PROPOSED STANDARD FORM OF
AGREEMENT FOR PROFESSIONAL ENGINEERING SERVICES

THIS AGREEMENT made and entered this _____day of _____, 2022 by and between the City of Pueblo, a Municipal Corporation (hereinafter "Owner") and Brown and Caldwell, Inc., a California corporation, 1697 Cole Boulevard, Golden, Colorado 80401, a professional engineering firm (hereinafter "Engineer") for Engineer to render certain professional engineering and related services for Owner in connection with the **Pueblo Sustainability Study**, hereinafter referred to as the "Project." In consideration of the mutual covenants hereinafter set forth, the parties agree as follows:

SECTION 1. GENERAL.

1.1 Engineer shall satisfactorily perform professional engineering and/or construction management] services for all phases of Project indicated below by mark placed in the appropriate box or boxes:

[x] - Study and Report Phase

[x] - Preliminary Design (Schematic) Phase

[ ] - Final Design Phase

[ ] - Construction Documents & Bidding Phase

[ ] - Construction Phase

Upon completion of any phase, Engineer shall not proceed with work on the next phase, if any, until authorized in writing by Owner to proceed therewith.

Such services shall include all usual and customary professional engineering services and the furnishing (directly or through its professional consultants) of customary and usual civil, structural, mechanical, electrical engineering, environmental, architectural, construction management and planning services as generally stated herein and as more specifically set forth in Appendix A. Engineer shall also provide any landscape engineering, architectural, surveying and geotechnical services incident to its work on the Project.

1.2 In performing the professional services, Engineer shall complete the work items described in Appendix A – Scope of Services and as generally identified in Section 2 of this Agreement which are applicable to each phase for which Engineer is to render professional services. In the event of a conflict, the Scope of Services set forth in Appendix A shall prevail.

1.3 Professional engineering services (whether furnished directly or through a professional consultant subcontract) shall be performed under the direction and supervision of a registered engineer in good standing and duly licensed to practice in the State of Colorado. Reproductions of final drawings for construction produced under this Agreement shall be the same as at least one record set which shall be furnished to Owner and which shall be signed by and bear the seal of such registered engineer.

1.4 Surveying work included within this Agreement shall be performed under the direction and supervision of a registered Professional Land Surveyor in good standing and duly licensed to practice in the State of Colorado. All plats and surveys produced under this Agreement shall be signed by and bear the seal of said Professional Land Surveyor.

1.5 Any architect services provided under this Agreement shall be performed under the direction and supervision of an architect licensed to practice architecture in the state of Colorado.

SECTION 2. ENGINEERING SERVICES.

2.1 Study and Report Phase. If Engineer is to provide professional services with respect to the Project during the Study and Report Phase, Engineer shall perform the following unless otherwise indicated in the attached Scope of Service (Appendix A):

(a) Consult with Owner to determine his requirements for the Project and review available data.

(b) Advise Owner as to the necessity of his providing or obtaining from others data or services of the types described in paragraph 2.2(c), and assist Owner in obtaining any such services.

(c) Provide special analyses of Owner's needs, planning surveys, site evaluations and comparative studies of prospective sites and solutions.

(d) Identify and analyze requirements of governmental authorities and regulatory agencies involved in approval or permitting any aspect of Project.

(e) Provide general economic analysis of Owner's requirements applicable to various alternatives.

(f) Prepare a Report with appropriate exhibits indicating clearly the considerations involved and the alternative solutions available to Owner, and setting forth Engineer's findings and recommendations with opinions of probable costs.

(g) Furnish electronic copies of the Report to present and review it in person with Owner.

2.2 Preliminary Design (Schematic) Phase. If Engineer is to provide professional services with respect to the Project during the Preliminary Design Phase, Engineer shall perform the following unless otherwise indicated in the attached Scope of Service (Appendix A):

(a) Consult with Owner and determine the general design concept and Project requirements based upon information furnished by Owner as well as any study Report on the Project.

(b) Prepare and submit to Owner preliminary design documents consisting of final design criteria, preliminary drawings, an outline of specifications, and written descriptions of all significant features of Project.

(c) Prepare and submit to Owner a requirements checklist of any subsurface investigation, additional data, permits, or other information and requirements which is anticipated will be necessary for the design or construction of Project.

(d) Provide written disclosure to Owner of significant design assumptions and design risks and advantages/disadvantages inherent in or presented by design alternatives, and make recommendations to Owner based thereon.

(e) Prepare and submit to Owner a preliminary cost estimate for the Project including construction cost, contingencies, professional compensation, consultant fees, costs of land and rights of way, compensation for damages and finance costs, if any.

(f) Engineer shall furnish electronic copies of each above referenced submittal document to Owner for Owner's use and shall review same in person with Owner.

2.3 Final Design Phase. If Engineer is to provide professional services with respect to the Project during the Final Design Phase, Engineer shall:

(a) After consultation with the Owner, receipt of Owner's selection of any design options and review of the Preliminary Design Documents, if any, prepare and submit to Owner final Drawings showing the scope, extent and character of the work to be performed by contractors, and Specifications describing such work and the requirement therefor. Such plans and Specifications shall comply with all applicable building codes and requirements of regulatory agencies having any approval authority. Final design, including Drawings and Specifications, shall also comply with ADA Accessibility Guidelines (ADAAG) Manual developed by the U. S. Architectural and Transportation Barriers Board (1998) or ADA Standards for Accessible Design published at 28 C.F.R. Part 36, Appendix A, whichever is applicable. Engineer **shall include an attest statement on each record drawing sheet of final plan drawings that certifies compliance with either the ADAAG Manual or 28 CFR Part 36 Standards.**

(b) Make reasonable revisions to the Drawings and Specifications requested by Owner, informing the Owner of any change in probable construction costs as a result of such revisions.

(c) Provide technical criteria, written descriptions and design data for Owner's use, and disclose any significant risks and advantages/disadvantages inherent in or presented by design choices.

(d) Based upon Engineer's professional judgment, prepare and submit to Owner a current detailed cost estimate for the Project including construction cost, contingencies, professional compensation, consultant fees, land and right of way costs, damages and finance costs, if any.

(e) Engineer shall furnish 3 (three) copies of each above referenced submittal document to Owner for Owner's use, and shall review same in person with Owner.

2.4 Construction Documents & Bidding Phase. If Engineer is to provide professional services with respect to the Project during the Construction Documents & Bidding Phase, Engineer shall:

(a) Prepare and submit to Owner draft forms of contract agreement, general and special conditions, bid forms invitations to bid, information for bidders, forms of warranty and including any special requirements imposed upon such contracts by any federal or other funding source and by any regulatory agency. In preparing such draft forms, Engineer shall consider and incorporate, to the extent both advisable and feasible, owner's standard forms of agreement, warranty, payment and performance bonds, general conditions and selected specifications.

(b) After review and comment by Owner, prepare and submit all deliverables identified in Appendix A to this Agreement, final forms of contract agreement, general and special conditions, Drawings, specifications, bid forms, invitations to bid, information for bidders, and forms of warranty, together with any Addenda which may be required or appropriate to correct errors, clarify Drawings or Specifications or advise of changes. 3 (three) copies of these final bid documents shall be furnished to Owner. Unless otherwise specified in Appendix A, a copy of all contract documents and drawings shall also be submitted to Owner in Microsoft Word and AutoCAD (2013 or later version) format on electronic media.

(c) Make recommendations to Owner concerning the need for prequalification of equipment, vendors or bidders, and, if requested by Owner, incorporate prequalification requirements in final bid and construction contract documents.

(d) Attend a pre-bid conference with bidders to discuss Project requirements and receive requests for clarification, if any, to be answered by Engineer in writing to all plan holders.

(e) Consult with and make recommendations to Owner concerning: acceptability of bidders, subcontractors, suppliers, materials, equipment, suitability of proposed "or equals", amount of bids and any other matter involved in consideration and review of bids and bidders upon which Owner may reasonably request Engineer's advice.

(f) Prepare and periodically update a Project Schedule for Owner's review and acceptance, which shall include the schedule for the performance of the Engineer's services and a construction schedule for the components of the work, including phasing of construction, and times for commencement and completion of the several construction contracts. In the Project Schedule, the Engineer shall coordinate and integrate the Engineer's services and the Owner's responsibilities with anticipated construction schedules, highlighting critical and long lead times.

(g) Provide recommendations and information to Owner regarding the allocation of responsibilities for safety programs among contractors.

(h) Advise the Owner on Engineer's recommended division of the Project construction work into individual categories or work and separate contracts, and make recommendations as required so that the work of the several contractors is coordinated, all responsibilities have been assigned to the appropriate contract, the likelihood of jurisdictional disputes has been minimized and proper coordination has been provided for phased construction.

2.5 Construction Phase. If Engineer is to provide professional services with respect to the Project during the Construction Phase, after award by the Owner of a general contract or contracts for construction of the Project,

Engineer shall:

I. Engineering Functions.

(a) Perform all duties and functions to be performed by Engineer under the terms of the construction contract.

(b) Visit the Project site, perform observations as to the progress and quality of the work and advise the Owner as to same. The frequency and level of observation shall be commensurate with the nature of the work and size of the Project, except that any specific provisions set forth in Appendix A - Scope of Services concerning the level of observation shall determine Engineer's obligation concerning level of observation.

(c) Make determinations as to whether the work is proceeding in general accordance and compliance with the construction contract documents.

(d) Promptly advise the Owner in writing of any observed omissions, substitutions, defects or deficiencies noted in the work of any contractor, subcontractor, supplier or vendor on the Project.

(e) Reject any work on the Project that does not conform to the contract documents.

(f) On request of the Owner, the construction contractor or any subcontractor on the Project, issue written interpretations as to the Drawings and Specifications and requirements of the construction work.

(g) Review shop drawings, samples, product data and other submittals of the contractor for general conformance with the design concept of Project and compliance with the Drawings, Specifications and all other contract documents, and indicate to Contractor and Owner with respect thereto, any exceptions noted, or modification or resubmittals required.

(h) Review all applications of Contractor for payment and in connection with same, issue certificates for payment to the Owner for such amounts as are properly payable under the terms of the construction contract. Each such certificate shall constitute Engineer's representation to Owner that he has made periodic observations of the Project during construction and that to the best of his knowledge, the work for which payment has been sought has been completed by Contractor in general accordance with the Drawings, Specifications and other contract documents.

(i) Subject to written concurrence by Owner, promptly render a written recommendation to Owner concerning all proposed substitutions of material and equipment.

(j) Draft, for Owner's consideration, and offer recommendations upon, all proposed change orders and contract modifications.

(k) On application for final payment by the Contractor, make a final inspection of the Project, assembling and delivering to the Owner any written guaranties, instructions manuals, as-built drawings, diagrams and charts required by the contract documents, and issuing a certificate of final completion of the Project.

(l) The Engineer shall, if so provided in the construction contract, be the interpreter of the construction documents and arbiter of claims and disputes thereunder. Upon written request of the Owner or Contractor, the Engineer shall promptly make written interpretations of the contract documents and render written decisions on all claims, disputes and other matters relating to the execution or progress of the work on the Project. The interpretations and decisions of the Engineer shall be final and binding on the Contractor and Owner, unless the Director of the Wastewater Department of the Owner shall, within seven calendar days after receipt of the Engineer's interpretation or decision, file his written objections thereto with the Engineer and Contractor.

II. Construction Management Functions by Engineer.

(a) Perform all duties and functions specifically identified to be performed by the Construction Manager under the terms of the construction contracts, if any.

(b) Provide administrative, management and related services to coordinate scheduled activities and responsibilities of the construction contractors with each other and with the Owner and the Engineer, including monitoring agreed-upon budgets and the Project Schedule based upon the executed Contract Documents.

(c) Schedule and conduct meetings to discuss such matters as procedures, progress and scheduling. Engineer shall prepare and promptly distribute minutes of the meetings to the Owner and Contractors.

(d) Update the Project construction schedule incorporating the activities of the Contractors on the Project, including activity sequences and durations, allocation of labor and materials, processing of shop drawings, product data and samples, and delivery of items requiring long lead time and procurement. The Project construction schedule shall include the Owner's occupancy requirements showing portions of the Project having occupancy priority. Engineer shall update the Project construction schedule as needed to show current conditions. If any update indicates that the previously approved Project construction schedule may not be met, Engineer shall recommend corrective action to Owner.

(e) Consistent with the various bidding and contract documents, coordinate the sequence of construction and assignment of space in areas where contractors are or will be performing work.

(f) Observe performance of the contractors and recommend courses of action to the Owner when requirements of any contract are not being fulfilled.

(g) Monitor the approved estimate of construction cost for the Project, and show actual costs for activities in progress and estimates for uncompleted tasks by way of comparison with approved estimates. Advise the Owner of any variances between actual and estimated costs.

(h) Review the safety programs developed by each of the contractors solely for purpose of coordinating the safety programs with those of the other contractors. Engineer's responsibilities for coordination of safety programs shall not extend to direct control over or charge of the acts or omissions of the contractors, subcontractors or others not directly employed by Engineer, including any health or safety programs and precautions required by such construction work. Engineer has no duty to inspect, observe, correct or report on health or safety deficiencies of the contractors.

(i) Schedule and coordinate the sequence of construction by and among the contractors in accordance with the contract documents and the latest approved Project construction schedule. Engineer's responsibility under this subsection shall not extend to direct control over or charge of the means, methods, techniques, sequences and procedures of any contractor necessary for completing all portions of the construction work in accordance with the contract documents and any compliance with applicable laws and regulations.

(j) Maintain at the Project site for Owner one record copy of all contracts, plans, specifications, addenda, change orders, approved shop drawings, approved product data and approved submittals, and other documents in good order prepared in part on the basis of information compiled and furnished by others, and record drawings may not always represent the exact location, type of various components or exact manner in which Project was finally constructed, all of which shall be delivered to Owner upon completion of the Project or upon Owner's request. Engineer is not responsible for any errors or omissions in the information from others that are incorporated into the record drawings.

2.6 Additional Responsibilities. This paragraph applies to all phases of Engineer's work.

(a) Engineer shall be responsible for the professional quality, technical accuracy, timely completion and coordination of all of Engineer's work, including that performed by Engineer's consultants, and including designs, Drawings, Specifications, reports and other services, irrespective of Owner's approval or acquiescence in same. Engineer shall, without additional compensation, correct or revise any errors, omissions or other deficiencies in his work in breach of applicable standards of care.

(b) Engineer shall be responsible, in accordance with applicable law, to Owner for all loss or damage to Owner to the extent caused by Engineer's negligent act or omission.

(c) Engineer's professional responsibility shall comply with the generally-accepted standard of care applicable to the type of engineering and architectural and construction management services provided in effect at the time services are rendered and commensurate with the size, scope and nature of the Project.

(d) Engineer shall be completely responsible for the safety of Engineer's employees in the execution of work under this Agreement and shall provide all necessary safety equipment for said employees. Notwithstanding the foregoing, Engineer is not responsible for the health and safety duties of others, including compliance with health or safety programs and precautions.

(e) Engineer acknowledges that, due to the nature of engineering and related professional services and the impact of same on the Project, the Owner has a substantial interest in the personnel and consultants to whom Engineer assigns principal responsibility for services performed under this Agreement. Consequently, Engineer represents that Engineer has selected and intends to employ or assign the key personnel and consultants identified in Appendix C - "Identification of Personnel, Subcontractors and Task Responsibility", attached hereto for the Project assignments and areas of responsibility stated therein. Within 10 days of execution of this Agreement, Owner shall have the right to object in writing to employment on the Project of any such key person, consultant or assignment of principal responsibility, in which case Engineer will employ alternate personnel for such function or reassign such responsibility to another to whom Owner has no reasonable objection. Thereafter, Engineer shall not assign or reassign Project work to any person to whom Owner has reasonable objection.

Within 5 days of execution of this Agreement, Engineer shall designate in writing a Project representative who shall have complete authority to bind Engineer, and to whom Owner should address communications.

(f) Promptly after execution of this Agreement and upon receipt of authorization from Owner to proceed, Engineer shall submit to Owner for approval a schedule showing the order in which Engineer proposes to accomplish his work, with dates on which he will commence and complete each major work item. The schedule shall provide for performance of the work in a timely manner so as to not delay Owner's time table for achievement of interim tasks and final completion of Project work, provided however, the Engineer will not be responsible for delays beyond his control.

(g) Before undertaking any work which Engineer considers beyond or in addition to the scope of work and services which Engineer has contractually agreed to perform under the terms of this Agreement, Engineer shall advise Owner in writing (i) that Engineer considers the work beyond the scope of this Agreement, (ii) the reasons the Engineer believes the out of scope or additional work should be performed, and (iii) a reasonable estimate of the cost of such work. Engineer shall not proceed with such out of scope or additional work until authorized in writing by Owner. The compensation for such authorized work shall be negotiated, but in the event the parties fail to negotiate or are unable to agree as to compensation, then Engineer shall be compensated for his direct costs and professional time at the rates set forth in Appendix B - "Fee Schedule".

SECTION 3. OWNER'S RESPONSIBILITIES

3.1 Owner shall:

(a) Designate a representative to whom all communications from Engineer shall be directed and who shall have limited administrative authority on behalf of Owner to receive and transmit information and make decisions with respect to Project. Said representative shall not, however, have authority to bind Owner as to matters of legislative or fiscal policy.

(b) Advise Engineer of Owner's Project requirements including: objective, project criteria, use and performance requirements, special considerations, physical limitations, financial constraints, and required construction contract provisions and standards.

(c) Provide Engineer with available information pertinent to the Project including any previous reports, studies or data possessed by Owner which relates to design or construction of the Project. Engineer shall rely on information provided without verification unless otherwise agreed to in Appendix A. Owner shall notify of any known or potential health or safety hazards existing at or near the project site.

(d) Arrange for Engineer to have access to enter private and public property as required for Engineer to perform his services.

(e) Examine all studies, reports, sketches, Drawings, Specifications, proposals and other documents presented by Engineer, and render written decisions pertaining thereto within a reasonable time. The Owner's approval of Drawings, design, Specifications, reports and incidental engineering work or materials furnished hereunder shall not in any way relieve the Engineer of responsibility for the professional adequacy of his work. The Owner's review, approval or acceptance of, or payment for, any of the services shall not be construed to operate as a waiver of any rights under this Agreement or of any cause of action arising out of the performance of this Agreement.

(f) Upon advice of the necessity to do so from Engineer, obtain required approvals and permits for the Project. The Engineer shall provide all supportive documents and exhibits necessary for obtaining said approvals and permits.

(g) Notify Engineer whenever Owner becomes aware of any substantial development or occurrence which materially affects the scope or timing of Engineer's services.

(h) If Engineer's scope of work includes services during construction, Owner will approve acceptable draft language prepared by Engineer for inclusion in Owner's contract with the construction contractor which require the construction contractor to indemnify and hold harmless Engineer, its officers, employees, agents, and consultants against claims, suits, demands, liabilities, losses, damages, and costs, including reasonable attorneys' fees and all other costs of defense, arising out of the performance of the work of the contractor, breach of contract, or willful misconduct of the contractor or its subcontractors, employees, and agents.

Owner will approve acceptable draft language prepared by Engineer for inclusion in Owner's contract with the construction contractor which require (a) the contractor to name Engineer, its directors, officers and employees as additional insureds on the contractor's general liability insurance and/or Owner's and Contractor's Protective policy (OCP), and any builder's risk, or other property insurance purchased by Client or the contractor to protect work in progress or any materials, supplies, or equipment purchased for installation therein; and (b) the contractor to furnish contractor's certificates of insurance evidencing that Engineer, its officers, employees, agents, and consultants are named as additional insureds on contractor's general liability and property insurance applicable to the Project. Contractor's policies shall be primary and any such insurance carried by the Engineer shall be excess and noncontributory. The certificates shall provide that Engineer be given 30 days' written notice prior to any cancellation thereof.

(i) Owner shall perform its obligations and render decisions within a reasonable time under the presented circumstances. However, given the nature of Owner's internal organization and requirements, a period of 14 days shall be presumed reasonable for any decision not involving policy decision or significant financial impact. A period of 45 days shall be presumed reasonable for Owner to act with respect to any matter involving policy or significant financial impact.

SECTION 4. TIME FOR PERFORMANCE.

Engineer's obligation to render services shall continue for such period of time as may reasonably be required for completion of the work contemplated in Appendix A - Scope of Services and Section 1 of this Agreement.

SECTION 5. PAYMENT.

5.1 Owner will pay to Engineer as full compensation for all services required to be performed by Engineer under this Agreement, except for services for additional work or work beyond the scope of this Agreement, an amount not to exceed $65,031.00 in the aggregate, and not to exceed those maximum amounts set forth in Appendix B - "Fee Schedule" and computed in accordance with this Section. In the event compensation for services is set forth in Appendix B as to each phase of work indicated in Section 1.1 of this Agreement, the maximum amount of compensation for any phase shall not exceed the amount specified in Appendix B for such phase.

5.2 Engineer shall submit periodic, but not more frequently than monthly, applications for payment, aggregating to not more than the maximum amount, for actual professional services rendered and reimbursable expenses incurred. Such applications shall be submitted with appropriate documentation that such services have been

performed and expenses incurred. Thereafter, Owner shall pay Engineer for the amount of the application within 30 days of the date of billing, provided that sufficient documentation has been furnished., With respect to construction phase services, Owner will not be required to pay more than 90% of the maximum amount unless the Engineer's services have been completed to Owner's reasonable satisfaction and all required Engineer submittals have been provided.

5.3 The rates of compensation for service and for reimbursable expenses to be used with periodic and final payment applications shall be those set forth in Appendix B - "Fee Schedule."

5.4 No separate or additional payment shall be made for profit, overhead, local telephone expenses, lodging, routine photocopying, computer time, or similar expenses unless otherwise provided and listed in Appendix B - "Fee Schedule."

5.5 No compensation shall be paid to Engineer for services required and expenditures incurred in correcting Engineer's negligent errors or omissions.

5.6 Compensation for authorized work beyond the scope of this Agreement shall be governed by Paragraph 2.6(g).

SECTION 6. TERMINATION.

6.1 The Owner reserves the right to terminate this Agreement and Engineer's performance hereunder, at any time upon 10 days written notice, either for cause or for convenience. Upon such termination, Engineer shall cease all work and stop incurring expenses, and shall promptly deliver to the Owner all data, Drawings, Specifications, reports, estimates, calculations, summaries and all other information, and materials as Engineer may have accumulated in performing this Agreement, together with all finished work and work in progress.

6.2 Upon termination of this Agreement for events or reasons not the fault of Engineer, Engineer shall be paid at the rates specified in Appendix B - "Fee Schedule" for all services rendered and reasonable costs incurred to date of termination; together with any reasonable costs incurred within 10 days of termination provided such latter costs could not be avoided or were incurred in mitigating loss or expenses to Owner or Engineer. In no event shall payment to Engineer upon termination exceed the maximum compensation provided for complete performance in paragraph 5.1 and Appendix B.

6.3 In the event termination of this Agreement or Engineer's services is for breach of this Agreement by Engineer, or for other fault of Engineer including but not limited to any failure to timely proceed with work, or to pay its employees and consultants, or to perform services with that level of care and skill ordinarily exercised by professional Engineers specializing in the design of Sanitary Sewer Outfalls and Sewer Crossing Design or to perform work in a manner deemed satisfactory by Owner's Director of Public Works, then in that event, Engineer's entire right to compensation shall be limited to payment at the rates specified in Appendix B for services satisfactorily performed and reimbursable expenses reasonably incurred, prior to date of termination.

6.4 Engineer's professional responsibility for his completed work and services shall survive any termination.

SECTION 7. GENERAL PROVISIONS.

7.1 (a) Ownership of Documents. All designs, Drawings, Specifications, technical data, and other documents or instruments procured or produced by the Engineer in the performance of this Agreement ("Work Product") shall be the sole property of the Owner upon payment to Engineer therefore and the Owner is vested with all rights therein of whatever kind and however created, whether created by common law, statutory law, or by equity. The Engineer agrees that the Owner shall have access at all reasonable times to inspect and make copies of all notes, designs, drawings, specifications, and all other technical data pertaining to the work to be performed under this Agreement. In the event Owner uses the designs, Drawings or Specifications provided hereunder for another project independent from Project, without adaptation by Engineer, Owner shall hold harmless and indemnify Engineer from all loss, claims, injury and judgments arising from the use of such designs, Drawings or Specifications for such other project. In no

event shall Engineer publish its Work Product developed pursuant to this Agreement except (i) with advance, written consent of Owner, which consent may be granted or withheld in Owner's sole and absolute discretion and (ii) in full compliance with the requirements of this Agreement and applicable federal regulations.

7.2 Insurance and Indemnity.

(a) Engineer agrees that he has procured and will maintain during the term of this Agreement, such insurance as will protect him from claims under workers' compensation acts, claims for damages because of bodily injury including personal injury, sickness or disease or death of any of his employees or of any person other than his employees, and from claims or damages because of injury to or destruction of property including loss of use resulting therefrom; and such insurance will provide for coverage in such amounts as set forth in subparagraph (b).

(b) The minimum insurance coverage which Engineer shall obtain and keep in force is as follows:

(i) Workers' Compensation Insurance complying with statutory requirements in Colorado and in any other state or states where the work is performed. The Workers' Compensation insurance policy shall contain an endorsement waiving subrogation against the Owner.

(ii) Commercial General and Automobile Liability Insurance with limits not less than One Million and No/100 Dollars ($1,000,000.00)per occurrence for personal injury, including but not limited to death and bodily injury, and One Million Five Hundred Thousand and No/100 Dollars ($1,500,000.00) for excess umbrella liability.

(iii) Professional Liability Insurance with coverage of not less than $1,000,000.00 covering claims arising from the negligent acts, errors or omissions in the services performed by Engineer for Owner under this Agreement. This policy shall provide coverage for all professionals providing services under this Agreement by or through the Engineer, including coverage for Engineer's activities performed in both its engineering and construction manager capacities.

(c) Engineer agrees to hold harmless, defend and indemnify Owner from and against any liability to third parties, to the extent caused by the negligent acts, errors or omissions of Engineer, his employees, subcontractors and consultants.

7.3 Notices. Any and all notices or other communications required or permitted by this Agreement or by law to be served on or given to either the Owner or the Engineer by the other party shall be in writing and shall be deemed duly served and given when personally delivered to the party to whom it is directed, or in lieu of such personal service when deposited in the United States mail, first-class postage prepaid, addressed to the Owner, City of Pueblo Department of Wastewater, Attention: Andra Ahrens, Director, 1300 S. Queens Avenue, Pueblo, Colorado, 81001, or to the Engineer, Brown and Caldwell, Inc., at the address listed above. Either party may change his address for the purpose of this paragraph by giving written notice of such change to the other party in the manner provided in this paragraph.

7.4 Entire Agreement. This instrument contains the entire agreement between the Owner and the Engineer respecting the Project, and any other written or oral agreement or representation respecting the Project or the duties of either the Owner or the Engineer in relation thereto not expressly set forth in this instrument is null and void. In the event of any conflict between any provision of this Agreement and a provision of any Appendix or attachment to this Agreement, the provision in the Appendix or attachment shall control and supersede the conflicting provision in this Agreement.

7.5 Successors and Assigns. This Agreement shall be binding on the parties hereto and on their partners, heirs, executors, administrators, successors, and assigns; provided, however, that neither this Agreement, nor any part thereof, nor any moneys due or to become due hereunder to the Engineer may be assigned by him without the written consent of the Owner. Notwithstanding the foregoing, if the authorized scope of work includes construction activities or the oversight of construction, Engineer may, at its discretion and upon notice to Owner, assign all of its contractual rights and obligations with respect to such activities or services to Brown and Caldwell Constructors, its wholly owned affiliate.

7.6 Amendments. No amendment to this Agreement shall be made nor be enforceable unless made by written Amendment signed by an authorized representative of Engineer and by Owner's Director of Public Works.

7.7 Choice of Law. This Agreement shall be governed and interpreted in accordance with the laws of the State of Colorado.

7.8 Equal Employment Opportunity. In connection with the performance of this Agreement, Engineer shall not discriminate against any employee or applicant for employment because of race, color, religion, sex, national origin, disability or age. Engineer shall endeavor to insure that applicants are employed, and that employees are treated during employment without regard to their race, color, religion, sex, national origin, disability or age.

7.9 Severability. If any provision of this Agreement, except for Section 2.6, is determined to be directly contrary to and prohibited by law or the requirements of any federal grant or other Project funding source, then such provision shall be deemed void and the remainder of the Agreement enforced. However, it is the intent of the parties that Section 2 of this Agreement not be severable, and that if any provision of said section be determined to be contrary to law or the terms of any federal grant, then as of the time of any such determination this entire Agreement shall be void and terminated pursuant to the provisions of Section 6, without waiving any claims or defenses

7.10 Appropriations. Subject to execution of this Agreement by the Director of Finance certifying that a balance of appropriation exists and funds are available, the amount of money appropriated for this Agreement is equal to or in excess of the maximum compensation payable hereunder; provided, however, that if construction is phased and subject to annual appropriation, funds only in the amount of initial appropriation are available and Engineer shall confirm availability of funds before proceeding with work exceeding initial and subsequent annual appropriations.

7.11 Additional Requirements on Federally Funded Contracts. If any of the work to be performed by Engineer under this Agreement is funded in whole or in part with federal funds, then this Agreement shall be construed to include all applicable terms required by the federal assistance agreement and integrated federal regulations. By executing this Agreement, Engineer agrees to be bound by all such mandatory federal requirements. Such requirements shall be provided by Owner and incorporated into individual Agreements as applicable.

7.12 Force Majeure. Neither party shall be responsible for delays caused by circumstances beyond its reasonable control including but not limited to governmental action, statute, ordinance, rule or regulation, strike or other labor troubles, fire, acts of God, or other incidents outside of either party’s control that makes performance or acceptance impossible or impractical. The Consultant shall not be liable for any failure of or delay in the performance of this Agreement for the period that such failure or delay is due to causes beyond its reasonable control created from any force majeure event.

SECTION 8. DISPUTES.

8.1 Any unresolved dispute or disagreement between Engineer and Owner arising from or relating to this Agreement or Engineer's services or right to payment hereunder shall be decided in a state court of competent jurisdiction located in Pueblo, Colorado.

SECTION 9. APPENDICES.

9.1 The following Appendices are attached to and made a part of this Agreement:

Appendix A - "Scope of Services" consisting of 9 (nine) pages.

Appendix B - "Fee Schedule" consisting of 2 (two) pages.
Including Schedule of Personnel and Duties

SECTION 10. ACCESSIBILITY.

The Americans with Disabilities Act (ADA) provides that it is a violation of the ADA to design and construct a facility for first occupancy later than January 26, 1993, that does not meet the accessibility and usability requirements of the ADA except where an entity can demonstrate that it is structurally impractical to meet such requirements. The Engineer therefore, will use his or her best reasonable professional efforts in accordance with applicable standards of

care to implement applicable ADA requirements and other federal, state and local laws, rules codes, ordinances and regulations as they apply to the Project. Notwithstanding, unless otherwise specified in the Scope of Services, Owner shall have sole responsibility as between Client and Consultant for compliance with the Americans With Disabilities Act ("ADA") 42 U.S.C. 12101 et. Seq. and the related regulations.

SECTION 11 – STATE-IMPOSED MANDATES PROHIBITING WORKERS WITHOUT AUTHORIZATION FROM PERFORMING WORK

(a) At or prior to the time for execution of this Contract, Engineer shall submit to the Purchasing Agent of the City its certification that it does not knowingly employ or contract with a "worker without authorization", as that term is defined within §8-17.5-101 (9), C.R.S. (herein "Worker Without Authorization"), who will perform work under this Contract and that the Engineer will participate in either the "E-Verify Program" created in Public Law 208, 104th Congress, as amended and expanded in Public law 156, 108th Congress, as amended, that is administered by the United States Department of Homeland Security or the "Department Program" established pursuant to section 8-17.5-102(5)(c), C.R.S. that is administered by the Colorado Department of Labor and Employment in order to confirm the employment eligibility of all employees who are newly hired for employment to perform work under this Agreement.

(b) Engineer shall not:

(i) Knowingly employ or contract with a Worker Without Authorization to perform work under this Agreement;

(ii) Enter into a contract with a subcontractor that fails to certify to Engineer that the subcontractor shall not knowingly employ or contract with a Worker without Authorization to perform work under this Agreement.

(c) The following state-imposed requirements apply to this Agreement:

(i) The Engineer shall have confirmed the employment eligibility of all employees who are newly hired for employment to perform work under this Agreement through participation in either the E-Verify Program or Department Program.

(ii) The Contractor is prohibited from using either the E-Verify Program or Department Program procedures to undertake pre-employment screening of job applicants while this Agreement is being performed.

(iii) If the Engineer obtains actual knowledge that a subcontractor performing work under this contract knowingly employs or contracts with a Worker Without Authorization to perform work under this Agreement, the Engineer shall be required to:

A. Notify the subcontractor and the Purchasing Agent of the City within three (3) days that the Engineer has actual knowledge that the subcontractor is employing or contracting with a Worker Without Authorization; and

B. Terminate the subcontract with the subcontractor if within three (3) days of receiving the notice required pursuant to subparagraph (c)(iii)A. above, the subcontractor does not stop employing or contracting with the Worker without Authorization ; except that the Engineer shall not terminate the contract with the subcontractor if, during such three (3) days, the subcontractor provides information to establish that the subcontractor has not knowingly employed or contracted with a Worker without Authorization.

(iv) The Engineer is required to comply with any reasonable request by the Colorado Department of Labor and Employment (hereinafter referred to as "CDLE") made in the course of an investigation that CDLE is undertaking pursuant to its authority under §8-17.5-102(5), C.R.S.

(d) Violation of this Section by the Engineer shall constitute a breach of the agreement and grounds for termination. In the event of such termination, the Engineer shall be liable for City's actual and consequential damages.

(e) Nothing in this Section shall be construed as requiring the Engineer to violate any terms of participation in the E-Verify Program.

SECTION 12. PERA LIABILITY

The Engineer shall reimburse the Owner for the full amount of any employer contribution required to be paid by the Owner to the Public Employees' Retirement Association ("PERA") for salary or other compensation paid to a PERA retiree performing contracted services for the Owner under this Agreement. The Engineer shall submit the questionnaire to Owner.

IN WITNESS WHEREOF the parties hereto have made and executed this Agreement as of the day and year first above written.

CITY OF PUEBLO, A MUNICIPAL CORPORATION

By_____
Naomi Hedden, Purchasing Director

Attest_____
City Clerk

[S E A L]

BROWN AND CALDWELL, INC.

By_____
Mary Kay Provaznik, Denver Local Leader

BALANCE OF APPROPRIATION EXISTS FOR THIS CONTRACT AND FUNDS ARE AVAILABLE.

_____
Director of Finance

APPROVED AS TO FORM

_____
City Attorney

Attachments: Appendix A – Scope of Services
Appendix B – Fee Schedule

APPENDIX A

Brown and Caldwell Proposal for:
Sustainability Study

Prepared for
City of Pueblo
December 10, 2021

Project Overview

Brown and Caldwell (BC) will provide assistance to the City of Pueblo (COP), James R. Dilorio Water Reclamation Facility by performing a high-level feasibility study to identify potential cost-effective ways to improve energy efficiency through operations and/or utilization of alternative technologies. This effort is being categorized as a Sustainability Study.

Any changes to the contract must be authorized by the COP Wastewater Director and negotiated with the BC Project Manager.

Services will include:

- Review of provided operational and energy use data
- Identification of opportunities for energy efficiency
- Cursory review of alternative technologies (as defined further below under Phase 200) for evaluation of feasibility and cost effectiveness;Cost effectiveness will be a high-level evaluation of capital and operational costs
- Provide recommended short-list of potentially viable capital projects that would require a more detailed evaluation prior to a final decision on implementation of the technology and preliminary design

This Scope of Services includes the following phases:

Phase 100 – Project Management and Administration

Phase 200 – Technology Screening Evaluation

Phase 300 – Technical Memorandum

One attachment is also included with this Scope of Services:

Attachment 1 – Project Schedule

COP WW Responsibility

Pueblo WW will provide BC all available and relevant information to aid in the Sustainability Study. This includes, but is not limited to:

- Operational data: BC will request operational data specific to the plant (i.e., digester gas production data, digester gas chemical composition, etc.)
- Power consumption data: BC will request power consumption data specific to the plant

BC's Opinion of Probable Costs (Cost Estimate)

Pueblo acknowledges that construction cost estimates, financial analyses and feasibility projections are subject to many influences including, but not limited to, price of labor and materials, unknown or latent conditions of existing equipment or structures, and time or quality of performance by third parties. Pueblo acknowledges that such influences may not be precisely forecasted and are beyond the control of BC and that actual costs incurred may vary substantially from the estimates prepared by BC. BC does not warrant or guarantee the accuracy of construction or development cost estimates. Any costs provided by BC as part of this high-level feasibility study are not a result of full design or evaluation, should not be used for CIP planning purposes, but rather to help comparatively inform the short-list of potentially feasible technologies to pursue further in a future scope of work.

Phase 100 – Project Management and Administration

Project Management (PM) will consist of activities necessary to plan, oversee, direct, and manage engineering resources to complete the design, support bid-phase activities, and assist during construction. In addition, PM activities include monthly invoicing and status reporting.

Invoicing will occur monthly and will be prepared and submitted to the COP via email in an approved format. Invoices shall include total contract amount, total charges to date, previous billings, outstanding balance, current amount remaining, and total amount due.

Monthly project status reports will be prepared and submitted to the COP along with the monthly invoices. These reports will include summary of services completed since the previous report, current project schedule and budget status, project issues and potential changes, and project schedule updates if changes have been made and agreed upon by the COP.

Deliverables:

- Monthly invoices and progress reports
- Comment logs containing substantive QC comments and approved resolutions will be kept and may be made available to COP upon request

Phase 200 – Technology Evaluation

Objectives

As part of this project, BC will perform a cursory evaluation of the following technologies for feasibility and sustainability opportunities:

- Cogeneration
- Hydropower turbines
- Solar power
- Gas upgrading for pipeline injection or fleet vehicle use
- Fleet conversion
- Heat pumps
- Biological treatment
- Side-stream treatment
- Wind
- Energy efficiency study
- Food-to-waste co-digestion
- Grant opportunities
- Acid plus
- District heating

To support the feasibility study and achieve a recommended short-listed set of alternatives for a more detailed evaluation, cost impacts (capital and operational) will be reviewed. This evaluation does not produce a full cost analysis to determine an estimated net present value or other detailed financial analyses comparing revenue to capital costs, operation and maintenance (O&M), and repair and replacement (R&R) costs. While not included in this scope, if adequate opportunity for cost savings and energy sustainability is identified through this evaluation, a future business case

evaluation with a full O&M cost analyses on a few recommended alternatives may be beneficial to Pueblo for CIP and financial planning purposes.

Task 201: Cogeneration

A biogas utilization option such as combined heat and power (CHP), also commonly referred to as cogeneration, is a candidate technology for Pueblo where biogas can be cleaned up and combusted in internal combustion engines connected to an electrical generator to produce electricity for the plant or for sale back to the electric utility. The exhaust and jacket water systems are also plumbed to cool the engines which produces hot water that can be used to heat process fluids (i.e., digester contents) or buildings. This evaluation will include review of existing data and potential costs.

Assumptions

- Technology is limited to lean-burn and turbocharged internal combustion engines
- Biogas will require gas conditioning to remove contaminants (e.g., H2S, siloxanes, etc.) before use in the engine
- This evaluation is to determine the suitability of available cogeneration systems and the associated gas conditioning systems, and a cursory look at capital costs of such systems

Task 202: Hydropower turbines

At the point of discharge into the Arkansas River, there is the potential to utilize hydropower turbines to generate power for the facility. Hydropower turbines that don't affect the waterflow could potentially generate power at several locations within the plant and in the effluent channel. Twelve million gallons of water flows through the plant daily that can be used to operate the turbines. BC will evaluate the feasibility of hydropower turbines by calculating the approximate amount of power that may be generated and comparing that to the potential approximate costs of the system.

Assumptions

- This task is to review the technical viability of hydroturbines at the facility and, if technically viable, a cursory look at the estimated capital costs
- COP will provide water flow rates and elevations at the various sites that hydropower may be installed at the facility

Task 203: Solar

COP evaluated additional solar in 2017, but it was determined that 10 acres solar would be needed to produce enough power to make battery storage cost effective. The cost of battery storage has come down, but additional land may still be needed. Smaller solar fields could be added to offset more of the daily energy cost, but peak demand charges would not be reduced. Battery storage is necessary to offset peak demand to provide the most benefit. BC will evaluate how much solar would be required to make battery storage cost effective and describe the additional land requirements to make such a project possible.

Assumptions:

- COP will provide 2 years of monthly electric bills.

Task 204: Gas upgrading (RNG and CNG)

Beneficial reuse of digester gas could potentially allow the COP to redirect the biogas from being combusted in a boiler or waste gas burner to instead create a usable revenue generating product gas. A variety of technologies convert biogas to a renewable natural gas (RNG) product for injection into a natural gas pipeline or for use as compressed biomethane (CNG) in a vehicle fleet. Contaminants of concern in biogas that need to be removed in order to meet RNG and CNG standards are H_2S, moisture, siloxanes, and carbon dioxide (CO_2). Revenues include selling renewable identication numbers (RINs) and the sale of RNG or CNG. This analysis will review the suitability and viability of the available technologies and potential revenue stream generation, but will not serve as a full business case evaluation.

Assumptions:

- This evaluation is to determine the viability and potential suitability of available gas upgrading technologies for COP and a cursory look at capital costs of such a system.

Task 205: Fleet conversion

The biogas (methane) produced in the digesters can also be collected and processed to remove the hydrogen sulfide, carbon dioxide, moisture, carbon dioxide, and other trace contaminants (i.e., siloxanes) to provide a gaseous fuel (biomethane or CNG) to power vehicles. Considerations to be evaluated for this alternative is fleet vehicle opportunities (i.e., garbage trucks, busses, etc.) and their proximity to the treatment plant site. This will be a high-level review of existing fleet, potential for fleet conversion to CNG, and feasibility of potential biogas upgrades required.

Assumptions

- COP can provide information about the existing fleet (number and type of vehicles and approximate storage locations within Pueblo)
- Only bus fleets or sanitation fleets will be considered
- This evaluation is to determine the viability and potential suitability of upgrading the existing fleet of vehicles to operate on CNG, and a cursory look at capital costs of such upgrades

Task 206: Heat pumps

The wastewater in the collection system or even in the plant effluent maintains relatively constant temperatures, varying only a few degrees from summer to winter. This low-level energy is ideal for heat recovery that can harness this thermal source for heating and cooling. The recovered heat from the effluent could be used for process heating and building heating similar to how heat produced by a CHP system is used for those same purposes..

This evaluation will include reviewing information on existing heating system temperature and heat demands, establish if heat pumps are feasible (e.g., if they can meet required temperature and capacity), and development of a high-level cost approximation.

Assumptions

- Client has hot water system operating data and/or design data, and information on boilers (age, size, condition) and will provide to BC
- Assume direct effluent cooling, hybrid heat pump / boiler design
- Capital cost estimate will be major equipment cost with 4.0 multiplier

Task 207: Biological treatment

Biological wastewater treatment is energy-intensive, and it is a significant contributor to the COP's energy footprint. During previous projects, BC has helped the COP lower the energy requirements for biological treatment using advanced aeration control strategies, resulting in significant energy savings (approximately $150,000 per year). For this task, BC will review the current operation of the aeration system and controls and look for further optimization opportunities. For this, the existing BioWin model developed and calibrated by BC under previous projects will be employed. First, the model results will be compared with current plant operation and performance to establish a baseline for energy footprint and performance. Then, the BioWin model will be used to evaluate possible optimization opportunities to reduce energy requirements for treatment while meeting the existing Regulation 85's requirements.

Assumptions:

- COP to provide detailed operational data from the treatment plant for the past two years
- BC will analyze existing plant operation data and identify opportunities for optimization
- BC will use the existing biological process model to pre-screen optimization alternatives

Task 208: Side-stream treatment

Sidestream treatment of anaerobically digested dewatering centrate has proven to be a cost-effective and energy-efficient solution for wastewater treatment plants. The removal of nitrogen in sidestream using deammonification, where anammox bacteria is used to remove nitrogen without oxygen and carbon, is a highly sustainable practice now employed by many utilities worldwide. At COP, the sidestream treatment could provide overall nitrogen load reduction to the biological treatment, a reduction in ammonia spikes associated with centrifuge operation, and an overall reduction in aeration demands for biological treatment. Furthermore, sidestream treatment opens the possibility to co-digestion opportunities at the plant without negatively impacting the final effluent quality from the treatment plant. The BioWin process model developed under previous tasks will be used to analyze the viability of sidestream treatment from a process and economic standpoint. In addition, the process model will be used to develop sidestream process design criteria that specific sidestream technology providers will utilize. Submittals, including cost proposals from technology providers, will be reviewed, and a detailed comparison will be carried out.

Assumptions:

- COP to provide existing sidestream quality data for the past two years. If data is not available, BC will assume the results predicted by the BioWin model for the pre-screening phase
- BC will analyze existing data around centrate
- BC will use the existing biological process modeling results and proposals from a selected number of vendors to pre-screen sidestream alternatives

Task 209: Wind

BC will evaluate publicly available data to determine whether wind energy generation is a viable technology for COP to pursue.

Assumptions

- Data will be publicly available and representative of conditions at COPs facility

Task 210: Energy efficiency

BC will review conditions of energy efficiency to determine whether COP should pursue it as an opportunity to increase efficiencies at the facility.

Assumptions:

- BC will evaluate publicly available data/guidelines on what is covered for review in an energy efficiency study
- BC may contact Black Hills Energy to determine applicability of the facility, should budget allow

Task 211: Food-to-waste co-digestion

Food waste is the second largest category of municipal solid waste (MSW) sent to landfills in the United States, accounting for approximately 18% of the waste stream. Food waste is highly biodegradable and has a much higher volatile solids destruction rate (86-90%) than biosolids. Anaerobic digestion of food waste has many benefits for COP, including an increase in methane generation which can be used as an energy source. Wastewater treatment facilities can expect to see cost savings from incorporating food waste into anaerobic digesters due to production of on-site power and tipping fee for accepting the food waste. For this study, BC will evaluate the impact of co-digestion on the plant energy footprint and effluent quality using a desktop mass balance analysis coupled with steady-state BioWin model simulations. Typical design parameters for different feedstocks characteristics will be based on BC's experience with other municipalities. Energy mass balances (e.g., Sankey diagrams) will be generated to understand the impact of food waste digestion on the energy footprint and sustainability for COP.

Assumptions:

- A market for foot waste diversion to the JR Dilorio WRF is available within the City of Pueblo and surrounding communities
- Food waste characteristics based on available information and literature unless the information is readily available and to be provided to BC
- Additional food waste quantities to be added until the capacity of the existing anaerobic digestion system is met

Task 212: Grant opportunities

BC will research if grant opportunities exist for the evaluated technologies. This is important because a grant funding option could be the different between making a technology feasible for COP or not. BC recommends that a further evaluation of grant opportunities is conducted during the next phase of evaluation, after the short-list is developed and focused research is more easily achieved.

Assumptions

- BC will not be compiling any of the application details for the grant opportunities
- BC will not be applying for any of the grants listed as maybe being an option for funding (either entirely or partially) any technology

Task 213: Acid Plus

Acid Plus is a new invention of BC's that is eing tested as part of a WRF job at the University of Massachusetts – Amherst and City College of New York. The process should allow struvite harvesting upstream of methane-phase digesters (thereby reducing maintenance). It can also divert considerable H2S in the acid-phase biogas to waste (so that it does not need to be removed from methane-phase

biogas, making biogas treatment easier). Finally, existing digestion capacity may be increased by integrated use of recuperative thickening; potentially providing capacity for co-digestion.

Assumptions

- Acid Plus will be assumed to "work" prior to any even-laboratory-scale proof of such. COP is discouraged from proceeding until such at time that COP has comfort with the suitability of its implementation at the plant

Task 214: District heating

The quantity of recoverable heat in the facility's effluent may exceed the amount of heat required by the WRF. If a partnership could be established with a large nearby heat consumer (e.g. a hospital or university) to provide hot water for heating, a large heat pump system (described in Task 207) could be implemented to provide heat for the WRF as well as additional consumers. The additional consumers would pay a negotiated fee for the heat provided by the WRF.

For this task, BC will contact up to three potential nearby partners to collect information on their heat system. This task will identify any technically feasible partners based on compatibility with their existing system and proximity to the WRF.

Assumptions

- Only a cursory investigation will be conducted for providing District Heating to the CSU-Pueblo campus

Task 215: QC/Technical reviews

Each task listed above has hours allotted for quality control (QC)/technical review. This task includes hours for the client service manager (CSM) to conduct an overall QC of the work, as a whole, to ensure it meets client needs and expectations.

Phase 300 – Technical memorandum

Task 301: Draft

BC will summarize findings in a draft technical memorandum (TM) submitted to COP. After receiving comments from COP, BC will develop a final TM for submittal.

Task 302: Final

The final TM will be developed from one round of COP comments. The final TM will summarize the results of the aforementioned evaluations, and provide a list of potential cost-effective ways to improve energy efficiency through operations and/or utilization of alternative technologies. This list will inform the next scope of work to evaluate these potential technologies further.

QA/QC

Prior to the draft Technical Memorandum (TM), BC will conduct an internal QA/QC review of materials to be submitted. Review will include senior level discipline specific review, plus a technical readability review.

Deliverables

The following deliverables will be provided as part of this project

- BC will provide for review a draft TM summarizing the above evaluations and a recommendation of technologies to pursue
- After incorporating one round of client comments, BC will submit a final TM

Appendix B: Fee Schedule

Pueblo, City Dept of Wastewtr (CO) -- Pueblo-Sustainability Study

Phase	Phase Description	Kepley, Samantha A	Rose, Lisa J	Kell, Kevin A	Jimenez, Jose A	Buhman, Darrell L	Zemke, Peter E	Willis, John	Andrews, Nancy E	Brune, Lia	Forsberg, Dane C	Regmi, Pusker R	Total Labor Hours	Total Labor Effort	Total Effort
		PM	PA												
		$143	$101	$214	$240	$196	$184	$240	$214	$163	$122	$184			
100	**Project Management & Administration**	20	8	16	0	0	0	0	0	0	0	0	**44**	**$7,092**	**$7,092**
200	**Technology Evaluation**	12	0	4	4	62	17	32	9	78	16	40	**274**	**$50,444**	**$50,444**
201	Cogeneration	0	0	0	0	16	0	0	1	15	0	0	**32**	$5,795	**$5,795**
202	Hydropower turbines	0	0	0	0	7	0	0	4	7	0	0	**18**	$3,369	**$3,369**
203	Solar	0	0	0	0	0	0	0	0	0	16	0	**16**	$1,952	**$1,952**
204	Gas upgrading (RNG and CNG)	0	0	0	0	33	0	0	3	28	0	0	**64**	$11,674	**$11,674**
205	Fleet conversion	0	0	0	0	5	0	6	1	6	0	0	**18**	$3,612	**$3,612**
206	Heat pumps	0	0	0	0	1	17	0	0	22	0	0	**40**	$6,910	**$6,910**
207	Biological treatment	0	0	0	2	0	0	0	0	0	0	16	**18**	$3,424	**$3,424**
208	Side-stream treatment	0	0	0	1	0	0	0	0	0	0	8	**9**	$1,712	**$1,712**
209	Wind	0	0	0	0	0	0	4	0	0	0	0	**4**	$960	**$960**
210	Energy efficiency	6	0	0	0	0	0	0	0	0	0	0	**6**	$858	**$858**
211	Food-to-waste co-digestion	0	0	0	1	0	0	8	0	0	0	16	**25**	$5,104	**$5,104**
212	Grant opportunities	6	0	0	0	0	0	2	0	0	0	0	**8**	$1,338	**$1,338**
213	Acid Plus	0	0	0	0	0	0	8	0	0	0	0	**8**	$1,920	**$1,920**
214	District heating	0	0	0	0	0	0	4	0	0	0	0	**4**	$960	**$960**
215	QC/Technical reviews	0	0	4	0	0	0	0	0	0	0	0	**4**	$856	**$856**
300	**Technical Memorandum**	0	0	8	0	11	0	0	4	17	0	0	**40**	**$7,495**	**$7,495**
301	Draft	0	0	4	0	7	0	0	2	11	0	0	**24**	$4,449	**$4,449**
302	Final	0	0	4	0	4	0	0	2	6	0	0	**16**	$3,046	**$3,046**
	GRAND TOTAL	**32**	**8**	**28**	**4**	**73**	**17**	**32**	**13**	**95**	**16**	**40**	**358**	**$65,031**	**$65,031**

APPENDIX B

Brown and Caldwell Fee Schedule

Level	Engineering	Technical/Scientific	Administrative	Hourly Rate
A			Office/Support Services I	$67
B	Drafter Trainee	Field Service Technician I	Word Processor I Office/Support Services II	$74
C	Assistant Drafter	Field Service Technician II	Word Processor II Office/Support Services III	$81
D	Drafter Engineering Aide Inspection Aide	Field Service Technician III	Accountant I Word Processor III Office/Support Services IV	$92
E	Engineer I Senior Drafter Senior Illustrator Inspector I	Geologist/Hydrogeologist I Scientist I Senior Field Service Technician	Accountant II Word Processor IV	$101
F	Engineer II Inspector II Lead Drafter Lead Illustrator	Geologist/Hydrogeologist II Scientist II	Accountant III Area Business Operations Mgr Technical Writer Word Processing Supervisor	$122
G	Engineer III Inspector III Senior Designer Supervising Drafter Supervising Illustrator	Geologist/Hydrogeologist III Scientist III	Accountant IV Administrative Manager	$143
H	Senior Engineer Principal Designer Senior Construction Engineer Senior Engineer	Senior Geologist/Hydrogeologist Senior Scientist	Senior Technical Writer	$163
I	Principal Engineer Principal Construction Engineer Supervising Designer	Principal Geologist/Hydrogeologist Principal Scientist	Corp.Contract Administrator	$184
J	Supervising Engineer Supervising Constr. Engineer Supervising Engineer	Supervising Scientist Supervising Geologist/ Hydrogeologist	Assistant Controller	$196
K	Managing Engineer	Managing Geologist/Hydrogeologist Managing Scientist	Area Bus Ops Mgr IV	$214
L	Chief Engineer Executive Engineer	Chief Scientist Chief Geologist/Hydrogeologist	Corp Marketing Comm. Mgr.	$240
M	Vice President			$240
N - P	Senior Vice President President/Executive Vice President Chief Executive Officer			$242