



Department of Works and Engineering

## **KING'S WHARF REHABILITATION**

### **ADDENDUM NO. 2**

24<sup>TH</sup> August, 2018

The attention of the tenderers submitting proposals for the subject contract is called to the following ADDENDUM and to the TENDER PACKAGE:

#### **Item 1 – Addition**

A document titled Questions from Tenderers dated 24<sup>th</sup> August 2018 has been included with this addendum.

#### **Item 2 – Amendment**

King's Wharf Rehabilitation tender document, Appendix D, Section A. Deliverables (page 22)

Replace;

##### **Construction of new Concrete Deck**

All works associated with constructing the new concrete deck including the precast elements and the in-situ concrete to be placed. Also included will be the re-connection of the utilities that service the wharf and the installation of the deck furniture as detailed in the drawings. Construction work must be done in accordance with an approved work and safety method statement.

With;

##### **Construction of new Concrete Deck**

All works associated with constructing the new concrete deck including the precast elements and the in-situ concrete to be placed. Also included will be the re-connection of the utilities that service the wharf and the installation of the deck furniture as detailed in the drawings. Construction work must be done in accordance with an approved work and safety method statement.

The Contractor will be required to coordinate work with the Contractor selected to construct the building. The building is located on the concrete deck and will require the two Contractors to work together to sequence the work. This will include sharing the site with the building Contractor once this phase of the works commence. The building is currently in the design phase and will be similar in overall footprint to the current buildings but consolidated into one building. The timeframe for the collaboration of the Contractors is estimated to start in January. Once the building construction portion of the works is awarded a coordination meeting will be held and schedule decided.



**Item 3 – Amendment**

King's Wharf Rehabilitation tender document, Part 1, Section 1.5.3. (page 5)

Replace;

**1.5.3 Proposals to be Submitted in Prescribed Format**

Proponents shall submit at minimum three (3) original signed hard copies of their proposal or one (1) electronic copy (e-copy) in Microsoft Word or Adobe PDF format. If both a hard copy and an e-copy of the proposal are submitted and there is a conflict or inconsistency between the hard copy and the e-copy of the proposal, the hard copy of the proposal will prevail. Proposals should be submitted in a sealed package and prominently marked with the RFP title and number (see RFP cover) and will not be opened until Friday, August 31, 2018, 3:00:00 PM. The full legal name and return address of the proponent should be marked on the package as well.

With;

**1.5.3 Proposals to be Submitted in Prescribed Format**

Proponents shall submit at minimum three (3) original signed hard copies of their proposal or one (1) electronic copy (e-copy) in Microsoft Word or Adobe PDF format. If both a hard copy and an e-copy of the proposal are submitted and there is a conflict or inconsistency between the hard copy and the e-copy of the proposal, the hard copy of the proposal will prevail. Proposals should be submitted in a sealed package and prominently marked with the RFP title and number (see RFP cover) and will not be opened until Tuesday, September 4, 2018, 3:00:00 PM. The full legal name and return address of the proponent should be marked on the package as well.

**Item 4 – Addition**

A document titled CP Questions and Answers dated 23<sup>rd</sup> August 2018 has been included with this addendum.

	TENDER DOCUMENT TYPE	ANNEX	TENDER DOCUMENT REFERENCE	QUESTION	ANSWER
1	DRAWINGS	D	RAM-XX-0-DR-CW-210	Please provide details of services trough to buildings including method of suspending from the precast panels	Design of the new building has not yet been completed and therefore this has not yet been finalised. The trough sections will be supplied by the precast supplier.
2	DRAWINGS	D	RAM-XX-0-DR-CW-0502	Please provide details of interface of end transverse beams with service trough as they cross at 45 degrees	The service trench in this area will be similar to that along the front face of the wharf, with the trench base terminated at the edge of the transverse beams but the walls of the trench continuous over it. The geometry is shown in the AutoCAD drawings which have been provided (which are an output of the 3D Revit model). Full details will be shown on the construction issue drawings, but we believe there is sufficient information for accurate pricing of this item within the tender package. The trough sections will be supplied by the precast supplier.
3	DRAWINGS	D	RAM-XX-0-DR-CW-0341 RAM-XX-0-DR-CW-0343	The front beam drawing indicates a UHMW bearing plate where the T2 beam sits on the F4 pile cap corbel. No such bearing is indicated at the rear pile cap where the T1 beam sits on the G2 corbel nor is there any indication of a mortar bed or any other filling <ol style="list-style-type: none"> <li>1) Please provide details of where bearing plates are required and where mortar beds are required</li> <li>2) Are bearing plates to be supplied by the precast supplier or the contractor</li> <li>3) If to be supplied by Contractor please provide specification as this appears to be missing from the "Specification for Marine Works"</li> </ol>	1) Bearing plates are also required where the transverse beam meets the corbel of the rear ground beam; drawing RAM-XX-00-DR-CW-343, will be updated to reflect this.  2) Bearing plates are to be supplied by the precast supplier along with all the reinforcement  3) Not applicable
4	DRAWINGS	D	RAM-XX-0-DR-CW-220 RAM-XX-0-DR-CW-402	Although details and specification are provided for fenders and bollards, we assume these are to be provided new. There was, however, some discussion at the on-site meeting regarding reusing these items. Please confirm if fenders and bollards are to be new or reused.	New fenders and bollards should be supplied by the contractor, no such furniture items will be reused.  The cast in parts of the fender and bollard fixings will be provided by the precast supplier as part of the front beam.
5	DRAWINGS	D	RAM-XX-0-DR-CW-400 RAM-XX-0-DR-CW-202	Drawing RAM-XX-0-DR-CW-202 indicates the cut-off level of the piles to be +4'7" and +1'6" respectively for the intermediate and front piles. This however, conflicts with drawing RAM-XX-0-DR-CW-400 where the top of the concrete level is given as +4'7" and +1'6" respectively, and the top of the pile is 3 3/8" lower to accommodate the recessed bracing angles. Please confirm whether the levels indicated are pile cut-off or top of concrete.	The dimensions of +4'7" and +1'6" shown on RAM-XX-0-DR-CW-202 for the pile cut-off level of the 'all other piles' and 'front pile' respectively are correct, and so are the top of concrete values on this drawing at +8'8" and +8'0".  Top of the concrete levels provided on drawing RAM-XX-0-DR-CW-400 are incorrect and will be altered to match those values provided in RAM-XX-0-DR-CW-202.
6	GENERAL	n/a	n/a	Please confirm that the concrete docks on the inside of the arm from the end opposite the northern end of Kings Wharf to the Southernmost dock will be kept clear of vessels for use by the contractor	The concrete docks on the inside arm are where Marine and Ports store their boats, aside from the tour dock which may be made available upon request to WEDco.
7	GENERAL	n/a	Owner Supplied Precast	Please provide precast concrete shop drawings for positions of the lifting eyes for all the pre-cast elements. This is critical information required for the safe lifting and positioning of elements	Shop drawings are not yet available but will be provided to the successful contractor. Sufficient lifting eyes shall be provided to enable the safe lifting and positioning of the elements, the precast supplier has extensive previous experience in this regard. The successful contractor will be invited to raise any concerns with the proposed lifting eyes in due course.
8	GENERAL		Precast Panels	1) Please provide the anticipated schedule of your delivery for the pre-cast panels	1) Anticipated schedule is in the timeframe end of November to mid-

	TENDER DOCUMENT TYPE	ANNEX	TENDER DOCUMENT REFERENCE	QUESTION	ANSWER
				<p>2) It was noted in the site meeting that these would be delivered direct to Dockyard by ship. Please confirm</p> <p>3) Please advise is delivery is anticipated to be single ship delivery or multiple deliveries</p> <p>4) If multiple deliveries, please advise which components will be in which deliveries</p> <p>5) Please advise whether the Contractor, or others will be responsible for the unloading of precast from the vessel and the positioning of the precast in its initial storage location</p>	<p>December depending on availability of the ship.</p> <p>2) That is the plan to deliver to the commercial dock in dockyard (where the Oracle base was for America's Cup).</p> <p>3) Single ship delivery is anticipated.</p> <p>4) Procurement of ship is ongoing for the tender assume a single ship delivery.</p> <p>5) Due to unknowns how many ships, what equipment will be needed to offload the ship for the tender assume Contractor responsible for transporting the precast and other items from the unloading dock to the storage location (Cross Island).</p>
9	GENERAL	n/a	New Buildings on Dock	The tender documents clearly indicate that the dock is available for construction until 31 <sup>st</sup> March 2019 and there is no indication in the documents that any provision needs to be made for works to construct the new buildings on the dock as part of the dock works, nor to provide access to the dock for other to carry out the construction of the new buildings. Please confirm that this situation is correct for the purpose of the bid, otherwise provide details of what dates the dock works need to be made available, and indicate the area of completed dock required to construct the new buildings	See Item 1 of Addendum #2. There will be some flexibility with when the building contractor will start works on site but the Contractor for this project will have to coordinate with them and be prepared to share the site with them. Consideration should be given to sequencing the work such that the area required for the building construction becomes available as soon as possible.
10	MINUTES OF PREBID MEETING	n/a	Fly-ash	The meeting minutes note that fly ash is being imported for use on the project, however, the specification table 704/1 notes that no fly-ash or ggbs are not required in the in-situ concrete	<p>The meeting minutes are correct. It has been determined that it is more cost-effective to use concrete with fly-ash, than to use stainless steel reinforcement.</p> <p>Fly ash will be owner supplied (imported with precast units), and the owner will meet the additional cost of batching fly-ash into the concrete mix.</p> <p>The concrete specification will be updated prior to construction to reflect this change.</p>
11	RFP	n/a	PART 1 Page 5 Section 1.5.3	The section notes that the RFP will not be opened until 3:00pm on the 31 <sup>st</sup> August 2018, however, the tender return date is 3:00pm on 04 <sup>th</sup> September. Please clarify	Amended in Addendum #2 Item3.
12	SPECIFICATION	C	Series 000 – Introduction Page 4/8	Please provide the laser scan data referenced in this section	Laser scan can be provided to the selected Contractor. We believe there is sufficient information for accurate pricing within the tender package.
13	SPECIFICATION	C	Series 000 – Introduction List of Other Documents Page 8/8	<p>Please provide the following documents referred to in the specification: -</p> <ol style="list-style-type: none"> <li>1) 3D Laser Scan</li> <li>2) Historic Drawings by Woodbourne Associates</li> <li>3) Condition Assessment Kings Wharf Bermuda</li> <li>4) Underwater Infrastructure Survey</li> <li>5) Kings Wharf Checks Topographic Survey</li> </ol>	These documents can be provided to the selected Contractor. We believe there is sufficient information for accurate pricing within the tender package.
14	SPECIFICATION	C	Series 104 – Environmental Licenses Page 3/15	<ol style="list-style-type: none"> <li>1) Please advise what is meant by variations to environmental licenses</li> <li>2) Please confirm that all environmental permissions for work will be obtained by the Ministry of Public Works as advised in the bidders meeting</li> </ol>	<p>1) Ministry of Public Works can confirm that they will obtain all environmental licenses. The contractor shall comply will all conditions within such licenses, and provide information required in order for the licenses to be obtained – e.g. vessel details, information on construction methods, proposed protection measures, etc.</p> <p>Should any variations to the licenses be required as a result of the information supplied by the contractor being</p>

	TENDER DOCUMENT TYPE	ANNEX	TENDER DOCUMENT REFERENCE	QUESTION	ANSWER
					incomplete, incorrect, or because of changes within the contractors control, the cost of these variations shall be borne by the Contractor.  2) Confirmed
15	SPECIFICATION	C	Series 107 etc. Page 3/15	In this and several other locations in the specification, reference is made to a "Port Authority". Please advise what entity this is as it relates to the Kings Wharf works? WEDCO, Marine & Ports etc.?	Marine and Ports, and WEDCO
16	SPECIFICATION	C	Series 109 Page 4/15	We note the requirement for quality assurance, but is it the intention to run a full system on this project? If required, please provide additional information on scope of QA required	It is intended to implement a QA system which is proportionate for the scale and complexity of the project. The Contractor shall provide with his tender return his proposed QA system for client review/comment.
17	SPECIFICATION	C	Series 110 Sampling & Testing Page 4/15	1) Please provide details of what materials will require testing as independent testing facilities are not available in Bermuda and overseas testing is costly and takes precious time from an already short construction period 2) Will local concrete supplier testing be allowed for ready mixed concrete? 3) How will shear studs be tested?	1) The contractor shall allow for testing of in-situ concrete, and any steelwork for which traceability certificates cannot be provided.  2) Yes  3) Shear studs should be supplied with a suitable certificate demonstrating material compliance with a suitable standard (e.g. AWS D1.5 or UK Highways Agency Series 1800). Testing of shear studs shall be in accordance with AWS D1.5 or another international standard to be proposed and agreed by the client. As a minimum, it is expected that bend tests will be conducted on the first two studs of a run, and at a rate of 1 in 50 studs thereafter.
18	SPECIFICATION	C	Series 113 Temporary Accommodation Page 7/15	1) Please confirm that it is necessary to provide the noted approximately 2200 square feet of offices and facilities for the Client for a short 3-month project 2) If this is necessary then please provide a copy of the "Factories Act" to which the specification refers to as this is not a publication we are aware of in Bermuda	1) The contractor should provide a site office suitable for 4 No. people, plus toilets, kitchen area, storage etc. The sizes given are indicative, but need not be strictly complied with, especially if a shared office space is proposed. The meeting room is intended to be shared with the contractor.  2) Reference to factories act can be ignored and will be removed from final specification.
19	SPECIFICATION	C	Series 115 – Noise & Vibration Page 10/15	This section refers to noise levels in Note (i) below, but none are noted	This can be ignored. Contractor shall seek approval for noisy work outside of the normal working hours.
20	SPECIFICATION	C	Series 117 – Services & Supplies Page 10/15	Table 117/1 refers to work to install Foul, Potable Water & LV electrics to be wholly undertaken by the Contractor. Please provide drawings and specifications for the works required	The contractor is not required to install any services. The only requirement is to remove the existing services and provide and install the service containment as detailed on the drawings.
21	SPECIFICATION	C	Series 700 – Concrete Page 2	Table 704/1 refers to Table 701/1 for locations of insitu and mass concrete, but Table 701/1 does not seem to have been provided. Please provide Table 701/1	All references to Table 701/1 shall be replaced with "as noted on the project drawings". For clarity, no mass concrete is currently required.
22	SPECIFICATION	C	Series 1100 – Structural Steel Page 2/3	1001-3 refers to bracket supports for trench as galvanised, but drawings note stainless steel. Please clarify which is correct	Stainless steel shall be used, the specification will be updated
23	SPECIFICATION	C	Series 122 Page 12/15	The specification indicates that Contractor should allow 5 working days for a response from the Client. In light of the extremely short construction period can this be reduced or changed from working days to calendar days?	Except in exceptional circumstances, a response will be given within 3 working days.

	TENDER DOCUMENT TYPE	ANNEX	TENDER DOCUMENT REFERENCE	QUESTION	ANSWER
24	SPECIFICATION	C	Series 700 – Concrete Page 11	Table 704/1 refers to additional requirements for concrete subject to sulphate attack as being CSA A23.1 – Table 3 exposure S-3. We do not believe that the Type 1 cement available in Bermuda meets this requirement. Please confirm that it is acceptable to use the Bermuda Cement Type 1.	Please provide the specification of the proposed cement for review and confirmation.
25	SPECIFICATION	C	Series 002 – Clean and potentially implement plating repairs to some pile heads	Please advise how the “potential” requirement to implement plating repairs to some pile heads is to be assessed? Should an allowance be confirmed for us to carry for this item until the piles are inspected. If so please advise allowance to be carried.	Include in the tender provision for 10 pile heads and the rate per pilehead.

**King's Wharf Rehabilitation**

**CP Questions and Answers – 23<sup>rd</sup> August 2018**

The drawing indicates anodes on piles in rows A, C and E, while the spec indicates C, D, and E	The drawing is correct.
Also the Dolphin Head piles indicate type 1 anodes on the drawings and Type 3 in the spec.	The drawing is correct – 12 No Type 1 anodes to be provided on each dolphin head, 2 per pile.
The dolphin head's also have 12 piles with 2 anodes per pile in the drawings while the spec says 8 piles with 3 anodes per pile	<p>The drawing is correct.</p> <p>Each dolphin head has 6 piles. Each dolphin has two supporting arms/struts, and each arm is supported by a single pile. There are two dolphins, one north and one south.</p> <p>Therefore 62 type 1 anodes are required in total as noted on drawing 603 - 24 for the dolphins (2 per pile x 6 piles x 2 dolphins), and 38 for the main wharf (2 per pile x 19 piles of Row A)</p>
On the CP drawings there is a detail for an electrical connection throughout proposed structure. Does this mean there should be one of these above each pile?	<p>The piles in each bent shall be connected electrically via the reinforcement in the transverse beams (as shown on drawing 601). The bents shall each be connected to each other via the reinforcement in the slab joints, as shown in the tender addendum. This will in effect ensure all the wharf piles are electrically connected to one another.</p> <p>Two test points are required as shown in the tender addendum.</p>

Corrected Table to be included in the final specification

Pile Type/Row	Number of Piles	Anodes Type Req'd	No. of Anodes Per Pile	Total Number of
Wharf Row A	19	1	2	38
Wharf Row C	16	2	2	32
Wharf Row E	16	3	2	32
Dolphin Head	12	1	2	24
Dolphin Arm	4	2	2	8