



# CITY OF HOUSTON

Administration and Regulatory Affairs Department  
Strategic Purchasing Division

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March 23, 2012

**Subject:** Letter of Clarification No. 2 to Invitation to Bid No. S50-C24166 Remove Existing Bar Screens, Furnish and Install Bar Screen Systems and Associated Equipment for the Public Works and Engineering Department

**To:** All Prospective Bidders:

This letter of Clarification is being issued for the following reasons:

- **To revise SECTION B, Scope of Work/Technical Specifications:**

- 1.) Remove pages 11, 17, 18 & 19 of 29 and replace with pages 11, 17, 18 & 19 of 29, marked REVISED 3/19/2012.

**Note: No further questions will be accepted after the publication of this Letter of Clarification.**

When issued, Letter(s) of Clarification shall automatically become a part of the solicitation documents and shall supersede any previous specification(s) and/or provision(s) in conflict with the Letter(s) of Clarification. All revisions, responses, and answers incorporated into the Letter(s) of Clarification are collaboratively from both the Strategic Purchasing Division and the applicable City Department(s). It is the responsibility of the bidder/respondent to ensure that it has obtained all such letter(s). By submitting a bid on this project, bidders/respondents shall be deemed to have received all Letter(s) of

Furthermore, it is the responsibility of each Contractor to obtain any previous Letter of Clarification associated with this solicitation.

*Arturo Lopez*

Arturo Lopez  
Senior Procurement Specialist  
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Attachments: Revised pages, 11, 17, 18 & 19 of 29

*Partnering to better serve Houston*

Council Members: Brenda Stardig Jarvis Johnson Anne Clutterbuck Wanda Adams Mike Sullivan Al Hoang Oliver Pennington  
Edward Gonzalez James G. Rodriguez Stephen C. Costello Sue Lovell Melissa Noriega C.O. "Brad" Bradford  
Jolanda "Jo" Jones **Controller: Ronald C. Green**

**S50-C24166 / Letter of Clarification No. 2**

**Remove Existing Bar Screens, Furnish and Install Bar Screen Systems and Associated Equipment for the PublicWorks and Engineering Department**

**REVISED 3/23/2012**

manufacturer for the screen and motor submitted.

1.0.4.3 The Contractor shall be required to submit three copies of the operating instructions with descriptive literature, including a cross-sectional view of screen and motor combination, which indicates materials of construction, weights, principle dimensions and other important details.

1.0.4.4 The Contractor shall be required to submit evidence of experience in the form of an installation list with contact names and phone numbers.

1.0.5 Delivery, Storage and Handling

1.0.5.1 Shipping

1.0.5.1.1 The Contractor shall be required to ship equipment, material, and spare parts complete except where partial disassembly is required by transportation regulations or for protection of components.

1.0.5.1.2 The Contractor shall be required to pack spare parts in containers bearing labels clearly designating contents and pieces of equipment for which they are intended.

1.0.5.2 Receiving

1.0.5.1.1 The Contractor shall be required to store and safeguard equipment, material, and spare parts.

**PART 2 - PRODUCTS**

**2.0.1 Manufacturers (Either Section 2.0 and subsections or Section 2.1 and subsections are acceptable manufacturers.)**

2.0.1.1 The bar screen shall be a Mahr Bar Screen MSI as manufactured by Headworks Inc. or pre-qualified City approved equal. All pre-qualifications for City approved equals, must be submitted to the City's representative a minimum of 14 days prior to the bid opening. *(See the note on page 3 of 29 for final date)* Any pre-qualifications for City approved equals failing to meet that deadline will not be considered. The pre-qualification package shall include, but not be limited to the following: -

2.0.1.1.1 A complete set of dimensional drawings with descriptive information,

2.0.1.1.2 The process equipment electrical requirements with schematic diagrams.

2.0.1.1.3 The control panel layout diagram for the proposed bar screen with details on related components.

**S50-C24166 / Letter of Clarification No. 2**

**Remove Existing Bar Screens, Furnish and Install Bar Screen Systems and Associated Equipment for the PublicWorks and Engineering Department**

**REVISED 3/23/2012**

On	Auto & Any Position	Exercise run	Screen performs cleaning shuttle up to 4 times. If no success, screen stops and initiates alarm signal.	X min in LSP, every Y min. (X & Y are Operator adjustable)
On	Manual & Forward	Screen operates forward in LSP.	Screen stops immediately. No cleaning shuttle.	
On	Manual & Reverse	Screen operates in reverse in LSP.	Screen stops immediately. No cleaning shuttle.	
On	E-Stop Engaged	Screen stops immediately.	N/A	
On	Off & Any Position	Screen will not operate.	N/A	
On	Hand & Off	Screen will not operate.	N/A	
Off	Any Position & Any Position	Screen will not operate.	N/A	

**2.05 DESIGN DATA**

Channel Width	4.0 ft.
Channel Depth	17.0 ft.
Discharge Height above Operating Floor	4.5 ft.
Maximum Water Depth	16.83 ft.
Bar Spacing	0.75 In.
Screen Incline from Vertical	80deg

**2.1.0 Manufacturers (2) (Pre-Qualified City Approved Equal)**

**2.1.0.1 The Bar screen [s] shall be as manufactured by Duperon Corporation, 515 N. Washington, Saginaw, Michigan, TF 989.383.8479. The screens shall be FlexRake® Model, Full Penetration, or pre-qualified City approved equal..**

**A PDF version of the Duperon Technical Specifications can be viewed on the following web link:**

**<https://purchasing.houstontx.gov/buyer/BidDocumentManager.aspx?id=C24166>**

**S50-C24166 / Letter of Clarification No. 2**

**Remove Existing Bar Screens, Furnish and Install Bar Screen Systems and Associated Equipment for the PublicWorks and Engineering Department**

**REVISED 3/23/2012**

**PART 3 - EXECUTION**

3.0.1 Installation

3.0.1.1 The equipment shall be installed by the installing contractor in strict conformance with manufacturer's recommendations.

3.0.2 Response Time

3.0.2.1 The Contractor shall respond within 12 hours to any call that relates to the working of the equipment and provide customer support to immediately address any issues with the equipment and warranty.

**3.0.3 Wet Weather**

**3.0.3.1 *During rain events occurring anywhere within the Northbelt Wastewater Treatment Plant service area, the Contractor shall not impede the flow of water through the Northbelt Plant. The Contractor shall remove any stop log(s) or other item(s) or equipment(s) (excluding bar screens), which impede the flow of wastewater. Removal of such impediments shall occur prior to the arrival of the increased flow at the plant. The provisions in this section will not have to be followed if the Contractor obtains prior written permission from Gurdip Hyare or his designee.***

**PART 4 - FIELD QUALITY CONTROL**

4.0.1 Functional Test

4.0.1.1 After the bar screens and associated equipment have been completely installed and working under the direction of the manufacturer, the Contractor shall be required to conduct field tests necessary to demonstrate that operation conforms to these specifications. The Contractor shall be required to provide water or wastewater, labor, equipment, and incidentals required to complete field tests.

4.0.2.1 The Contractor shall be required to demonstrate with a final acceptance test that these specifications have been met by the equipment as installed. As a minimum, the Contractor shall be required to perform the following tests:

4.0.2.1.1 That the units have been properly installed and are in correct alignment.

4.0.2.1.2 That the units operate without overheating or overloading any parts and without objectionable vibration.

**S50-C24166 / Letter of Clarification No. 2**

**Remove Existing Bar Screens, Furnish and Install Bar Screen Systems and Associated Equipment for the PublicWorks and Engineering Department**

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- 4.0.2.1.3 That there are no mechanical defects in any of the parts.
- 4.0.2.1.4 That the controls perform satisfactorily.
- 4.0.3 If the bar screen's performance does not comply with specifications, the Contractor shall be required to take corrective measures or remove and replace bar screens with bar screens which meet the performance criteria specified.
- 4.0.4 Start-Up. Beneficial use of the bar screens will not occur until after the start-up activities have been performed and accepted by the City Engineer. The start-up activities include the following:
  - 4.0.4.1 Receipt and acceptance by the City Engineer of draft Operation and Maintenance manuals, including the wiring and ladder diagrams.
  - 4.0.4.2 Installation inspection by the City operating, electrical and instrumentation staff followed by any corrective measures required by the Contractor.
  - 4.0.4.3 *Satisfactory operation of the bar screens for seven consecutive days under the City's control in full automatic mode, without failure. "Failure" is considered to be any malfunction or operational problem that requires correction by maintenance personnel or the Contractor, such as: high or low water level, any motor alarm, power failure, phase failure, communication failure, PLC failure, transducer failure, UPS failure. The Contractor shall make appropriate corrections and restart the 7-day test period. The 7-day test period will be suspended for failures due to uncontrollable situations but will resume, as soon as test conditions are restored.***
  - 4.0.4.3 The Contractor shall be required to provide the services of a factory-trained technician for a period of 2 hours to train the City's operating and maintenance personnel. The training session shall be scheduled and coordinated by the Contractor.
- 4.0.5 Acceptance. After the start-up operation has been successfully completed, the City will accept the bar screens when **four copies of** the final operation and maintenance manuals have been received, reviewed, and accepted by the City. The Contractor shall be required to include ladder logic diagrams and wiring and termination diagrams for both power and instrumentation systems.

**END OF SECTION**

**Page 19 of 29**

**END OF DOCUMENT**