP-FIT)

Supports economic recovery and transition in communities affected by impacts in the forest sector.

Maximum Funding Per Project	\$500,000
Percentage of Project Costs Eligible for Funding	100%



## Who Can Apply |

### Eligibility Requirements:

- The proposed project must directly serve the applicant's community(ies).
- Where multiple communities collaborate and the project serves multiple communities, each applicant community must meet the eligibility requirements of the funding category. However, their combined population can be larger.
- Population size will be determined using [Statistics Canada 2021 Census Data](#). Communities with populations up to 500 over the respective limits are eligible to apply.
- Communities with populations under 25,000 in the CRD and Metro Vancouver areas can contact the program office to request an exception.

## Eligible Project Locations |

### REDIP-ED Eligible Project Communities

- Indigenous and non-Indigenous communities with populations of 25,000 or less outside of Metro Vancouver and the Capital Regional District

### REDIP-EC Eligible Project Communities

- Small rural communities with populations of 2,500 or less outside of Metro Vancouver and the Capital Regional District
- All Indigenous communities and organizations outside of Metro Vancouver and the Capital Regional District

### REDIP-FIT Eligible Project Communities

- Indigenous and non-Indigenous communities located outside of Metro Vancouver and the Capital Regional District experiencing or anticipating impacts of changes in the forest sector, including old growth deferrals
- As part of the application process, applicants to REDIP-FIT will be asked to self-identify ongoing, acute or anticipated impacts. Please refer to page 17 for more information

## Who Can Apply (Cont.) |

	<b>Economic Capacity and Economic Diversification</b>	<b>Forest Impact Transition</b>
<b>Eligible Lead Applicants</b>	<ul style="list-style-type: none"> <li>• Local Governments</li> <li>• Regional Districts</li> <li>• Indigenous communities and organizations</li> <li>• Indigenous Development Corporations</li> <li>• Not-for-profits</li> </ul>	<ul style="list-style-type: none"> <li>• Local Governments</li> <li>• Regional Districts</li> <li>• Indigenous communities</li> </ul> <p><i>Lead applicants can formally delegate project to a partner organization</i></p>
<b>Ineligible Lead Applicants</b>	<ul style="list-style-type: none"> <li>• Federal entities, including federal Crown Corporations</li> <li>• Applicants not operating within the Province of British Columbia</li> <li>• Businesses</li> <li>• A political party, political action group or lobby group</li> <li>• Registered charities</li> </ul>	<ul style="list-style-type: none"> <li>• All ineligible lead types for <b>REDIP-EC</b> and <b>REDIP-ED</b></li> <li>• Not-for-profits</li> <li>• Indigenous Development Corporations</li> </ul>
<b>Eligible Partners (Optional; no limit)</b>	<ul style="list-style-type: none"> <li>• All types of eligible lead applicants</li> <li>• Non-Indigenous Development Corporations</li> <li>• Industry organizations</li> <li>• Businesses*</li> <li>• Community Foundations</li> <li>• Post-secondary institutions</li> </ul>	<ul style="list-style-type: none"> <li>• All types of eligible lead applicants</li> <li>• Not-for-profits</li> <li>• Indigenous Development Corporations</li> </ul>
<b>Ineligible Partners</b>	<ul style="list-style-type: none"> <li>• Entities owned by, or that own the applicant organization</li> <li>• Entities owned by the same parent organization as the applicant</li> </ul>	

\* For-profit entities can serve as partners with an eligible applicant as long as the proposed project identifies broad community benefits and does not negatively impact other businesses.



## Who Can Apply (Cont.) |

### Partners must:

- Have an active role in the project but are not required to contribute financially.
- Provide proof of partnership confirming their role and commitment to the project (such as an email or letter).

### Application Limit:

- Lead applicants can submit an application for only one funding category per intake - i.e. **REDIP-EC**, **REDIP-ED** OR **REDIP-FIT**
- Regional districts can submit one application for REDIP for each eligible Electoral Area.
- Regional districts must clearly identify which community(ies) or unincorporated area(s) they are applying on behalf of.
- For **REDIP-ED**, regional districts can submit applications on behalf of the whole district if the total population is less than 25,000.
- Eligible partners can be partners on multiple projects.
- Projects that are unable to be funded through one funding category may be considered for funding through the other two funding categories.



## What Types of Projects are Eligible? |

Projects must meet all applicable federal and provincial environmental legislation and standards including consultation with Indigenous nations.

It is the applicant's responsibility to obtain any required approvals and permits.

### Economic Capacity:

Aims to build the economic capacity of small rural communities and provide or improve their ability to support economic diversification (max funding \$100,000).

#### Eligible project types include:

- Community assessment projects such as identifying community economic development capacity, community needs and/or opportunities.
- Capacity building projects such as strengthening local economic development capacity through targeted coaching, job shadowing, mentorship, and/or professional development.
- Engagement projects such as community consultation, project identification and/or fostering in-house economic development services and resources.
- Staff recruitment and retention projects such as ones that reduce staff turnover, enhance stability, or temporarily increase staff positions, time and/or resources.

### Economic Diversification:

REDIP-ED has two types of grants. The **Development** grant aims to support the planning of programs, services and infrastructure projects (max funding \$100,000).

The **Implementation** grant aims to fund the implementation of programs or services, or the construction of infrastructure resulting in new, upgraded or preserved local asset(s) (max funding \$1,000,000).

### Forest Impact Transition:

REDID-FIT applicants may submit projects that are eligible under REDIP-ED. (max funding \$500,000).

*Information continued on page 10*





## Economic Diversification - Eligible Projects (Cont.):

	DEVELOPMENT	IMPLEMENTATION
<b>Soft Infrastructure</b>	<ul style="list-style-type: none"> <li>• Feasibility studies.</li> <li>• Business plans.</li> <li>• Program design.</li> <li>• Service planning.</li> </ul>	<ul style="list-style-type: none"> <li>• New or enhanced programs or services related to related to workforce development, business development, and industry/sector development, retention, and expansion.</li> </ul>
<b>Hard Infrastructure</b>	<ul style="list-style-type: none"> <li>• Infrastructure design including architecture, engineering, assessment costs, and planning.</li> </ul>	<ul style="list-style-type: none"> <li>• Construction of a new asset or the upgrading of an existing asset to support the development, stability, and scaling up of businesses.</li> <li>• Assets to support sector development, and investment attraction.</li> </ul>

# Creating a Project Budget |

## To be eligible, project costs must:

- Directly benefit and be essential to the project.
- Be reasonable and accurately estimated.

All project related costs must be included in the project budget. Eligible costs refers to project costs eligible for funding through REDIP. Ineligible costs must be included but funded through the applicant contribution or other funding sources.

## Eligible Funding Costs

### General Costs

#### Eligible

- Costs incurred after approval and on or before the project completion date
- Capital purchases essential to project implementation
- Staff salaries in the lead or partner organization(s) working directly on project activities :
  - **REDIP-EC** up to 100% of total project costs
  - **REDIP-ED** and **REDIP-FIT** up to 15% of total project costs

#### Ineligible

- Any unpaid costs including invoices or holdbacks
- Accrued costs
- Goods or services costs which are received through donations or in kind
- Costs incurred prior to approval date and after project completion date
- Land acquisition
- GST and PST
- Financing costs and interest charges

### Construction/Materials Costs

#### Eligible

- Insurance related to construction
- Equipment and/or furnishing essential to project operations
- Utility, electrical, sanitary sewer, and storm sewer set-up/connection services to project site

#### Ineligible

- Liability insurance for directors
- General routine, cyclical repairs and maintenance
- Traditional municipal infrastructure (roads, sidewalks, etc.)



## Professional Costs

### Eligible

- Consulting services
- Project management
- Design/engineering costs
- Environmental reviews
- Archaeological assessments

### Ineligible

- Cost associated with necessary permits and building approvals
- Legal costs
- Project-related professional fees payable to the eligible applicant
- Academic research that does not deliver concrete actions or tangible benefits

## Communication Activities Costs

### Eligible

- Indigenous consultation
- Culturally relevant hospitality costs as part of the consultation process
- Communications, marketing or promotion-related costs
- Travel, accommodation and meals related to the project based on government per diem rates

### Ineligible

- Gifts
- Direct meeting and/or lobbying of any level of government
- Expenses relating to hosting conferences or large community events
- Remuneration and travel of elected officials
- International travel requires a special review to determine eligibility
- Alcohol

## Applicant Contribution

Applicants to **REDIP-EC** and **REDIP-FIT** do not need to provide an applicant contribution.

Applicants to **REDIP-ED** must provide 20% of the total project budget up to \$200,000 as the applicant and/or partner financial contribution. For example, for a project funded \$1,000,000, applicants must contribute at least \$200,000 for a total project budget of at least \$1,200,000

The application will not be assessed if it does not meet the financial contribution requirement. Confirmation of applicant funding commitment may be requested upon review of applications.

### Source of Applicant Financial Contribution

The applicant financial contribution may come from:

- Applicants' own funds, including funds obtained through financing
- Funds from not-for-profit organizations, such as development trusts
- Funds from partners
- In-kind contributions (see below)

Funding for the applicant financial contribution cannot come from:

- Other government sources (federal or provincial)

Funding from other government programs (federal or provincial) can contribute to the overall project funding if it is not part of the applicant financial contribution.

## In-kind Contributions

The applicant in-kind contributions:

- May be up to 10% of the applicant's financial contribution
- May include goods and services donated to a project by the eligible applicant and/or eligible partners (e.g., staff time, use of space or equipment).
- Must be clearly identified in the budget form
- Must be valued at fair market value

## Other Sources of Funding

Applicants must clearly outline the amount and source of all project funding. Verification of these funding sources may be requested through the assessment process.





Examples	Total Project Budget	Program Contribution	Applicant Contribution*	Other Sources of Funding
<b>Development Grant Example 1</b>	> \$100,000	> \$80,000 (80%)	> \$20,000 minimum (Can include up to \$10,000 in-kind)	\$0
<b>Development Grant Example 2</b>	> \$150,000	> \$100,000 (maximum amount)	> \$30,000 minimum (Can include up to \$15,000 in-kind)	\$20,000
<b>Implementation Grant Example 1</b>	> \$1,000,000	> \$800,000 (80%)	> \$200,000 minimum (Can include up to \$100,000 in-kind)	\$0
<b>Implementation Grant Example 2</b>	> \$1,500,000	> \$1,000,000 (maximum amount)	> \$250,000 (Can include up to \$100,000 in-kind)	\$250,000

*\*20% minimum confirmed contribution (up to \$250,000) direct from applicant required - up to 10% of this can be provided in-kind. Project costs not covered by REDIP funding and direct applicant contribution can be covered by other sources of funding such as federal grants.*

## Project Timelines |

Project timelines must meet the following timeframes:

	Economic Capacity	Economic Diversification and Forest Impact Transition
<b>Project Start</b>	<ul style="list-style-type: none"> <li>Project activities must start within six months of approval and acceptance of funds.</li> </ul>	<ul style="list-style-type: none"> <li>Project activities must start within one year of approval and acceptance of funds.</li> </ul>
<b>Project Completion</b>	<ul style="list-style-type: none"> <li>Year 1 activities must be completed within one year of project start.</li> <li>Year 2 activities must be completed within a year of approval and acceptance of Year 2 funding.</li> </ul>	<ul style="list-style-type: none"> <li>Project activities must be completed within two years of project start (i.e., one construction season)</li> </ul>

- When applying for a single phase of a larger infrastructure project, the phase must independently result in outcomes which align with REDIP objectives and be useable infrastructure even if subsequent phases do not proceed.
- Project timelines should consider relevant supply chain delays, permit approval timelines and availability of contractors and consultants.

## Supporting Documentation |

Applications require the following documentation:

- Project budget (completed using the REDIP-EC or REDIP-ED/FIT budget template)
- Partnership letter(s) (only if partners are listed)

The following documents may be added to an application, as applicable:

- Quotes
- Project plans
- List of permits or approvals needed
- Funding confirmation or commitment

# How Applications will be Assessed |

The following merit-based process is used to evaluate applications:

- The REDIP application is received online and is reviewed for eligibility.
- The assessment panel evaluates eligible applications using the assessment criteria below and determines the level of funding and/or conditions on payment of awards.
- Program staff may conduct due diligence with other ministries to gather expert feedback regarding the feasibility and/or funding of proposed projects. Experts may review project-specific information provided in the application form.
- The program area informs each applicant of the assessment panel’s decision. Decisions are expected on or before March 31, 2023.

Component	Criteria	Scoring		
		EC	ED	FIT
Project Need	<ul style="list-style-type: none"> <li>• Describes the details of the project clearly and demonstrates why the project is needed.</li> <li>• Preference will be given to Indigenous, small and remote communities; and communities that identify/exhibit the strongest need for support with economic development capacity.</li> </ul>	20	14	10
Project Benefits	<p><b>ALL FUNDING CATEGORIES:</b></p> <ul style="list-style-type: none"> <li>• Identifies clear and tangible community benefits resulting from the project.</li> <li>• Clearly describes how/why project activities will achieve intended outcomes.</li> </ul> <p><b>REDIP-ED AND REDIP-FIT</b></p> <ul style="list-style-type: none"> <li>• Identifies and clearly demonstrates how the project will bring economic benefits to the community.</li> <li>• Details how the project will help create good, sustainable jobs in the community.</li> <li>• If project includes infrastructure costs, describes why it is needed to support community economic development.</li> </ul>	14	30	20
Project Timeline	<ul style="list-style-type: none"> <li>• Demonstrates that the project is thoroughly planned and ready for implementation.</li> <li>• Includes information on any permits, permissions or other steps that are required for the project to be implemented and completed.</li> <li>• Provides clear project milestones, with appropriate timelines, and describes how they will be completed successfully.</li> </ul>	10	10	8

<b>Project Budget</b>	<ul style="list-style-type: none"> <li>Contains detailed descriptions and accurate estimates of projects costs.</li> <li>Demonstrates costs are direct and essential to project implementation and are clearly linked to project activities described in the application.</li> </ul>	10	15	15
<b>Project Risk &amp; Feasibility</b>	<p><b>ALL FUNDING CATEGORIES:</b></p> <ul style="list-style-type: none"> <li>Demonstrates clear consideration for potential environmental impacts and presents mitigation strategies.</li> <li>Identifies potential risk factors (cost overruns, timeline delays) and sufficient mitigation strategies.</li> </ul> <p><b>REDIP-ED AND REDIP-FIT:</b></p> <ul style="list-style-type: none"> <li>Demonstrates that the organization has the resources and skills to complete the project.</li> </ul>	6	11	11
<b>Community Support / Planning</b>	<ul style="list-style-type: none"> <li>Provides strong linkages between project activities and community planning.</li> </ul>	10	10	8
<b>Diversity, Inclusion and Reconciliation</b>	<ul style="list-style-type: none"> <li>Demonstrates that the project has the support of Indigenous and non-Indigenous communities.</li> <li>Demonstrates organizational commitment to diversity, inclusion and Indigenous reconciliation.</li> <li>Considers the potential impacts of the project on all community members.</li> </ul>	10	10	8
<b>Applicant Self-assessment</b>	<ul style="list-style-type: none"> <li>Preference will be given to organizations or communities with limited capacity to address economic development challenges.</li> </ul>	20	-	-
<b>Forest Impacts</b>	<p><b>REDIP-EC AND REDIP-ED:</b></p> <ul style="list-style-type: none"> <li>Forest Impacts questions will not affect the scoring. Some projects submitted under these streams may be considered for funding under REDIP-FIT.</li> </ul> <p><b>REDIP-FIT:</b></p> <ul style="list-style-type: none"> <li>Applicants must self-identify recent, ongoing or anticipated forest sector economic impacts to be eligible for funding.</li> </ul>	-	-	20
<b>Total</b>		<b>100</b>	<b>100</b>	<b>100</b>



## Receiving REDIP Funding |

### Grant Agreements

Awarding of funding to successful applicants is conditional upon finalization of a grant agreement that sets out the terms and conditions of the funding. The program reserves the right to award partial contributions of the total funding request.

- Successful **REDIP-EC** applicants receive an initial payment upon signing of the grant agreement and the remaining payment in year two, conditional on the submission of a progress report.
- Successful **REDIP-ED/FIT** applicants receive a one-time grant payment upon signing of the grant agreement.

The total amount of the grant payable will not exceed the amount noted in the grant agreement. The recipient is responsible for all costs over and above the grant amount, including cost overruns, ineligible/eligible costs, ongoing maintenance and operating costs associated with the operations of the completed project.

### Reporting

As per the grant agreements, funding recipients are required to submit project progress reports and a final report that outlines the project's performance and outcomes. Further details on reporting requirements will be provided to successful applicants.

### Recognition of Provincial Funders

Recognition of funding support from the Province of British Columbia should be acknowledged in all promotional events and materials, both print and online. The approved provincial logo and graphics standards are [available online](#) in a variety of ready-to-use digital formats.

The grant agreement for successful applicants has further information on requirements.

## Confidentiality and Support |

### Freedom of Information

Applications submitted under the program are subject to the Freedom of Information and Protection of Privacy Act. The information being collected is for the purpose of administering the program and evaluating eligibility under the program. The names and locations of successful award recipients may be published, along with the amount of the award, in various communications and promotional vehicles in the Province of British Columbia. Applications, in whole or in part, may be shared with other provincial ministries as part of the due diligence process.

### Conflict of Interest/Confidentiality

All documents received by the program are treated as confidential. Program staff uphold the standards for conflict of interest and confidentiality required by all B.C. public service employees.

### Contact Information and Application Support

If you have a question that is not addressed in this program guide or the website ([gov.bc.ca/redip](http://gov.bc.ca/redip)), support is available from program staff at [ruraldevelopment@gov.bc.ca](mailto:ruraldevelopment@gov.bc.ca) or by calling 250-356-7950.

## Appendix A: Definitions |

- Indigenous communities and organizations:
  - A band council within the meaning of Section 2 of the Indian Act
  - An Indigenous development corporation;
  - A First Nation, Inuit or Métis government or authority established pursuant to a self-government agreement or a comprehensive land claim agreement between His Majesty the King in Right of Canada and an Indigenous people of Canada, that has been approved, given effect and declared valid by federal legislation;
  - A First Nation, Inuit or Métis government that is established by or under legislation whether federal or provincial that incorporates a governance structure; or
  - An incorporated not-for-profit organization whose central mandate is to improve Indigenous outcomes, working in collaboration with one or more of the Indigenous entities referred to above, a local government, or British Columbia.
- Local government:
  - An incorporated municipality; or
  - A regional district applying for an electoral area or unincorporated community.
- Not-for-profit:
  - An organization incorporated as a not-for-profit corporation or society formed under an Act of Canada or the Province of British Columbia and in good standing under the relevant Act;
  - Not-for-profit co-operatives incorporated as community service co-ops under the B.C. Co-operative Association Act are considered eligible as a not-for-profit organization.
  - Operating primarily for community benefit, and a provider of programs that benefit the community and not solely its members' interest.



Ministry of  
Jobs, Economic Recovery  
and Innovation





## 1. Overview

**PLEASE READ THE RURAL ECONOMIC DIVERSIFICATION AND INFRASTRUCTURE PROGRAM (REDIP) INFORMATION GUIDE** before completing this application form. It is important to review the eligibility and selection criteria and submit a fully completed application online by **January 4, 2023 (1:00PM PST)**.

**NOTE:** This Word/PDF version of the application form is intended to help applicants prepare their responses in advance of submitting an online application. The online application will include a preliminary eligibility assessment that will prompt applicants to verify their eligibility for funding. Aside from this, all questions included in the online application form are included in this Word/PDF version. Please review eligibility requirements outlined in the REDIP Program Guide prior to preparing your application.

While all efforts have been made to ensure consistency, some questions may appear in a different format or order in the online application form. The online application form is dynamic, meaning you can use navigation bars to go back and forth through sections prior to submitting. Some questions are responsive: additional questions will appear based on your responses.

The online application form will auto-save while you work on it, even if you close your browser window. If you clear your browser history or select "Start Over" progress will be lost. To ensure progress is not lost, we recommend saving a back-up of your answers in this Word/PDF version of the application form. When you start an online application, we recommend bookmarking the link for easier access to your in-progress application.



**ALL TEXT-BASED QUESTIONS CAN BE ANSWERED IN BULLET FORM**

<b>REDIP - Contact Information</b>
<b>Rural Policy and Programs Branch</b>
Phone: (250) 356-7950
Email: <a href="mailto:ruraldevelopment@gov.bc.ca">ruraldevelopment@gov.bc.ca</a>

**2. Funding Category**

**1) Which funding category are you applying for?**

- Economic Diversification – REDIP-ED (80% of project costs)**  
*Development (Max. \$100,000)*  
*Implementation (Max \$1M)*

- Forest Impact Transition – REDIP-FIT (Max \$500,000, 100% of project costs)**

<b>Applicant Contact Information</b>	
<b>Legal Name of Lead Applicant:</b> The Corporation of the Village of Cumberland	
<b>Primary Contact Name:</b> Kaelin Chambers	<b>Title of Primary Contact:</b> Economic Development Officer
<b>Phone Number:</b> 250-400-9015	<b>Email Address:</b> KChambers@Cumberland.ca
<b>Lead Applicant Organization Mailing Address:</b> 2673 Dunsmuir Avenue Cumberland BC V0R 1S0	
<b>Signatory Contact Name/Title:</b> Michelle Mason, Chief Administrative Officer	
<b>Phone Number:</b> 250-336-2291	<b>Email Address:</b> MMason@Cumberland.ca



In the future, would you like to be informed about our programs via email communications? YES

### 3. Applicant Information

<b>1. Who is the lead applicant for this project? (Select One)</b>		
<input checked="" type="checkbox"/> <b>Local Government</b>	<input type="checkbox"/> <b>Regional District</b>	<input type="checkbox"/> <b>Non-for-profit</b>
<input type="checkbox"/> <b>Indigenous Community or Organization</b>	<input type="checkbox"/> <b>Indigenous Development Corporation</b>	

**2. Please tell us about your organization and describe any key economic development priorities or goals the organization has for the community.**

Cumberland’s Economic Development Strategy was developed to guide economic development and decision-making in Cumberland. It provides a long-term vision and implementation framework for economic development initiatives that can be completed between 2018 and 2023.

In implementing the key components of the Strategy, the Village has been working to increase the number and value of non-residential tax streams, improve its economic diversity, business growth potential and employment opportunities for all Cumberland residents.

Cumberland is experiencing strong demand for, and under-supply of available employment lands. Encouraging the growth and development of these lands has become a key interest of the Village to generate opportunities to diversify its tax base.

These factors are a key focus of the Economic Development Strategy, through the Investment Attraction Action Plan and Bevan Industrial Land Concept Plan which recommend the Village be better investment-ready by better identifying and facilitating opportunities to develop lands, properties and major projects that meets the community’s needs and interests. The Village aims to build on the recent success of attracting investment in the new 6-lot industrial subdivision within the Bevan Lands, including construction of a new 30,000 ft<sup>2</sup> facility for Tree Island Yogurt.

Further direction from the Strategy, around Village Core Improvements and policies/incentives to support active use of vacant properties, is being driven by the Village’s Properties and Facilities Review process. This work is currently guiding how the Village can leverage its limited land holdings to finance the redevelopment of civic facilities and facilitate further commercial development in the community.

*Maximum 250 Words*

**3. Are there project partners?**

<input type="checkbox"/> <b>Yes</b> <i>(If yes, answer questions 4-6 below)</i>
<input checked="" type="checkbox"/> <b>No</b> <i>(If no, move forward to Section 4)</i>



**4. Who is/are the project partner(s)?** *(Select all that apply)*

<input type="checkbox"/> Local Government	<input type="checkbox"/> Indigenous Community or Organization
<input type="checkbox"/> Regional District	<input type="checkbox"/> Indigenous Development Corporation
<input type="checkbox"/> Industry Organization	<input type="checkbox"/> Not-For-Profit Organization
<input type="checkbox"/> Business	<input type="checkbox"/> Non-Indigenous Development Corporation
<input type="checkbox"/> Community Foundation	<input type="checkbox"/> Post-Secondary Institution



**5. Please provide the name and contact information for all project partners.**

*Online application allows for more than 1 partner to be submitted.*

Project Partner Information	
Primary Contact Name:	Title of Primary Contact:
Phone Number:	Email Address:
Please attach partnership(s) letter to your application.	

**6. Project partners must have an active role in the project but are not required to contribute financially. Please describe the role of all partners listed.**

*Maximum 250 Words*

## 4. Project Information

**1. Project title:**

The Village of Cumberland Investment and Development Readiness Project

**2. Please briefly describe your project in 1-2 sentences** *(This answer may be used for public communications).*

The Village of Cumberland Investment and Development Readiness Project will guide how the Village can strategically facilitate private commercial development, such as the Bevan Industrial Lands. It'll also provide the organization with guidance in managing its land portfolio, specifically the Union Road Lands, through land value capture and disposition, for the redevelopment of civic facilities and facilitate new commercial development in the community. The Project will consider and include three specific study components, including:

- Fiscal Impact Analysis on New or potential Development, including an Industrial, Commercial and Investment (ICI) Inventory Assessment
- Development and Servicing Strategy for Union Road Lands



Rural Economic Diversification and Infrastructure Program (REDIP)  
Application Questions: REDIP-ED and REDIP FIT

*Maximum 100 Words*





**3. What project type best describes your project?**

**REDIP – Economic Diversification - Development**

- Feasibility study
- Business plan
- Program design
- Service planning
- Infrastructure plans *(Please answer question 14 if selected)*
- Other [please specify]

**REDIP – Economic Diversification - Implementation**

- New or enhanced program delivery
- New or enhanced service delivery
- Construction of a new asset *(Please answer question 14 if selected)*
- Preservation of an existing asset *(Please answer question 14 if selected)*
- Other [please specify]

**REDIP – Forest Impact Transition**

- Feasibility study
- Business plan
- Program design
- Service planning
- Infrastructure plans *(Please answer question 14 if selected)*
- New or enhanced program delivery
- New or enhanced service delivery
- Construction of a new asset *(Please answer question 14 if selected)*
- Preservation of an existing asset *(Please answer question 14 if selected)*
- Other [please specify]

**4. Please select the [BC Economic Development Region](#) where the project will take place:**

<input type="checkbox"/> Thompson/Okanagan	<input type="checkbox"/> Northeast	<input checked="" type="checkbox"/> Vancouver Island/Coast
<input type="checkbox"/> Mainland/Southwest	<input type="checkbox"/> Cariboo	<input type="checkbox"/> Nechako
<input type="checkbox"/> North Coast	<input type="checkbox"/> Kootenay	

**1) Please provide the Regional District where the project will take place.**

*The online application form will provide a list of Regional Districts based on your selection of BC Economic Development Region.*



[Empty box]

**2) Which community(ies) will be directly served by the project?**

The Village of Cumberland (pop. 4,447) will directly benefit from the Project, along with the adjacent municipalities of Courtenay and Comox who collectively comprise the urban core of the Comox Valley Regional District (CVRD)(Pop. 72,445).

**3) Please tell us about the community(ies). What are they key economic sector or drivers within the community(ies)?**

The Village along with the adjacent municipalities of Courtenay and Comox comprise the urban core of the Comox Valley Regional District (CVRD), which has a total population of approximately 72,445 of which 4,447 people live in Cumberland (2021 census population).

Locally, the Village of Cumberland is a community in transition. According to recent Census data, the community’s population increased by 18.5 % from 2016 to 2021, more than twice the growth rate experienced in the CVRD region (8.9%). Cumberland residents are also younger with an average age of 39 years in 2021, as compared to an average of 51 years in the CVRD. Recognizing this change, the Cumberland Official Community Plan (OCP) indicates that known development could bring more than 4,000 new housing units in future years, and that the population could reach 8,500 by 2030.

As identified within the Village’s Investment Attraction Action Plan (2020), the Village has the capacity to accommodate growth in employment land demand over the coming decades. At current absorption rates, the demand for employment land in the Comox Valley will significantly exceed the supply soon. The Bevan industrial area and the Highway 19 interchange lands (of which Union Road is a part) represent the most significant opportunities to support this growth, while also providing additional economic benefit to both the Village and the greater CVRD.

*(Maximum 250 Words)*

**5. What community need, or opportunity are you trying to address?**

In implementing the Economic Development Strategy, the Village has been working to expand its non-residential tax streams in the community, improve its economic diversity, business growth potential and employment opportunities for all Cumberland residents.

Currently 74.0% of Village tax revenue is generated via residential taxes, with 18.0% of revenue through business taxes, 2.0% via light industry, and 4.0% from other property classes. To respond appropriately to the Village’s dependence on residential growth, Cumberland looks to create a better

balance of tax revenue by improving the community's investment readiness by assessing the fiscal impacts of new and/or proposed developments in the community.

Municipal facilities including the administration office, public works yard and recreation centre located in the downtown core are also nearing the end of their useful life and there is a need to plan for their replacement. The Village also owns land on the periphery, at Union Road. There is an opportunity to move the public works facility out of the downtown core to free up land to pursue more suitable uses and to further economic development and downtown revitalization. A further opportunity exists to fund this redevelopment through land value capture and disposition of surplus land at Union Road.

*Maximum 200 Words*

## 6. What are the intended outcomes of the project?

The intended outcomes of the Project are to ensure that the Village is an investment ready community and able to best guide/facilitate opportunities to diversify its non-residential tax base. By acting on recommendations towards a better understanding of the economic, commercial, and industrial potential of the Village's employment lands, by:

- Identifying and tracking key industrial, commercial and investment lands and/or properties. This includes utilized, vacant and underutilized commercial and/or industrial lands, their servicing characteristics, and locational attributes.
- Quantifying the industrial and/or commercial land use demand in the Village to evaluate how/where the current supply of investment land can accommodate future demand/interest.
- Establishing a projection of potential demand of new development on municipal services and budgets and identify whether the property tax revenues from new and/or future developments will balance out incurred costs.
- A land use plan for Village-owned land at Union Road to outline land value capture prior to disposition. This includes a plan for future use, Official Community Plan and Zoning Bylaw amendment, and servicing, prior to disposition of surplus land.
- The plan for disposition of surplus land at Union Road will allow for planning to begin for moving the public works facility out of the downtown core.

*Maximum 200 Words*

## 7. How will the project achieve its intended outcomes?

The Village intends to utilize qualified professional(s) to complete the needed project components/studies all of which will be coordinated/managed by Village staff.



The Project will consider and include three specific study components to achieve the intended outcomes, including:

- Industrial, Commercial and Investment Lands Assessment - Identifies and inventories key industrial, commercial and investment lands and/or properties in the Village. This includes utilized, vacant and underutilized commercial and/or industrial lands, their servicing characteristics, and locational attributes.
- Fiscal Impact Analysis on New or Proposed Development – Estimates the public cost of new development, by undertaking a projection of the direct, current, and public costs and revenues associated with new and/or proposed growth/development
- Development and Servicing Strategy for Village Owned Lands at Union Road - To be developed in four phases: due diligence land analysis (environmental and civil engineering), concept development, appraisal and financial feasibility modelling, and community engagement planning.

*Maximum 200 Words*



**8. In bullet form, what economic sector(s) will this project contribute to?**

The Investment Readiness Project will facilitate the investment/development of new industrial and commercial spaces, support the growth and diversification of the Village’s non-residential tax base and provide employment opportunities to all residents of the Comox Valley

*Maximum 50 Words*

**9. How will your project contribute to economic development or diversification?**

<b>a) Creating new business in an established industry in the community</b>				
<input type="checkbox"/> None	<input type="checkbox"/> Little	<input type="checkbox"/> Moderate	<input checked="" type="checkbox"/> Strong	<input type="checkbox"/> Very Strong
<b>b) Increasing revenue for local businesses or organizations</b>				
<input type="checkbox"/> None	<input type="checkbox"/> Little	<input checked="" type="checkbox"/> Moderate	<input type="checkbox"/> Strong	<input type="checkbox"/> Very Strong
<b>c) Supporting a new or emerging industry or sector</b>				
<input type="checkbox"/> None	<input type="checkbox"/> Little	<input type="checkbox"/> Moderate	<input checked="" type="checkbox"/> Strong	<input type="checkbox"/> Very Strong
<b>d) Attracting investments to the community</b>				
<input type="checkbox"/> None	<input type="checkbox"/> Little	<input type="checkbox"/> Moderate	<input checked="" type="checkbox"/> Strong	<input type="checkbox"/> Very Strong
<b>e) Attracting skilled workers to the community</b>				
<input type="checkbox"/> None	<input type="checkbox"/> Little	<input type="checkbox"/> Moderate	<input checked="" type="checkbox"/> Strong	<input type="checkbox"/> Very Strong
<b>f) Increasing tourist visitation</b>				
<input checked="" type="checkbox"/> None	<input type="checkbox"/> Little	<input type="checkbox"/> Moderate	<input type="checkbox"/> Strong	<input type="checkbox"/> Very Strong
<b>g) Supporting clean growth opportunities</b>				
<input checked="" type="checkbox"/> None	<input type="checkbox"/> Little	<input type="checkbox"/> Moderate	<input type="checkbox"/> Strong	<input type="checkbox"/> Very Strong

**10. Please explain how your project will contribute to outcome(s) selected above.**

**a) Creating new business in an established industry in the community** – Access to affordable and available industrial and commercial land in the community is currently limiting potential economic growth. Currently, many local businesses have had to relocate to larger neighbouring communities to find their needed growth opportunities. Likewise, many local businesses have purposefully limited their growth potential so that they may remain in the community.

Encouraging the growth of industrial/commercial lands in the Village (and region) and increasing the supply of available commercial land/development will help maintain more affordable property costs and encourage growth/incubation of small-medium businesses.

**b) Increasing revenue for local businesses or organizations** – Advancing the Village's investment and development readiness initiatives will create a variety of opportunities for local businesses by facilitating business growth/expansion, attracting new and complimentary industry to the area, facilitating the re-organization of industrial spaces, and expanding our regional workforce capacity and skills.

The community's lack of commercial and industrial space has created a barrier in the growth and expansion of emerging industries and sectors in the community. Taking steps to improve the availability and potential affordability of commercial spaces in the Village will help improve the profitability of local businesses and/or organizations.

**c) Supporting a new or emerging industry or sector** – As identified within the Investment Attraction Action Plan there are several key industries and/or sectors emerging because of recent community growth. Specifically, the Village has seen an increase in interest/operations related to outdoor recreation (mountain biking, hiking), health and wellness (ie physio and massage therapy) and construction trades. Likewise, recent development within the Bevan industrial lands has brought new industries to the community such as food production, warehousing, and professional services.

In undertaking a commercial, industrial and investment lands and buildings inventory, including a list of major development projects and assets in Cumberland, the Village will be better able to identify and facilitate development that best meets the community's needs and interests. This includes an opportunity to leverage Village owned lands to contribute to the needed economic growth while also addressing its own civic infrastructure needs.

**d) Attracting investments to the community** – These works will support the Village in becoming a more investment ready community by identifying and promoting lands, properties and major projects that provide the most benefit to the community. There are several potential investment and development projects in Cumberland, including Bevan industrial lands, which is the largest supply of future industrial land in Comox Valley and the Highway 19 Interchange Lands within which the Village has some land holdings/interests (ie The Union Road Lands).

Through the Village's facilities and properties review process, the Union Road Lands have been identified as an opportunity for the Village to utilize land disposition to fund the development of a new Public Works facility and instigate further commercial investment in the community.

**e) Attracting skilled workers to the community**- Advancing the Village's investment and development readiness initiatives will create a variety of opportunities for local businesses by facilitating business growth/expansion, attracting new and complimentary industry to the area,



facilitating the re-organization of industrial spaces, and expanding our regional workforce capacity and skills.

*Maximum 150 Words/per outcome*

**11. Will this project create direct jobs in the community?**

<input type="checkbox"/> <b>Yes</b>	<input checked="" type="checkbox"/> <b>No</b> <i>Skip to question 12.</i>
<b>If yes</b> , please provide an estimate of the total number of jobs created by your project:	
<b>Full Time</b>	
<b>Part-time</b>	
<b>Casual</b>	
<b>Seasonal</b>	

**12. Please describe how the project will create jobs in the community**

Completion of this Project is anticipated to generate limited direct job opportunities in the Village. However, when undertaking public projects, the Village of Cumberland uses a social procurement framework to leverage public dollars and achieve desirable and targeted social impact for the Village through competitive bid and purchasing activities.

The Village’s procurement framework expands on the traditional understanding of “best value” to include positive societal benefits, alongside high quality, and competitive bids. Any contractor selected to undertake this project will be required to meet the needs and expectations of this policy, including factors such as paying living wages, and hiring diversely and locally.

For the Village, infrastructure projects, such as the servicing of the Union Road Lands, are intended to improve the well-being of a community affected by the project, including local job creation and training opportunities (including for apprentices), improvement of public space, and any further benefits identified by the community.



Rural Economic Diversification and Infrastructure Program (REDIP)  
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*Maximum 200 Words*





**13. Will some or all jobs continue after the project end date?**

**If yes:** *Please describe how these positions will be sustained long-term or until their completion*

All jobs directly related to this work will not continue past the completion of the work.  
However, the outcomes of this work will facilitate further/future commercial and industrial development in the community that will result in greater employment options for all residents of the Comox Valley

*Maximum 200 Words*

**14. How will the proposed infrastructure support community economic development?**

The Development and Servicing Strategy for Village Lands component of the Project will explore the feasibility options for redeveloping the Village owned Union Road Lands, including a conceptual servicing plan for the parcel.

The servicing of the Union Road Lands is a key community economic development opportunity for both the Village and greater CVRD region. These lands are also strategically located adjacent to the proposed mixed-use development (i.e., interchange Lands). The Interchange Lands include a proposed 700-acre development, consisting of retail, restaurants, hotels, and housing. The development has an approved comprehensive development agreement with the Village and discussions with the proponent are ongoing. The Village is looking to utilize opportunities in the Union Road Lands to capitalize on current demand in the area and facilitate commercial and/or economic development opportunities for the adjacent parcels.

Similarly, undertaking an additional fiscal analysis of the Village’s commercial industrial and investment lands will guide future Village plans and decision-making with respect to community economic development. Specifically, it will help in determining the potential demand that new development places on municipal services and budgets and identify whether the flow of new property tax revenues from a new development will balance out the incurred costs.

*Maximum 200 Words*

**5. Project Timeline**

**1. When will the project start?**

April 1<sup>st</sup>, 2023 or immediately upon receiving funding

**2. When is the project expected to be complete?**



Rural Economic Diversification and Infrastructure Program (REDIP)  
Application Questions: REDIP-ED and REDIP FIT

September 1<sup>st</sup>, 2024



**3. Please provide a project timeline with up to ten project milestones. If your project requires obtaining permits and approvals include the time required to obtain them in the project timeline.**

*For each milestone, please include estimate completion (month, year) and a description of milestone (maximum 100 words)*

1. <b>April 1, 2023</b> – Release Project RFP seeking qualified professional(s) and/or award contracts (procurement process varies depending on project component)
2. <b>May 1, 2023</b> – Select project consultant(s)
3. <b>June 1, 2023</b> – Complete existing conditions and due diligence reports required to inform Project components/studies
4. <b>August 1, 2023</b> – Complete/Finalize FIA and ICI studies
5. <b>September 1, 2023</b> – Complete concept development for Union Road
6. <b>February, 2024</b> – Complete appraisal and financial feasibility modelling for Union Road
7. <b>June 2024</b> – Complete community engagement planning for Union Road
8. <b>September 2024</b> – Complete development and servicing plan for Union Road
9.

**Commented [CS1]:** I think only month needed, not also day



**10.**



## 6. Project Budget

**1. Please complete and submit the separate detailed Budget Form, available on the REDIP website, including eligible and ineligible costs, application contributions and other sources of funding.**

**2. Total Project Cost:**

\$116,838

**3. Funding Request from REDIP:**

\$97,125

**4. Total Applicant Contribution** *(REDIP – ED projects only)*

**Cash contributions:** \$10,000

**In-kind contributions:** \$10,000

**5. Other Sources of Government Funding (if applicable)**

No other funding sources

## 7. Project Risk and Feasibility

### 1. Please provide any relevant details about how the budget was prepared (e.g., from where did you receive quotes, how recent are the quotes etc.)?

The budget was prepared by reviewing/discussing similar existing studies completed by neighbouring communities and/or municipalities of the same size/demographic. Where available, staff members also connected directly with firms/consultants experienced in this work to ascertain the appropriate costs/budget.

*Maximum 200 words*

### 2. How will you address an overrun in project costs that meets or exceeds the contingency provided in the budget?

When undertaking planning studies/projects such as these, the Village utilizes a 'not to exceed' clause in its contractor agreements. This clause establishes a maximum amount payable to a contractor for the work under a time and materials contract.

*Maximum 200 words*

### 3. Please identify any potential project risk factors (such as permit delays, timeline changes, troubles getting materials or finding staff) and your plan to mitigate and address them if they occur.

The potential risks in completing this project on time/budget are minimal as the Village has the needed capacity to manage the project. Likewise, the project is not an infrastructure project and does not have permitting requirements or requires the purchase of material.

Some risk does exist in identifying/selecting a single contractor for the complete breadth of prescribed works, particularly with respect to the development and servicing works at Union Road. Likewise, some risk also exists in the availability of consultants experienced in completing this work.

However, the Village has identified existing contractors that can complete each of the required works and does have the means/capacity to act as project manager and coordinate each component as an individual study/contractor (if required).

Respecting the Village is a small organization; additional risk mitigation has been built into this Project by hiring a project manager to oversee the Project itself.

*Maximum 300 words*

### 4. Who will own the completed infrastructure?



The Village of Cumberland

*Maximum 100 words*

**5. Please describe who will be responsible for ongoing operational costs and maintenance of the project when complete.**

Once complete, the Village will be responsible for any ongoing operational costs and/or maintenance from implementing the project.

*Maximum 200 words*

**6. Are there potential environmental impacts of the project to consider. If yes, please describe the impacts and how they might be mitigated**

For the Union Road portion of the project, an environmental assessment will be conducted as a first step to ensure that the development and servicing plan is designed to mitigate any environmental impacts.

*Maximum 200 words*

**7. Please describe the resources and skills of your organization and project partners (if applicable) to manage and complete the project, including past achievements or experience implementing similar projects.**

The Village of Cumberland is a full-service municipality with experienced, qualified staff and resources required to manage and complete this project.

The Village also has a successful record in effectively utilizing rural economic development funding to complete key economic development initiatives in the community including:

- The Cumberland Economic Development Strategy (2017)
- Hiring of an Economic Development Coordinator (2018)
- Completion of Key Projects from the Economic Development Strategy such as:
  - The Cumberland Investment Attraction Action Plan (2020)
  - The Bevan Industrial Lands Conceptual Master Plan (2020)
  - The Cumberland Economic Development Web-portal (2020)
- Union Road Watermain Servicing Project (2021)

*Maximum 300 words*



## 8. Supporting Documentation

1. If applicable, you may attach any of the following documents in support of your project if they have been acquired. Please do not provide community plans or feasibility studies.

- Project quotes/plans
- Letters of support
- Permits or list of permits
- Funding Confirmation

*Property and facilities review – refer to confidential report in text but include one-pager.*





## 9. Community Support/Planning

### 1. How does the project support existing community or economic plans?

The need for the associated works of this Project is identified within a variety of existing community or economic plans, including:

- The Cumberland Economic Development Strategy (2018-2023)
- The Cumberland Investment Attraction Action Plan (2020)
- The Bevan Industrial Lands Conceptual Master Plan (2020)
- The Bevan Lands Implementation Plan (2022)
- The Cumberland Facilities and Properties Review (2022- confidential report)

Collectively, these documents represent a means of completing a key strategic priority in the Village. Specifically, to increase the number and value of non-residential tax streams in the community, improve its economic diversity, business growth potential and employment opportunities for Cumberland residents of all ages.

*Maximum 200 words*

### 2. Is there community support for the project either through public consultation or letters of support?

Yes (Answer #3 Below)     In Progress (#3 below)     No (Answer #4 Below)

### 3. Please describe this support and how it is demonstrated.

The development of the commercial and industrial lands is identified as a community priority within the Economic Development Strategy and Council's Strategic Priorities. The creation of these documents included extensive public engagement.

The overall validity and/or public acceptance of this project will carry minimal risk, as related community and stakeholder engagement on the strategies/plans initiatives involved in this Project includes strong industry and community input and support for the described works.

*Maximum 200 Words*

### 4. Please explain why not. Are there barriers to acquiring community support or engaging in public consultation?

There have been no barriers to acquiring community support or engaging in public consultation with respect to the Project initiatives

*Maximum 200 Words*



## 10. Diversity, Inclusion and Reconciliation

**1. Is there Indigenous support for this project either through engagement or partnerships?** *Indigenous applicants can skip to question 4.*

<input type="checkbox"/> Yes (Answer #2 Below)	<input checked="" type="checkbox"/> In Progress (#2 below)	<input type="checkbox"/> No (Answer #3 Below)
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**2. Please describe this support and how it is demonstrated.**

In respecting Cumberland is located within the unceded territory of the K’omoks First Nation, the Village has endeavored to work transparently and/or in collaboration with the K’omoks people on plans/projects that may impact indigenous rights, values, or interests. The respective staff/councils from the Village and K’omoks First Nation have scheduled quarterly meetings to discuss a variety of interests, including key works currently being completed by the Village, including this Project. Respecting the limited capacity of K’omoks First Nation to meet the demand of all Comox Valley communities seeking project input, this application includes budget (\$5,000) to ensure their participation in the Project should they express interest.

*Maximum 200 Words*

**3. Please explain why not. Are there barriers to acquiring Indigenous support or engaging with Indigenous community(ies)?**

*Maximum 200 Words*

**4. What are the potential impacts of the project on all community members (e.g., sex, gender, ethnicity, race, culture, language, age, ability, geography, economic status)? How have these impacts been identified and understood?**

Yes, impacts of the project on community members have been considered/discussed through extensive public engagement as part of the 2018 Economic Development Strategy, 2020 Bevan Industrial Lands Concept Master Plan and Cumberland Investment Attraction Action Plan, which provide the overarching direction and priority status needed to proceed with the project.



In addition, the Village’s social procurement policy will ensure that all related project works result in community benefits and/or opportunities for Village residents.

*Maximum 200 Words*

**5. Does your organization have policy or guiding principles related to diversity, inclusion and/or Indigenous reconciliation?**

Yes (Answer #6 below)       No (Answer #7 below)

**6. Please describe the policy or guiding principles and how this project will strengthen diversity, inclusion and/or Indigenous reconciliation.**

The Village’s social procurement policy will ensure the Village receives additional social and economic benefits because of project works. This policy ensures that Village contractors intend to create employment/training opportunities arising from the construction or maintenance of Village facilities, including youth and at-risk youth; aboriginal persons; women; newcomers to Canada or retiring veterans, transitioning into new careers.

The key social, employment and economic goals that the Village’s Social Procurement framework and Community Benefit Clauses work to address, includes:

- Promote the Living Wage and fair employment practices.
- Improve access to contracts for micro, small business and social enterprises.
- Increase the number of local jobs that support young working families.
- Increase social inclusion by improving contract access for equity-seeking groups, such as social enterprises.
- Increase training and apprenticeship opportunities.
- Help move people out of poverty, providing increased independence and sustainable employment for those in need.
- Improve opportunities for meaningful independence and community inclusion for citizens living with disabilities; and
- To stimulate an entrepreneurial culture of social innovation

*Maximum 200 Words*

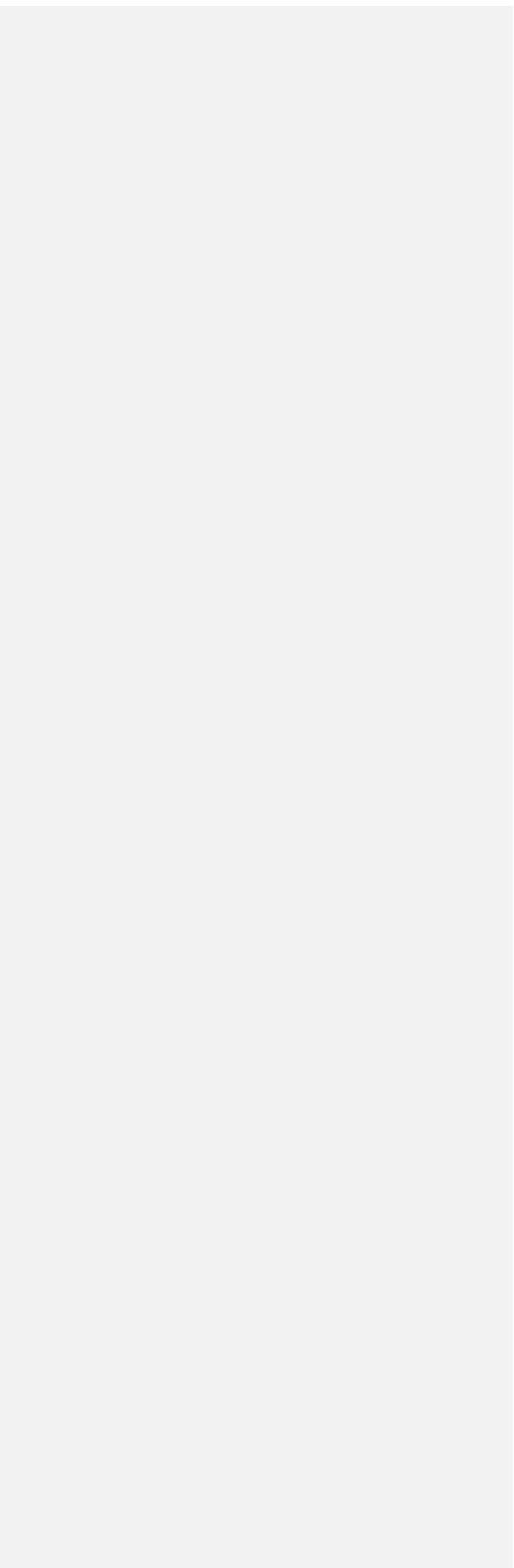
**7. How will this project help strengthen diversity, inclusion and/or Indigenous reconciliation within your organization and community?**

[Empty text box for answer]

*Maximum 200 Words*



Rural Economic Diversification and Infrastructure Program (REDIP)  
Application Questions: REDIP-ED and REDIP FIT





## 11. Forest-Sector Impacts

**1. How dependent is your community on the forestry sector?** *Please answer questions 2 and 3 if you answered moderately, dependent, or very dependent.*

<input type="checkbox"/> Not at all	<input checked="" type="checkbox"/> Little	<input type="checkbox"/> Moderately	<input type="checkbox"/> Dependent	<input type="checkbox"/> Very Dependent
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**2. Please describe the forestry sector’s role in your community.**

The forestry sector plays a limited role in the Village. There are no forestry sector businesses within the Village and only 4% of the Village’s labour force works within the agriculture, forestry, fishing and hunting industry as identified within the 2021 Census data.

*Maximum 200 Words*

**3. Has the forestry sector in your community been impacted, or is it projected to be impacted, by closures or curtailments within the sector or recent regulatory changes such as old growth deferrals and pauses in BC Timber Sales?** *If yes, please explain these impacts.*

The forestry sector in Cumberland is limited and direct economic impacts resulting from closures or curtailments within the sector or recent regulatory changes such as old growth deferrals and pauses in BC Timber Sales have been minimal.

*Maximum 200 Words*



## 12. Applicant Feedback

### 1. How did you learn about REDIP?

<input checked="" type="checkbox"/> Press/Media announcement
<input type="checkbox"/> Regional economic trust
<input type="checkbox"/> Community organization
<input checked="" type="checkbox"/> Government of BC Regional Manager
<input type="checkbox"/> Word of mouth
<input type="checkbox"/> Other [please specify]

### 2. Have you applied to these provincial rural economic develop programs in the past? *If yes, please answer question 3.*

<input checked="" type="checkbox"/> Rural Dividend
<input checked="" type="checkbox"/> Community Economic Recovery Infrastructure Program

### 3. Were you successful in receiving funding?

<input checked="" type="checkbox"/> Yes	<input type="checkbox"/> No
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### 4. How long did this application take you to complete? *(In hours)*

12 hrs
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### 5. Do you any additional comments about the application process?

The maximum word requirements can be difficult to manage and can limit how applicants effectively articulate/describe the proposed project need and scope.
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*Maximum 250 Words*



### 13. Applicant Attestation

By submitting this application, I confirm that I have the authority to submit this request and agree to the conditions described below.

- (a) All information contained herein is correct and complete to the best of my knowledge;
- (b) Awarding of funding to successful applicants will be conditional upon finalization of a grant agreement that sets out the terms and conditions of the funding;
- (c) I consent to receiving email notifications regarding this application and any subsequent emails from the Rural Economic Diversification and Infrastructure Program or those working on behalf of the Rural Economic Diversification and Infrastructure Program that relate to this application.

*Applications submitted under the program are subject to the Freedom of Information and Protection of Privacy Act. The information being collected is for the purpose of administering the program and will be used for the purpose of evaluating eligibility under the program.*

*Information collected through the application process may be disclosed to Government of British Columbia staff outside the Rural Policy and Programs Branch in order to conduct due diligence on this application.*

*In addition, the applicant organization's name, location, funded activity, and award amount may be made publicly available, including worldwide by way of the Internet, should funding be awarded.*

**I have read the Attestation above and agree to all terms therein.**

ELIGIBLE COSTS				
Infrastructure Costs				
	Description	Total Quantity	Per Unit Amount	Total Cost
<b>Salary and Wages</b>				
Salaries and other employment benefits specifically related to the project (up to 15% of total project costs). Provide job title, wage rate, number of hours or months of employment.				
<b>Salary and Wages Sub-Total:</b>				<b>\$0</b>
<b>Project Planning</b>				
For example, costs associated with environmental assessment, engagement and consultation, climate lens assessments, community employment benefit plans	Environmental Assessment	150.00	100.00	15,000.00
	Civil Engineering Assessment	100.00	100.00	10,000.00
	Engagement planning	19.00	125.00	2,375.00
	Council engagement	38.00	125.00	4,750.00
<b>Planning Sub-Total:</b>				<b>\$32,125</b>
<b>Design / Engineering</b>				
Up to 15% of construction project costs can be engineering/consulting fees.				
<b>Design / Engineering Sub-Total:</b>				<b>\$0</b>
<b>Construction / Materials</b>				
Items should reflect the major components in your project without going into specific detail.				
<b>Construction / Materials Sub-Total:</b>				<b>\$0</b>
<b>Contingency</b>				
Contingency is generally reflective of the Class of Cost Estimate. Please find guidance on Cost Estimate Classes and related contingencies at the bottom of this document.				
<b>Contingency Sub-Total:</b>				<b>\$0</b>
Non-Infrastructure Costs				
<b>Consulting and Professional Fees</b>				
List any costs associated with project management, business studies, and project-related professional fees.	Fiscal Impact Analysis Report	500.00	40/hr	20,000
	Industrial, Commercial and Investment Lands Assessment	500.00	40/hr	20,000
	Appraisal of Village Owned Land	125.00	80.00	10,000
	Project Management for Village Owned Land	125.00	80.00	10,000
<b>Consulting and Professional Fees Sub-Total:</b>				<b>\$60,000</b>
<b>Training</b>				
Training activities as part of the Eligible Project or to support the project.				
<b>Training Sub-Total:</b>				<b>\$0</b>
<b>Marketing and Promotion</b>				
Marketing or promotion-related costs or speaker stipends.				
<b>Marketing and Promotion Sub-Total:</b>				<b>\$0</b>
<b>Capital Purchases</b>				



Capital purchases up to 35% of total project costs that are essential to project implementation, including: off-road vehicles, office equipment, and software and new technology.				
<b>Capital Purchases Sub-Total:</b>				<b>\$0</b>
<b>Travel and Meetings</b>				
Meals and travel-related expenses must be based on government per diem rates: <a href="https://www2.gov.bc.ca/assets/gov/careers/all-employees/pay-and-benefits/appendix_1_travel_allowances.pdf">https://www2.gov.bc.ca/assets/gov/careers/all-employees/pay-and-benefits/appendix_1_travel_allowances.pdf</a>				
<b>Travel and Meetings Sub-Total:</b>				<b>\$0</b>
<b>Program/Service Delivery Costs</b>				
Costs related to the delivery of economic development/diversification programs and services.				
<b>Program/Service Delivery Costs Sub-Total:</b>				<b>\$0</b>
<b>Other Eligible Costs</b>				
Any eligible costs that do not fit under the above categories.	To facilitate engagement with, and/or inclusion of K'omoks First Nation in the Project	125 hrs	\$40/hr	5,000
<b>Other Eligible Costs Sub-Total:</b>				<b>\$5,000</b>
<b>TOTAL ELIGIBLE COSTS*:</b>				<b>\$97,125</b>

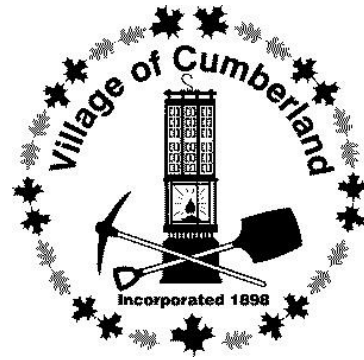
INELIGIBLE COSTS				
	Description	Source of Funding	Funding Confirmed (Y/N)?	Total Cost
	Land Acquisition Cost			
	Leasing Land, Building and Other Facilities			
	Financing Charges			
	Legal Fees			
	Tax Rebate			
	Other			
<b>TOTAL INELIGIBLE COSTS*:</b>				<b>\$0</b>

<b>TOTAL GROSS PROJECT COSTS (Eligible + Ineligible)*:</b>				<b>\$97,125</b>
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\*Totals must match totals in the Budget section of the Application Form.

PROJECT FUNDING				
REDIP Funding				
REDIP Grant Request (auto calculated from Eligible Costs)				97,125.00
Applicant Contribution				
	Description			Total Amount
Applicant Financial Contribution (minimum 10% of total project costs up to \$200,000)				\$10,000
Applicant In-Kind Contribution (maximum 10% of total project costs)				\$10,000
<b>TOTAL APPLICANT CONTRIBUTION:</b>				<b>\$19,713</b>
<b>PERCENTAGE OF TOTAL PROJECT COSTS:</b>				<b>20%</b>
Other Funding				
	Funding Source	Description		Total Amount
<b>TOTAL OTHER FUNDING:</b>				<b>\$0</b>
<b>TOTAL PROJECT FUNDING:</b>				<b>\$116,838</b>

# COUNCIL MEMBER REPORT



DATE: January 3, 2022  
 TO: Mayor and Councillors  
 FROM: Councillor Brown  
 SUBJECT: November/December 2022 Monthly Report

Date	Event	Comments
Nov 2	CV Substance Use Committee	Working Group meeting
Nov 4	Council	Council Legal Orientation
Nov 7	Council	Council's Inaugural Meeting and swearing in ceremony
Nov 8	Council	Council Orientation – municipal operations & services, regulatory services
Nov 9	Council	Council orientation – Legislative and financial
Nov 10	Council	Council Orientation – Land Use Planning and community development
	CBA	CBA AGM – New Board elected.
Nov 11	Remembrance Day	Remembrance Day at the Legion
Nov 14	Council	Regular Council Meeting
Nov 18	Council	Orientation – Capital projects and Operations Projects
Nov 21	Housing Announcement	Mayors Call with Minister of Municipal Affairs – Dialogue on Provincial Housing Announcement FMI: <a href="https://news.gov.bc.ca/releases/2022PREM0065-001745">https://news.gov.bc.ca/releases/2022PREM0065-001745</a>
Nov 23	Safe Harbour	Diversity and Inclusion Workshop
Nov 24	Climate Caucus	Climate Caucus Webinar: Pushing for Ambitious Climate Action at the Municipal Level
Nov 25	Council	Council Orientation – Capital and operating projects day 2
Nov 25	Meeting	Meeting with Lee Everson to discuss Gukwas sa Wagalus (Rainbow House) project and Kumugwe Cultural Society
Nov 28	COTW	Committee of the Whole
	Council	Regular Council Meeting
Nov 29	BCSPI	BC Social Procurement Initiative – co-chairs meeting with staff
Nov 30	Workshop	Climate biodiversity health nexus Integrated Food Systems Planning workshop FMI on the project: <a href="https://www.researchgate.net/publication/362001437_Exploring_food_systems">https://www.researchgate.net/publication/362001437_Exploring_food_systems</a>

		<a href="#">in the Comox Valley through a climate-biodiversity-health lens Preliminary analysis and initial insights</a>
Dec 1	Climate Caucus	Learning and Unlearning – Working with Indigenous Peoples Session 1
	Karver	Meeting with CCS Principal and Karver/Grant to look for space for totems to be finished at CCSS
	PAC	Parents Advisory Committee at CCS to discuss safe routes and traffic calming in the area of the school
Dec 2	EcoForum	Baynes Sound/Lambert Channel Ecoforum Discussion on threats to water quality and ecosystem health: Unmonitored septic, Education Needed around maintenance of systems, South Sewer project, Septic Smart course at CVRD
Dec 3	Vista Radio	Meeting with Robin Ram - Opportunities
	Leaders Lunch	Lunch with Mayors and Chairs
	COTW	Team building – personality and values workshop
Dec 4	Open House	Holiday Reception with Colonel JP Gagnon (wing commander)
Dec 5	Webinar	Accelerating Climate Action through Circular Economy FMI: <a href="#">canadian circular cities</a>
Dec 6	Kwax dzi'dzas	Update with Transition society and Dawn to Dawn on affordable housing project
	Board Variance	Legal seminar on the role and scope of Board of Variance
	CVRD	Regional Parks and Trails Orientation
Dec 8	Celebration	Honoring the service of Leslie Baird hosted by the Museum
	Tree Light Up	Launching the season with the tree light up and carols in Village Square
Dec 9	ICET	Board Meeting – Orientation and approval of project funding
	BCSPI	BC Social Procurement Steering Committee Meeting Elected Co-chair with Jenna Stoner from Squamish
	APBC	Meeting with Ambulance and Paramedics of BC – orientation and advocacy and an invite to include them in our community events
Dec 12	Council	Final Council Meeting of 2022
Dec 15	VIHA	Query into lease agreement finalization
	Events Society	Cumberland Events Society AGM
Dec 16	NIC	Meeting with Diane Naugler ED Community Engagement to discuss NIC Housing, opportunities for collaboration and partnership with NIC
	Minister Kang	Introductory call with Minister Kang – New Minister of Municipal Affairs
Dec 19	LGPMR	Local Government Policing Modernization Roundtable Meeting Confidential – continued discussion of recommendations
Dec 20	Jet FM	Mayors Minute radio interview

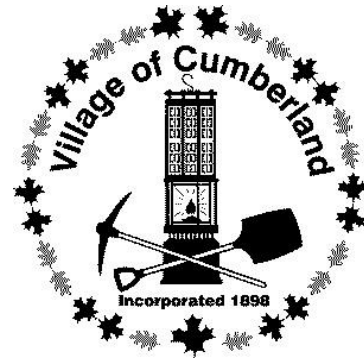
# COUNCIL MEMBER REPORT



DATE: January 3<sup>rd</sup>, 2023  
 TO: Mayor and Councillors  
 FROM: Councillor Neil Borecky  
 SUBJECT: Monthly Report for December 2023

Date	Event	Details
15/12/22	CJC Meeting	Met with the Community Justice Centre to discuss schedule and incoming Chief Administrator Karen (full name withheld) is the new Bruce Curtis (...not sure if that is public knowledge yet.) Also looking for new patron for the CJC. Discussing the Capanola lecture series coming up in March. Crown Isle may sponsor the dinner.
15/12/22	Cumberland Events Committee Meeting	Attended the Cumberland Events Committee meeting. Reviewed financials. Discussed the Feb. 18 <sup>th</sup> Washoe tournament and the "Cinch" (card game) tournament. Looked at minor changes to the Constitution of the Committee. Chatted about my role in doing soapbox derby competition with an added exciting feature of the adult portion of the race. Next Meeting January 15 <sup>th</sup> at 2616 Derwent at 6:30 pm.

# COUNCIL MEMBER REPORT



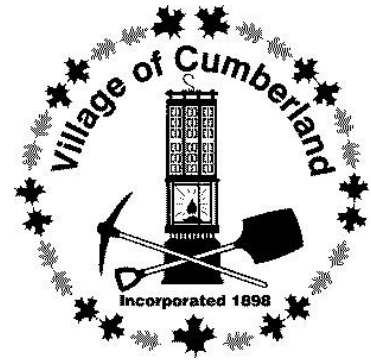
DATE: January 3, 2023  
 TO: Mayor and Councillors  
 FROM: Councillor Ketler  
 SUBJECT: Monthly Report for November/December 2023

Date	Event	Details
Nov 7	Village Inaugural meeting	Oath of Office
Nov 10	Council Orientation	Land Use Planning and Community Development
Nov 14	Regular Council Meeting	<a href="http://www.cumberland.ca/meetings">www.cumberland.ca/meetings</a>
Nov 15	K'omoks First Nation	CVRD monthly meeting
Nov 15	CVRD Regular Board Meeting	Inaugural Board Meeting – Oath of Office, Elected as Chair, Dir Cole-Hamilton elected as Vice-Chair
Nov 16	CVRD Chair/Vice Chair/CAO agenda meeting	Set agenda for following week's CVRD Board meeting
Nov 18	Island Coastal Economic Trust	North Island-Sunshine Coast Regional Advisory Committee meeting
Nov 18	Council Orientation	Capital & Operations projects
Nov 22	CVRD Board Orientation	Roles & Responsibilities, Social Media Review, Code of Conduct and Appointment of North Island 911 Board of Directors
Nov 23	Village Agenda Review	Mayor and CAO – set agenda for following weeks Council meeting
Nov 23	CVRD Chair/Vice Chair/CAO agenda meeting	Set agenda for following week's CVRD Board meeting
Nov 23	Safe Harbour – Diversity and Inclusion Workshop	Affiliation of Multicultural Societies and Service Agencies of BC (AMSSA) – Mosaic Consulting training workshop
Nov 25	Village Orientation	Day 2 – Capital and Operating projects
Nov 25	Town of Comox event	Christmas Tree Lighting

Nov 25	Minister Hutchings	CVRD meeting with Minister of Rural and Economic Development – topics: Rural Strategic Plan, Rural Connectivity, Ec dev impacts of emergencies, Mitigation Planning, Emergency Services etc.
Nov 28	Village COTW	Development Approvals Process Modernization, Lake Park Society and Lake Park Masterplan and Community Service Funding
Nov 28	Regular Council Meeting	<a href="http://www.cumberland.ca/meetings">www.cumberland.ca/meetings</a>
Nov 29	Equity and Public Policy meeting	Comox Valley Social Planning Society planning of future workshop
Nov 30	CVRD Chair/Vice Chair/CAO agenda meeting	Set agenda for following week's CVRD Board meeting
Nov 30	CV Food Policy Council	Call out for new members, SD71 Strat Plan, CVRD Food Hub Plan, LT Food Strategy, Federal National School Food Policy, subcommittees, EMBC food strat project, CVRD AG Plan etc.
Dec 2	Closed Village Council meeting	<a href="http://www.cumberland.ca/meetings">www.cumberland.ca/meetings</a>
Dec 2	Leaders Lunch	Comox Valley Mayors, KFN Chief, CVRD Chair and 19 Wing Base Commander meet informally each quarter
Dec 4	19 Wing Holiday Open House and later Village Christmas Party	Happy Holidays!
Dec 6	Regional Parks and Trails Committee	Inaugural meeting - attended in audience as alternate
Dec 6	CVRD Recreation Commission	Terms of Reference, Orientation to Rec Services (Track and Field, Rec Complexes, Exhibition Grounds, Rec Grant), Timeline for Strategic Planning
Dec 6	CVRD Regular Board Meeting	Orientation – Procurement/Financial Planning, CV Tourism Service, and Human Resources. Parcel Tax Roll Review, Next Generation 911 Local Government Agreement (data sharing), UBCM Community Emergency Prep Funding for Cultural Safety and Humility Grant (joint appl SRD). Bylaws – No 725 Ec Dev Sevice ADOPTED, No 734 Visitor Centre Fees ADOPTED
Dec 7	Village Agenda Review	Mayor and CAO – set agenda for following weeks Council meeting

Dec 7	CVRD Chair/Vice Chair/CAO agenda meeting	Set agenda for following week's CVRD Board meeting
Dec 8	K'omoks First Nation	CVRD monthly meeting
Dec 12	Vancouver Island and Coastal Communities – Climate Leaders	Need letter of appointment from CVRD, in-person meeting planned for LGLA in Feb 2023, tri-Chair model, RD funding approvals, proactive vs reactive, carbon pollution standard
Dec 13	CVRD Facilities Tour	Elected officials toured the CVRD Sewage Treatment Facility, the CV Sports & Aquatic Centre and the Drinking Water Treatment Facility
Dec 14	CVRD Chair/Vice Chair/CAO agenda meeting	Set agenda for following week's CVRD Board meeting
Dec 20	CVRD Regular Board Meeting	Orientation - Transit Service, Homelessness Support Service, Emergency Shelter and Supportive Housing Service and CV Emergency Program

# COUNCIL MEMBER MONTHLY REPORT



DATE: Nov. 7 2022  
TO: Mayor and Councillors  
FROM: Councillor Troy Therrien  
SUBJECT: November/December 2022 Monthly Report

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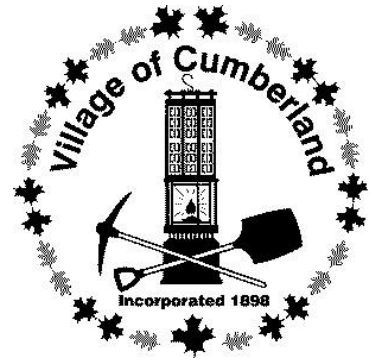
Very little to report this month.

Unfortunately, due to a last-minute scheduling conflict I was unable to attend the Accessibility committee meeting on Nov 21. I will definitely make time to attend the Jan. Meeting.

Councillor Kettler and I did a walking inspection of Coal Valley with a representative from Bell Group. We identified some concerns about the drainage into neighbouring properties and needed restoration of a small watercourse.



# COUNCIL REPORT



REPORT DATE: December 19, 2022

MEETING DATE: January 9, 2023

File No.

TO: Mayor and Councillors

FROM: Rob Crisfield, Manager of Operations

SUBJECT: Development Cost Charges Bylaw

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## RECOMMENDATION

THAT Council adopt the Development Cost Charges Bylaw 1173, 2022.

## PURPOSE

Seek Council adoption of the Development Cost Charges Bylaw following statutory approval from the province.

## PREVIOUS COUNCIL DIRECTION

Date	Resolution
2022-08-08	THAT Council give 1st, 2nd and 3rd readings to "Development Cost Charges Bylaw No. 1173, 2022"; THAT Council direct staff to refer the DCC Background Report by Urban Systems dated July 21, 2022, to the Ministry of Municipal Affairs for approval by the Inspector of Municipalities.
2021-07-26	THAT Council approve additional funding to be included in the 2021-2024 budget for the following items: c. Development Cost bylaw completion estimated to cost an additional \$25,000 to be funded from the Development Cost Charge reserves.

## BACKGROUND

The Village of Cumberland's DCC program was last reviewed and updated in 2013. The Village has identified the need to update its DCC program to account for important changes that have occurred since 2013 including the following:

- The completion of several capital projects.
- Changing growth projections and development pressures.

- The development of new and updated community plans.
- Changes to provincial legislation and policies.
- The completion of engineering studies and infrastructure master plans that provide a better understanding of what projects are required to accommodate development and growth.
- Inflation and increased construction costs for capital projects.

The updated DCC program that is proposed ensures that the people who will use and benefit from the services provided pay their share of the costs in a fair and equitable manner. It creates certainty by providing stable charges to the development industry and by allowing the orderly and timely construction of infrastructure.

Council reviewed an early draft of the proposed DCC program and provided feedback. Some minor revisions were made to the program based on that feedback. The revised program was then presented to the community at an open house (see attached background report). Following the community open house, a copy of the proposed DCC program was submitted to the Ministry of Community Services for review. The Ministry of Community Services must approve the updated DCC program before it can be adopted and come into effect. The Ministry officially does its review after 3<sup>rd</sup> reading. This review has now been completed and the Village has received statutory approval to proceed with the final reading and adoption of the bylaw.

## **ALTERNATIVES**

1. Not adopt the bylaw.

## **STRATEGIC OBJECTIVE**

- Healthy Community
- Quality Infrastructure Planning and Development
- Comprehensive Community Planning
- Economic Development

## **FINANCIAL IMPLICATIONS**

The proposed Development Cost Charge program ensures that the level of investment that the Village makes today does not place undue financial pressures or hardships on current or future generations. It helps ensure the Village can fund capital infrastructure while distributing the costs equitably between existing taxpayers and new development and developing a solid financial foundation for the community.

## **OPERATIONAL IMPLICATIONS**

None

## **CLIMATE CHANGE IMPLICATIONS**

Along with supporting existing community climate actions, DCC projects will also be reviewed for opportunities to incorporate climate change considerations during future design and construction. Current engineering best practice is to consider current and future impacts of climate change as well.

## **ATTACHMENTS**

1. Statutory Approval from Deputy Inspector of Municipalities for Bylaw 1173.
2. Development Cost Charges Bylaw No. 1173, 2022
3. Village of Cumberland DCC Background Report dated July 2022.

## **CONCURRENCE**

Courtney Simpson, Manager of Development Services **CS**

Rachel Parker, Corporate Officer **RP**

Respectfully submitted,

***R. Crisfield***

---

Rob Crisfield  
Manager of Operations

***M. Mason***

---

Michelle Mason  
Chief Administrative Officer



## *Statutory Approval*

***Under the provisions of sections*** \_\_\_\_\_ **560**

***of the*** \_\_\_\_\_ **Local Government Act**

***I hereby approve Bylaw No.*** \_\_\_\_\_ **1173**

***of the*** \_\_\_\_\_ **Village of Cumberland**

***a copy of which is attached hereto.***

***Dated this***    **24<sup>th</sup>**            ***day***

***of***            **November**            ***, 2022***

A handwritten signature in blue ink, appearing to be "B. Bell", written over a horizontal line.

**Deputy Inspector of Municipalities**

**THE CORPORATION OF THE VILLAGE OF CUMBERLAND**

**BYLAW NO. 1173, 2022**

**A bylaw to establish development cost charges.**

WHEREAS pursuant to the *Local Government Act*, the Council of the Village of Cumberland may, by bylaw, impose development cost charges;

AND WHEREAS development cost charges may be imposed for the purpose of providing funds to assist the municipality in paying the capital costs of providing, constructing, altering, or expanding sewage, water, drainage and highway facilities, other than off-street parking facilities, and providing and improving park land to service directly or indirectly, the development for which the charges are imposed;

AND WHEREAS the Council of the Village of Cumberland is satisfied that the charges imposed by this Bylaw are related to capital costs attributable to projects included in the municipality's capital expenditure plans;

AND WHEREAS the Council of the Village of Cumberland has considered the charges imposed by this bylaw in relation to:

- (i) future land use patterns and development;
- (ii) the phasing of works and services;
- (iii) the provision of park land described in the Official Community Plan;
- (iv) how development designed to result in a low environmental impact may affect the capital costs of infrastructure; and
- (v) whether the charges are excessive in relation to the capital costs of prevailing standards of service in the municipality.

AND WHEREAS Council of the Village of Cumberland has deemed charges imposed by this bylaw:

- (i) are not excessive in relation to the capital costs of prevailing standards of services in the municipality;
- (ii) will not deter development in the municipality;
- (iii) will not discourage the construction of reasonably priced housing or the provision of reasonably priced serviced land in the municipality; and
- (iv) will not discourage development designed to result in a low environmental impact in the municipality.

The Council of the Corporation of the Village of Cumberland, in open meeting assembled, enacts as follows:

**Title**

1. This Bylaw may be cited for all purposes as the “Development Cost Charges Bylaw No. 1173, 2022”.

**Definitions**

2. The definitions of words and phrases that are not included in this section shall have the meaning assigned to them in the *Local Government Act* or the *Community Charter*, as the case may be.

3. In this bylaw:

BUILDING PERMIT means any permit required by the Village of Cumberland that authorizes the construction, alteration or extension of a building or structure.

COMMERCIAL means any commercial use or development as defined by the Village of Cumberland’s zoning bylaw.

DWELLING UNIT means one or more habitable rooms that together function as a set of living quarters for one person or household. A dwelling unit contains one set of cooking facilities and has a private entrance either from outside or from a common hall inside a building. Dwelling units include vacation rentals, but do not include other commercial sleeping accommodations for the travelling public or recreational vehicles as defined by Village of Cumberland’s zoning bylaw.

GROSS FLOOR AREA means the total area of all the floors measured to the extreme outer limits of the building, or to the centre of common walls as calculated in accordance with the Village of Cumberland’s zoning bylaw.

INDUSTRIAL means any industrial use or development as defined by the Village of Cumberland’s zoning bylaw.

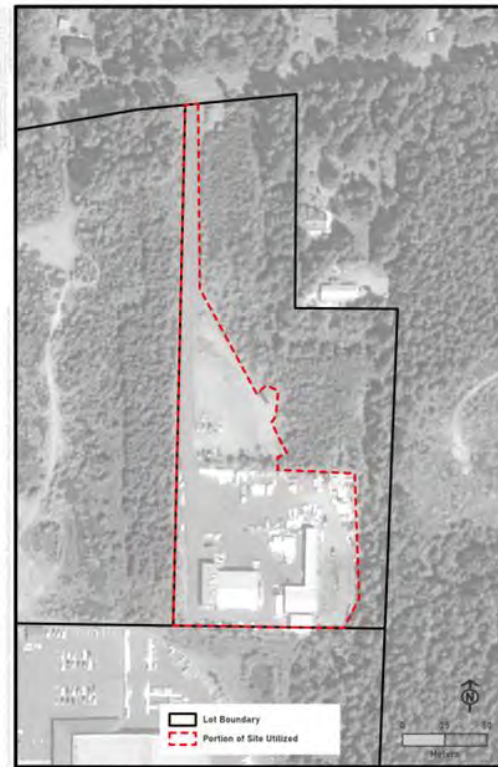
INSTITUTIONAL means any institutional use or development as defined by the Village of Cumberland’s zoning bylaw.

LOT	means land designated as a separate and distinct parcel on a legally recorded subdivision plan or description filed in the records of the Land Title Office.
MUNICIPALITY	means the municipal corporation of the Village of Cumberland.
RESIDENTIAL	means any building or portion of a building containing dwelling units.
RESIDENTIAL, LOW DENSITY	means a residential use or development that consists of the following types of dwellings as defined by the Village of Cumberland's zoning bylaw: <ul style="list-style-type: none"><li>(a) single-family</li><li>(b) duplex</li></ul>
RESIDENTIAL, MEDIUM DENSITY	means a residential use or development that consists of the following types of dwellings as defined by the Village of Cumberland's zoning bylaw: <ul style="list-style-type: none"><li>(c) townhouse</li><li>(d) manufacture home</li></ul>
RESIDENTIAL, HIGH DENSITY	means a residential use or development that consists of the following types of dwellings as defined by the Village of Cumberland's zoning bylaw: <ul style="list-style-type: none"><li>(a) multi-family</li><li>(b) apartment</li></ul>
SECONDARY SUITE	means a self-contained, accessory dwelling unit located within a principal single-family dwelling or in an accessory building on the same parcel as a single-family dwelling. A secondary suite does not include a duplex. A secondary suite shares common utility connections with a principal single-family dwelling. A secondary suite must follow all regulations outlined in the Village of Cumberland's zoning Bylaw.

**SITE UTILIZED**

means the part of a lot is being used, developed or that is affected by a Development Permit and/or Building Permit as illustrated in Figure A.

**Figure A: Example of Showing Portion of Site Utilized**



**ZONING BYLAW**

means “Zoning Bylaw No. 1027, 2016” as amended or superseded from time to time.

**Development Cost Charges**

4. The development cost charges set out in Schedule A to this bylaw are imposed on every person who obtains:
  - (a) approval of a subdivision; or
  - (b) a building permit authorizing the construction, alteration or extension of a building or structure, including a building that will, after the construction, alteration or extension, contain fewer than four (4) self-contained dwelling units and be put to no other use than the residential use in those dwelling units
5. Every person subject to the development cost charges imposed by this bylaw must pay the development cost charges to the Village of Cumberland in accordance with this bylaw.



### Exemptions

6. Despite any other provision of this bylaw, a development cost charge is not payable if any of the following applies in relation to a development authorized by a building permit:
  - (a) the permit authorizes the construction, alteration or extension of a building or part of a building that is, or will be, after the construction, alteration or extension, exempt from taxation under section 220(1)(h) or by a bylaw authorized by 224(2)(f) of the *Community Charter*;
  - (b) a development cost charge has previously been paid for the development unless, as a result of further development, new capital cost burdens will be imposed on the Village of Cumberland;
  - (c) the development does not impose new capital cost burdens on the Village of Cumberland;
  - (d) the permit authorizes the construction, alteration or extension of self-contained dwelling units in a building, and the area of each self-contained dwelling unit is no larger than 29m<sup>2</sup>, and each dwelling unit will be put to no other use than residential use; or
  - (e) the value of the work authorized by the permit does not exceed \$50,000.
7. Despite any other provision of this bylaw, development cost charges are not required or payable for secondary suites.

### Calculation of Applicable Charges

8. The amount of development cost charges payable in relation to a particular development shall be calculated using the rates set out in Schedule A to this bylaw based on the applicable number of development units.
9. Transportation, water, drainage, parks development cost charges imposed by this bylaw are applicable to all development throughout the Village of Cumberland.
10. Different sanitary sewer development cost charges are imposed by this bylaw and are applicable in the following areas:
  - (a) Village-wide sanitary sewer development cost charges are applicable to all development within the municipal boundary of the Village of Cumberland as shown on Schedule B to this bylaw.
  - (b) Additional area specific development cost charges are applicable to development within the Area Specific Sanitary Sewer DCC Area boundaries shown on Schedule B to this bylaw.

11. The amount of development cost charges payable in relation to a mixed-use type of development shall be calculated separately for each portion of the development, according to the separate use types, that are included in the building permit application and shall be the sum of the charges payable for each type.
12. Where a type of development is not identified in Schedule A to this bylaw, the amount of development cost charges to be paid to the Village of Cumberland shall be equal to the development cost charges that are payable for the most comparable type of development.

### **Timing of Payment**

13. Development cost charges imposed by this Bylaw must be paid in full to the Village of Cumberland at the following times:
  - (a) where an application is made for the subdivision of land for single-family residential development, at the time of approval of such subdivision;
  - (b) for duplex developments, at the time of subdivision approval for one of the dwelling units, and for the second dwelling unit, at the time of approval of a building permit authorizing the development; and
  - (c) for all other types of development to which this bylaw applies, including multi-family residential, commercial, industrial, and institutional development, after the application for a building permit has been made but before the building permit has been issued.

### **Severability**

14. If any section, subsection, clause or phrase of this bylaw is, for any reason, held to be invalid by a court of competent jurisdiction, it shall be deemed to be severed and the remainder of this bylaw shall remain valid and enforceable in accordance with its terms.

### **Repeal and Transition**

15. Subject to section 16 of this bylaw, the “Corporation of the Village of Cumberland Development Cost Charges Bylaw No.934, 2010”, and all amendments thereto are hereby repealed.
16. Despite section 15 of this bylaw, the “Corporation of the Village of Cumberland Development Cost Charges Bylaw No. 934, 2010”, and all amendments thereto shall apply for the purpose of imposing and collecting development cost charges in relation to “in-stream” development applications referred to in sections 511 and 568 of the *Local Government Act*, and for no other purpose.

**Effective Date**

17. This bylaw shall come into force on the day of adoption.

**READ A FIRST TIME THIS                      8<sup>TH</sup>    DAY OF                      AUGUST                      2022.**

**READ A SECOND TIME THIS                      8<sup>TH</sup>    DAY OF                      AUGUST                      2022.**

**READ A THIRD TIME THIS                      8<sup>TH</sup>    DAY OF                      AUGUST                      2022.**

**APPROVED BY THE INSPECTOR  
OF MUNICIPALITIES THE                      24<sup>TH</sup>    DAY OF                      NOVEMBER                      2022.**

**ADOPTED THIS    DAY OF    2022.**

\_\_\_\_\_  
Mayor

\_\_\_\_\_  
Corporate Officer

**SCHEDULE A**

Table 1: Development Cost Charges in force at the date of bylaw adoption

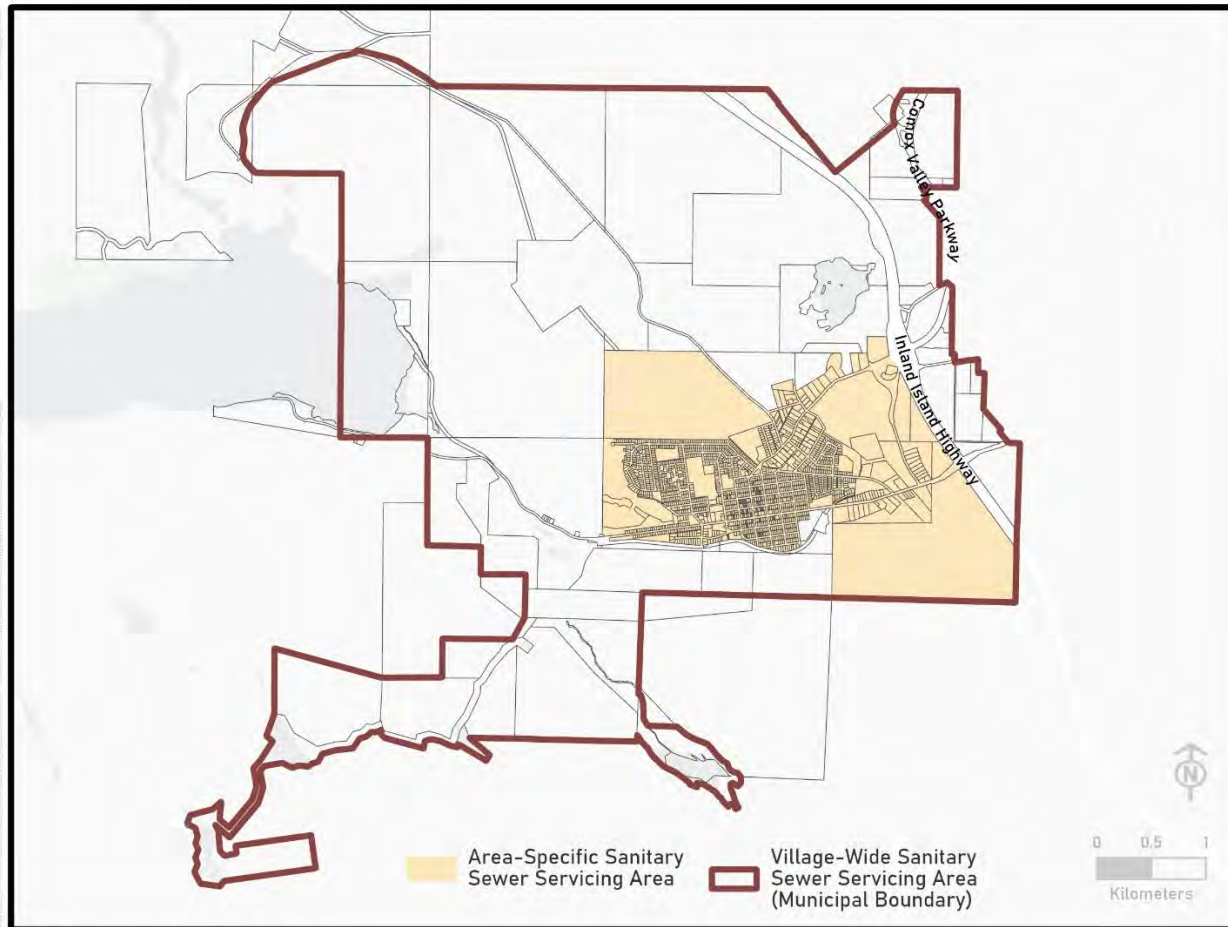
<b>Land Use (Development Units)</b>	<b>Transportation</b>	<b>Water</b>	<b>Sanitary Sewer Village Wide</b>	<b>Sanitary Sewer Area Specific</b>	<b>Storm Drainage</b>	<b>Parks</b>
<b>Low Density Residential</b> (per dwelling unit or lot)	\$8,007.00	\$3,725.07	\$1,075.88	\$4,263.13	\$2,178.74	\$1,032.51
<b>Medium Density Residential</b> (per dwelling unit)	\$3,524.29	\$3,004.09	\$867.64	\$3,438.01	\$1,176.52	\$832.67
<b>High Density Residential</b> (per dwelling unit)	\$3,524.29	\$2,403.27	\$694.11	\$2,750.41	\$718.98	\$666.13
<b>Commercial</b> (per m <sup>2</sup> of gross floor area)	\$83.28	\$15.62	\$4.51	\$17.88	\$6.97	--
<b>Industrial</b> (per ha of site utilized)	\$72,178.22	\$21,629.46	\$6,247.03	\$24,753.66	\$49,021.60	--
<b>Institutional</b> (per m <sup>2</sup> of gross floor area)	\$95.23	\$13.22	\$3.82	\$15.13	\$6.54	--

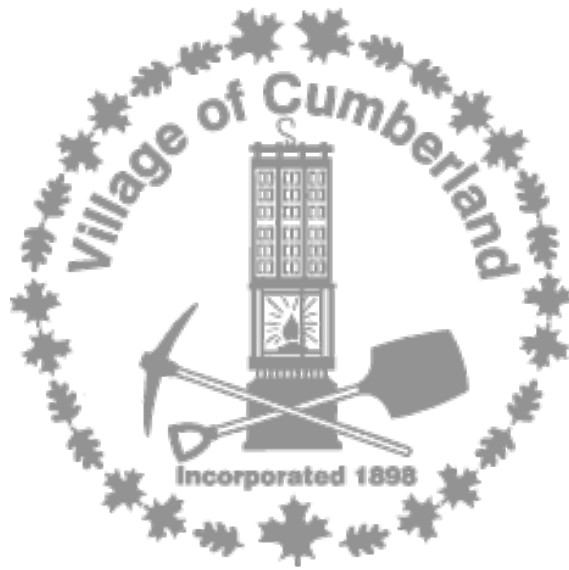
**Notes to Schedule:**

- Area Specific Sanitary Sewer development cost charges only apply to development within the Area Specific Sanitary Sewer Servicing Area shown on Schedule B to this Bylaw. When this this is the case, Sanitary Sewer Village-Wide development cost charges are also imposed.

**SCHEDULE B**

Map 1: Village Wide (Municipal Boundaries) and Area Specific Sanitary Sewer Servicing Area





# DCC Background Report

## July 2022

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## APPENDICES

Appendix A	Sanitary Sewer DCC – Area Specific Map
Appendix B	DCC Project Details
Appendix C	Existing Village of Cumberland Development Cost Charge Bylaw No. 934, 2010
Appendix D	Proposed Village of Cumberland Development Cost Charge Bylaw No. _____
Appendix F	DCC Rate Comparisons
Appendix E	Council Reports and Open House Materials

## EXECUTIVE SUMMARY

This report presents proposed the Village of Cumberland's proposed Development Cost Charge (DCC) program. All projects included in the DCC program are owned and controlled by the Village of Cumberland. The report consists of the following parts.

- **Part 1** – outlines the purpose of the DCC investigation and includes information on the guiding principles, legislation enabling DCCs, and the use of the provincial *DCC Best Practices Guide*.
- **Part 2** – reviews the public consultation and stakeholder engagement process.
- **Part 3** – outlines the specific capital projects and identifies DCC recoverable costs. This part discusses the timeframe for the DCC program, the municipal assist factor, grant assistance, interim financing, and the allocation of costs between existing and new development. It also includes an explanation for applying DCCs on a community-wide or area-wide basis.
- **Part 4** – presents growth projections based on population trends over the past 25 years and discussions with staff.
- **Parts 5 to 9** – summarizes the capital costs for each different DCC service (i.e. transportation, water, sanitary, storm, and parks). The total capital costs for each service and the total DCC program costs are shown below in Table 1.

**Table 1**  
**Village of Cumberland**  
**Total DCC Program Recoverable Costs**

Service	Total Capital Costs	Municipal Costs	DCC Recoverable Program Costs
Transportation	\$24,756,307	\$5,602,307	\$16,518,657
Water	\$9,945,672	\$1,519,523	\$7,518,318
Sanitary Sewer (Village-Wide)	\$16,150,000	\$4,368,250	\$4,281,750
Sanitary Sewer (Area-Specific )	\$22,843,000	\$4,435,180	\$6,626,070
Storm Drainage	\$7,456,355	\$1,298,472	\$6,157,883
Parks	\$4,471,365	\$2,258,039	\$2,213,325

## DCC Background Report

Parts 5 to 9 also show how the DCC rates are calculated using the information from Parts 3 and 4. The proposed DCC rates are shown in Table 2.

- **Part 10** – includes information on implementation issues such as exemptions to the Bylaw, grace periods, DCC rebates, and credits, as well as suggestions for monitoring and accounting related to the DCC Bylaw.



**Table 2  
Village of Cumberland  
Proposed DCC Rate Summary**

<b>Land Use</b>	<b>Transportation</b>	<b>Water</b>	<b>Sanitary Sewer (Village-Wide)</b>	<b>Sanitary Sewer (Area-Specific)</b>	<b>Storm Drainage</b>	<b>Parks</b>	<b>Total</b>
<b>Low Density Residential</b> (per lot)	\$8,007.00	\$3,725.07	\$1,075.88	\$4,263.13	\$2,178.74	\$1,032.51	\$20,282.32
<b>Medium Density Residential</b> (per dwelling unit)	\$3,524.29	\$3,004.09	\$867.64	\$3,438.01	\$1,176.52	\$832.67	\$12,843.22
<b>High Density Residential</b> (per dwelling unit)	\$3,524.29	\$2,403.27	\$694.11	\$2750.41	\$718.98	\$666.13	\$10,757.20
<b>Commercial</b> (per m <sup>2</sup> of gross floor area)	\$83.28	\$15.62	\$4.51	\$17.88	\$6.97	--	\$128.27
<b>Industrial</b> (per ha of site utilized)	\$72,178.22	\$21,629.46	\$6,247.03	\$24,753.66	\$49,021.60	--	\$173,829.98
<b>Institutional</b> (per m <sup>2</sup> of gross floor area)	\$95.23	\$13.22	\$3.82	\$15.13	\$6.54	--	\$133.93

## PART 1. BACKGROUND

---

### 1.1 Purpose of this Report

The Village of Cumberland's DCC program was last reviewed and updated in 2013. The Village has identified the need to update its DCC program to account for important changes that have occurred since 2013 including the following:

- The completion of several capital projects
- Changing growth projections and development pressures
- The development of new and updated community plans
- Changes to provincial legislation and policies
- The completion of engineering studies and infrastructure master plans that provide a better understanding of what projects are required to accommodate development and growth
- Inflation and increased construction costs for capital projects

The updated DCC program that is proposed ensures that the people who will use and benefit from the services provided pay their share of the costs in a fair and equitable manner. It creates certainty by providing stable charges to the development industry and by allowing the orderly and timely construction of infrastructure.

This report presents the proposed DCC program. However, the material provided in this report is meant to provide information only. Reference should be made to *Development Cost Charge Bylaw No. 934, 2010* (and amendments) for the Village of Cumberland's DCC rates until the Council has adopted a new DCC Bylaw.

### 1.2 Legislative and Regulatory Background

Development cost charges are special charges collected by local governments to help pay for infrastructure expenditures required to service growth. The *Local Government Act (LGA)* provides the authority for municipalities to levy DCCs. The purpose of a DCC is to assist the municipality in accommodating development through a dedicated source of funding for the capital costs of:

- providing, constructing, altering, or expanding sewage, water, storm drainage, and transportation facilities (other than off-street parking)
- providing and improving parkland.

## DCC Background Report

Municipalities wanting to collect DCCs must adopt a DCC Bylaw that specifies the amount of DCCs that will be collected. The charges may vary with respect to:

- different zones or different defined or specific areas
- different uses
- different capital costs as they relate to different classes of development
- different sizes or different numbers of lots or units in a development

Funds collected through DCCs must be deposited in a separate reserve account. These funds may only be used to pay for the capital costs of the works and short-term financing costs of a debt incurred for capital works identified in the DCC program. The costs for capital works include not only the actual construction of the works but also the planning, engineering, and legal costs which are directly related to the works, as well as improving parkland if a parkland acquisition and development DCC is established.

### 1.3 Bill 27

On May 29, 2008, the Provincial Government enacted new legislation pertaining to DCCs. The legislative changes include the option for municipalities to exempt or waive DCCs for the following classes of “eligible development”:

- not-for-profit rental housing, including supportive living housing (similar provisions were in the previous legislation, but did not require a Bylaw to waive or reduce DCCs for not-for-profit rental housing)
- for-profit affordable rental housing
- subdivisions of small lots designed to result in low greenhouse gas emissions
- developments designed to result in a low environmental impact

If the Village of Cumberland wishes to provide DCC waivers or reductions, it could adopt a DCC Waiver Bylaw that establishes definitions for each class of “eligible development”, corresponding rates of reduction, and requirements that must be met in order to obtain a waiver or reduction. Council, however, is not *obligated* to adopt any of these new provisions. To make up for any foregone DCC revenue, the Village of Cumberland would have to secure alternate revenue sources.

## DCC Background Report

### 1.4 Use of DCC Best Practices Guide

The Ministry of Community Services (the “Ministry”) has prepared a *DCC Best Practices Guide*. The purpose of this document is to outline an accepted process to develop a DCC program. This report was developed in consideration of the *DCC Best Practices Guide*, which was followed where it was appropriate to do so.

A copy of the Best Practices Guide is available online at:

- [https://www2.gov.bc.ca/assets/gov/british-columbians-our-governments/local-governments/finance/dcc\\_best\\_practice\\_guide\\_2005.pdf](https://www2.gov.bc.ca/assets/gov/british-columbians-our-governments/local-governments/finance/dcc_best_practice_guide_2005.pdf)

## PART 2. PUBLIC CONSULTATION & STAKEHOLDER ENGAGEMENT

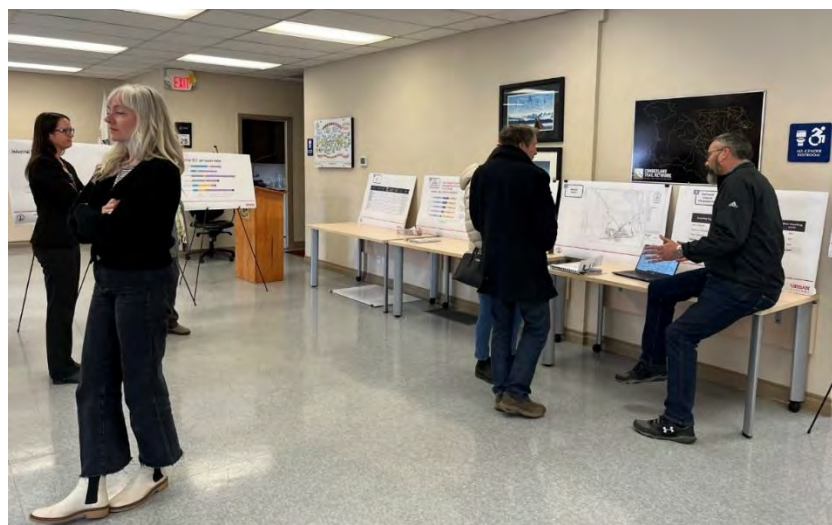
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### 2.1 Public Consultation & Stakeholder Engagement

Although the *Local Government Act* does not require a public participation process, the Best Practices Guide does suggest that an opportunity for public participation be included as part of the development of a DCC program. The purpose of such a process is to allow those who are interested in or affected by, the proposed DCCs to offer comments and input. The Best Practices Guide does not set a recommended format to be followed for public participation; instead, the type of public participation to be used is decided by the local government itself.

In this case, public participation included an open house and email communication with community stakeholders. The open house was held in May 2022 in the Village of Cumberland Council Chambers. The Village posted notice of the event on their website and local developers were notified by email in advance of the event. Copies of the public notice and poster boards are in Appendix E of this report. The complete background report, information about DCCs, the updated DCC costs and community comparisons were made available at the open house. Key topics of discussion during the event included:

- In-stream applications
- DCC credits
- Drainage calculations
- Community comparisons, specifically within the Comox Valley
- Bevan industrial lands and future servicing strategies





## PART 3. GUIDING PRINCIPLES AND KEY ELEMENTS

---

### 3.1 Guiding Principles

Some key assumptions were made at the beginning of this DCC investigation. These assumptions form an integral part of the report and are based on the following significant principles:

- **Integration** – This DCC program is just one of many broader goals and initiatives. Other goals and initiatives in the Local Government Act, other provincial legislation, regional growth strategies, and Official Community Plans should also be reflected. In dealing with land efficiency, housing affordability, and sustainability, a local government uses DCCs as one of the ways to handle these issues. Community plans, land use plans, and corporate financial and capital infrastructure strategies must be taken into consideration when developing DCCs.
- **Benefiter Pays** – Those who benefit from new infrastructure in the Village of Cumberland should pay for the installation of such systems.
- **Fairness and Equity** – Since costs should be shared amongst the benefitting parties, mechanisms should be put in place to ensure fair cost distribution between existing users and new development. For those costs allocated to new development, DCCs should be used to ensure equitable distribution of the costs between the various land uses and different development projects.
- **Accountability** – To promote accountability, all information used for the development of DCCs should be accessible and understandable by all stakeholders.
- **Certainty** – The DCC program should be designed to ensure stable charges and timely construction of infrastructure. Developers rely on the stability of DCC rates when planning their projects. Certainty in DCC revenue helps ensure that infrastructure is constructed in a timely manner and helps avoid deferring or cancelling development.

### 3.2 Relationship to Other Documents

This proposed DCC program has been developed to be consistent with the Local Government Act and the provincial DCC Best Practices Guide. All capital costs associated with projects over the next five years are included in the five year financial plan/capital expenditure program. In addition, the following documents were also reviewed and have been followed to ensure consistency where it was appropriate to do so.

- Village of Cumberland Development Cost Charge Bylaw No. 934, 2010

## DCC Background Report

- Village of Cumberland Official Community Plan, 2014
- Village of Cumberland Roads Master Plan, 2007
- Village of Cumberland Sanitary Sewer Master Plan, 2010
- Village of Cumberland Sanitary Sewer Master Plan Supplemental Report, 2011
- Village of Cumberland Stormwater Drainage Master Plan, 2010
- Village of Cumberland Waster System Master Plan, 2007
- Village of Cumberland Long-Term Water Supply Strategy, 2016
- Village of Cumberland Parks and Greenways Master Plan, 2014
- Village of Cumberland Five Year Financial Plan

### 3.3 DCC Time Frame

The first step in determining DCC costs is to set a time frame for the DCC program. The time frame for the Village of Cumberland's proposed DCC program is to 2045. The capital expenditure forecasts outlined in this report include all DCC projects that need to be constructed to allow for anticipated development.

### 3.4 DCC Planning Area (Community-wide vs. Area-specific Program)

In a community-wide DCC program, the same DCC rate is applied for each land use deemed to generate a similar capital cost burden regardless of the location of the development. An area-specific DCC typically divides the community into different areas according to geographic or other distinctive areas based on technical reasons. For example, it would be appropriate to establish an area-specific DCC for an area that is uniquely serviced by a series of specific water works, which can only service that particular area due to unique location.

A community-wide DCC program is the best approach for the Village of Cumberland with the exception of an area-specific sanitary sewer DCC. This decision was made considering the following questions:

- **What does the provincial *DCC Best Practice Guide* recommend?**  
The provincial *DCC Best Practice Guide* recommends that all DCCs be established on a community-wide basis, unless a significant disparity exists between those who pay the DCC and benefiting users.
- **How are DCCs currently applied within the Village of Cumberland?**  
The current DCC Bylaw is applied on a community-wide basis.
- **Who benefits from the capital works in a direct or indirect manner?**  
All development in the community with the exception of the sanitary sewer DCC for industrial development.

- **Is a community wide DCC a fair manner to distribute the costs in relationship to the development of land throughout the Village of Cumberland?**

Generally speaking, the development will be spread out throughout the Village, however currently industrial development in the Bevan Industrial Lands do not have sanitary trunk sewer servicing. Therefore, it would not be fair to incur capital cost burdens for the provision of sewer collection mains which are not servicing the industrial areas. As such, DCCs for sanitary sewer trunk mains will be collected on an area-specific basis, only for the Area-Specific Sanitary Sewer DCC area as seen in Appendix A. Sanitary sewer treatment and master planning are designed for growth in the entire Village of Cumberland, and as such those DCC's are levied on a municipal-wide basis.

- **What are the cash flow implications of collecting area-specific DCCs vs. community-wide DCCs for a municipality the size of the Village of Cumberland? How will the manner of DCC collection affect the Village's ability to get the DCC program built?**

Community-wide DCCs would give the most flexibility in terms of accumulating and spending DCC revenues. Area-specific DCCs can limit the amount of DCCs available to fund works throughout the Village by having multiple DCC reserves with a small amount in different reserves, this can result in waiting a long time to collect a significant amount of DCCs to build any works in a timely manner.

- **What are the typical complexities and costs of establishing the community-wide vs. area-specific DCC?**

Having a community-wide DCC can reduce the complexity of collecting the DCC and cost of administering the DCC reserves. A community-wide DCC Bylaw is often a simpler document to apply by front counter staff as well and can reduce the staff time required to assess, collect and expend the DCCs. We believe the reduced administration effort from having a community-wide DCC can be significant.

### 3.5 DCC Recoverable Costs

As specified by the *Local Government Act*, the DCC recoverable costs for projects include planning, engineering, and legal costs directly related to the work for which a capital cost may be incurred. The provincial *DCC Best Practices Guide* further clarifies the interpretation of the Ministry to include:

- Planning
- Public consultation
- Engineering design
- Right-of-way or parkland acquisition

## DCC Background Report

- Legal costs
- Interim financing
- Contract administration
- Construction
- Contingencies

While interest on long-term debt has not been included in the recoverable capital costs presented in this report, it should be noted that the definition of “capital costs” (Section 932 of the Act) has been recently amended to include interest in exceptional circumstances where borrowing is required. The Inspector of Municipalities will only allow interest costs in exceptional circumstances that necessitate the construction of specific infrastructure projects in advance of sufficient DCC cash flows (e.g. fixed-capacity infrastructure, out-of-sequence projects, or greenfield developments). In these cases, local governments or developers are required to front-end the cost of the growth-related infrastructure and recover their costs through DCCs as growth occurs. However, the Ministry continues to encourage local governments to adopt DCC programs that limit the need for borrowing to exceptional cases.

### 3.6 Grant Assistance

As per the Provincial *DCC Best Practices Guide*, grants that have not been secured have not been included as part of the DCC calculations.

### 3.7 Interim Financing

The capital costs shown in the report do not include interim financing.

### 3.8 Allocation of Costs

It is often the case that new infrastructure works benefit both existing and new development, and as such, should be paid for by both parties in accordance with the benefit received by each. The costs of such works need to be allocated equitably between new and existing development.

For each proposed infrastructure project, costs are allocated between existing development and new growth. To determine the proper allocation for each project, individual projects can be divided into two broad categories:

- **Category 1 – Projects that are required solely to accommodate new growth**  
Projects in this category benefit new growth only. In other words, they would not be contemplated if no new growth were forecasted. One hundred percent (100%) of the benefit and cost of each project in this category have been allocated to new growth.

- **Category 2 – Projects that upgrade the level of service or resolve existing deficiencies**

Projects in this category may provide some benefit to existing development, but they also provide benefit to new growth. Without the completion of these projects, new development would not be able to proceed. In these cases, a portion of the cost of each DCC project is allocated to existing and new development. The following factors have been considered when determining what portion to allocate to new growth for recovery through DCCs:

- current standards of servicing required by the Village of Cumberland.
- whether the work on the project is primarily for upgrading deficiencies and upkeep of the system or whether it is primarily for increasing capacity.
- a comparison of the size of the existing population versus the size of expected new growth.
- a comparison of what the size of the project would be if the project were for the existing population, versus what the size of the project would be if the project were expanded to accommodate the new growth as well.

Table 3 (next page) indicates, in general terms, the percentage of the costs that are attributable to new growth according to the type of service. The number 100% indicates category one projects that principally benefit new growth alone. Numbers less than 100% indicate category two projects that benefit both new growth and the existing population.

**Table 3  
Village of Cumberland  
Allocation of Costs Attributable to New Growth**

DCC Type	Benefit Allocation %
Transportation	50% to 100%
Storm drainage	50% to 100%
Sanitary Sewer	50% to 100%
Water	50% to 100%
Parks and Open Space	50% to 100%

In each of the DCC programs (Parts 5 through 9), the exact percentage of the benefit that can be attributed to new growth is indicated in the column entitled “Benefit Allocation %”. That allocation is applied to the estimated costs to arrive at the amount that can be recovered by DCCs before the municipal assist factor is applied. That information can be found in the column entitled “Benefit Allocation” in all the DCC programs.

**3.9 Municipal Assist Factor**

The *Local Government Act* stipulates that an assist factor will be included as part of the calculation of DCCs. An assist factor represents a municipalities contribution towards the capital costs for projects that are attributed to new development. This contribution is in addition to the costs that are allocated to the existing population. The portion of the costs that the Village of Cumberland will have to cover because of the assist factor will have to be financed through other means (e.g. existing taxpayers).

The actual level of the assist factor is determined by the municipality. A municipality can have a different assist factor for each type of capital works (e.g. sanitary sewer vs. roads projects); however, a municipality cannot have a municipal assist factor that varies for different land uses within the District, (e.g. single-family residential vs. multi-family residential vs. commercial)

As outlined in Section 1.2 of this report, the *Local Government Act* also stipulates that a municipality consider the following factors when setting DCC rates:

- future land use patterns and development
- the phasing of works and services
- whether the charges are excessive in relation to the capital costs of prevailing standards of service
- whether the costs will deter development

## DCC Background Report

- whether the charges will discourage the construction of reasonably priced housing or the provision of reasonably priced serviced land

The matters above have been considered and the assist factor for the proposed DCC program has been set at 1% for each type of DCC (see Table 4 below). This is consistent with Village of Cumberland's current DCC program.

**Table 4**  
**Village of Cumberland**  
**Municipal Assist Factor by DCC Type**

DCC Type	Municipal Assist Factor
Road	1%
Water	1%
Sanitary Sewer	1%
Storm drainage	1%
Parks and Open Space	1%

## PART 4. GROWTH PROJECTIONS

### 4.1 Residential

The Village of Cumberland’s population is expected to grow to approximately 8869 people by 2046. Approximately 50% of this future population is expected to be the result of new growth. This projection is based on a review of historic growth rates and an analysis of the development potential of existing areas that will likely develop from now to 2046. This includes existing lands currently zoned but not developed or remaining lands in planned neighbourhoods where the type of land use is known. Based on input provided by staff, it has been forecasted that residential development will likely consist of:

- **60% low density dwelling units** – this means detached single-family dwellings as defined by the Village of Cumberland current bylaws.
- **20% medium density dwelling units** – this means patio homes, duplexes, townhouses, rowhouses, mobile home parks, and manufactured homes as defined by the Village of Cumberland’s current bylaws.
- **20% high density dwelling units** – this means apartment dwellings and multi-family dwellings as currently defined by the Village of Cumberland’s current bylaws.

Table 5 (below) provides a breakdown of the expected that future development. Average household sizes are based on a review of historic averages available through Statistics Caranda. Average household size has been increased to 3.1 people per unit from a historical average of 2.5 to account for secondary suites which are currently permitted in all low-density residential zones.

**Table 5**  
**Village of Cumberland**  
**Residential Growth by Dwelling Type**

Dwelling Type	Future Distribution	Average Household Size	New Population	New Dwelling Units
Low Density	60%	3.1	2,979	961
Medium Density	20%	2.5	803	321
High Density	20%	2.0	640	320
<b>TOTAL</b>	<b>100%</b>	<b>n/a</b>	<b>4,422</b>	<b>1,602</b>



**4.2 Commercial, Industrial, and Institutional**

Commercial, industrial, and institutional development have historically been sporadic in the Village of Cumberland. Because of this, past development trends cannot reliably be extrapolated into the future. Instead, commercial, industrial, and institutional development projections have been established based on a review of available land, discussions with senior Village staff, and an analysis of typical developments in other parts of the Comox Valley. These development projections are summarized in Table 6 (below).

**Table 6  
Village of Cumberland  
Commercial, Industrial, and Institutional Development Projections**

Land Use	New Development by 2046
Commercial	8,000 m <sup>2</sup> of new gross floor area <i>For scale and reference, a typical grocery store in the surrounding Comox Valley area is approximately 4,000 m<sup>2</sup></i>
Industrial	65 hectares of new site area used <i>For scale and reference, most existing light industrial developments along Cumberland road utilize approximately 0.75 to 1.50 ha of land each.</i>
Institutional	3,800 m <sup>2</sup> of new gross floor area <i>For scale and reference, a typical elementary school in the surrounding area is approximately 3,500 m<sup>2</sup>.</i>

**4.3 Area-Specific Growth Projections**

Table 7 shows the estimated new development by land use within the area-specific boundaries shown in Appendix A.

**Table 7  
Village of Cumberland  
Area-Specific Growth Projections**

<b>Land Use</b>	<b>Distribution of Development within Area</b>	<b>Estimated New Development</b>	<b>Base Unit of Measurement</b>
Residential Low Density	95%	913	Lot
Residential Medium Density	100%	321	Dwelling
Residential High Density	100%	320	Dwelling
Commercial	100%	8,000	m <sup>2</sup> gross floor area
Industrial	5%	3.25	ha of site utilized
Institutional	100%	3,800	m <sup>2</sup> gross floor area

## PART 5. TRANSPORTATION DCCS

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### 5.1 Transportation DCC Program

The Transportation DCC program includes a variety of capital works including road widening, traffic circles, traffic calming, sidewalks, and active transportation corridors. The location of the works is shown on Map 1 and summarized in Table 11. Detailed project sheets are provided in Appendix B.

**Table 8  
Village of Cumberland  
Transportation DCC Program Costs**

Municipal Costs	DCC Recoverable Program Costs	Total Capital Costs
\$5,602,307	\$16,518,656	\$24,756,307

The total cost of the transportation projects is approximately \$24.7 million of which approximately \$16.5 million is DCC recoverable. These costs include the construction of new road infrastructure plus engineering, contingency, and project administration.

### 5.2 Traffic Generation and Calculation of Road Impact

For transportation works, costs are distributed based on the trips generated by each land use. The weighted trip ends used are presented in Table 8 below. They have been developed based on a review of the Institute of Transportation Engineers, *Trip Generation Manual*, 10<sup>th</sup> Edition, 2019 and a review of weighted trip ends used in other neighbouring municipalities DCC programs. The rates used (see Table 9) are for the most part consistent with the Town of Comox. For commercial development the rate is similar to the one used by the City of Courtenay. It is a customized rate that accounts for commercial infill development that generates lower traffic volumes.

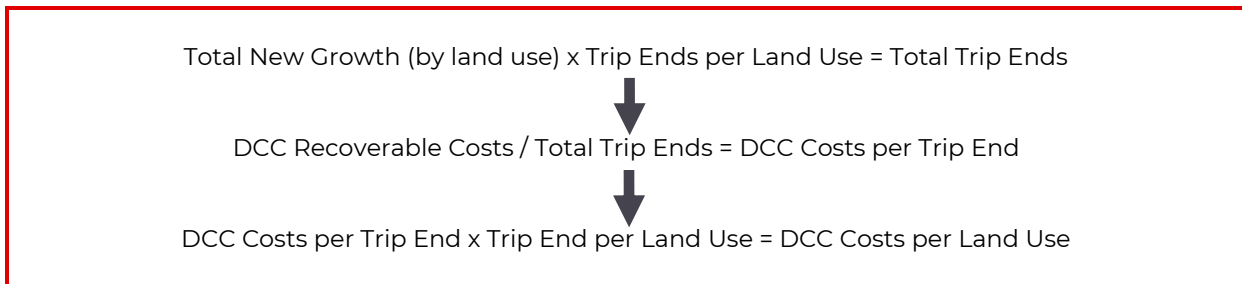
**Table 9  
Village of Cumberland  
Equivalent Units for Transportation**

Land Use	Base Unit	Equivalent Generation (Rate Per Base Unit)
Residential (Low Family)	Lot	13.20
Residential (Medium Density)	Dwelling Unit	5.81
Residential (High Density)	Dwelling Unit	5.81
Commercial	Gross Floor Area (m <sup>2</sup> )	0.1373
Industrial	Utilized Area (ha)	118.990
Institutional	Gross Floor Area (m <sup>2</sup> )	0.1570

**5.3 Transportation DCC Calculation**

The Transportation DCC rates have been calculated according to the various principles and assumptions discussed earlier in this report. Calculation based on a standard transportation assumption of 30% FAR. The basic calculation is shown in Equation 1.

**Equation 1  
Village of Cumberland  
Transportation DCC Calculation**

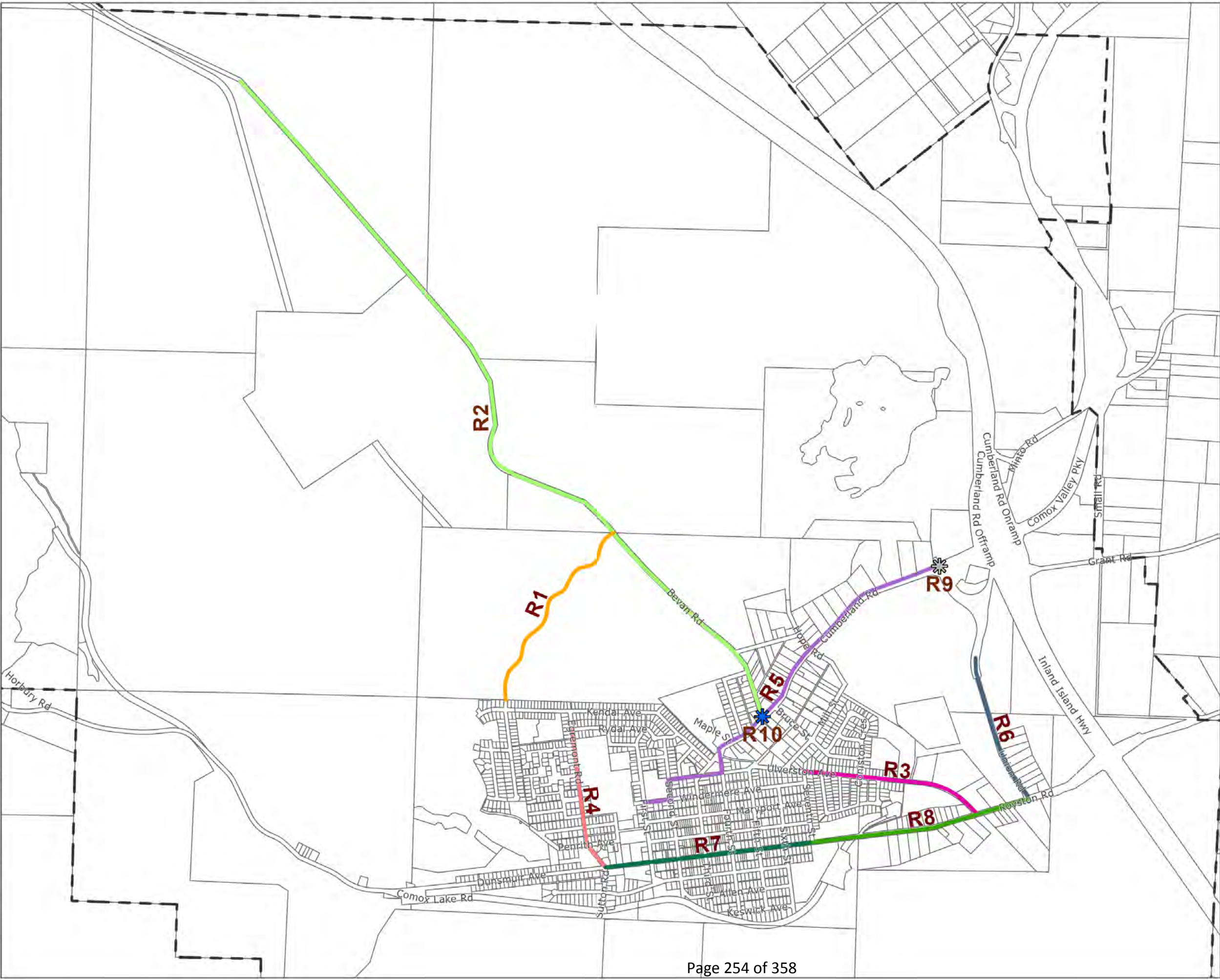


The proposed Transportation DCC rates are shown in Table 10. The detailed Transportation DCC calculations are shown on Table 11 and Table 12.

**Table 10**  
**Village of Cumberland**  
**Proposed Transportation DCC Rates**

Land Use	DCC Rate	Unit
Residential (Low Density)	\$8,007.00	per Lot
Residential (Medium Density)	\$3,524.29	per Dwelling Unit
Residential (High Density)	\$3,524.29	per Dwelling Unit
Commercial	\$83.28	per m <sup>2</sup> of Gross Floor Area
Industrial	\$72,178.22	per hectare of Land Utilized
Institutional	\$95.23	per m <sup>2</sup> of Gross Floor Area

Level supplied by Wastewater on April 4, 2022 at 11:52 AM  
 Level provided by consultant on April 4, 2022 at 11:52 AM  
 Level provided by consultant on September 10, 2017 at 11:40 AM



**DCC Bylaw Review**  
**Transportation**

**Legend**

- Municipal Boundary
- R1
- R2
- R3
- R4
- R5
- R6
- R7
- R8
- R9
- R10

The accuracy & completeness of information shown on this drawing is not guaranteed. It will be the responsibility of the user of the information shown on this drawing to locate & establish the precise location of all existing information whether shown or not.

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 Metres

**Coordinate System:** NAD 1983 UTM Zone 10N  
**Scale:** 1:17,500 (When plotted at 11"x17")

**Data Sources:**  
 - Data provided by ParcelMap BC, DataBC, NRCAN

Project #:	3332.0006.01
Author:	AK/OS
Checked:	ZH/JH
Status:	<b>Final</b>
Revision:	A
Date:	2022 / 4 / 4

**URBAN**  
 systems

**FIGURE 1**

**Table 11  
Village of Cumberland  
Transportation DCC Program**

		Col. (1)	Col. (2)	Col. (3)	Col. (4)	Col. (5) = (3) x (4)	Col. (6) = (5) x 0.01	Col. (7) = (5) - (6)	Col. (8) = (3) - (7)
Project No.	Description	Total Cost Estimate	Grants Amount	Village Cost	Benefit Factor	Benefit to New Development	Municipal Assist Factor (1%)	DCC Recoverable	Total Municipal Responsibility
R1	Bike Lane - Bevan Rd Connector	\$832,360	\$0	\$832,360	75%	\$624,270	\$6,243	\$618,027	\$214,333
R2	Corridor Improvement - Bevan Rd	\$7,716,300	\$0	\$7,716,300	100%	\$7,716,300	\$77,163	\$7,639,137	\$77,163
R3	Corridor Improvement - Ulverston Ave	\$1,601,000	\$0	\$1,601,000	60%	\$960,600	\$9,606	\$950,994	\$650,006
R4	Corridor Improvement - Egremont St. (Dunsmuir Ave. to Ulverston Ave.)	\$1,224,058	\$0	\$1,224,058	50%	\$612,029	\$6,120	\$605,909	\$618,149
R5	Corridor Improvement - Cumberland Rd. (Union Rd. to 1st St.)	\$2,895,967	\$1,528,318	\$1,367,648	50%	\$683,824	\$6,838	\$676,986	\$690,662
R6	Corridor Improvement - Union Rd. (Royston Rd. to 600m south of Cumberland Rd)	\$1,568,000	\$0	\$1,568,000	60%	\$940,800	\$9,408	\$931,392	\$636,608
R7	Corridor Improvement - Dunsmuir Ave. (Egremont St. to 7th St.)	\$3,408,842	\$1,107,025	\$2,301,817	50%	\$1,150,908	\$11,509	\$1,139,399	\$1,162,418
R8	Corridor Improvement - Dunsmuir Ave. (7th St to Union Rd.)	\$2,826,000	\$0	\$2,826,000	50%	\$1,413,000	\$14,130	\$1,398,870	\$1,427,130
R9	Intersection Upgrade - Cumberland Rd. at Union Rd.	\$1,241,890	\$0	\$1,241,890	100%	\$1,241,890	\$12,419	\$1,229,471	\$12,419
R10	Intersection Upgrade - Cumberland Rd. at Bevan Rd.	\$1,241,890	\$0	\$1,241,890	100%	\$1,241,890	\$12,419	\$1,229,471	\$12,419
R11	Transportation Master Plan	\$200,000	\$0	\$200,000	50%	\$100,000	\$1,000	\$99,000	\$101,000
		<b>\$24,756,307</b>	<b>\$2,635,344</b>	<b>\$22,120,963</b>		<b>\$16,685,512</b>	<b>\$165,855</b>	<b>\$16,518,657</b>	<b>\$5,602,307</b>

**Table 12**  
**Village of Cumberland**  
**Transportation DCC Rate Calculation**

<b>A: Transportation Generation Calculation</b>				
<b>Land Use</b>	<b>Col. (1)</b>	<b>Col. (2)</b>	<b>Col. (3)</b>	<b>Col. (4) = (1) x (3)</b>
	<b>Estimated New Development</b>	<b>Base Unit of Measurement</b>	<b>Equivalent Generation (Rate Per Base Unit)</b>	<b>Trip Ends</b>
Residential (Low Density)	961	lot	13.200	12685.2
Residential (Medium Density)	321	dwelling	5.810	1865.0
Residential (High Density)	320	dwelling	5.810	1859.2
Commercial	8,000	m <sup>2</sup> gross floor area	0.137	1098.4
Industrial	65	ha of site utilized	118.990	7734.4
Institutional	3,800	m <sup>2</sup> gross floor area	0.157	596.6
			Total Trip Ends	25838.8 (a)
<b>B: Unit Transportation DCC Calculations</b>				
Net DCC Program Recoverable		\$16,518,656.50	(b)	
Existing DCC Reserve Monies		\$845,107.50	(c)	
Net Amount to be Paid by DCCs		\$15,673,549.00	(d) = (b) - (c)	
DCC per Equivalent Person		\$606.59	(e) = (d) / (a)	
<b>C: Resulting Transportation DCCs</b>				
Residential (Low Density)		\$8,007.00	per lot	(e) x Col. (3)
Residential (Medium Density)		\$3,524.29	per dwelling unit	(e) x Col. (3)
Residential (High Density)		\$3,524.29	per dwelling unit	(e) x Col. (3)
Commercial		\$83.28	per m <sup>2</sup> gross floor area	(e) x Col. (3)
Industrial		\$72,178.22	per ha of site utilized	(e) x Col. (3)
Institutional		\$95.23	per m <sup>2</sup> gross floor area	(e) x Col. (3)

**Note:** Figures may not add up perfectly due to rounding



## PART 6. WATER DCCS

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### 6.1 Water DCC Program

The Water DCC Program includes waterworks projects and improvements related to the distribution of water within the Village of Cumberland’s boundaries. The location of the works is shown on Map 2 and summarized in Table 16. Detailed project sheets are provided in Appendix B.

**Table 13  
Village of Cumberland  
Water DCC Program Costs**

Municipal Costs	DCC Recoverable Program Costs	Total Capital Costs
\$1,519,523	\$7,518,318	\$9,945,672

The total cost of the improvements is approximately \$9.9 million of which approximately \$7.5 million is DCC recoverable. These costs include the construction of new water infrastructure plus engineering, contingency, and project administration.

### 6.2 Water Demand and Calculation of Equivalent Population

The Water DCC is based on the need for additional services to meet the demands of population growth. For residential demand, occupancy rates can be used to project demands for water services. For non-residential land uses, an equivalency is used. The equivalent factors used are presented in Table 14 below. They are consistent with the equivalent factors used during the Village of Cumberland’s last major DCC update in 2013.

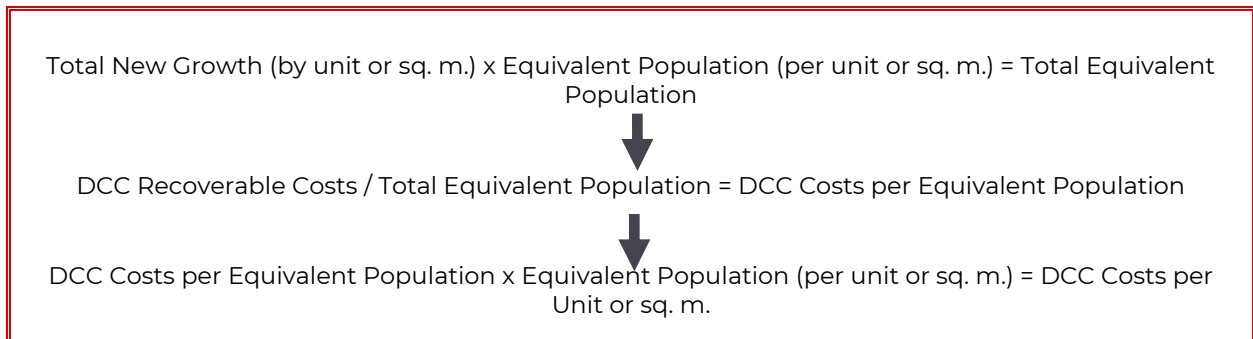
**Table 14  
Village of Cumberland  
Equivalent Units for Water**

Land Use	Base Unit	Equivalent Population Per Base Unit
Residential (Low Density)	Lot	3.1
Residential (Medium Density)	Dwelling Unit	2.5
Residential (High Density)	Dwelling Unit	2.0
Commercial	Gross Floor Area (m <sup>2</sup> )	0.013
Industrial	Utilized Area (ha)	18.0
Institutional	Gross Floor Area (m <sup>2</sup> )	0.011

**6.3 Water DCC Calculation**

The Water DCC rates have been calculated according to the various principles and assumptions discussed earlier in this report. The basic calculation is shown in Equation 2.

**Equation 2  
Village of Cumberland  
Water DCC Calculation**



The proposed Water DCC rates are shown in Table 14. The detailed Water DCC calculations are shown on Table 16 and Table 17.

**Table 15  
Village of Cumberland  
Proposed Water DCC Rates**

Land Use	DCC Rate	Unit
Residential (Low Density)	\$3,725.07	per Lot
Residential (Medium Density)	\$3,004.09	per Dwelling Unit
Residential (High Density)	\$2,403.27	per Dwelling Unit
Commercial	\$15.62	per m <sup>2</sup> of Gross Floor Area
Industrial	\$21,629.46	per hectare of Land Utilized
Institutional	\$13.22	per m <sup>2</sup> of Gross Floor Area

Last updated by osieff on February 10, 2022 at 11:48 AM  
 Last exported by osieff on February 10, 2022 at 11:47 AM  
 Last printed by osieff on September 25, 2017 at 11:46 AM



**DCC Bylaw Review**  
**Water Projects**

**Legend**

- Municipal Boundary
- W1
- W2
- W3
- W4
- W5
- W6
- W7
- W8

The accuracy & completeness of information shown on this drawing is not guaranteed. It will be the responsibility of the user of the information shown on this drawing to locate & establish the precise location of all existing information whether shown or not.

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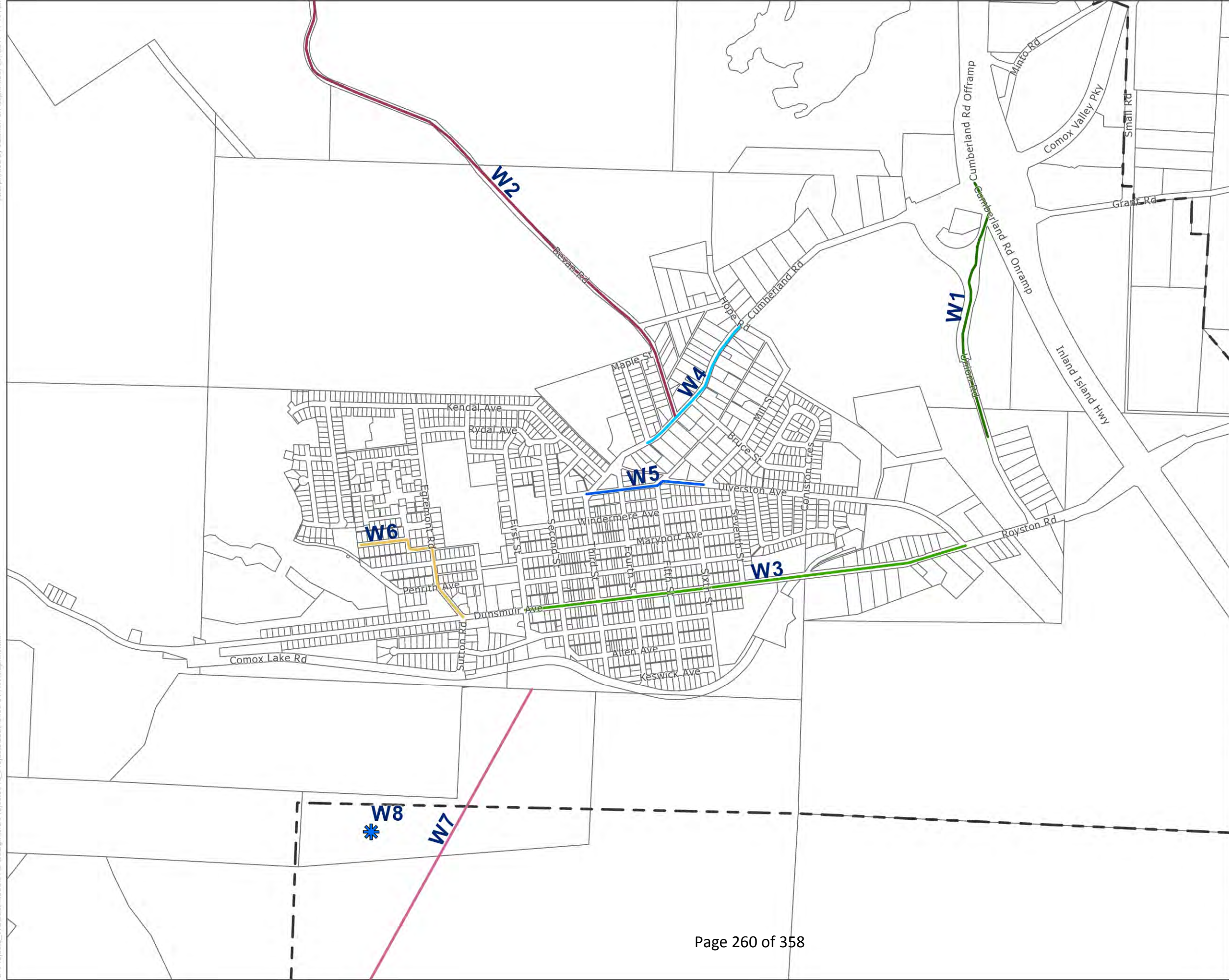
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**Scale:** 1:13,000  
 (When plotted at 11"x17")

**Data Sources:**  
 - Data provided by ParcelMap BC, DataBC, NRCAN

Project #: 3332.0006.01  
 Author: AK/OS  
 Checked: ZH/JH  
 Status: **Final**  
 Revision: A  
 Date: 2022 / 2 / 10



**FIGURE 2**



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**Table 16**  
**Village of Cumberland**  
**Water DCC Rate Calculation**

		Col. (1)	Col. (2)	Col. (3)	Col. (4)	Col. (5) = (3) x (4)	Col. (6) = (5) x 0.01	Col. (7) = (5) - (6)	Col. (8) = (3) - (7)
Project No.	Description	Total Cost Estimate	Grants Amount	Village Cost	Benefit Factor	Benefit to New Development	Municipal Assist Factor (1%)	DCC Recoverable	Total Municipal Responsibility
W1	Watermain Looping - Union Rd. (Cumberland Rd. to North of Royston Rd.)	\$764,400	\$0	\$764,400	100%	\$764,400	\$7,644	\$756,756	\$7,644
W2	New Watermain - Bevan Rd. (Cumberland Rd. to 1500m North of Landfill)	\$2,842,000	\$0	\$2,842,000	100%	\$2,842,000	\$28,420	\$2,813,580	\$28,420
W3	Watermain Upgrade - Dunsmuir Ave. (1st St. to Ulverston Ave)	\$3,157,661	\$738,017	\$2,419,645	75%	\$1,814,733	\$18,147	\$1,796,586	\$623,058
W4	Watermain Upgrade - Cumberland Rd. (Primrose St. to Hope Rd.)	\$405,610	\$169,813	\$235,797	85%	\$200,427	\$2,004	\$198,423	\$37,374
W5	Watermain Upgrade - Ulverston Ave. (3rd St. to Mill St.)	\$344,700	\$0	\$344,700	50%	\$172,350	\$1,724	\$170,627	\$174,074
W6	Watermain Upgrade - Windermere Ave. (Egremont St. to 2592 Windermere Ave.)	\$332,300	\$0	\$332,300	50%	\$166,150	\$1,662	\$164,489	\$167,812
W7	Main Water Supply Main Upgrade	\$1,949,000	\$0	\$1,949,000	80%	\$1,559,200	\$15,592	\$1,543,608	\$405,392
W8	Water Master Plan	\$150,000	\$0	\$150,000	50%	\$75,000	\$750	\$74,250	\$75,750
		<b>\$9,945,672</b>	<b>\$907,830</b>	<b>\$9,037,842</b>		<b>\$7,594,261</b>	<b>\$75,943</b>	<b>\$7,518,318</b>	<b>\$1,519,523</b>

**Table 17**  
**Village of Cumberland**  
**Water DCC Rate Calculation**

<b>A: Water Generation Calculation</b>				
<b>Land Use</b>	<b>Col. (1)</b>	<b>Col. (2)</b>	<b>Col. (3)</b>	<b>Col. (4) = (1) x (3)</b>
	<b>Estimated New Development</b>	<b>Base Unit of Measurement</b>	<b>Equivalent Generation (People Per Base Unit)</b>	<b>Equivalent Population</b>
Residential (Low Density)	961	lot	3.1	2979.1
Residential (Medium Density)	321	dwelling	2.5	802.5
Residential (High Density)	320	dwelling	2.0	640.0
Commercial	8,000	m <sup>2</sup> gross floor area	0.013	104.0
Industrial	65	ha of site utilized	18.0	1170.0
Institutional	3,800	m <sup>2</sup> gross floor area	0.011	41.8
			Total Equivalent Population	5737.4 (a)
<b>B: Unit Water DCC Calculations</b>				
Net DCC Program Recoverable		<a href="#">\$7,518,318.36</a>	(b)	
Existing DCC Reserve Monies		\$624,048.01	(c)	
Net Amount to be Paid by DCCs		\$6,894,270.35	(d) = (b) - (c)	
DCC per Equivalent Person		\$1,201.64	(e) = (d) / (a)	
<b>C: Resulting Water DCCs</b>				
Residential (Low Density)		<b>\$3,725.07</b>	<b>per lot</b>	(e) x Col. (3)
Residential (Medium Density)		<b>\$3,004.09</b>	<b>per dwelling unit</b>	(e) x Col. (3)
Residential (High Density)		<b>\$2,403.27</b>	<b>per dwelling unit</b>	(e) x Col. (3)
Commercial		<b>\$15.62</b>	<b>per m<sup>2</sup> gross floor area</b>	(e) x Col. (3)
Industrial		<b>\$21,629.46</b>	<b>per ha of site utilized</b>	(e) x Col. (3)
Institutional		<b>\$13.22</b>	<b>per m<sup>2</sup> gross floor area</b>	(e) x Col. (3)

**Note:** Figures may not add up perfectly due to rounding

## PART 7. SANITARY SEWER DCCS

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### 7.1 Sanitary Sewer DCC Program

The Sanitary Sewer DCC Program incorporates sanitary sewer projects and improvements related to the collection of wastewater. This includes two separate DCC areas, one Village-Wide Sanitary Sewer DCC area and the Area-Specific Sanitary Sewer DCC. DCCs are calculated in the respective areas to ensure developments are not being charged for works that will not benefit them. The map in Appendix A shows the location of the Area-Specific DCCs and the Village-Wide DCCs and the projects are shown on Map 3 and summarized in Table 23 and Table 24. Detailed project sheets are provided in Appendix B.<sup>1</sup>

**Table 18**  
**Village of Cumberland**  
**Sanitary Sewer DCC Program Costs (Village-Wide)**

Municipal Costs	DCC Recoverable Program Costs	Total Capital Costs
\$4,368,250	\$4,281,750	\$16,150,000

For the Village-Wide DCC, the total cost of the improvements is approximately \$16.2 million of which approximately \$4.2 million is DCC recoverable. These costs include the construction of a new sewage treatment plant and the creation of a sanitary sewer master plan plus engineering, contingency, and project administration where applicable.

**Table 19**  
**Village of Cumberland**  
**Sanitary Sewer DCC Program Costs (Area-Specific)**

Municipal Costs	DCC Recoverable Program Costs	Total Capital Costs
\$66,930	\$6,626,070	\$6,693,000

For the Area-Specific DCC, the total cost of the improvements is approximately \$6.6 million of which approximately \$6.6 million is DCC recoverable. These costs include the construction of new sewer infrastructure plus engineering, contingency, and project administration.

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<sup>1</sup> Note that the Village-Wide DCC program includes 2 out of the 4 sanitary sewer projects and the Area-Specific DCC includes all 4 sanitary sewer projects

**7.2 Sanitary Sewer Demand and Calculation of Equivalent Population**

The sanitary sewer DCC is based on the need for additional services to meet the demands of population growth. For residential demand, occupancy rates can be used to project demands for sanitary sewer services. For non-residential land uses, an equivalency is used. The equivalent factors used are presented in Table 20 below. They are consistent with the equivalent factors used during the Village of Cumberland's last major DCC update in 2013.

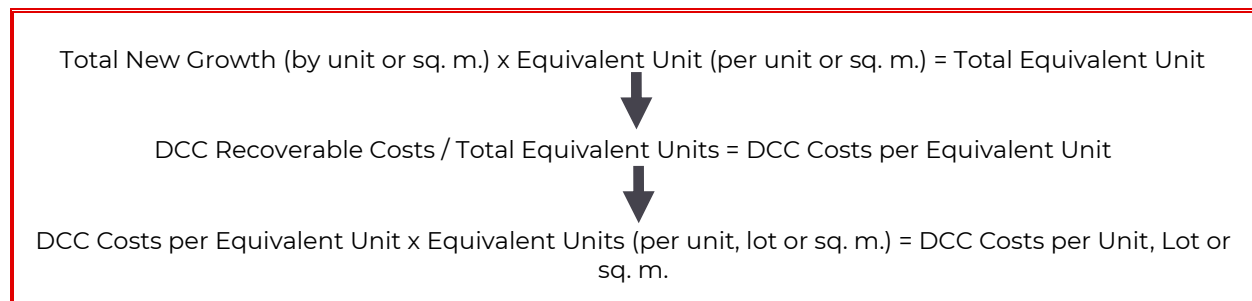
**Table 20  
Village of Cumberland  
Equivalent Units for Sanitary Sewer**

Land Use	Base Unit	Equivalent Population Per Base Unit
Residential (Low Density)	Lot	3.1
Residential (Medium Density)	Dwelling Unit	2.5
Residential (High Density)	Dwelling Unit	2.0
Commercial	Gross Floor Area (m <sup>2</sup> )	0.013
Industrial	Utilized Area (ha)	18.0
Institutional	Gross Floor Area (m <sup>2</sup> )	0.011

**7.3 Sanitary Sewer DCC Calculation**

The Sanitary Sewer DCC rates have been calculated according to the various principles and assumptions discussed earlier in this report. The basic calculation is shown in Equation 3.

**Equation 3  
Village of Cumberland  
Sanitary Sewer DCC Calculation**



The proposed Sanitary Sewer DCC rates are shown in Table 21 and Table 22. The detailed Sanitary Sewer DCC calculations are shown on Tables 23 to 26.



**Table 21  
Village of Cumberland  
Proposed Sanitary Sewer DCC Rates (Village-Wide)**

<b>Land Use</b>	<b>DCC Rate</b>	<b>Unit</b>
Residential (Low Density)	\$1,075.88	per Lot
Residential (Medium Density)	\$867.64	per Dwelling Unit
Residential (High Density)	\$694.11	per Dwelling Unit
Commercial	\$4.51	per m <sup>2</sup> of Gross Floor Area
Industrial	\$6,247.03	per hectare of Land Utilized
Institutional	\$3.82	per m <sup>2</sup> of Gross Floor Area

**Table 22  
Village of Cumberland  
Proposed Sanitary Sewer DCC Rates (Area-Specific)**

<b>Land Use</b>	<b>DCC Rate</b>	<b>Unit</b>
Residential (Low Density)	\$4,263.13	per Lot
Residential (Medium Density)	\$3,438.01	per Dwelling Unit
Residential (High Density)	\$2,750.41	per Dwelling Unit
Commercial	\$17.88	per m <sup>2</sup> of Gross Floor Area
Industrial	\$24,753.66	per hectare of Land Utilized
Institutional	\$215.13	per m <sup>2</sup> of Gross Floor Area

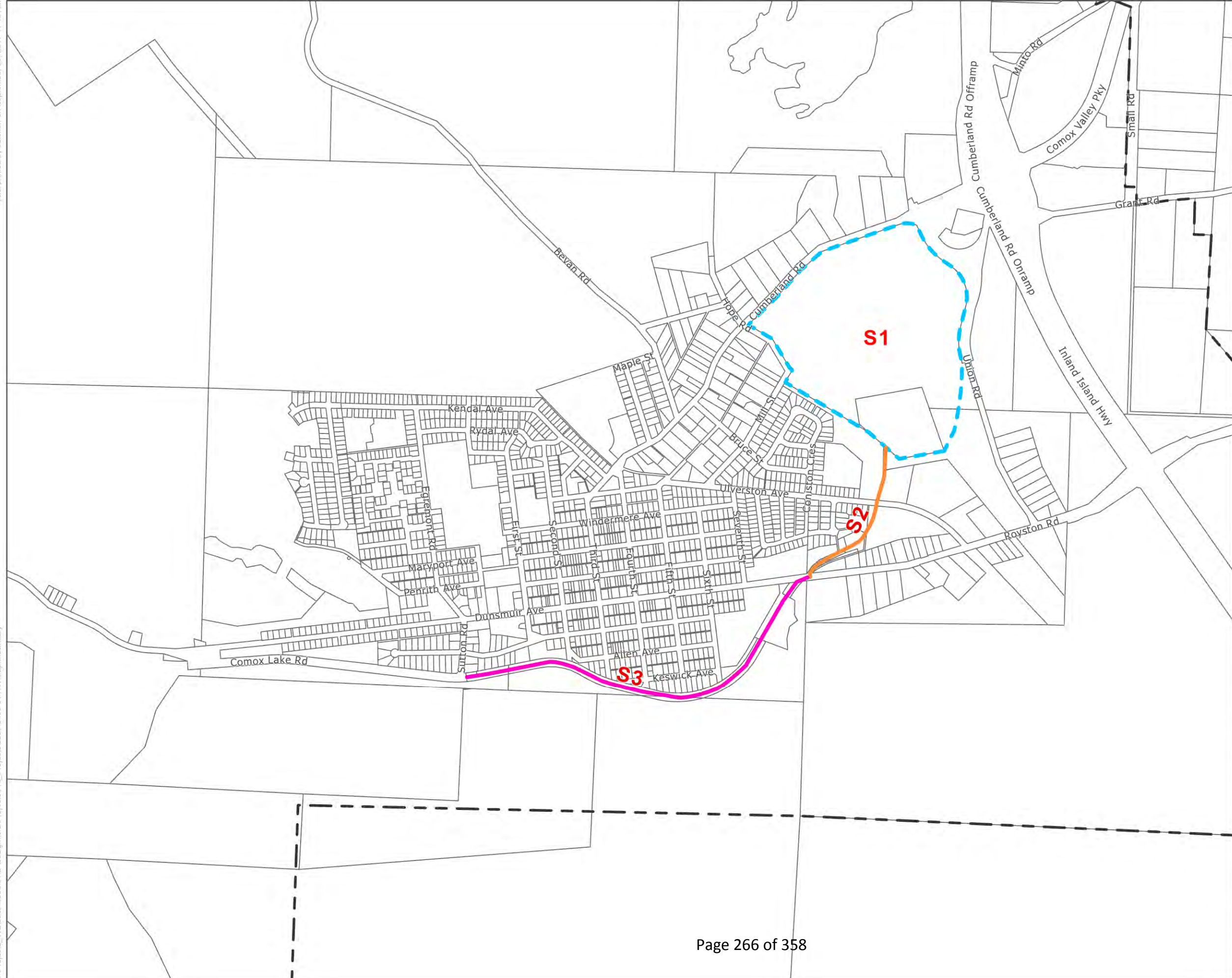
Level updated by ossefort on February 10, 2022 at 11:48 AM  
Last exported by ossefort on February 10, 2022 at 11:48 AM  
Last printed by ossefort on September 25, 2017 at 11:46 AM



# DCC Bylaw Review Sanitary Projects

### Legend

-  Municipal Boundary
-  S1
-  S2
-  S3



The accuracy & completeness of information shown on this drawing is not guaranteed. It will be the responsibility of the user of the information shown on this drawing to locate & establish the precise location of all existing information whether shown or not.



**Coordinate System:** NAD 1983 UTM Zone 10N  
**Scale:** 1:13,000 (When plotted at 11"x17")

**Data Sources:**  
- Data provided by ParcelMap BC, DataBC, NRCAN

Project #: 3332.0006.01  
 Author: AK/OS  
 Checked: ZH/JH  
 Status: **Final**  
 Revision: A  
 Date: 2022 / 2 / 10



**FIGURE 3**

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**Table 23**  
**Village of Cumberland**  
**Sanitary Sewer DCC Program (Village-Wide)**

		Col. (1)	Col. (2)	Col. (3)	Col. (4)	Col. (5) = (3) x (4)	Col. (6) = (5) x 0.01	Col. (7) = (5) - (6)	Col. (8) = (3) - (7)
Project No.	Description	Total Cost Estimate	Grants Amount	Village Cost	Benefit Factor	Benefit to New Development	Municipal Assist Factor (1%)	DCC Recoverable	Total Municipal Responsibility
S1	Sewage Treatment Plant Upgrades (additional population)	\$16,000,000	\$7,500,000	\$8,500,000	50%	\$4,250,000	\$42,500	\$4,207,500	\$4,292,500
S4	Sanitary Sewer Master Plan	\$150,000	\$0	\$150,000	50%	\$75,000	\$750	\$74,250	\$75,750
		<b>\$16,150,000</b>	<b>\$7,500,000</b>	<b>\$8,650,000</b>		<b>\$4,325,000</b>	<b>\$43,250</b>	<b>\$4,281,750</b>	<b>\$4,368,250</b>

**Table 24**  
**Village of Cumberland**  
**Sanitary Sewer DCC Program (Area Specific)**

		Col. (1)	Col. (2)	Col. (3)	Col. (4)	Col. (5) = (3) x (4)	Col. (6) = (5) x 0.01	Col. (7) = (5) - (6)	Col. (8) = (3) - (7)
Project No.	Description	Total Cost Estimate	Grants Amount	Village Cost	Benefit Factor	Benefit to New Development	Municipal Assist Factor (1%)	DCC Recoverable	Total Municipal Responsibility
S2	Trunk Upgrade - Dunsmuir Ave. to Lagoon (700m of 900mm)	\$1,957,000	\$0	\$1,957,000	100%	\$1,957,000	\$19,570	\$1,937,430	\$19,570
S3	Trunk Upgrade - Sutton Rd. to Dunsmuir Ave. (Twinning)	\$4,736,000	\$0	\$4,736,000	100%	\$4,736,000	\$47,360	\$4,688,640	\$47,360
		<b>6,693,000</b>	<b>\$0</b>	<b>\$6,693,000</b>		<b>\$6,693,000</b>	<b>\$66,930</b>	<b>\$6,626,070</b>	<b>\$66,930</b>

**Table 25**  
**Village of Cumberland**  
**Sanitary Sewer DCC Rate Calculation (Village-Wide)**

<b>A: Sanitary Sewer Generation Calculation</b>				
<b>Land Use</b>	<b>Col. (1)</b>	<b>Col. (2)</b>	<b>Col. (3)</b>	<b>Col. (4) = (1) x (3)</b>
	<b>Estimated New Development</b>	<b>Base Unit of Measurement</b>	<b>Equivalent Generation (People Per Base Unit)</b>	<b>Equivalent Population</b>
Residential (Low Density)	961	lot	3.1	2979.1
Residential (Medium Density)	321	dwelling	2.5	802.5
Residential (High Density)	320	dwelling	2.0	640.0
Commercial	8,000	m <sup>2</sup> gross floor area	0.013	104.0
Industrial	65	ha of site utilized	18.0	1170.0
Institutional	3,800	m <sup>2</sup> gross floor area	0.011	41.8
			Total Equivalent Population	5737.4 (a)
<b>B: Unit Sanitary Sewer DCC Calculations</b>				
Net DCC Program Recoverable		<a href="#">\$4,281,750.00</a>	(b)	
Existing DCC Reserve Monies <sup>2</sup>		\$2,290,542.36	(c)	
Net Amount to be Paid by DCCs		\$1,991,207.64	(d) = (b) - (c)	
DCC per Equivalent Person		\$347.06	(e) = (d) / (a)	
<b>C: Resulting Sanitary Sewer DCCs</b>				
Residential (Low Density)		<b>\$1,075.88</b>	<b>per lot</b>	(e) x Col. (3)
Residential (Medium Density)		<b>\$867.64</b>	<b>per dwelling unit</b>	(e) x Col. (3)
Residential (High Density)		<b>\$694.11</b>	<b>per dwelling unit</b>	(e) x Col. (3)
Commercial		<b>\$4.51</b>	<b>per m<sup>2</sup> gross floor area</b>	(e) x Col. (3)
Industrial		<b>\$6,247.03</b>	<b>per ha of site utilized</b>	(e) x Col. (3)
Institutional		<b>\$3.82</b>	<b>per m<sup>2</sup> gross floor area</b>	(e) x Col. (3)

**Note:** Figures may not add up perfectly due to rounding

<sup>2</sup> Accounts for 83% of existing sanitary sewer DCC reserves. In previous DCC program, projects considered Village-Wide accounted for approximately 83% of the sanitary sewer DCC program.

**Table 26**  
**Village of Cumberland**  
**Sanitary Sewer DCC Rate Calculation (Village-Core)**

<b>A: Sanitary Sewer Generation Calculation</b>				
<b>Land Use</b>	<b>Col. (1)</b>	<b>Col. (2)</b>	<b>Col. (3)</b>	<b>Col. (4) = (1) x (3)</b>
	<b>Estimated New Development</b>	<b>Base Unit of Measurement</b>	<b>Equivalent Generation (People Per Base Unit)</b>	<b>Equivalent Population</b>
Residential (Low Density)	913	lot	3.1	2830.3
Residential (Medium Density)	321	dwelling	2.5	802.5
Residential (High Density)	320	dwelling	2.0	640.0
Commercial	8,000	m <sup>2</sup> gross floor area	0.013	104.0
Industrial	3.25	ha of site utilized	18.0	58.5
Institutional	3,800	m <sup>2</sup> gross floor area	0.011	41.8
			Total Equivalent Population	4477.1 (a)
<b>B: Unit Sanitary Sewer DCC Calculations</b>				
Net DCC Program Recoverable		<a href="#">\$6,626,070</a>	(b)	
Existing DCC Reserve Monies <sup>3</sup>		\$469,147.23	(c)	
Net Amount to be Paid by DCCs		\$6,156,922.77	(d) = (b) - (c)	
DCC per Equivalent Person		\$1,375.20	(e) = (d) / (a)	
<b>C: Resulting Sanitary Sewer DCCs</b>				
Residential (Low Density)		<b>\$4,263.13</b>	<b>per lot</b>	(e) x Col. (3)
Residential (Medium Density)		<b>\$3,438.01</b>	<b>per dwelling unit</b>	(e) x Col. (3)
Residential (High Density)		<b>\$2,750.41</b>	<b>per dwelling unit</b>	(e) x Col. (3)
Commercial		<b>\$17.88</b>	<b>per m<sup>2</sup> gross floor area</b>	(e) x Col. (3)
Industrial		<b>\$24,753.66</b>	<b>per ha of site utilized</b>	(e) x Col. (3)
Institutional		<b>\$15.13</b>	<b>per m<sup>2</sup> gross floor area</b>	(e) x Col. (3)

**Note:** Figures may not add up perfectly due to rounding

<sup>3</sup> Accounts for 17% of existing sanitary sewer DCC reserves. In previous DCC program, projects within the Village-Core area (shown in Appendix A accounted for approximately 17% of the sanitary sewer DCC program.

## PART 8. STORM DRAINAGE DCCS

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### 8.1 Storm Drainage DCC Program and Rates

The storm drainage DCC program is comprised of drainage facilities, including piping and detention ponds. The location of the works is shown on Map 4 and summarized in Table 30. Detailed project sheets are provided in Appendix B.

**Table 27**  
**Village of Cumberland**  
**Storm Drainage DCC Program Costs**

Municipal Costs	DCC Recoverable Program Costs	Total Capital Costs
\$1,298,472	\$6,157,883	\$7,456,355

The total cost of the improvements is approximately \$7.4 million of which approximately \$6.1 million is DCC recoverable. These costs include the construction of new storm drainage infrastructure plus engineering, contingency, and project administration.

### 8.2 Calculation of Equivalent Units for Storm Drainage

In general terms, the impact on the storm drainage system of developing a parcel of land is expressed as the amount of stormwater run-off that must be accommodated by the system. The accepted parameter for expressing imperviousness in stormwater run-off calculations is the “run-off coefficient”. Generally speaking, the run-off coefficient reflects the ratio between the impervious area on a parcel and the total area of the parcel. Run-off coefficients are then used to determine equivalency factors necessary to develop Equivalent Storm Drainage Units (EDUs), the basis for calculating storm drainage DCCs. The equivalent factors used are presented in Table 28 below. They are consistent with the equivalent factors used in the provincial DCC Best Practices Guide. They are also consistent with the equivalent factors used during the Village of Cumberland’s last major DCC update in 2013.

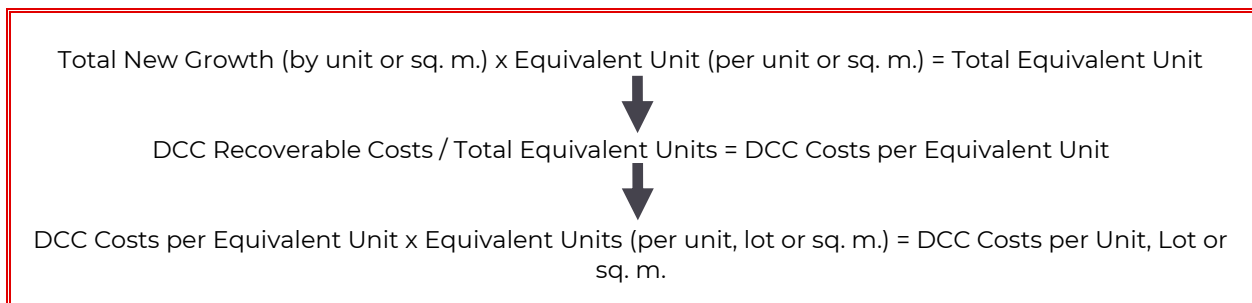
**Table 28**  
**Village of Cumberland**  
**Equivalent Units for Storm Drainage**

Land Use	Base Unit	Equivalent Storm drainage Unit Per Base Unit
Residential (Low Density)	Lot	961.0
Residential (Medium Density)	Dwelling Unit	173.3
Residential (High Density)	Dwelling Unit	105.6
Commercial	Gross Floor Area (m <sup>2</sup> )	25.6
Industrial	Utilized Area (ha)	1462.5
Institutional	Gross Floor Area (m <sup>2</sup> )	11.4

**8.3 Storm Drainage DCC Calculation**

The Storm drainage DCC rates have been calculated according to the various principles and assumptions discussed earlier in this report. The basic calculation is shown in Equation 4.

**Equation 4**  
**Village of Cumberland**  
**Storm Drainage DCC Calculation**



The proposed Storm drainage DCC rates are shown in Table 29. The detailed Storm Drainage DCC calculations are shown on Table 30 and Table 31.



**Table 29**  
**Village of Cumberland**  
**Proposed Storm Drainage DCC Rates**







Land Use	DCC Rate	Unit
Residential (Low Density)	\$2,178.74	per Lot
Residential (Medium Density)	\$1,176.52	per Dwelling Unit
Residential (High Density)	\$718.98	per Dwelling Unit
Commercial	\$6.97	per m <sup>2</sup> of Gross Floor Area
Industrial	\$49,021.60	per hectare of Land Utilized
Institutional	\$6.54	per m <sup>2</sup> of Gross Floor Area

Level updated by consultant on February 10, 2022 at 11:45 AM  
Last exported by consultant on February 10, 2022 at 11:45 AM  
Last printed by consultant on September 25, 2017 at 11:46 AM

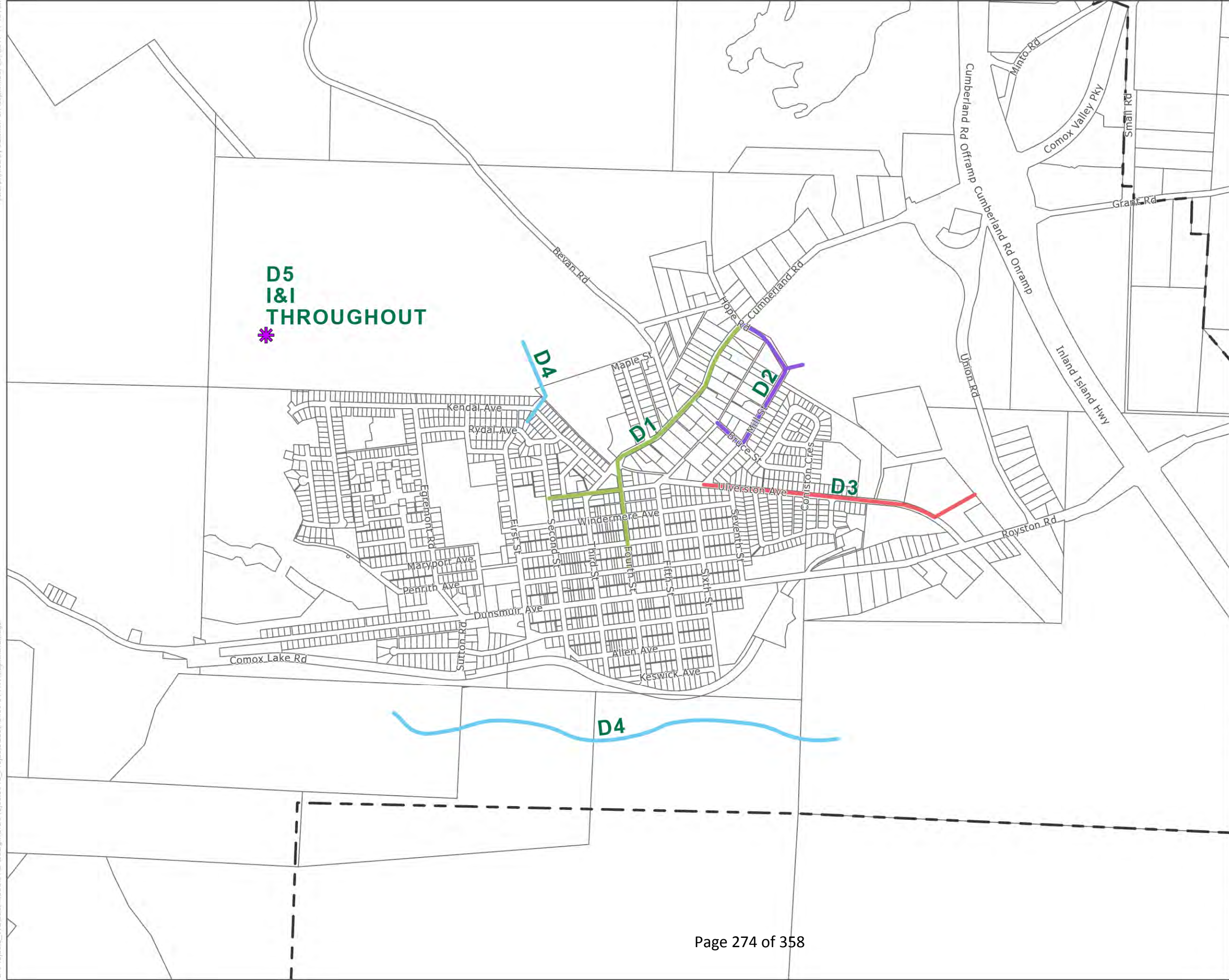


### DCC Bylaw Review Drainage Projects

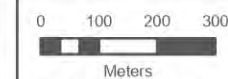
#### Legend

-  Municipal Boundary
-  D1
-  D2
-  D3
-  D4
-  D5

**D5  
I&I  
THROUGHOUT**  

The accuracy & completeness of information shown on this drawing is not guaranteed. It will be the responsibility of the user of the information shown on this drawing to locate & establish the precise location of all existing information whether shown or not.



**Coordinate System:** NAD 1983 UTM Zone 10N  
**Scale:** 1:13,000  
(When plotted at 11"x17")

**Data Sources:**  
- Data provided by ParcelMap BC, DataBC, NRCAN

Project #:	3332.0006.01
Author:	AK/OS
Checked:	ZH/JH
Status:	<b>Final</b>
Revision:	A
Date:	2022 / 2 / 10



**FIGURE 4**

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**Table 30**  
**Village of Cumberland**  
**Storm Drainage DCC Program**

		Col. (1)	Col. (2)	Col. (3)	Col. (4)	Col. (5) = (3) x (4)	Col. (6) = (5) x 0.01	Col. (7) = (5) - (6)	Col. (8) = (3) - (7)
Project No.	Description	Total Cost Estimate	Grants Amount	Village Cost	Benefit Factor	Benefit to New Development	Municipal Assist Factor (1%)	DCC Recoverable	Total Municipal Responsibility
D1	Drainage Corridor Improvement - Cumberland Rd.	\$1,573,216	\$0	\$1,573,216	80%	\$1,258,573	\$12,586	\$1,245,987	\$327,229
D2	Drainage Corridor Improvement - Mill St.	\$674,800	\$0	\$674,800	80%	\$539,840	\$5,398	\$534,442	\$140,358
D3	Drainage Corridor Improvement - Ulverston Ave.	\$955,320	\$0	\$955,320	80%	\$764,256	\$7,643	\$756,613	\$198,707
D4	South Cumberland Discharge Area Improvements	\$2,603,019	\$0	\$2,603,019	80%	\$2,082,415	\$20,824	\$2,061,591	\$541,428
D5	I&I Improvements	\$1,500,000	\$0	\$1,500,000	100%	\$1,500,000	\$15,000	\$1,485,000	\$15,000
D6	Storm Drainage Master Plan	\$150,000	\$0	\$150,000	50%	\$75,000	\$750	\$74,250	\$75,750
		<b>\$7,456,355</b>	<b>\$0</b>	<b>\$7,456,355</b>		<b>\$6,220,084</b>	<b>\$62,201</b>	<b>\$6,157,883</b>	<b>\$1,298,472</b>

**Table 31**  
**Village of Cumberland**  
**Storm Drainage DCC Rate Calculation**

<b>A: Storm Drainage Generation Calculation</b>				
Land Use	Col. (1)	Col. (2)	Col. (3)	Col. (4) = (1) x (3)
	Estimated New Development	Base Unit of Measurement	Equivalence Factor	Equivalent Drainage Units
Residential (Low Density)	961	lot	1.0	961.0
Residential (Medium Density)	321	dwelling	0.54	173.3
Residential (High Density)	320	dwelling	0.33	105.6
Commercial	8,000	m <sup>2</sup> gross floor area	0.0032	25.6
Industrial	65	ha of site utilized	22.5	1462.5
Institutional	3,800	m <sup>2</sup> gross floor area	0.003	11.4
			Total Equivalent Population	2739.4 (a)
<b>B: Unit Storm Drainage DCC Calculations</b>				
Net DCC Program Recoverable		\$6,157,883.16	(b)	
Existing DCC Reserve Monies		\$189,361.20	(c)	
Net Amount to be Paid by DCCs		\$5,968,521.96	(d) = (b) - (c)	
DCC per Equivalent Person		\$2,178.74	(e) = (d) / (a)	
<b>C: Resulting Storm Drainage DCCs</b>				
Residential (Low Density)		<b>\$2,178.74</b>	<b>per lot</b>	(e) x Col. (3)
Residential (Medium Density)		<b>\$1,176.52</b>	<b>per dwelling unit</b>	(e) x Col. (3)
Residential (High Density)		<b>\$718.98</b>	<b>per dwelling unit</b>	(e) x Col. (3)
Commercial		<b>\$6.97</b>	<b>per m<sup>2</sup> gross floor area</b>	(e) x Col. (3)
Industrial		<b>\$49,021.60</b>	<b>per ha of site utilized</b>	(e) x Col. (3)
Institutional		<b>\$6.54</b>	<b>per m<sup>2</sup> gross floor area</b>	(e) x Col. (3)

**Note:** Figures may not add up perfectly due to rounding

## PART 9. PARK DCCS

### 9.1 Park DCC Program and Rates

The Park DCC program is comprised of park land acquisition and park land development projects, including playgrounds and trails. All parks DCC projects do not include any improvements that are not permitted in a parks DCC program. The location of the works are shown on Map 5 and summarized in Table 35. Detailed project sheets are provided in Appendix B.

**Table 32**  
**Village of Cumberland**  
**Park DCC Program Costs**

Municipal Costs	DCC Recoverable Program Costs	Total Capital Costs
\$2,258,039	\$2,213,325	\$4,471,365

The total cost of the improvements is approximately \$4.4 million, of which approximately \$2.2 million is DCC recoverable. No external funding is expected. These costs include the acquisition and development of park land plus planning, engineering, contingency, and project administration.

### 9.2 Calculation of Equivalent Units for Parks

Equivalent park and open space units are similar to those used for sanitary sewer and water DCC calculations. There is not contribution for commercial or industrial categories in accordance with the Provincial *DCC Best Practices Guide*. Equivalencies are show in Table 32.

**Table 33**  
**Village of Cumberland**  
**Equivalent Units for Park**

Land Use	Base Unit	Equivalent Park and Open Space Unit Per Base Unit
Residential (Low Density)	Dwelling Unit/Lot	3.1
Residential (Medium Density)	Dwelling Unit	2.5
Residential (High Density)	Dwelling Unit	2.0

## DCC Background Report

### 9.3 Park DCC Calculation

The Park DCC rates have been calculated according to the various principles and assumptions discussed earlier in this report. The basic calculation is shown in Equation 5.

**Equation 5**  
**Village of Cumberland**  
**Park DCC Calculation**

Total New Growth (by unit or sq. m.) x Equivalent Unit (per unit or sq. m.) = Total Equivalent Unit

↓

DCC Recoverable Costs / Total Equivalent Units = DCC Costs per Equivalent Unit

↓

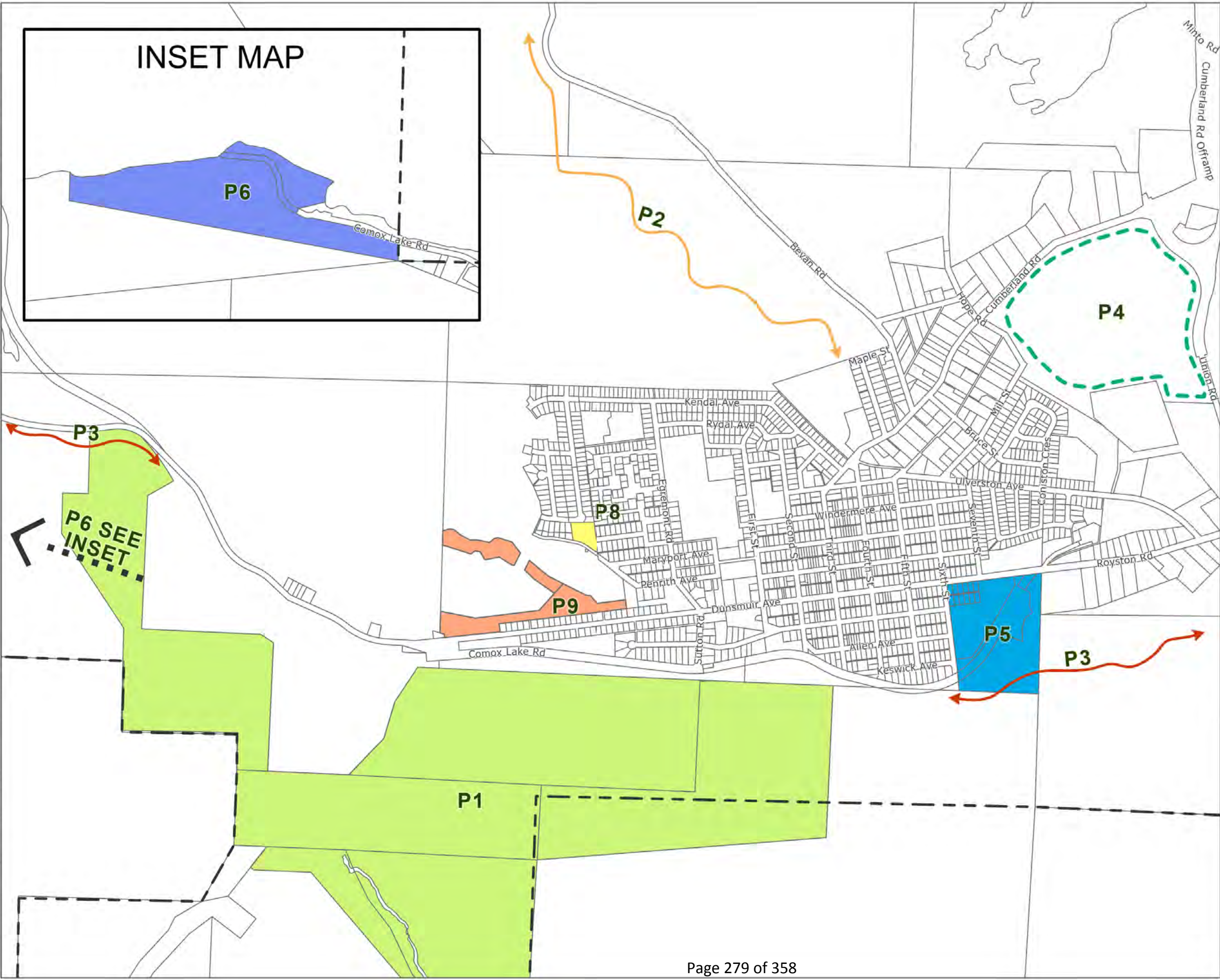
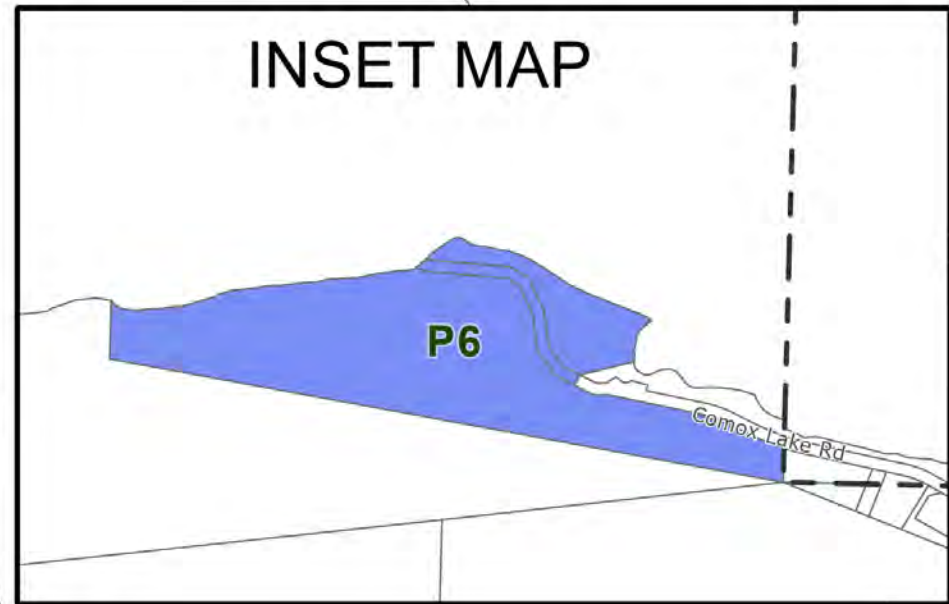
DCC Costs per Equivalent Unit x Equivalent Units (per unit, lot or sq. m.) = DCC Costs per Unit, Lot or sq. m.

The proposed Park DCC rates are shown in Table 33. The detailed Park DCC calculations are shown on Table 35 and Table 36.

**Table 34**  
**Village of Cumberland**  
**Proposed Park DCC Rates**

Land Use	DCC Rate	Unit
Residential (Low Density)	\$1,032.51	per Lot
Residential (Medium Density)	\$832.67	per Dwelling Unit
Residential (High Density)	\$666.13	per Dwelling Unit

Last updated by user on April 14, 2022 at 8:49 AM  
 Last reported by user on April 14, 2022 at 8:49 AM  
 Last modified by user on September 25, 2017 at 11:40 AM

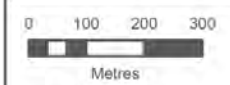


**DCC Bylaw Review  
Parks Projects**

**Legend**

- Municipal Boundary
- P1
- P2
- P3
- P4
- P5
- P6
- P8
- P9

The accuracy & completeness of information shown on this drawing is not guaranteed. It will be the responsibility of the user of the information shown on this drawing to locate & establish the precise location of all existing information whether shown or not.



**Coordinate System:** NAD 1983 UTM Zone 10N  
**Scale:** 1:13,000 (When plotted at 11"x17")

**Data Sources:**  
 - Data provided by ParcelMap BC, DataBC, NRCAN  
 - Park boundaries were digitized from the Parks map at [cumberland.ca](http://cumberland.ca)

Project #: 3332.0006.01  
 Author: AK/OS  
 Checked: ZH/JH  
 Status: **Final**  
 Revision: A  
 Date: 2022 / 4 / 14



**FIGURE 5**

**Table 35**  
**Village of Cumberland**  
**Park DCC Program**

		Col. (1)	Col. (2)	Col. (3)	Col. (4)	Col. (5) = (3) x (4)	Col. (6) = (5) x 0.01	Col. (7) = (5) - (6)	Col. (8) = (3) - (7)
Project No.	Description	Total Cost Estimate	Grants Amount	Village Cost	Benefit Factor	Benefit to New Development	Municipal Assist Factor (1%)	DCC Recoverable	Total Municipal Responsibility
P1	Community Forest Expansion (Acquisition and Improvement)	\$931,027	\$0	\$931,027	50%	\$465,514	\$4,655	\$460,858	\$470,169
P2	North Wellington Colliery (Acquisition and Improvement)	\$888,800	\$0	\$888,800	50%	\$444,400	\$4,444	\$439,956	\$448,844
P3	South Wellington Colliery (Acquisition and Improvement)	\$1,199,600	\$0	\$1,199,600	50%	\$599,800	\$5,998	\$593,802	\$605,798
P4	Lagoon Greenway (Improvement)	\$426,938	\$0	\$426,938	50%	\$213,469	\$2,135	\$211,334	\$215,603
P5	Village Park (Improvement)	\$600,000	\$0	\$600,000	50%	\$300,000	\$3,000	\$297,000	\$303,000
P6	Cumberland Lake Park (Improvement)	\$100,000	\$0	\$100,000	50%	\$50,000	\$500	\$49,500	\$50,500
P7	Parks Master Plan	\$100,000	\$0	\$100,000	50%	\$50,000	\$500	\$49,500	\$50,500
P8	Solport Park (Improvement)	\$125,000	\$0	\$125,000	50%	\$62,500	\$625	\$61,875	\$63,125
P9	Camp Road Greenway (Improvement)	\$100,000	\$0	\$100,000	50%	\$50,000	\$500	\$49,500	\$50,500
		<b>\$4,471,365</b>	<b>\$0</b>	<b>\$4,471,365</b>		<b>\$2,235,682</b>	<b>\$22,357</b>	<b>\$2,213,325</b>	<b>\$2,258,039</b>



**Table 36**  
**Village of Cumberland**  
**Park DCC Rate Calculation**

<b>A: Parks Generation Calculation</b>				
Land Use	Col. (1)	Col. (2)	Col. (3)	Col. (4) = (1) x (3)
	Estimated New Development	Base Unit of Measurement	Equivalence Factor (People Per Base Unit)	Equivalent Population
Residential (Low Density)	961	lot	3.1	2979.1
Residential (Medium Density)	321	dwelling	2.5	802.5
Residential (High Density)	320	dwelling	2.0	640.0
			Total Equivalent Population	4421.6 (a)
<b>B: Unit Parks DCC Calculations</b>				
Net DCC Program Recoverable		<a href="#">\$2,213,325.43</a>	(b)	
Existing DCC Reserve Monies		\$740,640.06	(c)	
Net Amount to be Paid by DCCs		\$1,472,685.37	(d) = (b) - (c)	
DCC per Equivalent Person		\$333.07	(e) = (d) / (a)	
<b>C: Resulting Parks DCCs</b>				
Residential (Low Density)		<b>\$1,032.51</b>	<b>per lot</b>	(e) x Col. (3)
Residential (Medium Density)		<b>\$832.67</b>	<b>per dwelling unit</b>	(e) x Col. (3)
Residential (High Density)		<b>\$666.13</b>	<b>per dwelling unit</b>	(e) x Col. (3)

**Note:** Figures may not add up perfectly due to rounding

## PART 10.DCC RATES & IMPLEMENTATION

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### 10.1 Summary of Proposed DCC Rates

Table 37 (next page) summarizes the proposed Village of Cumberland DCC rates.

### 10.2 Bylaw Exemptions

The *Local Government Act* is quite clear that a DCC cannot be levied if the proposed development does not impose new capital cost burdens on the Village, or if a DCC has already been paid in regard to the same development. However, if additions to the development create a new capital cost burden or use up the capacity of existing infrastructure, DCCs can be levied for the additional costs.

The *Local Government Act* further exempts DCCs at the time of application for a Building Permit if:

- the Building Permit is for a church or place of worship;
- the value of the work authorized by the Building Permit does not exceed \$50,000 or an amount as prescribed by Bylaw; or
- development of self-contained residential dwelling units in a building if each unit is no larger than 29 square metres..

The legislation also exempts DCCs on residential developments of less than four units (i.e. duplexes or triplexes), unless such a DCC charge is provided for in the local government's DCC Bylaw. To enact this approach, the DCC Bylaw must include a specific provision; which the current DCC Bylaw does include.

In addition, Bill 27, as discussed in Part 1.3, has given local governments the discretionary authority to waive or reduce DCCs for certain types of development to promote affordable housing and low impact development. Under this new legislation, the Village of Cumberland will have to adopt a Bylaw to waive or reduce DCCs for not-for-profit rental housing. At this time, the Village has decided to not waive or reduce DCCs for these types of development, but may consider this in the future.

### 10.3 Collection of Charges – Building Permit and Subdivision

Municipalities can choose to collect DCCs at subdivision approval or Building Permit issuance. The Village of Cumberland will collect DCCs for detached single family residential dwellings at

## DCC Background Report

subdivision approval. Collecting DCCs for single-family residential developments early on at the subdivision approval stage will ensure timely provision of infrastructure and services.

All other DCCs will be collected at Building Permit, which is when the size and number of buildings to be constructed will be known. Collecting DCCs based on this more accurate information will result in more equitable distribution of growth costs.

The DCC Bylaw will specify when DCCs will be collected for different development types. Where a development type has not been specified in the DCC Bylaw, the DCC levied will be based on the rate of the most similar development type.

**Table 37**  
**Village of Cumberland**  
**Proposed DCC Rate Summary**

Land Use	Transportation	Water	Sanitary Sewer (Village-Wide)	Sanitary Sewer (Area-Specific)	Storm Drainage	Parks	Total
<b>Low Density Residential</b> (per lot)	\$8,007.00	\$3,725.07	\$1,075.88	\$4,263.13	\$2,178.74	\$1,032.51	\$20,282.32
<b>Medium Density Residential</b> (per dwelling unit)	\$3,524.29	\$3,004.09	\$867.64	\$3,438.01	\$1,176.52	\$832.67	\$12,843.22
<b>High Density Residential</b> (per dwelling unit)	\$3,524.29	\$2,403.27	\$694.11	\$2750.41	\$718.98	\$666.13	\$10,757.20
<b>Commercial</b> (per m <sup>2</sup> of gross floor area)	\$83.28	\$15.62	\$4.51	\$17.88	\$6.97	--	\$128.27
<b>Industrial</b> (per ha of site utilized)	\$72,178.22	\$21,629.46	\$6,247.03	\$24,753.66	\$49,021.60	--	\$173,829.98
<b>Institutional</b> (per m <sup>2</sup> of gross floor area)	\$95.23	\$13.22	\$3.82	\$15.13	\$6.54	--	\$133.93

#### 10.4 Collection of DCCs on Redeveloped or Expanded Developments

When an existing building or development undergoes an expansion or redevelopment, there is usually a need for additional DCC related engineering services. The new developer/ builder should pay the applicable DCCs based on the additional floor area for commercial land uses and additional developed area for industrial land uses at the DCC rates in the current DCC Bylaw. In essence, the Village is giving a DCC credit for the existing development or building. DCCs are only levied on the new development/ building area.

#### 10.5 In-Stream Applications and Grace Periods

The *Local Government Act* requires that subdivision applications that are complete and application fees have been paid, be provided one-year protection from the proposed DCC rates. These in-stream active subdivision applications will be exempted from any increase in DCCs for one year from the date of implementation of the new DCC Bylaw.

Effective January 1, 2011, Building Permits are also given the same in-stream exemptions as subdivision applications under the *LGA*. Complete Building Permit applications will also be exempt from any increase in DCCs for one year from the date of implementation of the new DCC Bylaw. In 2014, this in-stream exemption was further extended to include rezoning and development permit applications that have been submitted to a local government (in a form acceptable to the local government and fees paid).

The Village has not considered introducing a grace period in the new DCC Bylaw at this time. If no grace period is included once the proposed DCC Bylaw has been given the fourth and final reading, the proposed DCC rates will be in effect. The *Local Government Act* requirements will apply.

#### 10.6 DCC Rebates and Credits

The *Local Government Act* stipulates that should an owner pay for specific services inside or outside of the boundaries of the land being subdivided or developed and these services are included in the calculation to determine the DCC, then the amount paid must be deducted from the class of DCC that is applicable to the service. In practice, should the Village, for example, require an owner to build a watermain outside their development and the watermain is in the DCC program, the Village will credit the owner the cost of the watermain up to the water DCCs paid.

The Village should establish a policy or practice to guide staff in the collection of DCCs and the use of DCC credits. There may be situations in which it is not in the best interests of the Village to allow an owner to build DCC services outside of their subdivision or development. Building

such services may start or accelerate development in areas in which the Village is not prepared to support.

The Village may establish a DCC rebate policy to fund DCC works advanced by owners and developers prior to the Village building such services. For example, an owner may be required to service their property to the local sanitary sewer standard but the Village would request that this main be upsized to a trunk sewer. The incremental portion of costs beyond the local requirement may be offered as a DCC rebate from DCC reserves. Again, a Village policy or practice is recommended to ensure consistent application of the DCC rebate principle. Often policies for DCC credits, rebates, and latecomer agreements are drafted to assist staff in development financing.

### **10.7 DCC Monitoring and Accounting**

In order to monitor the DCC Program, the Village of Cumberland should enter all of the projects contained in the DCC program into its tracking system. The tracking system would monitor the status of the project from the conceptual stage through to its final construction. The tracking system would include information about the estimated costs, the actual construction costs, and the funding sources for the projects. The construction costs would be based on the tender prices received, and the land costs based on the actual price of utility areas and or other land and improvements required for servicing purposes. The tracking system would indicate when projects are completed, their actual costs and would include new projects that are added to the program.

### **10.8 DCC Reviews**

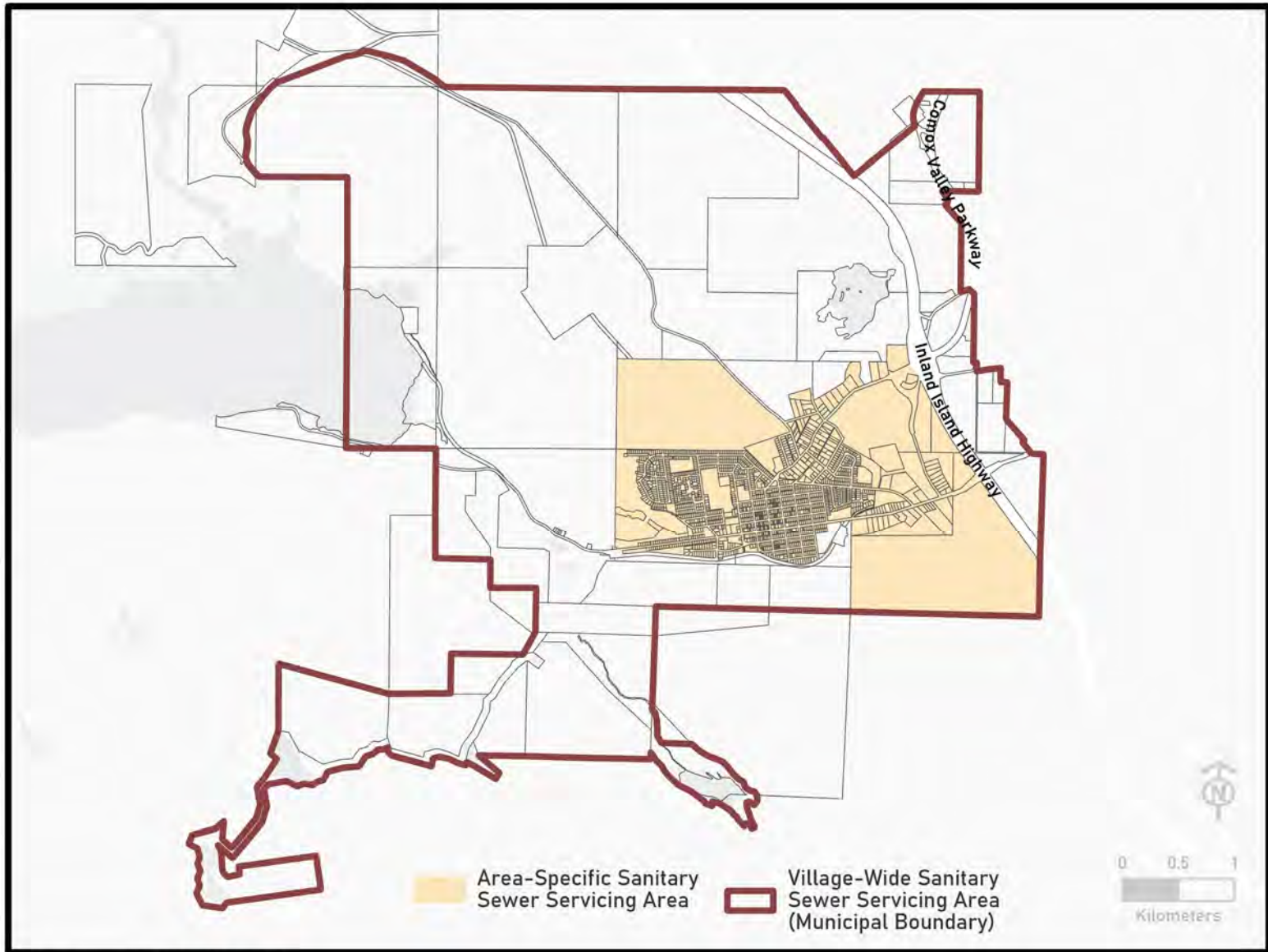
To keep the DCC program as current as possible, the Village of Cumberland should review its program annually. Based on its annual review, the Village may make minor amendments to the DCC rates. Minor amendments may include the deletion of completed projects, the addition of new projects, the deletion of estimated construction costs, with the inclusion of actual construction costs and time frame adjustments. This also requires a DCC Bylaw amendment.

Major amendments of the DCC program and rates will occur when significant land use changes are made, when new servicing plans are prepared or when the information upon which the DCCs are calculated has become significantly outdated or requires significant revision. Based on experience, a major amendment to the DCC program and rates is needed every 2 to 5 years.

## **APPENDIX A**

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### **Sanitary Sewer DCC – Area Specific Map**



Project Number: 3332.0009.01 | Author: BB | Status: Draft | 2022 / 7 / 22

The accuracy & completeness of information shown on this drawing is not guaranteed. It will be the responsibility of the user of the information shown on this drawing to locate & establish the precise location of all existing information whether shown or not.



## **APPENDIX B**

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### **DCC Project Details**



# Development Cost Charge Bylaw

## Village of Cumberland



### Transportation DCC Background Information

#### Bike Lane – Bevan Road Connector (R1)

#### Project Description

A paved bike trail that will connect new developments to the existing Village.

Project Timing	Priority Level	Cost of Work
10 to 20 years	Low	\$832,360
Total		\$832,360

#### Benefits in Doing This Work

- Increased connectivity within Village's active transportation network
- Increased ability to accommodate cyclists and other forms of active transportation
- Reduction in vehicle traffic on roads due to increased levels of cycling and other forms of active transportation
- Improved safety

#### Estimated Allocation of Costs

New Development: 75%  
Existing Users: 25%

#### Project Location

Beginning towards the end of Kendall Road and extending North to connect with Bevan Road south of the landfill entrance.

#### Comments

This project was included in the previous DCC program. Project costs have been updated by Urban Systems to reflect current costs. The estimate includes 15% for Engineering and 35% for Contingency.



# Development Cost Charge Bylaw

## Village of Cumberland



### Transportation DCC Background Information

### Corridor Improvement – Bevan Rd (R2)

#### Project Description

This project will provide corridor improvements to Bevan Road from Cumberland road to 1,600 m past Pidgeon Lake Road.

Project Timing	Priority Level	Cost of Work
0 to 5 years	High	\$7,716,000
Total		\$7,716,000

#### Benefits in Doing This Work

- Increased capacity to accommodate vehicle traffic and other forms of transportation
- Increased access to the Bevan Road area to promote increased development
- Increased connectivity within Village's transportation network

#### Estimated Allocation of Costs

New Development: 100%  
Existing Users: 0%

#### Project Location

Bevan Road beginning at Cumberland Road and extending to 1,600 m past Pidgeon Lake Road.

#### Comments

This is a new project that was not included in the previous DCC program. Project costs have been estimated by Urban Systems based on a review of current unit rates and construction costs. Estimate includes:

1. Road widening and minor road upgrades including ditching on the existing paved portion of Bevan Road between Cumberland Road and Pidgeon Lake Road.
2. Upgraded roadway including asphalt surfacing of existing section from Pidgeon Lake Road to the end of the project.
3. Street lighting over the entirety of the project length.
4. The estimate includes 15% for Engineering and 35% for Contingency.



# Development Cost Charge Bylaw

## Village of Cumberland



### Transportation DCC Background Information

### Corridor Improvement – Ulverston Ave. (R3)

#### Project Description

Upgraded road cross section and sidewalk improvements along the Ulverston Road corridor.

Project Timing	Priority Level	Cost of Work
0 to 5 years	High	\$1,601,000
Total		\$1,601,000

#### Benefits in Doing This Work

- Increased connectivity within Village’s transportation network
- Improved capacity to accommodate new vehicle traffic, pedestrian movements, and various forms of active transportation (e.g. cycling)
- Improved safety

#### Estimated Allocation of Costs

New Development: 60%  
Existing Users: 40%

#### Project Location

- Ulverston Avenue from 5<sup>th</sup> Street to Royston Road

#### Comments

This project represents two project segments from the previous DCC program that have been consolidated:

- Road improvement on Ulverston Avenue from the Chicane to Royston Road
- Sidewalk improvement on Ulverston Avenue from 5<sup>th</sup> Street to Royston Road

Project costs have been updated by Urban Systems to reflect current costs. The estimate includes 15% for Engineering and 35% for Contingency.



# Development Cost Charge Bylaw

Village of Cumberland



## Transportation DCC Background Information

### Corridor Improvement – Egremont St. (Dunsmuir Ave. to Ulverston Ave.) (R4)

#### Project Description

Upgraded road cross section and sidewalk improvements along the Egremont Street corridor.

Project Timing	Priority Level	Cost of Work
0 to 5 years	High	\$1,224,058
Total		\$1,224,058

#### Benefits in Doing This Work

- Increased connectivity within Village’s transportation network
- Improved capacity to accommodate new vehicle traffic, pedestrian movements, and various forms of active transportation (e.g. cycling)
- Improved safety

#### Estimated Allocation of Costs

New Development: 50%  
Existing Users: 50%

#### Project Location

- Egremont Street from Dunsmuir Avenue to Rydal Avenue

#### Comments

This project represents four project segments from the previous DCC Program that have been consolidated:

- Road Improvement – Egremont Street from Dunsmuir Avenue to Maryport Avenue
- Sidewalk Improvement – Egremont Street from Dunsmuir Avenue to Maryport Avenue
- Sidewalk Improvement – Egremont Street from Maryport Avenue to Ulverston Avenue
- Sidewalk Improvement – Egremont Street from Ulverston Avenue to Rydal Avenue

Project costs have been updated by Urban Systems to reflect current costs. The estimate includes 15% for Engineering and 35% for Contingency.



# Development Cost Charge Bylaw

## Village of Cumberland



### Transportation DCC Background Information

#### Corridor Improvement – Cumberland Rd. (Union Rd. to 1<sup>st</sup> St.) (R5)

#### Project Description

Upgraded road cross section and sidewalk improvements along the Cumberland Road corridor.

Project Timing	Priority Level	Cost of Work
0 to 5 years	High	\$2,895,967
Grants Received		\$1,528,318
Village Cost (i.e. less grants)		\$1,367,648

#### Benefits in Doing This Work

- Increased connectivity within Village's transportation network
- Improved capacity to accommodate new vehicle traffic, pedestrian movements, and various forms of active transportation (e.g. cycling)

#### Estimated Allocation of Costs

New Development: 50%  
Existing Users: 50%

#### Project Location

Cumberland Road from Union Road to 4<sup>th</sup> Street.

#### Comments

For the most part, this is a new project that was not included in the previous DCC program. However, it also includes three relatively small project segments from the previous DCC program:

- Sidewalk along 2<sup>nd</sup> Street from Ulverston Avenue to Windermere Avenue
- Sidewalk along Windermere Avenue from 2<sup>nd</sup> Street to 1<sup>st</sup> Street
- Sidewalk along Ulverston Avenue from 4<sup>th</sup> Street to 2<sup>nd</sup> Street

Project costs have been estimated by Urban Systems based on a review of projects recently tendered within the Village of Cumberland<sup>1</sup>. The estimate includes 15% for Engineering and 35% for Contingency for unfinished portions of the project.

<sup>1</sup> This includes a portion of this project that has already been started (i.e. from Bevan Road to Lot 1 - Plan 59488 west of Union Road). The overall costs for this portion of the project is \$1,986,101.65. However, it is assumed that only 90% of those overall costs are attributed to 'transportation' upgrades (i.e. DCC project R6) and the remaining 10% are attributed to 'water' upgrades (i.e. DCC project W4).



# Development Cost Charge Bylaw

## Village of Cumberland



### Transportation DCC Background Information

#### Corridor Improvement – Union Road (Royston Road to 600m South of Cumberland rd) (R6)

#### Project Description

Upgraded road cross section improvements along the Union Road corridor. This includes widening and re-aligning the road.

Project Timing	Priority Level	Cost of Work
5 to 10 years	Moderate	\$1,568,000
Total		\$1,568,000

#### Benefits in Doing This Work

- Increased connectivity within Village's transportation network
- Improved capacity to accommodate new vehicle traffic
- Improved safety

#### Estimated Allocation of Costs

New Development: 60%  
Existing Users: 40%

#### Project Location

Union Road from Royston Road to 600m South of Cumberland rd.

#### Comments

This is a new project that was not included in the previous DCC program. Project costs have been estimated by Urban Systems based on a review of current unit rates and construction costs. The estimate includes 15% for Engineering and 35% for Contingency.



# Development Cost Charge Bylaw

## Village of Cumberland



### Transportation DCC Background Information

#### Corridor Improvement – Dunsmuir Ave. (Egremont St. to 7<sup>th</sup> St.) (R7)

#### Project Description

Upgraded road cross section and sidewalk improvements along the Dunsmuir Avenue corridor from Egremont Street to 7<sup>th</sup> Street.

Project Timing	Priority Level	Cost of Work
0 to 5 years	High	\$3,408,842
Grants Received		\$1,107,025
Village Cost (i.e. less grants)		\$2,301,817

#### Benefits in Doing This Work

- Increased connectivity within Village's transportation network
- Improved capacity to accommodate new vehicle traffic, pedestrian movements, and various forms of active transportation (e.g. cycling)
- Improved safety

#### Estimated Allocation of Costs

New Development: 50%  
Existing Users: 50%

#### Project Location

Dunsmuir Avenue from Egremont Street to 7<sup>th</sup> Street.

#### Comments

This project was included in the previous DCC program. Project costs have been updated by Urban Systems based on a review of projects recently tendered within the Village of Cumberland<sup>2</sup>. The estimate includes 15% for Engineering and 35% for Contingency for unfinished portions of the project.

<sup>2</sup> This includes a portion of this project that has already been started (i.e. between 2<sup>nd</sup> Street and 7<sup>th</sup> Street). The overall costs for this portion of the project is \$3,038,903.65. However, it is assumed that only 60% of those overall costs are attributed to 'transportation' upgrades (i.e. DCC project R8). It is assumed that another 40% are attributed to 'water' upgrades (i.e. DCC project W3).





# Development Cost Charge Bylaw

## Village of Cumberland



### Transportation DCC Background Information

## Corridor Improvement – Dunsmuir Avenue (7<sup>th</sup> St. to Union Road) (R8)

### Project Description

Upgraded road cross section and sidewalk improvements along the Dunsmuir Avenue corridor from 7<sup>th</sup> St. to Union Road.

Project Timing	Priority Level	Cost of Work
5 to 10 years	Moderate	\$2,826,000
Total		\$2,826,000

### Benefits in Doing This Work

- Increased connectivity within Village's transportation network
- Improved capacity to accommodate new vehicle traffic, pedestrian movements, and various forms of active transportation (e.g. cycling)
- Improved safety

### Estimated Allocation of Costs

New Development: 50%  
Existing Users: 50%

### Project Location

Dunsmuir Avenue from 7<sup>th</sup> St. to Union Road.

### Comments

This project was included in the previous DCC program. Project costs have been updated by Urban Systems to reflect current costs. The estimate includes 15% for Engineering and 35% for Contingency.



# Development Cost Charge Bylaw

## Village of Cumberland



### Transportation DCC Background Information

## Intersection Upgrade – Cumberland Rd. at Union Rd. (R9)

### Project Description

Intersection upgrades. This includes improved alignments and new traffic signals.

Project Timing	Priority Level	Cost of Work
10 to 20	Low	\$1,241,890
Total		\$1,241,890

### Benefits in Doing This Work

- Improved traffic flow
- Improved capacity and access to accommodate new developments
- Improved safety

### Estimated Allocation of Costs

New Development: 100%

Existing Users: 0%

### Project Location

Cumberland Road at Union Road Intersection.

### Comments

This project represents two project segments from the previous DCC Program that have been consolidated:

- Intersection Upgrade at Cumberland Road and Union
- Traffic Signal at Cumberland and Union

Project costs have been estimated by Urban Systems based on a review of current unit rates and construction costs. The estimate includes 15% for Engineering and 35% for Contingency.



# Development Cost Charge Bylaw

## Village of Cumberland



### Transportation DCC Background Information

#### Intersection Upgrade – Cumberland Rd. at Bevan Rd. (R10)

#### Project Description

Intersection upgrades. This includes improved alignments and new traffic signals.

Project Timing	Priority Level	Cost of Work
5 to 10	Moderate	\$1,241,890
Total		\$1,241,890

#### Benefits in Doing This Work

- Improved traffic flow
- Improved capacity and access to accommodate new developments
- Improved safety

#### Estimated Allocation of Costs

New Development: 100%  
 Existing Users: 0%

#### Project Location

Cumberland Road at Bevan Road intersection.

#### Comments

This project represents two project segments from the previous DCC Program that have been consolidated:

- Intersection Upgrade Bevan at Cumberland
- Traffic Signal Bevan at Cumberland

Project costs have been estimated by Urban Systems based on a review of current unit rates and construction costs. The estimate includes 15% for Engineering and 35% for Contingency.



# Development Cost Charge Bylaw

## Village of Cumberland



### Transportation DCC Background Information

### Transportation Master Plan (R11)

#### Project Description

Developing a new Transportation Master Plan that identifies improvements to the existing network as well and upgrades and new projects required to accommodate future growth.

Project Timing	Priority Level	Cost of Work
10 to 20 years	Low	\$200,000
Total		\$200,000

#### Benefits in Doing This Work

- Identify improvements to the existing network
- Identify upgrades and new projects required to accommodate future growth (i.e. beyond what is identified in the current and proposed DCC program)

#### Estimated Allocation of Costs

New Development: 50%  
Existing Users: 50%

#### Project Location

Throughout the Village.

#### Comments

This is a new project that was not included in the previous DCC program. The cost estimate has been developed based on discussions with staff from the Village's Planning and Engineering Department.



# Development Cost Charge Bylaw

## Village of Cumberland



### Water DCC Background Information

## Watermain Looping – Union Rd. (Cumberland Rd. to North of Royston Rd.) (W1)

### Project Description

A new 200mm (8 inch) watermain loop installed along Union Road from Cumberland Road to north of Royston Road. This will provide needed capacity and redundancy within the water system to accommodate for increased demand on the water system.

Project Timing	Priority Level	Cost of Work
5 to 10 years	Moderate	\$764,400
Total		\$764,400

### Benefits in Doing This Work

- Maintain pressure in the system
- Provide adequate fire flows

### Estimated Allocation of Costs

New Development: 100%  
Existing Users: 0%

### Project Location

Union Road from Cumberland Road to north of Royston Road

### Comments

This is a new project that was not included in the previous DCC program. Cost estimates provided by the Village of Cumberland's Engineering Department (Rob Crisfield).



# Development Cost Charge Bylaw

## Village of Cumberland



### Water DCC Background Information

#### New Watermain – Bevan Rd. (Cumberland Rd. to 1500m North of Landfill) (W2)

#### Project Description

Installation of a new watermain along Bevan Road from Cumberland Road to approximately 1,500 meters north of the landfill entrance. This will serve industrial and commercial operators proposed in the lands north and east of the landfill.

Project Timing	Priority Level	Cost of Work
0 to 5 years	Immediate	\$2,842,000
Total		\$2,842,000

#### Benefits in Doing This Work

- Provision of water servicing to new development.

#### Estimated Allocation of Costs

New Development: 100%  
Existing Users: 0%

#### Project Location

Bevan Road from Cumberland Road to approximately 1,500 meters north of the landfill entrance.

#### Comments

This is a new project that was not included in the previous DCC program. Cost estimates were provided by the Village of Cumberland's Engineering Department (Rob Crisfield).



# Development Cost Charge Bylaw

## Village of Cumberland



### Water DCC Background Information

## Watermain Upgrade – Dunsmuir Ave (1<sup>st</sup> St. to Ulverston Ave.) (W3)

### Project Description

Watermain replacement and upsizing (from 200mm to 250mm) along Dunsmuir Avenue from 1<sup>st</sup> St. to Carlisle Lane.

Project Timing	Priority Level	Cost of Work
0 to 5 years	High	\$3,157,661
Grants Received		\$738,017
Village Cost (i.e. less grants)		\$2,419,645

### Benefits in Doing This Work

- Provide additional capacity in the water distribution system

### Estimated Allocation of Costs

New Development: 75%  
Existing Users: 25%

### Project Location

Dunsmuir Avenue from 1<sup>st</sup> St. to Ulverston Avenue.

### Comments

The segment from 1<sup>st</sup> St. to Carlisle Lane was included in the previous DCC program (project number W330); however, the scope of the project has since increased to include an additional segment from Carlisle Lane to Ulverston Avenue. The expanded version of this project was first identified in the Village's Long-Term Water Supply Strategy (2016). Project costs have been estimated by Urban Systems based on a review of projects recently tendered within the Village of Cumberland<sup>1</sup>. The estimate includes 15% for Engineering and 35% for Contingency for unfinished portions of the project.

<sup>1</sup> This includes a portion of this project that has already been started (i.e. between 2<sup>nd</sup> Street and 7<sup>th</sup> Street). The overall costs for this portion of the project is \$3,038,903.65. However, it is assumed that only 40% of those overall costs are attributed to 'water' upgrades (i.e. DCC project W3). It is assumed that another 60% are attributed to 'transportation' upgrades (i.e. DCC project R7).



# Development Cost Charge Bylaw

## Village of Cumberland



### Water DCC Background Information

#### Watermain Upgrade – Cumberland Rd. (Primrose St. to Hope Rd.) (W4)

#### Project Description

Upgrade watermain along Cumberland Road from Primrose Road to Hope Street.

Project Timing	Priority Level	Cost of Work
5 to 10 years	Moderate	\$405,610
Grants Received		\$169,813
Village Cost (i.e. less grants)		\$235,797

#### Benefits in Doing This Work

- Provide additional capacity in the water distribution system

#### Estimated Allocation of Costs

New Development: 85%

Existing Users: 15%

#### Project Location

Cumberland Road from Primrose St. to Hope Road.

#### Comments

This project was included in the previous DCC program (project number W170). Project costs have been estimated by Urban Systems based on a review of projects recently tendered within the Village of Cumberland<sup>2</sup>. The estimate includes 15% for Engineering and 35% for Contingency for unfinished portions of the project.

<sup>2</sup> This includes a portion of this project that has already been started (i.e. from Bevan Road to Hope Road). This segment was completed as part of a larger project. The overall costs for this portion of the project is \$1,986,101.65. However, it is assumed that only 10% of those overall costs are attributed to 'water' upgrades (i.e. DCC project W4) and the remaining 90% are attributed to 'transportation' upgrades (i.e. DCC project R5).





# Development Cost Charge Bylaw

## Village of Cumberland



### Water DCC Background Information

#### Watermain Upgrade – Ulverston Ave. (3<sup>rd</sup> St. to Mill St.) (W5)

#### Project Description

Upgrade 424 meters of watermain along Ulverston Avenue from 3<sup>rd</sup> Street to Mill Street.

Project Timing	Priority Level	Cost of Work
5 to 10 years	Moderate	\$344,700
Total		\$344,700

#### Benefits in Doing This Work

- Provide additional capacity in the water distribution system

#### Estimated Allocation of Costs

New Development: 50%

Existing Users: 50%

This project will benefit both new and existing users.

#### Project Location

Ulverston Avenue from 3<sup>rd</sup> Street to Mill

#### Comments

This is a new project that was not included in the previous DCC program. It was first identified as a priority in the Village's Long-Term Water Supply Strategy (2016). Cost estimates were provided by the Village of Cumberland's Engineering Department (Rob Crisfield).



# Development Cost Charge Bylaw

## Village of Cumberland



### Water DCC Background Information

#### Watermain Upgrade – Windermere Ave. (Egremont St. to 2592 Windermere Ave.) (W6)

#### Project Description

Upgrading the watermain (from 100mm to 200mm) along Windermere Avenue from Egremont Street to 2592 Windermere.

Project Timing	Priority Level	Cost of Work
5 to 10 years	Moderate	\$332,300
Total		\$332,300

#### Benefits in Doing This Work

- Provide additional capacity in the water distribution system

#### Estimated Allocation of Costs

New Development: 50%  
Existing Users: 50%

#### Project Location

Windermere Avenue from Egremont Street to 2592 Windermere.

#### Comments

This is a new project that was not included in the previous DCC program. Cost estimates were provided by the Village of Cumberland's Engineering Department (Rob Crisfield).



# Development Cost Charge Bylaw

## Village of Cumberland



### Water DCC Background Information

#### Main Water Supply Main Upgrade (W7)

#### Project Description

Adding an additional (400mm) water supply main and upsizing the existing main (from 300mm to 400mm).<sup>3</sup>

Project Timing	Priority Level	Cost of Work
0 to 5 years	Immediate	\$1,949,000
Total		\$1,949,000

#### Benefits in Doing This Work

- Provide additional capacity in the water distribution system
- Provides redundancy in the system

#### Estimated Allocation of Costs

New Development: 80%  
Existing Users: 20%

#### Project Location

Area south of the Village Core.

#### Comments

This is a new project that was not included in the previous DCC program. It was first identified as a priority in the Village's Long-Term Water Supply Strategy (2016) Project costs have been estimated by Urban Systems based on a review of projects recently tendered within the Village of Cumberland<sup>4</sup>. The estimate includes 15% for Engineering and 35% for Contingency for unfinished portions of the project.

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<sup>4</sup> This includes a portion of this project that has already been started (i.e. the twinning portion). The overall costs for this portion of the project is \$650,000. The existing project costs were identified in the Village's Long-Term Water Supply Strategy as project F-5.



# Development Cost Charge Bylaw

## Village of Cumberland



### Water DCC Background Information

## Water Master Plan (W8)

### Project Description

Developing a new Water Master Plan that identifies improvements to the existing system as well and upgrades and new projects required to accommodate future growth.

Project Timing	Priority Level	Cost of Work
10 to 20 years	Low	\$150,000
Total		\$150,000

### Benefits in Doing This Work

- Identify improvements to the existing system
- Identify upgrades and new projects required to accommodate future growth (i.e. beyond what is identified in the current and proposed DCC program)

### Estimated Allocation of Costs

New Development: 50%  
Existing Users: 50%

### Project Location

Throughout the Village.

### Comments

This is a new project that was not included in the previous DCC program. The cost estimate has been developed based on discussions with staff from the Village's Planning and Engineering Department.



# Development Cost Charge Bylaw

## Village of Cumberland



### Sanitary DCC Background Information

## Sewer Treatment Plant Upgrades (Additional Population) (S1)

### Project Description

The development of a new sewage treatment plant to meet Federal and Provincial standards for sanitary sewer effluent at an additional population of 4447. This includes the addition of disinfection and treatment, expanded infrastructure, solids removal and charcoal re-bed.

Project Timing	Priority Level	Cost of Work
10-20 years	Low	\$16,000,000
Grant Support		\$7,500,000
Total		\$8,500,000

### Benefits in Doing This Work

- Capacity to accommodate growth
- Improved treatment
- Compliance with future regulations

### Estimated Allocation of Costs

New Development: 50%  
Existing Users: 50%

### Project Location

Near the existing sewer treatment facility

### Comments

This project was included in the previous DCC program (project number S120). Project costs have been provided by the Village of Cumberland.



# Development Cost Charge Bylaw

## Village of Cumberland



### Sanitary DCC Background Information

#### Trunk Upgrade– Dunsmuir Ave. to Lagoon (700m of 900mm) (S2)

#### Project Description

This project is to upgrade approximately 700 meters of existing sanitary sewer trunk main (to 900mm pipe) between Dunsmuir Avenue and the lagoons. This allows for the existing sanitary system to accommodate increased flows from development.

Project Timing	Priority Level	Cost of Work
0 – 5 years	High	\$1,957,000
Total		\$1,957,000

#### Benefits in Doing This Work

- Provide additional capacity in the collection system.

#### Estimated Allocation of Costs

New Development: 100%  
Existing Users: 0%

#### Project Location

Near Carlisle Lane between Dunsmuir Avenue to the Village's lagoons.

#### Comments

This project was included in the previous DCC program (project number S301). Project costs have been updated by Urban Systems to reflect current costs. The estimate includes 15% for Engineering and 35% for Contingency.



# Development Cost Charge Bylaw

## Village of Cumberland



### Sanitary DCC Background Information

#### Trunk Upgrade - Sutton Rd. to Dunsmuir Ave. (Twinning) (S3)

#### Project Description

This project is to twin the existing sanitary sewer trunk main from Sutton Road to Dunsmuir Avenue. This allows for increased capacity and necessary redundancy to meet increasing demands on the sanitary system attributed to growth.

Project Timing	Priority Level	Cost of Work
5 – 10 years	Moderate	\$4,736,000
Total		\$4,736,000

#### Benefits in Doing This Work

- Provide additional capacity in the collection system.

#### Estimated Allocation of Costs

New Development: 100%  
Existing Users: 0%

#### Project Location

South of the village core along the Wellington Colliery from Sutton Road to Dunsmuir Avenue.

#### Comments

This project was included in the previous DCC program (project number S1). Project costs have been updated by Urban Systems to reflect current costs. The estimate includes 15% for Engineering and 35% for Contingency.



# Development Cost Charge Bylaw

## Village of Cumberland



### Sanitary DCC Background Information

#### Sanitary Sewer Master Plan (S4)

#### Project Description

Developing a new Sanitary Sewer Master Plan that identifies improvements to the existing network as well and upgrades and new projects required to accommodate future growth.

Project Timing	Priority Level	Cost of Work
0 – 5 years	High	\$150,000
Total		\$150,000

#### Benefits in Doing This Work

- Identify improvements to the existing system
- Identify upgrades and new projects required to accommodate future growth (i.e. beyond what is identified in the current and proposed DCC program)

#### Estimated Allocation of Costs

New Development: 50%  
Existing Users: 50%

#### Project Location

Throughout the Village.

#### Comments

This is a new project that was not included in the previous DCC program. The cost estimate has been developed based on discussions with staff from the Village's Planning and Engineering Department.





# Development Cost Charge Bylaw

## Village of Cumberland



### Drainage DCC Background Information

## Drainage Corridor Improvement – Cumberland Rd. (D1)

### Project Description

Improving and upsizing drainage infrastructure throughout a major drainage corridor.

Project Timing	Priority Level	Cost of Work
0 to 5 years	High	\$1,573,216
Total		\$1,573,216

### Benefits in Doing This Work

- Improved capacity to accommodate increased levels of stormwater run-off

### Estimated Allocation of Costs

New Development: 80%  
Existing Users: 20%

### Project Location

- Cumberland Road from 4<sup>th</sup> Street to lagoon area (via Hope)
- 4<sup>th</sup> Street from Penrith Avenue to Cumberland Road
- Ulverston Avenue from 2<sup>nd</sup> Street to 4<sup>th</sup> Street

### Comments

This is a new project that was not included in the previous DCC program. These specific upgrades are identified in the Village's current Storm Drainage Master Plan. Project costs identified in that plan have been taken from the Village Stormwater Drainage Master Plan (2010) and have been brought escalated to reflect current costs.



# Development Cost Charge Bylaw

## Village of Cumberland



### Drainage DCC Background Information

#### Drainage Corridor Improvement – Mill St. (D2)

#### Project Description

Improving and upsizing drainage infrastructure throughout a major drainage corridor.

Project Timing	Priority Level	Cost of Work
0 to 5 years	High	\$674,800
Total		\$674,800

#### Benefits in Doing This Work

- Improved capacity to accommodate increased levels of stormwater run-off

#### Estimated Allocation of Costs

New Development: 80%

Existing Users: 20%

#### Project Location

Mill Street from Bruce Street to Hope Road and Bruce Street from the lane to Mill Street.

#### Comments

This project represents two project segments from the previous DCC Program that have been consolidated:

- Bruce, lane to Mill (D330)
- Mill, Bruce to Hope (D330)

This project was included in the previous DCC program. These specific upgrades are identified in the Village's current Storm Drainage Master Plan. Project costs identified in that plan have been taken from the Village Stormwater Drainage Master Plan (2010) and have been brought escalated to reflect current costs.



## Development Cost Charge Bylaw Village of Cumberland



### Drainage DCC Background Information

#### Drainage Improvement – Ulverston Ave. (D3)

##### Project Description

Improving and upsizing drainage infrastructure throughout a major drainage corridor.

Project Timing	Priority Level	Cost of Work
5 to 10 years	Moderate	\$955,320
Total		\$955,320

##### Benefits in Doing This Work

- Improved capacity to accommodate increased levels of stormwater run-off

##### Estimated Allocation of Costs

New Development: 80%

Existing Users: 20%

##### Project Location

Ulverston Avenue from 7<sup>th</sup> Street to Maple Lake Creek.

##### Comments

This is a new project that was not included in the previous DCC program. These specific upgrades are identified in the Village's current Storm Drainage Master Plan. Project costs identified in that plan have been taken from the Village Stormwater Drainage Master Plan (2010) and have been brought escalated to reflect current costs.



# Development Cost Charge Bylaw

## Village of Cumberland



### Drainage DCC Background Information

#### South Cumberland Discharge Area Improvements - (D4)

#### Project Description

Improvements to stormwater drainage infrastructure south of the core Village site. This includes construction of open channels, detention facilities and pipelines to control runoff from future development in the south and west of the community.

Project Timing	Priority Level	Cost of Work
5 to 10 years	Moderate	\$2,603,019
Total		\$2,603,019

#### Benefits in Doing This Work

- Improved capacity to accommodate increased levels of stormwater run-off

#### Estimated Allocation of Costs

New Development: 80%  
Existing Users: 20%

#### Project Location

Wetland areas south of the Village core.

#### Comments

This project was included in the previous DCC program (project number D510 & D520). These specific upgrades are identified in the Village's current Storm Drainage Master Plan. Project costs identified in that plan have been taken from the Village Stormwater Drainage Master Plan (2010) and have been brought escalated to reflect current costs..



# Development Cost Charge Bylaw

## Village of Cumberland



### Drainage DCC Background Information

#### I&I Improvements (D5)

#### Project Description

New storm drainage network to prevent inflow and infiltration (I&I) into the sanitary sewer system. This does not include replacing or renewing existing infrastructure.

Project Timing	Priority Level	Cost of Work
0 to 5 years	High / Ongoing	\$1,500,000
Total		\$1,500,000

#### Benefits in Doing This Work

- Increased capacity in the sanitary sewer system because of reduced I&I

#### Estimated Allocation of Costs

New Development: 100%  
Existing Users: 0%

#### Project Location

Throughout the Village of Cumberland.

#### Comments

This project was included in the previous DCC program (project number D530). The cost estimate has been developed based on discussions with staff from the Village's Planning and Engineering Department.



# Development Cost Charge Bylaw

## Village of Cumberland



### Drainage DCC Background Information

#### Storm Drainage Master Plan (D6)

#### Project Description

Developing a new Storm Drainage Master Plan that identifies improvements to the existing network as well and upgrades and new projects required to accommodate future growth.

Project Timing	Priority Level	Cost of Work
0 – 5 years	high	\$150,000
Total		\$150,000

#### Benefits in Doing This Work

- Identify improvements to the existing system
- Identify upgrades and new projects required to accommodate future growth (i.e. beyond what is identified in the current and proposed DCC program)

#### Estimated Allocation of Costs

New Development: 50%  
Existing Users: 50%

#### Project Location

Throughout the Village.

#### Comments

This is a new project that was not included in the previous DCC program. The cost estimate has been developed based on discussions with staff from the Village's Planning and Engineering Department.



# Development Cost Charge Bylaw

## Village of Cumberland



### Parks DCC Background Information

## Cumberland Community Forest Park (Acquisition and Improvement) (P1)

### Project Description

Cumberland Community Forest Park is a well-used park providing hiking and mountain biking trails to the community. The park has experienced increased levels of usership necessitating expansion and trail improvements to accommodate growing demand. The Cumberland Community Forest Park Expansion will require land acquisition and trail development to maintain continuity with existing sections of the park. This project will benefit both new and existing users, but much of the additional capacity is designed to address future demand. It allows the Village of Cumberland (VOC) to supply adequate levels of regional parkland and reduce the negative impact of growth on existing trail networks.

Project Timing	Priority Level	Cost of Work
0 to 5 years	High	\$931,027
Total		\$931,027

### Benefits in Doing This Work

- Increased capacity to accommodate new demand from future growth
- Expanded park area for the benefit of existing residents

### Estimated Allocation of Costs

New Development: 50%  
Existing Users: 50%

### Project Location

Existing Cumberland Community Forest Park and lands west and east

### Comments

This is a new project that was not included in the previous DCC program. It was first identified as a priority in the Village's Parks and Greenways Master Plan (2014). Cost estimates were provided by the Village of Cumberland's Planning and Engineering Department (Rob Crisfield) and were updated by Urban Systems to reflect current costs They include:

- \$831,027 for Acquisition
- \$100,000 for Trail Improvements



# Development Cost Charge Bylaw

## Village of Cumberland



### Parks DCC Background Information

## North Wellington Colliery (Acquisition and Improvement) (P2)

### Project Description

The Wellington Colliery Trails provide important linkages and connectivity within Village of Cumberland's trail and parkland network. This project is about the acquisition of a key Right-of-Way and development of a trail. That will result in an expanded network.

Project Timing	Priority Level	Cost of Work
5 to 10 years	Moderate	\$888,800
Total		\$888,800

### Benefits in Doing This Work

- Increased capacity to accommodate new demand from future growth
- Expanded park area for the benefit of existing residents

### Estimated Allocation of Costs

New Development: 50%  
Existing Users: 50%

### Project Location

This trail extends the length of Kendal Avenue, approximately 500 m from Cumberland Rd.

### Comments

This is a new project that was not included in the previous DCC program. It was first identified as a priority in the Village's Parks and Greenways Master Plan (2014). Cost estimates were provided by the Village of Cumberland's Planning and Engineering Department (Rob Crisfield) and updated by Urban Systems. They include:

- \$200,000 for Acquisition
- \$688,800 for Improvements





# Development Cost Charge Bylaw

## Village of Cumberland



### Parks DCC Background Information

## South Wellington Colliery (Acquisition and Improvement) (P3)

### Project Description

The Wellington Colliery Trails provide important linkages and connectivity within Village of Cumberland's trail and parkland network. This project is about the acquisition of a key Right-of-Way, development of a trail, and expansion to the west. That will result in the extension of an existing trail network resulting in important linkages and an expanded network.

Project Timing	Priority Level	Cost of Work
5 to 10 years	Moderate	\$1,199,600
Total		\$1,199,600

### Benefits in Doing This Work

- Increased capacity to accommodate new demand from future growth
- Expanded park area for the benefit of existing residents
- Expansion of existing trail network and important linkages

### Estimated Allocation of Costs

New Development: 50%  
Existing Users: 50%

### Project Location

South of the Village core between 2<sup>nd</sup> and 6<sup>th</sup> streets, extension to the east to Cumberland's administrative boundary and extension to the west to Cumberland's administrative boundary.

### Comments

This is a new project that was not included in the previous DCC program. It was first identified as a priority in the Village's Parks and Greenways Master Plan (2014). Cost estimates were provided by the Village of Cumberland's Planning and Engineering Department (Rob Crisfield) for eastward expansion and Outlook Engineering and Landscape Architecture for Westward Expansion. They include:

- \$280,000 for Acquisition
- \$919,600 for Improvements

Costs were adjusted by Urban Systems to reflect current costs.



# Development Cost Charge Bylaw

## Village of Cumberland



### Parks DCC Background Information

### Lagoon Greenway (Improvements) (P4)

#### Project Description

The development of a trail network throughout the Lagoon Greenway. This includes 600 meters of gravel trail (4 meters wide).

Project Timing	Priority Level	Cost of Work
5 to 10 years	Moderate	\$426,938
Total		\$426,938

#### Benefits in Doing This Work

- Increased capacity to accommodate new demand from future growth
- Expanded usable park area for the benefit of existing residents

#### Estimated Allocation of Costs

New Development: 50%  
Existing Users: 50%

#### Project Location

Land around the Village of Cumberland's lagoons.

#### Comments

This project was included in the previous DCC program. Project costs have been updated by Urban Systems to reflect current costs. The estimate includes 15% for Engineering and 35% for Contingency.



# Development Cost Charge Bylaw

## Village of Cumberland



### Parks DCC Background Information

#### Village Park (Improvement) (P5)

##### Project Description

Village Park is the main community park in Cumberland. This project includes a range of improvements to improve and expand the use of this park. Improvements include new public washrooms, storage areas, multi-use gathering areas, benches and picnic tables.

Project Timing	Priority Level	Cost of Work
5 to 10 years	Moderate	\$600,000
Total		\$600,000

##### Benefits in Doing This Work

- Increased capacity to accommodate new demand from future growth
- Expanded usable park area for the benefit of existing residents

##### Estimated Allocation of Costs

New Development: 50%  
Existing Users: 50%

##### Project Location

Village Park off Dunsmuir Avenue.

##### Comments

This project was included in the previous DCC program. Updated cost estimates below were provided by the Village of Cumberland's Parks and Recreation Department (Kevin McPhedran):

- \$400,000 for new washrooms/storage area/change rooms
- \$175,000 multi-use gathering area (covered)
- \$25,000 benches, picnic tables, gathering area



# Development Cost Charge Bylaw

## Village of Cumberland



### Parks DCC Background Information

#### Cumberland Lake Park (Improvements) (P6)

##### Project Description

Cumberland Lake Park is located on the shores of Comox Lake. This project includes a range of minor improvements to improve and expand the use of this park. Improvements include, expanded parking infrastructure, picnic tables, benches and gathering areas.

Project Timing	Priority Level	Cost of Work
0 to 5 years	High	\$100,000
Total		\$100,000

##### Benefits in Doing This Work

- Enhanced parked infrastructure to accommodate growing usership
- Improved recreation experience

##### Estimated Allocation of Costs

New Development: 50%  
Existing Users: 50%

##### Project Location

At the end of Comox Lake Road, on the shores of Comox Lake.

##### Comments

This is a new project that was not included in the previous DCC program. It was first identified as a priority in the Village's Parks and Greenways Master Plan (2014). Cost estimates were provided by the Village of Cumberland's Parks and Recreation Department (Kevin McPhedran)..



# Development Cost Charge Bylaw

## Village of Cumberland



### Parks DCC Background Information

#### Parks Master Plan (P7)

#### Project Description

Developing a new Parks Master Plan that identifies improvements to the existing system as well and upgrades and new projects required to accommodate future growth.

Project Timing	Priority Level	Cost of Work
10 to 20 years	Low	\$100,000
Total		\$100,000

#### Benefits in Doing This Work

- Identify improvements to the existing system
- Identify upgrades and new projects required to accommodate future growth (i.e. beyond what is identified in the current and proposed DCC program)

#### Estimated Allocation of Costs

New Development: 50%  
Existing Users: 50%

#### Project Location

Throughout the Village.

#### Comments

This is a new project that was not included in the previous DCC program. The cost estimate has been developed based on discussions with staff from the Village's Planning and Engineering Department.



# Development Cost Charge Bylaw

## Village of Cumberland



### Parks DCC Background Information

#### Solport Park (Improvement) (P8)

#### Project Description

This project includes a range of minor improvements including picnic tables, benches, gathering areas, landscaping and development of neighbourhood trails.

Project Timing	Priority Level	Cost of Work
0 to 5 years	High	\$125,000
Total		\$125,000

#### Benefits in Doing This Work

- Increased capacity to accommodate new growth
- Expanded usable park area to the benefit of existing residents

#### Estimated Allocation of Costs

New Development: 50%  
Existing Users: 50%

#### Project Location

Coal Valley Estates, south of Kentmere Ave, at the end of Windemere Ave.

#### Comments

This is a new project that was not included in the previous DCC program. The cost estimate has been developed based on discussions with staff from the Village's Parks and Recreation Department.



# Development Cost Charge Bylaw

## Village of Cumberland



### Parks DCC Background Information

## Camp Road Greenway (Acquisition and Improvement) (P9)

### Project Description

This project includes a range of minor improvements and land acquisition to expand the use of this park. Improvements and acquisition involve the development of additional neighbourhood trails.

Project Timing	Priority Level	Cost of Work
0 to 5 years	High	\$100,000
Total		\$100,000

### Benefits in Doing This Work

- Increased greenway capacity to accommodate new growth
- Expanded trail system to the benefit of existing residents

### Estimated Allocation of Costs

New Development: 50%  
Existing Users: 50%

### Project Location

North of Dunsmuir Ave between Centennial Place and the end of Dunsmuir Ave.

### Comments

This is a new project that was not included in the previous DCC program. The cost estimate has been developed based on discussions with staff from the Village's Parks and Recreation Department.

## **APPENDIX C**

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### **Existing Village of Cumberland Development Cost Charge Bylaw No. 934, 2010**



## **APPENDIX D**

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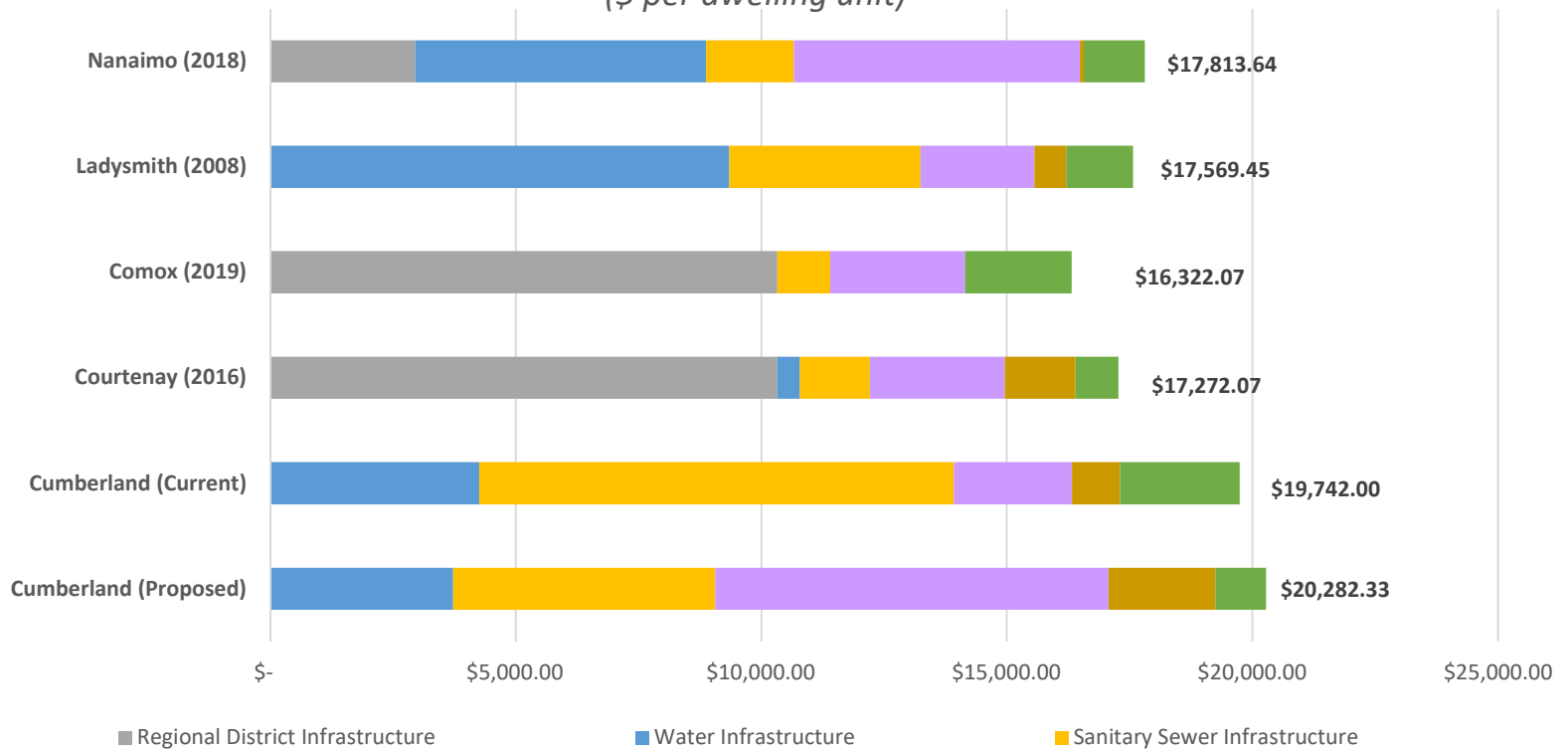
### **Proposed Village of Cumberland Development Cost Charge Bylaw No. \_\_\_\_\_**

## **APPENDIX F**

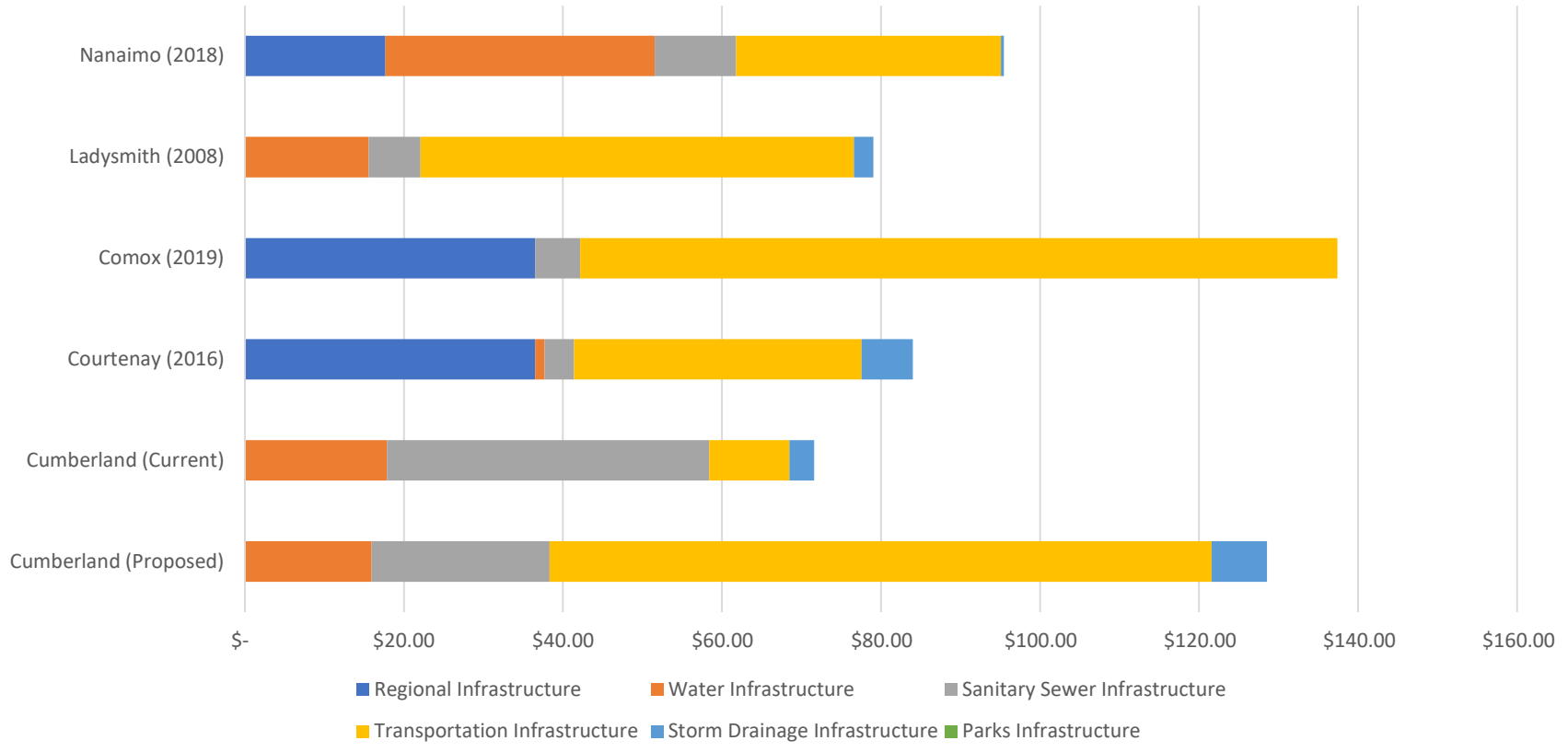
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### **DCC Rate Comparisons**

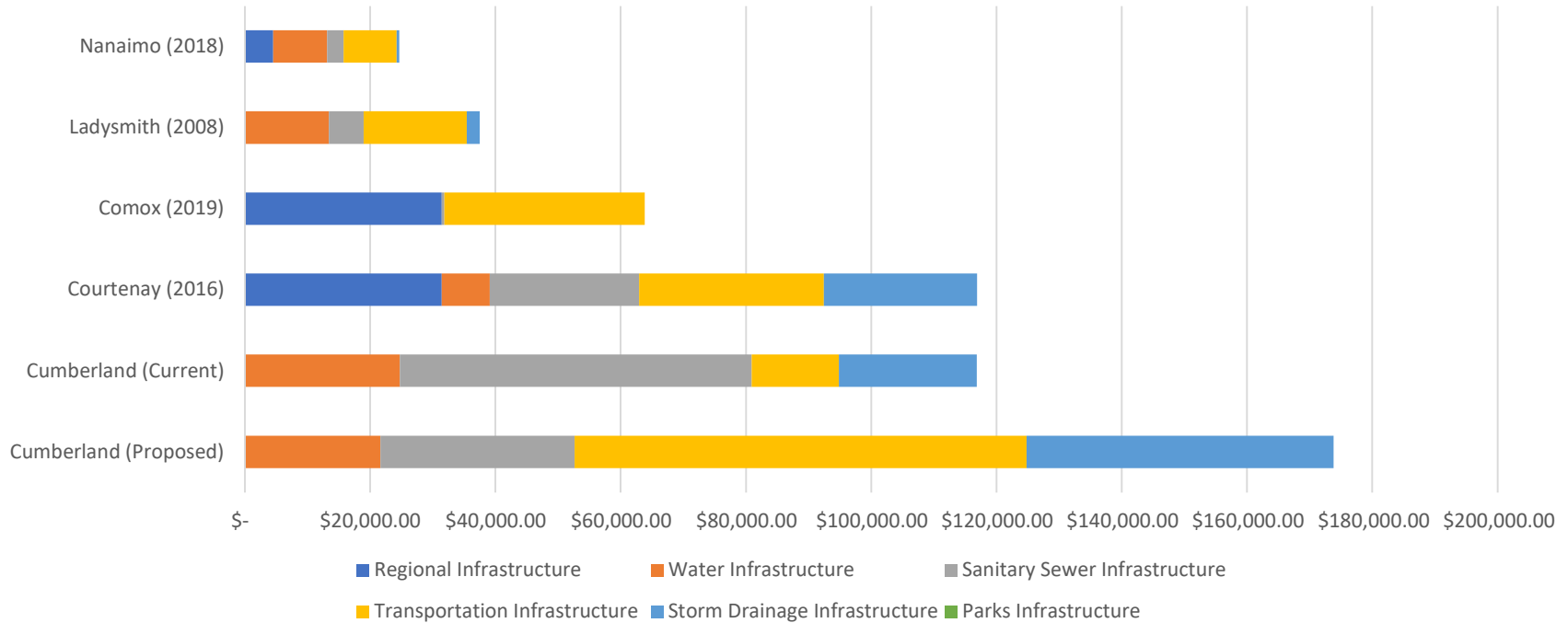
**Development Cost Charges**  
**Single-Family Residential**  
*(\$ per dwelling unit)*



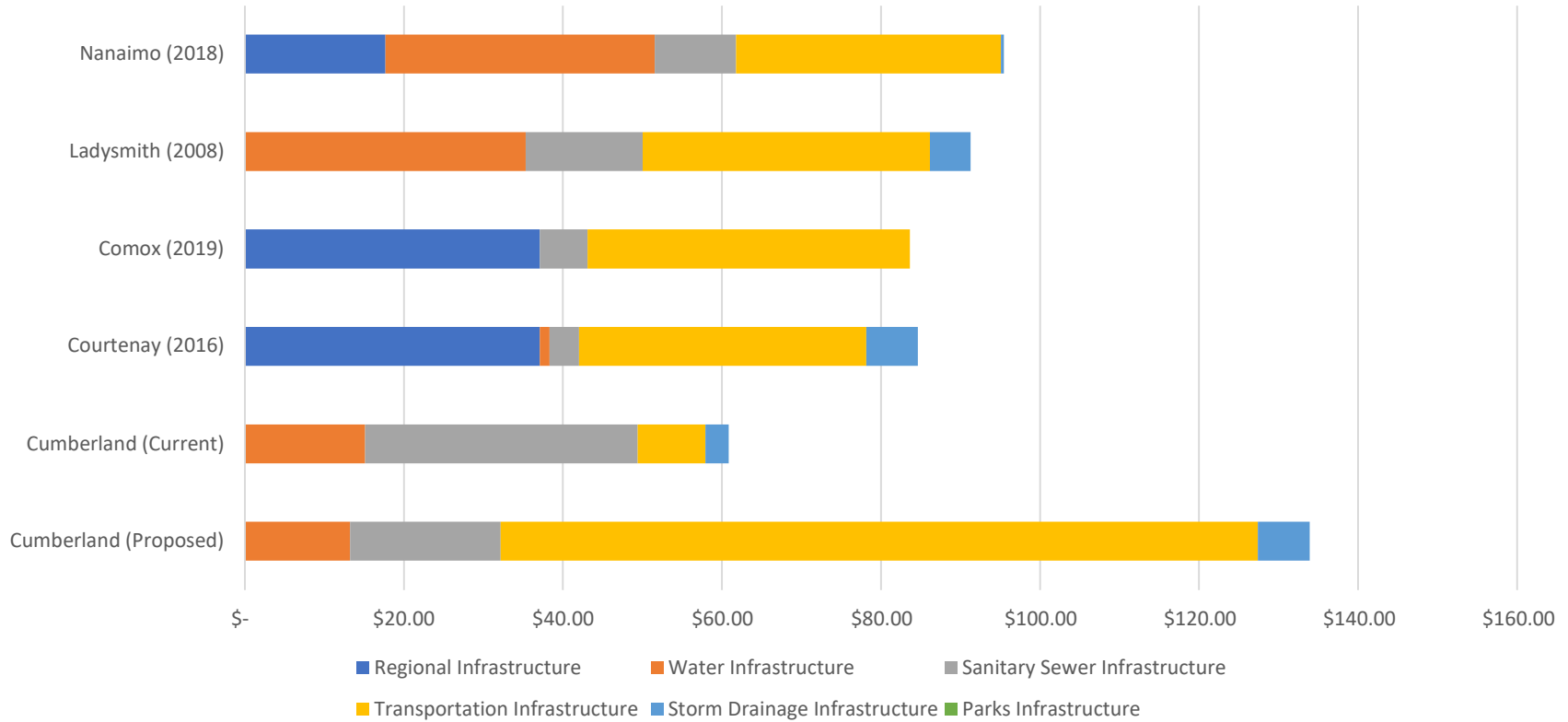
### Commercial (per square meter)



### Industrial ( for a hypothetical development that covers 1 hectare with a 1,000 square metre shop



### Institutional (per square meter)



## **APPENDIX E**

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### **Council Reports and Open House Materials**



# Village of Cumberland



**Development Cost Charges (DCC) Update**  
**April 26, 2022**

**Jake Hughson, MCIP, RPP, Community Planner**  
**Dan Huang, MCIP, RPP, Senior Planner**  
**Sydney Rankmore, MCRP, Community Planner**



# Agenda

1. Project Background
2. Development Finance Tools
3. What are DCCs
4. Calculating DCCs
5. DCC Comparisons
6. Key Policy Areas
7. Next Steps



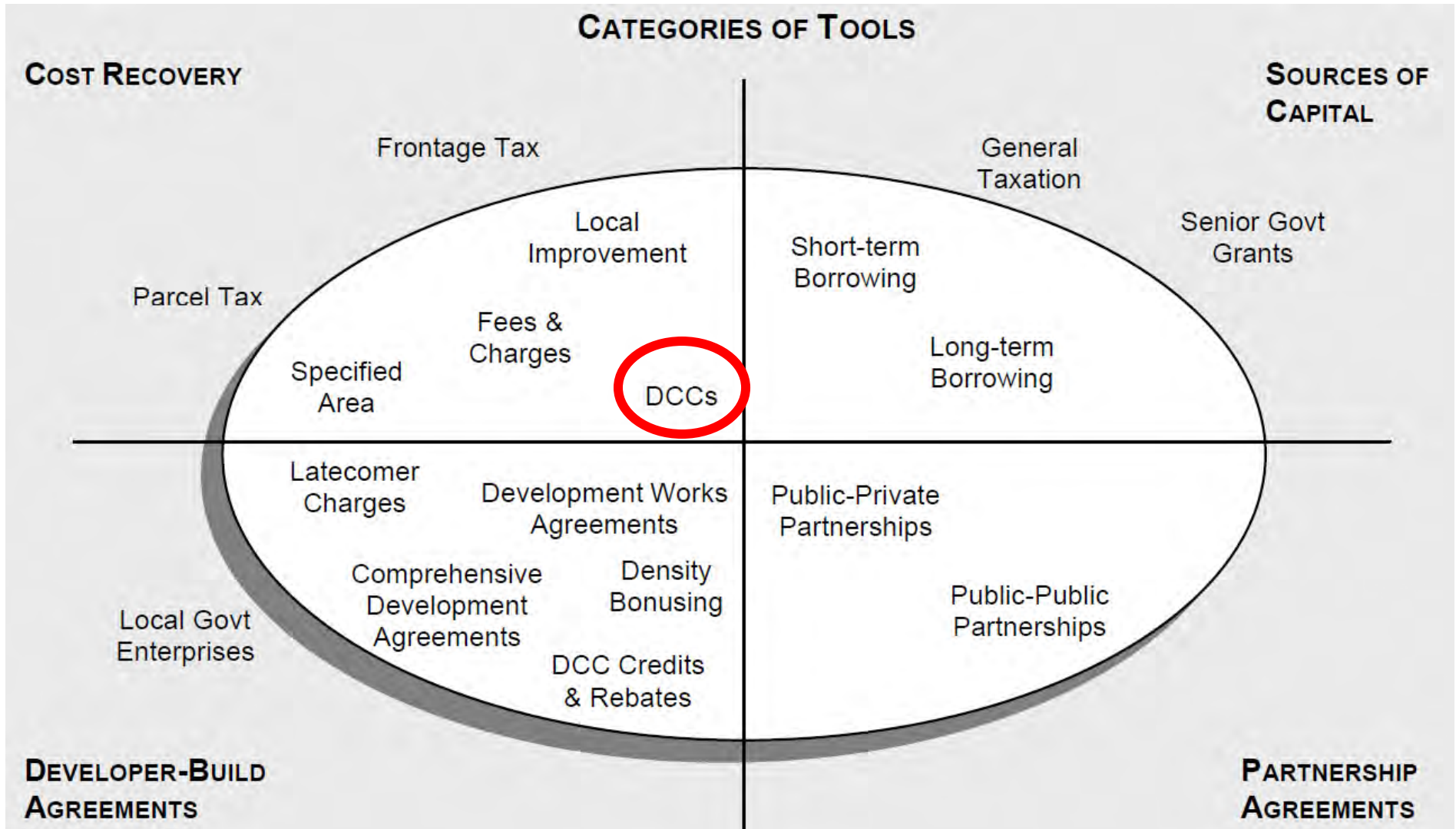
# Project Background



- The last major DCC update was in 2013.
- Since that time, the Village has experienced growth and changing demographics
- In 2019, Urban Systems was hired to review and update Cumberland's DCC program



# Development Finance Tools



Source: *Development Finance Choices Guide, Province of BC*



# What are DCCs?

- One-time charges levied on new development to help fund infrastructure needed to support growth.
  - Water
  - Sanitary Sewer Storm Drainage
  - Transportation
  - Parkland
- DCCs are collected at the time of:
  - Subdivision, and/or
  - Building Permit
- DCC Bylaws must:
  - Comply with the Provincial Law, and
  - Be approved by the Ministry of Municipal Affairs

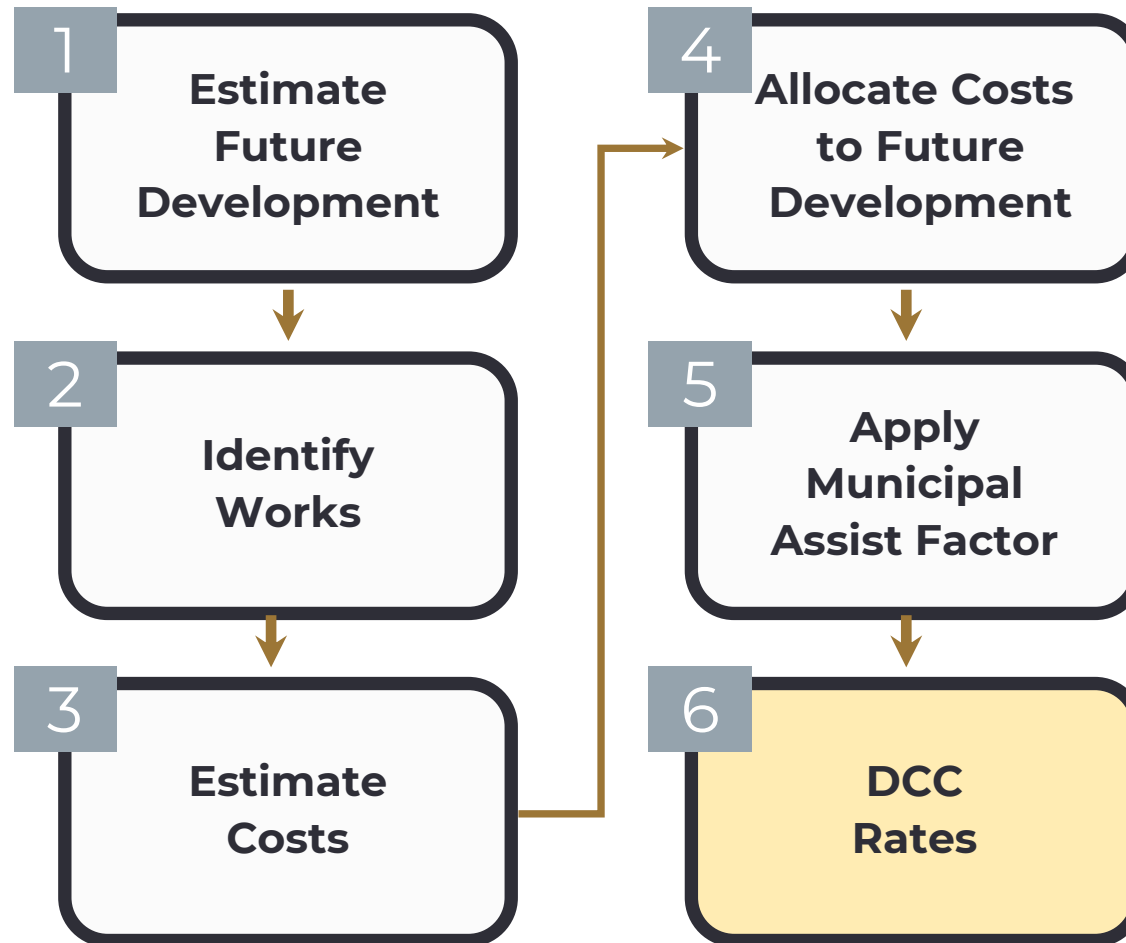


# Calculating DCCs

$$\text{DCC} = \frac{\text{INFRASTRUCTURE COSTS}}{\text{NEW DEVELOPMENT}}$$



# How Are DCCs Calculated?



1

## Estimate Future Development

Dwelling Type	Future Distribution	Average Household Size	New Population	New Dwelling Units
Low Density	60%	3.1	2,979	961
Medium Density	20%	2.5	803	321
High Density	20%	2.0	640	320
<b>TOTAL</b>	<b>100%</b>	<b>n/a</b>	<b>4,422</b>	<b>1,602</b>



1

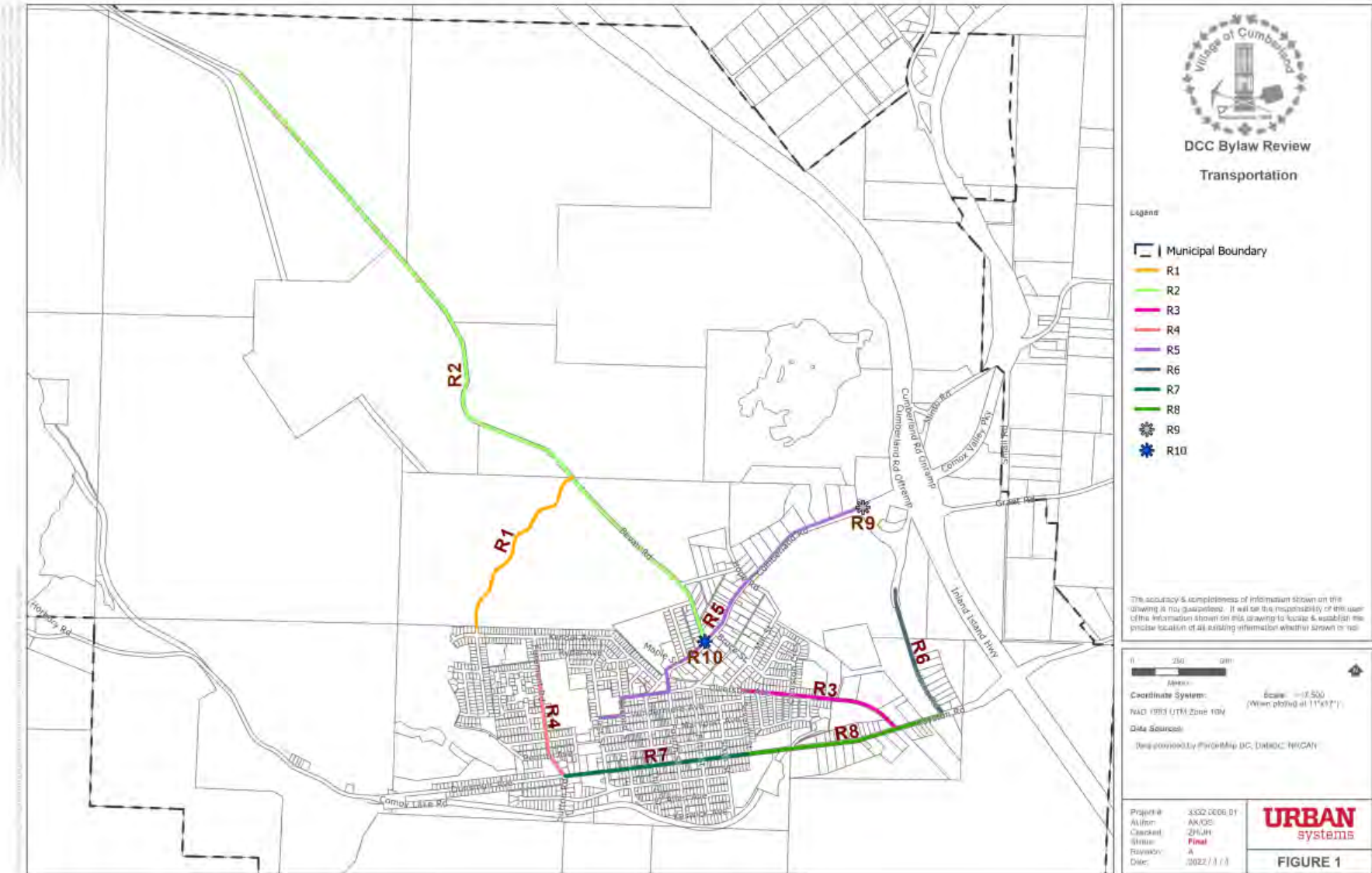
## Estimate Future Development

Land Use	New Development by 2046
Commercial	8,000 m <sup>2</sup> of new gross floor area <i>For scale and reference, a typical grocery store in the surrounding Comox Valley area is approximately 4,000 m<sup>2</sup></i>
Industrial	65 hectares of new site area used <i>For scale and reference, most existing light industrial developments along Cumberland road utilize approximately 0.75 to 1.50 ha of land each.</i>
Institutional	3,800 m <sup>2</sup> of new gross floor area <i>For scale and reference, a typical elementary school in the surrounding area is approximately 3,500 m<sup>2</sup>.</i>

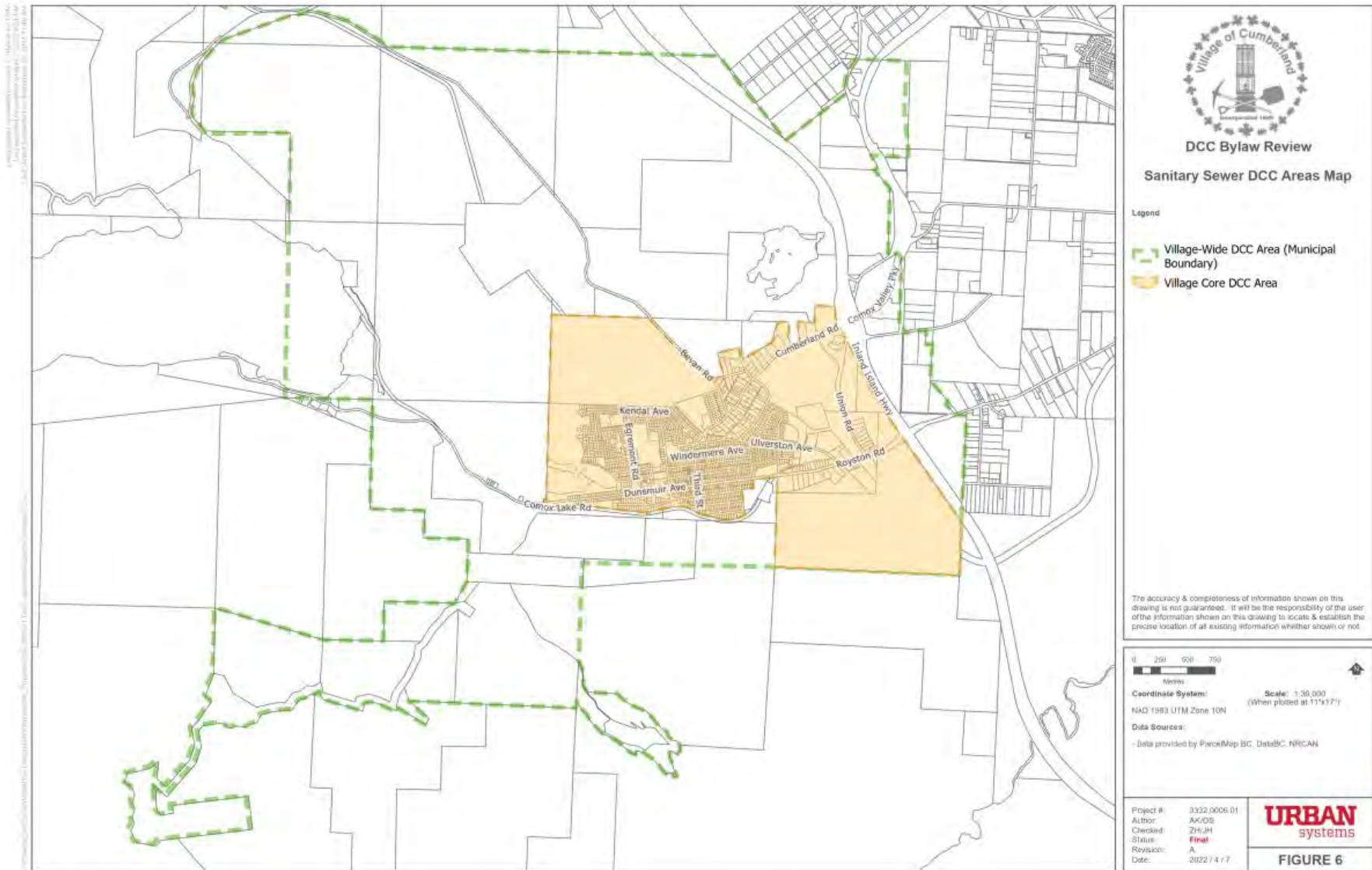




# Identify Works



# Identify Works



3

**Estimate  
Costs**

4

**Allocate Costs  
to Future  
Development**

Project No.	Description	Total Cost Estimate	Benefit Factor	Benefit to New Development
R1	Bike Lane - Bevan Rd Connector	\$832,360	75%	\$624,270
R2	Corridor Improvement - Bevan Rd	\$7,716,300	100%	\$7,716,300
R3	Corridor Improvement - Ulverston Ave	\$1,601,000	60%	\$960,600
R4	Corridor Improvement - Egremont St. (Dunsmuir Ave. to Ulverston Ave.)	\$1,224,058	50%	\$612,029
R5	Corridor Improvement - Cumberland Rd. (Union Rd. to 1st St.)	\$2,895,967	50%	\$683,824
R6	Corridor Improvement - Union Rd. (Royston Rd. to Public Works Yard)	\$1,568,000	60%	\$940,800
R7	Corridor Improvement - Dunsmuir Ave. (Egremont St. to 7 <sup>th</sup> St.)	\$3,408,842	50%	\$1,150,908
R8	Corridor Improvement - Dunsmuir Ave. (7 <sup>th</sup> St to Union Rd.)	\$2,826,000	50%	\$1,413,000
R9	Intersection Upgrade - Cumberland Rd. at Union Rd.	\$1,241,890	100%	\$1,241,890
R10	Intersection Upgrade - Cumberland Rd. at Bevan Rd.	\$1,241,890	100%	\$1,241,890
R11	Transportation Master Plan	\$200,000	50%	\$100,000
		<b>\$24,756,307</b>		<b>\$16,685,512</b>

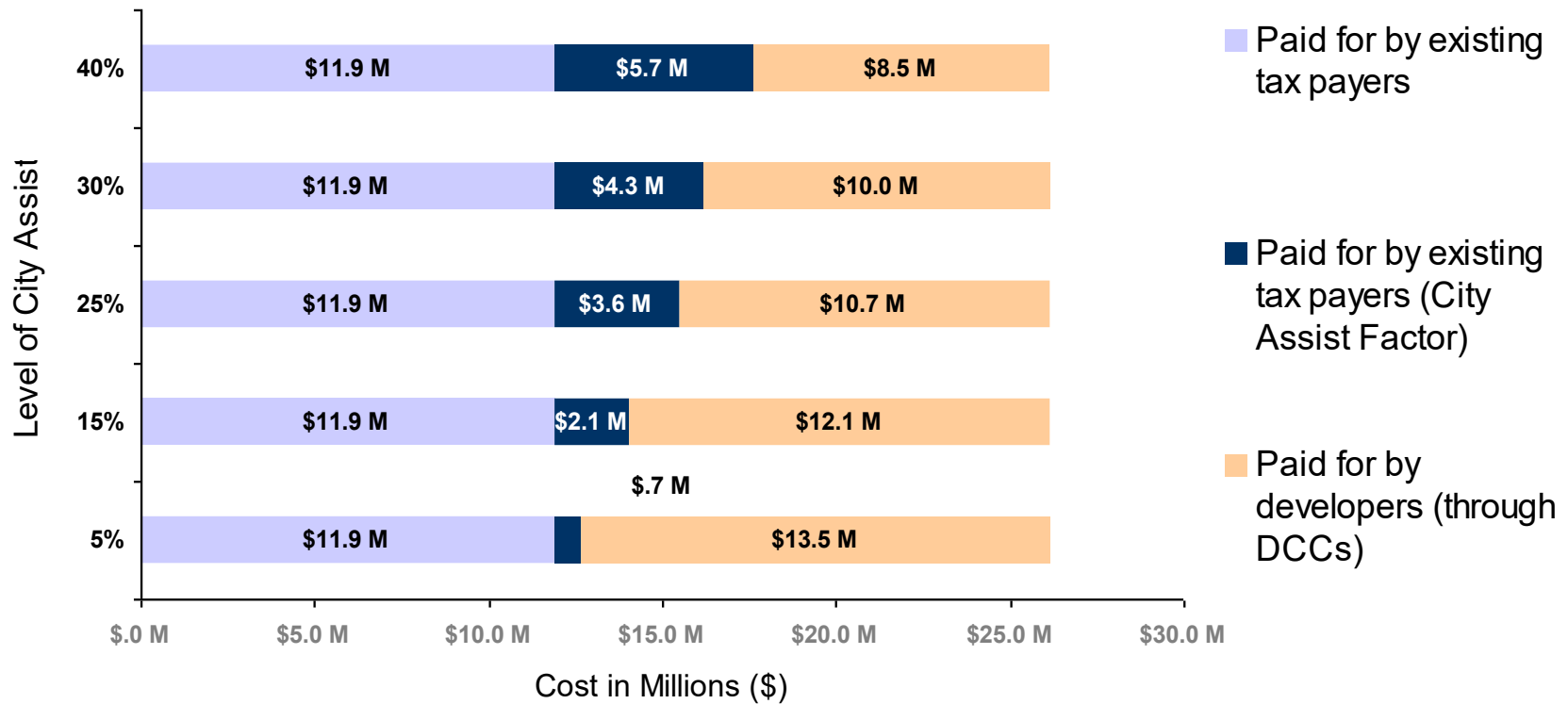


5

## Apply Municipal Assist Factor

# The Village of Cumberland's Current Municipal Assist Factor is the typical 1% minimum

## Example: City of Fort St. John DCCs

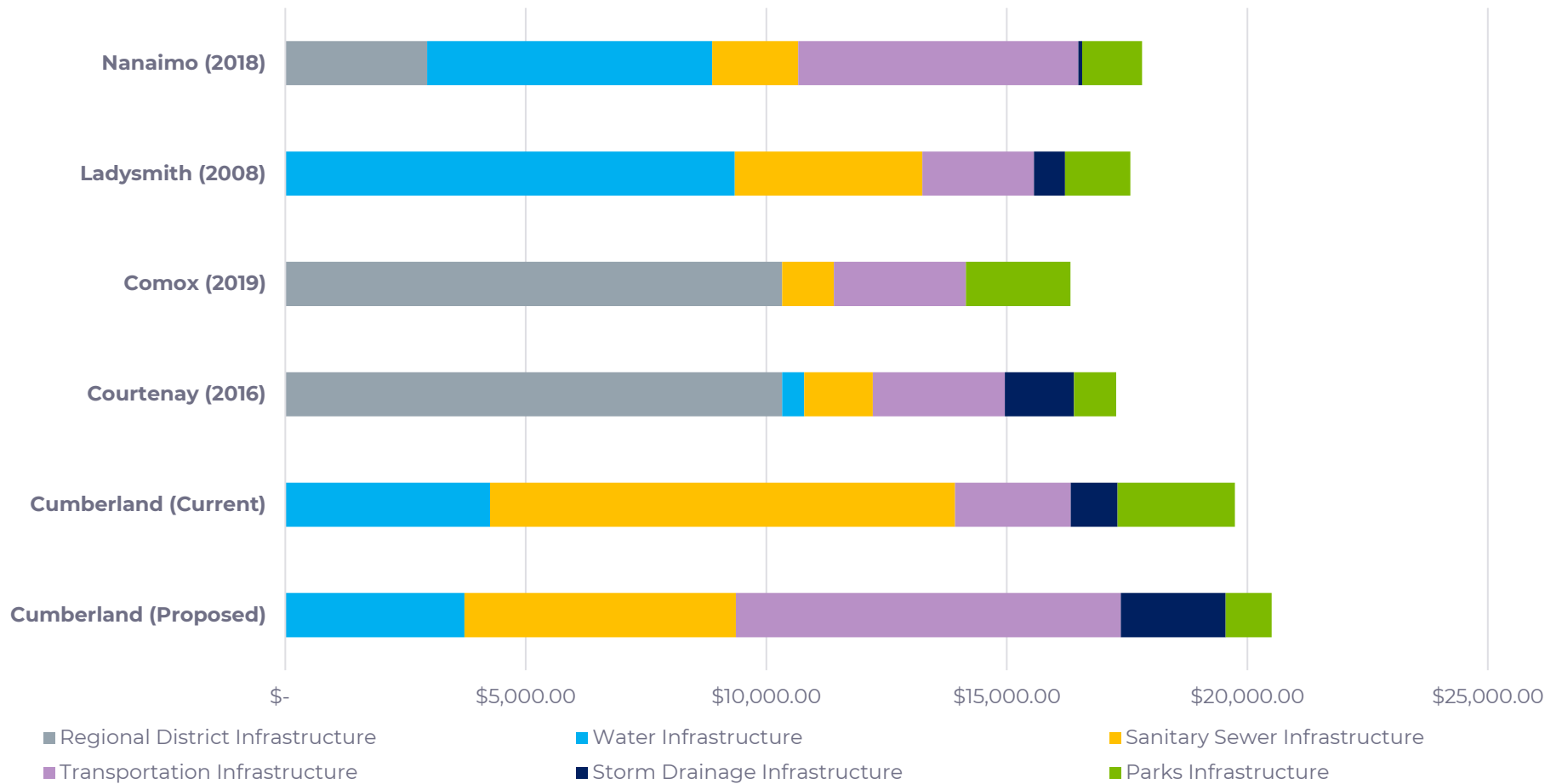


## DCC Rates

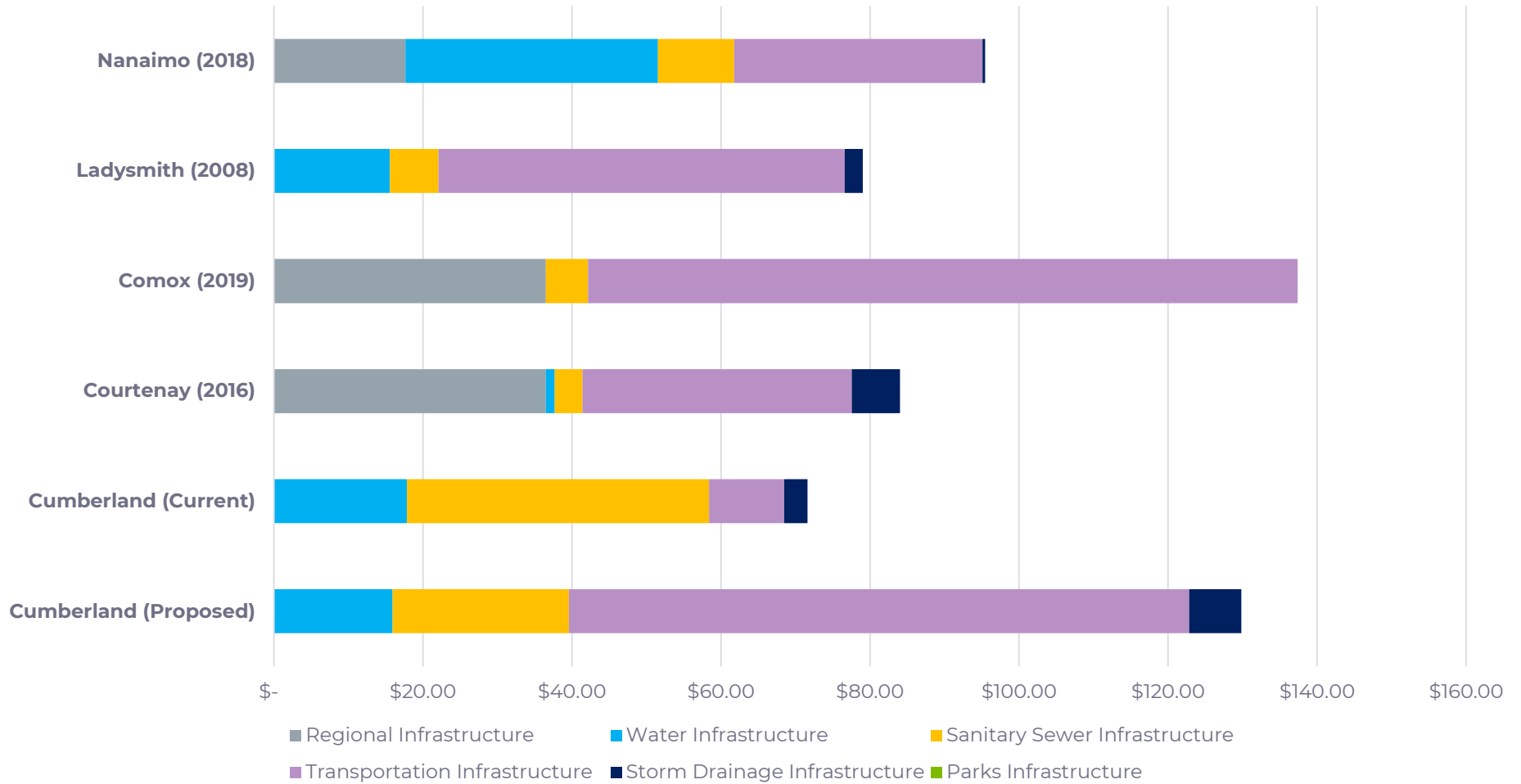
Land Use	Transportation	Water	Sanitary Sewer (Village-Wide)	Sanitary Sewer (Village-Core)	Storm Drainage	Parks	Total
<b>Low Density Residential</b> (per dwelling unit / lot)	\$8,007.00	\$3,725.07	\$1,296.73	\$5,640.17	\$2,178.74	\$954.42	\$21,801.12
<b>Medium Density Residential</b> (per dwelling unit)	\$3,524.29	\$3,004.09	\$1,044.95	\$4,548.52	\$1,176.52	\$769.69	\$14,068.06
<b>High Density Residential</b> (per dwelling unit)	\$3,524.29	\$2,403.27	\$835.95	\$3,638.82	\$718.98	\$615.75	\$11,737.07
<b>Commercial</b> (per m <sup>2</sup> of gross floor area)	\$83.28	\$15.62	\$5.43	\$23.65	\$6.97	--	\$134.96
<b>Industrial</b> (per ha of site utilized)	\$72,178.22	\$21,629.46	\$7,523.57	\$32,749.35	\$49,021.60	--	\$183,102.20
<b>Institutional</b> (per m <sup>2</sup> of gross floor area)	\$95.23	\$13.22	\$4.60	\$20.01	\$6.54	--	\$139.60



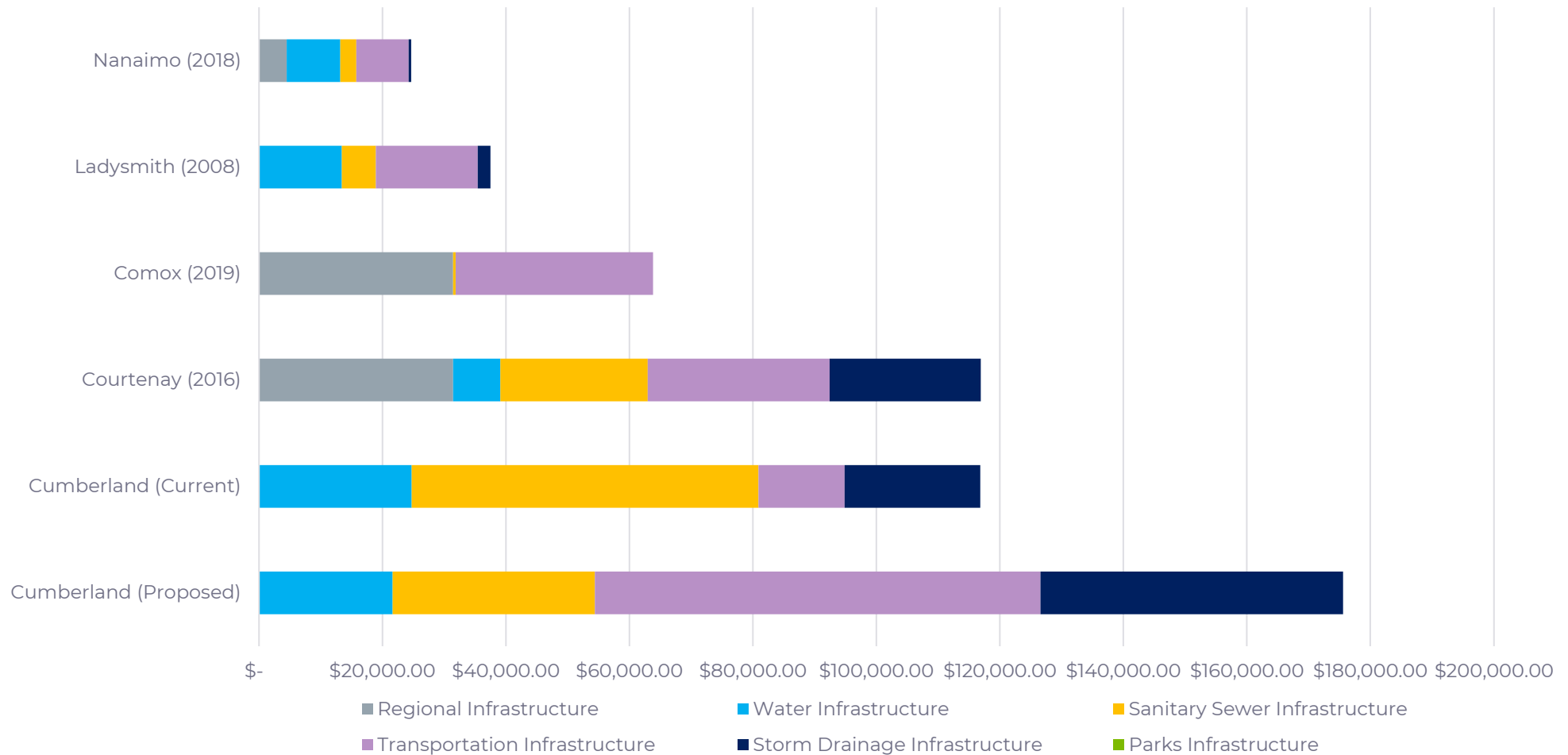
# Single Family Residential DCC: per dwelling unit



# Commercial DCC: per square meter



# Industrial DCC: \*per hectare

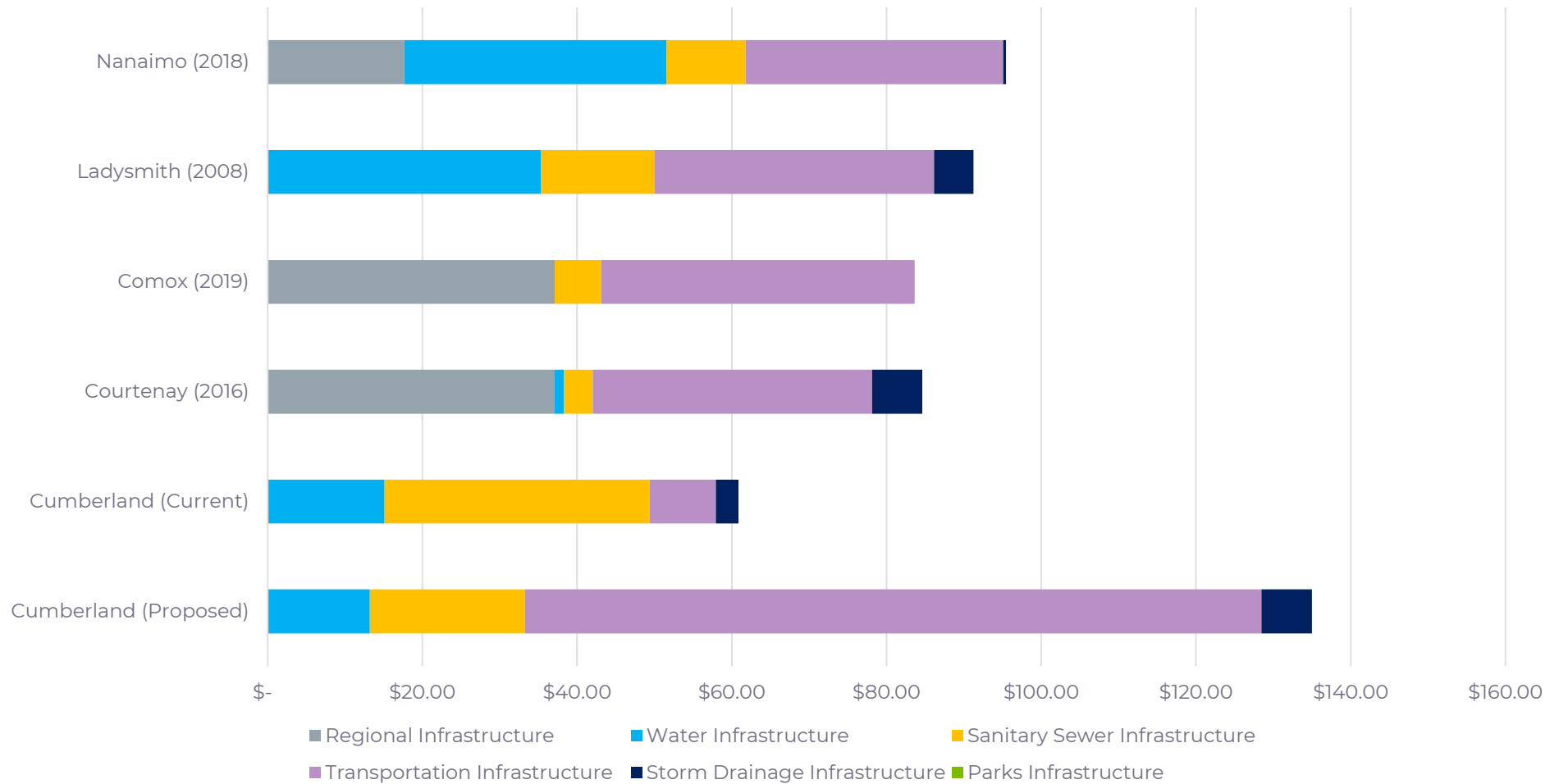


\*For hypothetical development with a 1 hectare site and a 1,000 square meter shop





# Institutional DCC: per square meter



# Key Policy Areas: Exemptions

The *Local Government Act* identifies conditions where DCC Exemptions apply, plus ones which can be varied by Council within the DCC Bylaw:

## **Required:**

- Buildings for public worship
- Where no new infrastructure is required to accommodate growth

## **Optional:**

- Building permits for under \$50,000 in value
- Residential units = or < 29m<sup>2</sup> in size
- Less than 4 units, i.e. duplex/triplexes



# Key Policy Areas: Waivers and Reductions (Permissive)

- Generally prohibited by LGA
- Only allowed for:
  - Not-for-profit or for-profit affordable rental housing, including supportive living
  - Housing designed for reduced environmental impact
- Foregone revenue must be made up by other sources
- Waivers can be implemented under separate bylaw that does not require Ministry Approval



# Key Policy Areas: In-Stream Protection and Grace Period

- Length of time offered as notification that new DCCs will be put into effect
- Granted as an acknowledgement of the impact DCCs may have on the development industry
- The Local Government Act requires that subdivision applications that are complete and application fees have been paid, be provided one-year grace period from the proposed DCC rates.
- The Village has not considered introducing a grace period in the new DCC Bylaw at this time



# Next Steps

1. **Refresher Workshop with Staff**
2. Update Background Report and Draft DCC Bylaw
3. **Workshop with Council**
4. Early Referral to Ministry
5. **Community and Stakeholder Engagement** ← **We are here**
6. Finalize Background Report and Checklist
7. **Presentation to Council**
8. Submit to Ministry for Approval
9. Prepare Bylaw for Adoption



**QUESTIONS or COMMENTS?**