ENGINEERING, PROCUREMENT AND CONSTRUCTION AGREEMENT BY AND BETWEEN BC&E USA COLUSA 1, LLC, OWNER AND HERLING CONSTRUCTION, INC. GENERAL CONTRACTOR

THIS ENGINEERING, PROCUREMENT AND CONSTRUCTION AGREEMENT ("Agreement"), effective as of the date of the last party to sign below, is entered into by and between BC&E USA COLUSA 1, LLC, a California limited liability company (Owner) and HERLING CONSTRUCTION, INC. (Contractor), a California corporation.

For valuable consideration the parties hereby agree as follows:

- 1. **SCOPE OF WORK:** Contractor shall be responsible for the parameters of work hereinafter described:
 - A) PLANS AND SPECIFICATIONS: Contractor has attached to this Agreement, a detailed description of the scope of work providing detailed itemization of the project to be completed (Exhibit A), and a Schedule of Values to complete said work (Exhibit B). Contractor will also provide an Estimated Construction Schedule (Exhibit C) of which includes anticipated dates of issued drawings and related documents, which shall compose the plans and specification, along with Expected construction activities. Owner shall have the right to review and approve the plans, specifications, included drawings, and documents. Owner's approval shall not be unreasonably withheld or delayed. Owner shall notify Contractor of any defects or deficiencies within 10 days of submittal of drawings or documents included in the plans and specifications. Owner's failure to respond within 10 days of submittal of the same shall be deemed to be an approval by Owner. Should Owner identify any defect or deficiency in the plans, specification, drawings, or documents provided, Contractor shall respond to Owners comments within 7 days of its submittal to Contractor. Contractor shall reasonably endeavor to implement and accommodate with any such specified items and shall work with Owner. Both parties operating in good faith to resolve the itemized issues of contention. Regarding plans and specifications including drawings and related documents, the following provisions shall apply.
 - i) Any changes shall be reflected by written change order signed by the parties.
 - ii) Owner's lender shall have the right and be afforded timely opportunity to review and approve any individual change estimated to cost \$250,000.00 or more. Owner's lender may review the plans and specifications and any such change orders by an independent engineer retained by the lender. If the lender or lender's independent engineer fails to respond within five business days after receipt of a request of a change or changes by the lender's engineer, such change or change order shall be deemed to have been approved by lender and Owner.
 - B) IMPROVEMENTS: Contractor shall perform construction of improvements to the site required by the plans and specifications and scope of work, including the demolition of any existing improvements or structures. Contractor shall conduct clearing, excavating, filling, or compacting of the site and the removal or importation of related materials (except for the handling, remediation, or removal of any preexisting hazardous substance). Hazardous substances will include those introduced to the site by a source independent of contractor at any time or archeological discoveries. Such matters and removal shall be the duty of owner.

- C) EQUIPMENT: Procure, supply, transport equipment, including owner's supplied equipment and unload and store equipment until ready for installation.
- D) CONSTRUCTION MANAGEMENT: Provide construction management to complete the project in accordance with the terms and conditions of this agreement.
- E) SITE CONDITION: Contractor shall accept responsibility for maintaining an environmentally clean site and avoiding spilled and contamination of the site.
- F) PERFORMANCE TESTING: Contractor shall conduct performance testing as hereinafter set forth in this agreement.
- G) TRAINING ASSISTANCE: Contractor shall assist in training procedures as hereinafter set forth in this agreement.
- H) CITY OF COLUSA BOARD MEETINGS: Owner is coordinating with the City of Colusa in providing the improvements to be constructed by Contractor. Contractor shall assist owner in planning and submitting appropriate documents and participating in City of Colusa Council Board (CCB) meetings related to the project as maybe required by the CCB Certificate.
- I) TESTING: Contractor shall conduct performance testing as set forth in Operating Instructions set forth in Exhibit D.
- J) OWNER SUPPLIED EQUIPMENT & SPARE PARTS: Contractor, working in conjunction with the owner shall provide a price list of recommended operating spare parts that may have more tendency for ware than others.
- K) SPECIAL TOOLS AND OPERATING SPARE PARTS: Contractor shall provide a list of special tools and recommended operating spare parts required for the testing and operation of the Facility prior to commissioning.
- L) FAILURE DURING START-UP: Should any Owner Supplied equipment fail prior to commercial operation; spare parts may be withdrawn from Owner's stock of operations and maintenance stores and the equipment that failed returned to operating condition.
- 2. CONTRACTOR'S PERSONNEL AND LABOR RELATIONS: Contractor shall hire sufficient and suitable qualified and experienced personnel to perform and manage the work of improvement and to direct the operating and maintenance personnel in the commissioning and testing of the facility. Contractor's personnel shall be capable of performing Contractor's obligations under this agreement in a professional and workmanlike manner.
- 3. GOVERNMENTAL AUTHORIZATION: Contractor shall assist the Owner with obtaining the governmental authorizations required, including local construction required authorizations, to perform the tasks necessary in completing the work of improvement. Control of the work; the Contractor shall be solely responsible for construction means, methods, techniques, sequences, procedures, safety, and security programs in connection with the work of improvement. Required building/construction permits shall be obtained by Contractor, the cost thereof shall be included as part of the project price.

- 4. TITLE TO PROJECT PROPERTY: Owner warrants to Contractor that Contractor is not responsible to determine the project site location, property lines, third party easement rights, or other survey or title issues related to the worksite being provided by Owner. Warranty of title is that the property is owned by Owner. All portions of the subject property and rights related thereto are owned by Owner.
- 5. OWNER REQUESTED CHANGE ORDERS TO PLANS AND SPECIFICATIONS: Owner may make reasonable changes to the scope of the work including changes to the plans and specifications and related drawings and documents from time to time during the construction of the project in accordance with this agreement. Any such change or modification shall only be made by written change order "signed by both parties". Such change order shall become a part of this contract. Owner agrees to pay any increase in the cost of the project because of this change order.
 - A) DEFINITION OF CHANGE: A *change* shall mean a change in scope of work, specifications, performance guarantees, contract price, guaranteed completion date, or project schedule, as applicable or any other import to the work or schedule. A change may result from Owner directed changes, Owner requested changes and other impacts to the work.

6. GENERAL CONTRACTOR CHANGE ORDERS TO PLANS AND SPECIFICATIONS:

- 1) GENERAL CONTRACTOR CHANGES: It is anticipated that the general contractor may and in certain circumstances must, by written notice, request a change. Upon receipt of Contractors request and any supporting documentation reasonably requested by Owner, then within 5 business days, Owner will notify Contractor of its acceptance or rejection of such request. Upon Owner's approval of such request and agreement on the terms of an associated change order, Contractor may proceed with the implementation of such change. If Owner elects not to proceed with any change requested by Contractor resulting from a change in law, the discovery of Hazardous Substances or any article of value or antiquity or of archaeological or geotechnical interest, or any unforeseen or varying site or other conditions or event of Force Majeure, Owner shall provide written notification to Contractor to stop work; otherwise Contractor shall be entitled to continue with the work as changed and pending agreement on the changes to price, schedule and other effected provisions herein, Contractor shall be compensated on a negotiated basis. If such change, discovery, condition, event, or amendment increases Contractor's cost or liabilities or materially impacts Contractor's ability to continue its performance hereunder, Contractor shall continue to work in other areas while formally raising its concerns on this specific issue. Contractor shall have no liability for the consequences of such election not to proceed with such change if such option is exercised in good faith.
- 7. ADJUSTMENT TO AGREEMENT: Should a change order cause an increase or decrease in Contractor's cost of or time required for performance of this agreement or otherwise affect any material provision of this agreement or materially impact the work as provided in the agreement or increase Contractor's cost or time required for performance of this agreement or otherwise adversely affect any provision of the agreement, Contractor shall be entitled to an adjustment to the contract price, project schedule, performance guarantees, guaranteed completion date or any other provision of this agreement which are materially affected by such change. In the event the parties are unable to agree as to the specific changes referenced herein, then the matter shall be resolved by the dispute resolution provision of this contract.

- 8. FORCE MAJEURE CAUSED BY CHANGE IN LAW OR OWNER DELAY OR OTHER EVENTS: Contractor shall give timely notice of any event or circumstance that Contractor believes is or might become Force Majeure, Owner delay, governmental delay, or third-party delay, barring unforeseen site condition or change in law. The notice shall include the information required with respect to associated change reasonably required with respect to the associated change that is required to be provided by Contractor as a result. If it is impracticable to specify the adjustments the Contractor will claim, the Contractor will provide Owner with periodic supplemental notices during the time the event or circumstances continues.
- 9. MITIGATION OF EVENT: Contractor shall use reasonable efforts to remove or mitigate the effects of any Force Majeure referenced herein.
- 7. SITE SECURITY: Contractor shall warehouse or otherwise provide the appropriate storage for equipment at or in the vicinity of the site. Contractor shall be responsible for the proper fencing, guarding lighting and security of the work and equipment on the site.
- 8. CONTRACT PRICE AND SCHEDULE OF VALUE: Exhibit B hereto contains a total cost for the improvements set forth in the scope and schedule of work contained in Exhibit A. On a monthly basis, Contractor will submit to Owner an application for payment for that portion of work completed. Owner shall retain the right to pay Contractor's subcontractors directly for completed and approved work should contractor fail to pay Contractor's subcontractor within the terms of such subcontract. Any payments made to Contractor's Subcontractor by owner on behalf of the Contractor will be deducted from the total price set forth in Exhibit B
- 9. **DUTIES AND AUTHORITY OF OWNER REPRESENTATIVE:** Owner plans to designate a representative (the Owner's Representative), who is mutually acceptable to Owner and Contractor, which acceptance shall not be withheld unreasonably, and who shall be authorized to act on behalf of Owner, with whom Contractor may consult at all reasonable times and whose instructions, approvals, requests and decisions shall be binding upon Owner as to all matters pertaining to this agreement and the performance of Owner hereunder. Owner may change the Owner's Representative at any time by written notice to Contractor. Decisions and approvals by the Owner's Representative will comply with the terms of this agreement and laws and will not be unreasonably withheld or delayed. Contractor is aware that Owner has engaged a separate third-party contractor to construct other improvements on Owner's behalf in close proximity to the vicinity of the work contemplated by this Agreement, and Contractor shall coordinate its work and employees with the work being performed by Owner's other third-party contractor. Contractor shall use its best efforts to cooperate and coordinate with the other third-party contractor to maximize the efficiency of all work being performed by owner,
- 10. COMMENCEMENT OF WORK: Owner shall inform Contractor in writing 30 days prior to the date, for Contractor to commence work.
- 11. PROJECT CONSTRUCTION SCHEDULE: See Exhibit C
- 12. RESPONSIBILITIES OF OWNER:
 - A. COORDINATION WITH UTILITY: Owner with the assistance of Contractor will be always responsible for coordinating and communicating with the utility with respect with all matters including the submission of notices and other documents in the handling and processing of comments given by the utility.

- B. QUALIFIED PERSONNEL FOR TRAINER: Owner will at its expense and in sufficient time, provide or cause to be provided suitable qualified and where necessary licensed operators in the number requested by Contractor for training by Contractor. Contractor will supply or cause to be supplied such small tools, classrooms, office equipment and other similar equipment necessary to facilitate on the job training of the operations personnel as needed and in adequate time. Operators subsequent to their training, Owner will provide at its expense, such Operators to Contractor for the purpose of shadowing or assisting Contractor during commissioning and start of activities and continuing through commissioning.
- C. OWNER SUPPLIED EQUIPMENT: Owner shall ensure that any required Owner's supplied equipment will be delivered to this site in a timely fashion. Owner's supplied equipment date of delivery is set forth on Exhibit C. Failure of Owner to deliver such equipment, shall relieve Contractor of completion delay penalties caused by any delivery delay. Any Owner supplied equipment delivered to this site incomplete or otherwise not in accordance with agreement, Contractor shall have the option to have the supplier complete the assembly before turning it over to Contractor or to assign such work to the Contractor via change order. Any such change order will both estimate the cost and schedule impacts associated with the work.
- D. ACCESS TO SITE AND RIGHTS OF WAY: Owner shall provide at Owner's expense in a timely fashion, unrestricted access to the site for commencement of commercial operation. This shall include all easements or other rights of way required for access to the site and performance of the work to be provided.

13. RESPONSIBILITIES OF CONTRACTOR:

Contractor's duties and rights in connection with the above-described project are as follows:

A. Responsibility for and Supervision of Construction.

Contractor shall be solely responsible for all construction under this contract, including the techniques, sequences, procedures, and means, and for coordination of all work. Contractor shall supervise and direct the work to the best of his/her ability and give it all attention necessary for such proper supervision and direction.

B. Discipline and Employment.

Contractor shall maintain at all times strict discipline among his/her employees, and Contractor agrees not to employ for work on the project any person unfit or without sufficient skill to perform the job for which he or she was employed.

C. Furnishing of Labor, Materials, etc.

Contractor shall provide and pay for all labor, materials, and equipment, including tools, construction equipment, and machinery, utilities, including water, transportation, and all other facilities and services necessary for the proper completion of work on the project in accordance with the contract documents.

D. Payment of Taxes and Procurement of Licenses and Permits.

Contractor shall pay all taxes required by law in connection with work on the project in accordance with this agreement including sales, use, and similar taxes. Contractor shall secure all licenses and permits necessary for proper completion of the work, outside what has already been obtained by Owner, paying the fees for such licenses and permits.

E. Compliance with Construction Laws and Regulations.

Contractor shall comply with all laws and ordinances, and the rules, regulations, or orders of all public authorities relating to the performance of the work under and pursuant to this agreement. If any of the contract documents are at variance with any such laws, ordinances, rules, regulations, or orders, he or she shall notify Owner promptly on discovery of such variance.

F. Responsibility for Negligence of Employees and Subcontractors.

Contractor assumes full responsibility for acts, negligence, or omissions of all his/her employees on the project, for those of his subcontractors and their employees, and for those of all other persons doing work under a contract with him.

G. Warranty of Fitness of Equipment and Materials.

Contractor represents and warrants to Owner that all equipment and materials used in the work and made a part of the structures on such work, or placed permanently in connection with such work, will be new unless otherwise specified in the contract documents, of good quality, free of defects, and in conformity with the contract documents. It is agreed between the parties to this agreement that all equipment and materials not so in conformity will be considered defective.

- **14. RIGHT TO CURE**: Contractor shall have the right to cure a defect before Owner may file any action in court against Contractor.
- 15. DESTRUCTION AND DAMAGE: If the Project is destroyed or damaged for any reason, except where such destruction or damage was caused by the sole negligence of the Contractor or its subcontractors, Owner shall pay Contractor for any additional work done by Contractor in rebuilding or restoring the Project to its condition prior to such destruction or damage. If the estimated cost of replacing work already accomplished by Contractor exceeds 20 percent of the Contract price, either the Contractor or Owner may terminate this Contract. Upon termination by either party, Contractor shall be excused from further performance under this Contract and Owner shall pay Contractor a percentage of the Contract price in proportion to the amount of work accomplished prior to the destruction or damage.
- 16. WARRANTY OF TITLE: Contractor warrants good title to the work and equipment and warrants and guarantees that title when it passes shall vest in Owner and will be free and clear of any liens, claims, charges, security interests, encumbrances or the rights of other persons or entities.
- 17. TITLE TO WORK: Title to work will pass to Owner upon payment to Contractor, Subcontractors and Suppliers as and for the work and equipment.
- **18. TITLE TO PLANS AND SPECIFICATIONS:** Title to plans and specifications, drawings and like material required to be provided to Owner shall pass to the Owner upon payment of fees due.
- **20. GENERAL CONTRACTOR INSURANCE:** Contractor shall provide general contractor's lability insurance in an amount and form as required by Owner's lender and the City of Colusa and as further set forth in Paragraph 35 herein.
- 21. **DOCUMENTATION:** Contractor shall determine the nature and scope of documentation required to complete the work. Such documentation may include, but is not limited to, architectural drawings, engineering drawings and specifications to comply with governmental permits and other documents necessary to complete the scope of work. Contractor shall obtain such documents and the costs thereto shall be reflected on Exhibit B.

- 22. COMPLETION: If required by Owner's lender, Contractor shall provide a performance bond for the Contractor's scope of the work in a form stipulated by the lender. Completion shall occur 12 months after the signing of the Agreement.
- **23. WARRANTY:** Contractor warrants all the work set forth in this Agreement herein to be of sufficient quality and that all work was completed in a professional manner, adhering to industry standards and best practices. Only quality materials, consistent with contractual specifications, were used, and the work is free from defects in workmanship and materials. Such a warranty shall extend for a period of two years from the completion of the scope of work set forth herein.
- 24. SCHEDULE AND PERFORMANCE GUARANTEES: Contractor warrants that it will adhere to the Project Schedule as set forth on the Attached Exhibit A, and any other scheduling responsibility and performance terms contained in this Agreement, and Contractor will be solely liable for any costs or penalties that result from any such delays, that are not otherwise excused in this Agreement, including, but not limited to any costs pertaining to the performance bond referenced in Section 22 herein.
- 25. LIMITATION OF LIABILITY: Notwithstanding any other provision of this agreement to the contrary, express or implied, the maximum aggregate liability of Contractor pursuant to this agreement, whether based on delay, contract, tort, negligence, strict liability, warranty, indemnity, error and omission or any other cause or legal theory whatsoever, shall be the aggregate limit, which limit includes but is not limited to liquidated damages, warranty indemnity and all other obligations including any breach resulting in termination. Such liability shall not exceed a maximum liability for liquidated damages of 25% of the contract price. Contractor's liability herein shall cease upon the completion of the warranty period, except for warranty remedies and associated extension of warranty time.
- 26. RELEASES VALID: Releases, disclaimers and limitations on liability expressed herein shall apply even in the event of the negligence, strict liability, fault, or breach of contract (including other legal bases of responsibility such as fundamental breach) of the party whose liability is released, disclaimed or limited.
- 27. LIQUIDATED DAMAGES NOT PENALTY: The parties acknowledge and agree that because of the unique nature of the facility and the unavailability of a substitute facility, it is difficult or impossible to determine with precision the amount of damages that would or might be incurred by the Owner as a result of Contractor's failure to achieve the performance guarantees or the guaranteed completion date. It is understood and agreed by the parties that (i) Owner shall be damaged by failure of Contractor to meet such obligations, (ii) it would be impracticable or extremely difficult to fix the actual damages resulting there from, (iii) any sums which would be payable under agreement are in the nature of liquidated damages and not a penalty and are fair and reasonable and (iv) such payment represents a reasonable estimate of fair compensation for the losses that may reasonably be anticipated from such failure and shall without duplication, be the sole and exclusive measure of damages and exclusive remedy of Owner with respect to any such failure by Contractor.
- **28. ASSIGNMENT**: Neither party may assign this Contract, or payments due under the Contract, without the other party's written consent. Any such assignment shall be void and of no effect.

29. INTERPRETATION:

- **A.** Interpretation of Documents. The Contract, drawings, and specifications are intended to supplement one another. In the event of a conflict, the specifications shall control the drawings, and the Contract shall control both. If work is displayed on the drawings but not called for in the specifications, or if the work is called for in the specifications but not displayed on the drawings, Contractor shall be required to perform the work as though it were called for and displayed in both documents.
- **B.** Entire Agreement. This Contract constitutes the entire agreement of the parties. No other agreements, oral or written, pertaining to the work to be performed under this Contract exists between the parties. This Contract may only be modified by a written agreement signed by both parties.
- **C. Governing Law.** This Contract shall be interpreted and governed in accordance with the laws of the State of California.
- **30. ATTORNEYS' FEES AND COSTS:** If any party to this Contract brings a cause of action against the other party arising from or relating to this Contract, the prevailing party in such proceeding shall be entitled to recover reasonable attorney fees and court costs.

31. PERFORMANCE:

- A. Contractor may, at its discretion, engage licensed subcontractors to perform work pursuant to this Contract provided Contractor shall remain fully responsible for the proper completion of the Project.
- B. All work shall be completed in a workman-like manner and in compliance with all building codes and applicable laws. To the extent required by law, all work shall be performed by individuals duly licensed and authorized by law to perform said work.
- C. Contractor agrees to remove all debris and leave the premises in broom clean condition.

32. TIME OF ESSENCE; EXTENSION OF TIME

- A. All times stated in this agreement or in the contract documents are of the essence.
- B. The times stated in this agreement or in the contract documents may be extended by a change order signed by the parties.

33. SUBCONTRACTORS

- A. Contractor agrees to furnish Owner, prior to the execution of this Agreement, with a list of names of subcontractors to whom he proposes to award the principal portions of the work to be subcontracted by him.
- B. A subcontractor, for the purposes of this agreement, shall be a person or company with whom Contractor has a direct contract for work at the project site.

- C. Contractor agrees not to employ a subcontractor to whose employment Owner reasonably objects, nor shall Contractor be required to hire a subcontractor to whose employment he reasonably objects.
- D. All contracts between Contractor and subcontractors shall conform to the provisions of the contract documents and shall incorporate in them the relevant provisions of this Agreement.

34. MANDATORY ARBITRATION OF DISPUTES.

Any Claim arising out of or related to the Contract, except Claims of an aesthetic nature and except those waived, shall, after decision by the Architect or 30 days after submission of the Claim to the Architect, be subject to arbitration.

Prior to arbitration, the parties shall try to resolve disputes by mediation. Claims not resolved by mediation shall be decided by arbitration which, unless the parties mutually agree otherwise, shall be in accordance with the Construction Industry Arbitration Rules of the American Arbitration Association currently in effect. The demand for arbitration shall be filed in writing with the other party to the Contract and with the American Arbitration Association, and a copy shall be filed with the Architect.

A demand for arbitration shall be made within the following time limits: 180 days from the completion of improvements, and in other cases within a reasonable time after the Claim has arisen, and in no event shall it be made after the date when institution of legal or equitable proceedings based on such Claim would be barred by the applicable statute of limitations.

Limitation on Consolidation or Joinder. No arbitration arising out of or relating to the Contract shall include, by consolidation or joinder or in any other manner, parties other than the Owner, Contractor, a separate contractor, and other persons substantially involved in a common question of fact or law whose presence is required if complete relief is to be accorded in arbitration. No person or entity other than the Owner, Contractor or a separate contractor shall be included as an original third party or additional third party to an arbitration if their interest or responsibility is insubstantial. Consent to arbitration involving an additional person or entity shall not constitute consent to arbitration of a Claim not described therein or with a person or entity not named or described therein. The foregoing agreement to arbitrate and other agreements to arbitrate with an additional person or entity duly consented to by parties to the Agreement shall be specifically enforceable under applicable law in any court having jurisdiction thereof.

Claims and Timely Assertion of Claims. The party filing a notice of demand for arbitration must assert in the demand all Claims then known to that party on which arbitration is permitted to be demanded.

Judgment on Final Award. The award rendered by the arbitrator or arbitrators shall be final, and judgment may be entered upon it in accordance with applicable law in any court having jurisdiction thereof.

NOTICE: BY INITIALING IN THE SPACE BELOW YOU ARE AGREEING TO HAVE ANY DISPUTE ARISING OUT OF THE MATTERS INCLUDED IN THE "ARBITRATION OF DISPUTES' PROVISION DECIDED BY NEUTRAL ARBITRATION AS PROVIDED BY CALIFORNIA LAW AND YOU ARE GIVING UP

ANY RIGHTS YOU MIGHT POSSESS TO HAVE THE DISPUTE LITIGATED IN A COURT OR JURY TRIAL. BY INITIALING IN THE SPACE BELOW YOU ARE GIVING UP YOUR JUDICIAL RIGHTS TO DISCOVERY AND APPEAL, UNLESS THOSE RIGHTS ARE SPECIFICALLY INCLUDED IN THE "ARBITRATION OF DISPUTES' PROVISION. IF YOU REFUSE TO SUBMIT TO ARBITRATION AFTER AGREEING TO THIS PROVISION, YOU MAY BE COMPELLED TO ARBITRATE UNDER THE AUTHORITY OF THE BUSINESS AND PROFESSIONS CODE OR OTHER APPLICABLE LAWS. YOUR AGREEMENT TO THIS ARBITRATION PROVISION IS VOLUNTARY.

WE HAVE READ AND UNDERSTAND THE FOREGOING AND AGREE TO SUBMIT DISPUTES ARISING OUT OF THE MATTERS INCLUDED IN THE "ARBITRATION OF DISPUTES' PROVISION TO NEUTRAL ARBITRATION:

35. INSURANCE

A. Contractor's Liability Insurance.

Contractor agrees to keep in force at his/her own expense during the entire period of construction on the project such liability insurance as will protect him/her from claims, under workers' compensation and other employee benefit laws, for bodily injury and death, and for property damage, that may arise out of work under this agreement, whether directly or indirectly by Contractor, or directly or indirectly by a subcontractor. The minimum liability limits of such insurance shall not be less than the limits specified in the contract documents or by law for that type of damage claim. Such insurance shall include contractual liability insurance applicable to Contractor's obligations under this agreement. Proof of such insurance shall be filed by Contractor with Owner within a reasonable time after execution of this agreement.

B. Owner's Liability Insurance.

Owner agrees to maintain in force his/her own liability insurance during the construction on this project and reserves the right to purchase such additional insurance as in his /her opinion is necessary to protect him/her against claims arising out of the Contractor's operation, without diminishing Contractor's obligation to carry the insurance specified in this agreement on Contractor's part to be carried.

C. Property Damage Insurance on Work Site.

Owner agrees to maintain at his/her expense during construction of the project property damage insurance on the work at the site to its full insurable value, including interests of Owner, Contractor, and subcontractors, against fire, vandalism, and other perils ordinarily included in extended coverage. Losses under such insurance will be adjusted with and made payable to Owner as trustee for the parties insured as their interests appear. Owner shall file a copy of all such policies with Contractor within a reasonable time after construction begins under and pursuant to this agreement.

D. Waiver of Work Site Property Damage Claims to Extent of Insurance Coverage.

Owner and Contractor waive all claims against each other for fire damage or damages from other perils covered by insurance provided in Subparagraph C. of this Section. Contractor agrees to obtain waivers of such claims by all subcontractors.

36. CORRECTING WORK

When it appears to Contractor during the course of construction that any work does not conform to the provisions of the contract documents, Contractor shall make necessary corrections so that such work will so conform, and in addition will correct any defects caused by faulty materials, equipment, or quality of performance in work supervised by him or her or by a subcontractor, appearing within 180 days from the date of issuance of a certificate of substantial completion, or within such longer period as may be prescribed by law or as may be provided for by applicable special guaranties in the contract documents.

37 TERMINATIONS

A. Contractor's Termination.

Contractor may, on 30 days written notice to Owner, terminate this agreement before the completion date specified in this agreement when for a period of 60 (number) days after a progress payment is due, through no fault of Contractor, Owner fails to make the payment. On such termination, Contractor may recover from Owner payment for all work completed and for any loss sustained by Contractor for materials, equipment, tools, or machinery to the extent of actual loss plus loss of a reasonable profit, provided he or she can prove such loss and damages.

B. Owner's Termination.

Owner may, on 30 days' notice to Contractor, terminate this agreement before the completion date specified in this agreement, and without prejudice to any other remedy he may have, when Contractor defaults in performance of any material provision in this agreement, or fails to carry out the construction in accordance with the provisions of the contract documents. On such termination, Owner may take possession of the work site and all materials, equipment, tools, and machinery on the work site, and finish the work in whatever way he deems expedient. If the unpaid balance on the contract price at the time of such termination exceeds the reasonable expense of finishing the work, Owner will pay such excess to Contractor. If the expense of finishing the work exceeds the unpaid balance at the time of termination, Contractor agrees to pay the difference to Owner.

C. On any such default by Contractor, Owner may elect not to terminate this agreement, and in such event he or she may make good the deficiency of which the default consists of and deduct the costs from the progress payment then or to become due to Contractor.

38. NO WAIVER

The failure of either party to this Agreement to insist upon the performance of any of the terms and conditions of this Agreement, or the waiver of any breach of any of the terms and conditions of this Agreement, shall not be construed as subsequently waiving any such terms and conditions, but the same shall continue and remain in full force and effect as if no such forbearance or waiver had occurred.

39. WARRANTY: Contractor's warranty shall be limited to defects in workmanship within the scope of work performed by Contractor and which arise and become known within two (2) years from the date hereof. All said defects arising after two (2) years and defects in material are not warranted by Contractor. Contractor hereby assigns to Owner all warranties on materials as provided by the manufacturer of such materials.

40. SUCCESS COMPENSATION: Contractor will earn a 30% success fee on this contract as well as the PSA with APS IP Holding Equipment upon completion of the Project on time and within budget. This success fee may be paid in Membership Interests in BC&E USA Colusa 1, LLC at Owners Discretion.

AGREED:	
CONTRACTOR:	OWNER:
Signature Bick HERLING V.P.	Signature
Print Name & Title	Print Name
10 /27 /2023 Date	Date
103198 License Number JERRY HERLING	
33562 Yuca pa Revo., Yuca pa , (A Name and Address of License Holder 92399	

EXHIBITS

Exhibit A Scope of Work

Exhibit B Schedule of Values

Exhibit C Construction Schedule

Exhibit D Owner Supplied Equipment

EXHIBIT B SCHEDULE OF VALUES

City of Colusa Gasification #1

	city or corasa casimoation in 2
	(2861 Niagara Ave, Colusa 95932)
Pre Construction	

Pre Construction				
NTP			\$959,068.32	\$959,068.32
Mobilization			\$479,534.16	\$479,534.16
Components				
Move from Coachella to Yucaipa	\$278,750.00	\$43,373.50	\$235,376.50	
Prep for Installation	\$688,000.00	\$107,052.80	\$580,947.20	
Move from Yucaipa to Colusa	\$508,250.00	\$79,083.70	\$429,166.30	\$1,245,490.00
Niagara Property Improvements		\$0.00	·	
Clean Up Building	\$93,350.00	\$14,525.26	\$78,824.74	
Remove Grow House	\$186,700.00	\$29,050.52	\$157,649.48	
Remove Clean Rooms	\$186,700.00	\$29,050.52	\$157,649.48	\$394,123.70
Engineering and Permiting		\$0.00		
	\$225,000.00	\$35,010.00	\$189,990.00	\$189,990.00
General Conditions		\$0.00	•	
Overhead	\$840,492.60	\$130,780.65	\$709,711.95	\$709,711.95
Site Grading and Utilities	7-1-1	\$0.00	¥1.00). ==.00	4:30): ==:00
	\$242,500.00	\$37,733.00	\$204,767.00	
Niagara Property Civil Works: Road Base 4500' x 20' x 6" Niagara Property Civil Works: Concrete Slab for Processing 105,500sf		, ,		
	\$1,860,800.00 \$223,875.00	\$289,540.48	\$1,571,259.52	¢1 065 066 57
Niagara Property Civil Works: 12 Bunkers 65 concrete blocks each	\$225,875.00	\$34,834.95	\$189,040.05	\$1,965,066.57
Building Modifications/Construction		\$0.00		
Interior Electrical	\$216,500.00	\$33,687.40	\$182,812.60	
New Building (20,000 SF) Permitting	\$233,332.32	\$36,306.51	\$197,025.81	
New Building (20,000 SF) Foundation	\$699,996.95	\$108,919.53	\$591,077.42	
New Building (20,000 SF) Material Receiving	\$349,998.47	\$54,459.76	\$295,538.71	
New Building (20,000 SF) Erection	\$699,996.95	\$108,919.53	\$591,077.42	
New Building (20,000 SF) Electrical Installation	\$466,664.63	\$72,613.02	\$394,051.62	
New Building (20,000 SF) Finish Inside and Epoxy	\$350,011.68	\$54,461.82	\$295,549.86	\$2,547,133.45
Equipment Installation		\$0.00		
New Niagara Building: Placement of Components	\$442,500.00	\$68,853.00	\$373,647.00	
New Niagara Building: Testing & Optimizing Plant	\$186,500.00	\$29,019.40	\$157,480.60	
New Niagara Building: Completion of Installation	\$265,500.00	\$41,327.15	\$224,172.85	\$755,300.45
SUBTOTAL	\$9,245,418.60	\$1,438,602.48	\$9,245,418.60	\$9,245,418.60
Submit for Bond and Insurance Requirements 3.6	\$345,264.59	\$345,264.59	\$345,264.59	\$345,264.59
Total	\$9,590,683.19	\$1,783,867.07	\$9,590,683.19	\$9,590,683.19
	\$275,875.00	\$42,542.68		\$233,332.32
	\$827,625.00	\$127,628.05		\$699,996.95
	\$413,812.50	\$63,814.03		\$349,998.47
	\$827,625.00	\$127,628.05		\$699,996.95
	\$551,750.00	\$85,085.37		\$466,664.63
		\$63,801.82		\$350,011.68
	\$413,813.50			
	\$3,310,501.00	\$510,500.00		\$2,800,001.00

EXHIBIT A

SCOPE OF WORK

1 Introduction

Contractor will perform, furnish, undertake, provide (or cause to be performed, furnished, undertaken and provided by approved subcontractors), all Work necessary for the procurement, installation and construction of the Facility, all as necessary or useful to deliver the Facility to Owner, as detailed further below and otherwise as described in the Agreement, and as may be detailed further or modified ("Scope of Work"). Contractor acknowledges that Contractor's performance of the Work constitutes a fixed price obligation, which Contractor will perform on a turnkey basis, for the Contract Price, in accordance with the applicable Project Design and Schedule, and in accordance with all other terms, conditions and requirements of the Agreement.

Any Work done described in this Exhibit shall commence only after execution of the Notice to Proceed (NTP. Upon completion of the Work, the Contractor shall substantiate the Work performed through photographs and other reasonable evidence in a form that can be provided to third parties by the Owner. The Contractor shall cooperate in facilitating third party inspection of the work as reasonably requested by the Owner.

The Contractor shall provide Owner a site-specific safety plan that is in compliance with the Occupational Safety and Health Administration ("OSHA") standards and any local requirements ("Site Safety Plan"). The Contractor is responsible for providing a safe work environment and for safety of the public as it relates to the Work.

The Contractor will be considered prime contractor and ensure all other parties and or subcontractors activities are coordinated per OSHA standards.

The Contractor shall provide OSHA compliant construction facilities as required to complete the Work. These facilities may include, at the Contractor's discretion, temporary toilets, trash collection, trash management and construction debris disposal.

The Owner will be responsible for the Facility Gasification Equipment Owned by BC&E USA Colusa I.

Contractor's Scope of Work generally includes, without limitation, the provision by it or its subcontractors of:

- (i) procurement of all Governmental Authorizations for the Facility (unless such Governmental Authorizations are designated to be procured by Owner as detailed herein), some of which may need to be procured as part of the limited Work (not including Owner Supplied Equipment);
- (ii) Review and recommendations of Owner designs to complete the Work.
- (iii) Engineering designs as required for temporary or construction measures in order to complete the Work of which is not considered part of the final Facility.
- (iv) procurement of all Materials other than Owner Supplied Equipment and transportation and delivery of the same to the applicable Work Site.

- (v) timely inspection of, custody and care for, and installation of Owner Supplied Equipment.
- (vi) the provision of all equipment, tools, facilities, and utilities at the Work Site.
- (vii) the provision of all labor, supervision and project management services.
- (viii) all monitoring, 3rd party material testing, supervision, equipment, training and third-party expenses related to compliance with applicable regulations and standards.
- (ix) civil work relating to preparation of the Site.
- (x) installation of civil and electrical works, foundation and building modifications, gasifiers, and various balance of system equipment and components.
- (xi) all civil and electrical works relating to the Project interconnection.
- (xii) testing, commissioning, start-up activities for related Work.
- (xiii) All quality control and quality assurance
- (xiv) support as required for Gasifier equipment suppliers commissioning.
- (xv) support as required for the performance testing by Owner.
- (xvi) support as required for the commissioning by Utility.

in each case as necessary for the proper execution and completion of the Work in accordance with the Agreement. Contractor acknowledges that it is obligated to perform all tasks required by the Scope of Work or reasonably implied by the Scope of Work to be necessary in order to deliver to Owner the completed and fully operational Facility meeting all terms, conditions and requirements of the Agreement.

Contractor's Scope of Work shall also include and comply with all applicable requirements contained in the Construction Agreement and other Exhibits.

2 Definitions and Acronyms

All capitalized terms herein not defined below shall have the meaning prescribed to them in the form of the Construction Agreement.

3 Project Details

This section provides Project information and details to support the engineering, design and construction of the Project.

- 3.1 General Project Information
 - 3.1.1 Project Name: City of Colusa #1
 - 3.1.2 Project Coordinates (Lat/Long): 39.1752599, -121.9950122
 - 3.1.3 Interconnection voltage: 12 kV

- 3.1.4 Property Size (Acres): 2.5 to property boundaries
- 3.2 Project Attributes
 - 3.2.1 Design Life (years):15
- 3.3 Project Special Conditions
 - 3.3.1 General construction activities shall be limited to the hours defined by the Permits. Unless approved by the Owner.
 - 3.3.2 Contractor shall comply with all Landowner Requirements and acknowledges that the Owner is responsible for damages at the Project Site that result from Contractor's performance of the Work. Contractor shall take reasonable care to limit damage to land outside the work areas and including damage to fences and roads.
 - 3.3.3 Additional special conditions per Permits outlined under **Exhibit D**
 - 3.3.4 NEED TO DEFINE AIR PERMIT AND PERMIT TO OPERATE

4 General Requirements

- 4.1 Scope of Work
 - 4.1.1 The Owner will be responsible for the Project engineering and design.? Either us or them
 - 4.1.2 Contractor shall provide a complete and functional Project. Including but not limited to the 2.8 MW Gasification System and Interconnection.
 - 4.1.3 Contractor shall construct the Project in accordance with the terms of the Construction Agreement, Owner supplied equipment design and the Specifications.
 - 4.1.4 Contractor's scope of work is to procure, assist owner with obtaining permits, construct, interconnect, commission, startup, and test a gasification system which is built in compliance with the required attributes in section 3 of this Exhibit and meets commissioning and acceptance testing requirements and as per the approved Commissioning Plan and Acceptance Test Plan provided by owner.
 - 4.1.5 It is the Contractor's responsibility to ensure that all aspects of Project construction comply with all federal, state, and local code requirements and all industry codes and standards. This includes, but is not limited to, the list specified in section 7.
 - 4.1.6 The Contractor will make sure all Work follows and does not deviate from the electrical, structural and civil designs by conducting quality control and assurance and perform field inspections, unless approved in writing by the Owner.
 - 4.1.7 Contractor shall perform, supply or cause to be supplied all equipment, Materials, labor, services, supervision, testing devices, drawings, calculations, specifications, manuals required for the Owners Project Design, excluding those listed in Exhibit D: Owner Supplied Equipment.
 - 4.1.8 Major components of the Work include:
 - 4.1.8.1 Project management including, but not limited to:
 - 4.1.8.1.1 Project administration

- 4.1.8.1.2 Scheduling
- 4.1.8.1.3 Quality control
- 4.1.8.1.4 Safety program administration, including Prime Contractor Responsibility
- 4.1.8.1.5 Progress reporting
- 4.1.8.1.6 Coordination of Contractor's personnel and subcontractors
- 4.1.8.1.7 Compliance with Applicable Permits and environmental requirements
- 4.1.8.2 Engineering of Work and construction support.
- 4.1.8.3 Document handover including but not limited to:
 - 4.1.8.3.1 Comprehensive operation and maintenance manuals for any contractor supplied equipment. Including signed and sealed vendor drawings, record drawings, recommended spare part lists and warranty information.
 - 4.1.8.3.2 Final review and Construction Report. The report shall be written and include summary of the design review, confirmation that the Works have been completed in accordance with the design, operating and maintenance procedures related to the constructed Works, and overall certification that the constructed Works are safe to operate and will perform as intended. The report will summarize and identify all quality control information, reports, testing, nonconformances, calibrations records, 3rd party testing accreditations.
 - 4.1.8.3.3 Redline drawings and provide any information as required for the As-built / Record drawings by the Owners engineer.
- 4.1.8.4 Subject to limitations in Exhibit D: Owner Supplied Equipment, procurement of all Material, equipment, and services, including but not limited to:
 - 4.1.8.4.1 Procurement of all materials, including, if applicable, but not limited to, fence, gates, control enclosures, relays, RTUs, relay panels, communication equipment, switches, routers, fuses, meters, servers, operating systems, alarm system, cabinets, foundations and foundation materials, hardware and fasteners, conduits, conductors, bonding and grounding equipment, and all related materials included in the Owner Design.
 - 4.1.8.4.2 Coordinating and shipping all material required for Owners Supplied Equipment to be installed on site.
 - 4.1.8.4.3 Procurement of all services including, but not limited to, subcontracted services required to prepare, install, construct, connect and test equipment at the Site
 - 4.1.8.4.4 Development of specifications and bid packages for subcontracted Work

- 4.1.8.4.5 Bid evaluation and selection for subcontracted Work
- 4.1.8.4.6 QA/QC material inspections and reception docket (bill of lading)
- 4.1.8.4.7 Obtaining all datasheets, relevant technical notes, installation, operations and maintenance manuals for all Project equipment
- 4.1.8.4.8 Priced list of recommended operating spare Parts with manufacturer-recommended spare part quantities based on the number of components installed at the Project.
- 4.1.8.5 Construction of all Project facilities including, but not limited to:
 - 4.1.8.5.1 Securing and controlling the Site and Site access
 - 4.1.8.5.2 protection of existing permanent easements as required. In consultation with the landowner(s) participating in the project who own these structures or partial structures, one or more of them may be removed to facilitate the construction.
 - 4.1.8.5.3 Removal of existing vegetation and debris as required
 - 4.1.8.5.4 Construction management and supervision
 - 4.1.8.5.5 Construction labor and training
 - 4.1.8.5.6 Construction and installation of all Project equipment
 - 4.1.8.5.7 Safety program
 - 4.1.8.5.8 Quality program
 - 4.1.8.5.9 Construction Aids and any necessary installation, including but not limited to construction trailers, and sanitary facilities and waste disposal.
 - 4.1.8.5.10 Construction utilities such as electrical power, water and telecommunications
 - 4.1.8.5.11 Parking for construction crews
 - 4.1.8.5.12 Construction, maintenance, removal and restoration of all temporary construction needs such as material laydown staging areas and temporary access.
 - 4.1.8.5.13 Construction fencing and lighting
 - 4.1.8.5.14 Construction sanitary facilities
 - 4.1.8.5.15 All consumables
 - 4.1.8.5.16 Site clean-up and reclamation
- 4.1.8.6 Inspection, testing and commissioning activities including, but not limited to:
 - 4.1.8.6.1 Commissioning and testing
 - 4.1.8.6.2 Acceptance testing support for Owner and PG&E
 - 4.1.8.6.3 Support for Owners Performance Testing

- 4.1.8.6.4 All personnel and test equipment required to perform the inspection, testing and commissioning activities.
- 4.2 Contractor shall be responsible for disposal of all waste material from the Work, including, but not limited to, disposal procedures for non-hazardous solid waste not reused of recycled, construction debris, timber and other vegetative debris, hazardous waste, and contaminated soils from equipment oil, fuel spills, caused by Contractor or Subcontractors.
 - 4.2.1 Within the period prescribed and in accordance with all requirements of the Agreement, Contractor shall provide to Owner the Health and Safety Management Plan (HSE Plan) for the Work to ensure that appropriate measures are taken to support safe construction, including Prime Contractor responsibilities.
 - 4.2.2 The HSE Plan shall include, but not be limited to:
 - (i) an Emergency Response Plan, including coordination with local first responders.
 - (ii) all hazards generated by the Work activities at the Site
 - (iii) all safe work procedures designed to avoid or mitigate hazards at the Site
 - (iv) a first response plan for medical services and first aid
 - (v) hazardous substance operations and response
 - (vi) means of ingress and egress
 - (vii) fire and rescue response; and
 - (viii) reporting of safety incidents.
 - 4.2.3 Contractor shall provide safety supervision to maintain safe conditions for workers, visitors and the general public as it relates to the Work.
 - 4.2.4 Contractor shall procure and install arc-flash labels (templates provided by the Owner), and utilize appropriate PPE, for work performed in or near any live electrical components.
 - 4.2.5 Contractor shall perform daily safety briefings and inform all workers of relevant hazards involved in the Work.
 - 4.2.6 Contractor shall update the Health and Safety Management Plan (HSE Plan) as needed and shall ensure that it is comprehensive in all phases of construction, commissioning, acceptance and operation.
 - 4.2.7 Contractor shall develop lock-out-tag-out (LOTO) procedures for performing the Work and testing of the Work.
 - 4.2.8 Contractor shall provide project orientation and safety training to all construction workers and management staff and visitors who enter the Site.
 - 4.2.9 Contractor shall provide incident reports for all near-miss, first-aid, lost time, material damage and medical assistance events within 24 hours of their occurrence and keep a complete report binder shall be kept on site.
 - 4.2.10 The Owner may, at any time and from time to time, inspect the Site health and safety conditions or audit the health and safety performance records to determine the Contractor's compliance with the HSE Plan and all applicable health and safety

laws or requirements of any Governmental Authority. Such inspection or audit may take place without warning or notice of intent.

4.3 Environmental and Permit Requirements

- 4.3.1 Refer to the Construction Agreement, specifically, but not limited to, sections 1. E.
- 4.3.2 Contractor is with respect to the Work solely responsible for the protection of the environment, and shall comply strictly with and ensure that its Subcontractors comply.
- 4.3.3 The Contractor shall adhere to all NPDES requirements and implement and maintain all SWPPP measures
- 4.3.4 Contractor shall provide environmental training to all construction workers and management staff and visitors who enter the Site and report diligently to Owner, but no later than 24 hours of its knowledge, any environmental incident that occurs at the Site or any site surrounding the Site or on which Work is being performed.
- 4.3.5 The role of Environmental Monitor will be completed by a Contractor site staff member as it pertains to erosion and sediment control.

4.4 Project Schedule

4.4.1 Refer to the Construction Agreement for the requirements, specifically, but not limited to, sections 24. and related Exhibits.

4.5 Project Management

- 4.5.1 Contractor shall submit a Project Management Plan within thirty (60) days following the Execution Date meeting the following requirements:
 - 4.5.1.1 Designated Key Personnel who will be responsible for each portion of the Project, as defined in the Agreement, section 1. D., 2. Project reporting procedures and frequencies.
 - 4.5.1.2 Chain of communication.
 - 4.5.1.3 Change control plan.
- 4.5.2 The Contractor shall keep on the Site, throughout the Work, a competent and responsible Project Manager. If the Project Manager is not at site, there will be an assigned Construction Manager or Site Superintendent responsible and directing of the Work. The Project Manager shall not be removed or changed from the Work for the Project without prior written approval of the Owner. The Project Manager shall have the authority to represent and bind the Contractor. If the Project Manager is to be temporarily absent from Site during the execution of the Work, a suitable replacement shall be appointed subject to the approval of the Owner.
- 4.5.3 The Project Manager shall convene weekly conference calls with the Owner and agents designated by the Owner to communicate status of the Work.
- 4.5.4 The Project Manager shall issue all required reports (plan of the day, weekly update, monthly progress report) in accordance with the Agreement, specifically but not limited to section 1. A. and related Exhibits.
- 4.5.5 Contractor, Contractor's subcontractors the performing work shall hold and document Plan of the Day ("POD") meetings daily at a mutually agreed time to coordinate their work activities and to minimize their interference with each other's work activities.

- 4.5.6 Before any work is performed, a pre-construction conference shall be held to review contract requirements; establish a detailed schedule of operations; discuss the Contractor's safety rules and policies and the contractor's site HSE plan; discuss material handling; introduce various members of the Contractor's, Owner's, and engineer's staffs; and resolve any questions raised by any of the parties.
- 4.5.7 During construction, weekly and monthly progress meetings shall be held to review job progress; review project work schedules; review requests for payment; resolve problems that may arise; discuss any accidents or near accidents since the last meeting; and address any other matters of concern to any of the parties.
- 4.5.8 The Contractor shall prepare a summary of each meeting within two (2) working days of the meeting, especially noting any decisions made, and shall deliver a copy of same to the Owner (or Owner's designated representative).

4.6 Engineering

- 4.6.1 Contractor Design submittals for review and comment by Owner and Contractor. Submittal milestones shall be included in the Project Schedule and include:
 - 4.6.1.1 30% Design Documents review
 - 4.6.1.2 60% Design Documents review
 - 4.6.1.3 90% Design Documents review
 - 4.6.1.4 IFC Design Documents review.
 - 4.6.1.5 Or any other material Design change review requested by Owner.
- 4.6.2 Contractor shall designate an engineering manager (as Key Personnel) who will be responsible for the overall management and administration of engineering design integration for procurement, construction and testing Work.
- 4.6.3 As-Built Design Documents Red-line: to be submitted within 15 days of completion of the Acceptance Tests for the Substation and the Switchyard and within 20 days for the rest of the facility for the purposes of Substantial Completion.

4.7 Procurement

- 4.7.1 Contractor shall provide documentation if required by Owner, including manufacturer data sheets, test reports and drawings, that demonstrate all materials and equipment meet the Specifications and the Design requirements.
- 4.7.2 Contractor should prioritize when possible, the use of commercially available compliant equipment, to facilitate procurement of spares for O&M activities.
- 4.7.3 All vendor documents received by Contractor shall be maintained by Contractor and available to Owner at all times.
- 4.7.4 Contractor shall be responsible for the procurement, handling, shipping costs and delivery of all equipment, materials and services, including, without limitation, locating, negotiating, inspecting, expediting, shipping, shipping permits, unloading, receiving, verifying, customs clearance and claims. All monitoring services including third party audits and factory visits with respect to manufacturing of equipment shall be communicated to Owner.
- 4.7.5 Packing lists shall be maintained by Contractor at the Project and shall be available for Owner review.

- 4.7.6 All freight costs for all Material and equipment supplied by Contractor shall be the responsibility of the Contractor.
- 4.7.7 All applicable taxes, tariff fees and import duties shall be the responsibility of the Contractor.
- 4.7.8 All customs documentation and fees shall be the responsibility of the Contractor.
- 4.7.9 All equipment stored offsite or at the Site shall be in accordance with Good Industry Practices and manufacturer's recommendations. Contractor is responsible of all equipment and materials (including Owner supplied Materials once received) and shall secure and keep free from damage, dirt, flooding and debris.
- 4.7.10 Contractor shall perform all inspection and pre-installation maintenance activities, including inspection at reception to identify potential damage, to ensure compliance with manufacturer's recommendations. Contractor shall maintain a log of such activities, such log to include the date of such activities and the names and signatures of the personnel performing such activities. Such log shall be available to Owner for review.
- 4.7.11 Contractor shall obtain all warranty information for all Project Materials and equipment supplied by Contractor and provide to Owner All key equipment warranties shall permit assignment to Owner without consent.
- 4.7.12 Contractor shall obtain all installation, operations and maintenance manuals for all Project equipment supplied by Contractor.
- 4.7.13 Contractor is responsible and shall secure all Materials (Owner and Contractor supplied) located at the Site until to the Final Completion Date.

4.8 Construction

- 4.8.1 Contractor shall provide construction and installation services necessary for the completion of the Work in a safe and orderly manner in compliance with all applicable laws and all requirements of governmental authorities, the specifications, applicable standards, the Permits and good industry practice.
- 4.8.2 Prior to any Work at the Site, Contractor shall demonstrate or provide to Owner:
 - 4.8.2.1 All safety requirements stated in the Contract have been met.
 - 4.8.2.2 Contractor has received all installation manuals and requirements for all Project equipment.
 - 4.8.2.3 Contractor has provided to Owner an up-to-date procurement and construction schedule indicating firm commitment dates for all Project equipment.
 - 4.8.2.4 All Applicable Permits necessary to conduct the Work at the Site have been obtained, and all conditions, commitments, plans and environmental mitigation measures associated with the Applicable Permits have been met or implemented.
 - 4.8.2.5 All site-specific plans, programs, documentation required in due time by Owner
- 4.8.3 All workmanship shall comply with good industry practices, Applicable Laws and Applicable Standards.

- 4.8.4 Contractor is responsible for on-site security and safety from the earlier of site mobilization or NTP until Substantial Completion.
- 4.8.5 The Contractor shall comply with all landowner requirements as set forth in the Agreement.
- Dust control, Clean roads, Traffic control, Site housekeeping, Storm Water 4.8.6 Pollution Prevention Plan (SWPPP): During construction of the Project, Contractor shall apply necessary dust-control measures and shall comply with the SWPPP. The Contractor shall be responsible for approved dust suppression applications in accordance with state, local and Owner requirements along the public and access roads and in other construction areas as required for its Work until the Project achieves Substantial Completion. The Contractor shall minimize, and control debris transfer to existing roadways. The Contractor shall be responsible for cleaning and protecting the local roads as needed and as directed by the Owner or County officials due to traffic associated with its Work. The Contractor is responsible for temporary traffic control measures as required for management of construction vehicles and all delivery vehicles including Owner-supplies equipment delivery vehicles on public roads and project access roads within the project area associated with its Work. The Contractor shall assist owner in obtaining transportation permits and develop, finalize, provide, and implement a traffic plan and final delivery route plan for owner procured equipment and materials.
- 4.8.7 Property damage: The Contractor shall perform the Work in a manner that will cause the minimum of inconvenience or injury to the landowners and occupiers adjacent to the Site and, at its sole cost and expense, and in accordance with the applicable landowner requirements, shall restore all property on or adjacent to the Site and access thereto that is damaged due to the Work or Contractor's negligence, to a better condition or as good a condition as before the damage occurred.

The Contractor shall ensure that its Work does not interfere with, or cause any damage to, any existing facilities, and/or adjacent lands and shall not cut or connect into existing facilities without specific written instruction and approval of the Owner to do so.

The Contractor shall avoid, where possible, or minimize any damage to functioning field tile drainage systems and soils resulting from the construction, operation, and/or maintenance of the facility in agricultural areas. Unless otherwise agreed to by the landowner, damaged field tile systems shall be promptly repaired to at least original conditions or modern equivalent at Contractor's expense. If applicable, excavated topsoil shall be segregated and restored in accordance with the lease or easement agreements with the landowner. Unless otherwise agreed to by the landowner, severely compacted soil shall be plowed or otherwise de-compacted during construction, if necessary, to restore them to original condition.

If Contractor fails to repair, remediate, or replace any property, identified in writing as being damaged due to the Work or Contractor's negligence by the date specified, the Owner shall repair, remediate or replace the damages and set off the applicable cost of repair, remediation or replacement from any monies due to the Contractor under the Contract Documents.

4.8.8 Gates and fencing: The Contractor shall provide for existing fence removal, restoration, and repair across and adjacent to site access roads

- 4.8.9 Temporary Facilities and Utilities: Contractor shall provide and maintain all required temporary construction utilities such as electric power, water for concrete and dust control and telecommunication service (high-speed internet and telephones lines), as well as OSHA compliant temporary facilities, throughout the Project's construction period. These facilities shall be comprised of Contractor construction trailers, equipped with A/C, heating, drinking water and photocopier, space, communication and utility maintenance of the temporary yard and entrances, temporary washrooms, waste collection, waste management and construction debris disposal in accordance with the Solid Waste Disposal Plan, and installation of any required construction laydown/staging area. The laydown/staging area shall be removed after Project completion and the area restored in accordance with the Agreement and Permit requirements.
- 4.8.10 Contractor shall provide all fuels required for construction activities.
- 4.8.11 Contractor shall provide adequate lavatory facilities for the peak quantity of workers, including management, at the Site during execution. Contractor is responsible for all service and waste removal.
- 4.8.12 Contractor is responsible for properly containerizing, removing and disposing of all solid waste, including any Hazardous Materials waste generated during the Work, in accordance with the Solid Waste Disposal Plan.
- 4.9 Quality Assurance and Quality Control (QA/QC)
 - 4.9.1 The Contractor shall develop, implement and be solely responsible for establishing an effective quality assurance and quality control plan covering all aspects of the Work, including all aspects of design, engineering, supply, labour, supervision, tools, materials, equipment, construction, and for ensuring and demonstrating compliance with all requirements of the Contract.
 - 4.9.2 Contractor shall provide QA/QC supervision to maintain quality control in line with industry standards for similar work.
 - 4.9.3 Within thirty (30) days following the Notice to Proceed Date or Contract signature date, whichever comes first, Contractor shall provide to Owner a Site-specific, detailed QA/QC Plan. The QA/QC Plan, at a minimum, shall address all aspects of:
 - 4.9.3.1 Procurement of equipment, including inspections
 - 4.9.3.2 Construction of the Project, including inspection and testing procedures to verify the construction complies with the AHJ-approved design and permit conditions
 - 4.9.3.3 Commissioning and testing of the Project as stated in **Exhibit D.**
 - 4.9.3.4 Corrective action procedures that address defective materials, chain of supply, discrepant system components and field issues.
 - 4.9.4 Contractor shall have the QA/QC Plan reviewed by Owner to ensure all testing and inspection procedures satisfy applicable standards and regulations.

- 4.9.5 Contractor shall perform inspections and field quality control testing throughout the construction process including:
 - 4.9.5.1 Assessing existing conditions
 - 4.9.5.2 Condition of equipment at reception
 - 4.9.5.3 Construction installation placement and qualification measurements
 - 4.9.5.4 Final inspections and tests
- 4.9.6 Testing shall comply with good industry practices, Applicable Laws and Applicable Standards.
 - 4.9.6.1 Testing shall include, but is not limited to: Commissioning and acceptance testing requirements of Exhibit D.
 - 4.9.6.2 Soil compaction testing where required as determined and recommended by the Site geotechnical report and/or the Owners engineer.
 - 4.9.6.3 Concrete compressive strength testing for all poured concrete, in accordance with ASTM C39, ACI 318 and any other applicable code or standard
 - 4.9.6.4 Any other tolerance requirements as outlined in the approved engineering drawings and/or manufacturer's recommendations.
- 4.9.7 Torque
 - 4.9.7.1 Contractor shall ensure all fasteners are torqued properly according to the manufacturer or licensed engineer's instructions.
- 4.9.8 Contractor shall coordinate and document all QA/QC requirements and inspection and test results.
- 4.9.9 Contractor shall provide at least a five (5) Business Day, or more at the Owner's request, notice to Owner prior to the following events for Owner to witness or review the QA/QC inspection and testing results required of each:
 - 4.9.9.1 Field copies of the "working copy" test reports (including third party test reports, acceptance guides, etc.) shall be photocopied and left at Site at all times. Test reports with the exception of third party testing, shall be submitted to Owner for audit. The Contractor is wholly responsible for evaluation of test results and assurance that equipment is acceptable for service.
 - 4.9.9.2 Site Visits and Inspections: The Owner, the Owner's representatives and their agents and consultants may, at all times during the performance of the Work, have access to the Work and visit the Contractor's and any subcontractors' facilities at intervals appropriate to the progress of construction without impeding progress to remain familiar with the progress and quality of the Work and to determine if the Work is proceeding in conformance with the Contract.

4.10 Commissioning

- 4.10.1 The Contractor shall develop and provide a detailed Commissioning Plan for the Project in accordance with the Agreement.
- 4.10.2 Commissioning shall be performed in accordance with the manufacturer's installation, commission and O&M manuals, and in accordance with the Commissioning Plan.
- 4.10.3 The Commissioning Plan specifications should define the minimum requirements for field inspection and testing of electrical equipment for the Project as outlined (Commissioning Plan and Requirements).
- 4.10.4 The Commissioning Plan shall include all relevant testing required to demonstrate compliance with the Project's interconnection.
- 4.10.5 In addition to the requirements, the Commissioning Plan to be provided by Contractor in accordance with the Agreement, and referenced industry standards, all testing shall be conducted in accordance with any instructions provided by the equipment manufacturer. Any conflict between these requirements shall be brought to the Owner's attention for resolution.
- 4.10.6 The Contractor shall be responsible for fully commissioning the Work and shall furnish all labor, equipment, tools, and Materials required to perform the Commissioning Tests.
- 4.10.7 Technicians performing the work shall be qualified by virtue of training and experience for the type of work performed and shall be familiar with the equipment under test. They shall be trained in the nature of the hazards involved and shall be capable of judging the serviceability of the equipment.
- 4.10.8 Contractor shall provide, for Owner review and approval, a complete set of commissioning test forms .
- 4.10.9 A complete report (Commissioning Test Report) of all testing shall be provided. The Engineer of Record or an independent Licensed Electrical Engineer shall review all substation and switchyard testing and commissioning reports and provide a letter of compliance prior to substation or switchyard energization.

4.11 Acceptance Testing

- 4.11.1 The Acceptance Test shall be used to verify that all components of the Project production capacity installed by the Contractor meet or exceeds the minimum target capacity of **2.8** MW
- 4.11.2 The Contractor shall assist as required for testing the completed Project in accordance with the PPA and assist in any Utility acceptance requirements.

4.12 Manuals

- 4.12.1 At Substantial Completion or before, Contractor shall provide a comprehensive Project manual, which shall contain the following as a minimum:
 - 4.12.1.1 Final Contract Agreements
 - 4.12.1.1.1 Agreement
 - 4.12.1.1.2 Completion Certificates
 - 4.12.1.1.3 Warranties
 - 4.12.1.2 Project Overview and As-Built Drawings
 - 4.12.1.2.1 Contractor will provide all red-line markups of the modifified building which houses the gasification system
 - 4.12.1.2.2 Contractor will provide all red-line markups of the Gasification Generating System.
 - 4.12.1.3 Studies and Reports
 - 4.12.1.3.1 Commissioning Reports, Test Reports, Inspection Reports and QA/QC Documentation
 - 4.12.1.3.2 Independent Laboratory Test Results if any
 - 4.12.1.4 QA/QC documentation
 - 4.12.1.5 Health and Safety documentation including but not limited to accident reports and hazardous material disposal reports
 - 4.12.1.6 Applicable Permits
 - 4.12.1.6.1 Owner Permits
 - 4.12.1.6.2 Contractor Permits
 - 4.12.1.6.3 Permit compliance documentation
- 4.12.2 Operations and maintenance manuals for all Equipment and Materials.
- 4.12.3 Software manuals and access information.
- 4.12.4 Contractor shall provide comprehensive Operating manual, detailing all services to be provided through the duration of the life of the system.
- 4.12.5 Complete Project manual and Operating manual shall be submitted to Owner no later than Final Completion Date.
- 4.13 Training
 - 4.13.1 Contractor shall provide to Owner the training necessary and appropriate training for the proper and safe operation and control of the facility prior to energization of the project substation, gen-tie and switchyard.
- 4.14 Community Relations
 - 4.14.1 Contractor shall develop a relations plan including but not limited to a contractor complaints resolution process with input from Owner.

- 4.14.2 Contractor shall maintain positive relations with the community and neighbors during the Work.
- 4.14.3 Contractor shall take appropriate steps to minimize disturbance to local residents.
- 4.14.4 Contractor shall maintain vegetation along the Site boundaries.

4.15 Vegetation Management

4.15.1 Contractor shall manage vegetation at the Site during the Work.

4.16 Security Requirements

- 4.16.1 The contractor shall provide a Security Plan. At a minimum, security shall address the following:
 - 4.16.1.1 Security measures to protect equipment, materials, and personnel.
 - 4.16.1.2 Work zone access and controls both during and after working hours
 - 4.16.1.3 Warning signs of the the potential of hazardous Work activities, as appropriate.
 - 4.16.1.4 Lighting requirements for working during non-daylight hours, as applicable.
 - 4.15.1.5 Further security specifications including fencing as required
 - 4.15.1.7 Storage shall be in contractor scope until substantial completion. The storage shall be of 30 days period minimum.

4.17 Access Rights

4.17.1 The Owner will, if applicable, provide the Contractor with details of the limitations or restrictions on the Contractor's activities for the Work at the Site prior to commencement of the Work. The Owner will provide access to the Site in accordance with the Agreement.

4.18 Restoration, Replanting and Landscaping

- 4.18.1 The Contractor shall be restore project to a clean and finished condition in accordance with the Permit requirements.
- 4.18.2 Fencing: Contractor shall provide permanent fencing if required to surround all above-ground features of the Project

5 Electrical Requirements

5.1 General

- 5.1.1 Contractor is responsible for electrical system studies for design of all electrical components and systems, including but not limited to, grounding studies including touch and step potential considerations, short circuit studies, load flow studies, insulation coordination, protective device coordination, cable sizing and thermal ampacity calculations for conditions of use and shall be signed and sealed by an appropriately licensed professional engineer.
- 5.1.2 Contractor is responsible to supply and install all aspects necessary for a fully functional 2.8 MW Gasification Facility
- 5.1.3 A fire mitigation plan (by Owner) shall be required.
- 5.2 Setbacks and access ways shall comply with the local jurisdiction's specific fire code and requirement

5.3 Interconnection

5.3.1 The Contractor shall help coordinate testing with the Utility acceptance testing and control system acceptance testing as required.

5.4 Telecommunication Services

5.4.1 The Contractor shall help coordinate testing with the Telcom acceptance testing and control system acceptance testing as required.

5.5 Signage

- 5.5.1 Prior to the start of construction in any particular area, sensitive resources such as buried utilities shall be demarcated with flagging or signage.
- 5.5.2 Signs shall be posted indicating:
 - 5.5.2.1 The presence of multiple power sources
 - 5.5.2.2 The presence of high voltage
 - 5.5.2.3 That entry is restricted to authorized personnel only
 - 5.5.2.4 Trespassing is not allowed
 - 5.5.2.5 The Site is monitored by a security system
- 5.5.3 As per ANSI Z-535, Section **11.1**, "signs shall be so placed to alert and inform the viewer in sufficient time to take appropriate evasive actions to avoid potential harm from the hazard." The legibility of the sign, frequency of duplicity and height shall support the line of sight of the viewer to satisfy the ANSI statement.

6 Civil and Structural Requirements

6.1 General

6.1.1 The Contractor shall perform all Site clearing and grubbing of the Site if required, including but not limited to grading, excavating, and removal of existing structures.

7 Industry Standards and Codes

7.1 Government and Jurisdictional Codes and Requirements

The Contractor shall engineer and construct the Project in compliance with all current applicable Federal, State and local building codes and requirements adopted by the applicable agencies having jurisdiction.

7.2 Industry Codes and Standards

Additional industry codes and standards include