



MORIN BUILDING
8570 EXECUTIVE PARK AVENUE
FAIRFAX, VIRGINIA 22031

May 14, 2018

To: All Prospective Offerors

Issued by: Donald Legg, Manager Procurement

Subject: Addendum #3, IFB 18-51, University Tank Replacement

The purpose of this addendum is to provide answers to questions asked by prospective bidders, to revise the specifications as noted. **Note: Bidders shall provide bids on the new 00400 Bid Form Addendum 3 attached.**

I. Questions and answers

- A. Question: Division 13 – Composite Elevated Water Storage Tank, Section 13220, 1.5.B of the University Tank Replacement Bid Set Specifications states “Concrete placement height shall be a minimum of 6 feet (unless otherwise approved by the Engineer) and a maximum of 12 feet.” We respectfully request that “6 feet” be revised to “4 feet” – or confirmation that Engineer will allow.
Answer: See IFB Modification A and C below.
- B. Question: The Geotech Report suggests that Augercast piles with a length / depth of 60’ should be sufficient. However, we are concerned that the blow-counts infer that significantly longer piles may be found necessary. If that occurs, will the additional lengths (and possibly the mobilization of a larger drilling rig) be chargeable to the \$ 100K Allowance we are to include for under Bid Form # 4 (Unsuitable Soils)? We are concerned that the Load Test may fail at the suggested 60’ length and thus need to confirm that any resulting / directly attributable additional costs would be billable under this (or another) Allowance.
Answer: The Geotechnical Report provides the characteristics that the geotechnical engineer recommends for construction of auger cast in place piles. These characteristics are based on the analysis of the soil borings that were taken at this site. The Contractor is responsible for his own foundation design.

- C. Question: The Geotech Report suggests the use of much higher strength grout that is typical (6000 psi vs 4000 psi). This will restrict certain pile suppliers from bidding and/or increase the costs of performing the load tests. Please advise if this 6000 psi value is mandatory. The geotechnical report requires a minimum grout compressive strength of 6000 psi for the ACIP. This is unusual and difficult to obtain. As such our ACIP foundation subcontractors are unwilling to bid. Can the requirements for minimum grout compressive strength be reduced to industry standard 5000 psi? If this reduction is acceptable does this affect the allowable capacities of the pile?

Answer: A 5000 psi grout mix may be utilized, however the Applied Stress of the ACIP vs. the Max. Allowable Stress of the pile must be determined to be adequate (not exceed the Max. Allowable Stress) as to not damage the pile under final loading. Depending on the ACIP length/diameter/capacity pile utilized for final design, a lowering of the allowable capacity may be required. Provide the selected ACIP calculations for review and approval by the geotechnical and structural engineers of record.

- D. Question: How many Test Piles (for compression/lateral testing) does the Engineer plan to request? Can we assume it will only be two (2), and that they can be installed early on as “test piles” (vs using production piles, which could delay progress of that critical path scope)?

Answer: Per Specification Section 02355, two test piles that are “sacrificial” shall be assumed to be installed and tested prior to production pile installation. The test piles shall not be production piles since the test piles could potentially be tested to failure. The load tests from a geotechnical perspective are for axial compression acceptability, however, as a result of the design, if the structural engineer requires additional load testing for pile capacity requirements for lateral loading or uplift loading, then additional load tests/piles shall be specified by the structural engineer.

- E. Question: The Geotech Report suggests pile spacing of “2.5 x pile diameter”. Since these piles will not be bearing on rock you may wish to increase this to 3x (similar to what VDOT would require for this region) due to the loose soils encountered in Boring B-3).

Answer: Pile spacing of 2.5 times the pile diameter is acceptable.

- F. Question: While the question was raised in multiple formats by multiple parties, the Approval Process and what Bidders should assume for an overall Duration of that phase still remains “muddy”.

Answer: See IFB Modification H below

- G. Question: What are the work week restrictions?

Answer: Restrictions concerning work days and work hours are identified in the contractor documents and addendums.

- H. Question: Are review of submittals by Engineer and Owner concurrent?

Answer: Yes

- I. Question: Will this contract be awarded by May 31 and NTP by 2nd week of June?

Answer: The award date is addressed in Addendum 2. Notice to Proceed will be soon after contract execution, which is contingent upon the Contractor getting the required contract bonds and insurance.

II. IFB Modifications

- A. Revise the second paragraph of Specification Section 13220, Section 1.5 B (page 13220-11) as follows:

~~DELETE: The forming system for the pedestal wall shall be engineered and detailed with procedures to meet the increased demands of architectural concrete. Formwork design, installation and removal shall comply with the minimum requirements of ACI 318, ACI 117 and the applicable requirements of ACI 347, except as modified by this Section. The form system shall use curved, prefabricated form segments of the largest practical size to minimize panel joints. The calculated deflection of facing material and supporting elements shall not exceed the larger of 1/360 times the span or 1/16 inch (1.6 mm). Concrete placement height shall be a minimum of 6 feet (unless otherwise approved by the Engineer) and a maximum of 12 feet. Formwork shall be designed for full height plastic concrete head lateral pressure, construction loads, and wind loads. Wall forms shall incorporate a positive means of adjustment to maintain dimensional tolerances specified. Wall forms shall be adjusted for vertical plumb and circularity and locked into position with through wall form ties prior to concrete placement. Working platforms that allow safe access for inspection and concrete placement shall be provided. Form facing material shall be metal, or plywood faced with plastic or fiberglass.~~

~~Drop chutes shall be used in all wall concreting operations. Concrete shall be placed directly between reinforcement layers to prevent aggregate segregation and form splatter with the resulting surface finish variations.~~

~~The Contractor shall demonstrate an acceptable form finish by providing a mock up panel. The mock up panel shall be poured in place on the job site and constructed using the proposed form work, concrete and placement methods. Minimum size will be 4 feet wide by 6 feet high. This panel shall be agreed upon by the Contractor, Owner, and Engineer as the reference standard with which to judge surface quality, appearance and uniformity of texture and color. Review and acceptance of formed concrete surface must be made immediately upon form removal. The Contractor shall be responsible to inform the Engineer as to pour schedule so that the Owner and Engineer are present to review the panel at the time of form removal. Concrete with surface defects exceeding limitations~~

~~specified herein or not meeting the standard represented by the mock-up panel shall be repaired to meet that standard, or removed. Alternatively, the Contractor may elect to use the initial wall lift as a mock-up of the acceptable surface. If the surface of this initial lift is judged to be inferior, then the Contractor shall replace the entire lift at no cost to the Owner.~~

ADD: “The forming system for the pedestal wall shall be engineered and detailed with procedures to meet the increased demands of architectural concrete. Formwork design, installation and removal shall comply with the minimum requirements of ACI 318, ACI 117 and the applicable requirements of ACI 347, except as modified by this Section. The form system with rustications shall use curved, prefabricated form segments of the largest practical size to minimize panel joints. The calculated deflection of facing material and supporting elements shall not exceed the larger of 1/360 times the span or 1/16 inch (1.6 mm). Concrete placement height shall be a minimum of 4 feet (unless otherwise approved by the Engineer) and a maximum of 12 feet. Formwork shall be designed for full height plastic concrete head lateral pressure, construction loads, and wind loads. Wall forms shall incorporate a positive means of adjustment to maintain dimensional tolerances specified. Wall forms shall be adjusted for vertical plumb and circularity and locked into position prior to concrete placement. Working platforms that allow safe access for inspection and concrete placement shall be provided. Form facing material shall be metal, or plywood faced with plastic or fiberglass.

Drop chutes shall be used in all wall concreting operations. Concrete shall be placed directly between reinforcement layers to prevent aggregate segregation and form splatter with the resulting surface finish variations.

The Contractor shall demonstrate an acceptable architectural concrete finish in accordance with ACI by providing a mock up panel. The mock up panel shall be poured in place on the job site and constructed using the proposed form work, concrete and placement methods. Minimum size will be one full form panel in size, but not less than 8 feet wide by 6 feet high. This panel shall be agreed upon by the Contractor, Owner, and Engineer as the reference standard with which to judge surface quality, appearance and uniformity of texture and color. Review and acceptance of formed concrete surface must be made immediately upon form removal. The Contractor shall be responsible to inform the Engineer as to pour schedule so that the Owner and Engineer are present to review the panel at the time of form removal. Concrete with surface defects exceeding limitations specified herein or not meeting the standard represented by the mock-up panel shall be repaired to meet that standard, or removed. If the surface of this mock-up is judged to be inferior, then the Contractor shall prepare an acceptable form finish mock-up at no cost to the Owner.”

- B. Revise the Specification Section 02355, Section 3.2 D (page 2355-10) as follows:

DELETE: “~~The test pile may be incorporated into the foundation system of the structure provided that there is no structural damage to the pile, as determined by the Engineer.~~”

ADD: “The test pile are to be constructed in a location away from the foundation such that they will not have an influence on the foundation.”

- C. DELETE: Section 00400 from the Specifications in its entirety.

ADD: The attached Section 00400 to the Specifications in its entirety.

- D. Revise the Specification Section 01140, Section 1.04 C as follows:

DELETE:

- ~~• Work will be prohibited at the site on the day of Commencement and degree conferral, during student move-in periods at the beginning of the fall semester, and during reading days and final exams. Dates for these events within the GMU academic years in which this project occurs are listed in the following tables:~~

ADD:

- “Construction activity noise levels shall not exceed 50 dBA at the edge of the tank site during the period of reading days prior to exams through the final day of exams. Work during the period of reading days prior to exams through the final day of exams is not prohibited but is restricted to this noise level. This noise limit generally precludes the use of heavy equipment, truck movements, and use of impact tools. In addition, work will be prohibited at the site on the day of Commencement and degree conferral, Winter Graduation, as well as during student move-in periods at the beginning of the fall semester. Dates for these events within the GMU academic years in which this project occurs are listed in the following tables. The date showing First Day of Classes is provided for informational purposes:”

- E. Revise the Specification Section 01500, Section 1.09 C (page 1140-2) list item 2 as follows:

DELETE: “~~Construction activity noise levels shall not exceed 50 dBA at the edge of the site during the period of reading days prior to exams through the final day of exams (10 days). This noise limit generally precludes the use of heavy equipment, truck movements, and use of impact Project 2547 Division 001 01500-8 March 2018 tools. In addition, work will be prohibited at the site on the day of Commencement and degree conferral, as well as during student move-in~~

periods at the beginning of the fall semester. These dates are published on the GMU academic calendar available online at www.gmu.edu.”

ADD: “Construction activity noise levels shall not exceed 50 dBA at the edge of the site during the period of reading days prior to exams through the final day of exams (10 days). Work during the period of reading days prior to exams through the final day of exams is not prohibited but is restricted to this noise level. This noise limit generally precludes the use of heavy equipment, truck movements, and use of impact tools. In addition, work will be prohibited at the site on the day of Commencement and degree conferral, as well as during student move-in periods at the beginning of the fall semester. These dates are published on the GMU academic calendar available online at www.gmu.edu.”

- F. Revise the Specification Section 01500, Section 1.09 C (page 1140-2) list item 2 as follows:

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- G. Revise the Specification Section 03300, Section 3.2 I (page 1140-2) list item 2 as follows:

~~DELETE: “Mock Up Panel: The Contractor shall demonstrate an acceptable form finish by providing a mock up panel. The mock up panel shall be constructed using the proposed form work, concrete and placement methods. Minimum size will be 4 ft wide by 6 ft high. This panel shall be agreed upon by the Contractor, Owner, and Engineer as the reference standard with which to judge surface quality, appearance and uniformity of texture and color for all architectural concrete panels to be constructed at the tank. Review and acceptance of formed concrete surface must be made immediately upon form removal.~~

~~Concrete with surface defects exceeding limitations specified herein or not meeting the reference standard represented by the mock-up panel shall, where required by Engineer or Owner, be repaired by the Contractor to meet that standard, or removed, at no cost to the Owner.~~

~~Alternatively, the Contractor may elect to use the initial wall lift as a mock-up of the acceptable surface. If the surface of this initial lift is judged to be inferior, then the Contractor shall replace the entire lift at no cost to the Owner.”~~

ADD: “Mock Up Panel: The Contractor shall demonstrate an acceptable architectural concrete finish in accordance with ACI by providing a mock up panel. The mock up panel shall be constructed using the proposed form work, concrete and placement methods. Minimum size will be one full form panel in size, but not less than 8 ft wide by 6 ft high. This panel shall be agreed upon by the Contractor, Owner, and Engineer as the reference standard with which to judge surface quality, appearance and uniformity of texture and color for all architectural concrete panels to be constructed at the tank. Review and acceptance of formed concrete surface must be made immediately upon form removal. Concrete with surface defects exceeding limitations specified herein or not meeting the reference standard represented by the mock-up panel shall, where required by Engineer or Owner, be repaired by the Contractor to meet that standard, or removed, at no cost to the Owner.

If the surface of this mock-up is judged to be inferior, then the Contractor shall prepare an acceptable form finish mock-up at no cost to the Owner.”

- H. DELETE the following from Section 1140, Paragraph 1.04 D. of Addendum No. 2 (page 1140-13):

~~The Contractor is not authorized to initiate demolition of the existing tank until:~~

- ~~a. The Braddock Road Water Main is in service; and~~
- ~~b. The tank and foundation shop drawings have been approved by OWNER and ENGINEER.~~

ADD the following to Section 1140, Paragraph 1.04 D.

Contractor shall comply with the following requirements:

- a. Start of the Site Work requires a 4 week advanced written notice by the Contractor to the Owner after Notice to Proceed.

- b. Child Development Center turning extension and concurrent hydrant relocation cannot be performed until existing tank is permanently out of service.
- c. Demolition of existing tank cannot be performed until:
 - 1.) Contractor provides written notification to Owner, at least 21 days prior to start of demolition;
 - 2.) Braddock Road Water Main is in service; and
 - 3.) The shop drawing submittal for the new foundation and tank has been approved by OWNER and ENGINEER.
- d. Foundation and tank construction requires all new tank shop drawings to be approved by BCOM, and the CO-17 Building Permit for Construction has been issued by BCOM. Contractor must comply with any stipulations or pre-requisites listed with issued CO-17 Building Permit for Construction.

Any extension of Contract Time due to inclement weather, shall be addressed as per Section 00700, Article 8. C. (page 00700-16)

III. Acknowledgement

Acknowledge your receipt of, and compliance with, this Addendum by either signing the attached acknowledgement, or referencing its receipt and your compliance, in your bid.

Attachments as Noted

IFB 18-51 – University Tank Replacement

ACKNOWLEDGEMENT OF RECEIPT OF ADDENDUM # 3

I certify that the information contained in the proposal submitted on behalf of the below named firm incorporates any and all changes to the original specification. I further certify by my signature below, that I am fully authorized to acknowledge receipt of the above addendum and also bind the below named firm to the terms, conditions and specifications of the IFB and any changes thereto made by this addendum.

ACKNOWLEDGED BY:

FOR: _____
Company Name

Date

Signature of Authorized Agent

Printed/typed name

Title