



State of New Mexico Public School Facilities Authority

Agreement No. SA2022-8

THIS Agreement ("Agreement") is made by and between the New Mexico Public Schools Facility Authority hereinafter referred to as "PSFA" and the Energy Balance and Integration, hereinafter referred to as the "Contractor," and is effective as of the date set forth below upon which it is executed by the PSFA.

WHEREAS, the PSFA issued a Request for Proposals (RFP) for Test, Adjust and Balance Services, RFP No. 2022-003; and

WHEREAS, the Contractor submitted its Proposal, dated September 23, 2021; and

WHEREAS, the Proposal submitted by Contractor is incorporated by reference and made a part of this Agreement by way of this reference; and

WHEREAS, the Contractor has the experience and technical ability to provide the work/services; and

WHEREAS, this Agreement shall be utilized by the PSFA and school districts collectively, on an as-needed basis, when the PSFA and school districts are Co-Owners of a project, or by the school districts acting on their own; and

NOW, THEREFORE, THE FOLLOWING TERMS AND CONDITIONS ARE MUTUALLY AGREED BETWEEN THE PARTIES:

1. Scope of Work

- A. The Contractor shall perform the work as described in **Exhibit A**.
- B. An individual scope of work and purchase order will be assigned for each task assigned pursuant to this Agreement. Each task assigned shall be issued pursuant to a fully executed project proposal submitted by the Contractor, with written acceptance by PSFA and/or the District.

2. Compensation

- A. The Contractor shall be compensated in full payment for services satisfactorily performed according to the labor rates in the proposal, herein included as **Exhibit B**. Contractor shall be reimbursed per the billable expenses defined in the RFP, as well as for the printing costs for the final reports. Itemized receipts are required for all reimbursements.

- B. Payment shall be made upon acceptance of each deliverable and upon the receipt and acceptance of a detailed, certified Payment Invoice.
- C. Payment will be made to the Contractor's designated mailing address. In accordance with Section 13-1-158 NMSA 1978, payment shall be tendered to the Contractor within thirty (30) days of the date of written certification of acceptance.
- D. All Payment Invoices MUST BE received by PSFA no later than fifteen (15) days after the termination of this Agreement. Payment Invoices received after such date WILL NOT BE PAID.
- E. The Contractor shall be reimbursed by the PSFA for applicable New Mexico gross receipts taxes, excluding interest or penalties assessed on the Contractor by any authority. PLEASE NOTE NO PROPERTY TAX WILL BE PAID TO THE CONTRACTOR BY THE STATE. The payment of taxes for any money received under this Agreement shall be the Contractor's sole responsibility and should be reported under the Contractor's Federal and State tax identification Number. Contractor and all subcontractors shall pay all Federal, state and local taxes Applicable to its operation and any persons employed by the Contractor. Contractor shall require all subcontractors to hold PSFA harmless from any responsibility for taxes, damages and interest, if applicable, contributions required under Federal and/or state and local laws and regulations and any other costs, including transaction privilege taxes, unemployment compensation insurance, Social Security and Worker's Compensation.

3. Term

This Agreement shall begin on the date approved by the PSFA and shall end on October 31, 2026, unless the option to renew for an additional three (3) years is exercised. In such case, the final termination date would be October 31, 2029 unless the Agreement is terminated pursuant to this Agreement's Termination Clause or Appropriations Clause. The PSFA reserves the right to renew the Agreement through a written amendment signed by all required signatories, but in any case the Agreement shall not exceed the total number of years allowed pursuant to NMSA 1978, § 13-1-150.

4. Termination

- A. Grounds. The PSFA may terminate this Agreement for convenience or cause. The Contractor may only terminate this Agreement based upon the PSFA's uncured, material breach of this Agreement.
- C. Notice; PSFA Opportunity to Cure.
 - 1. Except as otherwise provided in sub-paragraph A of this Clause and the Appropriations Clause of this Agreement, PSFA shall give Contractor written notice of termination at least thirty (30) days prior to the intended date of termination.
 - 2. Contractor shall give PSFA written notice of termination at least thirty (30) days prior to the intended date of termination, which notice shall (i) identify all PSFA's material breaches of this Agreement upon which the termination is based and (ii) state what PSFA must do to cure such material breaches. Contractor's notice of termination shall only be effective (i) if PSFA does not cure all material breaches within the thirty (30) day notice period or (ii) in the case

of material breaches that cannot be cured within thirty (30) days, PSFA does not, within the thirty (30) day notice period, notify the Contractor of its intent to cure and begin with due diligence to cure the material breach.

3. Notwithstanding the foregoing, this Agreement may be terminated immediately upon written notice to the Contractor (i) if the Contractor becomes unable to perform the services contracted for, as determined by the PSFA; (ii) if, during the term of this Agreement, the Contractor is suspended or debarred by the State Purchasing Agent; or (iii) the Agreement is terminated pursuant to the Appropriations Clause of this Agreement.

- C. Liability. Except as otherwise expressly allowed or provided under this Agreement, the PSFA's sole liability upon termination shall be to pay for acceptable work performed prior to the Contractor's receipt or issuance of a notice of termination; provided, however, that a notice of termination shall not nullify or otherwise affect either party's liability for pre-termination defaults under or breaches of this Agreement. The Contractor shall submit an invoice for such work within thirty (30) days of receiving or sending the notice of termination. THIS PROVISION IS NOT EXCLUSIVE AND DOES NOT WAIVE PSFA'S OTHER LEGAL RIGHTS AND REMEDIES CAUSED BY THE CONTRACTOR'S DEFAULT/BREACH OF THIS AGREEMENT.

5. Appropriations

The terms of this Agreement are contingent upon sufficient appropriations and authorization being made by the Legislature of New Mexico for the performance of this Agreement. If sufficient appropriations and authorization are not made by the Legislature, this Agreement shall terminate immediately upon written notice being given by the PSFA to the Contractor. The PSFA's decision as to whether sufficient appropriations are available shall be accepted by the Contractor and shall be final. If the PSFA proposes an amendment to the Agreement to unilaterally reduce funding, the Contractor shall have the option to terminate the Agreement or to agree to the reduced funding, within thirty (30) days of receipt of the proposed amendment.

6. Status of Contractor

The Contractor and its agents and employees are independent contractors performing professional or general services for the PSFA and are not employees of the State of New Mexico. The Contractor and its agents and employees shall not accrue leave, retirement, insurance, bonding, use of state vehicles, or any other benefits afforded to employees of the State of New Mexico as a result of this Agreement. The Contractor acknowledges that all sums received hereunder are reportable by the Contractor for tax purposes, including without limitation, self-employment and business income tax. The Contractor agrees not to purport to bind the State of New Mexico unless the Contractor has express written authority to do so, and then only within the strict limits of that authority.

7. Conflict of Interest; Governmental Conduct Act

- A. The Contractor represents and warrants that it presently has no interest and, during the term of this Agreement, shall not acquire any interest, direct or indirect, which would conflict in any manner or degree with the performance or services required under the Agreement.
- B. The Contractor further represents and warrants that it has complied with, and, during the term of this Agreement, will continue to comply with, and that this Agreement complies with all

applicable provisions of the Governmental Conduct Act, Chapter 10, Article 16 NMSA 1978. Without in any way limiting the generality of the foregoing, the Contractor specifically represents and warrants that:

1. in accordance with NMSA 1978, § 10-16-4.3, the Contractor does not employ, has not employed, and will not employ during the term of this Agreement any PSFA employee while such employee was or is employed by PSFA and participating directly or indirectly in PSFA's contracting process;
 2. this Agreement complies with NMSA 1978, § 10-16-7(A) because (i) the Contractor is not a public officer or employee of the State; (ii) the Contractor is not a member of the family of a public officer or employee of the State; (iii) the Contractor is not a business in which a public officer or employee or the family of a public officer or employee has a substantial interest; or (iv) if the Contractor is a public officer or employee of the State, a member of the family of a public officer or employee of the State, or a business in which a public officer or employee of the State or the family of a public officer or employee of the State has a substantial interest, public notice was given as required by NMSA 1978, § 10-16-7(A) and this Agreement was awarded pursuant to a competitive process;
 3. in accordance with NMSA 1978, § 10-16-8(A), (i) the Contractor is not, and has not been represented by, a person who has been a public officer or employee of the State within the preceding year and whose official act directly resulted in this Agreement and (ii) the Contractor is not, and has not been assisted in any way regarding this transaction by, a former public officer or employee of the State whose official act, while in State employment, directly resulted in PSFA's making this Agreement;
 4. this Agreement complies with NMSA 1978, § 10-16-9(A) because (i) the Contractor is not a legislator; (ii) the Contractor is not a member of a legislator's family; (iii) the Contractor is not a business in which a legislator or a legislator's family has a substantial interest; or (iv) if the Contractor is a legislator, a member of a legislator's family, or a business in which a legislator or a legislator's family has a substantial interest, disclosure has been made as required by NMSA 1978, § 10-16-7(A), this Agreement is not a sole source or small purchase contract, and this Agreement was awarded in accordance with the provisions of the Procurement Code;
 5. in accordance with NMSA 1978, § 10-16-13, the Contractor has not directly participated in the preparation of specifications, qualifications or evaluation criteria for this Agreement or any procurement related to this Agreement; and
 6. in accordance with NMSA 1978, § 10-16-3 and § 10-16-13.3, the Contractor has not contributed, and during the term of this Agreement shall not contribute, anything of value to a public officer or employee of PSFA.
- C. Contractor's representations and warranties in paragraphs A and B of this Clause are material representations of fact upon which PSFA relied when this Agreement was entered into by the Parties. Contractor shall provide immediate written notice to PSFA if, at any time during the term of this Agreement, Contractor learns that Contractor's representations and warranties in paragraphs A and B of this Clause were erroneous on the effective date of this Agreement or have become erroneous by reason of new or changed circumstances. If it is later determined that

Contractor's representations and warranties in paragraphs A and B of this Clause were erroneous on the effective date of this Agreement or have become erroneous by reason of new or changed circumstances, in addition to other remedies available to PSFA and notwithstanding anything in the Agreement to the contrary, PSFA may immediately terminate the Agreement.

D. All terms defined in the Governmental Conduct Act have the same meaning in this Agreement.

8. Amendment

A. This Agreement shall not be altered, changed or amended except by instrument in writing executed by the Parties hereto and all other required signatories.

B. If PSFA propose an amendment to the Agreement to unilaterally reduce funding due to budget or other considerations, the Contractor shall, within thirty (30) days of receipt of the proposed Amendment, have the option to terminate the Agreement, pursuant to the termination provisions as set forth in the Terminations Clause of this Agreement, or to agree to the reduced funding.

9. Merger

This Agreement incorporates all the Agreements, covenants and understandings between the Parties hereto concerning the subject matter hereof, and all such covenants, Agreements and understandings have been merged into this written Agreement. No prior Agreement or understanding, oral or otherwise, of the Parties or their agents shall be valid or enforceable unless embodied in this Agreement.

10. Penalties for Violation of Law

The Procurement Code, NMSA 1978 §§ 13-1-28 through 13-1-199, imposes civil and criminal penalties for violation of the statute. In addition, the New Mexico criminal statutes impose felony penalties for illegal acts, including bribes, gratuities and kickbacks.

11. Equal Opportunity Compliance

The Contractor agrees to abide by all federal and state laws and rules and regulations, and executive orders of the Governor of the State of New Mexico, pertaining to equal employment opportunity. In accordance with all such laws of the State of New Mexico, the Contractor assures that no person in the United States shall, on the grounds of race, religion, color, national origin, ancestry, sex, age, physical or mental handicap, or serious medical condition, spousal affiliation, sexual orientation or gender identity, be excluded from employment with or participation in, be denied the benefits of, or be otherwise subjected to discrimination under any program or activity performed under this Agreement. If Contractor is found not to be in compliance with these requirements during the life of this Agreement, Contractor agrees to take appropriate steps to correct these deficiencies.

12. Workers Compensation

The Contractor agrees to comply with state laws and rules applicable to workers compensation benefits for its employees. If the Contractor fails to comply with the Workers Compensation Act and applicable rules when required to do so, this Agreement may be terminated by PSFA.

13. Applicable Law

The laws of the State of New Mexico shall govern this Agreement, without giving effect to its choice of law provisions. Venue shall be proper only in a New Mexico court of competent jurisdiction in accordance with NMSA 1978, § 38-3-1 (G). By execution of this Agreement, Contractor acknowledges and agrees to the jurisdiction of the courts of the State of New Mexico over any and all lawsuits arising under or out of any term of this Agreement.

14. Records and Financial Audit

The Contractor shall maintain detailed time and expenditure records that indicate the date, time, nature and cost of services rendered during the Agreement's term and effect and retain them for a period of three (3) years from the date of final payment under this Agreement. The records shall be subject to inspection by PSFA, the Department of Finance and Administration and the State Auditor. PSFA shall have the right to audit billings both before and after payment. Payment under this Agreement shall not foreclose the right of PSFA to recover excessive or illegal payments

15. Invalid Term or Condition

If any term or condition of this Agreement shall be held invalid or unenforceable, the remainder of this Agreement shall not be affected and shall be valid and enforceable.

16. Enforcement of Agreement

A party's failure to require strict performance of any provision of this Agreement shall not waive or diminish that party's right thereafter to demand strict compliance with that or any other provision. No waiver by a party of any of its rights under this Agreement shall be effective unless express and in writing, and no effective waiver by a party of any of its rights shall be effective to waive any other rights.

17. Non-Collusion

In signing this Agreement, the Contractor certifies the Contractor has not, either directly or indirectly, entered into action in restraint of free competitive bidding in connection with this offer submitted to the PSFA.

18. Notices

Any notice required to be given to either party by this Agreement shall be in writing and shall be delivered in person, by courier service or by U.S. mail, either first class or certified, return receipt requested, postage prepaid, as follows:

To PSFA:
Marilee Gallacher, SPSM
Contracts Administrator
1312 Basehart Rd., SE Suite 200
Albuquerque, NM 87106-4365

To the Contractor:
Energy Balance and Integration
Rallin M. Harris
Project Manager
8915 Adams Street NE
Suite A
Albuquerque, NM 87113

19. Succession

This Agreement shall extend to and be binding upon the successors and assigns of the parties.

20. Headings

Any and all headings herein are inserted only for convenience and ease of reference and are not to be considered in the construction or interpretation of any provision of this Agreement. Numbered or lettered provisions, sections and subsections contained herein, refer only to provisions, sections and subsections of this Agreement unless otherwise expressly stated.

21. Default/Breach

In case of Default and/or Breach by the Contractor, for any reason whatsoever, PSFA and the State of New Mexico may procure the goods or Services from another source and hold the Contractor responsible for any resulting excess costs and/or damages, including but not limited to, direct damages, indirect damages, consequential damages, special damages and PSFA and the State of New Mexico may also seek all other remedies under the terms of this Agreement and under law or equity.

22. Equitable Remedies

Contractor acknowledges that its failure to comply with any provision of this Agreement will cause the PSFA irreparable harm and that a remedy at law for such a failure would be an inadequate remedy for the PSFA, and the Contractor consents to the PSFA's obtaining from a court of competent jurisdiction, specific performance, or injunction, or any other equitable relief in order to enforce such compliance. The PSFA's rights to obtain equitable relief pursuant to this Agreement shall be in addition to, and not in lieu of, any other remedy that PSFA may have under applicable law, including, but not limited to, monetary damages.

23. Indemnification

The Contractor shall defend, indemnify and hold harmless PSFA and the State of New Mexico from all actions, proceedings, claims, demands, costs, damages, attorneys' fees and all other liabilities and expenses of any kind from any source which may arise out of the performance of this Agreement, caused by the negligent act or failure to act of the Contractor, its officers, employees, servants, subcontractors, or agents resulting in injury or damage to persons or property during the time when the Contractor or any officer, agent, employee, servant or subcontractor thereof has performed or is performing services pursuant to this Agreement. In the event that any action, suit or proceeding related to the services performed by the Contractor or any officer, agent, employee, servant or subcontractor under this Agreement is brought against the Contractor, the Contractor shall, as soon

as practicable but no later than two (2) days after it receives notice thereof, notify the legal counsel of PSFA and the Risk Management Division of the New Mexico General Services Department by certified mail.

24. Insurance

Contractor shall maintain in force during the entire term of this Agreement, the following insurance coverage(s), naming the PSFA as an additional insured.

- A. Workers Compensation (including accident and disease coverage) at the statutory limit.
Employer's liability: \$100,000.
- B. Comprehensive general liability (including endorsements providing broad form property damage, personal injury coverage and contractual assumption of liability for all liability the Contractor has assumed under this Agreement). Limits shall not be less than the following:
 - 1. Bodily injury: \$1,000,000 per person /\$1,000,000 per occurrence.
 - 2. Property damage or combined single limit coverage: \$1,000,000.
 - 3. Automobile liability (including non-owned automobile coverage): \$1,000,000.
 - 4. Umbrella: \$1,000,000.
- C. Contractor shall maintain the above insurance for the term of this Agreement and name the PSFA as an additional insured and provide for 30 days cancellation notice on any Certificate of Insurance form furnished by Contractor. Such certificate shall also specifically state the coverage provided under the policy is primary over any other valid and collectible insurance and provide a waiver of subrogation.

25. Assignment

The Contractor shall not assign or transfer any interest in this Agreement or assign any claims for money due or to become due under this Agreement without the prior written approval of the PSFA.

26. Subcontracting

The Contractor shall not subcontract any portion of the services to be performed under this Agreement without the prior written approval of the PSFA. No such subcontract shall relieve the primary Contractor from its obligations and liabilities under this Agreement, nor shall any subcontract obligate direct payment from the PSFA.

27. Release

Final payment of the amounts due under this Agreement shall operate as a release of the PSFA, its officers and employees, and the State of New Mexico from all liabilities, claims and obligations whatsoever arising from or under this Agreement.

28. Confidentiality

Any Confidential Information provided to the Contractor by the PSFA or, developed by the Contractor based on information provided by the PSFA in the performance of this Agreement shall be kept confidential and shall not be made available to any individual or organization by the

Contractor without the prior written approval of the PSFA. Upon termination of this Agreement, Contractor shall deliver all Confidential Information in its possession to the PSFA within thirty (30) Business Days of such termination. Contractor acknowledges that failure to deliver such Confidential Information to the PSFA will result in direct, special and incidental damages.

29. Contractor Personnel

- A. Key Personnel. Contractor's key personnel shall not be diverted from those designated in the Matrix Form without the prior written approval of the PSFA. Key personnel are those individuals considered by the PSFA to be mandatory to the work to be performed under this Agreement.
- B. Personnel Changes. Replacement of any personnel shall be made with personnel of equal ability, experience, and qualification and shall be approved by the PSFA. For all personnel, the PSFA reserves the right to require submission of their resumes prior to approval. If the number of Contractor's personnel assigned to the Project is reduced for any reason, Contractor shall, within ten (10) Business Days of the reduction, replace with the same or greater number of personnel with equal ability, experience, and qualifications, subject to PSFA approval. The PSFA, in its sole discretion, may approve additional time beyond the ten (10) Business Days for replacement of personnel. The Contractor shall include status reports of its efforts and progress in finding replacements and the effect of the absence of the personnel on the progress of the Project. The Contractor shall also make interim arrangements to assure that the Project progress is not affected by the loss of personnel. The PSFA reserves the right to require a change in Contractor's personnel if the assigned personnel are not, in the sole opinion of the PSFA, meeting the PSFA's expectations.

30. Communications Facilitating Contract Administration

The Contractor shall create all contractual communications through the NMPSFA-CIMS and load all reports, meeting notes, pay applications, and any other pertinent project information into the NMPSFA-CIMS.

31. Incorporation by Reference and Precedence

- A. If this Agreement has been procured pursuant to a request for proposals, this Agreement is derived from (1) the request for proposal, (including any written clarifications to the request for proposals and any PSFA response to questions); (2) the Contractor's best and final offer; and (3) the Contractor's response to the request for proposals.
- B. In the event of a dispute under this Agreement, applicable documents will be referred to for the purpose of clarification or for additional detail in the following order of precedence: (1) Matrix; (2) amendments to the Agreement in reverse chronological order; (2) the Agreement, including the scope of work and all terms and conditions thereof; (3) the request for proposals, including attachments thereto and written responses to questions and written clarifications; (4) the Contractor's best and final offer if such has been made and accepted by the PSFA; and (5) the Contractor's response to the request for proposals.

32. Product of Service – Copyright

All materials developed or acquired by the Consultant under this Agreement shall become the property of the State of New Mexico and shall be delivered to the PSFA no later than the termination date of this Agreement. Nothing developed or produced, in whole or in part, by the Consultant under this Agreement shall be the subject of an application for copyright or other claim of ownership by or on behalf of the Consultant.

33. Invalid Term or Condition

If any term or condition of this Agreement shall be held invalid or unenforceable, the remainder of this Agreement shall not be affected and shall be valid and enforceable.

34. Authority

If Contractor is other than a natural person, the individual(s) signing this Agreement on behalf of Contractor represent and warrant that they have the power and authority to bind Contractor, and that no further action, resolution, or approval from Contractor is necessary to enter into a binding contract.

IN WITNESS WHEREOF, the Parties hereto have executed this Agreement as of the day and year last executed by either party hereto as indicated below.

CONTRACTOR:

Energy Balance and Integration

By:

Signature

Date

Print Name

Title

Contractor NM TAX ID Number:

OWNER

New Mexico Public School Facilities Authority

By:

Print Name

Title

1. GENERAL

1.1. REQUIREMENTS

- 1.1.1. Testing and balancing of the mechanical systems and associated controls shall be under the direction and coordination of the owner. Test and Balance (TAB) Services shall be responsible for coordination, supervision, execution, furnishing the data required by the test procedures, and report preparation for the testing, adjusting, and balancing requirements outlined in this Section.
- 1.1.2. TAB will be provided by the Owner's TAB Services Contractor and paid for by the Owner. This Section serves to clarify the responsibilities of the Contractors, and the Owner's TAB Services Contractor.
- 1.1.3. During the testing, adjusting, and balancing work, the Owner's TAB Services Contractor may identify issues or recommended corrective measures. These will be compiled in the Installation Issues Log maintained by the PAC and RFIs will be created by the PAC as appropriate. The Construction Stage Deficiency Log will be promulgated to responsible parties via the Owner's Representative and the Architect. **IMPLEMENTATION OF CORRECTIONS SHALL BE PERFORMED BY THE CONTRACTOR AT NO ADDITIONAL CHARGE.** If the Contractor believes recommended corrections are beyond the scope of work specified in the contract, it shall be the Contractor's responsibility to request and receive written change order authorization through the Owner's established process prior to undertaking those recommended corrections.
- 1.1.4. The General Contractor shall provide services of a qualified manufacturer's representative of the Direct Digital Control or Building Automation Systems and qualified representatives of the mechanical and electrical subcontractors as required for the TAB work and **THE SUB-CONTRACTORS SHALL INCLUDE COST FOR THE CONTRACTOR'S TESTING, ADJUSTING, AND BALANCING REQUIREMENTS IN HIS CONTRACT PRICE. SERVICES OF THE TAB AGENCY SHALL BE PROVIDED BY THE OWNER AND ARE NOT PART OF THE CONTRACT PRICE.**
- 1.1.5. Mechanical system installation, start-up, initial testing, the preparation of Operation and Maintenance Manuals, and operator training are the responsibility of the General Contractor. The testing, adjusting, and balancing requirements in this Section do not relieve the General Contractor from the obligations to complete all portions of the work in a satisfactory and fully operational manner.
- 1.1.6. The Owner's TAB Services Contractor shall include performing Testing and Balancing of the HVAC and Control Systems its Scope of Work.

1.2. REFERENCES

- 1.2.1. AABC – National Standards for Total System Balance
- 1.2.2. ASHRAE 111 – Practices for Measurement, Testing, Adjusting, and Balancing of Environmental Systems
- 1.2.3. NEBB – Procedural Standards for Measurement, Testing, Adjusting, and Balancing of Environmental Systems
- 1.2.4. SMACNA – HVAC Systems Testing, Adjusting, and Balancing

1.3. SUBMITTALS BY OWNER'S TAB SERVICES CONTRACTOR

- 1.3.1. Field Reports indicating deficiencies in systems that would prevent proper testing, adjusting, and balancing of systems and equipment to achieve specified performance.
- 1.3.2. Report forms or outlines indicating adjusting, balancing, and equipment data required. Submit prior to commencing work.
- 1.3.3. Test Reports including data on forms containing information indicated in Schedules.
- 1.3.4. Draft copies of TAB Report for review prior to Substantial Completion of Project.
- 1.3.5. Copies of final TAB Report.
- 1.3.6. Provide submittals and reports to PAC for transmittal to Owner's Representative and Architect/Engineer.
- 1.3.7. Provide two (2) reports in letter size, 3-ring binders with index page, indexing tabs, and with cover identification at front and side. One (1) Electronic Copy in PDF Format. Include set of reduced drawings with air outlets and equipment identified to correspond with data sheets, and indicating thermostat/temperature sensor locations.

1.4. QUALITY ASSURANCE

- 1.4.1. Perform total system balance in accordance with NEBB Procedural Standards.

1.5. SEQUENCING

- 1.5.1. Sequence TAB work in conjunction with work by the Contractor. TAB work and milestones shall be incorporated in the General Contractor's Construction Schedule.

- 1.5.2. Sequence TAB work to commence after completion of systems. TAB work shall be completed as a prerequisite for Substantial Completion of the Project.

2. EXECUTION

2.1. AGENCIES

- 2.1.1. The General Contractor will be responsible for coordination, supervision, execution, and report preparation for the testing, adjusting, and balancing requirements of this Section in coordination with the Owner's Independent Performance Assurance Contractor.

2.2. SYSTEM READINESS

- 2.2.1. The General Contractor shall verify that systems are installed, complete and operable before the commencement of TAB work. The General Contractor and the Owner's Independent Performance Assurance Contractor, shall insure the following conditions:

1. Systems are started and operating in a safe and normal condition.
2. Direct Digital Control System and temperature controls are installed complete and operable including verification of proper end device operation and installation of required software and programming.
3. Proper thermal overload protection is in place for electrical equipment
4. Final filters are new and in place.
5. Coil fins are clean and combed if needed
6. Duct systems are clean of debris.
7. Fans are rotating correctly
8. Motors and bearings are properly lubricated.
9. Any excessive vibration has been corrected.
10. Fire/Smoke and volume dampers are in place, open, and operating properly.
11. All ductwork connections are complete, access doors are closed, and duct end caps are in place.
12. Air outlets are installed and connected.
13. Duct system leakage is minimized per the Specifications.
14. Water systems have been flushed, refilled, and vented.
15. Strainers or filters are in place and clean.
16. Control valves, check valves, and flow meters are installed and operating properly.
17. All manual valves, balancing devices, and control valves are open.
18. Pump rotation is correct and water is flowing.
19. System make-up water pressure is properly adjusted.

- 2.2.2. NMPSFA Approved Pre-Functional Checklist forms to verify the readiness of systems for TAB work are provided following the end of this Section. The General Contractor shall have personnel with direct knowledge complete the individual checklists to verify that systems are installed, complete and operable prior to the commencement of TAB work. ***These checklists do not replace any manufacturer recommended procedures.***

- 2.2.3. Prior to commencement of TAB work, the General Contractor shall submit a written request to the Owner, including completed Pre-Functional Checklists forms for mechanical inspection of the project. This inspection shall be conducted by a duly appointed representative of the Mechanical Engineer's office, the Mechanical Contractor's Superintendent, and the Owner's PAC Services Contractor. The inspection shall establish to the satisfaction of all parties that the systems are ready for testing and balancing.
- 2.2.4. Prior to commitment of TAB work, the General Contractor and PAC Contractor shall submit completed documentation of successful Manufacturer's Start-Up of equipment and systems associated with TAB Services.
- 2.2.5. If the Owner's PAC and TAB Services Contractor finds that systems are not ready for TAB, the General Contractor will be subject to charges for the Owner's TAB Services Contractor's lost time and expenses.

2.3. PREPARATION

- 2.3.1. The Owner's TAB Services Contractor shall provide necessary calibrated instruments required for testing, adjusting, and balancing operations. The Owner's TAB Services Contractor shall make instruments available to Architect/Engineer to facilitate spot checks during testing.
- 2.3.2. Additional balancing devices, if required, shall be furnished and installed by Mechanical and Controls Contractors

2.4. INSTALLATION TOLERANCES

- 2.4.1. Air Handling Systems: Adjust to within plus or minus 10 percent of design conditions for supply systems and within plus or minus 10 percent of design conditions for return and exhaust systems.
- 2.4.2. Air Outlets and Inlets: Adjust total to within plus or minus 10 percent of design conditions to space. Adjust outlets and inlets in space to within plus or minus 10 percent of design conditions.
- 2.4.3. If tested air quantities are not within the required limits, the Contractor must replace fan pulleys, sheaves, belts, or add balancing dampers, etc. as required to meet the Specifications. If acceptable to Contractor, TAB Agency may install replacement pulleys, sheaves, or belts as required to meet the Specifications. Installation of pulleys, sheaves, or belts by TAB Agency shall have no effect on Contractor's warranty.
- 2.4.4. Water: Adjust to within plus or minus 10 percent of design conditions.

2.5. ADJUSTING BY OWNER'S TAB SERVICES CONTRACTOR

- 2.5.1. Ensure recorded data represents actual measured or observed conditions.

- 2.5.2. Permanently mark settings of valves, dampers, and other adjustment devices to allow settings to be restored. Set and lock memory stops.
- 2.5.3. After adjustments, take measurement to verify balance has not been disrupted or that such disruption has been rectified.
- 2.5.4. Leave systems in proper working order, replace belt guards, close access doors, close doors to electrical switch boxes, restore thermostats to specified settings, and restore Direct Digital Control System to normal operation.
- 2.5.5. At Final Inspection, recheck random selections of data recorded in report. Recheck points or areas as selected and witnessed by the Owner.

2.6. PROCEDURE BY OWNER'S TAB SERVICES CONTRACTOR

2.6.1. Air Handling and Distribution Systems

- 2.6.1.1. Adjust air handling and distribution systems to provide required or design supply, return, and exhaust air quantities at site altitude.
- 2.6.1.2. Make air quantity measurements in ducts by Pitot tube traverse of entire cross sectional area of duct.
- 2.6.1.3. The total air volume handled by the system shall be determined by means of a Pitot tube and draft gauge. The total air delivered by each duct shall be measured by Pitot tube traverses.
- 2.6.1.4. The average velocity in the duct shall be determined by velocity readings which are taken in the center of equally divided areas in the cross section of the duct. The number of areas in which velocity readings are to be taken is determined by the size of the duct, based on a maximum size of equally divided areas of 8 inches.
- 2.6.1.5. Measure air quantities at air inlets and outlets. The volume dampers, pressure controllers, outlets and other devices shall be adjusted so the air volumes will be as shown on the drawings.
- 2.6.1.6. Adjust distribution system to obtain uniform space temperatures free from objectionable drafts and noise.
- 2.6.1.7. Use volume control devices to regulate air quantities only to the extent that adjustments do not create objectionable air motion or sound levels. Effect volume control by duct internal devices such as dampers and splitters.
- 2.6.1.8. Vary total system air quantities by adjustment of fan speeds. Provide drive changes required. Vary branch air quantities by damper regulation.

- 2.6.1.9. Provide system schematic with required and actual air quantities recorded at each outlet or inlet.
- 2.6.1.10. Measure air static pressure conditions on air supply units, including filter and coil pressure drops, and total pressure across the fan. Make allowances for 50 percent loading of filters.
- 2.6.1.11. Adjust outside air automatic dampers, outside air, return air, and exhaust dampers for design conditions.
- 2.6.1.12. Measure temperature conditions across outside air, return air, and exhaust dampers to check leakage.
- 2.6.1.13. Where modulating dampers are provided, take measurements and balance at extreme conditions.
- 2.6.1.14. Measure building static pressure and adjust supply, return, and exhaust systems to provide required relationship between each to maintain approximately 0.05 inches positive static pressure near the building entries.
- 2.6.1.15. On completion of the test the Owner's TAB Services Contractor shall prepare a typewritten report showing the tested values for inclusion in the Final HVAC and Controls Performance Assurance Report. This report shall include all flows, temperatures, temperature drops, and motors for the plumbing and mechanical systems. The CFM of each supply outlet with corresponding room number shall be included. This report shall include the fan RPM, nameplate data, the voltage and amperage readings of the fan motors, and the fan suction and discharge static pressure.

2.6.2. Water Systems

- 2.6.2.1. Verify systems have been flushed clean, strainers and filters are in place and clean, and that the system has been refilled and vented.
- 2.6.2.2. Verify that Contractor has installed all temperature and pressure test plugs as required to obtain a thorough flow test.
- 2.6.2.3. Balance all water flows using pump curve data. Balance all chilled water coils, hot water coils, heat exchangers, cooling towers, boilers, and chillers to specified flow rates.
- 2.6.2.4. Provide air and water entering and leaving conditions on all equipment.
- 2.6.2.5. Record pump flow rates, pressures, running amperage, and full load amperage at design flow and shut off conditions.

2.7. SCHEDULES BY OWNER'S TAB SERVICES CONTRACTOR

2.7.1. Equipment Requiring Testing, Adjusting, and Balancing:

1. Air Handling Units
2. Fans
3. Air Filters
4. Air Inlets and Outlets
5. Heating System Pumps and Water Flows
6. Direct Digital Control System
7. Building Automation System

2.7.2. The Owner's TAB Services Contractor's report shall contain all test, adjustment, and balance data and information on any discrepancies from the specifications or design conditions. The following should be included as a minimum:

2.8. Title Page is to include:

1. Name of Owner's TAB Services Contractor
2. Address of Owner's TAB Services Contractor
3. Telephone Number(s) of Owner's TAB Services Contractor
4. Project Name
5. Project Location
6. Project Architect
7. Project Engineer
8. Project Contractor
9. Project Altitude
10. Report Data

2.9. Summary Comments are to include:

1. Final Performance versus Design
2. Notable characteristics of systems
3. Identify any instances where the actual control sequence of operation varies from the designed and submitted sequences.
4. Summary of outdoor and exhaust air flows to indicate amount of building pressurization
5. Nomenclature used throughout report
6. Test conditions

2.10. Instrument List:

1. Instrument Used
2. Manufacturer
3. Model Number
4. Serial Number
5. Calibration Date

2.11. Electric Motors:

1. Manufacturer
2. Model/Frame
3. HP/BHP
4. Phase, voltage, amperage, nameplate, actual, no load
5. RPM
6. Service factor
7. Starter size, rating, heater elements
8. Sheave make, size, bore (as installed and any replacement)

2.12. V-Belt Drive:

1. Identification/Location
2. Required driven RPM
3. Driven sheave diameter and RPM (as installed and any replacement)
4. Belt size and quantity
5. Motor sheave diameter and RPM (as installed and any replacement)

2.13. Air Moving Equipment:

1. Location
2. Manufacturer
3. Model Number
4. Serial Number
5. Supply air flow - specified and actual
6. Return air flow - specified and actual
7. Outside air flow - specified and actual
8. Total external static pressure – specified and actual
9. Inlet pressure
10. Discharge pressure
11. Sheave - make/size/bore (as installed and any replacement)
12. Belts - make/size/quantity
13. Fan RPM

2.14. Return Air/Outside Air Data:

1. Identification/location
2. Design air flow
3. Actual air flow
4. Design return air flow
5. Actual return air flow
6. Design outside air flow
7. Actual outside air flow
8. Return air temperature
9. Outside air temperature

2.15. Exhaust Fan Data:

1. Location
2. Manufacturer
3. Model Number
4. Serial Number
5. Air flow - specified and actual
6. Total external static pressure – specified and actual
7. Inlet pressure
8. Discharge pressure
9. Sheave - make/size/bore (as installed and any replacement)
10. Belts - make/size/quantity
11. Fan RPM

2.16. Duct Traverse:

1. System zone/branch
2. Duct size
3. Area
4. Design velocity
5. Design air flow
6. Test velocity
7. Test air flow
8. Duct static pressure
9. Air Temperature
10. Air correction factor

2.17. Water Systems

1. Location
2. Pump Manufacturer
3. Pump Model Number
4. Pump Serial Number
5. Water flow - specified and actual
6. Total pressure – specified and actual
7. Suction pressure
8. Discharge pressure
9. Full load amperage at design flow and shut off conditions

2.18. Vibration Test (by Owner's TAB Services Contractor if required by Owner)

2.18.1. Location of points:

1. Fan/pump bearing drive end
2. Fan/pump bearing opposite end
3. Motor bearing drive end

4. Motor bearing center (if applicable)
5. Motor bearing opposite end
6. Casing bottom or top
7. Casing side
8. Duct after flexible connection (discharge)
9. Duct after flexible connection (suction)

2.18.2. Test readings:

1. Horizontal - velocity and displacement
2. Vertical - velocity and displacement
3. Axial - velocity and displacement

2.18.3. Normally acceptable readings, velocity and acceleration

2.18.4. Unusual conditions at time of test

2.18.5. Vibration source if non-complying

2.19. Life Safety Systems

2.19.1. The Contractor shall be required to demonstrate satisfactory operation of Life Safety Controls and Smoke Damper operation to the Test and Balance Agency unless the appropriate Authority Having Jurisdiction requires separate verification by the local Fire Marshal.

3. CONSTRUCTION STAGE

- 3.1. The TAB shall assure close out the TAB Design Issues Log.
- 3.2. The TAB shall attend the Project Kick-Off Meeting, which may include the Performance Assurance Contractor (PAC) Kick-Off Meeting, and report on the expectations and deliverables of the TAB, submit the TAB Milestone Schedule for inclusion into the Project Schedule.
- 3.3. The TAB shall make periodic visits to attend Contractor's Progress Meeting, review the Project Schedule as it relates to TAB testing activities.
- 3.4. The TAB shall schedule and conduct Test, Adjust, and Balance (TAB) activities with the DP, GC, PAC, and PSFA's RFM.

5. CONSTRUCTION CLOSE-OUT

- 5.1. The TAB shall attend the Lesson's Learned Meeting with the Owners, PAC, DP, GC, and involved Subcontractors to discuss and document how the project went well and what could be improved upon going forward.
- 5.2. The TAB shall submit the TAB Final Report, formatted as to the Contract Documents, to be added to with testing and documentation from the follow up activities listed below.

- 5.3. The TAB shall assure inclusion in the upcoming Opposite Season Functional Testing schedule.

6. OPPOSITE SEASON FUNCTIONAL TESTING

- 6.1. The TAB shall assure no critical TAB issues remain from the Construction Stage.
- 6.2. The TAB shall participate in the Opposite Season Functional Testing. Opposite Season Functional Testing shall be scheduled when seasonal demands shift from when the original Functional Testing was conducted (i.e. demands shift from Heating to Cooling). The TAB shall be available, should adjustments and verifications be required.

7. 11 MONTH WARRANTY AND CORRECTION STAGE

- 7.1. The TAB's participation in the 11 Month Warranty and Correction Inspection is optional.
- 7.2. If participation is requested, the TAB shall add the 11 Month Warranty and Correction Inspection to the TAB's Final Report.

8. GENERAL NOTES

- 8.1. It is important that all updated and completed documents relating to TAB, shall be submitted to PSFA's Regional Facilities Manager (RFM) within 72 hours to ensure acceptance, and upload to PSFA's Construction Information Management System (CIMS) for review and invoice submissions.
- 8.2. TAB Contractor ensures that the PSFA RFM is continually notified of any issues, changes, updates, and submissions relating to TAB.
- 8.3. When school is in session, the scheduling of TAB activities may be after hours or on weekends.
- 8.4. Be aware that some of the submissions listed above are processes of PSFA's CIMS. Be sure to review the Processes within PSFA's CIMS, and utilize those processes in order to better organize and track submissions.

9. COMPENSATION, BILLABLE TRAVEL EXPENSES

- 9.1. Allowed, billable travel expenses shall not exceed the State of New Mexico's current allowable travel, per diem, and mileage amount limits. NMAC 2.42.2.8.A–B current rates are listed below. Note to Contractor: Itemized, detailed receipts are required as expense documentation for ALL billable, travel expenses. No lump sum receipts will be accepted as expense documentation. If the itemized receipt is not submitted as expense documentation, reimbursement for that purchase will not be given. These are the current, allowable amounts effective July 1, 2021. **NOTE: These amounts are subject to change by the State of New Mexico.**

9.2. Proposals, Purchase Orders, Invoices

- 9.2.1. The Contractor shall not be issued a purchase order authorizing work to commence until the Contractor's related proposal has been submitted and approved by the District and/or PSFA.
- 9.2.2. No invoice shall be approved for payment until the required reports and documentation have been submitted to the appropriate parties for approval.
- 9.2.3. Invoicing shall reflect only the actual services provided, hours used, and documented expenses for the line items have been provided.
- 9.2.4. Contractor shall be reimbursed for NM Gross Receipts Tax, subject to the current tax rate at the time of the issuance of the work order/purchase order.

9.3. Meals:

- 9.3.1. For less than 2 hours of travel beyond normal work day: none
- 9.3.2. For 2 hours, but less than 6 hours beyond the normal work day: \$18.00
- 9.3.3. For 6 hours, but less than 12 hours beyond the normal work day: \$40.00
- 9.3.4. For 12 hours or more beyond the normal work day: \$55.00

9.4. Lodging, Overnight Travel:

- 9.4.1. In state areas: \$151.00
- 9.4.2. In state special areas: \$194.00

9.5. Meals, Returning from overnight travel:

- 9.5.1. For less than 2 hours: none
- 9.5.2. For 2 hours but less than 6 hours: \$18.00
- 9.5.3. For 6 hours or more, but less than 12 hours: \$40.00
- 9.5.4. For 12 hours or more: \$55.00

9.6. Mileage, Private Conveyance Rate:

- 9.6.1. For the year beginning January 1, 2021, the New Mexico mileage rate is \$0.46 per mile. This amount is subject to change by the State of New Mexico.

Contractor: Energy, Balance and Integration**EXHIBIT B: LABOR RATES**

Contractor cannot alter this form or the personnel title/classifications. *If Contractor's personnel titles/classifications vary from those on this form, Offeror should select this form's title/classifications that most closely represent the Contractor's personnel positions.

Contractor shall reference all work positions associated with this project, and each position's firm, fixed, hourly rate. **This hourly rate does not include employee travel time, mileage, per diem or lodging.** PSFA, at its discretion, may negotiate revised rates with the Contractor on an annual basis through the duration of the contract term. **Failure to successfully negotiate rates may result in termination of the Agreement.**

	PERSONNEL TITLE/CLASSIFICATION	PAY RATE	
1.	Consultant – Project Manager, or equivalent*	\$124.00	Per hour
2.	Consultant – Staff Observation, or equivalent*	\$124.00	Per hour
3.	Consultant – Senior Technician, or equivalent*	\$124.00	Per hour
4.	Consultant – Technician, or equivalent*	\$124.00	Per hour
5.	Consultant – Administrative Assistant, or equivalent*	\$124.00	Per hour