

VILLAGE OF PORT ALICE
COUNCIL MEETING AGENDA
TO BE HELD WEDNESDAY JULY 10, 2024, at 6:00 pm
AT COUNCIL CHAMBERS, VILLAGE OFFICE



(1) CALL TO ORDER
We are privileged to acknowledge that this meeting is being held on the traditional territory of the Quatsino First Nations.

(2) ADOPTION OF AGENDA:
THAT the Agenda for the Meeting of the Village of Port Alice for July 10, 2024, be approved; AND THAT all delegations, reports, correspondence, and other information set to the agenda be received.

(3) DELEGATIONS:
a.) Quarterly RMCP report
Trevor Busch, Acting Staff Sergeant, Port Hardy RCMP

Pg 3-4

(4) MINUTES:
a.) *THAT the Minutes from the Regular Meeting Minutes of June 26, 2024, be approved.*

(5) NEW BUSINESS:

Pg 5-53

(6) COMMUNICATIONS:
a.) 2023-2034 Canada Community-Building Fund Agreement
June 21, 2024, Agreement from Brant Felker, Manager, CCBF Program Services

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REPORTS:
a.) Fire Chief's Monthly Report for June 2024
June 30, 2024, report from Jerry Rose, Fire Chief

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b.) Procedure Bylaw
June 27, 2024, Report from Bonnie Danyk, CAO/CFO

Pg 59-112

c.) Geotechnical Assessment 740-810 Marine Drive
July 2, 2024, Report from Johannes Fischer, P Eng.

(7) BYLAWS:

(8) QUESTION PERIOD:

(9) RESOLUTION TO PROCEED TO CLOSED MEETING
THAT the meeting be closed to the public to consider matters pursuant to the following sections of the Community Charter:

(k) negotiations and related discussions respecting the proposed provision of a municipal service that are at their preliminary stages and that, in the view of the council, could reasonably be expected to harm the interests of the municipality if they were held in public;

(10) RECONVENE:

(11) ADJOURNMENT:
THAT the meeting of the Village of Port Alice Council held July 10, 2024, be adjourned

VILLAGE OF PORT ALICE COUNCIL
REGULAR MEETING MINUTES
WEDNESDAY, JUNE 26, 2024
AT COUNCIL CHAMBERS, VILLAGE OFFICE



Present
Mayor Kevin Cameron
Councillor Holly Aldis
Councillor Sean Watson
Councillor Russell Murray - Online
Councillor David Stewart

Absent

Staff
Tanya Spafford, Deputy CAO/CFO
Ryan Nicholson, Economic Development Officer
Bonnie Danyk, CAO/CFO

Call to order 6:00pm

ADOPTION OF AGENDA:

Moved, Seconded and CARRIED

49/24
Adoption of
Agenda

***THAT** the Agenda for the Meeting of the Village of Port Alice for June 26, 2024, be approved; AND
THAT all delegations, reports, correspondence, and other information set to the agenda be received.*

DELEGATION:

50/24
Minutes of
June 12, 2024

MINUTES:

Moved, Seconded and CARRIED

***THAT** the Minutes from the Council Meeting of June 12, 2024, be approved.*

NEW BUSINESS:

COMMUNICATIONS:

REPORTS:

51/24 Com
Forest Director

North Island Community Forest Director – Three-year Term

June 17, 2024, report from CAO/CFO, Bonnie Danyk

Moved, Seconded and CARRIED

***THAT** Alma Vant Schip be appointed to the North Island Community Forest Board for a term of three years ending June 2027.*

LGMA Conference

June 18, 2024, report from CAO/CFO, Bonnie Danyk

Accounts Payable Listing for May 2024

June 18, 2024, report from CAO/CFO, Bonnie Danyk

June 21, 2024

Bonnie Danyk
Chief Administrative Officer Chief Financial Officer
Village of Port Alice
Box 130
Port Alice, BC V0N 2N0

SENT VIA E-MAIL: cao@portalice.ca

Dear Bonnie Danyk:

RE: 2024-2034 CANADA COMMUNITY-BUILDING FUND AGREEMENT

Please find enclosed the 2024-2034 Community Works Fund Agreement between the Village of Port Alice and the Union of BC Municipalities. As part of the renewed Canada Community-Building Fund Agreement, the CWF will continue to provide dedicated and predictable funds to each local government in British Columbia for investments in local infrastructure and capacity-building priorities.

In order to receive your first CWF payment for the 2024/25 funding year, please review the Agreement, sign, and return to ccbf@ubcm.ca.

Once we have received the Agreement, we will return an executed version for your records.

Please also include a Council resolution authorizing the Mayor and Corporate Officer to sign on behalf of your local government.

We have provided a program guide, an information sheet, and estimated funding for the first five years of the program on our UBCM CCBF [website](#).

If you have any questions, please email us at ccbf@ubcm.ca or call us at 250-356-5134.

Sincerely,



Brant Felker
Manager, CCBF Program Services

2024-2034 COMMUNITY WORKS FUND AGREEMENT

under the

ADMINISTRATIVE AGREEMENT ON THE CANADA COMMUNITY-BUILDING FUND

This Agreement made as of _____, 202__,

BETWEEN:

Village of Port Alice (the Local Government)

AND

The **UNION OF BRITISH COLUMBIA MUNICIPALITIES** (UBCM) as continued by section 2 of the *Union of British Columbia Municipalities Act RSBC 2006, c.1*, as represented by the President (the "UBCM")

1. PURPOSE

The purpose of this Community Works Fund Agreement is to set out the roles and responsibilities of the Local Government and UBCM related to any Community Works Fund funds that may be delivered to the Local Government by UBCM.

2. SCHEDULES

The following annexes and schedules, originating in whole or part from the Agreement, are attached to and form part of this Community Works Fund Agreement:

Schedule A:	Ultimate Recipient Requirements
Schedule B:	Eligible Project Categories
Schedule C:	Eligible and Ineligible Expenditures
Schedule D:	Program Reporting
Schedule E:	Communications Protocol
Schedule F:	Asset Management
Schedule G:	Housing Report

3. ROLE OF UBCM

3.1 UBCM has, pursuant to the Agreement, agreed with Canada and British Columbia to:

- a) receive CCBF funding from Canada and allocate funds so received from Canada pursuant to the Agreement, including allocating Community Works Funds to the Local Government to be spent on Eligible Projects and Eligible Expenditures in accordance with the terms and conditions of this Community Works Fund Agreement;
- b) report to Canada and British Columbia, including Annual Reports and Outcome Reports, as required by the Agreement; and

- c) fulfill other roles and responsibilities as set out in the Agreement.

4. CONTRIBUTION PROVISIONS

- 4.1 Over the term of this Community Works Fund Agreement, UBCM will pay the Local Government its annual allocation within 30 days of receipt of such funds from Canada.
- 4.2 Payments under section 4.1 are subject to UBCM receiving sufficient CCBF funds from Canada, and Local Government compliance with this Community Works Fund Agreement and any other Funding Agreement under the Prior Agreement.
- 4.3 Annual allocation is based on a formula set out in section 1.1 of Annex B of the Agreement. In the first year of this Community Works Fund Agreement, the Local Government will receive \$48,530, in two equal instalments which, subject to section 4.2, are expected to be delivered in the month following July 15 and between November 15, 2024 and March 31, 2025.
- 4.4 Annual allocation to the Local Government for all subsequent years under this Community Works Fund Agreement continue to be based on the funding formula set out in the Agreement, but are subject to change by UBCM from the amount set out in section 1.1 of Annex B of the Agreement due to such circumstances as local government boundary changes and new Local Government incorporations, changes in Census populations and changes in amounts that may be received by UBCM from Canada.
- 4.5 Timing of payments in subsequent years under this Community Works Fund Agreement to the Local Government by UBCM are subject to change due to any changes in timing of payments to UBCM by Canada.

5. USE OF FUNDS BY LOCAL GOVERNMENT

- 5.1 Any CCBF funding that may be received by the Local Government and any Unspent Funds, and any interest earned thereon held by the Local Government must be used by the Local Government in accordance with this Community Works Fund Agreement, including specifically Section 6. (Commitments of the Local Government).
- 5.2 Any CCBF funding that may be received by the Local Government and any Unspent Funds, and any interest earned thereon held by the Local Government will be treated as federal funds with respect to other federal infrastructure programs.

6. COMMITMENTS OF THE LOCAL GOVERNMENT

- 6.1 The Local Government shall:
 - a) Be responsible for the completion of each Eligible Project in accordance with Schedule B (Eligible Project Categories) and Schedule C (Eligible and Ineligible Expenditures).
 - b) Comply with all requirements outlined in Schedule D (Program Reporting), Schedule E (Communications Protocol) and Schedule G (Housing Report).

- c) Continue to strengthen the development and implementation of asset management best practices over the course of the Agreement, in accordance with Schedule F.
- d) Invest, in a distinct account, Community Works Fund funding it receives from UBCM in advance of it paying Eligible Expenditures.
- e) With respect to Contracts, award and manage all Contracts in accordance with their relevant policies and procedures and, if applicable, in accordance with the Agreement on International Trade and applicable international trade agreements, and all other applicable laws.
- f) Invest into Eligible Projects, any revenue that is generated from the sale, lease, encumbrance or other disposal of an asset resulting from an Eligible Project where such disposal takes place within (5) years of the date of completion of the Eligible Project.
- g) Allow Canada and UBCM reasonable and timely access to all of its documentation, records and accounts and those of their respective agents or Third Parties related to the use of CWF funding and Unspent Funds, and any interest earned thereon, and all other relevant information and documentation requested by Canada or its designated representatives for the purposes of audit, evaluation, and ensuring compliance with this Administrative Agreement.
- h) Keep proper and accurate accounts and records in respect of all Eligible Projects for at least six (6) years after completion of the Eligible Project and, upon reasonable notice, make them available to Canada and UBCM. Keep proper and accurate accounts and records relevant to the CWF program for a period of at least six (6) years after the termination of this Administrative Agreement.
- i) Ensure your actions do not establish or be deemed to establish a partnership, joint venture, principal-agent relationship or employer-employee relationship in any way or for any purpose whatsoever between Canada and the Local Government, or between Canada and a Third-Party.
- j) Ensure that the Local Government do not represent themselves, including in any agreement with a Third Party, as a partner, employee or agent of Canada.
- k) Ensure that no current or former public servant or public office holder to whom any post-employment, ethics and conflict of interest legislation, guidelines, codes or policies of Canada applies will derive direct benefit from CCBF funding, Unspent Funds, and interest earned thereon, unless the provision or receipt of such benefits is in compliance with such legislation, guidelines, policies or codes.
- l) Ensure that the Local Government will not, at any time, hold the Government of Canada, British Columbia, or UBCM, its officers, servants, employees or agents responsible for any claims or losses of any kind that the Local Government, Third Parties or any other person or entity may suffer in relation to any matter related to CCBF funding or an Eligible Project and that the Local Government will, at all times, compensate the Government of Canada, British Columbia, or UBCM, its officers, servants, employees, and agents for any claims or losses of any kind that any of the Local Government may suffer in relation to any matter related to CCBF funding or an Eligible Project.
- m) Agree that any CCBF funding received will be treated as federal funds for the purpose of other federal infrastructure programs.
- n) Agree that the above requirements which, by their nature, should extend beyond the expiration or termination of this Administrative Agreement, will extend beyond such

expiration or termination.

7. TERM

This Community Works Fund Agreement will be effective as of April 1, 2024 and will be in effect until March 31, 2034 unless the Parties agree to renew it. In the event where this Community Works Fund Agreement is not renewed, any CCBF funding and Unspent Funds, and any interest earned thereon held by the Local Government, that have not been expended on Eligible Projects or other expenditures authorized by this Community Works Fund Agreement as of March 31, 2034 will nevertheless continue to be subject to this Community Works Fund Agreement until such time as may be determined by the Parties.

8. SURVIVAL

The rights and obligations, set out in Sections 5.1, 5.2 and 6.1 will survive the expiry or early termination of this Community Works Fund Agreement and any other section which is required to give effect to the termination or to its consequences shall survive the termination or early termination of this Community Works Fund Agreement.

9. AMENDMENT

The Local Government acknowledges that the Agreement may from time to time be amended by agreement of Canada, British Columbia and UBCM and if and whenever such amendments to the Agreement are made, the Local Government agrees that UBCM may require this Community Works Fund Agreement to be amended to reflect, at the sole discretion of UBCM, the amendments made to the Agreement. Where UBCM requires this Community Works Fund Agreement to be so amended, it will provide to the Local Government notice in writing of the amendments it requires. Such amendments shall from part of this Community Works Fund Agreement and be binding on the Local Government and UBCM thirty (30) days after such notice, unless before then the Local Government elects in writing to give written notice of termination of this Community Works Fund Agreement to UBCM.

10. WAIVER

No provision of this Community Works Fund Agreement shall be deemed to be waived by UBCM, unless waived in writing with express reference to the waived provisions and no excusing, condoning or earlier waiver of any default by the Local Government shall be operative as a waiver, or in any way limit the rights and remedies of UBCM or Canada.

11. NO ASSIGNMENT

This Community Works Fund Agreement is not assignable by the Local Government and the Local Government shall not assign, pledge, or otherwise transfer any entitlement to allocation of funds under this Community Works Fund Agreement to any person and shall upon receipt of any allocation of funds hereunder pay and expend such funds thereafter only in accordance with the terms of this Community Works Fund Agreement.

12. NOTICE

Any notice, information or document provided for under this Community Works Fund Agreement must be in writing and will be effectively given if delivered or sent by mail, postage or other charges prepaid, or by email. Any notice that is delivered will have been received on delivery; and any notice mailed will be deemed to have been received eight (8) calendar days after being mailed.

Any notice to UBCM will be addressed to:

Executive Director
525 Government Street
Victoria, British Columbia
V8V 0A8
Email: ccbfb@ubcm.ca

Any notice to the Local Government will be addressed to:

The Corporate Officer at the place designated as the Local Government office.

SIGNATURES

This Community Works Fund Agreement has been executed on behalf of the Local Government by those officers indicated below and each person signing the agreement represents and warrants that they are duly authorized and have the legal capacity to execute the agreement.

Village of Port Alice

UNION OF BC MUNICIPALITIES

Original signed by:

Original signed by:

Mayor

Corporate Officer

Corporate Officer

General Manager, Victoria Operations

Signed by Village of Port Alice on the _____
day of _____, 202__.

The Community Works Fund Agreement have been
executed by UBCM on the _____ day of
_____, 202__.

Schedule A – Definitions

“Affordable Housing” means a dwelling unit where the cost of shelter, including rent and utilities, is a maximum of 30% of before-tax household income. The household income is defined as 80% or less of the Area Median Household Income (AMHI) for the metropolitan area or rural region of the Ultimate Recipient.

“Administrative Agreement or Agreement” means the 2024-2034 Administrative Agreement on the Canada Community-Building Fund in British Columbia and UBCM.

“Asset Management” means an integrated process, bringing together skills, expertise, and activities of people; with information about a community’s physical and natural assets; and finances; so that informed decisions can be made, supporting Sustainable Service Delivery.

“Canada Community-Building Fund” (CCBF) means the program established under section 161 of the *Keeping Canada’s Economy and Jobs Growing Act*, S.C. 2011, c. 24 as amended by section 233 of the *Economic Action Plan 2013 Act, No. 1*, S.C. 2013, c. 33, as the Gas Tax Fund and renamed the Canada Community-Building Fund in section 199 of *Budget Implementation Act, 2021, No. 1*.

“Chief Financial Officer” means in the case of a municipality, the officer assigned financial administration responsibility under S. 149 of the *Community Charter*, and in the case of a Regional District, the officer assigned financial administration responsibility under S. 199 of the *Local Government Act*, R.S.B.C. 1996, c.323.

“Community Works Fund” means the fund provided from the Canada Community-Building Fund to be dispersed to local governments based on a percentage of the per capita allocation for local spending priorities in accordance with the terms and conditions set out in the Agreement.

“Community Works Fund Agreement” means this Agreement made between UBCM and Local Government.

“Contract” means an agreement between an Ultimate Recipient and a Third Party whereby the latter agrees to supply a product or service to an Eligible Project in return for financial consideration.

“Core Housing Need” means a household living in an unsuitable, inadequate or unaffordable dwelling and cannot afford alternative housing in their community.

“Eligible Expenditures” means those expenditures described as eligible in Schedule C (Eligible and Ineligible Expenditures).

“Eligible Projects” means projects as described in Schedule B (Eligible Project Categories).

“Funding Agreement” means an agreement between British Columbia and UBCM and an Ultimate Recipient setting out the terms and conditions of the CCBF funding to be provided to the Ultimate Recipient, containing, at a minimum, the elements in Schedule A (Ultimate Recipient Requirements).

“Gender Based Analysis Plus” (GBA Plus or GBA+) is an analytical process that provides a rigorous method for the assessment of systemic inequalities, as well as a means to assess how diverse groups of women, men, and gender diverse people may experience policies, programs and initiatives. The “plus” in GBA Plus acknowledges that GBA Plus is not just about differences between biological (sexes) and socio-cultural (genders). GBA Plus considers many other identity factors such as race, ethnicity, religion, age, and mental or physical disability, and how the interaction between these factors influences the way we might experience government policies and initiatives. Conducting a GBA Plus analysis involves considering all intersecting identity factors as part of GBA Plus, not only sex and gender. GBA+ is a priority for the Government of Canada.

“Housing Needs Assessment” means a report informed by data and research describing the current and future housing needs of a municipality or community according to guidance provided by Canada.

“Housing Report” means the duly completed housing report to be prepared and delivered by British Columbia and UBCM to Canada annually by September 30, as described in Schedule G (Housing Report).

“Ineligible Expenditures” means those expenditures described as ineligible in Schedule C (Eligible and Ineligible Expenditures).

“Infrastructure” means municipal or regional, publicly or privately owned tangible capital assets, or natural assets, in British Columbia primarily for public use or benefit.

“Local Government” means a municipality as defined in the *Community Charter* [SBC 2003] Chapter 26, a regional district as defined in the *Local Government Act* [RSBC 1996] Chapter 323, and the City of Vancouver as continued under the *Vancouver Charter* [SBC 1953] Chapter 55.

“Oversight Committee” means the committee established to monitor the overall implementation of this Administrative Agreement as outlined in section 7 (Oversight Committee) of this Administrative Agreement.

“Party” means Canada, British Columbia or UBCM when referred to individually and collectively referred to as “Parties”.

“Previous Agreements” means any agreements between Canada, British Columbia and UBCM for the purposes of administering the Gas Tax Fund or Canada Community-Building Fund (CCBF).

“Prior Community Works Fund Agreement” means the 2014-2024 Community Works Fund Agreement between this Local Government and the UBCM.

Third Party” means any person or legal entity, other than Canada, British Columbia and UBCM or an Ultimate Recipient, who participates in the implementation of an Eligible Project by means of a Contract.

“Sustainable Service Delivery” means ensuring that current community service needs, and how those services are delivered (in a socially, economically and environmentally responsible

manner), do not compromise the ability of future generations to meet their own needs. Sound asset management practices support Sustainable Service Delivery by considering community priorities, informed by an understanding of the trade-offs between the available resources and the desired services.

“Ultimate Recipient” means this Local Government

- (i) a Local Government or its agent (including its wholly owned corporation);
- (ii) a non-local government entity, including Indigenous recipients, non-governmental and not-for-profit organizations, on the condition that the Local Government(s) has (have) indicated support for the project through a formal resolution of its (their) council(s) or board(s) and that the entity receiving funds delivers a service typical of local government.
- (iii) TransLink, BC Transit, and Islands Trust

“Unspent Funds” means funds that have not been spent towards an Eligible Project or eligible costs in accordance with this Agreement or the Previous Agreements prior to the effective date of this Agreement.

SCHEDULE B - Eligible Project Categories

Eligible Projects include investments in Infrastructure for its construction, renewal or material enhancement in each of the following categories (as defined in the current program terms and conditions):

1. Local roads and bridges – roads, bridges and active transportation infrastructure
2. Short-sea shipping – infrastructure related to the movement of cargo and passengers around the coast and on inland waterways, without directly crossing an ocean
3. Short-line rail – railway related infrastructure for carriage of passengers or freight
4. Regional and local airports – airport-related infrastructure (excludes the National Airport System)
5. Broadband connectivity – infrastructure that provides internet access to residents, businesses, and/or institutions in Canadian communities
6. Public transit – infrastructure which supports a shared passenger transport system which is

- available for public use
7. Drinking water – infrastructure that supports drinking water conservation, collection, treatment and distribution systems
 8. Wastewater – infrastructure that supports wastewater and storm water collection, treatment and management systems
 9. Solid waste – infrastructure that supports solid waste management systems including the collection, diversion and disposal of recyclables, compostable materials and garbage
 10. Community energy systems – infrastructure that generates or increases the efficient usage of energy
 11. Brownfield Redevelopment - remediation or decontamination and redevelopment of a brownfield site within municipal boundaries, where the redevelopment includes:
 - the construction of public infrastructure as identified in the context of any other category under the Canada Community-Building Fund, and/or;
 - the construction of local government public parks and publicly-owned social housing.
 12. Sport Infrastructure – amateur sport infrastructure (excludes facilities, including arenas, which would be used as the home of professional sports teams or major junior hockey teams (e.g. Western Hockey League))
 13. Recreational Infrastructure – recreational facilities or networks
 14. Cultural Infrastructure – infrastructure that supports arts, humanities, and heritage
 15. Tourism Infrastructure – infrastructure that attract travelers for recreation, leisure, business or other purposes
 16. Resilience – Infrastructure and systems that protect and strengthen the resilience of communities and withstand and sustain service in the face of climate change, natural disasters and extreme weather events.
 17. Fire halls – fire halls and fire station infrastructure – including fire trucks
 18. Capacity building - includes investments related to strengthening the ability of municipalities to develop long-term planning practices including: capital investment plans, integrated community sustainability plans, integrated regional plans, housing needs assessments and housing planning, and/or asset management plans, related to strengthening the ability of recipients to develop long-term planning practices.

Note: Investments in health infrastructure (hospitals, convalescent and senior centres) are not eligible.

SCHEDULE C - Eligible and Ineligible Expenditures

1. Eligible Expenditures

1.1 Eligible Expenditures of Ultimate Recipients will be limited to the following:

- a) the expenditures associated with acquiring, planning, designing, constructing or renewal and rehabilitation of infrastructure and any related debt financing charges specifically identified with that asset;
- b) for capacity building category only, the expenditures related to strengthening the ability of Local Governments to improve local and regional planning including capital investment plans, integrated community sustainability plans, integrated regional plans, housing needs assessments, and/or asset management plans. The expenditures could include developing and implementing:
 - i. studies, strategies, or systems related to asset management, which may include software acquisition and implementation;
 - ii. studies, strategies, or systems related to housing or land use, including Housing Needs Assessments;
 - iii. training directly related to asset management planning; and
 - iv. long-term infrastructure plans.
- c) the expenditures directly associated with joint federal communication activities and with federal project signage.

1.2 Employee and Equipment Costs: The incremental costs of the Ultimate Recipient's employees or leasing of equipment may be included as Eligible Expenditures under the following conditions:

- a) the Ultimate Recipient is able to demonstrate that it is not economically feasible to tender a Contract;
- b) the employee or equipment is engaged directly in respect of the work that would have been the subject of the Contract; and,
- c) the arrangement is approved in advance and in writing by UBCM.

2. Ineligible Expenditures

The following are deemed Ineligible Expenditures:

- a) project expenditures incurred before April 1, 2005;
- b) project expenditures incurred before April 1, 2014 for the following investment categories:
 - i. highways;
 - ii. regional and local airports;
 - iii. short-line rail;

- iv. short-sea shipping;
 - v. disaster mitigation;
 - vi. broadband connectivity;
 - vii. brownfield redevelopment;
 - viii. cultural infrastructure;
 - ix. tourism infrastructure;
 - x. sport infrastructure; and
 - xi. recreational infrastructure.
- c) Fire Hall project expenditures incurred before April 1, 2021;
 - d) Fire Truck purchases as stand-alone expenditures and expenditures under the Resilience Infrastructure category before April 1, 2024;
 - e) the cost of leasing of equipment by the Ultimate Recipient, any overhead costs, including salaries and other employment benefits of any employees of the Ultimate Recipient, its direct or indirect operating or administrative costs of Ultimate Recipients, and more specifically its costs related to planning, engineering, architecture, supervision, management and other activities normally carried out by its staff, except in accordance with Eligible Expenditures above;
 - f) taxes for which the Ultimate Recipient is eligible for a tax rebate and all other costs eligible for rebates;
 - g) purchase of land or any interest therein, and related costs;
 - h) legal fees;
 - i) routine repair or maintenance costs; and
 - j) costs associated with healthcare infrastructure or assets.

SCHEDULE D - Program Reporting

Ultimate Recipient Reporting

Ultimate Recipient requirements for program reporting under the CWF consist of the submission of an Annual Expenditure Report, and an outcomes report, which will be submitted to UBCM for review and acceptance. The reporting year is from January 1 to December 31. In addition to overall program reporting, specific asset management reporting and housing reporting obligations are described in Schedule F and G.

1. Ultimate Recipient Annual Expenditure Report

The Ultimate Recipient will provide UBCM an Annual Expenditure Report by June 1 of each year for the prior calendar year reporting which will include the following elements: unique project identifier, project title, project description, investment category, project start date, project end date, geo-location, total project cost, CCBF funding spent, closing balance, output indicator, and where applicable, a housing indicator and an outcomes indicator. A reporting template will be provided by UBCM.

The Annual Expenditure Report may also include a communications and signage report, and confirmation by the Ultimate Recipient's CFO that expenditures are eligible use of funds in accordance with the terms and conditions of this Agreement.

2. Audited Financial Report

The Ultimate Recipient must submit an Audited Financial Statement to British Columbia in order to receive funds in each reporting year.

2.1 Independent Audit or Audit Based Attestation:

UBCM will provide an independent audit opinion, or an attestation based on an independent audit and signed by a senior official designated in writing by UBCM, as to:

- a) the accuracy of the information submitted in the Financial Report Table; and
- b) that CCBF funding and Unspent Funds, and any interest earned thereon, were expended for the purposes intended.

2.2 Ultimate Recipient audit:

UBCM and Canada may perform an audit or of an Ultimate Recipient annually.

3. Housing Report

By September of 30 each year British Columbia and UBCM will provide to Canada a report on housing as outlined in Schedule G (Housing Report).

4. Outcomes Report

By March 31 of each year, British Columbia and UBCM will provide to Canada an outcomes report that will outline the following program benefits:

- a) beneficial impacts on communities of completed Eligible Projects, supported by specific outcomes examples in communities;
- b) the impact of CCBF as a predictable source of funding;
- c) progress made on improving Local Government planning and asset management, including development or update of Housing Needs Assessments; and
- d) a description of how CCBF funding has alleviated housing pressures tied to infrastructure gaps and contributed to housing supply and affordability outcomes (further details on this requirement may be found in Schedule G – Housing Report).

The outcomes report will present a narrative on how each program benefit is being met. A template and guidance document will be provided by Canada.

SCHEDULE E – Communications Protocol

In support of transparency and accountability of the CCBF, the following communications protocol will apply to all communications activities undertaken regarding any CCBF funding and will apply to the Parties and Ultimate Recipients. Communicating to Canadians on the use of CCBF funding is clearly linked with our joint accountability to Canadians. Compliance with this protocol will inform the timing and flow of any CCBF funding and is critical to meeting our joint commitment to transparency.

1. Purpose

- 1.1 The Communications Protocol applies to all communications activities related to any CCBF funding, including annual allocations and the identification and communication of projects under this Administrative Agreement. Communications activities may include, but are not limited to: public or media events, news releases, reports, digital and social media products, project signs, digital signs, publications, success stories and vignettes, photo compilations, videos, advertising campaigns, awareness campaigns, editorials, awards programs, and multi-media products.
- 1.2 Through collaboration, Canada, British Columbia and UBCM agree to work to ensure consistency in the communications activities meant for the public. This will include the importance of managing the delivery of communications activities based on the principle of transparent and open discussion.
- 1.3 Failure by British Columbia, UBCM or its Ultimate Recipient to adhere to this communication protocol may affect the timing and flow of any CCBF funding that may be transferred by Canada.

2. Joint communications approach

- a. British Columbia and UBCM agree to work in collaboration with Canada to develop a joint communications approach to ensure visibility for the program, the provision of upfront project information and planned communications activities throughout the year.

Canada will provide a “Communications Approach” template to be completed by British Columbia and UBCM. This approach will then be reviewed and approved by Canada as well as British Columbia and UBCM.

This joint communications approach will have the objective of ensuring that proactive communications activities are undertaken each year to communicate the annual allocations and key projects, as identified in the communications approach, located in both large and small communities by using a wide range of communications tools to ensure local visibility.

To accomplish this, Canada, British Columbia and UBCM agree to establish a communications subcommittee that will meet biannually. This committee will review and approve a communications plan at the beginning of each year.

- b. Canada, British Columbia and UBCM will work together on the initial annual joint communications approach, which will be finalized and approved by Canada's Co-Chair and British Columbia and UBCM agree that achievements under the joint communications approaches will be reported to the

Oversight Committee once a year.

- c. Through the communications subcommittee, British Columbia and UBCM agree to assess, with Canada, the effectiveness of communications approaches on an annual basis and, as required, update and modify the joint communications approach, as required. Any modifications will be brought to Canada's Co-Chair, British Columbia's Co-Chair and UBCM's Co-Chair, as appropriate for approval.
- d. If informed of a communications opportunity (ex. milestone event, news release) by an Ultimate Recipient, Canada, British Columbia and UBCM agree to share information promptly and coordinate participation in alignment with section 4.3, 4.5 and 5.2 of this communications protocol.
- e. Canada, British Columbia and UBCM agree to ensure the timely sharing of information, products (ex. news releases, media advisories), and approvals in support of communications delivery.

3. Inform Canada on allocation and intended use of CCBF funding for communications planning purposes

- 3.1 British Columbia and UBCM to provide to Canada upfront information on planned Eligible Projects and Eligible Projects in progress on an annual basis, prior to the construction season. Canada, British Columbia and UBCM will each agree, in this joint communications approach, on the date this information will be provided. Through the creation of a sub-committee, Canada, British Columbia and UBCM will be required to enact a communications approach that will be assessed bi-annually through the sub-committee mechanism.

In this agreement the information will include, at a minimum:

- Ultimate Recipient name; Eligible Project name; Eligible Project category, a brief but meaningful Eligible Project description; expected project outcomes including housing (if applicable); federal contribution; anticipated start date; anticipated end date; and a status indicator: not started, underway, completed.

Canada will link to the UBCM's CCBF website where this information will be accessible to the general public.

- 3.2 British Columbia and UBCM agree that the above information will be delivered to Canada in an electronic format deemed acceptable by Canada.
- 3.3 Canada, British Columbia and UBCM each agree that their joint communications approach will ensure the most up-to-date Eligible Project information is available to Canada to support media events and announcements (see 4.2 for full definition) for Eligible Projects.

4. Announcements and media events for Eligible Projects

- 4.1 At Canada's request, Canada, British Columbia and UBCM agree to coordinate an announcement regarding annual allocations of CCBF funding.

- 4.2 Media events and announcements include, but are not limited to: news conferences, public announcements, and the issuing of news releases to communicate funding of projects or key milestones (e.g. ground breaking ceremonies, completions).
- 4.3 Key milestones events and announcements (such as ground breaking ceremonies and grand openings) may also be marked by media events and announcements, news releases, or through other communications activities. Ultimate recipients, Canada, British Columbia and UBCM will have equal visibility through quotes and will follow the Table of Precedence for Canada.
- 4.4 Media events and announcements related to Eligible Projects will not occur without the prior knowledge and agreement of British Columbia and UBCM, as appropriate, Canada and the Ultimate Recipient.
- 4.5 The requester of a media event or an announcement will provide at least 15 working days' notice to other parties of their intention to undertake such an event or announcement. An event will take place at a mutually agreed date and location. British Columbia and UBCM, and, as appropriate, Canada and the Ultimate Recipient will have the opportunity to participate in such events through a designated representative. If communications is proposed through the issuing of a news release (with no supporting event), Canada requires at least 15 working days' notice and 5 working days with the draft news release to secure approvals and confirm the federal representative's quote.
- 4.6 For media events, each participant will choose its own designated representative. UBCM and Ultimate Recipients are responsible for coordinating all onsite logistics.
- 4.7 British Columbia and UBCM shall not unreasonably delay the announcement of opportunities identified in annual communications plans that have been pre-approved in advance.
- 4.8 The conduct of all joint media events, announcements for project funding, and supporting communications materials (ex. News releases, media advisories) will follow the Table of Precedence for Canada.
- 4.9 All joint communications material related to media events and announcements must be approved by Canada and recognize the funding of the parties.
- 4.10 All joint communications material for funding announcements must reflect Canada's Policy on Official Languages and the Policy on Communications and Federal Identity.
- 4.11 Canada, British Columbia and UBCM and Ultimate Recipients agree to ensure equal visibility in all communications activities.

5. Program communications

- 4.1 Canada, British Columbia, UBCM and Ultimate Recipients may include messaging in their own communications products and activities with regard to the CCBF.

- 4.2 The party undertaking these activities will recognize the funding of all contributors.
- 4.3 The conduct of all joint events and delivery of supporting communications materials (ex. News releases) that support program communications (ex. Such as intake launches) will follow the Table of Precedence for Canada.
- 4.4 Canada, British Columbia and UBCM agree that they will not unreasonably restrict the other parties from using, for their own purposes, public communications products related to the CCBF prepared by Canada, British Columbia and UBCM or Ultimate Recipients, or, if web-based, from linking to it.
- 4.5 Notwithstanding Section 4 of Schedule E (Communications Protocol), Canada retains the right to meet its obligations to communicate to Canadians about the CCBF and the use of funding.

6. Operational communications

- 6.1 British Columbia, UBCM or the Ultimate Recipient is solely responsible for operational communications with respect to Eligible Projects, including but not limited to, calls for tender, construction, and public safety notices. Operational communications as described above are not subject to the federal official language policy.
- 6.2 Canada does not need to be informed on operational communications. However, such products should include, where appropriate, the following statement, "This project is funded in part by the Government of Canada" or "This project is funded by the Government of Canada", as applicable.
- 6.3 British Columbia, UBCM and the Ultimate Recipient will share information as available with Canada should significant emerging media or stakeholder issues relating to an Eligible Project arise. Canada, British Columbia and UBCM will advise Ultimate Recipients, when appropriate, about media inquiries received concerning an Eligible Project.

7. Communicating success stories

- 7.1 British Columbia and UBCM to facilitate communications between Canada and Ultimate Recipients for the purposes of collaborating on communications activities and products including, but not limited to Eligible Project success stories, including the positive impacts on housing, Eligible Project vignettes, and Eligible Project start-to-finish features.

8. Advertising campaigns

- 8.1 Canada, British Columbia, UBCM or an Ultimate Recipient may, at their own cost, organize an advertising or public information campaign related to the CCBF or Eligible Projects. However, such a campaign must respect the provisions of this Administrative Agreement. In the event of such a campaign, the sponsoring party or Ultimate Recipient agrees to inform the other parties of its intention, and to inform them no less than 21 working days prior to the campaign launch.

9. Digital Communications, Websites and webpages

- 9.1 Where British Columbia and UBCM produce social media content to provide visibility to CCBF programs or projects, they shall @mention the relevant Infrastructure Canada official social media account.
- 9.2 Where a website or webpage is created to promote or communicate progress on an Eligible Project or Projects, it must recognize federal funding through the use of a digital sign or through the use of the Canada wordmark and the following wording, "This project is funded in part by the Government of Canada" or "This project is funded by the Government of Canada", as applicable. The Canada wordmark or digital sign must link to Canada's website, at www.infrastructure.gc.ca. The guidelines for how this recognition is to appear and language requirements are published on Canada's website, at <http://www.infrastructure.gc.ca/pub/signage-panneaux/intro-eng.html>.

10. Project signage

- 10.1 Unless otherwise approved by Canada, British Columbia, UBCM or Ultimate Recipients will install a federal sign to recognize federal funding at Eligible Project site(s). Federal sign design, content, and installation guidelines will be provided by Canada and included in the joint communications approach.
- 10.2 Where British Columbia, UBCM or an Ultimate Recipient decides to install a sign, a permanent plaque or other suitable marker recognizing their contribution with respect to an Eligible Project, it must recognize the federal contribution to the Eligible Project(s) and be approved by Canada.
- 10.3 British Columbia, UBCM or the Ultimate Recipient is responsible for the production and installation of Eligible Project signage, or as otherwise agreed upon.
- 10.4 British Columbia and UBCM to inform Canada of signage installations on a basis mutually agreed upon in the joint communications approaches.

11. Communication Costs

- 11.1 The eligibility of costs related to communication activities that provide public information on this Administrative Agreement will be subject to Schedule C (Eligible and Ineligible Expenditures).

SCHEDULE F – Asset Management

Canada, British Columbia and UBCM agree that the measures contained in the Previous Agreements to create and foster a culture of asset management planning were effective in increasing the capacity of the diverse range of Ultimate Recipients in British Columbia and UBCM to enhance their community's sustainability.

Under the previous Agreement (2014-2024), local governments in BC demonstrated a commitment to improving asset management practices within their respective communities. As awareness and knowledge has grown, asset management practices and culture has matured. However, as noted in the *2022 Status of Asset Management in BC Report*, while moving in the right direction, there remains significant gaps and priority areas where local governments need to improve if they are to realize the full benefits of asset management.

Using the results from the *2022 Status of Asset Management in BC Report* as a guide, the Oversight Committee will develop and approve Asset Management Commitments, over the duration of this Agreement for ultimate recipients, consistent with the Asset Management for Sustainable Service Delivery: A BC Framework. Asset Management BC will be asked to provide expertise and input where appropriate.

All Ultimate Recipients will be required to meet the Asset Management Commitments. Asset Management Commitments may vary depending on whether the Ultimate Recipient is; a Local Government, a non-local government entity, Translink, and/or BC Transit. Asset Management Commitments will focus on strengthening asset management capacity over the term of the Agreement while continuing to recognize the varying capacities of Ultimate Recipients and the range of ongoing asset management activities.

The Oversight Committee will consider Asset Management Commitments under the following areas;

- Reporting on continuous improvement of Asset Management practices over the duration of the Agreement, including reporting through the Ministry of Municipal Affairs Local Government Data Entry (LGDE) System,
- Development and implementation of Long-term Financial Plans
- Ongoing Asset Management education and training, and
- Implementing asset management performance measurement.

SCHEDULE G – Housing Report

1. Housing Needs Assessments

- 1.1 By March 31, 2025, or as otherwise agreed upon by Canada and British Columbia, municipalities with a 2021 Census population of 30,000 or more are required to complete and make available to Canada a Housing Needs Assessment (HNA) prepared in accordance with provincial legislation and additional details provided, as agreed to by Canada and British Columbia, which together align with the information requirements, spirit and intent of the federal Housing Needs Assessment template and the guidance document.
- 1.2 HNAs should be used by British Columbia and UBCM in preparing the Project-Level Housing Report and the Housing Narrative in the CCBF Outcomes Report in order to identify housing pressures related to infrastructure. HNAs should also be used by municipalities to prioritize infrastructure projects that support increased housing supply where it makes sense to do so.
- 1.3 HNAs must be made publicly available on the municipal website and municipalities are to provide links to the page where the HNAs are posted to Canada for all Ultimate Recipients in their jurisdiction that have a 2021 Census population of 30,000 or more.
- 1.4 A separate HNA Guidance Document has been provided by Canada.

2. Project-Level Housing Report

By September 30 of each year, starting in 2025, British Columbia and UBCM will provide Canada a Housing Report in an electronic format deemed acceptable by Canada consisting of the following:

2.1 Methodology

British Columbia and UBCM will provide a description of the process used to collect data and information presented in the Housing Report. The methodology section should include the following information:

- Scope of the report and related rationale.
- Reporting process used to collect data from Ultimate Recipients.
- Identification of baseline data and other data sets used for the purposes of the report and which data has been excluded.
- How performance indicators were assessed in British Columbia.

2.2 Municipalities Identified for Project-Level Reporting

Criteria for Project-Level Reporting

Municipalities with a population of 30,000 or more, outside of the Metro Vancouver Region, that have housing pressures that can be addressed through closing infrastructure gaps or building capacity where it makes sense to do so, must:

- be included in Table 1 (below); and,
- provide project-level data on housing requirements to British Columbia and UBCM, for inclusion in the Housing Report that will be submitted by British Columbia and UBCM to Canada.

HNA and project-level reporting requirements can also be applied to other municipalities as agreed to by Canada, British Columbia and UBCM. Municipalities that do not meet these criteria may additionally be included at the discretion of British Columbia and UBCM, but are not required by Canada to include project-level data in the annual Housing Report.

British Columbia and UBCM will be expected to summarize project-level information from the municipalities identified by the above criteria to report to Canada annually.

The following table (**Table 1**) is to be used as a template to identify municipalities required to provide project-level reporting and to identify housing pressures related to infrastructure needs. Housing pressures should be consistent with needs and pressures identified by Ultimate Recipients in their HNAs. British Columbia and UBCM will provide an aggregate of this table to Canada in their annual Housing Report.

Ultimate Recipient	Project Level Reporting Criteria	Key Infrastructure-Related Housing Pressures
<i>Name of the municipality</i>	<i>Identify which criteria as noted above applies</i>	<i>Identify key housing gaps and needs that are related to infrastructure</i>

Table 1: Ultimate Recipients Identified for Project Level Reporting

2.3 Project-Level Housing Outcomes

For municipalities required to provide project-level reporting, British Columbia and UBCM are required to collect project-level data on housing outcomes and to complete the table below (Table 2) on an annual basis.

Table 2 is intended to link the housing pressures identified in Table 1 and in HNAs with outcomes supported by CCBF projects that can help Ultimate Recipients to address their specific housing pressures. More specifically, Table 2 is to be completed by Ultimate Recipients outlined in Section 1.2. It will include a subset of the projects from the above project list and this subset represents projects with housing outcomes.

Project ID	Ultimate Recipient	Project Title	Project Description	Investment Category	Housing Outcomes and Indicators
<i>As provided in program reporting (Schedule D)</i>	<i>As provided in Table 1</i>	<i>As provided in program reporting (Schedule D)</i>	<i>Provide a brief description of the project</i>	<i>Indicate which CCBF category the project falls under</i>	<i>Identify key housing outcomes and indicators (section 2.3) that will be used to measure success.</i>

Table 2: Project-Level Reporting on Housing Outcomes

2.3.1 Housing Outcome Indicators

For each of the projects listed in Table 2, British Columbia and UBCM shall report on the following core indicators, as relevant to each investment category.

- # of housing units supported or preserved; and
- # of affordable housing units supported or preserved.

Units enabled is a measure of increased capacity for potential housing development as a result of the infrastructure investment made and, in some cases, where CCBF funding contributed directly to housing development (e.g., building social housing as part of brownfield remediation category, may include new units directly supported by CCBF funding).

3. Housing Narrative in the CCBF Outcomes Report

By March 31st each year, starting in 2026, British Columbia and UBCM shall provide Canada with a narrative report on program-level housing outcomes. This narrative report will be aligned with and incorporated into the annual CCBF Outcomes Report.

The housing narrative should outline how CCBF has supported housing supply and affordability pressures within British Columbia and UBCM's jurisdiction, over the reporting period, and measures taken between British Columbia, UBCM and Ultimate Recipients to improve housing supply and improve housing affordability for Canadians. It should also align with identified needs within Ultimate Recipients Housing Needs Assessments once they have been developed.

Further, British Columbia and UBCM must include in their Outcomes Report a narrative assessment of measures they have taken to improve housing outcomes through CCBF funded infrastructure projects. This should include:

- How Ultimate Recipients have prioritized specific infrastructure investments, where it made sense to do so, that support an increased supply of housing (e.g., upgrading pipes to support densification rather than sprawl, or remediating a brownfield site that could then be used for affordable housing);
- How Ultimate Recipients are utilizing CCBF funding to build local capacity for sound land use and development planning (e.g., through the capacity building category).
- Any measures taken to preserve and/or increase supply and mix of affordable housing (e.g., minimizing displacement, making land available for non-market housing, minimum affordability requirements for private developers); and

This housing narrative must also include responses to the following questions:

- How many or what percentage of projects from the total CCBF project list contribute to an increase in housing supply and how many housing units were supported or preserved (as outlined in 2.3.1)?
- What percentage of total housing units supported or preserved are affordable?
- How many communities have published a new Housing Needs Assessment or an updated one within the last 5 years?

For further information and details on the housing narrative portion of the Outcomes Report please refer to the Housing Report Template and Guidance document.

4. Assessment of the Housing Reports and Compliance

4.1 Assessment of Housing Reports

Both the project-level housing report and the housing narrative on program-level housing outcomes will be assessed against the Government of Canada's Evaluation Framework as well as HNAs.

4.2 Compliance

Failure by British Columbia, UBCM or its Ultimate Recipient to adhere to this Schedule may affect the timing and flow of any CCBF funding that may be transferred by Canada. Repeated or sustained failures to comply with the terms of this Schedule could result in downward adjustment of allocations for British Columbia, UBCM or Ultimate Recipient for future Infrastructure Canada programs.

VILLAGE OF PORT ALICE

Port Alice Volunteer Fire Department Fire Chief's Monthly Report For the month June 2024

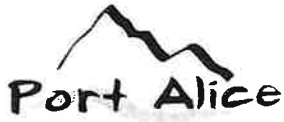
Active Members	13	Rescue Calls	0
On Leave	2	Fire Calls	0
New/Recruits **	1	Lift Assist Calls	0
Total	16	Ambulance Driver Assist Calls	0
Mutual Aid Calls	0	Public Relation Events	0
Number Of False Alarms	0	Training Events	0

Practices / Events:

Date	Attendance	Purpose
04-June		Practice: Rope Practice
11-June		Practice: Rope Practice
18-June		Practice: Monitor Practice
25-June		Practice: Month End Checks
PAVFD Updates		

Fire Chief: _____

Administrator: _____



VILLAGE OF PORT ALICE REPORT TO COUNCIL

To: Mayor and Council
From: CAO / CFO
Date: June 27, 2024
Subject: Procedure Bylaw

Councillor Murray has requested that Council have a discussion regarding amending the Procedure Bylaw to allow Councillors to attend Closed Meetings electronically.

Bylaw 677, 2022 Part 2 (c) states that " Council Members may not participate by electronic means in any portion of a meeting closed to the public under the *Community Charter*, Section 90.

The process to amend a Procedure Bylaw requires notice in accordance with section 94 [*public notice*] describing the proposed changes in general terms. This means that we would have to advertise in the newspaper for two consecutive weeks as well as posting in our public notice places. The newspaper ads would cost approximately \$500.

If Council decides that they would like to make this change: First reading of the Bylaw would be August 14, 2024, Second and Third on September 11, 2024 and adoption on September 25, 2024.



Bonnie Danyk
CAO / CFO



McElhanney



July 2, 2024

Geotechnical Assessment

740-810 Marine Drive

Village of Port Alice, BC

Submitted to: The Village of Port Alice

Prepared by McElhanney Ltd.

Contact

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Address

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Our file: 2211-80553-00

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1.1. SCOPE OF WORK

The scope of work for this geotechnical assessment was outlined in the proposal (*McElhanney File No. 2221-49437-00, rv.2, dated November 20, 2023*) and comprised:

- Summary of soil and groundwater conditions encountered in the site assessment;
- Summary of existing slope conditions and slope stability review;
- Discussion of slope stabilization methods;
- Geotechnical considerations for the design and construction of potential slope stabilization methods, and;
- Recommendations for further geotechnical work (if required).

2. Background

2.1. REGULATORY CONTEXT & GUIDELINES

This report has been prepared in accordance with EGBC's Guidelines for Legislated Landslide Assessments for Proposed Residential Developments in BC (May 2010).

2.2. PREVIOUS INVESTIGATIONS

McElhanney prepared a site review letter titled *740 -810 Marine Drive Review and Assessment—Port Alice, BC*, issued to the Village of Port Alice on September 21, 2021. The letter summarized a visual assessment of pavement conditions along Marine Drive and the embankment fill slope between Marine Drive and the downslope service road.

The site review was to include a visual assessment of the culvert crossing, but at the time of the site review, it was not readily accessible for review.

The site review letter recommended the following:

- Completion of a detailed geotechnical investigation to help understand the site's geotechnical context (i.e., determine the extent of slope movement, modes of failure, and global stability of this portion of Marine Drive and the downslope service road).
 - Assess the potential repair concepts (options 1 & 2) for Marine Drive.
- Completion of a visual inspection of the culvert crossing as it is nearing the end of its service life and others within the vicinity are in poor condition.



3. GEOTECHNICAL SITE ASSESSMENT

3.1. GEOTECHNICAL SUBSURFACE INVESTIGATION

The geotechnical field investigation conducted on April 10th and 11th, 2024, involved the advancement of six (6) boreholes (BH24-01 to BH24-06) and two (2) test pits (TP24-01 and TP24-02). Three (3) of the boreholes (BH24-01 to BH24-03) were sited at the top of the Marine Drive embankment. The remaining three (3) boreholes (BH24-03 to BH24-06) were advanced along the toe of the slope. McElhanney personnel recorded the approximate locations of these test pits and boreholes with a handheld GPS and referenced them from existing structures. Test pit and borehole locations are shown in **Drawing B-01**, provided as **Appendix B** to this report.

McElhanney personnel logged and photographed the subsurface soil and groundwater conditions. Test pits were advanced to the extent of the excavator's reach, approximately 2.0 meters below the ground surface (mbgs), as summarized in **Table 3-1** below. The boreholes were advanced to a maximum depth of 5.18 mbgs.

Light groundwater seepage was encountered in BH24-02 at approximately 2.1m below the ground surface. The soil unit descriptions in test pit and borehole logs are based on the Modified Unified Classification System for Soil, which is included in **Appendix C**.

Table 3-1: Test Pit and Borehole Summary

TEST PIT/ BOREHOLE ID	TOTAL DEPTH ² (mbgs)	DEPTH TO GROUNDWATER ² (mbgs)	DEPTH TO DCPT REFUSAL ² (mbgs)
TP24-01	2.0	-	-
TP24-02	1.9	-	-
BH24-01	4.27	-	4.4
BH24-02	5.18	2.1	4.1
BH24-03	3.96	-	4.5
BH24-04	3.96	-	1.9
BH24-05	3.05	-	2.8
BH24-06	2.13	-	-

Notes:

1. The attached test pit and borehole logs describe subsurface soil and groundwater conditions.
2. The depth of the test pits, boreholes, DCPT refusal, and groundwater levels below ground surface measurements are approximate.



Table 4-1: Summary of Encountered Soil Units

MATERIAL	DEPTH TO THE TOP OF UNIT (m)	OBSERVED THICKNESS (m)	SOIL DESCRIPTION
ASPHALT	0	0.14	ASPHALT, paved surface (BH24-02 only)
VARIED FILL	0	0.4 to 1.5	SAND and GRAVEL, trace silt, trace cobbles, compact to dense, brown-grey, moist, organics and wood debris inclusions.
ORGANICS/ TOPSOIL	0	0.3	SILT, some sand, trace gravel, soft, black, damp, wood debris and organic inclusions. (TP24-02 only)
	0.5	0.4	SAND and GRAVEL, trace silt, compact, red-brown, moist. (TP24-07 only)
NATURALLY DEPOSITED (SAND/SILT)	0.8 to 1.2	>0.5	SILT, sandy, trace gravel, trace cobbles, loose to compact, orange-brown, moist. OR SAND, silty, trace gravel, loose to compact, orange-brown, moist. OR SAND, trace to some gravel, dense to very dense, brown with grey mottling, moist.

4.2. GROUNDWATER

At the time of the test pit investigation, the groundwater table was encountered in BH24-02 at a depth of 2.1m below the slope's crest. No surface water ponding was observed during the investigation. Groundwater conditions at other times and locations can differ from those observed within test pit and borehole locations during the field investigation. Groundwater levels can be expected to fluctuate seasonally and with cycles of precipitation.

4.3. SEISMIC DATA

Seismic data for the Site was obtained from Natural Resources Canada and the 2020 National Building Code of Canada, as shown below in **Table 4-2**. The estimated peak ground acceleration (PGA) due to a seismic event with a 2% in the 50-year probability of exceedance (1 in the 2475-year event)² is 0.69g for Site Class D.



6. Discussion and Recommendations

The geotechnical recommendations presented in this report are based on direct field observations, field and laboratory testing results, available information regarding the proposed development, and McElhanney's experience with similar projects. Considering the inherent nature of soil variations, soil and groundwater conditions between and beyond test holes can differ from those encountered during the investigation. In such instances, geotechnical recommendations, design, and construction adjustments may be necessary.

6.1. GENERAL DISCUSSION

Based on conditions observed in the test holes, the road embankment contains poorly consolidated, marginal fill subject to downslope movement. The road embankment slope is subject to shallow creep and shallow translating failures that may affect the west lane of Marine Drive. However, deeper seated rotational and translational failures may occur under wet conditions and/ or seismic loading. Analyses indicate that Marine Drive and the service road may be significantly damaged by a design earthquake. The evaluated options presented below may also be subject to severe damage from a design earthquake. Buildings sited downslope of Marine Drive may also be damaged by slope failures. Construction of any mitigation measures would require the existing gas line to be exposed and secured and the removal of existing trees.

The following options were considered to stabilize the Marine Drive side slopes above the service road:

- Install a Mechanically Stabilized Earth (MSE) retaining wall;
- Install a 3m high gabion wall to retain existing road embankment fill;
- Remove marginal fill within the slope and replace with engineered fill;

The following sections summarize the proposed stabilization methods and how they were evaluated.

6.2. ANALYSIS

6.2.1 Methodology

Slope stability analyses of existing conditions and proposed mitigation methods were conducted in accordance with EGBC's Guidelines for Legislated Landslide Assessments for Proposed Residential Developments in BC (EGBC, published March 1, 2023). A typical slope section was selected for evaluation. The cross-section was based on LiDAR data supplemented with field survey measurements.

Slope stability modelling applied Morgenstern-Price's limit equilibrium method in GeoStudio's Slope/W software (version 2021.4). Soil parameters were estimated from field and laboratory testing data. The groundwater table was assumed to be within the loose, silty sand deposits. Seismic acceleration parameters were based on the 2020 National Building Code of Canada (NBCC 2020) Peak Ground



Table 6-1: Summary of Factors of Safety¹

CONDITION	FACTOR OF SAFETY (FS)	COMMENTS
Static (Long-Term)	1.5	Long-term stability under static conditions
Seismic	1.0	Pseudo-static analysis considering a horizontal ground acceleration equal to the PGA for the design 2% in 50-year (1 in 2475) earthquake event

Notes:

1. As referenced in the National Building of Canada (NBCC 2020) design guidelines.

The internal stability of the proposed mitigation options were also evaluated according to the factors of safety shown in **Table 6-2**.

Table 6-2: Summary of Factors of Safety for Soil Retaining Structures

CONDITION	FACTOR OF SAFETY (FS)		
	STATIC	1 IN 475 YR SEISMIC EVENT	1 IN 2475 YR SEISMIC EVENT
GLOBAL STABILITY (LONG TERM)	1.5	1.2	1.1
SLIDING	1.5	1.2	1.1
OVERTURNING	2.0	1.5	1.1
BEARING	2.0	1.5	1.1

Notes:

1. From EGBC Retaining Wall Design Guidelines, V. 1.1, February 25, 2020.

6.2.4. Soil Parameters

Material properties for stability analyses were inferred from soil conditions observed during the subsurface investigation, in-situ testing, laboratory testing, published values for similar deposits, and McElhanney's previous experience with similar soils in the area. Applied soil parameters are summarized below in **Table 6-3**.



Table 6-4: Summary of slope analysis results for the existing slope

SCENARIO	PEAK GROUND ACCELERATION (PGA)	FoS	COMMENTS
Static	0	<1.0	Shallow failures of roadside slope
Static	0	1.1	Slope failures affecting the west shoulder and west lane of Marine Dr
Static	0	1.5	Slope Failures affecting the west lane of Marine Dr, or the east half of Service Rd
2% in 50 yrs	0.7	<1.0	Deeper seated failure affecting gas line and road prism. Significant damage expected on Marine Dr and Service Rd
5% in 50 yrs	0.5	<1.0	Deeper seated failure affecting gas line and road prism. Significant damage expected on Marine Dr and Service Rd
10% in 50 yrs	0.4	<1.0	Deeper seated failure affecting gas line and road prism. Significant damage expected on Marine Dr and Service Rd
0.5 (10% in 50 yrs)	0.2	1.0	Failures through loose silty sand affecting Service Rd and the west half of Marine Drive

6.3. MSE BLOCK RETAINING WALL

An MSE block wall would comprise a concrete block retaining wall with a geogrid reinforced soil block, per **Figure 3** below. This would mitigate shallow slope movement and shallower failures while providing additional parking areas adjacent to the service road. This option would provide the greatest increase in stability and improve subgrade drainage due to the drain rock curtain.

However, this design may still be subject to global failure from a design earthquake and is less economical than other options discussed in this report. Construction would require significant excavation into the Marine Drive embankment to accommodate ~2.6m horizontal geogrid lengths behind the block facing. The existing gas line must be exposed and secured to accommodate construction.



6.4.1 Slope Remediation

The final option considered partially removing the marginal fill and placing keyed-in rip rap and compacted engineered fill to buttress the road embankment. The slope grade would likely be similar to the existing slope grade. This would be the least intrusive and economical way to mitigate slope movement. There would be a slight improvement in global stability under static conditions (FoS ~ 1.3). Shallow slope failures and shallow creep would be less likely. Additional drainage measures might also be incorporated within the engineered fill to improve the Marine Drive subgrade stability.

This option would not provide an additional parking area along the service road. There may still be a potential for movement in the Marine Drive shoulder. This option would do little to improve the global stability of the road embankment during a design earthquake.

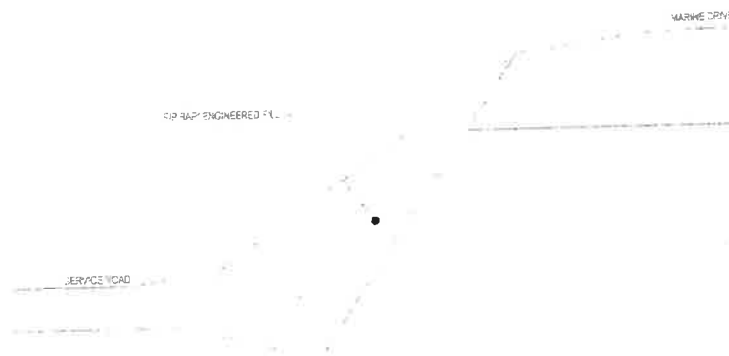


Figure 5- Cross-section view of remediated slope

6.4.2 General Slope Recommendations

Based on the preliminary slope stability analysis results, we recommend the following measures and precautions to reduce the potential for slope-related hazards:

1. Shallow translating failures may compromise soil subgrade supporting roadways, and infrastructure sited on the slope face and proximal to the slope toe. Any proposed infrastructure to be sited on the slope or within 5m of the slope crest or toe should be evaluated for global slope stability.
2. Stormwater within the subject site should be controlled by closed, non-perforated piping or ditching that conveys storm flows to a suitable outlet. This includes runoff from roadways, roof areas, and driveways. This recommendation is intended to minimize as much as practicable the surface water flows upland from the top of the bank.
3. Vegetation on the steep slope should be maintained in a dense state as an erosion control measure. Trees should remain undisturbed unless removal is necessary for the construction of the proposed design. Stumps should be left in place on the slope wherever possible. Any



APPENDIX A – LIMITATIONS

APPENDIX B – GEOTECHNICAL TEST HOLE LOCATION PLAN

APPENDIX C – TEST HOLE LOGS

CLIENT: Village of Port Alice	PROJECT: VoPA - Marine Drive Geotech Assessment	BOREHOLE No. BH24-02
CONTRACTOR: Bluemax Drilling Ltd.	CO-ORDS N/E: 5587976.74 607105.77	PROJECT No. 2211-80553-00
METHOD: Solid Stem Auger/Tracked Drill Rig	LOCATION: Port Alice, BC	ELEVATION:

DEPTH (m)	GRAPHIC LOG	MATERIAL DESCRIPTION	SAMPLE TYPE NUMBER	POCKET PEN (kPa)	DCPT Blows				WATER	REMARKS
					20	40	60	80		
0.14		Asphalt.								
1		SAND and GRAVEL, dense, well graded, brown, moist, (FILL).	G G1							Max aggregate size = 50mm, round aggregate. DCPT test between 0.3m & 0.6m required 123 blows to travel 0.3m.
1.52		SAND, trace gravel, loose, black, wet, organic and wood debris inclusions.	G G2							Saturated @ 2.13m.
2		SILT, trace sand, trace gravel, stiff to very stiff, blue grey, moist.	G G3	196						DCPT rod bending toward west @ 2.44m, hole augured to 3.05m and test restarted. Tor-Vane reading = 73.5kPa.
3		SAND, loose to compact, brown, wet, organic inclusions.								
3.35		SILT, sandy, soft to firm, orange brown, moist.								
4			G G4	49						DCPT test abandoned @ 4.1m due to probe refusal, assumed large rock.
5										
5.18		Terminated at 5.18 m. Due to auger refusal.								



McElhanney

LOGGED BY: R. Hache	START DATE: April 10, 2024
REVIEWED BY: B. McLean	COMPLETION DATE: April 10, 2024
COMPLETION DEPTH: 5.18 m	Sheet 1 of 1

CLIENT: Village of Port Alice	PROJECT: VoPA - Marine Drive Geotech Assessment	BOREHOLE No. BH24-04
CONTRACTOR: Bluemax Drilling Ltd.	CO-ORDS N/E: 5587921.63 607136.52	PROJECT No. 2211-80553-00
METHOD: Solid Stem Auger/Tracked Drill Rig	LOCATION: Port Alice, BC	ELEVATION:

DEPTH (m)	GRAPHIC LOG	MATERIAL DESCRIPTION	SAMPLE TYPE NUMBER	DCPT Blows				REMARKS
				20	40	60	80	
1		SAND and GRAVEL, some silt to silty, loose, well graded, brown, moist.	G G1	◆	◆	◆		Max aggregate size = 75mm. DCPT test hit large cobble @ 1.2m, hole augured to 1.5m and test restarted, trial between 1.5m & 1.8m required 115 blows to travel 0.3m.
2		SAND, medium grained, some silt, dense, orange brown, moist to wet.	G G2	◆				◆ DCPT test abandoned at 1.9m due to probe refusal, assumed large cobble or boulder.
3		No recovery, traces of grey/white dust on drill tip.						
4		Terminated at 3.96 m. Due to auger refusal.						
5								



McElhanney

LOGGED BY: R. Hache	START DATE: April 11, 2024
REVIEWED BY: B. McLean	COMPLETION DATE: April 11, 2024
COMPLETION DEPTH: 3.96 m	Sheet 1 of 1

CLIENT: Village of Port Alice	PROJECT: VoPA - Marine Drive Geotech Assessment	BOREHOLE No. BH24-06
CONTRACTOR: Bluemax Drilling Ltd.	CO-ORDS N/E: 5587963.16 607105.62	PROJECT No. 2211-80553-00
METHOD: Solid Stem Auger/Tracked Drill Rig	LOCATION: Port Alice, BC	ELEVATION:

DEPTH (m)	GRAPHIC LOG	MATERIAL DESCRIPTION	SAMPLE TYPE NUMBER	<ul style="list-style-type: none"> ▲ N Value ● Moisture Content (%) Plastic/Liquid Limit (%) □ Fines Content (%) ◆ DCPT Blows 				REMARKS
				20	40	60	80	
		SAND and GRAVEL, loose, black, wet, organic inclusions.						White sand layer observed between 0.15m and 0.25m.
1	0.91	SAND, silty, loose, brown, wet.	G G1					Last DCPT tip, test started in augured hole @ 1.5m to avoid loosing tip in shallow cobbles. Test immediately hit refusal at 1.8m assumed due to large cobble or boulder.
	1.52	SAND, trace to some gravel, dense to very dense, brown with grey mottles, moist.						DCPT trial between 1.5m & 1.8m required 175 blows to travel 0.3m.
2	2.13	Terminated at 2.13 m. Due to auger refusal.	G G2					
3								
4								
5								



McElhanney

LOGGED BY: R. Hache	START DATE: April 11, 2024
REVIEWED BY: B. McLean	COMPLETION DATE: April 11, 2024
COMPLETION DEPTH: 2.13 m	Sheet 1 of 1

CLIENT: Village of Port Alice	PROJECT: VoPA - Marine Drive Geotech Assessment	TEST PIT No. TP24-02
CONTRACTOR: Village of Port Alice Public Works	CO-ORDS N/E: 5587963.16 607105.62	PROJECT No. 2211-80553-00
METHOD: Backhoe/John Deere SK 310	LOCATION: Port Alice, BC	ELEVATION:

DEPTH (m)	GRAPHIC LOG	MATERIAL DESCRIPTION	SAMPLE TYPE NUMBER	<ul style="list-style-type: none"> ▲ N Value ● Moisture Content (%) Plastic/Liquid Limit (%) □ Fines Content (%) ◆ DCPT Blows 				REMARKS
				20	40	60	80	
		Organic topsoil.						
0.30		SILT, some sand, trace clay, trace gravel, loose, grey with orange brown mottles, wet, (FILL).						Till like, weathered, max aggregate size = 75mm.
0.90		SAND and GRAVEL, some silt, loose, black, moist, organic inclusions.						
1.10		SAND, silty to some silt, trace gravel, compact, moist.	G G1					
1.90		Terminated at 1.90 m. Due to reaching target depth.						
2								
3								
4								
5								

	LOGGED BY: R. Hache	START DATE: April 11, 2024
	REVIEWED BY: B. McLean	COMPLETION DATE: April 11, 2024
	COMPLETION DEPTH: 1.90 m	Sheet 1 of 1

Seismic Hazard Values

User requested values

Code edition	NBC 2020
Site designation X_s	X_0
Latitude (°)	50.427
Longitude (°)	-127.489

Please select one of the tabs below.

NBC 2020 Additional Values Plots API Background Information

The 5%-damped spectral acceleration ($S_a(T, X)$, where T is the period, in s, and X is the site designation) and peak ground acceleration (PGA(X)) values are given in units of acceleration due to gravity (g , 9.81 m/s²). Peak ground velocity (PGV(X)) values are given in m/s. Probability is expressed in terms of percent exceedance in 50 years. Further information on the calculation of seismic hazard is provided under the *Background information* tab.

The 2%-in-50-year seismic hazard values are provided in accordance with Article 4.1.8.4. of the NBC 2020. The 5%- and 10%-in-50-year values are provided for additional performance checks in accordance with Article 4.1.8.23. of the NBC 2020.

See the *Additional Values* tab for additional seismic hazard values, including values for other site designations, periods, and probabilities not defined in the NBC 2020.

NBC 2020 - 2%/50 years (0.000404 per annum) probability

$S_a(0.2, X_0)$	$S_a(0.5, X_0)$	$S_a(1.0, X_0)$	$S_a(2.0, X_0)$	$S_a(5.0, X_0)$	$S_a(10.0, X_0)$	PGA(X_0)	PGV(X_0)
0.26	0.32	0.342	0.381	0.458	0.5485	0.69	0.734

The log-log interpolated 2%/50 year $S_a(4.0, X_0)$ value is **0.3446**

▼ Tables for 5% and 10% in 50 year values

NBC 2020 - 5%/50 years (0.001 per annum) probability

$S_a(0.2, X_0)$	$S_a(0.5, X_0)$	$S_a(1.0, X_0)$	$S_a(2.0, X_0)$	$S_a(5.0, X_0)$	$S_a(10.0, X_0)$	PGA(X_0)	PGV(X_0)
0.26	0.32	0.342	0.381	0.458	0.5485	0.69	0.734

The log-log interpolated 5%/50 year $S_a(4.0, X_0)$ value is **0.2170**

NBC 2020 - 10%/50 years (0.0021 per annum) probability

$S_a(0.2, X_0)$	$S_a(0.5, X_0)$	$S_a(1.0, X_0)$	$S_a(2.0, X_0)$	$S_a(5.0, X_0)$	$S_a(10.0, X_0)$	PGA(X_0)	PGV(X_0)
0.26	0.32	0.342	0.381	0.458	0.5485	0.69	0.734

The log-log interpolated 10%/50 year $S_a(4.0, X_0)$ value is **0.1440**

Soil Moisture Content



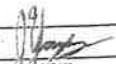
Report

Client: Village of Port Alice **Lab ID:** 24-587 to 596
 Project Name: Marine Drive Geotech Assessment Project Number: 2211-80553
 Report Number: 1
 Report Date: 1 - May - 2024

Material Type: Native Soil Sample Date: 10/11-Apr-24
 Source: Bore Holes Sampled by: R. Hache
 Other: _____ Test Date: 23-Apr-24
 Tested by: C. Hall

Test Pit / Bore Hole Number	Sample Depth (m)	Container Number	Tare (g)	Tare + Wet (g)	Tare + Dry (g)	Moisture (%)
BH #3	G3 @ 2.7	F-5	208.8	1292.1	1046.3	29.3
BH #3	G2 @ 1.8	B-8	232.9	819.9	609.6	55.8
BH #3	G4 @ 3.7	B-3	231.8	493.2	444.3	23.0
BH #3	G1 @ .9	B-2	233.9	1896.7	1714.0	12.3
BH #2	G1 @ 1.1	J-6	224.6	1127.0	1060.6	7.9
BH #2	G2 @ 1.8	J-2	225.5	865.0	585.0	77.9
BH #2	G3 @ 2.7	J-8	225.1	1526.1	1350.0	15.7
BH #4	G1 @ .9	F-4	210.8	1338.3	1146.8	20.5
BH #6	G2 @ 2.1	J-7	224.3	384.9	358.8	19.4

Sample BH #2 G2 - Lots of organics present in sample.

Reviewed by 
 C. Hall
 10/11/2024



McElhanney Ltd.

F 4644 Madrona Place
Courtenay, BC

SIEVE ANALYSIS REPORT
Series 8 16 30 50

PROJECT NO. 2211-80553
CLIENT Village of Port Alice
CC

TO
Village of Port Alice
1061 Marine Dr.
Port Alice, BC
V0N 2N0

ATTN: Ronald Campbell

PROJECT Marine Drive Geotech Assessment

Port Alice

CONTRACTOR

SIEVE TEST NO. 2

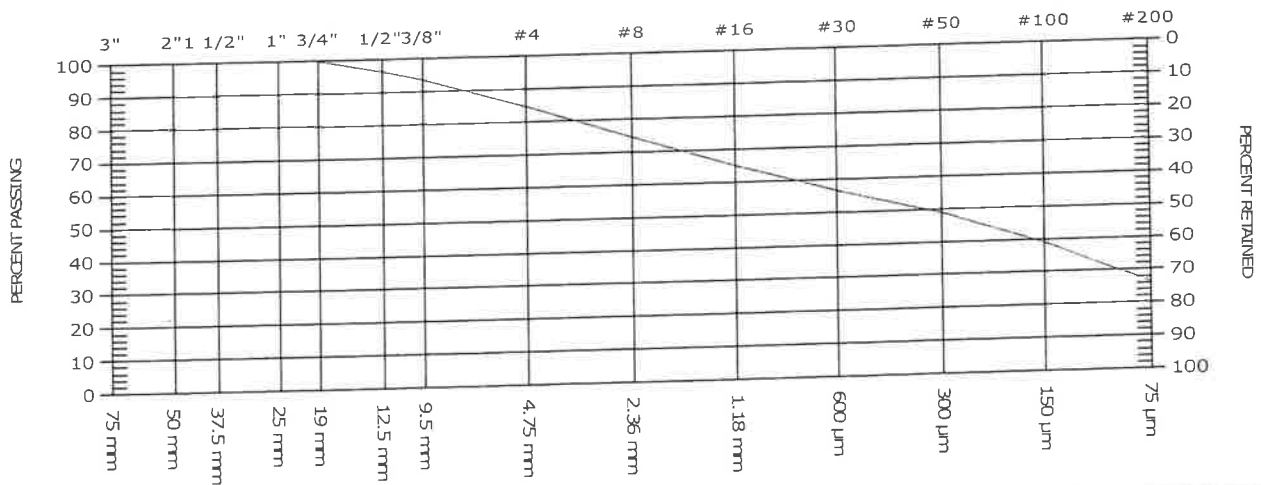
DATE TESTED 23-Apr-2024

DATE SAMPLED 11-Apr-2024

DATE RECEIVED 23-Apr-2024

SUPPLIER Test Pit
SOURCE TP #2 @ 1.4m
SPECIFICATION
MATERIAL TYPE SAND silty, some gravel

SAMPLED BY R. Hache
TESTED BY C. Hall
TEST METHOD WASHED



GRAVEL SIZES	PERCENT PASSING	GRADATION LIMITS
3"	75 mm	
2"	50 mm	
1 1/2"	37.5 mm	
1"	25 mm	
3/4"	19 mm	100.0
1/2"	12.5 mm	96.5
3/8"	9.5 mm	93.6

SAND SIZES AND FINES	PERCENT PASSING	GRADATION LIMITS
No. 4	4.75 mm	84.7
No. 8	2.36 mm	74.6
No. 16	1.18 mm	65.0
No. 30	600 µm	56.5
No. 50	300 µm	48.8
No. 100	150 µm	38.9
No. 200	75 µm	26.4

MOISTURE CONTENT: 38.0%

COMMENTS
Lab ID: 24-586



McElhanney Ltd.

F 4644 Madrona Place
Courtenay, BC

SIEVE ANALYSIS REPORT
Series 8 16 30 50

PROJECT NO. 2211-80553
CLIENT Village of Port Alice
CC

TO Village of Port Alice
1061 Marine Dr.
Port Alice, BC
V0N 2N0

ATTN: Ronald Campbell

PROJECT Marine Drive Geotech Assessment

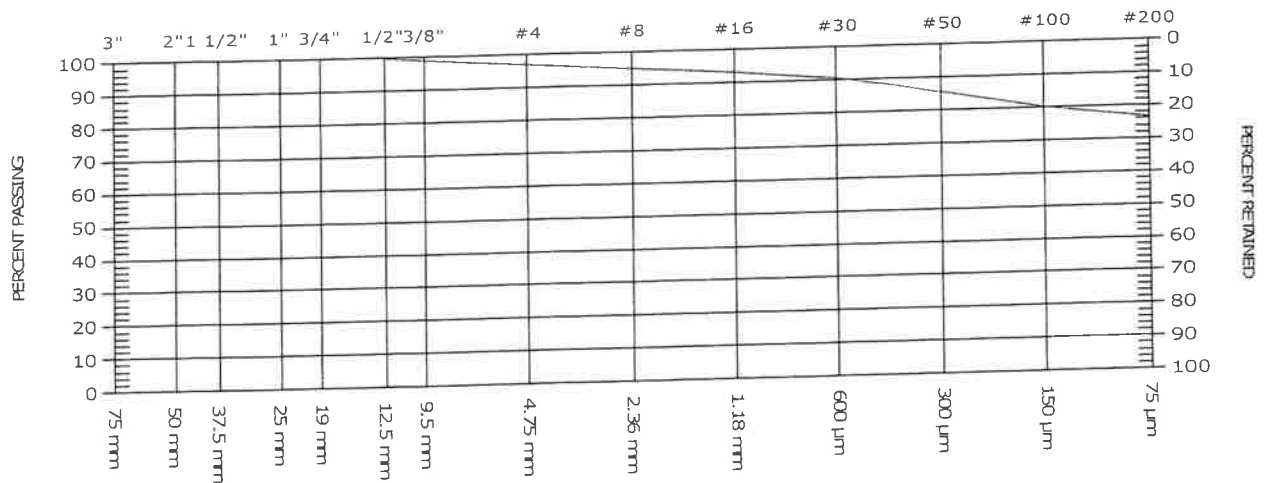
Port Alice

CONTRACTOR

SIEVE TEST NO. 4 DATE TESTED 23-Apr-2024 DATE SAMPLED 10-Apr-2024 DATE RECEIVED 23-Apr-2024

SUPPLIER Bore Hole
SOURCE BH #1 G2 @ 2.7m
SPECIFICATION
MATERIAL TYPE SILT sandy, trace gravel

SAMPLED BY R. Hache
TESTED BY C. Hall
TEST METHOD WASHED



GRAVEL SIZES		PERCENT PASSING	GRADATION LIMITS	SAND SIZES AND FINES		PERCENT PASSING	GRADATION LIMITS
3"	75 mm			No. 4	4.75 mm	97.1	
2"	50 mm			No. 8	2.36 mm	95.1	
1 1/2"	37.5 mm			No. 16	1.18 mm	93.2	
1"	25 mm			No. 30	600 µm	90.6	
3/4"	19 mm			No. 50	300 µm	85.6	
1/2"	12.5 mm	100.0		No. 100	150 µm	80.2	
3/8"	9.5 mm	99.0		No. 200	75 µm	76.6	

MOISTURE CONTENT: 48.4%

COMMENTS
Lab ID: 24-585

PER [Signature]



McElhanney Ltd.

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Courtenay, BC

SIEVE ANALYSIS REPORT
Series 8 16 30 50

PROJECT NO. 2211-80553
CLIENT Village of Port Alice
CC

TO Village of Port Alice
1061 Marine Dr.
Port Alice, BC
V0N 2N0

ATTN: Ronald Campbell

PROJECT Marine Drive Geotech Assessment

Port Alice

CONTRACTOR

SIEVE TEST NO. 6

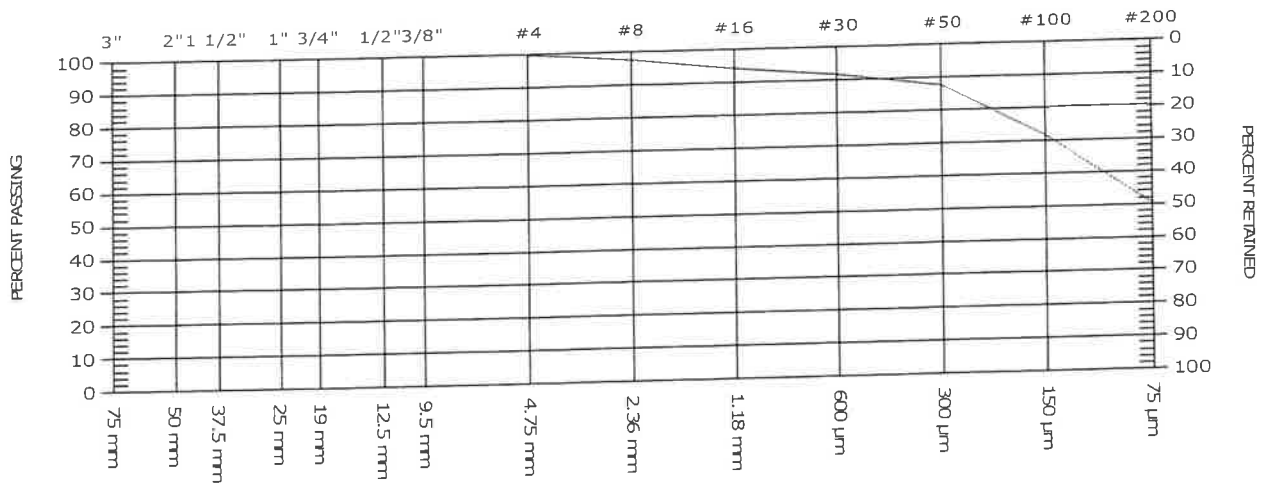
DATE TESTED 23-Apr-2024

DATE SAMPLED 10-Apr-2024

DATE RECEIVED 23-Apr-2024

SUPPLIER Bore Hole
SOURCE BH #4 G2 @ 2.3
SPECIFICATION
MATERIAL TYPE SAND and SILT

SAMPLED BY R. Hache
TESTED BY C. Hall
TEST METHOD WASHED



GRAVEL SIZES	PERCENT PASSING	GRADATION LIMITS
3"	75 mm	
2"	50 mm	
1 1/2"	37.5 mm	
1"	25 mm	
3/4"	19 mm	
1/2"	12.5 mm	
3/8"	9.5 mm	100.0

SAND SIZES AND FINES	PERCENT PASSING	GRADATION LIMITS
No. 4	4.75 mm	100.0
No. 8	2.36 mm	97.7
No. 16	1.18 mm	94.4
No. 30	600 µm	91.7
No. 50	300 µm	87.7
No. 100	150 µm	71.5
No. 200	75 µm	50.5

MOISTURE CONTENT: 16.4%

COMMENTS
Lab ID: 24-579

PER [Signature]



McElhanney Ltd.

F 4644 Madrona Place
Courtenay, BC

SIEVE ANALYSIS REPORT
Series 8 16 30 50

PROJECT NO. 2211-80553
CLIENT Village of Port Alice
CC

TO
Village of Port Alice
1061 Marine Dr.
Port Alice, BC
V0N 2N0

ATTN: Ronald Campbell

PROJECT Marine Drive Geotech Assessment

Port Alice

CONTRACTOR

SIEVE TEST NO. 8

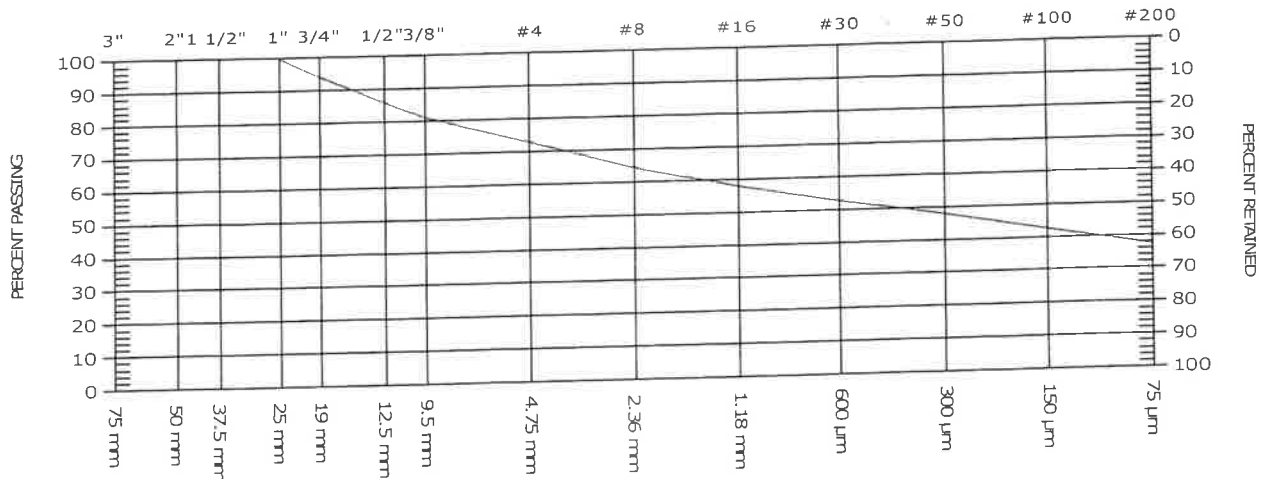
DATE TESTED 23-Apr-2024

DATE SAMPLED 11-Apr-2024

DATE RECEIVED 23-Apr-2024

SUPPLIER Bore Hole
SOURCE BH #5 SPT 1.8m - 2.3m
SPECIFICATION
MATERIAL TYPE SAND and SILT gravelly

SAMPLED BY R. Hache
TESTED BY C. Hall
TEST METHOD WASHED



GRAVEL SIZES		PERCENT PASSING	GRADATION LIMITS	SAND SIZES AND FINES		PERCENT PASSING	GRADATION LIMITS
3"	75 mm			No. 4	4.75 mm	72.9	
2"	50 mm			No. 8	2.36 mm	64.5	
1 1/2"	37.5 mm			No. 16	1.18 mm	58.0	
1"	25 mm	100.0		No. 30	600 µm	52.7	
3/4"	19 mm	94.1		No. 50	300 µm	47.9	
1/2"	12.5 mm	86.0		No. 100	150 µm	42.5	
3/8"	9.5 mm	81.1		No. 200	75 µm	37.4	

MOISTURE CONTENT: 12.1%

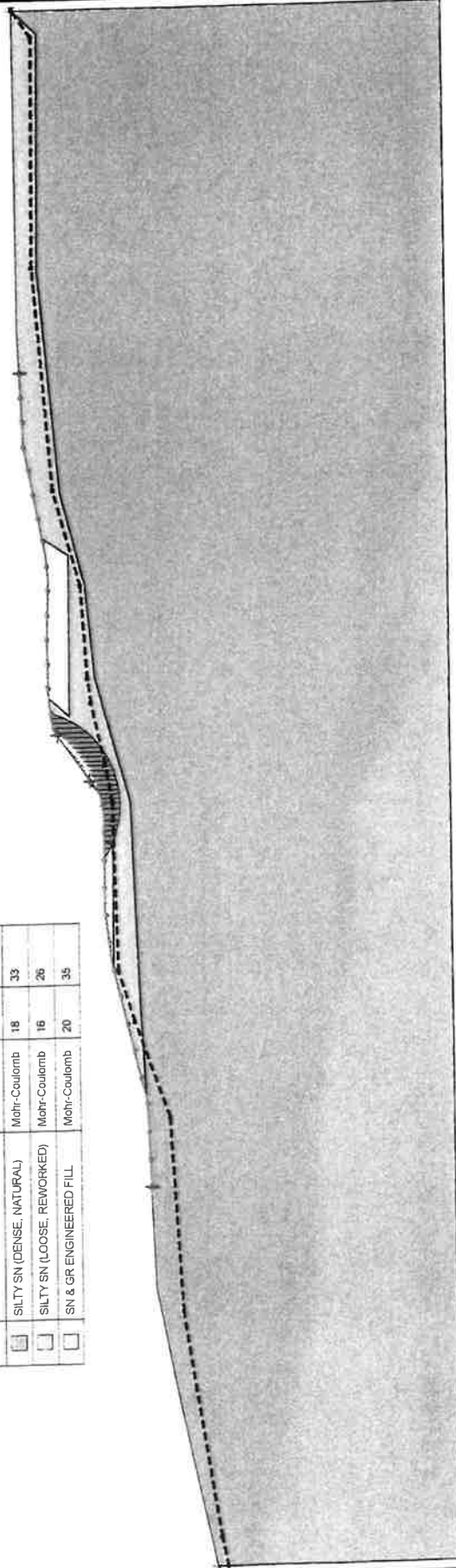
COMMENTS
Lab ID: 24-580

APPENDIX F – SLOPE STABILITY ANALYSIS RESULTS

Marine Dr - Static

Color	Name	Slope Stability Material Model	Unit Weight (kN/m ³)	Effective Friction Angle (°)
<input type="checkbox"/>	SILTY SN (DENSE, NATURAL)	Mohr-Coulomb	18	33
<input type="checkbox"/>	SILTY SN (LOOSE, REWORKED)	Mohr-Coulomb	16	26
<input type="checkbox"/>	SN & GR ENGINEERED FILL	Mohr-Coulomb	20	35

1.312



SLOPE/W Analysis Static

221180553_Marine Dr, Pt Alice_Slope_JF.gsz

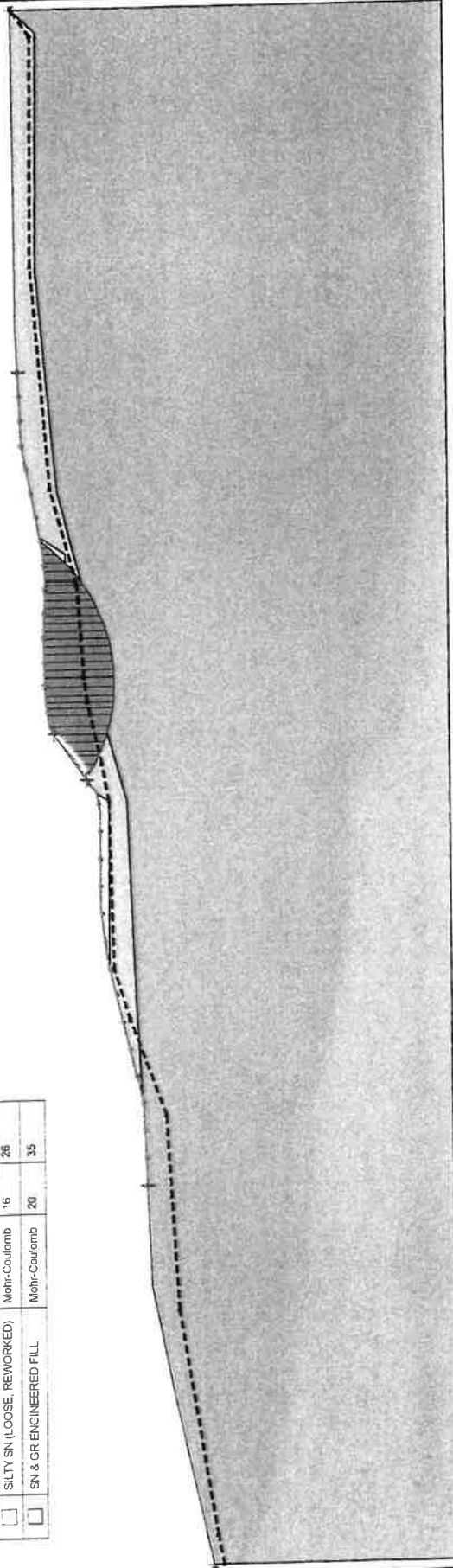
2024-06-26

1.435

Marine Dr - Seismic (K=0.69)

Color	Name	Slope Stability Material Model	Unit Weight (kN/m ³)	Effective Friction Angle (°)
<input type="checkbox"/>	SILTY SN (DENSE, NATURAL)	Multi-Coulomb	18	33
<input type="checkbox"/>	SILTY SN (LOOSE, REWORKED)	Multi-Coulomb	16	26
<input type="checkbox"/>	SN & GR ENGINEERED FILL	Multi-Coulomb	20	35

1:1000







SLOPE/W Analysis Seismic

221180553_Marine Dr, Pt Alice_Slope_JF.gsz

2024-06-26

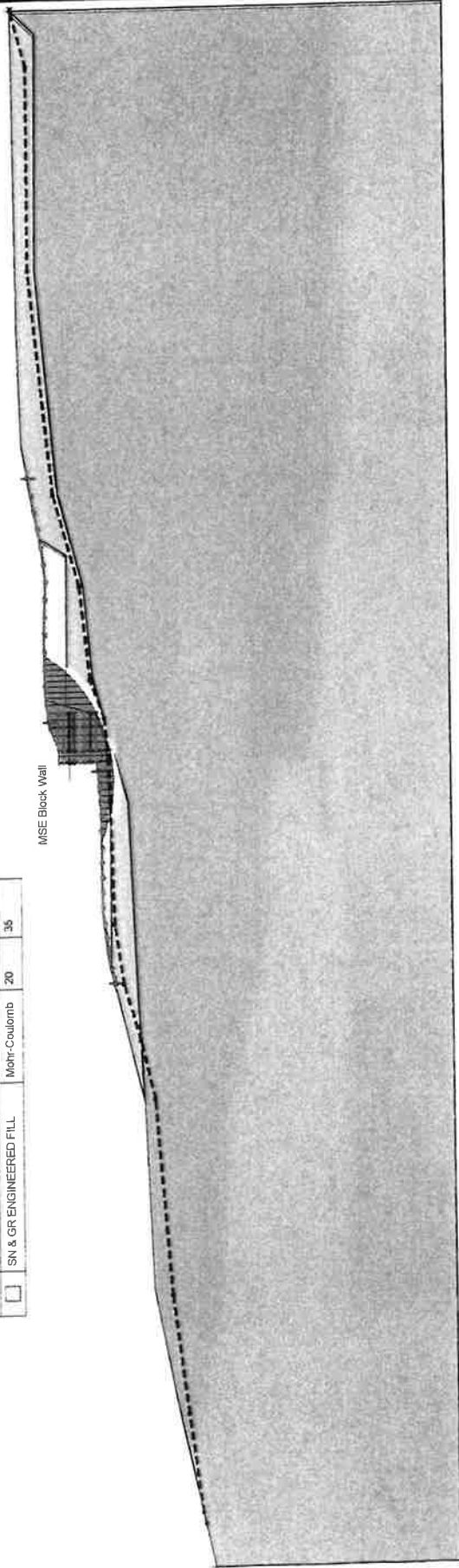
1.435

Marine Dr - Seismic (k=0.2)

Color	Name	Slope Stability Material Model	Unit Weight (kN/m ³)	Effective Friction Angle (°)
	CONC. BLOCKS	High Strength	23	
	SILTY SN (DENSE, NATURAL)	Mohr-Coulomb	18	33
	SILTY SN (LOOSE, REWORKED)	Mohr-Coulomb	16	26
	SN & GR ENGINEERED FILL	Mohr-Coulomb	20	35

0.960

MSE Block Wall

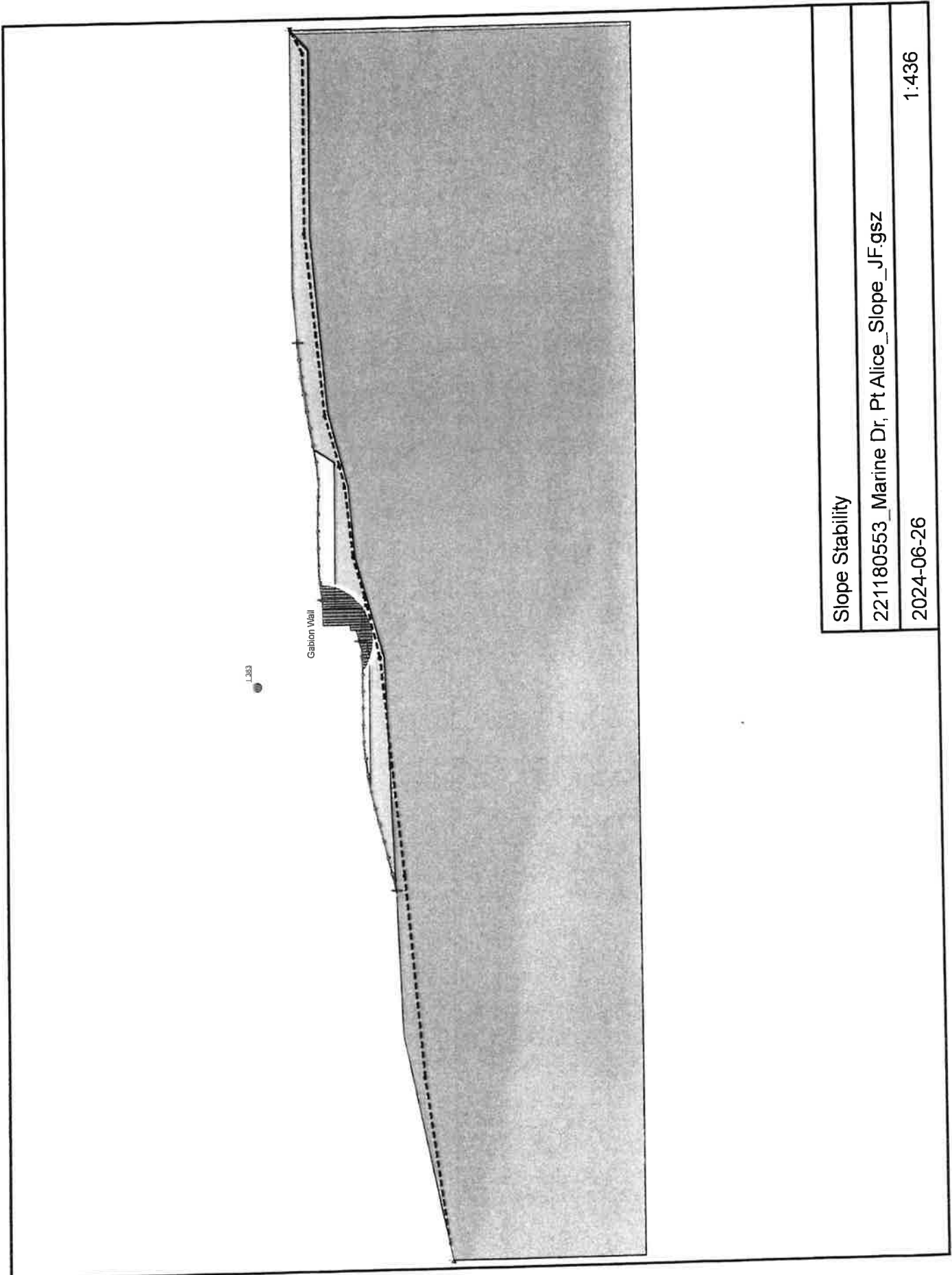


Global Stability (Seismic) (2)

221180553 Marine Dr, Pt Alice_Slope_JF.gsz

2024-06-26

1:435



Slope Stability

221180553_Marine Dr, Pt Alice_Slope_JF.gsz

2024-06-26

1:436



Gateway to the Wild West Coast

INFORMATION ITEMS

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- Skip to footer

British Columbia News

Clean, affordable electricity will power growth on Vancouver Island

<https://news.gov.bc.ca/31226>

BC Hydro will build more than \$3 billion in capital projects on Vancouver Island over the next decade to upgrade and expand the electricity grid and provide clean power for homes and businesses in growing communities.

"We must build out B.C.'s electrical system like never before, to power our homes and businesses, to power a growing economy and to power our future," said Josie Osborne, Minister of Energy, Mines and Low Carbon Innovation. "On Vancouver Island and in communities across B.C., these construction projects will create thousands of good jobs over the next decade and ensure that people have access to clean, affordable and reliable electricity, when they need it and where they need it."

In January 2024, the Province announced BC Hydro's updated 10-Year Capital Plan, which contains \$36 billion in regional and community infrastructure investments throughout B.C., a 50% increase in investments over its previous capital plan. These construction projects are forecasted to support 10,500 to 12,500 jobs annually, on average, and will increase and maintain BC Hydro's capital investments as major projects such as Site C are completed.

The plan reflects growing demand for electricity across sectors due to population growth and housing construction, increased industrial development, and people and businesses switching from fossil fuels to clean electricity, among other factors.

"In growing regions like Vancouver Island where we are seeing substantial housing, building, transportation and industrial growth, we are embarking on significant upgrades to our electricity system, including investments in our generation plants, new and expanded substation projects as well as major distribution investments to support underground and overhead infrastructure extensions to ensure we can continue to provide reliable and clean electricity to our customers," said Chris O'Riley, president and CEO, BC Hydro. "We are also making important changes to our customer-connections process to speed up timelines for newly constructed homes and buildings."

Vancouver Island is experiencing significant growth in Victoria, Saanich, Langford, Colwood and Nanaimo. To meet growth in these areas, BC Hydro is investing in several projects as part of its 10-Year Capital Plan, including:

- building a new substation in the Langford area that will power an additional 40,000 to 70,000 homes and be in service by 2030;
- replacing end-of-life transmission underground cables that service Victoria, Esquimalt and Saanich, increasing capacity more than 60%, enough to power more than 100,000 additional homes;
- major distribution investments to increase power-line capacity to support new residential housing and anticipated residential load growth in:
 - Bear Mountain and Langford Heights;
 - Victoria, Oak Bay and Esquimalt;
 - District of Saanich and central Saanich; and
 - North and South Nanaimo.
- upgrades of transmission capacity to Vancouver Island by replacing old undersea cables with new cables by the Gulf Islands; and

"Langford is one of the fastest-growing communities in B.C., and these projects ensure that both new residents and lifelong locals have access to reliable and clean electricity. The new Langford area substation will power an additional 40,000 to 70,000 homes, ensuring the Westshore region gets the energy it needs to support its growth."

Bruce Williams, CEO, Victoria Chamber of Commerce –

"Greater Victoria's business community is at the forefront of climate action leadership and we strongly support work being done to reduce emissions. The projects being undertaken on Vancouver Island add resiliency to our power grid and will ensure our region has sustainable access to clean energy."

Quick Facts:

- Currently, 98% of the power generated for B.C.'s integrated grid comes from clean or renewable resources, making B.C. a leader in North America when it comes to clean energy.
- Electricity demand in B.C. is expected to increase by 15% or more between now and 2030.
- BC Hydro has kept rate increases below the rate of inflation for six years in a row. B.C. currently has the second-lowest residential electricity rates in North America, and the third lowest commercial and industrial rates.
- BC Hydro was a net exporter of electricity for the past five years (2019-23), with most imports coming from dedicated clean sources of electricity.

Learn More:

To view BC Hydro's 10-year capital plan, Power Pathway: Building BC's energy future, visit:
https://news.gov.bc.ca/files/CS-4307-CapitalPlan_LTR.pdf (https://news.gov.bc.ca/files/CS-4307-CapitalPlan_LTR.pdf)

To view a graph of BC Hydro's planned capital spending, visit: https://news.gov.bc.ca/files/CS-4307-CapitalExpenditures_Chart.pdf (https://news.gov.bc.ca/files/CS-4307-CapitalExpenditures_Chart.pdf)

For details on Powering Our Future: BC's Clean Energy Strategy, visit: <https://www2.gov.bc.ca/gov/content?id=E28B86DD48CC469684A9401B54087682> (<https://www2.gov.bc.ca/gov/content?id=E28B86DD48CC469684A9401B54087682>)

Alanah Connie

Ministry of Energy, Mines and Low Carbon Innovation
Media Relations
Alanah.connie@gov.bc.ca

BC Hydro Media Relations

media@bchydro.com
604 928-6468

Acknowledgment

The B.C. Public Service acknowledges the territories of First Nations around B.C. and is grateful to carry out our work on these lands. We acknowledge the rights, interests, priorities, and concerns of all