## PROFESSIONAL SERVICES AGREEMENT

**THIS AGREEMENT** is made and entered by and between COLLIN COUNTY, TEXAS, a political subdivision of the State of Texas, hereinafter referred to as "County", and, <u>Engineered Air Balance Co., Inc.</u>, a <u>Texas</u> Corporation, hereinafter referred to as "Firm", to be effective from and after the date as provided herein.

#### WITNESSETH:

WHEREAS, the County desires to engage the services of the Firm to perform related engineering services in connection with Testing, Adjusting and Balancing for Collin County, hereinafter referred to as the "Project"; and

**WHEREAS**, the Firm desires to render such engineering services for the County upon the terms and conditions provided herein.

# NOW, THEREFORE, KNOW ALL MEN BY THESE PRESENTS:

That for and in consideration of the covenants contained herein, and for the mutual benefits to be obtained hereby, the parties hereto agree as follows:

### I. Retention of the Firm

The County hereby agrees to retain the Firm to perform professional engineering services in connection with the Project; Firm agrees to perform such services in accordance with the terms and conditions of this Agreement, exercising the same degree of care, skill, and diligence as is ordinarily possessed and exercised by a member of the same profession, currently practicing, under similar circumstances.

#### **II.** Scope of Services

- 2.1 The parties agree that Firm shall perform such services as are set forth herein and described in Exhibit "A", which is attached hereto and thereby made a part of this Agreement. Work for each phase shall be preceded by a Notice to Proceed issued by County. The parties understand and agree that deviations or modifications in the form of written change orders may be authorized from time to time by the County.
- 2.2 The Firm will serve as the County's professional engineering representative under this Agreement, providing professional engineering, consultation, advice and furnishing customary services incidental thereto. The Firm agrees to cooperate and coordinate with other design professionals, the County and its contractors to help facilitate efficient construction of the Project and maintain the Project schedule.
- 2.3 The Firm shall advise the County with regard to the necessity for subcontract work such as special surveys, tests, test borings, or other subsurface investigations in connection with design and engineering work to be performed hereunder. The Firm shall also advise the County concerning the results of same. Such survey, test, and investigations shall be furnished to the County.
- 2.4 The presence or duties of the Firm's personnel at a construction site, whether as on-site representatives or otherwise, do not make the Firm or its personnel in any way responsible for those duties

that belong to County's construction contractors or other entities, and do not relieve the construction contractors or any other entity of their obligations, duties, and responsibilities, including but not limited to, all construction methods, means, techniques, sequences and procedures necessary for completing all portions of the construction work in accordance with the Contract Documents and any health or safety precautions required by such construction work. The Firm and its personnel have no authority to exercise any control over any construction contractor or other entity or their employees in connection with their work or any health or safety precautions.

- 2.5 The Firm will make periodic recommendations for periodic construction progress payments to the construction contractor. Recommendations by the Firm to the County for periodic construction progress payments to the construction contractor will be based on the Firm's knowledge, information, and belief from sampling and observation that the work has progressed to the point indicated. Such recommendations do not represent that there are not other matters at issue between the County and the construction contractor that affect the amount that should be paid.
- 2.6 The Firm agrees, if required by project, to provide a complete and coordinated set of drawings and specifications for the construction of the Project, if required by the project, exercising the same degree of care, skill, and diligence as is ordinarily possessed and exercised by a member of the same profession, currently practicing, under similar circumstances. Construction drawings, specifications, and other construction documents prepared by the Firm or its consultants and submitted to the County for approval or contractors for bidding or negotiation purposes shall be complete and capable of construction "as is". While the utility of communications between design professionals and construction contractors for the purpose of clarifying design intent is recognized, the Project should be capable of construction without the necessity of formal revisions or contract modifications to provide missing design information after construction contracts are awarded. Said documents shall comply with all applicable codes, ordinances, statutes, and regulations governing the design of the Project.
- 2.7 The Firm, if required by the project, shall assist the County in the preparation and filing of documents required for the approval of governmental authorities having jurisdiction over the Project.

#### **III. Schedule of Services**

- 3.1 The Firm agrees to commence its services immediately upon execution of this Agreement, or as otherwise directed in writing by the County, and to proceed diligently with said services to completion as described in the Completion Schedule attached hereto as Exhibit "B" and thereby made a part of this Agreement. Firm shall not be considered in default of this Agreement for delays in performance caused by circumstances beyond its reasonable control. Should such circumstances occur, the Firm shall, within a reasonable time of being prevented from performing, give written notice to the County describing the circumstances preventing continued performance and the efforts being made to resume performance of this Agreement.
- 3.2 In the event that the Firm is delayed in the progress of the work on the Project by an act or neglect of the County, County's employees, or separate contractors employed by the County, or by changes ordered in the Project, fire, adverse weather conditions not reasonably anticipated, unavoidable casualties or other causes beyond the Firm's control, or delay authorized by the County pending arbitration, or by other causes which the County and Firm agree may justify delay, then the Contract Time shall be reasonably extended by Change Order. The County shall have the right at any time to delay or suspend the work or any part thereof for any reasonable time and if this happens, the Firm's sole remedy for any delays or suspension shall be any extension of time. The County shall not be independently liable to the Firm for any delay or

interference caused by circumstances beyond the County's control or any delay caused by any other person or entity.

### IV. Compensation and Method of Payment

The parties agree that Firm shall be compensated for all services provided pursuant to this Agreement in the amount and manner described and set forth in the Fee Schedule attached hereto as Exhibit "C" and thereby made a part of this Agreement. Firm further agrees that it will prepare and present such monthly progress reports and itemized statements per the fee schedule described in said Exhibit "C". Payment will be made in accordance with The Texas Government Code, Title 10, Subtitle F, Chapter 2251. Firm further agrees to the following terms prior to payment being due by County:

## A. Invoice and Payment

- (1) The Firm shall provide the County sufficient documentation to reasonably substantiate the invoices.
- (2) The Firm will issue monthly invoices for all work performed under the Agreement.
- (3) In the event of disputed or contested billing, only that portion so contested will be withheld from payment, and the undisputed portion will be paid. The County will exercise reasonableness in contesting any portion thereof. NO interest will accrue on any contested portion of the billing until mutually resolved.
- (4) In the event of any conflict between Paragraph IV and Chapter 2251 of the Texas Government Code, The Texas Government Code shall prevail.

#### V. Information to be provided by the County

- 5.1 The County agrees to furnish to Firm, prior to the Firm's commencement of its services, all that information set forth and described on Exhibit "D", which is attached hereto and thereby made a part of this Agreement.
- 5.2 The County will make its facilities accessible to the Firm as required for the Firm's performance of its services. The Firm represents that it understands the scope of this Agreement and has reviewed and inspected the Project sites, and can fully perform its obligations pursuant to this Agreement. Any failure of the Firm to acquaint itself with the available information will not relieve the Firm from its responsibilities pursuant to this Agreement.
- 5.3 The County shall disclose, to the extent known to the County, the results of prior tests, inspections or investigations conducted for the Project upon request by the Firm.

## VI. Progress Meetings

In addition to providing the monthly progress reports as required under Paragraph IV herein above, Firm agrees to attend all monthly progress meetings scheduled by County, and at such meetings to outline work accomplished and special problem or delays encountered in connection with the Project during the previous report period, as well as planned work activities and special problems and delays anticipated for the next report period. The Firm agrees to cooperate and coordinate with other design professionals, the County and its contractors to help facilitate efficient construction of the Project and maintain the Project schedule.

#### VII. Insurance

Firm agrees to meet all insurance requirements as set forth on Exhibit "E" which is attached hereto and thereby made a part of this Agreement.

#### VIII. Indemnity

Firm agrees to indemnify the County to the fullest extent allowed by section 271.904 of the Texas Local Government Code, including payment of the County's reasonable attorneys' fees to the extent such is allowed under 271.904(b).

The Firm must be in compliance with the provisions of Section 2254.0031 of the Texas Government Code, which incorporates by reference Section 271.904(d) of the Texas Local Government Code. The Firm shall perform services (1) with professional skill and care ordinarily provided by competent Engineers practicing under the same or similar circumstances and professional license, and (2) as expeditiously as is prudent considering the ordinary professional skill and care of a competent Engineer.

#### IX. Independent Contractor

In the performance of services hereunder, the Firm shall be deemed an independent contractor and shall not, with respect to its acts or omissions, be deemed an agent, subcontractor or employee of the County.

## X. Assignment and Subletting

The Firm agrees that neither this Agreement nor the services to be performed hereunder will be assigned or sublet without the prior written consent of the County. The Firm further agrees that the assignment or subletting or any portion or feature of the services required in the performance of this Agreement shall not relieve the Firm from its full obligations to the County as provided by this Agreement.

#### XI. Audits and Records/Prohibited Interest

- 11.1 The Firm agrees that at any time during normal business hours, and as often as County may deem necessary, Firm shall make available to representatives of the County for examination all of its records with respect to all matters covered by this Agreement, and will permit such representatives of the County to audit, examine, copy and make excerpts or transcripts from such records, and to make audits of all contracts, invoices, materials, payrolls, records of personnel, conditions of employment and other data relating to all matters covered by this Agreement, all for a period of three (3) years from the date of final settlement of this Agreement or of such other or longer period, if any, as may be required by applicable statute or other lawful requirements.
- 11.2 The Firm agrees that it is aware of the conflict of interest requirements of the state law which are applicable to persons entering into contracts with the County and will abide by the same. Further, a lawful representative of Firm shall execute the Affidavit shown in Exhibit "F". Firm understands and agrees that the existence of a conflict of interest during the term of this Agreement will render the agreement voidable.

11.3 The Firm acknowledges to the County that it has made full disclosure in writing of any existing conflicts of interest or potential conflicts of interest, including personal financial interest, direct or indirect, in property abutting the proposed Project and business relationships with persons or entities with interest in abutting properties.

## XII. Contract Termination

The parties agree that County shall have the right to terminate this Agreement without cause upon thirty (30) days written notice to Firm. In the event of such termination without cause, Firm shall deliver to County all finished or unfinished documents, data, studies, surveys, drawings, maps, models, reports, photographs or other items prepared by Firm in connection with this Agreement. Firm shall have the right to terminate this Agreement upon thirty (30) days written notice to County in the event of the County's breach of any material term of this Agreement, including but not limited to compensation and method of payment. Regardless of which party initiates termination, Firm shall be entitled to compensation for any and all services completed to the satisfaction of County in accordance with the provisions of this Agreement prior to termination.

### XIII. Ownership of Documents

Original drawings and specifications (Instruments of Service) created by Firm are the property of the Firm; however, the Project is the property of the County, and Firm may not use the drawings and specifications for any purpose not relating to the Project without County's consent. County shall be furnished with such reproductions of drawings and specifications as County may reasonably require. Upon completion of the services or any earlier termination of this Agreement under Article XII, and payment in full of all monies due Firm, Firm will revise drawings to reflect significant changes made during construction as per the marked-up prints, drawings, and other data furnished to the Firm by or through the County or Contractor. Firm will promptly furnish the County with one (1) complete set of reproducible record prints. All such reproductions shall be the property of the County who may use them without the Firm's permission for any proper purpose relating to the Project, including but not limited to, maintenance of the Project, additions to the Project, or completion of the Project. The aforementioned revisions will be based upon information supplied by the County's construction contractor and will be assumed by Firm to be complete and accurate. As such, Firm shall not be responsible for errors or omissions resulting therefrom. Prints shall be furnished, as an additional service, at any other time requested by County. The County may use such drawings in any manner it desires; provided, however, that the Firm shall not be liable for the use of such drawings for any project other than the Project described herein.

### XIV. Complete Contract

- 11.1 This Agreement, including the exhibits hereto numbered "A" through "F", constitute the entire agreement by and between the parties regarding the subject matter hereof and supersedes all prior written or oral understandings. This Agreement may only be amended, supplemented, modified or canceled by a duly executed written instrument, signed by the County and the Firm.
- 11.2 Warranties contained in this Agreement are in addition to and not in lieu of, any and all other liability imposed upon the Firm by law with respect to the Firm's duties, obligations, and performance hereunder. The Firm's liability hereunder shall survive the County's final acceptance and payment for the Project. All representations and warranties set forth in this Agreement, including without limitation, this

paragraph, shall survive the final completion of the Work or earlier termination of this Agreement. The Firm acknowledges that the County is relying upon the Firm's skill and experience in performing the services pursuant to this Agreement.

## XV. Mailing of Notices

Unless instructed otherwise in writing, Firm agrees that all notices or communications to the County permitted or required under this Agreement shall be addressed to the County at the following address:

Bill Burke Construction Projects Director 4600 Community Ave. McKinney, TX 75071 Bill Bilyeu Collin County Administrator 2300 Bloomdale #4192 McKinney, TX 75071

Collin County Purchasing 2300 Bloomdale #3160 McKinney, TX 75071

County agrees that all notices or communications to Firm permitted or required under this Agreement shall be addressed to Firm at the following address:

David Harrell Engineered Air Balance Co., Inc. 3309 Matrix Drive Richardson, TX 75082

All notices or communications required to be given in writing by one party or the other shall be considered as having been given to the date such notice or communication is posted by the sending party.

### XVI. Miscellaneous

#### A. Paragraph Headings

The paragraph headings contained herein are for convenience only and are not intended to define or limit the scope of any provision in this Agreement.

#### **B.** Interpret Contract Fairly

Although this Agreement is drafted by County, should any part be in dispute, the parties agree that the Agreement shall not be construed more favorable for either party.

## C. Venue/Governing Law

The parties agree that the laws of the State of Texas shall govern this Agreement, and that it is performable in Collin County, Texas. The venue for any litigation related to this Agreement shall be in Collin County, Texas.

#### D. Parties Bound

County and Firm, and their partners, successors, subcontractors, executors, legal representatives, and administrators are hereby bound to the terms and conditions of this Agreement.

## E. Severability

In the event a term, condition, or provision of this Agreement is determined to be void, unenforceable, or unlawful by a court of competent jurisdiction, then that term, condition, or provision shall be deleted and the remainder of the Agreement shall remain in full force and effect.

#### F. Effective Date

This Agreement shall be effective from and after execution by both parties hereto.

#### G. Term of Agreement

The term of Agreement shall conform to the schedule as stipulated in Exhibit "B" attached herein. No other extension shall be authorized unless granted by written agreement between the County and Firm.

## H. Observe and Comply

Firm shall at all times observe and comply with all federal and State laws and regulations and with all City ordinances and regulations which in any way affect this Agreement and the work hereunder, and shall observe and comply with all orders, laws, ordinances and regulations which may exist or may be enacted later by governing bodies having jurisdiction or authority for such enactment. No plea of misunderstanding or ignorance thereof shall be considered. Firm agrees to defend, indemnify and hold harmless County and all of its officers, agents, and employees from and against all claims or liability arising out of the violation or any such order, law, ordinance, or regulation, whether it be by itself or its employees.

## I. Expenses for Enforcement

In the event either Party hereto is required to employ an attorney to enforce the provisions of this Agreement or is required to commence legal proceedings to enforce the provisions hereof, the prevailing Party shall be entitled to recover from the other, reasonable attorney's fees and court costs incurred in connection with such enforcement, including collection.

## J. Force Majeure

No party shall be liable or responsible to the other party, nor be deemed to have defaulted under or breached this Agreement, for any failure or delay in fulfilling or performing any term of this Agreement, when and to the extent such failure or delay is caused by or results from acts beyond the affected party's reasonable control, including, without limitation: acts of God; flood, fire or explosion; war, invasion, riot or other civil unrest; actions, embargoes or blockades in effect on or after the date of this Agreement; or national or regional emergency (each of the foregoing, a "Force Majeure Event"). A party whose performance is affected by a Force Majeure Event shall give notice to the other party, stating the period of time the occurrence is expected to continue and shall use diligent efforts to end the failure or delay and minimize the effects of such Force Majeure Event.

# WITNESS OUR HANDS AND SEALS on the date indicated below.

Date: \\\(\(\)\\	COLLIN COUNTY, TEXAS  By: Wolfe Our
(0	Michelle Charnoski, NIGP-CPP, CPPB
	Purchasing Agent
	Court Order No.
	2021-1082-11-0-1
Date: November 8, 2021	By:
	Kevin/Underwood
	Title: President

# ACKNOWLEDGMENT

STATE OF TEXAS }
COUNTY OF COLLIN }
<b>BEFORE ME</b> , <u>Terria Wallace</u> on this day personally appeared <u>Kevin Underwood</u> , of <u>Engineered Air Balance Co.</u> , <u>Inc.</u> , a <u>Texas</u> Corporation, known to me (or proved to me on the oath of <u>personal knowledge</u> or through <u>Drivers license</u> (description of identity card or other document) to be the person whose name is subscribed to the foregoing instrument and acknowledged to me that he/she executed the same as the act and deed of the corporation, for the purposes and consideration therein expressed and in the capacity therein stated.
GIVEN UNDER MY HAND AND SEAL OF OFFICE, this the 8 day of November, 2021.
Notary Public, State of Texas
Terria Wallace Printed Name
My Commission expires on the 20 day of March, 2024.  TERRIA WALLACE Notary Public, State of Texas Comm. Expires 03-20-2024 Notary ID 11911871
STATE OF TEXAS }
COUNTY OF COLLIN }
BEFORE ME, Allysun Zajac on this day personally appeared Michelle Charnoski, Purchasing Agent of COLLIN COUNTY, TEXAS, a political subdivision of the State of Texas, known to me to be the person whose name is subscribed to the foregoing instrument and acknowledged to me that he/she executed the same as the act and deed of COLLIN COUNTY, TEXAS, for the purposes and consideration therein expressed and in the capacity therein stated.
GIVEN UNDER MY HAND AND SEAL OF OFFICE, this the 11th day of November , 2021.
Notary Public, State of Texas  ALLYSON ZAJAC  Notary Public STATE OF TEXAS  Notary ID # 13219459-7  Printed Name  Notary ID # 13219459-7  My Comm. Exp. September 23, 2023
My Commission expires on the 23rd day of September, 2023.

#### **EXHIBIT "A"**

#### SCOPE OF SERVICES

Collin County will need testing and balancing services for HVAC systems to determine if the HVAC equipment is operating efficiently.

- 1.1 The vendor shall be responsible for testing, adjusting, balancing and logging actual data on all air distribution and air moving equipment, pumps, heating and cooling equipment and the operating conditions on all motors, etc. as indicated in this specification.
  - 1.1.1 Air Handling Units
    - 1.1.1.1 Verify that the outside, return and relief air dampers are operational and move freely
    - 1.1.1.2 Verify that filters are clean
    - 1.1.1.3 Verify correct fan rotation
    - 1.1.1.4 If belt driven, verify proper belt tension and that fan and motor sheaves are properly aligned
    - 1.1.1.5 Verify that all AHU safeties are operational (firestat, freezestat, high static pressure, etc.)
    - 1.1.1.6 If applicable, verify that unit volume control (static pressure) is operational. Set fan volume control device for 100% capacity (terminal boxes set at 100% capacity)
    - 1.1.1.7 Verify correct size and rating of motor overload
    - 1.1.1.8 Verify fan motor is not overloaded; amperage readings do not exceed motor nameplate rating
    - 1.1.1.9 Determine total supply and return air. Air quantities to be determined by duct traverse if duct configuration permits and air velocity is 1000 feet per minute or greater
    - 1.1.1.10 Balance air distribution system (see Terminal Boxes and Air Distribution Devices)
    - 1.1.1.11 If air volume is less than design and motor capacity is available, adjust fan or fans to supply and return design CFM. If new sheave or sheaves and belts are required, data will be submitted to Contractor

- 1.1.1.12 If applicable, determine the required static pressure and submit the static pressure control set point to control contractor for setting
- 1.1.1.13 Test and adjust the minimum outside air and return air CFM relationship to design
- 1.1.1.14 Test and record entering and leaving air temperature of electric heating coil to verify design heating capacity, if applicable
- 1.1.1.15 Verify all temperature control devices are set and calibrated at design set point

## 1.1.2 Coil Units

- 1.1.2.1 Filters are clean
- 1.1.2.2 Verify correct fan rotation
- 1.1.2.3 If belt driven, verify proper belt tension and that fan motor sheaves are properly aligned
- 1.1.2.4 Verify that all Fan Coil unit safeties are operational
- 1.1.2.5 Verify correct size and rating of motor overload protection
- 1.1.2.6 Verify fan motor is not overloaded; amperage readings do not exceed motor nameplate rating
- 1.1.2.7 Determine total supply air
- 1.1.2.8 If air volume is less than design and motor capacity is available, adjust fan to supply design CFM. If belt driven and new sheave or sheaves and belts are required, data will be submitted to Contractor
- 1.1.2.9 Balance air distribution system (see Air Distribution Devices).
- 1.1.2.10 Test and record entering and leaving air temperature of electric heating coil to verify design heating capacity, if applicable
- 1.1.2.11 Verify all temperature control devices are set and calibrated at design setpoint

#### 1.1.3 Terminal Boxes

- 1.1.3.1 Determine sequence of operation from the specifications and verify that all control devices are installed and operational
- 1.1.3.2 Set primary air volumes (minimum and maximum) and adjust fan volume, if applicable
- 1.1.3.3 Balance air distribution system (see Air Distribution Devices)
- 1.1.3.4 Test capacity of heating devices, if applicable, by measuring entering and leaving air temperature of device
- 1.1.3.5 Test and verify box sequence operation to ensure specified control sequence
- 1.1.3.6 Check calibration of thermostat
- 1.1.4 Air Distribution Devices
  - 1.1.1.1 Preset all volume dampers in the 100% open position
  - 1.1.1.2 Determine and verify proper air pattern detection devices have been installed
  - 1.1.1.3 Read out all air distribution devices serviced by their source (VAV Terminal, FPB Terminal, Fan Coil Unit, Constant Volume Air Handling Unit, Supply Fan, Exhaust Fan, etc.)
  - 1.1.1.4 Balance all air distribution devices proportional to design CFM
  - 1.1.1.5 Adjust source to design CFM
  - 1.1.1.6 Verify that all air distribution devices are within plus or minus 10% of design
- 1.1.5 Supply/Exhaust/Smoke Fans
  - 1.1.5.1 Verify correct fan rotation
  - 1.1.5.2 If belt driven, verify proper belt tension and that the fan and motor are properly aligned.
  - 1.1.5.3 Verify that all safeties and interlocks are operational
  - 1.1.5.4 Verify correct size and rating of motor overload protection
  - 1.1.5.5 Verify fan motor is not overloaded; amperage readings do not exceed nameplate rating

- 1.1.5.6 Determine total air. Air quantities to be determined by duct traverse if duct configuration permits and air velocity is 1000 fee per minute or greater
- 1.1.5.7 If air volume is less than design and motor capacity is available, adjust fan to design CFM. If new sheave or sheaves and belts are required, data will be submitted to Contractor
- 1.1.5.8 Balance air distribution system (see Air Distribution Devices)

## 1.1.6 Pumps

- 1.1.6.1 At the time the contractor removes the strainers, verify that they are clean and the proper type.
- 1.1.6.2 Verify correct pump rotation
- 1.1.6.3 Verify correct sizing of each motor overload protection
- 1.1.6.4 Verify pump motors are not overloaded; amperage readings do not exceed motor nameplate rating
- 1.1.6.5 Preset all manual valves at pumps and heat transfer devices to 100% open position
- 1.1.6.6 Set all automatic control valves to 100% flow position
- 1.1.6.7 Determine total GPM by measuring actual pumping head of pump and relate to manufacturer's curves
- 1.1.6.8 Measure actual pressure drop at each heat transfer device and flow metering device, if applicable
- 1.1.6.9 Balance all heat transfer devices proportional to within 10% of design GPM by adjusting balancing valves
- 1.1.6.10 If GPM is above design and the mechanical specifications indicate the pump impellers are to be trimmed to provide design GMP, data will be furnished in order that the Contractor can trim the impeller or impellers. If not, discharge balancing valve at each pump will be adjusted as required to obtain design GPM as related to the manufacturer's curves
- 1.1.6.11 Verify all interlocks and flow switches
- 1.1.6.12 Test and record entering and leaving air and water temperatures at all heat transfer devices

- During the balancing process, all abnormalities or malfunctions of equipment or components discovered by the Testing, Adjusting, and Balancing personnel, will be reported in the interim test and balance report to the project Architect/Engineer, Owner and Contractor so that the condition can be corrected expediently.
- 1.3 The temperature controls will be verified for calibration and proper relationship between control devices. The Contractor will be advised of any instruments out of calibration in the interim test and balance report so that the Automatic Temperature Controls (ATC) contractor can recalibrate, using data supplied by the Testing, Adjusting, and Balancing firm. The ATC contractor shall assist the Testing, Adjusting, and Balancing firm as required.
- 1.4 Thoroughly test the Energy Management (EMS), if applicable. The testing of the Energy Management System shall include all HVAC controls, sensors, operators, sequences, etc. The tests shall include verification that commands introduced at the EMS console actually occur and temperatures, pressures, etc. indicated at the EMS console correlate with the actual reading at the sensing point. The ATC contractor and/or EMS contractor shall provide technical support to the Testing, Adjusting, and Balancing firm for a complete check or the HVAC temperature controls and/or the Energy Management System.
- 1.5 After testing, adjusting and balancing to design conditions, if comfort conditions are not being maintained, the air conditioning system shall be rebalanced within the limitation of the equipment installed to obtain comfort conditions. If comfort conditions cannot be obtained, a report will be submitted giving specific data regarding the trouble area.
- 1.6 Make a total of three (3) inspections within ninety (90) days after occupancy of the building, and make adjustments if required, to insure that satisfactory conditions are being maintained throughout. Inspections to be coordinated through the Architect/Engineer and Owner and shall be documented with a supplemental report containing data and information as required.
- 1.7 Make an inspection during the opposite season from that in which the initial adjustments were made and at that time make any necessary modifications to the initial adjustment required to produce optimum operation of the systemic components to produce the proper conditions in each conditioned space. The opposite season inspection shall be coordinated with the Architect/Engineer and Owner. This inspection shall be documented with a supplemental report containing any pertinent data and information regarding readings and adjustments made.

#### 1.8 TESTING, ADJUSTING, BALANCING REPORT

1.8.1 The Testing, Adjusting, and Balancing report shall incorporate all performance data for HVAC systems. The intent of the final report is to provide a reference of actual operating conditions for the Owner's operating personnel.

- 1.8.2 All measurements and recorded readings (of air, water, electricity, etc.) that appear in the report must be made on site by the permanently employed technicians or engineers of the Testing, Adjusting, and Balancing firm.
- 1.8.3 The Testing, Adjusting, and Balancing report shall include but not be limited to the following:
  - 1.8.3.1 Index
  - 1.8.3.2 Preface: A general discussion of the system, an outline of normal and ventilation modes of operation, any unusual operating conditions and any deficiencies corrected.
- 1.8.3.3 Instrumentation List: A list of instruments used by type, model, range and calibration date. All instruments must be calibrated within six (6) months prior to starting date of Testing, Adjusting, and Balancing services.
  - 1.8.3.4 Air Handling Units, Fan Coil Units, etc.:
    - 1.8.3.1.1 Manufacturer, model, size, and serial number
    - 1.8.3.1.2 Design and actual CFM (Supply, Return and Outside)
    - 1.8.3.1.3 Design and actual RPM
    - 1.8.3.1.4 Static pressure entering and leaving filters, coils, and fan
    - 1.8.3.1.5 Motor nameplate data
    - 1.8.3.1.6 Motor starter data and motor overload protection size and rating
    - 1.8.3.1.7 Actual motor amperage and voltage (all phases)
    - 1.8.3.1.8 Filter; type, size and quantity
  - 1.8.3.5 Terminal Boxes:
    - 1.8.3.5.1 Manufacturer, model and size
    - 1.8.3.5.2 Location
    - 1.8.3.5.3 Design and actual primary air CFM (maximum and minimum)
    - 1.8.3.5.4 Design and actual fan CFM, if applicable
    - 1.8.3.5.5 Electric duct heater KW and actual temperature differential across electrical heating coil.

- 1.8.4 Air Distribution Devices:
  - 1.8.1.1 Manufacturer, model and size
  - 1.8.1.2 Location
  - 1.8.1.3 Design and actual CFM (cooling and heating)
- 1.8.1.4 Air distribution devices where a velocity indicating instrument is used to determine CFM; required and actual velocity in FPM. (When hood used to determine CFM, only CFM recorded).
- 1.8.5 Supply/Exhaust Fans:
  - 1.8.5.1 Manufacturer, model and size
  - 1.8.5.2 Design and actual CFM
  - 1.8.5.3 Design and actual RFM
  - 1.8.5.4 Design and actual static pressure
  - 1.8.5.5 Motor nameplate data
  - 1.8.5.6 Motor starter data and motor overload protection size and rating
  - 1.8.5.7 Actual motor amperage and voltage (all phases)
- 1.8.6 Water Coils
  - 1.8.6.1 Manufacturer
  - 1.8.6.2 Design and actual CFM
  - 1.8.6.3 Design and static pressures
  - 1.8.6.4 Design and actual entering and air temperatures
  - 1.8.6.5 Design and actual leaving air temperatures
  - 1.8.6.6 Actual outside air temperature
  - 1.8.6.7 Design and actual entering water temperature
  - 1.8.6.8 Design and actual leaving water temperature

- 1.8.6.9 Design and actual coil pressure drop
- 1.8.6.10 Design and actual GPM
- 1.8.7 Pumps:
  - 1.8.7.1 Manufacturer, model and size
  - 1.8.7.2 Design and estimated impeller size from manufacturers pump curves
  - 1.8.7.3 Actual pump suction and discharge pressures
  - 1.8.7.4 Design and actual pumping head
  - 1.8.7.5 Design and actual GPM
  - 1.8.7.6 Motor nameplate data
  - 1.8.7.7 Motor starter data and motor overload protection size and rating
  - 1.8.7.8 Actual motor amperage and voltage (all phases)
- 1.9 INSTRUCTIONS TO OPERATING PERSONNEL
  - 1.9.1 Testing, Adjusting, and Balancing firm shall instruct the operating personnel regarding the following:
    - 1.9.1.1 Systems Operation
    - 1.9.1.2 Unusual Operating Conditions
    - 1.9.1.3 System Troubleshooting Procedure
- 1.10 GUARANTEE
  - 1.10.1 Provide warranty of twelve (12) months after occupancy during which time the Architect/Engineer and/or Owner may, at his discretion, request check of the balance of any HVAC equipment. Provide Testing, Adjusting, and Balancing technicians to assist as required in making such tests. When any device is found not balanced in accordance with the mechanical plans and specifications, that HVAC system shall be completely rebalanced as directed by the Architect/Engineer and/or Owner at the Testing, Adjusting, and Balancing firms expense.
  - 1.11 The above listing must not be taken as all inclusive regarding test and procedures. Additional information or tests beneficial to the project should be noted in the information submittal. The final and actual specification sections and work may vary.

## **EXHIBIT "B"**

## COMPLETION SCHEDULE

This agreement shall be effective upon execution by both parties and shall be in effect beginning on the date of award and continue for one (1) year with the option of four (4) one (1) year renewals.

Project Schedule will be determined by each individual project.

# EXHIBIT "C"

# FEE SCHEDULE

Invoices will be transmitted to the County on a monthly basis based on a percentage of work completed at that time.

Labor Rates	<u>2021</u>	2022	<u>2023</u>
Sr. Project Manager:	\$165.00	\$170.00	\$170.00
Project Manager:	\$145.00	\$150.00	\$150.00
Project Leader:	\$125.00	\$130.00	\$135.00
Technician:	\$105.00	\$110.00	\$115.00

# EXHIBIT "D"

## INFORMATION TO BE PROVIDED BY THE COUNTY

The County will make available to Firm any and all information, data, etc. as it may have in its possession relating to the project described herein.

#### **EXHIBIT "E"**

## INSURANCE REQUIREMENTS

- 1.1 Before commencing work, the vendor shall be required, at its own expense, to furnish the Collin County Purchasing Agent with certified copies of all insurance certificate(s) indicating the coverage to remain in force throughout the term of this contract.
  - 1.1.1 **Commercial General Liability** insurance including but not limited to the coverage indicated below. Coverage shall not exclude or limit Products/Completed Operations, Contractual Liability, or Cross Liability.

•	Each Occurrence:	\$1,000,000
•	Personal & Adv Injury:	\$1,000,000
•	Products/Completed Operation:	\$1,000,000
•	General Aggregate:	\$2,000,000

1.1.2 Workers Compensation insurance as required by the laws of Texas, and Employers' Liability.

Employers' Liability

•	Liability, Each Accident:	\$500,000
•	Disease-Each Employee:	\$500,000
•	Disease – Policy Limit:	\$500,000

- 1.1.3 **Commercial Automobile Liability** insurance including owned, non-owned, and hired vehicles used in connection with the contract.
  - Combined Single Limit Each Accident: \$1,000,000
- 1.1.4 **Professional/Errors & Omissions Liability** insurance with a two (2) year extended period of coverage, (i.e. tail coverage). If you choose to have project coverage endorsed onto your base policy, this would be acceptable.

• Each Occurrence/Aggregate: \$1,000,000

1.1.5 Umbrella/Excess Liability insurance.

Each Occurrence/Aggregate: \$1,000,000

- 1.2 With reference to the foregoing insurance requirement, the vendor shall endorse applicable insurance policies as follows:
  - 1.2.1 A waiver of subrogation in favor of Collin County, its officials, employees, volunteers and officers shall be for General Liability, Commercial Automobile Liability and Workers' Compensation.
  - 1.2.2 The vendor's insurance coverage shall name Collin County as additional insured under the General Liability policy.
  - 1.2.3 All insurance policies shall be endorsed to require the insurer to immediately notify Collin County of any decrease in the insurance coverage limits.
  - 1.2.4 All insurance policies shall be endorsed to the effect that Collin County will receive at least thirty (30) days notice prior to cancellation, non-renewal or termination of the policy.

- 1.2.5 All copies of Certificates of Insurance shall reference the project/contract number.
- 1.3 All insurance shall be purchased from an insurance company that meets the following requirements:
  - 1.3.1 A financial rating of A+VII or better as assigned by the BEST Rating Company or equivalent.
- 1.4 Certificates of Insurance shall be prepared and executed by the insurance company or its authorized agent, and shall contain provisions representing and warranting the following:
  - 1.4.1 Sets forth all endorsements and insurance coverages according to requirements and instructions contained herein.
  - 1.4.2 Sets forth the notice of cancellation or termination to Collin County.

## **EXHIBIT "F"**

# AFFIDAVIT OF REGULATION OF CONFLICTS OF INTEREST

The undersigned declares and affirm that during the term of this contract they will maintain compliance as defined in Vernon's Texas Codes Annotated, Local Government Code Title 5, Section C, Chapter 171.

I further understand and acknowledge that the existence of a prohibited interest at any time during the term of this contract will render the contract voidable.

Name of Firm	Engineered Air Balance Co., Inc.	
Title of Officer	President	
Signature of Officer	Jan / fran	
Date:	November 8, 2021	
	ACKNOWLEDGMENT	
STATE OF TEXAS	}	
COUNTY OF COLL	<u>IN</u> }	
<b>BEFORE ME</b> , on this day personally appeared Kevin Underwood, known to me (or proved to me on the oath of personal knowledge or through Drivers license (description of identity card or other document) to be the person whose name is subscribed to the foregoing instrument and acknowledged to me that he/she executed the same for the purposes and consideration therein expressed.		
GIVEN UNDER MY H	AND AND SEAL OF OFFICE, this the 8 day of _	November , 2021.
Deria	wallace	
Notary Public, State of	f Texas	
Terria Wallace Printed Name	<u>ə</u>	TERRIA WALLACE Notary Public, State of Texas Comm. Expires 03-20-2024 Notary ID 11911871
My Commission expir	res on the <u>20</u> day of <u>March</u> , <u>2024</u> .	