



Tuesday, May 17, 2022 / Pricing valid for 30 days from date

Job Location: New Port Richey City Hall
5919 Main St.
New Port Richey, FL 34652

To whom it may concern:

In accordance with ITB #17-012 for HVAC Preventative Maintenance Contract terms and conditions, we are pleased to provide this scope of work and pricing for the replacement of a Carrier Aqua Snap Chiller m/n 30RBA0805 s/n 1607083433 and the associated two pumps, motors and hydronic specialties, located at the New Port Richey City Hall, 5919 Main St, New Port Richey. The following is a replacement proposal with a scope of work based on a “like for like” replacement. Our proposal is divided into four descriptive sections- labor, equipment including hydronic specialties, electrical and engineering, with a breakdown of costs and exclusions continued to the end of page three, as follows:

LABOR FOR BOTH CHILLER, PUMPS & MOTOR DEMO & INSTALLATION

- Furnish regular hours labor & rental crane, mobilize labor per schedule with city staff
- Disconnect all controls
- Remove existing chiller and dispose
- Install one replacement 80-ton chiller.
- Modify and reconnect chiller to existing chilled water piping and accessories
- Remove air separator from second floor mechanical room
- Install new air separator closer to pumps and motor in first floor mechanical room
- Flush and clean chilled water loop and add new water treatment chemicals
- Remove and dispose of existing pumps and motors
- Install two new pumps and motors with two new VFD’s on first floor mechanical room
- Install Hydronic specialties as listed
- Scrape and paint chiller support structure with rustoleum
- Perform T&B of new chiller
- Provide startup, permit coordination, request permit inspections

EQUIPMENT

- Provide one replacement chiller
- Provide two B&G Base Mounted Pump Series e-1510, Model 2 BD and two associated VFD’s
- Provide two BG_115118 - B&G DC-3X Suction Diffusers
- Provide two BG_132160 - B&G 3DS-3B BALANCED Type Triple Duty valves
- Provide one B&G RL-4F Rolairtrol Air Separator 4
- Provide one BG_116493 - B&G D40V Series D Vertical ASME Diaphragm Tank
- Provide all other associated hydronic specialties required

ELECTRICAL

- Disconnect and reconnect chiller and chiller pumps.



LABOR FOR THREE CHILLED WATER AIR HANDLER INSTALLATION

- Furnish regular hours labor & rental crane, mobilize labor per schedule with city staff
- Disconnect all controls
- Remove existing three chilled water air handlers and dispose: AHU #1, AHU #2 and AHU #3
- Install three replacement CHW AHU's #1, #2 & #3
- Provide and install custom duct transitions for three CHW air handling units
- Modify and reconnect piping to new CHW air handling units including required piping, fittings and insulation
- Remove three outdoor air duct heaters and dispose
- Install three new outdoor air duct heaters\
- Remove existing chilled water control valves and replace with new
- Remove and dispose of three VFD's controlling three CHW AHU's
- Install new VFD's controlling three CHW AHU's
- Provide startup, permit coordination, request permit inspections

EQUIPMENT

Provide three replacement CHW air handling units, #1, #2 & #3, complete with:

- 2" solid double wall construction with R-13 foam internal insulation
- 6" steel base rail
- G-90 galvanized steel construction
- Chilled water-cooling coil section
- Copper tubes
- 0.010" Aluminum fins
- Stainless steel supports, bulkhead, and casings
- 2" Spring isolators
- Sound ratings of entire unit per ARI-260 and AMCA 210 pure tone qualified to 50HZ
- ETL listed for product safety, ASHRAE 90.1 compliant, ASHRAE 62, ISO Quality Certification

ELECTRICAL

- Disconnect and reconnect of air handlers 1, 2 and 3

ENGINEERING

Provide mechanical and electrical design for the removal and In-kind replacement of the existing 95 Ton air cooled chiller and associated pumps, air separator and expansion tank.

- Redesign the chilled water piping routing and accessories to accommodate new chiller, pumps, air separator and expansion tank.
- Provide electrical design as required for new chiller and pumps.
- Re-connect to new KMC Control system.

Provide mechanical and electrical design for the removal and In-kind replacement of the existing central station air handlers AHU-1, AHU-2 and AHU-3.

- Modify existing ductwork within the mechanical rooms to accommodate new air handlers.
- Modify existing chilled water pipe within the mechanical rooms to accommodate new air handler.
- Replace existing chilled water control valves at each AHU with new.
- Replace existing outside air duct heaters with new.



- Provide electrical design as required for new air handlers.
- General services shall include the following:
 - Pre-design site visit to determine existing conditions and building/systems layout.
 - Develop CAD drawings of the specific areas within the scope of this project.
 - Prepare and submit signed & sealed Mechanical and Electrical documents including Florida Energy Efficiency Code report to AMSCO for permitting and construction.
 - Construction Administration to include:
 - /Shop Drawing review.
 - Office based responses to RFIs.
 - Two (2) Mechanical and one (1) Electrical site visits (i.e. substantial inspection & final inspection)

Controls Scope of Work

1. Air Handlers (Qty:3)

- Furnish and install (1) KMC panel at each AHU for control of:
 - Fan Start Stop
 - Fan Status
 - Outside Air Damper Actuator
 - Supply Duct Temperature Sensor
 - Cold Deck Temperature Sensor
 - Return Air Temp/Humidity Sensor
 - Static Pressure Sensor
 - Hi-Static Sensor
 - Chilled Water Valve **(Qty: 3, provided by ABC and installed by AMSCO)**

2. Chiller (Qty: 1)

- Furnish and install (1) KMC panel for the Chiller for control of:
 - Start/Stop
 - Status
 - Pump Start/Stop
 - Pump Status
 - Supply Temperature Sensor
 - Return Temperature Sensor

3. Power Meter (Qty: 1)

- Furnish and install interface wiring for monitoring of (1) Power Meter.

4. Existing VAV Units (Qty: 27)

- Furnish and install (1) KMC panel at each new VAV for control of:
 - Supply Duct Temperature Sensor
 - Electric Heat Staging
 - Netsensor for Temperature/Humidity **(Qty:1)**
 - Netsensor for Space Temperature **(Qty: 26)**

5. Air Handlers for IT Room (Qty: 2)

- Furnish and install (1) KMC panel at the air handlers for control of:
 - Start/Stop
 - Status
 - Supply Duct Temperature Sensor
 - Netsensor

6. Vav for IT Room (Qty:1)

- Furnish and install (1) KMC panel for control of:
 - Supply Duct Temperature Sensor
 - Netsensor for space temperature



We **include** the following: **Niagra N4 Graphics**

- Programming and commissioning
- Owner Instruction
- 1 Year Warranty

We **exclude** the following:

- BacNet Interface Card / Provided by equipment manufacturer**
- VFD's Provided by equipment manufacturer

The following is a breakdown of budgetary costs for the scope of work in this proposal:

| | |
|--|----------------------------|
| Equipment: Chiller | \$ 51,550.00 |
| Pumps, motors, hydronic specialties, balancing, piping, fittings, insulation | \$ 76,495.00 |
| Labor | \$ 68,800.00 |
| Engineering | \$ 17,500.00 |
| Electrical | \$ 18,450.00 |
| Shipping, handling | \$ 10,330.00 |
| Crane Service | \$ 11,654.00 |
| Sub-Total for job including labor and materials: | \$254,779.00 |
| THREE CHW Air Handling Units | \$ 50,500.00 |
| Labor | \$ 54,492.00 |
| VFD's, duct heater, piping, fittings, insulation | \$ 64,397.00 |
| Engineering | \$ 17,500.00 |
| Electrical | \$ 19,850.00 |
| Shipping, handling | \$ 7,827.00 |
| Crane Service | \$ 6,650.00 |
| Sub-Total for job including equipment, labor and materials: | \$221,216.00 |
| ABC (KMC) Controls Pricing | \$ 96,410.00 |
| Manufacturer's 5-year parts & labor warranty | \$ 3,775.76 |
| Permit Fess carried | \$ 5,993.42 |
| - <i>Permit fee to be deduct to AMSCO and credit back to owner</i> | |
| Total for job including equipment, labor and materials: | <u>\$582,174.18</u> |
| Owner Contingency | \$ 20,000.00 |
| Total including Owner Contingency: | <u>\$602,174.18</u> |

Exclusions:

- 1/ Payment & Performance Bond
- 2/ Any changes due to completed engineered designs, plan review for permit or permit inspections, existing electrical service, piping, chiller supports etc.
- 3/ Disconnection of fire alarm and sprinkler piping for existing equipment prior to removal and reconnection of new equipment installed
- 4/ Any carpentry work
- 5/ Any work not specified in this proposal

Exclusions to Engineering scope of work:
(cont'd on page 5)



- Attending design coordination and inspection meetings in addition to those described above.
- VAV's other than installation of new controls and testing.
- Detailed cooling load calculations of the existing building.
- Evaluation/modification of the existing airside systems.
- Civil/Site Engineering design.
- Structural Engineering design.
- Additional electrical load analysis or 30-day load study to determine peak demand, if required. Our fee assumes the existing electrical service is sufficient for the additional electrical load. If a 3rd Party electrical consultant is required to survey existing electrical equipment ADD \$1,800.00.
- Additional site visits beyond that mentioned in the general services. Additional site visits to be billed at \$900/visit per discipline.
- Any design reviews, coordination, presentations, etc. required to meet Owner requirements, if required.
- Value Engineering exercise and associated revisions to the design/contract documents.

Notes:

1/ AMSCO will schedule a pre-construction meeting with the City of New Port Richey maintenance staff and management to coordinate all aspects of project

2/ AMSCO will provide a One (1) year parts and labor warranty on installation with a manufacturer's five-year parts & labor warranty on selected by owner on equipment.

3/ Notice of Commencement and Notice to Owner will be required for this project. Please note that the Florida Building Code may restrict signatories on all notarized documents required for permitting purposes.

Please find below specifications for pricing of the chiller and air handlers we issued to the manufacturer's for this project.

Chiller:

1. PROVIDE A FACTORY INSTALLED CIRCUIT BREAKER WITH 65,000 AIC SHORT CIRCUIT RATING FOR CHILLER AND FOR EACH COMPRESSOR ON THE ELECTRICAL CIRCUIT
2. PROVIDE FACTORY INSTALLED 1.25" UV RESISTANT ARMACELL EVAPORATOR INSULATION.
3. PROVIDE FACTORY INSTALLED THERMAL DISPERSION FLOW SWITCH.
4. PROVIDE CONDENSER COILS AND BASE FRAME GRILLS. WIRE MESH IS NOT ACCEPTABLE.
5. PROVIDE CHILLER WITH COPPER TUBES AND ALUMINUM FINS. IF THIS IS NOT AVAILABLE, CLEARLY STATE WHAT ALTERNATE IS BEING PROVIDED
6. PROVIDE A FACTORY INSTALLED STRAINER WITH A BLOW DOWN VALVE TO FACILITATE PERIODIC CLEANING.
7. PROVIDE A FACTORY INSTALLED AND WIRED CONTROL POWER TRANSFORMER TO PROVIDE CONTROL POWER.
8. PROVIDE VFD ON THE LEAD CONDENSER FAN ON EACH CIRCUIT.
9. PROVIDE A CONDENSER COIL COATING WITH A MINIMUM OF 6,000 HOURS IN THE ASTM B-117 SALT SPRAY TEST. COATING MAY NOT DECREASE HEAT TRANSFER BY MORE THAN 1%.
10. FACTORY INSTALLED BACNET INTERFACE TO DISPLAY ALL POINT ON POINTS LIST TO BAS.
11. PROVIDE WITH Spring ISOLATORS.
12. 1ST YEAR PARTS AND LABOR WARRANTY ON THE ENTIRE MACHINE BY CHILLER MANUFACTURER
13. 2ND-5TH YEAR COMPRESSOR REPLACEMENT WARRANTY BY MANUFACTURER (PARTS ONLY)
14. FACTORY STARTUP BY A FACTORY AUTHORIZED TECHNICIAN
15. FROM A COLD START THE CHILLER MUST BE ABLE TO REACH 100% LOAD WITHIN THREE MINUTES WHEN THE LOAD IS PRESENT.
16. ADD ALTERNATE #1 – PROVIDE A 5 YEAR PARTS, LABOR AND REFRIGERANT WARRANTY



17. ADD ALTERNATE #2 – PROVIDE FULL UNIT PARTS, LABOR AND REFRIGERANT WARRANTY FOR YEARS 6 TO 10

AHUs

1. PROVIDE UNIT WITH 2” DOUBLE WALL WITH MINIMUM THERMAL RESISTANCE OF R-13.
2. PROVIDE UNIT WITH DOUBLE SLOPED INSULATED STAINLESS STEEL IAQ DRAIN PAN AND STAINLESS-STEEL COIL CASING IN THE COOLING COIL MODULE.
3. PROVIDE UNIT WITH A 6 INCH BASE RAIL
4. PROVIDE TWO INCH ANGLED MERV 13 FILTERS
5. PROVIDE UNIT WITH INVERTER DUTY MOTOR WITH FACTORY MOUNTED AEGIS SHAFT GROUNDING RINGS
6. AHU-1 AND AHU-2 - PROVIDE WITH A DIRECT DRIVE PLENUM FAN WITH total 2.5 INCHES OF ESP. ACCESS DOOR BETWEEN THE COIL AND FAN SHALL BE A MINIMUM OF 12 INCHES.
7. AHU-1 AND AHU-2 – PROVIDE WITH A WALL MOUNTED VFD WITH BYPASS
8. AHU-3 PROVIDE WITH A DIRECT DRIVE MOTORIZED IMPELLER WITH 2.5 INCHES OF ESP. PROVIDE ACCESS DOOR IN VERTICAL COIL SECTION.

Below is the comparison chart comparing all the pricing and our recommendation for which equipment vendor should be selected.

| NPR City Hall Chiller & AHU's 1-3 Replacement Equipment Pricing Comparison | | | | |
|---|---------------|---------------|---------------|------------------|
| Manufacturer | | | | |
| Equipment | Trane | Carrier | JCI | Diakin |
| Air Handlers / OA Elec Heaters | \$50,500.00 | \$50,500.00 | \$58,600.00 | \$52,740.00 |
| Chiller | \$72,000.00 | \$51,550.00 | \$79,600.00 | \$72,860.00 |
| 5-year parts & labor warranty | \$7,310.00 | \$3,775.00 | \$7,500.00 | \$4,970.00 |
| 6 - 10-year parts & labor warranty | \$11,920.00 | \$7,551.00 | \$7,500.00 | \$10,860.00 |
| VFD's | \$2,500.00 | \$4,500.00 | \$7,500.00 | \$4,500.00 |
| Sub Total Package Includ. Warranty | \$144,230.00 | \$117,876.00 | \$160,700.00 | \$145,930.00 |
| Tax (7.0%) | \$10,096.10 | \$8,251.32 | \$11,249.00 | \$10,215.10 |
| Total Including Tax | \$154,326.10 | \$126,127.32 | \$171,949.00 | \$156,145.10 |
| Air Handler Lead Times | 18 - 22 Weeks | 22 - 23 Weeks | 28 Weeks | 37 - 39 Weeks |
| Chiller Lead Times | 33 Weeks | 25 - 26 Weeks | 40 Weeks | 24 - 25 Weeks |
| Notes | See Note 1, 3 | See Note 1, 3 | See Note 3, 4 | See Note 1, 2, 3 |
| Meets Specifications | Yes | Yes | Mostly | Mostly |
| 1. Did not provide break down and packaged all equipment together in one price. Pricing break down indicted by comparing to others and spreading cost around. | | | | |
| 2. Chiller proposed utilizing micro channel condenser coils in lieu of tube and fin. Providing with wire guards in lieu of louver panels as requested. Everything else is per specifications. | | | | |



3. Additional warranty costs selected by owner is 5-year and is included in AMSCO estimate and proposal.

4. Chiller proposed utilizing micro channel condenser coils in lieu of tube and fin. Everything else is per specifications.

BAL / AMSCO Selection is highlighted yellow and pricing carried in proposal amount.

Please let me know if you have any questions regarding this proposal.

Sincerely,
Aaron Danton, Project Manager / Estimator / Engineering, AMSCO
David Ruby, Account Manager, AMSCO