

Department of Works and Engineering Water and Wastewater Section

# **Request for Qualifications**

# For

# Water Treatment Plant Engineering Services



# Devon Springs Water Treatment Plant (Reverse Osmosis Unit A)Refurbishment

46 Devon Springs Road Devonshire FL 01, Bermuda

Project No. 50/201/75

Issue Date: 30<sup>th</sup> October 2015 Submission Deadline: 16<sup>th</sup> November, 2015

Written enquires should be sent to: Attention: Mr. J. Tarik Christopher Email: <u>tjchristopher@gov.bm</u>

Copy to Mr. Keith Claridge kclaridge@gov.bm

General Post Office Building, 3<sup>nd</sup> Floor, 56 Church Street, Hamilton HM 12, BERMUDA Hamilton HM CX, BERMUDA Phone: (441) 295-5151 Website: <u>www.gov.bm</u>



## **Table of Contents**

1.	Introd	luction	1
2.	RFQ S	Submittal Requirements	2
3.	Select	tion Process	4
4.	Due D	Date	4
5.	Enqui	iries	5
6.	Docu	ments Included	5
Annex I	Eligib	ility and Qualification Requirements	6
Annex II	Scope	e of Work	7
Annex III	Туре о	f Contract	8
Exhibit 'A	.': Sub	mission Evaluation Matrix	9
Notice of	Non-In	terest1	1
Attachme	nt A	Statement of Qualifications	1
Attachme	nt B	Company Information	1
Attachme	nt C	Personnel Qualifications	1
Attachme	nt D	Project Experience	1



Request for Qualifications Page 1 of 11

#### 1. Introduction

The Government of Bermuda, Ministry of Public Work, through the Department of Works and Engineering (DWE) is presently soliciting Request for Qualifications (RFQ) from qualified engineering firms and individuals to form an official "bidders list". The primary objective of this RFQ will be to assess and compile a list of potential bidders. This list shall be used to solicit sealed bids for upcoming Devon Springs Water Treatment Plant Reverse Osmosis Unit Refurbishment.

The DWE uses a "Qualification Based Selection" process in determining which Engineering firm to be added the list. The process will include an evaluation and ranking of each Engineering firm based on a set evaluation criteria (Annex I). The best ranking Engineering Firms and individuals may be asked for an oral interview and will be ranked again based on set evaluation criteria (Exhibit A). Based on the RFQ proposals and the oral interview, if conducted, the top Engineering firms will be included on a bidders list to submit a full Engineering proposal.

The DWE encourage RFQ proposal to include a comprehensive team of qualified professionals, capable of providing the variety of services as outlined in the Scope of Services Section (Annex II)

**In brief the Works** will involve the design of a revised operation of the unit followed by the provision of reverse osmosis system refurbishment/upgrades, instrumentation and digital control systems upgrades; electrical and mechanical works, and construction management services. The Government of Bermuda proposes to refurbish Reverse Osmosis Unit A at the Devon Springs Water Treatment Facility at 46 Devon Springs Road, Devonshire, FL 01, Bermuda. This work involves a review of the existing Unit A and re-design of the unit to provide a two stage operation, the resultant reverse osmosis system upgrades, instrumentation and digital control systems upgrades; electrical, and mechanical, and construction management services as defined in the drawings and specifications and requires qualified contractors to complete the work.

This RFQ Package includes the following documents:

- Instructions on Qualification Process
- Annex I Eligibility and Qualification requirements
- Annex II Scope of Work
- Annex II Type of Contract
- Exhibit 'A' Evaluation Matrix
- Notice of Intention Form
- Attachment A Statement of Qualifications
- Attachment B Company Information
- Attachment C Personnel Qualifications
- Attachment D Project Experience

#### 1. Schedule

Action	Date
RFQ for Submission Released	30 <sup>th</sup> October 2015
Deadline to request additional information	9 <sup>th</sup> November 2015
Last date on which additional information is issued by the Ministry	13 <sup>th</sup> November 2015
Deadline for Receipt of RFQ Submissions	3pm 16 <sup>th</sup> November 2015

\*All times Atlantic Standard Time



**Department of Works and Engineering** 

#### 2. Plant Description

The Ministry of Public Works, through the Department of Works and Engineering, and the Water and Sewage Section is responsible for specific aspects of Bermuda's water and wastewater management system, this includes overseeing and administration of public water operations and services; public water and wastewater policy, contract and negotiations; production and distribution, development and regulations including oversight of the process of establishing water and wastewater policy guidelines in Bermuda. The Ministry of Public Works Policy with regards to potable water generation at its premises is to produce water using reverse osmosis units, and water treatment standards which are in accordance with industry standards.

The Water and Wastewater section operates the Devon Spring Water Treatment plant which has been reduced to two reverse osmosis treatment trains. The Reverse Osmosis Unit A train is currently configured as a two stage unit utilizing 8 pressure vessels. The original design capacity of the unit was rated at 150,000 Imp Gals per day from a three stage configuration with 10 pressure vessels. Each train is fed separately from a collection tank receiving raw water from a brackish wellfield system consisting of 72 wells with a maximum combined capacity of 490,000 Imp Gals per day. The maximum TDS of the water is 5,000 mg/l.

The existing plant underwent a major refurbishment 22 years ago but it has deteriorated into a poor condition generally. The latest arrangement for the Water Treatment plant was originally designed in 1992 with construction substantially completed in 1993. Currently the plant has ceased production of water.

#### 3. Project need

The project needs consists of providing all labour, supervision, tools, equipment, materials and services to perform a complete refurbishment of Unit A reverse osmosis Treatment train.

#### 4. Proposed project

- .1 Preliminary primary project components include:
  - .1 Project Coordination
  - .2 Project Management
  - .3 RO system operation design
  - .4 RO System mechanical equipment and instrumentation
  - .5 RO System Process Control Digital Control Systems (DCS)

TIME SCHEDULE WATER TREATMENT PLANT IMPROVEMENTS TO BE COMPLETED BEFORE MAY, 2016.

#### 2. **RFQ Submittal Requirements**

# 1. If companies elect to respond to this RFQ, submission of their response assumes the acceptance of the following understandings:

a. Government reserves the right to reject any or all of the submissions received in response to the RFQ, to waive irregularities or to cancel or modify the RFQ in any way, and at any Government chooses, in its sole discretion, if Government determines that it is in the interest of Government of Bermuda.



- b. Submissions will be opened at Government's convenience. Note that all the information submitted in response to this RFQ is subject to Bermuda Public Access to Information Act.
- c. GOVERNMENT further reserves the right to make selections under this RFQ without discussion of the proposals received.
- d. Submissions must be signed by an authorized officer of the Company.
- e. Submissions must also provide name, title, address and telephone number for individuals with authority to negotiate and contractually bind the company, and for those who may be contacted for the purpose of clarifying or supporting the information provided in the submission.
- f. Government will not be responsible for any expenses incurred by any company in conjunction with the preparation or presentation of any submission with respect to this RFQ.
- g. Government's selection of companies through this RFQ is not an offer.
- h. The completed "Attached **Response Forms (10 pages)( Word Document)** Must be submitted.
- i. The Response forms must meet the requirements stated within this Request for Qualifications (RFQ) documents. Electronic submissions in PDF format will be accepted. The completed form can also be submitted with the following information written on the outside of an envelope or in the body of the e-mail: **Company name, address, contact name and phone number**, addressed as follows:

Ministry of Public Works Department of Works and Engineering General Post Office Building 3nd Floor, 56 Church Street Hamilton HM 12 Bermuda

Attention: J. Tarik Christopher Email: <u>tjchristopher@gov.bm</u> copy in Mr. Keith Claridge <u>kclaridge@gov.bm</u>

Subject line of the email must state: "RFQ - Devon Springs Water Treatment Plant Reverse Osmosis Unit Refurbishment".

Contractors may submit a company profile/bio in addition to, but <u>not</u> in replacement of the response forms"

- j. Nothing within this RFQ shall be construed to create any legal obligation on the part of the Government of Bermuda. The Government of Bermuda reserves the right, in its sole discretion, to amend, suspend, terminate, or reissue this RFQ in whole or in part, at any stage.
- k. Failure to comply with the instructions and requirements of this RFQ will be cause for disqualification. Failure to properly complete the attached forms or to submit the required information may cause the proposal to be considered non-compliant and be rejected.
- I. Any interpretation of, additions to, deletions from, or any other corrections to the RFQ, will be issued as written addenda. It is the sole responsibility of the potential contractors to check



with the contact person to ensure that all available information has been received prior to submitting a response.

- m. All documentation submitted in response to this RFQ will become the property of the Government of Bermuda. All responses will remain confidential.
- n. Response Forms may be withdrawn by written notice.

#### 2. Cost of Submission

.1 The Contractor shall bear all costs associated with the preparation and submission of his request for qualification and the **Government of Bermuda**, **Ministry of Public Works** (*hereinafter referred to as the Ministry*), will in no case be responsible or liable for these costs, regardless of the conduct or outcome of the Submission process.

#### 3. Selection Process

- a. A Department of Works & Engineering Selection Committee will be designated by the Ministry of Public Works.
- b. The Engineering Firm will be ranked based upon the evaluation criteria below
  - Responsiveness to the RFQ
  - Experience of personnel to be assigned
  - Technical Capabilities
- c. Contractor submissions shall be compiled and assessed. Suitably qualified firms will form the bidders list. This list shall be used to tender and solicit sealed bids for upcoming Devon Springs Water Treatment Plant Reverse Osmosis Unit Refurbishment.
- d. The Government reserves the right to solicit additional relevant information concerning any contractor's records of performance for use in the evaluation process. The Bermuda Government also reserves the right to disqualify a contractor from prequalification and/or bidding if it has actual knowledge of poor safety or performance (quality, financial, schedule) on previous projects.

#### 4. Due Date

Your response shall be due no later than (16<sup>th</sup> November 2015) at 3:00 p.m.

Responses received after the deadline will be deemed non-compliant and will be rejected.



**Department of Works and Engineering** 

#### 5. Enquiries

Any questions or requests for clarification regarding this invitation or the abatement works should be **provided in writing, by email**, as follows:

Ministry of Public Works Department of Works and Engineering 3<sup>rd</sup> Floor, 56 Church Street Hamilton, HM12 Bermuda

Attention: J Tarik ChristopherCopy to: Keith ClaridgeFax: (441) 292-4219;Email: tjchristopher@gov.bmEmail: tjchristopher@gov.bmkclaridge@gov.bmAbsolutely no verbal questions/clarification will be acknowledged.

The Ministry will post on the Government of Bermuda Portal website: <u>www.opmp.gov.bm</u> "Procurement Notices" tab all responses to any request for clarification which is received earlier than 3 days prior to the submission deadline.

The Government of Bermuda, its agents and employees, shall not be responsible for any information given by way of verbal communication.

Any questions that are received by the Government of Bermuda that affect the qualification process will be responded to all parties and included as an addenda to this RFQ.

#### 6. Documents to be included

- a) Attach the Response Forms (TO BE COMPLETED/SIGNED AND RETURNED)
- b) Resumes shall be included in an Appendix



**Department of Works and Engineering** 

#### Annex I Eligibility and Qualification Requirements

- .1 The Contractor and/or the Contractor's sub-contractors (*hereinafter referred to as the Contractor*) must meet certain requirements, specified herein, in order to be considered as eligible Contractors for the project. Contractors, sub-contractors and contracting teams, who fail to meet with the requirements specified herein as to qualifications, will not qualify for this project, and their request for qualification will not be accepted.
- .2 The Contractor must have a minimum of 10 years' experience in designing, servicing, and installing mechanical systems, instrumentation, and digital control systems in the Reverse Osmosis Water Treatment Industry.
- .3 The Contractor must have a minimum of 10 years' experience in programming and troubleshooting PLC systems and be able to provide support with 24 hours of receiving a service call request.
- .4 In addition to the experience of the firm or firms as noted above, the experience of the key individuals responsible for the project must meet the following criteria:
  - .1 Contractor's Project Manager: 10 years of experience in commercial building and industrial plant mechanical or electrical installations.
  - .2 Project Superintendent: 10 years of experience as Project Superintendent in commercial building and industrial plant mechanical or electrical.
- .5 The Contractor shall submit with his completed request for qualification all appropriate documentation in order to demonstrate the necessary experience and expertise. This shall include descriptions of relevant and similar past projects, details of their Project Team with resumes of key personnel to be assigned to the project and the names and full details of experience of any sub-contractors.
- .6 Submissions by a joint venture of two or more firms as partners shall comply with the following requirements:
  - .1 One of the partners shall be nominated as being the lead; and this authorisation shall be evidenced by submitting a power of attorney signed by legally authorised signatories of all the partners;
  - .2 The lead partner shall be authorised to incur liabilities and receive instructions for and on behalf of any and all partners of the joint venture.
  - .3 A copy of the Agreement entered into by the joint venture partners shall be submitted with the Statement of Qualification.



Department of Works and Engineering

#### Annex II Scope of Work

#### 1.1. Description of Scope of Services to be performed by the Engineering firm

- .1 The Ministry of Public Works (*hereinafter referred to as the "Ministry"*), proposes to invite qualified contractors to bid on the refurbishment of Unit A Reverse Osmosis train at the Devon Springs Water Treatment Plant, 46 Devon Springs Road, Devonshire, Bermuda.
- .2 The work will be undertaken in two phases:
  - .1 Firstly undertake a reverse osmosis unit design to provide a revised unit operation of two stages with a permeate production recovery rate not less than 70%. The first phase will be considered complete upon the approval of a full set of design shop drawings and replacement equipment listing. All equipment to be used will conform to the drawings and specifications issued with the submission.
  - .2 The second phase of the contract comprises the provision and install of the reverse osmosis system refurbishment in accordance with the approved shop drawings and will include, instrumentation and digital control systems upgrades; electrical and mechanical works, as defined on the drawings and in the specifications. The project will be completed after a full Commissioning of the unit; operational training for Ministry staff; and provision of a full set of operation and equipment manuals.

#### 1.2 System Description

- .1 The Devon Springs Water Treatment Plant is a Government owned and operated facility for the purpose of providing water treatment (reverse osmosis system) to water coming from local wells and to supply potable water to the public.
- .3 The building has two storeys and its purpose is for industrial use.
- .4 The Reverse Osmosis Unit A is to operate as a two stage unit utilizing up to a total of 10 pressure vessels. The original design capacity of the unit was rated at 150,000 Imp Gals per day.
- .5 The raw water feed to the plant is generated from a brackish wellfield consisting of 72 wells with a maximum combined capacity of 490,000 Imp Gals per day. The maximum TDS of the water is 5,000 mg/l.
- .6 The RO unit is to be designed as plug flow with no recirculation.
- .7 The product water from the plant shall be to drinking water standards in compliance with the Bermuda Health Department.
- .8 The redesign will be assessed on recovery rate and robust operation.

#### 1.3 Other Requirements

- .1 The work includes the furnishing of all labour, materials, equipment and services necessary for, and reasonably incidental to, the completion of all the Work.
- .9 The work shall be fully tested and left in perfect working order. Supply all incidental accessories necessary to make the work complete.



### 1.4 Work to be Performed

The Work of Project will generally consist of the following tasks:

- .1 Undertake a design review to provide a revised unit operation of two stages to enable a minimum permeate production at a 70% recovery rate
- .2 Undertake a refurbishment of Unit A Mechanical Systems and Instrumentation in accordance with an approved design submitted by the Contractor inclusive of all necessary piping and electrical works.
- .3 Undertake a replacement of the Process Control Systems



**Department of Works and Engineering** 

#### Annex III Type of Contract

- .1 Project will be completed under a single contract. The Contract will be based on the Federation Internationale des Ingenieurs-Conseils (FIDIC) Plant and Design Build Contract First Edition 1999.
- .2 The Contract includes the following which may be subcontracted or performed by the Contractor:
  - .1 **Project Coordination**
  - .2 .3 Project Management
  - RO system operation design
  - .4 RO System mechanical equipment and instrumentation
  - .5 RO System Process Control - Digital Control Systems (DCS)



Engineering Services Devon Spring Water Treatment Plant Refurbishment **Request for Qualifications** Page 10 of 11

Department of Works and Engineering

### Exhibit 'A': Submission Evaluation Matrix

## A. TECHNICAL / MANAGERIAL COMPETENCE EVALUATION SECTION:

Technical Competence of Consultant's Team / Organisation	Score / 10	Weighting	Total Weighted Score
Score the availability of competent and qualified personnel and other resources available to perform Services in the required timeframe, including the qualifications and past performance of assigned staff on similar assignments	/10	2.0	/20
Score contractor's Corporate Background and performance on similar projects	/10	1.0	/10
Score Company History in undertaking and successfully completing three similar Projects	/10	2.0	/20
Score knowledge of design in relation to drinking water standards as well as codes and ordinances relating to the provision of drinking water treatment	/10	2.0	/20
Score References – From three recent Employers who are were contacted concerning the firm's performance in completing similar scope projects	/10	2.0	/20
Technical / Managerial Score: /90			/90

## B. SOCIAL ENVIRONMENTAL AND ECONOMIC:

SOCIAL, ENVIRONEMENT AND ECONOMIC	Score / 10	Weighting	Total Weighted Score
Percentage of Workforce that are Bermudian	/10	.5	/5
Does the bidder have an Environmental Policy in place	/10	.5	/5
	Prices and	Rates Score:	/10

TOTAL EVALUATION SCORE: \_\_\_\_\_/100



#### Notice of Non-Interest

**Note:** Receipt of this completed form will assist the Government of Bermuda in calling for future bids. Please complete and submit this form prior to the closing date and time as shown on the Request for Qualification/Quotation/Proposal/Tender form.

#### A response is <u>not</u> being submitted for the following reason(s):

We do not provide the required services.	Insufficient time to prepare quote/tender.
Specifications are not sufficiently defined.	We are unable to competitively quote/tender at this time.
Insufficient information to prepare proposal.	We do not have resources to handle this requirement.
Cannot meet delivery requirements.	Licensing restrictions (please explain).
Cannot quote/tender a firm price at this time.	Other reasons or additional comments (please explain below).

I/We wish to quote/tender on similar goods/services in the future	Signature			
🗌 Yes 🗌 No	Print Name			
Date				
Company Name				
Address				
City				
Parish/Province/State Postal/Zip Code				
Telephone Number				
Email Address				



GOVERNMENT OF BERMUDA Ministry of Public Works Department of Works and Engineering

Request for Qualifications

Page 1 of 1

See the attached Responses forms for these attachments.

Attachment AStatement of QualificationsAttachment BCompany InformationAttachment CPersonnel QualificationsAttachment DProject Experience