

**PROFESSIONAL SERVICE AGREEMENT
BETWEEN SANTA FE COUNTY AND
ENGINEERING ECONOMICS, INC.**

THIS AGREEMENT is made and entered into this 7th day of April 2016, by and between **SANTA FE COUNTY**, hereinafter referred to as the "County" and **ENGINEERING ECONOMICS, INC.**, whose principal address is 11930 Menaul NE, #224C, Albuquerque, NM 87112 hereinafter referred to as the "Contractor".

WHEREAS, the County requires professional commissioning services for the design and construction of the County Administration Building located at 100 Catron Street, Santa Fe, and renovation of the County Administration Building at 102 Grant Avenue, Santa Fe, New Mexico; and to consult and verify, as a third party agent, that the design and preparation of the architectural/engineering plans and specifications, and the construction contractor will be performed in accordance with best practices and requirements; and

WHEREAS, the Contractor's proposal was the most highly rated proposal and clearly demonstrated its ability and qualifications to perform the required professional services for this project; and

WHEREAS, pursuant to NMSA 1978, Sections 13-1-112 and 13-1-117, competitive sealed proposals were solicited through Request for Proposals No. 2016-0174-PW-RM to obtain the services and to consult and verify construction for the above stated project; and

WHEREAS, the County requires the services of the Contractor and the Contractor is willing to provide these services and both parties wish to enter into this Agreement.

NOW, THEREFORE, it is agreed between the parties:

1. SCOPE OF WORK

The Contractor shall furnish all expertise, labor and resources, in accordance with generally accepted professional commissioning practices and provide all services necessary during the term of this Agreement. The following points summarize the systems that the Contractor will be required to commission under this Agreement:

- Planning through construction document review and recommendations;
- Building envelope commissioning;
- LEED commissioning;
- Measurement and verification;
- All the heating, ventilating and air conditioning systems;
- Refrigeration systems;
- Lighting controls (occupancy sensors and daylight dimming);
- Hot water system (boilers, hot water pumps, valves, piping);
- Renewable energy systems (wind, solar);
- Emergency power generators and automatic transfer switching;
- Data and communication;
- Paging systems;

- Security system;
- Fire alarm system;
- Irrigation;
- Plumbing;
- Vertical transportation;
- Construction Phase meetings and site observations.
- Other special systems as requested by the County; and
- Conduct an 11-month warranty review.

2. **DELIVERABLES:** Contractor's specific commissioning services are described in detail on Exhibit A (Contractor's proposal), attached hereto and incorporated into this Agreement as Contractor's Scope of Work. Contractor's Deliverables are listed on page 5 for the new Administration Building at 100 Catron Street, and page 6 for the remodel or renovation of the County Building at 102 Grant Avenue.

3. **ADDITIONAL SERVICES**

A. The parties agree that all tasks set forth in Section 1 (Scope of Work) of this Agreement shall be completed in full, to the satisfaction of the County, in accordance with professional standards and for the amount set forth in Section 4 (Compensation, Invoicing and Set-Off), of this Agreement, and for no other cost, amount, fee or expense.

B. The County may from time to time request changes in the scope of work to be performed hereunder. Such changes, including any increase or decrease in the amount of the Contractor's compensation, which are mutually agreed upon by and between the County and the Contractor, shall be incorporated in written amendments to this Agreement.

4. **COMPENSATION, INVOICING AND SET-OFF**

A. In consideration of its obligations under this Agreement the Contractor shall be compensated as follows:

- 1) County shall pay to the Contractor in full payment for services satisfactorily performed. Contractor will submit two separate pay requests or invoices to the County monthly for services performed related to commissioning services for the County Building at 100 Catron Street, and for the renovation of the Administration Building at 102 Grant Avenue, Santa Fe. Invoices shall include a monthly detailed status report for all activities performed and percentage completed in relation to the project tasks and phases described on Exhibit A.
- 2) The total amount payable to the Contractor for services performed under this Agreement shall not exceed **Two Hundred Sixty-eight Thousand Five Hundred Ninety Dollars and No Cents (\$268,590.00) exclusive of** New Mexico gross receipts tax.

- 3) This amount is a maximum and not a guarantee that the work assigned to be performed by Contractor under this Agreement shall equal the amount stated herein. The parties do not intend for the Contractor to continue to provide services without compensation when the total compensation amount is reached. The County will notify the Contractor when the services provided under this Agreement reach the total compensation amount. In no event will the Contractor be paid for services provided in excess of the total compensation amount without this Agreement being amended in writing.

B. The Contractor shall submit a written request for payment to the County when payment is due under this Agreement. Upon the County's receipt of the written request, the County shall issue a written certification of complete or partial acceptance or rejection of the contractual items or services for which payment is sought.

- 1) The County's representative for certification of acceptance or rejection of contractual items and services shall be **Brad Isaacson, Project Manager II, Public Works Department**, or such other individual as may be designated in the absence of the office representative.
- 2) The Contractor acknowledges and agrees that the County may not make any payment hereunder unless and until it has issued a written certification accepting the contractual services or deliverables.
- 3) Within 30 days of the issuance of a written certification accepting the services or deliverables, the County shall tender payment for the accepted items or services. In the event the County fails to tender payment within 30 days of the written certification accepting the items or services, the County shall pay late payment charges of one and one-half percent (1.5%) per month, until the amount due is paid in full.

C. In the event the Contractor breaches this Agreement, the County may, without penalty, withhold any payments due the Contractor for the purpose of set-off until such time as the County determines the exact amount of damages it suffered as a result of the breach.

D. Payment under this Agreement shall not foreclose the right of the County to recover excessive or illegal payment.

5. EFFECTIVE DATE AND TERM

This Agreement shall, upon due execution by all parties, become effective as of the last date of signature by the parties hereto (the Effective Date). The term of this Agreement is one year from the Effective Date, unless earlier terminated pursuant to Section 5 (Termination) or Section 6 (Appropriations and Authorizations). The County has the option to extend the term in one-year increments not to exceed a total of four years in total. The County may exercise this option by submitting a written notice to the Contractor that the term of this Agreement will be extended. The notice must be submitted to the Contractor at least 60 days prior to expiration of the term.

6. TERMINATION

A. Termination of Agreement for Cause. Either party may terminate the Agreement based upon any material breach of this Agreement by the other party. The non-breaching party shall give the breaching party written notice of termination specifying the grounds for the termination. The termination shall be effective 30 days from the breaching party's receipt of the notice of termination, during which time the breaching party shall have the right to cure the breach. If, however, the breach cannot with due diligence be cured within 30 days, the breaching party shall have a reasonable time to cure the breach, provided that, within 30 days of its receipt of the written notice of termination, the breaching party began to cure the breach and advised the non-breaching party in writing that it intended to cure.

B. Termination for Convenience of the County. The County may, in its discretion, terminate this Agreement at any time for any reason by giving the Contractor written notice of termination. The notice shall specify the effective date of termination, which shall not be less than 15 days from the Contractor's receipt of the notice. The County shall pay the Contractor for acceptable work, determined in accordance with the specifications and standards set forth in this Agreement, performed before the effective date of termination but shall not be liable for any work performed after the effective date of termination.

7. APPROPRIATIONS AND AUTHORIZATIONS

This Agreement is contingent upon sufficient appropriations and authorizations being made for performance of this Agreement by the Board of County Commissioners of the County and/or, if state funds are involved, the Legislature of the State of New Mexico. If sufficient appropriations and authorizations are not made in this or future fiscal years, this Agreement shall terminate upon written notice by the County to the Contractor. Such termination shall be without penalty to the County, and the County shall have no duty to reimburse the Contractor for expenditures made in the performance of this Agreement. The County is expressly not committed to expenditure of any funds until such time as they are programmed, budgeted, encumbered and approved for expenditure by the County. The County's decision as to whether sufficient appropriations and authorizations have been made for the fulfillment of this Agreement shall be final and not subject to challenge by the Contractor in any way or forum, including a lawsuit.

8. INDEPENDENT CONTRACTOR

The Contractor and its agents and employees are independent contractors and are not employees or agents of the County. Accordingly, the Contractor and its agents and employees shall not accrue leave, participate in retirement plans, insurance plans, or liability bonding, use County vehicles, or participate in any other benefits afforded to employees of the County. Except as may be expressly authorized elsewhere in this Agreement, the Contractor has no authority to bind, represent, or otherwise act on behalf of the County and agrees not to purport to do so.

9. 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 advance written approval of the County. Any attempted assignment or transfer without the County's advance written approval shall be null and void and without any legal effect.

10. SUBCONTRACTING

The Contractor shall not subcontract or delegate any portion of the services to be performed under this Agreement without the advance written approval of the County. Any attempted subcontracting or delegating without the County's advance written approval shall be null and void and without any legal effect.

With the County's execution of this Agreement, the Count approves the Contractor's use of subcontractor services to be provided by Avocet Design and Consulting, LLC, as more specifically described in Exhibit A.

11. PERSONNEL

A. All work performed under this Agreement shall be performed by the Contractor or under its supervision.

B. The Contractor represents that it has, or will secure at its own expense, all personnel required to discharge its obligations under this Agreement. Such personnel (i) shall not be employees of or have any contractual relationships with the County and (ii) shall be fully qualified and licensed or otherwise authorized or permitted under federal, state, and local law to perform such work.

12. RELEASE

Upon its receipt of all payments due under this Agreement, the Contractor releases the County, its elected officials, officers, agents and employees from all liabilities, claims, and obligations whatsoever arising from or under or relating to this Agreement.

13. CONFIDENTIALITY

Any confidential information provided to or developed by the Contractor 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 County.

14. PUBLICATION, REPRODUCTION, AND USE OF MATERIAL; COPYRIGHT

A. The County has the unrestricted right to publish, disclose, distribute and otherwise use, in whole or in part, any reports, data, or other material prepared under or pursuant to this Agreement.

B. The Contractor acknowledges and agrees that any material produced in whole or in part under or pursuant to this Agreement is a work made for hire. Accordingly, to the extent that any such material is copyrightable in the United States or in any other country, the County shall own any such copyright.

15. CONFLICT OF INTEREST

The Contractor represents that it has no and shall not acquire any interest, direct or indirect, that would conflict in any manner or degree with the performance of its obligations under this Agreement.

16. NO ORAL MODIFICATIONS; WRITTEN AMENDMENTS REQUIRED

This Agreement may not be modified, altered, changed, or amended orally but, rather, only by an instrument in writing executed by the parties hereto. The Contractor specifically acknowledges and agrees that the County shall not be responsible for any changes to Section 1 (Scope of Work) of this Agreement unless such changes are set forth in a duly executed written amendment to this Agreement.

17. ENTIRE AGREEMENT; INTEGRATION

This Agreement incorporates all the agreements, covenants, and understandings between the parties hereto concerning the subject matter hereof, and all such agreements, covenants and understandings have been merged into this written Agreement. No prior or contemporaneous agreement, covenant or understandings, verbal or otherwise, of the parties or their agents shall be valid or enforceable unless embodied in this Agreement.

18. NOTICE OF PENALTIES

The Procurement Code, NMSA 1978, Sections 13-1-28 through 13-1-199, imposes civil and criminal penalties for its violation. In addition, New Mexico criminal statutes impose felony penalties for bribes, gratuities, and kickbacks.

19. EQUAL EMPLOYMENT OPPORTUNITY COMPLIANCE

A. The Contractor agrees to abide by all federal, state, and local laws, ordinances, and rules and regulations pertaining to equal employment opportunity and unlawful discrimination. Without in any way limiting the foregoing general obligation, the Contractor specifically agrees not to discriminate against any person with regard to employment with the Contractor or participation in any program or activity offered pursuant to this Agreement on the grounds of race, age, religion, color, national origin, ancestry, sex, physical or mental handicap, serious medical condition, spousal affiliation, sexual orientation, or gender identity.

B. The Contractor acknowledges and agrees that failure to comply with this Section shall constitute a material breach of this Agreement.

20. COMPLIANCE WITH APPLICABLE LAW; CHOICE OF LAW

A. In performing its obligations hereunder, the Contractor shall comply with all applicable laws, ordinances, and regulations.

B. Contractor shall comply with the requirements of Santa Fe County Ordinance 2014-1 (Establishing a Living Wage).

C. This Agreement shall be construed in accordance with the substantive laws of the State of New Mexico, without regard to its choice of law rules. Contractor and the County agree that the exclusive forum for any litigation between them arising out of or related to this Agreement shall be state district courts of New Mexico, located in Santa Fe County.

21. RECORDS AND INSPECTIONS

A. To the extent its books and records relate to (i) its performance of this Agreement or any subcontract entered into pursuant to it or (ii) cost or pricing data (if any) set forth in this Agreement or that was required to be submitted to the County as part of the procurement process, the Contractor agrees to (i) maintain such books and records during the term of this Agreement and for a period of six years from the date of final payment under this Agreement; (ii) allow the County or its designee to audit such books and records at reasonable times and upon reasonable notice; and (iii) to keep such books and records in accordance with generally accepted accounting principles (GAAP).

B. To the extent its books and records relate to (i) its performance of this Agreement or any subcontract entered into pursuant to it or (ii) cost or pricing data (if any) set forth in this Agreement or that was required to be submitted to County as part of the procurement process, the Contractor also agrees to require any subcontractor it may hire to perform its obligations under this Agreement to (i) maintain such books and records during the term of this Agreement and for a period of six years from the date of final payment under the subcontract; (ii) to allow the County or its designee to audit such books and records at reasonable times and upon reasonable notice; and (iii) to keep such books and records in accordance with GAAP.

22. INDEMNIFICATION

A. The Contractor shall defend, indemnify, and hold harmless the County and its elected officials, agents, and employees from any losses, liabilities, damages, demands, suits, causes of action, judgments, costs or expenses (including but not limited to court costs and attorneys' fees) resulting from or directly or indirectly arising out of the Contractor's performance or non-performance of its obligations under this Agreement, including but not limited to the Contractor's breach of any representation or warranty made herein.

B. The Contractor agrees that the County shall have the right to control and participate in the defense of any such demand, suit, or cause of action concerning matters that relate to the County and that such suit will not be settled without the County's consent, such consent not to be unreasonably withheld. If a conflict exists between the interests of the County and the Contractor in such demand, suit, or cause of action, the County may retain its own counsel to represent the County's interest.

C. The Contractor's obligations under this section shall not be limited by the provisions of any insurance policy the Contractor is required to maintain under this Agreement.

23. SEVERABILITY

If any term or condition of this Agreement shall be held invalid or non-enforceable by any court of competent jurisdiction, the remainder of this Agreement shall not be affected and shall be valid and enforceable to the fullest extent of the law.

24. 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 the County: Santa Fe County
Office of the County Attorney
102 Grant Avenue
P.O. Box 276
Santa Fe, New Mexico 87504-0276

Attn: Brad Isaacson, Project Manager
Santa Fe County Public Works
102 Grant Avenue
P.O. Box 276
Santa Fe, NM 87504-0276

To the Contractor: Attn: Matthew H. Davis, PE
Engineering Economics, Inc.
11930 Menaul NE, #224C
Albuquerque, New Mexico 87112

25. CONTRACTOR'S REPRESENTATIONS AND WARRANTIES

The Contractor hereby represents and warrants that:

A. This Agreement has been duly authorized by the Contractor, the person executing this Agreement has authority to do so, and, once executed by the Contractor, this Agreement shall constitute a binding obligation of the Contractor.

B. This Agreement and Contractor's obligations hereunder do not conflict with Contractor's corporate agreement or any statement filed with the New Mexico Secretary of State on Contractor's behalf.

C. Contractor is legally registered and is properly licensed by the New Mexico State to do the work anticipated by this Agreement and shall maintain such registration and licensure in good standing throughout the duration of the Agreement.

26. FACSIMILE SIGNATURES

The parties hereto agree that a facsimile signature has the same force and effect as an original for all purposes.

27. NO THIRD-PARTY BENEFICIARIES

This Agreement was not intended to and does not create any rights in any persons not a party hereto.

28. INSURANCE

A. General Conditions. The Contractor shall submit evidence of insurance as is required herein. Policies of insurance shall be written by companies authorized to write such insurance in New Mexico.

B. General Liability Insurance, Including Automobile. The Contractor shall procure and maintain during the life of this Agreement a comprehensive general liability and automobile insurance policy with liability limits in amounts not less than \$1,000,000.00 combined single limits of liability for bodily injury, including death, and property damage for any one occurrence. Said policies of insurance shall include coverage for all operations performed for the County by the Contractor; coverage for the use of all owned, non-owned, hired automobiles, vehicles and other equipment, both on and off work; and contractual liability coverage under which this Agreement is an insured contract. The County of Santa Fe shall be a named additional insured on the policy.

C. Workers' Compensation Insurance. The Contractor shall comply with the provisions of the Workers' Compensation Act.

D. Professional Liability Insurance. The Contractor shall procure and maintain during the life of this Agreement a Professional Liability Insurance.

E. Increased Limits. If, during the life of this Agreement, the Legislature of the State of New Mexico increases the maximum limits of liability under the Tort Claims Act (NMSA 1978, Sections 41-4-1 through 41-4-29, as amended), the Contractor shall increase the maximum limits of any insurance required herein.

29. PERMITS, FEES, AND LICENSES

Contractor shall procure all permits and licenses, pay all charges, fees, and royalties, and give all notices necessary and incidental to the due and lawful performance of its obligations hereunder.

30. NEW MEXICO TORT CLAIMS ACT

No provision of this Agreement modifies or waives any sovereign immunity or limitation of liability enjoyed by County or its "public employees" at common law or under the New Mexico Tort Claims Act, NMSA 1978, Section 41-4-1, et seq.

31. CAMPAIGN CONTRIBUTION DISCLOSURE FORM

The Contractor agrees to compute and submit simultaneous with execution of this Agreement a Campaign Contribution Disclosure Form approved by the County.

32. APPOINTMENT OF AGENT FOR SERVICE OF PROCESS, if applicable

The Contractor hereby irrevocably appoints Matthew H. Davis, PE, Engineering Economics, Inc. 11930 Menaul NE, #224C, Albuquerque, New Mexico 87112, as its agent upon whom process and writs in any action or proceeding arising out of or related to this Agreement may be served. The Contractor acknowledges and agrees that service upon its designated agent shall have the same effect as though the Contractor were actually and personally served within the state of New Mexico.

33. SURVIVAL

The provisions of following paragraphs shall survive termination of this Contract; INDEMNIFICATION; RECORDS AND INSPECTION; RELEASE, CONFIDENTIALITY, PUBLICATION, REPRODUCTION, AND USE OF MATERIAL; COPYRIGHT; COMPLIANCE WITH APPLICABLE LAW; CHOICE OF LAW; NO THIRD-PARTY BENEFICIARIES; SURVIVAL.

IN WITNESS WHEREOF, the parties have duly executed this Agreement as of the date first written above.

SANTA FE COUNTY:

Miguel M. Chavez
Miguel M. Chavez, Chair
Santa Fe County Board of County Commissioners

3/29/16
Date

ATTESTATION:

Geraldine Salazar
Geraldine Salazar
Santa Fe County Clerk

3/29/2016

Approved as to form:

Gregory S. Shaffer
Gregory S. Shaffer
Santa Fe County Attorney

3-18-16

Date


Finance Department

Carole H. Jaramillo
Carole H. Jaramillo
Finance Director

3/21/16

Date

CONTRACTOR:


(Signature and title)

4/7/2016
Date

Matthew H. Davis Branch Manager
(Print Name and title)

Exhibit A

Engineering Economics, Inc.

1930 Menaul NE, #224C
Albuquerque, New Mexico 87112
Telephone 505 830 6069

March 9, 2016

Rose Moya
Procurement Specialist Senior
Santa Fe County Purchasing Division
142 W. Palace Ave.
Santa Fe, NM 87501

**Re: New Santa Fe County Administration Building Project RFP# 2016-0174-PW/RM
LEED® Commissioning Services
Proposal No. 10-16006**

Dear Ms. Moya:

We are pleased to present this fee proposal for LEED® commissioning services for the New Santa Fe County Administration Building Project. This proposal is to provide commissioning services in compliance with LEED V4 Certification requirements as described below. It is understood that the new building will include approximately 70,000 square feet and the renovation of 102 Grant is approximately 37,000 square feet.

We are requesting by this Fee Proposal to sub contract to Avocet Design and Consulting the Envelope Commissioning portion of the scope of work.

SCOPE OF WORK

- Planning through construction document review and recommendations.
- Building Envelope Commissioning – Sub-consultant is Avocet Design and Consulting
- LEED Commissioning Includes the following:

Fundamental Building Systems Commissioning services will be provided in compliance with LEED Certification requirements as listed below.

1. Serve as the Commissioning Authority on behalf of the Owner to ensure that the project intent is achieved for the systems to be commissioned.
2. Assist in developing the Owner's Project Requirements. Review and comment on the Basis of Design as provided by the design team.
3. Develop a Commissioning Plan and use it to guide the commissioning process.
4. Confirm incorporation of commissioning requirements into the construction documents.
5. Conduct a review of contractor submittals for systems to be commissioned, focusing on controls.
6. Verify inclusion of Systems Manual requirements in construction documents.
7. Verify inclusion of operator and occupant training requirements in construction documents.
8. Perform Design reviews of the construction documents at each phase of design as agreed upon.
9. Develop construction checklists to verify proper installation and startup of systems to be commissioned.
10. Develop functional test procedures, customized for building systems and equipment.

Rose Moya
March 9, 2016

11. Perform on-site functional testing of equipment and systems to verify intended performance.
12. Provide ongoing documentation of the commissioning process, including letters with review comments, Project Communication Reports and an Issues Log to track issues to resolution.
13. Verify systems Manual Updates and Delivery.
14. Verify operator and occupant training delivery and effectiveness.
15. Prepare Current Facilities Requirements and Operations and Maintenance Plan.
16. Provide a Final Commissioning Report to document the entire commissioning process.
17. Verify seasonal testing
18. Perform an on-site, post-occupancy/warranty review of system operation and performance, within approximately ten (10) months of substantial completion.
19. Develop an on-going commissioning plan.

Systems and equipment to be LEED commissioned will include the following as appropriate:

1. Building heating, ventilation and air conditioning systems
 2. Building automation system
 3. Domestic water heating system, pumps and controls
 4. Electrical service, distribution, lighting and lighting controls (interior and exterior)
 5. Renewable energy systems
- Measurement & Verification (only on New Administration Building) – Comply with IPMVP Option D. We will verify that the requirements are included in the design documents, create the M&V Plan, assist with information needed to calibrate the model at the end of construction and monitor the energy use and report to the county per M&V Plan.
 - All equipment of the heating, ventilation and air conditioning systems (Included in LEED Cx Scope)
 - Refrigeration systems – NOT APPLICABLE
 - Lighting Controls (Occupancy sensors and daylight dimming) (Included in LEED Cx Scope)
 - Hot water systems (boilers, hot water pumps, valves, piping) (Included in LEED Cx Scope)
 - Renewable energy systems (wind, solar) (Included in LEED Cx Scope)
 - Emergency power generators and automatic transfer switching. Only in new admin building, scope for design reviews, construction installation observations, observing factory testing per specifications.
 - Data and communications – review specs, review installation, observe and verify specified testing is completed.
 - Paging Systems – NOT APPLICABLE
 - Security Systems. Review specs, review installation, observe and verify specified testing is completed, independent testing as necessary to confirm functionality.
 - Fire Alarm System – NOT APPLICABLE
 - Irrigation. Review specs, review installation, observe and verify specified testing and training is completed.
 - Plumbing. Review specs, review installation, observe and verify pressure testing.
 - Vertical transportation. Review specs, review installation, observe testing and training.
 - Construction Phase meetings and site observations.
 - Other special systems – NOT APPLICABLE
 - Conduct 11- month Warranty review

This Scope of Work includes multiple construction site visits for a commissioning scoping/kickoff meeting with the commissioning team (Owner's representative, designers and contractors), installation reviews and startup verification. Commissioning meetings during functional testing are also included in the scope.

Rose Moya
March 9, 2016

FEE

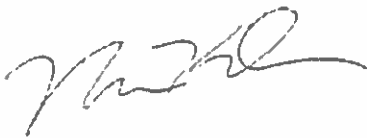
Our fee to complete the described Scope of Work will be on a Lump Sum Fixed Fee Basis, inclusive of labor, travel and miscellaneous expenses. A breakdown of this fee is attached in the form of the pay request.

Additional services beyond the described Scope of Work will be billed at our standard hourly rates per the attached schedule.

We look forward to working with you and to a successful project.

Sincerely,

Engineering Economics, Inc.



Matthew H. Davis, PE, LEED® AP

Attachments:

- EEI Standard Rate Schedule
- Pay App New Admin
- Pay App 102 Grant Remodel
- Avocet Design and Consulting Proposal

ENGINEERING ECONOMICS, INC.
NEW MEXICO

CONSULTING RATE SCHEDULE
JANUARY 2016

	<u>Up To</u>
Matt Davis, Sr. Project Manager	\$145/Hour
Carl Peterson, Sr. Project Engineer	\$120/Hour
Steve Foxe, Sr. Technician	\$120/Hour
Administrative Support	\$65/Hour

CONSULTANTS (Avocet Design & Consulting)

110% of invoice received

REIMBURSABLE EXPENSES

Mileage: Personal Car..... IRS rates

These are current rates and are subject to review and revision annually.

ARCHITECT ENGINEER PAY REQUEST
Santa Fe County Purchasing Division
142 W. Palace Ave. Santa Fe NM 87501

Project Manager: Brad Isaacson
Project Name & Number: Santa Fe County Administration Building
Architect/Engineer:
Engineering Economics, Inc., 780 Simons St. Suite 210, Golden, CO 80401

Date: _____
Project No.: _____
Contract #: _____
Pay Request No: 1

Basic Services	Contract Sum	Percentage Completed	Completed to Date	Less Prev Request	Current Request	Revision (PMT)
Programming Phase	\$0.230.00	0.00%	\$0.00	\$0.00	\$0.00	
Cx Schematic Phase	\$6,000.00	0.00%	\$0.00	\$0.00	\$0.00	
Cx Design Development Phase	\$7,040.00	0.00%	\$0.00	\$0.00	\$0.00	
Cx Construction Doc Phase	\$6,000.00	0.00%	\$0.00	\$0.00	\$0.00	
Bidding & Neg Phase	\$2,100.00	0.00%	\$0.00	\$0.00	\$0.00	
Cx Const. Phase	\$25,360.00	0.00%	\$0.00	\$0.00	\$0.00	
Cx Project Close Out Phase	\$37,280.00	0.00%	\$0.00	\$0.00	\$0.00	
Cx 11 Month Inspection Phase	\$5,400.00	0.00%	\$0.00	\$0.00	\$0.00	
Cx Monitor Based	\$17,000.00	0.00%	\$0.00	\$0.00	\$0.00	
Measure & Verify Design Phase	\$5,000.00	0.00%	\$0.00	\$0.00	\$0.00	
Measure & Verify Const. Phase	\$7,000.00	0.00%	\$0.00	\$0.00	\$0.00	
Measure & Verify Verify Phase	\$8,000.00	0.00%	\$0.00	\$0.00	\$0.00	
Envelope Cx Prog Phase	\$1,100.00	0.00%	\$0.00	\$0.00	\$0.00	
Envelope Cx DD/CD Phase	\$8,800.00	0.00%	\$0.00	\$0.00	\$0.00	
Envelope Cx Const. Phase	\$28,060.00	0.00%	\$0.00	\$0.00	\$0.00	
Subtotal	\$179,680.00	0.00%	\$0.00	\$0.00	\$0.00	
 Gross Receipts Tax	\$12,342.63	6.87%	\$0.00		\$0.00	
 TOTAL CONTRACT	\$191,522.63					
 TOTAL AMOUNT DUE	\$0.00					

CERTIFICATION:

I do hereby certify that the work described herein has been performed and that no previous payment for the Total Amount Due, as shown above, has been received.

SIGNATURE _____ **DATE:** _____

ARCHITECT ENGINEER PAY REQUEST

Santa Fe County Purchasing Division
142 W. Palace Ave. Santa Fe NM 87501

Project Manager: Brad Isaacson
Project Name & Number: Santa Fe County 102 Grant Remodel

Date:
Project No.:
Contract #:
Pay Request No: 1

Architect Engineer:
Engineering Economics, Inc., 980 Simms St. Suite 210, Golden, CO 80401

	Contract Sum	Percentage Completed	Completed to Date	Less Prev Payment	Current Request	Payment Due
Basic Services						
Planning Phase	\$2,450.00	100%	\$0.00	\$0.00	\$0.00	\$0.00
Schematic Phase	\$1,500.00	100%	\$0.00	\$0.00	\$0.00	\$0.00
Design Development Phase	\$2,500.00	100%	\$0.00	\$0.00	\$0.00	\$0.00
Construction Doc Phase	\$3,500.00	100%	\$0.00	\$0.00	\$0.00	\$0.00
Bidding & Neg Phase	\$2,500.00	100%	\$0.00	\$0.00	\$0.00	\$0.00
Const Phase	\$1,300.00	100%	\$0.00	\$0.00	\$0.00	\$0.00
Project Closeout Phase	\$6,000.00	100%	\$0.00	\$0.00	\$0.00	\$0.00
11 Month Inspection Phase	\$3,200.00	100%	\$0.00	\$0.00	\$0.00	\$0.00
Master Plan	\$17,000.00	100%	\$0.00	\$0.00	\$0.00	\$0.00
Multiple Program Phase	\$1,100.00	100%	\$0.00	\$0.00	\$0.00	\$0.00
Multiple Construction Phase	\$4,400.00	100%	\$0.00	\$0.00	\$0.00	\$0.00
Multiple Const Phase	\$1,900.00	100%	\$0.00	\$0.00	\$0.00	\$0.00
Subtotal	\$49,010.00	100%	\$0.00	\$0.00	\$0.00	\$0.00
Gross Receipts Tax	\$6,462.28					
TOTAL CONTRACT	\$55,472.28					
TOTAL AMOUNT DUE	\$0.00					

CERTIFICATION:

I do hereby certify that the work described herein has been performed and that no previous payment for the Total Amount Due, as shown above, has been received.

SIGNATURE _____ DATE: _____

BECx BUILDING ENVELOPE COMMISSIONING

The building envelope is *"all materials, components, systems & assemblies intended to provide shelter and environmental separation between interior and exterior."* ASTM E 2813

Building Envelope Commissioning (BECx) enhances project delivery & durability by providing additional oversight of the envelope components of the building from design through construction.

BECx may be driven by LEED V4 compliance or other mandated standards. While LEED V4 provides a starting point for the commissioning process, we base our approach on more comprehensive standards including ASHRAE Guideline 0 2005, NIBS Guideline 3 2012 and ASTM E2813. The latter provides detailed requirements for Fundamental and Enhanced Commissioning.

Below is a basic outline of envelope commissioning activities. Scope and specific commissioning plan, schedule, deliverables, required tests, etc. are customized in coordination with project goals, budget, schedule, delivery method and construction type. While ASTM E2813 outlines specific requirements to achieve Fundamental and Enhanced Commissioning, we believe it is in the best interest of each Owner and specific project to develop a unique plan that considers the Owner's requirements, construction type and cost considerations.

The most critical components are the design review, construction observation of building envelope activities and field testing of these assemblies.

DESIGN REVIEW

The review of construction documents considers compatibility of materials, reviews critical intersections and material sequencing, encourages greater coordination between trades and highlights critical areas for contractor. We recommend two design reviews at a minimum, one during Design Development or beginning of Construction Document Phase, and second at 95% CDs. However, design review participation may begin as early as Schematic Design providing assistance with envelope assembly selection.

CONSTRUCTION OBSERVATIONS

Construction observation brings additional eyes to the installation of complex assemblies. Hidden construction defects can have big impacts down the road. Additional oversight of trades allows confirms that materials and application practices are held to construction documents, approved submittals and manufacturer's installation recommendations. This process results not only in the correction of construction defects but also documents correct installations. Scope of required field observations would be determined based on design and on selection of the General Contractor.

FIELD TESTING

Field testing of constructed assemblies allows physical verification that intersections and assemblies have been properly detailed and installed. We recommend testing of any relevant mock-ups and at initial installation of critical assemblies such as windows as well as at completion for certain assemblies. Testing of horizontal waterproofing is typically recommended by the manufacturer, and we would provide observation of these types of tests and document results. The full scope of field tests would be determined based on Owner's requirements and costs.

102 GRANT

The full scope of services is geared toward new construction. For existing buildings, such as 102 Grant, the scope would be outlined with the Owner and Architect to determine which activities would best assist the design and construction process. If new windows are installed, we would recommend field testing. Replacement of the roof would benefit from construction observations and possibly field testing. Infrared imaging could be useful in evaluating current insulation, or other existing issues of concern such as air leakage through the envelope.

DESIGN & CONSULTING LLC

711 Roma Avenue NW Albuquerque NM 87102 505 242 627 sarah@dc-llc.com

RECx Activities

Pre-Design

- Review of & assistance with development of OPR for performance & durability goals.
- Development of commissioning scope, budget, plan & schedule (on-going).

Deliverables: activities may include: Participation in charrettes & design meetings, review components to be addressed in OPR with design team & project stakeholders

Design Phases

- Review envelope design & detailing for constructability, continuity and compatibility, review of specifications for inclusion of commissioning requirements, coordination with drawings
- Development of performance matrix & testing plan
- Verify consistency of design documentation with Owner's Project Requirements & Basis of Design
- Build engagement and cooperation among project team members

Deliverables may include: Detailed comments and questions, drawing mark ups, in-person discussion of review or design assistance, Performance Matrix and Testing Plan

Pre-Construction Phase

- Bid Assistance
- Value Engineering Decision Assistance (as regards integrity of building envelope)

Construction Phase

- Development of Construction Phase Commissioning Plan; includes required activities, outline of RECx Agent, GC & subcontractor responsibilities, schedule of Construction Observations and Testing
- Mock-up Recommendations and Review
- Participation in relevant pre-construction conferences and review of relevant shop drawings & submittals; below grade waterproofing, roofing, windows & exterior skin assemblies at a minimum
- Development of construction observation checklists; to be utilized during Construction Observations by RECx agent; or may be implemented by General Contractor Quality Assurance and verified by RECx agent.
- Perform Construction Observations at: mock-ups, first installations, pre-determined milestones & as determined necessary. Recommend (3) per week during relevant activities, (1) at a minimum.
- Laboratory testing may be required for specific materials and / or assemblies (performed by independent testing agencies)
- Field testing verification & observation (per relevant ASTM & manufacturer's protocol). Scope as determined appropriate by team during design phases. Tests may include:
 - Water testing; Hose test (fenestration or air barrier)
 - Water leakage with air pressure difference test (fenestration or air barrier)
 - Electronic Leak Detection of waterproofing membranes
 - Horizontal waterproofing flood tests
 - Pull tests of EIFS assembly, Pull-off strength testing of coatings, Strength of concrete & masonry anchors
 - Infrared thermal and moisture evaluation of insulation
 - Elastomeric sealant adhesion and pull testing
 - Envelope air leakage testing (mock-up, partial assembly or full envelope for Enhanced)

Deliverables: Commissioning Plan, Construction Observation Field reports, Issue resolution log, Testing observation & reports

Post construction

- Final commissioning report & documentation
- Maintenance manuals & envelope preventative maintenance and routine evaluation guide
- Warranty review – 10 month walk

DESIGN & CONSULTING, LLC

11 Roma Avenue NW Albuquerque NM 87102 505.242.7527 chara@nisdcloud.com

BECx BUILDING ENVELOPE COMMISSIONING

PROPOSED SCOPE OF SERVICES

March 9, 2016

Proposed Scope of Services - New Construction 100 Catron	Frequency	Unit Cost	Total
Design Commissioning Coordination Meeting & Plan Development (Programming)	1	\$1,000	\$1,000
Design Review (Design Development / Construction Documents)	2	\$4,000	\$8,000
Construction Phase Commissioning Meeting and Plan (Construction Phase)	1	\$1,000	\$1,000
Pre Construction Conference Participation & Submittal Review (Construction)	4	\$600	\$2,400
Building Envelope Construction Observations (Construction Phase) (Critical trades incl. below grade vapor barrier, air / weather barrier & exterior skin, insulation, windows, roofing. Critical site visit times: at initial installation, weekly during, and at completion)	40	\$440	\$17,600
Air & Water Infiltration Testing (recommend 10% of windows, 2-3 per elevation) (Construction Phase)	4	\$2,000	\$8,000
Infrared Thermal Analysis (based on square footage of building envelope) (Construction Phase)	1	\$5,600 sq ft.	\$5,600
Additional Services to be billed at hourly rate of \$110 for design review, etc., field observations at \$80 per hour.			
Estimated Total (not including GRT as applicable)			\$43,600

Proposed Scope of Services - Renovation 102 Grant	Frequency	Unit Cost	Total
Pre-Design Meeting & Envelope Design Assistance (Programming)	1	\$1,000	\$1,000
Design Review (Design Development / Construction Documents)	2	\$2,000	\$4,000
Construction Phase Commissioning Meeting and Plan (Construction Phase)	1	\$1,000	\$1,000
Pre-Construction Conference Participation & Submittal Review (Construction Phase)	2	\$600	\$1,200
Building Envelope Construction Observations (Construction Phase) (Critical trades incl. stucco and windows. Critical site visit times: at initial installation, weekly during, and at completion)	10	\$440	\$4,400
Air & Water Infiltration Testing (recommend 10% of windows, 2-3 per elevation) (Construction Phase)	3	\$2,000	\$6,000
Additional Services to be billed at hourly rate of \$110 for design review, etc., field observations at \$80 per hour			
Estimated Total (not including GRT as applicable)			\$17,600

OUR TEAM

proct design and consulting, LLC is a woman-owned consulting firm formed in 2010 with the goal of improving the quality of construction, reducing construction defects and call-backs, and analyzing existing building energy-efficiency improvements. Raised and educated in New Mexico, Sara Stewart, registered architect, applies her architectural background and Building Science training to provide superior evaluations and service.

Our strategic approach is informed by combined background in architecture and Quality Assurance. Our work with General Contractors and Owners to provide a more durable building envelope through quality assurance inspections and performance testing in the field gives us a unique vantage and an intimate understanding the process. We possess, collectively and individually, significant experience with the finesse required to work with General Contractors and Subcontractors, managing the concerns of both Building and Owner.

As part of the Owner's Team, from inception through completion, we will work closely with the Owner's Representative and the Project Team, advocating in the Owner's interest for the best designed and built envelope within the Owner's budget.