

REGIONAL DISTRICT OF NANAIMO

Invitation to Tender 21-019:

BENSON CREEK FALLS REGIONAL PARK

ACCESS IMPROVEMENTS – PHASE 2: AMMONITE FALLS

TENDER DOCUMENTS



Prepared for:

Regional District of Nanaimo
6300 Hammond Bay Road
Nanaimo, BC
V9T 6N2

Prepared By:

Herold Engineering Limited
3701 Shenton Road
Nanaimo, BC
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Date: June 24, 2021
Project No. 0837-067

Regional District of Nanaimo

21-019: BENSON CREEK FALLS REGIONAL PARK

ACCESS IMPROVEMENTS – PHASE 2:

AMMONITE FALLS

Nanaimo, BC

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REGIONAL DISTRICT OF NANAIMO

21-019: BENSON CREEK FALLS REGIONAL PARK

ACCESS IMPROVEMENTS – PHASE 2:

AMMONITE FALLS

Nanaimo, BC

Tenders, clearly marked '21-019 Benson Creek Falls Access Improvements Phase 2' will be received by email to ASadeghi@heroldengineering.com on or before 15:00 hours, July 15, 2021. The owner and consultant will not be responsible for any technological delays. Tenders will NOT be opened in public; however, unverified results will be distributed to bidders and posted on the RDN and BC Bid websites as soon as reasonably practicable.

The project site is in Benson Creek Regional Park west of Nanaimo, BC. The project site is accessible only by foot traffic via Weigles Road, Jameson Road, with the possibility of using the Vancouver Island University (VIU) Forestry Access Road with permission from VIU. The work consists of: supply and installation of timber staircase and viewing platform, supply and installation of wooden steps on grade, and all works incidental thereto as shown on the drawings.

The Tender Documents are available on BC BID and on the Regional District of Nanaimo website <https://www.rdn.bc.ca/current-bid-opportunities>

A non-mandatory site meeting is scheduled for July 6, 2021, at 10:00 a.m. meeting at the VIU Woodlot gate at the end of Galloway Gulch Road. Bidders should participate in the site meeting and complete a thorough examination of the project area and familiarize themselves with the works. The site is remote, and access limited and difficult. Work Points have been clearly marked in the field and should be read in conjunction with the project drawings.

Location map with direction to the project site is included in **Appendix A**.

Direct all inquiries, in writing to: Attention: Ali Sadeghi, P. Eng., Project Manager, Herold Engineering Limited, 3701 Shenton Road, Nanaimo, BC, V9T 2H1, Phone 250.751.8558, and e-mail: ASadeghi@heroldengineering.com

Each Tender Form received from a Bidder must be accompanied by a **verifiable digital Bid Bond (E-Bond)** and a **verifiable digital Surety's Consent** as defined by the Surety Association of Canada (<https://www.suretycanada.com/SAC/Surety-Bonds/E-Bonding/SAC/Surety-Bonds/E-Bonding.aspx?hkey=01cd2088-9918-454e-bb0e-a309fa495bef>) in the amount equal to TEN PERCENT (10%) of the TOTAL AMOUNT OF TENDER. Bid Bonds shall be issued by a Surety licenced in British Columbia. The successful Bidder will be required to a Performance Bond and a Labour & Materials Bond each in the amount of 50% of the total contract value. Tenders must remain valid for sixty (60) days following the closing time and date.

The Owner reserves the right to reject any or all tenders, to accept the tender deemed most favourable in the interests of the Owner. The lowest or any tender may not necessarily be accepted. The Owner reserves the right to waive minor irregularities in any Tender as the interests of the Regional District may require without stating reasons therefore.

REGIONAL DISTRICT OF NANAIMO
21-019: BENSON CREEK FALLS REGIONAL PARK
ACCESS IMPROVEMENTS – PHASE 2:
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PART II
INSTRUCTIONS TO TENDERERS

Regional District of Nanaimo
21-019: BENSON CREEK FALLS REGIONAL PARK
ACCESS IMPROVEMENTS – PHASE 2:
AMMONITE FALLS
Nanaimo, BC
PART II

INSTRUCTIONS TO TENDERERS

ARTICLE 1. TENDER

Tenders clearly marked '21-019 Benson Creek Falls Access Improvements Phase 2' will be received by email to ASadeghi@heroldengineering.com on or before 15:00 hours, **July 15, 2021**. The owner and consultant will not be responsible for any technological delays. Tenders will NOT be opened in public.

ARTICLE 2. NON-MANDATORY BIDDERS MEETING

A non-mandatory site meeting scheduled for **July 6, 2021, at 10:00 a.m.** meeting at the VIU Woodlot gate at the end of Galloway Gulch Rd. Bidders should participate in the site meeting and complete a thorough examination of the project area and familiarized themselves with the works. Work Points have been clearly marked in the field and should be read in conjunction with the project drawings.

Location map with direction to the project site is included in **Appendix A**

ARTICLE 3. SCOPE OF WORK

The scope of work to be carried out for access improvements consists of but is not necessarily limited to, the following:

- Mobilization and Demobilization
- Public access plan & site safety management
- Improvement to access trail as deemed necessary by bidders
- Foundation excavation
- Formwork for stairs foundation
- Supply and installation of cast-in-place concrete footing
- Supply and installation of timber staircase
- Supply and installation of wooden steps on grade
- Supply and installation of timber viewing platform
- Other Miscellaneous works
- Environmental mitigation
- Quality Management

ARTICLE 4. STANDARDS AND SPECIFICATIONS

All work and materials are to be as described in:

- Any specifications referenced on the contract documents or drawings.
- Regional District of Nanaimo Parks and Trails Guidelines

The Standard Construction Contract Document for this project is CCDC 18 - 2001 as amended by the Supplementary General Conditions.

ARTICLE 5. DEPOSIT FOR CONTRACT DOCUMENTS

There is no cost for the Contract Documents in digital format.

ARTICLE 6. EXAMINE

The Tenderer should carefully examine the Contract Documents and the site of the proposed works, judging for and satisfying themselves as to the probable conditions to be encountered. Should a Tenderer find discrepancies in, or omissions from, the drawings or other documents, or should they be in doubt as to their meaning, they should at once notify the Consultant. The Tenderer may not claim, after the submission of a tender, that there was any misunderstanding with respect to the conditions imposed by the documents.

Although provision is made in the General Conditions for certain unforeseen site conditions, Tenderers shall make allowances in their bids for such conditions as in the sole opinion of the Tenderer are warranted. It is expected that Tenderers will visit the site before tendering and shall satisfy themselves as to the nature and location of the Work, the means of temporary access, and shall obtain all necessary information as to risks, contingencies and circumstances which may affect his/her Tender. The Tenderer is responsible for obtaining all information required for the preparation of the Tender.

The Tenderer's attention is drawn to the Supplementary General and Special Conditions of the documents, which contain any changes or additions to the General Conditions. The Tenderer's attention is also drawn to any addenda, which may be issued prior to the time of tender closure.

No verbal agreement or conversation made or had at any time with any officer, agency, or employee of the Owner or the Consultant shall affect or modify any of the terms or obligations neither herein stated, nor deemed to be any representation or warranty.

ARTICLE 7. ENVIRONMENTAL INFORMATION

An Environmental Management Plan (EMP) is included in **Appendix D**.

The Tenderer is advised that the Regional District of Nanaimo will retain an environmental monitor to assist the successful Contractor in the implementation of EMP.

ARTICLE 8. GEOTECHNICAL INFORMATION

The Tenderer is advised that all the relevant geotechnical information for this project is compiled in the Tetra Tech reports is included in **Appendix C**.

ARTICLE 9. QUERIES/ADDENDA

Direct all questions in writing **only** to **Ali Sadeghi, P.Eng., Project Manager**, Herold Engineering Limited, 3701 Shenton Road, Nanaimo, BC, V9T 2H1 or by email to ASadeghi@heroldengineering.com.

Addenda may be issued during bidding period. All Addenda become part of the Contract Documents. Changes in cost from Addenda items are to be included in the bid price. Verbal answers are only binding when confirmed by written addenda.

Addenda will be posted to BC BID and on the Regional District of Nanaimo website <https://www.rdn.bc.ca/current-bid-opportunities>. Tenderers are solely responsible to check for any addenda prior to submitting their Tender.

Clarifications requested by Tenderers should be received in writing not less than five (5) business days before date set for receipt of Bids.

ARTICLE 10. FORM OF SUBMISSION

Tenders clearly marked '21-019 Benson Creek Falls Access Improvements Phase 2' will be received by email to ASadeghi@heroldengineering.com on or before 15:00 hours, July 15, 2021. The owner and consultant will not be responsible for any technological delays. Tenders will not be opened in public.

Electronically submitted Tenders will be deemed to be successfully received when the time as posted on the incoming email is at or before the established closing date and time. It is the Tenderer's sole responsibility to ensure their Tender is received when, where and how it is specified in this document.

ARTICLE 11. SCHEDULE OF COMPLETION

The Regional District of Nanaimo requires that this contract be completed by December **31, 2021**.

RDN can not be held responsible financially for any cost to the Tenderer due to project delays.

No In-stream work is anticipated.

A bird breeding season pre-clearing nest survey is required if vegetation removal or site disturbed (i.e. downwash from helicopter) occurs within nesting season between March 15 to August 15.

ARTICLE 12. TENDER SIGNING

If the Tenderer is an individual, a corporation or a partnership, the Tender shall be executed by the individual or a partner authorized to legally bind the tenderer to the statements made in the Tender.

If the Tenderer is a joint venture, each party to the joint venture shall execute the Tender in the manner appropriate to such party.

ARTICLE 13. QUANTITIES

The quantities inserted against the various items in the Schedule of Quantities and Prices of the Tender Form have been stated for the purpose of comparing tenders on a uniform basis, but it must be distinctly understood that any quantities shown in the said Schedule are approximate only and that neither the Owner nor the Consultant expressly or by implication represent that the actual quantities will even approximately correspond therewith.

No variation in the quantities actually handled shall give rise to any claim against the Owner or the Consultant.

ARTICLE 14. TENDER PRICE

Unit and lump sum prices shall be filled in where indicated in the Schedule of Quantities and Prices of the Tender Form. The unit prices shall be extended in accordance with the quantities shown and the extensions shall be inserted in the space provided. The total tender must be an accurate extension of the unit and lump sum prices submitted and the quantities shown. All pricing is to be in Canadian Dollars.

In the event of a discrepancy between the unit prices and extended totals, the unit prices will govern, and the Consultant will correct the extended totals accordingly.

In the event of a discrepancy between a maximum allowable lump sum price and the submitted lump sum price, the maximum allowable price shall govern, and the Consultant will correct the price and extend totals accordingly. The prices tendered shall include the supply of all materials except those specified to be supplied by others, all supervision, labor and equipment and a provision for overhead and profit and shall represent the entire cost to the Owner for the completed works as specified and shown on the drawings. All costs to prepare a Tender shall be borne solely by the Tenderer.

ARTICLE 15. NOT USED

ARTICLE 16. LIST OF SUBCONTRACTORS

The Tenderer should indicate, in the List of Subcontractors in the Tender Form, the names of all subcontractors he proposes to employ on the work. Subcontractors shall not be changed, or additional subcontractors employed without the written authorization of the Consultant. Failure to submit a complete list may result in the Tender being considered incomplete.

ARTICLE 17. SCHEDULE OF FORCE ACCOUNT RATES

The Tenderer should indicate, in the Schedule of Force Account Rates of the Tender Form, all personnel and equipment hourly rates likely to be used on the project. All equipment rates are to be in line with the current 'Blue Book' rates.

These rates will form the basis for payment for force account work carried out in accordance with the General Conditions. Failure to adequately complete the schedule may result in the Tender being considered incomplete.

ARTICLE 18. LIST OF MANUFACTURERS AND SUPPLIERS

The Tenderer should indicate in the List of Manufacturers and Suppliers in the Tender Form, the manufacturer or product brand name of the items listed together with the name of the supplier or distributor from which each item will be purchased.

Where more than one supplier or manufacturer is listed or specified, the name of the selected supplier or manufacturer shall be inserted. Manufacturers and suppliers will not be changed from those shown in the Tender Form without the written authorization of the Consultant. Failure to complete the list may result in the Tender being considered incomplete.

ARTICLE 19. PROPOSED ALTERNATE MATERIALS

The Tenderer may propose to use materials other than that specified or shown on the drawings by providing the required information in the list of Proposed Alternate Materials in the Tender Form. Evaluation of proposed alternate materials will be made by the Owner following the closing of tenders. However, the Total amount of Tender must be based on the use of specified materials.

ARTICLE 20. SECURITY REQUIREMENTS

Bid Bonds:

The Tender must be accompanied by a **verifiable digital Bid Bond (E-Bond)** in an amount not less than ten percent (10%) of the Tender Price and must be issued by a surety company licensed to conduct business in the province wherein the work is located, and must be accompanied with a **verifiable digital Surety's Consent** as defined by the Surety Association of Canada (<https://www.suretycanada.com/SAC/Surety-Bonds/E-Bonding/SAC/Surety-Bonds/E-Bonding.aspx?hkey=01cd2088-9918-454e-bb0e-a309fa495bef>)

The Bid Bond must be a **verifiable digital Bid Bond (E-Bond)** only, no photocopied or scanned copies of the bond are permissible. Failure to comply will result in an incomplete submission.

If the successful Tenderer fails for any reason to execute the Contract Agreement and to provide the surety bonds stipulated in the General Conditions within the time agreed to in the Tender Form, and such extension of time as may be granted by the Owner, that portion of his Bid Bond will be forfeited to and retained by the Owner in the amount of the difference in money between the Total Tender and the amount for which the Owner may legally contract with another party to perform the work, if the latter amount be in excess of the former.

The Bid Bonds submitted by unsuccessful Tenderers will be returned once a fully executed contract is in place or the period for which tenders are irrevocable has elapsed, whichever shall first happen.

Labour and Material Payment Bonds and Performance Bonds:

The successful Tenderer shall provide a digital or original paper Performance Bond and a digital or original paper Labour and Material Payment Bond each in the amount of FIFTY PERCENT (50%) of the TOTAL CONTRACT PRICE.

These bonds should be provided within fourteen (14) days of contract award and must be maintained in good standing until the fulfilment of the Contract, including the requirements of the Warranty provided for in GC 12.3 - Warranty and the payment of all obligations arising under the Contract. Should the successful Tenderer fail to provide these required bonds; the Bid Bond may be forfeited.

The costs attributed to providing such bonds shall be included in the Total Amount of Tender. The obligee, on the bonds must be the Owner.

Submit with the Tender a **verifiable digital Bid Bond (E-Bond)** and a **verifiable digital Consent of Surety** stating that the Surety is willing to supply the Performance and Labour and Material Payment Bonds required.

The **Bid Bond and Surety's Consent must be submitted in a verifiable digital format** and must meet the following criteria:

1. The version submitted by the Tenderer must be verifiable by the Owner with respect to the totality and wholeness of the bond form, including: the content; all digital signatures; all digital seals; with the Surety Company, or an approved verification service provider of the Surety Company.
2. The version submitted must be viewable, printable and storable in standard electronic file formats acceptable to the Owner, and in a single file. Format should be pdf.
3. The verification may be conducted by the Owner immediately or at any time during the life of the bond and at the discretion of the Owner with no requirement for passwords or fees.
4. As defined by the Surety Association of Canada.
<https://www.suretycanada.com/SAC/Surety-Bonds/E-Bonding/SAC/Surety-Bonds/E-Bonding.aspx?hkey=01cd2088-9918-454e-bb0e-a309fa495bef>

Bonds failing the verification process will NOT be valid and the bid may be rejected.

Bonds passing the verification process will be treated as original and authentic.

ARTICLE 21. TENDER WITHDRAWAL

A Tenderer may, without prejudice to himself, withdraw his tender on written request received by the Consultant (Ali Sadeghi, P.Eng., Herold Engineering) any time prior to the time set for the closing of tenders.

ARTICLE 22. REVISIONS TO TENDER

Any revision to the tender by the Tenderer must be in writing by letter, properly executed, and received by the Consultant (Ali Sadeghi, Herold Engineering) at the closing location before the closing time.

1. Email

Email revisions must be received as a new email by the Consultant (Ali Sadeghi, P.Eng., Herold Engineering) prior to the established closing time. The Tenderer assumes all responsibility for the timely and effective delivery of any emailed revision.

The revision must substantially comply with the following requirements:

- a. state the tender number and description;
- b. state the closing time; and,
- c. state the amount by which the tender is to be increased or decreased AND the increase or decrease to each unit price affected.

2. Amount of Bid Bond

The Tenderer must ensure that the total amount of the Bid Bond is not less than ten percent (10%) of the total tender price. The Tenderer should consider the effect of revisions on the tender price and the verifiable digital Bid Bond (E-Bond) requirements.

3. Multiple Revisions

Where a Tenderer submits multiple revisions to the original tender price, each revision should be numbered sequentially by the Tenderer. Unless the Tenderer clearly stipulates to the contrary on the face of the revision, each successive revision will nullify and replace any previous revision to the identified item or tender price.

4. Unclear or Ambiguous Revisions

If in the opinion of the Owner or Consultant, any revision is unclear, ambiguous as to meaning or intent, or does not comply with the requirements of Article 14, that revision will be disregarded and the original tender price, or the tender price determined by consideration of any other revisions will prevail.

The Owner or Consultant, their employees and agents will not assume any responsibility for timely receipt of any revisions.

ARTICLE 23. TENDER REJECTION

The Owner reserves the right to reject any or all tenders; the lowest bid will not necessarily be accepted.

Without limiting the generality of the foregoing, any tender may be disqualified or rejected which is incomplete, obscure, or irregular, which has erasures or corrections in the Tender Form, which has prices

that are omitted or are unbalanced, which contains an escalator clause or other qualifying conditions or has an insufficient or irregular Surety.

A tender shall also be rejected if there is any evidence that the Tenderer has any legal connection with any other company, firm or person submitting a tender for this work, any knowledge of the tender prices to be submitted for this work by others, or any undisclosed connection or arrangement with any other company, firm, or person having a financial interest in the proposed Contract.

The Owner reserves the right to reject any or all tenders, to accept the tender deemed most favourable in the interests of the Owner, and to re-issue the tender with the same or different terms. Acceptance of any tender is based on the availability of adequate funds to the Owner and regulatory approvals.

ARTICLE 24. AWARD

Preference will be given to tenders that give the greatest value based on quality, service, and price.

The Owner will, upon selection of an acceptable tender, issue in writing a Notice of Intent to Award to the Tenderer. This notice will be given as soon as possible following the closing of tenders and, unless otherwise agreed to by the Tenderer, not later than sixty (60) days following the closing of tenders.

ARTICLE 25. WORKSAFE BC AND SAFETY

1. The Tenderer is advised that the workplace may have the following known operations and/or site conditions that could present a potential hazard to workers and other persons at the workplace.

Other hazards may exist, such as:

Excavations	Poor access
Remote Site	Overhead hazard (trees)
Wildlife interaction	Steep terrain

2. The successful Tenderer will be designated as the Prime Contractor and must be qualified and willing to undertake the role and shall fulfill the **Prime Contractor** responsibilities as defined in
 - a. WorkSafeBC *Occupational Health and Safety Regulation*, Notice of project, Section 20.2, and Coordination of multiple employer workplaces, Section 20.3;
 - b. *Workers Compensation Act* (BC), Coordination at multiple-employer workplaces, Section 118, Subsections (1) & (2); and
 - c. General Requirements, Section 3.10 WorkSafe BC.
3. The Prime Contractor will be required to coordinate the safety of all workers on the work site, including their employees, their subcontractors, Regional District, work crews and their contractors. Prior to commencing work, the successful Tenderer will be required to forward a copy of their current OH&S Safety Program document, WorkSafeBC Notice of Project, and WorkSafeBC Clearance Letter.

ARTICLE 26. TESTING

The Regional District of Nanaimo will employ a Materials Testing Consultant during the work to test all work and materials deemed necessary and determine whether they are in accordance with the Specifications. The Contractor shall coordinate his work with the Consultant to ensure that the testing is done efficiently, and no delays are caused.

ARTICLE 27. DFO PERMITTING

Submission of The Request for Review for the Department of Fisheries and Oceans is not required for this project.

ARTICLE 28. TRANSPORTATION

Transportation of materials, machinery, crews, etc. to and from the project site is the sole responsibility of the successful Tenderer. The project sites are not road accessible, and Tenderers must give consideration to safe and cost-effective material transportation to and from the work site.

ARTICLE 29. COVID 19

Tenderers are advised that the Regional District of Nanaimo acknowledges both the challenges and uncertainty in managing the Coronavirus (COVID-19) in BC's construction industry going forward. Portions of this tender contain specific starting and completion dates that may or may not be achievable, depending on future restrictions and the duration of these restrictions. Additional risk may be realized from supply chain issues and potential construction site slowdowns, resulting in a delay in delivery of the project.

The successful Tenderer will be required to provide the Owner and Consultant with a COVID-19 management plan including safe work plans that meet current Federal and Provincial Government and WorksafeBC requirements.

ARTICLE 30. No Claim for Compensation

Except as expressly and specifically permitted in these Instructions to Tenderers, no Tenderer shall have any claim for any compensation of any kind whatsoever, by participating in the tender, and by submitting a bid each Tenderer shall be deemed to have agreed that it has no claim.

ARTICLE 31. Solicitation of Board Members

If a member of the Board, or a person who was a member of the Board in the previous six months has a direct or indirect interest in the contract, then the Tenderer shall report this to the REGIONAL DISTRICT in accordance with Section 107 of the *Community Charter* upon being notified of the award of the contract. The Tenderer warrants and represents that it has not received any information or a record from any Board member or former Board member contrary to Section 108 of the *Community Charter*.

ARTICLE 32. Freedom of Information and Protection of Privacy Act

All documents submitted to the REGIONAL DISTRICT will be held in confidence by the REGIONAL DISTRICT, subject to the provisions of the Province of British Columbia's *Freedom of Information and Protection of Privacy Act*. Unverified bid results and the successful vendor and value of the award is routinely released.

ARTICLE 33. Ownership of Tenders

All Tenders, including any attachments and other documentation, submitted to and accepted by the RDN in response to this Tender become the property of the RDN.

ARTICLE 34. Litigation Clause

The RDN may, in its absolute discretion, reject a Proposal submitted by Proponent, if the Proponent, or any officer or director of the Proponent is or has been engaged either directly or indirectly through another corporation in legal action against the RDN, its elected or appointed officers and employees in relation to:

- (a) any other contract for works or services; or any matter arising from the RDN's exercise of its powers, duties, or functions under the Local Government Act, Community Charter or another enactment within five years of the date of this Call for Proposals.

In determining whether to reject a Proposal under this clause, the RDN will consider whether the litigation is likely to affect the Proponent's ability to work with the RDN, its consultants and representatives and whether the RDN's experience with the Proponent indicates that the RDN is likely to incur increased staff and legal costs in the administration of this Contract if it is awarded to the Proponent.

REGIONAL DISTRICT OF NANAIMO
21-019: BENSON CREEK FALLS REGIONAL PARK
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PART III

SUPPLEMENTARY GENERAL AND SPECIAL CONDITIONS

REGIONAL DISTRICT OF NANAIMO
BENSON CREEK FALLS REGIONAL PARK
ACCESS IMPROVEMENTS – PHASE 2:
AMMONITE FALLS
Nanaimo, BC

PART III

SUPPLEMENTARY GENERAL AND SPECIAL CONDITIONS

1. Supplementary General Conditions.....	SC2
2. Special Conditions	SC4
3. Pay Item Descriptions (For all Scheduled Works)	SC7

1. SUPPLEMENTARY GENERAL CONDITIONS

1. General

These Supplementary Conditions shall be read in conjunction with the General Conditions of the Contract and shall govern over them.

The Standard Construction Contract Document for the project is CCDC 18 - 2001.

2. Article A-2 Agreements and Amendments

Add paragraph 2.3:

Counterpart:

This Agreement may be executed in any number of counterparts, each of which will be deemed to be an original and all of which taken together will be deemed to constitute one and the same instrument. Delivery by electronic transmission in portable document format (PDF) of an executed counterpart of this Agreement is as effective as delivery of an originally executed counterpart of this Agreement.

3. GC 1.1 Contract Documents

a) **Replace** 1.1.7 with:

1.1.7 If there is a conflict within the Contract Documents:

- .1 The order of priority of documents, from highest to lowest, shall be
- the Agreement between the Owner and the Contractor,
 - the Definitions,
 - Supplementary Conditions,
 - the Tender Documents,
 - the Drawings,
 - Technical Specifications,
 - the General Conditions,
 - Material and finishing schedules.

b) Paragraph 1.1.9 after the words are and shall remain in the first sentence, **add** 'as between the Engineer and the Contractor'

4. GC 1.4 Assignment

After neither party to the Contract shall assign the Contract or a portion thereof without the written consent of the other, **delete** 'which consent shall not be unreasonably withheld.'

5. GC 3.5 Construction Schedule

Revise clause 3.5.1.2 to include "and submit to the Owner and Consultant in PDF format and native file format."

6. GC 3.7 Layout of The Work

The Contractor will be responsible for the project layout. Temporary benchmarks and digital AutoCAD files will be provided by the Owner. The Contractor must satisfy himself before commencing any work as to the meaning and correctness of all stakes and marks, and no claim will be entertained by the Owner for or on account of any alleged inaccuracies, unless the Contractor notified the Consultant of such inaccuracies in writing before commencing the Work.

The Contractor shall assume full responsibility for alignment, elevations, and dimensions of all parts of the Work, regardless of whether the Contractor's work has been checked by the Consultant.

7. GC 3.12 Use of the Work

Add paragraph 3.12.3: The Contractor shall maintain the place of Work in a tidy condition and free from accumulation of debris. Waste material must be promptly removed from site.

8. GC 5.5 Applications for Progress Payment

Add paragraph 5.5.7: With every application for payment after the first progress payment, a Statutory Declaration on CCDC 9A-2001 Form shall be completed and sworn before a Notary Public or a Commissioner of Oaths for the Province of British Columbia.

9. GC 5.6 Progress Payment

Revise clause GC 5.6.2 as follows:

The Owner will, within Thirty (30) days of the date of the Consultant's Certificate, make Agreement. The actual amount paid is subject to the Owner's rights under law or this Contract to make deductions. Payment to the Contractor on account in accordance with the provisions of Article A-5 of the agreement. The actual amount paid is subject to the Owner's rights under law or this Contract to make deductions.

Add paragraph 5.6.4: Before any payment is made by the Owner to the Contractor, the Consultant or the Owner may by written notice, require that the Contractor furnish such further detailed information as the Consultant or the Owner may determine is necessary to establish compliance by the Contractor with the Contract Documents.

10. GC 5.7 Substantial Performance of Work

Add paragraph 5.7.1.1: There will be no progressive Substantial Performance of Portions of the Work.

11. GC 5.9 Progressive Release of Holdback

Paragraph 5.9.1: **Delete** entire paragraph **and replace** with the following: 'There will be no progressive release of holdback funds.'

12. GC 5.13 Interest

Add GC 5.13: Notwithstanding the provisions of Article A-5 PAYMENT, paragraph 5.3, the Owner is not liable to pay interest on any amount which may at any time become payable to the Contractor under this Contract whether the payment is in default and whether or not any action or other proceeding has been commenced in respect thereof.

13. GC 6.7 Quantity Variations

Delete entire section.

2. SPECIAL CONDITIONS

1. Scope of Work

The scope of work to be carried out for trail improvements and bridge construction, consists of but is not necessarily limited to, the following:

- Mobilization and Demobilization
- Public access plan & site safety management
- Improvement to access trail as deemed necessary by bidders
- Foundation excavation
- Formwork for stairs foundation
- Supply and installation of cast-in-place concrete footing
- Supply and installation of timber staircase
- Supply and installation of wooden steps on grade
- Supply and installation of timber viewing platform
- Other Miscellaneous works
- Environmental mitigation
- Quality Management

2. Prime Contractor

The successful Tenderer will be designated as the Prime Contractor and must be qualified and willing to undertake the role and shall fulfill the Prime Contractor responsibilities as defined in WorkSafeBC Occupational Health and Safety Regulation, and Coordination of multiple employer workplaces.

3. Herold Engineering (HEL) – Consultant

Herold Engineering acting on behalf of the Regional District of Nanaimo will provide Contract Administration and Construction Field Review services.

4. Materials

All material for the project to meet the requirements as specified and shown on the drawings.

5. Meetings

In addition to a pre-construction meeting with the Herold Engineering staff and RDN Project Manager, regular weekly meetings will be held to discuss project progress and address any scope of work updates. The meeting frequency may be adjusted based on project progress and work happening at that time. The meeting location will be at the project site.

6. Slope Stability

The project site is characterized by steep slopes. At the minimum, the Contractor shall adhere to the following guidelines:

- Concrete footings should be placed as soon as possible after excavation.
- The soil exposed for construction of footings should be kept dry during excavation and prior to footing construction to prevent loosening of the soil.
- Excavation and footings work should be done during a forecasted period of dry weather, when the groundwater table is lower and there is less chance of a rainfall event while the excavations are exposed.

- Avoid exposing and working with silt bearing surfaces during periods of rainfall. Excavations should be exposed for a minimum period during a window of minimal precipitation.
- The Contractor must develop a site-specific safe work procedure, prepared by a qualified person. It is expected that this would involve work shutdowns in periods of heavy rainfall and other procedures to mitigate risks associated with the steep slopes. This plan must be approved by RDN and its representative before the commencement of works.
- Contractors are to observe the recommendation as stated in the Tetra Tech Geotechnical report.

7. Public Access

The project sites will be closed to the public for the duration of the works and the Contractor is not required to accommodate public traffic access within the Construction area. The Contractor shall be responsible for supplying, installing, and maintaining all necessary signing, flagging and other such warning or traffic control devices for the safety of the public within the construction zone or as determined by the Consultant. The Contractor is expected to regularly inspect and monitor their work site to ensure public safety, workers safety and security. Record of the inspection shall be kept for owner's review.

A Public Access Plan and Site Safety Management is to be submitted for approval prior to the pre-construction meeting.

8. Hours of Work

Hours of work for the project shall be limited to between 6 AM and 7 PM, Monday to Friday. Requests for exemptions will be considered based on scheduling requirements.

9. Site Security

The Contractor shall be solely responsible for site security and shall provide all the means necessary or desirable for security and protection of the work site, all materials, supplies, tools and equipment and all other improvements, whether or not incorporated into the work.

10. Access Improvement

It is the Contractors responsibility to review and assess the existing trail and access road to ensure it meets their requirements to complete the project. No alteration to trail alignment is anticipated nor allowed without written permission by the Regional District of Nanaimo and the Consultant.

11. Protection of Existing Trail

The Contractor is cautioned that any damage done to the trail wearing surface, such as scoring, teeth marks, track marks, etc., shall be completely reinstated in a manner acceptable to the Consultant and Regional District of Nanaimo and no extra payment shall be made.

12. Tree Protection

All trees within the project area will require protection. Care is to be taken when working around these trees and the cutting of any roots. Any Regional District of Nanaimo bylaws related to working around trees apply, unless otherwise advised by the District or the Environmental Monitor.

Tree protection measures are to be to the satisfaction of the Environmental Monitor and RDN.

13. Record Drawings

- a. Contractor to maintain a complete set of 'redline' record drawings for the duration of the project.
- b. Drawings shall include all information as specified elsewhere for the construction drawings but shall be corrected upon completion of construction to note all works removed or abandoned during construction. This information shall be retained in a digital point file.
- c. All dimensions, elevations and inverts shown shall reflect the As-Built conditions of the construction and all references to "Proposed" shall be removed. As-Built drawings shall be to scale in accordance with the As-Built dimensions shown. The Revision Table shall be completed indicating the drawings are As-Built. All changes and notes marked in "red ink" on the IFC drawings.
- d. All As-Built features shall be surveyed, and survey points recorded in a digital point file with all changes marked on the IFC drawings in red ink. The As-Built drawing shall reflect the true elevation and location of all constructed features, in both the plan and profile views.

14. Construction Survey Layout

The Contractor is to provide all necessary construction layout. The Consultant will supply the Contractor with the necessary survey control points and AutoCAD base plan digital files to enable the Contractor to control the final layout of the work. The Contractor shall be responsible for the conformance of the finished work to this data even though it may be checked by the Consultant. Any known or suspected discrepancies or deviations from the plans are to be reported immediately to the Consultant.

15. Environmental Mitigation

Environmental Mitigation measures must be in accordance with Benson Creek Fall Regional Park Environmental Impact and Remediation Assessment & Environmental Protection Plan by Aquaparian Environmental Consulting Ltd., included in **Appendix D**.

Contractor shall develop a detailed Sediment and Erosion Control Plan which will identify contingency measures and emergency procedures suitable to the method of construction and procedures deemed necessary to complete the works. The Erosion plan will be reviewed by RDN and Project Environmental Consultant prior to the commencement of works.

16. Fire Protection

The Contractor shall take every precaution to prevent an unintentional fire from occurring on or about the work site. The following conditions in respect to fire protection shall be followed:

- a. No burning of any debris on or about the work site unless authorized by RDN, Ministry of Forest, Lands and Natural Resource Development, and BC Wildfire services.
- b. No smoking on or about the work site.

17. Wildfire Act and Wildfire Regulation

The Contractor, employees, and subcontractors work operations must comply with the BC Wildfire Act and Wildfire Regulations. This includes wildfire hazard assessment and abatement during "high risk" activities as defined by the BC Wildfire Regulations. It's the Contractor's responsibility to review and understand the Act and Regulation and take steps to ensure compliance.

3. PAY ITEM DESCRIPTIONS (FOR ALL SCHEDULED WORKS)

1. General Requirements

1. Mobilization and Demobilization

Mobilization includes, but is not limited to, the movement of necessary personnel, equipment, supplies and all incidentals to the work site, to commence the Project and for associated costs which must be performed in order to commence the Project.

No payment for “*Mobilization*” will be made until the value of the Work completed on bid items other than Mobilization exceeds 10% of the total tender price. When the amount bid for Mobilization exceeds 10% of the original Total Tender amount, the Owner will withhold the portion in excess of 10% of the original Total Tender until the date of Construction Completion.

The total amount bid for Mobilization will be paid only once, regardless of the number of times the Contractor mobilizes to the Site.

Payment for demobilization is included in the total bid amount for Mobilization and there will be no separate or additional payment made for demobilization.

2. Project Layout

This item is for all of the Contractor's costs related to the survey layout item required for the construction of stairs and wooden on step grade and any other items required to complete the work. The Consultant will provide digital layout information. Payment for “*Project Layout*” will be made at the lump sum amount tendered for this item.

3. Public Access Plan / Site Safety Management and Site Security

This item is for all costs associated with the preparation of the Public Access Plan / Site Safety Management, control of public traffic as required for the work, as well as site security as outlined in Item 7 and 9 of the Special Conditions of the Contract.

Payments for “*Public Access Plan*” and “*Site Security*” will be made at the lump sum amount tendered for this item.

4. Environmental Mitigation

Payment for “*Environmental Mitigation*” will be made at the lump sum price as shown in the Tender Form. The price shall include all work incidental thereto for the implementation of the recommendations in the Benson Creek Fall Regional Park Environmental Impact and Remediation Assessment & Environmental Protection Plan by Aquaparian Environmental Consulting Ltd., included in the **Appendix D**. The Contractor will be required to maintain the works until Total Performance of the Contractor as directed by the environmental consultant.

2. Timber Stairs & Viewing Platform

The Contractor will be required to supply and install cedar timber (red or yellow) staircase with the following features:

- Approximately 32 lineal meters including landing.
- Approximately 9 meters long and 3 meters wide cedar timber (red or yellow) viewing platform.

- Cedar (red or yellow) timber handrails.
- Cedar (red or yellow) timber posts.
- Cast-in-place concrete pier footings.
- See drawings (**Appendix B**) for more detailed information

It is the Contractors responsibility to verify all dimensions and elevations prior to construction of the stairs. This may include detailed field survey and layout of the proposed structures.

Changes to foundation may be required following project geotechnical engineer's field review.

Payment for "*Supply - Timber Stairs & Landing*", "*Supply - Viewing Platform*", "*Install - Timber Stairs & Landing*" and "*Install - Viewing Platform*" will be made per lineal metre as shown in the Tender Form. This price shall include the supply of all materials, labor and equipment to completed works as specified and shown on the drawings.

3. Foundation Construction

The Contractor will be required to supply and install cast in place foundation to support the stairs and viewing platform as detailed in the project drawings.

It is the Contractors responsibility to verify the location and elevation of all foundations. This may include detailed field survey and layout of the proposed structures.

Changes to foundation may be required following project geotechnical engineer's field review of the excavated ground.

Payment for "*Supply and installation of Cast-in-Place Foundation*" will be made at the lump sum amount tendered for this item. This price shall include the supply of all materials, labor and equipment to completed works as specified and shown on the drawings.

4. Wooden Steps on Grade

The Contractor will be required to supply and install wooden steps on grade with the following features:

- Approximately 40 lineal metres
- Cedar (red or yellow) riser ties and decking.
- Rebar pins into subgrade or dowels grouted into competent bedrock.
- See drawings (**Appendix B**) for more detailed information.

Payment for "*Wooden Steps on Grade*" will be made at the unit rate basis per lineal metre as shown in the Tender Form. This price shall include the supply of all materials, labor and equipment to completed works as specified and shown on the drawings.

5. Miscellaneous Work

1. Crib Step Delineator

Payment for supply and installation of "*Crib Step Delineator*" as specified in the drawings will be made at per lineal metre as shown in the Tender Form. The prices shall include the supply of all materials, labor, and equipment to completed works as specified and shown on the drawings.

4. STANDARD SPECIFICATIONS

- Any specifications referenced on the contract documents or drawings.
- Regional District of Nanaimo Parks and Trails Guidelines - January 2014.

REGIONAL DISTRICT OF NANAIMO
21-019: BENSON CREEK FALLS REGIONAL PARK
ACCESS IMPROVEMENTS – PHASE 2:
AMMONITE FALLS
Nanaimo, BC

PART IV

CIVIL WORKS CONTRACT
CCDC 18 - 2001

REGIONAL DISTRICT OF NANAIMO
21-019: BENSON CREEK FALLS REGIONAL PARK
ACCESS IMPROVEMENTS – PHASE 2:
AMMONITE FALLS
Nanaimo, BC

PART V

TENDER FORM, CCDC 18 - 2001 UNIT PRICE CONTRACT

REGIONAL DISTRICT OF NANAIMO
BENSON CREEK FALLS REGIONAL PARK
ACCESS IMPROVEMENTS – PHASE 2:
AMMONITE FALLS
Nanaimo, BC
PART V
TENDER FORM

The undersigned Tenderer, having carefully examined the Contract Documents and the locality of the proposed work, and having full knowledge of the work required and of the materials to be furnished and used, hereby agrees to provide all necessary materials, supervision, labour, and equipment and to perform and complete all work and fulfil everything as set forth and in strict accordance with the Contract Documents and Addenda numbered _____* for the prices stated in the Tender Form Schedule of Quantities and Prices.

The undersigned also agrees:

1. That the Instructions to Tenderers form part of this tender and agrees to be bound by the requirements set forth in the Instructions to Tenderers.
2. That the Owner is not bound to accept the lowest or any tender.
3. That this tender is irrevocable for sixty (60) days after the closing date for receipt of tenders and that the Owner may at any time within such period accept this tender whether any other tender has previously been accepted or not.
4. To commence and proceed actively with the work after Notice to Proceed is received, and to attain Substantial Performance, as defined by the Builders Lien Act, subject to the provisions of the General Conditions for extension of Contract time.
5. To do all extra work not reasonably inferable from the specifications or drawings but called for in writing by the Consultant and to accept as full compensation therefore payment in accordance with the provisions of the General Conditions.
6. That the estimates of quantities shown in the Tender Form are estimates only for the purpose of comparing tenders on a uniform basis and that neither the Owner nor the Consultant represent that the actual quantities will correspond therewith and that we will be paid at the tendered unit prices for the actual quantities handled.
7. That the Owner may delete from the Contract a portion or portions of the Work without any change in the unit prices provided such deletion is not for the purpose of allowing someone else to perform the deleted portion during the Contract Time.

* To be Completed by Tenderer

Name of Contractor

Business Address

City, Postal Code

Date

Phone No.

Total Amount of Tender \$

Signature of Authorized Representative

The above tendered sum **includes all taxes**, duties, and any other additional charges on any or all material, equipment, and labour, and it is understood that payment will be made for the completion of all work specified in this Contract based on the unit prices tendered only and that any approved extras or refunds shall be made by mutual agreement between the Consultant and the Contractor.

Completion of Work

If the undersigned be notified in writing of the acceptance of this proposal, within fourteen (14) days following such acceptance, he agrees to execute and Agreement for the above stated sum in the form of the specimen submitted to guarantee completion of the Contract in accordance with the documents and within the time stated in the Specifications.

Security Deposit and Surety's Consent

Accompanying this tender please find our security deposit in the form of a **verifiable digital Bid Bond (E-Bond) in the amount of ten percent (10%) of the tender price (including taxes)**, and a **verifiable digital Consent of Surety** to provide a Performance Bond and a Labour and Materials Bond each in the amount to 50% of the tender price. This security deposit for unsuccessful Tenderers will be returned within (60) days from the tender opening date. The security deposit for the successful tender may become the property of the Owner if the Tenderer fails or refuses to execute a contract within fourteen (14) days after notification that he is the successful Tenderer unless extended by the Owner.

Signatures

The undersigned agrees that the Owner reserves the right to reject the tender on any one or all projects.

I.

Witness

Legal Name of Tenderer

Title

Date

II.

Witness

Title

Date

Signature of Authorized Representative

Item	Description	Est. Qty	Units	Unit Price	Total
Section 1	General Requirements				
1.01	Mobilization	1	Lump Sum		
1.02	Project Layout	1	Lump Sum		
1.03	Site Safety Management	1	Lump Sum		
1.04	Public Access Plan	1	Lump Sum		
1.05	Site Security	1	Lump Sum		
1.06	Environmental Mitigation	1	Lump Sum		
Section 2	Timber Stairs				
2.01	Supply - Timber Stairs & Landing	32	Lineal metre		
2.02	Install - Timber Stairs & Landing	32	Lineal metre		
Section 3	Viewing Platform				
3.01	Supply - Viewing Platform	9	Lineal metre		
3.02	Install - Viewing Platform	9	Lineal metre		
Section 4	Cast-in-Place Foundation				
4.01	Supply and installation of Cast-in-Place Foundation	1	Lump Sum		
Section 5	Crib Steps				
5.01	Supply and Installation - Wooden Steps on Grade	40	Lineal metre		
Section 6	Miscellaneous Work				
6.01	Supply and Installation - Crib Step Delineator	40	Lineal metre		

SUMMARY

Section 1 – General Requirements

Section 2 - Timber Stairs

Section 3 – Viewing Platform

Sections 4 – Cast-in-Place Foundation

Sections 5 – Crib Steps

Sections 6 – Miscellaneous Work

Subtotal - Tender Bid Price**GST 5%****TOTAL**

LIST OF SUBCONTRACTORS

It is our intention that the following work will, subject to the Consultant's approval, be subcontracted to the firms indicated below. All other work will be performed by our own forces, except as authorized in writing by the Consultant.

<u>Trade / Payment Method</u>	<u>Name and Address of Subcontractor</u>

LIST OF MANUFACTURERS AND SUPPLIERS

The following is a list of suppliers from whom we intend to purchase the various items of material indicated, together with the product brand name or the name of the manufacturer of each.

We will alter neither products nor suppliers from those listed below without the written authorization of the Consultant.

<u>Item</u>	<u>Product Brand Name or Manufacturer</u>	<u>Supplier</u>

SCHEDULE OF FORCE ACCOUNT RATES

The following personnel and equipment rates will form the basis of payment for force account work carried out in accordance with Article 17 of the General Conditions. (Complete Schedule or attach similar information).

Personnel:

List by Occupation	Hourly Rate	Overtime Rate
Superintendent		
Foreman		
Labourer		
Security		
Others		
(Specify)		

Equipment: (to be as per current 'Blue Book' rates).

Description	Hourly Rate	Model and Size
(Specify)		

PROPOSED ALTERNATE MATERIALS

We propose using the following materials as alternates to those specified and shown on the drawings. Should any of these proposed alternates be accepted, we will adjust our Total Tender in accordance with the price variation shown below. These prices will represent the total cost difference to the Owner for supply and installation of the proposed alternate products in lieu of those specified.

Item	Product Brand Name or Manufacturer	Supplier	Price Variation

APPENDIX A

REGIONAL DISTRICT OF NANAIMO

21-019: BENSON CREEK FALLS REGIONAL PARK

ACCESS IMPROVEMENTS – PHASE 2:

AMMONITE FALLS

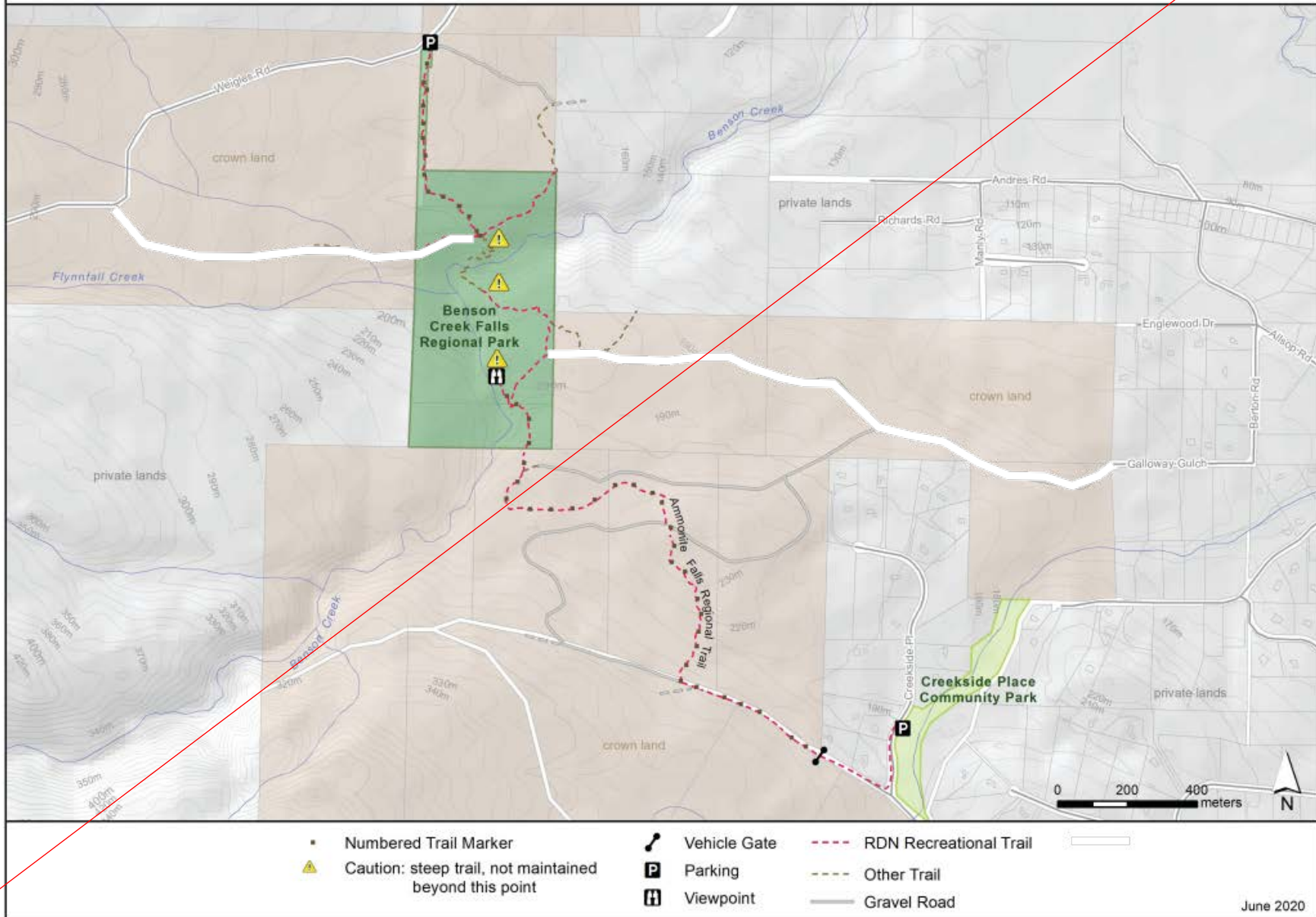
Nanaimo, BC

PART V

Location Map



BENSON CREEK FALLS REGIONAL PARK & AMMONITE FALLS REGIONAL TRAIL



APPENDIX B

REGIONAL DISTRICT OF NANAIMO

21-019: BENSON CREEK FALLS REGIONAL PARK

ACCESS IMPROVEMENTS – PHASE 2:

AMMONITE FALLS

Nanaimo, BC

SCHEDULE OF DRAWINGS
(Drawings bound separately)

SCHEDULE OF DRAWINGS**(Drawings bound separately)**

Drawing No.	Project Drawing No.	Description	Revision No.	Date
0837-067-S00	S00	Cover sheet	0	June 23, 2021
0837-067-S10	S10	General Notes	0	June 23, 2021
0837-067-S11	S11	Plan and Elevation Sheet 1	0	June 23, 2021
0837-067-S12	S12	Plan and Elevation Sheet 2	0	June 23, 2021
0837-067-S13	S13	Typical Detail Sheet 1	0	June 23, 2021
0837-067-S14	S14	Typical Detail Sheet 2	0	June 23, 2021

APPENDIX C

REGIONAL DISTRICT OF NANAIMO

21-019: BENSON CREEK FALLS REGIONAL PARK

ACCESS IMPROVEMENTS – PHASE 2:

AMMONITE FALLS

Nanaimo, BC

Geotechnical Assessment - Benson Creek Crossing and Ammonite Falls

TO BE ISSUED IN A FUTURE ADDENDUM

APPENDIX D

REGIONAL DISTRICT OF NANAIMO

21-019: BENSON CREEK FALLS REGIONAL PARK

ACCESS IMPROVEMENTS PHASE 2:

AMMONITE FALLS

Nanaimo, BC

**Benson Creek Fall Regional Park Environmental Impact and
Remediation Assessment & Environmental Protection Plan
Aquaparian Environmental Consulting Ltd.**

TO BE ISSUED IN A FUTURE ADDENDUM

File: H:\Projects\0837-067 BCFRP Access Improvements\045 Drawings\Active\Benson Creek Trail - Falls\2021\04\23\0837-067 S00.dwg Plot Time: Jun 23, 2021 - 2:32pm User: Plunghy
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BENSON CREEK FALLS REGIONAL PARK ACCESS IMPROVEMENTS

DRAWING LIST

<u>DRAWING NUMBER</u>	<u>DESCRIPTION</u>
0837-067 S00	FALLS SITE - COVER SHEET AND DRAWING LIST
0837-067 S10	FALLS SITE - GENERAL NOTES AND GENERAL ARRANGEMENT
0837-067 S11	FALLS SITE - PLAN AND ELEVATION SHEET 1
0837-067 S12	FALLS SITE - PLAN AND ELEVATION SHEET 2
0837-067 S13	FALLS SITE - TYPICAL DETAILS SHEET 1
0837-067 S14	FALLS SITE - TYPICAL DETAILS SHEET 2



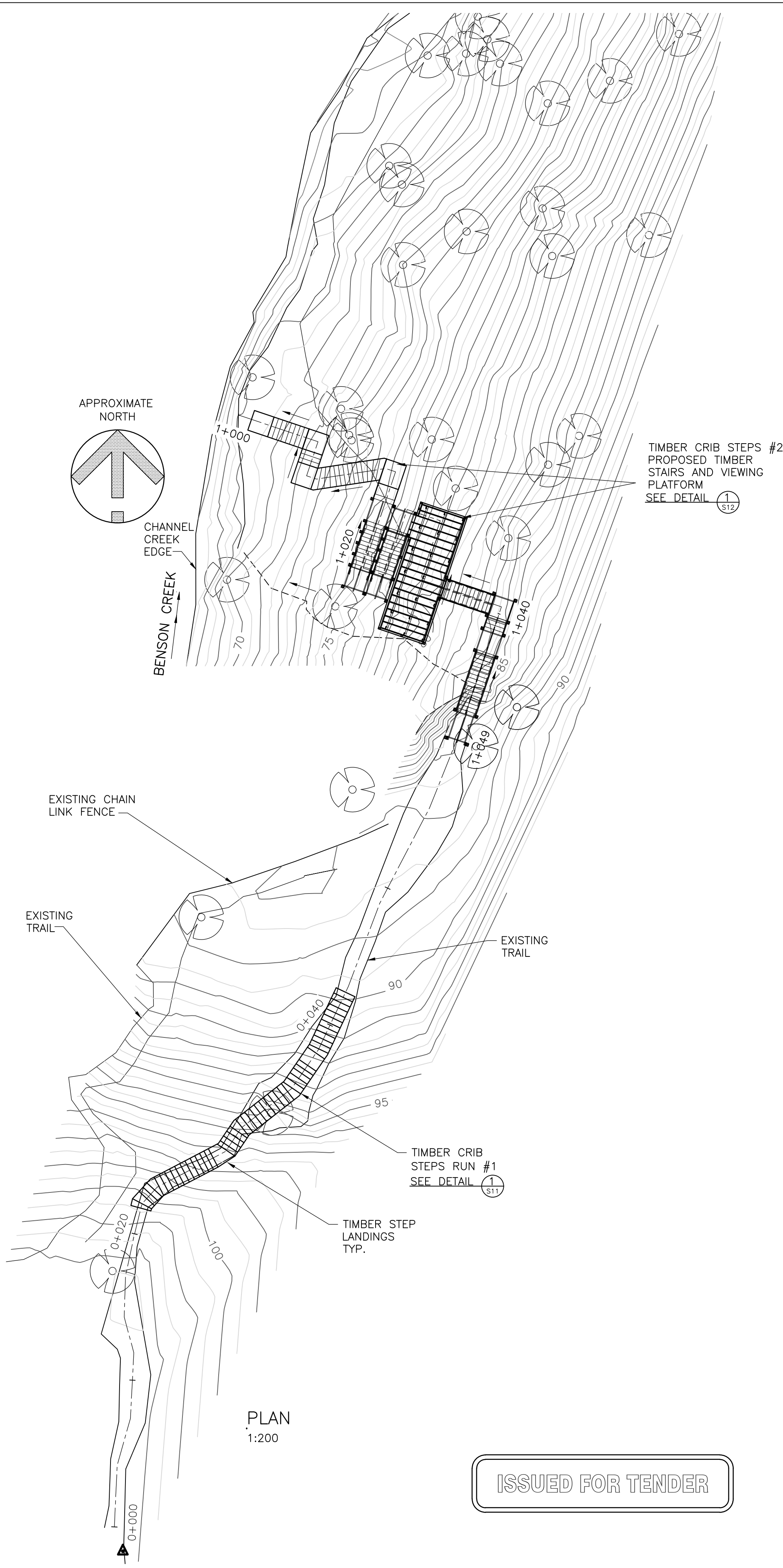
3701 Shenton Rd, Nanaimo, BC V9T 2H1
Tel: 250-751-8558 Fax: 250-751-8559
Email: mail@heroldengineering.com

HEROLD PROJECT NO.
0837-067

ARCHITECTURAL D 24" x 36" 1/4" = 1' 0"

File: H:\Projects\Benson Creek\Drawings\Access Improvements\Access Improvements.dwg Plot Time: Jan 23, 21 2:54 PM User: Peter Ungly

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GENERAL NOTES:

1.0 GENERAL

1.1 DESIGN LOADS

LIVE LOAD: 4.0 KPa
WIND LOAD: 0.47 KPa (FOR 10 YEAR HOURLY WIND PRESSURE)

1.2 READ STRUCTURAL DRAWINGS IN CONJUNCTION WITH ALL OTHER CONTRACT DRAWINGS AND DOCUMENTS. REPORT ANY CONFLICTS TO THE ENGINEER BEFORE COMMENCING WORK.

1.3 VERIFY ALL DIMENSIONS AND ELEVATIONS PRIOR TO CONSTRUCTION.

1.4 NOTIFY ENGINEER 48 HOURS IN ADVANCE FOR INSPECTION OF STRUCTURAL CONNECTIONS BEFORE COVERING UP.

1.5 CONTRACTOR'S RESPONSIBILITY: THESE DRAWINGS SHOW COMPLETED STRUCTURAL COMPONENTS OF THE BRIDGE, STAIRS AND STEPS. THE REQUIRED TEMPORARY BRACING AND SHORING TO PERFORM THE WORK SAFELY IS THE RESPONSIBILITY OF THE CONTRACTOR.

1.6 ENVIRONMENTAL WORK PROCEDURES, TIMING, AND SPECIAL PRECAUTIONS SHALL BE IN ACCORDANCE WITH THE REQUIREMENTS AND LIMITATIONS OF THE FEDERAL DEPARTMENT OF FISHERIES AND OCEANS, AND THE PROVINCIAL MINISTRY OF WATER, LAND AND AIR PROTECTION.

1.7 ELEVATIONS ARE IN METRES AND DIMENSIONS ARE IN MILLIMETRES.

1.8 UNDER NO CIRCUMSTANCES ARE DRAWINGS TO BE SCALED.

1.9 QUALITY ASSURANCE QUALIFICATION OF CONTRACTOR AND SUPERINTENDENT: THE CONTRACTOR SHALL BE FULLY CONVERSANT WITH ALL SAFETY PROCEDURES AND REGULATIONS RELATING TO CONSTRUCTION, AND SHALL EMPLOY STAGING AND OTHER SAFETY PROVISIONS AS SPECIFIED ELSEWHERE AND REQUIRED BY THE WORKERS COMPENSATION BOARD REGULATIONS.

2.0 ENVIRONMENTAL CONSTRUCTION REQUIREMENTS

2.1 ALL TREES AND ROOTS TO BE PRESERVED UNLESS IDENTIFIED. LOWER BRANCHES ON EXISTING TREES MAY BE PRUNED IF NECESSARY, PER ISA PRUNING GUIDELINES.

2.2 ALL EXCESS MATERIAL FROM CONSTRUCTION TO BE DISPOSED OF BY CONTRACTOR OFF SITE, IN ACCORDANCE WITH ALL LOCAL, PROVINCIAL AND FEDERAL REGULATIONS.

3.0 CAST-IN-PLACE CONCRETE

3.1 ALL CONCRETE WORK SHALL CONFORM TO THE REQUIREMENTS OF CAN/CSA A23.1-06 AND A23.2-06.

3.2 CONCRETE MIXES SHALL CONFORM TO CAN/CSA A23.1-06 AND A23.2-06 AND SHALL HAVE THE FOLLOWING PROPERTIES:

CLASS	28 DAY STRENGTH	SIZE MAXIMUM AGGREGATE	MAXIMUM SLUMP	AIR CONTENT	EXPOSURE
FOOTINGS	35 MPa	19mm	75mm	4% TO 7%	F-2

3.3 REINFORCING STEEL TO CONFORM TO CSA SPECIFICATION G30.18M, GRADE 400, UNLESS NOTED OTHERWISE.

3.4 LAP OF BARS FOR SPLICES TO BE 40 x BAR DIAMETER, UNLESS NOTED OTHERWISE.

3.5 PROVIDE A 20mm CHAMFER ON ALL EXPOSED EDGES OF CONCRETE, UNLESS NOTED OTHERWISE.

3.6 CONCRETE FINISHES SHALL BE IN ACCORDANCE WITH CAN/CSA A23.1.

3.7 ALL CONCRETE CURING SHALL BE IN ACCORDANCE WITH CAN/CSA A23.1. SPECIAL PRECAUTIONS SHALL BE TAKEN AS NOTED IN CSA A23.1 FOR PLACING AND CURING CONCRETE ABOVE 27° C AND BELOW 5° C.

3.8 MINIMUM CONCRETE COVER TO REINFORCING SHALL BE 50mm, UNLESS NOTED OTHERWISE.

3.9 REINFORCEMENT ABBREVIATIONS:

H2E HOOK 2-ENDS, STANDARD HOOK
H1E HOOK 1-END, STANDARD HOOK
H2E600 HOOK 2-ENDS, 600 LONG HOOKS
15M1600 15M STRAIGHT BAR, 1600 LONG

4.0 MISCELLANEOUS STEEL CONNECTIONS

4.1 BOLTED CONNECTIONS SHALL UTILIZE ASTM A307 GALVANIZED. BOLTS COMPLETE WITH NUTS AND MALLEABLE IRON WASHERS, UNLESS OTHERWISE SHOWN ON DRAWINGS.

4.2 ROUGH HARDWARE: BOLTS, NUTS, WASHERS, HOT DIPPED GALVANIZED FOR EXTERIOR USE. NAILS AND SPIKES TO CONFORM TO CSA B111-1974, S406-92.

5.0 TIMBER

5.1 ALL NEW TIMBER TO CONFORM TO CSA-0141-91 "SOFTWOOD LUMBER" TIMBER GRADES AND SPECIES AS FOLLOWS:

MEMBER	(FINISH)	SPECIES	GRADE
CAP/RAILS	(S4S)	YELLOW CEDAR	GROUP A No. 1, OR BETTER
POST	(ROUGH)	YELLOW CEDAR	GROUP A No. 1, OR BETTER
STEPS	(ROUGH)	YELLOW CEDAR	GROUP A No. 1, OR BETTER

5.2 ALL TIMBER CONSTRUCTION, DETAILS AND FASTENINGS SHALL CONFORM FULLY TO CSA O86, CURRENT EDITION.

5.3 PRE-DRILL ALL BOLT AND LAG SCREW SHANK HOLES (BUT NOT LEAD HOLES). BOLT HOLES SHOULD BE FULL LENGTH AND SIZE FOR MACHINE BOLTS.

7.0 FOUNDATION

7.1 ASSUMED DESIGN VALUES: PAD FOOTINGS 200 KPA

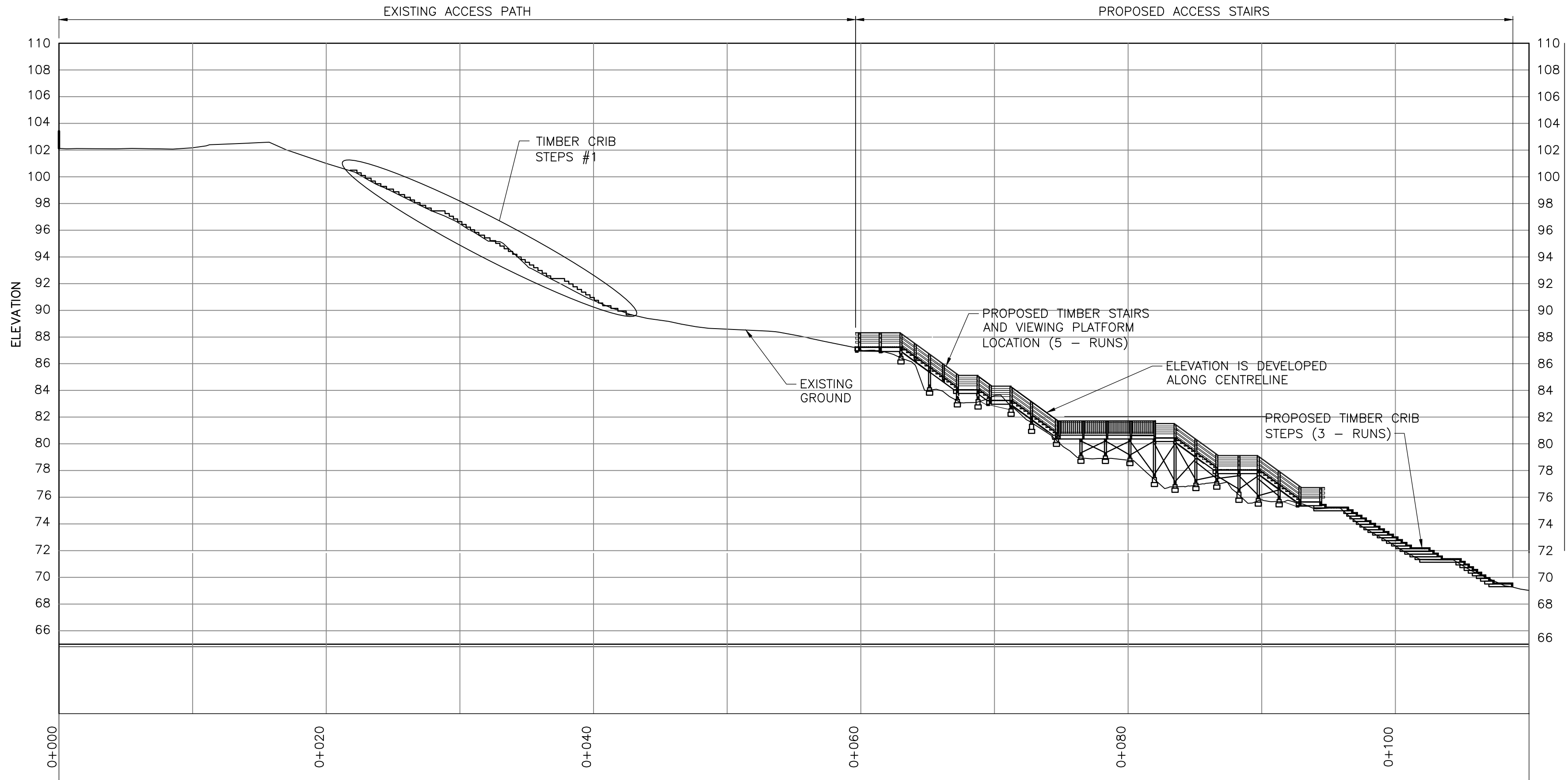
7.2 ALLOWABLE BEARING CAPACITY TO BE CONFIRMED BY GEOTECHNICAL ENGINEER PRIOR TO CONSTRUCTION.

7.3 FOUNDATION BEARING MATERIAL SHALL BE PROTECTED FROM RAIN, FROST, SNOW AND WATER INFILTRATION.

7.4 FOOTING ELEVATIONS INDICATED ON THE DRAWINGS REPRESENT MINIMUM VALUES TO BE USED. VARIABLE SITE SOIL CONDITIONS, UNDERGROUND SERVICES AND EXISTING STRUCTURES MAY REQUIRE ADJUSTMENT OF FOOTING ELEVATIONS. THE CONTRACTOR SHALL MAKE ALLOWANCES FOR MINOR VARIATIONS IN FOOTING ELEVATIONS IN HIS BID. CONTACT STRUCTURAL ENGINEER FOR INSTRUCTIONS REGARDING SITE CONDITIONS THAT DIFFER FROM WHAT IS SHOWN ON DRAWINGS.

6.0 ABBREVIATIONS

CL	-	CLEAR
C	-	CENTRELINE
CP	-	COMPLETE PENETRATION
C/W	-	COMPLETE WITH
DWG.	-	DRAWING
EL.	-	ELEVATION
I.D.	-	INSIDE DIAMETER
LLH	-	LONG LEG HORIZONTAL
LLV	-	LONG LEG VERTICAL
MAX.	-	MAXIMUM
MIN.	-	MINIMUM
N.T.S.	-	NOT TO SCALE
OPP.	-	OPPOSITE
PL	-	PLATE
R	-	RADIUS
SIM.	-	SIMILAR
S.S.	-	STAINLESS STEEL
T.O.	-	TOP OF
TYP.	-	TYPICAL
U/S	-	UNDERSIDE
U.N.O.	-	UNLESS NOTED OTHERWISE
WP	-	WORK POINT



ISSUES					
No.	DATE	ISSUED FOR	No.	DATE	ISSUED FOR
A	2019.09.18	CLIENT REVIEW			
B	2019.11.22	CLIENT REVIEW			
C	2020.01.22	CLIENT REVIEW			
D	2021.06.21	CLIENT REVIEW			
O	2021.06.23	TENDER			

SUB CONSULTANT

DRAFTED
PHU
DRAFTING REVIEW
JPMC
DESIGNED
AS
DESIGN REVIEW
MCGS

HEROLD ENGINEERING
3701 Shenton Rd, Nanaimo, BC V9T 2H1
Tel: 250-751-8558 Fax: 250-751-8559
Email: mail@heroldengineering.com

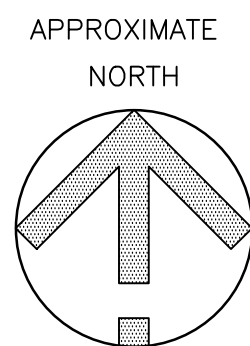
ENGINEERS SEAL
Professional Engineer
Herold Engineering Ltd.
B.C. Reg. No. 12085

FALLS SITE
- GENERAL NOTES
AND GENERAL
ARRANGEMENT

BENSON CREEK FALLS REGIONAL PARK
ACCESS IMPROVEMENTS
RECREATION & PARKS PARKSVILLE BC V9P 2X4
REGIONAL DISTRICT OF NANAIMO

HEL PROJECT No. 0837-067	CLIENT DWG. No. N/A
SCALE AS SHOWN	PERMIT No. N/A
HEL DRAWING No. S10	REVISION 0

DESTROY ALL DRAWINGS SHOWING PREVIOUS REVISION



1
S10

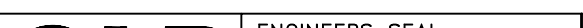

DETAIL
1:75

NOTES:

1. FOR GENERAL NOTES SEE DWG. S10
2. ALL ELEVATIONS ARE BASED ON A LOCAL DATUM.
3. HAND DELINEATORS NOT SHOWN FOR CLARITY.



CENTER LINE PROFILE
1:75

ISSUES									SUB CONSULTANT		DRAFTED PHU		 3701 Shenton Rd, Nanaimo, BC V9T 2H1 Tel: 250-751-8558 Fax: 250-751-8559 Email: mail@heroldengineering.com		ENGINEERS SEAL		FALLS SITE - PLAN AND ELEVATION SHEET 1		BENSON CREEK FALLS REGIONAL PARK ACCESS IMPROVEMENTS RECREATION & PARKS PARKSVILLE BC V9P 2X4 REGIONAL DISTRICT OF NANAIMO				HEL PROJECT No. 0837-067		CLIENT DWG. No. N/A		
No.	DATE	ISSUED FOR	No.	DATE	ISSUED FOR	No.	DATE	ISSUED FOR	DRAFTING REVIEW JJMC		DESIGNED AS												SCALE AS SHOWN		PERMIT No. N/A		
A	2019.11.22	CLIENT REVIEW																									
B	2020.01.20	CLIENT REVIEW																									
C	2021.06.21	CLIENT REVIEW																									
D	2021.06.23	TENDER																									
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NOTES:

1. FOR GENERAL NOTES SEE DWG. S10
2. ALL ELEVATIONS ARE BASED ON A LOCAL DATUM.
3. HAND DELINEATORS NOT SHOWN FOR CLARITY.

ISSUES							
No.	DATE	ISSUED FOR	No.	DATE	ISSUED FOR	No.	DATE
A	2019.11.22	CLIENT REVIEW					
B	2020.01.20	CLIENT REVIEW					
C	2021.06.21	CLIENT REVIEW					
D	2021.06.23	TENDER					

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SUB CONSULTANT

DRAFTED PHU
DRAFTING REVIEW JJMC
DESIGNED AS
DESIGN REVIEW MCGS



ENGINEERS SEAL

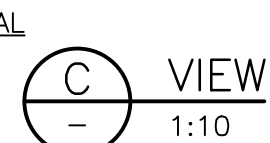


FALLS SITE
- PLAN AND
ELEVATION SHEET 2

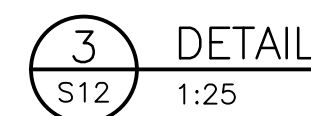
BENSON CREEK FALLS REGIONAL PARK
ACCESS IMPROVEMENTS
RECREATION & PARKS PARKSVILLE BC V9P 2X4
REGIONAL DISTRICT OF NANAIMO

HEL PROJECT No. 0837-067	CLIENT DWG. No. N/A
SCALE AS SHOWN	PERMIT No. N/A
HEL DRAWING No. S12	REVISION 0

ARCHITECTURAL D 24" x 36" 1/4" = 1'-0" 1/8" = 1'-0" 1/16" = 1'-0" 1/32" = 1'-0" 1/64" = 1'-0" 1/128" = 1'-0" 1/256" = 1'-0" 1/512" = 1'-0" 1/1024" = 1'-0" 1/2048" = 1'-0" 1/4096" = 1'-0" 1/8192" = 1'-0" 1/16384" = 1'-0" 1/32768" = 1'-0" 1/65536" = 1'-0" 1/131072" = 1'-0" 1/262144" = 1'-0" 1/524288" = 1'-0" 1/1048576" = 1'-0" 1/2097152" = 1'-0" 1/4194304" = 1'-0" 1/8388608" = 1'-0" 1/16777216" = 1'-0" 1/33554432" = 1'-0" 1/67108864" = 1'-0" 1/134217728" = 1'-0" 1/268435456" = 1'-0" 1/536870912" = 1'-0" 1/1073741824" = 1'-0" 1/2147483648" = 1'-0" 1/4294967296" = 1'-0" 1/8589934592" = 1'-0" 1/17179869184" = 1'-0" 1/34359738368" = 1'-0" 1/68719476736" = 1'-0" 1/137438953472" = 1'-0" 1/274877906944" = 1'-0" 1/549755813888" = 1'-0" 1/1099511627776" = 1'-0" 1/2199023255552" = 1'-0" 1/4398046511104" = 1'-0" 1/8796093022208" = 1'-0" 1/17592186044416" = 1'-0" 1/35184372088832" = 1'-0" 1/70368744177664" = 1'-0" 1/140737488355328" = 1'-0" 1/281474976710656" = 1'-0" 1/562949953421312" = 1'-0" 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NOTE: FOOTINGS SHALL BEAR ON SOLID
GROUND FREE OF ALL ORGANIC MATERIAL.



ISSUED FOR TENDER

NOTES:

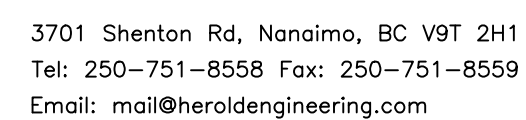
1. FOR GENERAL NOTES, SEE DWG. S01
2. ALL ELEVATIONS ARE BASED ON A LOCAL DATUM.

ISSUES							
No.	DATE	ISSUED FOR	No.	DATE	ISSUED FOR	No.	DATE
A	2020.01.20	CLIENT REVIEW					
B	2021.06.21	CLIENT REVIEW					
C	2021.06.23	TENDER					

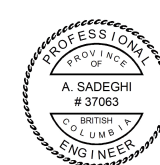
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SUB CONSULTANT

DRAFTED PHU
DRAFTING REVIEW JJMC
DESIGNED AS
DESIGN REVIEW MGCS



ENGINEERS SEAL



FALLS SITE
- TYPICAL DETAILS
SHEET 2

**BENSON CREEK FALLS REGIONAL PARK
ACCESS IMPROVEMENTS**
RECREATION & PARKS PARKSVILLE BC V9P 2X4
REGIONAL DISTRICT OF NANAIMO

HEL PROJECT No. 0837-067	CLIENT DWG. No. N/A
SCALE AS SHOWN	PERMIT No. N/A
HEL DRAWING No. S14	REVISION 0