



REQUEST FOR STATEMENTS OF QUALIFICATIONS (RFSQ) No. 21-087

DATE: December 2, 2021

Project Title: GNPCC Biogas Flare Upgrade Engineering Services

The Regional District of Nanaimo invites qualified and experienced firms to submit Statements of Qualifications to complete the detailed design for the replacement/upgrade of the Greater Nanaimo Pollution Control Centre (GNPCC) gas flare including structural, electrical, instrumentation, mechanical, and piping design. Eligible Firms must have a Permit to Practice professional engineering in BC issued by EGBC.

A. Intent

This Request for Statements of Qualifications (RFSQ) is issued to determine the most qualified and experienced service provider to meet the Regional District of Nanaimo's requirements, expectations, and timeline.

The Regional District of Nanaimo will review submissions received in response to this RFSQ and enter discussions with the top-ranked Respondent to negotiate the terms, scope, timeline, and cost based on the actual scope of work required (the Work). Should these negotiations fail to result in a contract for the Work, the Regional District of Nanaimo may then elect to negotiate with the next highest-ranked service provider and so on until an agreement is reached or the process is cancelled.

In any event, the Regional District of Nanaimo shall not be bound to enter a contract with any Respondent to this RFSQ and, at its sole discretion, may elect to collapse this process.

B. Background

The Regional District of Nanaimo (RDN) owns and operates the Greater Nanaimo Pollution Control Centre (GNPCC), located at 4600 Hammond Bay Road, Nanaimo B.C. The facility was constructed in 1973 and has seen numerous upgrades during its lifetime, most recently the upgrade to secondary treatment, which was completed in November 2020.

The treatment process includes three anaerobic digesters which generate biogas. Biogas is collected from the digesters, and a portion is consumed to power process boilers, a portion is to be used by an electricity cogeneration unit, and excess biogas is flared.

The existing gas flare system was constructed in 1997 and includes a 75 mm (3-inch) biogas flare system by Mactronic Inc., a Division of Aereon. Previous correspondence with Aereon indicates that the flare has a capacity of 3,200 m³/d which is inadequate for the estimated future maximum biogas production of 6,100 m³/d.

Photographs of the existing flare and surrounding area are included in Appendix A.

C. Contemplated Scope of Services

The general scope of services requested as part of this RFSQ includes all engineering design, management and control required to prepare a complete biogas flare demolition and replacement/upgrade design package that can be effectively executed by contractors, and provide the RDN with detailed and useable records for ongoing operational and maintenance use. These services include:

- i. Project management plans and procedures to ensure project quality, cost, schedule, and risk control;
 - ii. Review all available record documents and complete a topographic survey to provide a base plan for design;
 - iii. Drawings, specifications, data sheets, and other documents required for a complete detailed design to demolish and replace/upgrade the GNPCC gas flare compliant with federal and provincial regulations including CSA/ANSI B149.6:20 Code for Digester Gas, Landfill Gas, and Biogas Generation and Utilization;
 - iv. Detailed design to include new flare and flow meter to be monitored via facility Process Control System and historian;
 - v. Detailed design to include all civil, structural, electrical, instrumentation, controls, mechanical and piping required for a complete design;
 - vi. Design and/or construction sequencing is to address the need to maintain flaring of excess gas throughout the construction;
 - vii. Design reviews, submittals, and cost estimates;
 - viii. Participate in process safety, operability, and maintainability reviews;
 - ix. Procurement support for flare package equipment including specifications and datasheets, tender preparation, tender Q&A support, and bid evaluation and recommendation. RDN to administer the tender;
 - x. Procurement support for main construction including tender preparation, tender Q&A support, and bid evaluation and recommendation. RDN to administer the tender;
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- xi. Project lists, plans, and reports to allow for fully documented design, construction, commissioning, and ongoing operational reference;
- xii. All design calculations are to be submitted to the owner for record.

D. Contemplated Schedule

- i. The Flare Package Equipment issued for Tender by March 31, 2022. Flare package equipment has an approximate lead time of 28 weeks from issuance of PO.
- ii. Class A (+/-) 10% Installed Cost Estimate along with complete design documents by April 30, 2022.
- iii. Final design documents ready to be issued for Tender by May 30, 2022 to allow tender and award by late July.
- iv. Flare decommissioning and replacement is anticipated for September to December 2022.

E. Statement of Qualifications and Evaluation

The statement of qualifications should be no longer than twelve (12) single-sided pages in length (not including cover page, cover letter and appendices). Please include the following:

- Qualifications and areas of expertise of the Firm and nominated Project Team. Please include CV/Resume of the Project Team and explain their role in the project, and an organizational chart demonstrating roles and lines of responsibility for the Project Team.
 - Experience of Firm and nominated Project Team in previous relevant projects. Provide short descriptions of similar projects and assignments completed by both the Firm and nominated Project Team members. Preference will be given to brownfield project examples which consider the need to maintain flaring throughout the replacement. Provide client references for two of the referenced projects.
 - A description of your Firm's
 - Project management processes to assure quality and project control.
 - Design submittal/review/procurement milestones.
 - Relevant supporting resources that could be drawn on should additional expertise be required.
 - List of relevant engineering and design software.
 - Provide within the appendices sample documents that contain typical examples of the following documents:
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- Project Execution Plan Table of Contents
- Monthly Progress Report (limit to 1 page)
- Installed Cost Estimate template
- P&ID drawing from similar scope project (limit to 1 page)
- Process Control Narrative
- Engineering Work Package (EWP) Table of Contents
- A statement of your firm's ability to complete the work within the timeframe described.
- A statement confirming that your Firm has a Permit to Practice professional engineering in BC issued by EGBC.

Statements of Qualifications (the "SOQ") will be initially evaluated by the Regional District of Nanaimo based on the above and assigned a qualitative score out of 50 points. Any or all SOQs will not necessarily be accepted.

F. Submission Date & Time

Statements of Qualifications should be received **BY EMAIL ONLY** on or before 3:00:00 p.m. local time on the 16 day of December, 2021 . The RDN reserves the right to accept late submissions.

G. Questions and Submissions

Questions are requested five (5) calendar days before the closing date.

Questions and submissions should be directed to:

James Haddou
Project Engineer
Regional District of Nanaimo
6300 Hammond Bay Road, V9T 6N2
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APPENDIX A: Photographs







