BUCKMAN DIRECT DIVERSION BOARD
PROFESSIONAL SERVICES CONTRACT
FOR ENGINEERING SERVICES

THIS PROFESSIONAL SERVICES CONTRACT ("Contract") is made and entered into by and between the Buckman Direct Diversion Board, hereinafter referred to as the "BDDB," and Stantec Consulting Services, Inc., hereinafter referred to as "Design Engineer" (together, the "Parties"), and is effective as of the date set forth below upon which it is executed by the Parties ("Effective Date").

RECITALS

WHEREAS, the Chief Procurement Officer of the City of Santa Fe has made the determination that this Contract was procured in accordance with the provisions of the New Mexico Procurement Code (NMSA 1978, Section 13-1-28 et seq.) pursuant to NMSA 1978, Section 13-1-95.2. E; through 13-1-119; and

WHEREAS, Design Engineer is one of such requisite skills and qualifications and is willing to engage with the BDDB for professional services, in accordance with the terms and conditions hereinafter set forth, and Design Engineer, understanding and consenting to the foregoing, is willing to render such professional services as outlined in this Contract; and

WHEREAS, the purpose of this Contract is to replace or substantially modify the existing BDD river intake to provide a reliable and maintainable means of diverting raw water while reducing the amount of sediment and debris entering the BDD raw-water system ("Project"); and

WHEREAS, Design Engineer does hereby accept its designation as an engineering firm rendering services for the BDDB as set forth in this Contract; and

WHEREAS, Design Engineer represents that, in accordance with the Engineering and Surveying Practice Act, NMSA 1978, Section 61-23-1-23, et. seq., the following named person or persons are professional engineer(s) who will be responsible, in charge of and directly responsible for the services required of the engineer under this Contract:

Patricia Bolliger, PE
Tracy Anderson, PE

NOW, THEREFORE, the Parties hereby agree as follows:

1. Scope of Work

Design Engineer shall provide the Scope of Work for the BDDB as described in attached Attachment A and pursuant to the Schedule Estimate attached as Attachment B.

A. Design Engineer shall be responsible for the professional quality, technical accuracy, completion, and the coordination of all planning, design, drawings, specifications, reports, and other services furnished by Design Engineer or any employee, agent, or subcontractor of Design Engineer under this Contract. Design Engineer shall, without additional compensation, correct or revise any errors, omissions, or other deficiencies in its employee's, agent's, or subcontractor's designs, drawings, specifications, reports, and other services.

B. Design Engineer acknowledges that approval by the BDDB of drawings, specifications, reports and incidental engineering work or materials furnished under the Scope of Work shall not in any way relieve Design Engineer of their responsibility for the technical accuracy and adequacy of the work.

C. All engineering work shall be performed by, or under the direct supervision of, professional engineers licensed in the State of New Mexico.

2. Standard of Performance; Licenses

A. Design Engineer represents that Design Engineer possesses the personnel, experience, and knowledge necessary to perform the Scope of Work in accordance with the reasonable skill and diligence required by customarily accepted professional practices and procedures normally provided in the performance of such services.

B. Design Engineer agrees to obtain and maintain throughout the term of this Contract all applicable professional and business licenses required by law, for itself, its employees, agents, representatives and subcontractors.

3. Compensation

A. The BDDB shall pay to Design Engineer in full payment for services satisfactorily performed at the rates indicated in the schedules attached hereto as Attachment C, C-1 & C-2, determined based on the personnel conducting specific duties under the Scope of Work with all time expended specifically indicated, and based upon deliverables, milestones and budget. Such compensation is not to exceed $2,187,563.66, excluding gross receipts tax. The applicable New Mexico gross receipts tax levied on the amounts payable under this Contract shall be paid by the BDDB to Design Engineer. The BDDB is under no obligation to expend all of the total compensation amount.

B. The maximum compensation specified is not a guarantee that the work assigned to be performed by Design Engineer under this Contract shall equal the amount stated herein. The Parties do not intend for Design Engineer to continue to provide services without compensation when the total compensation is reached. Design Engineer is responsible for notifying the BDDB when the services provided under this Contract reach the total compensation amount. In no event will Design Engineer be paid for services provided in excess of the total compensation amount without this Contract being amended in writing prior to those services in excess of the total compensation amount being provided.

C. Payment is subject to availability of funds pursuant to the Paragraph 7 Appropriations set forth below. All invoices MUST BE received by the BDDB no later than thirty (30) days after the termination of the fiscal year in which the services were delivered.

D. Design Engineer must submit a detailed statement accounting for all services performed and expenses incurred. If the BDDB finds that the services are not acceptable, within thirty (30) days after the date of receipt of written notice from Design Engineer that payment is requested, it shall provide Design Engineer a notice explaining the defect or objection to the services, and outlining steps Design Engineer may take to provide remedial action. Upon certification by the BDDB's Owner Representative that the services have been received and accepted, payment shall be tendered to Design Engineer within thirty (30) days after the date of acceptance. If payment is made by mail, the payment shall be deemed tendered on the date it is postmarked. No interest, finance charges, penalties or other late payments shall be assessed against the BDDB except to the extent required by applicable New Mexico law. Any such charges shall accrue only on amounts properly due, undisputed, and for work that has been accepted

E. Expenditures will be incurred on an as-needed basis to complete tasks described in the Scope of Work at the BDDB's direction. Additional specific deliverables, milestones, tasks, time-sensitive reporting, data, plans, designs, and/or any other professional services requested or generated will be made a part of a specific Change Order or additional Task Order the BDDB may provide to Design Engineer after execution of this Contract and will be negotiated and finalized at such time.

4. Term

THIS CONTRACT SHALL NOT BECOME EFFECTIVE UNTIL APPROVED BY THE BDDB. This Contract shall terminate on November 5, 2030, unless terminated pursuant to Paragraph 5 (Termination), or Paragraph 7 (Appropriations). This Contract shall not exceed a total of four (4) years from the Effective Date in accordance with NMSA 1978, Section 13-1-150 through 13-1-152.

5. Termination

A. Default. If either Party should fail to fulfill in a timely and proper manner its obligations under this Contract, or if either Party should violate any of the covenants, agreements, or stipulations of this Contract, such Party, in addition to remedies available under the terms of this Contract, thereupon shall have the right to terminate this Contract by giving written notice to the other Party of such termination and specifying the effective date thereof at least fifteen (15) days before the effective date of such termination. Such termination shall become final upon the effective date in the absence of the defaulting Party curing its default which gave rise to the notice of termination.

B. Abandonment of Project. If the Project is abandoned by the BDDB, the BDDB may terminate this Contract at any time by giving at least fifteen (15) days' written notice to Design Engineer.

C. Termination for convenience of the BDDB. The BDDB may terminate this Contract, in whole or in part, for the BDDB's convenience at any time by giving at least thirty (30) days' written notice to Design Engineer.

D. Termination Due To Non-Funding. In the event the funding sources for the services under this Contract are determined by the BDDB to be inadequate for any reason, the BDDB may terminate this Contract by giving at least ten (10) days' written notice to Design Engineer.

E. Effect of Termination. Upon Design Engineer's receipt of a notice of termination, Design Engineer shall promptly discontinue all services, unless otherwise directed in writing by the BDDB. All finished or unfinished documents, data, sketches, calculations, summaries, estimates, records, schedules, studies, surveys, drawings, maps, models, photographs, reports, and such other information and data accumulated in the performance of services under this Contract, whether complete or in progress, prepared by Design Engineer under this Contract shall become the BDDB's property regardless of the cause for termination upon full payment of all monies owed to Design Engineer. Design Engineer shall be entitled to receive compensation for actual work satisfactorily completed hereunder, including reimbursable expenses authorized by the BDDB which are due, but shall not be entitled to recover any other sums, including but not limited to, consequential damages, or loss of anticipated profits, for any termination allowed pursuant to this Paragraph. In the event of termination for convenience, the BDDB may take over the work of the Project and continue the Project by contract with another party or with its own staff.

6. Standard of Care

A. Design Engineer agrees that it and its employees shall possess the experience, knowledge, and character necessary to qualify them individually for the duties they perform in connection with the services to be performed under this Contract. Design Engineer further agrees that it will require its consultants, subconsultants, joint venturers, and agents to agree with Design Engineer that it possesses the experience, knowledge, and character necessary to qualify individually for the duties that are performed in connection with the services to be performed for Design Engineer on the Project.

B. Design Engineer shall perform the Scope of Work in accordance with the degree of care, skill, diligence, and judgment ordinarily exercised by competent professional engineers performing services on projects of similar size, complexity and type at the time the work is performed. Design Engineer will perform professional services under this Contract according to the standard of care applicable to a firm with a national practice and which possesses professional expertise in the engineering of municipal water and diversion facilities

7. Appropriations

The terms of this Contract are contingent upon sufficient appropriations and authorization being

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

8. Status of Design Engineer

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

9. Assignment

Design Engineer shall not assign or transfer any interest in this Contract or assign any claims for money due or to become due under this Contract without the prior written approval of the BDDB.

10. Subcontracting

Design Engineer shall not subcontract any portion of the services to be performed under this Contract without the prior written approval of the BDDB. No such subcontract shall relieve Design Engineer from its obligations and liabilities under this Contract, nor shall any subcontract obligate direct payment from the BDDB.

11. Release

Final payment of the amounts due under this Contract shall operate as a release of the BDDB, its officers and employees from all liabilities, claims and obligations whatsoever arising from or under this Contract.

12. Confidentiality

Any confidential information provided to or developed by Design Engineer in the performance of this Contract shall be kept confidential and shall not be made available to any individual or organization by Design Engineer without the prior written approval of the BDDB. The restrictions on the use and disclosure of the confidential information shall not apply to information which (a) was in the possession of Design Engineer before receipt of same from the BDDB; or (b) becomes

publicly available other than through Design Engineer; or (c) is disclosed pursuant to the requirements of a governmental authority or judicial order, but only to the extent required to comply with the said requirements of the government authority or judicial order.

13. Product of Service Copyright

Upon full payment of all monies owed to Design Engineer, all materials, including all electronic materials, developed or acquired by Design Engineer under this Contract shall become the property of the BDDB and shall be delivered to the BDDB no later than the termination date of this Contract. Nothing developed or produced, in whole or in part, by Design Engineer under this Contract shall be the subject of an application for copyright or other claim of ownership by or on behalf of Design Engineer.

14. Conflict of Interest; Governmental Conduct Act

A. Design Engineer represents and warrants that it presently has no interest and, during the term of this Contract, shall not acquire any interest, direct or indirect, which would conflict in any manner or degree with the performance or work required under the Contract.

B. Design Engineer further represents and warrants that it has complied with, and, during the term of this Contract, will continue to comply with, and that this Contract complies with all applicable provisions of the Governmental Conduct Act, NMSA 1978, Section 10-16, et. seq.

C. Design Engineer's representations and warranties in subsections A and B of this Paragraph 14 are material representations of fact upon which the BDDB relied when this Contract was entered into by the Parties. Design Engineer shall provide immediate written notice to the BDDB if, at any time during the term of this Contract, Design Engineer learns that Design Engineer's representations and warranties in subsections A and B of this Paragraph 14 were erroneous on the effective date of this Contract or have become erroneous by reason of new or changed circumstances. If it is later determined that Design Engineer's representations and warranties in subsections A and B of this Paragraph 14 were erroneous on the effective date of this Contract or have become erroneous by reason of new or changed circumstances, in addition to other remedies available to the BDDB and notwithstanding anything in the Contract to the contrary, the BDDB may immediately terminate the Contract.

D. All terms defined in the Governmental Conduct Act have the same meaning in this Paragraph 14.

15. Amendment

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

B. If the BDDB proposes an amendment to the Contract to unilaterally reduce funding due to budget or other considerations, Design Engineer shall, within thirty (30) days of receipt of

the proposed amendment, have the option to terminate the Contract, pursuant to the termination provisions as set forth in Paragraph 5 herein, or to agree to the reduced funding.

16. Entire Contract

This Contract, together with any other documents incorporated herein by reference and all related attachments and schedules, constitutes the sole and entire agreement of the Parties with respect to the subject matter of this Contract, and supersedes all prior and contemporaneous understandings, agreements, representations, and warranties, both written and oral, with respect to the subject matter. In the event of any inconsistency between the statements in the body of this Contract and any related attachments and schedules, the statements in the body of this Contract shall control. Order of precedence concerning conflicts between documents concerning this Contract shall be as follows:

- This Executed Contract
- Amendments (Change Orders)
- Design Engineer's Response to RFP

17. Penalties for violation of law

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

18. Equal Opportunity Compliance

Design Engineer agrees to abide by all federal and state laws and rules and regulations, and the City of Santa Fe Code, pertaining to equal employment opportunity. In accordance with all such laws of the State of New Mexico, Design Engineer assures that no person in the United States shall, on the grounds of race, religion, color, national origin, ancestry, sex, age, physical or mental handicap, or serious medical condition, spousal affiliation, sexual orientation or gender identity, be excluded from employment with or participation in, be denied the benefits of, or be otherwise subjected to discrimination under any program or activity performed under this Contract. If Design Engineer fails to meet these requirements during the term of this Contract, Design Engineer agrees to take appropriate steps to correct these deficiencies.

19. Applicable Law

The laws of the State of New Mexico shall govern this Contract, without giving effect to its choice of law provisions. Venue shall be proper only in the First Judicial District Court, Santa Fe County, State of New Mexico. By execution of this Contract, Design Engineer acknowledges and agrees to the jurisdiction of the First Judicial District Court, Santa Fe County, New Mexico over all lawsuits arising out of this Contract.

20. Insurance

Design Engineer shall procure and maintain at its expense until final payment by the BDDB (or as otherwise provided herein) for services covered by this Contract, insurance in the kinds and amounts hereinafter provided with insurance companies authorized to do business in (and an agent for service of process within) the State of New Mexico, covering all operations under this Contract. Before commencing any services under this Contract, Design Engineer shall furnish to the BDDB a certificate or certificate(s) in form satisfactory to the BDDB showing that it has complied with this Paragraph. Such certificate(s) is required in addition to a copy of each insurance policy required herein. Various types of required insurance may be written in one or more policies. Kinds and amounts of insurance required are as follows:

A. **Commercial General Liability (COL) Insurance Including Automobile**: Commercial general liability and automobile insurance policies with liability limits in amounts not less than $2,000,000.00 combined single limit of liability for bodily injury, including death, and property damage in any one occurrence, for each policy, plus an additional $5,000,000.00 excess/umbrella coverage.

B. Said policies of insurance shall be in effect for the term of this Contract and include coverage for all operations performed for the BDDB by Design Engineer, coverage for the use of all owned, non-owned, hired automobiles, vehicles and other equipment both on and off work, and contractual liability coverage shall not exclude the indemnification provisions (including but not limited to Article IX) of this Contract. The BDDB shall be named an additional insured on the Commercial General Liability Insurance policies.

C. **Workers' Compensation Insurance/Employer's Liability**: Workers' Compensation Insurance in accordance with the provisions of the Workers' Compensation Act, NMSA 1978, Section 52-1, et. seq. Employer's Liability coverage of $1,000,000.00.

D. **Professional Liability Insurance**:

1. Professional liability insurance in an amount of $7,000,000 in the aggregate. Such policy shall be in effect for the term of this Contract (the "Basic Professional Liability Insurance").

2. All policies for "claims made" coverage shall satisfy the requirements of this subsection only when coverage is provided for [the entire time of the performance of this contract and for year(s) thereafter], and

(a) All insurance policies shall allow Design Engineer to extend the time in which a claim may be made for five years or for a period equal to the time remaining during which insurance is required by this Contract after the cancellation of the policy, whichever is greater, for occurrences or claims that may arise during the term of the policy, and;

(b) Each new policy shall provide for an inception (or retroactive) date that is the same as the initial date of this Contract, provided that subsections of D.2(a) and D.2(b) will not both be required as long as continuous coverage is provided for the time set forth above.

E. The BDDB reserves the right to review certificates of all required insurance policies and/or amendments or replacement policies at any time. Design Engineer will provide the BDDB with copies of the actual insurance policies referenced herein (including any endorsements of amendments thereto) at the time of Design Engineer's execution of this Contract.

21. Records and Financial Audit

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

22. Indemnification

To the greatest extent permitted by law, Design Engineer shall indemnify, hold harmless (but not defend) the BDDB, City of Santa Fe, Santa Fe County, Las Campanas Water and Sewer Cooperative and The Club at Las Campanas; their respective elected officials, officers, employees, and representatives ("Indemnified Parties") from all losses, damages, or judgments, including payments of all reasonable attorneys' fees and costs on account of any judgment, execution, action or demand to the extent caused by Design Engineer's acts, errors or omissions in performance of the Scope of Work under this Contract as well as Design Engineer's employees, agents, representatives and subcontractors or any tier. Should any action, suit or proceeding related to the services performed by Design Engineer or any officer, agent, employee, servant or subcontractor under this Contract be brought against any Indemnified Parties, the BDDB shall, as soon as practicable but no later than ten (10) days after it receives notice thereof, notify the Design Engineer.

23. New Mexico Tort Claims Act

Any liability incurred by the BDDB in connection with this Contract is subject to the immunities and limitations of the New Mexico Tort Claims Act, NMSA 1978, Section 41-4-1, et. seq. as amended. The BDD and its "public employees" as defined in the New Mexico Tort Claims Act, do not waive sovereign immunity, do not waive any defense and do not waive any limitation of liability pursuant to law. No provision in this Contract modifies or waives any provision of the New Mexico Tort Claims Act.

24. Invalid Term or Condition

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

25. Enforcement of Contract

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

26. Notices

Any notice required to be given to either Party by this Contract 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 BDDB: Bradley Prada
BDDB Facilities Manager
341 Caja Del Rio Rd.
Santa Fe, New Mexico 87506

To Design Engineer Contractor: Patricia Bolliger
Stantec Consulting Services, Inc.
6501 Americas Pkwy NE Suite 700
Albuquerque, NM 87110

27. Authority

If Design Engineer is other than a natural person, the individual(s) signing this Contract on behalf of Design Engineer represents and warrants that he or she has the power and authority to bind Design Engineer, and that no further action, resolution, or approval from Design Engineer is necessary to enter into a binding contract.

28. Merger

This Contract incorporates all the agreements, covenants, and understandings between the Parties hereto concerning the subject matter hereof, and all such covenants, agreements, and understandings have been merged into this written Contract. All terms and conditions of the procurement (**RFQ # FY26-TRFQP-A&E-094**) and Design Engineer's response to such document(s) are incorporated herein by reference and are included in the order of precedence. No prior agreement or understanding, oral or otherwise, of the Parties or their agents shall be valid or

enforceable unless embodied in this Contract.

29. Non-Collusion

In signing this Contract, Design Engineer certifies that it has not, either directly or indirectly, entered into action in restraint of free competitive bidding in connection with this offer submitted to the City's Chief Procurement Officer.

30. Default/Breach

To the extent caused by Default and/or Breach by Design Engineer, the BDDB may procure the goods or services from another source and hold Design Engineer responsible for any resulting excess costs and/or damages, including but not limited to, direct damages and the BDDB may also seek all other remedies under the terms of this Contract and under law or equity.

31. Equitable Remedies

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

32. Default and Force Majeure

The BDDB reserves the right to cancel all or any part of this Contract without cost to the BDDB, if Design Engineer fails to meet the provisions of this Contract and, except as otherwise provided herein, to hold Design Engineer liable for any excess cost occasioned by the BDDB due to Design Engineer's default. Design Engineer shall not be liable for any excess costs if failure to perform the order arises out of causes beyond the control and without the fault or negligence of Design Engineer; such causes include, but are not restricted to, acts of God or the public enemy, acts of the State or Federal Government, fires, floods, epidemics, quarantine restrictions, strikes, freight embargoes, unusually severe weather and defaults of subcontractors due to any of the above, unless the BDDB shall determine that the supplies or services to be furnished by the subcontractor were obtainable from other sources in sufficient time to permit Design Engineer to meet the required delivery scheduled. The rights and remedies of the BDDB provided in this clause shall not be exclusive and are in addition to any other rights now being provided by law or under this Contract.

33. BDD Data/Information

BDDB shall furnish applicable information and technical data in BDDB's possession or control, and subject to disclosure by BDDB, for Design Engineer's use to assist with the proper performance of the Scope of Work, prior to Design Engineer's commencement of the work or at

such other times as BDDB and Design Engineer mutually agree. Design Engineer may rely upon information furnished by BDDB to the extent such reliance is reasonable; provided, however, Design Engineer shall exercise the professional standard of care in reviewing such information and shall promptly notify BDDB of any apparent errors, omissions, inconsistencies, or conditions that a reasonably prudent engineer would identify.

34. Limitation of Liability

The total amount of all claims BDDB may have against Design Engineer under this Contract or arising from the performance or non-performance of the services called for under this Contract, including but not limited to claims for negligence, negligent misrepresentation and breach of contract, shall be limited to the greater of the fees paid to Design Engineer or $7,000,000. This limitation of liability shall not apply to 1) Design Engineer's true third party indemnification obligations under Paragraph 22 ("true third party" meaning a claim by a person or entity that is not a party to this Contract and is not otherwise connected with the Project, expressly excluding the contractor, any consultant not engaged by Design Engineer, and any other Project participant); or 2) claims arising from the gross negligence, or reckless or willful misconduct of Design Engineer. As BDDB's sole and exclusive remedy under this Contract, any claim, demand or suit shall be directed and/or asserted only against Design Engineer and not against any of Design Engineer's employees, officers or directors. Neither BDDB nor Design Engineer shall be liable to the other or shall make any claim for any incidental, indirect or consequential damages arising out of or connected to this Contract or the performance of the services on this Project. This mutual waiver includes, but is not limited to, damages related to loss of profits, loss of income, unrealized energy savings or diminution of property value.

IN WITNESS WHEREOF, the Parties have executed this Contract as of the date of the signature by the required approval authorities below.

BUCKMAN DIRECT DIVERSION BOARD

Signature:_____

Name: Jamie A. Cassutt

Title: BDDB Chair

Date: _____

APPROVED AS TO FORM:

Signature:_____

Name: Nancy R. Long, Esq.

Title: BDDB Counsel

Date: _____

CONTRACTOR:

STANTEC CONSULTING SERVICES, INC.

Signature:_____

Name: _____

Title: _____

Date: _____

CRS# _____
Registration # _____

Attachment A

Scope of Work – Buckman Direct Diversion Intake Alternatives Evaluation and 30-Percent Design

I. Project Description

The Buckman Direct Diversion (BDD) Facility diverts surface water from the Rio Grande approximately 15 miles northwest of Santa Fe, New Mexico. The existing river intake and associated sediment-management facilities do not provide the reliability, sediment exclusion, access, or maintainability needed to consistently meet BDD's operational requirements. High and highly variable sediment and turbidity conditions in the Rio Grande can result in excessive sediment entering the raw-water system, reduced diversion capability, increased maintenance requirements, and accelerated wear of downstream equipment.

The purpose of the BDD Intake Project (Project) is to replace or substantially modify the existing BDD river intake to provide a reliable and maintainable means of diverting raw water while reducing the amount of sediment and debris entering the BDD raw-water system. The Project shall be located at or in the vicinity of the existing BDD point of diversion and shall be capable of diverting up to 20.8 million gallons per day (MGD) (32.2 cubic feet per second [cfs]) under river and sediment conditions as defined in the Project Performance Criteria developed under Task 2 below.

The Project shall address intake hydraulics; sediment and debris exclusion and management; aquatic species protection; raw-water conveyance and connections to existing facilities; and safe and practical access for operation, inspection, maintenance, cleaning, and sediment management. The Project shall support reliable long-term operation over the range of Rio Grande flows, water-surface elevations, and sediment conditions as defined in the Project Performance Criteria developed under Task 2 below. The design shall recognize that diversion may not be feasible under all conditions and shall identify conditions under which diversion may need to be reduced or suspended. Construction planning shall consider the need to maintain limited BDD operations during construction and tie-in.

The Project is limited to the river intake and improvements necessary at or in the vicinity of the intake to achieve the required performance. Existing downstream BDD facilities shall be considered as necessary to establish interface and performance requirements; however, design of modifications or improvements to existing downstream facilities is not included in this Scope of Work.

II. Scope Intent

This Scope of Work establishes the required project tasks, objectives, decision points, and minimum deliverables for the Buckman Direct Diversion Board (BDDB) intake alternatives assessment and 30-percent design (Work). The 30-percent design is intended to be used to support procurement of Construction Manager-General Contractor/Construction Manager-at-Risk for future phases, although other contracting methods are also under consideration. Design Engineer shall develop and submit a schedule, level of effort, and fee required to complete each task described below. Except where specific requirements or constraints are stated herein, Design

Engineer is responsible for recommending the analyses, tools, investigations, design methods, and sequencing appropriate to accomplish the Work.

The Work may reference relevant material to be provided by BDDB such as intake concepts and other available project information. Alternatives to be developed (Alternatives) should be 15% screening-level design. Design Engineer should refine, combine, modify, or supplement any previous concepts as necessary to develop viable Alternatives. Intake geometry, hydraulic controls, sediment and debris management, aquatic species exclusion (e.g., silvery minnow), raw-water conveyance and connection to existing raw water lift station, operations, maintainability, constructability, permitting, and long-term reliability should be evaluated as an integrated system.

AECOM will lead all Federal and State permitting strategy and coordination on BDDB's behalf. Design Engineer will support the permitting effort by providing the technical and design information, analyses, and participation described in Task 8 to support development of a permit strategy and permit risk evaluation.

Currently, BDDB is conducting a survey by a registered professional land surveyor to support hydraulic analysis of the Alternatives. BDDB expects a supplemental survey will be required once the Alternatives are initially evaluated. The cost for the additional survey will be the responsibility of BDDB.

The hydraulic feasibility of each Alternative should be developed to a level that allows analysis and comparison relative to the Project Performance Criteria developed under Task 2 below. 1-D and 2-D modeling will be utilized for initial river hydraulics during initial evaluation and comparison of the Alternatives. 3-D modeling will be utilized to supplement the modeling in the 30% design. Additional bulk sampling of river sediment will be completed as part of Task 3. Design Engineer should conduct a thorough evaluation of the existing data with recommendations for future sediment data collection.

AECOM will serve as the Owner's Representative and Wright Water Engineers (WWE) as the Board's Consulting Engineer. A Technical Review Board (TRB) has been established to provide independent expert design review and input. Design Engineer shall coordinate with BDDB, AECOM, WWE, the TRB, and other stakeholders identified by BDDB or its representatives. Approval of the preferred Alternative and any changes in the Project scope shall be approved by BDDB based on recommendations and results of Design Engineer's work.

A list of Supplemental Assumptions is attached as Attachment A-1

III. Scope of Work

A. Task 1: Project Management, Coordination, and Project Controls

1. Objective

Provide project management, technical coordination, quality management, schedule and budget control, and communication necessary to complete the Alternatives assessment and 30-percent design.

2. Activities

Design Engineer shall provide the services necessary to:

- Prepare and maintain a Project Management Plan identifying project organization, key personnel, responsibilities, communication and document-control protocols, quality management procedures, project schedule, and project budget.

- Prepare and maintain a detailed project schedule identifying technical activities, decision points, workshops, TRB reviews, BDDB actions, agency coordination, and design milestones.

- Conduct a half-day project kickoff meeting with BDDB, AECOM, WWE, the TRB, and other participants identified by BDDB. The kickoff meeting will be conducted onsite in conjunction with the field site visit described in Task 2.

- Conduct regular project coordination meetings with BDDB, AECOM and WWE; assume biweekly virtual coordination meetings unless otherwise agreed.

- Prepare and submit a draft and final Quality Management Plan (QMP) that defines coordination and management of Design Engineer disciplines and subconsultants and establishes internal Technical Independent Review (TIR) and quality assurance and quality control (QA/QC) practices.

- Maintain decision and risk tracking sufficient to identify significant assumptions, unresolved issues, responsible parties, required decisions, as well as technical, operational, permitting, constructability, cost, schedule, and implementation risks.

- Provide monthly invoicing and progress reporting including completed work, upcoming activities, decisions required, schedule status, and budget status.

3. Deliverables

- Project Management Plan.
- Baseline and updated project schedules.
- Meeting agendas and minutes.
- Decision and risk tracking.
- Monthly progress reports.
- Quality Management Plan (QMP).

B. Task 2 – Existing Information Review, Data Gaps and Supplemental Investigation Recommendations, and Performance Criteria

1. Objective

Develop and finalize Project performance criteria. Available Project information to be provided by BDDB may be utilized as reference materials. Design Engineer should establish the design basis for Alternatives to be developed and evaluated.

2. Activities

Design Engineer should provide services necessary to:

- Review available Project information including operational records, survey and mapping, hydraulic and sediment information, water-quality data, geotechnical information, permitting documents, aquatic-resource information, and other relevant materials.

- Develop and finalize Project performance criteria. The performance criteria shall define the requirements against which the Alternatives will be developed and evaluated. Performance criteria should consider diversion capacity and operating range, hydraulic performance, sediment and debris management, aquatic species exclusion, operational flexibility, maintainability, resilience, service life, interface with the San Juan-Chama return-flow pipeline, constructability, and compatibility with existing facilities. Performance criteria shall be developed by Design Engineer and approved by BDDB before use.

- Identify geotechnical considerations that may affect Alternatives evaluation, constructability, foundation concepts, and cost. If a significant subsurface uncertainty is identified that could affect Alternative selection, Design Engineer shall identify the need for supplemental investigation for BDDB consideration.

- Review existing permits, approvals, environmental documentation, and prior agency coordination and identify potential implications for the alternatives and selected design, including where existing authorizations may require amendment, re-evaluation, or new authorization.

- Identify material data gaps, uncertainties, and additional information or investigations needed, such as additional topographic survey, utility, subsurface geotechnical data, and additional site, hydraulic, or river sediment information needed to support Alternatives evaluation and 30-percent design. Design Engineer shall recommend how those gaps should be addressed.

- Conduct a half-day field site visit in conjunction with the project kickoff meeting (Task 1) to review the existing BDD facilities and intake site and discuss available data, preliminary Project Performance Criteria considerations, permitting, and other relevant Project considerations.

- Provide a description, review, and recommendation for the contracting method for the final design and construction.

3. Deliverables

- Project Performance Criteria memorandum.
- Data-gap and supplemental-investigation recommendations.
- Contracting methods recommendation memorandum.

C. Task 3 –Technical Analyses

1. Objective

Perform the technical analyses necessary to develop, evaluate, and advance the 30% design of a viable intake Alternative with a defensible understanding of river, sediment, operational, constructability, maintenance, and regulatory conditions.

2. Activities

Design Engineer should provide services necessary to:

- Characterize the hydrologic, hydraulic, sediment-transport, geomorphic, and water-quality conditions relevant to diversion intake performance and sediment exclusion over the anticipated operating range and conditions.

- Develop a flood frequency analysis using peak flows from Otowi USGS stream gage (#08313000) up to the 0.01 Annual Exceedance Probability (AEP).

- Develop sediment transport estimates of the existing river channel. Existing suspended sediment and turbidity data will be derived from USGS measurements and BDD data at their facility. Other water quality (WQ) criteria is not included in the analysis (e.g. nutrients and radio nuclides).

- Collect bed material in the project reach approximately 1,000 ft upstream and downstream of the existing diversion site. Approximate 10 bulk samples of the surface material will be collected and delivered to a geotechnical laboratory to develop a particle size gradation (ASTM D6913/D1140).

- Download publicly available aerial photography of the project area to analyze planform stability

- Historical survey information will be provided by BDD to analyze historical vertical stability

- Develop and apply hydraulic and sediment-transport analyses and models appropriate to evaluate Alternatives and support the selected Alternative through 30-percent design. Design Engineer shall describe the proposed modeling tools, calibration/validation approach, scenarios, and level of analysis in its technical approach and/or work plan. The models developed under this ask will include one-dimensional (1D) and two-dimensional models (2D) hydraulic models that can also predict sediment transport movement.
    - Three annual hydrographs corresponding to dry, median, and wet hydrologic conditions. The hydrologic record will be taken from the Otowi USGS stream gage.

- Three single storm events will also be considered corresponding to different design discharges (e.g. 2-yr, 10-yr, 100-yr).

- Calibration data for high flow events will be performed based upon data collected by BDD.

- Define aquatic species protection and screening requirements and evaluate their interaction with intake hydraulics, sediment and debris management, cleaning systems, bypass/return provisions, operations, maintenance, and construction.

- Coordinate technical analyses across disciplines so that hydraulic, sediment, structural, mechanical, geotechnical, fish-protection, operational, maintenance, and constructability considerations are evaluated as an integrated system.

3. Deliverables

- Technical memoranda, model documentation, all modeling files allowing for independent review of inputs, assumptions, and output, and investigation results as appropriate to support subsequent tasks.

D. Task 4 – Intake Concept Development and Fatal-Flaw Screening

1. Objective

Develop up to five intake and diversion concepts in addition to Options A-C and identify a minimum of three and up to five viable Alternatives that meet the project performance criteria for advancement to approximately 15-percent design under Task 5.

2. Activities

Design Engineer should provide the services necessary to:

- Identify and develop concepts for diversion, intake, and screening as an integrated system, considering diversion controls, intake configuration, sediment exclusion and removal, debris management, aquatic species exclusion, raw-water conveyance and connection to existing facilities, interface with the San Juan-Chama return-flow pipeline, access, maintenance, construction sequencing, and operational requirements for Design Engineer's technical evaluation.

- Perform fatal-flaw screening sufficient to identify concepts that should not be advanced due to hydraulic or sediment exclusion/removal performance, operational incompatibility, constructability, permitting, environmental, site, infrastructure, cost, or other material constraints.

- Participate in a concept screening workshop and respond to review comments. Refinement following this review shall be incorporated into the alternatives advanced under Task 5.

3. Deliverables

- Concept Development and Fatal-Flaw Screening Technical Memorandum.
- Screening-level plans, profiles, sections, schematics, or other graphics necessary to describe the three to five viable concepts.
- Concept review workshop materials and comment responses.

E. Task 5 – Preliminary Design of Alternatives (Approximately 15 Percent)

1. Objective

Advance a minimum of three and up to five viable Alternatives to a consistent preliminary level of design sufficient to define the principal components, configuration, and operating concept of each Alternative. Evaluate hydraulic and sediment performance, constructability, operations and maintenance, permitting considerations, cost, risk, and implementation requirements; and provide a comparable technical basis for evaluation and recommendation for selection of a preferred Alternative.

2. Activities

Design Engineer should provide services necessary to:

- Advance a minimum of three and up to five viable Alternatives to approximately 15-percent design, including the layout, principal components, operating concept, tie-ins to existing facilities, and major design assumptions needed for comparison.
- Evaluate hydraulic and sediment performance, diversion reliability, sediment and debris management, aquatic species protection, constructability, construction phasing, maintenance access, operational continuity, permitting implications, and long-term operations and maintenance (O&M) requirements for each Alternative. The 1D and 2D hydraulic and sediment transport models developed under Task 3 will be applied to each alternative to assess sediment exclusion for each alternative. The 3 annual hydrographs and 3 design storm hydrographs will be simulated in the 1D or 2D model.
- Establish and document the design conditions and assumptions necessary to apply the performance criteria to be used during Alternatives development and evaluation, including the maximum daily river diversion requirement of 20.8 MGD (32.2 cfs) under appropriate operating conditions, in a Design Basis Memorandum.
- Develop conceptual construction sequencing and phasing for each Alternative, including how BDDB operations could be maintained during construction and tie-ins.

- Prepare planning-level construction and O&M cost estimates for each Alternative on a consistent basis suitable for comparison and preferred alternative selection. Construction cost estimates shall be prepared to a level consistent with an AACE Class 4 estimate. Document the basis, assumptions, exclusions, contingencies, and expected accuracy of the estimates.

- Identify alternative-specific risks, uncertainties, assumptions, and opportunities for refinement.

3. Deliverables

- Design Basis Memorandum for use in Alternatives development, evaluation, and 30-percent design.

- Approximately 15-percent design packages for each Alternative, including plans, profiles, sections, schematics, or other graphics necessary to describe the three to five viable Alternatives.

- Planning-level construction cost estimates and comparative planning-level O&M cost information(excluding full lifecycle cost analysis) for each Alternative (AACE Class 4 estimate).

- Alternative-specific phasing and constructability documentation.

- Risk information for use in alternatives evaluation.

F. Task 6 – Alternatives Evaluation and Preferred Alternative Selection

1. Objective

Develop and use a Multi-Criteria Decision Analysis (MCDA) framework as the basis for comparing the 15-percent Alternatives and supporting identification of a preferred Alternative. The MCDA should reflect technical information and maintain a transparent, consistent, and technically defensible Alternative evaluation process.

2. Activities

Design Engineer should provide services necessary to:

- Develop an MCDA framework, including criteria, scoring methodology, and weighting, in coordination with input from BDDB, AECOM, WWE, operations staff, and other stakeholders identified by BDDB.
- Evaluate alternatives using criteria that address, at a minimum, sediment and debris management, hydraulic performance and diversion reliability, implementation feasibility and risk, operations and maintenance burden, capital cost, aquatic species protection, constructability, and permitting risk.

- Use quantitative technical results where appropriate and clearly document assumptions, scoring methods, weighting, uncertainty, and sensitivity of the evaluation to material assumptions or weighting decisions.

- Present the 15-percent Alternatives and MCDA results to BDDB, AECOM, WWE, operations staff, and the TRB and participate in the Alternatives/MCDA review workshop. Address comments before the preferred Alternative decision.

- Provide a documented technical basis for the evaluation and identify recommended refinements to the selected Alternative before advancement to 30-percent design. Design Engineer shall make a technical recommendation for BDDB to review.

3. Deliverables

- MCDA methodology and evaluation materials.

- Alternatives Evaluation and Preferred Alternative Technical Memorandum.

- Workshop/presentation materials and comment responses.

- Documented preferred-alternative decision and design refinements to be carried forward.

G. Task 7 – Preferred Alternative 30-Percent Design

1. Objective

Advance the civil, hydraulic, structural, mechanical, process, electrical, instrumentation, controls, geotechnical, aquatic-species-protection, sediment and debris-management, raw-water conveyance, access, and other design elements of the preferred alternative to a coordinated 30-percent design that establishes the technical basis, configuration, expected performance, implementation approach, and cost basis for subsequent final design and permitting.

2. Activities

Design Engineer should provide services necessary to:

- Evaluate and document the expected performance of the selected Alternative relative to the established Project performance criteria, including diversion reliability, hydraulic performance, sediment and debris management, aquatic species exclusion, and operational requirements. Document expected diversion and sediment-exclusion performance over the applicable range of river elevations, flows, and sediment conditions, including anticipated operational limitations or periods when diversion may need to be curtailed.

- The 1D and 2D models developed for the alternative analysis will be refined to analyze sediment exclusion of the selected Alternative. The 3 annual hydrographs and 3 design storm hydrographs will be simulated in the 1D or 2D model.

- A three-dimensional (3D) CFD model will be developed and used to analyze specific aspects of the project including fish exclusion, and sediment transport

and sluicing. The CFD model will be applied to existing conditions and for the selected alternative under pumping conditions. Three flows (base flow, median flow, and high flow) will be simulated for existing conditions and preferred alternative. Three different configurations of the intake and pump well will be considered.

- Develop the construction phasing and sequencing concept sufficiently to demonstrate constructability, temporary works, and tie-in needs, and maintenance of limited BDDB operations during implementation.

- Prepare a Basis of Design Report documenting the project performance criteria and design criteria, assumptions, analyses, selected equipment and system concepts, expected performance, design development, permitting considerations, technical data for major equipment, level of reliance on vendor design, draft list of suppliers for major equipment, operations and maintenance considerations, recommendations for additional geotechnical investigations under future Task Orders during detailed design development, and unresolved issues requiring resolution during final design.

- Prepare a coordinated 30-percent design package including drawings and Technical Specifications Table of Contents. At a minimum, drawings should address site layout and grading, diversion and intake layouts and sections, major utilities and conveyance, process and mechanical systems, equipment layouts, structural arrangements, and electrical one-line diagram information appropriate to the selected Alternative.

- Prepare an opinion of probable construction cost appropriate to the 30-percent level of design, consistent with an AACE Class 3 estimate. Document the cost estimate basis, assumptions, exclusions, contingencies, and major cost risks. Update O&M cost information for the selected Alternative.

- Prepare an implementation schedule identifying major permitting, design, procurement, construction, in-water work, commissioning, and operational transition activities at a level appropriate to 30-percent design.
- Submit a draft 30-percent package for BDDB, AECOM, WWE, operations staff, and TRB review. Participate in a review workshop; resolve comments; and issue the final 30-percent package.

3. Deliverables

- Draft and final 30-percent design package including drawings and Technical Specifications Table of Contents.

- Draft and final Basis of Design Report.

- Supporting design calculations and technical memoranda, as appropriate.

- Opinion of probable construction cost for the 30-percent design and updated planning-level O&M cost information (AACE Class 3 estimate).

- Preliminary implementation/construction schedule.

- Review workshop materials, comment log, and documented comment resolution.

H. Task 8 – Regulatory and Agency Coordination

1. Objective

Provide technical support to BDDB and its representatives for permitting and regulatory coordination throughout Alternatives development and 30-percent design. Incorporate permitting feasibility, regulatory requirements, and schedule risk into project decisions and design development. AECOM will lead permitting and agency coordination on BDDB's behalf.

2. Activities

Design Engineer should provide services necessary to:

- Support BDDB and its representatives in identifying anticipated federal, state, tribal, and local permits, approvals, consultations, and environmental/cultural-resource requirements applicable to the Alternatives and selected design.

- Provide design and technical information necessary to support the permit/regulatory matrix maintained by BDDB and its representatives, including information needs, anticipated timing and dependencies, and material design or permitting risks.

- Support agency coordination led by BDDB and its representatives, including participation in meetings and preparation of technical information as requested, and incorporate applicable agency input into alternatives development and the 30-percent design.

- Support development of the permitting strategy for the selected alternative by identifying design information, studies, analyses, and other technical information anticipated to be required during subsequent permitting and final design.
- Provide an aquatics permitting specialist with appropriate experience to advise the project team during Alternatives development, evaluation, and 30-percent design regarding aquatic-resource permitting requirements, design considerations, required studies and technical information, and agency coordination needs.

- Identify and recommend any additional permitting or regulatory specialists that Design Engineer considers appropriate to support Alternatives development, evaluation, and 30-percent design.

3. Deliverables

- Technical information and input supporting the Permit/Regulatory Matrix.

- Technical materials supporting agency coordination, as requested.

- Design-related permitting requirements and recommendations for subsequent design and permitting.

I. Task 9 – Supplemental Services

- BDDB may accommodate supplemental work up to a not-to-exceed amount of $200,000.00, if required during Design Engineer's execution of the Scope of Work. Design Engineer shall identify and obtain prior approval from the BDDB Project Manager before conducting any additional or supplemental work. Design Engineer shall submit an approval request that includes the need or basis for the supplemental work along with a scope, schedule and fee acceptable to the BDDB Project Manager. Compensation for Design Engineer's fee for any supplemental work will be in accordance with Design Engineer's established fee schedule under this Contract, including but not limited to, labor categories and hourly rates.

IV. Project Assumptions and Owner-Provided Information

Design Engineer should develop its work plan and fee based on the following project assumptions. Design Engineer should identify any additional assumptions necessary to define its proposed work plan and fee.

- BDDB and its representatives will provide relevant available project information including previously considered concepts, existing facility information, operational data, survey and mapping, prior studies and related information, and available permitting and environmental documentation.

- Existing fishery data is sufficient for alternatives selection, development of design criteria, and design review. In the absence of site-specific information, general life history information of the Rio Grande Silvery Minnow and other fish species targeted during design will suffice. This project will not require extensive fishery surveys.

- Survey and mapping currently being obtained separately by BDDB will be made available to Design Engineer. Additional survey or site information identified as necessary by Design Engineer shall be coordinated with and approved by BDDB before proceeding.

- Hydrologic analysis will consist of analysis of Otowi USGS stream gage. No hydrologic modeling of Rio Grande or tributaries is assumed. Assume all hydrologic data is available online.

- Collection of additional sediment loading data or WQ monitoring data is not required by Design Engineer.

- Suspended sediment and turbidity data will be derived by USGS measurements and BDD data at their facility.

- Existing geotechnical information is sufficient for Alternative Analysis and 30% design.

- Current LiDAR is available for project reach.

- Calibration data consisting of water surface elevation at high flows will be provided by BDD.

- 1D/2D hydraulic and sediment transport models will be used for the conceptual development and analysis. CFD analysis will not be necessary for the alternative analysis to address sediment sluicing, fish exclusion, and pumping hydraulics.

- Modeling will be performed for the alternative analysis to qualitatively rank the sediment exclusion potential. In some cases, there may be significant uncertainty associated with some aspects of the alternative performance due to inherent model limitations of resolution, description of the physical processes, or time required for the simulations.

- Information currently being developed by BDDB through an ongoing Ranney collector well investigation near the intake site will be provided for reference during Alternatives development and 30-percent design when available. Diversion-specific geotechnical exploration is not anticipated during this phase unless a material subsurface uncertainty is identified that could affect alternative selection.

- Any previous concepts are provided for reference only. Design Engineer is expected to refine these concepts or develop additional concepts as appropriate based on its technical evaluation and subsequent design development.

- Design Engineer shall support the TRB review process by providing appropriate technical and design materials, participating in review meetings and workshops, responding to comments, and incorporating input resulting from the reviews.

- At a minimum it is expected that there will be the following major meetings/workshops:

    - Kickoff meeting with BDD, AECOM, WWE, Design Engineer, TRB.
    - 15% Alternatives/MCDA Workshop with BDD, AECOM, WWE, Design Engineer, TRB.
    - Draft 30% Workshop with BDD, AECOM, WWE, Design Engineer, TRB.

- Design Engineer will identify the number of TRB review and comment-response iterations assumed in its proposed work plan and level of effort.

- AECOM will lead permitting and regulatory agency coordination on BDDB's behalf. Design Engineer will provide technical and design support as described in Task 8 on an hourly basis. Description of work, deliverables, and support activities completed to be included in monthly progress report completed under Task 1.

- For the purpose of developing the estimated level of effort and associated fee proposal, Design Engineer assumes Option 3 as the preferred alternative that will be advanced to 30% design development.

- Unless otherwise noted, each deliverable will be submitted in draft form for BDDB review. Stantec assumes a two-week review and comment period for each draft deliverable. Following receipt of consolidated comments, Stantec will address comments and submit a final deliverable. One round of review and comment is assumed.

- The work covered by this Scope of Work concludes with completion of the final 30-percent design package which will be used for procurement of services for the next phases of the project. Final design, construction documents, and construction-phase services are not included in this phase unless subsequently authorized.

Buckman Direct Diversion Intake Analysis and 30% Design Project

Attachment A-1 – List of Supplemental Assumptions

1. General Project Assumptions
    a. Project Duration
        i. The fee is based on an approximate 16-month project duration from notice to proceed through completion of the final 30% design deliverable. Extensions to the project schedule beyond 16 months may require adjustment to project management and coordination budgets.
    b. Review Periods
        i. The fee assumes:
            1. One draft and one final submission for each major deliverable all delivered electronically unless otherwise stated.
            2. One consolidated review package per deliverable.
            3. Two-week Owner review period for draft deliverables.
            4. One comment resolution cycle per deliverable.
        ii. Additional review cycles or comment packages constitute additional services.
    c. Preferred Alternative
        i. The fee is based on the BDDB assumption that Concept C of the concepts developed by AECOM is the preferred alternative ultimately advanced to 30% design. Stantec estimates a 30% design package consisting of up to 65 drawings. Significant deviations from Concept 3 or selection of a materially different alternative may require scope, schedule, and fee adjustment.
    d. Meetings and Workshops
        i. Kickoff Meeting
            1. Fee assumes up to four Stantec staff members and up to one GEI staff member in attendance. Fee assumes up to one additional GEI staff member attending virtually.
            2. Travel costs are included.

ii. Kickoff Field Site Visit

1. Existing facilities only will be visited.
2. No specialized field measurements, surveys, or investigations are expected to occur during this visit.
3. Fee assumes up to four Stantec staff members and up to one GEI staff member in attendance. Fee assumes up to one additional GEI staff member attending virtually.

iii. BDDB Coordination Meetings

1. Fee assumes biweekly virtual meetings lasting up to one hour per meeting.
2. Fee is based on a 16-month project duration.
3. Fee assumes up to four Stantec staff members and up to two GEI staff members in attendance. Up to 11 additional Stantec technical staff will be available on standby during the meeting and will participate virtually only as needed to address discipline-specific technical questions or discussions.
4. Fee includes preparation of meeting agenda and meeting minutes.

iv. Internal Coordination Meetings

1. Internal Technical Meetings
    a. Purpose is to ensure technical team alignment with project objectives, budget, schedule, deliverables, quality, etc.
    b. Fee assumes biweekly virtual meetings lasting up to one hour per meeting.
    c. Fee is based on a 16-month project duration.
    d. Fee assumes up to 13 Stantec staff members (project technical lead and discipline leads) in attendance.
    e. Fee includes preparation of meeting agenda and meeting minutes.
2. Internal Project Leadership Meetings
    a. Purpose is to prepare for the biweekly BDDB Coordination Meetings.
    b. Fee assumes biweekly virtual meetings lasting up to one hour per meeting.

c. Fee is based on a 16-month project duration.

d. Fee assumes up to four Stantec staff members attending virtually.

e. Fee includes preparation of meeting agenda and meeting minutes.

v. Concept Screening Workshop

1. Fee assumes one workshop lasting up to four hours.

2. Fee assumes up to four Stantec staff members attending in person and up to two GEI staff members attending virtually. Up to nine additional Stantec technical staff will participate virtually as needed to address discipline-specific technical questions or discussions.

3. Fee assumes one review cycle addressing one consolidated set of review comments.

4. Travel costs are included.

5. Stantec assumes the BDDB will provide concurrence on the three to five concepts to advance to 15% design during this workshop.

vi. MCDA/Alternatives Review Workshop

1. Fee assumes one workshop lasting up to four hours.

2. Fee assumes up to four Stantec staff members attending in person.

3. Travel costs are included.

4. Additional workshops constitute additional services.

vii. Draft 30% Design Review Workshop

1. Fee assumes one workshop lasting up to eight hours.

2. Fee assumes up to four Stantec staff members attending in person and up to nine Stantec staff members attending virtually.

3. Travel costs are included.

4. Additional workshops constitute additional services.

e. Deliverable Standards

i. All deliverables will be prepared and completed in accordance with Stantec's standards and in accordance with the QMP.

2. Modelling Assumptions

    a. Hydraulic and Sediment Transport Modeling

        i. Alternatives Phase

            1. A combination of 1D and 2D hydraulic and sediment transport models will be developed that reflect existing conditions and proposed conditions.

            2. Evaluation of:

                a. 3 annual hydrographs (dry, median, and wet conditions)

                b. 3 design storm hydrographs (2-yr, 10-yr, and 100-yr)

        ii. 30% Design Phase

            1. Refinement of the 1D and 2D models to reflect changes to 30% design from the 15 % design phase.

        iii. CFD Modeling

            1. Fee assumes the CFD modeling will cover the existing conditions, the preferred alternative, three flow conditions (base flow, median flow, high flow), and three intake/pump well configurations.

            2. Only the preferred alternative advancing to 30% design will undergo CFD modeling. Additional CFD runs are not included.

        iv. Physical Hydraulic Modeling

            1. Excluded from scope of work.

3. Alternatives Assumptions

    a. Number of Concepts and Alternatives

        i. Fee includes:

            1. Development of up to five intake and diversion concepts in addition to Options A-C, prepared by AECOM. Stantec anticipates up to one drawing per concept to describe the concepts.

            2. Fatal flaw screening.

            3. Advancement of up to five alternatives to approximately 15%. Stantec anticipates up to 10 drawings per alternative’s 15% design.

        ii. If BDDB directs the evaluation of additional alternatives, additional services will be required.

iii. Electrical and Instrumentation and Controls (I&C) Participation

1. The fee assumes that Electrical and I&C considerations will not be significant differentiators during fatal-flaw screening and alternatives analysis. Therefore, the majority of the Electrical and I&C effort is allocated to Task 7 Preferred Alternative 30-Percent Design. Additional Electrical or I&C analysis required during fatal-flaw screening and alternatives analysis may require an adjustment to the scope and fee.

b. MCDA

i. Fee assumes:

1. One Alternatives/MCDA Review Workshop discussed in Section 1.e.vi of this list of supplemental assumptions.

2. One draft and final MCDA Technical Memorandum.

3. One preferred alternative recommendation for the BDDB's concurrence prior to advancing to 30% design.

ii. Additional sensitivity analyses, workshops, or scoring iterations are excluded.

4. Geotechnical Assumptions

a. Existing Information

i. Fee assumes existing geotechnical information is adequate for alternatives evaluation and 30% design.

ii. No new geotechnical borings included.

b. Future Explorations

i. Services include:

1. Identification of future borings.

2. Exploration recommendations.

ii. Services exclude:

1. Drilling

2. Test pits

3. CPT work

4. Laboratory testing (with the exception of sieve analysis of approximately 10 surface bed material bulk samples described in Task 3 to develop a particle size gradation)

5. Survey Assumptions
    a. Fee assumes use of BDDB-provided
        i. Topographic survey
        ii. Bathymetry
        iii. LiDAR
        iv. Existing mapping
    b. Supplemental survey, if and as identified by Design Engineer, is BDDB-provided and not included in the fee.
6. Sediment Sampling Assumptions
    a. Fee includes:
        i. Collection of approximately 10 bulk samples.
        ii. Particle size analyses.
        iii. Sediment sampling is assumed to occur on the same day as the project kickoff meeting and site visit, provided river flow and site conditions allow the work to be performed safely. If conditions do not allow for sampling, a separate site visit will be required and the associated labor, travel, and expenses will be addressed through an amendment to the fee.
        iv. Existing site access is available and no permits are required to collect samples.
    b. The laboratory testing budget is excluded from the labor fee and carried as a reimbursable expense of up to $3,300 in laboratory testing costs.
7. Regulatory Support Assumptions
    a. Permit Lead and Support
        i. AECOM serves as the permitting lead and will prepare and maintain the permit / regulatory matrix.
        ii. Stantec provides support, up to the specified budget, after which additional services will be required for additional support:
            1. Technical support

2. Permit-related engineering information
3. Meeting participation as requested.

iii. Permit preparation is excluded.

iv. Any permitting comments that result in significant re-design are not included and will require an amendment.

v. Preparation of cultural or environmental site surveys is excluded from the scope of work.

b. Agency Meetings

i. Fee assumes a limited allocated budget for attending agency meetings coordinated through AECOM.

ii. Additional agency meetings, technical memoranda, or permit support beyond this scope and applicable fee may require additional services.

8. Drawing Assumptions

a. 15% Screening-Level Design of up to Five Alternatives

i. Fee assumes concept-level exhibits only.

ii. Not intended to support permitting or bidding.

b. 30% Design of Preferred Alternative

i. Fee includes:

1. Site layout
2. Intake layouts
3. Process diagrams
4. Structural concepts
5. Electrical one-line diagram
6. Technical Specifications Table of Contents

ii. Not intended for bidding or construction

9. Technical Review Board Assumptions

a. Fee assumes:

i. Participation in the three major workshops identified in the Scope: Concept Screening Workshop, MCDA/Alternatives Review Workshop, and Draft 30% Design Review Workshop.

ii. One review cycle for each major deliverable.

iii. One consolidated set of comments from BDDB, AECOM, WWE, TRB, operations staff, and stakeholders.

b. Additional review meetings, iterative comment cycles, or redesign resulting from multiple review cycles are outside the basis of the fee and may require additional services.

10. Construction Cost Estimates

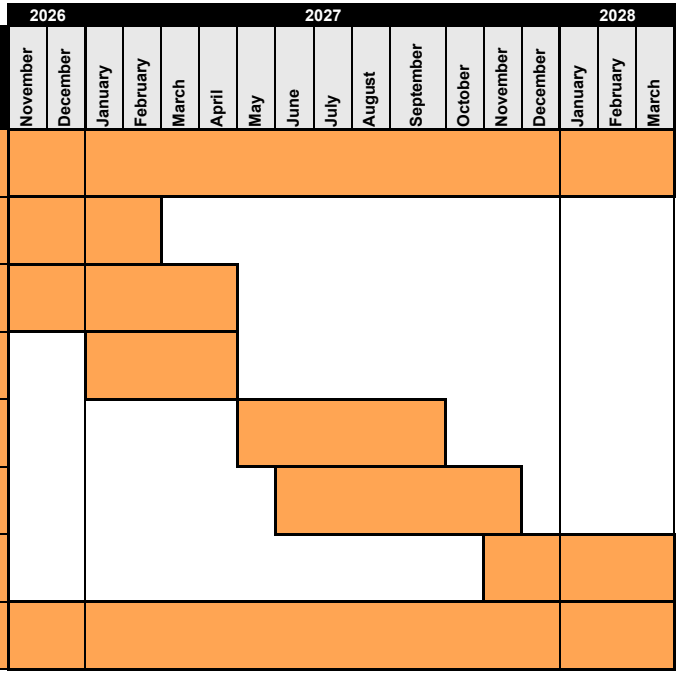
a. Construction cost estimates will be prepared in accordance with the Association for the Advancement of Cost Engineering (AACE) standards.
   i. Class 4 for 15% design
   ii. Class 3 for 30% design

b. In preparing the construction cost estimates, Stantec has no control over costs of labor, materials, competitive bidding environments and procedures, unknown field conditions, financial and/or market conditions or other factors that can affect the cost of construction and the operation of the facilities, all of which are beyond the Consultant's control and are unavoidably in a state of change. It is therefore acknowledged that the Consultant cannot and does not make any warranty, promise, or representation either expressed or implied, that proposals, bids, opinions of probable construction costs, or costs of operation and maintenance will not vary substantially from its probable construction cost.

Attachment B - Schedule Estimate

Buckman Direct Diversion Intake Analysis and 30% Design

Task Number	Task Name	Start Date	End Date	Duration (days)	Net Working Days
1	Project Management, Coordination, and Project Controls	2026/11/09	2028/03/08	486	348
2	Existing Information Review, Data Gaps & Supplemental Investigation Recommendations, & Performance Criteria	2026/11/09	2027/02/26	110	80
3	Technical Analyses	2026/11/16	2027/04/30	166	120
4	Intake Concept Development and Fatal-Flaw Screening	2027/01/11	2027/04/30	110	80
5	Preliminary Design of Alternatives (Approx. 15%)	2027/05/03	2027/09/10	131	95
6	Alternatives Evaluation and Preferred Alternative Selection	2027/06/07	2027/11/15	162	116
7	Preferred Alternative 30% Design	2027/11/15	2028/03/08	115	83
8	Regulatory and Agency Coordination	2026/11/09	2028/03/08	486	348



Attachment C - Work Breakdown Structure and Level of Effort Estimate

Project Summary	Hours	Labour	Expense	Subs	Total
Fixed Fee	0	$0.00	$0.00	$0.00	**$0.00**
Time & Material	7,832.5	$1,773,307.02	$13,361.76	$191,895.00	**$1,978,563.78**
Total (excl. NMGRT)	7,832.5	$1,773,307.02	$13,361.76	$191,895.00	**$1,978,563.78**

Task Number	Task Name	Task Type	Hours	Labour	Expense	Subs	Total
1	Project Management, Coordination, and Project Controls	Time & Material	1,186.5	$287,504.79	$2,111.46	$27,414.20	$317,030.45
2	Existing Information Review, Data Gaps & Supplemental Investigation Recommendations, & Performance Criteria	Time & Material	353	$83,624.82	$0.00	$17,591.20	$101,216.02
3	Technical Analyses	Time & Material	838	$184,265.06	$3,300.00	$14,825.80	$202,390.86
4	Intake Concept Development and Fatal-Flaw Screening	Time & Material	565	$127,017.28	$2,727.46	$27,643.00	$157,387.74
5	Preliminary Design of Alternatives (Approx. 15%)	Time & Material	1,606	$357,062.16	$0.00	$12,240.80	$369,302.96
6	Alternatives Evaluation and Preferred Alternative Selection	Time & Material	549	$124,254.00	$2,611.42	$15,408.80	$142,274.22
7	Preferred Alternative 30% Design	Time & Material	2,619	$581,269.26	$2,611.42	$56,377.20	$640,257.88
8	Regulatory and Agency Coordination	Time & Material	116	$28,309.65	$0.00	$20,394.00	$48,703.65
9	Supplemental Services	Time & Material	TBD	TBD	TBD	TBD	$200,000.00

Fee Estimate Detail

ATTACHMENT C-1

Buckman Direct Diversion
2026 GEI Support Services: Fisheries and Permitting Support

GEI Consultants, Inc.

Task		Budget Breakdown*												GEI Total Labor Hours	GEI Costs		
		Scientist/Engineering Rate Classification										GIS Tech	Techn./ Admin.		Labor	Direct Expenses	GEI Total
		8	7	6	6	5	5	4	3	2	1						
		Eco	Eco	Eng	Eco	Eng	Eco	Eco	Eco	Eco	Eco						
	Rate $/Hr	$317	$288	$278	$235	$244	$194	$163	$144	$136	$120	$162	$129				
Task 1 - Project Management, Coordination, and Project Controls		**0**	**42**	**0**	**52**	**0**	**0**	**0**	**0**	**0**	**0**	**0**	**0**	**94**	**$24,172**	**$750**	**$24,922**
1.3	Project Kickoff Meeting		2		12									14	$3,252	$750	$4,002
1.4	Virtual Project Coordination Meetings		13		13									27	$6,973	$0	$6,973
1.6	Decision and Risk Tracking		13		13									27	$6,973	$0	$6,973
1.7	Monthly Invoicing and Progress Reporting		13		13									27	$6,973	$0	$6,973
Task 2 - Existing Information Review, Data Gaps & Supplemental Investigation Recommendations, & Performance Criteria		**0**	**18**	**0**	**40**	**0**	**8**	**0**	**0**	**0**	**0**	**0**	**0**	**66**	**$12,740**	**$0**	**$15,992**
2.1	Available Project Information Review		8		16									24	$6,064	$0	$6,064
2.5	Permitting and Environmental Information Review		8		12		8							28	$6,676	$0	$6,676
2.6	Field Site Visit		2		12									14	$3,252	$0	$3,252
Task 3 -Technical Analyses		**0**	**6**	**0**	**50**	**0**	**0**	**0**	**0**	**0**	**0**	**0**	**0**	**56**	**$13,478**	**$0**	**$13,478**
3.7	Aquatic Species Requirements & Evaluation		6		50									56	$13,478	$0	$13,478
Task 4 - Intake Concept Development and Fatal-Flaw Screening		**0**	**10**	**0**	**50**	**0**	**0**	**0**	**0**	**0**	**0**	**0**	**0**	**60**	**$14,630**	**$0**	**$14,630**
4.1	Identify and Develop up to 5 Additional Concepts				40									40	$9,400	$0	$9,400
4.2	Fatal-Flaw Screening		6		6									12	$3,138	$0	$3,138
4.3	Concept Screening Workshop		4		4									8	$2,092	$0	$2,092
Task 5 - Preliminary Design of Alternatives (Approx. 15%)		**0**	**6**	**0**	**40**	**0**	**0**	**0**	**0**	**0**	**0**	**0**	**0**	**46**	**$11,128**	**$0**	**$11,128**
5.3	Design Basis Memorandum		6		40									46	$11,128	$0	$11,128
Task 6 - Alternatives Evaluation and Preferred Alternative Selection		**0**	**16**	**0**	**40**	**0**	**0**	**0**	**0**	**0**	**0**	**0**	**0**	**56**	**$14,008**	**$0**	**$14,008**
6.1	MCDA Methodoolgy and Evaluation Framework		6		30									36	$8,778	$0	$8,778
6.2	Alternatives Evaluation and Preferred Alternative Tech Memo		4		4									8	$2,092	$0	$2,092
6.4	Alternatives/MCDA Review Workshop		6		6									12	$3,138	$0	$3,138
Task 7 - Preferred Alternative 30% Design		**0**	**4**	**0**	**160**	**0**	**0**	**0**	**0**	**0**	**0**	**0**	**0**	**164**	**$38,752**	**$0**	**$38,752**
7.1	Modeling and Establish Project Performance Criteria				120									120	$28,200	$0	$28,200
7.3	Basis of Design Report		4		40									44	$10,552	$0	$10,552
Task 8 - Regulatory and Agency Coordination		**0**	**40**	**0**	**16**	**0**	**0**	**20**	**0**	**0**	**0**	**0**	**0**	**76**	**$18,540**	**$0**	**$18,540**
8.1	Permitting and Environmental Requirements Identification Support		8		3			4						15	$3,708	$0	$3,708
8.2	Design and Technical Support		8		3			4						15	$3,708	$0	$3,708
8.3	Agency Coordination Support		8		3			4						15	$3,708	$0	$3,708
8.4	Permitting Strategy Development Support		8		3			4						15	$3,708	$0	$3,708
8.5	Aquatics Permitting Support		8		3			4						15	$3,708	$0	$3,708
TOTAL		**0**	**141**	**0**	**448**	**0**	**8**	**20**	**0**	**0**	**0**	**0**	**0**	**617**	**$147,448**	**$750**	**$151,450**

Notes
* GEI may utilize additional grade levels to complete work based on efficiencies and/or skillsets by task.

ATTACHMENT C-2 (This attachment appears in a condensed format in the PDF and may be printed at full size for easier viewing.)

Detailed WBS and LOE

| Task Number | Task Name | Project Technical Quality Management | Project Technical Quality Management | Project Technical Quality Management | Project Technical Quality Management | Project Technical Quality Management | Project Technical Quality Management | Project Technical Quality Management | Graphic Artist | CAD/BIM | River, Sediment, & Hydraulics | River, Sediment, & Hydraulics | River, Sediment, & Hydraulics | River, Sediment, & Hydraulics | River, Sediment, & Hydraulics | River, Sediment, & Hydraulics | Geotechnical Geologist | Geotechnical Geologist | Geotechnical Geologist | Geotechnical Geologist | Geotechnical Geologist | Geotechnical Geologist | Geotechnical Geologist | Geotechnical Geologist | Geotechnical Geologist | MCHA Planning | MCHA Planning | MCHA Planning | MCHA Planning | Intake Design | Intake Design | Intake Design | Intake Design | Gate Structure | Gate Structure | Gate Structure | Gate Structure | Gate Structure | Gate Structure | Gate Structure | Structural | Structural | Structural | Structural | Civil Site | Civil Site | Civil Site