



**VILLAGE OF BELCARRA
REGULAR COUNCIL AGENDA
Village Hall
July 24, 2023
7:00 PM**



*This meeting is live streamed and recorded by the Village of Belcarra
To view the meeting click: [Village of Belcarra - YouTube](#)*

We wish to acknowledge that this meeting is taking place on the unceded territory of the Coast Salish Peoples. Tum-Tumay-Whueton, or Belcarra, is home to an ancestral village of the Tsleil-Waututh Nation. We are thankful to conduct our work within their territory.

COUNCIL

Mayor Jamie Ross
Councillor Carolina Clark
Councillor Joe Elworthy
Councillor Janet Ruzycki
Councillor Liisa Wilder

1. CALL TO ORDER

Mayor Ross will call the meeting to order.

2. APPROVAL OF THE AGENDA

2.1 Regular Council Meeting, July 24, 2023

Recommendation:

That the agenda for the Regular Council Meeting, July 24, 2023 be approved as circulated.

3. ADOPTION OF MINUTES

3.1 Regular Council Meeting, July 10, 2023

Recommendation:

That the minutes from the Regular Council Meeting held July 10, 2023 be adopted.

4. DELEGATIONS AND PRESENTATIONS

4.1 Pat Dennett, Port Moody Alderside Road Citizen's Committee (ARC)

- Presentation on changes to the Port of Vancouver's Licensing Agreements for Waterfront Homeowners.

5. REPORTS

- 5.1** Paula Richardson, Chief Administrative Officer, report dated July 24, 2023 regarding Terms of Reference for the Village of Belcarra Integrated Long-Term (15-Year) Financial Plan & Related Community Financial Sustainability Report

Recommendation:

That the Terms of Reference for the Village of Belcarra Integrated Long-Term (15-Year) Financial Plan & Related Community Financial Sustainability Report forwarded from the July 17, 2023 Finance Standing Committee Meeting be approved.

- 5.2** Paula Richardson Chief Administrative Officer, report dated July 24, 2023 regarding budget variances for the period ending June 30, 2023.

Recommendation:

That the report titled "Budget Variance Report Based on Results to June 30, 2023" forwarded from the July 17, 2023 Finance Standing Committee Meeting be received into the record for information.

- 5.3** Paula Richardson, Chief Administrative Officer, report dated July 24, 2023 regarding the Watson Trail options.

Recommendation:

That staff be directed to proceed with one of the following options as described in the report dated July 24, 2023 to allow work to be carried out on the Watson Trail:

- Option 1 Minimal Changes to the Trail; **or**
- Option 2 Moderate changes to Watson Trail; **or**
- Option 3 Significant changes to Watson Trail.

- 5.4** Stewart Novak, Public Works & Emergency Preparedness Coordinator, report dated July 24, 2023 regarding the Tatlow Reservoir Project Progress Report

Recommendation:

That the report dated July 24, 2023 titled "Tatlow Reservoir Progress Report" be received into the record for information.

- 5.5** Stewart Novak, Public Works & Emergency Preparedness Coordinator, report dated July 24, 2023 regarding the status of the seismic sensor at the Tatlow Station

Recommendation:

That staff be directed to purchase and install a new seismic sensor for the Tatlow Station at an estimated cost of up to \$10,000.00 and that the strategic plan and capital budgets be amended accordingly.

6. REPORTS FROM MAYOR AND PROJECT LEADS**6.1 Mayor's Report**

Mayor Ross attended the following:

- BC Wildfire Service
- Situational Update Wildfire and Drought – Bowinn Ma Minister of Emergency Management and Climate Readiness – attended by Mayors & Chairs on July 13, 2023
- RCMP Decision made in Surrey – July 19, 2023 - B.C.'s Public Safety Minister Mike Farnworth said that the province is directing the City of Surrey to move forward with the transition to the Surrey Police Service.
- A tour hosted by the Western Canada Marine Response Corporation (WCMRC) of the new oil spill response base in Vancouver Harbour on July 12, 2023. Mayor Ross advised that shoreline protection training in Belcarra in Bedwell Bay is scheduled for July 21, 2023 and that there will be training taking place in Belcarra Narrows on July 31, 2023.
- Rotary Club Speaking engagement at the Coquitlam Sunrise Club – Rotary Graduate Scholarship – held on July 18, 2023

7. REPORT FROM CHIEF ADMINISTRATIVE OFFICER**8. BYLAWS**

No items

9. CORRESPONDENCE/PROCLAMATIONS**INFORMATION ITEMS****Recommendation:**

That the items in Section 9 – Correspondence/Proclamations – Information Items be received into the record as information.

- 9.1** Don Babineau, Belcarra Resident, e-mail dated July 6, 2023 regarding questions to Council pertaining to water required to fight fires in the Village of Belcarra.
- 9.2** George V. Harvie, Chair, Metro Vancouver Board, letter dated July 11, 2023 regarding a proposed land use designation amendment to *Metro 2050* for the City of Surrey for a site located at 11420 – 157A Stret in the City's Fraser Heights area. *(The full report is available for viewing at the Village office).*
- 9.3** Brian Hirsch, Belcarra Resident, e-mail dated July 14, 2023 regarding Council communication with Belcarra Residents and the Facebook groups Belcarra Oversight and Belcarra Together.

- 9.4 Sherry Chisholm, Belcarra Resident, e-mail dated July 12, 2023 regarding a letter from the Village of Anmore pertaining to a plan for a new firehall.
- 9.5 Sherry Chisholm, Belcarra Resident, e-mail dated July 15, 2023 regarding apparent conflicts of interest for the Mayor of the Village of Belcarra.

ACTION ITEMS

10. NEW BUSINESS

- 10.1 Motion by Councillor C. Clark (brought forward as a Notice of Motion at the July 10, 2023 Regular Council Meeting)

That staff be directed to provide a report on the feasibility of a Qualified Environmental Professional (QEP) assessment to guide decisions on requests for tree trimming along the Marine Avenue foreshore; and

That staff be directed to provide a report confirming the riparian zone area along Marine Avenue.

11. PUBLIC QUESTION PERIOD

12. ADJOURNMENT

Recommendation:

That the July 24, 2023 Regular Meeting be adjourned.



**VILLAGE OF BELCARRA
REGULAR COUNCIL MEETING MINUTES
July 10, 2023**



This meeting was held in Council Chambers and live streamed at
[Village of Belcarra - YouTube](#)

Council in Attendance

Mayor Jamie Ross
Councillor Carolina Clark
Councillor Joe Elworthy
Councillor Janet Ruzycki
Councillor Liisa Wilder

Staff in Attendance

Paula Richardson, Chief Administrative Officer
Stewart Novak, Public Works & Emergency Preparedness Coordinator
Connie Esposito, Accounting Clerk
Amanda Seibert, Corporate Officer/Recording Secretary

Others in Attendance

Barry Fan, P. Eng. Urban Systems

We wish to acknowledge that this meeting took place on the unceded territory of the Coast Salish peoples. Tum-Tumay-Whueton, or Belcarra, is home to an ancestral village of the Tseil-Waututh Nation. We are thankful to conduct our work within their territory.

1. CALL TO ORDER

Mayor Ross called the meeting to order at 7:01 pm

2. APPROVAL OF THE AGENDA

2.1 Regular Council Meeting, July 10, 2023

Moved by: Councillor Clark
Seconded by: Councillor Ruzycki

That the agenda for the Regular Council Meeting of July 10, 2023 be approved as circulated.

CARRIED

3. ADOPTION OF MINUTES**3.1 Special Council Meeting, June 19, 2023**

Moved by: Councillor Clark
Seconded by: Councillor Ruzycki

That the minutes from the Special Council Meeting held on June 19, 2023 be adopted as circulated.

CARRIED

3.2 Regular Council Meeting, June 19, 2023

Moved by: Councillor Ruzycki
Seconded by: Councillor Elworthy

That the minutes from the Regular Council Meeting held on June 19, 2023 be adopted as circulated.

CARRIED

4. DELEGATIONS AND PRESENTATIONS

Mayor Ross introduced and congratulated William Mostrenko, a young Belcarra resident who was awarded the Governor General's Academic Bronze Medal at the Heritage Woods Secondary School convocation ceremony. William has also been the recipient of numerous other awards including the 2023 HWSS Top String Orchestra Student Award, the HWSS Top Academic Grade 10 Student Award and the HWSS To All-Around Grade 11 Student award.

4.1 Urban Systems – Barry Fan, P. Eng

- Report and presentation on the Watson Trail Barrier Application Review

The Chief Administrative Officer introduced Barry Fan, P. Eng, Urban Systems representative. Mr. Fan provided a PowerPoint presentation on the Watson Trail which included the following:

- Project background and objectives
- Staff concerns
- Outline of the review process carried out by Urban Systems
- Existing conditions versus design criteria and best practice

He outlined the key findings of the review which included the following:

- Watson Trail is not considered a trail for all ages and abilities or universally accessible due to the extensive grade;
- Use of baffle gates is an appropriate trailhead entry feature to encourage cyclists to dismount;
- Watson Trail can be considered a 'trail connector' which may not be universally acceptable but can be suitable for more user types with some upgrades;

Mr. Fan spoke on potential options for work which can be done on the trail and costs associated with each option.

Council discussion ensued with questions for the presenter and staff. Options as presented were also discussed. The presenter and staff answered questions and provided clarification on concerns expressed.

The Mayor opened the floor to questions and comments from the public.

Debra Struk, Belcarra resident, commented on the grade of the Watson Trail and that she believed the water course in the ravine to be a salmon bearing stream. She felt that finer gravel was appropriate for use on the trail and indicated that she was not in favour of paving.

Joe Weber, Belcarra resident, expressed surprise at the hiring of a consultant. He also expressed concern with the opening up of the Watson Trail for people on mountain bikes and potential safety and liability issues. He spoke in favour of the use of crushed limestone to pack the trail.

Dave Warren, Belcarra resident, expressed that it is not unusual for a person to dismount prior to accessing bicycle paths. He felt baffles protect pedestrians and that it was not a hardship to request that bicycle users dismount.

Brian Hirsch, Belcarra resident, requested information on the cost of the study. He queried whether two trails were required and suggested that the whole trail network be reviewed as well as the expense of upgrading a short trail.

Jim Chisholm, Belcarra resident, queried as to the quote from the consultant prior to carrying out the work.

Mike Mostrenko, Belcarra resident, suggested that all signs should utilize universal symbols.

Council discussion continued pertaining to options for the Watson trail. A resolution was not made.

4.2 Ian Devlin, Belcarra Resident

- Presentation on the Tatlow Reservoir Water System

Mr. Devlin provided a presentation which included the following:

- Fire flow requirements and suggested updates to Belcarra Bylaw No. 456, 2012
- Water storage required as per the WSP modelling study report and the chlorination of the Tatlow Reserve to allow the minimum fill set-point to be raised
- Details on the potential chlorination of the Tatlow Reservoir to allow the minimum fill set-point to be raised
- Investigation of a water sprinkler system in the Village Hall

Council discussion ensued with members of Council requesting clarification and further information from Mr. Devlin and staff. Discussion also ensued on a disconnected seismic sensor attached to the tank.

The Mayor opened the floor to questions and comments from the public.

Castel Tuazon, Belcarra resident, queried how long the Tatlow reservoir had been at 65%. He surmised that the tank is designed to be full and felt chlorination would be a simple process.

Brian Hirsch, Belcarra resident, commented on the number of consultant reports pertaining to the Tatlow Reservoir, the Water Committee's analysis, and Mr. Devlin's presentation. He asked that Council make a decision on the reservoir.

John Snell, Belcarra resident, addressed his question to the presenter and requested clarification on the impact on the water levels of the Tatlow reservoir that adding a sprinkler system to the village hall will have. The presenter provided clarification.

Debra Struk, Belcarra resident, queried on the length of time it will take to do a life expectancy on the tank, who was doing that and what has been done to date.

The Public Works & Emergency Preparedness Coordinator provided an update of work done to date.

Debra Struk, Belcarra resident, asked when Council will pass a bylaw on fire flow.

The Chief Administrative Officer advised that a bylaw will have to be written and research will be required prior to such a bylaw being brought forward.

Klaus Bever, Belcarra resident, queried on the last time the Tatlow Tank was filled to 95% and how many times in the past few years has the tank been filled to 95%. He also asked whether WSP will provide an indication as to the safety of filling the tank to 95% and how long the tank can hold that fill level.

The Public Works & Emergency Preparedness Coordinator provided information on the fill levels of the tank and on the tank capacity to handle a 95% fill level.

Klaus Bever, Belcarra resident, referred to Mr. Devlin's presentation indicating that the tank should be at a 95% fill level along with a chlorination system. He expressed that as staff has also indicated the tank can hold a 95% fill rate that there is merit in installing a chlorination system as soon as possible.

Jim Chisholm, Belcarra resident, referred to past reports by Dayton and Knight and queried whether the same questions are being asked of WSP.

The Public Works & Emergency Preparedness Coordinator provided clarification on the studies carried out in the past and provided an outline of the process followed resulting from the studies.

Moved by: Councillor Elworthy

Seconded by: Councillor Clark

That a report be provided at the July 24, 2023 Regular Council Meeting outlining the progress on the issues of the life expectancy of the Tatlow Tank, the actual condition of the tank and an update on the security fencing being constructed around the tank currently.

CARRIED

- 5.1 Paula Richardson, Chief Administrative Officer, report dated July 10, 2023 regarding an update on parking in the Village of Belcarra.

The Chief Administrative Officer reviewed the staff report. She emphasized that residents are required to have permits to park on Belcarra streets.

Moved by: Councillor Clark

Seconded by: Councillor Elworthy

That the report dated July 10, 2023 regarding Parking Update be received into the record for information.

Council discussion ensued on current parking regulations, enforcement, and signage.

The Mayor opened the floor to questions and comments from the public.

Peter Boekhout, Belcarra resident, queried why the Bylaw Officer is driving the Village's one ton truck and not the Kubota.

The Public Works & Emergency Preparedness Coordinator advised this was due to a safety concern factor.

Debra Struk, Belcarra resident, advised that Deep Cove has many No Parking signs. She indicated that spots for resident parking were needed and expressed it was hoped persons from the Water Ski Club could connect to obtain guest passes. She spoke in favour of restrictions pertaining to parking within the Village.

Klaus Bever, Belcarra resident, reminded all that an operator of a motor vehicle is responsible for conducting behaviour with knowledge of rules. He spoke in favour of the current bylaw and expressed that traffic has been reduced and as a result the Village is a safer place.

Joe Weber, Belcarra resident, spoke in support of the current bylaw. He recommended that passes be stickers.

The Mayor called the question on the motion

CARRIED

6. REPORTS FROM MAYOR AND PROJECT LEADS

6.1 Mayor's Report

Mayor Ross attended the following:

- Joined Metro Vancouver Chair George Harvie and Vice Chair John McEwen at the Renaming of Colony Farm Regional Park – July 1, 2023
 - kwikwəłəm (Kwikwetlem) First Nation and Metro Vancouver announced that Colony Farm Regional Park has been renamed as łéxətəm Regional Park and Colony Farm Road has been renamed as łéxətəm Road. kwikwəłəm First Nation and their members selected the name łéxətəm (pronounced tla-hut-um)

which means "to be invited" in hə́nqə́mihə́m. The renaming is a positive step forward in a new relationship for kʷikwə́łəm First Nation and Metro Vancouver.

- Port Moody Canada Day Celebration – July 1, 2023
- Chaired the meeting of the TransLink Mayors' Council Small Communities Caucus: Anmore, Belcarra, Bowen Lions Bay, and Tsawwassen First Nation – June 29, 2023
- Interface Wildfire DPA Policy – B.A. Blackwell Open House – July 5, 2023
 - Bruce Blackwell of B.A. Blackwell & Associates provided a presentation on an Interface Wildfire DPA Policy for public consultation
- Port Coquitlam Community Foundation – Croquet for Community – July 6, 2023

Mayor Ross declared a Conflict of Interest as follows:

"I am declaring a Conflict of Interest and am recusing myself from this Council meeting noting that I am not entitled to participate in the discussion of the matter, or to vote on the matter, because of a direct pecuniary interest in the matter. I am a director and a member of a Group Wharf Association and one that is the subject of legal action.

I am now recusing myself."

Mayor Ross left the meeting at 9:31 pm

Deputy Mayor Ruzycki assumed the Chair.

6.2 Councillors' Reports

Councillor Ruzycki attended the Vancouver Port Mayors' Committee Meeting and reported on the various activities and issues discussed at the meeting.

7. REPORT FROM CHIEF ADMINISTRATIVE OFFICER

The Chief Administrative Officer provided an update on the status of the draft Official Community Plan (OCP). She advised that the Village received a 24-page Metro 2050 implementation guide which was completed and returned to Metro Vancouver and that the document has been forwarded to legal counsel for review. She reported that due to this work being necessary, the draft OCP will not become available for Council review until September.

Brian Hirsch, Belcara resident, queried whether it is possible to invite the Port Authority to a Council meeting.

Staff will reach out to the Port Authority.

Mayor Ross returned to the meeting at 9:39 pm and assumed the Chair.

The Chief Administrative Officer advised that a meeting of the Finance Standing Committee is scheduled for July 17, 2023. She also advised that as this is a committee meeting, the public is invited to attend, however, there will be no public participation during the meeting.

The Chief Administrative Officer advised that a \$25,000 grant was awarded to the Village of Belcarra for work to be carried out on the development of a long-term asset management plan.

8. BYLAWS

8.1 Village of Belcarra Financial Plan Bylaw No. 606, 2023, Amendment Bylaw No. 613, 2023

To amend the 5-Year Financial Plan for the years 2023 – 2027 in order to provide funding necessary to achieve Council's Strategic Plan and related Work Plan.

Moved by: Councillor Clark
Seconded by: Councillor Elworthy

That the Village of Belcarra 5-Year (2023 – 2027) Financial Plan Bylaw No. 606, 2023, Amendment Bylaw No. 613, 2023 be adopted.

CARRIED

9. CORRESPONDENCE/PROCLAMATIONS

ACTION ITEMS

9.1 Mayor D. Brodie, City of Richmond, letter dated May 25, 2023, regarding changes in provincial legislation need to address gas utilities in British Columbia and requesting that a letter be sent to the Province asking the government to reform the BC Utilities Commission (BCUC) and enact legislation to regulate greenhouse gas emissions from gas utilities in BC.

Mayor Ross reviewed the documents forwarded by the Mayor of Richmond to reduce greenhouse gas emissions and regulations around rejecting the use of RNG and hydrogen in new construction to meet GHC limits.

Moved by: Councillor Ruzycki
Seconded by: Councillor Elworthy

That the letter dated May 25, 2023 from Mayor D. Brodie, City of Richmond regarding changes in provincial legislation to address gas utilities in British Columbia be received into the record for information only.

CARRIED

- 9.2 Randy Manhas, Secretary-Treasurer/CFO, School District No. 43 – Coquitlam, letter dated June 22, 2023 regarding the resolution passed by the Board of Education pertaining to the District's 2023 Eligible Schools Sites Proposal.

Moved by: Councillor Clark

Seconded by: Councillor Elworthy

That the School District No. 43 (Coquitlam) Board resolution for proposed eligible school site requirements be accepted.

CARRIED

INFORMATION ITEMS

- 9.3 Ingrid Taylor, Executive Medical Director, Population and Public Health, Fraser Health, letter dated June 8, 2023 regarding community preparedness for hot and smoky periods during summer 2023.
- 9.4 Klaus Bever, Belcarra resident, email dated June 8, 2023 regarding a follow up to a Council motion made in 2022 on a response to a ICBC Safety Review presentation.
- 9.5 Christine Trefanenko, Manager, Project Emergency Management, email dated June 14, 2023 regarding the Trans Mountain Expansion Project Report titled "Fate & Behaviour Bitumen Research (BC EAO Condition 35) – Local Coastal Governments."
- 9.6 Trans Mountain Construction Notice, notice for the month of June 2023, regarding an update on the Westridge Marine Terminal Construction as part of the Trans Mountain Expansion Project.
- 9.7 Paul Horn, Mayor, City of Mission, letter dated June 16, 2023, regarding a recent decision made by the RCMP to reduce the role of Highway Patrol in responding to traffic collisions on numbered Provincial highways.
- 9.8 Joel Johnston, Belcarra resident, email dated June 19, 2023, regarding requests to trim and potentially remove tress along the waterfront on Marine Avenue directly.
- 9.9 Ian Devlin, Belcarra resident, email dated June 20, 2023, regarding a Council discussion on a financial plan amendment relating to the Village of Belcarra water system.
- 9.10 Ralph Drew, Belcarra resident, email dated June 23, 2023 regarding statements made on the Village of Belcarra's water main flushing program.
- 9.11 Gwen Chute, Belcarra resident, letter dated June 26, 2023, expressing support for a neighbouring property owner's concern with the impact of water run-off on their property as well as adjacent properties.
- 9.12 George V. Harvie, Chair, Metro Vancouver Board, letter dated June 27, 2023 regarding a proposed land use designation amendment to *Metro 2050* for the Township of Langley for property at 23699 and 23737 Fraser Highway. *(The full report is available for viewing at the Village office).*

- 9.13** Leslie Kellett, Deputy Corporate Officer, City of Prince George, email dated June 28, 2023 regarding a resolution to be submitted to the 2023 UBCM Convention and shared with UBCM member municipalities titled “Reimbursing Local Governments for Medical Services Provided by Local Government Fire and Rescue Services”.

Moved by: Councillor Clark
Seconded by: Councillor Ruzycki

That Items 9.11 and 9.13 be moved to Section 9 – Correspondence/Proclamations – Action Items for discussion.

CARRIED

Moved by: Councillor Clark
Seconded by: Councillor Elworthy

That correspondence Items 9.3 to 9.10 and Item 9.12 be received into the record for information.

CARRIED

Note Items 9.11 and 9.13 will be dealt with as Action Items.

- 9.11** Gwen Chute, Belcarra resident, letter dated June 26, 2023, expressing support for a neighbouring property owner’s concern with the impact of water run-off on their property as well as adjacent properties.

Council discussion ensued on the concerns of the resident and it was requested that further information be provided.

Moved by: Councillor Clark
Seconded by: Councillor Ruzycki

That the letter dated June 26, 2023 from Gwen Chute, Belcarra resident, be referred to Public Works staff and that a report be provided to a Regular Council Meeting in September 2023 on the resident’s concerns pertaining to water impact in conjunction with a report on the Kelly Road construction.

CARRIED

- 9.13** Leslie Kellett, Deputy Corporate Officer, City of Prince George, email dated June 28, 2023 regarding a resolution to be submitted to the 2023 UBCM Convention and shared with UBCM member municipalities titled “Reimbursing Local Governments for Medical Services Provided by Local Government Fire and Rescue Services”.

Moved by: Councillor Ruzycki
Seconded by: Councillor Clark

That a resolution to be submitted to the 2023 UBCM Convention and shared with UBCM member municipalities titled “Reimbursing Local Governments for Medical Services Provided by Local Government Fire and Rescue Services” be supported at the UBCM convention.

Council discussion ensued on the ramifications of a Council motion committing individual Councillors to supporting a motion brought forward at UBCM.

The motion was withdrawn through unanimous consent.

Moved by: Councillor Clark

Seconded by: Councillor Ruzycki

That the email dated June 28, 2023 from Leslie Kellett, Deputy Corporate Officer, City of Prince George regarding a resolution to be submitted to the 2023 UBCM Convention and shared with UBCM member municipalities titled “Reimbursing Local Governments for Medical Services Provided by Local Government Fire and Rescue Services” be received into the record for information.

CARRIED

10. NEW BUSINESS

Notice of Motion

Councillor Clark advised that she will be bringing a motion forward to the July 24, 2023 Regular Council Meeting requesting a staff report based on Correspondence Item 9.8 and the intended use of the tree bylaw.

11. PUBLIC QUESTION PERIOD

John Snell, Belcarra resident, put forward two questions. The first question was whether an option to do nothing on the Watson Trail was a consideration. The second question was the impact on the financial plan as adopted should Council decide to fast track a sprinkler system for the Village Hall.

The Chief Administrative Officer advised on amendments which can be made to the financial plan.

Debra Struk, Belcarra resident, queried whether Council can consider a bylaw prohibiting smoking in public places and referred to other municipalities which have put such a bylaw in place. She expressed concern with persons coming out of the park and smoking at the edge of Bedwell Bay Road. She asked if buckets allowing smokers to put out cigarettes could be put out.

The Chief Administrative Officer will report back on the issue of containers and advised that queries have been sent to legal counsel on a smoking bylaw.

Jim Chisholm, Belcarra resident, queried why a letter from Anmore was not on the agenda and when the Village of Belcarra plans to address the timeline and intent related to the Sasamat Fire Hall and its construction.

The Chief Administrative Officer advised that matter has been referred to legal counsel.

Brian Hirsch, Belcarra resident, requested a copy of the Letters Patent concerning the Fire Department. The Chief Administrative Officer will confirm with legal counsel.

12. ADJOURNMENT

Moved by: Councillor Clark
Seconded by: Councillor Wilder

That the July 10, 2023 Regular Council Meeting be adjourned at 10:36 pm

CARRIED

Certified Correct:

Jamie Ross
Mayor

Paula Richardson
Chief Administrative Officer



COUNCIL MEETING

Date: July 24, 2023

From: Paula Richardson, Chief Administrative Officer

Subject: Terms of Reference Village of Belcarra Integrated Long-Term (15-Year) Financial Plan & Related Community Financial Sustainability Report

Recommendations:

That the Terms of Reference for the Village of Belcarra Integrated Long-Term (15-Year) Financial Plan & Related Community Financial Sustainability Report forwarded from the July 17, 2023, Finance Standing Committee Meeting be approved.

Purpose:

To present a report provided to the Finance Standing Committee regarding a long-term financial plan and financial sustainability report.

Background:

The attached report was presented to the Finance Standing Committee on July 17, 2023. The Committee recommended that the report be forwarded to the July 24, 2024 Regular Council Meeting and that the Terms of Reference for the Village of Belcarra Integrated Long-Term (15 Year) Financial Plan & Related Community Financial Sustainability Report be approved by Council.

Attachment

- Report dated July 17, 2023 titled "Terms of Reference Village of Belcarra Integrated Long-Term (15-Year) Financial Plan & Related Community Financial Sustainability Report"



FINANCE STANDING COMMITTEE REPORT

Date: July 17, 2023

From: Ken Bjorgaard, Financial Consultant

Subject: Terms of Reference Village of Belcarra Integrated Long-Term (15-Year) Financial Plan & Related Community Financial Sustainability Report

Recommendations:

That the report on the Terms of Reference Village of Belcarra Integrated Long-Term (15-Year) Financial Plan & Related Community Financial Sustainability be forwarded to the July 24, 2023 Regular Council Meeting; and further

That the Finance Standing Committee recommend that the Terms of Reference for the Village of Belcarra Integrated Long-Term (15-Year) Financial Plan & Related Community Financial Sustainability Report be approved by Council.

Purpose:

This report provides the Terms of Reference for the Village of Belcarra Integrated Long-Term (15-Year) Financial Plan & Related Community Financial Sustainability Report (Project or Terms of Reference), for the Finance Standing Committee's consideration.

Background:

In Council's recently adopted strategic work plan the following goals or action items were identified:

- Create long-term (15 years) financial planning model with integration to infrastructure and capital plans (based on asset management results)
- Produce report for Council and community based on long-term financial plan which also addresses financial sustainability

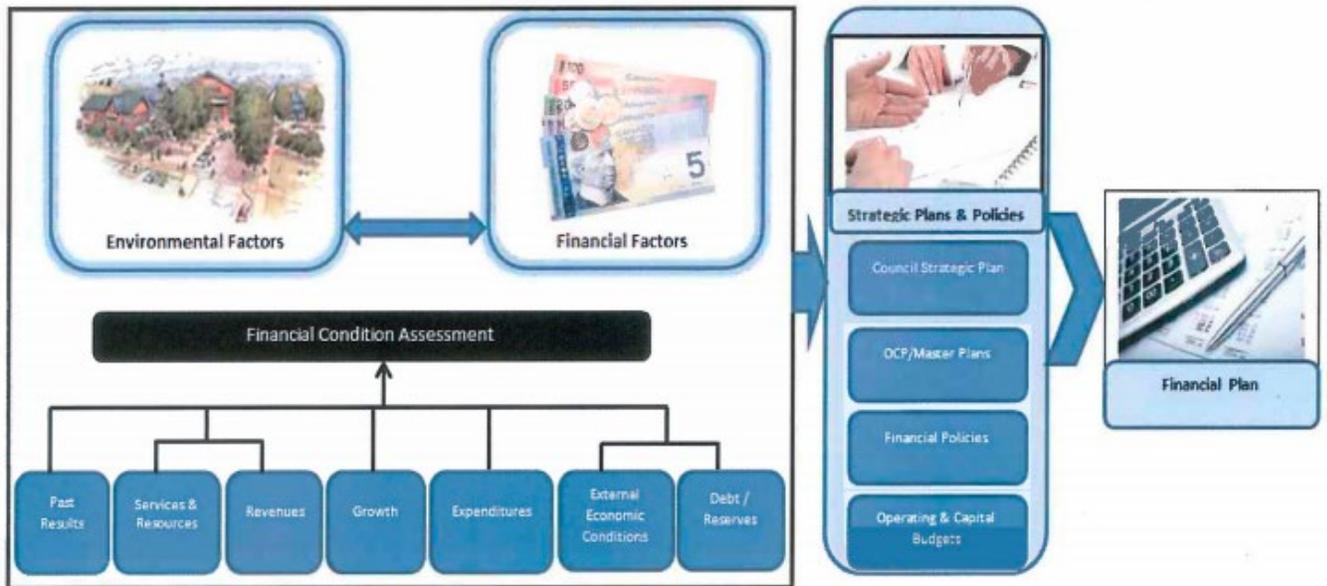
To accomplish the above goals a Terms of Reference (attached Appendix "A") has been drafted.

Discussion:

It is important that everyone has a common understanding as to what will be achieved with the Village’s Integrated Long-Term (15-Year) Financial Plan (Long-Term Financial Plan or Long-Term Plan) & Related Community Financial Sustainability Report (Sustainability Report), including the limitations of long-term financial planning, so that expectations are met and value for money is achieved.

The Project will encompass two phases, the actual Long-Term Plan and the Sustainability Report. The factors, strategies and policies, as shown in the graphic below, will be considered in developing the Long-Term Plan. Many of these items are based on best estimates and related assumptions including estimates and assumptions around growth or development, as guided by the official community plan (OCP). Five (5) strategic focus areas, those being: revenue sources, infrastructure & asset investments, reserves & surpluses, debt management and operating costs, together with guiding tenets in each of these areas, will be used as the basis for developing the Long-Term Plan. Based on the many variables involved, including different development and growth projections, different Long-Term Plan scenarios will be produced.

Financial Plan Model



The Sustainability Report will present the summarized Long-Term Plan results together with key financial indicators (sustainability, viability and flexibility) that can be used to gauge the Village’s progress towards financial sustainability. Key policy recommendations will also be provided in the Sustainability Report which can be considered as a means of improving financial sustainability and fiscal management.

The Village Long-Term Financial Plan should not be considered an end point in that the financial plan and related model will have to be used as an evolving tool that is updated as new or better data/information becomes available including asset management information on the condition, life expectancy and replacement cost of infrastructure/assets. The Long-Term Financial plan is highly dependent upon this asset management information (see Funding below) and as such the Long-Term Plan will have to evolve with new and/or better infrastructure/asset data.

Funding:

The UBCM recently approved grant funding for the Village's project titled "Development of an Integrated Long-Term Financial/Asset Management Plan" in the amount of \$25,000.00, with the total budget being \$50,000.00 (50% funded by the Village). This project has three (3) components as follows:

- Activity 1: Completion of Detailed Asset Management Plan
- Activity 2: Completion of Condition Assessment Framework
- Activity 3: Completion of Long-Term Financial Plan

The Long-Term Financial Plan component will provide some funding for the development of the Long-Term Plan and the other grant funding will be used to partially offset the cost of producing the Asset Management Plan and Condition Assessment Framework which will include a detailed GIS integrated asset inventory with asset attributes that enable staff to analyze and report on the condition, life expectancy, replacement cost as well as the probability and consequence of failure of assets. The asset data/information and condition assessments are essential to producing a credible Long-Term Financial Plan.

Council also recently approved a \$20,000.00 financial plan amendment for the "Long-Term (minimum 15-year time horizon) Financial Planning Model & Report on Financial Sustainability" funded from the Community Building Fund. In addition, the Village's existing 2023 financial plan includes \$30,000.00 of funding from the Community Building Fund to complete a review and to undertake field work related to providing a breakdown of asset components (including remaining useful lives) and to updating the GIS system accordingly. The \$30,000.00 is also supposed to be used to complete a 5-year condition assessment schedule for assessing key assets and to complete annual condition assessments.

After finalizing the estimated costs/budgets for all facets of this comprehensive project, including the Sustainability Report and the recently approved UBCM grant funding, a further financial plan amendment will be brought forward, which may include a reduction in the Village's overall contribution.

Strategic Work Plan Implications:

The attached Term of Reference addresses two (2) of Council's key strategic priorities as follows:

- Create long-term (15 years) financial planning model with integration to infrastructure and capital plans (based on asset management results)
- Produce report for Council and community based on long-term financial plan which also addresses financial sustainability

Attachment:

- Appendix "A" – Terms of Reference Village of Belcarra Integrated Long-Term (15-Year) Financial Plan & Related Community Financial Sustainability Report

Appendix “A” - Draft Terms of Reference
Village of Belcarra Integrated Long-Term (15-Year) Financial Plan & Related
Community Financial Sustainability Report

1. Background

In Council’s recently adopted strategic work plan the following goals or action items were identified:

- Create long-term (15 years) financial planning model with integration to infrastructure and capital plans (based on asset management results)
- Produce report for Council and community based on long-term financial plan which also addresses financial sustainability

In short, the Village of Belcarra wishes to develop a long-term financial plan to serve as a roadmap to financial sustainability, which means:

A financially sustainable organization that can adequately cover its operating costs, maintain in good repair its existing assets, replace assets where appropriate, fund future growth and service improvements, and plan for external impacts such as inflation, changes in technology, etc., to the extent possible, all funded over an appropriate period of time with stable and incremental revenues.

2. Purpose of Terms of Reference

It is important that Council, staff, the Village’s financial consultant and the community have a common understanding as to what will be achieved and will not be achieved with the Village’s Integrated Long-Term (15-Year) Financial Plan & Related Community Financial Sustainability Report (Project). The purpose of this Terms of Reference is to ensure that everyone has a common understanding of the goals and intended outcomes of this Project so that expectations are met and value for money is achieved.

3. Purpose of Long-Term Financial Plan

Once completed, the Village’s Integrated Long-Term (15-year) Financial Plan (Long-Term Financial Plan or Long-Term Plan) will serve as a conceptual framework or model for guiding decision making within the Village. To be successful the Long-Term Plan will have to address the challenges associate with the allocation of limited resources, public expectations around services, competing priorities and the need for affordability from taxpayer’s and rate payer’s perspectives.

The Village of Belcarra is not unique, in that like other local governments it has to fund programs and services with limited funding, while addressing rising costs, increased service responsibilities and aging infrastructure. Therefore, long-term financial planning and prioritization is critical to ensuring ongoing sustainability. By developing a Long-Term Financial Plan, Council will be able to strategically allocate scarce resources in a cost-effective manner with the overall goal being to keep the Village in a sound financial position and on a sustainable financial track in terms of providing services and amenities to its citizens.

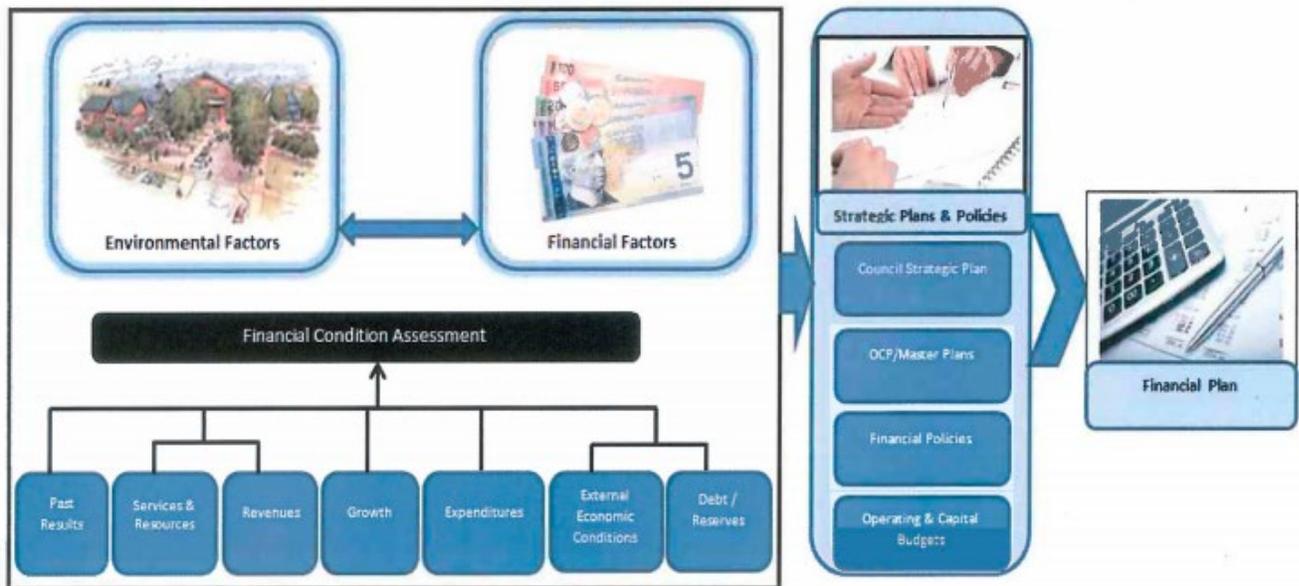
4. Financial Plan Model

There are many environmental and financial factors that go into developing a Long-Term Financial Plan, together with other strategic plans and policies, as highlighted in the diagram below. Many of these items are based on best estimates and related assumptions including estimates and assumptions around growth or development, as guided by the official community plan (OCP).

There are also other important documents or plans that inform and guide the Long-Term Financial Plan including Council's strategic plan and the Village's various infrastructure and asset plans. In this regard, the information or data about the Villages assets, as determined through asset management, is all-important and needs to be reflected in the Long-Term Plan.

In order to account for all of the variables and related assumptions that feed into the Village's Long-Term Plan, the financial plan model will have to be flexible enough to produce different scenarios based on changing factors and assumptions including different growth or development rates and scenarios. All variables and assumptions will be clearly stated in the Long-Term Financial Plan scenarios.

Financial Plan Model



5. Key Strategies and Tenants

It is important to understand and agree upon the underlying strategies and tenants that will form the basis for the Village's Long-Term Financial Plan. The five (5) strategic focus areas are: **revenue sources, infrastructure & asset investments, reserves & surpluses, debt management and operating costs.** These strategic areas and their associated tenants are explained below.

Revenue Sources

The purpose of this strategic focus area is to provide guidance for decisions related to the Village's planned revenue mix. Diversity and expansion of sustainable revenue streams will improve the balance between property taxes and other available revenue sources.

Property taxation, the largest of the Village's revenue sources, is an involuntary form of revenue generation. Property taxes are not necessarily related to specific services. User fees, on the other hand, typically generate revenue only when users consume a specific good or service. Grants from senior levels of government are usually, though not always, tied to specific operations or projects. Each of these revenue sources have their own strengths and weaknesses, depending on the nature of the service or project being funded.

Guiding Tenets

- those who receive direct benefits from a good or service should pay for that good or service according to the level or value of the benefit received;
- the full cost of providing a good or service should be the starting point when calculating user fees;
- in cases where groups of individuals may lack the resources required to consume Village goods and services, the Village may choose to provide a subsidy;
- the nature of a funding source should be considered to determine the appropriateness in funding a particular service or project, with the goal of matching limited funding sources with one-time or limited duration projects and matching ongoing funding sources with ongoing expenditures; and
- leveraging external funding sources and opportunities should be a priority.

Infrastructure & Asset Investments

The purpose of this strategic focus area is to guide decisions related to the Village's infrastructure and assets and to ensure long-term planning commits adequate funds to build, maintain, renew and protect the Village's infrastructure/assets, and to ensure that infrastructure/assets continue to meet the needs of the community.

Guiding Tenets

- infrastructure/assets should be environmentally and economically sustainable;
- infrastructure/assets are a capital investment and must be responsibility managed;
- there needs to be a systematic and predictable method of budgeting for the renewal and replacement funding for infrastructure/assets;
- infrastructure/assets must be maintained in a condition that enables them to perform their intended functions;
- a priority should be placed on funding the maintenance, renewal and replacement of existing infrastructure/assets before funding new assets/infrastructure; and
- infrastructure programs should support the values and objectives contained in plans and priorities approved by Council.

Reserves & Surpluses

The purpose of this strategic focus area is to provide guidance for decisions related to the Village's planned reserve fund and surplus strategy. Reserves and surpluses are a critical component of a local government's long-term financial strategy and related sustainability, as they provide flexibility, and minimize the Village's vulnerability and annual financial burden for taxpayers and rate payers. Investment and financing decisions aim to minimize risk and financial uncertainty for taxpayers/rate payers and reserves are an excellent way for achieving these aims. Reserves and surplus levels also provide local governments with the flexibility to adapt to opportunities and changing circumstances.

Guiding Tenets

- maintain adequate levels of reserves and surpluses to achieve financial stability for taxpayers and rate payers, including provision to fund emergency expenditures;
- build and maintain reserves to fund major planned and/or unforeseen expenditures;
- provide for stabilization in terms of fluctuations in operating and capital activities including offsetting cyclical and volatile revenues and expenditures;
- build up reserves to serve as internal financing and funding sources and to thus minimize external debt;
- reserves and surpluses should not be used to fund ongoing operating expenditures; and
- ensure adequate reserve levels to fund renewal and replacement of infrastructure/assets.

Debt Management

The purpose of this strategic focus area is to provide guidance for decisions related to managing the Village's debt. The prudent use of a debt management policy is a fundamental component of financial management which supports financial discipline and stability.

Guiding Tenets

- pay as you go funding and internal reserve financing is preferable to external debt;
- any debt should not impact long-term financial flexibility and should limit financial risk exposure;
- any debt should minimize the long-term cost of financing;
- debt should never be used to pay for operations;
- debt may be used to moderate significant tax or rate increases;
- debt levels should be managed to minimize the impact of debt servicing costs on taxpayers; and
- the term of the debt financing should not exceed the anticipated useful life of the underlying assets or infrastructure.

Operating Costs

The purpose of this strategic focus area is to provide guidance for decisions related to the Village's planned operating costs with the overall goal being to manage expenditures through efficiency gains and continuous improvement.

Guiding Tenets

- deliver core services efficiently and effectively ensuring value for money and the transparent stewardship of public funds;
- promote, establish, maintain and explore programs and facilities that encourage the use of alternative models and levels of delivery of services through continuous improvement;

- leverage external investments as much as possible (e.g. gas tax grants);
- match one-time or limited duration operating expenses with limited funding sources and match ongoing operating expenses with ongoing funding sources; and
- regularly review municipal expenditures in the context of inflationary increases.

Collectively the above strategies and tenets will guide the development of the Village's Long-Term Financial Plan and will form the basis for determining the level of investment that can be confidently sustained into the future.

6. Financial Plan Limitations

The Village's Long-Term Financial Plan is not an end point in that the Long-Term Plan and model will have to be used as an evolving tool that is updated as new or better data/information becomes available. In this regard, the Long-Term Plan is highly dependent upon information obtained through asset management including the condition, life expectancy and replacement cost of infrastructure/assets. As the Village's infrastructure/asset data and information evolves so will the Long-Term Plan.

7. Community Financial Sustainability Report

As part of Project deliverables, a Financial Sustainability Report will be prepared for Council and the community that incorporates the summarized Long-Term Financial Plan results together with key financial indicators (sustainability, viability and flexibility) which will be used to determine the Village's financial performance and position in comparison to benchmarks. These financial indicators, as explained below, can also be used on an ongoing basis to gauge and reflect on the Village's performance and progress in its financial sustainability journey.

- **Sustainability** - the degree to which the Village can deliver services and meet its financial commitments without increasing its debt or tax burden relative to the economy in which it operates.
- **Flexibility** - reflects the Village's ability to increase its available sources of funding (taxes, user fees, etc.) to meet increasing costs with particular attention to non-property tax based revenues. Local governments with relatively high flexibility have the potential to absorb cost increases without adversely impacting affordability for local residents and other ratepayers. On the other hand, local governments with low levels of flexibility have limited options with respect to generating new non-property tax based revenues, requiring an increased focus on expenditure reduction strategies.
- **Vulnerability** - represents the extent to which the Village is dependent on sources of revenues, predominantly grants from senior levels of government, over which it has no discretion or control. The determination of vulnerability considers: (i) unconditional operating grants; (ii) conditional operating grants; and (iii) capital grant programs. Local governments with relatively high indicators of vulnerability are at risk of expenditure reductions or taxation and user fee increases in the event that senior levels of funding are reduced. This is particularly relevant for local governments that are vulnerable with respect to operating grants from senior levels of government, as legislation does not allow local governments to issue long-term debt for operating purposes.

As a means of reporting the Village's financial condition, the financial sustainability report will consider various factors within each of the financial indicators. Examples of various factors that may be considered are as follows:

Sustainability

- Financial assets to financial liabilities
- Total reserves and reserve funds per household
- Total operating expenses as a percentage of taxable assessment
- Capital additions as a percentage of amortization expense

Flexibility

- Residential taxes per household
- Total long-term debt per household
- Residential taxation as a percentage of average household income
- Total taxation as a percentage of total assessment
- Debt servicing costs (interest and principal) as a percentage of total revenues
- Net book value of tangible capital assets as a percentage of historical cost of tangible capital assets

Vulnerability

- Operating grants as a percentage of total revenues
- Capital grants as a percentage of total capital expenditures

8. Summary and Deliverables

From a big picture point of view, the Village's Long-Term (15-year) Financial Plan will provide information that guides financial management decision-making in the short, medium and long-term. In addition to forecasting operating and capital requirements and associated sources of funding, the Long-Term Financial Plan will form the basis for recommended financial principles and policies to guide budgeting, borrowing, capital funding, appropriate levels for reserves and surpluses, etc.

It will be necessary to update the projections, assumptions etc., within the Long-Term Financial Plan model as new data or information becomes available including data related to infrastructure and assets that is continuously evolving. The first five (5) years of the long-term financial plan will also be used to fulfill the legislated five-year financial plan requirements under the Community Charter.

An overall Community Financial Sustainability Report will be produced which incorporates the summarized Long-Term Financial Plan results together with key financial indicators (sustainability, viability and flexibility) that can be used to gauge the Village's progress towards financial sustainability. Key policy recommendations will also be provided in the Community Financial Sustainability Report which can be considered as a means of improving financial sustainability and fiscal management.



COUNCIL MEETING

Date: July 24, 2023
From: Paula Richardson, Chief Administrative Officer
Subject: Budget Variance Report Based on Results to June 30, 2023

Recommendations:

That the report titled “Budget Variance Report Based on Results to June 30, 2023” forwarded from the July 17, 2023 Finance Standing Committee Meeting be received into the record for information.

Purpose:

To present a report provided to the Finance Standing Committee regarding budget variances based on results to June 30, 2023.

Background:

The attached report was presented to the Finance Standing Committee on July 17, 2023. The Committee recommended that the report be forwarded to the July 24, 2024 Regular Council Meeting for information purposes.

Appendix A Report dated July 17, 2023 titled “Budget Variance Report Based on Results to June 30, 2023.”



FINANCE STANDING COMMITTEE REPORT

Date: July 17, 2023
From: Ken Bjorgaard, Financial Consultant
Subject: Budget Variance Report Based on Results to June 30, 2023

Recommendations:

That the report dated July 17, 2023 titled "Budget Variance Report Based on Results to June 30, 2023" be received into the record for information; and

That the report be forwarded to the July 24, 2023 Regular Council Meeting.

Purpose:

Village of Belcarra Policy No. 195 states that "the Financial Officer will prepare a Report to Council, for periods ending June, September and December, comparing and analyzing the approved budget with actuals to date (Budget Variance Report)."

This Budget Variance Report for the period ending June 30th provides actual 2023 results year to date, estimated year-end results and estimated budget/actual variances. The year-end estimates are derived from an extrapolation of revenues and expenditures to date and from other information known at this particular point in time.

Background:

The following attached Appendices represent a detailed budget review of all of the Village's operating and capital funds:

- Appendix "A" – General Operating Fund Budget Review
- Appendix "B" – Water Operating Fund Budget Review
- Appendix "C" – Waste & Recycle Depot (WARD) Operating Fund Budget Review
- Appendix "D" – Capital Budget Review

A summary of budget/actual variance results and an explanation of the major variances follows. Overall, the Village is on track to meet its budget targets in the General Operating Fund and WARD Operating Fund in terms of the respective operating revenues and expenditures, and reserve/surplus transfers. The Village's Water Operating Fund (Fund) is experiencing increased costs related to an increase in District of North Vancouver infrastructure charges and from an increase in projected water usage and related costs (including flushing program), and the Fund should be monitored closely for the balance of the year. It should be noted that it is early in the fiscal year and other, unexpected impacts could still materialize before year-end.

General Operating Fund Summary

An increase (9.6%) in projected revenue partially offset by increased operating expenses (3.8%) is resulting in more funds available for transfer to general reserves. The Growing Communities Funds received (\$759,000) are also being transferred to reserves.

General Operating Fund						
	A	B	C	D = C-A	E = D/A	
Description	Final 2023 Budget	Actual Year-to-Date June 30, 2023	Estimated 2023 Year-End Balance	Projected Year-End/Budget \$ Variances	Projected Year-End/Budget % Variances	Explanations/Comments
Regular Operating Revenues ¹	\$1,445,067	\$1,441,689	\$1,584,081	\$139,014	9.6%	Increased interest earnings, building permit fees and other revenues, e.g. filming, cost recoveries, sale of asset, etc.
Regular Operating Expenses ¹	\$1,290,896	\$665,385	\$1,340,047	\$49,151	3.8%	Benefit & strategic planning costs; increase in building inspection costs (recovered through increased revenues), bylaw enforcement costs and legal costs
Allocation of Centralized Support Costs to MRN, Water & WARD	\$(299,739)	\$(156,841)	\$(313,474)	\$(13,735)	4.6%	Increased recoveries based on higher expenses allocated to MRN, Water and WARD
Transfers to General Reserves & Surplus	\$516,884	Not applicable	\$1,379,482	\$862,598	166.9%	Includes \$759,000 from Growing Communities Fund to be transferred to reserve. Other transfers are up by about \$104,000 based on net increase in revenue/expenses

¹ Not including one time project revenues & expenses

Water Operating Fund Summary

An increase in water operating costs (2.5%) is resulting in less funds available for transfer to reserves and surplus.

Water Operating Fund						
	A	B	C	D = C-A	E = D/A	
Description	Final 2023 Budget	Actual Year-to-Date June 30, 2023	Estimated 2023 Year-End Balance	Projected Year-End/Budget \$ Variances	Projected Year-End/Budget % Variances	Explanations/Comments
Regular Operating Revenues	\$392,424	\$383,406	\$394,919	\$2,495	0.6%	
Regular Operating Expenses	\$364,361	\$171,276	\$373,423	\$9,062	2.5%	Increase in costs from General Operating Fund, from District of North Vancouver infrastructure charge and from water usage (including flushing program)
Transfers to Reserves & Surplus	\$28,063	Not applicable	\$20,385	\$(7,678)	-27.4%	Less funds are available for transfer to reserves and surplus based in increase in expenses

Waste & Recycle Depot (WARD) Operating Fund Summary

A reduction in expenses mostly related to lower hauling costs for waste, recyclables & organics is resulting in less funds being transferred from WARD surplus to support operations.

Waste & Recycle Depot (WARD) Operating Fund						
	A	B	C	D = C-A	E = D/A	
Description	Final 2023 Budget	Actual Year-to-Date June 30, 2023	Estimated 2023 Year-End Balance	Projected Year-End/Budget \$ Variances	Projected Year-End/Budget % Variances	Explanations/Comments
Regular Operating Revenues	\$172,647	\$171,472	\$173,589	\$942	0.5%	
Regular Operating Expenses	\$187,873	\$77,897	\$175,865	\$(12,008)	-6.4%	Reduced hauling costs based on credits owing
Net Transfer from Reserve & Surplus	\$15,226	Not applicable	\$2,276	\$(12,950)	-85.1%	Less funds need to be transferred from surplus to support operations because of lower operating expenses

Capital Summary

The detailed projections (Appendix “D”) show which capital projects are expected to occur by year-end. Overall capital spending is expected to be under the budget for the year.

Capital Funds						
	A	B	C	D = C-A	E = D/A	
Description	Final 2023 Budget	Actual Year-to-Date June 30, 2023	Estimated 2023 Year-End Balance	Projected Year-End/Budget \$ Variances	Projected Year-End/Budget % Variances	Explanations/Comments
General Capital Expenditures	\$557,100	\$156,758	\$373,263	\$(183,837)	-33.0%	See detailed project listing in Appendix “D”
Water Capital Expenditures	\$125,000	\$0	\$107,000	\$(18,000)	-14.4%	See detailed project listing in Appendix “D”
WARD Capital Expenditures	\$8,000	\$1,188	\$1,188	\$(6,812)	-85.2%	See detailed project listing in Appendix “D”

Summary

Overall, this budget review halfway through the fiscal year indicates that the Village of Belcarra is on track to meet its budget targets in the General Operating Fund and the WARD Operating Fund, and is experiencing budget pressures in the Water Operating Fund. Capital spending is projected to be below budget. Staff will continue to monitor revenues and expenses on a monthly basis for the balance of the year. The next formal budget review to be presented to the Committee will occur for the nine (9) months ending September of 2023.

Appendix "A" - General Operating Fund Budget Review
Projected Variances Between 2023 Budget & Year-End Estimates Based on Results as at June 30, 2023

Page 1 of 2

	Final 2023 Budget	Actual Year-to-Date June 30, 2023	Estimated 2023 Year-End Balance	Projected Year-End/Budget Variances		Explanation of Major Variances & Comments
				\$'s	%	
Municipal Taxes	(995,669)	(995,667)	(995,667)	2	0.0%	
1% Utility Taxes	(10,628)	(13,439)	(13,439)	(2,811)	26.4%	
Penalties & interest (on taxes)	(10,190)	(33)	(14,767)	(4,577)	44.9%	Increase in number of properties not paying by due date
Bylaw Tickets & Business Licenses	(36,745)	(14,944)	(25,144)	11,601	-31.6%	Reduced time spent on bylaw enforcement due to staff absence
Planning & Building Permit Fees	(55,000)	(47,693)	(77,693)	(22,693)	41.3%	Increased building activity
Small Community Investment Fund (SCIF) Grant	(257,000)	(259,000)	(259,000)	(2,000)	0.8%	
School Tax Administration Grant	(3,077)	0	(3,086)	(9)	0.3%	
Interest Earnings	(51,507)	(73,476)	(153,476)	(101,969)	198.0%	Increased interest rates with more funds being available for transfer to reserves and surplus
Other Revenue	(25,251)	(37,437)	(41,809)	(16,558)	65.6%	Unforeseen revenue from sale of asset, legal fee recovery, Metro Vancouver recovery & extra filming revenue
TOTAL REGULAR OPERATING REVENUES	(1,445,067)	(1,441,689)	(1,584,081)	(139,014)	9.6%	
REGULAR OPERATING EXPENSES						
<u>Council, Legislative Services & Grants</u>						
Indemnities & Benefits	75,320	43,671	88,452	13,132	17.4%	Council benefits not included in 2023 budget
Council Conventions, Travel & Other	8,430	2,753	5,953	(2,477)	-29.4%	Lower travel and subscription/dues costs
Strategic Planning	0	12,001	12,001	12,001	>100.0%	Strategic planning session not included in 2023 budget
Grants	5,483	2,503	3,253	(2,230)	-40.7%	Fewer grant dollars provided
Meetings, Events & Appreciation	13,703	4,673	5,423	(8,280)	-60.4%	Lower Belcarra day costs and lower hospitality costs
Subtotal Council, Legislative Services & Grants	102,936	65,601	115,082	12,146	11.8%	
<u>Administration & Support Services</u>						
Administration	342,859	154,237	348,728	5,869	1.7%	
Human Resources	16,499	6,801	11,501	(4,998)	-30.3%	Reduce training & convention costs
Information Systems	54,508	46,921	61,921	7,413	13.6%	Increased support required from IT contactor
Legal & Audit	66,000	48,337	78,337	12,337	18.7%	Increased legal costs
Municipal Hall Operations & Maintenance	120,000	70,622	117,005	(2,995)	-2.5%	
Planning	40,000	7,334	27,334	(12,666)	-31.7%	Less regular planning project undertaken with focus being on the OCP
Finance, Engineering, Website & Environmental Contracts	106,191	54,623	103,873	(2,318)	-2.2%	
Building, Plumbing & Bylaw Services	117,148	57,334	136,399	19,251	16.4%	Increase building inspection and bylaw enforcement costs; offset by increase in building permit fees above
Other	2,279	665	815	(1,464)	-64.2%	
Subtotal Administration & Support Services	865,484	446,874	885,913	20,429	2.4%	
<u>Public Works & Road Network</u>						
Public Works	208,045	102,379	213,524	5,479	2.6%	
Vehicles & Equipment	56,363	34,046	59,438	3,075	5.5%	
Roads, Bridges, Storm Sewers etc. (Non-MRN)	35,394	5,113	33,997	(1,397)	-3.9%	
Trails & Public Spaces	9,170	1,081	9,733	563	6.1%	
Subtotal Public Works & Road Network	308,972	142,619	316,692	7,720	2.5%	
<u>Fire & Emergency Operations</u>						
Fire Protection	5,000	3,530	5,530	530	10.6%	
Emergency Preparedness	5,000	404	4,115	(885)	-17.7%	
Subtotal Fire & Emergency Operations	10,000	3,934	9,645	(355)	-3.6%	
<u>Interest & Banking</u>						
	3,504	6,357	12,715	9,211	262.9%	Increased interest paid to prepaid property tax accounts
TOTAL REGULAR OPERATING EXPENSES	1,290,896	665,385	1,340,047	49,151	3.8%	
<u>Allocation of Centralized Support Costs to MRN, Water & WARD</u>						
	(299,739)	(156,841)	(313,474)	(13,735)	4.6%	Increase costs results in more support costs allocated to MRN, Water & WARD
SURPLUS BEFORE ONE-TIME & IRREGULAR REVENUE/EXPENSES, ADJUSTMENTS & TRANSFERS	(453,910)	(933,145)	(557,508)	(103,598)	22.8%	Increased surplus based on increase in net revenue/expense
<u>Major Road Network (MRN)</u>						
TransLink MRN Grant	(168,196)	(56,643)	(162,359)	5,837	-3.5%	
Roads, Bridges, Storm Sewers etc. (MRN)	168,196	56,643	162,359	(5,837)	-3.5%	
Net MRN	0	0	0	0	0.0%	

Appendix "A" - General Operating Fund Budget Review
Projected Variances Between 2023 Budget & Year-End Estimates Based on Results as at June 30, 2023

Page 2 of 2

	Final 2023 Budget	Actual Year-to-Date June 30, 2023	Estimated 2023 Year-End Balance	Projected Year-End/Budget Variances		Explanation of Major Variances & Comments
				\$'s	%	
<u>ONE-TIME & IRREGULAR REVENUES/EXPENSES</u>						
UBCM Community Resiliency Investment Grant	0	0	(16,555)	(16,555)	>100.0%	Grant funded project see below
Asset Management Grant	0	0	(25,000)	(25,000)	>100.0%	Grant recently approved
Community Works Reserve Funding OCP & Asset Management	(70,000)	0	(45,000)	25,000	-35.7%	Less funds needed from Community Works Reserve due to grant
Official Community Plan (OCP)	20,000	0	20,000	0	0.0%	
Integrated Asset Management/Long-Term Financial Plan	20,000	0	20,000	0	0.0%	
Asset Management Program	30,000	1,540	30,000	0	0.0%	
UBCM Community Resiliency Investment Costs	0	16,555	16,555	16,555	>100.0%	Grant funded project see above
TOTAL ONE-TIME & IRREGULAR REVENUES/EXPENSES	0	18,095	0	0	0.0%	
<u>ADJUSTMENTS NON-CASH ITEMS (Amortization)</u>						
Amortization Offset	(162,068)	0	(162,068)	0	0.0%	
Amortization Expense	162,068	0	162,068	0	0.0%	
TOTAL ADJUSTMENTS NON-CASH ITEMS	0	0	0	0	0.0%	
<u>REVENUES TO BE TRANSFERRED TO RESERVES & SURPLUS</u>						
Community Works Grants	(62,974)	0	(62,974)	0	0.0%	
Transfer to Community Works Reserve	62,974	0	62,974	0	0.0%	
Growing Communities Fund Grant	0	(759,000)	(759,000)	(759,000)	>100.0%	Grant announced after budget finalized
Transfer to Growing Communities Fund Reserve	0	0	759,000	759,000	>100.0%	Grant announced after budget finalized
Transfer to Stabilization Reserve	5,000	0	5,000	0	0.0%	
Transfer to General Capital Reserve	257,300	0	283,104	25,804	10.0%	More funds available for transfer based on net revenue/expenses
Transfer to Vehicle & Equipment Reserve	10,404	0	10,404	0	0.0%	
Transfer to Transportation Infrastructure Reserve	120,000	0	120,000	0	0.0%	
Transfer of Interest to General Fund Reserves	41,206	0	119,000	77,794	188.8%	Increased transfers based on more interest earnings
Transfer to Surplus	20,000	0	20,000	0	0.0%	
TOTAL TRANSFERS (NET OF RELATED REVENUES)	453,910	(759,000)	557,508	103,598	22.8%	
BALANCE	0	(1,674,050)	0	0	0.0%	
Total Reserve Transfers	516,884		1,379,482	862,598	166.9%	
Growing Communities Funds(to be transferred to reserve)	-		(759,000)	(759,000)	>100.0%	
Total Projected Increase in Reserve not including Growing Communities Funds	516,884		620,482	103,598	20.0%	

Appendix "B" - Water Operating Fund Budget Review
Projected Variances Between 2023 Budget & Year-End Estimates Based on Results as at June 30, 2023

	Final 2023 Budget	Actual Year-to-Date June 30, 2023	Estimated 2023 Year-End Balance	Projected Year-End/Budget Variances		Explanation of Major Variances & Comments
				\$'s	%	
<u>REGULAR OPERATING REVENUES</u>						
<u>Fees & Charges</u>						
Water Annual User Fees	(383,988)	(382,656)	(382,656)	1,332	-0.3%	
Water System Connection Fees & Interest Income	(8,436)	(750)	(12,263)	(3,827)	45.4%	
TOTAL REGULAR OPERATING REVENUES	(392,424)	(383,406)	(394,919)	(2,495)	0.6%	
<u>REGULAR OPERATING EXPENSES</u>						
Administration (cost allocation)	161,470	84,491	168,870	7,400	4.6%	Increased allocation of support costs based on increase in general operating fund costs Increased charges from District of North Vancouver for infrastructure & increased flushing program
Water Purchases & Delivery	107,926	45,109	115,109	7,183	6.7%	
Environmental Monitoring, Lease & Radio License & Scada	12,837	3,827	11,188	(1,649)	-12.8%	
Public Works	55,301	27,912	60,515	5,214	9.4%	
Water Reservoir	1,125	0	1,125	0	0.0%	
Water Systems	25,702	9,937	16,616	(9,086)	-35.4%	Lower system maintenance than anticipated
TOTAL REGULAR OPERATING EXPENSES	364,361	171,276	373,423	9,062	2.5%	
DEFICIT (SURPLUS) BEFORE DEBT, ADJUSTMENTS & TRANSFERS	(28,063)	(212,130)	(21,496)	6,567	-23.4%	Increase in expenses results in less operating surplus
<u>PARCEL TAX & DEBT EXPENSES</u>						
Parcel Tax	(267,617)	(266,506)	(266,506)	1,111	-0.4%	
Transfer from Water Debt Repayment Reserve	(1,946)	0	(1,946)	0	0.0%	
Long-Term Debt Interest Expense	150,561	75,281	150,561	0	0.0%	
Debt Principle Payment	119,002	0	119,002	0	0.0%	
TOTAL PARCEL TAX & DEBT EXPENSES	0	(191,225)	1,111	1,111	>100.0%	
<u>ADJUSTMENTS NON-CASH ITEMS</u>						
Debt Actuarial Revenue	(44,814)	0	(44,814)	0	0.0%	
Debt Actuarial Offset	44,814	0	44,814	0	0.0%	
Amortization Offset	(139,249)	0	(139,249)	0	0.0%	
Amortization Expense	139,249	0	139,249	0	0.0%	
TOTAL ADJUSTMENTS NON-CASH ITEMS	0	0	0	0	0.0%	
<u>REVENUES TO BE TRANSFERRED TO RESERVES & SURPLUS</u>						
Transfer to MFA Cash Deposit Reserve	1,186	0	1,186	0	0.0%	Fewer funds available for transfer to reserve based on less operating surplus than budgeted for
Transfer to Vehicle & Equipment Reserve	1,561	0	1,561	0	0.0%	
Transfer to Water Capital Reserve	20,316	0	13,077	(7,239)	-35.6%	
Water Accumulated Surplus	5,000	0	4,561	(439)	-8.8%	
TOTAL TRANSFERS TO RESERVES & SURPLUS	28,063	0	20,385	(7,678)	-27.4%	
BALANCE	0	(403,355)	0	0	0.0%	

**Appendix "C" - Waste & Recycle Depot (WARD) Operating Fund Budget Review
 Projected Variances Between 2023 Budget & Year-End Estimates Based on Results as at June 30, 2023**

	Final 2023 Budget	Actual Year-to-Date June 30, 2023	Estimated 2023 Year-End Balance	Projected Year-End/Budget Variances		Explanation of Major Variances & Comments
				\$'s	%	
<u>REGULAR OPERATING REVENUES</u>						
Waste & Recycling Annual Fee	(170,147)	(170,922)	(170,922)	(775)	0.5%	
Tags, Permits & Licences	(1,000)	(550)	(1,150)	(150)	15.0%	
Interest Earnings	(1,500)	0	(1,517)	(17)	1.1%	
TOTAL REGULAR OPERATING REVENUES	(172,647)	(171,472)	(173,589)	(942)	0.5%	
<u>REGULAR OPERATING EXPENSES</u>						
Administration (cost allocation)	81,030	42,399	84,743	3,713	4.6%	Increased allocation of support costs based on increase in general operating fund costs
Public Works Support	6,101	3,079	6,676	575	9.4%	
Depot Operations	30,398	7,311	25,838	(4,560)	-15.0%	Staff vacancy for part of year
Hauling, Chipping & Electronic Waste Disposal Contracts	70,344	25,108	58,608	(11,736)	-16.7%	Lower hauling costs based on credits owing
TOTAL REGULAR OPERATING EXPENSES	187,873	77,897	175,865	(12,008)	-6.4%	
DEFICIT (SURPLUS) BEFORE ADJUSTMENTS & TRANSFERS	15,226	(93,575)	2,276	(12,950)	-85.1%	Reduced deficit projected based on lower operating costs
<u>ADJUSTMENTS NON-CASH ITEMS</u>						
Amortization Offset	(7,959)	0	(7,803)	156	-2.0%	
Amortization Expense	7,959	0	7,803	(156)	-2.0%	
TOTAL ADJUSTMENTS NON-CASH ITEMS	0	0	0	0	0.0%	
<u>TRANSFERS TO (FROM) RESESRVES & SURPLUS</u>						
Transfer to Vehicle & Equipment Reserve	1,000	0	1,000	0	0.0%	Less funds projected to be transferred from surplus base on reduced expenses
Transfer from Surplus	(16,226)	0	(3,276)	12,950	-79.8%	
TOTAL TRANSFERS FROM SURPLUS	(15,226)	0	(2,276)	12,950	-85.1%	
BALANCE	0	(93,575)	0	0	0.0%	

Appendix "D" - Village of Belcarra - Capital Budget Review
Projected Variances Between 2023 Budget & Year-End Estimates Based on Results as at June 30, 2023

	Final & Amended 2023 Budget	Actual Year-to-Date June 30, 2023	Estimated 2023 Year-End Balance	Projected Budget Variances		Explanation of Major Variances & Comments
				\$'s	%	
GENERAL CAPITAL						
Revenue (Funding from Reserves & Grants)	(557,100)	0	(373,263)	183,837	-33.0%	
Expenses						
COUNCIL LAPTOPS	9,400	9,358	9,358	(42)	-0.4%	
BUSINESS LICENSE MODULE	6,700	5,939	5,939	(761)	-11.4%	
LAPTOPS, MONITORS & TABLETS	2,000	4,456	4,456	2,456	122.8%	Additional hardware costs
MARINE AVE MILL & FILL	100,000	0	20,000	(80,000)	-80.0%	Design and Geotech only to occur in 2023
ROAD REHAB(INCL POTHOLE REPAIRS)	25,000	0	10,000	(15,000)	-60.0%	Focusing on other priorities in strategic plan
SHOULDERING BOULEVARDS	15,000	0	7,500	(7,500)	-50.0%	Shouldering to occur on MRN road only
BEDWELL BAY UPGRADE PROJECT (BBUP) ⁽¹⁾	65,000	0	65,000	0	0.0%	
MRN BEDWELL BAY RD SAFETY BARRIERS	50,000	8,293	13,293	(36,707)	-73.4%	Project to be completed in 2024
3640 BEDWELL BAY ROAD CULVERT ⁽¹⁾	40,000	0	40,000	0	0.0%	
PUBLIC WORKS EQUIPMENT	5,000	0	5,000	0	0.0%	
CRACK FILLING MACHINE	7,000	2,995	7,000	0	0.0%	
2023 KUBOTA	35,000	35,299	35,299	299	0.9%	
2023 CHEVY SILVERADO	140,000	80,478	110,478	(29,522)	-21.1%	Savings from special equipment added to truck
CREEK SURVEYS (RIPARIAN AREAS)	20,000	0	10,000	(10,000)	-50.0%	Anticipate 1/2 funding from grant
STORM SEWER & CATCH BASIN REPLACE	15,000	9,940	9,940	(5,060)	-33.7%	Obtained competitive pricing
TRAIL SYSTEM IMPROVEMENTS	2,000	0	0	(2,000)	-100.0%	Improvements occurring in operations
RE-DEVELOPMENT OF TENNIS COURT SITE ⁽¹⁾	10,000	0	10,000	0	0.0%	
MULTI-USE PATH, TRAIL & ROAD SHOULDER IMPROVEMENTS (MTRS) NETWORK MAPPING ⁽¹⁾	10,000	0	10,000	0	0.0%	
Total Expenses	557,100	156,758	373,263	(183,837)	-33.0%	
WATER CAPITAL						
Revenue (Funding from Reserves)	(125,000)	0	(107,000)	18,000	-14.4%	
Expenses						
TATLOW WATER RESERVOIR (Chlorination Investigation) ⁽¹⁾	5,000	0	5,000	0	0.0%	
ENGINEERING FOR WATER SYSTEM OPTIONS FOR ADDRESSING WATER SYSTEM DEFICIENCIES-Contracts ⁽¹⁾	30,000	0	20,000	(10,000)	-33.3%	Focus is on additional work at Tatlow and other studies
WATER EQUIPMENT	15,000	0	7,000	(8,000)	-53.3%	No other equipment to be purchased
EXCAVATION & FENCING TATLOW	45,000	0	45,000	0	0.0%	
Total Expenses	125,000	0	107,000	(18,000)	-14.4%	
WARD CAPITAL						
Revenue (Funding from Reserves)	(8,000)	0	(1,188)	6,812	-85.2%	
Expenses						
MINOR WARD EQUIP	8,000	1,188	1,188	(6,812)	-85.2%	No other equipment needs to be purchased
Total Expenses	8,000	1,188	1,188	(6,812)	-85.2%	

⁽¹⁾ 2023 Budget Amendments



COUNCIL REPORT



Date: July 24, 2023

File No. 5400-08

From: Paula Richardson, Chief Administrative Officer

Subject: **Watson Trail Options**

Recommendation:

That staff be directed to proceed with one of the following options as described in the report dated July 24, 2023, to allow work to be carried out on the Watson Trail:

- Option 1 Minimal Changes to the Trail; **or**
- Option 2 Moderate Changes to Watson Trail; **or**
- Option 3 Significant Changes to Watson Trail.

Purpose:

To provide Council with options for work to be carried out on the Watson Trail.

Background:

A report to Council regarding a Belcarra Trail Safety Review was provided by Urban Systems in December 2017. The Watson Trail design included the installation of wooden baffles to slow down people cycling as they enter and exit the trail, indicating that the trail is designed for slower speeds. Dismount signs are currently posted on both sides of the baffles.

Letters from residents were received by Council in the Spring of 2023, as well as in previous years, regarding the baffles at the entrance to Watson Trail. The writers expressed that the baffles were too narrow for bikes of all types to fit through the opening without dismounting or lifting the bikes to access the trail.

In response to continued concern over trail access, Council included the Watson Trail in the Strategic Plan for 2023 with the scope and cost to be determined. Funding for upgrades to the trail would come from the Community Building Fund.

As part of the Strategic Plan process to bring options on the Watson Trail back to Council, staff contacted Urban Systems with a request for a review of the Watson Trail to allow for recommendations on the viability of widening the opening of existing wooden baffles to improve access for a variety of users.

Urban Systems was asked to address staff concerns that the trail in its current form may not be appropriate and safe for all types of bicycles and users, all ages and abilities (AAA).

A meeting was arranged with Urban Systems prior to an onsite inspection and a quote was given for the work. The consultant who prepared the 2017 report was in attendance. The Urban Systems engineer who participated in the onsite inspection presented the findings at the July 10, 2023 Council Meeting. The cost of the review will come from the Community Works Building Fund as noted in the Strategic Plan.

Urban Systems provided three (3) options for Council consideration:

- **Option 1: Minimal Changes:** This option consists of increasing the opening width of wooden baffles to physically accommodate access for larger types of bicycles. The existing trail conditions would largely remain as is and this connection would not be considered AAA. The types of users accommodated would generally be for people walking or mountain biking. Those who are cycling are encouraged to dismount and walk. While this option does not improve the comfort and safety of the trail, the widening of the baffle entry point allows access for larger bicycle types.
- **Option 2: Moderate Changes: 2a)** This option consists of increasing the opening width of wooden baffles to physically accommodate access for larger types of bicycles, widening the existing trail where feasible, regrading to provide meandering curves as feasible, and paving with an asphalt surface with drainage improvements. While the grade of the connection would still limit the trail from being considered AAA, these upgrades can provide a more comfortable and safe connection than what is existing today. **2b)** the same as option 2a) with 75mm Granular Topping – Compacted as opposed to paving.
- **Option 3: Significant Changes:** To meet AAA design standards, the connection would have to be increased to provide a minimum 4 meter wide paved pathway and introduce the use of switchbacks to reduce the grades to 8.3% or less. Given that the existing available space is constrained and a switchback configuration being space intensive, this option would be considerably higher in cost and could also have further environmental and geotechnical requirements to accommodate the space requirements into the ravine. If this configuration is implemented to create a safe and comfortable connections for AAA, then the removal of the baffle gates may be appropriate. Two examples of a switchback configuration can be found here for reference: [Spirit Trail, City of North Vancouver](#) and [Cochrane, Alberta](#).

The Village has obtained legal advice with regard to signage on the trail as follows:

“We would recommend two sets of signs. First, on the trail itself, signs should be placed at all entrances and at least once on the trail itself “Recreational Trail: Use at Your Own Risk”. One of the signs should also have on it mounted a map of Watson Trail. Second, there should also be signs reading “Slow Down – Obstruction Ahead” on the road(s) approaching the bollards themselves.

Under the *Occupier’s Liability Act*, occupiers of premises owe a duty of care to ensure the safety of those on their premises. However, this duty is relaxed - per s. 3.3 - when the premise in question are “recreational trails reasonably marked as recreational trails” and the person using them is entering the premise for the purpose of recreation. If these pre-requisites are fulfilled, the occupier only has a duty to not “create a danger with intent to do harm” or to “act with reckless disregard to the safety of the person ... or property”.

Strategic Plan & Related Work Plan Implications:

Watson Trail is listed as one of Council's strategic priorities.

List of Some Key Infrastructure Projects (not all-inclusive) – page 1 of 2				
Project Category	Project Description	Year(s) Planned	Preliminary Cost/Budget	Funding Sources
Trail	Watson Trail	2023	Scope & cost to be determined	Community Building Fund

Conclusion:

In December 2017, a memorandum from Urban Systems titled “Belcarra Trail Safety Review” was presented to the Council of the day and received for informational purposes. The findings of the independent safety review done by Urban Systems in 2017 included the Watson Trail. Staff proceeded with work to build the trail and to install baffles and appropriate warning signage.

Over the years, the Watson Trail has become an issue for residents seeking greater accessibility to the trail and in response, the Watson Trail was included as part of Council’s Strategic Plan. Through this report, options have been provided for trail improvements and based on Council direction, staff will proceed with work on the Watson Trail.

- Appendix A: Urban Systems Watson Trail Barrier Application Review dated July 5, 2023
- Appendix B: Staff report dated December 11, 2017 titled “Belcarra Trail Safety Review”

MEMORANDUM



DATE July 5, 2023 FROM Barry Fan, P.Eng.
TO Paula Richardson FILE 4204.0006.01
Steward Novak
CC Sarah Freigang SUBJECT Watson Trail Barrier Application Review

1.0 INTRODUCTION

The Village of Belcarra has retained Urban Systems to conduct a review of the Watson Trail and determine the appropriateness of widening the opening or removing the existing trail baffle at Watson Road. The Village has received a request to widen the opening of the existing wooden baffle to ensure that a variety of bicycles and users can access the trail. The concern, identified by staff, is that the trail may not be appropriate and safe for all types of bicycles and users. By opening the trail for these users, the Village is concerned they may be encouraging the use of a trail that is not designed for people of all ages and abilities (AAA) and create increased safety concerns.

The review process included the following key tasks:

- Project kick-off meeting with the Village to discuss project understanding, key outcomes, and review process;
- Site visit with Village staff to review the site conditions;
- Internal review of the design guidance and best practices, including the Transportation Association of Canada (TAC) Geometric Design Guide for Canadian Roads 2017 (TAC Geometric Design Guide) and the Ministry of Transportation & Infrastructure (MOTI) British Columbia Active Transportation Design Guide 2019 (BCAT Design Guide)

This memo provides a summary of the existing conditions, a comparison to best practice design guidance, and potential upgrade options for the Watson Trail.

The safety improvement opportunities identified in this memo are based on limited information and data that was available to the project team at the time of the study and is based on the project team's observations during the site visit on June 5th 2023.

In addition, the suggested mitigation measures in this memo reflect the general nature of a solution which may or may not be adopted by the Village of Belcarra. It should be the responsibility of the Village of Belcarra to respond to the review findings in a way that the Village deems appropriate.

Finally, the suggested mitigation measures in this memo do not include any design effort and are conceptual in nature. Further work would be required in the future to develop conceptual and detailed designs to any mitigation measures that the Village choose to advance in the future.

2.0 EXISTING CONDITIONS AND DESIGN CRITERIA

The Watson Trail is a trail connection between Watson Road and Marine Avenue that is built on existing Village of Belcarra right-of-way. The trail is intended to provide a connection for residents walking and cycling within the Village. The existing facility includes a set of wooden baffles to slow down people cycling as they enter and exit the trail, indicating that the trail is designed for slower speeds.

The following section discusses the existing conditions and issues identified for the study area as they relate to best practices and recommended design criteria for a multi-use pathway. The issues presented are based on on-site observations and discussions with Village staff on June 5th 2023. The team conducted the site review alongside Village staff and also independently.

WIDTH OF FACILITY

The existing trail is approximately 1.5 metre wide, including approximately 0.5 to 0.8 metre wide gravel surface at the centreline of the trail. Although the existing right-of-way is about 20 metres wide, the available space between the existing residential property and ravine is approximately 4 to 5 metres wide. At the bottom of the trail, the width is constrained as a culvert crossing, restricted by a wooden panel fence and wooden post fence on either side (Figure 1).

Recommended Design Criteria: The general desirable width of a multi-use pathway is between 3.0 to 4.0 metres, with an additional 0.6 metres provided on both sides for clear width. When steep side slopes or large drops are present, the shoulder width should be increased to 1.5 metres. The minimum width of a multi-use pathway is 2.7 metres, based on the operating envelope of a single bicycle user (1.2 metres) and the operating envelope of two people walking abreast (1.5 metres).



Figure 1: Watson Trail lower section – culvert crossing

STEEP SLOPE

The existing trail has an approximate average slope of 11% between the entry point at Watson Road and the bottom of the hill at Tatlow Trail. Figure 2 shows a perspective of the steepness of the trail looking uphill.

Recommended Design Criteria: In the context of cycling, steep grades will reduce uphill velocities to a minimum, while downhill coasting speeds can reach 50 km/h. The practical maximum slope for a paved bike path is 1:12 or 8.3%. Beyond this grade, many people cycling will have to dismount and walk.¹ Facilities on slopes greater than 8.3% are not considered AAA. To be universally accessible, grades as steep as 8.3% are acceptable if intermittent landings are provided at intervals of no more than 9.0 metres.

Where a pathway has grades steeper than 8.3%, alternative treatments should be explored, such as switchbacks or locating the AAA route to an alternate route with more favourable grades even if more circuitous. Despite the strategies listed above, not all connections will be accessible for people of all ages and abilities. Wherever feasible, design professionals should ensure that where an inaccessible route exists, alternative routes or transportation modes are provided and made apparent through signage and wayfinding.

When compared to standards from trail guidelines, such as the [Trail Development Guidelines and Standards \(City of Coquitlam\)](#), Watson Trail currently can be considered a “trail connector”, which has a preferred maximum of 8% or 10% slope for short distances.



Figure 2: Watson Trail upper section - looking uphill

¹ Transportation Association of Canada (TAC), ‘Geometric Design Guide for Canadian Roads’ (2017)

PROXIMITY TO RAVINE

The existing trail runs adjacent to and between a residential property and a ravine with a steep slope, as illustrated in Figure 3. Low-height wooden fencing has been installed adjacent to the path where the slope is steepest near the top of the trail and along the curve at the bottom.

Recommended Design Criteria: The side slope that is located alongside a pathway can present a hazard to pathway users if a user were to veer off the pathway into the ravine. At side slopes steeper than 1:1 or with drops greater than or equal to 0.3 metres, the clear space to the path to the top of slope should be at least 1.5 metres. If 1.5 metres cannot be provided, a railing or barrier should be installed to help mitigate potential hazards, at a minimum of 0.6 metres from the edge of pathway.

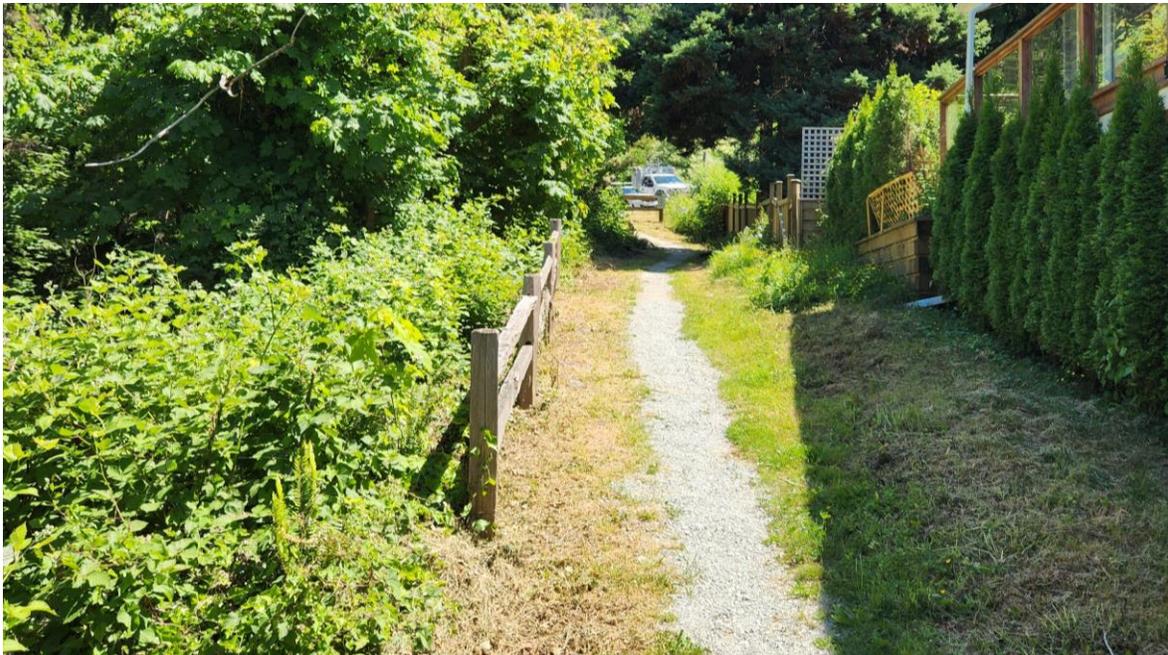


Figure 3: Existing wooden fence and condition adjacent to ravine

SURFACE MATERIAL

The existing trail surface is approximately 1.5 metre wide, with a strip ranging between 0.5 to 0.8 metre wide of gravel surface at the centreline of the trail. Village staff also noted that during the rainy season, surface runoff along the trail would lead to erosion of the ground and maintenance challenges to maintain an even surface.

Recommended Design Criteria: As multi-use pathways are intended to be accessible and accommodate a wide range of users and trip purposes, asphalt is the preferred surface type. This would mitigate erosion issues, and overland flow should be reviewed to determine appropriate treatment for conveying drainage through a swale or alternative drainage feature to a suitable outlet.

TIGHT HORIZONTAL CURVE AT BOTTOM OF TRAIL

At the bottom of the trail is a horizontal curve connecting the trail alignment towards the Tatlow Trail street, with an approximate radius of 9.5 metres. The steep downhill grades on the approach combined with this tight horizontal curve pose potential risks to bicycle users. Given the minimal turning radius and obstructed sightlines with the existing vegetation on either side, minimum stopping sight distance for bicycle users are not met to provide sufficient sight distance to people cycling who notice an obstacle on their intended path of travel and need to stop.

Recommended Design Criteria: Based on typical downhill design speeds of 30 to 50 km/h, the minimal radius recommended should be 24 to 73 metres. Where space is restricted, a lower turning radius may be used. A reduction to a design speed of 20 km/h, assuming downhill users are braking to slow down to negotiate the turn, a minimum radius of 9 metres can be used. In these situations, warning signage and trail widening is required. Vegetation can also be removed or trimmed back to provide sufficient line of sight for pathway users approaching Tatlow Trail.



Figure 4: Horizontal curve at bottom of trail - looking downhill

WOODEN BAFFLES

The existing wooden baffle at the top of the trail (Figure 5) serves as an access restriction feature to provide indication to users that this connection is a natural trail and would require bicycle users to dismount to navigate the connection safely. The baffle gates are staggered with an opening width of approximately 780mm.

Recommended Design Criteria: Best practice guidance for AAA facilities generally notes the recommendation to avoid the use of rigid bollards, maze gates, or other solid impediments in the point of entry unless there is a demonstrated history of motor vehicle encroachment, and/or a collision history.²

However, given the context of the Watson Trail facility and as summarized above, the existing conditions do not satisfy AAA design standards, and it may be appropriate to retain the wooden baffles to indicate to users that people cycling would need to dismount to navigate the trail connection safely. Use of baffles on nature trails where bicycle use is not permitted or at locations where cyclists are encouraged to dismount is suitable at trailheads for trail type facilities.³

Removal of the wooden baffles can be considered if additional improvements can be made to the trail to provide a AAA connection. Alternatively, if such upgrades are not practical or is cost prohibitive, providing an alternate route, even if more circuitous would be appropriate.



Figure 5: Wooden baffle gates at the top of trail

² BC MOTI, 'BC Active Transportation Design Guide' (2019)

³ City of Coquitlam, Trail Development Guidelines and Standards (2013)

3.0 POTENTIAL OPTIONS

Based on the assessment of existing conditions and review of best practice guidelines, the following key takeaways are noted:

- Given the slope of Watson Trail being greater than 8.3%, this connection is not considered all ages and abilities or universally accessible, and an alternate route with more favourable grades should be considered to provide universal access, even if more circuitous.
- Use of baffle gates where cyclists are encouraged to dismount is an appropriate trailhead entry feature.
- As the current conditions stand, Watson Trail can be considered a “trail connector”, which may not be universally accessible, but can be suitable for types of use including walking, jogging, stroller use, and mountain biking.

Several potential treatment options for improving the trail are outlined below.

- **Option 1: Minimal Changes:** This option consists of increasing the opening width of wooden baffles to physically accommodate access for larger types of bicycles. The existing trail conditions would largely remain as is and this connection would not be considered AAA. The types of users accommodated would generally be for people walking or mountain biking. Those who are cycling are encouraged to dismount and walk. While this option does not improve the comfort and safety of the trail, the widening of the baffle entry point allows access for larger bicycle types.
- **Option 2: Moderate Changes:** This option consists of increasing the opening width of wooden baffles to physically accommodate access for larger types of bicycles, widening the existing trail where feasible, regrading to provide meandering curves as feasible, and paving with an asphalt surface with drainage improvements. While the grade of the connection would still limit the trail from being considered AAA, these upgrades can provide a more comfortable and safe connection than what is existing today.
- **Option 3: Significant Changes:** To meet AAA design standards, the connection would have to be increased to provide a minimum 4.0 metre wide paved pathway and introduce the use of switchbacks to reduce the grades to 8.3% or less. Given that the existing available space is constrained and a switchback configuration being space intensive, this option would be considerably higher in cost and could also have further environmental and geotechnical requirements to accommodate the space requirements into the ravine. If this configuration is implemented to create a safe and comfortable connections for AAA, then the removal of the baffle gates may be appropriate. Two examples of a switchback configuration can be found here for reference: [Spirit Trail, City of North Vancouver](#) and [Cochrane, Alberta](#).

Based on discussions with Village staff, considerations for Option 2 with moderate changes appears to be the appropriate option to be explored further. Additional considerations are summarized below.

Key Changes:

1. **Widening Baffle Gates** – By widening the baffle gate opening to a width of 1.5 to 2.0 metres, the entry can accommodate larger bicycle types such as standard cargo bikes (up to 0.9 metres wide) and bicycles with child trailers (up to 0.75 metre wide).
2. **Widen and Pave Pathway** – To provide improved comfort and accessibility to a wider range of users, asphalt is the preferred surface type to provide a smooth continuous rolling surface. A path surface width of 3.0 to 4.0 metre at a maximum cross slope of 2% should be provided by regrading the available area. At the bottom of the trail, widening would also require lengthening the existing culvert next to Tatlow Trail and some replacement of existing fences. If feasible, introducing a meandering alignment to the pathway can be considered to reduce grades in steeper sections.

A drainage swale or ditch on the uphill side of the pathway running parallel to the path is recommended to convey drainage, along with drainage culvert underneath the path as required to direct the runoff into an appropriate inlet. Figure 6 below illustrates an example section of an upgraded urban trail configuration.

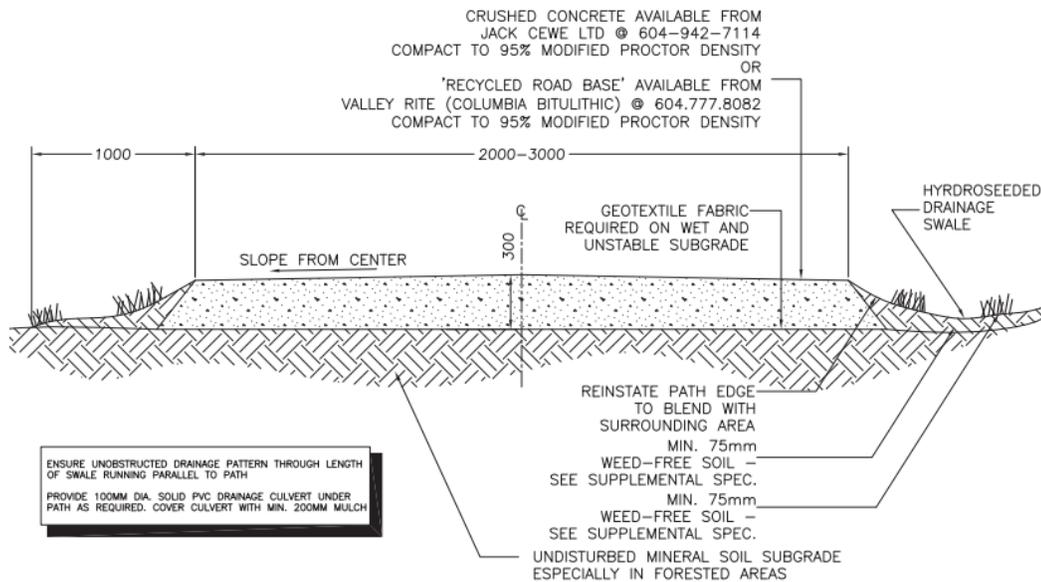


Figure 6: Urban Nature Trail example section - Trail Development Guidelines and Standards 2013 (City of Coquitlam)

3. **Upgraded Railing** – Adjacent to the ravine, if a 1.5 metre offset from the top of bank to the edge of trail cannot be provided, an upgrade of the existing railing to a preferred height of 1.2m high is recommended to prevent people cycling from falling over the railing.
4. **Signage** – Signage to clarify that the connection is not universally accessible and wayfinding to direct users to an alternate route can be considered at the entry points to Watson Trail. As the existing grade of the slope exceeds 8.3%, the connection is not considered AAA. Retaining the existing 'Dismount and Walk' signage is recommended to indicate to people cycling that they are encouraged to dismount and walk their bicycle on this connection. Additional warning signage can be considered to indicate in advance conditions on the pathway, such as the Hill Sign for Bicycles (WA-41), which is used for downgrades of 8% or more where the length of the downgrade is 50 m or more, and where the facility is located on a horizontal curve that makes higher speeds dangerous.



Figure 7: Example of WA-41 sign on a multi-use pathway

Depending on the facility type and types of users desired for this connection, and funding available, the Village may consider implementing variations of the recommended upgrades described above. If an alternate route can be provided, and the focus of the Watson Trail connection is desired to remain a natural trail connection, improvements such as paving and railing upgrades may not be as applicable.

DATE July 5, 2023
FILE 4204.0006.01
SUBJECT Watson Trail Barrier Application Review
PAGE 10 of 10



Sincerely,

URBAN SYSTEMS LTD.

A blue ink handwritten signature, appearing to read "Barry Fan", written over a faint blue circular scribble.

Barry Fan, P.Eng.
Transportation Engineer

cc: Sarah Freigang

/bf
Enclosure

\\us1.urban-systems.com\projects\Projects_VAN\4204\0006\01\R-Reports-Studies-Documents\R1-Reports\2023-06-12 Watson Trail Review Memo.docx

Class D Cost Estimate**Project** Watson Trail Review**Project Number** 4204.0006.01**Client** Village of Belcarra**Date** 6/30/2023**Completed By** C.WAN**Reviewed By** B.FAN**Summary**

Description	Subtotal	Contingency (30%)	Engineering	Total Corridor Cost
Watson Trail Improvements - Paved Pathway	\$ 83,900	25,170	20,000	\$ 130,000
Watson Trail Improvements - Unpaved Pathway	\$ 57,500	17,250	20,000	\$ 95,000

ESTIMATE NOTES, ASSUMPTIONS AND LIMITATIONS**Estimate Description**

The following estimate is for the Watson Trail Review Project. This preliminary estimate is a 'Class D' type estimate (order of magnitude) which uses simplified methods of estimate preparation based on a number of assumptions and limitations provided below.

Geotechnical, environmental and other investigations and analysis were not completed nor available as part of this study. Detailed project investigations and studies are required for the project to complete detailed design and implementation. The following cost estimate should not be used for budgeting or for the design and construction of any works.

Cost items, quantities and unit prices in the estimates are based on historical cost data from recent tenders for similar projects and general assumptions. This preliminary estimate uses 2023 unit rates in CDN dollars. Construction traffic control, mobilization/demobilization costs are assumed to be incidental to the rates used. A 30% contingency and allowance for engineering fees has been included.

Pathway and Site Preparation

Site Preparation is assumed to include Stripping (200mm), Clearing and Grubbing. A geotechnical investigation is required to confirm these general assumptions.

Pathway Structure is assumed to include base gravels (100mm), surface asphalt (50mm). A geotechnical assessment is recommended to confirm an appropriate pathway structure based on project requirements and site conditions. We have assumed the pathway will be constructed at or near the existing surface grades.

Drainage and Utilities

We have assumed that limited runoff near the path will typically be conveyed through an uphill swale with a culvert crossing to facilitate the crossing of the path. A drainage analysis is required to confirm culvert and swale sizing requirements, as well as any erosion and sediment control measures.

Electrical and Lighting

Estimate does not include lighting, electrical connections and/or upgrades to existing utility infrastructure.

Estimate does not include:

Lighting, municipal and utility type charges, legal and topographic surveys, GST/PST, permit charges, sub-consultant design & reporting, inspection and certification fees (electrical, geotechnical, environmental, landscape architect) as well as any legal fees.

Watson Trail Review Project - Cost Estimate Build-up (Option 2)

Location Description Watson Road to Tatlow Trail

Project Length (m) 80

Feature Width (m) 3

PAVED PATHWAY BUILD-UP

Description of Work	Unit	Unit Price	Quantity	Extended Amount
New signage	ea	\$ 500	4	\$ 2,000
Clearing and Grubbing	sq.m	\$ 25	320	\$ 8,000
Preparatory Work (Includes Common Excavation & Subbase Prep)	sq.m	\$ 40	360	\$ 14,400
New Asphalt Pavement	sq.m	\$ 150	240	\$ 36,000
Drainage Allowance	l.m	\$ 200	80	\$ 16,000
Railing Replacement Allowance	LS	\$ 5,000	1	\$ 5,000
Baffle Gates Modification Allowance	LS	\$ 2,500	1	\$ 2,500
SUBTOTAL COST ESTIMATE				\$ 83,900
Contingency	30%			\$ 25,170
Engineering Allowance	LS			\$ 20,000
Total Corridor Estimate				\$ 130,000

UNPAVED PATHWAY BUILD-UP

Description of Work	Unit	Unit Price	Quantity	Extended Amount
New signage	ea	\$ 500	4	\$ 2,000
Clearing and Grubbing	sq.m	\$ 25	320	\$ 8,000
Preparatory Work (Includes Common Excavation & Subbase Prep)	sq.m	\$ 40	360	\$ 14,400
75mm Granular Topping - Compacted	sq.m	\$ 40	240	\$ 9,600
Drainage Allowance	l.m	\$ 200	80	\$ 16,000
Railing Replacement Allowance	LS	\$ 5,000	1	\$ 5,000
Baffle Gates Modification Allowance	LS	\$ 2,500	1	\$ 2,500
SUBTOTAL COST ESTIMATE				\$ 57,500
Contingency	30%			\$ 17,250
Engineering Allowance	LS			\$ 20,000
Total Corridor Estimate				\$ 95,000

**COUNCIL REPORT****Date:** December 11, 2017

File No. 5400-08

From: Bernie Serné, ASCT, Superintendent of Public Works**Subject:** **Belcarra Trail Safety Review****Recommendation**

That Council receive the Belcarra Trail Safety Review dated November 10, 2017 from Urban Systems for information purposes; and

That staff follow up and complete the mitigation of issues outlined within the established timeline; and

That staff install appropriate warning signage at all Watson and Tatlow Trail driveway crossings.

Background

At the July 25, 2016 Council Meeting, a report regarding the Trails Implementation Proposal and Overview on the Public Consultation on Trails was submitted. A recommendation was proposed to prioritize by budget allocation and technical evaluation. As a part of the 2017 Budgeting process, funding was allocated for Watson and Tatlow Trails.

In June 2017, upgrades to Upper Tatlow Trail were completed. In September 2017, Phase 1 of the Watson Trail was completed from Watson Road to Avalon Creek. In October 2017, bike baffles and fencing were constructed on Watson trail. A meeting was held with the Park Solution trail Contractor to review the safety of the completed trail works.

Urban Systems was contracted to conduct a safety review on Watson and Tatlow Trails. In October 2017, the new Watson Trail and Tatlow Trail repairs were reviewed. Urban Systems prepared a report and outlined potential safety issues and suggested mitigation measures to further enhance safety on the trails.

Conclusion

The Urban Systems Trail Safety Review advised that, based on on-site observations of both Watson and Tatlow Trails, and following Recreational Trail Best Practice and Guidelines, the design of both Trails is appropriate for the type of connections provided.

A list of the potential safety issues and suggested mitigation measures for the trails was included. Staff have evaluated the review and completed a timeline for mitigation of the issues outlined.

The concerns of driveways crossing the trails have been conveyed to adjacent property owners. Staff will install appropriate signage to ensure user safety on the trails.

Attachment A: Urban System November 10, 2017, Belcarra Trail Safety Review Report

Attachment B: Belcarra November 22, 2017, Safety Trail Review – Mitigation and Timeline Document

MEMORANDUM

Date: November 10, 2017
To: Lorna Dysart
cc: Bernie Serne
From: Sarah Freigang & Brian Patterson
File: 4204.0003.01
Subject: Belcarra Trail Safety Review

The Village of Belcarra recently constructed the Watson Trail to provide a connection between Watson Road and Marine Avenue. This study has been initiated in response to concerns raised regarding the safety of the trail. Urban Systems Ltd. was contracted to conduct a safety review of this trail and look at other existing trails in the Village.

The purpose of this memorandum is to present the findings of the independent safety review of two trails in the Village of Belcarra, including the newly constructed Watson Trail and the established Tatlow Trail. The safety review focused on identifying safety issues for a variety of users including, people walking, cycling and driving. A site visit was conducted on Tuesday October 31, 2017 by Sarah Freigang and Brian Patterson. Bernie Serene from the Village of Belcarra also attended a portion of the site visit to orient the team to the trails and provide some background context of the projects. This memorandum outlines the results of the review.

The following resources were consulted as part of this review:

- Regional Parks Design Guidelines – Regional District of Okanagan (2015)
- Trail Development Guidelines and Standards – City of Coquitlam (2015)
- Recreational Trails Master Plan – District of West Kelowna (2012)
- Trail Standards Manual – District of Squamish (2010)

The suggested mitigation measures included in this memorandum are conceptual, and as such, reflect the nature of a solution, which may or may not be adopted by the Village of Belcarra. In other words, it is the responsibility of the Village of Belcarra to respond to the review findings in a way that the Village deems appropriate. In addition, it is recommended that the prepare a response report to be included as part of the internal project file to identify whether the suggestions to address the safety issues should be implemented.

1.0 Watson Trail

The Watson Trail is a new trail connection between Watson Road and Marine Avenue that was recently built on existing Village of Belcarra right-of-way. The trail is intended to provide a connection for residents walking and cycling within the Village. The trail is not intended to be an informal connection, and has not been signed or shown on mapping as a formal multi-use pathway. The design includes the installation of wooden baffles to slow down people cycling as they enter and exit the trail, indicating that the trail is designed for slower speeds. The trail has not yet been formally opened to the public. Below is a summary of the existing conditions of the trail.

- **Material:** Gravel / bark mulch
- **Length:** Approximately 90 metres
- **Width:** 1.5 metres
- **Intended users:** People walking and cycling
- **Additional characteristics:**

MEMORANDUM

Date: November 10, 2017
 File: 4204.0003.01
 Subject: Belcarra Trail Safety Review
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- Runs adjacent to and between a residential property and a ravine with a steep slope.
- Fencing has been installed adjacent to the path where the slope is steepest. The clearance /off-set from fence sufficient in addition to the 1.5 m operating space.
- The clearance from the residential property is also appropriate based on review guidelines.
- The gravel trail ends and transitions to bark mulch at the northern end.
- There are future plans to provide a new crossing over the creek and provide a gravel trail connection to Marine Avenue / Tatlow Trail at the north/west end of the trail.

As the unsigned trail is designed to provide a short 'natural trail' like neighbourhood connection between two streets, is meant for people walking and people cycling at slow speeds and has freestanding fencing/guardrail in place to address potential safety concerns associated with the adjacent slope. The height and design of the fencing does not appear to present a safety issue. The current design of the trail is appropriate for the type of neighbourhood connection it provides (**Appendix A**). While not designed specifically for mountain biking, based on existing characteristics, the trail would likely be classified as a "Easy" trail based on the IMBA Trail Rating System (**Appendix B**).

The following includes a list of the potential safety issues and suggested mitigation measures that the Village could consider to further enhance the safety of the trail.

Issues and Suggested Mitigation	Image
<p>Issue: Ramp/curb access from Watson Street is currently not a smooth transition. The uneven surface can present a safety issue.</p> <p>Suggested mitigation measure: Provide a smooth ramp surface to provide access to the trail connection.</p>	
<p>Issue: As the trail is currently closed, fallen leaves have not been cleared from the trail and can create a slipping hazard.</p> <p>Suggestion mitigation measure: On-going clearing and maintenance should occur once the trail is open.</p>	

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 Subject: Belcarra Trail Safety Review
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Issues and Suggested Mitigation	Image
<p>Issue: The trail has a 90 degree curve before it transitions to bark mulch. This curve runs adjacent to a slope and the creek (will be mitigated when future extension of the trail is completed). There is the potential for people cycling to have trouble navigating the curve and continue down the slope or into the creek.</p> <p>Suggested mitigation measure: Consider adding additional fencing / extending existing fencing along this portion of the trail.</p>	
<p>Issue: Based on observations, the trail as it approaches the curve (discussed above) there is a cross slope that may create a safety issue.</p> <p>Suggested mitigation measure: Consider adding additional aggregate to address the cross-slope overtime while recognizing drainage and design requirements.</p>	
<p>Issue: At the north-west end, the trail terminates at Marine Avenue/Driveway access. Due to existing vegetation and the curve in the road, the sightlines are limited for people using the trail and those on the road. This issue will be mitigated when the trail is extended. At this location the new Watson Street Trail and existing Tatlow Trail converge. The volume of motor vehicles using the road is anticipated to be low; however, trail users and motor vehicles may not be anticipating a conflict.</p> <p>Suggested mitigation measure: Consider installing signage warning of the potential conflict (WC-46).</p>	

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2.0 Tatlow Trail

The Tatlow Trail (Upper and Middle) is an established unsigned trail that provides a connection between Main Avenue and Bedwell Bay Road (Upper Tatlow) and Bedwell Bay Road and Marine Avenue (Middle Tatlow). The final portion of the trail, Lower Tatlow, is not formalized but provides access to the foreshore. The Village of Belcarra plans to improve the Lower Tatlow Trail in the future. The following provides a summary of the existing conditions and the identified potential safety issues for the established Upper and Middle portions of the Tatlow Trail.

2.1 Upper Tatlow

- **Material:** Gravel / Stairwell
- **Length:** Approximately 100 metres
- **Width:** 1.0 to 1.5 metres
- **Intended users:** People walking and cycling
- **Additional characteristics:**
 - Trail is accessed from Main Avenue through a residential driveway.
 - The trail is located between residential properties on Village right-of-way.

The unsigned trail is designed to provide a short and narrow 'natural trail' like neighbourhood connection between two streets. Due to the steepness of the slope, stairs have been installed; therefore, the main and intended user is pedestrians. The following includes a list of the potential safety issues and suggested mitigation measures that the Village could consider to further enhance the safety of the trail.

Issues and Suggested Mitigation	Image
<p>Issue: After the heavy rains experienced in the region, the trail experienced some wash out due to drainage issues creating a potential tripping and safety hazard.</p> <p>Suggested mitigation measure: Repair and refill the trail and where feasible address drainage issues.</p>	

MEMORANDUM

Date: November 10, 2017
 File: 4204.0003.01
 Subject: Belcarra Trail Safety Review
 Page: 5 of 8

Issues and Suggested Mitigation	Image
<p>Issue: Leaves, overgrown vegetation and other debris along the trail and stairwell can create a slipping hazard and reduce the width of the trail.</p> <p>Suggested mitigation measure: Ensure trail is maintained and kept clear of leaves and debris.</p>	
<p>Issue: There is a crosswalk located between Upper and Middle Tatlow Trail on Bedwell Bay Road (marked and signed). Sightlines are restricted due to the curve in the road which can create a potential safety issue. However, due to the stairwell and the steepness of the trail, users are likely to be crossing the crosswalk at low speeds.</p> <p>Suggested mitigation measure: Continue to monitor how the crosswalk is being used and if safety issues are observed or reported by users.</p>	

2.2 Middle Tatlow

- **Material:** Gravel
- **Length:** Approximately 155 metres
- **Width:** 1.0 to 2.0 metres (trail becomes wider closer to Marine Avenue)
- **Intended users:** People walking and cycling
- **Additional characteristics:**
 - Trail is accessed from Main Avenue through a residential driveway.
 - Located between residential properties.
 - The trail is quite steep. Gate fencing has been added to slow people cycling down to maneuver through the gates or dismount.
 - The trail widens after the gates when heading to Marine Avenue.
 - Future driveway will intersect the existing trail.

Like Upper Tatlow, this unsigned trail is designed to provide a short and narrow ‘natural trail’ like neighbourhood connection between two streets. The following includes a list of the potential safety issues and suggested mitigation measures that the Village could consider to further enhance the safety of the trail.

MEMORANDUM

Date: November 10, 2017
 File: 4204.0003.01
 Subject: Belcarra Trail Safety Review
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Issues and Suggested Mitigation	Image
<p>Issue: With the development of the adjacent property, there will be a residential driveway that intersects the trail near the bottom on the hill as trail users approach Marine Avenue. Motor vehicles crossing the trail to enter and exit the driveway or motor vehicles parked over the trail crossing can create a potential safety hazard for both people walking and those cycling on the trail.</p> <p>Suggested mitigation measure: It is part of the Village's future plan to create a chicane in the trail to slow people cycling down hill and to reduce potential driveway conflicts. This can help to slow trail users. It will be important to consider the impact of the chicane on sightlines.</p> <p>The Village can consider installing warning signage on the trail to warn of the driveway crossing (ensuring new signage does not create an obstruction) and informs users to slow down and use caution.</p>	

Based on the on-site observations of the Watson and Tatlow Trail and a review of recreational trail best practice and guidelines, the design of both trails is appropriate for the type of neighbourhood connections they provide, as outlined in **Appendix A**.

Sincerely,

URBAN SYSTEMS LTD.

Sarah Freigang
 Transportation Planner

Brian Patterson, MCIP RPP
 Active Transportation Expert

/SF

MEMORANDUM

Date: November 10, 2017
 File: 4204.0003.01
 Subject: Belcarra Trail Safety Review
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Appendix A: Design Guideline Comparison (Watson Trail)

Design Considerations	Guidelines			
	Regional Parks Design Guidelines Regional District of Okanagan	Trail Development Guidelines and Standards City of Coquitlam	Recreational Trails Master Plan District of West Kelowna	Trail Standards Manual District of Squamish
Comparable Trail Classification	Narrow Multi-Use Trail	Nature Trail	Narrow Multi-Use Trail	Neighbourhood
Trail Width	1 to 1.5 metres	2 metres where possible	1 to 2 metres	1.5 to 2.0 metres
Clear Width	2 to 2.5 metres	0.5 to 1.0 metres from edge of path	2 to 3 metres	3.0 metres / 4.0 metres preferred
Surface	Compacted granular / native material	Recycled road mulch or concrete	Compact aggregate	Fine compacting gravel
Longitudinal Slope	25%	Maximum 30%	Typically, up to 10%	0 to 15%

MEMORANDUM

Date: November 10, 2017
 File: 4204.0003.01
 Subject: Belcarra Trail Safety Review
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Appendix B: IMBA Trail Ratings

	Easiest White Circle 	Easy Green Circle 	More Difficult Blue Square 	Very Difficult Black Diamond 	Extremely Difficult Double Black Diamond 
Trail Width	72" or more	36" or more	24" or more	12" or more	6" or more
Tread Surface	Hardened or surfaced	Firm and stable	Mostly stable with some variability	Widely variable	Widely variable and unpredictable
Trail description	Less than 5% Max 10%	5% or less Max 15%	10% or less Max 15% or greater	15% or less Max 15% or greater	20% or more Max 15% or greater
Natural Obstacles and Technical Trail Features (TTF)	None	Unavoidable obstacles 2" tall or less Avoidable obstacles may be present Unavoidable bridges 36" or wider	Unavoidable obstacles 8" or less Avoidable obstacles may be present Unavoidable bridges 24" or wider TTF's 2' high or less, width of deck is greater than 1/2 the height	Unavoidable obstacles 15" tall or less Avoidable obstacles may be present May include loose rocks Unavoidable bridges 24" or wider TTF's 4' high or less, width of deck is less than 1/2 the height Shore sections may exceed criteria	Unavoidable obstacles 15" tall or greater Avoidable obstacles may be present May include loose rocks Unavoidable bridges 24" or narrower TTF's 4' high or greater, width of deck is unpredictable May sections may exceed criteria



November 22, 2017

Belcarra Safety Trail Review Mitigation and Timeline Document

Issues	Mitigation	Timeline	Completion
Watson Trail			
1. Ramp/curb access from Watson Street is currently not a smooth transition. The uneven surface can present a safety issue.	Provide a smooth ramp surface to provide access to the trail connection.	Will be done as a part of 2018 curb repairs	
2. As the trail is currently closed, fallen leaves have not been cleared from the trail and can create a slipping hazard.	On-going clearing and maintenance should occur once the trail is open.	Will be done in advance of opening and every November	
3. The trail has a 90 degree curve before it transitions to bark mulch. This curve runs adjacent to a slope and the creek (will be mitigated when future extension of the trail is completed). There is the potential for people cycling to have trouble navigating the curve and continue down the slope or into the creek.	Consider adding additional fencing / extending existing fencing along this portion of the trail.	Temp. Barrier prior to trail opening and added 20' of fencing to phase 2 works	
4. Based on observations, the trail as it approaches the curve (discussed above) there is a cross slope that may create a safety issue.	Consider adding additional aggregate to address the cross – slope over time while recognizing drainage and design requirements.	Added more mulch and will monitor roof drainage. Will add waterboard if condition persists	2017/11/17
5. At the north – west end, the trail terminates at Marine Avenue / Driveway access. Due to existing vegetation and the curve in the road, the sightlines are limited for people using the trail and those on the road. This issue will be mitigated when the trail is extended. At this location the new Watson Street Trail and existing Tatlow Trail converge. The volume of motor vehicles using the road is anticipated to be low: however, trail users and motor vehicles may not be anticipating a conflict.	Consider installing signage warning of the potential conflict (WC – 46)	Temp. Barrier prior to trail opening. Phase 2 works to remove ~6M of hedge. Road signage may be added if needed in conjunction with 3424 Marine works	

Issues	Mitigation	Timeline	Completion
Tatlow Trail			
1. After the heavy rains experienced in the region, the trail experienced some wash out due to drainage issues creating a potential tripping and safety hazard.	Repair and refill the trail and where feasible address drainage issues.	Ditch installed to cut off water from 3515 Main	2017/11/17
2. Leaves, overgrown vegetation and other debris along the trail and stairwell can create a slipping hazard and reduce the width of the trail.	Ensure the trail is maintained and kept clear of leaves and debris	Scheduled for November maintenance	
3. There is a crosswalk located between Upper and Middle Tatlow Trail on Bedwell Bay Road (marked and signed). Sightlines are restricted due to the curve in the road which can create a potential safety issue. However, due to the stairwell and the steepness of the trail, users are likely to be crossing the crosswalk at low speeds.	Continue to monitor how the crosswalk is being used and if safety issues are observed or reported by users.	Will monitor, Sight lines are fair, could add reflective strips on crosswalk poles?	
Middle Tatlow			
1. With the development of the adjacent property, there will be a residential driveway that intersects the trail near the bottom on the hill as trail users approach Marine Avenue. Motor vehicles crossing the trail to enter and exit the driveway or motor vehicles parked over the trail crossing can create a potential safety hazard for both people walking and those cycling on the trail.	It is part of the Village's future plan to create a chicane in the trail to slow people cycling down hill and to reduce potential driveway conflicts. This can help to slow trail users. It will be important to consider the impact of the chicane on sightlines. The Village can consider installing warning signage on the trail to warn of the driveway crossing (ensuring new signage does not create an obstruction) and informs users to slow down and use caution.	2018 Chicane works, sightline concern will be addressed. Will notify 3424 Marine of driveway concerns for their incorporation	2017/11/23



COUNCIL REPORT

Date: July 24, 2023
From: Stewart Novak, Public Works, and Emergency Preparedness Coordinator
Subject: **Tatlow Reservoir Project Progress Report**

Recommendation

That the report dated July 24, 2023 titled "Tatlow Reservoir Progress Report" be received into the record for information.

Purpose

To provide Council with an update on the ongoing work at the Tatlow Reservoir including:

- Chlorination system quote
- WSP inspection, tank assessment and life expectancy
- Excavating and fencing

Update

- Chlorination system quote:

WSP is seeking additional quotes for chlorination equipment and is expected to forward a draft copy of the report to staff. A report will be provided to Council when meetings resume in September.

- WSP Inspection, Tank Assessment and Life Expectancy

WSP conducted an exterior inspection on both reservoirs May 24, 2023 and returned June 29, 2023 to monitor the interior inspection and video recording of tanks and will be providing a report to Council when all data is finalized. A final report can be expected when meetings resume in September.

- Excavating and Fencing.

Excavation work has now been completed which provides a vehicle pathway and room for chain link fencing to be installed.

Staff have requested quotes from three fencing companies for installation of 6' high fencing and a 12' slide gate around the perimeter of the facility. Staff will be providing a status report on the progress of fencing in September.



COUNCIL REPORT

Date: July 24, 2023
From: Stewart Novak, Public Works, and Emergency Preparedness Coordinator
Subject: **Seismic Sensor Status Report, Tatlow Station**

Recommendation

That staff be directed to purchase and install a new seismic sensor for the Tatlow Station at an estimated cost of up to \$10,000.00 and that the strategic plan and capital budgets be amended accordingly.

Purpose

To provide Council with an update on the history and status of the seismic sensor in the Tatlow Station.

Background

At the July 10, 2023 Regular Council Meeting, it was requested that staff provide a report on the status of the seismic sensor installed into the Tatlow Station including the reasoning behind the removal of the sensor and provision of a timeline on the reconnection of the sensor.

The seismic sensor was installed into Tatlow Station in 2012 when Belcarra had designed and installed their new water distribution system to serve all Village residents not including Farrer cove and Twin Islands.

Records indicate that there were ongoing issues with the seismic sensor and that staff had trouble keeping the sensors calibrated so that the system would not trigger and go into an alarm state inadvertently.

The seismic system was designed with two functions for when a seismic event occurs. The first function is to send an alarm signal through SCADA to the water operators' phone which will alert the operators and describe the type of alarm code. The second function of the seismic sensor is that it automatically closes the seismic valve which is located between the outlet port of the reservoir and the distribution pipe that branches into Tatlow Station and the feeds the gravity fed line serving residents.

Due to the ongoing problems, the seismic sensor was eventually disconnected from the SCADA system and turned off in 2018-2019.

Since 2020 the seismic valve is currently connected and controllable by the water operators through SCADA however the seismic sensor remains out of service to this date.

In June of 2021, both WSP and a sales representative for the seismic sensor company carried out a site visit to the Tatlow Station and advised that the seismic sensor currently installed is no longer supported for parts and services. It was recommended that a new seismic sensor be purchased rather than attempting repairs of the currently installed sensor.

Staff have reached out to the seismic sensor sales company to request an updated quote on the cost to purchase and install a new sensor for Tatlow Station and will be providing SCADA wiring and programming details as per the company's request.

STRATEGIC WORK PLAN IMPLICATION

It should be noted that there currently is no budgeting for the purchase and installation of this item. In addition, work on this project may impact the progress of other projects adopted and scheduled in the strategic plan.

CONCLUSION

In response to a request from Council, staff is providing documentation pertaining to SCADA to a seismic sensor sales company to allow for the provision of a quote on the cost of a new seismic sensor. Staff is seeking direction from Council to allow purchase and installation of a new seismic sensor once a quote has been received. Should the cost of the project be higher than \$10,000, new direction will be sought.

From: dkbabineau [REDACTED]
Sent: Thursday, July 6, 2023 8:38 PM
To: Amanda Seibert <ASeibert@belcarra.ca>; Paula Richardson <prichardson@belcarra.ca>
Cc: Janet Ruzycski <jruzycki@belcarra.ca>; Carolina Clark <cclark@belcarra.ca>; Joe Elworthy <jelworthy@belcarra.ca>; Jamie Ross <jross@belcarra.ca>; Liisa Wilder <lwilder@belcarra.ca>; Jim and Sherry Chisholm <[REDACTED]>
Subject: Letter to Belcarra Council

Hi Amanda and Paula,

Could you please add this to the next council meeting agenda as a question to council?

Thanks!

I have suggested a few times that council, our water usage consultants and the residents have a special meeting to come to agreement on the following...

Determine how much water we feel we need to fight fires in the village and for how long?

Do we need 60 LPS for 90 minutes?

90 LPS for two hours?

I strongly believe that at this point we have enough information to have an informed discussion. Before we spend another dime on consultants for this project, we should tell them what we want. Once we have these two numbers, we can explore the options available to us to achieve the agreed upon water flows we want to have available to us to fight fires. The only other input we may want to consider at this time is a current opinion from FUS as I think the latest recommendations from this is some 10 years old. Perhaps invite them to this meeting?

At the last council meeting, only Carolina said that she is ready to have this conversation. My question to council is...

I would like a yes or no from each council member and mayor if they are prepared to have this conversation with the intent to reach agreement about the amount of water (how many LPS) we require to fight fires and for how long.

If yes, are you prepared to have this conversation in...

A. A separate town hall meeting with the consultants, all council members, and the residents?

OR

B. A regular council meeting?

I will be out of town for the next meeting so if I could get a report back on the answers from council it would be very much appreciated.

Thanks,

Don

Don Babineau

[REDACTED]

[REDACTED]

Belcarra, B.C.

[REDACTED]

Office of the Chair
Tel. 604-432-6215 or via Email
CAOAdministration@metrovancover.org

July 11, 2023

File: CR-12-01
Ref: RD 2023 Jun 30

Mayor Jamie Ross and Council
Village of Belcarra
4084 Bedwell Bay Road
Belcarra, BC V3H 4P8
VIA EMAIL: jross@belcarra.ca

Dear Mayor Jamie Ross and Council:

**Proposed Land Use Designation Amendment to Metro 2050
City of Surrey – Fraser Heights**

The City of Surrey is requesting a Type 3 Amendment to *Metro 2050* for a 10.2-hectare site located at 11420 – 157A Street in the City’s Fraser Heights area. The proposed regional land use designation amendment would redesignate the site from Industrial to General Urban to accommodate a residential development of 38 single-detached lots on the subject site.

At its June 30, 2023 regular meeting, the Board of Directors of the Metro Vancouver Regional District (MVRD) adopted the following resolution:

That the MVRD Board:

- a) *initiate the Metro 2050 amendment process for the City of Surrey’s requested regional land use designation amendment from Industrial to General Urban for the lands located at 11420 – 157A Street;*
- b) *give first, second, and third readings to “Metro Vancouver Regional District Regional Growth Strategy Amendment Bylaw No. 1366, 2023”; and*
- c) *direct staff to notify affected local governments as per section 6.4.2 of Metro 2050.*

As required by both the *Local Government Act* and *Metro 2050*, the regional growth strategy amendment process requires a minimum 45-day notification period to allow all affected local governments, First Nations, and members of the public to provide comment on the proposed amendment. Following the comment period, the MVRD Board will review all comments received and consider adoption of the amendment bylaw.

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The proposed amendment is a Type 3 amendment to *Metro 2050*, which requires that an amendment bylaw be passed by the MVRD Board by a 50% +1 weighted vote. For more information on regional growth strategy amendment procedures, please refer to Sections 6.3 and 6.4 in *Metro 2050*. A Metro Vancouver staff report providing background information and an assessment of the proposed amendment regarding its consistency with *Metro 2050* is enclosed.

You are invited to provide written comments on the proposed amendment. Please provide your comments to the contact below **by September 15, 2023**.

If you have any questions with respect to the proposed amendment, please contact Jonathan Coté, Deputy General Manager, Regional Planning and Housing Development, by phone at 604-432-6391 or by email at jonathan.cote@metrovancover.org.

Yours sincerely,

A handwritten signature in blue ink that reads "George V. Harvie". The signature is written in a cursive style and is underlined with a blue horizontal line.

George V. Harvie
Chair, Metro Vancouver Board

GVH/JWD/hm

cc: Paula Richardson, Chief Administrative Officer, Village of Belcarra
Jerry W. Dobrovlny, Commissioner/Chief Administrative Officer, Metro Vancouver
Heather McNell, Deputy Chief Administrative Officer, Policy and Planning, Metro Vancouver
Jonathan Coté, Deputy General Manager, Regional Planning & Housing Development, Metro Vancouver

Encl: [Metro 2050 Type 3 Proposed Amendment – City of Surrey \(Fraser Heights\)](#)

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(Severed portions are shaded)

From: Brian Hirsch [REDACTED]

Sent: Friday, July 14, 2023 7:54 AM

To: Jamie Ross <[jross@belcarra.ca](mailto:ross@belcarra.ca)>; Carolina Clark <cclark@belcarra.ca>; Joe Elworthy <jelworthy@belcarra.ca>; Janet Ruzycki <jruzycki@belcarra.ca>; Liisa Wilder <lwilder@belcarra.ca>

Subject: Msg from BrianHirsch - Communicating with Belcarra Residents

Mayor Ross and Councillors,

At the last All Candidates meeting in preparation for the election, in which you were all elected, you declared to your constituents - the Belcarra residents - your commitment to transparency and communication (as well as other undertakings).

To this end, if you have not joined already, I recommend you **join the FaceBook Belcarra Oversight Group** (& Belcarra Together Group). After all, it is one of the 21st Century's means of communication! You will get the pulse and views of what many of the residents are thinking and saying about issues concerning the governance and operation of our Village. You were voted in by the residents who put their trust in you - it behoves you to listen to what they have to say.

Carpe Diem.

Regards,

Brian

Brian Hirsch

Belcarra, British Columbia

[REDACTED]

July 12, 2023

To: Mayor and Council

From Sherry Chisholm

It appears that the Mayor decided on his own to send the letter from John McEwen regarding the plan for the new firehall for some sort of legal advice. WHY? Did the councilors know about this plan, were they consulted at all? IF NOT...WHY NOT? What do the councilors have to say about this? It seems to me that the elected group of councilors are not being kept informed on some actions. Is this legal? These recent actions regarding the letter appear improper or maybe illegal.

The other item that I would like to address is the Watson Trail. The Tatlow Trail has been well established for many years. Why are we developing another trail that is very close to Tatlow Trail and is only one lot width away from the Watson Trail? This leaves a private home with public trails on both sides of their home. WHY? I suggest that at the top of the Tatlow Trail that the encroachments by the nearest neighbors has discouraged its use and the new trail is being enhanced to also discourage the use of this old and well established Tatlow Trail. Possibly the neighbors who have their encroachments should be asked to get off the trail or at least pull back so as not to encumber the entry to the trail. The Watson trail is not needed so why spend the money. If bikes wish to get down to Marine Avenue what is wrong with Kelly Road which is wide and paved. Why disturb the quiet enjoyment of the private home with trails on both sides.

I am very alarmed by what appears to be the Mayor alone making decisions. The Villagers put their trust and votes to the entire council so that the group would discuss and make decisions with a balanced input from the entire group NOT A ONE MAN SHOW.

COUNCILORS MUST SPEAK UP AT THE PUBLIC MEETINGS AND SHOW THE VILLAGERS THAT THEY ARE INVOLVED AND INTERESTED IN REPRESENTING ALL THE VILLAGERS ...NOT THEIR PERSONAL NEEDS OR TO GO ALONG WITH THE MAYOR JUST TO GET ALLONG.

July 15, 2023

To: Mayor and Council

From: Sherry Chisholm

I am motivated to write this letter because of the many apparent conflict of interests that the Mayor of our small village appears to have. It seems to me there are too many for our Mayor to make unbiased decisions or even to speak to many issues because of conflict.

Our Village OCP (Official Community Plan) which includes some reference to road allowance and docks and therefore the mayor must recuse himself because of conflict of interest. As the Mayor cannot participate in discussions regarding our future plans for the Village then he is unable to represent the Village on many important matters.

AT present the Vancouver Port Corporation is sending out a new contract which is in my opinion unacceptable and we need a Mayor that can represent us at the Port meetings. Other municipal Mayors are all actively involved in discussions representing their voters at the Port.

Because the Mayor resides beside Tatlow Trail (road allowance) he would be greatly affected if it were sold...he would certainly be required to remove his personal use (encroachment). This, once again, puts him in personnel conflict.

When discussing the plan to enhance the Watson Road Path .. possibly even paving for bikes, once again puts him in personal conflict as it appears to me that he is trying to encourage folks to use Watson Trail only (approximately 100 feet away) and in doing so he leaves Tatlow Trail, by his home, for his quiet personal enjoyment and no need to remove his encroachment.

Another appearance of conflict is about the sale of Road Allowances (there are approximately 31). If the Village sold only a few upland road allowances we could clear our debt for water and pay our 50% share of the new firehalls that need to be built and there would be no tax increase added by another long term debt or possibly a per property levy. He would certainly be personally affected and once again would need to leave the table.

The Mayor is in conflict on dock discussion, OCP discussions any discussion regarding development or even sale of any road allowances because of his encroachment and residential location by Tatlow Road allowance. It seems to me that our Mayor will spend more time OFF the official table discussion than ON.

The council members MUST openly represent the Villagers on these important Village matters. It seems to me that our Mayor should, for the sake of appearance and his inability to discuss and represent these important matters which greatly concern Villagers that he should rethink his responsibilities to the Villagers.