

RESOLUTION NO. 22-236

A RESOLUTION AUTHORIZING THE CITY OF PORT ARTHUR SECTION 4A ECONOMIC DEVELOPMENT CORPORATION TO EXECUTE AN AGREEMENT WITH INDUSTRIAL COMMERCIAL MECHANICAL OF BEAUMONT, TEXAS FOR THE AIR BALANCING AND HVAC SYSTEM REPAIRS AT 501 PROCTER STREET IN AN AMOUNT NOT TO EXCEED \$18,488.00 FUNDS AVAILABLE IN EDC ACCOUNT NUMBER 120-80-625-5312-00-00-000.

WHEREAS, the office building at 501 Procter Street is in need of air balancing and HVAC system repairs; and

WHEREAS, Chapter 271 of the Texas Local Government Code allows a city, by resolution of its governing body, to participate in cooperative purchasing programs, such as BuyBoard Cooperative Purchasing Program ("BuyBoard") as an alternative to formal bid process; and

WHEREAS, per Resolution No. 02-341, the City entered into an Interlocal Agreement for cooperative purchasing with the BuyBoard Cooperative Purchasing Program; and

WHEREAS, Industrial Commercial Mechanical of Beaumont, Texas (ICM) has provided a quote to complete the HVAC repairs and air balancing through the BuyBoard Contract No. 638-21 attached hereto as "Exhibit A", in the amount of \$18,488.00; and

WHEREAS, the City of Port Arthur Section 4A Economic Development Corporation Board of Directors approved the quote submitted by ICM in an amount not to exceed \$18,488.00 at its regular board meeting of May 2, 2022.

NOW, THEREFORE, BE IT RESOLVED BY THE CITY COUNCIL OF THE CITY OF PORT ARTHUR:

Section 1. That the facts and opinions in the preamble are true and correct.

Section 2. That the City Council hereby authorizes the PAEDC to execute a proposal from Industrial Commercial Mechanical for the air balancing and HVAC repairs at 501 Procter Street in an amount not to exceed \$18,488.00.

Section 3. That a copy of the caption of this Resolution be spread upon the Minutes of the City Council.

READ, ADOPTED AND APPROVED on this 24th day of May A.D., 2022, at a Meeting of the City Council of the City of Port Arthur, Texas, by the following vote:

AYES:

Mayor Bartie; Mayor Pro Tem Holmes;
Councilmembers Kinleu, Marks, Moser
and Frank.

NOES: None.


Thurman Bartie, Mayor

ATTEST:


Sherri Bellard, City Secretary

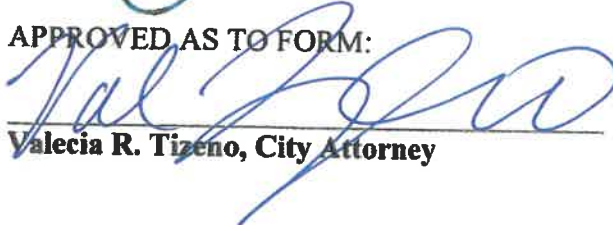
APPROVED:


Jerry LaBove, President of the PAEDC Board of Directors

APPROVED AS TO FORM:


Frank Garza, PAEDC Attorney

APPROVED AS TO FORM:


Valecia R. Tizeno, City Attorney

APPROVED AS TO AVAILABILITY OF FUNDS:


Kandy Daniel, Interim Finance Director

EXHIBIT "A"



**Industrial and Commercial
Mechanical**

TACLA23943C
4445 Westpark Avenue
Beaumont, TX 77705
Phone (409) 842-3737
Fax (409) 842-3738

May 9, 2022

Port Arthur EDC
501 Procter St. Ste. 100
Port Arthur, TX 77640

Attention: Jessica Carpenter
Reference: HVAC Equipment Survey/Repairs
Quote: 002-JA22

Dear Jessica,
Industrial & Commercial Mechanical LLC performed a complete building HVAC survey. After surveying the building, equipment and blueprints of engineer's design below are ICM's findings and recommendations to better control Temperature/Humidity throughout the building. A list of necessary repairs is included below to bring the current equipment operating at 100% capacity.

Description of equipment failures and building automation control issues:

1. First impression and foremost, the rooftop unit is extremely unsafe to perform service work. The unit sits at an elevated level above roof level that puts the unit controller about 8' feet off the ground. The steel structure under unit eliminates a ladder to be firmly secured down to safely perform electrical work. This causes the service technician having to stand on two cross bars to see the controller, which is very unsafe, due to the exposed 3phase 460v in panel. This has also created a problem in the past securing door latches to eliminate water from entering unit electrical panels. The upper door latches were found unlatched causing water to enter and electrical to get wet plus has destroyed all unit literature for troubleshooting equipment.
2. The Daikin roof top unit (Main unit that servers entire building) has an Alarm log history of past 50 alarms. The controller is only capable of storing the most recent 50 alarms. The 50 alarms are mostly identical to each other (High-Pressure alarm Circuit 1, and High-Pressure alarm Circuit 2). The keep repeating for a total of 25ea. to create log history of 50 most recent alarms. The unit will completely shut down when the following occurs. Circuit 1 High-Pressure alarm (Circuit 1 shuts down) and Circuit 2 High-Pressure alarm (Circuit 2 shuts down), now the entire unit is down, because these alarms are manually reset. Mathematically, it takes (2) alarms to generate (1) service call (50 alarms divided by 2 = 25 service calls). In summary there were a total of 25 High-Pressure alarms (1) for each circuit totaling 50 alarms and unit completely down 25times. High Pressure alarms are normally caused by Condenser Fan Motors not running and/or dirty condenser coils not allowing the high pressure freon to be cooled. It does not seem the issue has been resolved to prevent these alarms, and unit is just being reset to get back up and running until both circuits shut down again. After further investigation of Main Rooftop unit, see below further repairs that are deemed necessary to get the unit operating at 25% capacity to 100%.
 - Bad Main board with no 24 DC volt output for monitoring duct pressure to control blower speed.
 - Fan motor CFM21 and contactor M21 bad and needing replaced.
 - Fan contactor for CFM22 chattering due to faulty fan pressure cycling switch.
 - Main board D08 fan control circuit 2 faulty, will not send 120v output signal.
 - Duct pressure setpoint at 0.10 with no tube connected at duct sensor and supply air duct.
 - Faulty Fan cycling control switch circuit #1.
 - Faulty Fan cycling control switch circuit #2.
 - Bad high pressure switch circuit #1
 - Improper equipment configuration for the building application.

- Circuit #1 was found with a cracked refrigerant discharge line while onsite and no freon in circuit. ICM repaired leak and added a temporary positive pressure charge to eliminate any moisture from entering system.
 - Main power provided by Entergy will vary causing improper voltage to unit causing it to shut down. This has been an ongoing issue with the Port Arthur City Hall, Port Arthur Health Department, and Lamar Port Arthur College. This is not a unit failure but will have to be manually reset in the event of improper incoming voltage.
3. The Delta computerized building control called "Flash", is dependent of the Microsoft software and is older than Microsoft causing the end user unable to see graphics (Temperature Settings, Equipment Alarms, etc.). The Delta Controller is connected to the Ethernet Server of the building and has (2) current alarms on the A/C System, and no one is aware of unit failures plus failure notifications are not being sent out to an email address, stating the unit is in failure mode. The Delta computerized system is currently working but tells the end user nothing about the system until the space temperature is obviously out of range and a service call is generated. The Delta computerized controller states (5) Variable Air Volume units (VAV Boxes) have either low or no air flow. The VAV Boxes and/or troubled areas cannot be determined because the controller has no graphics giving detailed information as to where the units with issues are located throughout the building.
 4. Equipment scheduling is not adequate per building accommodations. According to the building employees the control company (Team Solution) that has been hired to make repairs, set schedules, etc. to the Delta computerized system has a schedule set for occupied mode and unoccupied mode to save money. Example: Normal working hours OCCUPIED MODE temperature setpoint 70° and non-working hours UNOCCUPIED MODE temperature setpoint 78°. ICM noticed Equipment alarms that were generated at 11pm on 3-23-22 and past alarms at 2am through early morning hours over the past 2 months. ICM spoke with Team Solution (Robert Nowlin) regarding scheduling modes. It was found that the building is scheduled to run 24/7 Monday through Friday, but the system has been forced to manual mode occupied meaning that the unit is configured to run 24/7 year-round.
 5. While performing survey ICM noticed the building needs air balancing, which has been previously quoted by Coastal Air Balance. ICM will be able to perform a complete building air balance setting parameters to the engineered mechanical specifications.

Description of procedures and miscellaneous items to be repaired/replaced:

- Replace main Daikin rooftop controller, reconfigure to match building applications. Lead time from factory 3weeks.
- Rewire condenser fan logics until the new main controller arrives to have full A/C capacity.
- Install circuit 1 & 2 high pressure switches with associated manual reset option.
- Install circuit 1 & 2 fan cycling switches to a heavy-duty style to handle higher amperage.
- Pressure check circuit 1 after leak was repaired and charge unit to factory specs.
- Install tubing to connect between supply duct and duct sensor. This will allow the controller to monitor the building demand and adjust blower speed accordingly.
- Install an external 24vdc power supply for the controller to read duct pressure.
- Perform Air Balance throughout the entire building.
- Verify proper operation of HVAC Equipment once all items have been updated and notify customer of any findings outside of the above work to be performed.

The proposed price for providing the above scope is:

Price: \$9,988.00 (Nine Thousand Nine Hundred Eighty-Eight dollars)

Air Balance Pricing to be added to above pricing: \$8,500.00 (Eight Thousand Five Hundred dollars)

Total Pricing for above items priced per the awarded Buyboard Contract Rates: \$18,488.00 (Eighteen Thousand Four Hundred Eighty-Eight dollars)

**INDUSTRIAL & COMMERCIAL MECHANICAL IS AN AWARDED VENDOR
FOR BUYBOARD CONTRACT # 638-21.**

Items not included in Proposed Work:

Installation of expanded metal across unit foundation support to perform safe work.

Any changes or modifications not included as part of proposal, or the proposed scope of work.

Any applicable taxes are excluded and will be billed extra. Prices are firm for thirty (30) days. Work to be performed on straight time basis and will begin upon receipt of a signed Repair Service Agreement or mutually agreed Purchase Order referencing the subject proposal.

Thank you for your request for this proposal. We would appreciate the opportunity to provide these services and as always, we certainly appreciate your valuable business.

Respectfully,

Justin Aycok

Vice President

Office: 409-842-3737

jaycock@ic-mechanical.com

Industrial & Commercial Mechanical

Accepted By: _____ Date: _____