

# LANEY COLLEGE POOL HEATERS UPGRADE

DOCUMENT 00 9113

## ADDENDA

BID NO. 17-18/21

Peralta Community College District

**Laney College Pool Heaters Upgrade  
900 Fallon Street Oakland, CA 94607**

December 1, 2017

### ADDENDUM No. 1

This addendum supersedes items of the original contract documents wherein it is inconsistent with it. All other conditions remain unchanged. The following changes, modifications, corrections, additions or clarifications shall apply to the contract documents and shall be made a part of and subject to all of the requirements thereof as if originally specified or shown. It is the responsibility of the bidder to review the list of attachments to ensure that the addendum is full and complete. This Addendum modifies the original Bid Documents for the above Bid.

**Acknowledge receipt of this addendum in the space provided on the BID FORM. Failure to do so may subject Bidder to disqualification.**

### Revisions\Additions

1. A second **mandatory** pre-bid meeting will be held on **December 4, 2017 at 11am** in the conference room at the Department of General Services, 333 East 8th Street, Oakland, CA 94606. The Pre-Bid Conference and Site Visit will last approximately two hours. Those who attended the first pre-meeting **are not required** to attend the second but are welcome to.
2. Request for Information (RFI) are due **December 6, 2017** at 4pm. Any necessary addenda will be issued by December 8, 2017. **The new bid due date is December 13, 2017 at 2pm.**
3. Document 00 4113 Bid Form has been modified and the new version is attached here.
4. Document 01 1100 Summary of Work has been modified and the new version is attached here.
5. Document 01 1000 Scope of Work has been modified and the new version is attached here.

Following is a description of the changes made.

1. Scope of Work:
  1. Added a CO2 Bulk tank
  2. Added 2 Servo Valves
  3. Added scope for concrete pad
2. Summary of Work - new Bid Items:
  1. Servo Valves
  2. CO2 Bulk Tank
  3. Concrete, rebar, and dowels
  4. Design-build for exhaust system
3. Bid Form - new bid items:
  1. Servo Valves
  2. CO2 Bulk Tank
  3. Concrete, rebar, and dowels
  4. Design-build for exhaust system

**END OF DOCUMENT**

**LANEY COLLEGE POOL HEATERS UPGRADE**

**DOCUMENT 00 4113**

**BID FORM**

**TO THE BOARD OF TRUSTEES OF THE PERALTA COMMUNITY COLLEGE DISTRICT**  
THIS BID IS SUBMITTED BY:

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(Firm/Company Name)

**Re: Laney College Pool Heaters Upgrade, 900 Fallon Street, Oakland, CA 94607, Bid No. \_\_\_\_\_**

1. The undersigned Bidder proposes and agrees, if this Bid is accepted, to enter into an agreement with **THE PERALTA COMMUNITY COLLEGE DISTRICT** in the form included in the Contract Documents, Document 00 5200 (Agreement), to perform and furnish all Work as specified or indicated in the Contract Documents for the Contract Sum and within the Contract Time indicated in this Bid and in accordance with all other terms and conditions of the Contract Documents.
2. Bidder accepts all of the terms and conditions of the Contract Documents, Document 00 1113 (Notice Inviting Bids), and Document 00 2113 (Instructions to Bidders), including, without limitation, those dealing with the disposition of Bid Security. This Bid will remain subject to acceptance for 60 Days after the day of Bid opening, unless there is a bid protest, then 90 days after the day of bid opening.
3. In submitting this Bid, Bidder represents that Bidder has examined all of the Contract Documents, performed all necessary Pre-Bid investigations, received the Pre-Bid conference minutes (if any), and received the following Addenda:

<b>Addendum Number</b>	<b><u>ADDENDUM DATE</u></b>	<b>Signature of Bidder</b>

4. Based on the foregoing, Bidder proposes and agrees to fully perform the Work within the time stated and in strict accordance with the Contract Documents for the following sums of money listed in the following Schedule of Bid Prices:

**BID PRICE**

Bid items are described in Section 01 1100 (Summary of Work).

<u>ITEM</u>	<u>DESCRIPTION</u>	<u>ESTIMATED QUANTITY</u>	<u>UNIT</u>	<u>UNIT PRICE</u>	<u>TOTAL</u>
1.	399,000 BTU Pentair ETI 400 Condensing Heaters	5		\$	
2.	Pentair Acu Drive VFDs, 7.5 HP 3-PH 480 VAC	2			
3.	Flow Meter: GF 2551 Blind Mag Meter, 4"	1			
4.	Flow Meter: GF 2551 Blind Mag Meter, 3"	1			
5.	Flowviz Analog Flow Meter, 2"	5			
6.	Pentair Heater Loop Pump	2			
7.	Condensate Neutralizer Kit	5			
8.	Concrete, Rebar, and Dowels				
9.	CO2 Bulk Tank	1			
10.	Servo Valves	2			
11.	PVC Sched 80 Piping				
12.	Pentair 3-way Diverter Valve	1			
13.	Cable Supports				
14.	Conduit & Wiring				
15.	Demolition				
16.	Design-build Exhaust System				
17.	Post Installation Services/Commissioning				
18.	Miscellaneous				
19.	Materials				
20.	Labor				
<u>TOTAL</u>				<b>TOTAL BID PRICE</b>	<b>\$</b>

Total Bid Price:

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(Total Bid Price in Words)

5. Subcontractors for work included in all Bid items are listed on Document 00 4330 (Subcontractors List) submitted herewith.
6. The undersigned Bidder understands that Owner reserves the right to reject this Bid.
7. If written notice of the acceptance of this Bid, hereinafter referred to as Notice of Award, is mailed or delivered to the undersigned Bidder within the time described in Paragraph 2 of this Document 00 4113 or at any other time thereafter before it is withdrawn, the undersigned Bidder will execute and deliver the documents required by Document 00 2113 (Instructions to Bidders) within the times specified therein.
8. Notice of Award or request for additional information may be addressed to the undersigned Bidder at the address set forth below.
9. The undersigned Bidder herewith encloses cash, a cashier's check, or certified check of or on a responsible bank in the United States, or a corporate surety bond furnished by a surety authorized to do a surety business in the State of California, in form specified in Document 00 2113 (Instructions to Bidders), in the amount of ten percent (10%) of the Total Bid Price and made payable to **THE PERALTA COMMUNITY COLLEGE DISTRICT**.
10. The undersigned Bidder agrees to commence Work under the Contract Documents on the date established in Document 00 7200 (General Conditions) and to complete all Work within the time specified in Document 00 5200 (Agreement).
11. The undersigned Bidder agrees that, in accordance with Document 00 7200 (General Conditions), liquidated damages for failure to complete all Work in the Contract within the time specified in Document 00 5200 (Agreement) shall be as set forth in Document 00 5200.
12. The names of all persons interested in the foregoing Bid as principals are:

**IMPORTANT NOTICE:** If Bidder or other interested person is a corporation, give the legal name of corporation, state where incorporated, and names of president and secretary thereof; if a partnership, give name of the firm and names of all individual co-partners composing the firm; if Bidder or other interested person is an individual, give first and last names in full.

**NAME OF BIDDER:** \_\_\_\_\_

Licensed in accordance with an act for the registration of Contractors, and with license number: \_\_\_\_\_ Expiration: \_\_\_\_\_.

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(Place of Incorporation, if Applicable) \_\_\_\_\_ (Principal)

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\_\_\_\_\_ (Principal)

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\_\_\_\_\_ (Principal)

I certify (or declare) under penalty of perjury under the laws of the State of California that the foregoing is true and correct.

\_\_\_\_\_  
(Signature of Bidder)

**NOTE:** If Bidder is a corporation, set forth the legal name of the corporation together with the signature of the officer or officers authorized to sign contracts on behalf of the corporation. If Bidder is a partnership, set forth the name of the firm together with the signature of the partner or partners authorized to sign contracts on behalf of the partnership.

Business Address:

\_\_\_\_\_  
\_\_\_\_\_  
\_\_\_\_\_

Contractor's Representative(s):

\_\_\_\_\_  
(Name/Title)  
\_\_\_\_\_  
(Name/Title)  
\_\_\_\_\_  
(Name/Title)

Officers Authorized to Sign Contracts

\_\_\_\_\_  
(Name/Title)  
\_\_\_\_\_  
(Name/Title)  
\_\_\_\_\_  
(Name/Title)

Telephone Number(s):

\_\_\_\_\_  
(Area Code) (Number)  
\_\_\_\_\_  
(Area Code) (Number)

Fax Number(s):

\_\_\_\_\_  
(Area Code) (Number)  
\_\_\_\_\_  
(Area Code) (Number)

Date of Bid:

\_\_\_\_\_

**END OF DOCUMENT**

## LANEY COLLEGE POOL HEATERS UPGRADE

### SECTION 01 1000 SCOPE OF WORK

#### PART 1 – GENERAL

##### 1.01 Summary

- A. Section includes SCOPE OF WORK including
  1. Outline of Scope of Work
  2. Broad Description of Scope of Work
  3. Itemization of Prep Work
  4. Itemization of Concrete Pad Installation
  5. Itemization of Electrical Equipment
  6. Itemization of Pool Heating System
  7. Itemization of Plumbing
  8. Itemization of CO<sub>2</sub> Bulk Tank
  9. List of Equipment and Accessories

##### 1.02 BROAD DESCRIPTION OF SCOPE OF WORK

- A. Work comprises the construction of **Owner's Laney College Pool Heaters Upgrade**, located at 900 Fallon St., Oakland, California 94607. The Pool Heaters Upgrade is per the scope of work, equipment, accessories specifications, and plans provided by Maktinta Energy.
  1. The work of this contract is comprised of the following: 1) the replacement of pool boilers with condensing heaters along with related pumps and piping; 2) the replacement of 2 pool VFDs; 3) the installation of 2 electronic (non-paddle wheel) blind flow meters to be connected to the Tek controllers; 4) the installation of analog flow meters; 5) the installation of a 3-way diverter valve; 6) the demolition and removal of the existing boilers and heating system from the pool area; 7) the installation of a concrete pad; 8) the installation of a CO<sub>2</sub> bulk tank and servo valves.
- B. Contractor shall commission system to maximize energy savings while insuring proper heater operation and serviceability.
- C. Note: This is a design/build, prevailing wage job. The successful bidder is further required to commission the system for reliable, energy efficient operation.
- D. Contractor shall install all equipment in a workmanlike manner in compliance with State and Local codes including but not limited to California Building Code, California Fire Code, California Mechanical Code, California Plumbing Code, and NFPA as well as meet the approval of Alameda County Health Department. Comply with all ADA requirements.
- E. The contractor shall provide a five (5) year warranty on the VFDs and a minimum two (2) year warranty on all other labor and materials.
- F. The Contractor, at no additional expense to the owner, shall replace or correct any work not judged acceptable by the Owner's testing agency, their consultants, County Health department, Utility or CSI inspectors.
- G. No installation shall be made that will provide a cross-connection or interconnection between a distributing supply for drinking water purposes and the swimming pool, or between the pool and either a sanitary or storm water sewer system that will permit a backflow of water or other fluids between systems.
- H. Contractor is responsible for the costs incurred in the demolition and disposal of unsalvageable equipment and materials. Contractor is also responsible for the costs incurred in relocating salvageable equipment away from the pool area.

### 1.03 ITEMIZATION OF PREP WORK

#### A. Prior to starting work at the site:

**ITEM 1** - Create equipment lists based on the construction documents provided by Maktinta Energy and submit for procurement approval.

**ITEM 2** - Develop the following specifications and submit to the district for approval (to be forwarded by district to the utility for rebate(s) approval and validated prior to start of construction).

- a. Proposed control strategy
- b. Proposed operation schedule: Determine, program, and document pool pump operating schedules in collaboration with school aquatics personal. Create at least 4 seasonal conditions including summer, competitive water sports with and without PE, and winter hiatus.
- c. Proposed associated energy savings calculations

#### B. Demolition and Removal of Existing Equipment

**ITEM1** – Remove and relocate existing boilers and associated items pegged for replacement to an onsite or offsite location to be specified by the Owner. Boilers and other salvageable equipment shall be returned the Owner.

**ITEM 2** – Remove and relocate existing exhaust pipes to an onsite or offsite location to be specified by the Owner.

**ITEM 3** – Dispose of all demolished and unsalvageable materials and equipment.

### 1.04 ITEMIZATION OF CONCRETE PAD INSTALLATION

Description of Items in Concrete Pad:

**Item 1** – Furnish and Install 4'x10' form.

**Item 2** – Clear area of any debris.

**Item 3** – Spread 1" of Class II aggregate base or sand in 4'x10' form.

**Item 4** – Install #4 rebar at 16" on centers over the Class II aggregate base.

**Item 5** – Install dowels into existing concrete, firmly securing the rebar.

**Item 6** – Pour and evenly distribute concrete into 4'x10' form.

**Item 7** – Broom Finish.

### 1.05 ITEMIZATION OF ELECTRICAL EQUIPMENT

#### A. Upon Rebate Approvals by utility company,

**ITEM 1** - Remove both pool pump VFDs.

**ITEM 2** - Procure and install **(2) VFDs** (*Pentair (Dan Foss) Acu Drive or equivalent to connect to existing (abandoned) fused disconnects*) – 1 for each pool, equipped with fused bypass/disconnects to facilitate serviceability and safe operation. Connect VFD's to Tek Controller. VFD's shall have a 5 year warranty and startup shall be provided by the contractor.

**ITEM 3** – If abandoned fuse disconnects meet current code, do one of the following:

- a. Reinsert abandoned fuse disconnects into circuits
- b. Replace abandoned fuse disconnects with **new fused bypass/disconnects**.
- c. Relocate Conductor splices into electrical gutter above.
- d. Identify and provide labels for all circuit conductors in gutter.
- e. Remove abandoned conduits and provide knockout seals.
- f. Provide new cable supports along the concrete wall.

**ITEM 4** - Procure and install **electronic (non-paddle wheel) flow meters** for both condensing heating systems (sending unit goes to Tek Controller monitoring system).

**ITEM 5** - Procure and install **all associated electrical and mechanical equipment** required by local and state codes and regulations, including high and low voltage wiring.

#### **1.06 ITEMIZATION OF POOL HEATING SYSTEM**

A. Description of Heating Systems Installation

**ITEM 1** – Replace existing boilers with **new condensing heating systems** for the dive pool (3 X 399,000BTU Pentair ETI 400) and lap pool (2 X 399,000BTU Pentair ETI 400), designed to operate in the high TDS (total dissolved solids) pool water chemistry typical of pool with a salt based chlorine generation system.

**ITEM 2** – Furnish and install analog flow meters for each condensing heater.

**ITEM 3** – Furnish and install a 3-way diverter valve for the lap pool condensing heaters.

**ITEM 4** - Provide and seismically brace heater exhaust venting to route combustion gases away from pool area and surrounding buildings. Vent termination shall be at least 7' above grade adjacent to public walkways. Exhaust piping to comply with manufacturer's install guidelines. Vent pipe construction will be of UL 1738 approved non-corrosive material, such as non-metallic PVC schedule 40 per ASTM D2665, CPVC schedule F441 or stainless steel such as AL 29-4C per UL 1738.

**ITEM 3** - Provide and install acid neutralization units for all heaters and plumb to drain in compliance with manufacturer's recommendations.

**ITEM 4** - Furnish and install 2 heater loop pumps (one for each pool).

**ITEM 5** - Commission system to maximize energy savings while insuring proper heater operation.

#### **1.07 ITEMIZATION OF PLUMBING**

A. Description of Plumbing Upgrades

**ITEM 1** – Replace circulation PVC piping as necessary to implement the design including proper size piping for heater sub-loops. All rigid PVC piping shall be NSF approved schedule 80 PVC. Any connections between metallic piping and/or equipment and CPVC shall be flanged.

**ITEM 2** – Procure (when necessary) and install all associated balancing valves, servo valves, check valves, service valves, pumps (if required), flow meters, temperature sensors and other plumbing components necessary and associated with the system.

**ITEM 3** – Procure and install all other tubing, conduit, or piping associated with the install of equipment specified.

#### **1.08 ITEMIZATION OF CO<sub>2</sub> BULK TANK**

Description of CO<sub>2</sub> Bulk Tank Replacement

**ITEM 1** – Remove existing CO<sub>2</sub> cylinders.

**ITEM 2** – Furnish and install new CO<sub>2</sub> Bulk Tank.

**ITEM 3** – Remove existing servo valves that control the CO<sub>2</sub>.

**ITEM 4** - Furnish and install 2 new servo valves.

#### **1.09 LIST OF EQUIPMENT & ACCESSORIES**

A. Description of 399,000 BTU Pentair ETI 400 Condensing Heaters. See drawings provided by Maktinta.

B. Description of Condensate Neutralizer Kit. See drawings provided by Maktinta.

C. Description of VFDs and associated fused bypass/disconnects. See drawings provided by Maktinta.

- D. Description of Blind Flow Meters and associated displays. See drawings provided by Maktinta.
- E. Description of Analog Flow Meters. See drawings provided by Maktinta.
- F. Description of 3-way Diverter Valve. See drawings provided by Maktinta.
- G. Description of other Electrical and Mechanical Equipment associated with system. See scope and drawings provided by Maktinta.
- H. Description of Exhaust Piping. See scope and drawings provided by Maktinta.
- I. Description of Heater Loop Pumps. See drawings provided by Maktinta.
- J. Description of Tubing, Conduit, and Wire. See drawings provided by Maktinta.
- K. Description of Concrete, Rebar, Dowels.
- L. Description of CO<sub>2</sub> Bulk Tanks.
- M. Description of Servo Valves.

# LANEY COLLEGE POOL HEATERS UPGRADE

## SECTION 01 1100 SUMMARY OF WORK

### PART 1 – GENERAL

#### 1.01 SUMMARY

- A. Section includes Summary of Work and Work Restrictions including:
  - 1. List of Sections
  - 2. Work Covered by Contract Documents
  - 3. Bid Item, Allowances, and Alternates
  - 4. Work Days and Hours
  - 5. Contractor Use of Site

#### 1.02 WORK COVERED BY CONTRACT DOCUMENTS

- A. Work comprises of the construction of **Owner's Peralta Laney College Pool Heaters Upgrade**, located at, **900 Fallon Street, Oakland CA 94607**. Pool Heaters Upgrade of Laney College are per the scope of work attached and equipment and accessories specifications by manufacturers and plans provided by Maktinta Energy.
- B. The Work of this Contract comprises construction of all the Work indicated, described in the Specifications, or otherwise required by the Contract Documents. Unless provided otherwise in the Contract Documents, all risk of loss to Work covered by Contract Documents shall rest with Contractor until Final Acceptance of the Work. Cost of maintenance of systems and equipment prior to Final Acceptance will be considered as included in prices Bid and no direct or additional payment will be made therefore.
- C. For all Bid items, furnish and install all Work, including connections to existing systems, indicated and described in Specifications and all other Contract Documents. Work and requirements applicable to each individual Bid item, or unit of Work, shall be deemed incorporated into the description of each Bid item (whether Lump Sum or Unit Price). Any Bid item may be deleted from the Work and Contract Sum, in total or in part, prior to or after award of Contract without compensation in any form or adjustment of other Bid items or prices therefore.
- D. Allowance Work shall be done as Change Orders and as specified in Section 01 2600 (Modification Procedures). Identify Allowance Items (See Document 00 4000 [Bid Form]) work on the Progress Schedules and on Applications for Payment. The Amount given on Document 00 4000 (Bid Form) under each Allowance Item is the sum of money set aside for each Allowance Item. These amounts shall be included in the Contract Sum on the Bid Form. If the cost of Work done under any Allowance Item is less than the amount given on the Bid Form under that Allowance Item, the Contract Sum shall be reduced by the difference between the amount given in the Bid Form and the cost of Work actually done.

#### 1.03 BID ITEMS, ALLOWANCES AND ALTERNATES

- A. Descriptions of Items on Bid Form 00 4113 (listed by Bid item numbers):
  - Bid Item 1** – 399,000 BTU Pentair ETI 400 Condensing Heaters: by unit price.
  - Bid Item 2** – Pentair Acu Drive VFDs, 7.5 HP 3-PH 480 VAC: by unit price.
  - Bid Item 3** – Flow Meter: GF 2551 Blind Mag Meter, 4": by unit price.
  - Bid Item 4** – Flow Meter: GF 2551 Blind Mag Meter, 3": by unit price.

- Bid Item 5** – Flowviz Analog Flow Meter, 2": by unit price.
- Bid Item 6** – Pentair Heater Loop Pump: by unit price.
- Bid Item 7** – Condensate Neutralizer Kit: by unit price.
- Bid Item 8** – Concrete, Rebar, and Dowels.
- Bid Item 9** - CO2 Bulk Tank: by unit price.
- Bid Item 10** – Servo Valves: by unit price.
- Bid Item 11** – PVC Sched 80 Piping: by size in inches and length in feet.
- Bid Item 12** – Pentair 3-way Diverter Valve: by unit price.
- Bid Item 13** – Cable Supports (along concrete wall).
- Bid Item 14** – Conduit & Wiring: by gauge and length.
- Bid Item 15** – Demolition.
- Bid Item 16** – Design-build Exhaust System
- Bid Item 17** – Post Installation Services/Commissioning.
- Bid Item 18** – Miscellaneous.
- Bid Item 19** – Materials: The Materials portion for all the work described in Section 1.02, A. above, the drawings provided and all other contract documents.
- Bid Item 20** – Labor: The Labor portion for all the work described in Section 1.02, above, the drawings provided and all other contract documents.

- B. Bid Alternates (listed by Bid item numbers):  
(Not Used)
- C. Bid Allowances (listed by Bid item numbers):  
(Not Used)

#### **1.04 WORK DAYS AND HOURS**

- A. Work Days and hours: See paragraph B and C.
- B. Work at the Site on weekends, holidays, or other than normal business hours are permitted with approval by Owner.
- C. Any activity, especially demolition that produces loud disruptive noise shall not be performed between the hours of 8am and 8pm on Monday-Friday. Contractor shall consult with Campus and District staff prior to commencement of potential disruptive noise activities. All other work can be performed during normal working hours. Daytime Saturday and Sunday work is acceptable with permission by the District. Early morning demolition work and cleanup must be completed prior to 8 am.

#### **1.05 CONTRACTOR USE OF SITE**

- A. Confine operations at Site to areas permitted by Contract Documents, permits, ordinances, and laws. Do not unreasonably encumber Site with materials or equipment.
- B. Assume full responsibility for protection and safekeeping of products stored on premises. Move any stored products that interfere with operations of Owner or other contractor.
- C. Coordinate parking, storage, staging, and Work areas with Owner. Owner will provide a storage area for Contractor's equipment and materials. Do not store construction materials in the dripline of any tree.
- D. Prior to commencement of Work or excavation, Contractor and Owner shall jointly survey the area adjacent to the Project area making permanent note and record of such existing damage such as cracks, sags or other similar damage. This record shall serve as a basis for determination of subsequent damage to structures, conditions or other existing improvements due to Contractor's operations. All parties making the survey shall sign the official record of existing damage. Cracks, sags or damage of any nature

to the adjacent Project area, not noted in the original survey but subsequently noted, shall be reported immediately to Owner.

- E. The Contractor shall follow all city ordinances in force during the duration of this Contract.
- F. It is essential that the Contractor perform the Work with as little interference and disturbance as possible to the surrounding neighborhood.
- G. When suspect materials, outside the scope of Work, are encountered during the Work or restoration process, the Contractor shall immediately contact the Project Manager for evaluation and approval of the methods for dealing with the material.

**PART 2 – PRODUCTS- NOT USED**

**PART 3 – EXECUTION – NOT USED**

**END OF SECTION**