

June 10, 2020

Dr. Bill King Interim Director of Facilities Technical Campus, Provost Collin College 2550 Bending Branch Way Allen, TX 75013

> Re: All Campuses Collin College Air Cleaning Systems Collin County, Texas

#### Dear Bill:

We are pleased to submit this proposal for Professional Mechanical and Electrical Engineering Services for the design of air cleaning systems at all ten (10) major campuses which include Allen Technical Campus, Celina Campus, Farmersville Campus, Frisco Campus, McKinney Campus, Plano Campus, Wyle Campus, Center for Higher Education, Courtyard Center, and the Public Safety Training Center, as further outlined below.

#### **SERVICES WOULD INCLUDE:**

- 1. Perform Mechanical and Electrical Engineering Design Services as follows:
  - a. Review the existing location, quantity and type of air handling equipment serving each space at each building at each campus that is an occupied (i.e. non-equipment only) space.
  - b. Based on a review of the type of equipment, determine the potential air cleaning technology that can be incorporated into the existing system, which will consist of either Ultraviolet (UV) type light technology installed in the air handler or Bi-Polar Ionizers installed downstream or upstream of the air handler.
  - c. Prepare drawings to identify the location, approximate size, type of air cleaning technology, airflow capacity, and location of air cleaning technology to be installed for all air handlers and fan coil units at all campuses and buildings. This may involve the use at some campuses of existing PDF files to help identify on drawings the locations of existing equipment.
  - d. Design for the associated electrical infrastructure to provide the required 24V, 120/1 or 208/1 power to all air cleaners at all units. This will include confirmation of panel capacity space, electrical panel location and electrical wiring and conduit sizing and breaker or disconnect sizing for all units.
  - e. Design for any associated electrical upgrades required to accommodate new power requirements for the air cleaners which would may include the need for new panels and transformers for additional power to serve the air cleaners at the units.
  - f. Design for new building Energy Management System (EMS) integration to some or all of the air cleaners to identify alarm inputs to the system when air cleaners are not properly functioning.
  - g. Design for new access door interlocks to de-energize any UV light systems installed upon openings the associated access doors at the air cleaners.
  - h. Design will be based on the assumption that all new air handling equipment is installed at the new campuses and buildings which include the IT Center at Frisco Campus, Celian Campus and

#### Farmersville Campus.

- i. Design does not include the current projects under design at the McKinney Campus for the new Welcome Center or the Alumni Hall Addition at the Frisco Campus. As part of the design for these projects air cleaning technology will be incorporated into the design of any new HVAC Systems at these campuses associated with these projects.
- 2. Field verify existing conditions as reasonably as possible as they pertain to the Scope of Work as defined herein. We include a minimum of two (2) site visits per campus for this purpose. It is possible additional site visits at some of the larger campuses may be required and this is included in this fee as well.
- 3. Prepare one (1) copy of finalized drawings for bidding package which will include drawings and separate technical typed Mechanical and Electrical Specifications to identify this work for bidding by Sub-Contractors directly to the District. It is our understanding that the District Purchasing Department will provide front end (General Contract Conditions).
- 4. Work with purchasing to develop a bid form that will allow for individual bid pricing per campus and one aggregate price for all campuses to be provided by bidding contractors. The bid form may also incorporate alternates for expedited delivery, shipping and installation of equipment.
- 5. Review design documents with you prior to issuance to incorporate any review comments.
- 6. It is our understanding that we will provide one set of the half size drawings and associated specifications to the campus for their use. We will also provide a FTP file site link with all Specifications and Drawings in .PDF format to the Purchasing Department and Facilities Department for their use and upload to their web site for distribution to bidders.
- 7. Answer questions and interpret Drawings and Specifications during the bidding process and construction phase.
- 8. Attend and conduct a mandatory Pre-Bid Conference to assist pre-qualified Bidders in clearly identifying their scope of work. Prepare Addenda as required during the Bidding Period.
- Review and comment on Construction Bids received, and make recommendations on award of a contract.
- 10. Attend and conduct up to Three (3) Pre-Construction Conferences to assist the successful Bidder(s) in answering any scope questions and to help coordinate building availability and work schedule with the District. It is understood that the associated work could be broken-out and awarded to multiple contractors so we have included the potential to conduct multiple pre-bid conferences.
- 11. Review submittals and Shop Drawings for conformance to the Contract Documents.
- 12. Conducts and attend bi-weekly (every two weeks) construction meetings for the project throughout the construction period. It is anticipated that the construction period will take approximately three (3) months which equates to six (6) regular construction meetings. Since this could be broken out we have included up to twelve (12) construction meetings to accommodate multiple contractors.
- 13. Visit the site to observe all work installed and report on discrepancies with respect to the Construction

Document requirements, as follows:

- a. Concurrent with bi-weekly construction meetings
- b. Approximately half way through Construction.
- c. At substantial Completion of all Construction.
- d. Others as necessary to resolve other Construction issues that cannot be resolved through normal construction administration procedures, as outlined above.
- 14. It is our understanding that the District will provide copies of Asbestos, or other hazardous material, reports, that are on file for this facility to the contractor.
- 15. Review contractor pay applications, as requited, for completeness and correctness and send to the college for processing.
- 16. Provide a General Order of Magnitude Cost Estimate for initial budget estimating purposes.
- 17. We understand that the District will provide copies of existing drawings for the Allen Technical Campus and electronic AutoCAD or Revit files for the Center for Higher Education, IT Center of Excellence at the Frisco Campus, and the Allen Technical Campus for us to use in preparing bid documents to identify locations of existing air handling equipment.

### **SERVICES WOULD NOT INCLUDE:**

- 1. Commissioning of electrical systems.
- 2. Testing, Adjusting, Balancing, and Commissioning of mechanical air conditioning systems. This is to be performed under a separate contract between the Owner and an independent Test and Balance Firm and Commissioning Agent, or incorporated into the Construction Contract work, preferably paid through an Allowance in the General Contract. Our fee is based on this work being performed in one of these manners. If this work is not performed as such, then, we cannot expend extraordinary amounts of time assisting in resolving related issues, as such issues become items beyond our control, unless reimbursed on an hourly basis for such work
- 3. Plumbing Engineering Services.
- 4. Civil Engineering or Site Surveying Services.
- Detailed Studies or analysis beyond the normal design of the MPE Systems, accept as Additional Services.
- 6. Landscape irrigation system design services.
- 7. Special Audio-Visual or Acoustical Systems design.
- 8. Data and Telephone Cabling System design.
- 9. Security, Closed-Circuit Television, Cable and Access Control Systems design.

- Leadership in Energy and Environment Design (LEED) or similar Sustainable Design related work, except as an additional service.
- 11. Negotiation with bidders. The project will be competitively bid or negotiated directly by you under and open contract. We will offer advice, as requested, in regard to pricing received.
- Services pertaining to Asbestos Containing Materials (ACM) or other hazardous materials discover or removal.
- 13. Architectural Services.
- 14. Structural Services.
- 15. Texas Accessibility Standards (TAS) and Americans with Disabilities Act (ADA) related work. As these are electrical modifications only, it is our understanding that we will not design any modifications that will require submission for ADA.
- 16. Preparation of the successful bidder's contract with the College. It is our understanding that the College will perform this work.
- 17. Attend any board meetings related to this project.
- 18. Multiple copies of the Bid Documents.
- 19. Any increased costs related to Professional Liability Insurance. Our Basic services includes Professional Liability and other standard insurance coverages up to \$1,000,000 per occurrence with \$2,000,000 aggregate. We understand that this is satisfactory to meet the contract requirements. Any limits above this would be an additional service and would be priced per such a specific request.

RWB Consulting Engineers proposes to provide the Engineering Services described above based on a lump sum fee of One Hundred Forty Thousand Dollars (\$140,000.00). This is based on a current general order of magnitude estimate of overall construction cost scope in the range of \$2,500,000.00 to \$3,000,000.00.

Reimbursable expenses for courier services, Postage, plotting costs and other reproduction costs incurred for deliverables, are included in this amount

For the purposes of allocations of fee based on progress of work performed the proportion of the fee for each customary phase is broken out as follows:

Design Development	15%
Construction Documents	50%
Bidding and Negotiation	5%
Construction Services	30%

Any additional scope of work not noted in the proposal would be done on an hourly basis in keeping with the attached bill rates or as an additional lump sum proposal at a future point in time. However, any additional work would not be pursued or designed until direction in writing from the college is received and either additional proposal or hourly bill rates are agreed to for compensation.

We appreciate the opportunity to provide this proposal for your consideration. Should this be acceptable to you, please indicate your approval by signing the enclosed copy where indicated below and returning it to us for our records.

Very truly yours,

**RWB** Consulting Engineers

Nathan P. Hart, P.E. Principal

APPROVED DATE

June 10, 2020

# AIR CLEANING SYSTEMS FOR ALL TEN CAMPUSES COLLIN COLLEGE

## BILLING RATES FOR PERSONNEL BY CLASSIFICATION

PRINCIPALS	@	\$215.00 PER MAN HOUR
PROJECT MANAGER	@	\$178.00 PER MAN HOUR
SENIOR ENGINEER	@	\$168.00 PER MAN HOUR
PROJECT ENGINEER	@	\$158.00 PER MAN HOUR
ENGINEER	@	\$147.00 PER MAN HOUR
SENIOR DESIGNER	@	\$126.00 PER MAN HOUR
ENGINEER INTERN	@	\$105.00 PER MAN HOUR
DESIGNER	@	\$100.00 PER MAN HOUR
CADD DESIGNER	@	\$90.00 PER MAN HOUR
TECHNICAL TYPIST	@	\$75.00 PER MAN HOUR