

## REQUEST FOR EXPRESSIONS OF INTEREST AND STATEMENTS OF QUALIFICATIONS

Title: CONSULTANT SERVICES - SEWER HEAT RECOVERY FACILITY AND INTEGRATION WITH DISTRICT ENERGY

**Reference No.**: 1220-050-2023-006

FOR PROFESSIONAL SERVICES

(General Services)

Issue Date: July 5, 2023

# REQUEST FOR EXPRESSIONS OF INTEREST AND STATEMENTS OF QUALIFICATIONS PRE-QUALIFICATION OF CONSULTANT SERVICES – SEWER HEAT RECOVERY FACILITY AND INTEGRATION WITH DISTRICT ENERGY

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#### REQUEST FOR EXPRESSIONS OF INTEREST AND STATEMENTS OF QUALIFICATIONS

#### 1. INTRODUCTION

#### 1.1 Purpose

The purpose of this RFEOI/SOQ is to:

- invite Submissions from Respondents that describe the desire, expertise and capability of the Respondent to participate in the project described in Schedule A; and
- (b) select a Respondent or Respondent(s) who may be invited to participate in a Request For Proposals process.

#### 1.2 Definitions

In this RFEOI/SOQ the following definitions shall apply:

- (a) "BC Bid Website" means www.bcbid.gov.bc.ca;
- (b) "City" means the City of Surrey;
- (c) "City Representative" has the meaning set out in Section 2.3;
- (d) "City Website" means www.surrey.ca;
- (e) "Date" has the meaning set out in Section 2.2;
- (f) "Evaluation Team" means the team appointed by the City;
- (g) "Preferred Respondent(s)" means the Respondent(s) selected by the Evaluation Team;
- (h) "Respondents" (individually the "Respondent") means an entity that submits a Submission in response to the RFEOI/SOQ issued by the City;
- (i) "RFEOI/SOQ" means this Request for Expressions of Interest and Statements of Qualifications;
- (j) "Services" has the meaning set out in Schedule A; and
- (k) "Submission" means a submission submitted in response to this RFEOI/SOQ.

#### 2. INSTRUCTIONS TO RESPONDENTS

#### 2.1 Address for Submission Delivery

The Respondent should submit the Submission <u>electronically</u> in a single pdf file which must be received by the City by email at: <u>purchasing@surrey.ca</u>

Confirmation of receipt of email will be issued. Submissions that cannot be opened or viewed may be rejected. A Respondent bears all risk that the City's receiving equipment functions properly so that the City receives the Submission.

**Note**: The maximum file size the City can receive is 10Mb. If sending large email attachments, Respondents should phone [604-590-7274] to confirm receipt.

#### 2.2 **Date**

The City would prefer to receive Submissions on or before July 26th, 2023. (the "Date").

#### 2.3 Inquiries

All inquiries related to this RFEOI/SOQ should be directed in writing to the person named below (the "City Representative"). Information obtained from any person or source other than the City Representative may not be relied upon.

Name: Sunny Kaila, Manager, Procurement Services

Email: <u>purchasing@surrey.ca</u>

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Inquiries should be made no later than seven (7) business days before the closing Date. The City reserves the right not to respond to inquiries made within seven (7) business days of the closing Date. Inquiries and responses will be recorded and may be distributed to all Respondents at the discretion of the City.

Respondents finding discrepancies or omissions in the RFEOI/SOQ documentation or having doubts as to the meaning or intent of any provision should immediately notify the City Representative. If the City determines that an amendment is required to this RFEOI/SOQ, the City Representative will issue an addendum in accordance with Section 2.4. No oral conversation will affect or modify the terms of this RFEOI/SOQ nor be relied upon by any Respondent.

#### 2.4 Addenda

If the City determines that an amendment is required to this RFEOI/SOQ, the City Representative will issue a written addendum by posting it on the BC Bid Website at

www.bcbid.gov.bc.ca and the City Website at <a href="www.surrey.ca">www.surrey.ca</a> (collectively, the "Websites"), and upon posting, any addenda will form part of this RFEOI/SOQ. It is the responsibility of Respondents to check the Websites for addenda. The only way this RFEOI/SOQ may be added to, or amended in any way, is by a formal written addendum. No other communication, whether written or oral, from any person will affect or modify the terms of this RFEOI/SOQ or may be relied upon by any Respondent. By delivery of a Submission, the Respondent is deemed to have received, accepted and understood the entire RFEOI/SOQ, including any and all addenda.

#### 2.5 Status Inquiries

All inquiries related to the status of this RFEOI/SOQ, including whether or not a Respondent has been selected, should be directed to the City Website and not to the City Representative.

#### 3. SUBMISSION FORM AND CONTENTS

#### 3.1 Form of Submission

Respondents should include the information below in their Submission.

#### A. LEAD FIRM PROFILE

- Firm name & address of lead firm.
- List of relevant completed projects, including short project descriptions for the three most relevant projects, and an approximate total volume of related work for the last five years (organized by year, in Canadian dollars).
- List of similar or related projects currently underway.
- General overview of the lead firm's approach to architectural design and construction administration of the overall project.

#### **B. SCOPE OF INTEREST**

Respondents should clearly indicate if they are interested in the entire Scope of Services or individual components.

#### **C. PROPOSED PROJECT TEAM**

- List and short profile of possible team members (role, qualifications, related experience) and other possible firms. CVs are not required. Please note the RFP will provide more detail about the expertise that will be expected. At this stage, the City is interested in understanding more about lead firms and their proposed partners that may be drawn upon to deliver this type of project. Recognizing that the expertise in certain specialties of sewer heat recovery technology may be limited, there may be overlap in team composition amongst project teams.
- References (project, client name and contact information only).

- List of projects completed in past the 5 years.
- Indicate which team member(s) will be the coordinating professional for each component of the work.

#### **D. CORPORATE SUSTAINABILITY**

Overview of corporate commitment to sustainability.

#### E. ADDITIONAL INFORMATION

Respondents can provide other information that is not requested here but which you think the City of Surrey should consider in evaluating your firm/team.

#### 3.2 Signature

The Submission should be signed by a person authorized to sign on behalf of the Respondent and include the following:

- (a) If the Respondent is a corporation then the full name of the corporation should be included, together with the names of authorized signatories. The Submission should be executed by all of the authorized signatories or by one or more of them provided that a copy of the corporate resolution authorizing those persons to execute the Submission on behalf of the corporation is submitted;
- (b) If the Respondent is a partnership or joint venture then the name of the partnership or joint venture and the name of each partner or joint venturer should be included, and each partner or joint venturer should sign personally (or, if one or more person(s) have signing authority for the partnership or joint venture, the partnership or joint venture should provide evidence to the satisfaction of the City that the person(s) signing have signing authority for the partnership or joint venture). If a partner or joint venturer is a corporation then such corporation should sign as indicated in subsection (a) above; or
- (c) If the Respondent is an individual, including a sole proprietorship, the name of the individual should be included.

#### 4. EVALUATION AND SELECTION

#### 4.1 Evaluation Team

The evaluation of Submissions will be undertaken on behalf of the City by the Evaluation Team. The Evaluation Team may consult with others including City staff members, third party consultants and references, as the Evaluation Team may in its discretion decide is required. The Evaluation Team will give a written recommendation for the selection of a Preferred Respondent or Preferred Respondents to the City. Such discussions will not in any way create a binding contract between the City and any such Respondents.

The City and its officials, employees, agents, consultants and advisors will not be liable to any Respondents, or any firm, corporation or individual member of a Respondent, for any claims, whether for costs, expenses, losses or damages, or loss of anticipated profits, or for any matter whatsoever, incurred by the Respondent, or any firm, corporation of individual member of a Respondent, in preparing and submitting a Submission or any other activity related to or arising out of this RFEOI/SOQ.

#### 4.2 Evaluation Criteria

The Evaluation Team will compare and evaluate all Submissions to determine the Respondent's strength and ability to provide the Services in order to determine the Submission which is most advantageous to the City using the following criteria:

- (a) Respondent's demonstrated understanding of this RFEOI/SOQ and the project requirements;
- (b) Respondent's should include a brief description of projects of similar nature to the scope of Services and the role the Respondent has undertaken on those projects;
- (c) Respondent's should provide information relating to experience and qualifications of all key personnel;
- (d) Respondent's demonstrated ability to provide the Services;
- (e) Respondent's approach to architectural design and sustainability; and
- (f) Respondent's references relevant to the project. The City prefers a minimum of 3 references.

The Evaluation Team will not be limited to the criteria referred to above, and the Evaluation Team may consider other criteria that the team identifies as relevant during the evaluation process. The Evaluation Team may apply the evaluation criteria on a comparative basis, evaluating the Submissions by comparing one Respondent's Submission to another Respondent's Submission. All criteria considered will be applied evenly and fairly to all Submissions.

#### 4.3 Evaluation Process

To assist in evaluation of the Submissions, the Evaluation Team may, in its sole and absolute discretion, but is not required to:

(a) conduct reference checks relevant to the project and background investigations of the Respondent, and any subcontractors proposed in the Submission, with internal and/or external sources, and consider and rely on any relevant

- information received from the references and from any background investigations in the evaluation of Submissions;
- (b) seek clarification or additional information from any, some, or all Respondents with respect to their Submission, and consider and rely on such supplementary information in the evaluation of Submissions;
- (c) request interviews/presentations with any, some, or all Respondents to clarify any questions or considerations based on the information included in Submissions, and consider and rely on any supplementary information received from interviews/presentations in the evaluation of Submissions; and
- (d) seek confirmation that the inclusion of any personal information about an individual in a Submission has been consented to by that individual.

The Evaluation Team is not obligated to complete a detailed evaluation of all Submission and may, after completing a preliminary review of all Submissions, identify and drop from any detailed evaluation any Respondent which, when compared to the other Respondent, the Evaluation Team judges, in its sole discretion, to not be in contention to be selected as the Preferred Respondent.

#### 4.4 Multiple Preferred Respondents

The City reserves the right and discretion to divide up the Services by type of work, or other basis as the City may decide, and to select one or more Preferred Respondents. If the City exercises its discretion to divide up the Services, the City will do so reasonably having regard for the RFEOI/SOQ and the basis of Submissions.

In addition to any other provision of this RFEOI/SOQ, Submissions may be evaluated based on advantages and disadvantages to the City that might result or be achieved from the City dividing up the Services and entering into one or more agreements with one or more Respondents.

#### 4.5 Litigation

In addition to any other provision of this RFEOI/SOQ, the City may, in its absolute discretion, reject a Submission if the Respondent, or any officer or director of the Respondent submitting the Submission, is or has been engaged directly or indirectly in a legal action against the City, its elected or appointed officers, representatives or employees in relation to any matter, or if the City has initiates legal action.

In determining whether or not to reject a Submission under this section, the City will consider whether the litigation is likely to affect the Respondent's ability to work with the City, its consultants and representatives and whether the City's experience with the Respondent indicates that there is a risk the City will incur increased staff and legal costs in the administration of an agreement if it is awarded to the Respondent.

#### 5. GENERAL CONDITIONS

#### 5.1 No City Obligation

This RFEOI/SOQ is simply an invitation for Submissions for the convenience of all parties. It is not a tender or a request for proposals and does not commit the City in any way to pre-qualify a Respondent(s), and the City reserves the complete right to at any time reject all Submissions, and to terminate this RFEOI/SOQ process.

#### 5.2 Respondent's Expenses

Respondents are solely responsible for their own expenses in preparing, and submitting a Submission, and for any meetings, negotiations or discussions with the City or its representatives and consultants, relating to or arising from this RFEOI/SOQ. The City and its representatives, agents, consultants and advisors will not be liable to any Respondent for any claims, whether for costs, expenses, losses or damages, or loss of anticipated profits, or for any other matter whatsoever, incurred by the Respondent in preparing and submitting a Submission, or participating in subsequent proposal requests, negotiations for an agreement, or other activity related to or arising out of this RFEOI/SOQ.

#### 5.3 No Contract

By submitting a Submission and participating in the process as outlined in this RFEOI/SOQ, Respondents expressly agree that no contract of any kind is formed under, or arises from, this RFEOI/SOQ, prior to the signing of a formal written agreement.

#### 5.4 Conflict of Interest

A Respondent shall disclose in its Submission any actual or potential conflicts of interest and existing business relationships it may have with the City, its elected or appointed officials or employees. The City may rely on such disclosure.

#### 5.5 Solicitation of Council Members, City Staff and City Consultants

Respondents and their agents will not contact any member of the City Council, City staff or City consultants with respect to this RFEOI/SOQ, other than the City Representative, at any time prior to the award of an agreement or the cancellation of this request for RFEOI/SOQ and which could be viewed as one Respondent attempting to seek an unfair advantage over other Respondents.

#### 5.6 Confidentiality

All Submissions become the property of the City and will not be returned to the Respondent. All Submissions will be held in confidence by the City unless otherwise required by law. Respondents should be aware the City is a "public body" defined by

and subject to the *Freedom of Information and Protection of Privacy Act* of British Columbia.

#### 5.7 Participating Entities

The City has conducted a constructability and pre-design work for this project using third party consultants. Any consultants involved in the civil and constructability reviews or pre-design work are not excluded from becoming a Respondent to this RFEOI/SOQ.

#### 6. CITY DISCLAIMER

- a. The information in this RFEOI/SOQ and any further supporting documentation is provided for reference purposes only. It is the responsibility of interested parties to confirm the accuracy and applicability of this information. All costs related to updating or acquiring additional information shall be born solely by the Respondent. The information contained in this RFEOI/SOQ has been prepared, in part, on information provided by others, and such information is believed to be accurate and reliable. However, by its receipt of this RFEOI/SOQ, each Respondent remises, releases, and forever discharges the City and its representatives (including staff and consultants and other professional advisors) from any and all claims which such person has, have, or may hereafter have arising out of any information contained herein. Any party who intends to submit a response to this RFEOI/SOQ is specifically invited to independently verify the accuracy of the information contained herein.
- b. The City shall not be obligated to review or accept any Submission and may reject any or all Submissions without giving reasons therefore.
- c. All negotiations and discussions with Respondents are on a "without prejudice" basis and cannot be construed as an agreement, and/or otherwise unless expressly approved by City Council and a written agreement is signed by the City.
- d. The City may negotiate with any one or more of the Respondents without having any duty or obligation to advise or allow any other Respondents to vary their Submission or otherwise negotiate with the City.
- e. The City may enter into discussions to clarify issues related to any Submission. If at any time the City reasonably forms the opinion that a mutually acceptable agreement is not likely to be reached, the City may give notice terminating discussions, but is under no obligation to do so.
- f. The City does not authorize any other person or agency to represent the Project on its behalf without the prior written approval of the City.

g. By submitting a Submission and participating in the process as outlined in this RFEOI/SOQ, Respondents expressly agree that no contract of any kind is formed under, or arises from, this RFEOI/SOQ process.

#### 7. DISCLAIMER

Notwithstanding anything contained herein, the Respondent agrees that he shall take all necessary steps to confirm the accuracy of this RFEOI/SOQ and agrees that the City shall have no liability whatsoever in respect of any losses or damages of any kind howsoever arising in relation to this RFEOI/SOQ.

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#### **SCHEDULE A - SCOPE OF SERVICES**

#### 1. BACKGROUND AND VISION

The City is expanding its District Energy System (DES) in the rapidly growing City Centre area. The DES currently provides heat to over 6 million square feet of building area in the City Centre, and the connected floor area is anticipated to double in the next three years. To reduce the Greenhouse Gas (GHG) intensity of the DES, the City plans to incorporate a Sewer Heat Recovery (SHR) facility into the DES, to be operational in 2026. This project involves the detailed design and construction administration of the overall project which is forecasted to cost approximately \$68 million. The City anticipates hiring one, or more, Construction Manager (CM) during schematic design early fall of 2023 to provide preconstruction service including design-assist services, constructability reviews, costing, value engineering, scheduling and to develop and coordinate the procurement of construction contracts in consultation with the City and consultants team. The project is broken down into the following major components:

- 1. Boiler upgrades at the existing West Village Energy Center (WVEC) to meet capacity demands for the winter of 2024.
- 2. Heat pump facility expansion at the WVEC that upgrades the heat for integration into the District Energy System (DES).
- 3. Sewage diversion and lift station that conveys sewage from the North Surrey Interceptor (NSI) sewer to the adjacent Sewer Heat Recovery (SHR) facility.
- 4. SHR facility that screens sewage, transfers heat from the sewage to the ambient temperature (AT) piping via heat exchangers, then circulates water to the West Village Energy Center (WVEC).
- 5. AT piping that conveys recovered heat from the SHR facility to the WVEC.

The City retained Kerr Wood Leidal (KWL) to conduct a constructability and preliminary conceptual design of major Components 1 and 2. The City retained Associated Engineering (AE) to conduct a civil and constructability review and preliminary conceptual design of major Components 3, 4, and 5. The results of these preliminary design assignments are included as Attachments 1 & 2.

#### 2. SCOPE OF SERVICES

The scope of Services includes five (5) distinct components:

#### Component 1 – Boiler upgrades at the WVEC (approximate cost: \$6M)

West Village Energy Center (WVEC) was constructed in 2018 and currently supplies heating to 19 customer buildings. There are currently three (3) 5 MW boilers installed at WVEC, however the plant was designed to accommodate three (3) 15 MW boilers. In order to meet the 2024/2025 winter demand, two (2) 5 MW boilers will be replaced with

two (2) 15 MW boilers. The first phase of construction is to remove two (2) existing gas fired boilers and replace them with two (2) new 15 MW boilers, evaluate and make recommendations for the future of the existing 5MW boilers from WVEC (eg., sell or store and repurpose).

The plant was designed to accommodate 15 MW boilers in the existing 5 MW boiler bays. 15 MW boilers will fit within the plant space including the equipment pad size and height requirements. The plant was designed so the piping can be upgraded around the boiler, without disrupting the main piping headers. The combustion air openings for the plant were designed to accommodate 15 MW boilers.

Two (2) 15 MW boilers have been ordered directly by the City due to long lead times associated with equipment procurement. The conceptual design by KWL considered the constraints at WVEC and a preferred concept plan layout is provided in KWL's report. The detailed design to be provided as part of this assignment of the 15 MW boiler integration will be based on the boilers procured by the city.

### Component 2 – Heat pump facility expansion at the WVEC (approximate cost: \$25M)

The study completed by KWL indicates that up to two 3 MW heat pumps (6 MW total) could fit within the WVEC. The waste heat recovery concept is to recover heat via heat exchangers at a new SHR facility near the North Surrey interceptor and connect these to the new heat pumps at WVEC via an ambient temperature (AT) piping system. Refer to components 3 to 5 for more information on the SHR components. KWL's study developed a conceptual design for integrating waste heat recovery into the WVEC. An analysis of heat pump technologies (based on efficiency, capacity, supply temperatures, maintenance, and operation requirements) resulted in the selection of two (2) 3 MW CYK heat pumps as the basis of design. Additional heat pump technology options will be reviewed during the initial design phase of the project. The heat pumps may have to be ordered directly by the City early in the design stage due to long lead times associated with equipment procurement.

This component involves all work necessary to complete the detailed design of the heat pump installation, integration into the heating pipe network at WVEC and the expansion of the WVEC facility to accommodate the necessary electrical infrastructure to support the heat pumps.

#### Component 3 – Sewage diversion and lift station (approximate cost: \$5M)

This involves all work necessary to complete the detailed design of the sewer diversion structure and lift station, integration into the SHR facility and the infrastructure located within the SHR facility. A conceptual design with two options for the diversion structure has been prepared by Associate Engineering. The intent is for this component of the project to be owned by Metro Vancouver and the design process will need to be coordinated with Metro Vancouver design and operational standards.

#### Component 4 – SHR facility (approximate cost: \$21M)

The SHR facility will screen sewage, transfers heat from the sewage to the (AT) piping via heat exchangers, then circulates water to the West Village Energy Center (WVEC). Itis projected to have an approximate footprint of 600 m2. It will house sewage screening technology, heat exchangers, AT piping circulation pumps, electrical equipment, and a washroom. Space will be allocated for additional sewage screening equipment and heat exchangers to future proof the facility's capacity, and for the addition of an operator office to be considered.

This component involves all work necessary to complete the detailed design of the Sewer Heat Recovery (SHR) facility and the infrastructure located within the SHR facility.

#### Component 5 – AT piping (approximate cost: \$11M)

The AT piping that conveys recovered heat from the SHR facility to the WVEC will consist of approximately 2.24 KM (trench length) buried HDPE piping in a closed loop supply/return configuration. The proposed pipe routing is shown in the Associated Engineering report. This component involves all work necessary to complete the detailed design of the AT piping system that integrates the connection between the Sewer SHR facility and the HP infrastructure located within the WVEC facility.

#### 3. PROJECT ESTIMATED TIMELINE

Project timeline schedule are subject to change at the sole and absolute discretion of the City based on the actual timelines of preceding activities.

Component	Start of Design	Construction Completion
Boiler Upgrades at WVEC	Q3 2023	Q3 2024
Heat pump facility expansion at the WVEC	Q4 2023	Q4 2025
Sewage diversion and lift station	Q4 2023	Q4 2025
SHR facility	Q4 2023	Q4 2025
AT piping	Q4 2023	Q4 2025

#### **ATTACHMENTS**

#### A. KERR WOOD LEIDAL ASSOCIATES LTD.

1. Constructability and Preliminary Conceptual Design Report

#### B. ASSOCIATED ENGINEERING

1. Civil and Constructability Review and Preliminary Design Report

Attachments may be viewed and/or obtained from the City of Surrey's Managed File Transfer Service (MFT) link noted below. Printing will be the sole responsibility of the Respondent.

Hostname: <a href="https://mft.surrey.ca">https://mft.surrey.ca</a>

Logon ID surreybid Password: Welcome

Locate Folder 1220-050-2023-006