

May 21, 2020 TCS 20-459

Mr. Greg Odom City of Seguin 600 River Rd. Seguin, TX 78155

Greg,

Here is the proposal to install one (1) CGAM040F2-40 Ton Air-Cooled Chiller (CGAM) air cooled chiller with pump package

TCS will:

- ✓ Supply and install:
 - o One (1) CGAM040F2 40 ton air cooled chiller (see below documents)
 - 40 Ton Air-Cooled Scroll Packaged Chiller
 - o Factory startup Included with report
 - Full factory refrigerant charge (HFC-410A)
 - With factory installed freeze protection
 - Refrigerant isolation valves (discharge valve)
 - UL listed to US and Canadian safety standard
 - Factory installed IFM flow switch
 - o Grooved pipe connection
 - Factory insulation 0.75"
 - Wide ambient (0F to 125F)
 - o Copper tube / aluminum fin condenser coil
 - o Across the line starter/direct on line
 - Single point connection main line unit power-ancillary items require other power
 - Circuit breaker
 - Dual refrigerant circuit with 4 scroll compressors
 - o Factory mounted louvered hail guards
 - LON interface card
 - With water strainer factory installed
 - 5 year parts, labor and refrigerant warranty for chiller and pump package

Pump package with the following

- Dual high head pump
- VFD for balancing
- Isolation valves
- Y strainer
- Insulation
- Heat tape
- Auto lead lag control and failure recovery
- Expansion



Chiller Install

- ✓ Supply a crane to set new chiller on pad in chiller yard
- ✓ Install Isolation valves for new chiller
- ✓ Will install new temporary connections
- ✓ Supply and install new steel pipe, fittings and valves main chill water loop
- ✓ Provide new 3" Belimo valve to current piping system
- ✓ Run new steel piping along south wall of coliseum. Leaving access door area clear for entry
- ✓ Will provide appropriate stands per specs
- ✓ Connect new steel piping to new Trane chiller
- ✓ Supply and install insulation and aluminum jacketing on all new chill water piping
- ✓ Install new flow sensor switch before new valve for controls per Schneider for old chiller
- ✓ Remove lockout / tagout and establish power and water
- ✓ Start new chiller up and log performance

Electrical

- ✓ Provide new 120V, 20A circuit for heat trace and control valve MV-1
- ✓ Run new conduit and wire from nearest 120 panel with spare circuit.
- ✓ Provide new power circuit (Sq. "D" 200amp switch) for new chiller from existing 1200A panel board in mechanical room.
- ✓ Will terminate at a predetermined location.
- ✓ Will run new conduit for control wiring for controls contractor
- ✓ All wiring, conduit and breakers will be code compliant
- ✓ Will connect electrical service to chiller
- ✓ Remove lockout / tagout

Replace current Control System

Details of Proposed Work

- Remove existing controllers and sensors from eight (8) AHUs, Boiler and Chiller Plant
- Provide, commission, and install one (1) Honeywell N4 WEB-8000 JACE.
 Honeywell N4 WEB-8000 JACE includes:
 - Memory for up to 25 devices and 1,500 points
 - Future upgradable memory of up to 200 devices and 10,000 points to add additional devices and/or points (additional purchase required)
 - o Software upgrade maintenance for one (1) year after installation
 - HTML 5 internet language
 - BACnet/MSTP and BACnet/IP driver
 - Lon driver
 - o Modbus driver
 - Embedded WEBPro Workbench



- Ability to communicate with other BAS systems (additional drivers not included)
- Scheduling of equipment
- Critical alarm notification via email and/or text (internet access required)
- Trending capabilities
- User security measurements
- Remote access via internet using any internet browser, smart phone or tablet with internet connection capabilities (external IP address required)
- Provide, install and program eight (8) Honeywell Spyder BACnet controllers for eight (8) Air Handlers
- Provide and install sixteen (16) 20K duct temperature sensors for supply and return air temperatures on each AHU
- Provide, install and program one (1) Honeywell Spyder BACnet controller to control the operation of the Boiler Plant boiler and pumps
- Provide, install and program one (1) Honeywell Spyder BACnet controller to control the operation of the Chiller Plant chillers and pumps
- Provide and install six (6) 20K immersion temperature sensors for supply and return water temperatures of two (2) chillers and one (1) boiler
- Provide and install BACnet communication cabling between all BACnet devices
- Integrate all BACnet devices and I/O points into Honeywell N4 WEB-8000 JACE
- Develop graphical representation of HVAC equipment and floorplan(s)
- Configure critical alarms and trends (determined by customer)
- Setup critical alarms to notify customer specified facility personnel
- Configure Honeywell N4 WEB-8000 JACE for local and/or remote access
- Verify operation of HVAC equipment based on industry standard sequence of operation for each specific piece of equipment
- Provide onsite customer training at completion of the project. Customer training includes:
 - Schedule modification/creation
 - Trend log viewing
 - Setpoint adjustments and timed overrides
 - Alarm viewing and acknowledgement
- Clean project area of trash and debris created by Texas Chiller Systems

Clarifications

- 1. Any service not listed is not included
- 2. Only Building Automation System components specified in the Proposed Work will be installed/replaced
- 3. Only temperature sensors will be replaced. All other sensors (i.e. duct static,



TEXAS CHILLER SYSTEMS

- pressure, etc.) will be re-utilized
- 4. Internet service is required for remote access and alarm email notifications
- 5. Dedicated Ethernet network data drop(s) to the system controllers for remote communications and local networking is to be provided by others
- 6. Proposal excludes operation and/or control of any life safety equipment
- 7. Electrical connections/installation is not included
- 8. If required, repair to ductwork, electrical heaters or fan is not included
- 9. Does not include Test & Balance of VAV/FPBs or HVAC equipment
- 10. Work will be performed during normal Texas Chiller Systems business hours
- 11. This proposal is valid for 60 days from the date on the proposal

The price for this scope is **\$121,300.00** not including taxes.

Please Note:

- If you have any questions, please give me a call.
- All work to be performed during normal work hours
- Controls will be programmed by Schneider Electric
- All salvaged items become the property of TCS
- Lead time on Trane chiller is 15 weeks as of today
- Includes City permit
- All work to be performed to National and local Code
- Exclude: sales tax, new controls,

Sincerely,

Mark McMurray
Sales Representative
Mechanical & Automation Service

TXMAS #: TXMAS -18-03FAC04 GSA Schedule #: GS-21F-086AA





TERMS AND CONDITIONS

By accepting this proposal, Purchaser agrees to be bound by the following terms and conditions:

SCOPE OF WORK. This proposal is based upon the use of straight time labor only. Plastering, patching and painting are excluded. "In-line" duct and piping devices, including, but not limited to, valves, dampers, humidifiers, wells, taps, flow meters, orifices, etc., if required, hereunder to be furnished by Texas Chiller Systems, shall be distributed and installed by others under Texas Chiller System's supervision but at no additional cost to Texas Chiller Systems. Purchaser agrees to provide Texas Chiller Systems with required field utilities (electricity, toilets, drinking water, project hoist, elevator service, etc.) without charge. Texas Chiller Systems agrees to keep the site clean of debris arising out of its own operation. Purchaser shall not back charge Texas Chiller Systems for any costs or expenses without Texas Chiller Systems written consent.

Unless specifically noted in the statement of the scope of work or service undertaken by Texas Chiller Systems under this agreement, Texas Chiller System's obligations under this agreement expressly exclude any work or service of any nature associated or connected with the identification, abatement, clean-up, control, removal, or disposal of environment hazards or dangerous substances, to include but not limited to asbestos or PCB's, discovered in or on the premises. Any language or provision of the agreement elsewhere contained which may authorize or empower the Purchaser to change, modify, or alter the scope of work or services to be performed by Texas Chiller Systems shall not operate to compel Texas Chiller Systems to perform any work relating to Hazards without Texas Chiller Systems express written consent.

PAYMENT TERMS. Texas Chiller Systems will invoice 30% upon contract execution, 30% upon equipment arrival, 30% upon start of project and 10% upon completion and acceptance of project. Payment of invoices are due in Texas Chiller System's office within fifteen (15) days of issuance of such invoice. Invoices not timely paid within these terms stated shall be considered past due, and are then subject to interest accruing at the rate of 1.5% per month.

MATERIALS. If the materials or equipment included in this proposal become temporarily or permanently unavailable for reasons beyond the control and without the fault of Texas Chiller Systems, then in the case of such a temporary unavailability, the time for performance of the work shall be extended to the extent thereof, and in the case of permanent unavailability, Texas Chiller Systems shall (a) be excused form furnishing said materials or equipment and (b) be reimbursed for the difference between the cist of the materials or equipment permanently unavailable and the cost of a reasonably available substitute therefore.

Texas Chiller Systems, LLC. PO Box 792248 San Antonio, Texas 78279-2248 Phone: 210- 650-9972 Fax: 210-650-9973



WARRANTY. Texas Chiller Systems warrants that the equipment manufactured shall be free from defects in material and workmanship arising from normal usage for a period of one (1) year from delivery of said equipment, or if installed by Texas Chiller Systems, for a period of one (1) year from installation. This warranty does not extend to any equipment which has been repaired by others, abused, altered or misused, or which has not been properly or reasonably maintained. Any repair work will have a thirty (30) day warranty, materials associated with these repairs will carry the manufacturers warranty only. THESE WARRANTIES ARE IN LIEU OF ALL OTHER WARRANTIES, EXPRESS OR IMPLIED, INCLUDING BUT NOT LIMITED TO, THOSE OF MERCHANTABILITY AND FITNESS FOR A SPECIFIC PURPOSE. If customer fails to pay all invoices in full, it is agreed that there shall be no warranty provided.

LIABILITY. Texas Chiller Systems shall not be liable for any special, indirect or consequential damages arising in any manner from the equipment or material furnished or the work performed pursuant to this agreement.

TAXES. The price of this proposal does not include duties, sales, use, excise, or other similar taxes, unless required by federal, state, or local law. Purchaser shall pay, in addition to the stated price, all taxes not legally required to be paid by Texas Chiller Systems or, alternatively, shall provide Texas Chiller Systems with acceptable taxes exemption certificates. Texas Chiller Systems shall provide Purchaser with any tax payment certificate upon request and after completion and acceptance of the work.

DELAYS. Texas Chiller Systems shall not be liable for any delay in the performance of the work resulting from or attributed to acts of circumstances beyond Texas Chiller System's control, including, but not limited to, acts of God, fire, riots, labor disputes, conditions of the premises, acts or omissions of the Purchaser,

Owner, or other Contractors or delay caused by suppliers or subcontractors of Texas Chiller Systems, etc.

COMPLIANCE WITH LAWS. Texas Chiller Systems shall comply with all applicable federal, state and local laws and regulations and shall obtain all temporary licenses and permits required for the prosecution of the work. Licenses and permits of a permanent nature shall be procured and paid for by the Purchaser.

VENUE. All invoices are due and payable in Texas Chiller System's office located at 9807 McCullough, San Antonio, Texas 78216. In the event legal action is commenced to enforce payment of obligations, venue for such legal action shall be in Bexar County, Texas, and the undersigned agrees to pay whatever sum the court determines to be reasonable attorney's fees, plus all expenses and costs incurred.

INSURANCE. Insurance coverage in excess of Texas Chiller Systems standard limits will be furnished when requested and required. No credit will be given or premium paid by Texas Chiller Systems for insurance afforded by others.

(Note: This proposal incorporates by reference the Terms and Conditions.)

(Payment Net 15 Days.)

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All material is guaranteed to be as specified. All work to be completed in a workmanlike manner according to standard practices. Any alteration or deviation from above specification involving extra costs will be executed only upon written orders, and will become an extra charge over and above the estimate. All agreements contingent upon strikes, accidents or delays beyond our control. Owner to carry fire, tornado and other necessary insurance. Our workers are fully covered by Workmen's Compensation Insurance.

Note: This proposal may be withdrawn by us if not accepted within thirty (30) days from the date above.

Acceptance of Proposal – The Above prices, specifications and conditions are satisfactory and are hereby accepted. You are authorized to do the work as specified. Payment will be made as outlined above.

Date of Acceptance:	
Name of Company:	_
Purchase Order Number:	
Signature:	
Printed Name:	
Title:	