



CITY OF HOUSTON

Administration and Regulatory Affairs Department
Strategic Purchasing Division

Annise D. Parker
Mayor

Calvin D. Wells, Deputy Director
City Purchasing Agent
P.O. Box 1562
Houston, Texas 77251-1562

F. 832.393.8755
<https://purchasing.houstontx.gov>

August 31, 2010

Subject: Letter of Clarification No. 2 to Invitation to Bid No. S50-C23703, Theater District Parking Garage Repairs for the General Services Department

To: All Prospective Bidders:

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

- **To revise the solicitation as follows:**

- 1.) To change the bid opening date from September 2, 2010 to September 9, 2010, 10:30 AM.
- 2.) To revise the electronic bid form. See revised electronic bid form on-line.
- 3.) To respond to questions posed by prospective bidders. **The questions and answers are as follows:**

Question #1 Drawing Sheet No. 20: Detail 9.4B, Note 2: The note reads "Center-pull couplers may not be used at Contractor's option". I believe this should read "Center-pull couplers may be used at Contractor's option". This change would be consistent with the notes on the detail and with detail 9.4 A.

Answer: **Note 2 should read as follows:** Center-pull coupler may be used at contractor's option. Alternatively, jacking device can be used from button-head to monostrand fixed/live end coupler. (See the attached revised Drawing Sheet No. 20)

Question #2 Drawing Sheet No. 20: Detail 9.4B, Note 3: The last sentence of this note reads "New stress simultaneously monostrand tendons shall be fully tensioned". I do not understand this note. The sentence structure is fractured and it makes no sense. Could you have the engineer clarify this note?

Answer: **Note 3 should read as follow:** Jacking devices shall be synchronized to provide equal tendon force. New monostrand tendons shall be stressed simultaneously and fully tensioned. (See the attached revised Drawing Sheet No. 20)

Question #3 Drawing Sheet Nos. 2, 15 and the Electronic Bid Form: Task items 2.3, 3.2, 3.6, 3.7: The Unit of Measure for these unit price task items is Square feet, yet there is a variable component of these repair items that will lead to inconsistent bids. For these task items, the unit of measure should be Cubic Feet so that the variable depth-of-repair is accounted for in the bid and bid volatility is removed.

Partnering to better serve Houston

**S50-C23703 / LETTER OF CLARIFICATION NO. 2
THEATER DISTRICT PARKING GARAGE REPAIRS
FOR THE GENERAL SERVICES DEPARTMENT**

Answer: The unit of measure is Square Foot (SF). Anticipated depths of concrete removal and repair are provided on Sheet 16, Detail 2.3 and 3.7 for Task Items 2.3 and 3.7, respectively. For bidding purposes, the bidder should assume that the maximum depth of concrete removal and repair for Task Items 3.2 and 3.6 is 4 inches. (See the attached revised Drawing Sheet No. 15)

Question #4 Drawing Sheet No. 2 and The Electronic Bid Form: Task item 9.0: The Unit of Measure for this task item is Each, yet the depth of repair is shown as variable. (the area of repair is noted as 4 sq. ft). To remove bid volatility, the UOM for this task item should be Linear Feet (depth of repair) so that the variable volume-of-repair material is being bid.

Answer: For Task Item 9.0, the unit of measure is Each. Sheet 17, Detail 9.0 indicates the area and maximum depth (less than or equal to ½ slab depth) of the repair location. The volume of repair can be estimated from these dimensions.

Question #5 Drawing Sheet No. 2 and The Electronic Bid Form: Task items 9.1 and 9.4: Similarly, the UOM for these task items should be Linear Feet rather than Each, so that the variable length-of-bar-repair is being bid.

Answer: For Task Item 9.1, the bid unit is Each. The repair extent is dependent on the extent of the corrosion on the post-tensioning tendons. For bidding purposes, assume a repair length of 3 ft. For Task Item 9.4, the bid unit is Each. The extent of concrete excavation shall be sufficient to install post-tensioning splice.

Question #6 Drawing Sheet No. 2 and The Electronic Bid Form: Task items 2.3, 2.4 and 3.7: These task items should be split into two different tasks each to account for the added effort that will be required in the post-tensioned slab as opposed to the non-post-tensioned slab to protect the post-tensioning (PT) tendons during concrete demolition.

Answer: Two different tasks each are not necessary for the slab repair work. The Contractor should exercise caution when conducting concrete repair work in slabs with post-tensioning tendons.

Question #7 Drawing Sheet No. 2 and The Electronic Bid Form: Task Item 9.0: Patching with repair materials should not be priced with this task item because this task leads to tasks 9.1, 9.2, 9.3 and 9.4, some of which also include repair patching, thus double-pricing this element of the repair. Repair patching should be included only in the final repair tasks, not the investigative task.

Answer: Task Item 9.0 is a post-tensioning tendon exploratory opening task item. Concrete patch repair will be conducted in accordance with Task Items 9.1, 9.2, 9.3 and 9.4.

Question #8 Drawing Sheet No. 2 and The Electronic Bid Form: Task Item 9.0 and 9.3: Having looked at the conditions of exposed tendons at the site, it appears that all conditions marked as 9.3 on the plans should be opened up for further investigation to determine the extant condition of the exposed tendon pack

**S50-C23703 / LETTER OF CLARIFICATION NO. 2
THEATER DISTRICT PARKING GARAGE REPAIRS
FOR THE GENERAL SERVICES DEPARTMENT**

before assigning the repair task. Will this investigation effort be priced as task 9.0 or should this investigative effort be included in 9.3 even though it may lead to a tendon splice per task 9.4?

Answer: The scope of work regarding repair locations are shown on the plan sheets and possible additional exploratory openings. (See Page 35 of 177, Section 01 01 15, Article T.I. 9.3 A. 2).

Question #9 Drawing Sheet No. 2 and The Electronic Bid Form: Task Items 9.3A, 9.3B, 9.3C, 9.3D, 9.3E and 9.3F: As the bid form is presently configured, bid item 9.3 A can have either 1, 2 or 3 locations of 4-bar grouping of CFRP NSM bars depending on where in the tendon run the broken tendon occurs, but yet only one price is asked for item 9.3A. The bars shown in details 9.3C, D, E and F have already been accounted for in details 9.3A and B. These details only show the configuration of bars if the tendon run is on a column line. By asking for a separate price for these details, the CFRP bars are being double-counted. I propose an alternate approach. The work shown in these task items should be broken down to its basic element, the 4-bar group of CFRP NSM bars. 9.3A would be the basic 4-bar group, 9.3B would be the installation of the lower level bars as defined in detail 9.3.1C/19 and 9.3 C would be equivalent to the present 9.3F, bars through a CMU wall. Then each tendon run would be a combination of these 3 basic elements depending on where in the plan it occurs and the guesswork and double-counting is removed from the bid pricing.

Answer: Various representative post-tension repair scenarios are presented for bidding purposes. For clarification, only one task item will be paid per corroded/broken tendon repair scenario. For example, Task Item 9.3D is a more specialized repair that includes execution steps in Task Item 9.3A. This repair would be paid only under Task Item 9.3D and not under both Task Items 9.3A and 9.3D. The same logic applies for Task Items 9.3B, 9.3C, 9.3E, and 9.3F. For Task Items 9.3C and 9.3E, work includes repair of orthogonal (2) tendons under a single unit price.

Question #10 Specification Section 03 08 00, Para. 3.4B, Page 114: Please clarify the statement that prohibits post-tensioning operations prior to the concrete repair material reaching a minimum strength. According to the details on the drawings, the concrete repair material is not even placed prior to the completion of the post-tensioning operations.

Answer: Section 03 38 00, Article 3.4B applies to an instance where concrete repair materials are placed at a post-tensioning anchor location (prior to splicing and stressing a post-tensioning tendon). This statement does not apply to concrete repair material placement at the splice location.

Question #11 Drawing Sheet No. 19: Detail 9.3.1A/19 shows the CFRP NSM bars installed into existing concrete. There will be occasions when the bars will need to be installed in applied concrete repair material used to cover an exposed and excavated P-T tendon. Will there be any special requirements either in the materials or in the installation of the repair material in this circumstance?

**S50-C23703 / LETTER OF CLARIFICATION NO. 2
THEATER DISTRICT PARKING GARAGE REPAIRS
FOR THE GENERAL SERVICES DEPARTMENT**

Answer: The Contractor shall be required to follow the manufacturer's written guidelines regarding concrete repair material curing and surface preparation procedures prior to installation of Carbon Fiber Reinforced Polymer Near Surface Mounted, (CFRP NSM) bars.

Question #12 Specifications Page 44, Section 01-01-15: Task 11.1: The title of this task item is "retighten pedestrian barrier cables", but in the execution section of this task it speaks of replacing the cable and/or anchoring hardware. When I visited the site last week, it did not appear that any of the cabling was damaged to the point it needed to be replaced. Could you please clarify: are we to simply re-tighten the cables that are there, or completely replace and tighten new cables?

Answer: The Contractor may re-tighten the pedestrian barrier cables provided that the cables can be adequately stressed to withstand pedestrian barrier forces prescribed by the City of Houston Building Code. New barrier cable hardware specifications are provided in the event that the contractor chooses to replace the barrier cables rather than retighten them.

Question #13 On the Electronic Bid Document Item Nos. 2, 3, 4, 5, 6, 7 and 8 all ask for square foot of repair. Is there no depth to the repair? Square foot repairs have no depth, if I price at 2 or 3 inches deep and another contractor prices at 1 inch deep his price will be way cheaper. The idea is for everyone to price "apples to apples" we can't do that if we don't agree on a qualified depth amount agreeable to all.

Answer: Overall slab depths and maximum depth of concrete removal are shown on the Sheet 15 of 20 of the drawings for Task Items 2.1, 2.3, 2.4, and 3.7. For bidding purposes, assume that the maximum depth of concrete removal and repair for Task Items 3.2, 3.6, and 4.1 is 4 inches. Payment will be per square foot (surface) of concrete repair.

Question #14 Is there a knowledge of how to access to repair locations would be allotted?

Answer: Typical repair locations were discussed during the prebid meeting walk through. The Contractor is responsible for providing access to repair locations shown on all drawings.

Question #15 Would blocking of drive paths and parking spots be in bulk or individual basis depending on repair locations?

Answer: The Contractor shall be required to coordinate with the Owner prior to blocking off parking spaces at the repair locations.

Question #16 We attended the prebid meeting on Wednesday morning. Normally the site visit with the engineer is held the same day of the prebid. However, the site visit for this project was the next morning. Because of other commitments we were not able to attend the site visit. Will we be able to visit the site next week?

Answer: Access to the project site will be available 24 hours per day. The Contractor must check in with the security office on site, prior to walking the facility.

**S50-C23703 / LETTER OF CLARIFICATION NO. 2
THEATER DISTRICT PARKING GARAGE REPAIRS
FOR THE GENERAL SERVICES DEPARTMENT**

Question #17 This goes along with the first question. Since we were not able to attend the site visit and cannot return until next week, we will definitely have technical questions we would like answered. The question cutoff is this afternoon at 4 pm. Will the city extend this question date?

Answer: No.

Question #18 The prebid meeting, site visit and question cutoff are all 1 week from the bid opening. Because the addendum will be issued so close to the original bid opening, will the City consider moving back the bid opening to a later date?

Answer: Yes, the bid opening date has been changed from September 2 to September 9, 2010.

Question #19 Will the City or Contractor be responsible for traffic control and blocking off the required spaces to do the job?

Answer: Yes.

Question #20 Will the consultant or Contractor be responsible for locating post-tension cables during construction?

Answer: The general areas of post-tensioned tendon repair are noted on the drawings. The Contractor shall be responsible for using non-destructive testing techniques (as required) to locate post-tensioning cables tendons within each area.

Question #21 The CFRP manufacturer will require that calculations be run to ensure the correct fabric weight is being used for the repair. Will these calculations be run by the consultant or the responsibility of the Contractor?

Answer: The consultant has already calculated and specified the correct amount of Carbon Fiber Reinforced Polymer, (CFRP) material for the project.

Question #22 Will the consultant be providing a stamped set of shoring drawings or will the Contractor be responsible for having an engineer design and stamp the shoring plan?

Answer: The Contractor shall be required to submit shoring drawings. Shoring drawings shall be signed and sealed by an Engineer licensed in the State of Texas. (See Page 113 of 177, Section 03 38 00, Article 3.1 B).

Question #23 Will there be a laydown area for equipment and material storage?

Answer: Yes, the location is the top level of the underground small Tranquility Garage along the west wall. Approximate location is between grid lines "D-2 and F-3". (See Drawing Sheet No. 9).

Question #24 Will we be able to use the owners water and electricity?

Answer: Yes.

**S50-C23703 / LETTER OF CLARIFICATION NO. 2
THEATER DISTRICT PARKING GARAGE REPAIRS
FOR THE GENERAL SERVICES DEPARTMENT**

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 bid documents and shall supersede any previous specification(s) and/or provision(s) in conflict with the Letter(s) of Clarification. It is the responsibility of the bidders to ensure that it has obtained all such letter(s). By submitting a bid on this project, bidders shall be deemed to have received all Letter(s) of Clarification and to have incorporated them into this solicitation.

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
832-393-8731

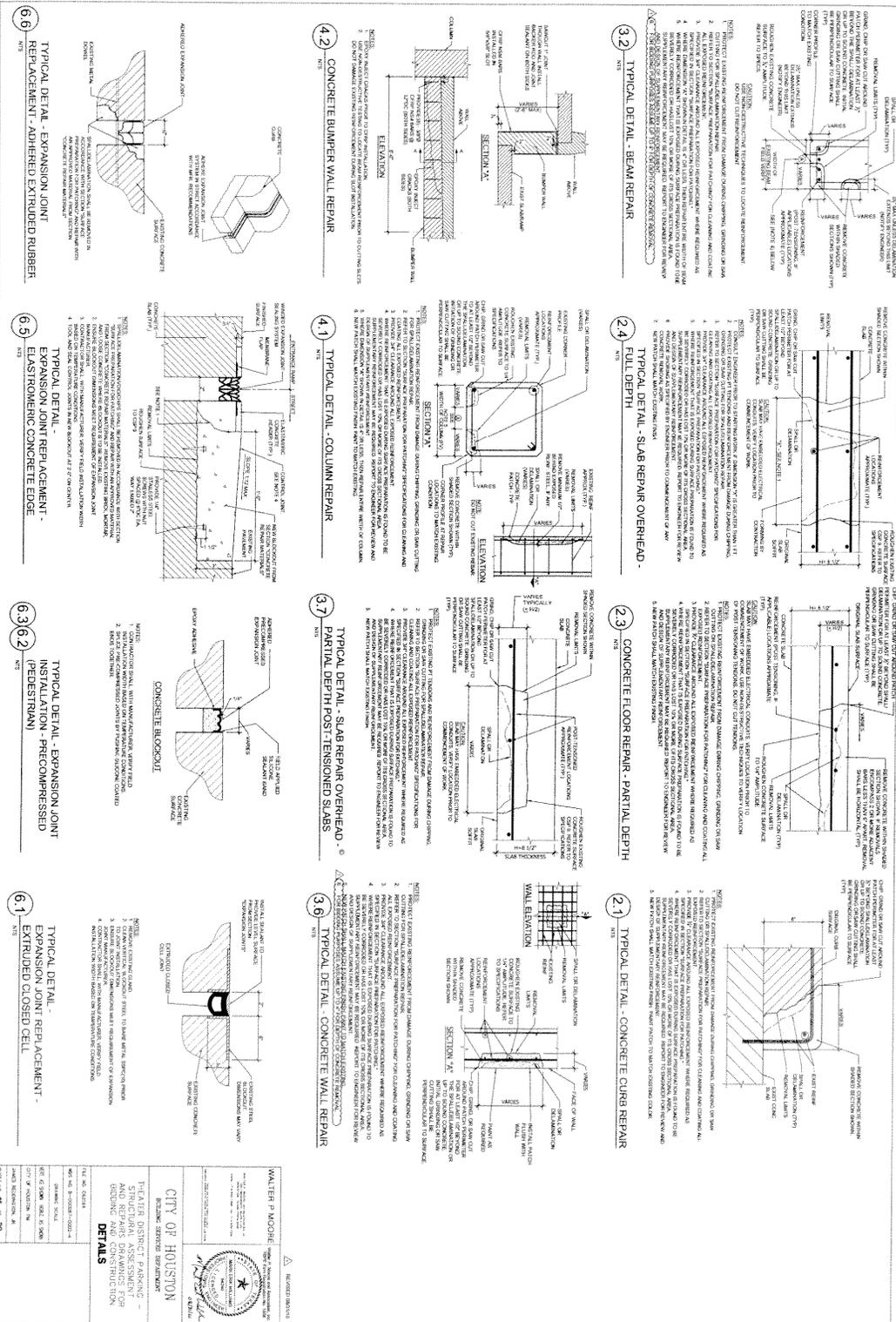
Attachments: 1. REVISED, Drawing Sheet No. 15.
 2. REVISED, Drawing Sheet No. 20.

A PDF version of the REVISED DRAWING SHEETS NOS. 15 and 20 can be viewed at:
<http://purchasing.houstontx.gov/buyer/BidDocumentManager.aspx?id=C23703>

S50-C23703 / LETTER OF CLARIFICATION NO. 2 THEATER DISTRICT PARKING GARAGE REPAIRS FOR THE GENERAL SERVICES DEPARTMENT

REVISED 8/31/2010 DRAWING SHEET NOS. 15 AND SHEET NO. 20

FILE: P:\03\2010\10000-00\00\00\Sheet\15-15-10.dwg



WALTER P. MOORE
 REGISTERED ARCHITECT
 ARCHITECTS & ENGINEERS
 1000 WEST 19TH STREET, SUITE 1000
 HOUSTON, TEXAS 77002-1000
 TEL: 713.865.1000
 FAX: 713.865.1001
 WWW: WPMOORE.COM

CITY OF HOUSTON
 GENERAL SERVICES DEPARTMENT
 THEATER DISTRICT PARKING -
 STRUCTURAL ASSESSMENT -
 REPAIRS AND CONSTRUCTION
 DETAILS

DATE: 08/31/10
 SHEET NO. 15 OF 20

