



Company:	City of Coppell	Job Name:	Daikin VRF Heat Pump System for Fire Station 3 * Revised*
Address:	255 Parkway Blvd Coppell, TX 75019	Address:	Fire Station # 3
Contact:	Christa Christian	Contract:	R150501-TX-15486
Phone No.:	972-462-5152	Date:	11/29/17
Email:	cchristian@coppelltx.gov	Quote No.	112917BCS

We propose pricing for the following scope of work, to include:

Installation of New Daikin VRF Heat Pump HVAC System in Fire Station 3

The HVAC system at Fire Station # 3 is antiquated and in need of replacement. The existing system is residential style units that are not capable of maintaining the low temps in the sleeping quarters and the proper humidity control for the station. TD Industries proposal is to install a **variable volume refrigerant** system that changes with the loads in the build with a variable speed technology. The new "VRF" system will be set up as a heat pump arrangement so the units will be able to heat in the winter months. This will eliminate the need for the existing gas fired units. This system will also incorporate a "dedicated" outside air unit that will "condition" 100% outside air and introduce it into the space as a "neutral" air temperature. This will help with continuous air changes in the building and help eliminate odor. The VRF system will be installed while the existing system operates. Once the new system is on line, the old units will be demo out and the separate outside air unit will be installed and new ductwork run.

Scope of Work

1. Install **15** new cassette and wall mount air handlers in designed areas.
2. **Kitchen upgraded from one 3 ton cassette to two 2 ton cassettes.**
3. Install dedicated air handler to cool existing electrical room.
4. Install condensing units per the drawing and label CU-1 and CU-2. **(20 tons plus 4 tons OA)**
5. Install CU-1 on new concrete pad.
6. Run new refrigerant lines from outside to associated air handlers per Daikin drawing using Daikin refrigerant fittings.
7. Install isolation valves at each air handler.
8. Run condensate lines to appropriate drain.
9. Install wired thermostats to each air handler.
10. Run new electrical service to 15 air handlers and 2 condensing units.
11. Pressure test to refrigerant lines to 550 psig pressure and check for leaks.
12. Evacuate and weigh in additional refrigerant.
13. Perform factory start on new system.
14. Once new system VRF system is on line, recover refrigerant out of the four existing systems and demo.
15. Demo old air handlers in the attic space and ductwork.
16. Existing grills will not be removed. Grills will need to be removed and sheetrock installed by others.
17. Once demo is complete, install new dedicated outside air unit air handler in the ceiling above main sleeping quarters.
18. Run supply ductwork to appropriate areas with new grills.
19. Duct in outside air from the roof level to new outside
20. Install new dedicated condensing unit for outside air, air handler on west end of the building.
21. Run refrigerant lines with isolation valves at the unit

22. Run new electrical to air handler and condensing unit.
23. Run condensate drain to appropriate drain.
24. Leak test refrigerant lines to 550 psig and check for leaks.
25. Evacuate and added additional charge as needed.
26. Perform factory startup on dedicated outside air unit.
27. Cleanup area and remove old equipment from the jobsite.

HVAC Labor 890hrs x \$88.25.....	\$78,542.50
Electrical Labor 135hrs x \$90.35.....	\$12,197.25
Materials.....	\$75,460.25
Total.....	\$166,200.00

Option 1 – Bacnet Gateway for Future Automation Hookup

Add \$8050.00

Note: All work to be performed during normal working hours. There will be interruptions in the sleeping quarters while the air handlers and refrigerant piping are installed. Sheetrock to patch old grill locations not included.

Total Price for Labor and Materials (Excluding Sales Tax)----- <u>See above</u>
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*** Net due upon receipt of invoice. Remit to P.O. Box 300008, Dallas, TX 75303-0008**

Thank you very much for the opportunity to provide pricing for the work listed above. Please contact me at the numbers listed below if you have any questions or need further information.

Respectfully submitted,

Bryan Strode | NTSG

Applied Systems/ Service Support /Chiller Retrofit

O: 972-888-9568 | F: 972-888-3418 | C: 972-322-3304

Accepted by

Date



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Clarifications

- This proposal is based on performing work **during normal working hours** and at normal wage rates paid by TDIndustries, Inc.
- Price is based on the assumption that the structure is of sufficient strength that all piping, duct and equipment can be supported from it.
- Proposal is inclusive of all permits and inspections as required by local and state agencies. Where work is being performed under a General Contractor, we will validate under Contractors Building Code permit.
- All pricing is based on award of contract and work commence not later than **60 days** from the date of this proposal with pricing subject to review after **30 days** from the date of proposal.
- TDIndustries, Inc. assumes no responsibility for existing services / conditions, their quality and/or performance.
- Existing valves must close and hold.
- TDIndustries, Inc. assumes no responsibility for condition of utilities or parking lots/roadways above or below grade.
- TDIndustries disclaims any responsibility for incorrect data contained in the plan, specs and/or engineering data.
- Proposal is based on use of building elevator.



LIMITED WARRANTY

1	EQUIPMENT, GOODS, MATERIAL PURCHASED AND INSTALLED BY TDINDUSTRIES: TDIndustries, Inc. shall use its best efforts to obtain from each manufacturer, in accordance with the manufacturer's warranty (copies of which will be furnished upon request) or customary practice, the repair or replacement of equipment, goods, or material that are defective in material or workmanship. The foregoing shall constitute the exclusive remedy of the customer and sole obligation of TDIndustries, Inc. THERE ARE NO WARRANTIES, EITHER WRITTEN OR ORAL, IMPLIED OR STATUTORY RELATING TO THE EQUIPMENT, GOODS, OR MATERIAL, PROVIDED WHICH EXTEND BEYOND THAT DESCRIBED IN THIS PARAGRAPH. NO IMPLIED STATUTORY WARRANTY OF MERCHANTABILITY OR FITNESS FOR A PARTICULAR PURPOSE SHALL APPLY.
2	Workmanship - Repair Installation - TDIndustries, Inc. warrants its workmanship to be free from defects for a period of 12-months from the date of completion of the above equipment, goods, and material. Sewer and Drain Cleaning - TDIndustries, Inc. warrants its workmanship for sewer and drain cleaning for a period of 24 hours from the date of completion. Any foreign material retrieved from sewer or drain will discharge warranty and incur additional costs for clearing stoppage.
	This proposal is submitted for customer's consideration with the understanding that it must be approved by TDIndustries, Inc. after its acceptance by the customer and is not binding upon TDIndustries, Inc. until so approved in writing.
	Your acceptance of this proposal is expressly limited to the terms of this document. Any additional or different terms or conditions set forth in your purchase order or in any similar such communication are hereby objected to by TDIndustries, Inc. and shall not be binding nor effective unless assented to in writing by an authorized representative of TDIndustries, Inc. Any order or any statement of intent to proceed with installation or any direction to proceed with installation or acceptance of this proposal or payment in full or part for any of the work or equipment furnished shall constitute customer's assent to the terms and conditions of this proposal.
	THIS PROPOSAL IS EXPRESSLY CONDITIONED UPON THE TERMS AND CONDITIONS CONTAINED OR REFERRED TO HEREIN, INCLUDING THOSE CONTAINED IN ANY ATTACHMENT HERETO.

STANDARD TERMS AND CONDITIONS

	THIS PROPOSAL IS EXPRESSLY CONDITIONED UPON THE TERMS AND CONDITIONS CONTAINED OR REFERRED TO HEREIN, INCLUDING THOSE CONTAINED IN ANY ATTACHMENT HERETO.
1	TDIndustries, Inc. liability or any claim for loss or damage arising out of this contract or from the performance or breach thereof or connected with the supplying of any labor, equipment, goods or material hereunder, or their sale, resale, operation or use, whether based on contract, warranty, tort (including negligence) or other grounds, shall not exceed the price allowable to such labor, equipment, goods or material, or part thereof involved in the claim. TDIndustries, Inc. shall not, under any circumstances, be liable for any labor charges without the prior written consent of TDIndustries, Inc. TDIndustries, Inc. shall not, in any event, be liable, whether as a result of breach of contract, warranty, tort (including negligence) or other grounds, for special, consequential, incidental or penal damages including, but not limited to, loss of profits, revenues, loss of the product or any associated product, cost of capital, cost of substitute products, facilities or services, downtime costs or claims of the Customer for such damages. If TDIndustries, Inc. furnishes Customer with advice or other assistance which concerns labor, equipment, goods, or material furnished hereunder, or any systems or equipment in which of such equipment, goods, or material may be installed, and which is not pursuant to this contract, the furnishing of such advice or assistance will not subject TDIndustries, Inc. to any liability, whether based on contract, warranty, tort (including negligence) or other grounds.
2	If TDIndustries, Inc. encounters asbestos, polychlorinated Biphenyl (PCB) or other hazardous substances on the site, TDIndustries, Inc. will stop work and report the condition to the owner or owners' representative. TDIndustries, Inc. will not resume work in the affected area until the asbestos, PCB's or other hazardous substances have been removed or otherwise controlled so that it does not pose a health or safety threat.
3	Any installation dates given in advance are estimated. Installation will be subject to prior orders with TDIndustries, Inc. TDIndustries, Inc. shall not be liable for failure to perform or delay in performance hereunder resulting from fire, labor difficulties, delays in usual sources of supply, major changes in economic conditions, or, without limitation by the foregoing, any cause beyond TDIndustries, Inc. reasonable control.
4	On arrival of any equipment, goods and material at the shipping address specified on the reverse side hereof, Customer shall assume all risk or loss or damage to such equipment, goods, or material.
5	In the event Customer requires TDIndustries, Inc. to delay shipment or completion of the work under this proposal, payment pursuant to this proposal shall not be withheld or delayed on such account. TDIndustries, Inc. shall have the right to deliver any portion of the equipment, goods or material to be furnished hereunder and to bill Customer therefore, and Customer agrees to pay for the same in accordance with terms of the payment hereof upon notification that such shipment is ready for delivery, notwithstanding the fact that Customer may be unable to receive or provide suitable storage space for any such partial delivery. In such event, such portion of the equipment, TDIndustries, Inc. may store goods or material ready for shipment at Customer's risk and expense.
6	The amount of any past, present or future occupation, sales, use, service, excise or other similar tax which TDIndustries, Inc. shall be liable for, either on its own behalf or on behalf of Customer, or otherwise, with respect to any equipment, goods, material or service covered by this proposal, shall be in addition to the prices set forth herein and shall be paid by Customer.
7	If the equipment, goods or material furnished hereunder requires the use of water or steam, recirculated or otherwise, TDIndustries, Inc. shall not be liable for the effect of its physical or chemical properties upon said equipment, goods or material.
8	All skilled or common labor which may be furnished by the Customer shall be considered and treated as Customer's own employees, and Customer agrees to fully protect and indemnify TDIndustries, Inc. against all claims for accidents or injuries to such employees in the course of the work, or to any person or persons through the negligence of such employees.
9	No oral representations are binding upon TDIndustries, Inc. unless reduced to writing and signed by an authorized representative of TDIndustries, Inc. All changes to this contract must be in writing.

Revised 05-09-2008

TDIndustries, Ltd. 13850 Diplomat Drive, Dallas, Texas 75234 - 972-888-9370, Fax #972-888-9520
License # A/C - TACL-A26339C, Plumbing - Larry Bartlett M-16723, and Electrical - 32734