REQUEST FOR PROPOSALS No. 25-047

French Creek Pollution Control Centre
ATAD Mixing Upgrade
Mechanical and Electrical Installation

ISSUED: October 9, 2025

CLOSING DATE AND TIME:
Submissions must be received on or before:
3:00 PM (15:00 hrs) Local Time on November 13, 2025

Submissions and Questions are to be directed to:
Rob Wood, Project Engineer
Regional District of Nanaimo
957 Lee Road
Parksville, BC V9P 1Z4
250-713-6356
rwood@rdn.bc.ca

Questions are requested at least five (5) business days before the closing date

Mandatory Onsite Information Session
1:00 PM (13:00 hrs) Local Time on October 20, 2025
French Creek Pollution Control Centre
957 Lee Road, Parksville, BC

Proposals will not be opened in public

Instructions to Proponents

The Regional District of Nanaimo (RDN) invites qualified firms to submit a proposal package to provide civil, structural, mechanical and electrical installation services for four (4) new hyperboloid sludge mixers and four (4) aeration blowers for the Autothermal Thermophilic Aerobic Digestor (ATAD) at the French Creek Pollution Control Centre (FCPCC) as set forth in this Request for Proposal (RFP).

The complete set of RFP documents can be downloaded from the following link:
https://cloud.rdn.bc.ca/s/HRcSaWSeLmSyXkk

Closing Date / Time / Submission Method

Submissions must be received on or before 3:00 PM (15:00 hrs), Local Time, on November 13, 2025.

Submission Method:

By Email: In PDF format with "**RFP No. 25-047 FCPCC ATAD Mixing Upgrade Installation**" as the subject line at this electronic address: rwood@rdn.bc.ca

Please note: Maximum email file size limit is 20MB, or less. The Regional District of Nanaimo (RDN) will not be liable for any technological delays of submissions.

Submissions received in any other manner will not be accepted.

Onsite Information Session (Mandatory)

A mandatory onsite information session will be held to provide Proponents an opportunity to review the site conditions and ask questions. Proponents are required to bring their own PPE; CSA hard-toe boots and hi-vis safety vest. The meeting will be held at FCPCC at the date and time indicated on the cover-page. **Please RSVP by email** to the listed RDN contact for this RFP.

Amendment to Proposals

Proposals may be amended in writing and sent via email to the RDN contact person identified on the cover page on or before the closing. Such amendments should be signed by the authorized signatory of the Proponent.

Addenda

If the RDN determines that an amendment is required to this RFP, the RDN will post the Addendum at the same location as the complete RFP documents (**https://cloud.rdn.bc.ca/s/HRcSaWSeLmSyXkk**). Each addendum will be incorporated into and become part of the RFP. No amendment of any kind to the RFP is effective unless it is contained in a written addendum issued by the RDN. It is the sole responsibility of the Proponent to check and ensure all amendments are included prior to submitting their final Proposal submission.

Withdrawal of Proposals

The Proponent may withdraw their Proposal at any time by submitting a written withdrawal email to the RDN contact person identified on the cover page on or before the closing.

Unsuccessful Vendors

The RDN will offer debriefings to unsuccessful Proponents, on request, at a mutually agreeable time.

1. INTRODUCTION

The purpose of this Request for Proposal (RFP) is to solicit submissions from qualified contractors to provide civil, structural and mechanical and electrical installation services for four (4) new hyperboloid sludge mixers and four (4) aeration blowers for the ATAD at the FCPCC. The FCPCC is located at 957 Lee Road, Parksville, BC. Details of the submission requirements are described in the following sections.

Contract award is subject to approval from the Board of Directors of the RDN.

2. BACKGROUND

French Creek Pollution Control Centre Background

Wastewater from approximately 29,000 people and businesses in Qualicum Beach, Parksville and the service areas of French Creek, Pacific Shores, Surfside and Barclay Crescent flows to the French Creek Pollution Control Centre (FCPCC), constructed in 1977. FCPCC also treats septage from septic systems and wastewater from properties with holding tanks.

FCPCC currently provides primary and secondary treatment to remove more than 90% of the biochemical oxygen demand (BOD) and total suspended solids (TSS). Solids removed during the treatment process are treated further to become biosolids. FCPCC treated 3.6 billion litres of wastewater in 2020. Treated wastewater is discharged into the Strait of Georgia 2,440 m offshore at a depth of 61 m.

Project Background

The ATAD treats wastewater sludge by mixing and aerating the sludge in four cells, connected in series. The aeration and mixing action encourages microbial digestion of the sludge. Temperatures increase in each successive cell from approximately 40C to 70C in the last cell. The upgrade will mix and aerate the sludge more fully to improve performance of the digestion process, decrease solids deposition in the tanks and reduce odours.

Project Asset Description

Each of the four ATAD cells is currently mixed and aerated by two Turborator mixer / aerators. Cold sludge enters the digestor in one or both of the first cells. The sludge flows between the four cells by gravity through valved openings in the walls separating the cells. Digested sludge flows by gravity into two storage tanks at the end of the digestor where it is then pumped to a final storage tank before flowing to centrifuges where the sludge is dewatered and then hauled offsite to a commercial soil manufacturing facility.

3. SCOPE OF SERVICES

The Proponent is required to provide the following services:

1. All labour, materials, equipment and temporary works (e.g. bypass pumping between cells) necessary to demolish existing equipment, install and connect new equipment, and support commissioning to provide a fully functioning mixing and aeration system for four cells in the ATAD. NOTE: The existing gantry crane at the ATAD is not in-service and is not available for use.

Temporary Works

2. Perform work in a sequenced manner, completing one cell at a time (including commissioning), to maintain operation of the digestor during construction. The proposed work sequence is described in **Appendix D**.

3. Empty and cleanout each cell as-required to complete installation of the new mixing / aeration system. Emptying each cell requires isolation and bypass of the tank, manual pump down of the sludge into an adjacent tank and removal of solids and build-up by hydro-vac. Cleanout requires confined-space entry by the hydro-vac crew to washdown and remove the remaining solids. This operation has historically taken RDN Operations one (1) day to pump down the tank and two (2) days to complete the solids removal and clean by hydro-vac.

4. Provide a temporary bypass pumping system with 100% redundancy to transfer sludge between cells as required to facilitate installation of works in the emptied cell being worked on. The pumping system must be:

    a. Capable of pumping up to three (3) litres per second of sludge containing up to 7% solids.

    b. Monitored 24/7 and issue a high-level alarm callout.

    The temporary bypass pumping system may be connected electrically to MCC #2 in the electrical room using spare Size 1 starters.

5. Move two (2) Turborator mixers and two (2) propeller mixers from first ATAD cell to be worked on to ATAD cell #2 and connect electrically with local control stations. ATAD cell #2 will be used temporarily to maintain capacity of the ATAD system until the upgrade is complete.

Demolition

6. Demolish and dispose of the existing Turborators, including electrical and instrumentation wiring.

7. Remove the existing propeller mixers, including electrical and instrumentation wiring. Return propeller mixers and mounting hardware to RDN. Restore insulation at removed equipment locations.

8. Demolish and dispose of existing concrete pad and piping for removed septage screen equipment. Restore area to finish grade with compacted 19mm minus gravel. Concrete pad conflicts with a portion of the new aeration blower concrete pad.

9. Remove and dispose of operator and associated pipe housing for mud valves in each cell.

10. Relocate temperature sensor and associated pipe housing for ATAD cell #6.

11. Reference screenshot package in the Mechanical and Structural Engineering Work Package in **Appendix B** for a visual of items to be demolished.

Structural

12. Cut an approximately 2.6m x 2.6m opening in the flat concrete roof of each cell for installation of the mixer.

13. Supply and install stainless steel support beams on the underside of the flat concrete roof to support each new mixer. Includes removal and reinstatement of insulation on roof at beams.

14. Supply and install a stainless steel cover plate, including structural support beams for the mixers and complete with insulation on underside of cover plate and reinstatement of existing insulation as-required, at each roof opening.

15. Supply and install a cast-in-place concrete pad, complete with containment, for installation of the aeration blowers.

Mechanical

16. Supply and install 150mm diameter SS316L and SS904L aeration piping, as noted on the drawings in **Appendix B**, from the blowers to the underside of each mixer body.

17. Install four (4) RDN-supplied Atlas Copco positive displacement blowers (26kW, 600V) on a concrete containment pad. Reference shop drawing package in **Appendix B**. Assemble the RDN-supplied blower enclosures.

18. Install four (4) RDN-supplied INVENT 2.5m diameter hyperboloid mixers (9.3 kW, 600V) and sparger rings within the ATAD cells.

19. Reference Mechanical, Piping and Structural Engineering Work Package in **Appendix B** for more detailed information.

20. Reference typical mixer installation video from INVENT included in vendor shop drawing section of **Appendix B**.

Electrical

21. Install four (4) new 15 hp VFD's for the mixers, four (4) new 40 hp VFD's for the blowers, four (4) new 80A breakers for the blowers and associated controls.

22. Supply and install electrical and instrumentation wiring for each new mixer and blower.

23. Reference Electrical Work Package in **Appendix C** for complete scope.

24. Reference Electrical Work Sequencing in **Appendix D** for more information regarding the necessary sequence of work to maintain operation of the ATAD.

Commissioning

25. Commission each new mixing and aeration system as it is completed. Each ATAD cell must be fully commissioned before the next cell can be worked on.

26. Coordinate commissioning with RDN Operations and the RDN's third-party programmer.

RDN Supplied Equipment

27. New Motor Control Centre (MCC) buckets complete with new Variable Frequency Drives (VFD's) and breakers for all new hyperboloid mixers and aeration blowers. See shop drawings from KJC Controls in the vendor documents section of **Appendix C** for details of scope of equipment supply.

28. Four (4) new hyperboloid mixers. See shop drawing package from INVENT in vendor drawings and documentation section of **Appendix B** for details of scope of equipment supply.

29. Four (4) new aeration blowers. See shop drawing package from Atlas Copco in vendor drawings and documentation section of **Appendix B** for details of equipment supply.

RDN Provided Services

30. Operation and maintenance of ATAD to maintain operation during construction, including operation of temporary works in ATAD cell #2.

31. Third-party programmer for integration of the new mixer / aerators with the existing plant control system. The Contractor shall coordinate commissioning activities with the RDN's programmer.

32. Geotechnical engineer for review and approval of subgrade at aeration blower concrete pad.

4. DELIVERABLES

Where applicable, deliverables are to be submitted to the RDN a minimum of six (6) weeks in advance of the planned work commencement. The deliverables shall be reviewed and accepted by the RDN prior to commencing work. The RDN will review submittals within 14 calendar days.

1. A temporary bypass pumping plan.
2. A detailed work sequencing plan describing the sequence of installation for the ATAD cells and required activities to move from cell to cell.
3. A detailed project schedule in MS Project.
4. Three-week lookahead schedules during construction.
5. A comprehensive quality control submittal including a completed inspection and test plan and a copy of all quality control documents (e.g. field and lab test reports and daily field records) for the project.
6. A commissioning plan outlining the detailed commissioning activities of each cell, including coordination required with the RDN and programmer.
7. Redlines of Issued-For-Construction documents detailing field changes for record drawing purposes.

5. SCHEDULE

The Proponent shall propose a work program conforming to the following requirements.

1. Commence work **January 2026**.
2. Achieve Substantial Completion of the project no later than **June 30, 2026**.

The Proponent shall advise, in their RFP submission, if there are any issues or concerns with the above requirements.

6. REFERENCE / BACKGROUND INFORMATION

The following reference documents are included in the appendices for additional facility and project background.

- **Appendix A** – Fee Proposal Form
- **Appendix B** – Mechanical and Structural Engineering Work Package
    - **Appendix A** – Project Drawings
    - **Appendix B** – Project Lists
    - **Appendix C** – Model Documentation (incl. screenshot package)
    - **Appendix D** – Project Specifications
    - **Appendix E** – Vendor Drawings and Documentation
- **Appendix C** – Electrical and Instrumentation (E&I) Engineering Work Package
    - **Appendix A** – E&I Lists
    - **Appendix B** – E&I Drawings
    - **Appendix C** – Screenshot Package
    - **Appendix D** – Owner Specifications
    - **Appendix E** – Vendor Documents
- **Appendix D** – Electrical Work Sequencing
- **Appendix E** – Sample Form of Contract
- **Appendix F** – WWS-COM-10.1 Contractor-Supplier Package – EMS Requirements
- **Appendix G** – Prime Contractor Preconstruction Meeting Form

7. PROPOSAL SUBMISSION AND EVALUATION

Submission

The RDN requests submissions from qualified contractors of a detailed proposal demonstrating that their solution meets the criteria provided above and further detailed in the appendices. To assist in receiving similar and relevant information, and to ensure your Proposal receives fair evaluation, the RDN asks Proponents to provide the following information.

Please include with your proposal:

a) Curriculum vitae for the key project personnel, including the project manager and superintendent.
b) Description of three to five similar or relevant reference projects completed within the last 10 years. Details for each project to include:
    a. Project name and location.
    b. Name and contact information for the owner's representative or engineer of record.
c) Gantt chart schedule identifying the key activities and milestone dates.
d) Description of any corporate sustainability initiatives / practices in place. For example:
    a. Describe the systems, policies and/or practices you use to understand and manage your energy consumption and to reduce GHG emissions resulting from your own operational activities.
    b. Describe the systems, policies and/or practices you use to reduce waste, associated with by-products of production and other operational activities, and to work towards a circular economy through the repurposing of materials/waste.
    c. Describe the systems, policies and/or practices you use to manage and reduce harmful gaseous emissions (e.g. VOCs, Sox, Nox, other air pollutants, toxic fumes); harmful solid

emissions (e.g. scarce metals, use of hazardous pesticides, particulate matter); and harmful liquid emissions (e.g. spills, liquid toxic waste, chemical fluids).

d. Describe any employment training, skills training, career mentoring, and/or apprenticeship opportunities you provide within your company.
e. Describe the systems, policies and/or practices you use to support local economic development in the communities and regions where you operate and do business such as sub-contracting and purchasing from local suppliers, partnerships with local organizations, and/or providing employment and skills training opportunities for the local workforce.
f. Describe the systems, policies and/or practices you use to promote wellness, active living, and/or work-life balance programs for all employees including strategies to manage physical safety and mental/emotional wellness.

e) Completion of the attached Fee Proposal form in **Appendix A**.

Evaluation

Proposals will be evaluated on a 70% financial, 30% technical basis. The technical evaluation will review:

- Qualifications and experience of proposed team (10%)
- Project and client references (10%)
- Schedule (5%)
- Sustainability practices (5%)

The financial component will be evaluated as follow: The lowest price proposal will receive full marks. Other proposals will receive reduced scores based on the proportion higher than the lowest price. i.e. Score = Min Cost/Cost x Fee Points.

Proposals submitted should be in enough detail to allow the RDN to determine the Proponent's qualifications and capabilities from the documents received. The selection committee, formed at the RDN's sole discretion, will score the Proposals in accordance with the criteria provided.

The RDN may evaluate proposals on a comparative basis by comparing one Proponent's proposal to another Proponent's proposal. The RDN reserves the right to not complete a detailed evaluation if the RDN concludes the proposal is materially incomplete, irregular or if it contains any financial or commercial terms that are unacceptable to the RDN.

The selection committee may proceed with an award recommendation or the RDN may proceed to negotiate with the highest evaluated Proponent with the intent of developing an agreement. If the parties after having bargained in good faith are unable to conclude a formal agreement, the RDN and the Proponent will be released without penalty or further obligations other than any surviving obligations regarding confidentiality and the RDN may, at its discretion, contact the Proponent of the next best rated Proposal and attempt to conclude a formal agreement with it, and so on until a contract is concluded or the proposal process is cancelled.

The RDN reserves the right to award the assignment in whole or in part or to add or delete any portion of the work. Throughout the evaluation process, the evaluation committee may seek additional clarification on any aspect of the Proposal to verify or clarify the information provided and conduct any background investigation and/or seek any additional information it considers necessary.

8. *PROPOSED PURCHASE CONTRACT*

The RDN's preferred form of Contract is attached herein in **Appendix E**. The Contract will also include the following forms: 'WWS-COM-10.1 Contractor-Supplier Package – EMS Requirements' and the 'Prime Contractor Preconstruction Meeting Form' in **Appendices F and G**, respectively. Proponents should carefully review this form of Contract. Proponents may (but are not required to) request that the RDN consider revisions to the form of Contract and include any clauses of concern in their proposal along with suggested language changes. Failure to do so means acceptance of the agreement as presented.

9. *BONDING*

Within 10 Business Days of receipt of the written Notice of Award, unless extended by the RDN, deliver to the RDN a Performance Bond and a Labour and Material Payment Bond, each in the amount of 50% of the Contract Price, covering the performance of the Work including the Contractor's obligations during the Maintenance Period, issued by a surety licensed to carry on the business of suretyship in the province of British Columbia, and in a form acceptable to the Owner. For clarity, **a bid bond is not required.**

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Appendix A
Fee Proposal Form

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Appendix B
Mechanical and Structural Engineering Work Package

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Appendix C
Electrical and Instrumentation Engineering Work Package

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Appendix D
Electrical Work Sequencing

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Appendix E
Sample Form of Contract

Appendix F
WWS-COM-10.1 Contractor-Supplier Package – EMS Requirements

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Appendix G
Prime Contractor Preconstruction Meeting Form